Volume 3

11-MAR-22 FW22A/0047
FINGAL CO.CO. PLDEPT

FOR

Mixed-Use Development

AT

Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 15

March 2022

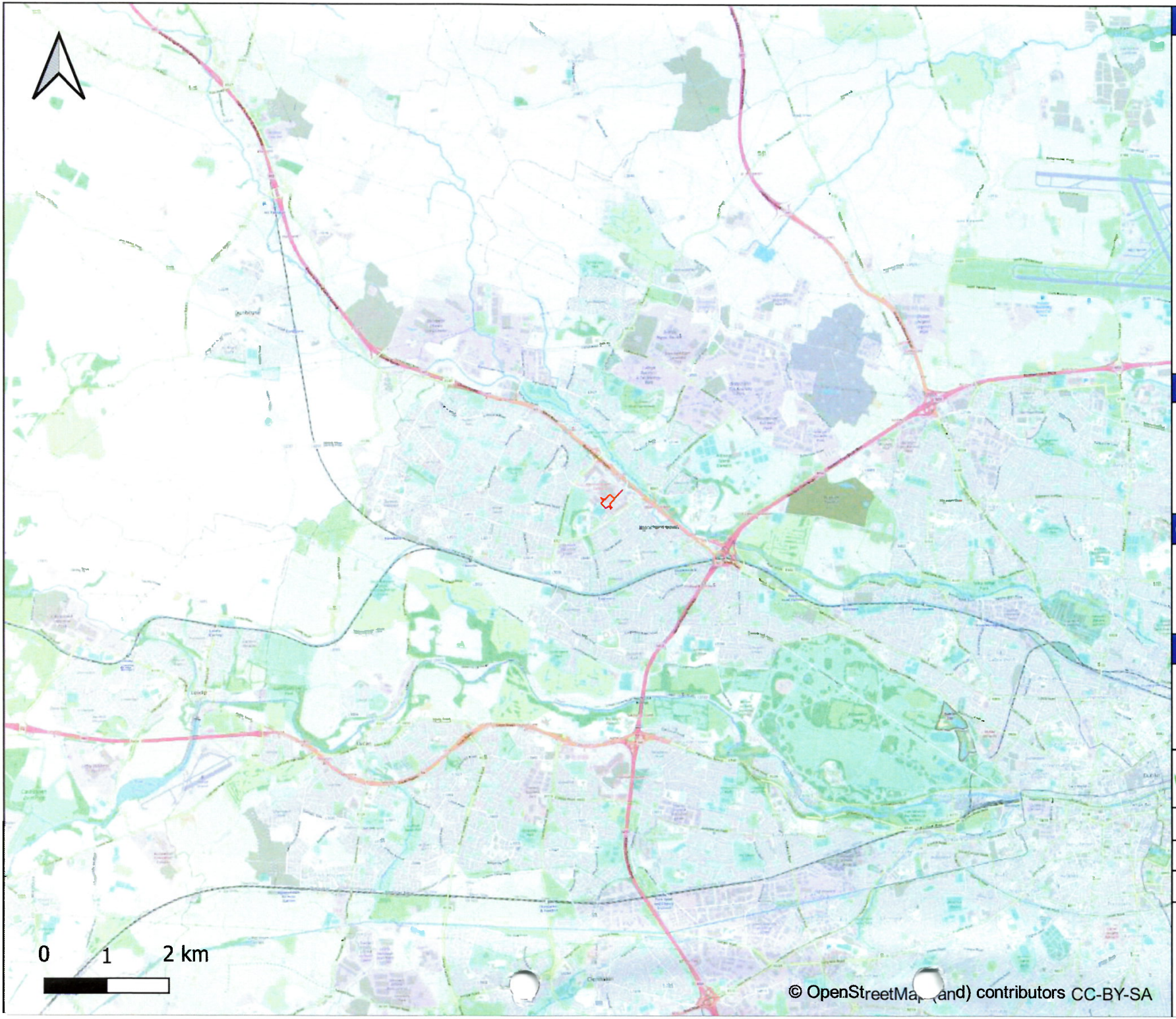
ON BEHALF OF

Blanche Retail Nominee Limited

Prepared by
Enviroguide Consulting
Dublin
3D Core C, Block 71, The Plaza,
Kerry
19 Henry Street
Wexford
Unit M10
www.enviroguide.ie
info@enviroguide.ie

Appendix A

11-MAR-22 FW22A/0047
FINGAL CO.CO. PLDEPT



Legend:

Site Boundary

Project:

EIAR for Proposed Mixed-use Development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 15

Client:

BLANCHE RETAIL NOMINEE LIMITED

Title:

Site Location

enviroguide consulting
3D Core C, Block 71, The Plaza
Park West, Dublin 12 E12F9TN
www.enviroguide.ie
info@enviroguide.ie
+353 (0)1 565 4738

Drawn By: GC	**Projection:** IRENET95 / Irish Transverse Mercator
Checked: CC	
Date: 07/03/2022	**Scale @ A4: 1:80000**

Notes:

Site boundaries shown are for illustration purposes only and do not represent legal or exact boundaries

PO

UND

63.1

35.4



(2) Site B + C - Roof Plan
1 : 500

Proposed Site Layout Plan - Roof Floor Plan

Roof Legends
- Extensive Green Roof / Maintenance Access Only
- Paved Roof / Maintenance Access Only

Revision Description	Date	Rev. No.	Issued by

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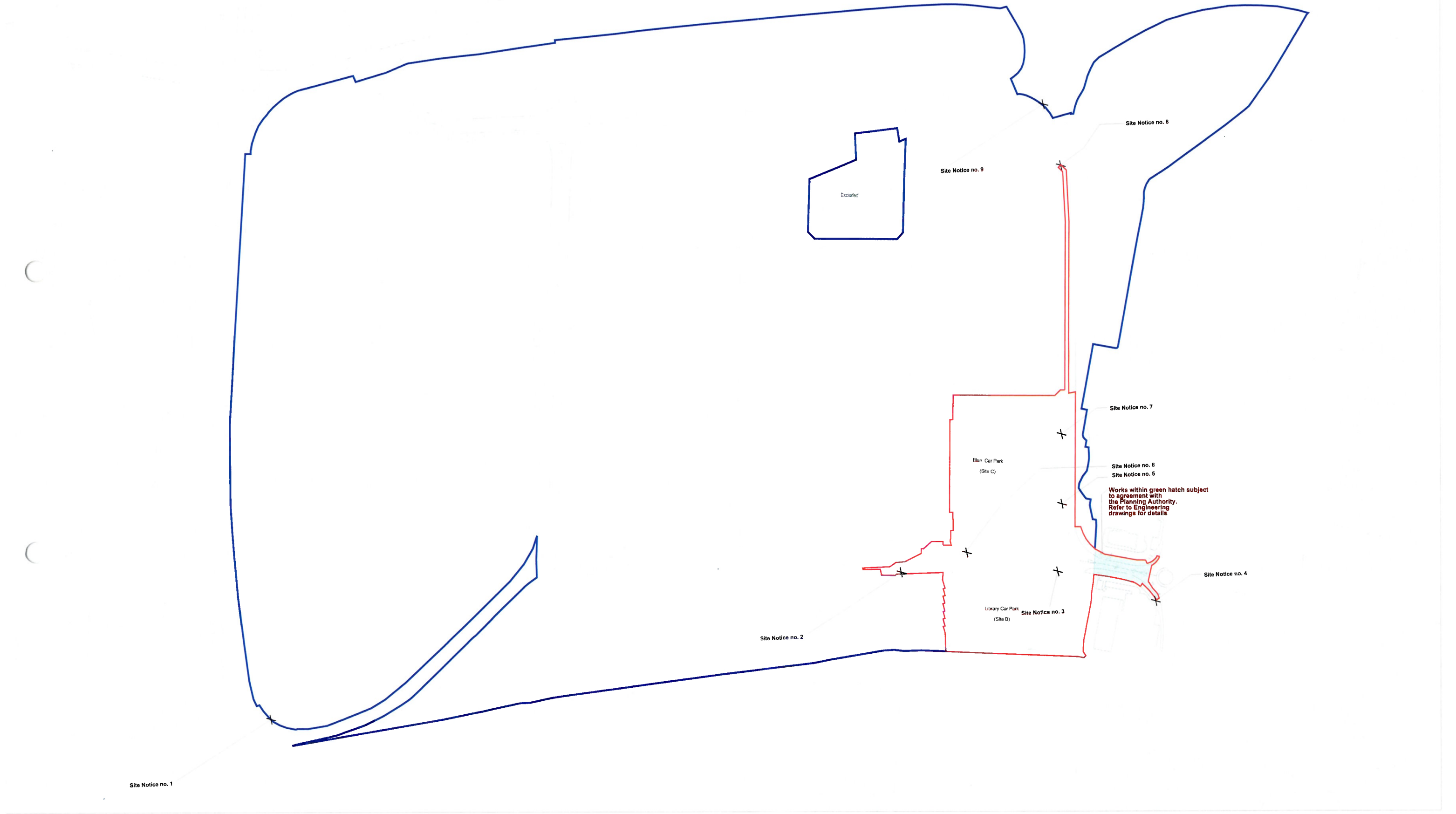
Cork
One South Mall
Cork City
Co. Cork
T12 CNN4 Ireland

Project Code:	20053	**Scale@ A1:**	As indicated
Project Lead:	JM	**Date:**	
Drawn By:	Author	**Revision:**	
Job No.:	20053	**Status:**	S0
Purpose:	Planning		

Project: Proposed Site B & C Mixed Use Development
Location: Blanchardstown Town Centre, Coolmine, Dublin15
Client: Blanche Retail Nominee Limited

Drawing Title: Proposed Site Layout Plan - Roof Floor Plan
Drawing No.: 20053-OMP-00-RF-DR-A-1004



SITE LOCATION PLAN - 1:1000

APPLICATION RED LINE BOUNDARY 2.55ha

ADJOINING LANDS IN THE CLIENT'S OWNERSHIP

FCC LANDS
(subject to separate consent request)

OS MAP SERIES 1:1000
OS MAP REF: 3129-14
ITM Centre Point Co-ordinate X,Y = 707048, 739354
Copyright Ordnance Survey Ireland and Government of Ireland
Ordnance Survey Ireland License No CYAL50241973

Revision Description	Date	Rev. No.	Issued by

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D06 XN52 Ireland
Cork
Unit South Mall
Cork City
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T12 CCN3 Ireland

Project No.:	0000	Scale @ A0:	1:1000
Project Lead:	JM	Date Printed:	22022022
Drawn By:	MD	Current Rev.:	
Model No.:	20053-OMP-BC-00-M2-A-1000 SITE LOCATION PLAN REV B		
Purpose:	PLANNING		

Project: Proposed Site B + C Mixed Use Development
Location: Blanchardstown Town Centre, Coolmine, Dublin 15
Client: Blanche Retail Nominee Limited

Drawing Title: SITE LOCATION MAP
Drawing No.: 20053-OMP-00-XX-DR-A-1000



1 Site B - North Elevation
1 : 200

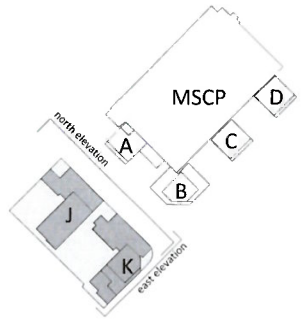


2 Site B - East Elevation
1 : 200

Site B - North and East Elevations

Material Legend

1 - Light Grey Brick
2 - Dark Grey Brick
3 - Red Brick
4 - Grey Brown Render
5 - Metal Gold
6 - Light Brown Render
7 - Dark Grey Render
8 - Selected Aluminium Window System with Spandrel Panel
9 - Mild Steel Gold Balustrade
10- Precaste Concrete
11- Gold Render



Revision Description	Date	Rev. No.	Issued by

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Co. Cork
T12 CCN3 Ireland

Project Code:	20053	**Scale**	As indicated
Project Lead:	JM	**Date:**	
Drawn By:	Author	**Revision:**	
Job No.:	20053	**Status:**	S0
Purpose:	Planning		

Project: Proposed Site B & C Mixed Use Development
Location: Blanchardstown Town Centre, Coolmine, Dublin15
Client: Blanche Retail Nominee Limited

Drawing Title: Site B - North and East Elevations
Drawing No.: 20053-OMP-SB-XX-DR-A-2000

Source File: 20053-OMP-ZZ-ZZ-DR-A-0001.rvt



1 Site B - South Elevation
1 : 200

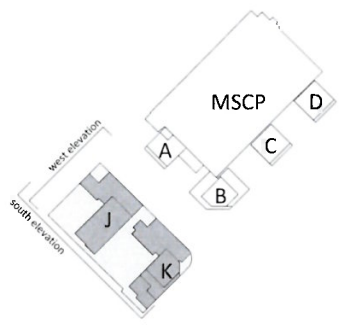


2 Site B - West Elevation
1 : 200

Site B - South and West Elevations

Material Legend

1 - Light Grey Brick
2 - Dark Grey Brick
3 - Red Brick
4 - Grey Brown Render
5 - Metal Gold
6 - Light Brown Render
7 - Dark Grey Render
8 - Selected Aluminium Window System with Spandrel Panel
9 - Mild Steel Gold Balustrade
10 - Precaste Concrete
11 - Gold Render



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Project Lead:	JM	**Date:**	
Drawn By:	Author	**Revision:**	
Job No.:	20053	**Status:**	S0
Purpose:	Planning		

Project: Proposed Site B & C Mixed Use Development
Location: Blanchardstown Town Centre, Coolmine, Dublin15
Client: Blanche Retail Nominee Limited

Drawing Title: Site B - South and West Elevations
Drawing No.: 20053-OMP-SB-XX-DR-A-2001

Source file: 20053-OMP-ZZ-ZZ-DR-A-0001.rvt



1 Site C - East Elevation
1 : 200

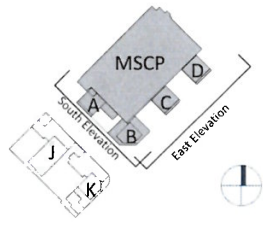


2 Site C - South Elevation
1 : 200

Site C - East and South Elevations

Material Legend

1 - Light Grey Brick
2 - Dark Grey Brick
3 - Red Brick
4 - Grey Brown Render
5 - Metal Gold
6 - Light Brown Render
7 - Dark Grey Render
8 - Selected Aluminium Window System with Spandrel Panel
9 - Mild Steel Gold Balustrade
10 - Precaste Concrete
11 - Gold Render



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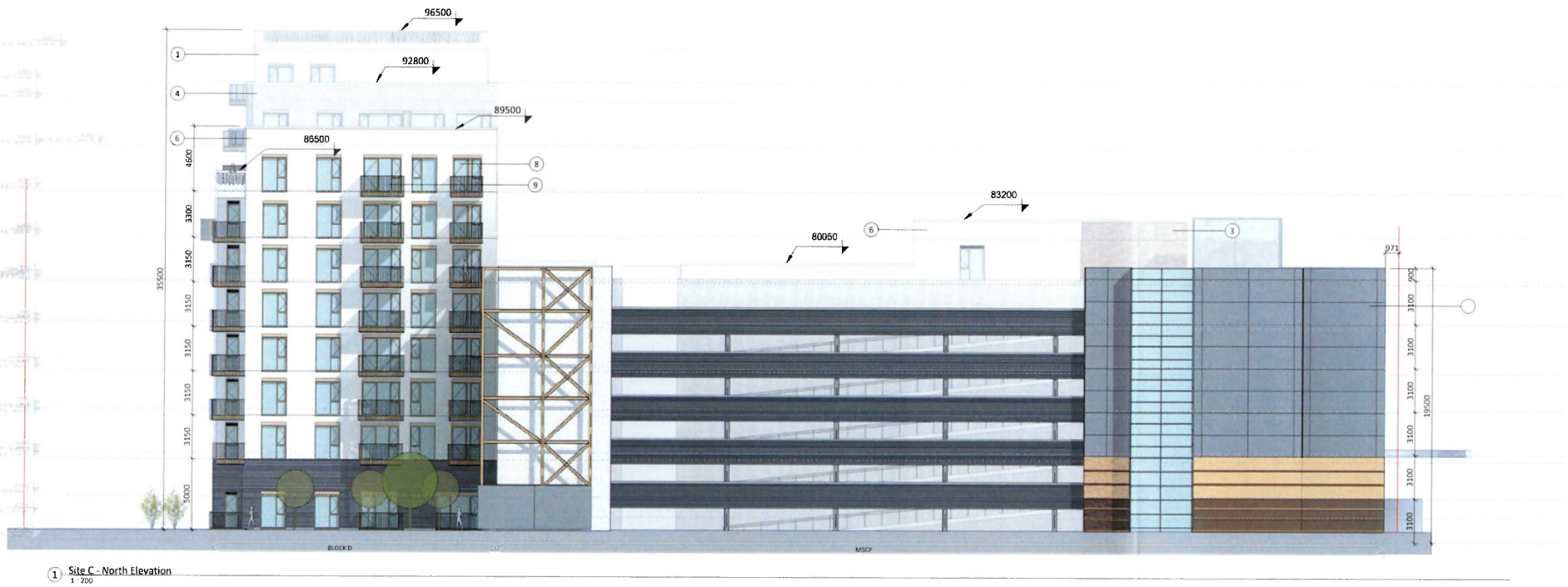
Project Code:	20053	Scale	As indicated
Project Lead:	JM	Date:	
Drawn By:	Author	Revision:	
Job No.:	20053	Status:	S0
Purpose:	Planning		

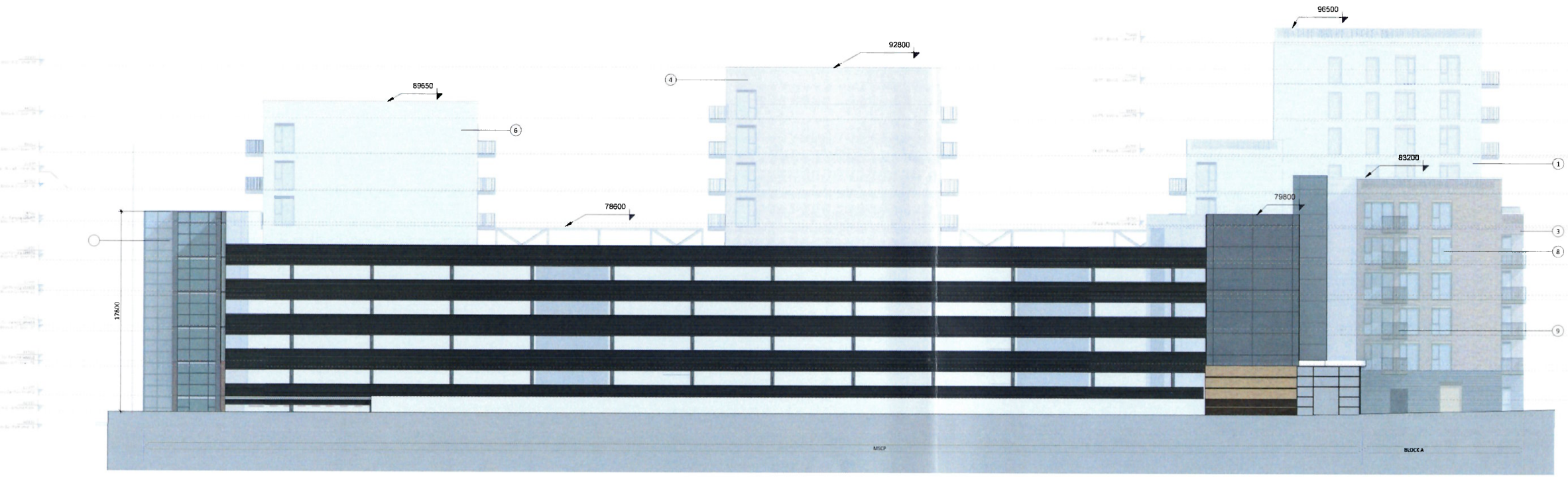
Project: Proposed Site B & C Mixed Use Development
Location: Blanchardstown Town Centre, Coolmine, Dublin15
Client: Blanche Retail Nominee Limited

Drawing Title: Site C - East and South Elevations
Drawing No.: 20053-OMP-SC-XX-DR-A-2000

Source file: 2053-OMP-ZZ-ZZ-DR-A-0001.rvt



1 Site C - North Elevation
1 : 200

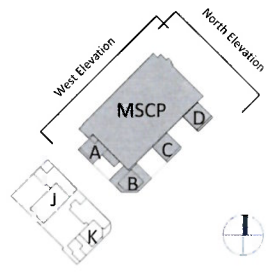


2 Site C - West Elevation1
1 : 200

Site C - West and North Elevations

Material Legend

1 - Light Grey Brick
2 - Dark Grey Brick
3 - Red Brick
4 - Grey Brown Render
5 - Metal Gold
6 - Light Brown Render
7 - Dark Grey Render
8 - Selected Aluminium Window System with Spandrel Panel
9 - Mild Steel Gold Balustrade
10- Precaste Concrete
11- Gold Render



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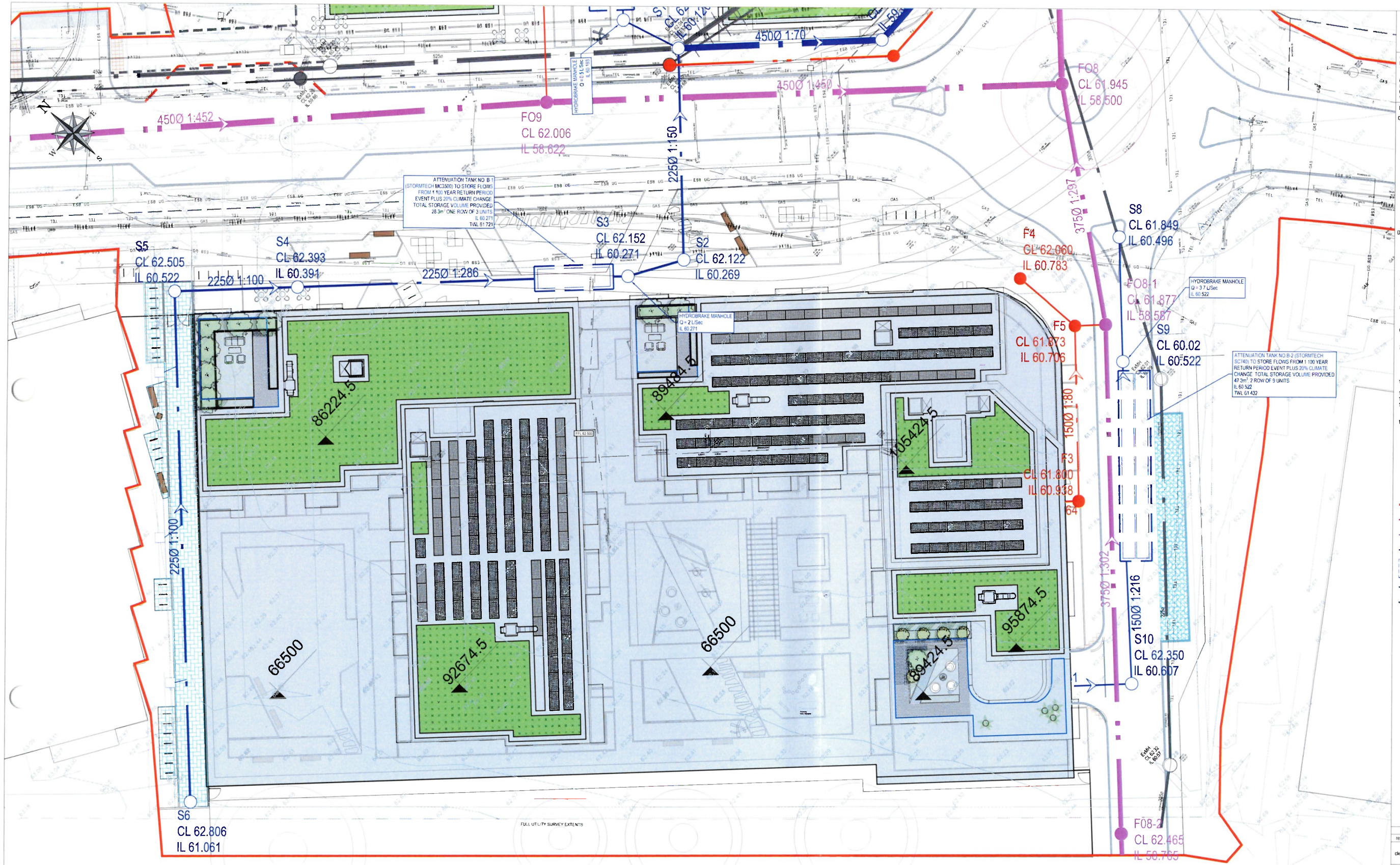
Project Lead:	JM	**Date:**	
Drawn By:	Author	**Revision:**	
Job No.:	20053	**Status:**	S0
Purpose:	Planning		

Project: Proposed Site B & C Mixed Use Development
Location: Blanchardstown Town Centre, Coolmine, Dublin15
Client: Blanche Retail Nominee Limited

Drawing Title: Site C - West and North Elevations
Drawing No.: 20053-OMP-SC-XX-DR-A-2001

Source file: 20053-OMP-ZZ-ZZ-DR-A-6001.rvt



ON ORIGINAL

0 5 10 15 20 30 40 50mm

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NOTES

GENERAL NOTES

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2. ALL DIMENSIONS IN METRES UNLESS SPECIFIED OTHERWISE
3. ALL CO-ORDINATES ARE TO IRISH TRANSVERSE MERCATOR
4. ALL LEVELS ARE TO ORDNANCE DATUM (MALIN HEAD)
5. ALL TEMPORARY TRAFFIC & OPERATIONS MANAGEMENT SHALL COMPLY FULLY WITH THE CIVIL ENGINEERING SPECIFICATION AND STANDARD CONSTRUCTION DETAILS
6. THE CONTRACTOR MUST LIAISE DIRECTLY WITH LOCAL AUTHORITY DEPARTMENTS AS DIRECTED IN THE CIVIL ENGINEERING SPECIFICATION AND STANDARD CONSTRUCTION DETAILS
7. ALL VEHICULAR & PEDESTRIAN, CYCLE & PRIVATE ACCESS ROUTES WITHIN AND SURROUNDING THE WORKS EXTENTS MUST BE MAINTAINED THROUGHOUT THE WORKS IN ACCORDANCE WITH THE CONTRACTORS APPROVED TEMPORARY TRAFFIC MANAGEMENT PLAN & CONSTRUCTION MANAGEMENT PLAN

DRAWING SPECIFIC NOTES

1. ALL DRAWINGS TO BE CHECKED BY CONTRACTOR ON SITE AND ENGINEER INFORMED OF DISCREPANCIES BEFORE WORK COMMENCES
2. CONTRACTOR SHALL SATISFY HIMSELF AS TO THE ACCURACY OF EXISTING DRAINAGE LEVELS & THE LOCATION OF EXISTING SERVICES ON SITE PRIOR TO COMMENCEMENT OF WORKS ON SITE
3. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE NRA SPECIFICATION FOR ROAD WORKS UNLESS NOTED OTHERWISE
4. MANHOLE COVER LEVELS ARE TO CONFORM WITH FINISHED ROAD AND PATH LEVELS
5. ALL SURFACE WATER DRAINAGE WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY'S CODE OF PRACTICE FOR DRAINAGE AND THE GDSDS
6. ALL FOUL DRAINAGE WORKS TO BE IN ACCORDANCE WITH IRISH WATERS' CODE OF PRACTICE FOR WASTEWATER SUPPLY AND WASTEWATER INFRASTRUCTURE STANDARD DETAILS
7. FOUL SEWERS TO BE CONCRETE PIPES (SPIGOT AND SOCKET JOINTS AND RUBBER RING FITTINGS COMPLYING WITH IS EN 1916) OR THERMOPLASTIC STRUCTURED WALL PIPES (COMPLYING WITH THE PROVISION OF IS EN 13476 AND WIS 4-35-01 2000) AND COMPLY WITH THE REQUIREMENTS OF THE IRISH WATER CODE OF PRACTICE
8. ALL SURFACE WATER SEWERS TO BE CLASS H CONCRETE TO EN1916 & IS 6 2004
11. SURFACE WATER COLLECTOR DRAINS 150mm DIA.
12. FOUL HOUSE CONNECTIONS TO BE 100mm DIA.
13. CONTRACTOR SHALL INSPECT THE ROUTE & CONFIRM LOCATIONS OF ALL TREES, FEATURES, ENTRANCES & ASPECTS IMPACTING CONSTRUCTION OF THE WORKS
14. NOTE THAT THE CONTRACTOR AND/OR ARCHITECT ARE RESPONSIBLE FOR CONNECTIONS INTO THE BUILDING

LEGEND:

- SITE BOUNDARY
- PROPOSED FOUL SEWER (F9 IL 99.99)
- STRATEGIC FOUL SEWER FOR PROPOSED DEVELOPMENT (F-Date IL 99.999)
- PROPOSED BASEMENT FOUL SEWER (99.99)
- PROPOSED ATTENUATION STORAGE TANK
- EXISTING SURFACE WATER (S1 IL 99.99)
- EXISTING FOUL SEWER (EnFS)
- PROPOSED ROAD GRADIENT (1:20)
- EXISTING LEVELS (57.15)
- PROPOSED LEVELS (57.15)
- FINISHED FLOOR LEVEL (FFL 99.99)
- PERMEABLE PAVING
- PROPOSED TREE PIT

rev	date	description	by	chkd
client approval		A - Approved		
		B - Approved with comments		
		C - Do not use		

suitability	issue purpose
S2 - INFORMATION	FOR PLANNING

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Chartered & Structural Engineers
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PHONE: +353 21 2124530

WATERFORD OFFICE: Suite B5 The Atrium, Maritana Gate, Canada Street, Waterford. X91 W226
PHONE: +353 51 309 500

project ref
BLANCHARDSTOWN SITE B AND SITE C MIXED USE DEVELOPMENT

drawing title
SITE B SITE SERVICES LAYOUT

architect
OMP

designed by	author	scale	sheet size
BK	JVS	1:200	A1

drawing no.	revision
210048-DBFL-CS-SP-DR-C-1311	P0

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0 5 10 15 20 30 40 50mm

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2. ALL DIMENSIONS IN METRES UNLESS SPECIFIED OTHERWISE.
3. ALL CO-ORDINATES ARE TO IRISH TRANSVERSE MERCATOR.
4. ALL LEVELS ARE TO ORDNANCE DATUM (MALIN HEAD).
5. ALL TEMPORARY TRAFFIC & OPERATIONS MANAGEMENT SHALL COMPLY FULLY WITH THE CIVIL ENGINEERING SPECIFICATION AND STANDARD CONSTRUCTION DETAILS
6. THE CONTRACTOR MUST LIAISE DIRECTLY WITH LOCAL AUTHORITY DEPARTMENTS AS DIRECTED IN THE CIVIL ENGINEERING SPECIFICATION AND STANDARD CONSTRUCTION DETAILS
7. ALL VEHICULAR & PEDESTRIAN, CYCLE & PRIVATE ACCESS ROUTES WITHIN AND SURROUNDING THE WORKS EXTENTS MUST BE MAINTAINED THROUGHOUT THE WORKS IN ACCORDANCE WITH THE CONTRACTORS APPROVED TEMPORARY TRAFFIC MANAGEMENT PLAN & CONSTRUCTION MANAGEMENT PLAN.

DRAWING SPECIFIC NOTES

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4. MANHOLE COVER LEVELS ARE TO CONFORM WITH FINISHED ROAD AND PATH LEVELS
5. ALL SURFACE WATER DRAINAGE WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY'S CODE OF PRACTICE FOR DRAINAGE AND THE GDSDS
6. ALL FOUL DRAINAGE WORKS TO BE IN ACCORDANCE WITH IRISH WATERS' CODE OF PRACTICE FOR WASTEWATER SUPPLY AND WASTEWATER INFRASTRUCTURE STANDARD DETAILS
7. FOUL SEWERS TO BE CONCRETE PIPES (SPIGOT AND SOCKET JOINTS AND RUBBER RING FITTINGS COMPLYING WITH IS EN 1916) OR THERMOPLASTIC STRUCTURED WALL PIPES (COMPLYING WITH THE PROVISION OF IS EN 13476 AND WIS 4-35-01 2000) AND COMPLY WITH THE REQUIREMENTS OF THE IRISH WATER CODE OF PRACTICE
10. ALL SURFACE WATER SEWERS TO BE CLASS H CONCRETE TO EN1916 & IS 6 2004.
11. SURFACE WATER COLLECTOR DRAINS 150mm DIA.
12. FOUL HOUSE CONNECTIONS TO BE 100mm DIA.
13. CONTRACTOR SHALL INSPECT THE ROUTE & CONFIRM LOCATIONS OF ALL TREES, FEATURES, ENTRANCES & ASPECTS IMPACTING CONSTRUCTION OF THE WORKS
14. NOTE THAT THE CONTRACTOR AND/OR ARCHITECT ARE RESPONSIBLE FOR CONNECTIONS INTO THE BUILDING

LEGEND:

- SITE BOUNDARY
- PROPOSED FOUL SEWER (F9, IL 99.99)
- STRATEGIC FOUL SEWER FOR PROPOSED DEVELOPMENT UNDERCROFT SURFACE DRAINAGE (DISCHARGE TO FOUL VIA INTERCEPTOR) (99.99)
- PROPOSED ATTENUATION STORAGE TANK
- EXISTING SURFACE WATER (EXSW)
- EXISTING FOUL SEWER (EXFS)
- PROPOSED ROAD GRADIENT (1:20)
- EXISTING LEVELS (57.15)
- PROPOSED LEVELS (57.15)
- FINISHED FLOOR LEVEL (FFL 99.99)
- PERMEABLE PAVING
- PROPOSED TREE PIT

1:452

FFL 62.000

82299.5

HYDROBRAKE MANHOLE
Q = 0.5 L/Sec
IL 60.193

ATTENUATION TANK NO. C-1 (STORMTECH SC740) TO STORE FLOWS FROM 1:100 YEAR RETURN PERIOD EVENT PLUS 20% CLIMATE CHANGE. TOTAL STORAGE VOLUME PROVIDED 18m³. 3 ROW OF 2 UNITS
IL 60.193
TWL 61.253

FO9
CL 62.0
IL 58.62

225Ø 1:500

98150

:150

S1
CL 62.035
IL 60.120

450Ø 1:76

78750

FFL 62.000

85574.5

S18
CL 61.793
IL 59.810

450Ø 1:72

S19
CL 61.600
IL 59.555

450Ø 1:110

225Ø 1:76

S20
CL 61.670
IL 59.440

ATTENUATION TANK NO. C-2 (STORMTECH SC740) TO STORE FLOWS FROM 1:100 YEAR RETURN PERIOD EVENT PLUS 20% CLIMATE CHANGE. TOTAL STORAGE VOLUME PROVIDED 13.9m³. 1 ROW OF 4 UNITS
IL 60.193
TWL 61.253

FFL 62.000

91724.5

FFL 62.000

88571

FFL 62.000

HYDROBRAKE MANHOLE
Q = 0.5 L/Sec
IL 58.709

225Ø 1:500

225Ø 1:300

225Ø 1:500

450Ø 1:451

450Ø 1:451

450Ø 1:445

450Ø 1:402

FO8
CL 61.945
IL 58.500

FO7
CL 61.304
IL 58.381

FO6
CL 60.996
IL 58.286

FO5
CL 60.821
IL 58.231

FO4
CL 60.683
IL 58.192

FULL UTILITY SURVEY EXTENTS

rev	date	description	by	chkd
client approval		A - Approved B - Approved with comments C - Do not use		

suitability: S2 - INFORMATION
issue purpose: FOR PLANNING

DBFL Consulting Engineers
Civil, Structural & Traffic Engineers
www.dbfl.ie

DUBLIN OFFICE: Ormond House Upper Ormond Quay Dublin 7 D07 W704
PHONE +353 1 690 4000

CORK OFFICE: 14 South Mall Cork T12 CT51
PHONE +353 21 2024700

WATERFORD OFFICE: Suite B5 The Atrium, Maritana Gate, Canada Street, Waterford X91 W926
PHONE +353 51 309 500

project ref:
BLANCHARDSTOWN SITE B AND SITE C MIXED USE DEVELOPMENT

drawing title:
SITE C SITE SERVICES LAYOUT

architect:
OMP

designed by	author	scale	sheet size
BK	JVS	1:200	A1

drawing no: 210048-DBFL-CS-SP-DR-C-1321
revision: P0

ON ORIGINAL

0 5 10 15 20 30 40 50mm

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NOTES:

GENERAL NOTES:

1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CIVIL ENGINEERING SPECIFICATION AND STANDARD CONSTRUCTION DETAILS.
2. ALL DIMENSIONS IN METRES UNLESS SPECIFIED OTHERWISE
3. ALL CO-ORDINATES ARE TO IRISH TRANSVERSE MERCATOR
4. ALL LEVELS ARE TO ORDNANCE DATUM (MALIN HEAD).
5. ALL TEMPORARY TRAFFIC & OPERATIONS MANAGEMENT SHALL COMPLY FULLY WITH THE CIVIL ENGINEERING SPECIFICATION AND STANDARD CONSTRUCTION DETAILS
6. THE CONTRACTOR MUST LIAISE DIRECTLY WITH LOCAL AUTHORITY DEPARTMENTS AS DIRECTED IN THE CIVIL ENGINEERING SPECIFICATION AND STANDARD CONSTRUCTION DETAILS.
7. ALL VEHICULAR & PEDESTRIAN, CYCLE & PRIVATE ACCESS ROUTES WITHIN AND SURROUNDING THE WORKS EXTENTS MUST BE MAINTAINED THROUGHOUT THE WORKS IN ACCORDANCE WITH THE CONTRACTORS APPROVED TEMPORARY TRAFFIC MANAGEMENT PLAN & CONSTRUCTION MANAGEMENT PLAN

DRAWING SPECIFIC NOTES

1. ALL DRAWINGS TO BE CHECKED BY CONTRACTOR ON SITE AND ENGINEER INFORMED OF DISCREPANCIES BEFORE WORK COMMENCES
2. CONTRACTOR SHALL SATISFY HIMSELF AS TO THE ACCURACY OF EXISTING DRAINAGE LEVELS & THE LOCATION OF EXISTING SERVICES ON SITE PRIOR TO COMMENCEMENT OF WORKS ON SITE
3. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE NRA SPECIFICATION FOR ROAD WORKS UNLESS NOTED OTHERWISE
4. MANHOLE COVER LEVELS ARE TO CONFORM WITH FINISHED ROAD AND PATH LEVELS
5. ALL SURFACE WATER DRAINAGE WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY'S CODE OF PRACTICE FOR DRAINAGE AND THE GDSDS
6. ALL FOUL DRAINAGE WORKS TO BE IN ACCORDANCE WITH IRISH WATERS CODE OF PRACTICE FOR WASTEWATER SUPPLY AND WASTEWATER INFRASTRUCTURE STANDARD DETAILS
7. FOUL SEWERS TO BE CONCRETE PIPES (SPIGOT AND SOCKET JOINTS AND RUBBER RING FITTINGS COMPLYING WITH IS EN 1916) OR THERMOPLASTIC STRUCTURED WALL PIPES (COMPLYING WITH THE PROVISION OF IS EN 13476 AND WIS 4-35-01 2009) AND COMPLY WITH THE REQUIREMENTS OF THE IRISH WATER CODE OF PRACTICE
8. ALL SURFACE WATER SEWERS TO BE CLASS H CONCRETE TO EN1916 & S 6 2004
9. SURFACE WATER COLLECTOR DRAINS 150mm DIA
10. FOUL HOUSE CONNECTIONS TO BE 100mm DIA
11. CONTRACTOR SHALL INSPECT THE ROUTE & CONFIRM LOCATIONS OF ALL TREES, FEATURES, ENTRANCES & ASPECTS IMPACTING CONSTRUCTION OF THE WORKS
12. NOTE THAT THE CONTRACTOR AND/OR ARCHITECT ARE RESPONSIBLE FOR CONNECTIONS INTO THE BUILDING

LEGEND:

- SITE A BOUNDARY
- PROPOSED GREEN ROOF
- PROPOSED BLUE ROOF
- CONVENTIONAL NON SUDS ROOF
- PERMEABLE PAVING
- PROPOSED ATTENUATION STORAGE TANK
- 59 / L 99.99 — PROPOSED SURFACE WATER DRAINAGE

rev	date	description	by	chkd
client approval		A - Approved B - Approved with comments C - Do not use		
suitability		issue purpose		
S2 - INFORMATION		ISSUEPURPOSE		

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PHONE +353 51 309 500

project ref

BLANCHARDSTOWN SITE B AND SITE C MIXED USE DEVELOPMENT

drawing title

SUDS AND SURFACE WATER CATCHMENT AREAS

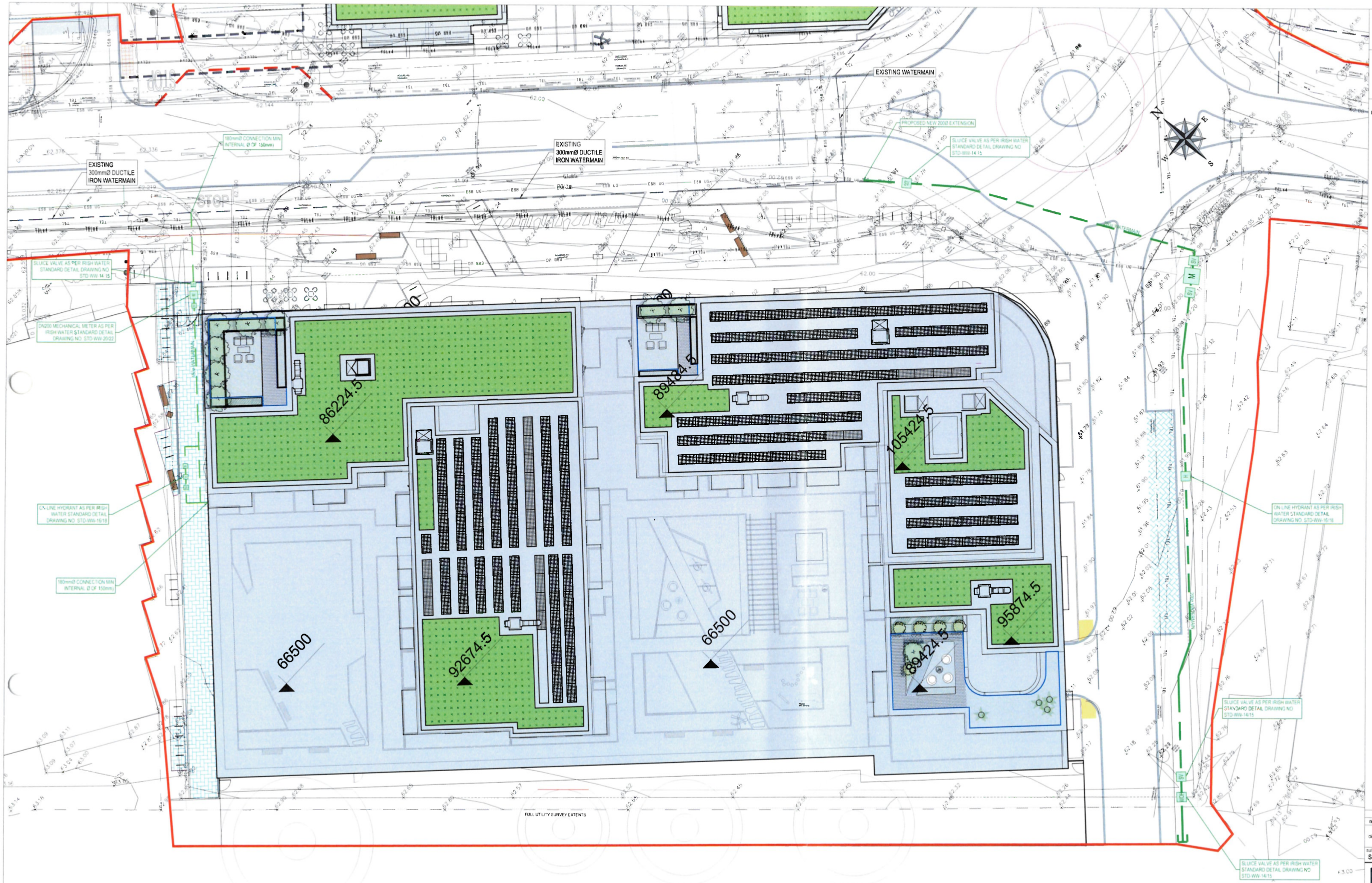
architect

OMP

designed by	author	scale	sheet size
BK	JVS	1:300	A1

drawing no. 210048-DBFL-SW-SP-DR-C-3005

revision P0



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NOTES

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DRAWING SPECIFIC NOTES

1. WATERMAIN INSTALLATION AND ALL WATER SUPPLY WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF IRISH WATERS CODE OF PRACTICE FOR WATER SUPPLY AND WATER INFRASTRUCTURE STANDARD DETAILS
2. WATERMAINS (AND SERVICE CONNECTIONS) TO BE PE-100 SDR-17 AND SHALL CONFORM TO IS EN 12201 (PART 1, PART 2 & PART 3)
3. AT 90 DEG TURNS USE 2 No 45 DEG BENDS
4. COVER TO WATERMAIN TO BE 900mm
5. CONNECTION BETWEEN EXISTING AND PROPOSED WATERMAINS TO BE CARRIED OUT IN ACCORDANCE WITH IRISH WATER STANDARD DETAILS STD-W-03 TO STD-W-15
6. ANCHOR BLOCKS TO BE POSITIONED AT DEAD ENDS, TEES BENDS AND AT EACH SIDE OF HYDRANTS AND VALVES IN ACCORDANCE WITH THE REQUIREMENTS OF IRISH WATER STANDARD DETAIL STD-W-28 (WATER MAIN THRUST AND SUPPORT BLOCKS)
7. HYDRANT OUTLET TO BE 200mm BELOW GROUND LEVEL UNLESS REQUESTED OTHERWISE
8. WHERE COVER TO PIPE IS LESS THAN 900mm IN GREEN AREAS AND 1200mm IN TRAFFICKED AREAS, ENCASE PIPE IN NEW 150mm CONCRETE WITH MOVEMENT JOINTS
9. NOTE THAT THE CONTRACTOR IS RESPONSIBLE FOR CONNECTIONS INTO THE BUILDING
10. CONNECTION TO INDIVIDUAL HOUSES IN ACCORDANCE WITH IRISH WATER STD-W-03
11. CONTRACTOR SHALL SATISFY THEMSELVES AS TO THE ACCURACY OF EXISTING SERVICES INFORMATION AND THE LOCATION OF EXISTING SERVICES ON SITE PRIOR TO COMMENCING INSTALLATION OF WATERMAINS
12. INSTALLATION OF SLUICE VALVES AND HYDRANTS SHALL BE IN ACCORDANCE WITH IRISH WATER'S STANDARD DETAILS STD-W-14 TO STD-W-19
13. MARKER POSTS AND PLATES ARE TO BE PROVIDED IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL STD-W-27
14. CONNECTION TO EXISTING WATERMAINS TO BE COORDINATED BY THE CONTRACTOR WITH IRISH WATER AND/OR THE LOCAL AUTHORITY
15. CONTRACTOR TO LIASE WITH IRISH WATER AND / OR THE LOCAL AUTHORITY AS REQUIRED REGARDING CLEANSING AND STERILISATION OF WATERMAINS

LEGEND:

- SITE BOUNDARY
- EXISTING WATERMAIN
- WASHOUT HYDRANT AS PER IRISH WATER STD-W-30A
- SLUICE VALVE AS PER IRISH WATER STD-W-15
- HYDRANT AS PER IRISH WATER STD-W-18
- PROPOSED WATERMAIN
- PROPOSED WATERMAIN DIVERSION
- SECTION OF WATERMAIN TO BE DIVERTED
- AIR VALVE AS PER IRISH WATER STD-W-22
- WATER METER AS PER IRISH WATER STD-W-26
- BOUNDARY BOX&CONNECTION AS PER STD-W-03

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		B - Approved with comments		
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suitability: S2 - INFORMATION
issue purpose: FOR PLANNING

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project ref:
BLANCHARDSTOWN SITE B AND SITE C MIXED USE DEVELOPMENT

drawing title:
SITE B WATERMAIN LAYOUT

architect:
OMP

designed by	author	scale	sheet size
BK	JVS	1:200	A1

drawing no: 210048-DBFL-WM-SP-DR-C-1306
revision: P0



ON ORIGINAL

0 5 10 15 20 30 40 50mm

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NOTES

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LEGEND:

- SITE BOUNDARY
- WATERMAIN SV — EXISTING WATERMAIN
- WO — WASHOUT HYDRANT AS PER IRISH WATER STD-W-30A
- SV — SLUICE VALVE AS PER IRISH WATER STD-W-15
- H — HYDRANT AS PER IRISH WATER STD-W-18
- PROPOSED WATERMAIN
- PROPOSED WATERMAIN DIVERSION
- SECTION OF WATERMAIN TO BE DIVERTED
- AV — AIR VALVE AS PER IRISH WATER STD-W-22
- M — WATER METER AS PER IRISH WATER STD-W-26
- BOUNDARY BOX&CONNECTION AS PER STD-W-03

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project ref
BLANCHARDSTOWN SITE B AND SITE C MIXED USE DEVELOPMENT

drawing title
SITE C WATERMAIN LAYOUT

architect
OMP

designed by	author	scale	sheet size
BK	JVS	1:200	A1

drawing no: 210048-DBFL-WM-SP-DR-C-1307
revision: P0

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4. All dimensions to be checked on site.
5. This drawing is to be read in conjunction with relevant consultants drawings.

KEY — PROPOSED HARD LANDSCAPE

- Site Boundary
- Paving Type 1. Product: Fresco Modular Black Paving. Supplier: Tobermore or Similar Approved. Size/Colour: 308x600x60mm /Silver Mid Grey and Granite Mix
- Paving Type 2. Product: Sienna Paving Setts. Supplier: Tobermore or Similar Approved. Size/Colour: 200x100x60mm/Graphite
- Paving Type 3. Product: Concrete Paving Setts. Supplier: Tobermore or Similar Approved. Size/Colour: 200x100x60mm/Silver
- Paving Type 4. Product: Mayfair Flags. Supplier: Tobermore or SimiIar Approved. Size/Colour: 450x450x50mm/Sandstone
- Paving Type 8. Product: Self Binding Gravel. Supplier: Brendon or Similar Approved. Size/Colour: 20/6x10/3x50mm/Silver
- Paving Type 9. Product: Bracewe Flags. Supplier: Marshalls or Similar Approved. Size/Colour: 900x450x50mm/Silver
- Paving Type 10. Product: Stepping stones. Reconstituted Stone
- Edging Type 1. Product: Raised kerb
- Edging Type 3. Product: Flush metal edge. Brushed Aluminium
- Edging Type 4. Product: Metal Planters. Mild Steel Galvanised and PCC RAL TBC
- Furniture Type 1. Product: Bench. Hardwood and Mild Steel Galvanised and PCC RAL TBC
- Furniture Type 8. Product: Pergola. Mild Steel Galvanised and PCC RAL TBC
- Furniture Type 9. Product: Grill
- Furniture Type 10. Product: Fire pit table
- Furniture Type 11. Product: Outdoor table and chairs
- Furniture Type 12. Product: Outdoor seating area
- Furniture Type 13. Product: Outdoor seating chair
- Furniture Type 14. Product: Outdoor hanging seat
- Furniture Type 15. Product: Work from home pod
- Furniture Type 7. Product: Metal Gate. Height: 1.2 m. Mild Steel Galvanised and PCC RAL TBC
- Boundary Type 2. Product: Metal Vertical Bar Railing. Height: 1.2 m. Mild Steel Galvanised and PCC RAL TBC
- PV panels to Engineer's specifications

KEY — PROPOSED PLAY

- Play Type 1. Product: Web Traverse
- Play Type 2. Product: Timber Stepping logs
- Play Type 3. Product: Balance Beam
- Play Type 4. Product: Granite Boulder

KEY — PROPOSED SOFT LANDSCAPE

- Proposed Hedge Planting. Refer to Soft Landscape Strategy
- Proposed Shrub Planting. Refer to Soft Landscape Strategy
- Proposed Herbaceous Planting. Refer to Soft Landscape Strategy
- Proposed Lawn. Product: Quality Lawn Turf. Supplier: Rolmen Medallion or Similar Approved
- Proposed Understorey Planting. Refer to Soft Landscape Strategy
- Proposed Climbers Planting. Refer to Soft Landscape Strategy
- Proposed Semi-Mature Trees. Refer to Soft Landscape Strategy
- Proposed Multi-Stem Trees. Refer to Soft Landscape Strategy
- Proposed Specimen Shrubs. Refer to Soft Landscape Strategy
- Proposed Sedum Roofs. Product: Refer to Planting Schedule. Refer to Soft Landscape Strategy

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rev	details	by	date
P07	Issued for Planning	HvK	03.03.2022
P06	Minor layout amendments	LP	28.01.2022
P05	Minor layout amendments	LP	14.01.2022
P04	Minor layout amendments		.2022
P03	Minor layout amendments		021
P02	Layout amendments		021
P01	Issued for information		10.2021
P06	Issued for planning	HvK	04.03.2022

north

Scale m 0 2 4 6 8 10 12 14 16 18 20
1:200

Project
Proposed Site B & C Mixed Use Development
Coolmine, Dublin 15

Drawing
Combined Illustrative Masterplan
Podium, Roof Terraces and Roofscape

Scale	Date	Checked By	Drawn By
1:200@A0	18.10.21	LP	LP

Drawing No: C0131 L1008
Revision: P06
Purpose of Issue: P
P = design information / P = planning / T = tender / C = construction / B = as built
Drawing sheet size - A0

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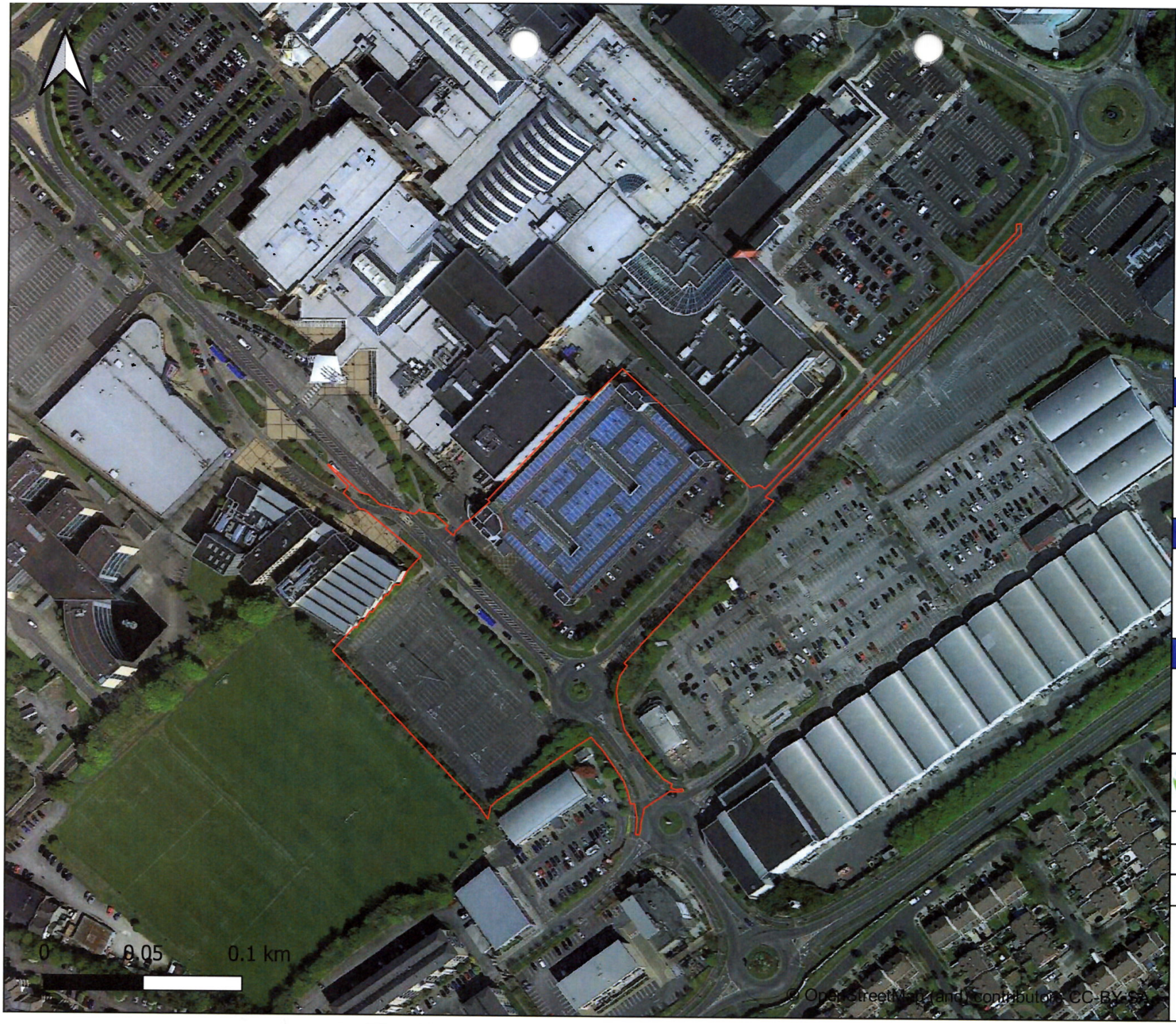

Legend:

Site Boundary

Project:

EIAR for Proposed Mixed-use Development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 15

Client:

BLANCHE RETAIL NOMINEE LIMITED

Title:

Site Layout

enviroguide consulting
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info@enviroguide.ie
t +353 (0)1 566 4738

Drawn By: GC	Projection: IRENET95 / Irish Transverse Mercator
Checked: CC	
Date: 07/03/2022	Scale @ A4: 1:2500

Notes:

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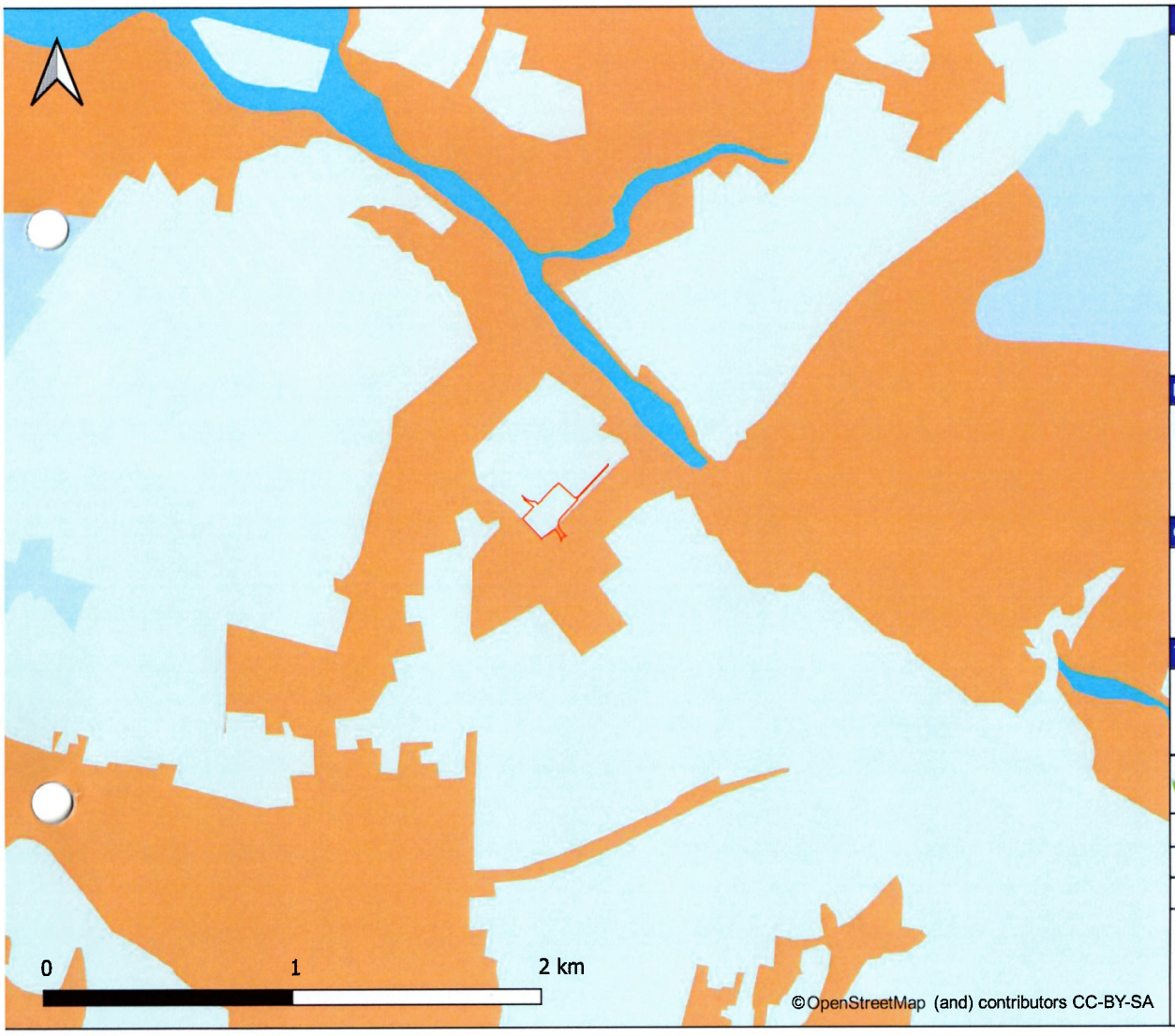

Legend:

Site Boundary

Soils

05RIV - River

0700d - Straffan

1000x - Elton

Urban

Project:

EIAR for Proposed Mixed-use Development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 15

Client:

BLANCHE RETAIL NOMINEE LIMITED

Title:

Teagasc Soils

enviroguide consulting

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Checked: CC	
Date: 07/03/2022	Scale @ A4: 1:20000

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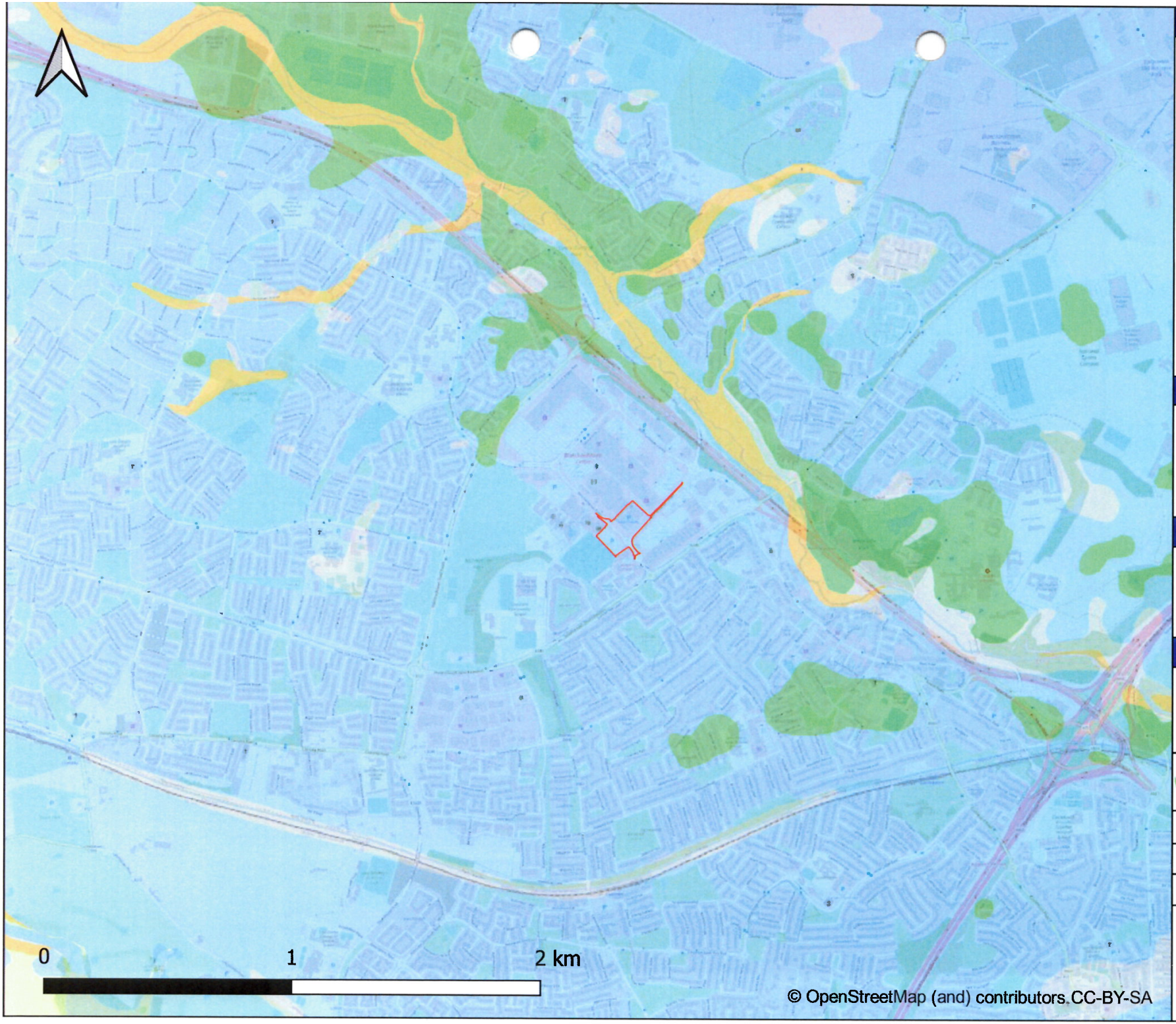

Legend:

Site Boundary

Quaternary Geology

- A, Alluvium
- Ag, Alluvium (gravelly)
- GLs, Gravels derived from limestones
- Rck, Bedrock outcrop or subcrop
- TLs, Till derived from limestones

Project:

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Title:

Quaternary Soils

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Checked: CC	
Date: 07/03/2022	Scale @ A4: 1:20000

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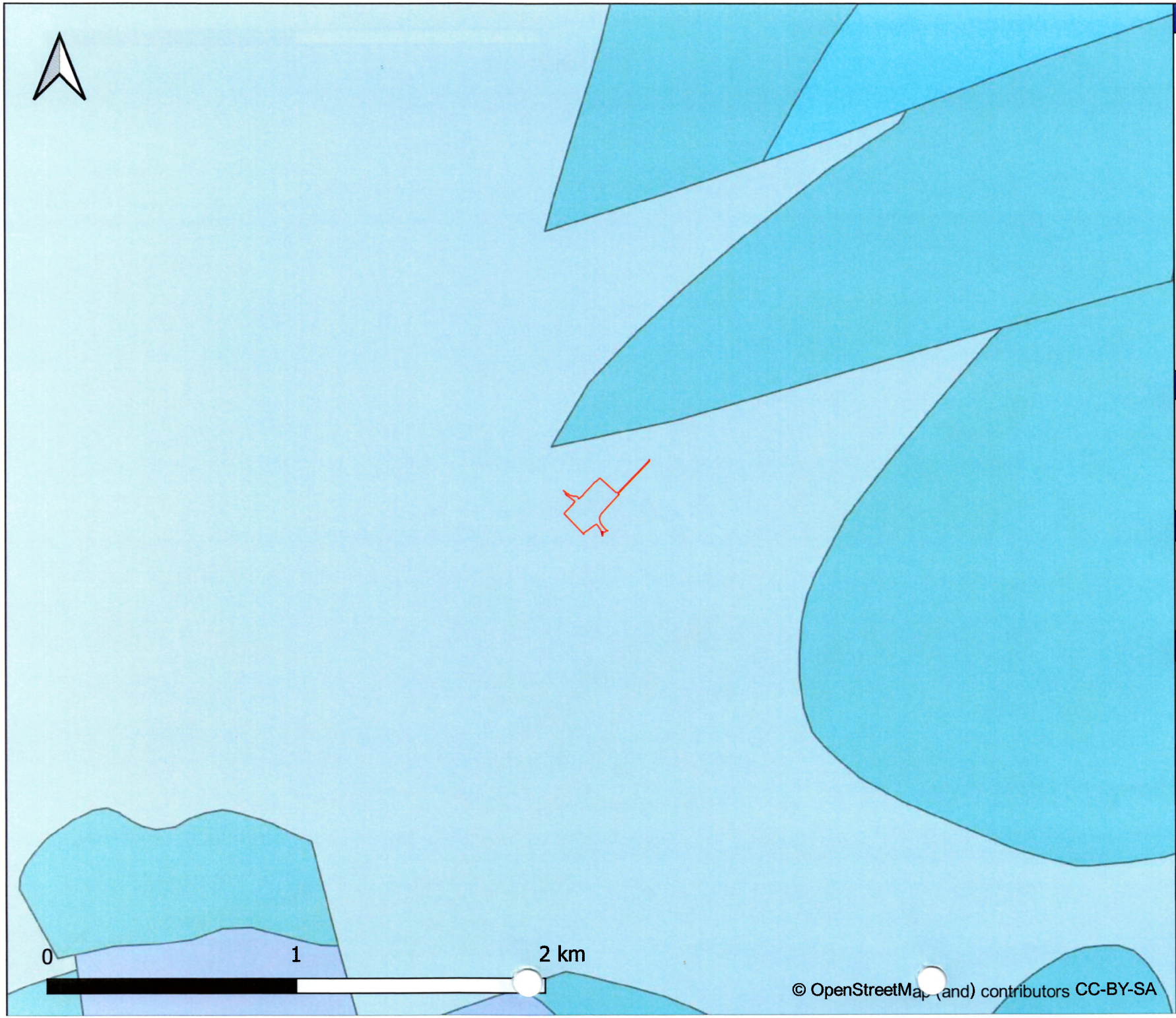

Legend:

Site Boundary

Bedrock Geology

- Lucan Formation
- Malahide Formation
- Tober Colleen Formation
- Waulsortian Limestones

Project:

EIAR for Proposed Mixed-use Development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 15

Client:

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Title:

Bedrock Geology

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Checked: CC	
Date: 07/03/2022	Scale @ A4: 1:20000

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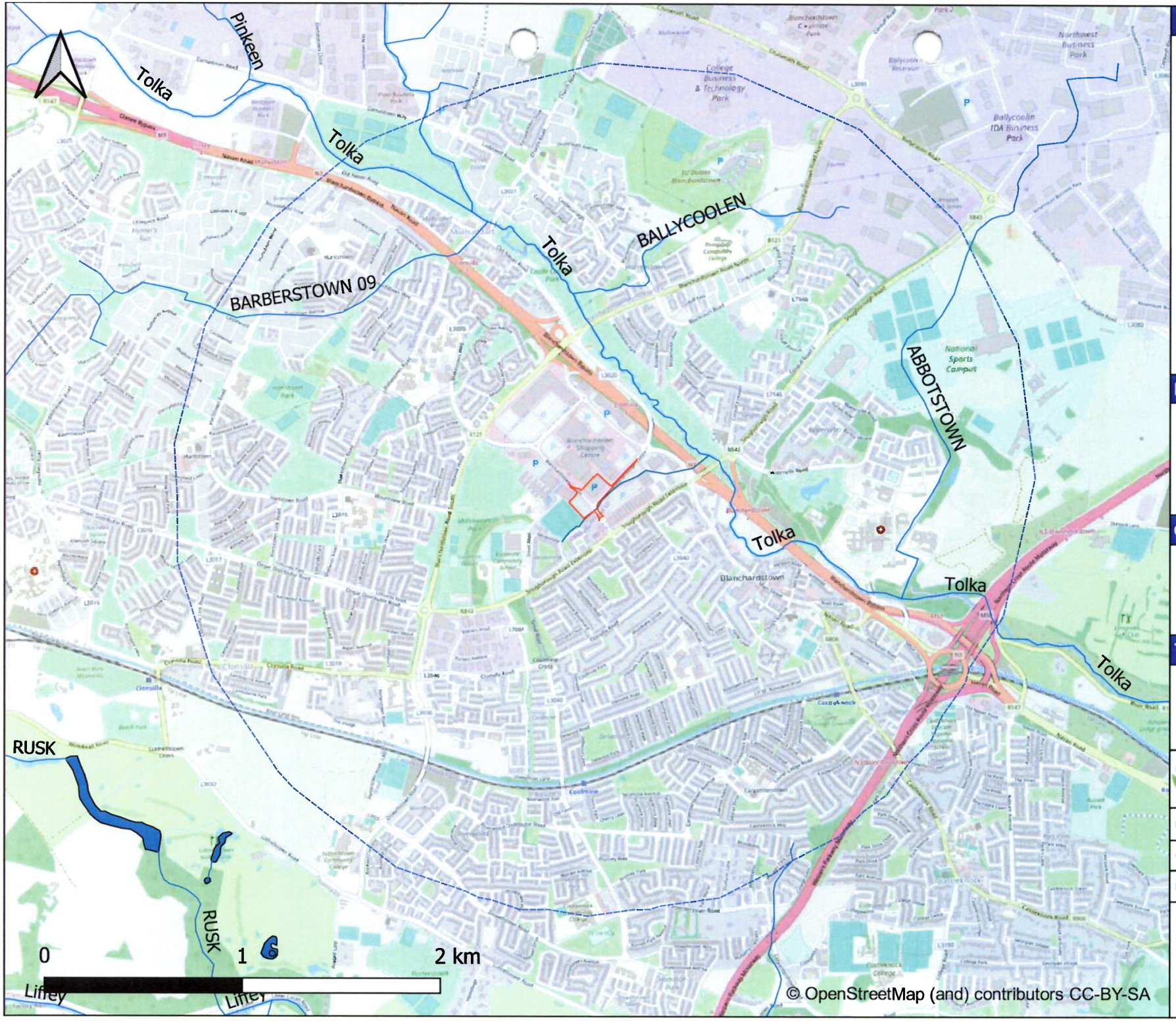

Legend:

- Site Boundary
- 2km Site Buffer
- Rivers and Streams
- Lakes
- Approximate Location of Unnamed Stream (OSI, 2021 Historical Mapping)

Project:

EIAR for Proposed Mixed-use Development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 15

Client:

BLANCHE RETAIL NOMINEE LIMITED

Title:

Local Surface Water Features

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Date: 07/03/2022	Scale @ A4: 1:25000

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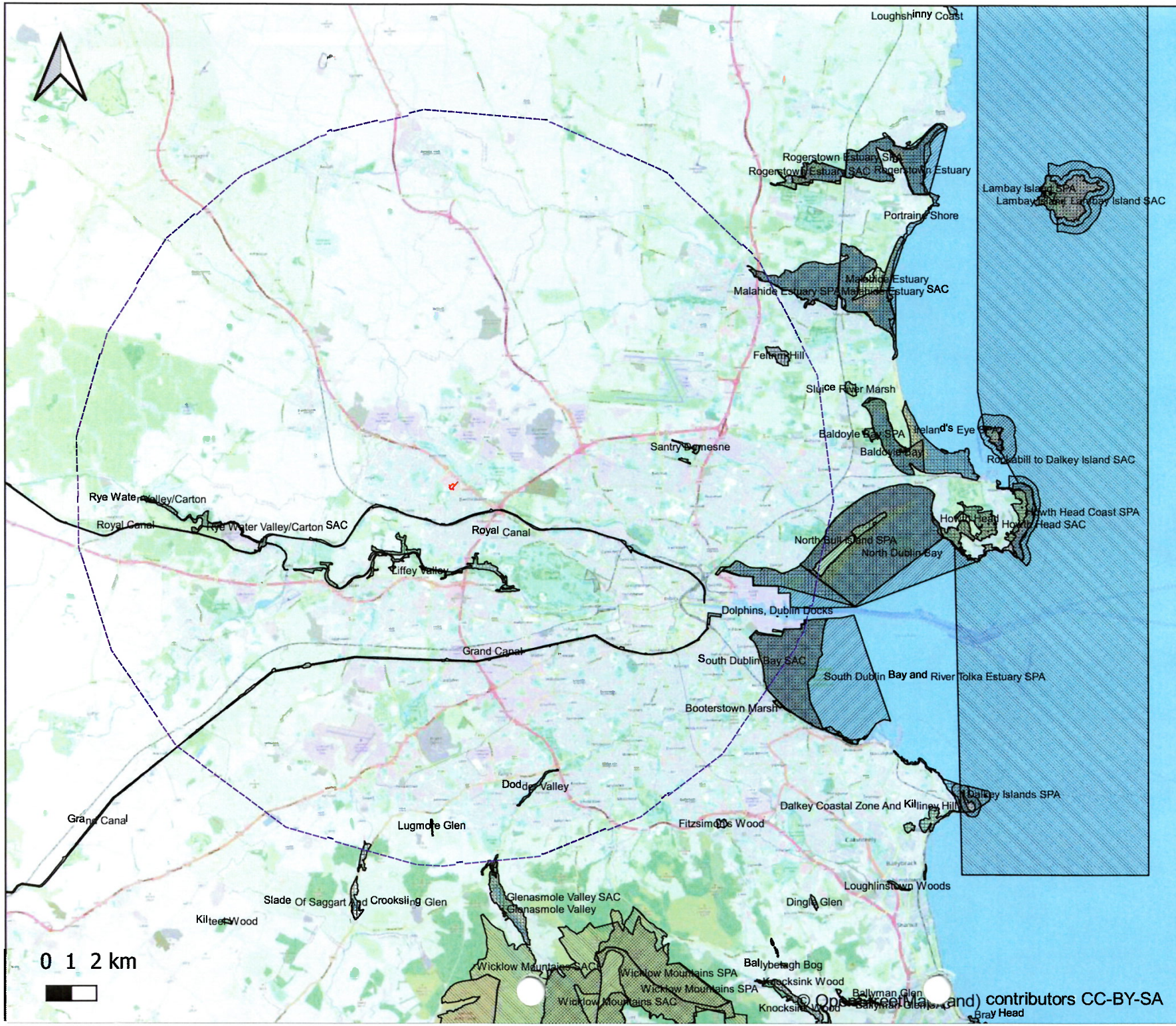

Legend:

- Site Boundary
- 15km Site Buffer
- SPA
- SAC
- pNHA

Project:

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Client:

BLANCHE RETAIL NOMINEE LIMITED

Title:

Designated and Protected Areas

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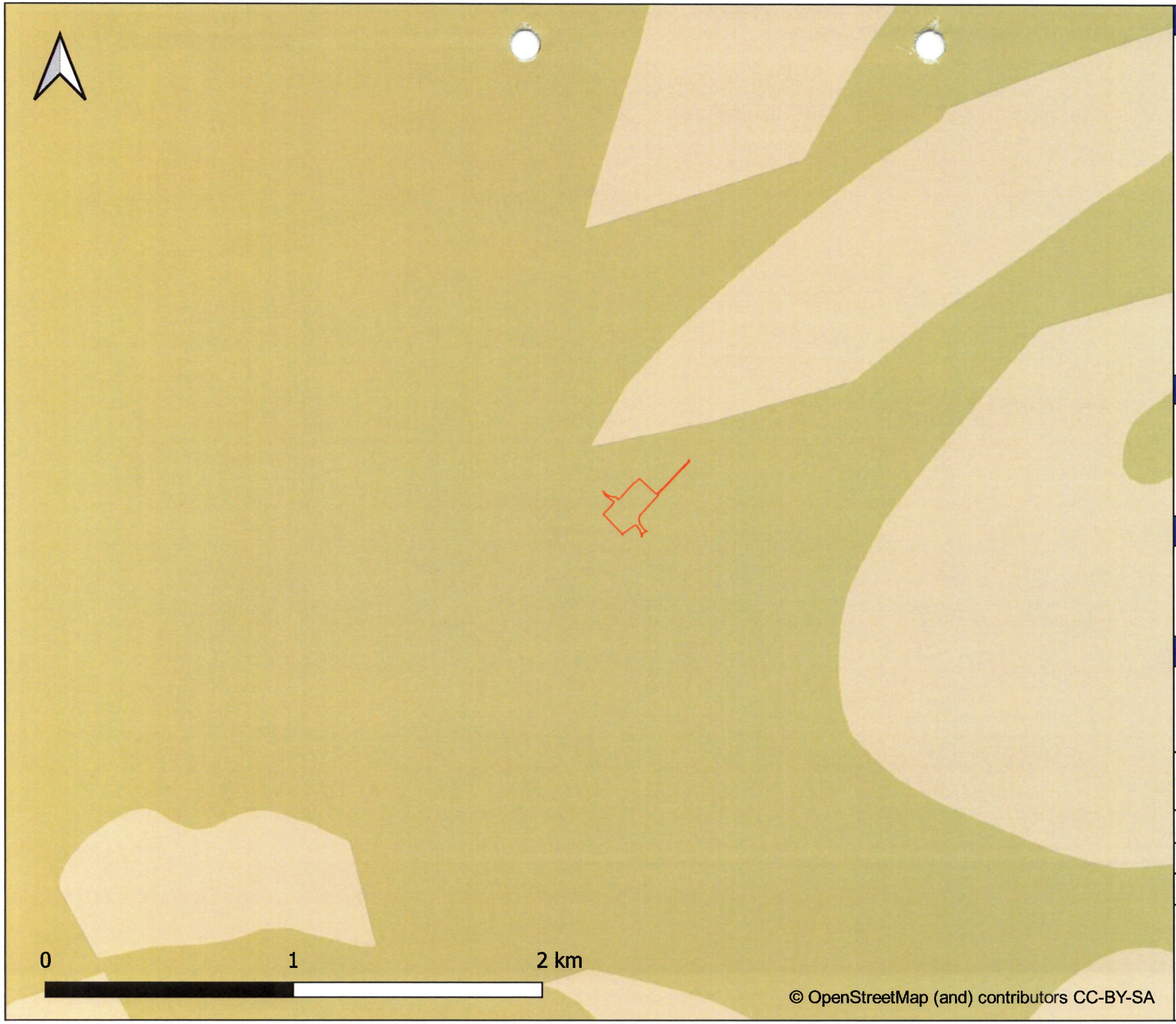
Drawn By: GC	Projection: IRENET95 / Irish Transverse Mercator
Checked: CC	
Date: 07/03/2022	Scale @ A4: 1:200000

Notes:

Site boundaries shown are for illustration purposes only and do not represent legal or exact boundaries



Legend:

Site Boundary

Bedrock Aquifer

LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones

PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones

Bedrock Aquifer Fault

Project:

EIAR for Proposed Mixed-use Development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 15

Client:

BLANCHE RETAIL NOMINEE LIMITED

Title:

Bedrock Aquifer

enviroguide consulting
3D Core C, Block 71, The Plaza
Park West, Dublin 12 D12F8TN
www.enviroguide.ie
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+353 (0)1 565 4730

Drawn By: GC	**Projection:** IRENET95 / Irish Transverse Mercator
Checked: CC	
Date: 07/03/2022	**Scale @ A4: 1:20000**

Notes:

Site boundaries shown are for illustration purposes only and do not represent legal or exact boundaries



Legend:

- Site Boundary

Groundwater Vulnerability

- Rock at or near Surface or Karst
- Extreme
- High
- Moderate
- Low
- Water

Project:

EIAR for Proposed Mixed-use Development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 15

Client:

BLANCHE RETAIL NOMINEE LIMITED

Title:

Groundwater Vulnerability

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Checked: CC	
Date: 07/03/2022	Scale @ A4: 1:20000

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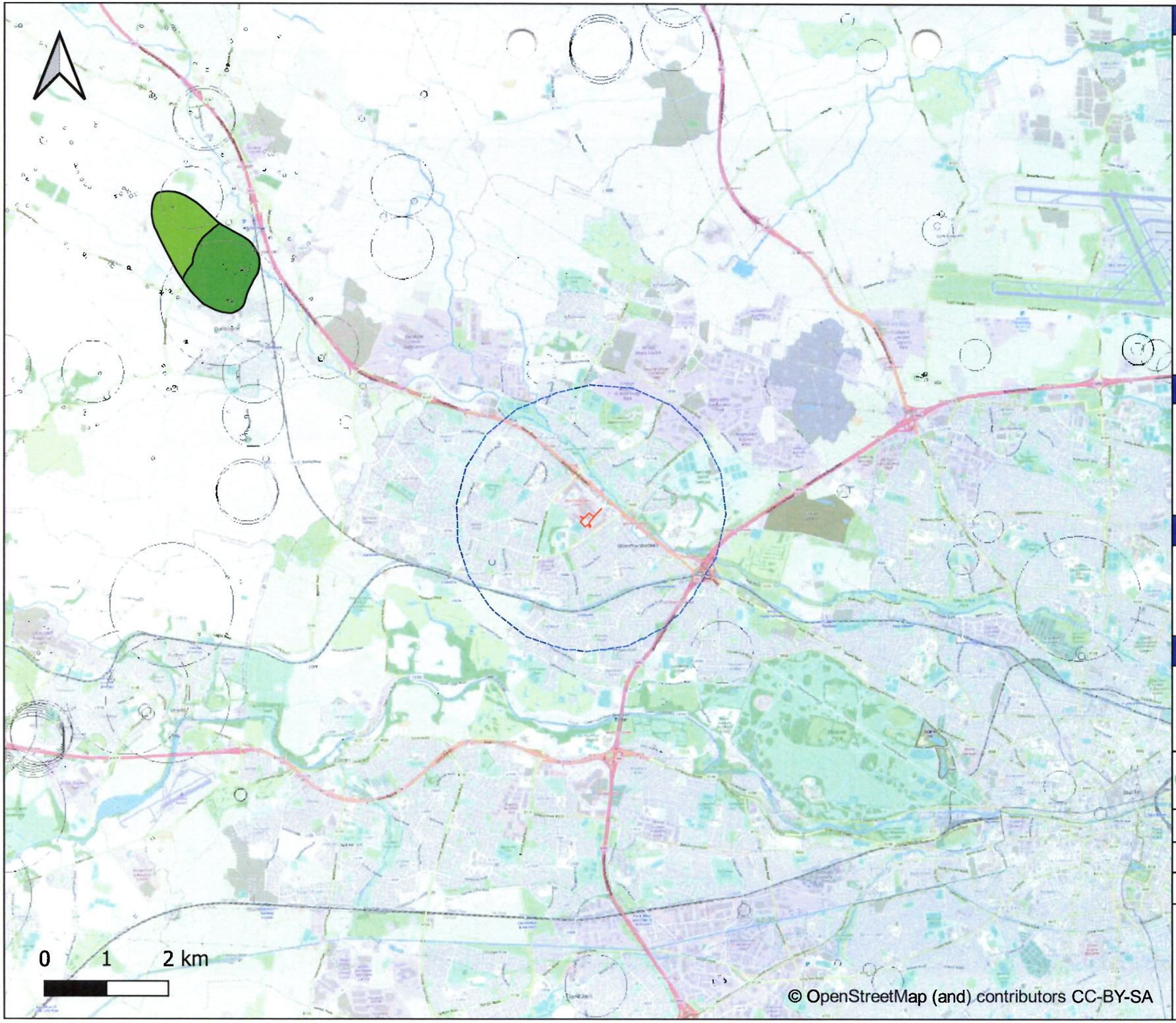
Site boundaries shown are for illustration purposes only and do not represent legal or exact boundaries



Legend:

- Site Boundary
- 2km Site Buffer

Public Supply SPAs

- SI-Inner Protection Area
- SO-Outer Protection Area

Groundwater Wells

- Groundwater Wells

Project:

EIAR for Proposed Mixed-use Development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 15

Client:

BLANCHE RETAIL NOMINEE LIMITED

Title:

Groundwater Wells, Springs and Source Protection Areas

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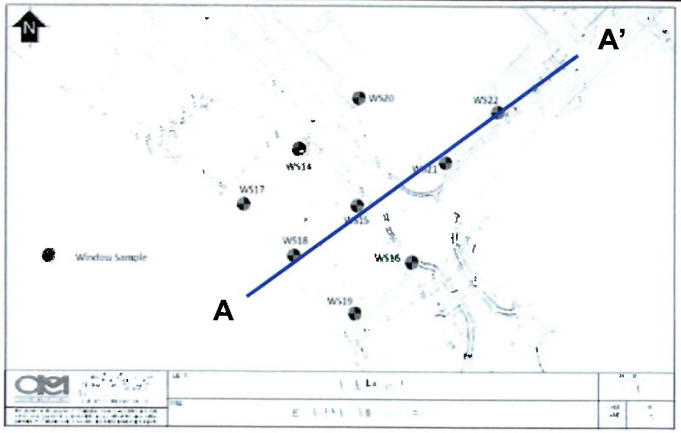
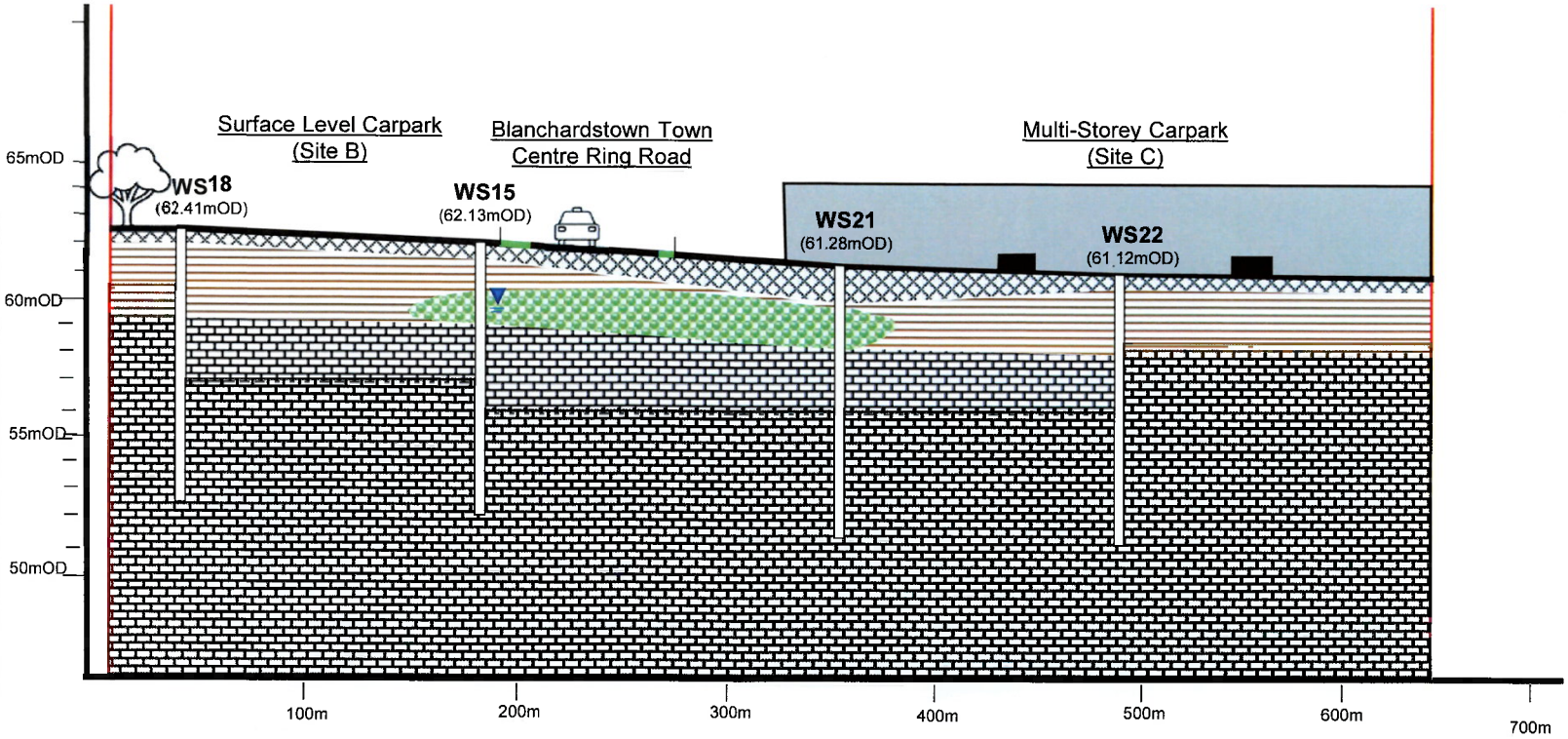
Checked: CC	
Date: 07/03/2022	Scale @ A4: 1:80000

Notes:

Site boundaries shown are for illustration purposes only and do not represent legal or exact boundaries





Legend

- Groundwater Level Measured at WS16 on the 22/09/2021
- ? Inferred Strata boundary
- Tarmacadam
- MADE GROUND; Brown to grey sandy gravelly CLAY
- Brown, sandy, gravelly CLAY with cobbles
- Grey to brown slightly sandy, clayey GRAVEL
- Bedrock described as black / dark grey fine-grained muddy LIMESTONE

Project:

EIAR for Proposed Mixed-use Development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 15

Client:

BLANCHE RETAIL NOMINEE LIMITED

Title

Schematic Cross Section A-A'

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Drawn by: GC	**Projection:**
Checked: CC	
Date: 02/07/2022	**Scale:** NTS

Notes:
Schematic cross section for illustration purposes only

Appendix B

IGSL Limited

DBFL Consulting Engineers

Blanchardstown Town Centre Development North Co. Dublin

Ground Investigation Report

Report No. 23311

September 2021



Report

M7 Business Park
Naas
Co. Kildare
Ireland

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Project: Blanchardstown Town Centre Development

Project No. 23311

Revision	Date	Title		
Rev 0	30/09/2021	Ground Investigation Report		
	Copies	Document Format	Prepared By	Reviewed By
		PDF	David Green	Brian Green
	To	DBFL Consulting Engineers		
Revision	**Date**	**Title**		
	Copies	Document Format	Prepared By	Reviewed By
	To			
Revision	**Date**	**Title**		
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Revision	**Date**	**Title**		
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	To			

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Waste Characterisation Assessment (O'Callaghan Moran)

FOREWORD

The following conditions and notes on the geotechnical site investigation procedures should be read in conjunction with this report.

Standards

The ground investigation works for this project have been carried out by IGSL in accordance with Eurocode 7 - Part 2: Ground Investigation & Testing (EN 1997-2:2007). This has been used together with complementary documents such as BS 5930 (1999), BS 1377 (Parts 1 to 9) and Engineers Ireland Specification & Related Documents for Ground Investigation in Ireland (2006). A new National Annex for use in the Republic of Ireland is currently in circulation for comment and will be adopted in the near future. In the mean time, the following Irish (IS) and European Standards or Norms are referenced:

- IS EN 1997-2 Eurocode 7: 2007 – Geotechnical Design – Part 2: Ground Investigation & Testing
- IS EN ISO 22475-1:2006 Geotechnical Investigation and Sampling – Sampling Methods & Groundwater Measurements
- IS EN ISO 14688-1:2002 Geotechnical Investigation and Testing – Identification and Classification of Soil, Part 1: Identification and Description
- IS EN ISO 14688-2:2004 Geotechnical Investigation and Testing – Identification and Classification of Soil, Part 2: Classification Principles
- IS EN ISO 14689-1:2004 Geotechnical Investigation and Testing - Identification & Classification of Rock, Part 1: Identification & Description

Reporting

Recommendations made and opinions expressed in this report are based on the strata observed in the exploratory holes, together with the results of in-situ and laboratory tests. No responsibility can be held by IGSL Ltd for ground conditions between exploratory hole locations.

The engineering logs provide ground profiles and configuration of strata relevant to the investigation depths achieved and caution should be taken when extrapolating between exploratory points. No liability is accepted for ground conditions extraneous to the investigation points.

This report has been prepared for DBFL Consulting Engineers and the information should not be used without prior written permission. The recommendations developed in this report specifically relate to the proposed development. IGSL Ltd accepts no responsibility or liability for this document being used other than for the purposes for which it was intended.

Boring Procedures

Unless otherwise stated, 'shell and auger' or cable percussive boring technique has been employed as defined by Section 6.3 of IS EN ISO 22475-1:2006. The boring operations, sampling and in-situ testing complies with the recommendations of IS EN 1997-2:2007 and BS 1377:1990 and EN ISO 22476-3:2005. The shell and auger boring technique allows for continuous sampling in clay and silt above the water table and sand and gravel below the water table (Table 2 of IS EN ISO 22475-1:2006).

It is highlighted that some disturbance and variations is unavoidable in particular ground (e.g. blowing sands, gravel / cobble dominant glacial deposits etc). Attention is drawn to this condition, whenever it is suspected. Where cobbles and boulders are recorded, no conclusion should be drawn concerning the size, presence, lithological nature, or numbers per unit volume of ground.

Rotary Drilling Procedures

Rotary drilling methods have been used to recover bedrock samples in line with Section 3.5 of IS EN 1997-2:2007 and IS EN ISO 22475-1. Where cable percussive boreholes terminated prematurely on an obstruction within overburden, open hole drilling methods (odex or symmetrix) were utilized to advance the drillholes through the superficial deposits with coring in bedrock. The key objectives of the rock sampling were to obtain high core recovery (TCR), minimize sample disturbance and facilitate accurate identification of strength, weathering and discontinuity characteristics.

In-Situ Testing

Standard penetration tests were conducted strictly in accordance with Section 4.6 of IS EN 1997-2:2007. The SPT equipment (hammer energy test) has been calibrated in accordance with EN ISO 22476-3:2005 and the Energy Ratio (E_r). A calibration certificate is available upon request. The E_r is defined as the ratio of the actual energy E_{meas} (measured energy during calibration) delivered to the drive weight assembly into the drive rod below the anvil, to the theoretical energy (E_{theor}) as calculated from the drive weight assembly. The measured number of blows (N) reported on the engineering logs are uncorrected. In sands, the energy losses due to rod length and the effect of the overburden pressure should be taken into account (see IS EN ISO 22476-3:2005).

Groundwater

The depth of entry of any influx of groundwater is recorded during the course of boring operations. However, the normal rate of boring does not usually permit the recording of an equilibrium level for any one water strike. Where possible drilling is suspended for a period of twenty minutes to monitor the subsequent rise in water level. Groundwater conditions observed in the borings or pits are those appertaining to the period of investigation. It should be noted however, that groundwater levels are subject to diurnal, seasonal and climatic variations and can also be affected by drainage conditions, tidal variations etc.

Engineering Logging

Soil and rock identification has been based on the examination of the samples recovered and conforms with IS EN ISO 14688-1:2002 and IS EN ISO 14689-1:2004. Rock weathering classification conforms to IS EN ISO 14689-1:2003 while discontinuities (bedding planes, joints, cleavages, faults etc) are classified in accordance with 4.3.3 of IS EN ISO 14689-1:2003. Rock mechanical indices (TCR, SCR, RQD) are defined in accordance with IS EN ISO 22475-1:2006.

Retention of Samples

Samples shall be retained for a period of 60 days following approval of the final factual report, as detailed in the Scope of Works.

1.0 Introduction and Objectives

It is proposed to redevelop three existing car parks at the Blanchardstown Town Centre in North Co. Dublin. The car park sites are denoted Site A, B and C as shown on Figure 1.

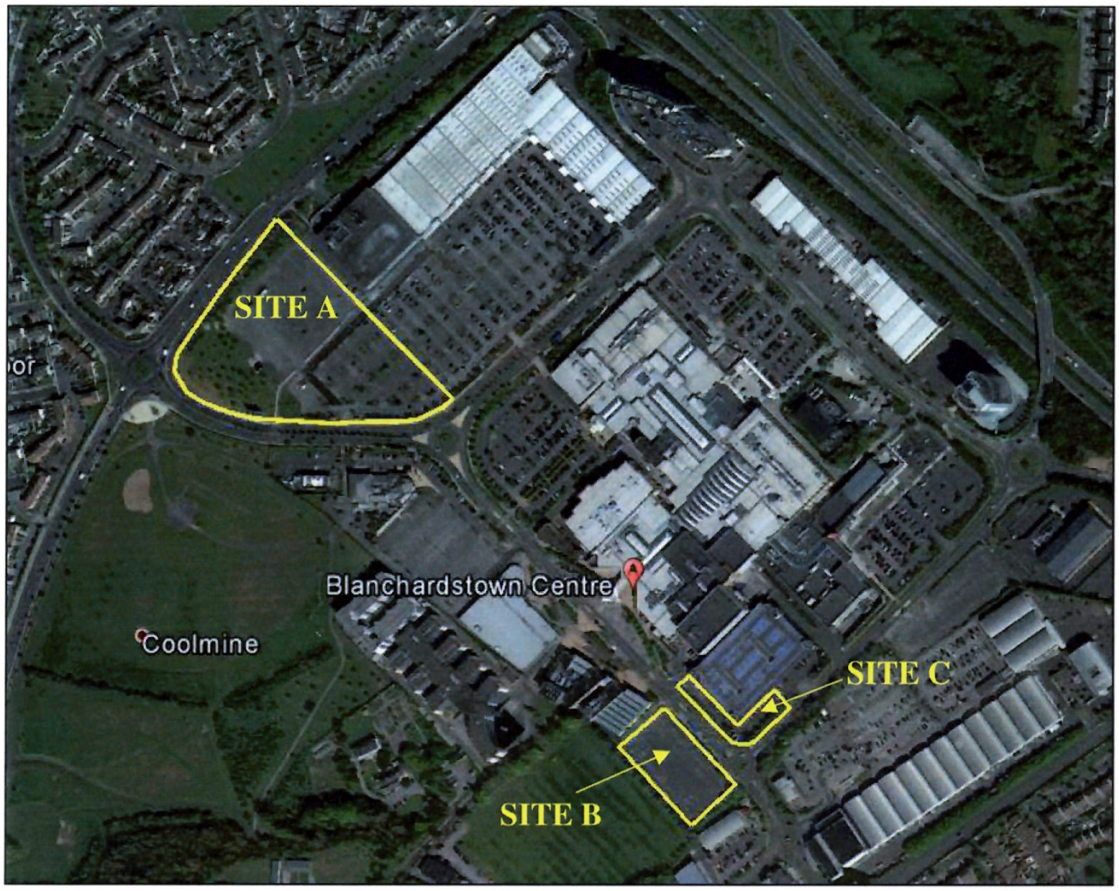


Figure 1 – Site Locations

In May 2021, IGSL Limited were appointed by the project consulting engineers, DBFL, to conduct a ground investigation at each of the three sites.

The objectives of the investigation were as follows:

- Ascertain the soil stratigraphy at the site
- Ascertain suitable bearing strata for structural foundations
- Determine the infiltration characteristics of the subsoils with respect to soakaway design
- Investigate the potential for sulphate attack on buried concrete
- Investigate for the presence of subsoil contamination
- Assess the suitability for the disposal of excavated soils to an inert landfill

This report presents the findings of the ground investigation and discusses these findings with respect to future development of this site. The environmental elements of the investigation were interpreted by O'Callaghan Moran and discussed in their Waste Characterisation Assessment, which is presented under separate cover.

2.0 Scope of Works

The exploratory works included the following:

- 22 nr. trial pits (inspection pits at rotary corehole locations)
- 22 nr. rotary coreholes
- 22 nr. window samples (at rotary corehole locations)
- 3 nr. infiltration tests
- A programme of geotechnical, chemical and environmental laboratory testing

2.1 Trial (Inspection) Pits

Trial pitting was performed in 22 locations (TP01 to TP22) using hand-digging with assistance from a 3-tonne tracked excavator. The prime purpose of the trial pits was to check for buried services in advance of rotary drilling and also to recover samples of the upper soils for environmental testing. The pits were typically dug to the target depth of 1.2 m BGL, although some pits terminated at shallower depths due to obstructions.

The trial pits were logged and sampled by an IGSL geotechnical engineer in accordance with BS 5930 (2015) and were excavated

Pit sidewalls were assessed in terms of their short-term stability and any instances of groundwater ingress were recorded. Environmental sub-samples were procured and placed in appropriate containers (amber glass jars and vials).

The trial pits were backfilled with the as-dug arisings and reinstated to the satisfaction of IGSL's site geotechnical engineer. The trial pit logs in Appendix 1 include descriptions of the soils encountered, groundwater conditions and stability of the pit sidewalls.

Since the trial pits were located within existing car parks, the surface materials comprised tarmacadam, which was underlain by a support layer of granular fill (hardcore). The total pavement construction typically extended to depths of between 0.35 and 0.5 m BGL.

The underlying soils consisted of predominately firm to stiff (locally soft to firm) brown sandy gravelly CLAY with cobbles, which remained present to the excavated depths.

In Car Park A, a thin layer of clay fill (Made Ground) was present beneath the granular fill. Some fragments of brick and plastic pipe were present within the fill material, which terminated at 0.6 m BGL. Similar material was encountered in trial pit TP20 (Car Park C) to a depth of 1.1 m BGL. Extraneous (non-natural) material in this location included fragments of concrete and plastic.

While most pits terminated within sandy gravelly clay at a depth of 1.2 m BGL, coarse granular material was encountered within the upper metre in trial pits TP01, 02, 08, 11 and 13 in Site A, and in TP16 in Site B.

All trial pits remained dry and stable during the period of excavation (typically 45 minutes). At TP02, seepage at a depth of 0.45 m BGL was attributed to surface water infiltration through the granular layer.

2.2 Window Samples

Window samples WS01 to WS22 were undertaken at each corehole and trial pit location. The prime purpose of the window samples was to recover undisturbed samples of the overburden soils from which environmental test specimens could be extracted.

Window samples are advanced by driving a steel sampling tube under constant percussive effort. The soils enter the tube within a protective plastic liner, which is withdrawn after every metre of progress. The liners are then placed in wooden channel boxes and transported to the IGSL offices where they are logged and sub-sampled as required.

Environmental sub-samples were extracted from the window sample recovery and placed in appropriate containers (amber glass jars and vials).

The window samples advanced through the base of the trial (inspection) pits, thereby commencing recovery below 1.2 m BGL in most instances.

Similar to the trial pits, the window samples encountered firm / stiff brown sandy gravelly CLAY to the sampled depth of 2.0 m BGL. In some instances, coarse obstructions (cobbles / boulders) prevented this depth from being achieved.

The window sample records are presented in Appendix 2 of this report.

2.3 Rotary Coreholes

Following the excavation of trial pits, rotary coreholes RC01 to RC22 were drilled using a Beretta T44 tracked coring rig in order to investigate for the presence of bedrock.

Symmetrix open hole techniques were used to advance through the overburden deposits, reverting to rotary coring in bedrock. It is noted that Symmetrix drilling produces highly pulverised drill returns and therefore, soil descriptions based on these returns are very approximate.

Rotary coring of bedrock was carried out using an air/mist flush to maximize recovery. Cores of 78 mm diameter were recovered and placed securely in wooden storage boxes. The recovered core was inspected by a qualified engineering geologist and logged in detail at IGSL's laboratory.

All cores were labelled and photographed for inclusion in the report. Photographs are presented digitally for ease of browsing and to permit close examination at high resolution. Corehole records and photographs are included in Appendix 3 of this report.

Table 1 shows the terminal depth of the window samples and the depths to weathered rock in each adjacent corehole at Site A. Table 2 shows similar information for Sites B and C. Also shown are the interpreted soil descriptions below the window sample depths, although it is again stressed that these are based on highly pulverised drill returns and should be taken as approximate only.

Location	Window Sample Depth (m BGL)	Overburden below window sample depth (based on Pulverised Drill Returns only)	Depth to Weathered Bedrock (m BGL)	Elevation of Weathered Bedrock (m OD)
RC01	2.00	Clayey GRAVEL	2.10	59.03
RC02	2.00	Clayey GRAVEL	2.30	58.95
RC03	1.50	Clayey GRAVEL	2.90	58.61
RC04	1.40	Clayey GRAVEL	2.70	59.46
RC05	1.80	Gravelly CLAY	2.60	60.07
RC06	2.00	Clayey GRAVEL	2.30	59.35
RC07	2.00	Clayey GRAVEL	2.30	59.19
RC08	1.10	Gravelly CLAY	2.40	59.10
RC09	2.00	Clayey GRAVEL	2.40	59.69
RC10	2.00	Gravelly cobbly CLAY	2.60	59.21
RC11	2.00	Gravelly CLAY	2.10	59.67
RC12	1.40	Clayey GRAVEL	2.40	59.43
RC13	1.10	Gravelly CLAY / clayey GRAVEL	2.40	60.01

Table 1 – Summary of Rotary Coring – Site A

Location	Window Sample Depth (m BGL)	Overburden below window sample depth (based on Pulverised Drill Returns only)	Depth to Weathered Bedrock (m BGL)	Elevation of Weathered Bedrock (m OD)
RC14	1.60	Clayey GRAVEL	2.80	59.58
RC15	2.00	Clayey GRAVEL	2.80	59.33
RC16	1.50	Gravelly CLAY	3.50	58.52
RC17	1.40	Clayey GRAVEL	3.00	59.68
RC18	2.00	Gravelly CLAY	3.30	59.11
RC19	3.00	Gravelly CLAY	3.90	58.32
RC20	1.60	Gravelly CLAY	2.50	59.38
RC21	1.60	Gravelly CLAY	3.00	58.28
RC22	1.50	Gravelly CLAY	3.00	58.12

Table 2 – Summary of Rotary Coring – Sites B and C

It can be seen from Table 1 that the depth to weathered bedrock at Site A ranged between approximately 2 and 3 m BGL (58.6 to 60.0 mOD) across the site. At Sites B and C, the depth to bedrock mostly ranged between approximately 2.5 and 3.5 m BGL (58.3 to 59.7 mOD)

The overlying overburden soils were assessed as gravelly clays or clayey gravels. However, it is noted that the water flush medium used during rotary drilling can "wash-out" clay soils, giving the drill returns the appearance of coarse granular material.

The bedrock was classified as predominately weak to strong black / dark grey fine-grained muddy LIMESTONE. The limestone was predominately fresh to locally slightly weathered and Pyrite crystallisation was locally evident.

Total Core Recovery (TCR) was 100% for all runs. Solid Core Recovery (SCR) was generally in the range 60 to 90% within the upper weathered limestone, locally reducing to 16% where the bedrock horizon was highly weathered and fractured. RQD values showed similar variations.

Photo 1 shows typical core recovery of the upper Limestone at Site A (RC03). The weathered (fractured) condition of the upper bedrock is clearly evident.

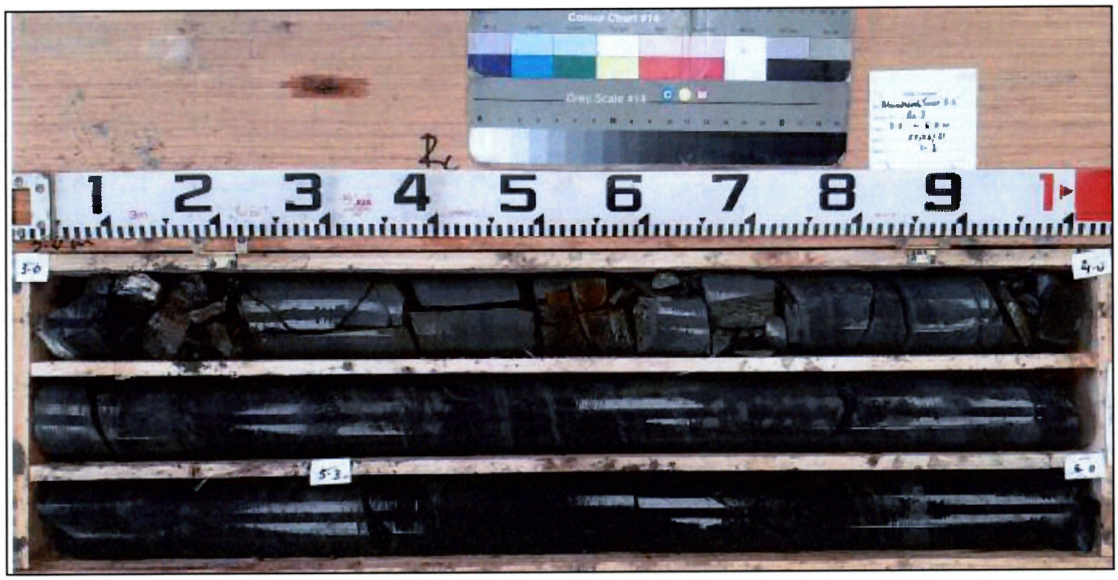


Photo 1 – Core recovery at RC03 (3.0 to 6.0 m BGL)

Photo 2 shows typical core recovery of the upper bedrock at Site B (RC15). Fracturing (weathering) of the upper limestone is clearly evident within the upper metre of recovery, with fresher rock present below approximately 4 m BGL.

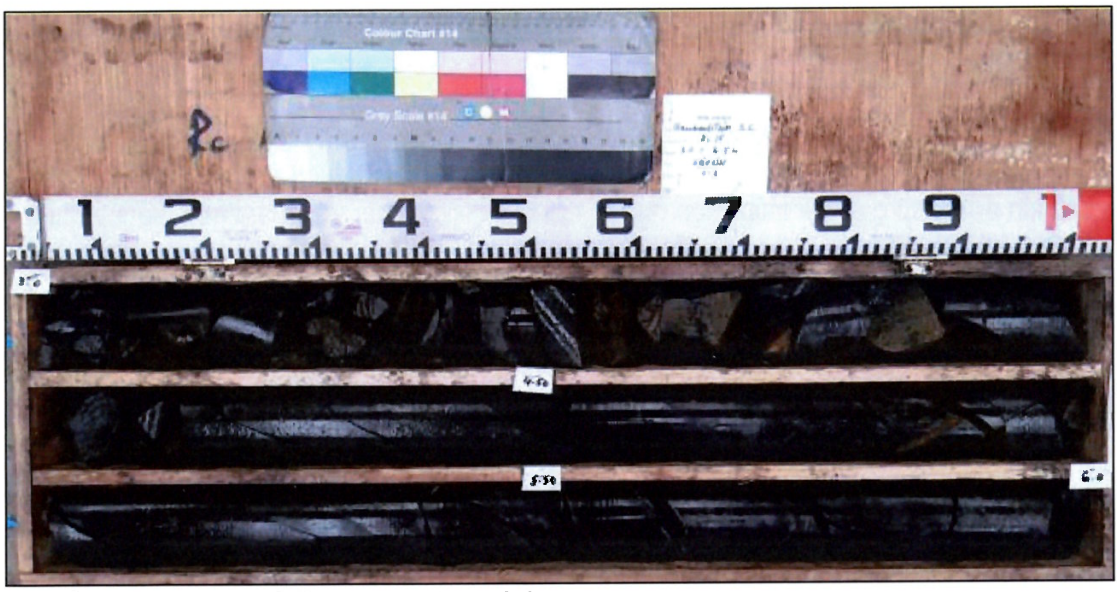


Photo 2 – Core recovery at RC15 (3.0 to 6.0 m BGL)

Photo 3 shows typical core recovery at Site C (RC21). The bedrock is generally fresh (intact) from the outset and only slightly fractured.

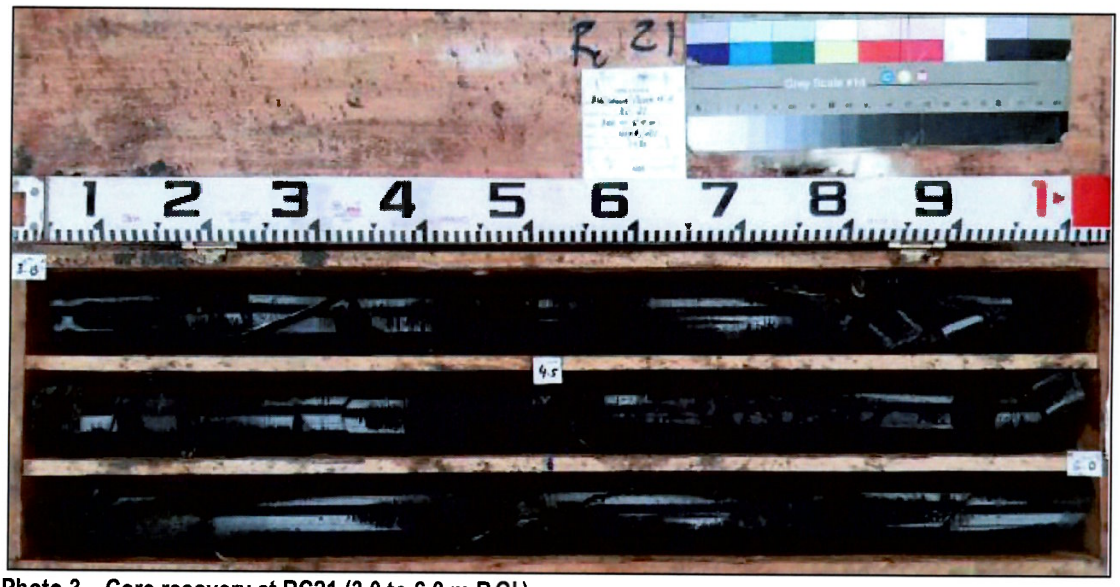


Photo 3 – Core recovery at RC21 (3.0 to 6.0 m BGL)

2.4 Infiltration Tests

Infiltration tests were undertaken in three locations (SA01 to SA03) to ascertain the suitability of the sub-soils for soakaway purposes. Tests SA01 and SA02 were located within Site A, while SA03 was positioned within Site B.

Testing was performed in accordance with BRE Digest 365 'Soakaway Design'.

To obtain a measure of the infiltration rate of the sub-soils, water is poured into the test pit to ensure total saturation of the sub-soils. This procedure is typically repeated twice more, and records taken of the fall in water level against time.

All test pits encountered a surfacing of Tarmacadam and granular fill, which was underlain by firm and stiff sandy gravelly clay.

Within Site A, test SA01 recorded a minimal fall in water level, which was not sustained. Test SA02 showed no infiltration during the test period.

At Site B, SA03 recorded a slow but steady fall in water level during the test period of 90 minutes, resulting in a relatively low infiltration rate of 0.0001 m/min (1.75×10^{-6} m/s).

2.5 Groundwater

No groundwater strikes were observed during drilling, although it is noted that the water flush medium used during rotary drilling and coring can mask or obscure groundwater strikes.

Water was present in all coreholes at the end of drilling, mostly at depths in the range 2.0 to 2.5 m BGL, locally deepening to 4.4 m BGL.

Since the short period of drilling rarely permits the true water table to establish, standpipes were installed in RC01, 09 and 16 in order to permit long-term groundwater monitoring.

The site was revisited on two occasions post-fieldwork in order to record groundwater levels in the standpipes. These are summarised on Table 3.

Location	Corehole Depth (m BGL)	Top of Response Zone (m BGL)	Base of Response Zone (m BGL)	Groundwater Depth / Elevation 27/07/2021 (m BGL)	Groundwater Depth / Elevation 22/09/2021 (m BGL)
RC01	10.20	2.00	10.20	1.19 / 59.94	1.17 / 59.96
RC09	10.00	2.00	10.00	1.96 / 60.13	1.97 / 60.12
RC16	10.00	2.00	10.00	1.97 / 60.05	1.50 / 60.52

Table 3 – Summary of Groundwater Monitoring

2.6 As-Built Survey

On completion of fieldworks, the location (x,y) and elevation (z) of each exploratory location was determined by detailed survey using GPS Realtime Kinetic survey instrument.

The National Grid survey co-ordinates and ground levels related to Malin Head Datum are presented on the exploratory hole records and these were used to plot the as-built locations on the Site Plan in Appendix 7 of this report.

2.7 Waste Characterisation Assessment

The results of environmental laboratory analyses on recovered samples were issued to environmental specialists O'Callaghan Moran (OCM), who have used this data to produce a detailed Waste Characterisation Assessment (WCA).

Their report, which is presented under separate cover, classifies the samples as either Hazardous or Non-Hazardous and assigns the appropriate List of Waste (LoW) code to each. Also included are recommended waste receptors for landfill disposal purposes.

3.0 Laboratory Testing

Laboratory testing was undertaken on selected samples of soil and rock. The results of rock strength testing are included in Appendix 5, while the results of chemical and environmental testing of both soil and rock are presented in Appendix 6.

3.1 Point Load and Uniaxial Compressive Strength Tests (Rock Core Samples)

Point Load Index tests were undertaken on selected rock core samples.

The Point Load Index Test provides a rapid strength assessment from rock fragments or cores. The test specimen is compressed between two cones loaded from a hydraulic hand pump. The core fails due to the tensile forces over the diametral area between the points. The strength at failure is expressed as the point load index Is.

For purposes of comparison the Is values are corrected to give the equivalent strength for a 50 mm diameter specimen. The compressive strength of the rock (qc) can be established using a correlation suggested by Goodman where UCS ≈ 18 to 24 x Is50.

The results of rock strength testing showed Is50 values mostly in the range 1 to 3 MPa, with an average of 2.5 MPa. These values correlated to equivalent UCS values in the range 20 to 60 MPa.

Uniaxial Compressive Strength (UCS) tests showed a similar scatter of results, measuring strengths in the range 2.5 to 65 MPa, but mostly in the range 20 to 50 MPa. In accordance with Table 5 of EN ISO 14869-1, these strengths would confirm the rock to be predominately Weak to Medium Strong.

3.2 Sulphate and pH Analyses

Determination of pH values and Sulphate content were conducted on five samples by a nominated accredited environmental laboratory (Eurofins Chemtest). Results are presented in reports prepared by the laboratory (Appendix 6).

The results of water-soluble (water/soil extract) Sulphate and pH analyses of soils revealed low SO_4 levels (maximum Water-Soluble Sulphate of 0.2 g/l) and near-neutral pH levels of 8.4 to 8.8. A maximum water-soluble Sulphate level of 0.42 g/l was measured for the rock core samples.

Twelve samples of limestone, as recovered from the rotary coreholes, were tested for Total Sulphur and Acid Soluble Sulphate. Testing was undertaken by UK laboratory Nicholls Colton in accordance with EN 1744.

The tests revealed Total Sulphur contents in the range 0.12 to 0.42% in association with Acid Soluble Sulphate contents of 0.02 to 0.06% SO_4.

The Nicholls Colton report is also presented in Appendix 6.

3.3 Environmental Laboratory Testing

A total of 22 soil samples were tested in accordance with the RILTA Suite, which is used to determine the suitability of soils for disposal to a landfill. The RILTA suite includes Heavy Metals, Polycyclic Aromatic Hydrocarbons (PAH), TPH-CWG, BTEX, PCB and Total Organic Carbon (TOC) carried out on dry soil samples. Also included are leachate analyses, whereby leachate is generated in accordance with CEN 10:1 specification and this is tested for the presence of recognised contaminants including Heavy Metals, Dissolved Organic Carbon (DOC) and Total Dissolved Solids (TDS). An Asbestos Screen is also included in the RILTA Suite.

The analyses were carried out by Eurofins Chemtest Laboratory and their reports are presented in Appendix 6.

4.0 Discussion

4.1 General

The ground conditions at Sites A, B and C have been shown to be relatively homogenous.

A surfacing of Tarmacadam and granular fill (Clause 804 hardcore or similar) overlies all three sites.

The underlying natural soils comprise firm to stiff brown sandy gravelly CLAY. This becomes coarser with depth, grading to clayey angular GRAVEL with cobbles. While only pulverised drill returns of this material were recovered using "open hole" drilling methods, it is likely that the coarse granular material is representative of the highly to completely weathered limestone bedrock (residual soil).

Rotary drilling and coring have confirmed the presence of bedrock at depths of between 2 and 3 m BGL at Site A, and between approximately 2.5 and 3.5 m BGL at Sites B and C. For all sites, the bedrock levels lie within an elevation range of 58 to 60 m OD.

The bedrock consists of weak to strong Limestone, which is locally heavily fractured at upper levels, while the "intact" limestone is predominately fresh, with only localised moderately weathered zones.

Groundwater strikes were not observed within the trial pits or window samples. On completion of drilling, water was observed at a shallowest depth of 1.9 m BGL in the coreholes.

Standpipes were installed within three rotary coreholes, and groundwater monitoring has shown shallowest levels of 1.2 m BGL (60.0 mOD) at Site A and 1.5 m BGL (60.5 mOD) at Site B.

4.2 Structural Foundations

While the particular details of any proposed development are not yet confirmed, it is understood that future structural foundations will be supported on the limestone bedrock.

With reference to Tables 1 and 2, it can be seen that the weathered limestone is presented at depths ranging between 2 and 3 m BGL at Site A and between approximately 2.5 and 3.5 m BGL at Sites B and C.

Where foundations are constructed directly on the limestone bedrock, an allowable bearing pressure of the order of 600 kPa could be assumed for the upper weathered and highly fractured bedrock (residual soils), increasing to c. 1.5 MPa within "intact" limestone. Based on the findings of the coreholes, it is expected that the removal of circa 0.5 metres of upper bedrock would be sufficient to reach the "intact" limestone.

4.3 Groundwater and Trench Stability

The trial pits remained stable during the period of excavation (typically 45 minutes) but were limited to a maximum depth of 1.2 m BGL. While no water was observed in the pits, this is unsurprising, given their limited depth.

Subsequent groundwater monitoring of standpipes has shown standing groundwater levels in the range 60.0 to 60.5 mOD (1.2 to 2.0 m BGL).

The observations made during trial pitting suggests that temporary foundation excavations to depths of 1.2 m BGL will remain mostly dry in the short term. Any water ingress is likely to arise from surface water infiltration and should be controllable using nominal pumping.

A key consideration if adopting trench / fill techniques for foundations will be the stability of open excavations. As noted previously, the trial pits remained stable during the period of excavation, although these were limited to 1.2 m depth. Some instability could be expected within deeper granular soils (or highly fractured weathered rock), particularly where groundwater is present.

Where excavations are left open for extended periods (e.g. drainage trenches), instability is likely to occur as the sidewalls relax, in which case trench control measures (e.g. trench box) will be required.

If basements are constructed, the associated mass excavation (typically c. 4 metres for single-level) would be expected to intercept the groundwater table. The rate of ingress is difficult to predict, since the groundwater table was not intercepted in the trial pits and therefore could not be observed. However, increased flow rates could be expected where excavations intercept the upper bedrock, which is highly fractured and will likely permit relatively free flowing ingress.

Based on the monitoring to date, water levels could rise to at least 1.2 m BGL, and possibly higher. For this reason, ongoing monitoring of standpipes would be recommended in order to provide a better understanding of the true groundwater level, and its fluctuations due to seasonal change or prolonged periods of heavy rainfall.

4.4 Excavation of Existing Materials

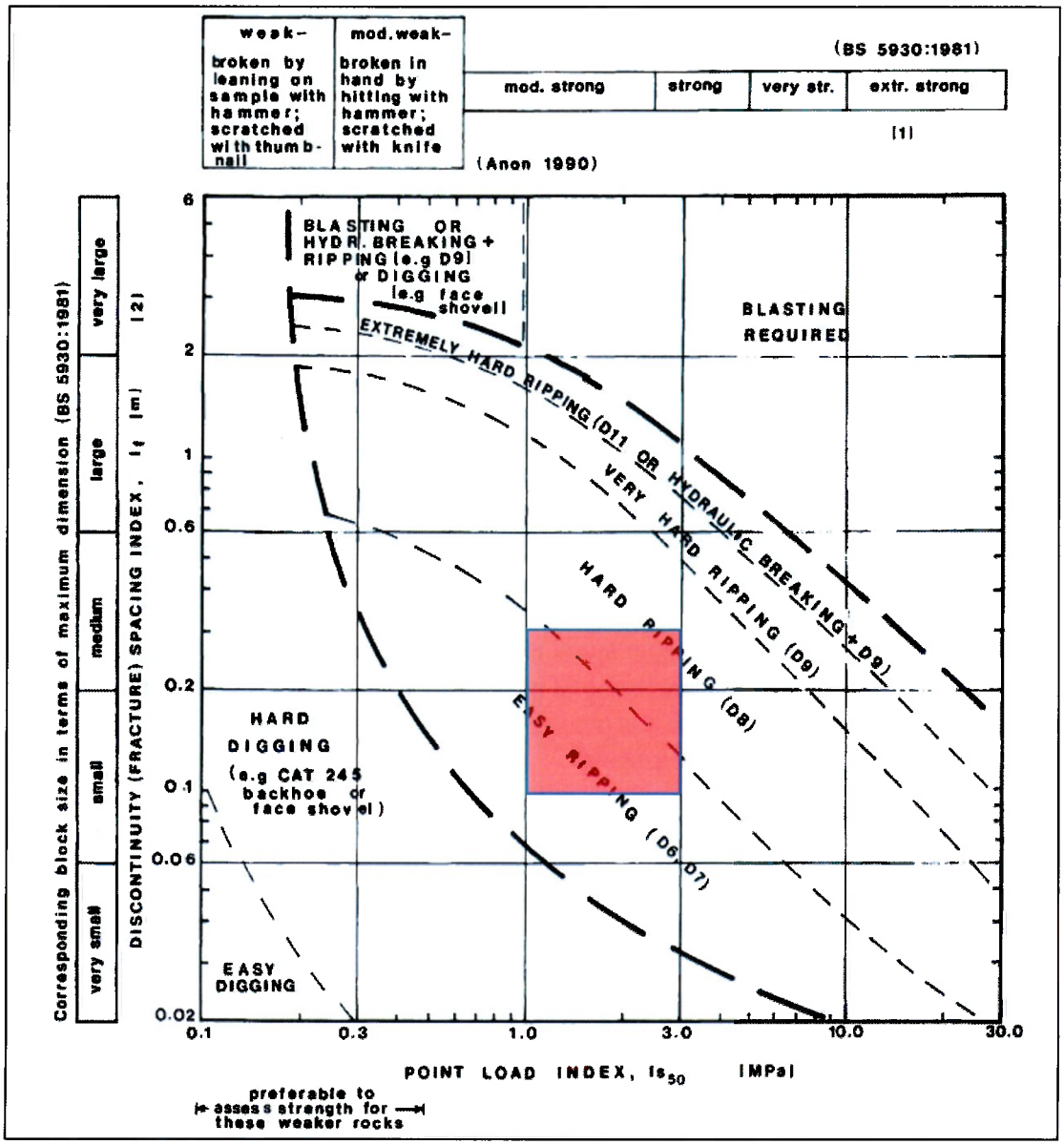
The inspection pits were excavated through firm and stiff sandy gravelly clay using a 6.5 tonne digger, which achieved the target depth of 1.2 m BGL in most locations. In some instances, the presence of large cobbles and boulders impeded excavation. However, the limited capacity of the excavator must be taken into account and it is likely that a larger machine (e.g. 20 tonne excavator equipped with a toothed bucket) could have loosened the cobbles / boulders and advanced further, possibly to the weathered bedrock horizon.

If a basement is proposed, a minimum excavation depth of circa 4 metres would be expected. With reference to Tables 1 and 2, the removal of up to 2 metres of Limestone bedrock may therefore be required in order to form the basement dig.

When estimating the excavatability of the limestone bedrock, reference should be made to the graph produced by Pettifer and Fookes, which categorises rock excavatability based on the Fracture Spacing Index and Point Load Index (Is_{50}) of the rock.

The Is_{50} values mostly range between 1 and 3 MPa. The bedrock Fracture Spacings above the typical basement depth of c. 8 m BGL are mostly clustered in the range 100 to 250 mm, although there are some instances of up to 400 mm spacings. To permit a preliminary assessment of rock excavatability with respect to the Pettifer and Fookes Chart, a typical Fracture Spacing range of 100 to 300 mm is suggested.

The adopted Fracture Spacing and Is_{50} strength ranges have been plotted on the Pettifer and Fookes chart. The relevant zone within the chart, corresponding to the adopted ranges is highlighted.



Pettifer and Fookes Excavatability Chart

Using these guideline parameters, the excavatability of the upper limestone bedrock is categorised as Easy to Hard Ripping, requiring the use of a D7 or D8 Caterpillar (32 tonne) or equivalent. However, it should be noted that the Pettifer and Fookes chart tends to underestimate the excavatability characteristics of Irish rock masses. Civil engineering contractors should be aware of this and carefully consider the difficulties associated with excavatability within intact limestone. It is therefore anticipated that large tracked excavators (40T) equipped with heavy duty hydraulic breakers (8T) will be required to efficiently or economically loosen the rock mass

Due to the nature of ripping and breaking, this will cause both vibratory and noise disturbance. Tolerable levels of both should be established and agreed with the civils contractor prior to excavation works commencing. It will be necessary to position vibration monitors adjacent to nearby structures to check that specified peak particle velocities are not exceeded.

In advance of excavation operations, it would be advisable to conduct dilapidation surveys of any vulnerable structures so that their initial condition can be established.

4.5 Chemical Attack on Buried Concrete

The results of Sulphate and pH testing showed low Sulphate and near-neutral pH levels.

With reference to Table C1 of BRE Special Digest 1: 2005, the level of Sulphate suggests a design Sulphate Class of DS-1. Assuming a static groundwater table, an ACEC (Aggressive Chemical Environment for Concrete) Classification of AC-1s is applicable, since the pH levels are greater than 5.5.

In terms of concrete to I.S. EN 206-1:2013, the chemical testing demonstrates that concrete could be manufactured to Class XA1.

4.6 Soakaway Design

Infiltration testing in two locations at Site A recorded both low and unsustained infiltration. This is not surprising, since very low permeability would be expected of the upper clay soils. In soils such as these, it is generally recommended that conventional soakaway systems are not attempted.

While deepening of the soakaways would ordinarily be considered in these circumstances, it is noted that the groundwater levels are relatively shallow (up to 1.2 m BGL) and conventional soakaway systems will not function below the water table.

At Site B, the upper soils exhibited a very low infiltration rate of 1.75×10^{-6} m/s. While consideration could be given to a soakaway system such as permeable paving or shallow trenches, the required storage volume (attenuation) is likely to be very high, which may render such designs impractical.

In light of the above, it may be preferable to discharge surface run-off water to an existing surface water system, using attenuation techniques to regulate the flow.

4.7 Potential for Pyritic Heave

As discussed in Section 2.3, the bedrock comprises grey/black "muddy" limestone. There was evidence of localised pyrite crystallisation, which is not uncommon amongst the Dublin limestones.

With regard to the potential for pyritic heave of foundations, there should be no concerns where foundations are constructed on suitably prepared limestone. Any loose / unconsolidated material (mudstone / shale) should be removed and the bedrock formation blinded with lean-mix concrete without delay. The purpose of this is to reduce the timeframe for potential oxidation.

Foundations can then be constructed directly on the lean mix concrete with no residual concerns regarding pyritic heave.

4.8 Chemical Assessment of Bedrock

Chemical analyses of rock core samples show very low Sulphate (Acid Soluble) and Sulphur levels.

If this material is subsequently crushed for re-use as capping on this site, the maximum Total Sulphur level of 0.40% satisfies the Upper Limit of 1% for Class 6F Capping, as specified in Table 6/1 of the Series 600 (Specification for Road Works).

While the chemical requirements for reuse have been satisfied, any bedrock proposed for reuse will require further assessment in accordance with Series 600 of the Specification for Roadworks in order to assess its mechanical and durability properties.

5.0 References

1. BS 5930:1999 +A2:2010 Code of Practice for Site Investigations; British Standards Institute

2. Manual of Contract Documents for Highway Works, Volume 5, Section 3, Ground Investigation, Part 4: Specification

3. BRE Special Digest 1: 2005 – Concrete in aggressive ground

4. EN 1997-3; Eurocode 7: Geotechnical Design – Part 3: Design assisted by field testing; 1997

5. BS1377; British Standard Methods of Test for Soils for Civil Engineering Purposes; British Standards Institute;1990.

6. BRE Digest 365, September 1991, British Research Establishment

7. Manual of Contract Documents for Road Works, Volume 1: Specification for Road Works (March 2007)

8. Manual of Soil Laboratory Testing, Volume 3; K.H. Head

9. ISRM – Suggested Methods for Determining Point Load Strength

10. ISRM – Suggested Methods for Determining the Uniaxial Compressive Strength and Deformability of Rock Materials

11. TRL Report 447- Sulphate specification for structural backfills

Appendix 1

Trial (Inspection) Pit Records

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP01**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,700.34 E 739,477.88 N
		DATE STARTED	26/05/2021
		DATE COMPLETED	26/05/2021
CLIENT		**GROUND LEVEL (m)**	61.13
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.05	61.08						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35	60.78						
Firm to stiff, brown, slightly sandy gravelly SILT/CLAY with some flat angular cobbles		0.65	60.48		AA138472	Env	0.50-0.85		
Very dense, brown/grey mottled, silty angular GRAVEL with angular cobbles (possible weathered rock)		0.85	60.28						
TP terminated due to possible boulders End of Trial Pit at 0.85m									

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP01 dug for check of any underground services in WS01/RC01 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP02**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,734.91 E 739,445.10 N
		DATE STARTED	27/05/2021
		DATE COMPLETED	27/05/2021
CLIENT		**GROUND LEVEL (m)**	61.25
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.04	61.21						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.45	60.80		AA138475	Env	0.50-1.00		
Firm to stiff, greyish brown, slightly sandy gravelly SILT/CLAY with some angular to subangular cobbles		0.90	60.35						
Very dense, grey, slightly silty angular GRAVEL with angular cobbles (possible weathered rock)		1.20	60.05						
End of Trial Pit at 1.20m									

0.0 1.0 2.0 3.0 4.0

Groundwater Conditions
Slightly seepage at 0.45m

Stability
TP stable

General Remarks
TP02 dug for check of any underground services in WS02/RC02 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP03**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,771.10 E 739,409.42 N
		DATE STARTED	27/05/2021
		DATE COMPLETED	27/05/2021
CLIENT		**GROUND LEVEL (m)**	61.51
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.05	61.46						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35	61.16						
Firm to stiff, brown, slightly sandy gravelly silty CLAY with some flat angular cobbles					AA138476	Env	0.50-1.00		
End of Trial Pit at 1.20m		1.20	60.31						

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP03 dug for check of any underground services in WS03/RC03 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP04**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,805.40 E 739,377.29 N
		DATE STARTED	27/05/2021
		DATE COMPLETED	27/05/2021
CLIENT		**GROUND LEVEL (m)**	62.16
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.07	62.09						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35	61.81						
Firm to stiff, brown to greyish brown, slightly sandy gravelly SILT/CLAY with some angular cobbles					AA138577	Env	0.50-1.00		
End of Trial Pit at 1.20m		1.20	60.96						

0.0 1.0 2.0 3.0 4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP04 dug for check of any underground services in WS04/RC04 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP05**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,839.82 E 739,345.44 N
		DATE STARTED	28/05/2021
		DATE COMPLETED	28/05/2021
CLIENT		**GROUND LEVEL (m)**	62.67
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0	TARMAC		0.08	62.59						
	MADE GROUND (comprised of brown/grey angular gravel and cobbles - C.L.804)		0.35	62.32						
	Firm to stiff, brown, slightly sandy slightly gravelly CLAY with some roots, occasional small pieces of red brick, and single pieces of old plastic pipe (FILL)		0.60	62.07		AA138484	Env	0.50-1.00		
1.0	Stiff to very stiff, light brown/brown, slightly sandy slightly gravelly SILT/CLAY with some angular cobbles									
	End of Trial Pit at 1.10m		1.10	61.57						
2.0										
3.0										
4.0										

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP13 dug for check of any underground services in WS13/RC13 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP06**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,660.14 E 739,436.05 N
		DATE STARTED	26/05/2021
		DATE COMPLETED	26/05/2021
CLIENT		**GROUND LEVEL (m)**	61.65
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.05	61.60						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35	61.30						
Firm to stiff, greyish brown, slightly sandy gravelly SILT/CLAY with some angular to subangular cobbles					AA138471	Env	0.50-1.00		
End of Trial Pit at 1.20m		1.20	60.45						

0.0 1.0 2.0 3.0 4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP06 dug for check of any underground services in WS06/RC06 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP07**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,702.56 E 739,411.01 N
		DATE STARTED	26/05/2021
		DATE COMPLETED	26/05/2021
CLIENT		**GROUND LEVEL (m)**	61.49
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.05	61.44						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.30	61.19						
Firm, light brown/brown, slightly sandy gravelly SILT/CLAY with occasional cobbles		0.55	60.94		AA138473	Env	0.50-1.00		
Firm to stiff, brown/grey mottled, very gravelly SILT/CLAY with many angular cobbles (possible very silty/clayey gravel)									
End of Trial Pit at 1.20m		1.20	60.29						

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP07 dug for check of any underground services in WS07/RC07 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP08**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,741.29 E 739,379.86 N
		DATE STARTED	27/05/2021
		DATE COMPLETED	27/05/2021
CLIENT		**GROUND LEVEL (m)**	61.50
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.05	61.45						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.30	61.20						
Firm to stiff, greyish brown, slightly sandy gravelly SILT/CLAY with some angular to subangular cobbles					AA138479	Env	0.50-0.90		
TP terminated due to possible boulders End of Trial Pit at 0.95m		0.95	60.55						

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP08 dug for check of any underground services in WS08/RC08 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP09**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,776.26 E 739,346.97 N
		DATE STARTED	27/05/2021
		DATE COMPLETED	27/05/2021
CLIENT		**GROUND LEVEL (m)**	62.09
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.05	62.04						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35	61.74						
Soft to firm, brown, very sandy slightly gravelly SILT/CLAY with occasional cobbles					AA138478	Env	0.50-1.00		
End of Trial Pit at 1.20m		1.20	60.89						

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP09 dug for check of any underground services in WS09/RC09 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP10**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,626.36 E 739,401.60 N
		DATE STARTED	26/05/2021
		DATE COMPLETED	26/05/2021
CLIENT		**GROUND LEVEL (m)**	61.81
		EXCAVATION METHOD	3T Mini Digger
ENGINEER	DBFL		

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.08	61.73						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)									
Firm, brown/grey mottled, sandy slightly gravelly SILT/CLAY		0.55	61.26		AA138470	Env	0.60-1.00		
1.0									
End of Trial Pit at 1.20m		1.20	60.61						
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP10 dug for check of any underground services in WS01/RC10 the location

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP11**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,670.39 E 739,359.93 N
		DATE STARTED	26/05/2021
		DATE COMPLETED	26/05/2021
CLIENT		**GROUND LEVEL (m)**	61.77
		EXCAVATION METHOD	3T Mini Digger
ENGINEER	DBFL		

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.05	61.72						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35	61.42						
Firm to stiff, brown to greysih brown, slightly sandy gravelly SILT/CLAY with many angular cobbles					AA138473	Env	0.50-1.00		
1.0 TP terminated due to possible boulders End of Trial Pit at 1.00m		1.00	60.77						
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP11 dug for check of any underground services in WS11/RC11 the location

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP12**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,692.68 E 739,338.09 N
		DATE STARTED	28/05/2021
		DATE COMPLETED	28/05/2021
CLIENT		**GROUND LEVEL (m)**	61.83
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.06	61.77						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35	61.48						
Firm to stiff, brown, slightly sandy gravelly SILT/CLAY with some angular cobbles					AA138482	Env	0.50-1.00		
End of Trial Pit at 1.20m		1.20	60.63						

0.0 1.0 2.0 3.0 4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP10 dug for check of any underground services in WS10/RC10 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP13**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	706,756.55 E 739,321.20 N
		DATE STARTED	28/05/2021
		DATE COMPLETED	28/05/2021
CLIENT		**GROUND LEVEL (m)**	62.41
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.06	62.35						
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35	62.06						
Stiff, light brown/brown, slightly sandy gravelly SILT/CLAY with some angular cobbles					AA138483	Env	0.50-0.80		
TP terminated due to possible boulders End of Trial Pit at 0.85m		0.85	61.56						
1.0									
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP13 dug for check of any underground services in WS13/RC13 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP14**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	707,055.04 E 739,043.48 N
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	62.38
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.09	62.29						
MADE GROUND (comprised of dark grey angular gravel - C.L.804)									
Soft to firm, brown, slightly sandy slightly gravelly CLAY with very occasional cobbles		0.50	61.88		AA15605 1	Env	0.50-1.00		
End of Trial Pit at 1.20m		1.20	61.18						

0.0 1.0 2.0 3.0 4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP14 dug for check of any underground services in WS14/RC14 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP15**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	707,090.74 E 739,008.76 N
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	62.13
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.07	62.06						
MADE GROUND (comprised of dark grey angular gravel - C.L.804)									
Firm, brownish grey, sandy slightly gravelly SILT/CLAY		0.50	61.63		AA156052	Env	0.50-1.00		
Firm, light brown/brown, sandy slightly gravelly SILT/CLAY		0.65	61.48						
Firm, light brown/brown, sandy gravelly SILT/CLAY with occasional cobbles		0.90	61.23						
End of Trial Pit at 1.20m		1.20	60.93						

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP15 dug for check of any underground services in WS15/RC15 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP16**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	707,111.87 E 738,969.93 N
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	62.02
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.10	61.92						
MADE GROUND (comprised of dark grey angular gravel - C.L.804)									
Firm, brown, sandy slightly gravelly slightly silty CLAY		0.60	61.42		AA156051	Env	0.60-1.00		
Firm, brown, sandy slightly gravelly slightly silty CLAY with some suban gular cobbles		0.90	61.12						
TP terminated due to possible boulders End of Trial Pit at 1.10m		1.10	60.92						

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP16 dug for check of any underground services in WS16/RC16 the location

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP17**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	707,019.77 E 739,003.28 N
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	62.68
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.09	62.59						
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.45	62.23						
Firm, brown, slightly sandy slightly gravelly CLAY with some cobbles		0.70	61.98		AA156053	Env	0.50-1.00		
Firm to stiff, brown, slightly sandy gravelly CLAY with some subangular to subrounded cobbles									
1.0									
End of Trial Pit at 1.20m		1.20	61.48						
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP17 dug for check of any underground services in WS17/RC17 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP18**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	707,054.08 E 738,968.38 N
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	62.41
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.09	62.32						
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.40	62.01						
Firm to stiff, brown, slightly sandy gravelly CLAY with some subangular to subrounded cobbles					AA156054	Env	0.50-1.00		
1.0									
End of Trial Pit at 1.20m		1.20	61.21						
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP18 dug for check of any underground services in WS18/RC18 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP19**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	707,084.58 E 738,942.44 N
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	62.22
		EXCAVATION METHOD	3T Mini Digger
ENGINEER	DBFL		

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.07	62.15						
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.33	61.89						
Soft to firm, brown, sandy gravelly CLAY with occasional cobbles					AA156055	Env	0.50-1.00		
End of Trial Pit at 1.20m		1.20	61.02						

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP19 dug for check of any underground services in WS19/RC19 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP20**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	707,096.13 E 739,064.60 N
		DATE STARTED	17/06/2021
		DATE COMPLETED	17/06/2021
CLIENT		**GROUND LEVEL (m)**	61.88
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.11	61.77						
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.40	61.48						
MADE GROUND (comprised of brown/grey mottled sandy gravelly clay, many angular cobbles, lean-mix/concrete, very occasional plastic rubbish)					AA156090	Env	0.50-1.00		
1.0 Firm, brown, slightly sandy gravelly CLAY with cobbles (possible original ground)		1.10	60.78						
End of Trial Pit at 1.20m		1.20	60.68						
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP20 dug for check of any underground services in WS20/RC20 the location

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP21**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	707,136.08 E 739,030.57 N
		DATE STARTED	17/06/2021
		DATE COMPLETED	17/06/2021
CLIENT		**GROUND LEVEL (m)**	61.28
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.08	61.20						
MADE GROUND (comprised of dark grey angular gravel - C.L.804)									
Firm to stiff, greyish brown, slightly sandy gravelly silty CLAY with many angular to subangular cobbles		0.55	60.73		AA156089	Env	0.60-1.00		
End of Trial Pit at 1.20m		1.20	60.08						

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP21 dug for check of any underground services in WS21/RC21 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP22**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	707,172.92 E 739,068.23 N
		DATE STARTED	17/06/2021
		DATE COMPLETED	17/06/2021
CLIENT		**GROUND LEVEL (m)**	61.12
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.07	61.05						
MADE GROUND (comprised of dark grey angular gravel - C.L.804)									
Soft to firm, very sandy gravelly silty CLAY with occasional cobbles		0.55	60.57		AA156088	Env	0.60-1.00		
End of Trial Pit at 1.20m		1.20	59.92						

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP22 dug for check of any underground services in WS22/RC22 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 30/9/21

Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 01 (Inspection Pit)



TP 01 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 02 (Inspection Pit)



TP 02 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 03 (Inspection Pit)



TP 03 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 04 (Inspection Pit)



TP 04 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 05 (Inspection Pit)



TP 05 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 06 (Inspection Pit)



TP 06 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 07 (Inspection Pit)



TP 07 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 08 (Inspection Pit)



TP 08 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 09 (Inspection Pit)



TP 09 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 10 (Inspection Pit)



TP 10 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 11 (Inspection Pit)



TP 11 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 12 (Inspection Pit)



TP 12 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 13 (Inspection Pit)



TP 13 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 14 (Inspection Pit)



TP 14 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 15 (Inspection Pit)



TP 15 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 16 (Inspection Pit)



TP 16 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 17 (Inspection Pit)



TP 17 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 18 (Inspection Pit)



TP 18 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 19 (Inspection Pit)



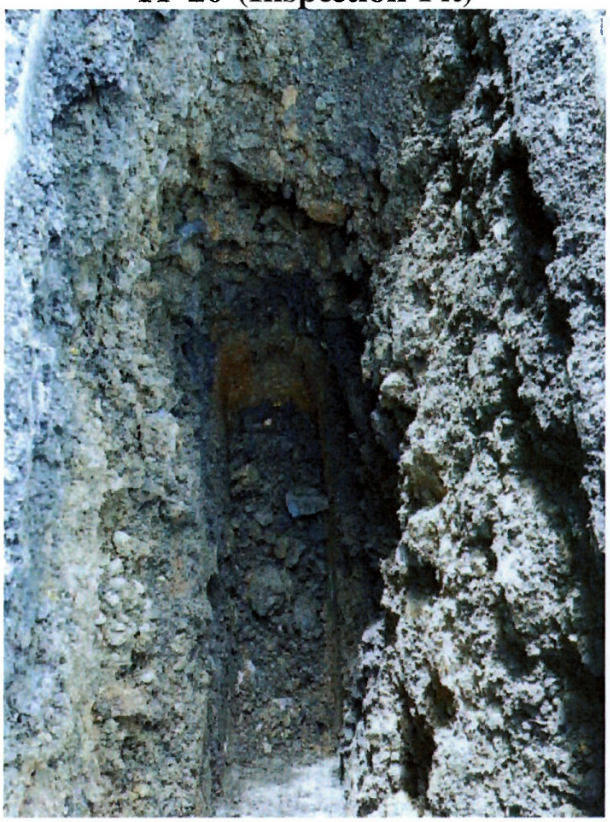
TP 19 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 20 (Inspection Pit)



TP 20 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 21 (Inspection Pit)



TP 21 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

TP 22 (Inspection Pit)



TP 22 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

SA 01



SA 01 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

SA 02



TP 02 – spoil



Project Number: 23311
Site: Blanchardstown T.C.
Project Engineer: DBFL

TRIAL PIT PHOTOGRAPHY RECORD

SA 03



SA 03 – spoil



Appendix 2

Window Sample Records

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. WS01
SHEET Sheet 1 of 1

CO-ORDINATES(_) 706,700 E
739,478 N

GROUND LEVEL (mOD) 61.13

DATE DRILLED 27/05/2021
DATE LOGGED 27/05/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP01 log							Inspection Pit blows			
	Firm, grey mottled brown, sandy gravelly SILT/CLAY		0.85	60.28		0.85-1.00	100	81 blows			
1.0	Firm to stiff, grey, sandy gravelly SILT/CLAY with angular cobbles		1.10	60.03		1.00-2.00	100	356 blows	AA144818	ENV	1.00-2.00
2.0	Final Depth 2.00m		2.00	59.13							
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. WS02
SHEET Sheet 1 of 1

CO-ORDINATES(_) 706,735 E
739,445 N

GROUND LEVEL (mOD) 61.25

DATE DRILLED 27/05/2021
DATE LOGGED 27/05/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples		
									Ref. Number	Sample Type	Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP02 log							Inspection Pit blows			
1.0									AA144816	ENV	1.00-2.00
	Dense to very dense, grey, slighlty silty angular GRAVEL with angular cobbles		1.20	60.05		1.20-2.00	100	269 blows			
2.0	Final Depth 2.00m		2.00	59.25							
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. **WS03**
SHEET Sheet 1 of 1

CO-ORDINATES(_) 706,771 E
739,409 N

GROUND LEVEL (mOD) 61.51

DATE DRILLED 08/06/2021
DATE LOGGED 08/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples		
									Ref. Number	Sample Type	Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP03 log							Inspection Pit blows			
1.0									AA144803	ENV	1.00-1.50
	Firm, grey/brown, sandy gravelly silty CLAY		1.20	60.31		1.20-1.50	100	210 blows			
	Obstruction - possible rock or boulder Final Depth 1.50m		1.50	60.01							
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. **WS04**
SHEET Sheet 1 of 1

CO-ORDINATES(_) 706,805 E
739,377 N

GROUND LEVEL (mOD) 62.16

DATE DRILLED 08/06/2021
DATE LOGGED 08/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP04 log							Inspection Pit blows			
1.0	Firm to stiff, brown to greyish brown, slightly sandy gravelly SILT/CLAY with some angular cobbles		1.20	60.96		1.20-1.40	0	133 blows			
	Obstruction - possible rock or boulder Final Depth 1.40m		1.40	60.76							
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
CO-ORDINATES(_)	706,840 E 739,345 N
GROUND LEVEL (mOD)	62.67
CLIENT	
ENGINEER	DBFL
BH NO.	**WS05**
SHEET	Sheet 1 of 1
DATE DRILLED	08/06/2021
DATE LOGGED	08/06/2021
DRILLED BY	C.Kavanagh
LOGGED BY	C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP05 log							Inspection Pit blows			
1.0	Stiff, green/grey, slightly sandy very gravelly SILT/CLAY with many angular cobbles		1.10	61.57		1.10-1.80	100	280 blows	AA149802	ENV	1.00-1.80
	Obstruction - possible rock or boulder Final Depth 1.80m		1.80	60.87							
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
BH NO.	**WS06**
SHEET	Sheet 1 of 1
CO-ORDINATES(_)	706,660 E 739,436 N
GROUND LEVEL (mOD)	61.65
DATE DRILLED	27/05/2021
DATE LOGGED	27/05/2021
CLIENT	
ENGINEER	DBFL
DRILLED BY	C.Kavanagh
LOGGED BY	C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP06 log							Inspection Pit blows			
1.0									AA149800	ENV	1.00-2.00
	Firm to stiff, dark grey/grey sandy gravelly SILT/CLAY		1.20	60.45		1.20-2.00	100	302 blows			
	Dense, dark grey, sandy angular GRAVEL with angular cobbles (possible weathered rock)		1.50	60.15							
2.0	Final Depth 2.00m		2.00	59.65							
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. WS07
SHEET Sheet 1 of 1

CO-ORDINATES(_) 706,703 E
739,411 N

GROUND LEVEL (mOD) 61.49

DATE DRILLED 27/05/2021
DATE LOGGED 27/05/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP07 log							Inspection Pit blows			
1.0									AA144821	ENV	1.00-2.00
	Firm to stiff, brown/grey mottled, very gravelly SILT/CLAY with many angular cobbles		1.20	60.29		1.20-2.00	90	322 blows			
2.0	Final Depth 2.00m		2.00	59.49							
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. **WS08**
SHEET Sheet 1 of 1

CO-ORDINATES(_) 706,741 E
739,380 N

GROUND LEVEL (mOD) 61.50

DATE DRILLED 08/06/2021
DATE LOGGED 08/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples		
									Ref. Number	Sample Type	Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP08 log							Inspection Pit blows			
1.0	Stiff, greyish brown, slightly sandy gravelly SILT/CLAY with some angular to subangular cobbles		0.95	60.55		0.95-1.10	100	147 blows	AA144809	ENV	1.00-1.10
	Obstruction - possible rock or boulder Final Depth 1.10m		1.10	60.40							
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
CO-ORDINATES(_)	706,776 E 739,347 N
GROUND LEVEL (mOD)	62.09
CLIENT	
ENGINEER	DBFL
BH NO.	**WS09**
SHEET	Sheet 1 of 1
DATE DRILLED	08/06/2021
DATE LOGGED	08/06/2021
DRILLED BY	C.Kavanagh
LOGGED BY	C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP09 log							Inspection Pit blows			
1.0									AA144812	ENV	1.00-2.00
	Soft to firm, brown, very sandy gravelly CLAY with some subangular cobbles		1.20	60.89		1.20-2.00	60	126 blows			
2.0	Final Depth 2.10m		2.00	60.09							
3.0											

General Remarks

Installations

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
CO-ORDINATES(_)	706,626 E 739,402 N
GROUND LEVEL (mOD)	61.81
CLIENT	
ENGINEER	DBFL
BH NO.	**WS10**
SHEET	Sheet 1 of 1
DATE DRILLED	27/05/2021
DATE LOGGED	27/05/2021
DRILLED BY	C.Kavanagh
LOGGED BY	C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP10 log							Inspection Pit blows			
1.0									AA144814	ENV	1.00-2.00
	Firm, brown/grey mottled, sandy slightly gravelly SILT/CLAY with occasional cobbles		1.20	60.61		1.20-2.00	80	233 blows			
2.0	Final Depth 2.00m		2.00	59.81							
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. **WS11**

SHEET Sheet 1 of 1

CO-ORDINATES(_) 706,670 E
739,360 N

GROUND LEVEL (mOD) 61.77

DATE DRILLED 27/05/2021

DATE LOGGED 27/05/2021

CLIENT

ENGINEER DBFL

DRILLED BY C.Kavanagh

LOGGED BY C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP11 log							Inspection Pit blows			
1.0	Firm to stiff, brown to greysih brown, slightly sandy gravelly SILT/CLAY with many angular cobbles		1.00	60.77		1.00-2.00	90	251 blows	AA144823	ENV	1.00-2.00
2.0	Final Depth 2.00m		2.00	59.77							
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. **WS12**
SHEET Sheet 1 of 1

CO-ORDINATES(_) 706,693 E
739,338 N

GROUND LEVEL (mOD) 61.83

DATE DRILLED 08/06/2021
DATE LOGGED 08/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP12 log							Inspection Pit blows			
1.0									AA144828	ENV	1.00-1.40
	Firm to stiff, brown, slightly sandy gravelly SILT/CLAY with some angular cobbles		1.20	60.63		1.20-1.40	100	161 blows			
	Obstruction - possible rock or boulder Final Depth 1.40m		1.40	60.43							
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
CO-ORDINATES(_)	706,757 E 739,321 N
GROUND LEVEL (mOD)	62.41
CLIENT	
ENGINEER	DBFL
BH NO.	**WS13**
SHEET	Sheet 1 of 1
DATE DRILLED	08/06/2021
DATE LOGGED	08/06/2021
DRILLED BY	C.Kavanagh
LOGGED BY	C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP13 log							Inspection Pit blows			
	Stiff, light brown/brown, slightly sandy gravelly SILT/CLAY with angular cobbles		0.85	61.56		0.85-1.10	20	210 blows			
1.0	Obstruction - possible rock or boulder Final Depth 1.10m		1.10	61.31							
2.0											
3.0											

General Remarks

Installations

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. **WS14**
SHEET Sheet 1 of 1

CO-ORDINATES(_) 707,055 E
739,043 N

GROUND LEVEL (mOD) 62.38

DATE DRILLED 29/06/2021
DATE LOGGED 29/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY J.C.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP14 log							Inspection Pit blows			
1.0									AA169724	ENV B	1.00-1.60 1.00-1.60
	Firm, light brown mottled grey and black sandy very gravelly silty CLAY with occasional cobbles		1.20	61.18		1.20-1.60	100	149 blows			
	Obstruction - possible rock or boulder Final Depth 1.60m		1.60	60.78							
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
CO-ORDINATES(_)	707,091 E 739,009 N
GROUND LEVEL (mOD)	62.13
CLIENT	
ENGINEER	DBFL
BH NO.	**WS15**
SHEET	Sheet 1 of 1
DATE DRILLED	29/06/2021
DATE LOGGED	29/06/2021
DRILLED BY	C.Kavanagh
LOGGED BY	J.C.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP15 log							Inspection Pit blows			
1.0									AA169726	ENV B	1.00-2.00 1.00-1.60
	Firm, greyish brown, sandy gravelly CLAY		1.20	60.93		1.20-2.00	100	168 blows			
	Medium dense, grey slightly clayey sandy GRAVEL		1.60	60.53					AA169727	B	1.60-2.00
2.0	Final Depth 2.00m		2.00	60.13							
3.0											

General Remarks

Installations

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**BH NO.**	**WS16**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	707,112 E 738,970 N	GROUND LEVEL (mOD) 62.02	**DATE DRILLED** 29/06/2021 **DATE LOGGED** 29/06/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER	DBFL	**LOGGED BY**	J.C.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP16 log							Inspection Pit blows			
1.0	Firm to stiff, grey brown mottled, sandy very gravelly silty CLAY with some cobbles		1.10	60.92		1.10-1.50	50	177 blows	AA169729	ENV B	1.00-1.50 1.00-1.50
	Obstruction - possible rock or boulder Final Depth 1.50m		1.50	60.52							
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. WS17
SHEET Sheet 1 of 1

CO-ORDINATES(_) 707,020 E
739,003 N

GROUND LEVEL (mOD) 62.68

DATE DRILLED 29/06/2021
DATE LOGGED 29/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY J.C.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP17 log							Inspection Pit blows			
1.0										ENV	1.00-1.40
	Firm to stiff, brown, slightly sandy gravelly CLAY with some subangular to subrounded cobbles		1.20	61.48		1.20-1.40	100	183 blows			
	Obstruction - possible rock or boulder Final Depth 1.40m		1.40	61.28							
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
CO-ORDINATES(_)	707,054 E 738,968 N
GROUND LEVEL (mOD)	62.41
CLIENT	
ENGINEER	DBFL
BH NO.	**WS18**
SHEET	Sheet 1 of 1
DATE DRILLED	29/06/2021
DATE LOGGED	29/06/2021
DRILLED BY	C.Kavanagh
LOGGED BY	J. Condon

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	MADE GROUND - Tar Machine / hand dug inspection pit for services - for all details see TP18 log		0.10	62.31				Inspection Pit blows			
	MADE GROUND comprised of firm brownish grey sandy very gravelly CLAY.										
1.0										ENV	1.00-2.00
	Firm to stiff brown sandy gravelly CLAY		1.20	61.21		1.20-2.00	100	190 blows			
	Firm to stiff brown sandy gravelly CLAY		1.40	61.01					AA153522	B	1.40-2.00
2.0	Final Depth 2.00m		2.00	60.41							
3.0											

General Remarks

Installations

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. WS19
SHEET Sheet 1 of 1

CO-ORDINATES(_) 707,085 E
738,942 N

GROUND LEVEL (mOD) 62.22

DATE DRILLED 29/06/2021
DATE LOGGED 29/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY J. Condon

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	MADE GROUND - Tar Machine / hand dug inspection pit for services - for all details see TP19 log		0.10	62.12				Inspection Pit blows			
	MADE GROUND comprised of soft to firm brownish grey sandy very gravelly CLAY.										
	Soft to firm greyish brown sandy gravelly CLAY.		0.90	61.32						ENV	1.00-2.00
1.0	Soft to firm, greyish brown, sandy gravelly CLAY		1.20	61.02		1.20-2.00	100	85 blows	AA153524	B	1.20-1.80
	Soft to firm brownish grey sandy gravelly CLAY. (Excess water from 2.3m)		1.80	60.42					AA153525	B	1.80-3.00
2.0						2.00-3.00	90	138 blows			
	Soft to firm brownish grey vry sandy very gravelly CLAY.		2.70	59.52							
3.0	Final Depth 3.00m		3.00	59.22							

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. **WS20**
SHEET Sheet 1 of 1

CO-ORDINATES(_) 707,096 E
739,065 N

GROUND LEVEL (mOD) 61.88

DATE DRILLED 29/06/2021
DATE LOGGED 29/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY J. Condon

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	MADE GROUND - Tar Machine / hand dug inspection pit for services - for all details see TP20 log		0.10	61.78				Inspection Pit blows			
	MADE GROUND comprised of firm brownish grey sandy very gravelly CLAY.										
1.0										ENV	1.00-1.60
	Firm, brown, sandy gravelly CLAY with some cobbles		1.20	60.68		1.20-1.60	100	164 blows			
	MADE GROUND comprised of firm brown sandy gravelly CLAY.		1.30	60.58							
	Obstruction - possible rock or boulder Final Depth 1.60m		1.60	60.28							
2.0											
3.0											

General Remarks

Installations

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. **WS21**
SHEET Sheet 1 of 1

CO-ORDINATES(_) 707,136 E
739,031 N

GROUND LEVEL (mOD) 61.28

DATE DRILLED 29/06/2021
DATE LOGGED 29/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY J. Condon

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	MADE GROUND - Tar Machine / hand dug inspection pit for services - for all details see TP21 log		0.10	61.18				Inspection Pit			
	MADE GROUND comprised of firm brownish grey sandy very gravelly CLAY.							blows			
1.0										ENV	1.00-1.60
	Possible weathered rock - MUDDY LIMESTONE recovered as dark grey clayey GRAVEL.		1.10	60.18					AA153528	B	1.10-1.60
	Dense, grey, clayey angular GRAVEL with angular cobbles (possible weathered rock)		1.20	60.08		1.20-1.60	100	189 blows			
	Obstruction - possible rock or boulder Final Depth 1.60m		1.60	59.68							
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

IGSL Ltd

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**BH NO.**	**WS22**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	707,173 E 739,068 N	GROUND LEVEL (mOD) 61.12	**DATE DRILLED** 29/06/2021
			DATE LOGGED 29/06/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER	DBFL	**LOGGED BY**	J. Condon

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP22 log							Inspection Pit blows			
1.0										ENV	1.00-1.50
	Firm to stiff, sandy gravelly silty CLAY with cobbles		1.20	59.92		1.20-1.50	100	159 blows			
	Obstruction - possible rock or boulder Final Depth 1.50m		1.50	59.62							
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 30/9/21

Appendix 3

Rotary Corehole Records

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC01**
		SHEET	Sheet 1 of 2
CO-ORDINATES	706,700.34 E 739,477.88 N	**DATE DRILLED**	08/06/2021
GROUND LEVEL (mOD)	61.13	**DATE LOGGED**	09/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL				
2									2.10	59.03		
								SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK				
	2.80								2.80	58.33		
3		100	83	53				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-2mm thick). Dips are 10°-20° & locally 50°.				
4	4.30											
5		100	87	67								
	5.80											
6		100	95	78		650						
7	7.30											
8		100	61	55								
	8.80											
9		100	91	91								

REMARKS

Hole cased 0.00-2.80m. Erect Covid-19 Safe Zone - 1hr

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type
09-06-21	10.00	2.00	10.20	50mm SP

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
09-06-21	10.20	2.80	2.10	Water level recorded 5 mins after end of drilling.

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC01**
		SHEET	Sheet 2 of 2
CO-ORDINATES	706,700.34 E 739,477.88 N	**DATE DRILLED**	08/06/2021
GROUND LEVEL (mOD)	61.13	**DATE LOGGED**	09/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
10	10.20							End of Borehole at 10.20 m	10.20	50.93		
11												
12												
13												
14												
15												
16												
17												
18												
19												

REMARKS

Hole cased 0.00-2.80m. Erect Covid-19 Safe Zone - 1hr

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type
09-06-21	10.00	2.00	10.20	50mm SP

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
09-06-21	10.20	2.80	2.10	Water level recorded 5 mins after end of drilling.

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC02**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,734.91 E 739,445.10 N	**DATE DRILLED**	09/06/2021
GROUND LEVEL (mOD)	61.25	**DATE LOGGED**	10/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL				
									2.30	58.95		
								SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK				
	3.00								3.00	58.25		
		100	62	36				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-25mm thick). Dips are 10°-20° & locally 50°.				
	4.30											
		100	65	25								
	5.80											
		100	79	65								
	7.30											
		100	90	86								
	8.80											
		100	78	51								
	10.00							End of Borehole at 10.00 m	10.00	51.25		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
10-06-21	10.00	3.00	1.90	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC03**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,771.10 E 739,409.42 N	**DATE DRILLED**	29/06/2021
GROUND LEVEL (mOD)	61.51	**DATE LOGGED**	29/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY				
									1.50	60.01		
								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL				
									2.90	58.61		
	3.00								3.00	58.51		
		100	16	0				SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered.				
	4.00											
		100	97	92	580			Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-10mm thick). Dips are 10°-20° & locally 50°.				
	5.30				570							
		100	94	63								
	6.00											
		100	96	74								
	6.70											
		100	95	70								
	8.20											
	8.50	100	77	50								
		100	59	40								
	10.00								10.00	51.51		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
29-06-21	10.00	3.00	1.90	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC04**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,805.40 E 739,377.29 N	**DATE DRILLED**	30/06/2021
GROUND LEVEL (mOD)	62.16	**DATE LOGGED**	30/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0					SYMMETRIX DRILLING: No recovery, observed by driller as returns of CLAY	1.50	60.66		
2					SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL	2.70	59.46		
3	3.00				SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	59.16		
4	4.25	100	54	28	Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-10mm thick). Dips are 10°-20° & locally 50°.				
5	5.65	100	79	61					
6	7.00	100	78	74					
7	8.50	100	90	72					
8	9.00	100	58	42					
9	10.00	100	92	65		10.00	52.16		

Fracture Spacing Log (mm): 0 250 500

Non-intact Zone

Legend

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
30-06-21	10.00	3.00	4.40	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC05**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,839.82 E 739,345.44 N	**DATE DRILLED**	01/07/2021
GROUND LEVEL (mOD)	62.67	**DATE LOGGED**	01/07/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of CLAY	1.50	61.17		
1								SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY	2.60	60.07		
2	3.00							SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	59.67		
3		100	61	7				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-8mm thick). Dips are 10°-20° & locally 50°.				
4	4.50											
5		100	74	41								
6	6.00											
7		100	83	66								
8	7.50											
9		100	82	67								
	9.00											
		100	92	78								
	10.00								10.00	52.67		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
01-07-21	10.00	3.00	4.20	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC06**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,660.14 E 739,436.05 N	**DATE DRILLED**	02/06/2021
GROUND LEVEL (mOD)	61.65	**DATE LOGGED**	04/06/2021
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
CLIENT		**DRILLED BY**	IGSL
INCLINATION (deg)	-90		
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL				
									2.30	59.35		
	3.00							SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	58.65		
		100	71	25				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-20mm thick). Dips are 10°-20° & locally 50°.				
	4.50	100	86	42								
	6.00	100	84	39								
	7.50	100	92	71								
	9.00	100	97	97	1000							
	10.00							End of Borehole at 10.00 m	10.00	51.65		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
04-06-21	10.00	3.00	3.20	Water level recorded 5 mins after end of drilling.

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC07**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,702.56 E 739,411.01 N	**DATE DRILLED**	10/06/2021
GROUND LEVEL (mOD)	61.49	**DATE LOGGED**	11/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0					SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL				
						2.30	59.19		
	3.00				SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	58.49		
		100	79	64	Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-2mm thick). Dips are 10°-20° & locally 60°.				
	4.50	100	91	74					
	6.00	100	56	41					
	7.50	100	75	59					
	9.00	100	92	84					
	10.00				End of Borehole at 10.00 m	10.00	51.49		

Fracture Spacing Log (mm): 0 – 250 – 500

Non-intact Zone

Legend

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
11-06-21	10.00	3.00	1.95	Water level recorded 5 mins after end of drilling.

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC08**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,741.29 E 739,379.86 N	**DATE DRILLED**	23/06/2021
GROUND LEVEL (mOD)	61.50	**DATE LOGGED**	23/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY	2.40	59.10		
	3.00							SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	58.50		
3		100	81	45				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-30mm thick). Dips are 10°-20° & locally 60°.				
4	4.50	100	81	55								
5												
6	6.00	100	84	65								
7	7.50											
8		100	89	77								
9	9.00	100	83	68								
	10.00							End of Borehole at 10.00m	10.00	51.50		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
23-06-21	10.00	3.00	3.20	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC09**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,776.26 E 739,346.97 N	**DATE DRILLED**	23/06/2021
GROUND LEVEL (mOD)	62.09	**DATE LOGGED**	25/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY	1.50	60.59		
1								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL	2.40	59.69		
2								SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	59.09		
3	3.00	100	51	11				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-3mm thick). Dips are 10°-20° & locally 60°.				
4	4.00	100	89	74								
5	5.50	100	92	83		610						
6	7.00	100	55	111								
7	8.50	100	91	84								
8	10.00								10.00	52.09		
9												
10												

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
25-06-21	10.00	3.00	3.40	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type
25-06-21	10.00	2.00	10.00	50mm SP

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC10**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,626.36 E 739,401.60 N	**DATE DRILLED**	01/06/2021
GROUND LEVEL (mOD)	61.81	**DATE LOGGED**	02/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL	1.50	60.31		
1								SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly cobbly CLAY	2.60	59.21		
2	3.00							SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	58.81		
3		100	33	14				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-80mm thick). Dips are 10°-20° & locally 60°.				
4	4.50											
5		100	81	63								
6	6.00											
7		100	75	58								
8	7.50											
9		100	69	47								
	9.00											
		100	77	39								
	10.00								10.00	51.81		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC11**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,670.39 E 739,359.93 N	**DATE DRILLED**	22/06/2021
GROUND LEVEL (mOD)	61.77	**DATE LOGGED**	22/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of CLAY	1.50	60.27		
1								SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY	2.10	59.67		
2								SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	58.77		
3	3.00	100	69	15				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-2mm thick). Dips are 10°-20° & locally 60°.				
4	4.50	100	77	61								
5	6.00	100	88	54								
6	7.50	100	88	82								
7	9.00	100	84	75								
8	10.00								10.00	51.77		
9												
10												

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
22-06-21	10.00	3.00	2.60	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC12**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,692.68 E 739,338.09 N	**DATE DRILLED**	18/06/2021
GROUND LEVEL (mOD)	61.83	**DATE LOGGED**	21/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL				
									2.40	59.43		
	3.00							SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	58.83		
3		100	69	37				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-15mm thick). Dips are 10°-20° & locally 50°.				
4	4.50	100	81	66								
5												
	6.00	100	92	67								
6												
7	7.50	100	75	55								
8												
	9.00	100	82	72								
9												
	10.00								10.00	51.83		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
21-06-21	10.00	3.00	2.30	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC13**
		SHEET	Sheet 1 of 1
CO-ORDINATES	706,756.55 E 739,321.20 N	**DATE DRILLED**	25/06/2021
GROUND LEVEL (mOD)	62.41	**DATE LOGGED**	28/06/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0					SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY	1.50	60.91		
					SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL	2.40	60.01		
	3.00				SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	59.41		
3		100	85	61	Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-15mm thick). Dips are 10°-20° & locally 50°.				
	4.00								
4		100	95	77					
5	5.50								
6		100	79	58					
	7.00								
7		100	81	45					
8	8.50								
9		100	92	81					
	10.00				End of Borehole at 10.00 m	10.00	52.41		

Fracture Spacing Log (mm): 0 250 500

Non-intact Zone

Legend

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
28-06-21	10.00	3.00	2.70	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC14**
		SHEET	Sheet 1 of 1
CO-ORDINATES	707,055.04 E 739,043.48 N	**DATE DRILLED**	26/07/2021
GROUND LEVEL (mOD)	62.38	**DATE LOGGED**	27/07/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY	1.50	60.88		
1								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL	2.80	59.58		
2	3.00							SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	59.38		
3		100	68	34				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered.				
4	4.20	100	92	75	910			Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-2mm thick). Dips are 10°-20° & locally 50°.				
5	5.70											
6		100	95	83								
7	7.20											
8		100	47	45								
9	8.70											
		100	85	72								
	10.00							End of Borehole at 10.00 m	10.00	52.38		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
26-07-21	10.00	3.00	1.90	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC15**
		SHEET	Sheet 1 of 1
CO-ORDINATES	707,090.74 E 739,008.76 N	**DATE DRILLED**	27/07/2021
GROUND LEVEL (mOD)	62.13	**DATE LOGGED**	28/07/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of CLAY	1.50	60.63		
1								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL	2.80	59.33		
2	3.00							SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	59.13		
3		100	29	8				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered Local shale layer at 5.62-5.63m Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally strongly iron-oxide stained, locally calcite-veined (1-2mm thick). Dips are 10°-20° & locally 50°.				
4	4.50	100	63	42								
5	5.50	100	77	58								
6	7.00	100	57	54	680							
7												
8	8.50	100	85	69	580				10.00	52.13		
9	10.00											
10												

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
28-07-21	10.00	3.00	2.10	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC16**
		SHEET	Sheet 1 of 1
CO-ORDINATES	707,111.87 E 738,969.93 N	**DATE DRILLED**	27/07/2021
GROUND LEVEL (mOD)	62.02	**DATE LOGGED**	28/07/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of CLAY				
1									1.50	60.52		
								SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY				
2												
3	3.50								3.50	58.52		
4	4.50	100	44	22				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally moderately weathered (at 3.61-4.04m) Local shale layer at 7.82-7.85m & 8.44-8.50m Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally strongly iron-oxide stained, locally calcite-veined (1-2mm thick). Dips are 10°-20° & locally 50°.				
5	5.50	100	71	46								
6	6.50	100	55	14								
7	7.50	100	47	33								
8	8.50	100	88	76								
9	10.00	100	89	78	70999 9999999999				10.00	52.02		

REMARKS

Hole cased 0.00-3.50m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
28-07-21	10.00	3.50	2.80	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type
28-07-21	10.00	2.00	10.00	50mm SP

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC17**
		SHEET	Sheet 1 of 1
CO-ORDINATES	707,019.77 E 739,003.28 N	**DATE DRILLED**	22/07/2021
GROUND LEVEL (mOD)	62.68	**DATE LOGGED**	23/07/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL				
	3.00								3.00	59.68		
3		100	84	33				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-2mm thick). Dips are 10°-20° & locally 50°.				
	4.00	100	84	41								
	5.50	100	88	81								
	7.00	100	94	91								
	8.50	100	88	73								
	10.00								10.00	52.68		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
23-07-21	10.00	3.00	2.10	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC18**
		SHEET	Sheet 1 of 1
CO-ORDINATES	707,054.08 E 738,968.38 N	**DATE DRILLED**	08/07/2021
GROUND LEVEL (mOD)	62.41	**DATE LOGGED**	09/07/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of CLAY				
1									1.50	60.91		
								SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY				
2									3.00	59.41		
3	3.30							SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL	3.30	59.11		
		100	84	46				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered.				
4	4.30	100	100	80				Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-8mm thick). Dips are 10°-20° & locally 50°.				
5	5.10	100	73	44								
6	6.30	100	85	61								
7	7.30	100	90	76	510							
8	8.30	100	74	64								
9	9.30	100	100	66								
	10.00								10.00	52.41		

REMARKS

Hole cased 0.00-3.50m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
08-07-21	10.00	3.50	1.90	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC19**
		SHEET	Sheet 1 of 1
CO-ORDINATES	707,084.58 E 738,942.44 N	**DATE DRILLED**	06/07/2021
GROUND LEVEL (mOD)	62.22	**DATE LOGGED**	07/07/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm)	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0					0 250 500			SYMMETRIX DRILLING: No recovery, observed by driller as returns of CLAY	3.00	59.22		
3								SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY	3.90	58.32		N = 46 (7, 9, 6, 12, 13, 15)
4	4.50							SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	4.50	57.72		
5		100	54	29				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared, locally slightly iron-oxide stained, locally calcite-veined (1-2mm thick). Dips are 10°-20° & locally 50°.				N = 30/20 mm (30, 30)
6	6.00	100	69	23								
7	7.50	100	63	38								
9	9.00	100	92	92	580							
10	10.00							End of Borehole at 10.00 m	10.00	52.22		

REMARKS

Hole cased 0.00-4.50m. Erect Covid-19 Safe Zone - 1hr

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

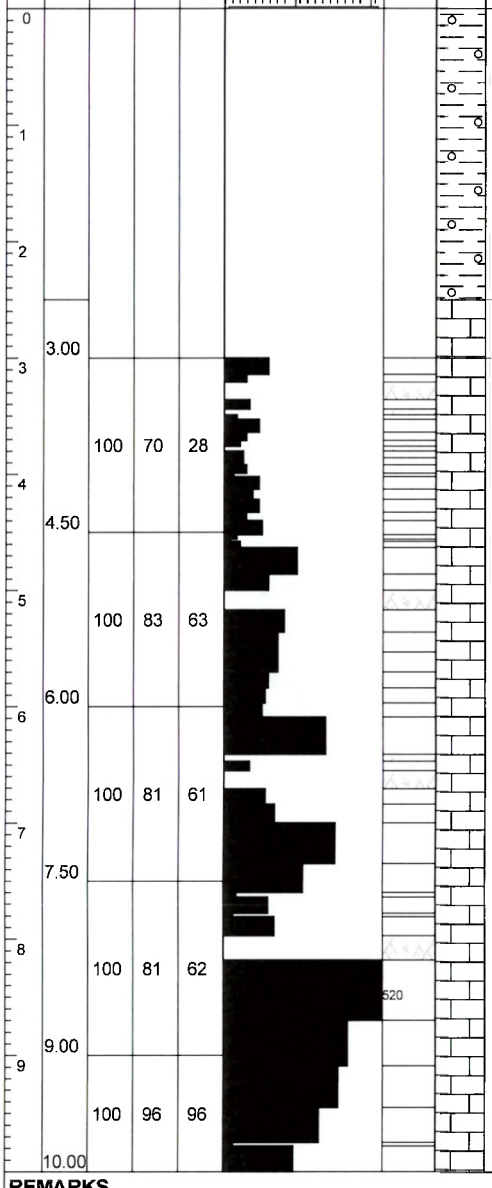
GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
07-07-21	10.00	4.50	2.20	Water level recorded 5 mins after end of drilling.

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC20**
		SHEET	Sheet 1 of 1
CO-ORDINATES	707,096.13 E 739,064.60 N	**DATE DRILLED**	29/07/2021
GROUND LEVEL (mOD)	61.88	**DATE LOGGED**	29/07/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		



Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY	2.50	59.38		
SYMMETRIX DRILLING: No recovery, observed by driller as returns of ROCK	3.00	58.88		
Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared & filled at 6.41-6.47m), locally slightly iron-oxide stained, locally calcite-veined (1-15mm thick). Dips are 10°-20° & locally 50°.	10.00	51.88		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

GROUNDWATER DETAILS

Date	Hole Depth	Casing Depth	Depth to Water	Comments
29-07-21	10.00	3.00	2.10	Water level recorded 5 mins after end of drilling.

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC21**
		SHEET	Sheet 1 of 1
CO-ORDINATES	707,136.08 E 739,030.57 N	**DATE DRILLED**	04/08/2021
GROUND LEVEL (mOD)	61.28	**DATE LOGGED**	04/08/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		

Downhole Depth (m)	Core Run Depth (m)	T.C.R.%	S.C.R.%	R.Q.D.%	Fracture Spacing Log (mm) 0 250 500	Non-intact Zone	Legend	Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
0								SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL				
	3.00								3.00	58.28		
3		100	72	34				Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantely muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared & filled at 6.41-6.47m), locally slightly iron-oxide stained, locally calcite-veined (1-2mm thick). Dips are 10°-20° & locally 50°.				
4	4.50											
		100	79	43								
6	6.00											
		100	84	57								
7	7.50											
		100	88	68								
9	9.00											
		100	91	69								
	10.00							End of Borehole at 10.00 m	10.00	51.28		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

INSTALLATION DETAILS

Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER DETAILS

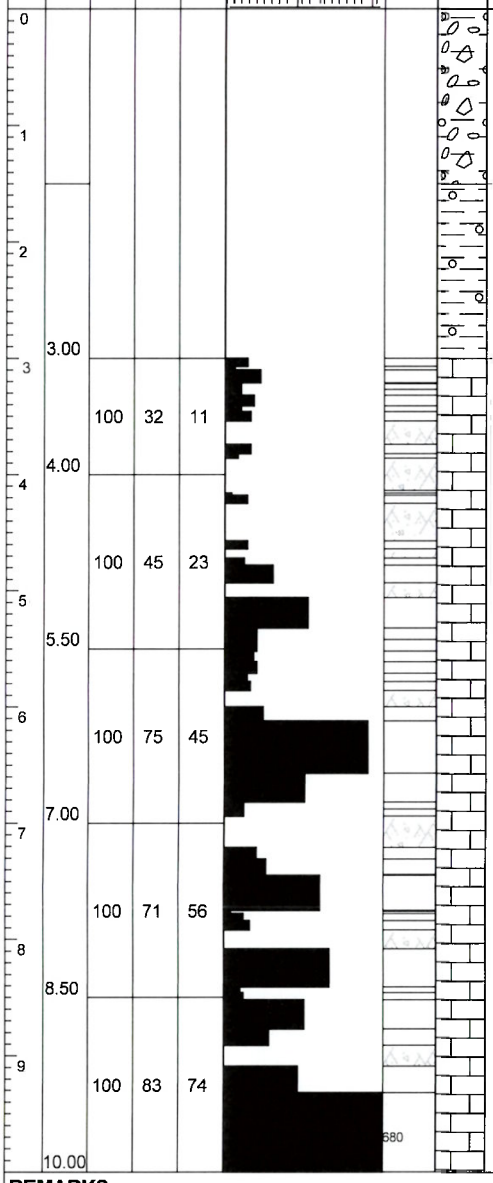
Date	Hole Depth	Casing Depth	Depth to Water	Comments
04-08-21	10.00	3.00	2.25	Water level recorded 5 mins after end of drilling.

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

GEOTECHNICAL CORE LOG RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**DRILLHOLE NO**	**RC22**
		SHEET	Sheet 1 of 1
CO-ORDINATES	707,172.92 E 739,068.23 N	**DATE DRILLED**	03/08/2021
GROUND LEVEL (mOD)	61.12	**DATE LOGGED**	03/08/2021
CLIENT		**DRILLED BY**	IGSL
ENGINEER	DBFL	**LOGGED BY**	D.O'Shea
RIG TYPE	BT - 44		
FLUSH	Air/Mist		
INCLINATION (deg)	-90		
CORE DIAMETER (mm)	78		



Description	Depth (m)	Elevation	Standpipe Details	SPT (N Value)
SYMMETRIX DRILLING: No recovery, observed by driller as returns of clayey GRAVEL	1.50	59.62		
SYMMETRIX DRILLING: No recovery, observed by driller as returns of gravelly CLAY	3.00	58.12		
Weak to strong, thickly to thinly bedded, black/dark grey, fine-grained, LIMESTONE (predominantly muddy with local sandy layers, localised pyrite crystallisation), fresh to locally slightly weathered. Discontinuities are widely to closely spaced, smooth, planar to locally curviplanar. Apertures are tight to locally moderately open, locally clay-smeared & filled at 4.14-4.16m, 7.44-7.45m & 7.75-7.76m), locally slightly iron-oxide stained, locally calcite-veined (1-8mm thick). Dips are 10°-20° & locally 50°.	10.00	51.12		

REMARKS

Hole cased 0.00-3.00m. Erect Covid-19 Safe Zone - 1hr

End of Borehole at 10.00 m

WATER STRIKE DETAILS

Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
					No water strike recorded

INSTALLATION DETAILS

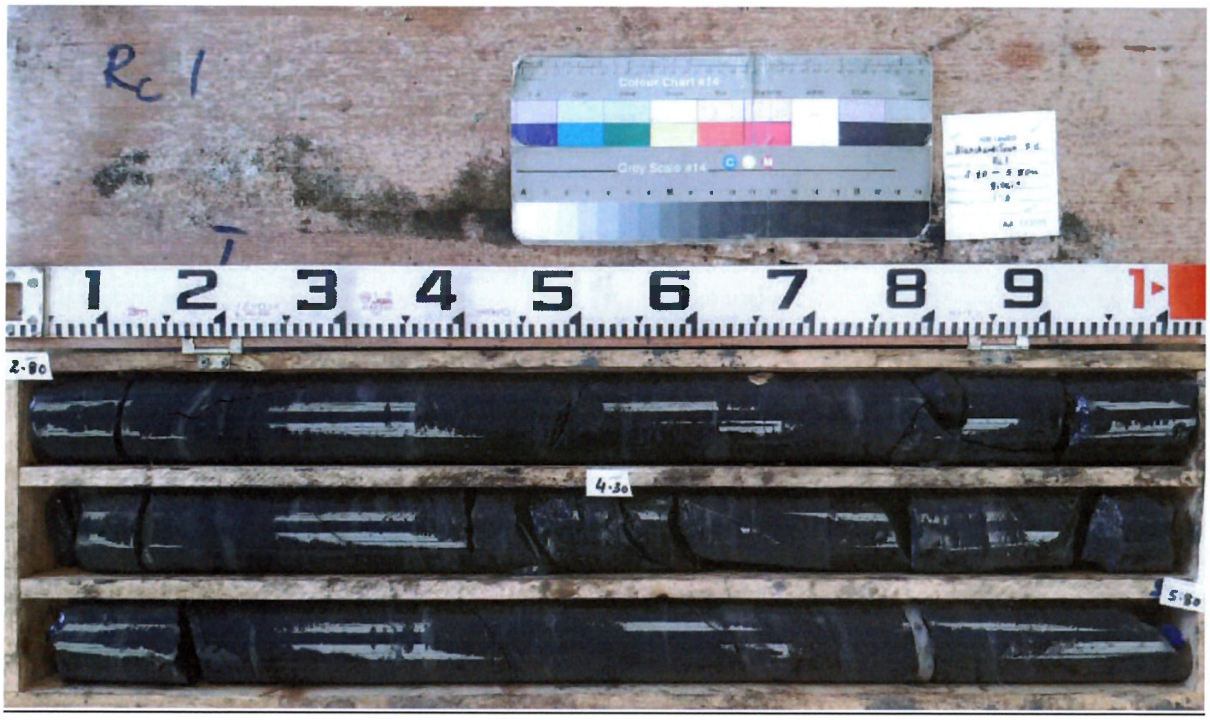
Date	Tip Depth	RZ Top	RZ Base	Type

GROUNDWATER DETAILS

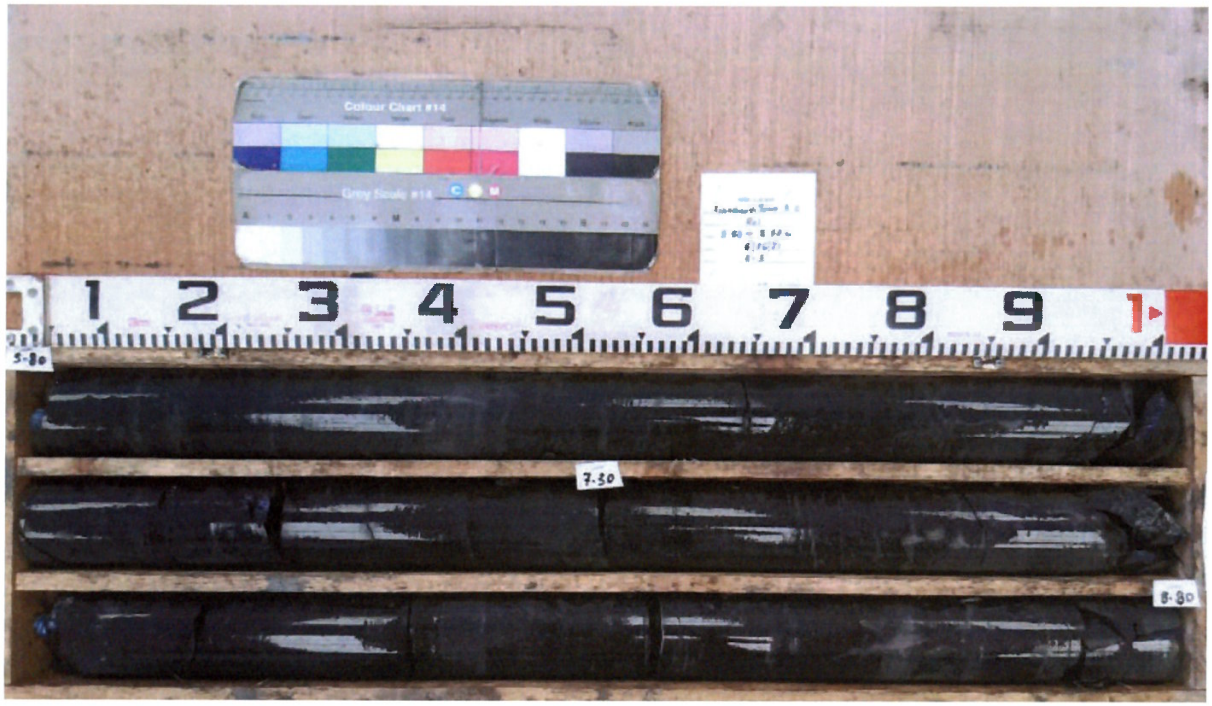
Date	Hole Depth	Casing Depth	Depth to Water	Comments
03-08-21	10.00	3.00	2.90	Water level recorded 5 mins after end of drilling.

IGSL RC FI 10M 23311.GPJ IGSL.GDT 30/9/21

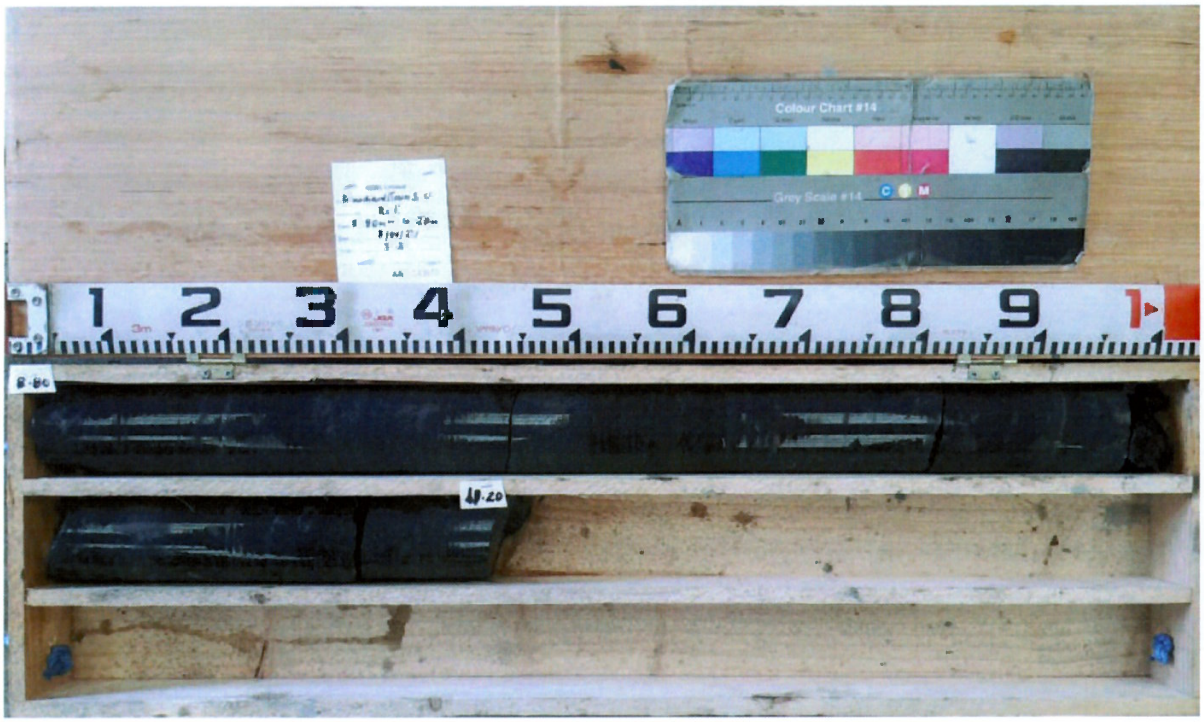
RC01 Box 1 of 3 – 2.80-5.80m



RC01 Box 2 of 3 – 5.80-8.80m



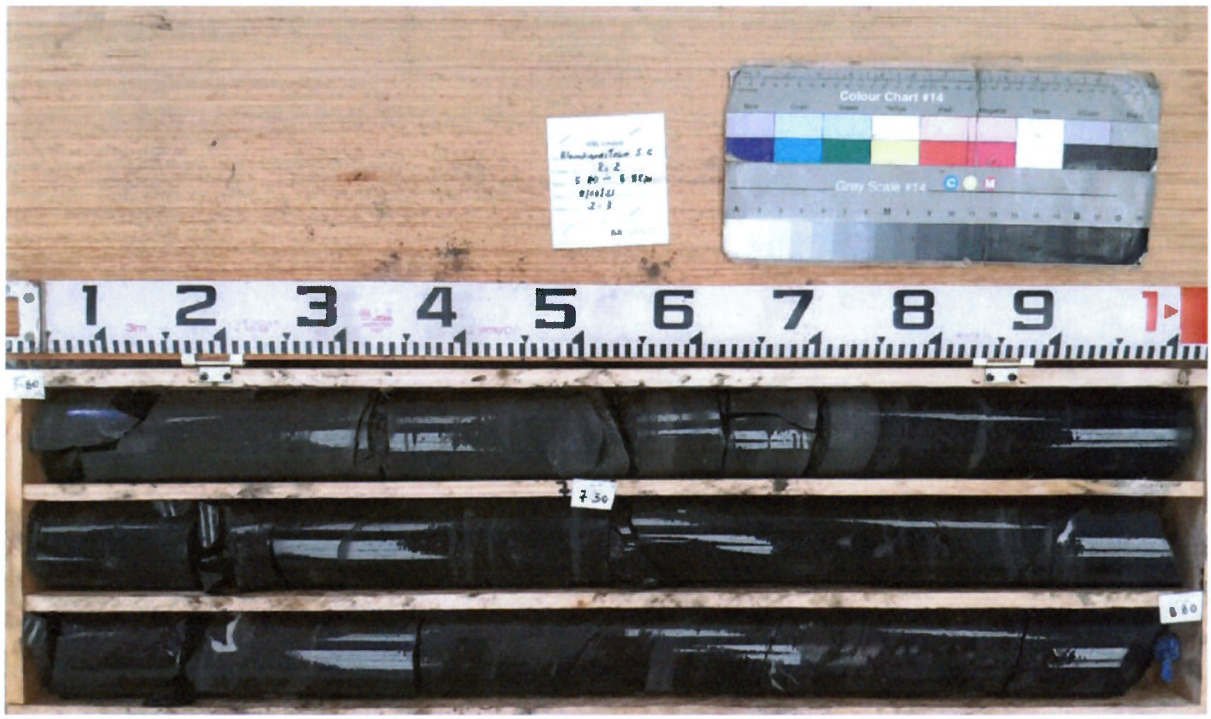
RC01 Box 3 of 3 – 8.80-10.20m



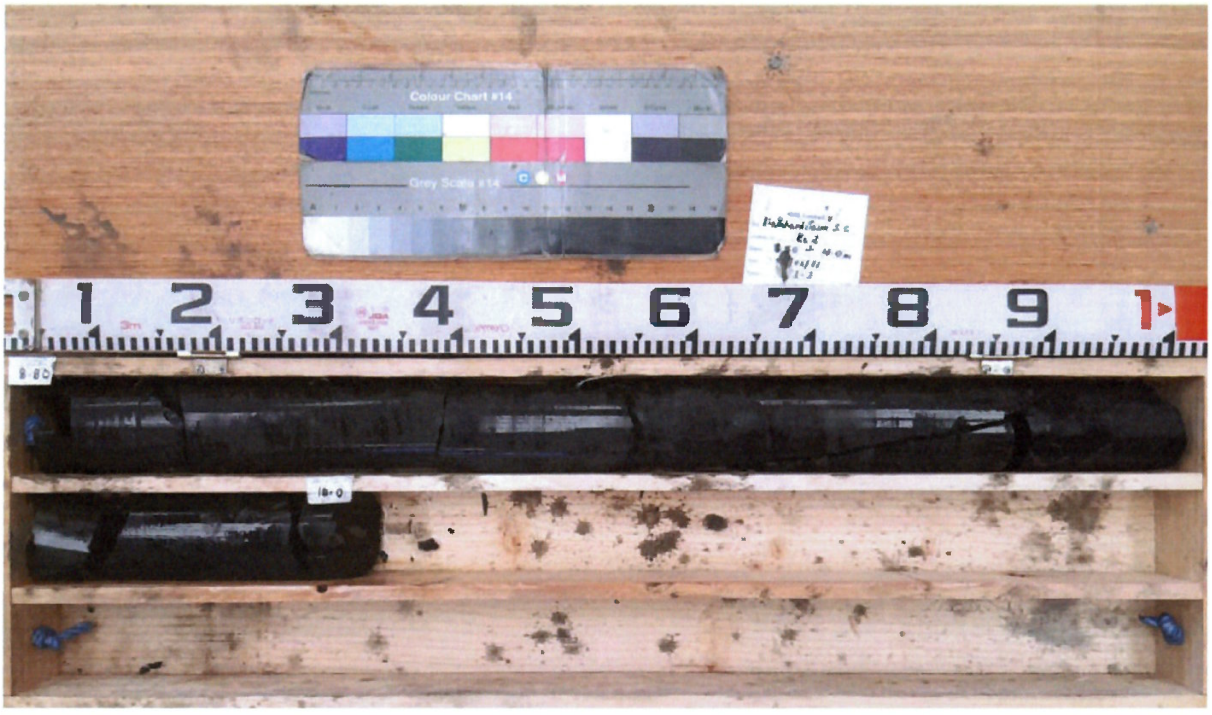
RC02 Box 1 of 3 – 3.00-5.80m



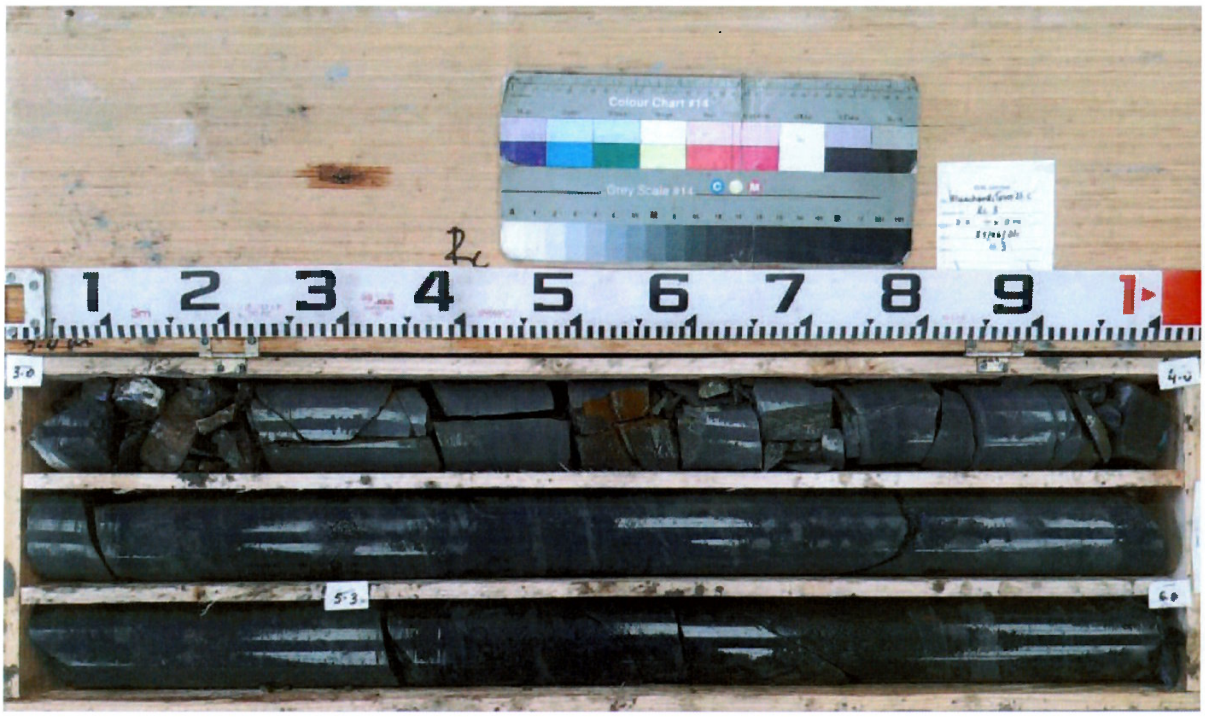
RC02 Box 2 of 3 – 5.80-8.80m



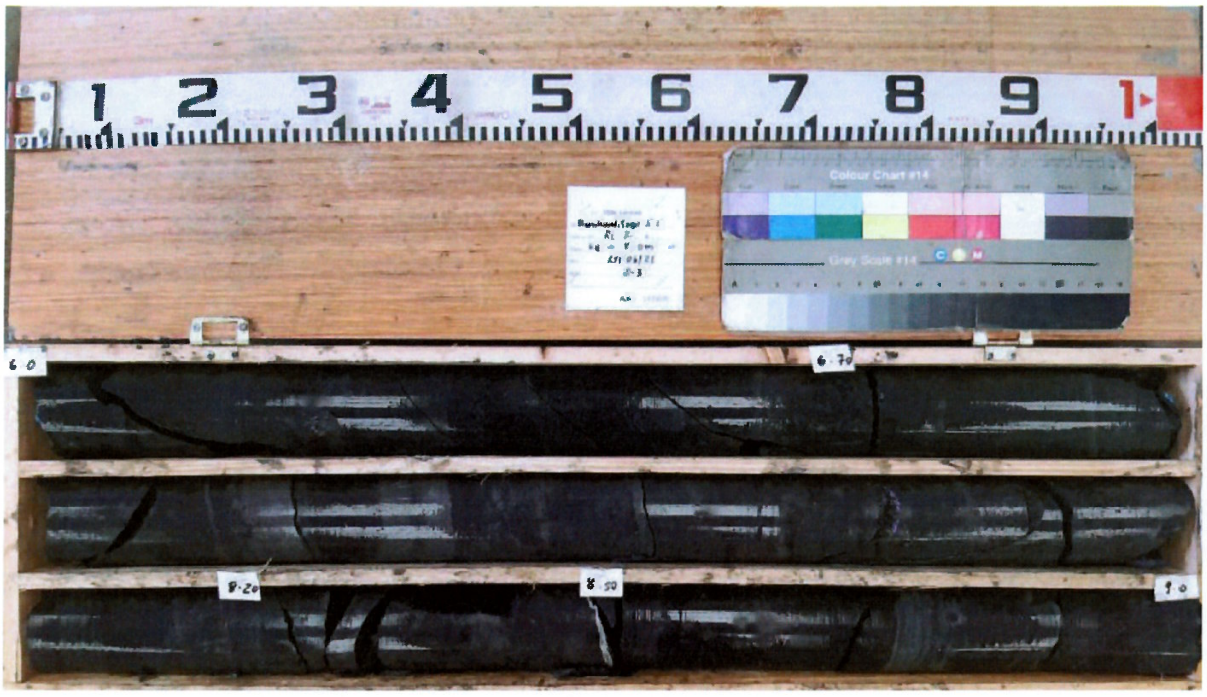
RC02 Box 3 of 3 – 8.80-10.00m



RC03 Box 1 of 3 – 3.00-6.00m



RC03 Box 2 of 3 – 6.00-9.00m



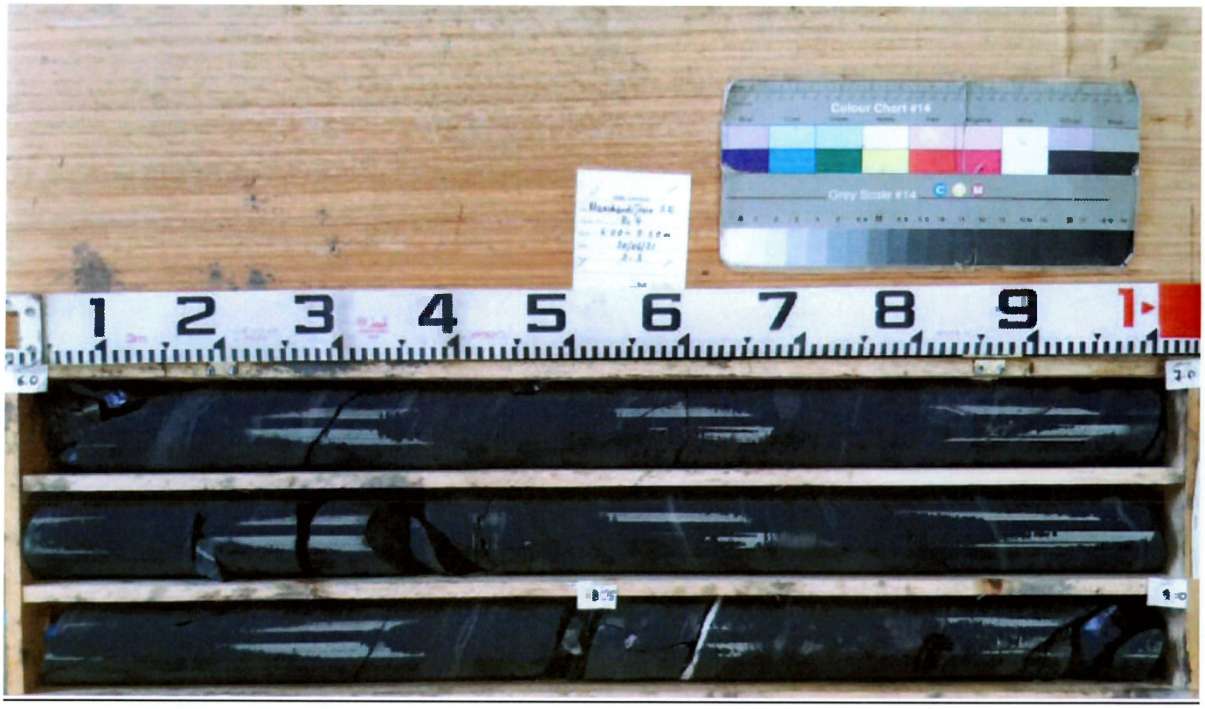
RC03 Box 3 of 3 – 9.00-10.00m



RC04 Box 1 of 3 – 3.00-6.00m



RC04 Box 2 of 3 – 6.00-9.00m



RC04 Box 3 of 3 – 9.00-10.00m



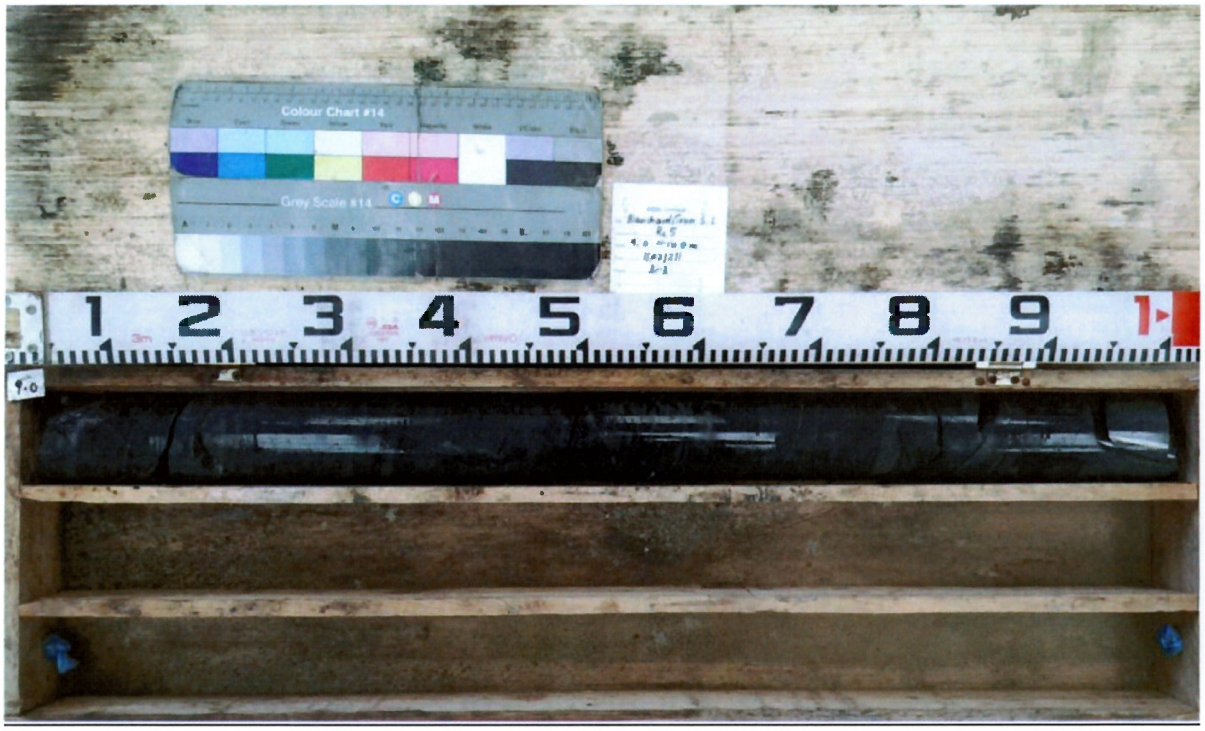
RC05 Box 1 of 3 – 3.00-6.00m



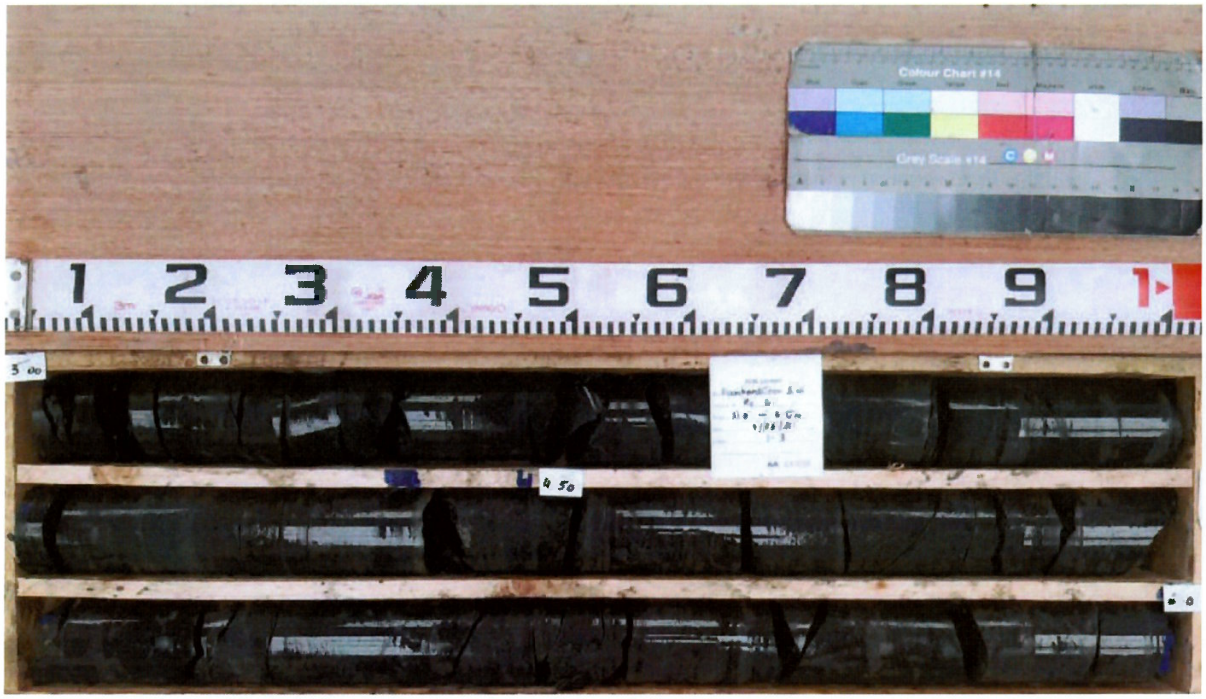
RC05 Box 2 of 3 – 6.00-9.00m



RC05 Box 3 of 3 – 9.00-10.00m



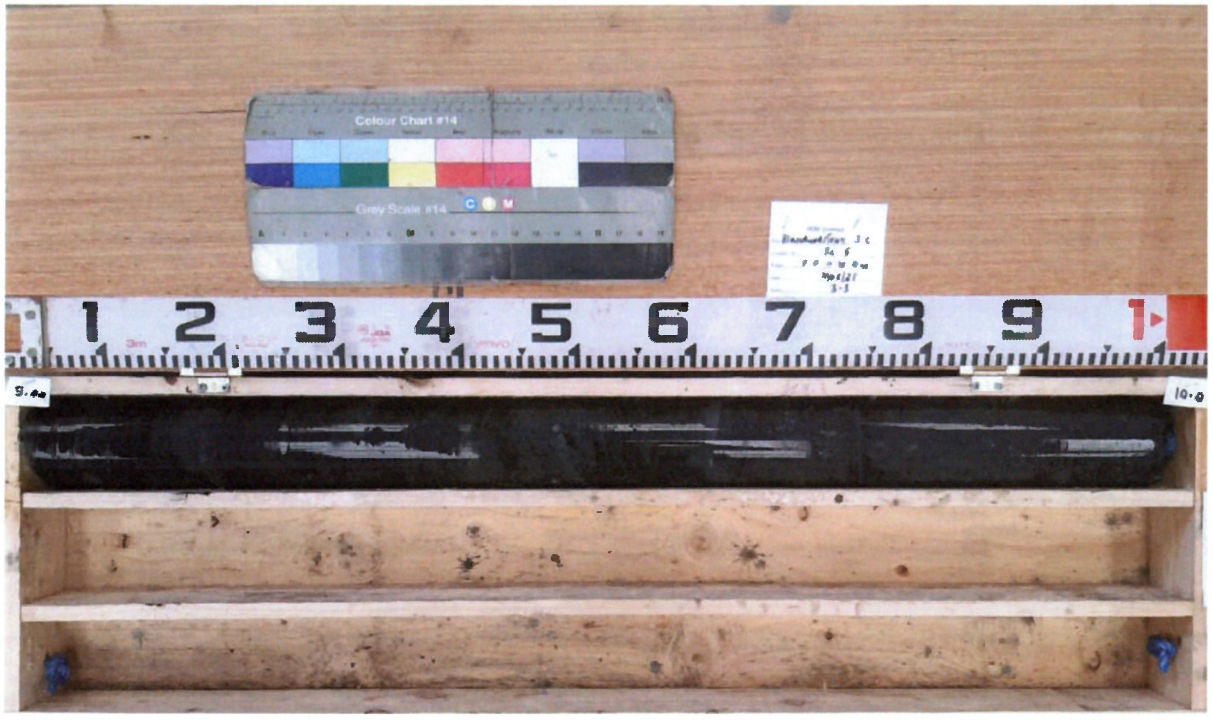
RC06 Box 1 of 3 – 3.00-6.00m



RC06 Box 2 of 3 – 6.00-9.00m



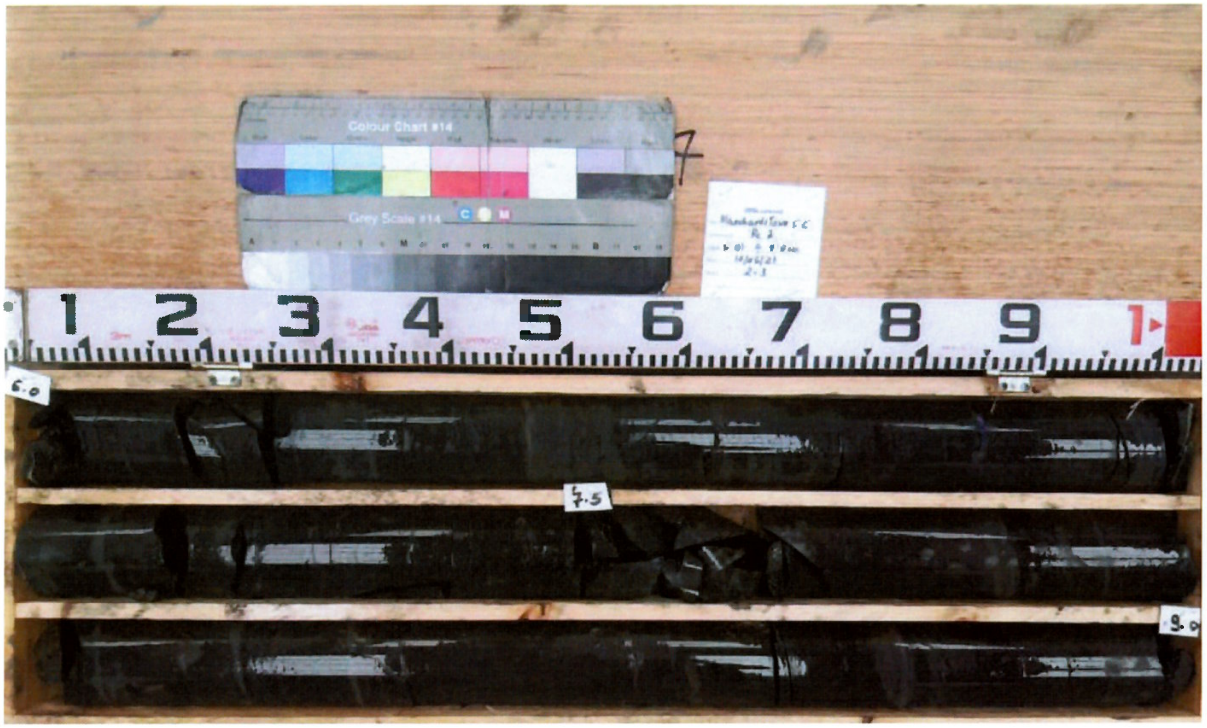
RC06 Box 3 of 3 – 9.00-10.00m



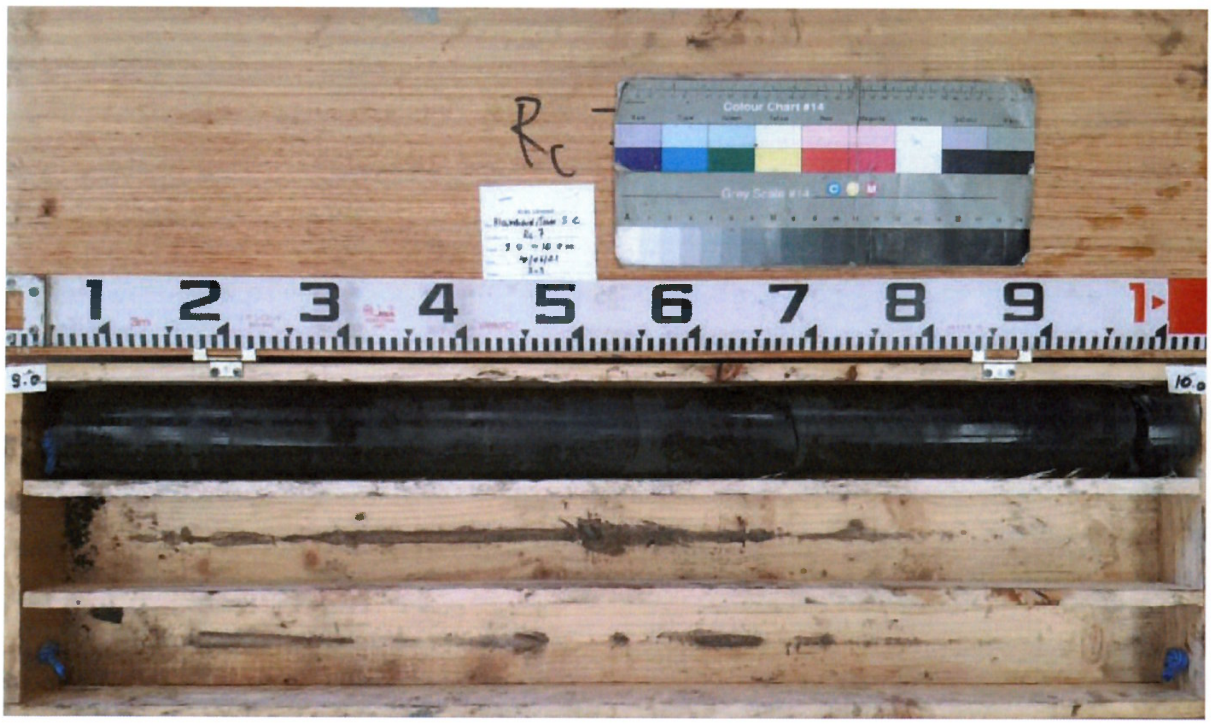
RC07 Box 1 of 3 – 3.00-6.00m



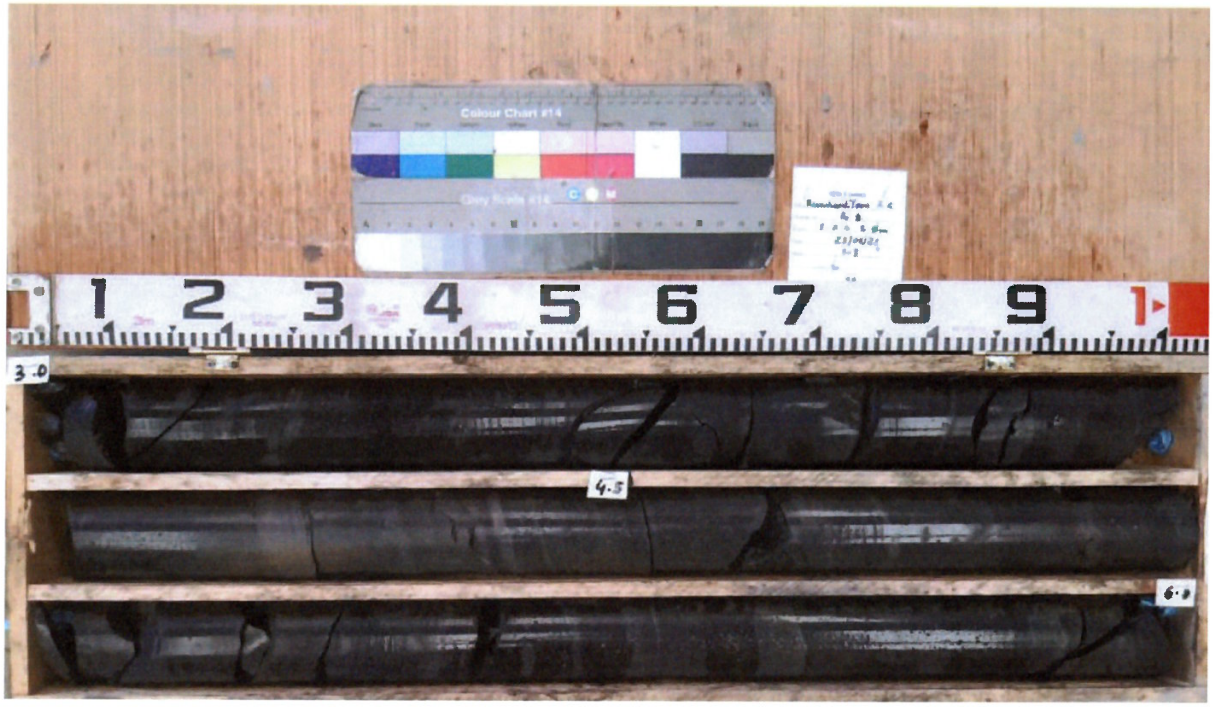
RC07 Box 2 of 3 – 6.00-9.00m



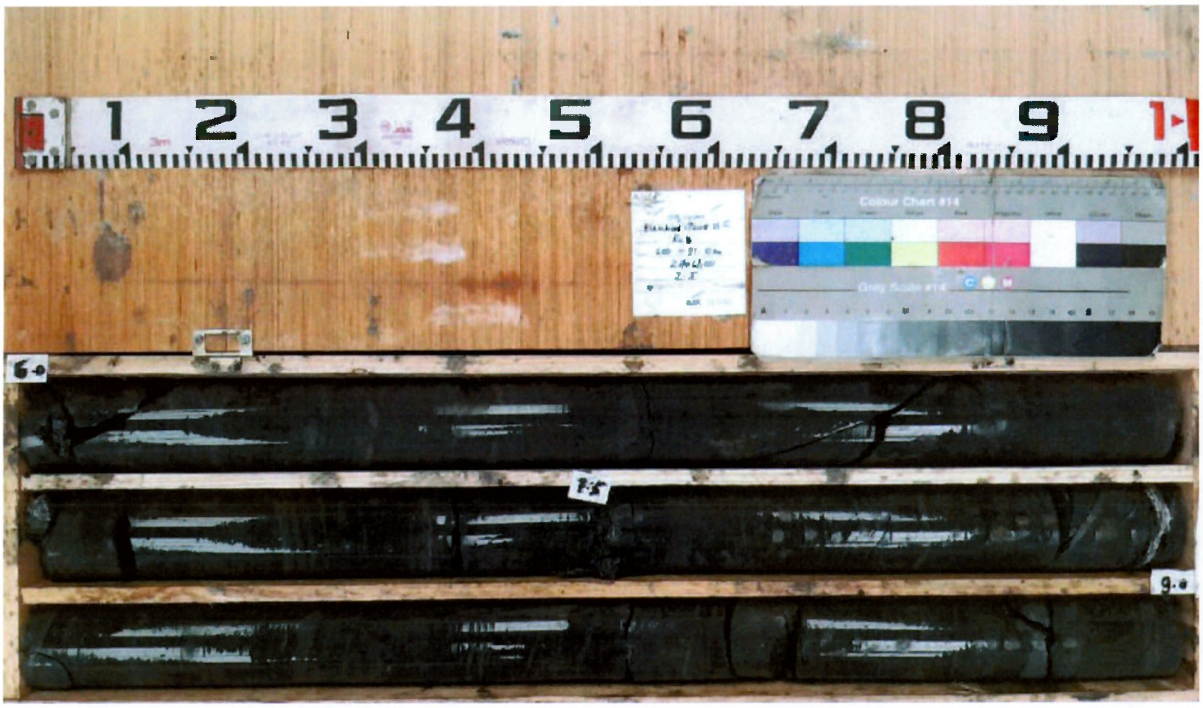
RC07 Box 3 of 3 – 9.00-10.00m



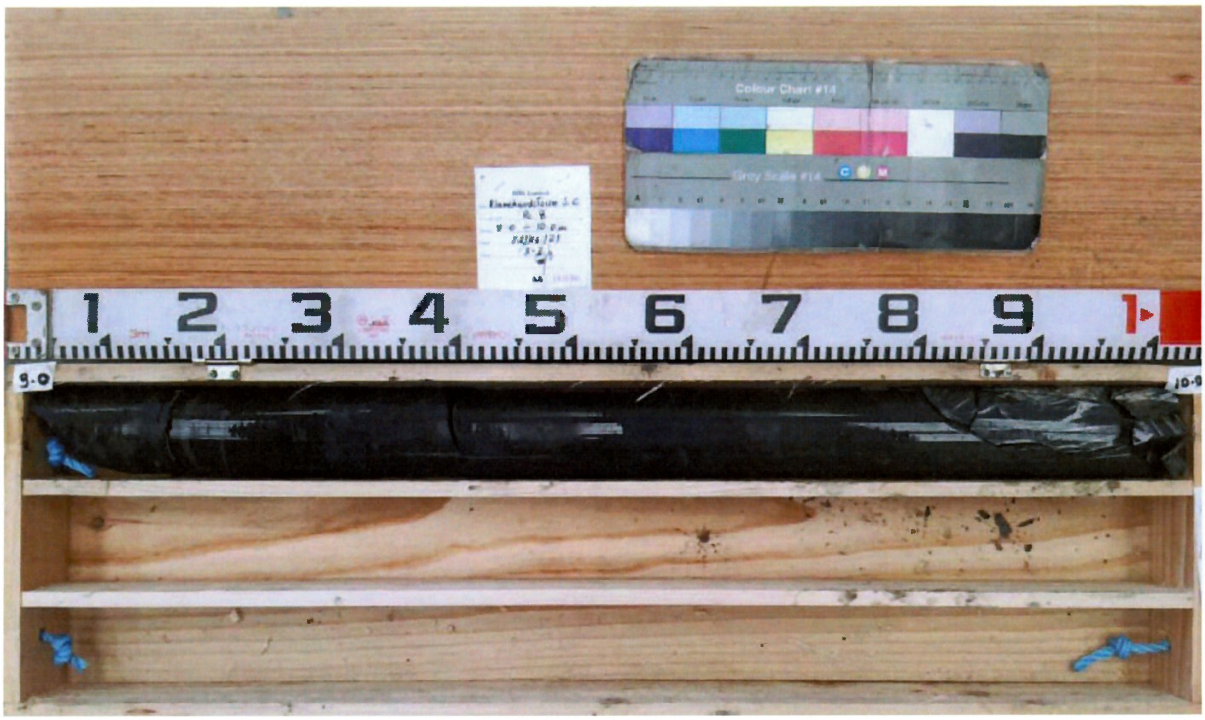
RC08 Box 1 of 3 – 3.00-6.00m



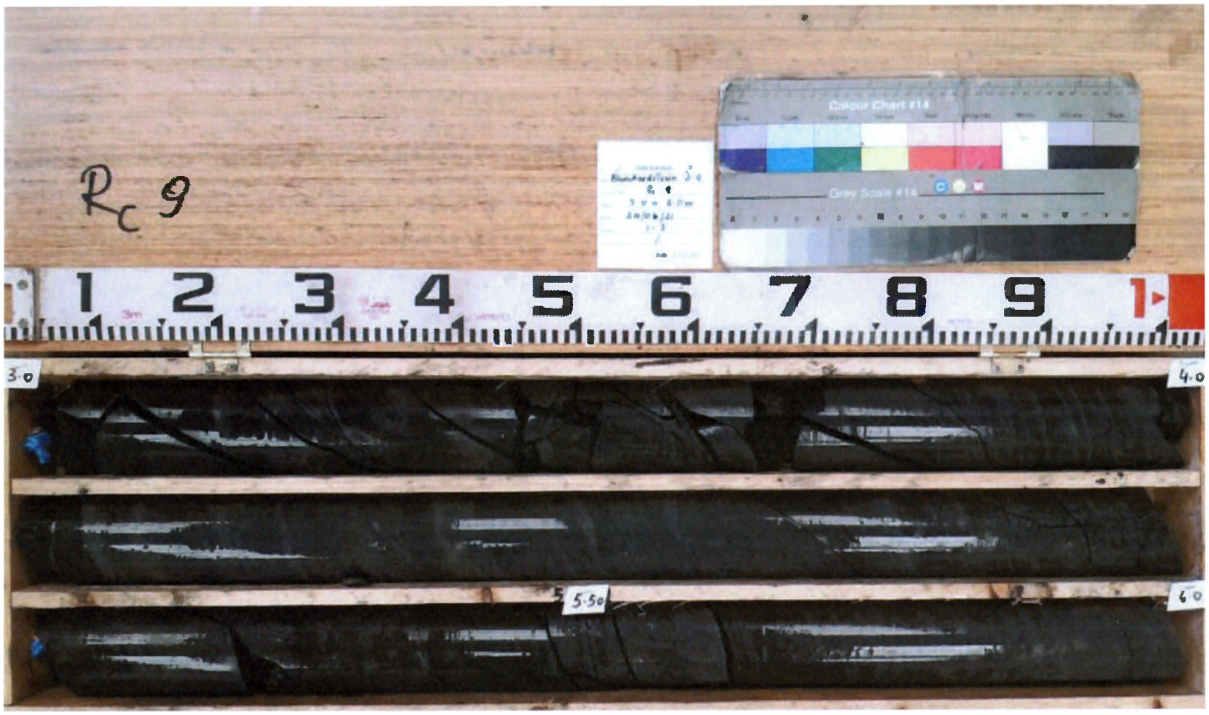
RC08 Box 2 of 3 – 6.00-9.00m



RC08 Box 3 of 3 – 9.00-10.00m



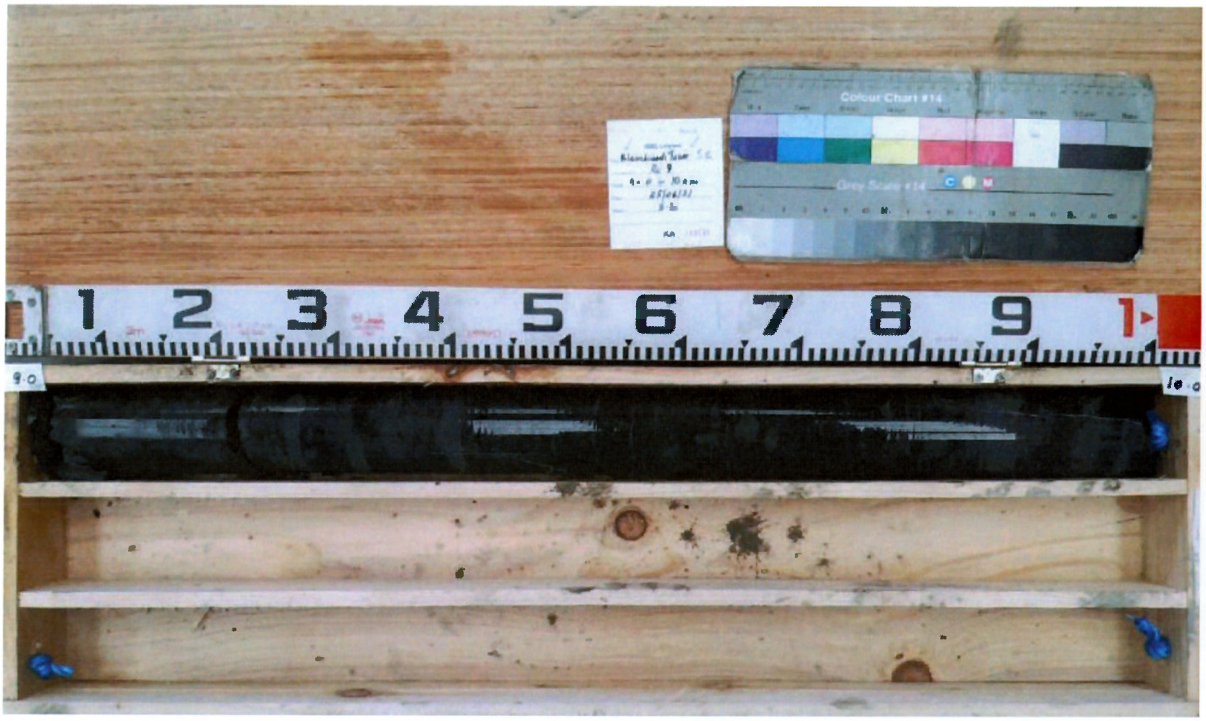
RC09 Box 1 of 3 – 3.00-6.00m



RC09 Box 2 of 3 – 6.00-9.00m



RC09 Box 3 of 3 – 9.00-10.00m



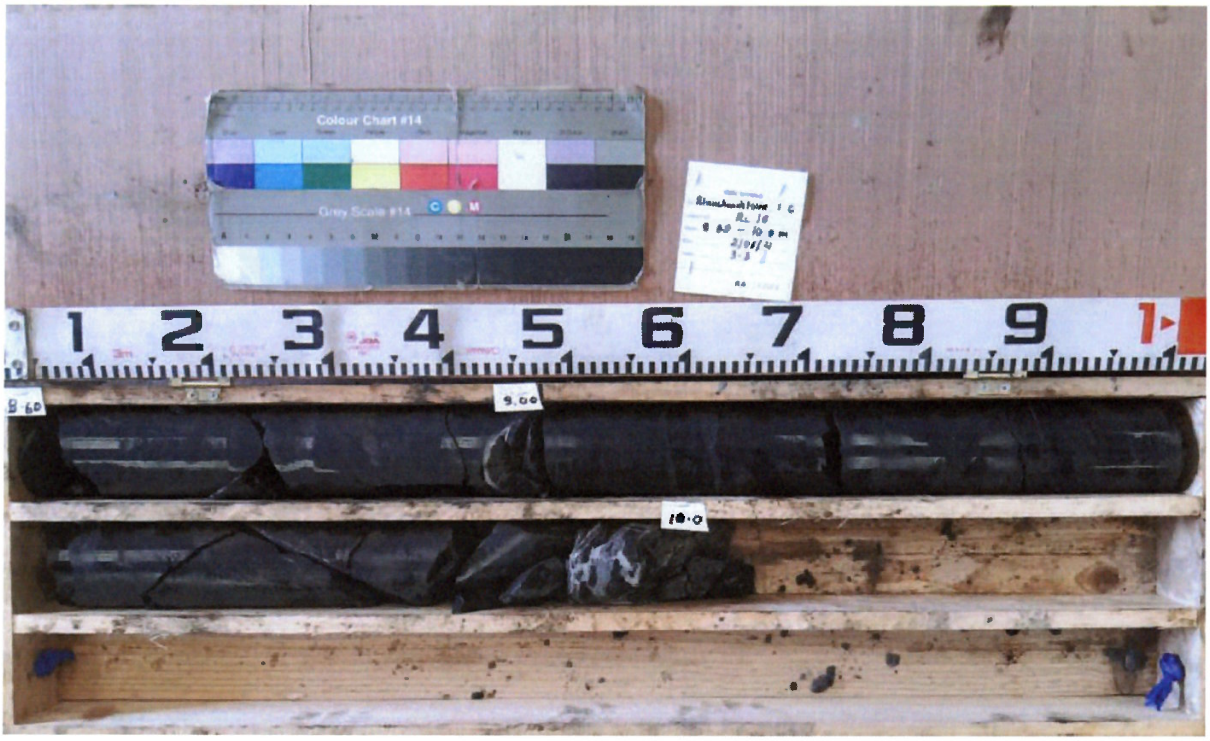
RC10 Box 1 of 3 – 3.00-5.70m



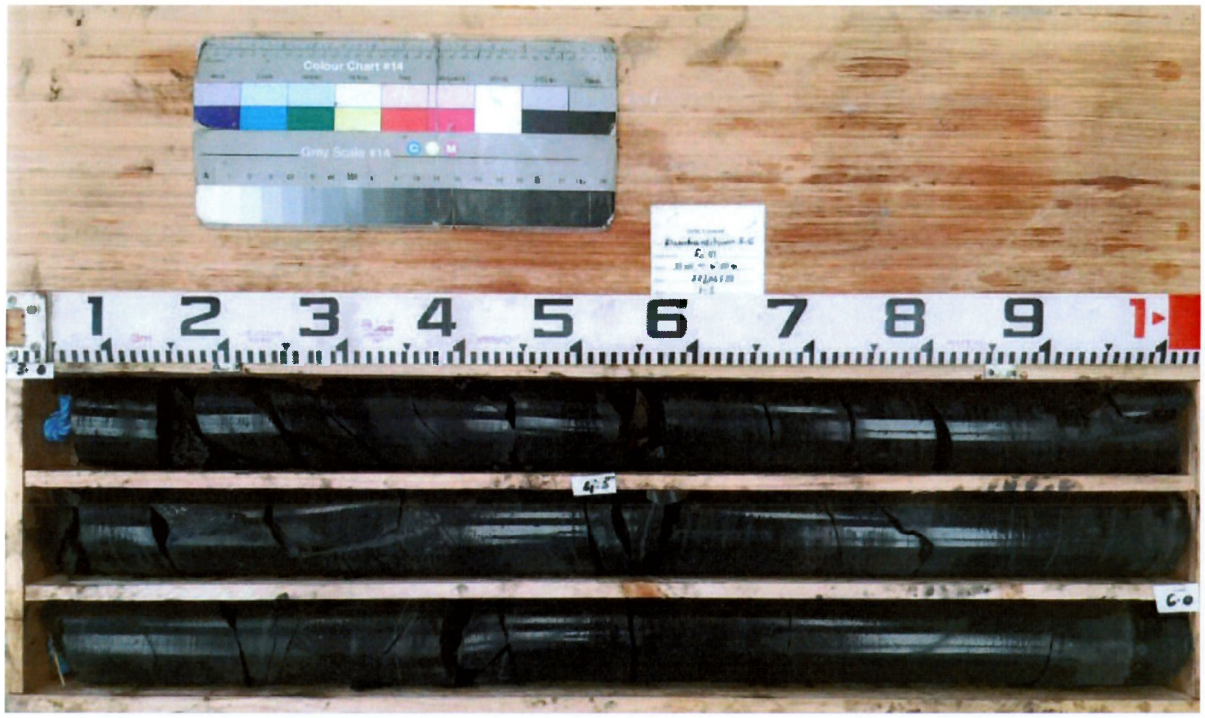
RC10 Box 2 of 3 – 5.70-8.60m



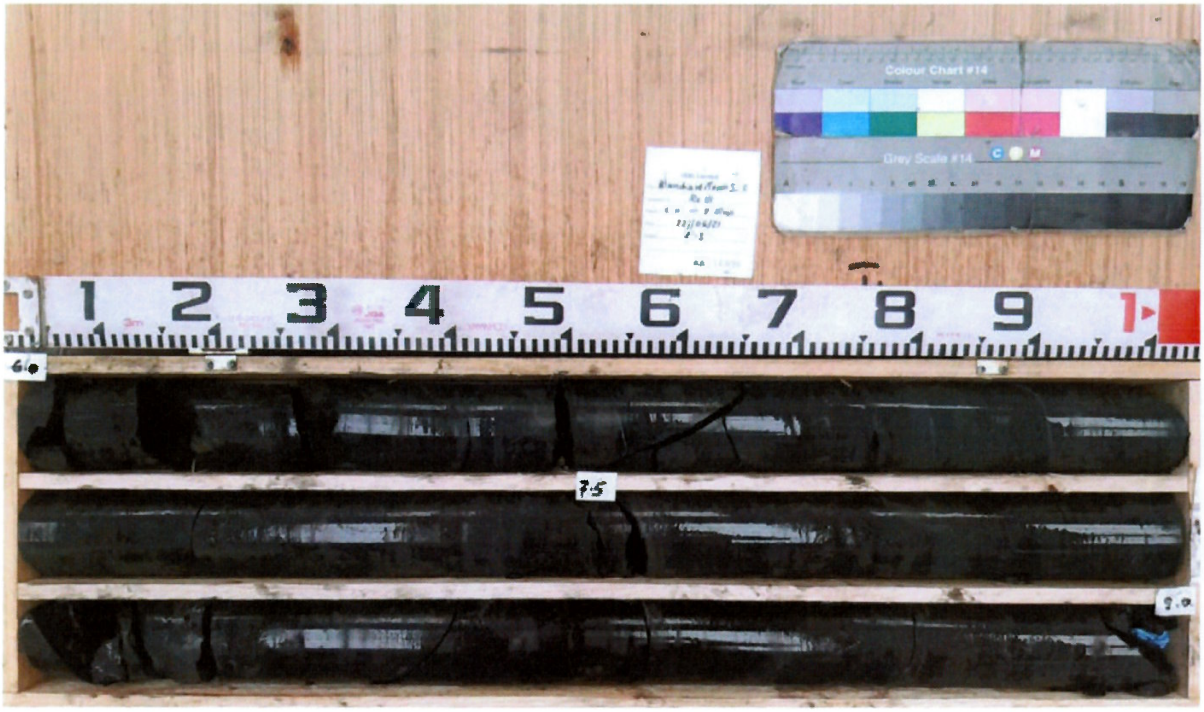
RC10 Box 3 of 3 – 8.60-10.00m



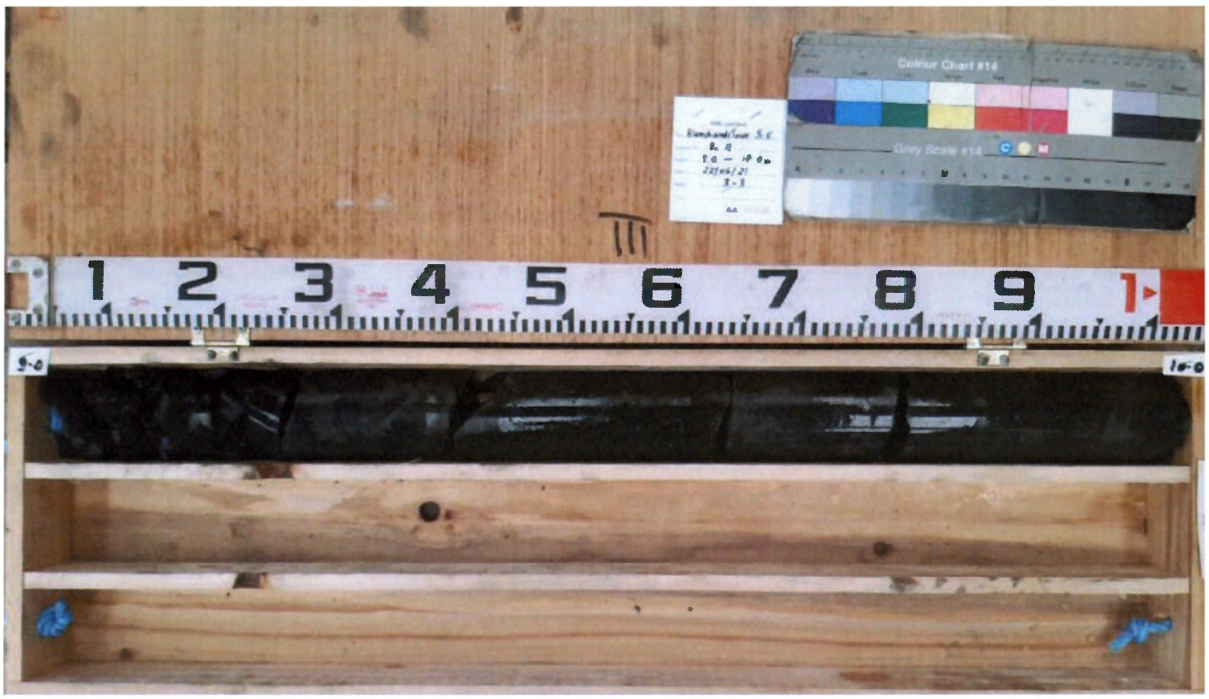
RC11 Box 1 of 3 – 3.00-6.00m



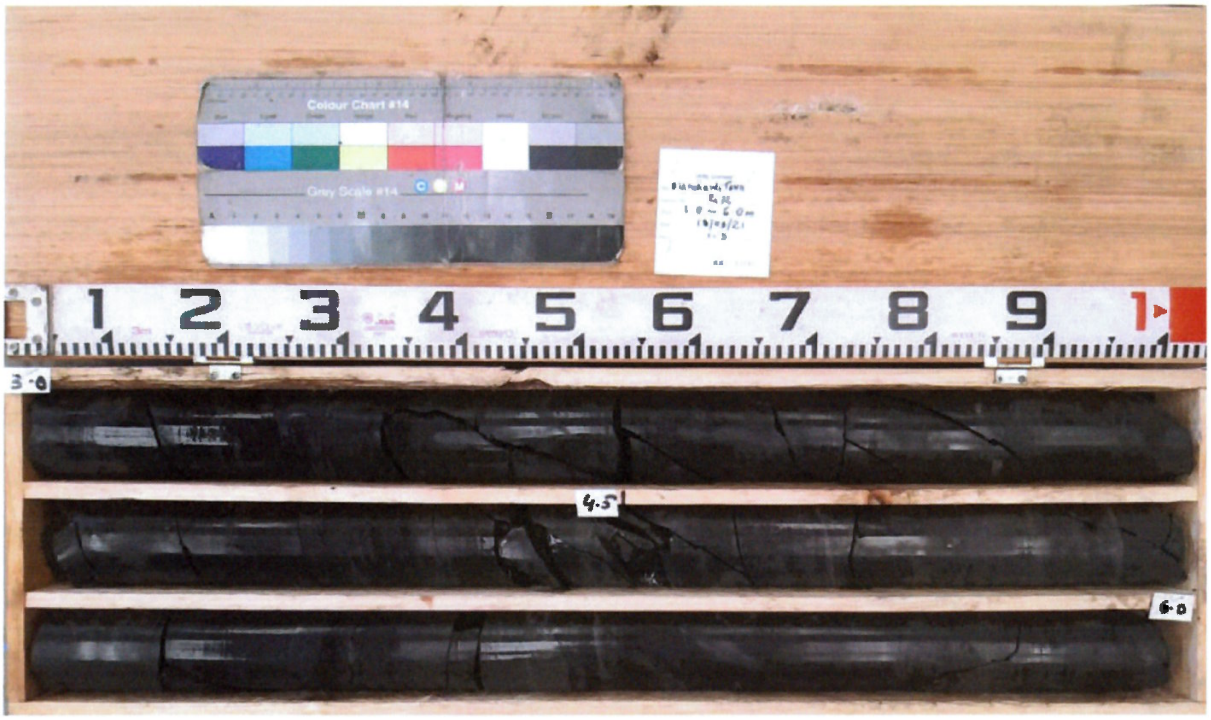
RC11 Box 2 of 3 – 6.00-9.00m



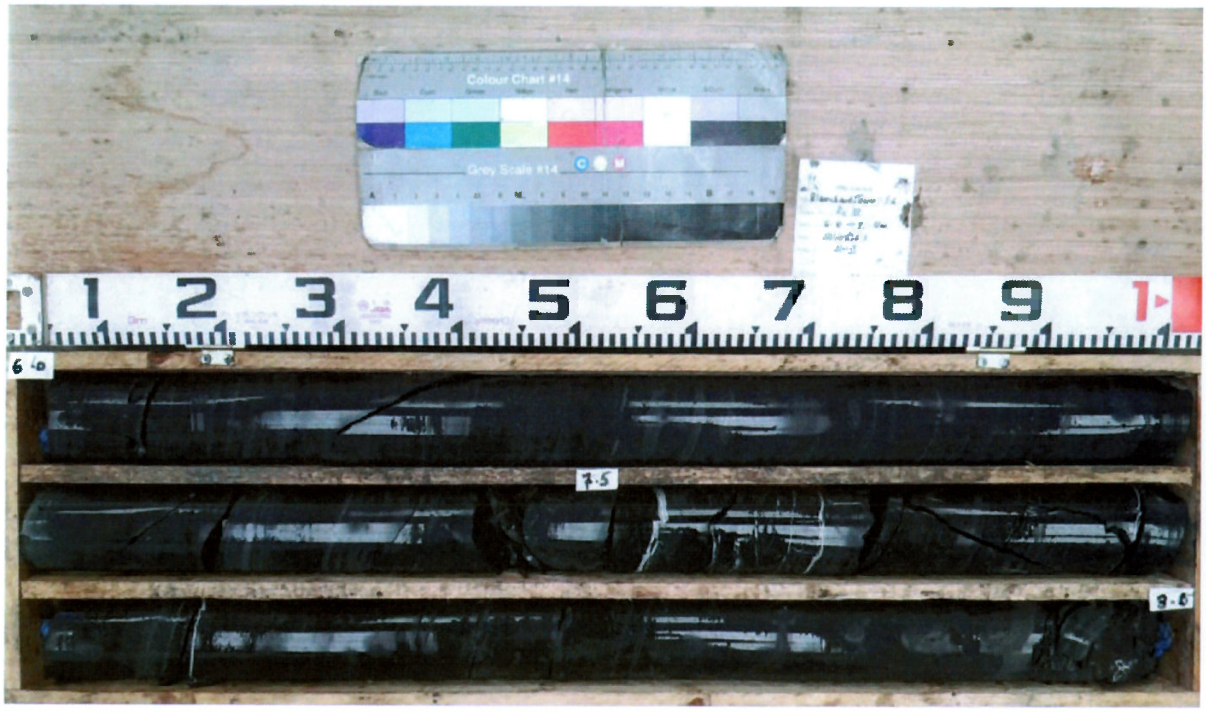
RC11 Box 3 of 3 – 9.00-10.00m



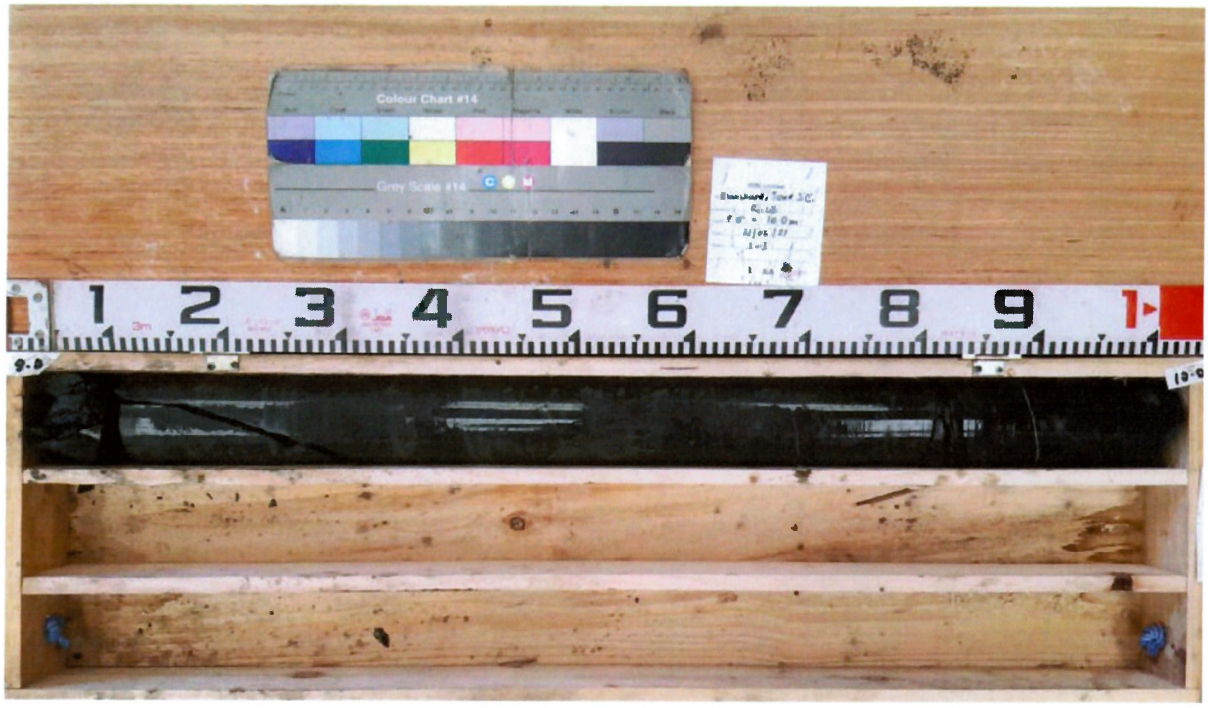
RC12 Box 1 of 3 – 3.00-6.00m



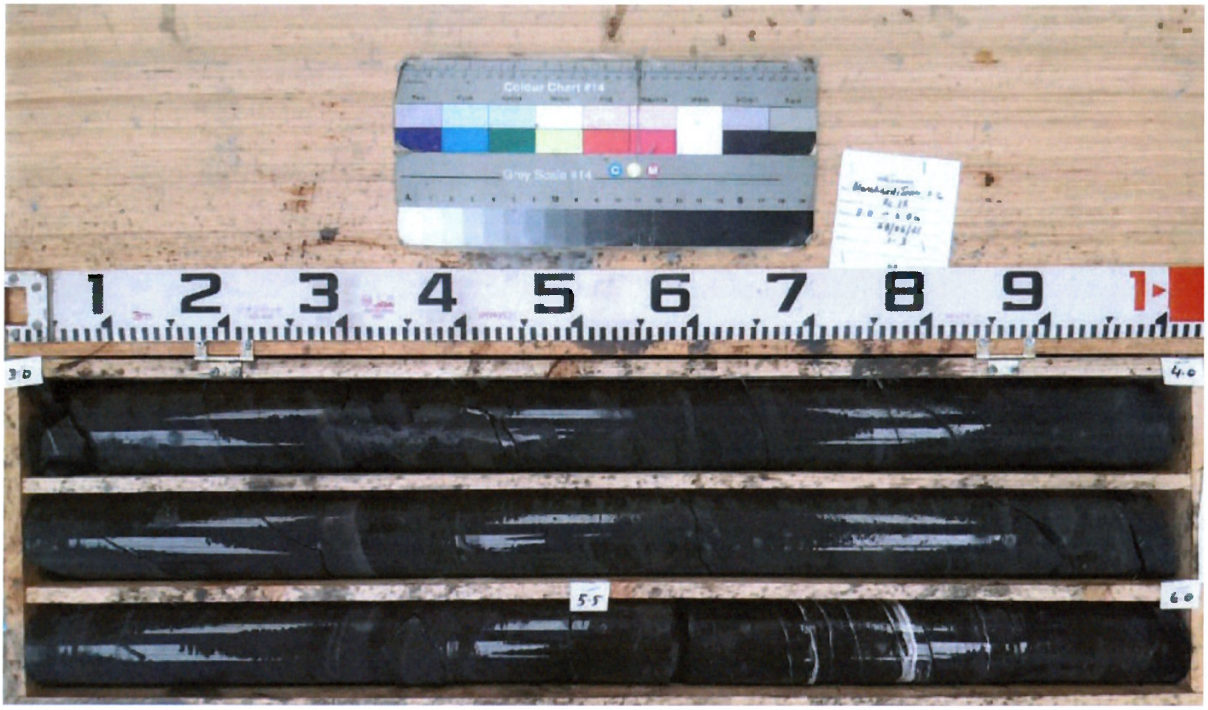
RC12 Box 2 of 3 – 6.00-9.00m



RC12 Box 3 of 3 – 9.00-10.00m



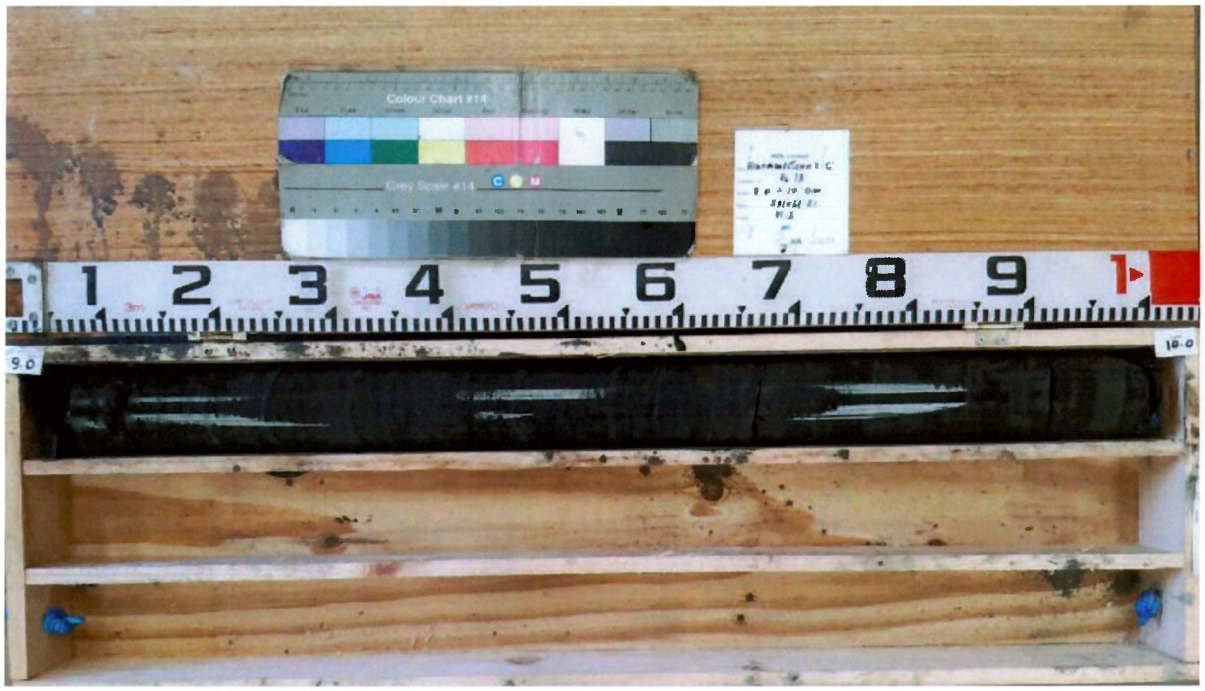
RC13 Box 1 of 3 – 3.00-6.00m



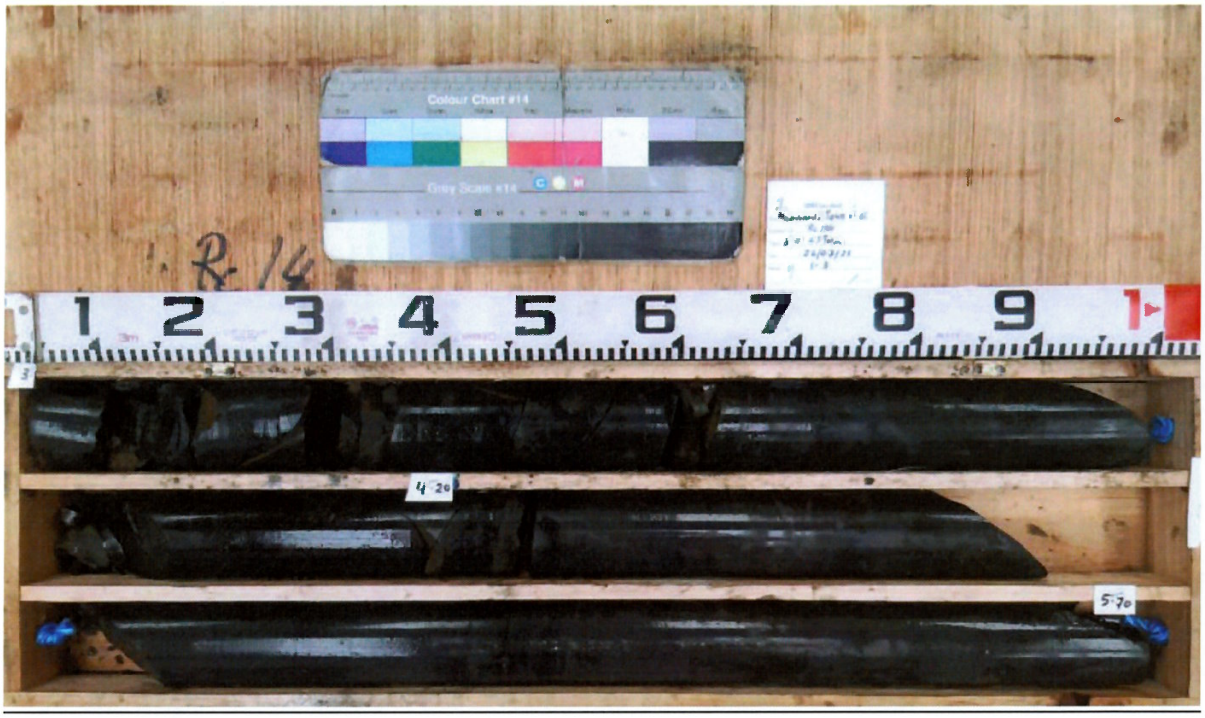
RC13 Box 2 of 3 – 6.00-9.00m



RC13 Box 3 of 3 – 9.00-10.00m



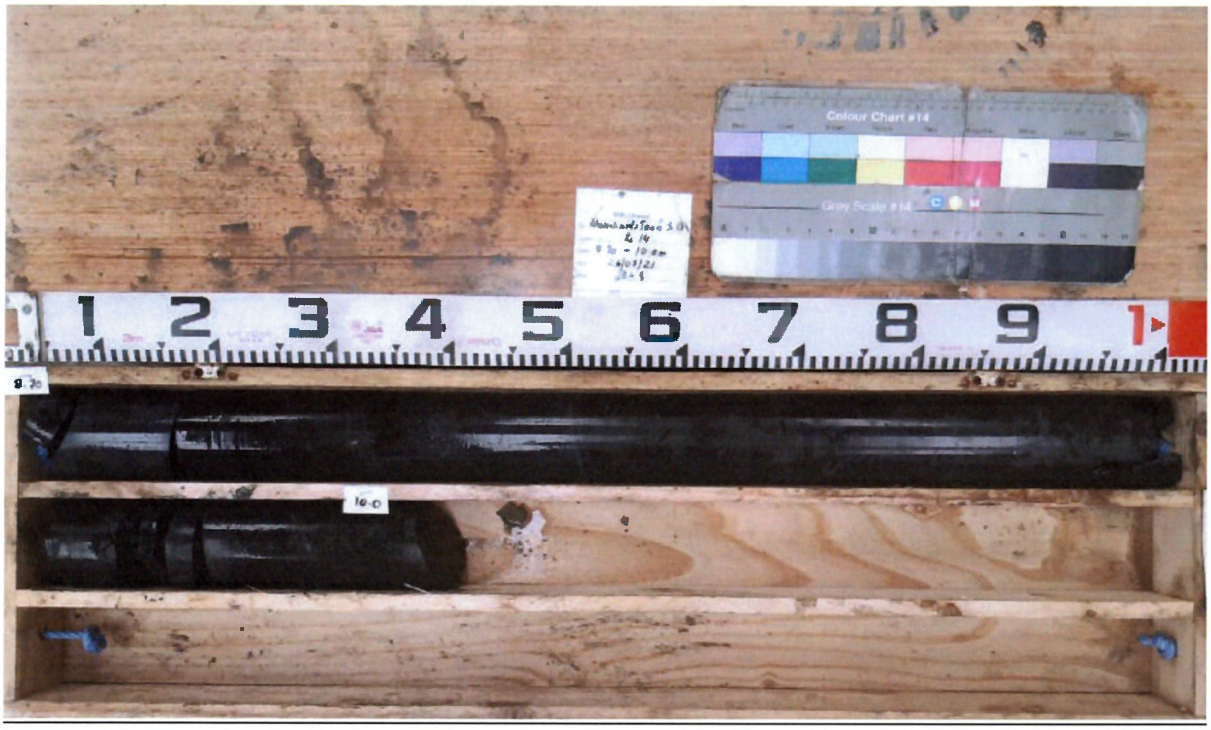
RC14 Box 1 of 3 – 3.00-5.70m



RC14 Box 2 of 3 – 5.70-8.70m



RC14 Box 3 of 3 – 8.70-10.00m



RC15 Box 1 of 3 – 3.00-6.00m



RC15 Box 2 of 3 – 6.00-9.00m



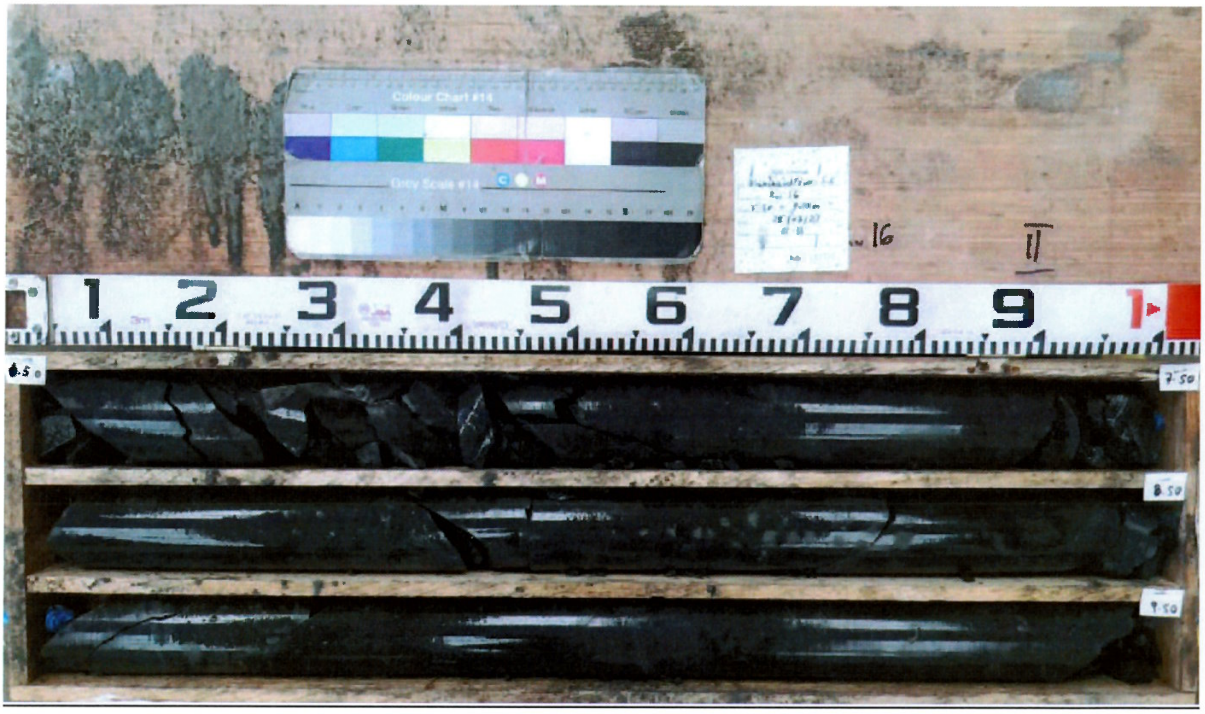
RC15 Box 3 of 3 – 9.00-10.00m



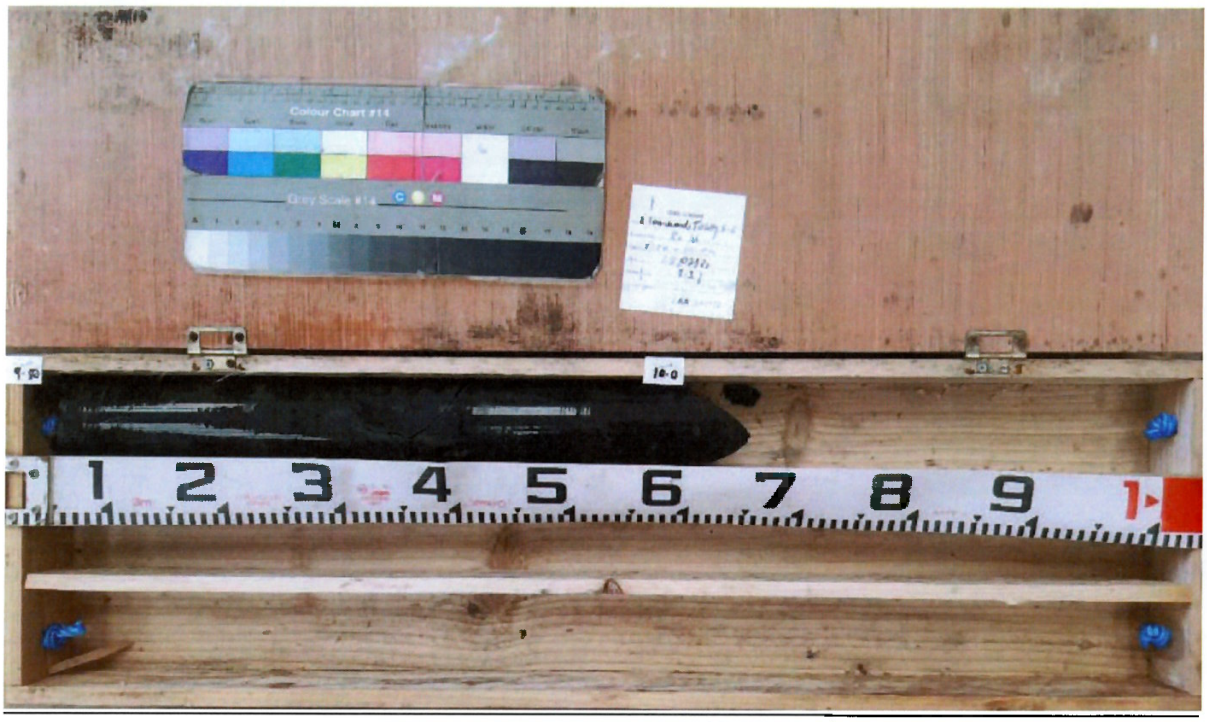
RC16 Box 1 of 3 – 3.50-6.50m



RC16 Box 2 of 3 – 6.50-9.50m



RC16 Box 3 of 3 – 9.50-10.00m



RC17 Box 1 of 3 – 3.00-6.00m



RC17 Box 2 of 3 – 6.00-9.00m



RC17 Box 3 of 3 – 9.00-10.00m



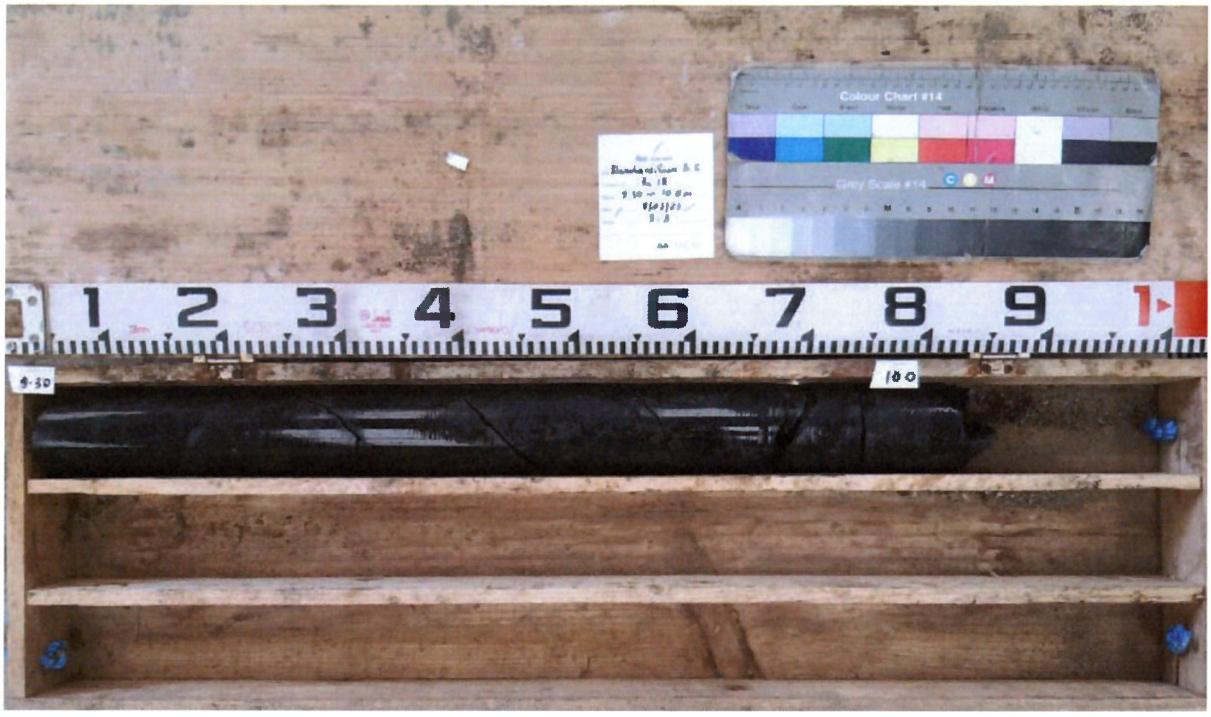
RC18 Box 1 of 3 – 3.30-6.30m



RC18 Box 2 of 3 – 6.30-9.30m



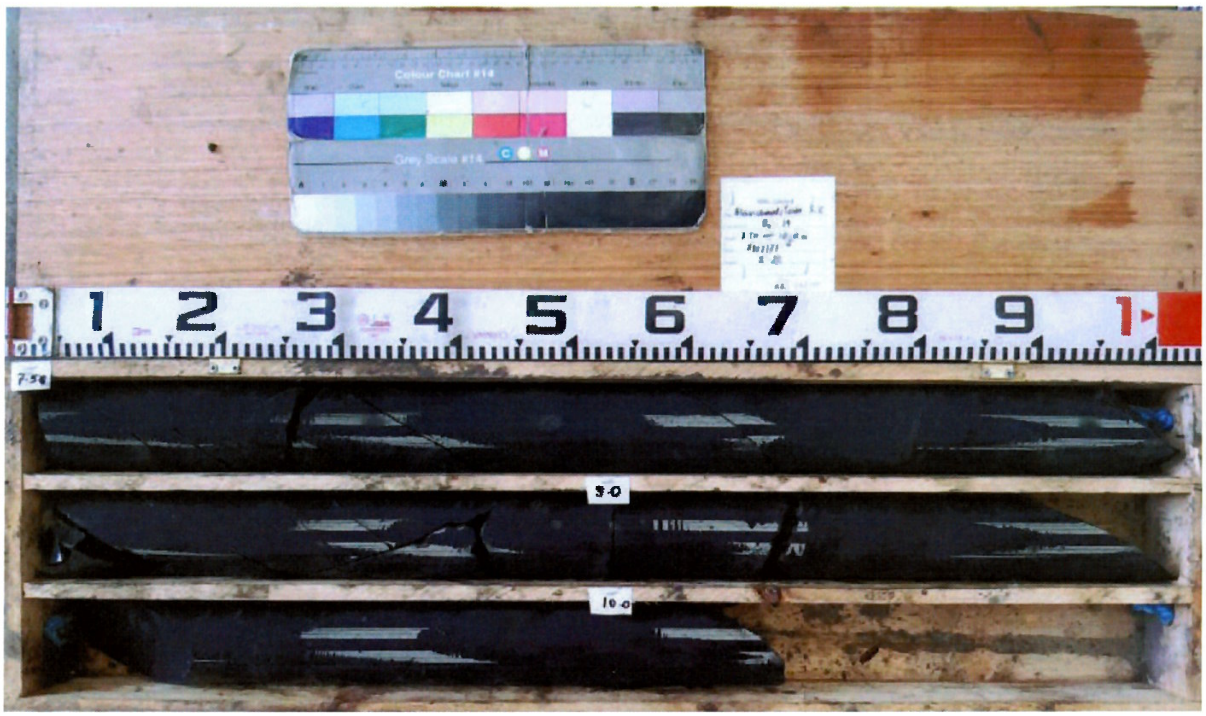
RC18 Box 3 of 3 – 9.30-10.00m



RC19 Box 1 of 2 – 4.50-7.50m



RC19 Box 2 of 2 – 7.50-10.00m



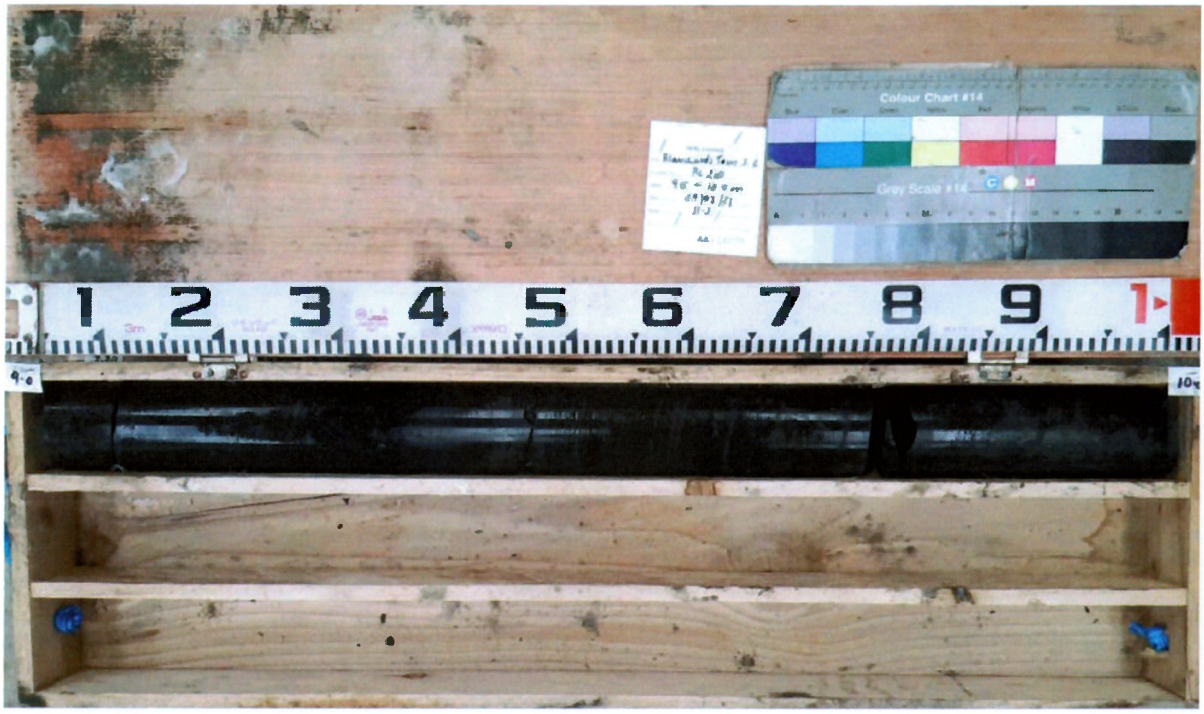
RC20 Box 1 of 3 – 3.00-6.00m



RC20 Box 2 of 3 – 6.00-9.00m



RC20 Box 3 of 3 – 9.00-10.00m



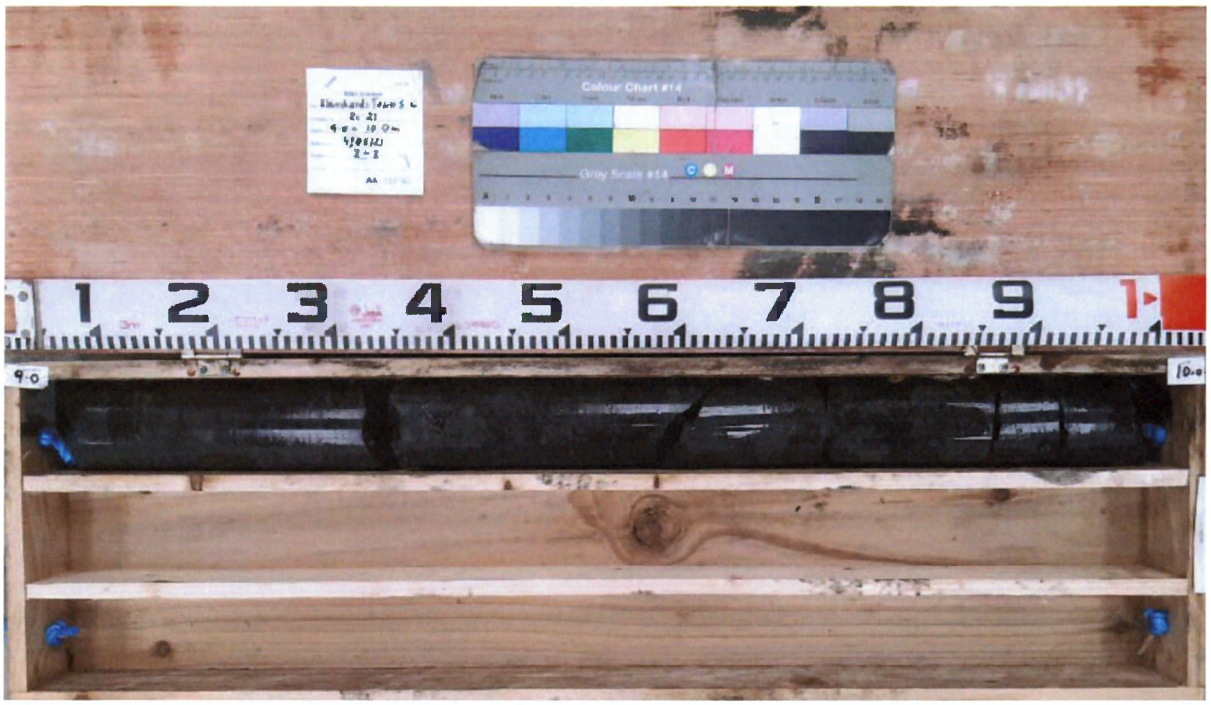
RC21 Box 1 of 3 – 3.00-6.00m



RC21 Box 2 of 3 – 6.00-9.00m



RC21 Box 3 of 3 – 9.00-10.00m



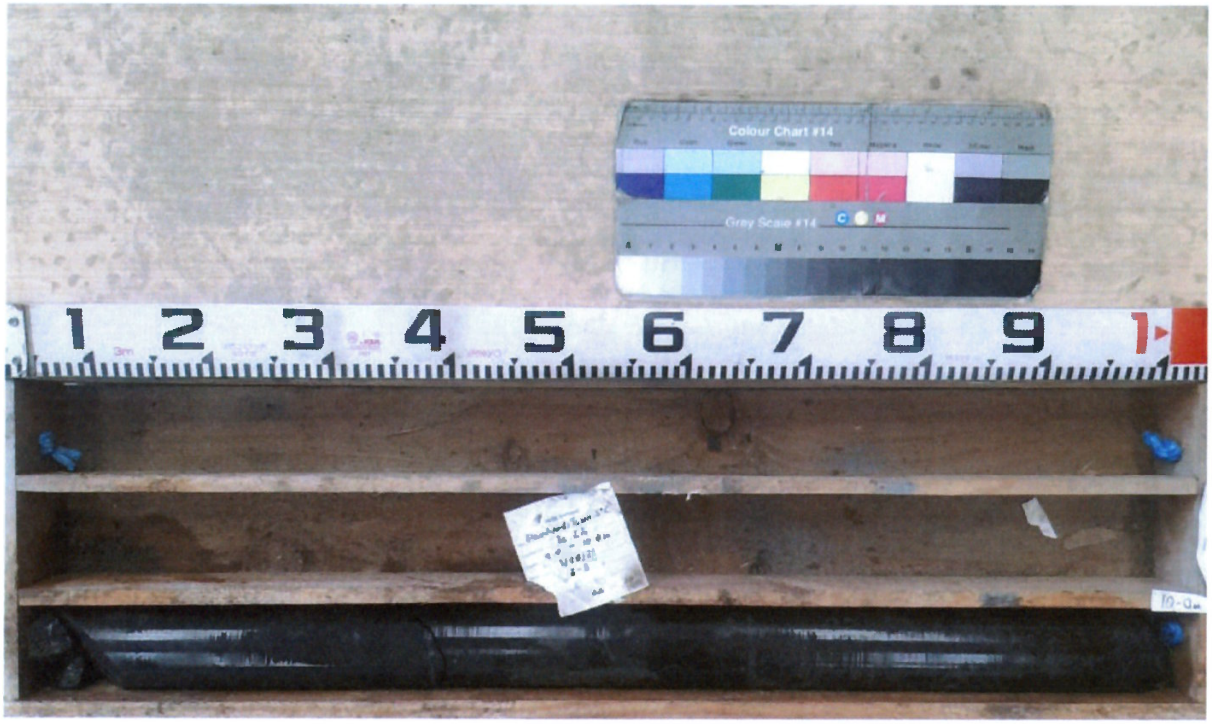
RC22 Box 1 of 3 – 3.00-6.00m



RC22 Box 2 of 3 – 6.00-9.00m



RC22 Box 3 of 3 – 9.00-10.00m



Appendix 4

Infiltration Test Records

Soakaway Design f -value from field tests IGSL

Contract: Blanchardstown T.C. 23311
Test No. SA01
Engineer DBFL
Date: 28/05/2021

Summary of ground conditions

from	to	Description	Ground water
0.00	0.05	TARMAC	DRY
0.05	0.35	MADE GROUND (comprised of grey angular gravel - C.L.504)	
0.35	1.20	Firm to stiff, brown, slightly sandy gravelly SILT/CLAY with some angular cobbles	

Notes:

Field Data

Depth to Water (m)	Elapsed Time (min)
0.580	0.00
0.580	1.00
0.585	2.00
0.585	3.00
0.585	4.00
0.585	5.00
0.585	6.00
0.590	7.00
0.590	8.00
0.590	9.00
0.590	10.00
0.592	12.00
0.592	14.00
0.595	16.00
0.595	18.00
0.597	20.00
0.600	25.00
0.605	30.00
0.610	35.00
0.610	40.00
0.610	45.00
0.610	50.00
0.610	55.00
0.610	60.00

Field Test

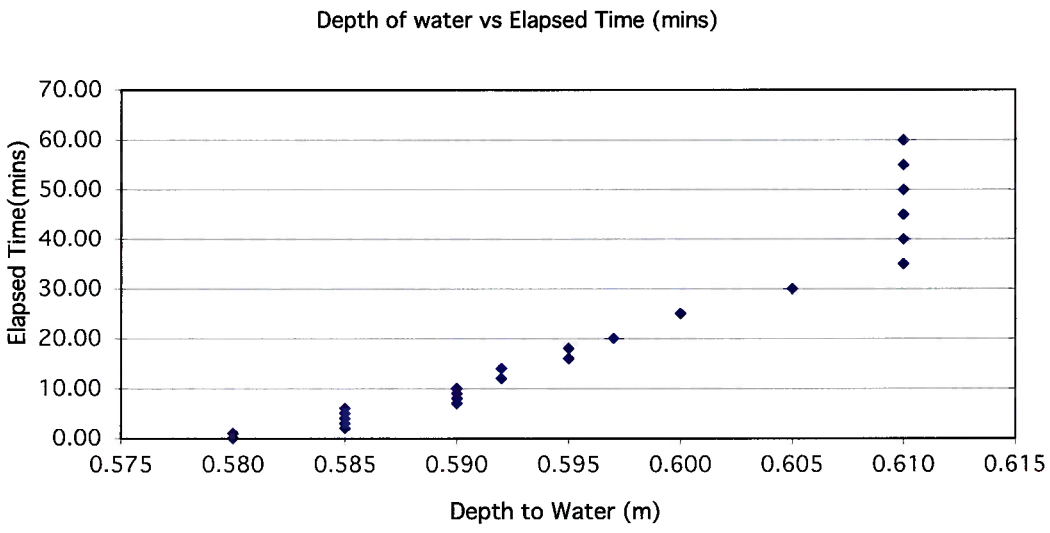
Depth of Pit (D)	1.20	m
Width of Pit (B)	0.50	m
Length of Pit (L)	1.50	m
Initial depth to Water =	0.58	m
Final depth to water =	0.610	m
Elapsed time (mins)=	60.00	
Top of permeable soil		m
Base of permeable soil		m

Water movement stop at 0.61m

Base area=	0.75	m2
*Av. side area of permeable stratum over test perio	2.42	m2
Total Exposed area =	3.17	m2

Infiltration rate (f) = Volume of water used/unit exposed area / unit time

f= 0.00012 m/min or 1.97161E-06 m/sec



Soakaway Design f -value from field tests

IGSL

Contract: Blanchardstown T.C.
Test No. SA02
Engineer DBFL
Date: 28/05/2021

23311

Summary of ground conditions

from	to	Description	Ground water
0.00	0.06	TARMAC	DRY
0.06	0.16	MADE GROUND (comprised of grey angular gravel - C.L.504)	
0.16	0.95	Stiff, light brown, slightly sandy slightly gravelly SILT/CLAY with very occasional	
		cobbles	
0.95		Obstruction - possible rock	

Notes:

Field Data

Depth to Water (m)	Elapsed Time (min)
0.510	0.00
0.510	1.00
0.510	2.00
0.510	3.00
0.510	4.00
0.510	5.00
0.510	6.00
0.510	7.00
0.510	8.00
0.510	9.00
0.510	10.00
0.510	12.00
0.510	14.00
0.510	16.00
0.510	18.00
0.510	20.00
0.510	25.00
0.510	30.00
0.510	35.00
0.510	40.00
0.510	45.00
0.510	50.00
0.510	55.00
0.510	60.00

Field Test

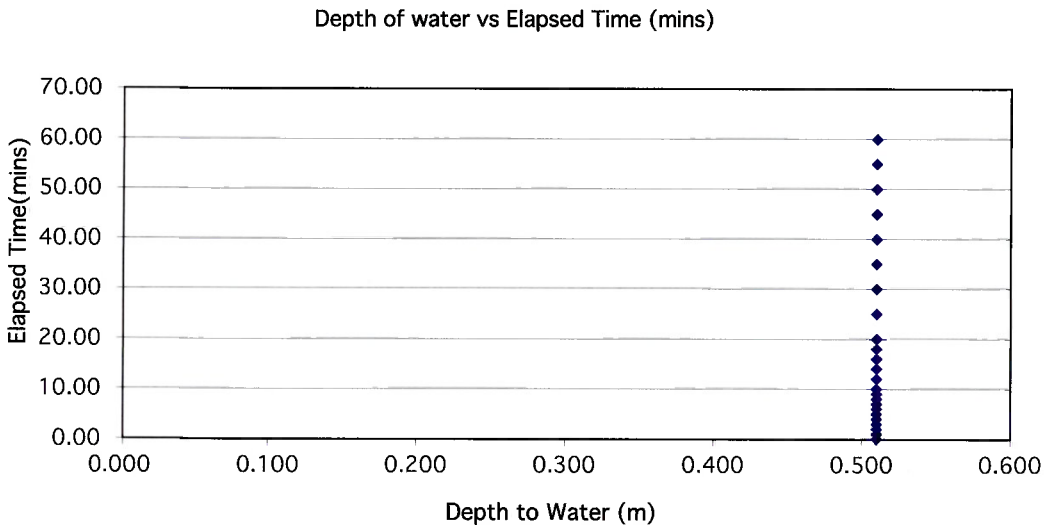
Depth of Pit (D)	0.95	m
Width of Pit (B)	0.50	m
Length of Pit (L)	1.50	m
Initial depth to Water =	0.51	m
Final depth to water =	0.510	m
Elapsed time (mins)=	60.00	
Top of permeable soil		m
Base of permeable soil		m

NO WATER SOAKAGE IN THE LOCATION

Base area=	0.75	m2
*Av. side area of permeable stratum over test period	1.76	m2
Total Exposed area =	2.51	m2

Infiltration rate (f) = Volume of water used/unit exposed area / unit time

f= 0 m/min or 0 m/sec



Soakaway Design f -value from field tests

IGSL

Contract: Blanchardstown T.C.
Test No. SA03
Engineer DBFL
Date: 17/06/2021

23311

Summary of ground conditions

from	to	Description	Ground water
0.00	0.06	TARMAC	
0.06	0.40	MADE GROUND (comprised of grey angular gravel - C.L.504)	
0.40	1.40	Firm to stiff, greyish brown, slightly sandy gravelly silty CLAY with occasional	DRY
		cobbles	

Notes:

Field Data

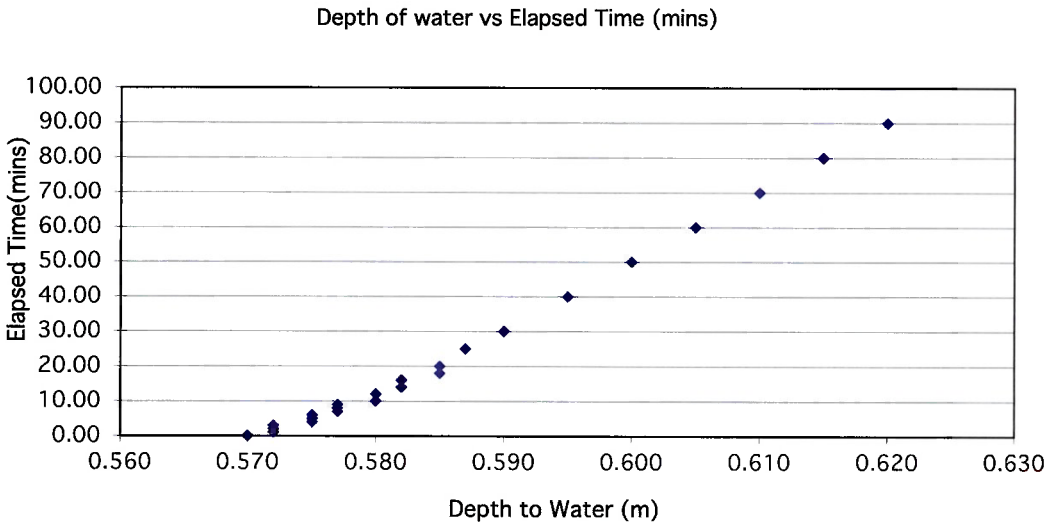
Depth to Water (m)	Elapsed Time (min)
0.570	0.00
0.572	1.00
0.572	2.00
0.572	3.00
0.575	4.00
0.575	5.00
0.575	6.00
0.577	7.00
0.577	8.00
0.577	9.00
0.580	10.00
0.580	12.00
0.582	14.00
0.582	16.00
0.585	18.00
0.585	20.00
0.587	25.00
0.590	30.00
0.595	40.00
0.600	50.00
0.605	60.00
0.610	70.00
0.615	80.00
0.620	90.00

Field Test

Depth of Pit (D)	1.40	m
Width of Pit (B)	0.50	m
Length of Pit (L)	1.50	m
Initial depth to Water =	0.57	m
Final depth to water =	0.62	m
Elapsed time (mins)=	90.00	
Top of permeable soil		m
Base of permeable soil		m
Base area=	0.75	m2
*Av. side area of permeable stratum over test perio	3.22	m2
Total Exposed area =	3.97	m2

Infiltration rate (f) = Volume of water used/unit exposed area / unit time

f= 0.0001 m/min or 1.74923E-06 m/sec



Appendix 5

Geotechnical Laboratory Testing

(Diametrial) POINT LOAD STRENGTH INDEX TEST DATA

Contract: Blanchardstown T.C.
Contract no. 23311
Date of test: 23/08/2021

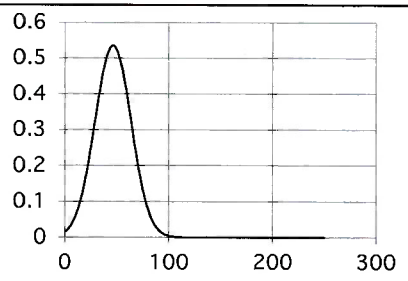
Sample Type: Core

RC No.	Depth m	D (Diameter) mm	P (failure load) kN	F	Is (index strength) Mpa	Is(50) (index strength) Mpa	*UCS MPa	Type	Orienation
RC01	3.1	78	15.0	1.222	2.47	3.01	60	d	//
	5.7	78	11.0	1.222	1.81	2.21	44	d	//
	7.5	78	8.0	1.222	1.31	1.61	32	d	//
	9.9	78	19.0	1.222	3.12	3.81	76	d	//
RC02	4.2	78	11.0	1.222	1.81	2.21	44	d	//
	5.9	78	5.0	1.222	0.82	1.00	20	d	//
	8.6	78	7.0	1.222	1.15	1.41	28	d	//
	9.8	78	8.0	1.222	1.31	1.61	32	d	//
	9.9	78	17.0	1.222	2.79	3.41	68	d	//
RC03	4.2	78	15.0	1.222	2.47	3.01	60	d	//
	5.9	78	9.0	1.222	1.48	1.81	36	d	//
	8.6	78	10.0	1.222	1.64	2.01	40	d	//
	9.4	78	10.0	1.222	1.64	2.01	40	d	//
	9.9	78	18.0	1.222	2.96	3.61	72	d	//
RC04	3.1	78	2.0	1.222	0.33	0.40	8	d	//
	5.7	78	9.0	1.222	1.48	1.81	36	d	//
	8.3	78	11.0	1.222	1.81	2.21	44	d	//
	9.9	78	15.0	1.222	2.47	3.01	60	d	//
RC05	3.8	78	14.0	1.222	2.30	2.81	56	d	//
	5.5	78	11.0	1.222	1.81	2.21	44	d	//
	7.6	78	15.0	1.222	2.47	3.01	60	d	//
	9.3	78	16.0	1.222	2.63	3.21	64	d	//
	9.9	78	10.0	1.222	1.64	2.01	40	d	//

Statistical Summary Data	Is(50)	UCS*
Number of Samples Tested	23	23
Minimum	0.40	8
Average	2.32	46
Maximum	3.81	76
Standard Dev.	0.86	17
Upper 95% Confidence Limit	4.00	80.07
Lower 95% Confidence Limit	0.64	12.81

Comments:
*UCS taken as k x Point Load Is(50): k= 20

*UCS Normal Distribution Curve



Abbreviations	
i	irregular
a	axial
b	block
d	diametral

approx. orientation to planes of weakness/bedding

U	unknown
P	perpendicular
//	parallel

(Diametrial) POINT LOAD STRENGTH INDEX TEST DATA

Contract: Blanchardstown T.C.
Contract no. 23311
Date of test: 23/08/2021

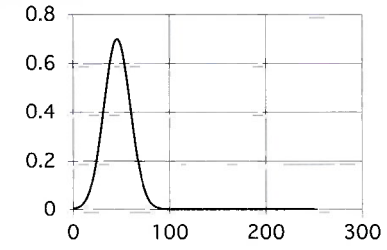
Sample Type: Core

RC No.	Depth m	D (Diameter) mm	P (failure load) kN	F	Is (index strength) Mpa	Is(50) (index strength) Mpa	*UCS MPa	Type	Orienation
RC06	3.9	78	11.0	1.222	1.81	2.21	44	d	//
	4.9	78	14.0	1.222	2.30	2.81	56	d	//
	5.9	78	9.0	1.222	1.48	1.81	36	d	//
	7.6	78	12.0	1.222	1.97	2.41	48	d	//
	8.6	78	16.0	1.222	2.63	3.21	64	d	//
RC07	3.1	78	18.0	1.222	2.96	3.61	72	d	//
	4.4	78	11.0	1.222	1.81	2.21	44	d	//
	6.5	78	6.0	1.222	0.99	1.20	24	d	//
	7.8	78	8.0	1.222	1.31	1.61	32	d	//
	9.2	78	9.0	1.222	1.48	1.81	36	d	//
RC08	3.2	78	12.0	1.222	1.97	2.41	48	d	//
	4.2	78	11.0	1.222	1.81	2.21	44	d	//
	5.8	78	16.0	1.222	2.63	3.21	64	d	//
	7.3	78	15.0	1.222	2.47	3.01	60	d	//
	8.8	78	9.0	1.222	1.48	1.81	36	d	//
RC09	4.5	78	12.0	1.222	1.97	2.41	48	d	//
	5.7	78	12.0	1.222	1.97	2.41	48	d	//
	6.9	78	16.0	1.222	2.63	3.21	64	d	//
	9.1	78	11.0	1.222	1.81	2.21	44	d	//
	9.9	78	8.0	1.222	1.31	1.61	32	d	//
RC10	4.3	78	15.0	1.222	2.47	3.01	60	d	//
	5.8	78	10.0	1.222	1.64	2.01	40	d	//
	7.0	78	8.0	1.222	1.31	1.61	32	d	//
	9.1	78	5.0	1.222	0.82	1.00	20	d	//

Statistical Summary Data	Is(50)	UCS*
Number of Samples Tested	24	24
Minimum	1.00	20
Average	2.29	46
Maximum	3.61	72
Standard Dev.	0.68	14
Upper 95% Confidence Limit	3.63	72.60
Lower 95% Confidence Limit	0.95	19.09

Comments:
*UCS taken as k x Point Load Is(50): k= 20

*UCS Normal Distribution Curve



Abbreviations	
i	irregular
a	axial
b	block
d	diametral

approx. orientation to planes of weakness/bedding

U	unknown
P	perpendicular
//	parallel

(Diametrial) POINT LOAD STRENGTH INDEX TEST DATA

Contract: Blanchardstown T.C.
Contract no. 23311
Date of test: 23/08/2021

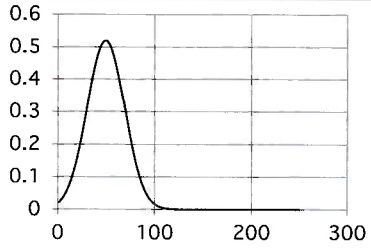
Sample Type: Core

RC No.	Depth m	D (Diameter) mm	P (failure load) kN	F	Is (index strength) Mpa	Is(50) (index strength) Mpa	*UCS MPa	Type	Orienation
RC11	3.8	78	14.0	1.222	2.30	2.81	56	d	//
	5.6	78	11.0	1.222	1.81	2.21	44	d	//
	7.3	78	9.0	1.222	1.48	1.81	36	d	//
	8.9	78	16.0	1.222	2.63	3.21	64	d	//
	9.9	78	17.0	1.222	2.79	3.41	68	d	//
RC12	4.1	78	11.0	1.222	1.81	2.21	44	d	//
	5.9	78	16.0	1.222	2.63	3.21	64	d	//
	8.6	78	15.0	1.222	2.47	3.01	60	d	//
	9.6	78	2.0	1.222	0.33	0.40	8	d	//
	9.8	78	13.0	1.222	2.14	2.61	52	d	//
RC13	3.1	78	19.0	1.222	3.12	3.81	76	d	//
	5.6	78	14.0	1.222	2.30	2.81	56	d	//
	6.7	78	8.0	1.222	1.31	1.61	32	d	//
	7.7	78	11.0	1.222	1.81	2.21	44	d	//
	8.9	78	2.0	1.222	0.33	0.40	8	d	//
RC14	4.1	78	11.0	1.222	1.81	2.21	44	d	//
	5.6	78	16.0	1.222	2.63	3.21	64	d	//
	7.5	78	22.0	1.222	3.62	4.42	88	d	//
	8.6	78	14.0	1.222	2.30	2.81	56	d	//
	9.9	78	7.0	1.222	1.15	1.41	28	d	//
RC15	4.6	78	15.0	1.222	2.47	3.01	60	d	//
	5.7	78	14.0	1.222	2.30	2.81	56	d	//
	7.2	78	6.0	1.222	0.99	1.20	24	d	//
	8.6	78	12.0	1.222	1.97	2.41	48	d	//
	9.8	78	14.0	1.222	2.30	2.81	56	d	//

Statistical Summary Data	Is(50)	UCS*
Number of Samples Tested	25	25
Minimum	0.40	8
Average	2.48	50
Maximum	4.42	88
Standard Dev.	0.96	19
Upper 95% Confidence Limit	4.36	87.23
Lower 95% Confidence Limit	0.60	12.03

Comments:
*UCS taken as k x Point Load Is(50): k= 20

*UCS Normal Distribution Curve



Abbreviations	
i	irregular
a	axial
b	block
d	diametral

approx. orientation to planes of weakness/bedding

U	unknown
P	perpendicular
//	parallel

(Diametrial) POINT LOAD STRENGTH INDEX TEST DATA

Contract: Blanchardstown T.C.
Contract no. 23311
Date of test: 23/08/2021

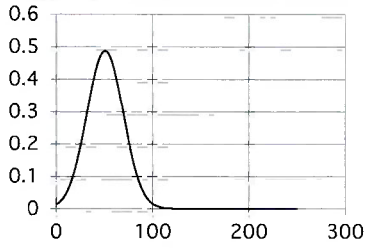
Sample Type: Core

RC No.	Depth m	D (Diameter) mm	P (failure load) kN	F	Is (index strength) Mpa	Is(50) (index strength) Mpa	*UCS MPa	Type	Orienation
RC16	4.3	78	9.0	1.222	1.48	1.81	36	d	//
	5.4	78	12.0	1.222	1.97	2.41	48	d	//
	7.3	78	18.0	1.222	2.96	3.61	72	d	//
	9.4	78	11.0	1.222	1.81	2.21	44	d	//
RC17	3.2	78	12.0	1.222	1.97	2.41	48	d	//
	5.4	78	4.0	1.222	0.66	0.80	16	d	//
	7.5	78	9.0	1.222	1.48	1.81	36	d	//
	9.3	78	18.0	1.222	2.96	3.61	72	d	//
	9.4	78	19.0	1.222	3.12	3.81	76	d	//
RC18	4.2	78	17.0	1.222	2.79	3.41	68	d	//
	5.0	78	5.0	1.222	0.82	1.00	20	d	//
	8.2	78	18.0	1.222	2.96	3.61	72	d	//
	9.4	78	17.0	1.222	2.79	3.41	68	d	//
RC19	4.6	78	11.0	1.222	1.81	2.21	44	d	//
	7.0	78	18.0	1.222	2.96	3.61	72	d	//
	8.0	78	15.0	1.222	2.47	3.01	60	d	//
	9.1	78	4.0	1.222	0.66	0.80	16	d	//
	9.9	78	17.0	1.222	2.79	3.41	68	d	//
RC20	4.1	78	15.0	1.222	2.47	3.01	60	d	//
	6.1	78	11.0	1.222	1.81	2.21	44	d	//
	7.1	78	10.0	1.222	1.64	2.01	40	d	//
	9.2	78	11.0	1.222	1.81	2.21	44	d	//
	9.7	78	10.0	1.222	1.64	2.01	40	d	//

Statistical Summary Data	Is(50)	UCS*
Number of Samples Tested	23	23
Minimum	0.80	16
Average	2.54	51
Maximum	3.81	76
Standard Dev.	0.94	19
Upper 95% Confidence Limit	4.38	87.69
Lower 95% Confidence Limit	0.70	13.92

Comments:
*UCS taken as k x Point Load Is(50): k= 20

*UCS Normal Distribution Curve



Abbreviations	
i	irregular
a	axial
b	block
d	diametral

approx. orientation to planes of weakness/bedding

U	unknown
P	perpendicular
//	parallel

(Diametrial) POINT LOAD STRENGTH INDEX TEST DATA

Contract: Blanchardstown T.C.
Contract no. 23311
Date of test: 23/08/2021

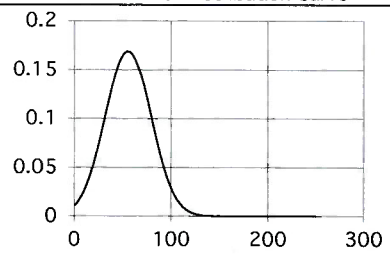
Sample Type: Core

RC No.	Depth m	D (Diameter) mm	P (failure load) kN	F	Is (index strength) Mpa	Is(50) (index strength) Mpa	*UCS MPa	Type	Orienation
RC21	4.3	78	14.0	1.222	2.30	2.81	56	d	//
	5.9	78	14.0	1.222	2.30	2.81	56	d	//
	6.6	78	16.0	1.222	2.63	3.21	64	d	//
	8.9	78	9.0	1.222	1.48	1.81	36	d	//
	9.9	78	12.0	1.222	1.97	2.41	48	d	//
RC22	3.8	78	2.0	1.222	0.33	0.40	8	d	//
	6.2	78	22.0	1.222	3.62	4.42	88	d	//
	6.8	78	20.0	1.222	3.29	4.02	80	d	//
	9.2	78	19.0	1.222	3.12	3.81	76	d	//
	9.9	78	11.0	1.222	1.81	2.21	44	d	//

Statistical Summary Data	Is(50)	UCS*
Number of Samples Tested	10	10
Minimum	0.40	8
Average	2.79	56
Maximum	4.42	88
Standard Dev.	1.18	24
Upper 95% Confidence Limit	5.10	102.07
Lower 95% Confidence Limit	0.48	9.56

Comments:
*UCS taken as k x Point Load Is(50): k= 20

*UCS Normal Distribution Curve



Abbreviations	
i	irregular
a	axial
b	block
d	diametral

approx. orientation to planes of weakness/bedding	
U	unknown
P	perpendicular
//	parallel

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC01
Depth (m):	3.60m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Muddy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

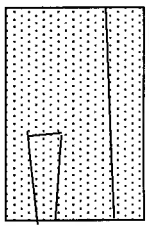
Sample Measurements

Length	201	
Diameter (Ø)	78.1	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	89	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{89000}{4788.19385}$

$= \dfrac{1000 \times P}{\prod \times (Ø/2)^2}$

$=$ 18.58 (Mpa)

Bulk Density $=$ 2.73 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC02
Depth (m):	6.70m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Muddy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

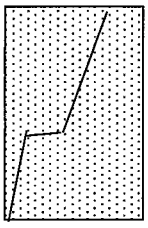
Sample Measurements

Length	200	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	56	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{56000}{4775.94}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^2}$

$=$ 11.72 (Mpa)

Bulk Density $=$ 2.69 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC03
Depth (m):	4.40m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Muddy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

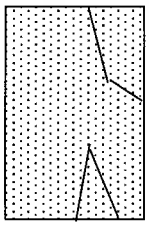
Sample Measurements

Length	201	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	138	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength = $\frac{138000}{4775.94}$

$= \frac{1000 \times P}{\prod \times (Ø/2)^2}$

= 28.88 (Mpa)

Bulk Density = 2.68 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC04
Depth (m):	5.70m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Muddy LIMESTONE

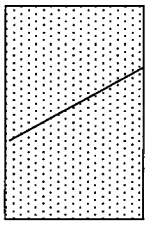
Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

Sample Measurements

Length	199	
Diameter (Ø)	78	mm

Sketch of Failure Surfaces



Testing

Load Rate	4.3	kN/min
Load at Failure (P)	12	kN

Strength Calculations

Uniaxial Compressive Strength $= \dfrac{12000}{4775.94}$

$= \dfrac{1000 \times P}{\prod \times (Ø/2)^2}$

$= 2.51$ (Mpa)

Bulk Density $= 2.70$ (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC05
Depth (m):	7.60m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Muddy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

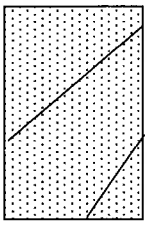
Sample Measurements

Length	186	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	145	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{145000}{4775.94}$

$= \dfrac{1000 \times P}{\prod \times (Ø/2)^{\wedge}2}$

$=$ 30.35 (Mpa)

Bulk Density $=$ 2.71 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC06
Depth (m):	9.40m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Muddy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

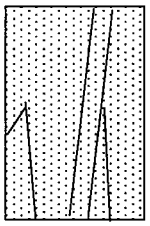
Sample Measurements

Length	202	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	137	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{137000}{4775.94}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^{\wedge}2}$

$=$ 28.67 (Mpa)

Bulk Density $=$ 2.71 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC07
Depth (m):	4.60m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Muddy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

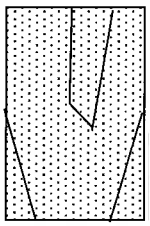
Sample Measurements

Length	202	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	162	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{162000}{4775.94}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^{\wedge}2}$

$=$ 33.90 (Mpa)

Bulk Density $=$ 2.69 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC08
Depth (m):	7.30m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Muddy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

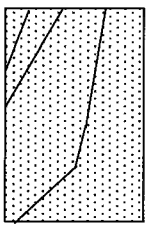
Sample Measurements

Length	199	
Diameter (Ø)	78.1	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	235	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{235000}{4788.19385}$

$= \dfrac{1000 \times P}{\prod \times (Ø/2)^{\wedge}2}$

$=$ 49.05 (Mpa)

Bulk Density $=$ 2.68 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC09
Depth (m):	9.30m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Muddy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

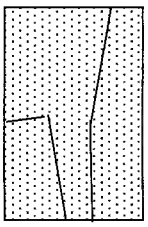
Sample Measurements

Length	200	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	79	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength = $\frac{79000}{4775.94}$

= $\frac{1000 \times P}{\Pi \times (Ø/2)^2}$

= 16.53 (Mpa)

Bulk Density = 2.68 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC10
Depth (m):	5.80m

Sample Description

Colour:	Grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

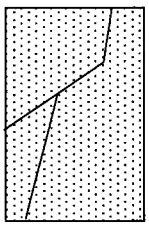
Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

Sample Measurements

Length	202	
Diameter (Ø)	78	mm

Sketch of Failure Surfaces



Testing

Load Rate	4.3	kN/min
Load at Failure (P)	311	kN

Strength Calculations

Uniaxial Compressive Strength $= \dfrac{311000}{4775.94}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^2}$

$=$ 65.09 (Mpa)

Bulk Density $=$ 2.71 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC11
Depth (m):	7.30m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

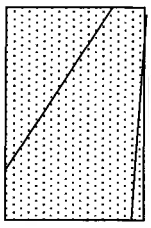
Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

Sample Measurements

Length	199	
Diameter (Ø)	78	mm

Sketch of Failure Surfaces



Testing

Load Rate	4.3	kN/min
Load at Failure (P)	111	kN

Strength Calculations

Uniaxial Compressive Strength $= \dfrac{111000}{4775.94}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^{\wedge}2}$

$=$ 23.23 (Mpa)

Bulk Density $=$ 2.69 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC12
Depth (m):	6.80m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

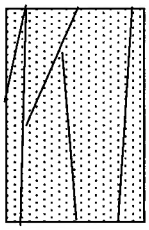
Sample Measurements

Length	202	
Diameter (Ø)	78.1	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	187	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{187000}{4788.19385}$

$= \dfrac{1000 \times P}{\prod \times (Ø/2)^2}$

$=$ 39.03 (Mpa)

Bulk Density $=$ 2.68 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC13
Depth (m):	8.80m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

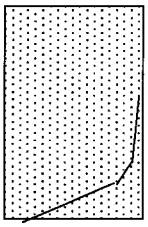
Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

Sample Measurements

Length	201	
Diameter (Ø)	78	mm

Sketch of Failure Surfaces



Testing

Load Rate	4.3	kN/min
Load at Failure (P)	93	kN

Strength Calculations

Uniaxial Compressive Strength $= \dfrac{93000}{4775.94}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^{\wedge}2}$

$=$ 19.46 (Mpa)

Bulk Density $=$ 2.70 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC14
Depth (m):	4.40m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

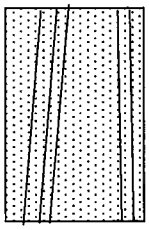
Sample Measurements

Length	199	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	204	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{204000}{4775.94}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^2}$

$=$ 42.69 (Mpa)

Bulk Density $=$ 2.71 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC15
Depth (m):	8.70m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

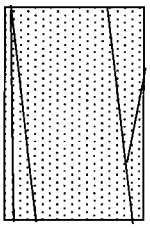
Sample Measurements

Length	200	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	72	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{72000}{4775.94}$

$= \dfrac{1000 \times P}{\prod \times (Ø/2)^2}$

$= 15.07$ (Mpa)

Bulk Density $= 2.68$ (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC16
Depth (m):	9.20m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

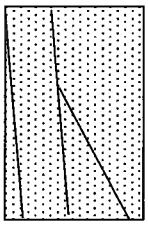
Sample Measurements

Length	202	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	136	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{136000}{4775.94}$

$= \dfrac{1000 \times P}{\prod \times (Ø/2)^2}$

$=$ 28.46 (Mpa)

Bulk Density $=$ 2.69 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC17
Depth (m):	8.30m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

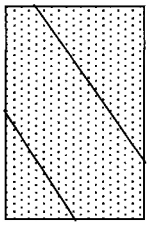
Sample Measurements

Length	200	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	236	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{236000}{4775.94}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^2}$

$=$ 49.39 (Mpa)

Bulk Density $=$ 2.68 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC18
Depth (m):	7.70m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

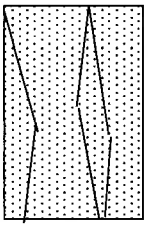
Sample Measurements

Length	184	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	109	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{109000}{4775.94}$

$= \dfrac{1000 \times P}{\prod \times (Ø/2)^2}$

$=$ 22.81 (Mpa)

Bulk Density $=$ 2.68 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC19
Depth (m):	9.20m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

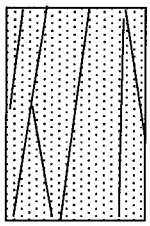
Sample Measurements

Length	198	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	272	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{272000}{4775.94}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^{\wedge}2}$

$=$ 56.92 (Mpa)

Bulk Density $=$ 2.70 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC20
Depth (m):	8.80m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

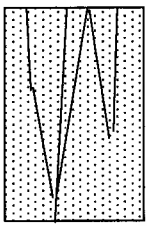
Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

Sample Measurements

Length	204	
Diameter (Ø)	78.1	mm

Sketch of Failure Surfaces



Testing

Load Rate	4.3	kN/min
Load at Failure (P)	198	kN

Strength Calculations

Uniaxial Compressive Strength = $\frac{198000}{4788.19385}$

= $\frac{1000 \times P}{\prod \times (Ø/2)^2}$

= 41.33 (Mpa)

Bulk Density = 2.71 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC21
Depth (m):	6.30m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

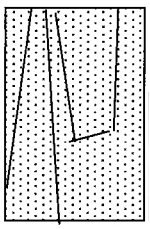
Sample Measurements

Length	195	
Diameter (Ø)	78	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	184	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{184000}{4775.94}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^{\wedge}2}$

$=$ 38.51 (Mpa)

Bulk Density $=$ 2.70 (Mg/m^3)

Notes:

Uniaxial Compression Test Report Sheet

I.G.S.L.

Sample Identification

Contract Name:	Blanchardstown T.C.
Job Number:	23311
Hole No:	RC22
Depth (m):	5.20m

Sample Description

Colour:	Dark grey
Grain size:	Fine-grained
Weathering Grade:	Fresh
Rock Type:	Sandy LIMESTONE

Weathering Grade Criteria

I. Fresh:	Unchanged from original state
II. Slightly weathered:	Slight discolouration, slight weakening
III. Moderately weathered:	Considerable weakening, penetrative discolouration
IV. Highly weathered:	Considerable weakening, penetrative discolouration, breaks in hand

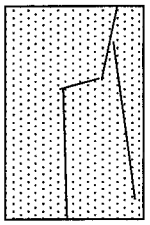
Sample Measurements

Length	200	
Diameter (Ø)	78.1	mm

Testing

Load Rate	4.3	kN/min
Load at Failure (P)	68	kN

Sketch of Failure Surfaces



Strength Calculations

Uniaxial Compressive Strength $= \dfrac{68000}{4788.19385}$

$= \dfrac{1000 \times P}{\Pi \times (Ø/2)^2}$

$=$ 14.19 (Mpa)

Bulk Density $=$ 2.68 (Mg/m^3)

Notes:

Appendix 6

Chemical and Environmental Laboratory Testing (Chemtest & Nicholls Colton Laboratories)

Nicholls Colton Group
7 - 11 Harding Street
Leicester
LE1 4DH

IGSL
Unit F
M7 Business Park
Naas

Analytical Test Report: L21/02984/IGS/21-20461

Your Project Reference:	**23311 - Blanchardstown TC**	Samples Received on:	20/08/2021
Your Order Number:	19429	Testing Instruction Received:	20/08/2021
Report Issue Number:	1	Sample Tested:	20/08 to 09/09/2021
Samples Analysed:	12 samples	Report issued:	09/09/2021

Signed

Peter Swanston
Environmental Laboratory Manager
Nicholls Colton Group

Notes:

General

Please refer to Methodologies tab for details pertaining to the analytical methods undertaken.

Samples will be retained for 14 days after issue of this report unless otherwise requested.

Samples were supplied by customer, results apply to the samples as received.

Where specification limits are included these are for guidance only. Where a measured value has been highlighted this is not implying acceptance or failure and certainty of measurement values have not been taken into account.

Uncertainty of measurement values are available on request.

Accreditation Key

UKAS = UKAS Accreditation, u = Unaccredited

Date of Issue 10/12/2020
Owned by Emily Blissett Customer Services Supervisor
Authorised by James Gane Commercial Manager
J:\Public\Projects\2021\L21\IGS - IGSL\L21 2984 IGS\[L21-02984 IGS - 21 20461 XLSX]Cover Sheet

Nicholls Colton Group
7 - 11 Harding Street
Leicester
LE1 4DH

L21/02984/IGS/21-20461

Project Reference - 23311 - Blanchardstown TC

Analytical Test Results - Aggregate Testing

NCRefe rence			185365	185366	185367	185368
Client Sample Number			RC01	RC03	RC06	RC07
Material			Core	Core	Core	Core
Source/Client Reference			RC01 - 6.80m	RC03 - 3.60m	RC06 - 9.90m	RC07 - 6.20m
Sample Description			Dark grey rock core lumps	Grey rock core lumps	Dark grey rock core lumps	Dark grey rock core lumps
	Units	**Accreditation**				
EN 1744 Determinations						
Total Sulphur content (as S)	(%)	UKAS	0.40	0.12	0.23	0.20
Acid soluble sulphate content (as SO_3)	(%)	UKAS	0.04	0.05	0.05	0.03
Acid soluble sulphate content (as SO_4)	(%)	u	0.05	0.06	0.06	0.04
Water soluble sulphate content (as SO_3)	(%)	UKAS	< 0.01	0.07	< 0.01	0.06
Water soluble sulphate content (as SO_3)	(mg/l)	u	< 50	348	< 50	295
Water soluble sulphate content (as SO_4)	(%)	u	< 0.01	0.08	< 0.01	0.07
Water soluble sulphate content (as SO_4)	(mg/l)	u	< 60	418	< 60	353

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L21/02984/IGS/21-20461

Project Reference - 23311 - Blanchardstown TC

Analytical Test Results - Aggregate Testing

NC Reference			185369	185370	185371	185372
Client Sample Number			RC08	RC09	RC11	RC13
Material			Core	Core	Core	Core
Source/Client Reference			RC08 - 3.50m	RC09 - 6.90m	RC11 - 3.20m	RC13 - 9.10m
Sample Description			Dark grey rock core lumps	Dark grey rock core lumps	Dark grey rock core lumps	Dark grey rock core lumps
	Units	**Accreditation**				
EN 1744 Determinations						
Total Sulphur content (as S)	(%)	UKAS	0.42	0.27	0.24	0.32
Acid soluble sulphate content (as SO_3)	(%)	UKAS	0.04	0.04	0.03	0.02
Acid soluble sulphate content (as SO_4)	(%)	u	0.04	0.04	0.04	0.02
Water soluble sulphate content (as SO_3)	(%)	UKAS	0.03	0.02	0.02	< 0.01
Water soluble sulphate content (as SO_3)	(mg/l)	u	173	85	97	< 50
Water soluble sulphate content (as SO_4)	(%)	u	0.04	0.02	0.02	< 0.01
Water soluble sulphate content (as SO_4)	(mg/l)	u	208	102	116	< 60

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Project Reference - 23311 - Blanchardstown TC

Analytical Test Results - Aggregate Testing

NCReference			185373	185374	185375	185376
Client Sample Number			RC15	RC17	RC19	RC22
Material			Core	Core	Core	Core
Source/Client Reference			RC15 - 6.00m	RC17 - 8.00m	RC19 - 9.10m	RC22 - 3.50m
Sample Description			Dark grey rock core lumps	Dark grey rock core lumps	Dark grey rock core lumps	Dark gery rock core lumps
	Units	**Accreditation**				
EN 1744 Determinations						
Total Sulphur content (as S)	(%)	UKAS	0.27	0.30	0.32	0.30
Acid soluble sulphate content (as SO_3)	(%)	UKAS	0.05	0.03	0.02	0.03
Acid soluble sulphate content (as SO_4)	(%)	u	0.06	0.04	0.03	0.03
Water soluble sulphate content (as SO_3)	(%)	UKAS	0.02	0.03	0.01	< 0.01
Water soluble sulphate content (as SO_3)	(mg/l)	u	114	146	54	< 50
Water soluble sulphate content (as SO_4)	(%)	u	0.03	0.04	0.01	< 0.01
Water soluble sulphate content (as SO_4)	(mg/l)	u	136	175	65	< 60

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Project Reference - 23311 - Blanchardstown TC

Analysis Methodologies and Notes

Determinant	Test method and notes
EN 1744 Total Sulphur	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 11.
EN 1744 Acid Soluble Sulphate	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 12.
EN 1744 Water Soluble Sulphate	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 10.

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UKAS TESTING
2183

Final Report

Report No.:	21-21171-1
Initial Date of Issue:	01-Jul-2021
Client	IGSL
Client Address:	M7 Business Park Naas County Kildare Ireland
Contact(s):	Darren Keogh
Project	23311 Blanchardstown TC PRS Project (DBFL)

Quotation No.:	Q20-19951	**Date Received:**	22-Jun-2021
Order No.:		**Date Instructed:**	22-Jun-2021
No. of Samples:	19		
Turnaround (Wkdays):	7	**Results Due:**	30-Jun-2021
Date Approved:	01-Jul-2021	**Subcon Results Due:**	30-Jun-2021

Approved By:



Details: Glynn Harvey, Technical Manager

Results - Leachate

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL						**Chemtest Job No.:**	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951						**Chemtest Sample ID.:**	1225637	1225638	1225639	1225640	1225641	1225642	1225643	1225644	1225645	1225646	1225647	1225648
Order No.:						Client Sample Ref.:	1-2	2-1	2-2	3-1	4-1	5-1	6-1	6-2	7-1	7-2	8-1	9-1
						Sample Location:	1	2	2	3	4	5	6	6	7	7	8	9
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
						Bottom Depth (m):	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**													
pH	U	1010	10:1		N/A		9.2	8.2	8.9	8.8	8.6	8.3	8.4	8.5	8.5	8.5	8.6	8.4
Ammonium	U	1220	10:1	mg/l	0.050		0.056	0.13	0.091	0.091	0.19	0.12	0.15	0.22	0.12	0.083	0.15	0.051
Ammonium	N	1220	10:1	mg/kg	0.10		1.0	1.4	1.3	1.2	2.3	1.3	1.7	2.6	1.4	0.97	1.8	0.58
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Leachate

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: GSL						Chemtest Job No.:	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951						Chemtest Sample ID.:	1225649	1225650	1225651	1225652	1225653	1225654	1225655
Order No.:						Client Sample Ref.:	10-2	11-1	11-2	12-1	13-1	1-1	10-1
						Sample Location:	10	11	11	12	13	1	10
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	1.00	0.00	1.00	0.00	0.00	0.50	0.60
						Bottom Depth (m):	2.00	1.00	2.00	1.00	1.00	1.00	1.00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**								
pH	U	1010	10:1		N/A		8.5	8.7	8.8	8.7	8.6	8.6	8.6
Ammonium	U	1220	10:1	mg/l	0.050		0.092	0.18	0.18	0.11	0.11	0.089	0.091
Ammonium	N	1220	10:1	mg/kg	0.10		1.1	2.3	2.4	1.4	1.3	1.1	1.1
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01		< 0.01	< 0.01	0.14	< 0.01	< 0.01	< 0.01	< 0.01
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL				Chemtest Job No.:	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951				Chemtest Sample ID.:	1225637	1225638	1225639	1225640	1225641	1225642	1225643	1225644	1225645
Order No.:				Client Sample Ref.:	1-2	2-1	2-2	3-1	4-1	5-1	6-1	6-2	7-1
				Sample Location:	1	2	2	3	4	5	6	6	7
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00
				Bottom Depth (m):	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00
				Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	7.1	7.4	6.8	9.4	17	13	8.4	9.3	9.9
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	[A] 0.56	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	[A] 8.4	[A] 1.5	[A] 3.0	[A] < 1.0	[A] < 1.0	[A] 3.1	[A] 1.2	[A] < 1.0	[A] < 1.0
Cyanide (Total)	U	2300	mg/kg	0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] 1.2	[A] 1.2	[A] 1.2	[A] 1.2	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.034	[A] 0.037	[A] 0.098	[A] 0.052	[A] 0.028	[A] 0.20	[A] 0.073	[A] 0.037	[A] 0.051
Arsenic	U	2450	mg/kg	1.0	15	16	21	9.8	79	19	25	26	19
Barium	U	2450	mg/kg	10	43	33	120	25	40	110	71	17	37
Cadmium	U	2450	mg/kg	0.10	0.44	1.3	1.5	1.0	0.99	1.2	1.4	1.2	0.42
Chromium	U	2450	mg/kg	1.0	30	16	18	10	34	22	21	28	40
Molybdenum	U	2450	mg/kg	2.0	< 2.0	< 2.0	4.1	< 2.0	3.4	2.1	< 2.0	< 2.0	< 2.0
Antimony	N	2450	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	2.4	2.0	< 2.0	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50	28	23	31	19	32	27	25	31	38
Mercury	U	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.11	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	67	42	58	32	87	48	65	77	84
Lead	U	2450	mg/kg	0.50	37	18	18	11	50	44	24	29	28
Selenium	U	2450	mg/kg	0.20	0.62	0.65	2.1	0.32	0.56	0.40	0.40	1.4	0.27
Zinc	U	2450	mg/kg	0.50	95	56	85	48	150	98	160	350	98
Chromium (Trivalent)	N	2490	mg/kg	1.0	30	16	18	10	34	22	21	28	40
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10	< 10	< 10	< 10	< 10	440	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 16	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 410	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 20	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] 440	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL					Chemtest Job No.:	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951					Chemtest Sample ID.:	1225637	1225638	1225639	1225640	1225641	1225642	1225643	1225644	1225645
Order No.:					Client Sample Ref.:	1-2	2-1	2-2	3-1	4-1	5-1	6-1	6-2	7-1
					Sample Location:	1	2	2	3	4	5	6	6	7
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00
					Bottom Depth (m):	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00
					Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 3.4	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 120	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] 130	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] 570	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
Benzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 1.4
Toluene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 9.4
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] 0.54	[A] 0.043	[A] 0.15	[A] 0.090	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010	[A] 0.086	[A] 0.016	[A] 0.014	[A] 0.020	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] 0.75	[A] 0.030	[A] 0.038	[A] 0.10	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] 0.73	[A] 0.051	[A] 0.069	[A] 0.14	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Phenanthrene	N	2800	mg/kg	0.010	[A] 5.6	[A] 0.29	[A] 0.34	[A] 0.40	[A] < 0.010	[A] 0.10	[A] < 0.010	[A] 0.040	[A] < 0.010	[A] < 0.010
Anthracene	N	2800	mg/kg	0.010	[A] 1.4	[A] 0.11	[A] 0.047	[A] 0.19	[A] < 0.010	[A] 0.020	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluoranthene	N	2800	mg/kg	0.010	[A] 10	[A] 0.57	[A] 0.28	[A] 0.42	[A] < 0.010	[A] 0.090	[A] < 0.010	[A] 0.040	[A] < 0.010	[A] < 0.010
Pyrene	N	2800	mg/kg	0.010	[A] 7.4	[A] 0.48	[A] 0.28	[A] 0.34	[A] < 0.010	[A] 0.080	[A] < 0.010	[A] 0.040	[A] < 0.010	[A] < 0.010
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] 5.1	[A] 0.62	[A] 0.19	[A] 0.22	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Chrysene	N	2800	mg/kg	0.010	[A] 5.0	[A] 0.48	[A] 0.24	[A] 0.22	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] 8.4	[A] 0.84	[A] 0.36	[A] 0.28	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] 3.6	[A] 0.69	[A] 0.16	[A] 0.15	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] 8.7	[A] 0.85	[A] 0.34	[A] 0.29	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] 7.5	[A] 1.1	[A] 0.34	[A] 0.35	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] 0.98	[A] 0.49	[A] 0.082	[A] 0.30	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] 5.1	[A] 0.65	[A] 0.22	[A] 0.25	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Coronene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] 71	[A] 7.3	[A] 3.2	[A] 3.8	[A] < 0.20	[A] 0.29	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL					21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951				**Chemtest Sample ID.:**	1225637	1225638	1225639	1225640	1225641	1225642	1225643	1225644	1225645
Order No.:				Client Sample Ref.:	1-2	2-1	2-2	3-1	4-1	5-1	6-1	6-2	7-1
				Sample Location:	1	2	2	3	4	5	6	6	7
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00
				Bottom Depth (m):	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00
				Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL					Chemtest Job No.:	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951					Chemtest Sample ID.:	1225646	1225647	1225648	1225649	1225650	1225651	1225652	1225653	1225654
Order No.:					Client Sample Ref.:	7-2	8-1	9-1	10-2	11-1	11-2	12-1	13-1	1-1
					Sample Location:	7	8	9	10	11	11	12	13	1
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.50
					Bottom Depth (m):	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
					Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
ACM Type	U	2192		N/A		-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020		8.6	11	14	8.8	7.3	7.6	7.9	9.6	14
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		[A] < 0.40	[A] 0.41	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] 2.7	[A] < 0.40	[A] 0.47
Sulphur (Elemental)	U	2180	mg/kg	1.0		[A] 1.3	[A] 1.5	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 1.7	[A] 1.4	[A] < 1.0	[A] < 1.0
Cyanide (Total)	U	2300	mg/kg	0.50		[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] 1.2	[A] 1.2	[A] 1.2	[A] 1.1
Sulphate (Acid Soluble)	U	2430	%	0.010		[A] 0.036	[A] 0.040	[A] 0.082	[A] 0.044	[A] 0.025	[A] 0.074	[A] 0.069	[A] 0.040	[A] 0.15
Arsenic	U	2450	mg/kg	1.0		16	12	17	16	19	15	14	16	27
Barium	U	2450	mg/kg	10		43	35	33	63	51	71	52	44	89
Cadmium	U	2450	mg/kg	0.10		0.33	0.19	0.65	1.5	1.5	0.79	1.1	1.5	2.3
Chromium	U	2450	mg/kg	1.0		37	31	32	20	17	13	22	15	21
Molybdenum	U	2450	mg/kg	2.0		< 2.0	< 2.0	< 2.0	3.0	3.0	2.9	2.3	2.5	4.4
Antimony	N	2450	mg/kg	2.0		< 2.0	< 2.0	< 2.0	4.6	2.8	< 2.0	< 2.0	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50		33	20	32	28	32	21	22	27	37
Mercury	U	2450	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50		79	65	70	55	56	47	46	46	61
Lead	U	2450	mg/kg	0.50		31	25	26	29	21	20	15	28	19
Selenium	U	2450	mg/kg	0.20		0.40	0.20	0.24	< 0.20	1.7	0.78	0.72	< 0.20	1.9
Zinc	U	2450	mg/kg	0.50		140	92	110	79	86	72	110	62	110
Chromium (Trivalent)	N	2490	mg/kg	1.0		37	31	32	20	17	13	22	15	21
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL					Chemtest Job No.:	21-211171	21-21171	21-21171	21-21171	21-21171	21-21171	21-211171	21-21171	21-21171
Quotation No.: Q20-19951					Chemtest Sample ID.:	1225646	1225647	1225648	1225649	1225650	1225651	1225652	1225653	1225654
Order No.:					Client Sample Ref.:	7-2	8-1	9-1	10-2	11-1	11-2	12-1	13-1	1-1
					Sample Location:	7	8	9	10	11	11	12	13	1
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.50
					Bottom Depth (m):	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
					Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
Benzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 1.9
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.11	[A] < 0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.030	[A] < 0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.090	[A] < 0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.13	[A] < 0.010	[A] < 0.010
Phenanthrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.42	[A] < 0.010	[A] < 0.010
Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.13	[A] < 0.010	[A] < 0.010
Fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.13	[A] 0.31	[A] 0.13	[A] 0.15
Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.12	[A] 0.25	[A] 0.13	[A] 0.23
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.070	[A] 0.14	[A] < 0.010	[A] < 0.010
Chrysene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.080	[A] 0.12	[A] < 0.010	[A] < 0.010
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.12	[A] < 0.010	[A] < 0.010
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.090	[A] < 0.010	[A] < 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.16	[A] < 0.010	[A] < 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.10	[A] < 0.010	[A] < 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.070	[A] < 0.010	[A] < 0.010
Coronene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] 0.40	[A] 2.3	[A] 0.26	[A] 0.38
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL					Chemtest Job No.:	21_21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951					Chemtest Sample ID.:	1225646	1225647	1225648	1225649	1225650	1225651	1225652	1225653	1225654
Order No.:					Client Sample Ref.:	7-2	8-1	9-1	10-2	11-1	11-2	12-1	13-1	1-1
					Sample Location:	7	8	9	10	11	11	12	13	1
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.50
					Bottom Depth (m):	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
					Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010		[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL			**Chemtest Job No.:**		21-21171
Quotation No.: Q20-19951			**Chemtest Sample ID.:**		1225655
Order No.:			Client Sample Ref.:		10-1
			Sample Location:		10
			Sample Type:		SOIL
			Top Depth (m):		0.60
			Bottom Depth (m):		1.00
			Asbestos Lab:		IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	10
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	[A] < 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	[A] 2.0
Cyanide (Total)	U	2300	mg/kg	0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] 6.1
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.19
Arsenic	U	2450	mg/kg	1.0	13
Barium	U	2450	mg/kg	10	41
Cadmium	U	2450	mg/kg	0.10	1.2
Chromium	U	2450	mg/kg	1.0	10
Molybdenum	U	2450	mg/kg	2.0	2.2
Antimony	N	2450	mg/kg	2.0	< 2.0
Copper	U	2450	mg/kg	0.50	19
Mercury	U	2450	mg/kg	0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	31
Lead	U	2450	mg/kg	0.50	8.8
Selenium	U	2450	mg/kg	0.20	1.1
Zinc	U	2450	mg/kg	0.50	57
Chromium (Trivalent)	N	2490	mg/kg	1.0	10
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL			**Chemtest Job No.:**		21-21171
Quotation No.: Q20-19951			**Chemtest Sample ID.:**		1225655
Order No.:			Client Sample Ref.:		10-1
			Sample Location:		10
			Sample Type:		SOIL
			Top Depth (m):		0.60
			Bottom Depth (m):		1.00
			Asbestos Lab:		IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10
Benzene	U	2760	µg/kg	1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0	[A] < 1.0
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] < 0.010
Phenanthrene	N	2800	mg/kg	0.010	[A] < 0.010
Anthracene	N	2800	mg/kg	0.010	[A] < 0.010
Fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010
Pyrene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] < 0.010
Chrysene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] < 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] < 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] < 0.010
Coronene	N	2800	mg/kg	0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] < 0.20
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL			**Chemtest Job No.:**		21-21171
Quotation No.: Q20-19951			**Chemtest Sample ID.:**		1225655
Order No.:			Client Sample Ref.:		10-1
			Sample Location:		10
			Sample Type:		SOIL
			Top Depth (m):		0.60
			Bottom Depth (m):		1.00
			Asbestos Lab:		IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225637						
Sample Ref:	1-2						
Sample ID:							
Sample Location:	1						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1.1	3	5	6
Loss On Ignition	2610	U	%	3.2	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 71	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.029	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0033	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.011	0.11	0.5	10	70
Copper	1455	U	0.0018	0.018	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0006	0.0060	0.5	10	30
Nickel	1455	U	0.0048	0.048	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.088	< 1.0	10	150	500
Sulphate	1220	U	1.3	13	1000	20000	50000
Total Dissolved Solids	1020	N	32	320	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	33	330	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.1

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225638						
Sample Ref:	2-1						
Sample ID:							
Sample Location:	2						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.40	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 7.3	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.034	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0095	0.095	0.5	10	70
Copper	1455	U	0.0024	0.024	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0004	0.0044	0.5	10	30
Nickel	1455	U	0.0042	0.042	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.1	11	800	15000	25000
Fluoride	1220	U	0.085	< 1.0	10	150	500
Sulphate	1220	U	4.6	46	1000	20000	50000
Total Dissolved Solids	1020	N	30	300	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.4

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225639						
Sample Ref:	2-2						
Sample ID:							
Sample Location:	2						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.61	3	5	6
Loss On Ignition	2610	U	%	2.6	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 3.2	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.050	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	0.021	0.21	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0089	0.089	0.5	10	70
Copper	1455	U	0.0010	0.010	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0082	0.082	0.5	10	30
Nickel	1455	U	0.0040	0.040	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0024	0.024	0.1	0.5	7
Zinc	1455	U	0.004	0.037	4	50	200
Chloride	1220	U	1.1	11	800	15000	25000
Fluoride	1220	U	0.26	2.6	10	150	500
Sulphate	1220	U	23	230	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.5	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	6.8

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225640						
Sample Ref:	3-1				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Sample ID:							
Sample Location:	3						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	U	%	[A] 0.30	3	5	6
Loss On Ignition	2610	U	%	2.7	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 3.8	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.038	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0099	0.099	0.5	10	70
Copper	1455	U	0.0007	0.0075	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0044	0.044	0.5	10	30
Nickel	1455	U	0.0041	0.041	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0007	0.0070	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.4	14	800	15000	25000
Fluoride	1220	U	0.35	3.5	10	150	500
Sulphate	1220	U	19	190	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.5	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.4

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225641						
Sample Ref:	4-1						
Sample ID:							
Sample Location:	4						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.46	3	5	6
Loss On Ignition	2610	U	%	3.7	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] 570	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.013	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0026	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.010	0.10	0.5	10	70
Copper	1455	U	0.0010	0.0096	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0022	0.022	0.5	10	30
Nickel	1455	U	0.0045	0.045	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.55	5.5	10	150	500
Sulphate	1220	U	6.6	66	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	17

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225642						
Sample Ref:	5-1						
Sample ID:							
Sample Location:	5						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1·4	3	5	6
Loss On Ignition	2610	U	%	4.9	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0·010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.29	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0070	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0·0008	0·0081	0·5	2	25
Barium	1455	U	0·009	0·095	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.010	0.10	0.5	10	70
Copper	1455	U	0.0016	0.016	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0·0019	0.019	0.5	10	30
Nickel	1455	U	0.0042	0.042	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0006	0.0060	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	3.6	36	800	15000	25000
Fluoride	1220	U	0.31	3.1	10	150	500
Sulphate	1220	U	77	770	1000	20000	50000
Total Dissolved Solids	1020	N	180	1800	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.8	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225643						
Sample Ref:	6-1						
Sample ID:							
Sample Location:	6						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.31	3	5	6
Loss On Ignition	2610	U	%	2.5	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.017	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.011	0.11	0.5	10	70
Copper	1455	U	0.0008	0.0081	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0020	0.020	0.5	10	30
Nickel	1455	U	0.0044	0.044	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.37	3.7	10	150	500
Sulphate	1220	U	19	190	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.8	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.4

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225644						
Sample Ref:	6-2						
Sample ID:							
Sample Location:	6						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.33	3	5	6
Loss On Ignition	2610	U	%	3.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.026	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0098	0.098	0.5	10	70
Copper	1455	U	0.0007	0.0075	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0023	0.023	0.5	10	30
Nickel	1455	U	0.0040	0.040	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0006	0.0065	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.37	3.7	10	150	500
Sulphate	1220	U	21	210	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.3

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225645						
Sample Ref:	7-1						
Sample ID:							
Sample Location:	7						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.55	3	5	6
Loss On Ignition	2610	U	%	3.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] 0.011	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.021	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.011	0.11	0.5	10	70
Copper	1455	U	0.0008	0.0077	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0030	0.030	0.5	10	30
Nickel	1455	U	0.0043	0.043	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0006	0.0056	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.34	3.4	10	150	500
Sulphate	1220	U	15	150	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225646						
Sample Ref:	7-2						
Sample ID:							
Sample Location:	7						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.61	3	5	6
Loss On Ignition	2610	U	%	3.6	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.016	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0097	0.097	0.5	10	70
Copper	1455	U	0.0011	0.011	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0019	0.019	0.5	10	30
Nickel	1455	U	0.0044	0.044	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	0.003	0.035	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.30	3.0	10	150	500
Sulphate	1220	U	13	130	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.9	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225647						
Sample Ref:	8-1						
Sample ID:							
Sample Location:	8						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.62	3	5	6
Loss On Ignition	2610	U	%	3.2	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.013	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0097	0.097	0.5	10	70
Copper	1455	U	0.0007	0.0072	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0021	0.022	0.5	10	30
Nickel	1455	U	0.0042	0.042	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.9	19	800	15000	25000
Fluoride	1220	U	0.23	2.3	10	150	500
Sulphate	1220	U	32	320	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.1	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225648						
Sample Ref:	9-1				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Sample ID:							
Sample Location:	9						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	U	%	[A] 0.35	3	5	6
Loss On Ignition	2610	U	%	3.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.043	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0006	0.0060	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0094	0.094	0.5	10	70
Copper	1455	U	0.0013	0.013	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0064	0.064	0.5	10	30
Nickel	1455	U	0.0040	0.040	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0013	0.013	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.2	12	800	15000	25000
Fluoride	1220	U	0.32	3.2	10	150	500
Sulphate	1220	U	25	250	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	8.4	84	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225649						
Sample Ref:	10-2						
Sample ID:							
Sample Location:	10						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] < 0.20	3	5	6
Loss On Ignition	2610	U	%	2.6	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.031	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0093	0.093	0.5	10	70
Copper	1455	U	0.0014	0.014	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0064	0.064	0.5	10	30
Nickel	1455	U	0.0044	0.044	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0011	0.011	0.1	0.5	7
Zinc	1455	U	0.032	0.32	4	50	200
Chloride	1220	U	1.8	18	800	15000	25000
Fluoride	1220	U	0.32	3.2	10	150	500
Sulphate	1220	U	24	240	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	11	110	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.8

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225650						
Sample Ref:	11-1						
Sample ID:							
Sample Location:	11						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.63	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.035	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0028	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0094	0.094	0.5	10	70
Copper	1455	U	0.0007	0.0074	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0067	0.067	0.5	10	30
Nickel	1455	U	0.0042	0.042	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0013	0.013	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.27	2.7	10	150	500
Sulphate	1220	U	16	160	1000	20000	50000
Total Dissolved Solids	1020	N	65	650	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.0	50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.3

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225651						
Sample Ref:	11-2						
Sample ID:							
Sample Location:	11						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.45	3	5	6
Loss On Ignition	2610	U	%	2.5	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.40	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.034	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0008	0.0076	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.011	0.11	0.5	10	70
Copper	1455	U	0.0009	0.0093	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.012	0.12	0.5	10	30
Nickel	1455	U	0.0052	0.052	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0015	0.015	0.1	0.5	7
Zinc	1455	U	0.003	0.026	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.38	3.8	10	150	500
Sulphate	1220	U	27	270	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.3	53	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225652						
Sample Ref:	12-1						
Sample ID:							
Sample Location:	12						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.47	3	5	6
Loss On Ignition	2610	U	%	2.7	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 2.3	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.029	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0097	0.097	0.5	10	70
Copper	1455	U	0.0008	0.0076	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0053	0.054	0.5	10	30
Nickel	1455	U	0.0043	0.043	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.8	18	800	15000	25000
Fluoride	1220	U	0.37	3.7	10	150	500
Sulphate	1220	U	22	220	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.3	53	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225653						
Sample Ref:	13-1						
Sample ID:							
Sample Location:	13						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.39	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.26	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.034	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0095	0.095	0.5	10	70
Copper	1455	U	0.0007	0.0071	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0021	0.021	0.5	10	30
Nickel	1455	U	0.0041	0.041	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.38	3.8	10	150	500
Sulphate	1220	U	7.8	78	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.7	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225654						
Sample Ref:	1-1						
Sample ID:							
Sample Location:	1						
Top Depth(m):	0.50						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.21	3	5	6
Loss On Ignition	2610	U	%	2.7	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.38	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.045	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0096	0.096	0.5	10	70
Copper	1455	U	0.0006	0.0063	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0029	0.030	0.5	10	30
Nickel	1455	U	0.0040	0.040	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.0	10	800	15000	25000
Fluoride	1220	U	0.28	2.8	10	150	500
Sulphate	1220	U	20	200	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.4	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225655						
Sample Ref:	10-1						
Sample ID:							
Sample Location:	10						
Top Depth(m):	0.60						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.69	3	5	6
Loss On Ignition	2610	U	%	2.6	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0040	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0025	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.010	0.10	0.5	10	70
Copper	1455	U	0.0008	0.0077	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0073	0.073	0.5	10	30
Nickel	1455	U	0.0044	0.044	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0016	0.016	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.39	3.9	10	150	500
Sulphate	1220	U	31	310	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.6	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1225637	1-2		1		A	Amber Glass 250ml
1225637	1-2		1		A	Plastic Tub 500g
1225638	2-1		2		A	Amber Glass 250ml
1225638	2-1		2		A	Plastic Tub 500g
1225639	2-2		2		A	Amber Glass 250ml
1225639	2-2		2		A	Plastic Tub 500g
1225640	3-1		3		A	Amber Glass 250ml
1225640	3-1		3		A	Plastic Tub 500g
1225641	4-1		4		A	Amber Glass 250ml
1225641	4-1		4		A	Plastic Tub 500g
1225642	5-1		5		A	Amber Glass 250ml
1225642	5-1		5		A	Plastic Tub 500g
1225643	6-1		6		A	Amber Glass 250ml
1225643	6-1		6		A	Plastic Tub 500g
1225644	6-2		6		A	Amber Glass 250ml
1225644	6-2		6		A	Plastic Tub 500g
1225645	7-1		7		A	Amber Glass 250ml
1225645	7-1		7		A	Plastic Tub 500g
1225646	7-2		7		A	Amber Glass 250ml
1225646	7-2		7		A	Plastic Tub 500g
1225647	8-1		8		A	Amber Glass 250ml
1225647	8-1		8		A	Plastic Tub 500g

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1225648	9-1		9		A	Amber Glass 250ml
1225648	9-1		9		A	Plastic Tub 500g
1225649	10-2		10		A	Amber Glass 250ml
1225649	10-2		10		A	Plastic Tub 500g
1225650	11-1		11		A	Amber Glass 250ml
1225650	11-1		11		A	Plastic Tub 500g
1225651	11-2		11		A	Amber Glass 250ml
1225651	11-2		11		A	Plastic Tub 500g
1225652	12-1		12		A	Amber Glass 250ml
1225652	12-1		12		A	Plastic Tub 500g
1225653	13-1		13		A	Amber Glass 250ml
1225653	13-1		13		A	Plastic Tub 500g
1225654	1-1		1		A	Amber Glass 250ml
1225654	1-1		1		A	Plastic Tub 500g
1225655	10-1		10		A	Amber Glass 250ml
1225655	10-1		10		A	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.

Test Methods

SOP	Title	Parameters included	Method summary
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING
2183

Final Report

Report No.:	21-23459-1
Initial Date of Issue:	16-Jul-2021
Client	IGSL
Client Address:	M7 Business Park Naas County Kildare Ireland
Contact(s):	Darren Keogh
Project	Blanchardstown
Quotation No.:	Q20-19951
Order No.:	
No. of Samples:	3
Turnaround (Wkdays):	7
Date Approved:	16-Jul-2021
Approved By:	
Details:	Glynn Harvey, Technical Manager

Date Received:	08-Jul-2021
Date Instructed:	08-Jul-2021
Results Due:	16-Jul-2021

Results - Leachate

Project: Blanchardstown

Client: IGSL								
Quotation No.: Q20-19951					Chemtest Job No.:	21-23459	21-23459	21-23459
					Chemtest Sample ID.:	1236760	1236761	1236762
					Sample Location:	WS14	WS15	WS18
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	1.00	1.00
					Bottom Depth (m):	1.60	2.00	2.00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
pH	U	1010	10:1		N/A	8.7	8.9	8.7
Ammonium	U	1220	10:1	mg/l	0.050	0.13	0.29	0.13
Ammonium	N	1220	10:1	mg/kg	0.10	1.7	4.2	1.7
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01	0.14	< 0.01	< 0.01
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010	< 0.010	< 0.010	< 0.010

Results - Soil

project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-23459	21-23459	21-23459
Quotation No.: Q20-19951					Chemtest Sample ID.:	1236760	1236761	1236762
					Sample Location:	WS14	WS15	WS18
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	1.00	1.00
					Bottom Depth (m):	1.60	2.00	2.00
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
ACM Type	U	2192		N/A	-	-	-	
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	
Moisture	N	2030	%	0.020	9.9	11	15	
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	
Sulphur (Elemental)	U	2180	mg/kg	1.0	[A] 1.1	[A] < 1.0	[A] 1.1	
Cyanide (Total)	U	2300	mg/kg	0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.027	[A] < 0.010	[A] < 0.010	
Arsenic	U	2450	mg/kg	1.0	15	13	12	
Barium	U	2450	mg/kg	10	59	29	36	
Cadmium	U	2450	mg/kg	0.10	0.29	1.7	1.5	
Chromium	U	2450	mg/kg	1.0	26	17	9.9	
Molybdenum	U	2450	mg/kg	2.0	< 2.0	2.1	3.0	
Antimony	N	2450	mg/kg	2.0	2.4	< 2.0	< 2.0	
Copper	U	2450	mg/kg	0.50	17	27	30	
Mercury	U	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	
Nickel	U	2450	mg/kg	0.50	47	39	35	
Lead	U	2450	mg/kg	0.50	26	14	14	
Selenium	U	2450	mg/kg	0.20	0.44	0.55	0.32	
Zinc	U	2450	mg/kg	0.50	65	65	68	
Chromium (Trivalent)	N	2490	mg/kg	1.0	26	17	9.9	
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10	< 10	< 10	< 10	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	

Results - Soil

Project: Blanchardstown

Client: IGSL			Chemtest Job No.:		21-23459	21-23459	21-23459
Quotation No.: Q20-19951			Chemtest Sample ID.:		1236760	1236761	1236762
			Sample Location:		WS14	WS15	WS18
			Sample Type:		SOIL	SOIL	SOIL
			Top Depth (m):		1.00	1.00	1.00
			Bottom Depth (m):		1.60	2.00	2.00
			Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10	[A] < 10	[A] < 10
Benzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Phenanthrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Chrysene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Coronene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Results - Single Stage WAC

Project: Blanchardstown

Chemtest Job No:	21-23459				**Landfill Waste Acceptance Criteria Limits**		
Chemtest Sample ID:	1236760						
Sample Ref:							
Sample ID:							
Sample Location:	WS14						
Top Depth(m):	1.00						
Bottom Depth(m):	1.60						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.85	3	5	6
Loss On Ignition	2610	U	%	3.2	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		9.1	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.014	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0013	0.013	0.5	10	70
Copper	1455	U	0.0005	0.0050	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.013	0.13	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0005	0.0054	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.80	8.0	10	150	500
Sulphate	1220	U	7.8	78	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23459						
Chemtest Sample ID:	1236761						
Sample Ref:							
Sample ID:							
Sample Location:	WS15						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.52	3	5	6
Loss On Ignition	2610	U	%	2.2	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		9.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.081	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0008	0.0080	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0006	0.0056	0.5	10	70
Copper	1455	U	0.0030	0.030	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0094	0.094	0.5	10	30
Nickel	1455	U	0.0028	0.028	0.4	10	40
Lead	1455	U	0.0007	0.0072	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0005	0.0051	0.1	0.5	7
Zinc	1455	U	0.014	0.14	4	50	200
Chloride	1220	U	1.7	17	800	15000	25000
Fluoride	1220	U	0.34	3.4	10	150	500
Sulphate	1220	U	3.9	39	1000	20000	50000
Total Dissolved Solids	1020	N	57	570	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	12	120	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23459						
Chemtest Sample ID:	1236762						
Sample Ref:							
Sample ID:							
Sample Location:	WS18						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.44	3	5	6
Loss On Ignition	2610	U	%	3.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		9.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.022	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0007	0.0070	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.010	0.10	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.50	5.0	10	150	500
Sulphate	1220	U	3.6	36	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.2	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1236760			WS14		A	Amber Glass 250ml
1236760			WS14		A	Plastic Tub 1000g
1236761			WS15		A	Amber Glass 250ml
1236761			WS15		A	Plastic Tub 1000g
1236762			WS18		A	Amber Glass 250ml
1236762			WS18		A	Plastic Tub 1000g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.

Test Methods

SOP	Title	Parameters included	Method summary
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING
2183

Amended Report

Report No.:	21-23475-2		
Initial Date of Issue:	19-Jul-2021	**Date of Re-Issue:**	06-Sep-2021
Client	IGSL		
Client Address:	M7 Business Park Naas County Kildare Ireland		
Contact(s):	Darren Keogh		
Project	Blanchardstown		
Quotation No.:	Q20-19951	**Date Received:**	08-Jul-2021
Order No.:		**Date Instructed:**	08-Jul-2021
No. of Samples:	5		
Turnaround (Wkdays):	42	**Results Due:**	06-Sep-2021
Date Approved:	06-Sep-2021		
Approved By:			
Details:	Glynn Harvey, Technical Manager		

Results - Leachate

Project: Blanchardstown

Client: IGSL										
Quotation No.: Q20-19951					**Chemtest Job No.:**	21-23475	21-23475	21-23475	21-23475	21-23475
					Chemtest Sample ID.:	1236855	1236856	1236857	1236858	1236859
					Sample Location:	WS 16	WS 17	WS 19	WS 20	WS 21
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.70	1.00	1.00	1.00
					Bottom Depth (m):	1.50	1.40	2.00	1.60	1.60
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**					
pH	U	1010	10:1		N/A	8.8	8.6	8.6	8.6	8.7
Ammonium	U	1220	10:1	mg/l	0.050	0.16	0.15	0.11	0.17	0.33
Ammonium	N	1220	10:1	mg/kg	0.10	2.1	1.9	1.4	2.1	4.1
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01	< 0.01	0.12	< 0.01	0.17	0.13
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-23475	21-23475	21-23475	21-23475
Quotation No.: Q20-19951					Chemtest Sample ID.:	1236855	1236856	1236857	1236858	1236859
					Sample Location:	WS 16	WS 17	WS 19	WS 20	WS 21
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.70	1.00	1.00	1.00
					Bottom Depth (m):	1.50	1.40	2.00	1.60	1.60
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**						
ACM Type	U	2192		N/A		-	-	-	-	-
Asbestos Identification	U	2192		N/A		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020		2.3	4.9	11	6.0	9.6
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0		[A] 3.8	[A] 7.0	[A] < 1.0	[A] 2.9	[A] < 1.0
Cyanide (Total)	U	2300	mg/kg	0.50		[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphate (Acid Soluble)	U	2430	%	0.010		[A] 0.044	[A] 0.052	[A] 0.010	[A] 0.046	[A] 0.016
Arsenic	U	2450	mg/kg	1.0		17	21	16	29	16
Barium	U	2450	mg/kg	10		73	61	48	71	35
Cadmium	U	2450	mg/kg	0.10		0.74	0.54	2.4	0.75	0.46
Chromium	U	2450	mg/kg	1.0		3.6	4.4	9.8	13	28
Molybdenum	U	2450	mg/kg	2.0		< 2.0	< 2.0	5.1	< 2.0	< 2.0
Antimony	N	2450	mg/kg	2.0		< 2.0	< 2.0	< 2.0	2.1	< 2.0
Copper	U	2450	mg/kg	0.50		9.9	9.9	31	19	34
Mercury	U	2450	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50		15	22	38	40	76
Lead	U	2450	mg/kg	0.50		49	20	16	36	23
Selenium	U	2450	mg/kg	0.20		< 0.20	< 0.20	0.71	< 0.20	0.91
Zinc	U	2450	mg/kg	0.50		33	45	61	79	150
Chromium (Trivalent)	N	2490	mg/kg	1.0		3.6	4.4	9.8	13	28
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10		< 10	5700	< 10	< 10	< 10
Diesel Present	N	2670		N/A			True			
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] 240	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0	[A] 1800	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0	[A] 2200	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		[A] < 1.0	[A] 1400	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		[A] < 1.0	[A] 58	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		[A] < 5.0	[A] 5700	[A] < 5.0	[A] < 5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0	[A] 180	[A] < 1.0	[A] < 1.0	[A] < 1.0

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-23475	21-23475	21-23475	21-23475	21-23475
Quotation No.: Q20-19951					Chemtest Sample ID.:	1236855	1236856	1236857	1236858	1236859
					Sample Location:	WS 16	WS 17	WS 19	WS 20	WS 21
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.70	1.00	1.00	1.00
					Bottom Depth (m):	1.50	1.40	2.00	1.60	1.60
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**						
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		[A] < 1.0	[A] 310	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		[A] < 5.0	[A] 490	[A] < 5.0	[A] < 5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		[A] < 10	[A] 6200	[A] < 10	[A] < 10	[A] < 10
Benzene	U	2760	µg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Ethylbenzene	U	2760	µg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010		[A] 0.17	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010		[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010		[A] 0.042	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010		[A] 0.045	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Phenanthrene	N	2800	mg/kg	0.010		[A] 0.10	[A] 0.041	[A] 0.034	[A] < 0.010	[A] 0.032
Anthracene	N	2800	mg/kg	0.010		[A] 0.033	[A] 0.024	[A] 0.013	[A] < 0.010	[A] 0.028
Fluoranthene	N	2800	mg/kg	0.010		[A] 0.088	[A] 0.089	[A] 0.021	[A] 0.030	[A] 0.044
Pyrene	N	2800	mg/kg	0.010		[A] 0.098	[A] 0.076	[A] 0.041	[A] 0.031	[A] 0.051
Benzo[a]anthracene	N	2800	mg/kg	0.010		[A] 0.046	[A] 0.043	[A] 0.023	[A] 0.029	[A] 0.041
Chrysene	N	2800	mg/kg	0.010		[A] 0.086	[A] 0.048	[A] 0.036	[A] 0.048	[A] 0.059
Benzo[b]fluoranthene	N	2800	mg/kg	0.010		[A] 0.063	[A] 0.060	[A] < 0.010	[A] < 0.010	[A] 0.028
Benzo[k]fluoranthene	N	2800	mg/kg	0.010		[A] 0.044	[A] 0.023	[A] < 0.010	[A] < 0.010	[A] 0.043
Benzo[a]pyrene	N	2800	mg/kg	0.010		[A] 0.054	[A] 0.038	[A] < 0.010	[A] < 0.010	[A] 0.037
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010		[A] 0.071	[A] 0.052	[A] < 0.010	[A] < 0.010	[A] 0.046
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010		[A] 0.067	[A] 0.030	[A] < 0.010	[A] < 0.010	[A] 0.040
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010		[A] 0.082	[A] 0.032	[A] < 0.010	[A] < 0.010	[A] 0.040
Coronene	N	2800	mg/kg	0.010		[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20		[A] 1.1	[A] 0.56	[A] < 0.20	[A] < 0.20	[A] 0.49
PCB 28	N	2815	mg/kg	0.0010		[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010		[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010		[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010		[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010		[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010		[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010		[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010		[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23475						
Chemtest Sample ID:	1236855						
Sample Ref:							
Sample ID:							
Sample Location:	WS 16						
Top Depth(m):	1.00						
Bottom Depth(m):	1.50						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.72	3	5	6
Loss On Ignition	2610	U	%	2.4	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 1.1	100	--	--
pH	2010	U		9.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.034	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0027	0.5	2	25
Barium	1455	U	0.005	0.052	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0009	0.0090	0.5	10	70
Copper	1455	U	0.0007	0.0072	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.021	0.21	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	0.004	0.045	4	50	200
Chloride	1220	U	1.8	18	800	15000	25000
Fluoride	1220	U	0.63	6.3	10	150	500
Sulphate	1220	U	20	200	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	2.3

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23475						
Chemtest Sample ID:	1236856						
Sample Ref:							
Sample ID:							
Sample Location:	WS 17						
Top Depth(m):	0.70						
Bottom Depth(m):	1.40						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.57	3	5	6
Loss On Ignition	2610	U	%	1.8	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] 6200	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.56	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.026	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0027	0.5	2	25
Barium	1455	U	0.063	0.63	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0045	0.045	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.015	0.15	0.5	10	30
Nickel	1455	U	0.0044	0.044	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.0006	0.0058	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.6	16	800	15000	25000
Fluoride	1220	U	0.80	8.0	10	150	500
Sulphate	1220	U	23	230	1000	20000	50000
Total Dissolved Solids	1020	N	98	980	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.1	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	4.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23475						
Chemtest Sample ID:	1236857						
Sample Ref:							
Sample ID:							
Sample Location:	WS 19						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.64	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.049	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0008	0.0077	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.019	0.19	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.57	5.7	10	150	500
Sulphate	1220	U	9.7	97	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.8	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23475						
Chemtest Sample ID:	1236858						
Sample Ref:							
Sample ID:							
Sample Location:	WS 20						
Top Depth(m):	1.00						
Bottom Depth(m):	1.60						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.66	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.026	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0009	0.0085	0.5	2	25
Barium	1455	U	0.061	0.61	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0007	0.0075	0.5	10	70
Copper	1455	U	0.0010	0.0099	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.014	0.14	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.0010	0.010	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.8	18	800	15000	25000
Fluoride	1220	U	0.51	5.1	10	150	500
Sulphate	1220	U	31	310	1000	20000	50000
Total Dissolved Solids	1020	N	100	1000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.5	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	6.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23475						
Chemtest Sample ID:	1236859						
Sample Ref:							
Sample ID:							
Sample Location:	WS 21						
Top Depth(m):	1.00						
Bottom Depth(m):	1.60						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.87	3	5	6
Loss On Ignition	2610	U	%	3.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.49	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.022	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0008	0.0078	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.011	0.11	0.5	10	30
Nickel	1455	U	0.0006	0.0061	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	0.017	0.17	4	50	200
Chloride	1220	U	1.8	18	800	15000	25000
Fluoride	1220	U	0.45	4.5	10	150	500
Sulphate	1220	U	7.2	72	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.7	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

TPH Interpretation

Job	Sample	Matrix	Location	Sample Ref	Sample ID	Sample Depth (m)	Gasoline / Diesel Present	TPH Interpretation
21-23475	1236856	S	WS 17			0.70	Yes	Diesel and Lube Oil

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1236855			WS 16		A	Amber Glass 250ml
1236855			WS 16		A	Plastic Tub 1000g
1236856			WS 17		A	Amber Glass 250ml
1236856			WS 17		A	Plastic Tub 1000g
1236857			WS 19		A	Amber Glass 250ml
1236857			WS 19		A	Plastic Tub 1000g
1236858			WS 20		A	Amber Glass 250ml
1236858			WS 20		A	Plastic Tub 1000g
1236859			WS 21		A	Amber Glass 250ml
1236859			WS 21		A	Plastic Tub 1000g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.

Test Methods

SOP	Title	Parameters included	Method summary
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key	
U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING
2183

Final Report

Report No.:	21-24738-1
Initial Date of Issue:	26-Jul-2021
Client	IGSL
Client Address:	M7 Business Park Naas County Kildare Ireland
Contact(s):	Darren Keogh
Project	Blanchardstown
Quotation No.:	Q20-21693
Order No.:	
No. of Samples:	9
Turnaround (Wkdays):	7
Date Approved:	26-Jul-2021
Approved By:	
Details:	Glynn Harvey, Technical Manager

Date Received:	19-Jul-2021
Date Instructed:	19-Jul-2021
Results Due:	27-Jul-2021

Results - Leachate

Project: Blanchardstown

Client: IGSL								
Quotation No.: Q20-21693					**Chemtest Job No.:**	21-24738	21-24738	21-24738
					Chemtest Sample ID.:	1242986	1242992	1242993
					Sample Location:	TP14	WS12	WS5
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	0.5	1.4	1.8
					Bottom Depth (m):	1.0		
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
pH	U	1010	10:1		N/A	7.6	7.9	8.0
Ammonium	U	1220	10:1	mg/l	0.050	< 0.050	0.073	0.095
Ammonium	N	1220	10:1	mg/kg	0.10	0.28	0.76	1.0
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01	< 0.01	< 0.01	< 0.01
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738
Quotation No.: Q20-21693					Chemtest Sample ID.:	1242986	1242987	1242988	1242989	1242990	1242991	1242992	1242993	1242994
					Sample Location:	TP14	WS21	WS19	WS15	WS18	WS14	WS12	WS5	WS1
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.5	1.0	1.0	1.0	1.0	1.0	1.4	1.8	1.0
					Bottom Depth (m):	1.0	2.0	2.0	2.0	2.0	1.6			1.6
					Asbestos Lab:	COVENTRY						COVENTRY	COVENTRY	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
ACM Type	U	2192		N/A	-						-	-		
Asbestos Identification	U	2192		N/A	No Asbestos Detected						No Asbestos Detected	No Asbestos Detected		
Moisture	N	2030	%	0.020	19	6.8	12	6.8	12	13	8.0	11	10	
pH (2.5:1)	N	2010		4.0		[A] 8.4	[A] 8.4	[A] 8.5	[A] 8.5	[A] 8.5			[A] 8.6	
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	[A] < 0.40						[A] 0.48	[A] < 0.40		
Magnesium (Water Soluble)	N	2120	g/l	0.010		[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] < 0.010	
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010		[A] 0.017	[A] 0.023	[A] 0.046	[A] < 0.010	[A] 0.035			[A] 0.033	
Total Sulphur	U	2175	%	0.010		[A] 0.055	[A] 0.089	[A] 0.11	[A] 0.13	[A] 0.12			[A] 0.063	
Sulphur (Elemental)	U	2180	mg/kg	1.0	[A] 2.9						[A] 1.7	[A] < 1.0		
Chloride (Water Soluble)	U	2220	g/l	0.010		[A] 0.012	[A] 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] < 0.010	
Nitrate (Water Soluble)	N	2220	g/l	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010			< 0.010	
Cyanide (Total)	U	2300	mg/kg	0.50	[A] < 0.50						[A] < 0.50	[A] < 0.50		
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] 2.2						[A] 5.6	[A] 3.7		
Ammonium (Water Soluble)	U	2220	g/l	0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			< 0.01	
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.044	[A] 0.024	[A] 0.037	[A] 0.030	[A] 0.030	[A] 0.061	[A] 0.11	[A] 0.090	[A] 0.048	
Arsenic	U	2450	mg/kg	1.0	12						19	14		
Barium	U	2450	mg/kg	10	94						81	28		
Cadmium	U	2450	mg/kg	0.10	1.4						0.92	0.52		
Chromium	U	2450	mg/kg	1.0	27						21	26		
Molybdenum	U	2450	mg/kg	2.0	2.0						2.7	< 2.0		
Antimony	N	2450	mg/kg	2.0	2.9						2.2	< 2.0		
Copper	U	2450	mg/kg	0.50	110						97	140		
Mercury	U	2450	mg/kg	0.10	0.11						< 0.10	< 0.10		
Nickel	U	2450	mg/kg	0.50	50						58	61		
Lead	U	2450	mg/kg	0.50	32						26	36		
Selenium	U	2450	mg/kg	0.20	0.61						1.9	< 0.20		
Zinc	U	2450	mg/kg	0.50	110						83	48		
Chromium (Trivalent)	N	2490	mg/kg	1.0	27						21	26		
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50						< 0.50	< 0.50		
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10	< 10						< 10	< 10		
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738
Quotation No.: Q20-21693					Chemtest Sample ID.:	1242986	1242987	1242988	1242989	1242990	1242991	1242992	1242993	1242994
					Sample Location:	TP14	WS21	WS19	WS15	WS18	WS14	WS12	WS5	WS1
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.5	1.0	1.0	1.0	1.0	1.0	1.4	1.8	1.0
					Bottom Depth (m):	1.0	2.0	2.0	2.0	2.0	1.6			1.6
					Asbestos Lab:	COVENTRY						COVENTRY	COVENTRY	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0						[A] < 5.0	[A] < 5.0		
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0						[A] < 5.0	[A] < 5.0		
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10						[A] < 10	[A] < 10		
Benzene	U	2760	µg/kg	1.0	[A] < 1.0						[A] 1.8	[A] < 1.0		
Toluene	U	2760	µg/kg	1.0	[A] < 1.0						[A] 6.7	[A] < 1.0		
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0						[A] 5.2	[A] < 1.0		
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0						[A] 1.4	[A] < 1.0		
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0		
Naphthalene	N	2800	mg/kg	0.010	[A] 0.44						[A] 0.30	[A] < 0.010		
Acenaphthylene	N	2800	mg/kg	0.010	[A] 0.038						[A] 0.13	[A] < 0.010		
Acenaphthene	N	2800	mg/kg	0.010	[A] 0.43						[A] 0.16	[A] < 0.010		
Fluorene	N	2800	mg/kg	0.010	[A] 0.43						[A] 0.17	[A] < 0.010		
Phenanthrene	N	2800	mg/kg	0.010	[A] 1.8						[A] 0.56	[A] < 0.010		
Anthracene	N	2800	mg/kg	0.010	[A] 0.45						[A] 0.21	[A] < 0.010		
Fluoranthene	N	2800	mg/kg	0.010	[A] 1.6						[A] 0.67	[A] 0.079		
Pyrene	N	2800	mg/kg	0.010	[A] 1.2						[A] 0.62	[A] 0.059		
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] 0.80						[A] 0.29	[A] < 0.010		
Chrysene	N	2800	mg/kg	0.010	[A] 0.67						[A] 0.27	[A] < 0.010		
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] 0.73						[A] 0.37	[A] < 0.010		
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] 0.23						[A] 0.18	[A] < 0.010		
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] 0.67						[A] 0.28	[A] < 0.010		
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] 0.27						[A] 0.21	[A] < 0.010		
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] 0.076						[A] 0.085	[A] < 0.010		
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] 0.28						[A] 0.25	[A] < 0.010		
Coronene	N	2800	mg/kg	0.010	[A] < 0.010						[A] < 0.010	[A] < 0.010		
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] 10						[A] 4.8	[A] < 0.20		
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010		
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010		
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010		
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010		

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738
Quotation No.: Q20-21693					Chemtest Sample ID.:	1242986	1242987	1242988	1242989	1242990	1242991	1242992	1242993	1242994
					Sample Location:	TP14	WS21	WS19	WS15	WS18	WS14	WS12	WS5	WS1
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.5	1.0	1.0	1.0	1.0	1.0	1.4	1.8	1.0
					Bottom Depth (m):	1.0	2.0	2.0	2.0	2.0	1.6			1.6
					Asbestos Lab:	COVENTRY						COVENTRY	COVENTRY	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
PCB 153	N	2815	mg/kg	0.0010		[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
PCB 138	N	2815	mg/kg	0.0010		[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
PCB 180	N	2815	mg/kg	0.0010		[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010		[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
Total Phenols	U	2920	mg/kg	0.10		< 0.10						2.2	< 0.10	

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24738						
Chemtest Sample ID:	1242986						
Sample Ref:							
Sample ID:							
Sample Location:	TP14						
Top Depth(m):	0.5						
Bottom Depth(m):	1.0						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.83	3	5	6
Loss On Ignition	2610	U	%	5.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 10	100	--	--
pH	2010	U		7.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.27	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0009	0.0095	0.5	2	25
Barium	1455	U	0.098	0.98	20	100	300
Cadmium	1455	U	0.00082	0.0082	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.013	0.13	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.074	0.74	0.5	10	30
Nickel	1455	U	0.0019	0.019	0.4	10	40
Lead	1455	U	0.0049	0.049	0.5	10	50
Antimony	1455	U	0.0009	0.0092	0.06	0.7	5
Selenium	1455	U	0.0060	0.060	0.1	0.5	7
Zinc	1455	U	0.14	1.4	4	50	200
Chloride	1220	U	2.3	23	800	15000	25000
Fluoride	1220	U	0.64	6.4	10	150	500
Sulphate	1220	U	6.6	66	1000	20000	50000
Total Dissolved Solids	1020	N	120	1200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	37	370	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	19

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24738						
Chemtest Sample ID:	1242992						
Sample Ref:							
Sample ID:							
Sample Location:	WS12						
Top Depth(m):	1.4						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1.1	3	5	6
Loss On Ignition	2610	U	%	5.0	--	--	10
Total BTEX	2760	U	mg/kg	[A] 0.015	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 4.8	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.020	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0009	0.0087	0.5	2	25
Barium	1455	U	0.010	0.10	20	100	300
Cadmium	1455	U	0.00028	0.0028	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0017	0.017	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.075	0.75	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0029	0.029	0.1	0.5	7
Zinc	1455	U	0.038	0.38	4	50	200
Chloride	1220	U	3.4	34	800	15000	25000
Fluoride	1220	U	0.30	3.0	10	150	500
Sulphate	1220	U	25	250	1000	20000	50000
Total Dissolved Solids	1020	N	98	970	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	13	130	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24738						
Chemtest Sample ID:	1242993						
Sample Ref:							
Sample ID:							
Sample Location:	WS5						
Top Depth(m):	1.8						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.33	3	5	6
Loss On Ignition	2610	U	%	5.4	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0090	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0005	0.0055	0.5	10	70
Copper	1455	U	0.0006	0.0061	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.063	0.63	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0028	0.028	0.1	0.5	7
Zinc	1455	U	0.024	0.24	4	50	200
Chloride	1220	U	2.5	25	800	15000	25000
Fluoride	1220	U	0.28	2.8	10	150	500
Sulphate	1220	U	42	420	1000	20000	50000
Total Dissolved Solids	1020	N	120	1200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	23	230	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1242986			TP14		A	Amber Glass 250ml
1242986			TP14		A	Plastic Tub 500g
1242987			WS21		A	Amber Glass 250ml
1242987			WS21		A	Plastic Tub 500g
1242988			WS19		A	Amber Glass 250ml
1242988			WS19		A	Plastic Tub 500g
1242989			WS15		A	Amber Glass 250ml
1242989			WS15		A	Plastic Tub 500g
1242990			WS18		A	Amber Glass 250ml
1242990			WS18		A	Plastic Tub 500g
1242991			WS14		A	Amber Glass 250ml
1242991			WS14		A	Plastic Tub 500g
1242992			WS12		A	Amber Glass 250ml
1242992			WS12		A	Plastic Tub 500g
1242993			WS5		A	Amber Glass 250ml
1242993			WS5		A	Plastic Tub 500g
1242994			WS1		A	Amber Glass 250ml
1242994			WS1		A	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2220	Water soluble Chloride in Soils	Chloride	Aqueous extraction and measurememt by 'Aquakem 600' Discrete Analyser using ferric nitrate / mercuric thiocyanate.
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.

Test Methods

SOP	Title	Parameters included	Method summary
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING
2183

Amended Report

Report No.:	21-24743-2		
Initial Date of Issue:	26-Jul-2021	**Date of Re-Issue:**	06-Sep-2021
Client	IGSL		
Client Address:	M7 Business Park Naas County Kildare Ireland		
Contact(s):	Darren Keogh		
Project	Blanchardstown		
Quotation No.:	Q20-19951	**Date Received:**	19-Jul-2021
Order No.:		**Date Instructed:**	19-Jul-2021
No. of Samples:	10		
Turnaround (Wkdays):	35	**Results Due:**	06-Sep-2021
Date Approved:	06-Sep-2021		

Approved By:



Details: Glynn Harvey, Technical Manager

Results - Leachate

Project: Blanchardstown

Client: IGSL						Chemtest Job No.:	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743
Quotation No.: Q20-19951						Chemtest Sample ID.:	1243008	1243011	1243012	1243013	1243016	1243017
						Sample Location:	WS3	WS8	WS22	WS13	WS9	WS4
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	1.50	1.10	1.00	1.00	2.00	1.80
						Bottom Depth (m):			1.50	1.50		
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**							
pH	U	1010	10:1		N/A		8.6	8.7	9.1	8.9	8.9	8.8
Ammonium	U	1220	10:1	mg/l	0.050		< 0.050	< 0.050	0.16	< 0.050	< 0.050	< 0.050
Ammonium	N	1220	10:1	mg/kg	0.10		0.60	0.52	2.9	0.47	0.57	0.62
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01		1.1	0.42	0.33	0.23	0.21	0.20
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: Blanchardstown

Client: IGSL					**Chemtest Job No.:**	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743
Quotation No.: Q20-19951					**Chemtest Sample ID.:**	1243008	1243009	1243010	1243011	1243012	1243013	1243014	1243015	1243016
					Sample Location:	WS3	WS3	WS7	WS8	WS22	WS13	WS9	WS11	WS9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.50	1.00	1.00	1.10	1.00	1.00	1.00	1.00	2.00
					Bottom Depth (m):		2.00	2.00		1.50	1.50	2.00	2.00	
					Asbestos Lab:	DURHAM			DURHAM	DURHAM	DURHAM			DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
ACM Type	U	2192		N/A		-			-	-	-			-
Asbestos Identification	U	2192		N/A		No Asbestos Detected			No Asbestos Detected	No Asbestos Detected	No Asbestos Detected			No Asbestos Detected
Moisture	N	2030	%	0.020		8.1	6.2	7.3	2.7	5.0	10	7.9	6.9	7.0
pH (2.5:1)	N	2010		4.0			[A] 8.5	[A] 8.8				[A] 8.7	[A] 8.7	
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		[A] 0.50			[A] 0.42	[A] 1.0	[A] < 0.40			[A] < 0.40
Magnesium (Water Soluble)	N	2120	g/l	0.010			[A] 0.026	[A] < 0.010				[A] < 0.010	[A] < 0.010	
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010			[A] 0.20	[A] 0.19				[A] 0.15	[A] 0.030	
Total Sulphur	U	2175	%	0.010			[A] 0.26	[A] 0.27				[A] 0.083	[A] < 0.010	
Sulphur (Elemental)	U	2180	mg/kg	1.0		[A] 2.9			[A] 3.1	[A] < 1.0	[A] < 1.0			[A] 12
Chloride (Water Soluble)	U	2220	g/l	0.010			[A] < 0.010	[A] 0.017				[A] < 0.010	[A] < 0.010	
Nitrate (Water Soluble)	N	2220	g/l	0.010			< 0.010	< 0.010				< 0.010	< 0.010	
Cyanide (Total)	U	2300	mg/kg	0.50		[A] < 0.50			[A] < 0.50	[A] < 0.50	[A] < 0.50			[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		[A] 10			[A] 3.9	[A] 13	[A] 3.5			[A] 7.6
Ammonium (Water Soluble)	U	2220	g/l	0.01			< 0.01	< 0.01				< 0.01	< 0.01	
Sulphate (Acid Soluble)	U	2430	%	0.010		[A] 0.030	[A] 0.060	[A] 0.061	[A] 0.083	[A] 0.031	[A] 0.072	[A] 0.053	[A] 0.022	[A] 0.044
Arsenic	U	2450	mg/kg	1.0		16			11	18	19			16
Barium	U	2450	mg/kg	10		37			110	53	38			35
Cadmium	U	2450	mg/kg	0.10		0.26			1.3	1.5	0.57			0.32
Chromium	U	2450	mg/kg	1.0		34			17	17	30			31
Molybdenum	U	2450	mg/kg	2.0		< 2.0			2.1	2.3	< 2.0			< 2.0
Antimony	N	2450	mg/kg	2.0		< 2.0			< 2.0	< 2.0	< 2.0			< 2.0
Copper	U	2450	mg/kg	0.50		100			39	63	94			170
Mercury	U	2450	mg/kg	0.10		< 0.10			0.13	< 0.10	< 0.10			< 0.10
Nickel	U	2450	mg/kg	0.50		78			26	45	72			75
Lead	U	2450	mg/kg	0.50		38			35	19	21			39
Selenium	U	2450	mg/kg	0.20		0.65			0.77	0.57	0.25			0.32
Zinc	U	2450	mg/kg	0.50		130			77	77	60			110
Chromium (Trivalent)	N	2490	mg/kg	1.0		34			17	17	30			31
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50			< 0.50	< 0.50	< 0.50			< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10		< 10			< 10	3400	< 10			210
Diesel Present	N	2670		N/A						True				
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] 89	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] 750	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] 760	[A] < 1.0			[A] 26

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743
Quotation No.: Q20-19951					Chemtest Sample ID.:	1243008	1243009	1243010	1243011	1243012	1243013	1243014	1243015	1243016
					Sample Location:	WS3	WS3	WS7	WS8	WS22	WS13	WS9	WS11	WS9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.50	1.00	1.00	1.10	1.00	1.00	1.00	1.00	2.00
					Bottom Depth (m):		2.00	2.00		1.50	1.50	2.00	2.00	
					Asbestos Lab:	DURHAM			DURHAM	DURHAM	DURHAM			DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] 9.3	[A] < 1.0			[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		[A] < 5.0			[A] < 5.0	[A] 1600	[A] < 5.0			[A] 26
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] 27	[A] < 1.0			[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] 850	[A] < 1.0			[A] 110
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		[A] < 5.0			[A] < 5.0	[A] 880	[A] < 5.0			[A] 110
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		[A] < 10			[A] < 10	[A] 2500	[A] < 10			[A] 140
Benzene	U	2760	µg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Toluene	U	2760	µg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Ethylbenzene	U	2760	µg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] 1.2
o-Xylene	U	2760	µg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010		[A] < 0.010			[A] < 0.010	[A] 0.11	[A] < 0.010			[A] 0.25
Acenaphthylene	N	2800	mg/kg	0.010		[A] < 0.010			[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010		[A] < 0.010			[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] 0.41
Fluorene	N	2800	mg/kg	0.010		[A] < 0.010			[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] 0.30
Phenanthrene	N	2800	mg/kg	0.010		[A] 0.11			[A] 0.63	[A] 0.12	[A] < 0.010			[A] 3.5
Anthracene	N	2800	mg/kg	0.010		[A] 0.085			[A] 0.10	[A] < 0.010	[A] < 0.010			[A] 1.1
Fluoranthene	N	2800	mg/kg	0.010		[A] 0.093			[A] 0.60	[A] 0.11	[A] < 0.010			[A] 8.5
Pyrene	N	2800	mg/kg	0.010		[A] 0.086			[A] 0.56	[A] 0.11	[A] < 0.010			[A] 6.7
Benzo[a]anthracene	N	2800	mg/kg	0.010		[A] < 0.010			[A] 0.29	[A] < 0.010	[A] < 0.010			[A] 4.8
Chrysene	N	2800	mg/kg	0.010		[A] < 0.010			[A] 0.36	[A] < 0.010	[A] < 0.010			[A] 4.6
Benzo[b]fluoranthene	N	2800	mg/kg	0.010		[A] < 0.010			[A] 0.37	[A] < 0.010	[A] < 0.010			[A] 7.6
Benzo[k]fluoranthene	N	2800	mg/kg	0.010		[A] < 0.010			[A] 0.13	[A] < 0.010	[A] < 0.010			[A] 2.0
Benzo[a]pyrene	N	2800	mg/kg	0.010		[A] < 0.010			[A] 0.29	[A] < 0.010	[A] < 0.010			[A] 6.5
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010		[A] < 0.010			[A] 0.24	[A] < 0.010	[A] < 0.010			[A] 5.2
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010		[A] < 0.010			[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] 0.86
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010		[A] < 0.010			[A] 0.21	[A] < 0.010	[A] < 0.010			[A] 4.2
Coronene	N	2800	mg/kg	0.010		[A] < 0.010			[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20		[A] 0.37			[A] 3.8	[A] 0.45	[A] < 0.20			[A] 57
PCB 28	N	2815	mg/kg	0.0010		[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010		[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010		[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743
Quotation No.: Q20-19951					Chemtest Sample ID.:	1243008	1243009	1243010	1243011	1243012	1243013	1243014	1243015	1243016
					Sample Location:	WS3	WS3	WS7	WS8	WS22	WS13	WS9	WS11	WS9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.50	1.00	1.00	1.10	1.00	1.00	1.00	1.00	2.00
					Bottom Depth (m):		2.00	2.00		1.50	1.50	2.00	2.00	
					Asbestos Lab:	DURHAM			DURHAM	DURHAM	DURHAM			DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10			< 0.10	< 0.10	< 0.10			< 0.10

Results - Soil

Project: Blanchardstown

Client: IGSL				Chemtest Job No.:	21-24743
Quotation No.: Q20-19951				Chemtest Sample ID.:	1243017
				Sample Location:	WS4
				Sample Type:	SOIL
				Top Depth (m):	1.80
				Bottom Depth (m):	
				Asbestos Lab:	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	10
pH (2.5:1)	N	2010		4.0	
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	[A] < 0.40
Magnesium (Water Soluble)	N	2120	g/l	0.010	
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	
Total Sulphur	U	2175	%	0.010	
Sulphur (Elemental)	U	2180	mg/kg	1.0	[A] < 1.0
Chloride (Water Soluble)	U	2220	g/l	0.010	
Nitrate (Water Soluble)	N	2220	g/l	0.010	
Cyanide (Total)	U	2300	mg/kg	0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] 3.9
Ammonium (Water Soluble)	U	2220	g/l	0.01	
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.069
Arsenic	U	2450	mg/kg	1.0	13
Barium	U	2450	mg/kg	10	12
Cadmium	U	2450	mg/kg	0.10	0.31
Chromium	U	2450	mg/kg	1.0	12
Molybdenum	U	2450	mg/kg	2.0	< 2.0
Antimony	N	2450	mg/kg	2.0	< 2.0
Copper	U	2450	mg/kg	0.50	41
Mercury	U	2450	mg/kg	0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	26
Lead	U	2450	mg/kg	0.50	10
Selenium	U	2450	mg/kg	0.20	< 0.20
Zinc	U	2450	mg/kg	0.50	27
Chromium (Trivalent)	N	2490	mg/kg	1.0	12
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10	< 10
Diesel Present	N	2670		N/A	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] 12

Results - Soil

Project: Blanchardstown

Client: IGSL			**Chemtest Job No.:**		21-24743
Quotation No.: Q20-19951			**Chemtest Sample ID.:**		1243017
			Sample Location:		WS4
			Sample Type:		SOIL
			Top Depth (m):		1.80
			Bottom Depth (m):		
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] 12
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] 25
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] 830
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] 850
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] 860
Benzene	U	2760	µg/kg	1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0	[A] < 1.0
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] 0.13
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] 0.10
Phenanthrene	N	2800	mg/kg	0.010	[A] 0.35
Anthracene	N	2800	mg/kg	0.010	[A] 0.19
Fluoranthene	N	2800	mg/kg	0.010	[A] 0.72
Pyrene	N	2800	mg/kg	0.010	[A] 0.61
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] 0.50
Chrysene	N	2800	mg/kg	0.010	[A] 0.50
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] 0.79
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] 0.25
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] 0.73
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] 0.62
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] 0.23
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] 0.60
Coronene	N	2800	mg/kg	0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] 6.3
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010

Results - Soil

Project: Blanchardstown

Client: IGSL			Chemtest Job No.:		21-24743
Quotation No.: Q20-19951			Chemtest Sample ID.:		1243017
			Sample Location:		WS4
			Sample Type:		SOIL
			Top Depth (m):		1.80
			Bottom Depth (m):		
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243008						
Sample Ref:							
Sample ID:							
Sample Location:	WS3						
Top Depth(m):	1.50						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.91	3	5	6
Loss On Ignition	2610	U	%	4.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.37	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0070	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0005	0.0053	2	50	100
Mercury	1455	U	0.00005	0.00053	0.01	0.2	2
Molybdenum	1455	U	0.012	0.12	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0008	0.0083	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.32	3.2	10	150	500
Sulphate	1220	U	25	250	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.1

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243011						
Sample Ref:							
Sample ID:							
Sample Location:	WS8						
Top Depth(m):	1.10						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1.8	3	5	6
Loss On Ignition	2610	U	%	7.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 3.8	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0050	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0006	0.0064	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	< 0.0005	< 0.0005	2	50	100
Mercury	1455	U	0.00006	0.00056	0.01	0.2	2
Molybdenum	1455	U	0.0075	0.075	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0008	0.0083	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.19	1.9	10	150	500
Sulphate	1220	U	21	210	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	7.0	70	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	2.7

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

Chemtest Job No:	21-24743				**Landfill Waste Acceptance Criteria Limits**		
Chemtest Sample ID:	1243012						
Sample Ref:							
Sample ID:							
Sample Location:	WS22				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Top Depth(m):	1.00						
Bottom Depth(m):	1.50						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	U	%	[A] 0.60	3	5	6
Loss On Ignition	2610	U	%	2.5	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] 2500	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.45	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0020	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0022	0.022	0.5	2	25
Barium	1455	U	0.014	0.14	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	< 0.0005	< 0.0005	2	50	100
Mercury	1455	U	0.00007	0.00074	0.01	0.2	2
Molybdenum	1455	U	0.011	0.11	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.0008	0.0082	0.06	0.7	5
Selenium	1455	U	0.0007	0.0070	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.3	13	800	15000	25000
Fluoride	1220	U	0.27	2.7	10	150	500
Sulphate	1220	U	21	210	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	13	130	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	5.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243013						
Sample Ref:							
Sample ID:							
Sample Location:	WS13						
Top Depth(m):	1.00						
Bottom Depth(m):	1.50						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.44	3	5	6
Loss On Ignition	2610	U	%	4.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.014	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0006	0.0063	2	50	100
Mercury	1455	U	0.00006	0.00055	0.01	0.2	2
Molybdenum	1455	U	0.0079	0.079	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.4	14	800	15000	25000
Fluoride	1220	U	0.24	2.4	10	150	500
Sulphate	1220	U	40	400	1000	20000	50000
Total Dissolved Solids	1020	N	120	1200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	9.3	93	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243016						
Sample Ref:							
Sample ID:							
Sample Location:	WS9						
Top Depth(m):	2.00						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1.0	3	5	6
Loss On Ignition	2610	U	%	4.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] 140	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 57	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.010	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0002	0.0022	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0011	0.011	0.5	10	70
Copper	1455	U	0.0006	0.0060	2	50	100
Mercury	1455	U	0.00006	0.00061	0.01	0.2	2
Molybdenum	1455	U	0.010	0.10	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0010	0.010	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.33	3.3	10	150	500
Sulphate	1220	U	5.2	52	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243017						
Sample Ref:							
Sample ID:							
Sample Location:	WS4						
Top Depth(m):	1.80						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.40	3	5	6
Loss On Ignition	2610	U	%	3.5	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] 860	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 6.3	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.17	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0006	0.0064	0.5	10	70
Copper	1455	U	0.0006	0.0064	2	50	100
Mercury	1455	U	0.00006	0.00058	0.01	0.2	2
Molybdenum	1455	U	0.0078	0.078	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.7	17	800	15000	25000
Fluoride	1220	U	0.27	2.7	10	150	500
Sulphate	1220	U	42	420	1000	20000	50000
Total Dissolved Solids	1020	N	120	1200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

TPH Interpretation

Job	Sample	Matrix	Location	Sample Ref	Sample ID	Sample Depth (m)	Gasoline / Diesel Present	TPH Interpretation
21-24743	1243012	S	WS22			1.00	Yes	Diesel and Lube Oil

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1243008			WS3		A	Amber Glass 250ml
1243008			WS3		A	Plastic Tub 500g
1243009			WS3		A	Amber Glass 250ml
1243009			WS3		A	Plastic Tub 500g
1243010			WS7		A	Amber Glass 250ml
1243010			WS7		A	Plastic Tub 500g
1243011			WS8		A	Amber Glass 250ml
1243011			WS8		A	Plastic Tub 500g
1243012			WS22		A	Amber Glass 250ml
1243012			WS22		A	Plastic Tub 500g
1243013			WS13		A	Amber Glass 250ml
1243013			WS13		A	Plastic Tub 500g
1243014			WS9		A	Amber Glass 250ml
1243014			WS9		A	Plastic Tub 500g
1243015			WS11		A	Amber Glass 250ml
1243015			WS11		A	Plastic Tub 500g
1243016			WS9		A	Amber Glass 250ml
1243016			WS9		A	Plastic Tub 500g
1243017			WS4		A	Amber Glass 250ml
1243017			WS4		A	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2220	Water soluble Chloride in Soils	Chloride	Aqueous extraction and measurememt by 'Aquakem 600' Discrete Analyser using ferric nitrate / mercuric thiocyanate.
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.

Test Methods

SOP	Title	Parameters included	Method summary
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING
2183

Final Report

Report No.:	21-24757-1
Initial Date of Issue:	28-Jul-2021
Client	IGSL
Client Address:	M7 Business Park Naas County Kildare Ireland
Contact(s):	Darren Keogh
Project	Blanchardstown
Quotation No.:	Q20-19951
Order No.:	
No. of Samples:	8
Turnaround (Wkdays):	7
Date Approved:	28-Jul-2021
Approved By:	
Details:	Glynn Harvey, Technical Manager

Date Received:	19-Jul-2021
Date Instructed:	20-Jul-2021
Results Due:	28-Jul-2021

Results - Leachate

Project: Blanchardstown

Client: IGSL						Chemtest Job No.:	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757
Quotation No.: Q20-19951						Chemtest Sample ID.:	1243198	1243199	1243200	1243201	1243202	1243203	1243204	1243205
						Sample Location:	TP15	TP21	TP22	TP16	TP17	TP19	TP18	TP20
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0.50	0.60	0.60	0.60	0.50	0.50	0.50	0.50
						Bottom Depth (m):	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**									
pH	U	1010	10:1		N/A		8.5	8.6	8.7	8.7	8.8	8.8	8.7	8.6
Ammonium	U	1220	10:1	mg/l	0.050		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.050	0.20
Ammonium	N	1220	10:1	mg/kg	0.10		0.28	0.46	0.31	0.30	0.38	0.41	0.64	2.5
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01		0.16	0.19	0.13	0.16	0.14	0.13	< 0.01	0.11
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757
Quotation No.: Q20-19951					Chemtest Sample ID.:	1243198	1243199	1243200	1243201	1243202	1243203	1243204	1243205
					Sample Location:	TP15	TP21	TP22	TP16	TP17	TP19	TP18	TP20
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.50	0.60	0.60	0.60	0.50	0.50	0.50	0.50
					Bottom Depth (m):	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A		-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020		8.9	13	14	13	18	25	15	10
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0		[A] 3.7	[A] 3.1	[A] 1.6	[A] 9.1	[A] < 1.0	[A] 2.3	[A] 1.7	[A] < 1.0
Cyanide (Total)	U	2300	mg/kg	0.50		[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		[A] 6.1	[A] 8.0	[A] < 0.50	[A] 2.7	[A] < 0.50	[A] 2.2	[A] 1.5	[A] 2.2
Sulphate (Acid Soluble)	U	2430	%	0.010		[A] 0.021	[A] 0.020	[A] 0.057	[A] 0.077	[A] 0.043	[A] 0.049	[A] 0.046	[A] 0.098
Arsenic	U	2450	mg/kg	1.0		6.5	15	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	14
Barium	U	2450	mg/kg	10		39	21	52	73	64	130	91	66
Cadmium	U	2450	mg/kg	0.10		1.2	1.5	1.3	2.1	1.7	3.2	3.6	0.84
Chromium	U	2450	mg/kg	1.0		9.3	14	12	7.5	11	9.1	9.6	9.1
Molybdenum	U	2450	mg/kg	2.0		< 2.0	2.7	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Antimony	N	2450	mg/kg	2.0		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50		13	28	10	16	26	19	25	19
Mercury	U	2450	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.10	0.11	< 0.10
Nickel	U	2450	mg/kg	0.50		25	41	28	23	26	35	41	39
Lead	U	2450	mg/kg	0.50		8.4	18	13	14	18	19	19	30
Selenium	U	2450	mg/kg	0.20		< 0.20	0.52	< 0.20	0.22	< 0.20	< 0.20	0.20	0.46
Zinc	U	2450	mg/kg	0.50		36	89	47	43	57	37	46	80
Chromium (Trivalent)	N	2490	mg/kg	1.0		9.3	14	12	7.5	11	9.1	9.6	9.1
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757
Quotation No.: Q20-19951					Chemtest Sample ID.:	1243198	1243199	1243200	1243201	1243202	1243203	1243204	1243205
					Sample Location:	TP15	TP21	TP22	TP16	TP17	TP19	TP18	TP20
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.50	0.60	0.60	0.60	0.50	0.50	0.50	0.50
					Bottom Depth (m):	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
Benzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Phenanthrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.050	[A] 0.027	[A] < 0.010	[A] < 0.010	[A] < 0.010
Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.018	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.019	[A] 0.016	[A] < 0.010	[A] < 0.010	[A] < 0.010
Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.024	[A] 0.011	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Chrysene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Coronene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243198						
Sample Ref:							
Sample ID:							
Sample Location:	TP15						
Top Depth(m):	0.50						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.28	3	5	6
Loss On Ignition	2610	U	%	2.7	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.10	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0006	0.0057	0.5	2	25
Barium	1455	U	0.005	0.054	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0015	0.015	2	50	100
Mercury	1455	U	0.00007	0.00069	0.01	0.2	2
Molybdenum	1455	U	0.014	0.14	0.5	10	30
Nickel	1455	U	0.0010	0.010	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0006	0.0064	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.48	4.8	10	150	500
Sulphate	1220	U	13	130	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	27	270	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243199						
Sample Ref:							
Sample ID:							
Sample Location:	TP21						
Top Depth(m):	0.60						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.61	3	5	6
Loss On Ignition	2610	U	%	2.4	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.016	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0008	0.0081	2	50	100
Mercury	1455	U	0.00007	0.00071	0.01	0.2	2
Molybdenum	1455	U	0.012	0.12	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.5	15	800	15000	25000
Fluoride	1220	U	0.43	4.3	10	150	500
Sulphate	1220	U	15	150	1000	20000	50000
Total Dissolved Solids	1020	N	85	850	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	12	120	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243200						
Sample Ref:							
Sample ID:							
Sample Location:	TP22						
Top Depth(m):	0.60						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.34	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.011	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0002	0.0022	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0006	0.0063	0.5	10	70
Copper	1455	U	< 0.0005	< 0.0005	2	50	100
Mercury	1455	U	0.00007	0.00068	0.01	0.2	2
Molybdenum	1455	U	0.014	0.13	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.1	11	800	15000	25000
Fluoride	1220	U	0.87	8.7	10	150	500
Sulphate	1220	U	4.5	45	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

Chemtest Job No:	21-24757				**Landfill Waste Acceptance Criteria Limits**		
Chemtest Sample ID:	1243201						
Sample Ref:							
Sample ID:							
Sample Location:	TP16						
Top Depth(m):	0.60				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	U	%	[A] 0.59	3	5	6
Loss On Ignition	2610	U	%	2.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0070	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0004	0.0041	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0016	0.017	2	50	100
Mercury	1455	U	0.00007	0.00073	0.01	0.2	2
Molybdenum	1455	U	0.014	0.14	0.5	10	30
Nickel	1455	U	0.0005	0.0054	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0006	0.0059	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.5	15	800	15000	25000
Fluoride	1220	U	0.60	6.0	10	150	500
Sulphate	1220	U	13	130	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	57	570	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243202						
Sample Ref:							
Sample ID:							
Sample Location:	TP17						
Top Depth(m):	0.50						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.81	3	5	6
Loss On Ignition	2610	U	%	2.9	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.012	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0005	0.0046	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0018	0.018	2	50	100
Mercury	1455	U	0.00007	0.00068	0.01	0.2	2
Molybdenum	1455	U	0.013	0.13	0.5	10	30
Nickel	1455	U	0.0009	0.0089	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.3	13	800	15000	25000
Fluoride	1220	U	0.38	3.8	10	150	500
Sulphate	1220	U	9.9	99	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	63	630	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	18

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243203						
Sample Ref:							
Sample ID:							
Sample Location:	TP19						
Top Depth(m):	0.50						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.58	3	5	6
Loss On Ignition	2610	U	%	4.4	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0090	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0006	0.0058	2	50	100
Mercury	1455	U	0.00006	0.00057	0.01	0.2	2
Molybdenum	1455	U	0.020	0.20	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.50	5.0	10	150	500
Sulphate	1220	U	9.8	98	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	11	110	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	25

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243204						
Sample Ref:							
Sample ID:							
Sample Location:	TP18						
Top Depth(m):	0.50						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1.5	3	5	6
Loss On Ignition	2610	U	%	3.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0070	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0002	0.0022	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0007	0.0072	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.010	0.10	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0011	0.011	0.1	0.5	7
Zinc	1455	U	0.003	0.031	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.44	4.4	10	150	500
Sulphate	1220	U	14	140	1000	20000	50000
Total Dissolved Solids	1020	N	85	850	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

Chemtest Job No:	21-24757				**Landfill Waste Acceptance Criteria Limits**		
Chemtest Sample ID:	1243205						
Sample Ref:							
Sample ID:							
Sample Location:	TP20						
Top Depth(m):	0.50				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	U	%	[A] 0.42	3	5	6
Loss On Ignition	2610	U	%	5.2	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.11	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0009	0.0094	0.5	2	25
Barium	1455	U	0.011	0.11	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	< 0.0005	< 0.0005	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.011	0.11	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.0007	0.0066	0.06	0.7	5
Selenium	1455	U	0.0012	0.012	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	4.1	41	800	15000	25000
Fluoride	1220	U	0.24	2.4	10	150	500
Sulphate	1220	U	49	490	1000	20000	50000
Total Dissolved Solids	1020	N	120	1200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	7.0	70	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1243198			TP15		A	Amber Glass 250ml
1243198			TP15		A	Plastic Tub 500g
1243199			TP21		A	Amber Glass 250ml
1243199			TP21		A	Plastic Tub 500g
1243200			TP22		A	Amber Glass 250ml
1243200			TP22		A	Plastic Tub 500g
1243201			TP16		A	Amber Glass 250ml
1243201			TP16		A	Plastic Tub 500g
1243202			TP17		A	Amber Glass 250ml
1243202			TP17		A	Plastic Tub 500g
1243203			TP19		A	Amber Glass 250ml
1243203			TP19		A	Plastic Tub 500g
1243204			TP18		A	Amber Glass 250ml
1243204			TP18		A	Plastic Tub 500g
1243205			TP20		A	Amber Glass 250ml
1243205			TP20		A	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.

Test Methods

SOP	Title	Parameters included	Method summary
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key	
U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

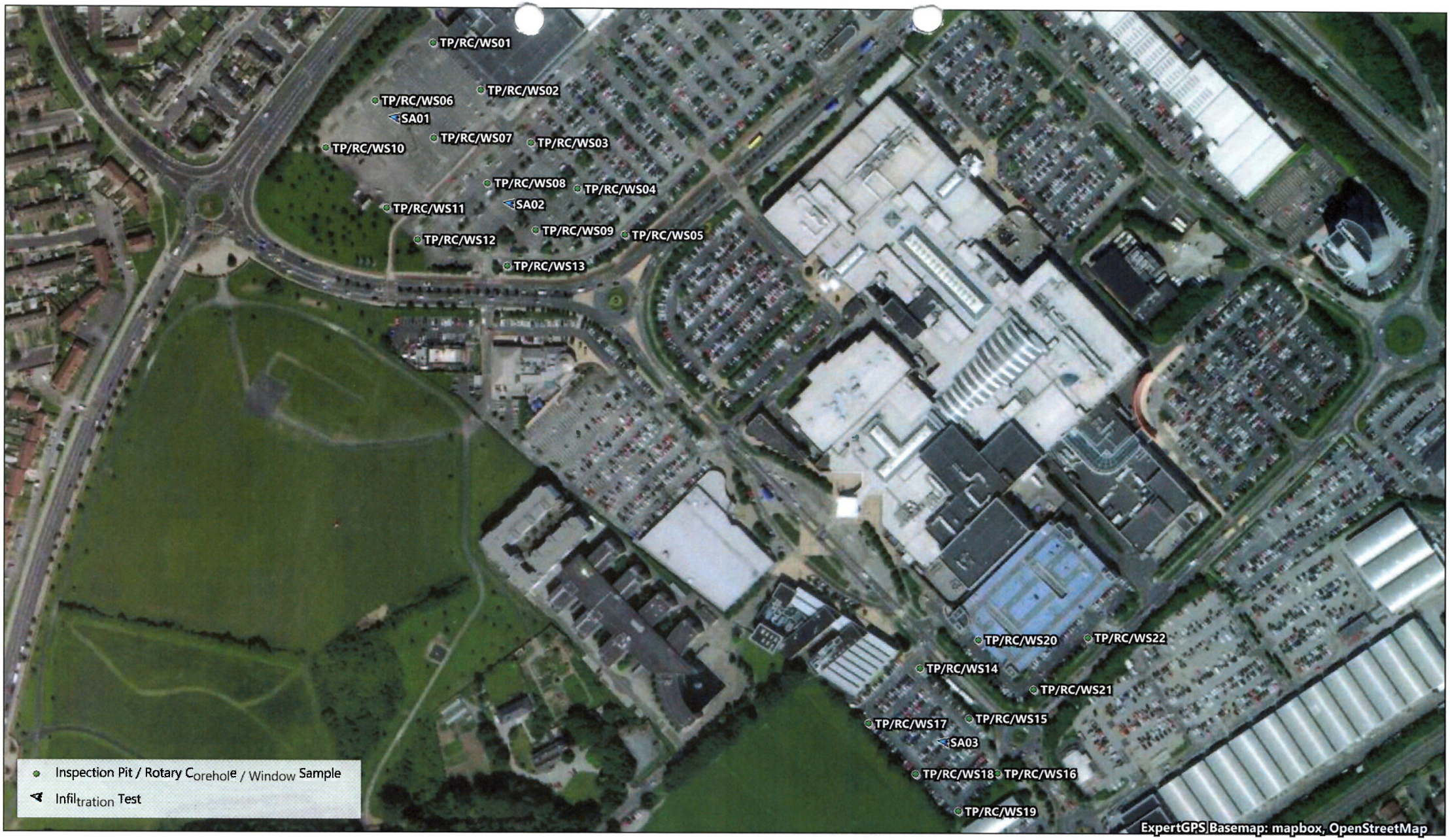
Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Appendix 7

As-Surveyed Site Plan



ExpertGPS

23311 Blanchardstown Town Centre - Sites A, B and C

50 0 50 100 150 200 250 300 350 400 450 500 550 600 m

Scale: 1 : 3500.

MN 2°10'

Appendix C

Unit 15
Melbourne Business Park
Model Farm Road
Cork T12 WR89

T: 021 434 5366
E:admin@ocallaghanmoran.com
www.ocallaghanmoran.com

Waste Characterisation Assessment

Blandchardstown Town Centre

Blanchardstown

County Dublin

Prepared For: -

IGSL Limited
Unit F
M7 Business Park
Naas
County Kildare

Prepared By: -

O' Callaghan Moran & Associates
Unit 15 Melbourne Business Park
Model Farm Road
Cork

September 2021

Project	Waste Characterisation: Blandchardstown Town Centre, Co. Dublin			
Client	IGSL Limited			
Report No	**Date**	**Status**	**Prepared By**	**Reviewed By**
210012301	08/09/2021	Final	Austin Hynes MSc	Sean Moran B.Sc. MSc

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APPENDIX 1 - Window Sample and Trial Pit Logs

APPENDIX 2 - Laboratory Results

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APPENDIX 4 - Excavation Plans

1 INTRODUCTION

IGSL Limited requested O'Callaghan Moran & Associates (OCM) to undertake a waste characterisation assessment of samples of made ground and natural soils collected from twenty-two (22 No.) trial pit/window sample boreholes installed at the site of a proposed development in Blanchardstown, County Dublin.

1.1 Methodology

IGSL provided a description of the ground conditions and collected samples of the soils from the trial pit locations. The samples were analysed at an accredited laboratory and the results formed the basis for a waste classification assessment, which was undertaken by OCM in accordance with the Environmental Protection Agency (EPA) Guidelines on the Classification of Waste (2015).

2 WASTE CLASSIFICATION ASSESSMENT

2.1 Soil Sampling and Laboratory Analysis

2.1.1 *Site Investigation*

The site investigation was completed by IGSL Limited in May 2021 and included the collection of forty-four composite samples from twenty-two (22 No.) window sample boreholes. The locations are shown on Figure 2.1. An inspection trial pit was excavated at each window sample location to circa 1.20 metres below ground level (mbgl), the numbers of which correlate directly. The logs are in Appendix 1.

There is tarmacadam underlain by GRAVEL (Clause 804) at the surface of all locations The logs indicate that the subsurface comprises MADE GROUND underlain by Natural Ground.. The MADE GROUND comprises soft to firm, slightly sandy gravelly SILT/CLAY to circa 1.20 mbgl. Made Ground was encountered to a depth of 1.60 mbgl in WS20. This is underlain by Natural Ground composed of firm to stiff, brown, slightly sandy gravelly CLAY. Dense to very dense, slightly silty GRAVEL with cobble content was encountered below 1.20 mbgl at WS02 and WS21, and below 1.50 mbgl at WS06. Medium dense, clayey sandy GRAVEL was encountered below 1.60 mbgl at WS15.

The Made Ground TP/WS05 and TP/WS20 contains occasional man-made material including red brick and plastic making up <2% of the soil matrix.

2.1.2 *Sample Collection*

IGSL collected the samples and placed them in laboratory prepared containers that were stored in coolers prior to shipment to Chemtest Ltd.

2.1.3 *Laboratory Analysis*

The samples were tested for, metals (arsenic, barium, cadmium, chromium, copper, mercury, molybdenum, nickel, lead, antimony, selenium and zinc, total organic carbon (TOC), BTEX (benzene, toluene, ethylbenzene and xylene) aliphatic and aromatic hydrocarbons, polychlorinated biphenyls (PCB), mineral oil, polyaromatic hydrocarbons (PAH) and asbestos. Leachate generated from the samples was tested for arsenic, barium, cadmium, chromium, copper, mercury, molybdenum, nickel, lead, antimony, selenium and zinc, chloride, fluoride, soluble sulphate, phenols, dissolved organic carbon (DOC), total dissolved solids (TDS).

This parameter range facilitates an assessment of the hazardous properties of the waste, and also allows a determination of appropriate off-site management options based on the Waste Acceptance Criteria (WAC) applied by landfill operators.

The analytical methods were all ISO/CEN approved and the method detection limits were below the relevant guidance/threshold values. The full laboratory report is in Appendix 2.

2.2 Waste Classification

The Haz Waste Online Classification Engine, developed in the UK by One Touch Data Ltd, was used to determine the waste classification. This tool was developed specifically to establish whether waste is non-hazardous or hazardous and has been approved for use in Ireland by the Environmental Protection Agency. The full Waste Classification Report is in Appendix 3 and the results are summarised in Table 2.1.

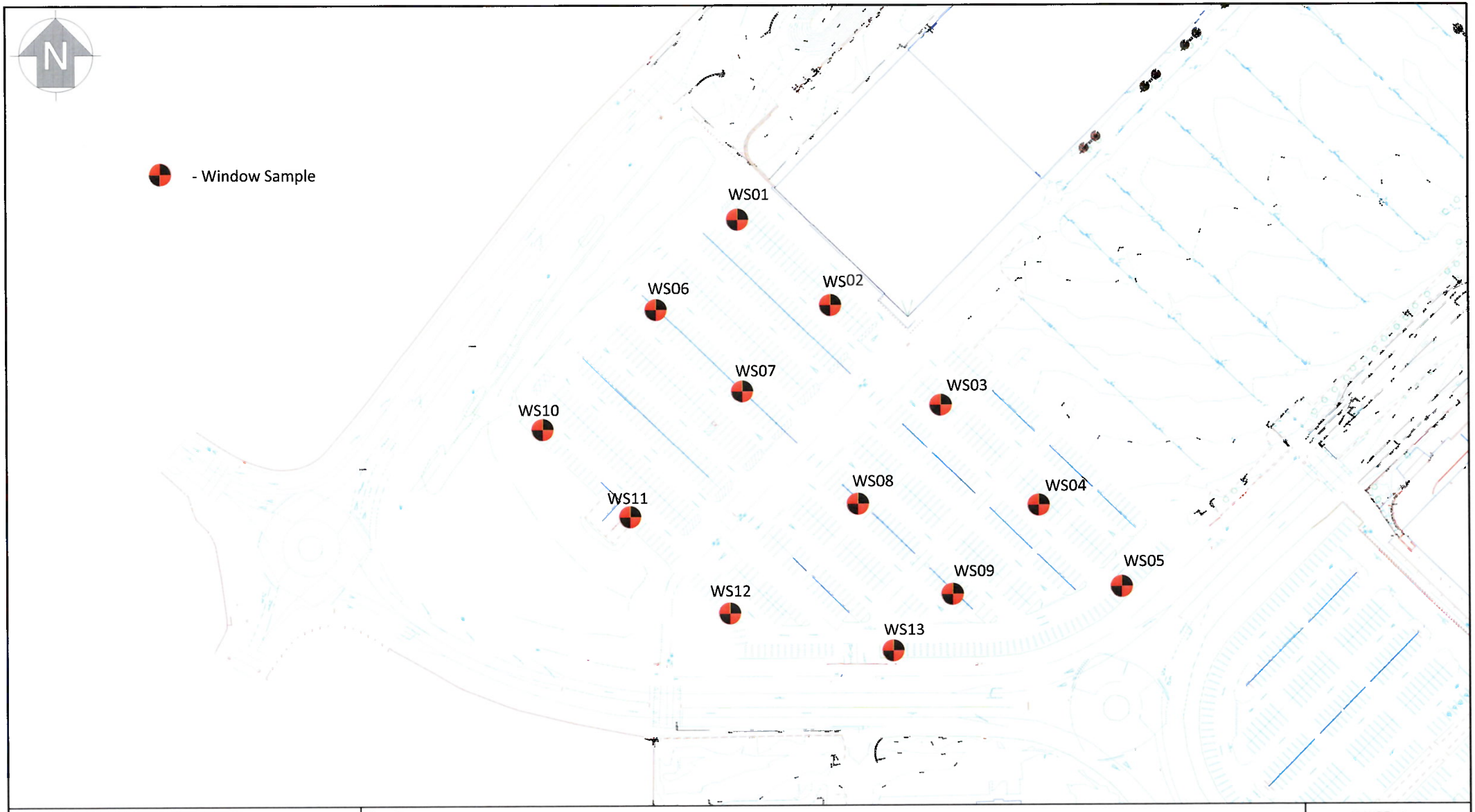
Table 2.1 Waste Classification

Sample No.	Depth	Classification	LoW Code	Sample No.	Depth	Classification	LoW Code
WS01 (1-1)	0.5-1.0	Non-Hazardous	17 05 04	WS12 (12-1)	0.0-1.0	Non-Hazardous	17 05 04
WS01 (1-2)	1.0-2.0	Non-Hazardous	17 05 04	WS12	1.4	Non-Hazardous	17 05 04
WS02 (2-1)	0.0-1.0	Non-Hazardous	17 05 04	WS13 (13-1)	0.0-1.0	Non-Hazardous	17 05 04
WS02 (2-2)	1.0-2.0	Non-Hazardous	17 05 04	WS13	1.0-1.5	Non-Hazardous	17 05 04
WS03 (3-1)	0.0-1.0	Non-Hazardous	17 05 04	WS14	1.0-1.6	Non-Hazardous	17 05 04
WS3	1.50	Non-Hazardous	17 05 04	WS15	1.0-2.0	Non-Hazardous	17 05 04
WS04 (4-1)	0.0-1.0	Non-Hazardous	17 05 04	WS 16	1.0-1.5	Non-Hazardous	17 05 04
WS4	1.80	Non-Hazardous	17 05 04	WS 17	0.7-1.4	Non-Hazardous	17 05 04
WS05 (5-1)	0.0-1.0	Non-Hazardous	17 05 04	WS18	1.0-2.0	Non-Hazardous	17 05 04
WS5	1.8	Non-Hazardous	17 05 04	WS 19	1.0-2.0	Non-Hazardous	17 05 04
WS06 (6-1)	0.0-1.0	Non-Hazardous	17 05 04	WS 20	1.0-1.6	Non-Hazardous	17 05 04
WS06 (6-2)	1.0-2.0	Non-Hazardous	17 05 04	WS 21	1.0-1.6	Non-Hazardous	17 05 04
WS07 (7-1)	0.0-1.0	Non-Hazardous	17 05 04	WS22	1.0-1.5	Non-Hazardous	17 05 04
WS07 (7-2)	1.0-2.0	Non-Hazardous	17 05 04	TP14	0.5-1.0	Non-Hazardous	17 05 04
WS08 (8-1)	0.0-1.0	Non-Hazardous	17 05 04	TP15	0.5-1.0	Non-Hazardous	17 05 04
WS8	1.10	Non-Hazardous	17 05 04	TP16	0.6-1.0	Non-Hazardous	17 05 04
WS09 (9-1)	0.0-1.0	Non-Hazardous	17 05 04	TP17	0.5-1.0	Non-Hazardous	17 05 04
WS9	2.00	Non-Hazardous	17 05 04	TP18	0.5-1.0	Non-Hazardous	17 05 04
WS10 (10-1)	0.6-1.0	Non-Hazardous	17 05 04	TP19	0.5-1.0	Non-Hazardous	17 05 04
WS10 (10-2)	1.0-2.0	Non-Hazardous	17 05 04	TP20	0.5-1.0	Non-Hazardous	17 05 04
WS11 (11-1)	0.0-1.0	Non-Hazardous	17 05 04	TP21	0.6-1.0	Non-Hazardous	17 05 04
WS11 (11-2)	1.0-2.0	Non-Hazardous	17 05 04	TP22	0.6-1.0	Non-Hazardous	17 05 04

Asbestos was not detected in any of the samples.

All samples are classified as non-hazardous and the appropriate List of Waste Code is 17 05 04 (Soil and Stone other than those mentioned in 17 05 03*). The samples from WS17 (0.7-1.4m)

and WS22 (1.0-1.5m) contain elevated levels of TPH. A hydrocarbon interpretation conducted by the laboratory indicated the presence of Diesel at non-hazardous concentrations.



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environmental management for business

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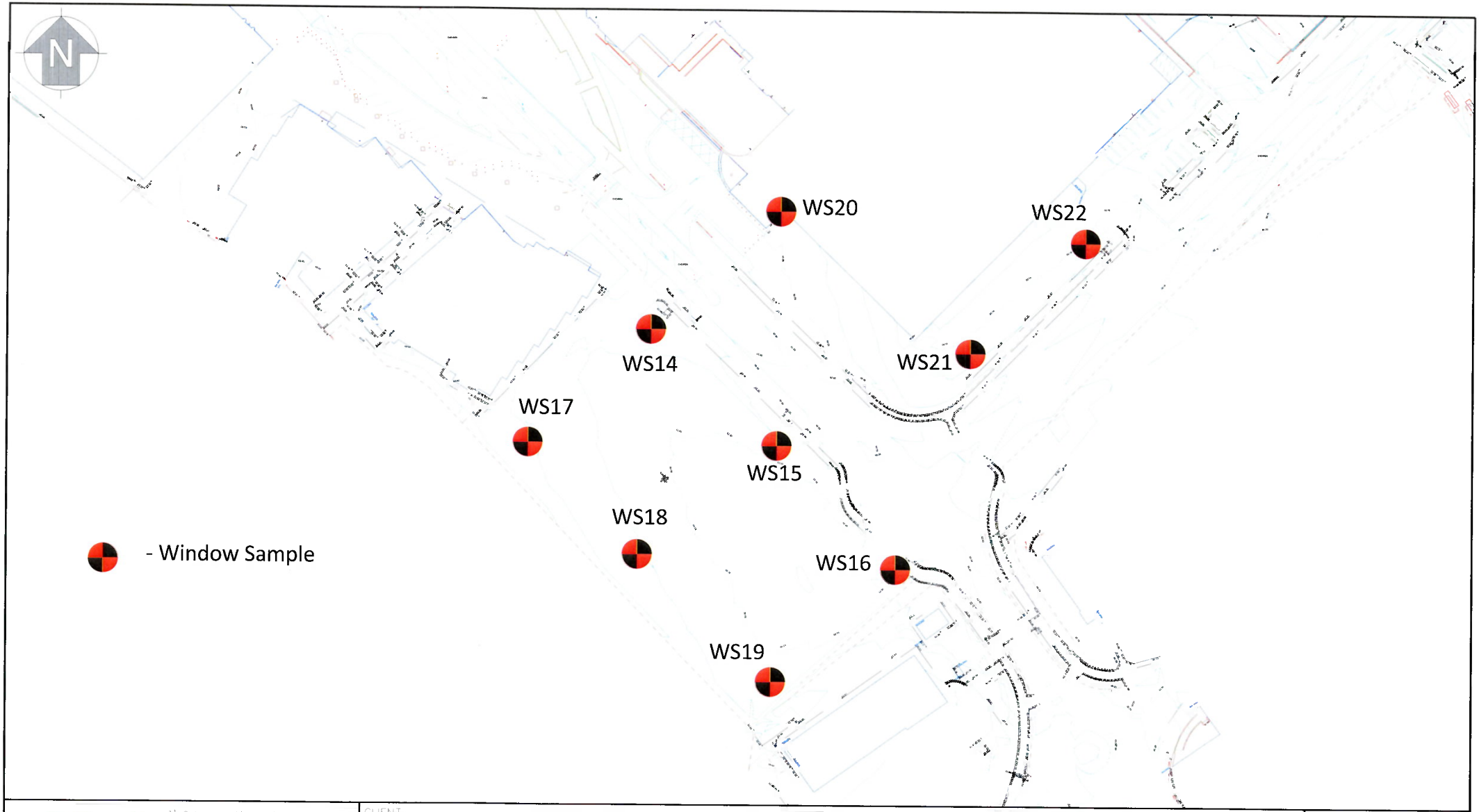
CLIENT: IGSL Limited

TITLE: Excavation Plan (WS01–WS13)

FIGURE No.: 2.1a

SCALE: SCALE

REV.: A



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CLIENT
IGSL Limited

FIGURE No
2.4b

TITLE
Excavation Plan (WS14-WS22)

SCALE
SCALE

REV.
A

2.3 Waste Acceptance Criteria

The results of the WAC testing are presented in Table 2.2, which includes for comparative purposes the WAC for Inert, Non Hazardous and Hazardous Waste Landfills pursuant to Article 16 of the EU Landfill Directive 1999/31/EC Annex II which establishes criteria and procedures for the acceptance of waste at landfills.

Molybdenum exceeds the inert landfill WAC in WS5 (0.0-1.0m), WS12 (1.4m) and TP14 (0.5-1.0m). Dissolved Organic Carbon exceeds the inert landfill WAC increased limits in TP16 and TP17. Mineral Oil exceeds the inert WAC increased limits in WS17 (0.7-1.4m) and WS22 (1.0-1.5m). All other samples meet the inert landfill WAC.

Table 2.2 WAC Results

Parameter	Unit	WS01 (1-1)	WS01 (1-2)	WS02 (2-1)	WS02 (2-2)	WS03 (3-1)	WS3	WS04 (4-1)	WS4	WS05 (5-1)	WS5	WS06 (6-1)	Inert Landfill	Inert Landfill Increased Limits	Non-Hazardous Landfill	Hazardous Landfill
Depth	m	0.5-1.0	1.0-2.0	0.0-1.0	1.0-2.0	0.0-1.0	1.50	0.0-1.0	1.80	0.0-1.0	1.8	0.0-1.0				
Antimony	mg/kg	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.06	0.18	0.7	5
Arsenic	mg/kg	< 0.0002	0.0033	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0026	< 0.0002	0.0081	< 0.0002	< 0.0002	0.5	1.5	2	25
Barium	mg/kg	< 0.0005	< 0.0005	< 0.0005	0.21	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.095	< 0.0005	< 0.0005	20	20	100	300
Cadmium	mg/kg	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	0.04	1	5
Chromium	mg/kg	0.096	0.11	0.095	0.089	0.099	< 0.0005	0.10	0.0064	0.10	0.0055	0.11	0.5	0.5	10	70
Copper	mg/kg	0.0063	0.018	0.024	0.010	0.0075	0.0053	0.0096	0.0064	0.016	0.0061	0.0081	2	2	50	100
Lead	mg/kg	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	0.5	10	50
Molybdenum	mg/kg	0.030	0.0060	0.0044	0.082	0.044	0.12	0.022	0.078	0.019	0.63	0.020	0.5	1.5	10	30
Nickel	mg/kg	0.040	0.048	0.042	0.040	0.041	< 0.0005	0.045	< 0.0005	0.042	< 0.0005	0.044	0.4	0.4	10	40
Selenium	mg/kg	< 0.0005	< 0.0005	< 0.0005	0.024	0.0070	0.0083	< 0.0005	< 0.0005	0.0060	0.028	< 0.0005	0.1	0.3	0.5	7
Zinc	mg/kg	< 0.003	< 0.003	< 0.003	0.037	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.24	< 0.003	4	4	50	200
Mercury	mg/kg	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00053	< 0.00005	0.00058	< 0.00005	< 0.00005	< 0.00005	0.01	0.01	0.2	2
Phenol	mg/kg	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	1	1	NE	NE
Fluoride	mg/kg	2.8	< 1.0	< 1.0	2.6	3.5	3.2	5.5	2.7	3.1	2.8	3.7	10	10	150	500
Chloride	mg/kg	10	< 10	11	11	14	< 10	< 10	17	36	25	< 10	800	2,400	15,000	25,000
Sulphate	mg/kg	200	13	46	230	190	250	66	420	770	420	190	1000*	3,000	20000*	50,000
DOC **	mg/kg	< 50	330	< 50	< 50	< 50	100	< 50	100	< 50	230	< 50	500	500	800	1,000
pH	pH units	8.6	8.7	8.6	8.7	8.6	8.5	8.2	8.4	8.5	8.3	8.7	NE	NE	NE	NE
TDS ***	mg/kg	780	320	300	720	780	840	710	1200	1800	1200	910	4,000	12,000	60,000	100,000
TOC	%	0.21	1.1	0.4	0.61	0.3	0.91	0.46	0.4	1.4	0.33	0.31	3	6	NE	6
Benzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
Toluene	mg/kg	0.0019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
Ethylbenzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
m/p-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
o-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
PCB Total of 7	mg/kg	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	1	1	NE	NE
Total 17 PAH's	mg/kg	0.38	71	7.3	3.2	3.8	0.37	< 0.20	6.3	0.29	< 0.20	< 0.20	NE	100	NE	NE
Mineral Oil	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10	440	< 10	< 10	< 10	< 10	500	500	NE	NE
Asbestos	% mass	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NE	NE	NE	NE

NAD denotes No Asbestos Detected

* denotes sulphate level exceeding inert waste limit may be considered as complying if the TDS value does not exceed 6,000mg/kg at L/S = 10l/kg.

** denotes a higher limit may be accepted provided the DOC alternative values of 500mg/kg is achieved

*** denotes TDS. The values for TDS can be used to sulphate and chloride.

PAH over 1mg/kg and Mineral Oil over 50 mg/kg exceeds limit at soil recovery site in Ireland

Table 2.3 WAC Results

Parameter	Unit	WS06 (6-2)	WS07 (7-1)	WS07 (7-2)	WS08 (8-1)	WS8	WS09 (9-1)	WS9	WS10 (10-1)	WS10 (10-2)	WS11 (11-1)	WS11 (11-2)	Inert Landfill	Inert Landfill Increased Limits	Non-Hazardous Landfill	Hazardous Landfill
Depth	m	1.0-2.0	0.0-1.0	1.0-2.0	0.0-1.0	1.10	0.0-1.0	2.00	0.6-1.0	1.0-2.0	0.0-1.0	1.0-2.0				
Antimony	mg/kg	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.06	0.18	0.7	5
Arsenic	mg/kg	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0064	0.0060	0.0022	0.0025	< 0.0002	0.0028	0.0076	0.5	1.5	2	25
Barium	mg/kg	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	20	20	100	300
Cadmium	mg/kg	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	0.04	1	5
Chromium	mg/kg	0.098	0.11	0.097	0.097	< 0.0005	0.094	0.011	0.10	0.093	0.094	0.11	0.5	0.5	10	70
Copper	mg/kg	0.0075	0.0077	0.011	0.0072	< 0.0005	0.013	0.0060	0.0077	0.014	0.0074	0.0093	2	2	50	100
Lead	mg/kg	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	0.5	10	50
Molybdenum	mg/kg	0.023	0.030	0.019	0.022	0.075	0.064	0.10	0.073	0.064	0.067	0.12	0.5	1.5	10	30
Nickel	mg/kg	0.040	0.043	0.044	0.042	< 0.0005	0.040	< 0.0005	0.044	0.044	0.042	0.052	0.4	0.4	10	40
Selenium	mg/kg	0.0065	0.0056	< 0.0005	< 0.0005	0.0083	0.013	0.010	0.016	0.011	0.013	0.015	0.1	0.3	0.5	7
Zinc	mg/kg	< 0.003	< 0.003	0.035	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.32	< 0.003	0.026	4	4	50	200
Mercury	mg/kg	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00056	< 0.00005	0.00061	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.01	0.2	2
Phenol	mg/kg	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	1	1	NE	NE
Fluoride	mg/kg	3.7	3.4	3.0	2.3	1.9	3.2	3.3	3.9	3.2	2.7	3.8	10	10	150	500
Chloride	mg/kg	< 10	< 10	< 10	19	< 10	12	< 10	< 10	18	< 10	< 10	800	2,400	15,000	25,000
Sulphate	mg/kg	210	150	130	320	210	250	52	310	240	160	270	1000*	3,000	20000*	50,000
DOC **	mg/kg	< 50	< 50	< 50	< 50	70	84	100	< 50	110	50	53	500	500	800	1,000
pH	pH units	8.7	8.6	8.6	8.7	8.6	8.7	8.6	8.4	8.5	8.7	8.5	NE	NE	NE	NE
TDS ***	mg/kg	840	710	710	910	720	710	720	910	840	650	720	4,000	12,000	60,000	100,000
TOC	%	0.33	0.55	0.61	0.62	1.8	0.35	1	0.69	< 0.20	0.63	0.45	3	6	NE	6
Benzene	mg/kg	< 0.001	0.0014	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
Toluene	mg/kg	< 0.001	0.0094	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
Ethylbenzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
m/p-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0012	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
o-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
PCB Total of 7	mg/kg	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	1	1	NE	NE
Total 17 PAH's	mg/kg	< 0.20	< 0.20	< 0.20	< 0.20	3.8	< 0.20	57	< 0.20	< 0.20	< 0.20	0.4	NE	100	NE	NE
Mineral Oil	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10	210	< 10	< 10	< 10	< 10	500	500	NE	NE
Asbestos	% mass	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NE	NE	NE	NE

NAD denotes No Asbestos Detected

* denotes sulphate level exceeding inert waste limit may be considered as complying if the TDS value does not exceed 6,000mg/kg at L/S = 10l/kg.

** denotes a higher limit may be accepted provided the DOC alternative values of 500mg/kg is achieved

*** denotes TDS. The values for TDS can be used to sulphate and chloride.

PAH over 1mg/kg and Mineral Oil over 50 mg/kg exceeds limit at soil recovery site in Ireland

Table 2.4 WAC Results

Parameter	Unit	WS12 (12-1)	WS12	WS13 (13-1)	WS13	WS14	WS15	WS 16	WS 17	WS18	WS 19	WS 20	Inert Landfill	Inert Landfill Increased Limits	Non-Hazardous Landfill	Hazardous Landfill
Depth	m	0.0-1.0	1.4	0.0-1.0	1.0-1.5	1.0-1.6	1.0-2.0	1.0-1.5	0.7-1.4	1.0-2.0	1.0-2.0	1.0-1.6				
Antimony	mg/kg	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0058	< 0.0005	< 0.0005	0.010	0.06	0.18	0.7	5
Arsenic	mg/kg	< 0.0002	0.0087	< 0.0002	< 0.0002	< 0.0002	0.0080	0.0027	0.0027	< 0.0002	< 0.0002	0.0085	0.5	1.5	2	25
Barium	mg/kg	< 0.0005	0.10	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.052	0.63	< 0.0005	< 0.0005	0.61	20	20	100	300
Cadmium	mg/kg	< 0.00011	0.0028	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	0.04	1	5
Chromium	mg/kg	0.097	< 0.0005	0.095	< 0.0005	0.013	0.0056	0.0090	< 0.0005	< 0.0005	< 0.0005	0.0075	0.5	0.5	10	70
Copper	mg/kg	0.0076	0.017	0.0071	0.0063	0.0050	0.030	0.0072	0.045	0.0070	0.0077	0.0099	2	2	50	100
Lead	mg/kg	< 0.0005	< 0.0005	< 0.0005	< 0.005	< 0.0005	0.0072	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	0.5	10	50
Molybdenum	mg/kg	0.054	0.75	0.021	0.079	0.13	0.094	0.21	0.15	0.10	0.19	0.14	0.5	1.5	10	30
Nickel	mg/kg	0.043	< 0.0005	0.041	< 0.0005	< 0.0005	0.028	< 0.0005	0.044	< 0.0005	< 0.0005	< 0.0005	0.4	0.4	10	40
Selenium	mg/kg	< 0.0005	0.029	< 0.0005	< 0.0005	0.0054	0.0051	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.1	0.3	0.5	7
Zinc	mg/kg	< 0.003	0.38	< 0.003	< 0.003	< 0.003	0.14	0.045	< 0.003	< 0.003	< 0.003	< 0.003	4	4	50	200
Mercury	mg/kg	< 0.00005	< 0.00005	< 0.00005	0.00055	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.01	0.2	2
Phenol	mg/kg	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	1	1	NE	NE
Fluoride	mg/kg	3.7	3.0	3.8	2.4	8.0	3.4	6.3	8.0	5.0	5.7	5.1	10	10	150	500
Chloride	mg/kg	18	34	< 10	14	< 10	17	18	16	< 10	< 10	18	800	2,400	15,000	25,000
Sulphate	mg/kg	220	250	78	400	78	39	200	230	36	97	310	1000*	3,000	20000*	50,000
DOC **	mg/kg	53	130	< 50	93	< 50	120	< 50	< 50	< 50	< 50	< 50	500	500	800	1,000
pH	pH units	8.5	8.4	8.6	8.3	9.1	9.2	9.6	8.8	9.3	8.8	8.7	NE	NE	NE	NE
TDS ***	mg/kg	840	970	710	1200	710	570	720	980	710	840	1000	4,000	12,000	60,000	100,000
TOC	%	0.47	1.1	0.39	0.44	0.85	0.52	0.72	0.57	0.44	0.64	0.66	3	6	NE	6
Benzene	mg/kg	< 0.001	0.0018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
Toluene	mg/kg	< 0.001	0.0067	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
Ethylbenzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
m/p-Xylene	mg/kg	< 0.001	0.0052	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
o-Xylene	mg/kg	< 0.001	0.0014	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
PCB Total of 7	mg/kg	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	1	1	NE	NE
Total 17 PAH's	mg/kg	2.3	4.8	0.26	< 0.20	< 0.20	< 0.20	1.1	0.56	< 0.20	< 0.20	< 0.20	NE	100	NE	NE
Mineral Oil	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10	< 10	5700	< 10	< 10	< 10	500	500	NE	NE
Asbestos	% mass	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NE	NE	NE	NE

NAD denotes No Asbestos Detected

* denotes sulphate level exceeding inert waste limit may be considered as complying if the TDS value does not exceed 6,000mg/kg at L/S = 10l/kg.

** denotes a higher limit may be accepted provided the DOC alternative values of 500mg/kg is achieved

*** denotes TDS. The values for TDS can be used to sulphate and chloride.

PAH over 1mg/kg and Mineral Oil over 50 mg/kg exceeds limit at soil recovery site in Ireland

Table 2.5 WAC Results

Parameter	Unit	WS 21	WS22	TP14	TP15	TP16	TP17	TP18	TP19	TP20	TP21	TP22	Inert Landfill	Inert Landfill Increased Limits	Non-Hazardous Landfill	Hazardous Landfill
Depth	m	1.0-1.6	1.0-1.5	0.5-1.0	0.5-1.0	0.6-1.0	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0	0.6-1.0	0.6-1.0				
Antimony	mg/kg	< 0.0005	0.0082	0.0092	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0066	< 0.0005	< 0.0005	0.06	0.18	0.7	5
Arsenic	mg/kg	< 0.0002	0.022	0.0095	0.0057	0.0041	0.0046	0.0022	< 0.0002	0.0094	< 0.0002	0.0022	0.5	1.5	2	25
Barium	mg/kg	< 0.0005	0.14	0.98	0.054	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.11	< 0.0005	< 0.0005	20	20	100	300
Cadmium	mg/kg	< 0.00011	< 0.00011	0.0082	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	0.04	1	5
Chromium	mg/kg	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0063	0.5	0.5	10	70
Copper	mg/kg	0.0078	< 0.0005	0.13	0.015	0.017	0.018	0.0072	0.0058	< 0.0005	0.0081	< 0.0005	2	2	50	100
Lead	mg/kg	< 0.0005	< 0.0005	0.049	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	0.5	10	50
Molybdenum	mg/kg	0.11	0.11	0.74	0.14	0.14	0.13	0.10	0.20	0.11	0.12	0.13	0.5	1.5	10	30
Nickel	mg/kg	0.0061	< 0.0005	0.019	0.010	0.0054	0.0089	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	0.4	10	40
Selenium	mg/kg	< 0.0005	0.0070	0.060	0.0064	0.0059	< 0.0005	0.011	< 0.0005	0.012	< 0.0005	< 0.0005	0.1	0.3	0.5	7
Zinc	mg/kg	0.17	< 0.003	1.4	< 0.003	< 0.003	< 0.003	0.031	< 0.003	< 0.003	< 0.003	< 0.003	4	4	50	200
Mercury	mg/kg	< 0.00005	0.00074	< 0.00005	0.00069	0.00073	0.00068	< 0.00005	0.00057	< 0.00005	0.00071	0.00068	0.01	0.01	0.2	2
Phenol	mg/kg	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	1	1	NE	NE
Fluoride	mg/kg	4.5	2.7	6.4	4.8	6.0	3.8	4.4	5.0	2.4	4.3	8.7	10	10	150	500
Chloride	mg/kg	18	13	23	< 10	15	13	< 10	< 10	41	15	11	800	2,400	15,000	25,000
Sulphate	mg/kg	72	210	66	130	130	99	140	98	490	150	45	1000*	3,000	20000*	50,000
DOC **	mg/kg	< 50	130	370	270	570	630	100	110	70	120	100	500	500	800	1,000
pH	pH units	8.7	8.5	7.9	8.4	8.3	8.3	8.3	8.2	8.4	8.3	8.5	NE	NE	NE	NE
TDS ***	mg/kg	780	720	1200	780	910	910	850	720	1200	850	720	4,000	12,000	60,000	100,000
TOC	%	0.87	0.6	0.83	0.28	0.59	0.81	1.5	0.58	0.42	0.61	0.34	3	6	NE	6
Benzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
Toluene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
Ethylbenzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
m/p-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
o-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE	NE
PCB Total of 7	mg/kg	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	1	1	NE	NE
Total 17 PAH's	mg/kg	0.49	0.45	10	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	NE	100	NE	NE
Mineral Oil	mg/kg	< 10	3400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	500	500	NE	NE
Asbestos	% mass	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NE	NE	NE	NE

NAD denotes No Asbestos Detected

* denotes sulphate level exceeding inert waste limit may be considered as complying if the TDS value does not exceed 6,000mg/kg at L/S = 10l/kg.

** denotes a higher limit may be accepted provided the DOC alternative values of 500mg/kg is achieved

*** denotes TDS. The values for TDS can be used to sulphate and chloride.

PAH over 1mg/kg and Mineral Oil over 50 mg/kg exceeds limit at soil recovery site in Ireland

2.4 Waste Management Options

The EPA has issued guidance on acceptance criteria for a range of parameters for soil recovery sites. This includes;

- Metals (solid concentration not leachability) in soil and stone (including As, Cd, Cr, Cu, Hg, Ni, Pb, Zn);
- Total organic carbon in soil and stone;
- Total BTEX (benzene, toluene, ethylbenzene, xylenes) in soil and stone;
- Mineral oil in soil and stone;
- Polycyclic aromatic hydrocarbons (PAHs) in soil and stone;
- Polychlorinated Biphenyls (PCBs) in soil and stone;
- Asbestos fibres in soil and stone.

The guidance requires that soils from brownfield sites should not exceed the limits for the parameters specified in Table 2.6 and 2.7. For metals limits have been specified for a range of soil types nationally separated into six domain areas.

Table 2.6 Soil Rec overySite Criteria

Parameter	Limit for Soil RecoverySites
Total BTEX	0.05 m g/kg
Mineral oil	50 m g/kg
Total PAHs	1 m g/kg
Total PCBs	0.05 mg/kg

The samples from WS01 (1.0-2.0m), WS02, WS03 (0.0-1.0m), WS04, WS08 (1.10m), WS09 (2.0m), WS12 (0.0-1.0m) and WS16 (1.0-1.5) exceed the soil recovery criteria for PAHs and/or Mineral Oil. These samples have therefore been classified as (B-1) suitable for treatment/disposal to inert landfill. The samples from WS12 (1.4m) and TP14 (0.5-1.0m) exceeds the inert WAC, therefore cannot be set to soil recovery sites.

The soil and stone cannot be sent to soil recovery sites if the trigger levels for a particular domain are exceeded. There is however some flexibility in applying the limits. A derogation applies where up to three parameters can exceed the limit for a sample provided the concentration in the samples is no more than 1.5 times the trigger level. The site which is subject to this investigation is located in Domain 2 and the trigger levels are listed in Table 2.7.

Table 2.7 Soil Recovery Trigger Levels

		Domain 2 Trigger Level	1.5 times TriggerLevel
Arsenic	mg/kg	24.90	37.35
Cadmium	mg/kg	3.28	4.92
Chromium	mg/kg	50.30	75.45
Copper	mg/kg	63.50	95.25
Mercury	mg/kg	0.36	0.54
Nickel	mg/kg	61.90	92.85
Lead	mg/kg	86.10	129.15
Zinc	mg/kg	197.00	295.5

The samples from WS03 (1.5m), WS04 (0.0-1.0m), WS06 (1.0-2.0m) and WS09 (2.0m) exceeds the soil recovery limits for metals. WS03 (1.5m) exceeds the 1.5 times trigger level for zinc. WS04 (0.0-1.0m) exceeds the 1.5 times trigger level for arsenic. WS06 (1.0-2.0m) and WS09 (2.0m) exceed the 1.5 times trigger level for copper. These soils from these areas are not suitable for soil recovery sites but are suitable for inert landfill (B-1). The samples from WS05 (1.8m), WS12 (1.4m) and TP14 (0.5-1.0m) exceed the soil recovery site criteria for metals, however as these samples exceed the inert WAC, the soil recovery criteria do not apply.

Waste management options are summarised on Table 2.8. All are subject to approval of the waste management facility operators. Class A wastes are suitable for recovery at a permitted soils recovery facility. B-1 wastes are suitable for recovery/disposal to inert waste landfill. B-2 wastes are suitable for recovery/disposal to inert waste landfill with increased limits. Class C wastes are suitable for disposal to non-hazardous landfill.

Table 2.8 Waste Management Options

Sample No.	Depth	LoW Code	Category	Sample No.	Depth	LoW Code	Category
WS01 (1-1)	0.5-1.0	17 05 04	A	WS12 (12-1)	0.0-1.0	17 05 04	B-1
WS01 (1-2)	1.0-2.0	17 05 04	B-1	WS12	1.4	17 05 04	B-2
WS02 (2-1)	0.0-1.0	17 05 04	B-1	WS13 (13-1)	0.0-1.0	17 05 04	A
WS02 (2-2)	1.0-2.0	17 05 04	B-1	WS13	1.0-1.5	17 05 04	A
WS03 (3-1)	0.0-1.0	17 05 04	B-1	WS14	1.0-1.6	17 05 04	A
WS3	1.50	17 05 04	B-1	WS15	1.0-2.0	17 05 04	A
WS04 (4-1)	0.0-1.0	17 05 04	B-1	WS 16	1.0-1.5	17 05 04	B-1
WS4	1.80	17 05 04	B-1	WS 17	0.7-1.4	17 05 04	C
WS05 (5-1)	0.0-1.0	17 05 04	A	WS18	1.0-2.0	17 05 04	A
WS5	1.8	17 05 04	B-2	WS 19	1.0-2.0	17 05 04	A
WS06 (6-1)	0.0-1.0	17 05 04	A	WS 20	1.0-1.6	17 05 04	A
WS06 (6-2)	1.0-2.0	17 05 04	B-1	WS 21	1.0-1.6	17 05 04	A
WS07 (7-1)	0.0-1.0	17 05 04	A	WS22	1.0-1.5	17 05 04	C
WS07 (7-2)	1.0-2.0	17 05 04	A	TP14	0.5-1.0	17 05 04	B-2
WS08 (8-1)	0.0-1.0	17 05 04	A	TP15	0.5-1.0	17 05 04	A
WS8	1.10	17 05 04	B-1	TP16	0.6-1.0	17 05 04	C
WS09 (9-1)	0.0-1.0	17 05 04	A	TP17	0.5-1.0	17 05 04	C
WS9	2.00	17 05 04	B-1	TP18	0.5-1.0	17 05 04	A
WS10 (10-1)	0.6-1.0	17 05 04	A	TP19	0.5-1.0	17 05 04	A
WS10 (10-2)	1.0-2.0	17 05 04	A	TP20	0.5-1.0	17 05 04	A
WS11 (11-1)	0.0-1.0	17 05 04	A	TP21	0.6-1.0	17 05 04	A
WS11 (11-2)	1.0-2.0	17 05 04	A	TP22	0.6-1.0	17 05 04	A

A	Classified as Non-Hazardous, 17 05 04 meets soil recovery criteria
B-1	Classified as Non-Hazardous, 17 05 04 meets inert WAC
B-2	Classified as Non-Hazardous, 17 05 04 meets inert WAC increased limits
C	Classified as Non-Hazardous 17 05 04

3 CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

3.1.1 *Waste Classification*

Asbestos was not detected any of the samples.

All samples are classified as non-hazardous and the appropriate List of Waste Code is 17 05 04 (Soil and Stone other than those mentioned in 17 05 03*).

The samples from WS17 (0.7-1.4m) and WS22 (1.0-1.5m) contain elevated levels of TPH. A hydrocarbon interpretation conducted by the laboratory indicates the presence of diesel at non-hazardous concentrations.

The recovery/disposal options are discussed in Section 2.4.

3.2 Recommendations

OCM recommend that a copy of this report be provided in full to the relevant waste management facilities to which the made ground and subsoils will be consigned to confirm its suitability for acceptance.

Appendix 1

Trial Pit and Window Sample Logs

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
LOGGED BY	I.Reder
CO-ORDINATES	
GROUND LEVEL (m)	
CLIENT	
ENGINEER	DBFL
TRIAL PIT NO.	**TP01**
SHEET	Sheet 1 of 1
DATE STARTED	26/05/2021
DATE COMPLETED	26/05/2021
EXCAVATION METHOD	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.05							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35							
Firm to stiff, brown, slightly sandy gravelly SILT/CLAY with some flat angular cobbles		0.65			AA138472	Env	0.50-0.85		
Very dense, brown/grey mottled, silty angular GRAVEL with angular cobbles (possible weathered rock)		0.85							
TP terminated due to possible boulders End of Trial Pit at 0.85m									

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP01 dug for check of any underground services in WS01/RC01 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
TRIAL PIT NO.	**TP02**
SHEET	Sheet 1 of 1
LOGGED BY	I.Reder
CO-ORDINATES	
DATE STARTED	27/05/2021
DATE COMPLETED	27/05/2021
GROUND LEVEL (m)	
CLIENT	
ENGINEER	DBFL
EXCAVATION METHOD	3T Mini Digger

	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0	TARMAC		0.04							
	MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.45							
	Firm to stiff, greyish brown, slightly sandy gravelly SILT/CLAY with some angular to subangular cobbles		0.90			AA138475	Env	0.50-1.00		
1.0	Very dense, grey, slightly silty angular GRAVEL with angular cobbles (possible weathered rock)		1.20							
	End of Trial Pit at 1.20m									
2.0										
3.0										
4.0										

Groundwater Conditions
Slightly seepage at 0.45m

Stability
TP stable

General Remarks
TP02 dug for check of any underground services in WS02/RC02 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
LOGGED BY	I.Reder
CO-ORDINATES	
GROUND LEVEL (m)	
CLIENT	
ENGINEER	DBFL
TRIAL PIT NO.	TP03
SHEET	Sheet 1 of 1
DATE STARTED	27/05/2021
DATE COMPLETED	27/05/2021
EXCAVATION METHOD	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.05							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35							
Firm to stiff, brown, slightly sandy gravelly silty CLAY with some flat angular cobbles					AA138476	Env	0.50-1.00		
1.0									
End of Trial Pit at 1.20m		1.20							
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP03 dug for check of any underground services in WS03/RC03 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP04**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	27/05/2021
		DATE COMPLETED	27/05/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.07							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35							
Firm to stiff, brown to greyish brown, slightly sandy gravelly SILT/CLAY with some angular cobbles					AA138 577	Env	0.50-1.0 0		
End of Trial Pit at 1.20m		1.20							

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP04 dug for check of any underground services in WS04/RC04 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP05**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	28/05/2021
		DATE COMPLETED	28/05/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.08							
MADE GROUND (comprised of brown/grey angular gravel and cobbles - C.L.804)		0.35							
Firm to stiff, brown, slightly sandy slightly gravelly CLAY with some roots, occasional small pieces of red brick, and single pieces of old plastic pipe (FILL)		0.60			AA138484	Env	0.50-1.00		
Stiff to very stiff, light brown/brown, slightly sandy slightly gravelly SILT/CLAY with some angular cobbles									
End of Trial Pit at 1.10m		1.10							

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP13 dug for check of any underground services in WS13/RC13 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
TRIAL PIT NO.	**TP06**
SHEET	Sheet 1 of 1
LOGGED BY	I.Reder
CO-ORDINATES	
DATE STARTED	26/05/2021
DATE COMPLETED	26/05/2021
CLIENT	
GROUND LEVEL (m)	
EXCAVATION METHOD	3T Mini Digger
ENGINEER	DBFL

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.05							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35							
Firm to stiff, greyish brown, slightly sandy gravelly SILT/CLAY with some angular to subangular cobbles					AA138471	Env	0.50-1.00		
1.0 End of Trial Pit at 1.20m		1.20							
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP06 dug for check of any underground services in WS06/RC06 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP07**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	26/05/2021
		DATE COMPLETED	26/05/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.05							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.30							
Firm, light brown/brown, slightly sandy gravelly SILT/CLAY with occasional cobbles		0.55			AA138473	Env	0.50-1.00		
Firm to stiff, brown/grey mottled, very gravelly SILT/CLAY with many angular cobbles (possible very silty/clayey gravel)									
End of Trial Pit at 1.20m		1.20							

0.0 1.0 2.0 3.0 4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP07 dug for check of any underground services in WS07/RC07 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
TRIAL PIT NO.	**TP08**
SHEET	Sheet 1 of 1
LOGGED BY	I.Reder
CO-ORDINATES	
DATE STARTED	27/05/2021
DATE COMPLETED	27/05/2021
CLIENT	
GROUND LEVEL (m)	
EXCAVATION METHOD	3T Mini Digger
ENGINEER	DBFL

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.05							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.30							
Firm to stiff, greyish brown, slightly sandy gravelly SILT/CLAY with some angular to subangular cobbles					AA138479	Env	0.50-0.90		
1.0 TP terminated due to possible boulders End of Trial Pit at 0.95m		0.95							
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP08 dug for check of any underground services in WS08/RC08 the location

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP09**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	27/05/2021
		DATE COMPLETED	27/05/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.05							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35							
Soft to firm, brown, very sandy slightly gravelly SILT/CLAY with occasional cobbles					AA138478	Env	0.50-1.00		
1.0 End of Trial Pit at 1.20m		1.20							
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP09 dug for check of any underground services in WS09/RC09 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP10**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	26/05/2021
		DATE COMPLETED	26/05/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.08							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)									
Firm, brown/grey mottled, sandy slightly gravelly SILT/CLAY		0.55			AA13847 0	Env	0.60-1. 00		
End of Trial Pit at 1.20m		1.20							

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP10 dug for check of any underground services in WS01/RC10 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP11**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	26/05/2021
		DATE COMPLETED	26/05/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.05							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35							
Firm to stiff, brown to greysih brown, slightly sandy gravelly SILT/CLAY with many angular cobbles					AA138473	Env	0.50-1.00		
1.0 TP terminated due to possible boulders End of Trial Pit at 1.00m		1.00							
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP11 dug for check of any underground services in WS11/RC11 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
TRIAL PIT NO.	**TP12**
SHEET	Sheet 1 of 1
LOGGED BY	I.Reder
CO-ORDINATES	
DATE STARTED	28/05/2021
DATE COMPLETED	28/05/2021
GROUND LEVEL (m)	
CLIENT	
ENGINEER	DBFL
EXCAVATION METHOD	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.06							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35							
Firm to stiff, brown, slightly sandy gravelly SILT/CLAY with some angular cobbles					AA138482	Env	0.50-1.00		
End of Trial Pit at 1.20m		1.20							

0.0
1.0
2.0
3.0
4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP10 dug for check of any underground services in WS10/RC10 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP13**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	28/05/2021
		DATE COMPLETED	28/05/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
TARMAC		0.06							
MADE GROUND (comprised of grey angular gravel and cobbles - C.L.804)		0.35							
Stiff, light brown/brown, slightly sandy gravelly SILT/CLAY with some angular cobbles					AA138483	Env	0.50-0.80		
TP terminated due to possible boulders End of Trial Pit at 0.85m		0.85							

0.0 1.0 2.0 3.0 4.0

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP13 dug for check of any underground services in WS13/RC13 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP14**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.09							
MADE GROUND (comprised of dark grey angular gravel - C.L.804)									
Soft to firm, brown, slightly sandy slightly gravelly CLAY with very occasional cobbles		0.50			AA156051	Env	0.50-1.00		
1.0									
End of Trial Pit at 1.20m		1.20							
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP14 dug for check of any underground services in WS14/RC14 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
TRIAL PIT NO.	**TP15**
SHEET	Sheet 1 of 1
LOGGED BY	I.Reder
CO-ORDINATES	
DATE STARTED	08/06/2021
DATE COMPLETED	08/06/2021
CLIENT	
GROUND LEVEL (m)	
EXCAVATION METHOD	3T Mini Digger
ENGINEER	DBFL

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.07							
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.50							
Firm, brownish grey, sandy slightly gravelly SILT/CLAY		0.65			AA156052	Env	0.50-1.00		
Firm, light brown/brown, sandy slightly gravelly SILT/CLAY		0.90							
1.0 Firm, light brown/brown, sandy gravelly SILT/CLAY with occasional cobbles		1.20							
End of Trial Pit at 1.20m									
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP15 dug for check of any underground services in WS15/RC15 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP16**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.10							
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.60			AA156051	Env	0.60-1.00		
Firm, brown, sandy slightly gravelly slightly silty CLAY		0.90							
1.0 Firm, brown, sandy slightly gravelly slightly silty CLAY with some suban gular cobbles		1.10							
TP terminated due to possible boulders End of Trial Pit at 1.10m									
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP16 dug for check of any underground services in WS16/RC16 the location

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP17**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.09							
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.45							
Firm, brown, slightly sandy slightly gravelly CLAY with some cobbles		0.70			AA156053	Env	0.50-1.00		
Firm to stiff, brown, slightly sandy gravelly CLAY with some subangular to subrounded cobbles		1.20							
1.0 End of Trial Pit at 1.20m									
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP17 dug for check of any underground services in WS17/RC17 the location

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP18**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.09							
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.40							
Firm to stiff, brown, slightly sandy gravelly CLAY with some subangular to subrounded cobbles					AA1560 54	Env	050-1. 00		
1.0									
End of Trial Pit at 1.20m		1.20							
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP18 dug for check of any underground services in WS18/RC18 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP19**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	08/06/2021
		DATE COMPLETED	08/06/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.07							
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.33							
Soft to firm, brown, sandy gravelly CLAY with occasional cobbles					AA156055	Env	0.50-1.00		
1.0									
End of Trial Pit at 1.20m		1.20							
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP19 dug for check of any underground services in WS19/RC19 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP20**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	17/06/2021
		DATE COMPLETED	17/06/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.11							
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.40							
MADE GROUND (comprised of brown/grey mottled sandy gravelly clay, many angular cobbles, lean-mix/concrete, very occasional plastic rubbish)					AA156090	Env	0.50-1.00		
1.0 Firm, brown, slightly sandy gravelly CLAY with cobbles (possible original ground)		1.10 1.20							
End of Trial Pit at 1.20m									
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP20 dug for check of any underground services in WS20/RC20 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**TRIAL PIT NO.**	**TP21**
		SHEET	Sheet 1 of 1
LOGGED BY	I.Reder	**CO-ORDINATES**	
		DATE STARTED	17/06/2021
		DATE COMPLETED	17/06/2021
CLIENT		**GROUND LEVEL (m)**	
ENGINEER	DBFL	**EXCAVATION METHOD**	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.08							
MADE GROUND (comprised of dark grey angular gravel - C.L.804)		0.55							
Firm to stiff, greyish brown, slightly sandy gravelly silty CLAY with many angular to subangular cobbles					AA156089	Env	0.60-1.00		
1.0 End of Trial Pit at 1.20m		1.20							
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP21 dug for check of any underground services in WS21/RC21 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

TRIAL PIT RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.
LOGGED BY	I.Reder
CO-ORDINATES	
GROUND LEVEL (m)	
CLIENT	
ENGINEER	DBFL
TRIAL PIT NO.	**TP22**
SHEET	Sheet 1 of 1
DATE STARTED	17/06/2021
DATE COMPLETED	17/06/2021
EXCAVATION METHOD	3T Mini Digger

Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples: Sample Ref	Samples: Type	Samples: Depth	Vane Test (KPa)	Hand Penetrometer (KPa)
0.0 TARMAC		0.07							
MADE GROUND (comprised of dark grey angular gravel - C.L.804)									
Soft to firm, very sandy gravelly silty CLAY with occasional cobbles		0.55			AA156088	Env	0.60-1.00		
1.0 End of Trial Pit at 1.20m		1.20							
2.0									
3.0									
4.0									

Groundwater Conditions
TP dry

Stability
TP stable

General Remarks
TP22 dug for check of any underground services in WS22/RC22 the location

IGSL TP LOG 23311.GPJ IGSL.GDT 4/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** WS01
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 27/05/2021
	DATE LOGGED 27/05/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP01 log							Inspection Pit blows			
	Firm, grey mottled brown, sandy gravelly SILT/CLAY		0.85			0.85-1.00	100	81 blows	AA144818	ENV	1.00-2.00
1.0	Firm to stiff, grey, sandy gravelly SILT/CLAY with angular cobbles		1.10			1.00-2.00	100	356 blows			
2.0	Final Depth 2.00m		2.00								
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.		**BH NO.**	**WS02**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)	**DATE DRILLED**	27/05/2021
		DATE LOGGED	27/05/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER DBFL		**LOGGED BY**	C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP02 log							Inspection Pit blows			
1.0									AA44816	ENV	1.00-2.00
	Dense to very dense, grey, slighlty silty angular GRAVEL with angular cobbles		1.20			1.20-2.00	100	269 blows			
2.0	Final Depth 2.00m		2.00								
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** WS03
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 08/06/2021
	DATE LOGGED 08/06/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP03 log							Inspection Pit blows			
1.0									AA144803	ENV	1.00-1.50
	Firm, grey/brown, sandy gravelly silty CLAY		1.20			1.20-1.50	100	210 blows			
	Obstruction - possible rock or boulder Final Depth 1.50m		1.50								
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** WS04
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 08/06/2021
	DATE LOGGED 08/06/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP04 log							Inspection Pit blows			
1.0	Firm to stiff, brown to greyish brown, slightly sandy gravelly SILT/CLAY with some angular cobbles		1.20			1.20-1.40	0	133 blows			
	Obstruction - possible rock or boulder Final Depth 1.40m		1.40								
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** WS05
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 08/06/2021
	DATE LOGGED 08/06/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP05 log							Inspection Pit blows			
1.0	Stiff, green/grey, slightly sandy very gravelly SILT/CLAY with many angular cobbles		1.10			1.10-1.80	100	280 blows	AA149802	ENV	1.00-1.80
	Obstruction - possible rock or boulder Final Depth 1.80m		1.80								
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.		**BH NO.**	**WS06**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)	**DATE DRILLED**	27/05/2021
		DATE LOGGED	27/05/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER DBFL		**LOGGED BY**	C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP06 log							Insp ection Pit blows			
1.0									AA149800	ENV	1.00-2.00
	Firm to stiff, dark grey/grey sandy gravelly SILT/CLAY		1.20			1.20-2.00	100	302 blows			
	Dense, dark grey, sandy angular GRAVEL with angular cobbles (possible weathered rock)		1.50								
2.0	Final Depth 2.00m		2.00								
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** WS07
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 27/05/2021
	DATE LOGGED 27/05/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP07 log							Inspection Pit blows			
1.0									AA144821	ENV	1.00-2.00
	Firm to stiff, brown/grey mottled, very gravelly SILT/CLAY with many angular cobbles		1.20			1.20-2.00	90	322 blows			
2.0	Final Depth 2.00m		2.00								
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.		**BH NO.**	**WS08**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)	**DATE DRILLED**	08/06/2021
		DATE LOGGED	08/06/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER DBFL		**LOGGED BY**	C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP08 log							Ins pection Pit blows			
1.0	Stiff, greyish brown, slightly sandy gravelly SILT/CLAY with some angular to subangular cobbles		0.95			0.95-1.10	100	147 blows	AA44809	ENV	1.00-1.10
	Obstruction - possible rock or boulder Final Depth 1.10m		1.10								
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** WS09
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 08/06/2021
	DATE LOGGED 08/06/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP09 log							Inspection Pit blows			
1.0									AA144812	ENV	1.00-2.00
	Soft to firm, brown, very sandy gravelly CLAY with some subangular cobbles		1.20			1.20-2.00	60	126 blows			
2.0	Final Depth 2.10m		2.00								
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.		**BH NO.**	**WS10**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)	**DATE DRILLED**	27/05/2021
		DATE LOGGED	27/05/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER DBFL		**LOGGED BY**	C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP10 log							Inspection Pit blows			
1.0									AA1448 14	ENV	1.00-2.00
	Firm, brown/grey mottled, sandy slightly gravelly SILT/CLAY with occasional cobbles		1.20			1.20-2.00	80	233 blows			
2.0	Final Depth 2.00m		2.00								
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.		**BH NO.**	**WS11**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)	**DATE DRILLED**	27/05/2021
		DATE LOGGED	27/05/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER DBFL		**LOGGED BY**	C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP11 log							Inspection Pit blows			
1.0	Firm to stiff, brown to greysih brown, slightly sandy gravelly SILT/CLAY with many angular cobbles		1.00			1.00-2.00	90	251 blows	AA144823	ENV	1.00-2.00
2.0	Final Depth 2.00m		2.00								
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** WS12
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 08/06/2021
	DATE LOGGED 08/06/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP12 log							Inspection Pit blows			
1.0									AA448 28	ENV	1.00-1.40
	Firm to stiff, brown, slightly sandy gravelly SILT/CLAY with some angular cobbles		1.20			1.20-1.40	100	161 blows			
	Obstruction - possible rock or boulder Final Depth 1.40m		1.40								
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** **WS13**
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 08/06/2021
	DATE LOGGED 08/06/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** C.H.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP13 log							Inspection Pit blows			
	Stiff, light brown/brown, slightly sandy gravelly SILT/CLAY with angular cobbles		0.85			0.85-1.10	20	210 blows			
1.0	Obstruction - possible rock or boulder Final Depth 1.10m		1.10								
2.0											
3.0											

General Remarks

Installations

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.		**BH NO.**	**WS14**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)	**DATE DRILLED**	29/06/2021
		DATE LOGGED	29/06/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER DBFL		**LOGGED BY**	J.C.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP14 log							Inspection Pit blows			
1.0									AA69724	ENV B	1.00-1.60 1.00-1.60
	Firm, light brown mottled grey and black sandy very gravelly silty CLAY with occasional cobbles		1.20			1.20-1.60	100	149 blows			
	Obstruction - possible rock or boulder Final Depth 1.60m		1.60								
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. WS15
SHEET Sheet 1 of 1

CO-ORDINATES(_)

GROUND LEVEL (mOD)

DATE DRILLED 29/06/2021
DATE LOGGED 29/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY J.C.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP15 log							Inspection Pit blows			
1.0									AA169726	ENV B	1.00-2.00 1.00-1.60
	Firm, greyish brown, sandy gravelly CLAY		1.20			1.20-2.00	100	168 blows			
	Medium dense, grey slightly clayey sandy GRAVEL		1.60						AA169727	B	1.60-2.00
2.0	Final Depth 2.00m		2.00								
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT	Blanchardstown T.C.	**BH NO.**	**WS16**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)	**DATE DRILLED**	29/06/2021
		DATE LOGGED	29/06/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER	DBFL	**LOGGED BY**	J.C.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP16 log							Inspection Pit blows			
1.0	Firm to stiff, grey brown mottled, sandy very gravelly silty CLAY with some cobbles		1.10			1.10-1.50	50	177 blows	AA69729	ENV B	1.00-1.50 1.00-1.50
	Obstruction - possible rock or boulder Final Depth 1.50m		1.50								
2.0											
3.0											

General Remarks

Installations

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** WS17
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 29/06/2021
	DATE LOGGED 29/06/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** J.C.

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP17 log							Inspection Pit blows			
1.0										ENV	1.00-1.40
	Firm to stiff, brown, slightly sandy gravelly CLAY with some subangular to subrounded cobbles		1.20			1.20-1.40	100	183 blows			
	Obstruction - possible rock or boulder Final Depth 1.40m		1.40								
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** WS18
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 29/06/2021
	DATE LOGGED 29/06/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** J. Condon

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples: Ref. Number	Samples: Sample Type	Samples: Depth (m)
0.0	MADE GROUND - Tar Machine / hand dug inspection pit for services - for all details see TP18 log		0.10					Inspection Pit blows			
	MADE GROUND comprised of firm brownish grey sandy very gravelly CLAY.										
1.0										ENV	1.00-2.00
	Firm to stiff brown sandy gravelly CLAY		1.20			1.20-2.00	100	190 blows			
	Firm to stiff brown sandy gravelly CLAY		1.40						AA153522	B	1.40-2.00
2.0	Final Depth 2.00m		2.00								
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.

BH NO. WS19
SHEET Sheet 1 of 1

CO-ORDINATES(_)

GROUND LEVEL (mOD)

DATE DRILLED 29/06/2021
DATE LOGGED 29/06/2021

CLIENT
ENGINEER DBFL

DRILLED BY C.Kavanagh
LOGGED BY J. Condon

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples		
									Ref. Number	Sample Type	Depth (m)
0.0	MADE GROUND - Tar Machine / hand dug inspection pit for services - for all details see TP19 log MADE GROUND comprised of soft to firm brownish grey sandy very gravelly CLAY.		0.10					Inspection Pit blows			
	Soft to firm greyish brown sandy gravelly CLAY.		0.90							ENV	1.00-2.00
1.0	Soft to firm, greyish brown, sandy gravelly CLAY		1.20			1.20-2.00	100	85 blows	AA153524	B	1.20-1.80
	Soft to firm brownish grey sandy gravelly CLAY. (Excess water from 2.3m)		1.80						AA153525	B	1.80-3.00
2.0						2.00-3.00	90	138 blows			
	Soft to firm brownish grey vry sandy very gravelly CLAY.		2.70								
3.0	Final Depth 3.00m		3.00								

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.		**BH NO.**	**WS20**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)	**DATE DRILLED**	29/06/2021
		DATE LOGGED	29/06/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER DBFL		**LOGGED BY**	J. Condon

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	MADE GROUND - Tar Machine / hand dug inspection pit for services - for all details see TP20 log		0.10					Inspection Pit			
	MADE GROUND comprised of firm brownish grey sandy very gravelly CLAY.							blows			
1.0										ENV	1.00-1.60
	Firm, brown, sandy gravelly CLAY with some cobbles		1.20			1.20-1.60	100	64 blows			
	MADE GROUND comprised of firm brown sandy gravelly CLAY.		1.30								
	Obstruction - possible rock or boulder Final Depth 1.60m		1.60								
2.0											
3.0											

General Remarks

Installations

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.	**BH NO.** WS21
	SHEET Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)
	DATE DRILLED 29/06/2021
	DATE LOGGED 29/06/2021
CLIENT	**DRILLED BY** C.Kavanagh
ENGINEER DBFL	**LOGGED BY** J. Condon

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	MADE GROUND - Tar Machine / hand dug inspection pit for services - for all details see TP21 log		0.10					Inspection Pit blows			
	MADE GROUND comprised of firm brownish grey sandy very gravelly CLAY.										
1.0										ENV	1.00-1.60
	Possible weathered rock - MUDDY LIMESTONE recovered as dark grey clayey GRAVEL.		1.10						AA153528	B	1.10-1.60
	Dense, grey, clayey angular GRAVEL with angular cobbles (possible weathered rock)		1.20			1.20-1.60	100	189 blows			
	Obstruction - possible rock or boulder Final Depth 1.60m		1.60								
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

IGSL Limited

WINDOW SAMPLE RECORD

REPORT NUMBER 23311

CONTRACT Blanchardstown T.C.		**BH NO.**	**WS22**
		SHEET	Sheet 1 of 1
CO-ORDINATES(_)	GROUND LEVEL (mOD)	**DATE DRILLED**	29/06/2021
		DATE LOGGED	29/06/2021
CLIENT		**DRILLED BY**	C.Kavanagh
ENGINEER DBFL		**LOGGED BY**	J. Condon

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Depth of Sample Run (m)	Recovery (%)	Blowcount	Samples Ref. Number	Samples Sample Type	Samples Depth (m)
0.0	Machine / hand dug inspection pit for services - for all details see TP22 log							Ins pection Pit blow s			
1.0										ENV	1.00-1.50
	Firm to stiff, sandy gravelly silty CLAY with cobbles		1.20			1.20-1.50	100	159 blows			
	Obstruction - possible rock or boulder Final Depth 1.50m		1.50								
2.0											
3.0											

General Remarks

Installations

WS WITH DISCRETE SAMPLES 23311.GPJ IGSL.GDT 5/7/21

Appendix 2

Laboratory Reports

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING
2183

Final Report

Report No.:	21-21171-1		
Initial Date of Issue:	01-Jul-2021		
Client	IGSL		
Client Address:	M7 Business Park Naas County Kildare Ireland		
Contact(s):	Darren Keogh		
Project	23311 Blanchardstown TC PRS Project (DBFL)		
Quotation No.:	Q20-19951	**Date Received:**	22-Jun-2021
Order No.:		**Date Instructed:**	22-Jun-2021
No. of Samples:	19		
Turnaround (Wkdays):	7	**Results Due:**	30-Jun-2021
Date Approved:	01-Jul-2021	**Subcon Results Due:**	30-Jun-2021

Approved By:



Details: Glynn Harvey, Technical Manager

Results - Leachate

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL					**Chemtest Job No.:**	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951					**Chemtest Sample ID.:**	1225637	1225638	1225639	1225640	1225641	1225642	1225643	1225644	1225645	1225646	1225647	1225648
Order No.:					Client Sample Ref.:	1-2	2-1	2-2	3-1	4-1	5-1	6-1	6-2	7-1	7-2	8-1	9-1
					Sample Location:	1	2	2	3	4	5	6	6	7	7	8	9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
					Bottom Depth (m):	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**												
pH	U	1010	10:1		N/A	9.2	8.2	8.9	8.8	8.6	8.3	8.4	8.5	8.5	8.5	8.6	8.4
Ammonium	U	1220	10:1	mg/l	0.050	0.056	0.13	0.091	0.091	0.19	0.12	0.15	0.22	0.12	0.083	0.15	0.051
Ammonium	N	1220	10:1	mg/kg	0.10	1.0	1.4	1.3	1.2	2.3	1.3	1.7	2.6	1.4	0.97	1.8	0.58
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Leachate

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL													
Quotation No.: Q20-19951					Chemtest Job No.:	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Order No.:					Chemtest Sample ID.:	1225649	1225650	1225651	1225652	1225653	1225654	1225655
					Client Sample Ref.:	10-2	11-1	11-2	12-1	13-1	1-1	10-1
					Sample Location:	10	11	11	12	13	1	10
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	1.00	0.00	0.00	0.50	0.60
					Bottom Depth (m):	2.00	1.00	2.00	1.00	1.00	1.00	1.00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**							
pH	U	1010	10:1		N/A	8.5	8.7	8.8	8.7	8.6	8.6	8.6
Ammonium	U	1220	10:1	mg/l	0.050	0.092	0.18	0.18	0.11	0.11	0.089	0.091
Ammonium	N	1220	10:1	mg/kg	0.10	1.1	2.3	2.4	1.4	1.3	1.1	1.1
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01	< 0.01	< 0.01	0.14	< 0.01	< 0.01	< 0.01	< 0.01
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL					Chemtest Job No.:	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951					Chemtest Sample ID.:	1225637	1225638	1225639	1225640	1225641	1225642	1225643	1225644	1225645
Order No.:					Client Sample Ref.:	1-2	2-1	2-2	3-1	4-1	5-1	6-1	6-2	7-1
					Sample Location:	1	2	2	3	4	5	6	6	7
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00
					Bottom Depth (m):	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00
					Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
ACM Type	U	2192		N/A		-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020		7.1	7.4	6.8	9.4	17	13	8.4	9.3	9.9
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		[A] 0.56	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0		[A] 8.4	[A] 1.5	[A] 3.0	[A] < 1.0	[A] < 1.0	[A] 3.1	[A] 1.2	[A] < 1.0	[A] < 1.0
Cyanide (Total)	U	2300	mg/kg	0.50		[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		[A] 1.2	[A] 1.2	[A] 1.2	[A] 1.2	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphate (Acid Soluble)	U	2430	%	0.010		[A] 0.034	[A] 0.037	[A] 0.098	[A] 0.052	[A] 0.028	[A] 0.20	[A] 0.073	[A] 0.037	[A] 0.051
Arsenic	U	2450	mg/kg	1.0		15	16	21	9.8	79	19	25	26	19
Barium	U	2450	mg/kg	10		43	33	120	25	40	110	71	17	37
Cadmium	U	2450	mg/kg	0.10		0.44	1.3	1.5	1.0	0.99	1.2	1.4	1.2	0.42
Chromium	U	2450	mg/kg	1.0		30	16	18	10	34	22	21	28	40
Molybdenum	U	2450	mg/kg	2.0		< 2.0	< 2.0	4.1	< 2.0	3.4	2.1	< 2.0	< 2.0	< 2.0
Antimony	N	2450	mg/kg	2.0		< 2.0	< 2.0	< 2.0	< 2.0	2.4	2.0	< 2.0	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50		28	23	31	19	32	27	25	31	38
Mercury	U	2450	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.11	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50		67	42	58	32	87	48	65	77	84
Lead	U	2450	mg/kg	0.50		37	18	18	11	50	44	24	29	28
Selenium	U	2450	mg/kg	0.20		0.62	0.65	2.1	0.32	0.56	0.40	0.40	1.4	0.27
Zinc	U	2450	mg/kg	0.50		95	56	85	48	150	98	160	350	98
Chromium (Trivalent)	N	2490	mg/kg	1.0		30	16	18	10	34	22	21	28	40
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10		< 10	< 10	< 10	< 10	440	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 16	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 410	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 20	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] 440	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL					Chemtest Job No.:	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951					Chemtest Sample ID.:	1225637	1225638	1225639	1225640	1225641	1225642	1225643	1225644	1225645
Order No.:					Client Sample Ref.:	1-2	2-1	2-2	3-1	4-1	5-1	6-1	6-2	7-1
					Sample Location:	1	2	2	3	4	5	6	6	7
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00
					Bottom Depth (m):	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00
					Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 3.4	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 120	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] 130	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] 570	[A] < 10	[A] < 10	[A] < 10	[A] < 10	
Benzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 1.4	
Toluene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 9.4	
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Naphthalene	N	2800	mg/kg	0.010	[A] 0.54	[A] 0.043	[A] 0.15	[A] 0.090	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Acenaphthylene	N	2800	mg/kg	0.010	[A] 0.086	[A] 0.016	[A] 0.014	[A] 0.020	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Acenaphthene	N	2800	mg/kg	0.010	[A] 0.75	[A] 0.030	[A] 0.038	[A] 0.10	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Fluorene	N	2800	mg/kg	0.010	[A] 0.73	[A] 0.051	[A] 0.069	[A] 0.14	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Phenanthrene	N	2800	mg/kg	0.010	[A] 5.6	[A] 0.29	[A] 0.34	[A] 0.40	[A] < 0.010	[A] 0.10	[A] < 0.010	[A] 0.040	[A] < 0.010	
Anthracene	N	2800	mg/kg	0.010	[A] 1.4	[A] 0.11	[A] 0.047	[A] 0.19	[A] < 0.010	[A] 0.020	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Fluoranthene	N	2800	mg/kg	0.010	[A] 10	[A] 0.57	[A] 0.28	[A] 0.42	[A] < 0.010	[A] 0.090	[A] < 0.010	[A] 0.040	[A] < 0.010	
Pyrene	N	2800	mg/kg	0.010	[A] 7.4	[A] 0.48	[A] 0.28	[A] 0.34	[A] < 0.010	[A] 0.080	[A] < 0.010	[A] 0.040	[A] < 0.010	
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] 5.1	[A] 0.62	[A] 0.19	[A] 0.22	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Chrysene	N	2800	mg/kg	0.010	[A] 5.0	[A] 0.48	[A] 0.24	[A] 0.22	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] 8.4	[A] 0.84	[A] 0.36	[A] 0.28	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] 3.6	[A] 0.69	[A] 0.16	[A] 0.15	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] 8.7	[A] 0.85	[A] 0.34	[A] 0.29	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] 7.5	[A] 1.1	[A] 0.34	[A] 0.35	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] 0.98	[A] 0.49	[A] 0.082	[A] 0.30	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] 5.1	[A] 0.65	[A] 0.22	[A] 0.25	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Coronene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] 71	[A] 7.3	[A] 3.2	[A] 3.8	[A] < 0.20	[A] 0.29	[A] < 0.20	[A] < 0.20	[A] < 0.20	
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL					Chemtest Job No.:	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951					Chemtest Sample ID.:	1225637	1225638	1225639	1225640	1225641	1225642	1225643	1225644	1225645
Order No.:					Client Sample Ref.:	1-2	2-1	2-2	3-1	4-1	5-1	6-1	6-2	7-1
					Sample Location:	1	2	2	3	4	5	6	6	7
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00
					Bottom Depth (m):	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00
					Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010		[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: GSL					Chemtest Job No.:	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951					Chemtest Sample ID.:	1225646	1225647	1225648	1225649	1225650	1225651	1225652	1225653	1225654
Order No.:					Client Sample Ref.:	7-2	8-1	9-1	10-2	11-1	11-2	12-1	13-1	1-1
					Sample Location:	7	8	9	10	11	11	12	13	1
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.50
					Bottom Depth (m):	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
					Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
ACM Type	U	2192		N/A		-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020		8.6	11	14	8.8	7.3	7.6	7.9	9.6	14
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		[A] < 0.40	[A] 0.41	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] 2.7	[A] < 0.40	[A] 0.47
Sulphur (Elemental)	U	2180	mg/kg	1.0		[A] 1.3	[A] 1.5	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 1.7	[A] 1.4	[A] < 1.0	[A] < 1.0
Cyanide (Total)	U	2300	mg/kg	0.50		[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] 1.2	[A] 1.2	[A] 1.2	[A] 1.1
Sulphate (Acid Soluble)	U	2430	%	0.010		[A] 0.036	[A] 0.040	[A] 0.082	[A] 0.044	[A] 0.025	[A] 0.074	[A] 0.069	[A] 0.040	[A] 0.15
Arsenic	U	2450	mg/kg	1.0		16	12	17	16	19	15	14	16	27
Barium	U	2450	mg/kg	10		43	35	33	63	51	71	52	44	89
Cadmium	U	2450	mg/kg	0.10		0.33	0.19	0.65	1.5	1.5	0.79	1.1	1.5	2.3
Chromium	U	2450	mg/kg	1.0		37	31	32	20	17	13	22	15	21
Molybdenum	U	2450	mg/kg	2.0		< 2.0	< 2.0	< 2.0	3.0	3.0	2.9	2.3	2.5	4.4
Antimony	N	2450	mg/kg	2.0		< 2.0	< 2.0	< 2.0	4.6	2.8	< 2.0	< 2.0	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50		33	20	32	28	32	21	22	27	37
Mercury	U	2450	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50		79	65	70	55	56	47	46	46	61
Lead	U	2450	mg/kg	0.50		31	25	26	29	21	20	15	28	19
Selenium	U	2450	mg/kg	0.20		0.40	0.20	0.24	< 0.20	1.7	0.78	0.72	< 0.20	1.9
Zinc	U	2450	mg/kg	0.50		140	92	110	79	86	72	110	62	110
Chromium (Trivalent)	N	2490	mg/kg	1.0		37	31	32	20	17	13	22	15	21
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL					Chemtest Job No.:	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Quotation No.: Q20-19951					Chemtest Sample ID.:	1225646	1225647	1225648	1225649	1225650	1225651	1225652	1225653	1225654
Order No.:					Client Sample Ref.:	7-2	8-1	9-1	10-2	11-1	11-2	12-1	13-1	1-1
					Sample Location:	7	8	9	10	11	11	12	13	1
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.50
					Bottom Depth (m):	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
					Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
Benzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] 1.9
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.11	[A] < 0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.030	[A] < 0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.090	[A] < 0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.13	[A] < 0.010	[A] < 0.010
Phenanthrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.42	[A] < 0.010	[A] < 0.010
Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.13	[A] < 0.010	[A] < 0.010
Fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.13	[A] 0.31	[A] 0.13	[A] 0.15
Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.12	[A] 0.25	[A] 0.13	[A] 0.23
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.070	[A] 0.14	[A] < 0.010	[A] < 0.010
Chrysene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.080	[A] 0.12	[A] < 0.010	[A] < 0.010
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.12	[A] < 0.010	[A] < 0.010
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.090	[A] < 0.010	[A] < 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.16	[A] < 0.010	[A] < 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.10	[A] < 0.010	[A] < 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.070	[A] < 0.010	[A] < 0.010
Coronene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] 0.40	[A] 2.3	[A] 0.26	[A] 0.38
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL													
Quotation No.: Q20-19951			Chemtest Job No.:		21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171	21-21171
Order No.:			Chemtest Sample ID.:		1225646	1225647	1225648	1225649	1225650	1225651	1225652	1225653	1225654
			Client Sample Ref.:		7-2	8-1	9-1	10-2	11-1	11-2	12-1	13-1	1-1
			Sample Location:		7	8	9	10	11	11	12	13	1
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.50
			Bottom Depth (m):		2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	IN_TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL			Chemtest Job No.:		21-21171
Quotation No.: Q20-19951			Chemtest Sample ID.:		1225655
Order No.:			Client Sample Ref.:		10-1
			Sample Location:		10
			Sample Type:		SOIL
			Top Depth (m):		0.60
			Bottom Depth (m):		1.00
			Asbestos Lab:		IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	10
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	[A] < 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	[A] 2.0
Cyanide (Total)	U	2300	mg/kg	0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] 6.1
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.19
Arsenic	U	2450	mg/kg	1.0	13
Barium	U	2450	mg/kg	10	41
Cadmium	U	2450	mg/kg	0.10	1.2
Chromium	U	2450	mg/kg	1.0	10
Molybdenum	U	2450	mg/kg	2.0	2.2
Antimony	N	2450	mg/kg	2.0	< 2.0
Copper	U	2450	mg/kg	0.50	19
Mercury	U	2450	mg/kg	0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	31
Lead	U	2450	mg/kg	0.50	8.8
Selenium	U	2450	mg/kg	0.20	1.1
Zinc	U	2450	mg/kg	0.50	57
Chromium (Trivalent)	N	2490	mg/kg	1.0	10
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL			Chemtest Job No.:		21-21171
Quotation No.: Q20-19951			Chemtest Sample ID.:		1225655
Order No.:			Client Sample Ref.:		10-1
			Sample Location:		10
			Sample Type:		SOIL
			Top Depth (m):		0.60
			Bottom Depth (m):		1.00
			Asbestos Lab:		IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10
Benzene	U	2760	µg/kg	1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0	[A] < 1.0
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] < 0.010
Phenanthrene	N	2800	mg/kg	0.010	[A] < 0.010
Anthracene	N	2800	mg/kg	0.010	[A] < 0.010
Fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010
Pyrene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] < 0.010
Chrysene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] < 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] < 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] < 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] < 0.010
Coronene	N	2800	mg/kg	0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] < 0.20
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010

Results - Soil

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Client: IGSL			Chemtest Job No.:		21-21171
Quotation No.: Q20-19951			Chemtest Sample ID.:		1225655
Order No.:			Client Sample Ref.:		10-1
			Sample Location:		10
			Sample Type:		SOIL
			Top Depth (m):		0.60
			Bottom Depth (m):		1.00
			Asbestos Lab:		IN-TRAN-D
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225637						
Sample Ref:	1-2						
Sample ID:							
Sample Location:	1						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1.1	3	5	6
Loss On Ignition	2610	U	%	3.2	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 71	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.029	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0033	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.011	0.11	0.5	10	70
Copper	1455	U	0.0018	0.018	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0006	0.0060	0.5	10	30
Nickel	1455	U	0.0048	0.048	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.088	< 1.0	10	150	500
Sulphate	1220	U	1.3	13	1000	20000	50000
Total Dissolved Solids	1020	N	32	320	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	33	330	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.1

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225638						
Sample Ref:	2-1						
Sample ID:							
Sample Location:	2						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.40	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 7.3	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.034	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0095	0.095	0.5	10	70
Copper	1455	U	0.0024	0.024	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0004	0.0044	0.5	10	30
Nickel	1455	U	0.0042	0.042	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.1	11	800	15000	25000
Fluoride	1220	U	0.085	< 1.0	10	150	500
Sulphate	1220	U	4.6	46	1000	20000	50000
Total Dissolved Solids	1020	N	30	300	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.4

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225639						
Sample Ref:	2-2				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Sample ID:							
Sample Location:	2						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	U	%	[A] 0.61	3	5	6
Loss On Ignition	2610	U	%	2.6	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 3.2	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.050	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	0.021	0.21	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0089	0.089	0.5	10	70
Copper	1455	U	0.0010	0.010	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0082	0.082	0.5	10	30
Nickel	1455	U	0.0040	0.040	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0024	0.024	0.1	0.5	7
Zinc	1455	U	0.004	0.037	4	50	200
Chloride	1220	U	1.1	11	800	15000	25000
Fluoride	1220	U	0.26	2.6	10	150	500
Sulphate	1220	U	23	230	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.5	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	6.8

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225640						
Sample Ref:	3-1						
Sample ID:							
Sample Location:	3						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.30	3	5	6
Loss On Ignition	2610	U	%	2.7	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 3.8	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.038	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0099	0.099	0.5	10	70
Copper	1455	U	0.0007	0.0075	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0044	0.044	0.5	10	30
Nickel	1455	U	0.0041	0.041	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0007	0.0070	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.4	14	800	15000	25000
Fluoride	1220	U	0.35	3.5	10	150	500
Sulphate	1220	U	19	190	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.5	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.4

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Chemtest Job No:	21-21171
Chemtest Sample ID:	1225641
Sample Ref:	4-1
Sample ID:	
Sample Location:	4
Top Depth(m):	0.00
Bottom Depth(m):	1.00
Sampling Date:	

Determinand	SOP	Accred.	Units		Landfill Waste Acceptance Criteria Limits		
					Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Total Organic Carbon	2625	U	%	[A] 0.46	3	5	6
Loss On Ignition	2610	U	%	3.7	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] 570	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.013	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0026	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.010	0.10	0.5	10	70
Copper	1455	U	0.0010	0.0096	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0022	0.022	0.5	10	30
Nickel	1455	U	0.0045	0.045	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.55	5.5	10	150	500
Sulphate	1220	U	6.6	66	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	17

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225642						
Sample Ref:	5-1						
Sample ID:							
Sample Location:	5						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1.4	3	5	6
Loss On Ignition	2610	U	%	4.9	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.29	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0070	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0008	0.0081	0.5	2	25
Barium	1455	U	0.009	0.095	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.010	0.10	0.5	10	70
Copper	1455	U	0.0016	0.016	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0019	0.019	0.5	10	30
Nickel	1455	U	0.0042	0.042	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0006	0.0060	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	3.6	36	800	15000	25000
Fluoride	1220	U	0.31	3.1	10	150	500
Sulphate	1220	U	77	770	1000	20000	50000
Total Dissolved Solids	1020	N	180	1800	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.8	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21_21171						
Chemtest Sample ID:	1225643						
Sample Ref:	6-1						
Sample ID:							
Sample Location:	6						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.31	3	5	6
Loss On Ignition	2610	U	%	2.5	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.017	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.011	0.11	0.5	10	70
Copper	1455	U	0.0008	0.0081	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0020	0.020	0.5	10	30
Nickel	1455	U	0.0044	0.044	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.37	3.7	10	150	500
Sulphate	1220	U	19	190	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.8	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.4

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225644						
Sample Ref:	6-2						
Sample ID:							
Sample Location:	6						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.33	3	5	6
Loss On Ignition	2610	U	%	3.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.026	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0098	0.098	0.5	10	70
Copper	1455	U	0.0007	0.0075	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0023	0.023	0.5	10	30
Nickel	1455	U	0.0040	0.040	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0006	0.0065	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.37	3.7	10	150	500
Sulphate	1220	U	21	210	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.3

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225645						
Sample Ref:	7-1						
Sample ID:							
Sample Location:	7						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.55	3	5	6
Loss On Ignition	2610	U	%	3.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] 0.011	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.021	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.011	0.11	0.5	10	70
Copper	1455	U	0.0008	0.0077	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0030	0.030	0.5	10	30
Nickel	1455	U	0.0043	0.043	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0006	0.0056	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.34	3.4	10	150	500
Sulphate	1220	U	15	150	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225646						
Sample Ref:	7-2						
Sample ID:							
Sample Location:	7						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.61	3	5	6
Loss On Ignition	2610	U	%	3.6	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.016	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0097	0.097	0.5	10	70
Copper	1455	U	0.0011	0.011	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0019	0.019	0.5	10	30
Nickel	1455	U	0.0044	0.044	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	0.003	0.035	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.30	3.0	10	150	500
Sulphate	1220	U	13	130	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.9	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225647						
Sample Ref:	8-1						
Sample ID:							
Sample Location:	8						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.62	3	5	6
Loss On Ignition	2610	U	%	3.2	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.013	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0097	0.097	0.5	10	70
Copper	1455	U	0.0007	0.0072	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0021	0.022	0.5	10	30
Nickel	1455	U	0.0042	0.042	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.9	19	800	15000	25000
Fluoride	1220	U	0.23	2.3	10	150	500
Sulphate	1220	U	32	320	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.1	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225648						
Sample Ref:	9-1						
Sample ID:							
Sample Location:	9						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.35	3	5	6
Loss On Ignition	2610	U	%	3.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.043	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0006	0.0060	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0094	0.094	0.5	10	70
Copper	1455	U	0.0013	0.013	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0064	0.064	0.5	10	30
Nickel	1455	U	0.0040	0.040	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0013	0.013	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.2	12	800	15000	25000
Fluoride	1220	U	0.32	3.2	10	150	500
Sulphate	1220	U	25	250	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	8.4	84	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

Chemtest Job No: / Chemtest Sample ID: / Sample Ref: / Sample ID: / Sample Location: / Top Depth(m): / Bottom Depth(m): / Sampling Date:					Landfill Waste Acceptance Criteria Limits		
					Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	U	%	[A] < 0.20	3	5	6
Loss On Ignition	2610	U	%	2.6	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.031	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0093	0.093	0.5	10	70
Copper	1455	U	0.0014	0.014	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0064	0.064	0.5	10	30
Nickel	1455	U	0.0044	0.044	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0011	0.011	0.1	0.5	7
Zinc	1455	U	0.032	0.32	4	50	200
Chloride	1220	U	1.8	18	800	15000	25000
Fluoride	1220	U	0.32	3.2	10	150	500
Sulphate	1220	U	24	240	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	11	110	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.8

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225650						
Sample Ref:	11-1						
Sample ID:							
Sample Location:	11						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.63	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.035	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0028	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0094	0.094	0.5	10	70
Copper	1455	U	0.0007	0.0074	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0067	0.067	0.5	10	30
Nickel	1455	U	0.0042	0.042	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0013	0.013	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.27	2.7	10	150	500
Sulphate	1220	U	16	160	1000	20000	50000
Total Dissolved Solids	1020	N	65	650	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.0	50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.3

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225651						
Sample Ref:	11-2				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Sample ID:							
Sample Location:	11						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	U	%	[A] 0.45	3	5	6
Loss On Ignition	2610	U	%	2.5	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.40	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.034	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0008	0.0076	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.011	0.11	0.5	10	70
Copper	1455	U	0.0009	0.0093	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.012	0.12	0.5	10	30
Nickel	1455	U	0.0052	0.052	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0015	0.015	0.1	0.5	7
Zinc	1455	U	0.003	0.026	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.38	3.8	10	150	500
Sulphate	1220	U	27	270	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.3	53	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225652						
Sample Ref:	12-1						
Sample ID:							
Sample Location:	12						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.47	3	5	6
Loss On Ignition	2610	U	%	2.7	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 2.3	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.029	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0097	0.097	0.5	10	70
Copper	1455	U	0.0008	0.0076	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0053	0.054	0.5	10	30
Nickel	1455	U	0.0043	0.043	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.8	18	800	15000	25000
Fluoride	1220	U	0.37	3.7	10	150	500
Sulphate	1220	U	22	220	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.3	53	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225653						
Sample Ref:	13-1						
Sample ID:							
Sample Location:	13						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.39	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.26	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.034	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0095	0.095	0.5	10	70
Copper	1455	U	0.0007	0.0071	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0021	0.021	0.5	10	30
Nickel	1455	U	0.0041	0.041	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.38	3.8	10	150	500
Sulphate	1220	U	7.8	78	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.7	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225654						
Sample Ref:	1-1						
Sample ID:							
Sample Location:	1						
Top Depth(m):	0.50						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.21	3	5	6
Loss On Ignition	2610	U	%	2.7	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.38	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.045	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0096	0.096	0.5	10	70
Copper	1455	U	0.0006	0.0063	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0029	0.030	0.5	10	30
Nickel	1455	U	0.0040	0.040	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.0	10	800	15000	25000
Fluoride	1220	U	0.28	2.8	10	150	500
Sulphate	1220	U	20	200	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.4	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: 23311 Blanchardstown TC PRS Project (DBFL)

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-21171						
Chemtest Sample ID:	1225655						
Sample Ref:	10-1						
Sample ID:							
Sample Location:	10						
Top Depth(m):	0.60						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.69	3	5	6
Loss On Ignition	2610	U	%	2.6	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0040	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0025	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.010	0.10	0.5	10	70
Copper	1455	U	0.0008	0.0077	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0073	0.073	0.5	10	30
Nickel	1455	U	0.0044	0.044	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0016	0.016	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.39	3.9	10	150	500
Sulphate	1220	U	31	310	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.6	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1225637	1-2		1		A	Amber Glass 250ml
1225637	1-2		1		A	Plastic Tub 500g
1225638	2-1		2		A	Amber Glass 250ml
1225638	2-1		2		A	Plastic Tub 500g
1225639	2-2		2		A	Amber Glass 250ml
1225639	2-2		2		A	Plastic Tub 500g
1225640	3-1		3		A	Amber Glass 250ml
1225640	3-1		3		A	Plastic Tub 500g
1225641	4-1		4		A	Amber Glass 250ml
1225641	4-1		4		A	Plastic Tub 500g
1225642	5-1		5		A	Amber Glass 250ml
1225642	5-1		5		A	Plastic Tub 500g
1225643	6-1		6		A	Amber Glass 250ml
1225643	6-1		6		A	Plastic Tub 500g
1225644	6-2		6		A	Amber Glass 250ml
1225644	6-2		6		A	Plastic Tub 500g
1225645	7-1		7		A	Amber Glass 250ml
1225645	7-1		7		A	Plastic Tub 500g
1225646	7-2		7		A	Amber Glass 250ml
1225646	7-2		7		A	Plastic Tub 500g
1225647	8-1		8		A	Amber Glass 250ml
1225647	8-1		8		A	Plastic Tub 500g

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1225648	9-1		9		A	Amber Glass 250ml
1225648	9-1		9		A	Plastic Tub 5 00g
1225649	10-2		10		A	Amber Glass 250ml
1225649	10-2		10		A	Plastic Tub 500g
1225650	11-1		11		A	Amber Glass 250ml
1225650	11-1		11		A	Plastic Tu b 50 0g
1225651	11-2		11		A	Amber Glass 250ml
1225651	11-2		11		A	Plastic Tub 50 0g
1225652	12-1		12		A	Amber Glass 250ml
1225652	12-1		12		A	Plastic Tub 50 0g
1225653	13-1		13		A	Amber Glass 250ml
1225653	13-1		13		A	Plastic Tub 50 0g
1225654	1-1		1		A	Amber Glass 250ml
1225654	1-1		1		A	Plastic Tub 500 g
1225655	10-1		10		A	Amber Glass 250ml
1225655	10-1		10		A	Plastic Tub 500 g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.

Test Methods

SOP	Title	Parameters included	Method summary
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING
2183

Final Report

Report No.:	21-23459-1
Initial Date of Issue:	16-Jul-2021
Client	IGSL
Client Address:	M7 Business Park Naas County Kildare Ireland
Contact(s):	Darren Keogh
Project	Blanchardstown
Quotation No.:	Q20-19951
Order No.:	
No. of Samples:	3
Turnaround (Wkdays):	7
Date Approved:	16-Jul-2021
Approved By:	
Details:	Glynn Harvey, Technical Manager

Date Received:	08-Jul-2021
Date Instructed:	08-Jul-2021
Results Due:	16-Jul-2021

Results - Leachate

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-23459	21-23459	21-23459
Quotation No.: Q20-19951					Chemtest Sample ID.:	1236760	1236761	1236762
					Sample Location:	WS14	WS15	WS18
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	1.00	1.00
					Bottom Depth (m):	1.60	2.00	2.00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
pH	U	1010	10:1		N/A	8.7	8.9	8.7
Ammonium	U	1220	10:1	mg/l	0.050	0.13	0.29	0.13
Ammonium	N	1220	10:1	mg/kg	0.10	1.7	4.2	1.7
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01	0.14	< 0.01	< 0.01
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-23459	21-23459	21-23459
Quotation No.: Q20-19951					Chemtest Sample ID.:	1236760	1236761	1236762
					Sample Location:	WS14	WS15	WS18
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	1.00	1.00
					Bottom Depth (m):	1.60	2.00	2.00
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
ACM Type	U	2192		N/A	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	9.9	11	15
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	[A] 1.1	[A] < 1.0	[A] 1.1
Cyanide (Total)	U	2300	mg/kg	0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.027	[A] < 0.010	[A] < 0.010
Arsenic	U	2450	mg/kg	1.0	15	13	12
Barium	U	2450	mg/kg	10	59	29	36
Cadmium	U	2450	mg/kg	0.10	0.29	1.7	1.5
Chromium	U	2450	mg/kg	1.0	26	17	9.9
Molybdenum	U	2450	mg/kg	2.0	< 2.0	2.1	3.0
Antimony	N	2450	mg/kg	2.0	2.4	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50	17	27	30
Mercury	U	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	47	39	35
Lead	U	2450	mg/kg	0.50	26	14	14
Selenium	U	2450	mg/kg	0.20	0.44	0.55	0.32
Zinc	U	2450	mg/kg	0.50	65	65	68
Chromium (Trivalent)	N	2490	mg/kg	1.0	26	17	9.9
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-23459	21-23459	21-23459
Quotation No.: Q20-19951					Chemtest Sample ID.:	1236760	1236761	1236762
					Sample Location:	WS14	WS15	WS18
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	1.00	1.00
					Bottom Depth (m):	1.60	2.00	2.00
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10	[A] < 10	[A] < 10	
Benzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Toluene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	
Naphthalene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Fluorene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Phenanthrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Chrysene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Coronene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	
Total Phenols	U	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	

Results - Single Stage WAC

Project: Blanchardstown

Chemtest Job No:	21-23459				Landfill Waste Acceptance Criteria Limits		
Chemtest Sample ID:	1236760						
Sample Ref:							
Sample ID:							
Sample Location:	WS14						
Top Depth(m):	1.00						
Bottom Depth(m):	1.60						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.85	3	5	6
Loss On Ignition	2610	U	%	3.2	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		9.1	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.014	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0013	0.013	0.5	10	70
Copper	1455	U	0.0005	0.0050	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.013	0.13	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0005	0.0054	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.80	8.0	10	150	500
Sulphate	1220	U	7.8	78	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23459						
Chemtest Sample ID:	1236761						
Sample Ref:							
Sample ID:							
Sample Location:	WS15						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.52	3	5	6
Loss On Ignition	2610	U	%	2.2	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		9.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.081	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0008	0.0080	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0006	0.0056	0.5	10	70
Copper	1455	U	0.0030	0.030	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0094	0.094	0.5	10	30
Nickel	1455	U	0.0028	0.028	0.4	10	40
Lead	1455	U	0.0007	0.0072	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0005	0.0051	0.1	0.5	7
Zinc	1455	U	0.014	0.14	4	50	200
Chloride	1220	U	1.7	17	800	15000	25000
Fluoride	1220	U	0.34	3.4	10	150	500
Sulphate	1220	U	3.9	39	1000	20000	50000
Total Dissolved Solids	1020	N	57	570	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	12	120	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23459						
Chemtest Sample ID:	1236762						
Sample Ref:							
Sample ID:							
Sample Location:	WS18						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.44	3	5	6
Loss On Ignition	2610	U	%	3.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		9.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.022	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0007	0.0070	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.010	0.10	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.50	5.0	10	150	500
Sulphate	1220	U	3.6	36	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.2	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1236760			WS14		A	Amber Glass 250ml
1236760			WS14		A	Plastic Tub 1000g
1236761			WS15		A	Amber Glass 250ml
1236761			WS15		A	Plastic Tub 1000g
1236762			WS18		A	Amber Glass 250ml
1236762			WS18		A	Plastic Tub 1000g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.

Test Methods

SOP	Title	Parameters included	Method summary
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING
2183

Amended Report

Report No.:	21-23475-2		
Initial Date of Issue:	19-Jul-2021	**Date of Re-Issue:**	06-Sep-2021
Client	IGSL		
Client Address:	M7 Business Park Naas County Kildare Ireland		
Contact(s):	Darren Keogh		
Project	Blanchardstown		
Quotation No.:	Q20-19951	**Date Received:**	08-Jul-2021
Order No.:		**Date Instructed:**	08-Jul-2021
No. of Samples:	5		
Turnaround (Wkdays):	42	**Results Due:**	06-Sep-2021
Date Approved:	06-Sep-2021		
Approved By:			
Details:	Glynn Harvey, Technical Manager		

Results - Leachate

Project: Blanchardstown

Client: IGSL										
Quotation No.: Q20-19951					Chemtest Job No.:	21-23475	21-23475	21-23475	21-23475	21-23475
					Chemtest Sample ID.:	1236855	1236856	1236857	1236858	1236859
					Sample Location:	WS 16	WS 17	WS 19	WS 20	WS 21
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.70	1.00	1.00	1.00
					Bottom Depth (m):	1.50	1.40	2.00	1.60	1.60
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**					
pH	U	1010	10:1		N/A	8.8	8.6	8.6	8.6	8.7
Ammonium	U	1220	10:1	mg/l	0.050	0.16	0.15	0.11	0.17	0.33
Ammonium	N	1220	10:1	mg/kg	0.10	2.1	1.9	1.4	2.1	4.1
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01	< 0.01	0.12	< 0.01	0.17	0.13
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: Blanchardstown

Client: IGSL		**Chemtest Job No.:**			21-23475	21-23475	21-23475	21-23475	21-23475
Quotation No.: Q20-19951		**Chemtest Sample ID.:**			1236855	1236856	1236857	1236858	1236859
		Sample Location:			WS 16	WS 17	WS 19	WS 20	WS 21
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			1.00	0.70	1.00	1.00	1.00
		Bottom Depth (m):			1.50	1.40	2.00	1.60	1.60
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**					
ACM Type	U	2192		N/A	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	2.3	4.9	11	6.0	9.6
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	[A] 3.8	[A] 7.0	[A] < 1.0	[A] 2.9	[A] < 1.0
Cyanide (Total)	U	2300	mg/kg	0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.044	[A] 0.052	[A] 0.010	[A] 0.046	[A] 0.016
Arsenic	U	2450	mg/kg	1.0	17	21	16	29	16
Barium	U	2450	mg/kg	10	73	61	48	71	35
Cadmium	U	2450	mg/kg	0.10	0.74	0.54	2.4	0.75	0.46
Chromium	U	2450	mg/kg	1.0	3.6	4.4	9.8	13	28
Molybdenum	U	2450	mg/kg	2.0	< 2.0	< 2.0	5.1	< 2.0	< 2.0
Antimony	N	2450	mg/kg	2.0	< 2.0	< 2.0	< 2.0	2.1	< 2.0
Copper	U	2450	mg/kg	0.50	9.9	9.9	31	19	34
Mercury	U	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	15	22	38	40	76
Lead	U	2450	mg/kg	0.50	49	20	16	36	23
Selenium	U	2450	mg/kg	0.20	< 0.20	< 0.20	0.71	< 0.20	0.91
Zinc	U	2450	mg/kg	0.50	33	45	61	79	150
Chromium (Trivalent)	N	2490	mg/kg	1.0	3.6	4.4	9.8	13	28
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10	< 10	5700	< 10	< 10	< 10
Diesel Present	N	2670		N/A		True			
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0	[A] 240	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] 1800	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] 2200	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] 1400	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] 58	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] 5700	[A] < 5.0	[A] < 5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0	[A] 180	[A] < 1.0	[A] < 1.0	[A] < 1.0

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-23475	21-23475	21-23475	21-23475
Quotation No.: Q20-19951					Chemtest Sample ID.:	1236855	1236856	1236857	1236858	1236859
					Sample Location:	WS 16	WS 17	WS 19	WS 20	WS 21
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	0.70	1.00	1.00	1.00
					Bottom Depth (m):	1.50	1.40	2.00	1.60	1.60
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**						
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] 310	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] 490	[A] < 5.0	[A] < 5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10	[A] 6200	[A] < 10	[A] < 10	[A] < 10
Benzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] 0.17	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] 0.042	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] 0.045	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Phenanthrene	N	2800	mg/kg	0.010	[A] 0.10	[A] 0.041	[A] 0.034	[A] < 0.010	[A] 0.032
Anthracene	N	2800	mg/kg	0.010	[A] 0.033	[A] 0.024	[A] 0.013	[A] < 0.010	[A] 0.028
Fluoranthene	N	2800	mg/kg	0.010	[A] 0.088	[A] 0.089	[A] 0.021	[A] 0.030	[A] 0.044
Pyrene	N	2800	mg/kg	0.010	[A] 0.098	[A] 0.076	[A] 0.041	[A] 0.031	[A] 0.051
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] 0.046	[A] 0.043	[A] 0.023	[A] 0.029	[A] 0.041
Chrysene	N	2800	mg/kg	0.010	[A] 0.086	[A] 0.048	[A] 0.036	[A] 0.048	[A] 0.059
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] 0.063	[A] 0.060	[A] < 0.010	[A] < 0.010	[A] 0.028
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] 0.044	[A] 0.023	[A] < 0.010	[A] < 0.010	[A] 0.043
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] 0.054	[A] 0.038	[A] < 0.010	[A] < 0.010	[A] 0.037
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] 0.071	[A] 0.052	[A] < 0.010	[A] < 0.010	[A] 0.046
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] 0.067	[A] 0.030	[A] < 0.010	[A] < 0.010	[A] 0.040
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] 0.082	[A] 0.032	[A] < 0.010	[A] < 0.010	[A] 0.040
Coronene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] 1.1	[A] 0.56	[A] < 0.20	[A] < 0.20	[A] 0.49
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23475						
Chemtest Sample ID:	1236855						
Sample Ref:							
Sample ID:							
Sample Location:	WS 16						
Top Depth(m):	1.00						
Bottom Depth(m):	1.50						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.72	3	5	6
Loss On Ignition	2610	U	%	2.4	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 1.1	100	--	--
pH	2010	U		9.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.034	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0027	0.5	2	25
Barium	1455	U	0.005	0.052	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0009	0.0090	0.5	10	70
Copper	1455	U	0.0007	0.0072	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.021	0.21	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	0.004	0.045	4	50	200
Chloride	1220	U	1.8	18	800	15000	25000
Fluoride	1220	U	0.63	6.3	10	150	500
Sulphate	1220	U	20	200	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	2.3

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

Chemtest Job No:	21-23475				Landfill Waste Acceptance Criteria Limits		
Chemtest Sample ID:	1236856						
Sample Ref:							
Sample ID:							
Sample Location:	WS 17						
Top Depth(m):	0.70						
Bottom Depth(m):	1.40						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.57	3	5	6
Loss On Ignition	2610	U	%	1.8	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] 6200	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.56	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.026	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0003	0.0027	0.5	2	25
Barium	1455	U	0.063	0.63	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0045	0.045	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.015	0.15	0.5	10	30
Nickel	1455	U	0.0044	0.044	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.0006	0.0058	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.6	16	800	15000	25000
Fluoride	1220	U	0.80	8.0	10	150	500
Sulphate	1220	U	23	230	1000	20000	50000
Total Dissolved Solids	1020	N	98	980	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.1	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	4.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23475						
Chemtest Sample ID:	1236857						
Sample Ref:							
Sample ID:							
Sample Location:	WS 19						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.64	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.049	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0008	0.0077	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.019	0.19	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.57	5.7	10	150	500
Sulphate	1220	U	9.7	97	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.8	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23475						
Chemtest Sample ID:	1236858						
Sample Ref:							
Sample ID:							
Sample Location:	WS 20						
Top Depth(m):	1.00						
Bottom Depth(m):	1.60						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.66	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.026	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0009	0.0085	0.5	2	25
Barium	1455	U	0.061	0.61	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0007	0.0075	0.5	10	70
Copper	1455	U	0.0010	0.0099	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.014	0.14	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.0010	0.010	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.8	18	800	15000	25000
Fluoride	1220	U	0.51	5.1	10	150	500
Sulphate	1220	U	31	310	1000	20000	50000
Total Dissolved Solids	1020	N	100	1000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.5	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	6.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-23475						
Chemtest Sample ID:	1236859						
Sample Ref:							
Sample ID:							
Sample Location:	WS 21						
Top Depth(m):	1.00						
Bottom Depth(m):	1.60						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.87	3	5	6
Loss On Ignition	2610	U	%	3.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.49	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.022	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0008	0.0078	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.011	0.11	0.5	10	30
Nickel	1455	U	0.0006	0.0061	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	0.017	0.17	4	50	200
Chloride	1220	U	1.8	18	800	15000	25000
Fluoride	1220	U	0.45	4.5	10	150	500
Sulphate	1220	U	7.2	72	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	3.7	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

TPH Interpretation

Job	Sample	Matrix	Location	Sample Ref	Sample ID	Sample Depth (m)	Gasoline / Diesel Present	TPH Interpretation
21-23475	1236856	S	WS 17			0.70	Yes	Diesel and Lube Oil

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1236855			WS 16		A	Amber Glass 250ml
1236855			WS 16		A	Plastic Tub 1000g
1236856			WS 17		A	Amber Glass 250ml
1236856			WS 17		A	Plastic Tub 1000g
1236857			WS 19		A	Amber Glass 250ml
1236857			WS 19		A	Plastic Tub 1000g
1236858			WS 20		A	Amber Glass 250ml
1236858			WS 20		A	Plastic Tub 1000g
1236859			WS 21		A	Amber Glass 250ml
1236859			WS 21		A	Plastic Tub 1000g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.

Test Methods

SOP	Title	Parameters included	Method summary
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING
2183

Final Report

Report No.:	21-24738-1		
Initial Date of Issue:	26-Jul-2021		
Client	IGSL		
Client Address:	M7 Business Park Naas County Kildare Ireland		
Contact(s):	Darren Keogh		
Project	Blanchardstown		
Quotation No.:	Q20-21693	**Date Received:**	19-Jul-2021
Order No.:		**Date Instructed:**	19-Jul-2021
No. of Samples:	9		
Turnaround (Wkdays):	7	**Results Due:**	27-Jul-2021
Date Approved:	26-Jul-2021		
Approved By:			
Details:	Glynn Harvey, Technical Manager		

Results - Leachate

Project: Blanchardstown

Client: IGSL								
Quotation No.: Q20-21693					Chemtest Job No.:	21-24738	21-24738	21-24738
					Chemtest Sample ID.:	1242986	1242992	1242993
					Sample Location:	TP14	WS12	WS5
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	0.5	1.4	1.8
					Bottom Depth (m):	1.0		
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
pH	U	1010	10:1		N/A	7.6	7.9	8.0
Ammonium	U	1220	10:1	mg/l	0.050	< 0.050	0.073	0.095
Ammonium	N	1220	10:1	mg/kg	0.10	0.28	0.76	1.0
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01	< 0.01	< 0.01	< 0.01
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: Blanchardstown

Client: IGSL			Chemtest Job No.:		21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738
Quotation No.: Q20-21693			Chemtest Sample ID.:		1242986	1242987	1242988	1242989	1242990	1242991	1242992	1242993	1242994
			Sample Location:		TP14	WS21	WS19	WS15	WS18	WS14	WS12	WS5	WS1
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.5	1.0	1.0	1.0	1.0	1.0	1.4	1.8	1.0
			Bottom Depth (m):		1.0	2.0	2.0	2.0	2.0	1.6			1.6
			Asbestos Lab:		COVENTRY						COVENTRY	COVENTRY	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-						-	-	
Asbestos Identification	U	2192		N/A	No Asbestos Detected						No Asbestos Detected	No Asbestos Detected	
Moisture	N	2030	%	0.020	19	6.8	12	6.8	12	13	8.0	11	10
pH (2.5:1)	N	2010		4.0		[A] 8.4	[A] 8.4	[A] 8.5	[A] 8.5	[A] 8.5			[A] 8.6
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	[A] < 0.40						[A] 0.48	[A] < 0.40	
Magnesium (Water Soluble)	N	2120	g/l	0.010		[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] < 0.010
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010		[A] 0.017	[A] 0.023	[A] 0.046	[A] < 0.010	[A] 0.035			[A] 0.033
Total Sulphur	U	2175	%	0.010		[A] 0.055	[A] 0.089	[A] 0.11	[A] 0.13	[A] 0.12			[A] 0.063
Sulphur (Elemental)	U	2180	mg/kg	1.0	[A] 2.9						[A] 1.7	[A] < 1.0	
Chloride (Water Soluble)	U	2220	g/l	0.010		[A] 0.012	[A] 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] < 0.010
Nitrate (Water Soluble)	N	2220	g/l	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010			< 0.010
Cyanide (Total)	U	2300	mg/kg	0.50	[A] < 0.50						[A] < 0.50	[A] < 0.50	
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] 2.2						[A] 5.6	[A] 3.7	
Ammonium (Water Soluble)	U	2220	g/l	0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			< 0.01
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.044	[A] 0.024	[A] 0.037	[A] 0.030	[A] 0.030	[A] 0.061	[A] 0.11	[A] 0.090	[A] 0.048
Arsenic	U	2450	mg/kg	1.0	12						19	14	
Barium	U	2450	mg/kg	10	94						81	28	
Cadmium	U	2450	mg/kg	0.10	1.4						0.92	0.52	
Chromium	U	2450	mg/kg	1.0	27						21	26	
Molybdenum	U	2450	mg/kg	2.0	2.0						2.7	< 2.0	
Antimony	N	2450	mg/kg	2.0	2.9						2.2	< 2.0	
Copper	U	2450	mg/kg	0.50	110						97	140	
Mercury	U	2450	mg/kg	0.10	0.11						< 0.10	< 0.10	
Nickel	U	2450	mg/kg	0.50	50						58	61	
Lead	U	2450	mg/kg	0.50	32						26	36	
Selenium	U	2450	mg/kg	0.20	0.61						1.9	< 0.20	
Zinc	U	2450	mg/kg	0.50	110						83	48	
Chromium (Trivalent)	N	2490	mg/kg	1.0	27						21	26	
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50						< 0.50	< 0.50	
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10	< 10						< 10	< 10	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	

Results - Soil

Project: Blanchardstown

Client: IGSL	Chemtest Job No.:	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738
Quotation No.: Q20-21693	Chemtest Sample ID..	1242986	1242987	1242988	1242989	1242990	1242991	1242992	1242993	1242994
	Sample Location:	TP14	WS21	WS19	WS15	WS18	WS14	WS12	WS5	WS1
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):	0.5	1.0	1.0	1.0	1.0	1.0	1.4	1.8	1.0
	Bottom Depth (m):	1.0	2.0	2.0	2.0	2.0	1.6			1.6
	Asbestos Lab:	COVENTRY						COVENTRY	COVENTRY	

Determinand	Accred.	SOP	Units	LOD								
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0						[A] < 5.0	[A] < 5.0	
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0						[A] < 5.0	[A] < 5.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10						[A] < 10	[A] < 10	
Benzene	U	2760	µg/kg	1.0	[A] < 1.0						[A] 1.8	[A] < 1.0	
Toluene	U	2760	µg/kg	1.0	[A] < 1.0						[A] 6.7	[A] < 1.0	
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0						[A] 5.2	[A] < 1.0	
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0						[A] 1.4	[A] < 1.0	
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0						[A] < 1.0	[A] < 1.0	
Naphthalene	N	2800	mg/kg	0.010	[A] 0.44						[A] 0.30	[A] < 0.010	
Acenaphthylene	N	2800	mg/kg	0.010	[A] 0.038						[A] 0.13	[A] < 0.010	
Acenaphthene	N	2800	mg/kg	0.010	[A] 0.43						[A] 0.16	[A] < 0.010	
Fluorene	N	2800	mg/kg	0.010	[A] 0.43						[A] 0.17	[A] < 0.010	
Phenanthrene	N	2800	mg/kg	0.010	[A] 1.8						[A] 0.56	[A] < 0.010	
Anthracene	N	2800	mg/kg	0.010	[A] 0.45						[A] 0.21	[A] < 0.010	
Fluoranthene	N	2800	mg/kg	0.010	[A] 1.6						[A] 0.67	[A] 0.079	
Pyrene	N	2800	mg/kg	0.010	[A] 1.2						[A] 0.62	[A] 0.059	
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] 0.80						[A] 0.29	[A] < 0.010	
Chrysene	N	2800	mg/kg	0.010	[A] 0.67						[A] 0.27	[A] < 0.010	
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] 0.73						[A] 0.37	[A] < 0.010	
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] 0.23						[A] 0.18	[A] < 0.010	
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] 0.67						[A] 0.28	[A] < 0.010	
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] 0.27						[A] 0.21	[A] < 0.010	
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] 0.076						[A] 0.085	[A] < 0.010	
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] 0.28						[A] 0.25	[A] < 0.010	
Coronene	N	2800	mg/kg	0.010	[A] < 0.010						[A] < 0.010	[A] < 0.010	
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] 10						[A] 4.8	[A] < 0.20	
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	

Results - Soil

Project: Blanchardstown

Client: IGSL			Chemtest Job No.:		21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738	21-24738
Quotation No.: Q20-21693			Chemtest Sample ID.:		1242986	1242987	1242988	1242989	1242990	1242991	1242992	1242993	1242994
			Sample Location:		TP14	WS21	WS19	WS15	WS18	WS14	WS12	WS5	WS1
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.5	1.0	1.0	1.0	1.0	1.0	1.4	1.8	1.0
			Bottom Depth (m):		1.0	2.0	2.0	2.0	2.0	1.6			1.6
			Asbestos Lab:		COVENTRY						COVENTRY	COVENTRY	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010						[A] < 0.0010	[A] < 0.0010	
Total Phenols	U	2920	mg/kg	0.10	< 0.10						2.2	< 0.10	

Results - Single Stage WAC

Project: Blanchardstown

Chemtest Job No:	21-24738						
Chemtest Sample ID:	1242986				Landfill Waste Acceptance Criteria Limits		
Sample Ref:					Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID:							
Sample Location:	TP14						
Top Depth(m):	0.5						
Bottom Depth(m):	1.0						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	U	%	[A] 0.83	3	5	6
Loss On Ignition	2610	U	%	5.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 10	100	--	--
pH	2010	U		7.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.27	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0009	0.0095	0.5	2	25
Barium	1455	U	0.098	0.98	20	100	300
Cadmium	1455	U	0.00082	0.0082	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.013	0.13	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.074	0.74	0.5	10	30
Nickel	1455	U	0.0019	0.019	0.4	10	40
Lead	1455	U	0.0049	0.049	0.5	10	50
Antimony	1455	U	0.0009	0.0092	0.06	0.7	5
Selenium	1455	U	0.0060	0.060	0.1	0.5	7
Zinc	1455	U	0.14	1.4	4	50	200
Chloride	1220	U	2.3	23	800	15000	25000
Fluoride	1220	U	0.64	6.4	10	150	500
Sulphate	1220	U	6.6	66	1000	20000	50000
Total Dissolved Solids	1020	N	120	1200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	37	370	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	19

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24738						
Chemtest Sample ID:	1242992						
Sample Ref:							
Sample ID:							
Sample Location:	WS12						
Top Depth(m):	1.4						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1.1	3	5	6
Loss On Ignition	2610	U	%	5.0	--	--	10
Total BTEX	2760	U	mg/kg	[A] 0.015	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 4.8	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.020	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0009	0.0087	0.5	2	25
Barium	1455	U	0.010	0.10	20	100	300
Cadmium	1455	U	0.00028	0.0028	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0017	0.017	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.075	0.75	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0029	0.029	0.1	0.5	7
Zinc	1455	U	0.038	0.38	4	50	200
Chloride	1220	U	3.4	34	800	15000	25000
Fluoride	1220	U	0.30	3.0	10	150	500
Sulphate	1220	U	25	250	1000	20000	50000
Total Dissolved Solids	1020	N	98	970	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	13	130	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24738						
Chemtest Sample ID:	1242993						
Sample Ref:							
Sample ID:							
Sample Location:	WS5						
Top Depth(m):	1.8						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.33	3	5	6
Loss On Ignition	2610	U	%	5.4	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0090	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0005	0.0055	0.5	10	70
Copper	1455	U	0.0006	0.0061	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.063	0.63	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0028	0.028	0.1	0.5	7
Zinc	1455	U	0.024	0.24	4	50	200
Chloride	1220	U	2.5	25	800	15000	25000
Fluoride	1220	U	0.28	2.8	10	150	500
Sulphate	1220	U	42	420	1000	20000	50000
Total Dissolved Solids	1020	N	120	1200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	23	230	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1242986			TP14		A	Amber Glass 250ml
1242986			TP14		A	Plastic Tub 500g
1242987			WS21		A	Amber Glass 250ml
1242987			WS21		A	Plastic Tub 500g
1242988			WS19		A	Amber Glass 250ml
1242988			WS19		A	Plastic Tub 500g
1242989			WS15		A	Amber Glass 250ml
1242989			WS15		A	Plastic Tub 500g
1242990			WS18		A	Amber Glass 250ml
1242990			WS18		A	Plastic Tub 500g
1242991			WS14		A	Amber Glass 250ml
1242991			WS14		A	Plastic Tub 500g
1242992			WS12		A	Amber Glass 250ml
1242992			WS12		A	Plastic Tub 500g
1242993			WS5		A	Amber Glass 250ml
1242993			WS5		A	Plastic Tub 500g
1242994			WS1		A	Amber Glass 250ml
1242994			WS1		A	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2220	Water soluble Chloride in Soils	Chloride	Aqueous extraction and measuremernt by 'Aquakem 600' Discrete Analyser using ferric nitrate / mercuric thiocyanate.
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.

Test Methods

SOP	Title	Parameters included	Method summary
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING
2183

Amended Report

Report No.:	21-24743-2		
Initial Date of Issue:	26-Jul-2021	**Date of Re-Issue:**	06-Sep-2021
Client	IGSL		
Client Address:	M7 Business Park Naas County Kildare Ireland		
Contact(s):	Darren Keogh		
Project	Blanchardstown		
Quotation No.:	Q20-19951	**Date Received:**	19-Jul-2021
Order No.:		**Date Instructed:**	19-Jul-2021
No. of Samples:	10		
Turnaround (Wkdays):	35	**Results Due:**	06-Sep-2021
Date Approved:	06-Sep-2021		

Approved By:



Details: Glynn Harvey, Technical Manager

Results - Leachate

Project: Blanchardstown

Client: IGSL						Chemtest Job No.:	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743
Quotation No.: Q20-19951						Chemtest Sample ID.:	1243008	1243011	1243012	1243013	1243016	1243017
						Sample Location:	WS3	WS8	WS22	WS13	WS9	WS4
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	1.50	1.10	1.00	1.00	2.00	1.80
						Bottom Depth (m):			1.50	1.50		
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**							
pH	U	1010	10:1		N/A		8.6	8.7	9.1	8.9	8.9	8.8
Ammonium	U	1220	10:1	mg/l	0.050		< 0.050	< 0.050	0.16	< 0.050	< 0.050	< 0.050
Ammonium	N	1220	10:1	mg/kg	0.10		0.60	0.52	2.9	0.47	0.57	0.62
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01		1.1	0.42	0.33	0.23	0.21	0.20
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: Blanchardstown

Client: IGSL					**Chemtest Job No.:**	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743
Quotation No.: Q20-19951					**Chemtest Sample ID.:**	1243008	1243009	1243010	1243011	1243012	1243013	1243014	1243015	1243016
					Sample Location:	WS3	WS3	WS7	WS8	WS22	WS13	WS9	WS11	WS9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.50	1.00	1.00	1.10	1.00	1.00	1.00	1.00	2.00
					Bottom Depth (m):		2.00	2.00		1.50	1.50	2.00	2.00	
					Asbestos Lab:	DURHAM			DURHAM	DURHAM	DURHAM			DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
ACM Type	U	2192		N/A		-			-	-	-			-
Asbestos Identification	U	2192		N/A		No Asbestos Detected			No Asbestos Detected	No Asbestos Detected	No Asbestos Detected			No Asbestos Detected
Moisture	N	2030	%	0.020		8.1	6.2	7.3	2.7	5.0	10	7.9	6.9	7.0
pH (2.5:1)	N	2010		4.0			[A] 8.5	[A] 8.8				[A] 8.7	[A] 8.7	
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		[A] 0.50			[A] 0.42	[A] 1.0	[A] < 0.40			[A] < 0.40
Magnesium (Water Soluble)	N	2120	g/l	0.010			[A] 0.026	[A] < 0.010				[A] < 0.010	[A] < 0.010	
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010			[A] 0.20	[A] 0.19				[A] 0.15	[A] 0.030	
Total Sulphur	U	2175	%	0.010			[A] 0.26	[A] 0.27				[A] 0.083	[A] < 0.010	
Sulphur (Elemental)	U	2180	mg/kg	1.0		[A] 2.9			[A] 3.1	[A] < 1.0	[A] < 1.0			[A] 12
Chloride (Water Soluble)	U	2220	g/l	0.010			[A] < 0.010	[A] 0.017				[A] < 0.010	[A] < 0.010	
Nitrate (Water Soluble)	N	2220	g/l	0.010			< 0.010	< 0.010				< 0.010	< 0.010	
Cyanide (Total)	U	2300	mg/kg	0.50		[A] < 0.50			[A] < 0.50	[A] < 0.50	[A] < 0.50			[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		[A] 10			[A] 3.9	[A] 13	[A] 3.5			[A] 7.6
Ammonium (Water Soluble)	U	2220	g/l	0.01			< 0.01	< 0.01				< 0.01	< 0.01	
Sulphate (Acid Soluble)	U	2430	%	0.010		[A] 0.030	[A] 0.060	[A] 0.061	[A] 0.083	[A] 0.031	[A] 0.072	[A] 0.053	[A] 0.022	[A] 0.044
Arsenic	U	2450	mg/kg	1.0		16			11	18	19			16
Barium	U	2450	mg/kg	10		37			110	53	38			35
Cadmium	U	2450	mg/kg	0.10		0.26			1.3	1.5	0.57			0.32
Chromium	U	2450	mg/kg	1.0		34			17	17	30			31
Molybdenum	U	2450	mg/kg	2.0		< 2.0			2.1	2.3	< 2.0			< 2.0
Antimony	N	2450	mg/kg	2.0		< 2.0			< 2.0	< 2.0	< 2.0			< 2.0
Copper	U	2450	mg/kg	0.50		100			39	63	94			170
Mercury	U	2450	mg/kg	0.10		< 0.10			0.13	< 0.10	< 0.10			< 0.10
Nickel	U	2450	mg/kg	0.50		78			26	45	72			75
Lead	U	2450	mg/kg	0.50		38			35	19	21			39
Selenium	U	2450	mg/kg	0.20		0.65			0.77	0.57	0.25			0.32
Zinc	U	2450	mg/kg	0.50		130			77	77	60			110
Chromium (Trivalent)	N	2490	mg/kg	1.0		34			17	17	30			31
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50			< 0.50	< 0.50	< 0.50			< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10		< 10			< 10	3400	< 10			210
Diesel Present	N	2670		N/A						True				
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] 89	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] 750	[A] < 1.0			[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		[A] < 1.0			[A] < 1.0	[A] 760	[A] < 1.0			[A] 26

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743
Quotation No.: Q20-19951					Chemtest Sample ID.:	1243008	1243009	1243010	1243011	1243012	1243013	1243014	1243015	1243016
					Sample Location:	WS3	WS3	WS7	WS8	WS22	WS13	WS9	WS11	WS9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.50	1.00	1.00	1.10	1.00	1.00	1.00	1.00	2.00
					Bottom Depth (m):		2.00	2.00		1.50	1.50	2.00	2.00	
					Asbestos Lab:	DURHAM			DURHAM	DURHAM	DURHAM			DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] 9.3	[A] < 1.0			[A] < 1.0	
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0			[A] < 5.0	[A] 1600	[A] < 5.0			[A] 26	
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] 27	[A] < 1.0			[A] < 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] 850	[A] < 1.0			[A] 110	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0			[A] < 5.0	[A] 880	[A] < 5.0			[A] 110	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10			[A] < 10	[A] 2500	[A] < 10			[A] 140	
Benzene	U	2760	µg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
Toluene	U	2760	µg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] 1.2	
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0			[A] < 1.0	[A] < 1.0	[A] < 1.0			[A] < 1.0	
Naphthalene	N	2800	mg/kg	0.010	[A] < 0.010			[A] < 0.010	[A] 0.11	[A] < 0.010			[A] 0.25	
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010			[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] < 0.010	
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010			[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] 0.41	
Fluorene	N	2800	mg/kg	0.010	[A] < 0.010			[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] 0.30	
Phenanthrene	N	2800	mg/kg	0.010	[A] 0.11			[A] 0.63	[A] 0.12	[A] < 0.010			[A] 3.5	
Anthracene	N	2800	mg/kg	0.010	[A] 0.085			[A] 0.10	[A] < 0.010	[A] < 0.010			[A] 1.1	
Fluoranthene	N	2800	mg/kg	0.010	[A] 0.093			[A] 0.60	[A] 0.11	[A] < 0.010			[A] 8.5	
Pyrene	N	2800	mg/kg	0.010	[A] 0.086			[A] 0.56	[A] 0.11	[A] < 0.010			[A] 6.7	
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] < 0.010			[A] 0.29	[A] < 0.010	[A] < 0.010			[A] 4.8	
Chrysene	N	2800	mg/kg	0.010	[A] < 0.010			[A] 0.36	[A] < 0.010	[A] < 0.010			[A] 4.6	
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010			[A] 0.37	[A] < 0.010	[A] < 0.010			[A] 7.6	
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010			[A] 0.13	[A] < 0.010	[A] < 0.010			[A] 2.0	
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] < 0.010			[A] 0.29	[A] < 0.010	[A] < 0.010			[A] 6.5	
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] < 0.010			[A] 0.24	[A] < 0.010	[A] < 0.010			[A] 5.2	
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] < 0.010			[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] 0.86	
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] < 0.010			[A] 0.21	[A] < 0.010	[A] < 0.010			[A] 4.2	
Coronene	N	2800	mg/kg	0.010	[A] < 0.010			[A] < 0.010	[A] < 0.010	[A] < 0.010			[A] < 0.010	
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] 0.37			[A] 3.8	[A] 0.45	[A] < 0.20			[A] 57	
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010	
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010	
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010	

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743	21-24743
Quotation No.: Q20-19951					Chemtest Sample ID.:	1243008	1243009	1243010	1243011	1243012	1243013	1243014	1243015	1243016
					Sample Location:	WS3	WS3	WS7	WS8	WS22	WS13	WS9	WS11	WS9
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	1.50	1.00	1.00	1.10	1.00	1.00	1.00	1.00	2.00
					Bottom Depth (m):		2.00	2.00		1.50	1.50	2.00	2.00	
					Asbestos Lab:	DURHAM			DURHAM	DURHAM	DURHAM			DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
PCB 118	N	2815	mg/kg	0.0010		[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010		[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010		[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010		[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010		[A] < 0.0010			[A] < 0.0010	[A] < 0.0010	[A] < 0.0010			[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10		< 0.10			< 0.10	< 0.10	< 0.10			< 0.10

Results - Soil

Project: Blanchardstown

Client: IGSL			Chemtest Job No.:		21-24743
Quotation No.: Q20-19951			Chemtest Sample ID.:		1243017
			Sample Location:		WS4
			Sample Type:		SOIL
			Top Depth (m):		1.80
			Bottom Depth (m):		
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	10
pH (2.5:1)	N	2010		4.0	
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	[A] < 0.40
Magnesium (Water Soluble)	N	2120	g/l	0.010	
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	
Total Sulphur	U	2175	%	0.010	
Sulphur (Elemental)	U	2180	mg/kg	1.0	[A] < 1.0
Chloride (Water Soluble)	U	2220	g/l	0.010	
Nitrate (Water Soluble)	N	2220	g/l	0.010	
Cyanide (Total)	U	2300	mg/kg	0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	[A] 3.9
Ammonium (Water Soluble)	U	2220	g/l	0.01	
Sulphate (Acid Soluble)	U	2430	%	0.010	[A] 0.069
Arsenic	U	2450	mg/kg	1.0	13
Barium	U	2450	mg/kg	10	12
Cadmium	U	2450	mg/kg	0.10	0.31
Chromium	U	2450	mg/kg	1.0	12
Molybdenum	U	2450	mg/kg	2.0	< 2.0
Antimony	N	2450	mg/kg	2.0	< 2.0
Copper	U	2450	mg/kg	0.50	41
Mercury	U	2450	mg/kg	0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	26
Lead	U	2450	mg/kg	0.50	10
Selenium	U	2450	mg/kg	0.20	< 0.20
Zinc	U	2450	mg/kg	0.50	27
Chromium (Trivalent)	N	2490	mg/kg	1.0	12
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10	< 10
Diesel Present	N	2670		N/A	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] 12

Results - Soil

Project: Blanchardstown

Client: IGSL			Chemtest Job No.:		21-24743
Quotation No.: Q20-19951			Chemtest Sample ID.:		1243017
			Sample Location:		WS4
			Sample Type:		SOIL
			Top Depth (m):		1.80
			Bottom Depth (m):		
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	[A] 12
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	[A] 25
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] 830
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] 850
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] 860
Benzene	U	2760	µg/kg	1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0	[A] < 1.0
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] 0.13
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] 0.10
Phenanthrene	N	2800	mg/kg	0.010	[A] 0.35
Anthracene	N	2800	mg/kg	0.010	[A] 0.19
Fluoranthene	N	2800	mg/kg	0.010	[A] 0.72
Pyrene	N	2800	mg/kg	0.010	[A] 0.61
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] 0.50
Chrysene	N	2800	mg/kg	0.010	[A] 0.50
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] 0.79
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] 0.25
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] 0.73
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] 0.62
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] 0.23
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] 0.60
Coronene	N	2800	mg/kg	0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] 6.3
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010

Results - Soil

Project: Blanchardstown

Client: IGSL			Chemtest Job No.:		21-24743
Quotation No.: Q20-19951			Chemtest Sample ID.:		1243017
			Sample Location:		WS4
			Sample Type:		SOIL
			Top Depth (m):		1.80
			Bottom Depth (m):		
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243008						
Sample Ref:							
Sample ID:							
Sample Location:	WS3						
Top Depth(m):	1.50						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.91	3	5	6
Loss On Ignition	2610	U	%	4.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.37	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0070	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0005	0.0053	2	50	100
Mercury	1455	U	0.00005	0.00053	0.01	0.2	2
Molybdenum	1455	U	0.012	0.12	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0008	0.0083	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.32	3.2	10	150	500
Sulphate	1220	U	25	250	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.1

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243011						
Sample Ref:							
Sample ID:							
Sample Location:	WS8						
Top Depth(m):	1.10						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1.8	3	5	6
Loss On Ignition	2610	U	%	7.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 3.8	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0050	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0006	0.0064	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	< 0.0005	< 0.0005	2	50	100
Mercury	1455	U	0.00006	0.00056	0.01	0.2	2
Molybdenum	1455	U	0.0075	0.075	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0008	0.0083	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.19	1.9	10	150	500
Sulphate	1220	U	21	210	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	7.0	70	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	2.7

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243012						
Sample Ref:							
Sample ID:							
Sample Location:	WS22						
Top Depth(m):	1.00						
Bottom Depth(m):	1.50						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.60	3	5	6
Loss On Ignition	2610	U	%	2.5	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] 2500	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 0.45	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0020	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0022	0.022	0.5	2	25
Barium	1455	U	0.014	0.14	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	< 0.0005	< 0.0005	2	50	100
Mercury	1455	U	0.00007	0.00074	0.01	0.2	2
Molybdenum	1455	U	0.011	0.11	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.0008	0.0082	0.06	0.7	5
Selenium	1455	U	0.0007	0.0070	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.3	13	800	15000	25000
Fluoride	1220	U	0.27	2.7	10	150	500
Sulphate	1220	U	21	210	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	13	130	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	5.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243013						
Sample Ref:							
Sample ID:							
Sample Location:	WS13						
Top Depth(m):	1.00						
Bottom Depth(m):	1.50						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.44	3	5	6
Loss On Ignition	2610	U	%	4.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.014	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0006	0.0063	2	50	100
Mercury	1455	U	0.00006	0.00055	0.01	0.2	2
Molybdenum	1455	U	0.0079	0.079	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.4	14	800	15000	25000
Fluoride	1220	U	0.24	2.4	10	150	500
Sulphate	1220	U	40	400	1000	20000	50000
Total Dissolved Solids	1020	N	120	1200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	9.3	93	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243016						
Sample Ref:							
Sample ID:							
Sample Location:	WS9						
Top Depth(m):	2.00						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 1.0	3	5	6
Loss On Ignition	2610	U	%	4.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] 140	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 57	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.010	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0002	0.0022	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0011	0.011	0.5	10	70
Copper	1455	U	0.0006	0.0060	2	50	100
Mercury	1455	U	0.00006	0.00061	0.01	0.2	2
Molybdenum	1455	U	0.010	0.10	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0010	0.010	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.33	3.3	10	150	500
Sulphate	1220	U	5.2	52	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24743						
Chemtest Sample ID:	1243017						
Sample Ref:							
Sample ID:							
Sample Location:	WS4						
Top Depth(m):	1.80						
Bottom Depth(m):							
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.40	3	5	6
Loss On Ignition	2610	U	%	3.5	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] 860	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] 6.3	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.17	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0006	0.0064	0.5	10	70
Copper	1455	U	0.0006	0.0064	2	50	100
Mercury	1455	U	0.00006	0.00058	0.01	0.2	2
Molybdenum	1455	U	0.0078	0.078	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.7	17	800	15000	25000
Fluoride	1220	U	0.27	2.7	10	150	500
Sulphate	1220	U	42	420	1000	20000	50000
Total Dissolved Solids	1020	N	120	1200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

TPH Interpretation

Job	Sample	Matrix	Location	Sample Ref	Sample ID	Sample Depth (m)	Gasoline / Diesel Present	TPH Interpretation
21-24743	1243012	S	WS22			1.00	Yes	Diesel and Lube Oil

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1243008			WS3		A	Amber Glass 250ml
1243008			WS3		A	Plastic Tub 500g
1243009			WS3		A	Amber Glass 250ml
1243009			WS3		A	Plastic Tub 500g
1243010			WS7		A	Amber Glass 250ml
1243010			WS7		A	Plastic Tub 500g
1243011			WS8		A	Amber Glass 250ml
1243011			WS8		A	Plastic Tub 500g
1243012			WS22		A	Amber Glass 250ml
1243012			WS22		A	Plastic Tub 500g
1243013			WS13		A	Amber Glass 250ml
1243013			WS13		A	Plastic Tub 500g
1243014			WS9		A	Amber Glass 250ml
1243014			WS9		A	Plastic Tub 500g
1243015			WS11		A	Amber Glass 250ml
1243015			WS11		A	Plastic Tub 500g
1243016			WS9		A	Amber Glass 250ml
1243016			WS9		A	Plastic Tub 500g
1243017			WS4		A	Amber Glass 250ml
1243017			WS4		A	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2220	Water soluble Chloride in Soils	Chloride	Aqueous extraction and measuremernt by 'Aquakem 600' Discrete Analyser using ferric nitrate / mercuric thiocyanate.
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.

Test Methods

SOP	Title	Parameters included	Method summary
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

UKAS TESTING
2183

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Email: info@chemtest.com

Final Report

Report No.:	21-24757-1
Initial Date of Issue:	28-Jul-2021
Client	IGSL
Client Address:	M7 Business Park Naas County Kildare Ireland
Contact(s):	Darren Keogh
Project	Blanchardstown
Quotation No.:	Q20-19951
Order No.:	
No. of Samples:	8
Turnaround (Wkdays):	7
Date Approved:	28-Jul-2021
Approved By:	
Details:	Glynn Harvey, Technical Manager

Date Received:	19-Jul-2021
Date Instructed:	20-Jul-2021
Results Due:	28-Jul-2021

Results - Leachate

Project: Blanchardstown

Client: IGSL						Chemtest Job No.:	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757
Quotation No.: Q20-19951						Chemtest Sample ID.:	1243198	1243199	1243200	1243201	1243202	1243203	1243204	1243205
						Sample Location:	TP15	TP21	TP22	TP16	TP17	TP19	TP18	TP20
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0.50	0.60	0.60	0.60	0.50	0.50	0.50	0.50
						Bottom Depth (m):	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**									
pH	U	1010	10:1		N/A		8.5	8.6	8.7	8.7	8.8	8.8	8.7	8.6
Ammonium	U	1220	10:1	mg/l	0.050		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.050	0.20
Ammonium	N	1220	10:1	mg/kg	0.10		0.28	0.46	0.31	0.30	0.38	0.41	0.64	2.5
Boron (Dissolved)	U	1455	10:1	mg/kg	0.01		0.16	0.19	0.13	0.16	0.14	0.13	< 0.01	0.11
Benzo[j]fluoranthene	N	1800	10:1	µg/l	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757
Quotation No.: Q20-19951					Chemtest Sample ID.:	1243198	1243199	1243200	1243201	1243202	1243203	1243204	1243205
					Sample Location:	TP15	TP21	TP22	TP16	TP17	TP19	TP18	TP20
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.50	0.60	0.60	0.60	0.50	0.50	0.50	0.50
					Bottom Depth (m):	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A		-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020		8.9	13	14	13	18	25	15	10
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40	[A] < 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0		[A] 3.7	[A] 3.1	[A] 1.6	[A] 9.1	[A] < 1.0	[A] 2.3	[A] 1.7	[A] < 1.0
Cyanide (Total)	U	2300	mg/kg	0.50		[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		[A] 6.1	[A] 8.0	[A] < 0.50	[A] 2.7	[A] < 0.50	[A] 2.2	[A] 1.5	[A] 2.2
Sulphate (Acid Soluble)	U	2430	%	0.010		[A] 0.021	[A] 0.020	[A] 0.057	[A] 0.077	[A] 0.043	[A] 0.049	[A] 0.046	[A] 0.098
Arsenic	U	2450	mg/kg	1.0		6.5	15	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	14
Barium	U	2450	mg/kg	10		39	21	52	73	64	130	91	66
Cadmium	U	2450	mg/kg	0.10		1.2	1.5	1.3	2.1	1.7	3.2	3.6	0.84
Chromium	U	2450	mg/kg	1.0		9.3	14	12	7.5	11	9.1	9.6	9.1
Molybdenum	U	2450	mg/kg	2.0		< 2.0	2.7	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Antimony	N	2450	mg/kg	2.0		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50		13	28	10	16	26	19	25	19
Mercury	U	2450	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.10	0.11	< 0.10
Nickel	U	2450	mg/kg	0.50		25	41	28	23	26	35	41	39
Lead	U	2450	mg/kg	0.50		8.4	18	13	14	18	19	19	30
Selenium	U	2450	mg/kg	0.20		< 0.20	0.52	< 0.20	0.22	< 0.20	< 0.20	0.20	0.46
Zinc	U	2450	mg/kg	0.50		36	89	47	43	57	37	46	80
Chromium (Trivalent)	N	2490	mg/kg	1.0		9.3	14	12	7.5	11	9.1	9.6	9.1
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Mineral Oil (TPH Calculation)	N	2670	mg/kg	10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0

Results - Soil

Project: Blanchardstown

Client: IGSL					Chemtest Job No.:	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757	21-24757
Quotation No.: Q20-19951					Chemtest Sample ID.:	1243198	1243199	1243200	1243201	1243202	1243203	1243204	1243205
					Sample Location:	TP15	TP21	TP22	TP16	TP17	TP19	TP18	TP20
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.50	0.60	0.60	0.60	0.50	0.50	0.50	0.50
					Bottom Depth (m):	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
Benzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Toluene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Ethylbenzene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
m & p-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
o-Xylene	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Naphthalene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Acenaphthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluorene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Phenanthrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.050	[A] 0.027	[A] < 0.010	[A] < 0.010	[A] < 0.010
Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.018	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.019	[A] 0.016	[A] < 0.010	[A] < 0.010	[A] < 0.010
Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] 0.024	[A] 0.011	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[a]anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Chrysene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Coronene	N	2800	mg/kg	0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010	[A] < 0.010
Total Of 17 PAH's	N	2800	mg/kg	0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20	[A] < 0.20
PCB 28	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 52	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 90+101	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 118	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 153	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 138	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
PCB 180	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total PCBs (7 congeners)	N	2815	mg/kg	0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010	[A] < 0.0010
Total Phenols	U	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243198						
Sample Ref:							
Sample ID:							
Sample Location:	TP15						
Top Depth(m):	0.50						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.28	3	5	6
Loss On Ignition	2610	U	%	2.7	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.10	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0006	0.0057	0.5	2	25
Barium	1455	U	0.005	0.054	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0015	0.015	2	50	100
Mercury	1455	U	0.00007	0.00069	0.01	0.2	2
Molybdenum	1455	U	0.014	0.14	0.5	10	30
Nickel	1455	U	0.0010	0.010	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0006	0.0064	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.48	4.8	10	150	500
Sulphate	1220	U	13	130	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	27	270	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

Chemtest Job No:	21-24757				Landfill Waste Acceptance Criteria Limits		
Chemtest Sample ID:	1243199						
Sample Ref:							
Sample ID:							
Sample Location:	TP21						
Top Depth(m):	0.60						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.61	3	5	6
Loss On Ignition	2610	U	%	2.4	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.016	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0008	0.0081	2	50	100
Mercury	1455	U	0.00007	0.00071	0.01	0.2	2
Molybdenum	1455	U	0.012	0.12	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.5	15	800	15000	25000
Fluoride	1220	U	0.43	4.3	10	150	500
Sulphate	1220	U	15	150	1000	20000	50000
Total Dissolved Solids	1020	N	85	850	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	12	120	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

Chemtest Job No:	21-24757				Landfill Waste Acceptance Criteria Limits		
Chemtest Sample ID:	1243200						
Sample Ref:							
Sample ID:							
Sample Location:	TP22						
Top Depth(m):	0.60						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.34	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.011	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0002	0.0022	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0006	0.0063	0.5	10	70
Copper	1455	U	< 0.0005	< 0.0005	2	50	100
Mercury	1455	U	0.00007	0.00068	0.01	0.2	2
Molybdenum	1455	U	0.014	0.13	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.1	11	800	15000	25000
Fluoride	1220	U	0.87	8.7	10	150	500
Sulphate	1220	U	4.5	45	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243201						
Sample Ref:							
Sample ID:							
Sample Location:	TP16						
Top Depth(m):	0.60						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.59	3	5	6
Loss On Ignition	2610	U	%	2.3	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0070	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0004	0.0041	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0016	0.017	2	50	100
Mercury	1455	U	0.00007	0.00073	0.01	0.2	2
Molybdenum	1455	U	0.014	0.14	0.5	10	30
Nickel	1455	U	0.0005	0.0054	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0006	0.0059	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.5	15	800	15000	25000
Fluoride	1220	U	0.60	6.0	10	150	500
Sulphate	1220	U	13	130	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	57	570	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243202						
Sample Ref:							
Sample ID:							
Sample Location:	TP17						
Top Depth(m):	0.50						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.81	3	5	6
Loss On Ignition	2610	U	%	2.9	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.012	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0005	0.0046	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0018	0.018	2	50	100
Mercury	1455	U	0.00007	0.00068	0.01	0.2	2
Molybdenum	1455	U	0.013	0.13	0.5	10	30
Nickel	1455	U	0.0009	0.0089	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.3	13	800	15000	25000
Fluoride	1220	U	0.38	3.8	10	150	500
Sulphate	1220	U	9.9	99	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	63	630	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	18

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243203						
Sample Ref:							
Sample ID:							
Sample Location:	TP19						
Top Depth(m):	0.50						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.58	3	5	6
Loss On Ignition	2610	U	%	4.4	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0090	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0006	0.0058	2	50	100
Mercury	1455	U	0.00006	0.00057	0.01	0.2	2
Molybdenum	1455	U	0.020	0.20	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.50	5.0	10	150	500
Sulphate	1220	U	9.8	98	1000	20000	50000
Total Dissolved Solids	1020	N	72	720	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	11	110	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	25

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

Chemtest Job No: / Chemtest Sample ID: / Sample Ref: / Sample ID: / Sample Location: / Top Depth(m): / Bottom Depth(m): / Sampling Date:					Landfill Waste Acceptance Criteria Limits		
					Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	U	%	[A] 1.5	3	5	6
Loss On Ignition	2610	U	%	3.1	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0070	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0002	0.0022	0.5	2	25
Barium	1455	U	< 0.005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0007	0.0072	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.010	0.10	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0011	0.011	0.1	0.5	7
Zinc	1455	U	0.003	0.031	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.44	4.4	10	150	500
Sulphate	1220	U	14	140	1000	20000	50000
Total Dissolved Solids	1020	N	85	850	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Blanchardstown

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-24757						
Chemtest Sample ID:	1243205						
Sample Ref:							
Sample ID:							
Sample Location:	TP20						
Top Depth(m):	0.50						
Bottom Depth(m):	1.00						
Sampling Date:							
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	[A] 0.42	3	5	6
Loss On Ignition	2610	U	%	5.2	--	--	10
Total BTEX	2760	U	mg/kg	[A] < 0.010	6	--	--
Total PCBs (7 congeners)	2815	N	mg/kg	[A] < 0.0010	1	--	--
TPH Total WAC	2670	U	mg/kg	[A] < 10	500	--	--
Total Of 17 PAH's	2800	N	mg/kg	[A] < 0.20	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.11	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0009	0.0094	0.5	2	25
Barium	1455	U	0.011	0.11	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	< 0.0005	< 0.0005	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.011	0.11	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.0007	0.0066	0.06	0.7	5
Selenium	1455	U	0.0012	0.012	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	4	50	200
Chloride	1220	U	4.1	41	800	15000	25000
Fluoride	1220	U	0.24	2.4	10	150	500
Sulphate	1220	U	49	490	1000	20000	50000
Total Dissolved Solids	1020	N	120	1200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	7.0	70	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1243198			TP15		A	Amber Glass 250ml
1243198			TP15		A	Plastic Tub 500 g
1243199			TP21		A	Amber Glass 250ml
1243199			TP21		A	Plastic Tub 500 g
1243200			TP22		A	Amber Glass 250ml
1243200			TP22		A	Plastic Tub 500 g
1243201			TP16		A	Amber Glass 250ml
1243201			TP16		A	Plastic Tub 500 g
1243202			TP17		A	Amber Glass 250ml
1243202			TP17		A	Plastic Tub 500 g
1243203			TP19		A	Amber Glass 250ml
1243203			TP19		A	Plastic Tub 500g
1243204			TP18		A	Amber Glass 250ml
1243204			TP18		A	Plastic Tub 5 00g
1243205			TP20		A	Amber Glass 250ml
1243205			TP20		A	Plastic Tub 5 00g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.

Test Methods

SOP	Title	Parameters included	Method summary
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Appendix 3

Waste Classification Report

environmental management for business

HazWasteOnline™

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

0JH3X-1S09A-E86ZJ

Job name

21-001-23 Blanchardstown TC

Description/Comments

Project

21-001-23

Site

Blanchardstown TC

Classified by

Name:
Austin Hynes
Date:
08 Sep 2021 15:01 GMT
Telephone:
+353 (0)21 4345366

Company:
O'Callaghan Moran & Associates
Unit 15 Melbourne Business Park,
Model Farm Road
Cork

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: -

Course	Date
Hazardous Waste Classification	-

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS01 (1-1)	0.5-1.0	Non Hazardous		3
2	WS01 (1-2)	1.0-2.0	Non Hazardous		6
3	WS02 (2-1)	0.0-1.0	Non Hazardous		9
4	WS02 (2-2)	1.0-2.0	Non Hazardous		12
5	WS03 (3-1)	0.0-1.0	Non Hazardous		15
6	WS3	1.50	Non Hazardous		18
7	WS04 (4-1)	0.0-1.0	Non Hazardous		21
8	WS4	1.80	Non Hazardous		24
9	WS05 (5-1)	0.0-1.0	Non Hazardous		27
10	WS5	1.8	Non Hazardous		30
11	WS06 (6-1)	0.0-1.0	Non Hazardous		33
12	WS06 (6-2)	1.0-2.0	Non Hazardous		36
13	WS07 (7-1)	0.0-1.0	Non Hazardous		39
14	WS07 (7-2)	1.0-2.0	Non Hazardous		42
15	WS08 (8-1)	0.0-1.0	Non Hazardous		45
16	WS8	1.10	Non Hazardous		48
17	WS09 (9-1)	0.0-1.0	Non Hazardous		51
18	WS9	2.00	Non Hazardous		54
19	WS10 (10-1)	0.6-1.0	Non Hazardous		57
20	WS10 (10-2)	1.0-2.0	Non Hazardous		60
21	WS11 (11-1)	0.0-1.0	Non Hazardous		63
22	WS11 (11-2)	1.0-2.0	Non Hazardous		66
23	WS12 (12-1)	0.0-1.0	Non Hazardous		69
24	WS12	1.4	Non Hazardous		72
25	WS13 (13-1)	0.0-1.0	Non Hazardous		75
26	WS13	1.0-1.5	Non Hazardous		78
27	WS14	1.0-1.6	Non Hazardous		81
28	WS15	1.0-2.0	Non Hazardous		84
29	WS 16	1.0-1.5	Non Hazardous		87
30	WS 17	0.7-1.4	Non Hazardous		90

#	Sample name	Depth [m]	Classification Result	Hazardproperties	Page
31	WS18	1.0-2.0	Non Hazardous		93
32	WS 19	1.0-2.0	Non Hazardous		96
33	WS 20	1.0-1.6	Non Hazardous		99
34	W S 21	1.0-1.6	Non Hazardous		102
35	W S22	1.0-1.5	Non Hazardous		105
36	TP14	0.5-1.0	Non Hazardous		108
37	TP1 5	0.5-1.0	Non Hazardous		111
38	TP 16	0.6-1.0	Non Hazardous		114
39	TP17	0.5-1.0	Non Hazardous		117
40	TP18	0.5-1.0	Non Hazardous		120
41	TP19	0.5-1.0	Non Hazardous		123
42	TP20	0.5-1.0	Non Hazardous		126
43	TP21	0.6-1.0	Non Hazardous		129
44	TP22	0.6-1.0	Non Hazardous		132

Related documents

#	Name	Description
1	O'Callaghan Moran Waste Steam	waste stream template used to create this Job

Report

Created by: Austin Hynes

Created date: 08 Sep 2021 15:01 GMT

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	135
Appendix B: Rationale for selection of metal species	136
Appendix C: Version	137

Classification of sample: WS01 (1-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS01 (1-1)
Sample Depth:
0.5-1.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		27	mg/kg	1.32	35.649	mg/kg	0.00356 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.47	mg/kg	3.22	1.513	mg/kg	0.000151 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.3	mg/kg	1.142	2.627	mg/kg	0.000263 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21	mg/kg	1.462	30.693	mg/kg	0.00307 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		37	mg/kg	1.126	41.658	mg/kg	0.00417 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19	mg/kg	1.56	29.636	mg/kg	0.0019 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4	mg/kg	1.5	6.601	mg/kg	0.00066 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		61	mg/kg	2.976	181.552	mg/kg	0.0182 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.9	mg/kg	1.405	2.669	mg/kg	0.000267 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		110	mg/kg	2.774	305.156	mg/kg	0.0305 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		0.0019 mg/kg		0.0019 mg/kg	0.00000019 %		
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
22	acenaphthylene		205-917-1	208-96-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
23	acenaphthene		201-469-6	83-32-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
24	fluorene		201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
25	phenanthrene		201-581-5	85-01-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
26	anthracene		204-371-1	120-12-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
27	fluoranthene		205-912-4	206-44-0		0.15 mg/kg		0.15 mg/kg	0.000015 %		
28	pyrene		204-927-3	129-00-0		0.23 mg/kg		0.23 mg/kg	0.000023 %		
29	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
30	chrysene	601-048-00-0	205-923-4	218-01-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene		205-883-8	191-24-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
37	phenol	604-001-00-2	203-632-7	108-95-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
								Total:	0.0642 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

toluene: (conc.: 1.9e-07%)

Classification of sample: WS01 (1-2)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS01 (1-2)
Sample Depth:
1.0- 2.0 m
Moisture content:
7.1%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.1% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic trioxide }		15 mg/kg	1.32	19.805 mg/kg	0.00198 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		0.56 mg/kg	3.22	1.803 mg/kg	0.00018 %		
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide }		0.44 mg/kg	1.142	0.503 mg/kg	0.0000503 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide(worst case) }		30 mg/kg	1.462	43.847 mg/kg	0.00438 %		
	215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { dicopper oxide; copper(I) oxide }		28 mg/kg	1.126	31.525 mg/kg	0.00315 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	37 mg/kg	1.56	57.713 mg/kg	0.0037 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate }		67 mg/kg	2.976	199.41 mg/kg	0.0199 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.62 mg/kg	1.405	0.871 mg/kg	0.0000871 %		
	034-002-00-8							
13	zinc { zinc chromate }		95 mg/kg	2.774	263.544 mg/kg	0.0264 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
14	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
	TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X / 216-653-1 / 1634-04-4							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				0.54	mg/kg		0.54	mg/kg	0.000054 %		
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				0.086	mg/kg		0.086	mg/kg	0.0000086 %		
		205-917-1	208-96-8									
23	acenaphthene				0.75	mg/kg		0.75	mg/kg	0.000075 %		
		201-469-6	83-32-9									
24	fluorene				0.73	mg/kg		0.73	mg/kg	0.000073 %		
		201-695-5	86-73-7									
25	phenanthrene				5.6	mg/kg		5.6	mg/kg	0.00056 %		
		201-581-5	85-01-8									
26	anthracene				1.4	mg/kg		1.4	mg/kg	0.00014 %		
		204-371-1	120-12-7									
27	fluoranthene				10	mg/kg		10	mg/kg	0.001 %		
		205-912-4	206-44-0									
28	pyrene				7.4	mg/kg		7.4	mg/kg	0.00074 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				5.1	mg/kg		5.1	mg/kg	0.00051 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				5	mg/kg		5	mg/kg	0.0005 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				8.4	mg/kg		8.4	mg/kg	0.00084 %		
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				3.6	mg/kg		3.6	mg/kg	0.00036 %		
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				8.7	mg/kg		8.7	mg/kg	0.00087 %		
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				7.5	mg/kg		7.5	mg/kg	0.00075 %		
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				0.98	mg/kg		0.98	mg/kg	0.000098 %		
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				5.1	mg/kg		5.1	mg/kg	0.00051 %		
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0687 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS02 (2-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS02 (2-1)
Sample Depth:
0.0-1.0 m
Moisture content:
7.4%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.4% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
3	boron { diboron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		1.3 mg/kg	1.142	1.485 mg/kg	0.000149 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		23 mg/kg	1.126	25.895 mg/kg	0.00259 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	18 mg/kg	1.56	28.077 mg/kg	0.0018 %		
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		42 mg/kg	2.976	125.003 mg/kg	0.0125 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		0.65 mg/kg	1.405	0.913 mg/kg	0.0000913 %		
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		56 mg/kg	2.774	155.352 mg/kg	0.0155 %		
14	TPH (C6 to C40) petroleum group TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				0.043	mg/kg		0.043	mg/kg	0.0000043 %		
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				0.016	mg/kg		0.016	mg/kg	0.0000016 %		
		205-917-1	208-96-8									
23	acenaphthene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		201-469-6	83-32-9									
24	fluorene				0.051	mg/kg		0.051	mg/kg	0.0000051 %		
		201-695-5	86-73-7									
25	phenanthrene				0.29	mg/kg		0.29	mg/kg	0.000029 %		
		201-581-5	85-01-8									
26	anthracene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
		204-371-1	120-12-7									
27	fluoranthene				0.57	mg/kg		0.57	mg/kg	0.000057 %		
		205-912-4	206-440									
28	pyrene				0.48	mg/kg		0.48	mg/kg	0.000048 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				0.62	mg/kg		0.62	mg/kg	0.000062 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				0.48	mg/kg		0.48	mg/kg	0.000048 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				0.84	mg/kg		0.84	mg/kg	0.000084 %		
	601-034-00-4	205-911-9	205-992									
32	benzo[k]fluoranthene				0.69	mg/kg		0.69	mg/kg	0.000069 %		
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				0.85	mg/kg		0.85	mg/kg	0.000085 %		
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				0.49	mg/kg		0.49	mg/kg	0.000049 %		
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				0.65	mg/kg		0.65	mg/kg	0.000065 %		
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0397 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS02 (2-2)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS02 (2-2)
Sample Depth:
1.0-2.0 m
Moisture content:
6.8%
(no correction)

LoW Code:
Chapter: 17. Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.8% NoMoisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide}	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide}	033-003-00-0	215-481-4	1327-53-3		21	mg/kg	1.32	27.727	mg/kg	0.00277 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.5	mg/kg	1.142	1.713	mg/kg	0.000171 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case)}		215-160-9	1308-38-9		18	mg/kg	1.462	26.308	mg/kg	0.00263 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper(I) oxide }	029-002-00-X	215-270-7	1317-39-1		31	mg/kg	1.126	34.903	mg/kg	0.00349 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18	mg/kg	1.56	28.077	mg/kg	0.0018 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.1	mg/kg	1.5	6.151	mg/kg	0.000615 %		
11	nickel { nickel chromate}	028-035-00-7	238-766-5	14721-18-7		58	mg/kg	2.976	172.623	mg/kg	0.0173 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.1	mg/kg	1.405	2.951	mg/kg	0.000295 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		85	mg/kg	2.774	235.802	mg/kg	0.0236 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				0.15	mg/kg		0.15	mg/kg	0.000015 %		
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				0.014	mg/kg		0.014	mg/kg	0.0000014 %		
		205-917-1	208-96-8									
23	acenaphthene				0.038	mg/kg		0.038	mg/kg	0.0000038 %		
		201-469-6	83-32-9									
24	fluorene				0.069	mg/kg		0.069	mg/kg	0.0000069 %		
		201-695-5	86-73-7									
25	phenanthrene				0.34	mg/kg		0.34	mg/kg	0.000034 %		
		201-581-5	85-01-8									
26	anthracene				0.047	mg/kg		0.047	mg/kg	0.0000047 %		
		204-371-1	120-12-7									
27	fluoranthene				0.28	mg/kg		0.28	mg/kg	0.000028 %		
		205-912-4	206-44-0									
28	pyrene				0.28	mg/kg		0.28	mg/kg	0.000028 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				0.36	mg/kg		0.36	mg/kg	0.000036 %		
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				0.16	mg/kg		0.16	mg/kg	0.000016 %		
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				0.34	mg/kg		0.34	mg/kg	0.000034 %		
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				0.34	mg/kg		0.34	mg/kg	0.000034 %		
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				0.082	mg/kg		0.082	mg/kg	0.0000082 %		
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0545 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS03 (3-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS03 (3-1)
Sample Depth:
0.0-1.0 m
Moisture content:
9.4%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.4% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.8	mg/kg	1.32	12.939	mg/kg	0.00129 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1	mg/kg	1.142	1.142	mg/kg	0.000114 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		10	mg/kg	1.462	14.616	mg/kg	0.00146 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19	mg/kg	1.126	21.392	mg/kg	0.00214 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11	mg/kg	1.56	17.158	mg/kg	0.0011 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		32	mg/kg	2.976	95.24	mg/kg	0.00952 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.32	mg/kg	1.405	0.45	mg/kg	0.000045 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		48	mg/kg	2.774	133.159	mg/kg	0.0133 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc.Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		0.09	mg/kg		0.09	mg/kg	0.000009 %		
22	acenaphthylene		205-917-1	208-96-8		0.02	mg/kg		0.02	mg/kg	0.000002 %		
23	acenaphthene		201-469-6	83-32-9		0.1	mg/kg		0.1	mg/kg	0.00001 %		
24	fluorene		201-695-5	86-737		0.14	mg/kg		0.14	mg/kg	0.000014 %		
25	phenanthrene		201-581-5	85-01-8		0.4	mg/kg		0.4	mg/kg	0.00004 %		
26	anthracene		204-371-1	120-12-7		0.19	mg/kg		0.19	mg/kg	0.000019 %		
27	fluoranthene		205-912-4	206-44-0		0.42	mg/kg		0.42	mg/kg	0.000042 %		
28	pyrene		204-927-3	129-00-0		0.34	mg/kg		0.34	mg/kg	0.000034 %		
29	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.22	mg/kg		0.22	mg/kg	0.000022 %		
30	chrysene	601-048-00-0	205-923-4	218-01-9		0.22	mg/kg		0.22	mg/kg	0.000022 %		
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-992		0.28	mg/kg		0.28	mg/kg	0.000028 %		
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.15	mg/kg		0.15	mg/kg	0.000015 %		
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.29	mg/kg		0.29	mg/kg	0.000029 %		
34	indeno[123-cd]pyrene		205-893-2	193-39-5		0.35	mg/kg		0.35	mg/kg	0.000035 %		
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.3	mg/kg		0.3	mg/kg	0.00003 %		
36	benzo[ghi]perylene		205-883-8	191-24-2		0.25	mg/kg		0.25	mg/kg	0.000025 %		
37	phenol	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
										Total :	0.0313 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS3

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS3
Sample Depth:
1.50 m
Moisture content:
8.1%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.1% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic trioxide }		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		0.5 mg/kg	3.22	1.61 mg/kg	0.000161 %		
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide }		0.26 mg/kg	1.142	0.297 mg/kg	0.0000297 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		34 mg/kg	1.462	49.693 mg/kg	0.00497 %		
	215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { dicopper oxide; copper(I) oxide }		100 mg/kg	1.126	112.589 mg/kg	0.0113 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	38 mg/kg	1.56	59.273 mg/kg	0.0038 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate }		78 mg/kg	2.976	232.149 mg/kg	0.0232 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.65 mg/kg	1.405	0.913 mg/kg	0.0000913 %		
	034-002-00-8							
13	zinc { zinc chromate }		130 mg/kg	2.774	360.639 mg/kg	0.0361 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
14	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
	TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X / 216-653-1 / 1634-04-4							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
		201-581-5	85-01-8									
26	anthracene				0.085	mg/kg		0.085	mg/kg	0.0000085 %		
		204-371-1	120-12-7									
27	fluoranthene				0.093	mg/kg		0.093	mg/kg	0.0000093 %		
		205-912-4	206-44-0									
28	pyrene				0.086	mg/kg		0.086	mg/kg	0.0000086 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0835 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS04 (4-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS04 (4-1)
Sample Depth:
0.0-1.0 m
Moisture content:
17%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.4	mg/kg	1.197	2.873	mg/kg	0.000287 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		79	mg/kg	1.32	104.306	mg/kg	0.0104 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.99	mg/kg	1.142	1.131	mg/kg	0.000113 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34	mg/kg	1.462	49.693	mg/kg	0.00497 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		32	mg/kg	1.126	36.028	mg/kg	0.0036 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	50	mg/kg	1.56	77.991	mg/kg	0.005 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4	mg/kg	1.5	5.101	mg/kg	0.00051 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		87	mg/kg	2.976	258.935	mg/kg	0.0259 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.56	mg/kg	1.405	0.787	mg/kg	0.0000787 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		150	mg/kg	2.774	416.122	mg/kg	0.0416 %		
14	TPH (C6 to C40) petroleum group			TPH		570	mg/kg		570	mg/kg	0.057 %		
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene											
	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene											
	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene											
	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene											
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene											
	601-052-00-2	202-049-5	91-20-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthylene											
		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
23	acenaphthene											
		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
24	fluorene											
		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
25	phenanthrene											
		201-581-5	85-01-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
26	anthracene											
		204-371-1	120-12-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
27	fluoranthene											
		205-912-4	206-44-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
28	pyrene											
		204-927-3	129-00-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
29	benzo[a]anthracene											
	601-033-00-9	200-280-6	56-55-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
30	chrysene											
	601-048-00-0	205-923-4	218-01-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene											
	601-034-00-4	205-911-9	205-99-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene											
	601-036-00-5	205-916-6	207-08-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene											
	601-032-00-3	200-028-5	50-32-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene											
		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene											
	601-041-00-2	200-181-8	53-70-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene											
		205-883-8	191-24-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
37	phenol											
	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB											
	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
									Total:	0.15 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.057%)

Classification of sample: WS4

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS4
Sample Depth:
1.80 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes(including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		13 mg/kg	1.32	17.164 mg/kg	0.00172 %		
3	boron { diborontrioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		0.31 mg/kg	1.142	0.354 mg/kg	0.0000354 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } / 215-160-9 / 1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper(I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		41 mg/kg	1.126	46.161 mg/kg	0.00462 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	10 mg/kg	1.56	15.598 mg/kg	0.001 %		
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		26 mg/kg	2.976	77.383 mg/kg	0.00774 %		
12	selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		<0.2 mg/kg	1.405	<0.281 mg/kg	<0.0000281 %		<LOD
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		27 mg/kg	2.774	74.902 mg/kg	0.00749 %		
14	TPH (C6 to C40) petroleum group / TPH		860 mg/kg		860 mg/kg	0.086 %		
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				0.13	mg/kg		0.13	mg/kg	0.000013 %		
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
		201-695-5	86-73-7									
25	phenanthrene				0.35	mg/kg		0.35	mg/kg	0.000035 %		
		201-581-5	85-01-8									
26	anthracene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
		204-371-1	120-12-7									
27	fluoranthene				0.72	mg/kg		0.72	mg/kg	0.000072 %		
		205-912-4	206-44-0									
28	pyrene				0.61	mg/kg		0.61	mg/kg	0.000061 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				0.5	mg/kg		0.5	mg/kg	0.00005 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				0.5	mg/kg		0.5	mg/kg	0.00005 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				0.79	mg/kg		0.79	mg/kg	0.000079 %		
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				0.25	mg/kg		0.25	mg/kg	0.000025 %		
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				0.73	mg/kg		0.73	mg/kg	0.000073 %		
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				0.62	mg/kg		0.62	mg/kg	0.000062 %		
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				0.23	mg/kg		0.23	mg/kg	0.000023 %		
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				0.6	mg/kg		0.6	mg/kg	0.00006 %		
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.112 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous PropertyInformation

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free drain ing liquid p hase

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.086%)

Classification of sample: WS05 (5-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS05 (5-1)
Sample Depth:
0.0-1.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2	mg/kg	1.197	2.394	mg/kg	0.000239 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19	mg/kg	1.32	25.086	mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2	mg/kg	1.142	1.371	mg/kg	0.000137 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		22	mg/kg	1.462	32.154	mg/kg	0.00322 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		27	mg/kg	1.126	30.399	mg/kg	0.00304 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	44	mg/kg	1.56	68.632	mg/kg	0.0044 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.11	mg/kg	1.353	0.149	mg/kg	0.0000149 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.1	mg/kg	1.5	3.15	mg/kg	0.000315 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		48	mg/kg	2.976	142.861	mg/kg	0.0143 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.4	mg/kg	1.405	0.562	mg/kg	0.0000562 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		98	mg/kg	2.774	271.866	mg/kg	0.0272 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	9547-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/ kg	<0.0000942 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthylene		205-917-1	208-968		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
23	acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
24	fluorene		201-695-5	86-73-7		<0 01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
25	phenanthrene		201-581-5	85-018		0.1	m g/kg		0.1	mg/kg	0.00001 %		
26	anthracene		204371-1	120-12-7		0.02	mg/k g		0.02	mg/kg	0.000002 %		
27	fluoranthene		205-912 4	206-44-0		0.09	mg/k g		0.09	mg/kg	0.000009 %		
28	pyrene		204927-3	29-00-0		0.08	mg/k g		0.08	mg/kg	0.000008 %		
29	benzo[a]anthracene	601-033-00-9	200-280-6	56 55-3		<0.01	m g/kg		<0.01	mg/kg	<0.000001 %		<LOD
30	chrysene	601-048-00-0	205-923-4	218-01-9		<0.01	m g/kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.01	m g/kg		<0.01	mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32 8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	5370-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene		205-883-8	191-24 2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
37	phenol	604-001-00-2	203-632-7	08-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
										Total :	0.0568 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS5

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sampledetails

Sample name:
WS5
Sample Depth:
1.8 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14	mg/kg	1.32	18.485	mg/kg	0.00185 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.52	mg/kg	1.142	0.594	mg/kg	0.0000594 %		
5	chromium in chromium(III) compounds { chromium(III) oxide(worst case) }		215-160-9	1308-38-9		26	mg/kg	1.462	38	mg/kg	0.0038 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		140	mg/kg	1.126	157.624	mg/kg	0.0158 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	36	mg/kg	1.56	56.153	mg/kg	0.0036 %		
9	mercury di chloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		61	mg/kg	2.976	181.552	mg/kg	0.0182 %		
12	selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2	mg/kg	1.405	<0.281	mg/kg	<0.0000281 %		<LOD
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		48	mg/kg	2.774	133.159	mg/kg	0.0133 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				0.079	mg/kg		0.079	mg/kg	0.0000079 %		
		205-912-4	206-44-0									
28	pyrene				0.059	mg/kg		0.059	mg/kg	0.0000059 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0585 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS06 (6-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS06 (6-1)
Sample Depth:
0.0-1.0 m
Moisture content:
8.4%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.4% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		25 mg/kg	1.32	33.008 mg/kg	0.0033 %		
3	boron { diboron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		1.4 mg/kg	1.142	1.599 mg/kg	0.00016 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38-9		21 mg/kg	1.462	30.693 mg/kg	0.00307 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		25 mg/kg	1.126	28.147 mg/kg	0.00281 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	24 mg/kg	1.56	37.436 mg/kg	0.0024 %		
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		65 mg/kg	2.976	193.457 mg/kg	0.0193 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		0.4 mg/kg	1.405	0.562 mg/kg	0.0000562 %		
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		160 mg/kg	2.774	443.863 mg/kg	0.0444 %		
14	TPH (C6 to C40) petroleum group TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.00 1	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00 3	203 625 9	108-88-3		<0.001	mg/k g		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202 849 4	100-41-4		<0.001	mg/k g		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/k g		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}	006-007-00-5				<0.5	m g/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
21	naphthalene	601-052-002	202049-5	91-20-3		<0.01	m g/kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthylene		205917-1	208-96-8		<0.01	m g/kg		<0.01	mg/kg	<0.000001%		<LOD
23	acenaphthene		201-469-6	83 32-9		<0.01	m g/kg		<0.01	mg/kg	<0.000001 %		<LOD
24	fluorene		201695-5	86-73-7		<0.01	m g/kg		<0.01	mg/kg	<0.000001 %		<LOD
25	phenanthrene		201-581-5	85 01-8		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
26	anthracene		204-371 1	120 12-7		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
27	fluoranthene		205-912-4	206-44-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
28	pyrene		204-927-3	129-00-0		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
29	benzo[a]anthracene	601-033 00-9	200-280-6	56-55 3		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
30	chrysene	601-048-00-0	205-923-4	218-01-9		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene	601034-00-4	205-911-9	20599-2		<0.01	mg/ kg		<0 01	mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene	601-036 00-5	205-916-6	207-08 9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene	601-032 00 -3	200-028-5	50-328		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70 3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene		205-883-8	191-24 2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
37	phenol	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00 4	215 648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
										Total.	0.0774 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS06 (6-2)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS06 (6- 2)
Sample Depth:
1.0-2 0 m
Moisture content:
9.3%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (ncluding excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.3% No Moisture C orrectn applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Facto r	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimonytrioxide }	51-005-00-X	2 5-175-0	309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { rsenic trioxi de}	033 003-00-0	215-481-4	1327 53-3		26	mg/ kg	1.32	34.328	mg/kg	0.00343 %		
3	boron { diboron trioxide; boric oxide }	005 008-00-8	215-125-8	1303 86-2		<0.4	mg/ kg	3.22	1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	2 5- 46-2	1306-19-0		1.2	mg/ kg	1.142	1.371	mg/kg	0.000137 %		
5	chromium in chromium(III) compounds { hromium(III) oxide (worst case) }		215-160-9	1308 38-9		28	mg/ kg	1.462	40.924	mg/kg	0.00409 %		
6	chromium in chromium(VI) compounds { chromi um(VI) oxide}	024001-00-0	2 5-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { d icopperoxide; copper I) oxide }	029-002 00-X	215-270-7	1317 39 1		31	mg/kg	1.126	34.903	mg/kg	0.00349 %		
8	lead { lead chromate }	082004-00-2	231846-0	758-97-6	1	29	mg/kg	1.56	45.235	mg/kg	0.0029 %		
9	mercury { mercury dichlor ide}	080010-00-X	231299-8	748794-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001 00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238766-5	14721-18-7		77	mg/kg	2.976	229.172	mg/kg	0.0229 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.4	mg/kg	1.405	1.967	mg/kg	0.000197 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		350	mg/kg	2.774	970.951	mg/kg	0.0971 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		205-912-4	206-44-0									
28	pyrene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.136 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS07 (7-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS07 (7-1)
Sample Depth:
0.0-1.0 m
Moisture content:
9.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.9% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19	mg/kg	1.32	25.086	mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.42	mg/kg	1.142	0.48	mg/kg	0.000048 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		40	mg/kg	1.462	58.462	mg/kg	0.00585 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		38	mg/kg	1.126	42.784	mg/kg	0.00428 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	28	mg/kg	1.56	43.675	mg/kg	0.0028 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		84	mg/kg	2.976	250.006	mg/kg	0.025 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.27	mg/kg	1.405	0.379	mg/kg	0.0000379 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		98	mg/kg	2.774	271.866	mg/kg	0.0272 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		0.0014	mg/kg		0.0014	mg/kg	0.00000014 %		
17	toluene	601-021-00-3	203-625-9	108-88-3		0.0094	mg/kg		0.0094	mg/kg	0.00000094 %		
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	9547-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
23	acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
24	fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
25	phenanthrene		201-581-5	85-01-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
26	anthracene		204-371-1	120-12-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
27	fluoranthene		205-912-4	206-44-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
28	pyrene		204-927-3	129-00-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
29	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
30	chrysene	601-048-00-0	205-923-4	218-01-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene		205-883-8	191-24-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
37	phenol	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
										Total:	0.0696 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

benzene: (conc.: 1.4e-07%)
toluene: (conc.: 9.4e-07%)

Classification of sample: WS07 (7-2)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS07 (7-2)
Sample Depth:
1.0-2.0 m
Moisture content:
8.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.6% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
3	boron { dibo ron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		0.33 mg/kg	1.142	0.377 mg/kg	0.0000377 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } / 215-160-9 / 1308-38-9		37 mg/kg	1.462	54.078 mg/kg	0.00541 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		33 mg/kg	1.126	37.154 mg/kg	0.00372 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	31 mg/kg	1.56	48.354 mg/kg	0.0031 %		
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		79 mg/kg	2.976	235.125 mg/kg	0.0235 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		0.4 mg/kg	1.405	0.562 mg/kg	0.0000562 %		
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		140 mg/kg	2.774	388.381 mg/kg	0.0388 %		
14	TPH (C6 to C40) petroleum group / TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0787 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS08 (8-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS08 (8-1)
Sample Depth:
0.0-1.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		12 mg/kg	1.32	15.844 mg/kg	0.00158 %		
3	boron { diboron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		0.41 mg/kg	3.22	1.32 mg/kg	0.000132 %		
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		0.19 mg/kg	1.142	0.217 mg/kg	0.0000217 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38-9		31 mg/kg	1.462	45.308 mg/kg	0.00453 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		20 mg/kg	1.126	22.518 mg/kg	0.00225 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	25 mg/kg	1.56	38.995 mg/kg	0.0025 %		
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		65 mg/kg	2.976	193.457 mg/kg	0.0193 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		0.2 mg/kg	1.405	0.281 mg/kg	0.0000281 %		
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		92 mg/kg	2.774	255.221 mg/kg	0.0255 %		
14	TPH (C6 to C40) petroleum group TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0577 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS8

Non Hazardous Waste
Classified as **17 0504**
in the List of Waste

Sample details

Sample name:
WS8
Sample Depth:
1.10 m
Moisture content:
2.7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 2.7% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11	mg/kg	1.32	14.524	mg/kg	0.00145 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.42	mg/kg	3.22	1.352	mg/kg	0.000135 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.3	mg/kg	1.142	1.485	mg/kg	0.000149 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		17	mg/kg	1.462	24.846	mg/kg	0.00248 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper ( ) oxide }	029-002-00-X	215-270-7	1317-39-1		39	mg/kg	1.126	43.91	mg/kg	0.00439 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	35	mg/kg	1.56	54.594	mg/kg	0.0035 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.13	mg/kg	1.353	0.176	mg/kg	0.0000176 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.1	mg/kg	1.5	3.15	mg/kg	0.000315 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26	mg/kg	2.976	77.383	mg/kg	0.00774 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.77	mg/kg	1.405	1.082	mg/kg	0.000108 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		77	mg/kg	2.774	213.609	mg/kg	0.0214 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				0.63	mg/kg		0.63	mg/kg	0.000063 %		
		201-581-5	85-01-8									
26	anthracene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
		204-371-1	120-12-7									
27	fluoranthene				0.6	mg/kg		0.6	mg/kg	0.00006 %		
		205-912-4	206-44-0									
28	pyrene				0.56	mg/kg		0.56	mg/kg	0.000056 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				0.29	mg/kg		0.29	mg/kg	0.000029 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				0.36	mg/kg		0.36	mg/kg	0.000036 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				0.37	mg/kg		0.37	mg/kg	0.000037 %		
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				0.13	mg/kg		0.13	mg/kg	0.000013 %		
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				0.29	mg/kg		0.29	mg/kg	0.000029 %		
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0435 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS09 (9-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS09 (9-1)
Sample Depth:
0.0-1.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17	mg/kg	1.32	22.446	mg/kg	0.00224 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.65	mg/kg	1.142	0.743	mg/kg	0.0000743 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		32	mg/kg	1.462	46.77	mg/kg	0.00468 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		32	mg/kg	1.126	36.028	mg/kg	0.0036 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	26	mg/kg	1.56	40.555	mg/kg	0.0026 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		70	mg/kg	2.976	208.339	mg/kg	0.0208 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.24	mg/kg	1.405	0.337	mg/kg	0.0000337 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		110	mg/kg	2.774	305.156	mg/kg	0.0305 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001%		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0665 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS9

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS9
Sample Depth:
2.00 m
Moisture content:
7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16	mg/kg	1.32	21.125	mg/kg	0.00211 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.32	mg/kg	1.142	0.366	mg/kg	0.0000366 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		31	mg/kg	1.462	45.308	mg/kg	0.00453 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper(I) oxide }	029-002-00-X	215-270-7	1317-39-1		170	mg/kg	1.126	191.401	mg/kg	0.0191 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	39	mg/kg	1.56	60.833	mg/kg	0.0039 %		
9	mercury { mercurydichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		75	mg/kg	2.976	223.22	mg/kg	0.0223 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.32	mg/kg	1.405	0.45	mg/kg	0.000045 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		110	mg/kg	2.774	305.156	mg/kg	0.0305 %		
14	TPH (C6 to C40) petroleum group			TPH		140	mg/kg		140	mg/kg	0.014 %		
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				0.0012	mg/kg		0.0012	mg/kg	0.00000012 %		
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				0.25	mg/kg		0.25	mg/kg	0.000025 %		
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				0.41	mg/kg		0.41	mg/kg	0.000041 %		
		201-469-6	83-32-9									
24	fluorene				0.3	mg/kg		0.3	mg/kg	0.00003 %		
		201-695-5	86-73-7									
25	phenanthrene				3.5	mg/kg		3.5	mg/kg	0.00035 %		
		201-581-5	85-01-8									
26	anthracene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
		204-371-1	120-12-7									
27	fluoranthene				8.5	mg/kg		8.5	mg/kg	0.00085 %		
		205-912-4	206-44-0									
28	pyrene				6.7	mg/kg		6.7	mg/kg	0.00067 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				4.8	mg/kg		4.8	mg/kg	0.00048 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				4.6	mg/kg		4.6	mg/kg	0.00046 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				7.6	mg/kg		7.6	mg/kg	0.00076 %		
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				2	mg/kg		2	mg/kg	0.0002 %		
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				6.5	mg/kg		6.5	mg/kg	0.00065 %		
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				5.2	mg/kg		5.2	mg/kg	0.00052 %		
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				0.86	mg/kg		0.86	mg/kg	0.000086 %		
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				4.2	mg/kg		4.2	mg/kg	0.00042 %		
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.103 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

TPH (C6 to C40) petroleum group: (conc.: 0.014%)
xylene: (conc.: 1.2e-07%)

Classification of sample: WS10 (10-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS10 (10-1)
Sample Depth:
0.6-1.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	17.164 mg/kg	0.00172 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2 mg/kg	1.142	1.371 mg/kg	0.000137 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		10 mg/kg	1.462	14.616 mg/kg	0.00146 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19 mg/kg	1.126	21.392 mg/kg	0.00214 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	8.8 mg/kg	1.56	13.726 mg/kg	0.00088 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.2 mg/kg	1.5	3.3 mg/kg	0.00033 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31 mg/kg	2.976	92.264 mg/kg	0.00923 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.1 mg/kg	1.405	1.546 mg/kg	0.000155 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		57 mg/kg	2.774	158.126 mg/kg	0.0158 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene											
	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene											
	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene											
	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene											
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene											
	601-052-00-2	202-049-5	91-20-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthylene											
		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
23	acenaphthene											
		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
24	fluorene											
		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
25	phenanthrene											
		201-581-5	85-01-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
26	anthracene											
		204-371-1	120-12-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
27	fluoranthene											
		205-912-4	206-44-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
28	pyrene											
		204-927-3	129-00-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
29	benzo[a]anthracene											
	601-033-00-9	200-280-6	56-55-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
30	chrysene											
	601-048-00-0	205-923-4	218-01-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene											
	601-034-00-4	205-911-9	205-99-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene											
	601-036-00-5	205-916-6	207-08-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene											
	601-032-00-3	200-028-5	50-32-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene											
		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene											
	601-041-00-2	200-181-8	53-70-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene											
		205-883-8	191-24-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
37	phenol											
	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB											
	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
									Total:	0.0335 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS10 (10-2)

Non Hazardous Waste
Classified as **17 0504**
in the List of Waste

Sample details

Sample name:
WS10 (10-2)
Sample Depth:
1.0-2.0 m
Moisture content:
8.8%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.8% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		4.6 mg/kg	1.197	5.507 mg/kg	0.000551 %		
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
3	boron { diboron trioxide; boric oxide } 005-007-00-8 / 215-125-8 / 1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		1.5 mg/kg	1.142	1.713 mg/kg	0.000171 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38-9		20 mg/kg	1.462	29.231 mg/kg	0.00292 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		28 mg/kg	1.126	31.525 mg/kg	0.00315 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	29 mg/kg	1.56	45.235 mg/kg	0.0029 %		
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		3 mg/kg	1.5	4.501 mg/kg	0.00045 %		
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		55 mg/kg	2.976	163.695 mg/kg	0.0164 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		<0.2 mg/kg	1.405	<0.281 mg/kg	<0.0000281 %		<LOD
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		79 mg/kg	2.774	219.158 mg/kg	0.0219 %		
14	TPH (C6 to C40) petroleum group TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0519 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS11 (11-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS11 (11-1)
Sample Depth:
0.0-1.0 m
Moisture content:
7.3%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.3% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		2.8 mg/kg	1.197	3.352 mg/kg	0.000335 %		
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		1.5 mg/kg	1.142	1.713 mg/kg	0.000171 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38-9		17 mg/kg	1.462	24.846 mg/kg	0.00248 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		32 mg/kg	1.126	36.028 mg/kg	0.0036 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	21 mg/kg	1.56	32.756 mg/kg	0.0021 %		
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		3 mg/kg	1.5	4.501 mg/kg	0.00045 %		
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		56 mg/kg	2.976	166.671 mg/kg	0.0167 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		1.7 mg/kg	1.405	2.389 mg/kg	0.000239 %		
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		86 mg/kg	2.774	238.577 mg/kg	0.0239 %		
14	TPH (C6 to C40) petroleum group TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-476 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthylene		205-917-1	208-968		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
23	acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
24	fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
25	phenanthrene		201-581-5	85-01-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
26	anthracene		204-371-1	120-12-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
27	fluoranthene		205-912-4	206-44-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
28	pyrene		204-927-3	129-00-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
29	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
30	chrysene	601-048-00-0	205-923-4	218-01-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-992		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene		205-883-8	191-24-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
37	phenol	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
										Total:	0.0538 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS11 (11-2)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS11 (11 -2)
Sample Depth:
1.0-2 0 m
Moisture content:
7.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.6% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLPindex number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		<2 mg/ kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327 53-3		15 mg/kg	1.32	19.805 mg/kg	0.00198 %		
3	boron { diboron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303 86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048002-00-0 / 215-146-2 / 1306-19-0		0.79 mg/kg	1.142	0.902 mg/kg	0.0000902 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38 9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { ch romium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0. 962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; coppe r(I) oxide } 029-002-00 X / 215-270-7 / 1317-39 1		21 mg/kg	1.126	23.644 mg/kg	0.00236 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758 97-6	1	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
9	mercury { mercury d ichloride} 080-010-00-X / 231-299-8 / 7487 94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { mol ybdenum(VI) oxide } 042-001-00 9 / 215-204-7 / 1313-27 5		2.9 mg/kg	1.5	4.351 mg/kg	0.000435 %		
11	nickel { nickel chromate } 028-035-00 7 / 238-766-5 / 14721-18-7		47 mg/kg	2.976	139.884 mg/kg	0.014 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		0.78 mg/kg	1.405	1.096 mg/ kg	0.00011 %		
13	zinc { zinc chromate } 024007-00-3 / 236-878-9 / 8530-65-9		72 mg/kg	2.774	199.739 mg/ kg	0.02 %		
14	TPH (C6 to C40) petroleum group TPH		<10 mg/kg		<10 mg/kg	<0 001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603- 81-00-X / 216-653-1 / 634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
22	acenaphthylene		205-917-1	208-96-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
23	acenaphthene		201-469-6	83-32-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
24	fluorene		201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
25	phenanthrene		201-581-5	85-01-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
26	anthracene		204-371-1	120-12-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
27	fluoranthene		205-912-4	206-44-0		0.13 mg/kg		0.13 mg/kg	0.000013 %		
28	pyrene		204-927-3	129-00-0		0.12 mg/kg		0.12 mg/kg	0.000012 %		
29	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.07 mg/kg		0.07 mg/kg	0.000007 %		
30	chrysene	601-048-00-0	205-923-4	218-01-9		0.08 mg/kg		0.08 mg/kg	0.000008 %		
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene		205-883-8	191-24-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
37	phenol	604-001-00-2	203-632-7	108-95-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
								Total:	0.0445 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS12 (12-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS12 (12-1)
Sample Depth:
0.0-1.0 m
Moisture content:
7.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.9% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14	mg/kg	1.32	18.485	mg/kg	0.00185 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.7	mg/kg	3.22	8.694	mg/kg	0.000869 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		22	mg/kg	1.462	32.154	mg/kg	0.00322 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22	mg/kg	1.126	24.77	mg/kg	0.00248 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15	mg/kg	1.56	23.397	mg/kg	0.0015 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.3	mg/kg	1.5	3.45	mg/kg	0.000345 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		46	mg/kg	2.976	136.908	mg/kg	0.0137 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.72	mg/kg	1.405	1.012	mg/kg	0.000101 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		110	mg/kg	2.774	305.156	mg/kg	0.0305 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CASNumber									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-883									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
		205-917-1	208-96-8									
23	acenaphthene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
		201-469-6	83-32-9									
24	fluorene				0.13	mg/kg		0.13	mg/kg	0.000013 %		
		201-695-5	86-73-7									
25	phenanthrene				0.42	mg/kg		0.42	mg/kg	0.000042 %		
		201-581-5	85-01-8									
26	anthracene				0.13	mg/kg		0.13	mg/kg	0.000013 %		
		204-371-1	120-12-7									
27	fluoranthene				0.31	mg/kg		0.31	mg/kg	0.000031 %		
		205-912-4	206-44-0									
28	pyrene				0.25	mg/kg		0.25	mg/kg	0.000025 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				0.14	mg/kg		0.14	mg/kg	0.000014 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				0.16	mg/kg		0.16	mg/kg	0.000016 %		
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				0.07	mg/kg		0.07	mg/kg	0.000007 %		
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total :	0.0564 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS12

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS12
Sample Depth:
1.4 m
Moisture content:
8%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8% No MoistureCorrection applied(MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide}	051-005-00-X	215-175-0	1309-64-4		2.2 mg/kg	1.197	2.634 mg/kg	0.000263 %		
2	arsenic { arsenic trioxide}	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.48 mg/kg	3.22	1.546 mg/kg	0.000155 %		
4	cadmium { cadmium oxide}	048-002-00-0	215-146-2	1306-19-0		0.92 mg/kg	1.142	1.051 mg/kg	0.000105 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21 mg/kg	1.462	30.693 mg/kg	0.00307 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper(I) oxide }	029-002-00-X	215-270-7	1317-39-1		97 mg/kg	1.126	109.211 mg/kg	0.0109 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	26 mg/kg	1.56	40.555 mg/kg	0.0026 %		
9	mercury { mercury dichloride}	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.7 mg/kg	1.5	4.051 mg/kg	0.000405 %		
11	nickel { nickel chromate}	028-035-00-7	238-766-5	14721-18-7		58 mg/kg	2.976	172.623 mg/kg	0.0173 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.9 mg/kg	1.405	2.669 mg/kg	0.000267 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		83 mg/kg	2.774	230.254 mg/kg	0.023 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		0.0018	mg/kg		0.0018	mg/kg	0.00000018 %		
17	toluene	601-021-00-3	203-625-9	108-88-3		0.0067	mg/kg		0.0067	mg/kg	0.00000067 %		
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		0.0066	mg/kg		0.0066	mg/kg	0.00000066 %		
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		0.3	mg/kg		0.3	mg/kg	0.00003 %		
22	acenaphthylene		205-917-1	208-96-8		0.13	mg/kg		0.13	mg/kg	0.000013 %		
23	acenaphthene		201-469-6	83-32-9		0.16	mg/kg		0.16	mg/kg	0.000016 %		
24	fluorene		201-695-5	86-73-7		0.17	mg/kg		0.17	mg/kg	0.000017 %		
25	phenanthrene		201-581-5	85-01-8		0.56	mg/kg		0.56	mg/kg	0.000056 %		
26	anthracene		204-371-1	120-12-7		0.21	mg/kg		0.21	mg/kg	0.000021 %		
27	fluoranthene		205-912-4	206-44-0		0.67	mg/kg		0.67	mg/kg	0.000067 %		
28	pyrene		204-927-3	129-00-0		0.62	mg/kg		0.62	mg/kg	0.000062 %		
29	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.29	mg/kg		0.29	mg/kg	0.000029 %		
30	chrysene	601-048-00-0	205-923-4	218-01-9		0.27	mg/kg		0.27	mg/kg	0.000027 %		
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.37	mg/kg		0.37	mg/kg	0.000037 %		
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.18	mg/kg		0.18	mg/kg	0.000018 %		
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.28	mg/kg		0.28	mg/kg	0.000028 %		
34	indeno[123-cd]pyrene		205-893-2	193-39-5		0.21	mg/kg		0.21	mg/kg	0.000021 %		
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.085	mg/kg		0.085	mg/kg	0.0000085 %		
36	benzo[ghi]perylene		205-883-8	191-24-2		0.25	mg/kg		0.25	mg/kg	0.000025 %		
37	phenol	604-001-00-2	203-632-7	108-95-2		2.2	mg/kg		2.2	mg/kg	0.00022 %		
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
										Total:	0.0625 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplemen taryHazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as thisis a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

benzene: (conc.: 1.8e-07%)
toluene: (conc.: 6.7e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

xylene: (conc.: 6.6e-07%)

Classification of sample: WS13 (13-1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS13 (13-1)
Sample Depth:
0.0-1.0 m
Moisture content:
9.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.6% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
3	boron { diboron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		1.5 mg/kg	1.142	1.713 mg/kg	0.000171 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		27 mg/kg	1.126	30.399 mg/kg	0.00304 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	28 mg/kg	1.56	43.675 mg/kg	0.0028 %		
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		2.5 mg/kg	1.5	3.75 mg/kg	0.000375 %		
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		46 mg/kg	2.976	136.908 mg/kg	0.0137 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		<0.2 mg/kg	1.405	<0.281 mg/kg	<0.0000281 %		<LOD
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		62 mg/kg	2.774	171.997 mg/kg	0.0172 %		
14	TPH (C6 to C40) petroleum group TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene											
	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene											
	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene											
	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene											
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene											
	601-052-00-2	202-049-5	91-20-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthylene											
		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
23	acenaphthene											
		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
24	fluorene											
		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
25	phenanthrene											
		201-581-5	85-01-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
26	anthracene											
		204-371-1	120-12-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
27	fluoranthene											
		205-912-4	206-44-0		0.13	mg/kg		0.13	mg/kg	0.000013 %		
28	pyrene											
		204-927-3	129-00-0		0.13	mg/kg		0.13	mg/kg	0.000013 %		
29	benzo[a]anthracene											
	601-033-00-9	200-280-6	56-55-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
30	chrysene											
	601-048-00-0	205-923-4	218-01-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene											
	601-034-00-4	205-911-9	205-99-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene											
	601-036-00-5	205-916-6	207-08-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene											
	601-032-00-3	200-028-5	50-32-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene											
		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene											
	601-041-00-2	200-181-8	53-70-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene											
		205-883-8	191-24-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
37	phenol											
	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB											
	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
									Total :	0.0432 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS13

Non Hazardous Waste
Classified as **17 0 504**
in the List of Waste

Sample details

Sample name:
WS13
Sample Depth:
1.0-1.5 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic tri oxide}		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron tri oxide;boric oxide }		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide}		0.57 mg/kg	1.142	0.651 mg/kg	0.0000651 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		30 mg/kg	1.462	43.847 mg/kg	0.00438 %		
	215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { di copper oxide; copper(I) oxide }		94 mg/kg	1.126	105.834 mg/kg	0.0106 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	21 mg/kg	1.56	32.756 mg/kg	0.0021 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate}		72 mg/kg	2.976	214.291 mg/kg	0.0214 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.25 mg/kg	1.405	0.351 mg/kg	0.0000351 %		
	034-002-00-8							
13	zinc { zinc chromate }		60 mg/kg	2.774	166.449 mg/kg	0.0166 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
14	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
	TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X / 216-653-1 / 1634-04-4							

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
22	acenaphthylene		205-917-1	208-96-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
23	acenaphthene		201-469-6	83-32-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
24	fluorene		201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
25	phenanthrene		201-581-5	85-01-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
26	anthracene		204-371-1	120-12-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
27	fluoranthene		205-912-4	206-44-0		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
28	pyrene		204-927-3	129-00-0		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
29	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
30	chrysene	601-048-00-0	205-923-4	218-01-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene		205-883-8	191-24-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
37	phenol	604-001-00-2	203-632-7	108-95-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
								Total:	0.0596 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS14

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS14
Sample Depth:
1.0-1.6 m
Moisture content:
9.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.9% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.4	mg/kg	1.197	2.873	mg/kg	0.000287 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15	mg/kg	1.32	19.805	mg/kg	0.00198 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.29	mg/kg	1.142	0.331	mg/kg	0.0000331 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26	mg/kg	1.462	38	mg/kg	0.0038 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		17	mg/kg	1.126	19.14	mg/kg	0.00191 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	26	mg/kg	1.56	40.555	mg/kg	0.0026 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		47	mg/kg	2.976	139.884	mg/kg	0.014 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.44	mg/kg	1.405	0.618	mg/kg	0.0000618 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		65	mg/kg	2.774	180.32	mg/kg	0.018 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene											
	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene											
	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene											
	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene											
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhe rein this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene											
	601-052-00-2	202-049-5	91-20-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthylene											
		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
23	acenaphthene											
		201-469-6	83-329		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
24	fluorene											
		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
25	phenanthrene											
		201-581-5	85-01-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
26	anthracene											
		204-371-1	120-12-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
27	fluoranthene											
		205-912-4	206-44-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
28	pyrene											
		204-927-3	129-00-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
29	benzo[a]anthracene											
	601-033-00-9	200-280-6	56-55-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
30	chrysene											
	601-048-00-0	205-923-4	218-01-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene											
	601-034-00-4	205-911-9	205-99-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene											
	601-036-00-5	205-916-6	207-08-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene											
	601-032-00-3	200-028-5	50-32-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene											
		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene											
	601-041-00-2	200-181-8	53-70-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene											
		205-883-8	191-24-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
37	phenol											
	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB											
	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
									Total:	0.0444 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS15

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS15
Sample Depth:
1.0- 2.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13	mg/kg	1.32	17.164	mg/kg	0.00172 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.7	mg/kg	1.142	1.942	mg/kg	0.000194 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		17	mg/kg	1.462	24.846	mg/kg	0.00248 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { di copper oxide; copper(I) oxide }	029-002-00-X	215-270-7	1317-39-1		27	mg/kg	1.126	30.399	mg/kg	0.00304 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14	mg/kg	1.56	21.837	mg/kg	0.0014 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.1	mg/kg	1.5	3.15	mg/kg	0.000315 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		39	mg/kg	2.976	116.074	mg/kg	0.0116 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.55	mg/kg	1.405	0.773	mg/kg	0.0000773 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		65	mg/kg	2.774	180.32	mg/kg	0.018 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
22	acenaphthylene		205-917-1	208-96-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
23	acenaphthene		201-469-6	83-32-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
24	fluorene		201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
25	phenanthrene		201-581-5	85-01-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
26	anthracene		204-371-1	120-12-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
27	fluoranthene		205-912-4	206-44-0		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
28	pyrene		204-927-3	129-00-0		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
29	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
30	chrysene	601-048-00-0	205-923-4	218-01-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene		205-883-8	191-24-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
37	phenol	604-001-00-2	203-632-7	108-95-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
								Total:	0.0405 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 16

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS 16
Sample Depth:
1.0-1.5 m
Moisture content:
2.3%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 2.3% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		17 mg/kg	1.32	22.446 mg/kg	0.00224 %		
3	boron { diboron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		0.74 mg/kg	1.142	0.845 mg/kg	0.0000845 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38-9		3.6 mg/kg	1.462	5.262 mg/kg	0.000526 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		9.9 mg/kg	1.126	11.146 mg/kg	0.00111 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	49 mg/kg	1.56	76.431 mg/kg	0.0049 %		
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		15 mg/kg	2.976	44.644 mg/kg	0.00446 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		<0.2 mg/kg	1.405	<0.281 mg/kg	<0.0000281 %		<LOD
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		33 mg/kg	2.774	91.547 mg/kg	0.00915 %		
14	TPH (C6 to C40) petroleum group TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewherein this Annex}				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				0.17	mg/kg		0.17	mg/kg	0.000017 %		
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				0.042	mg/kg		0.042	mg/kg	0.0000042 %		
		201-469-6	83-32-9									
24	fluorene				0.045	mg/kg		0.045	mg/kg	0.0000045 %		
		201-695-5	86-73-7									
25	phenanthrene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
		201-581-5	85-01-8									
26	anthracene				0.033	mg/kg		0.033	mg/kg	0.0000033 %		
		204-371-1	120-12-7									
27	fluoranthene				0.088	mg/kg		0.088	mg/kg	0.0000088 %		
		205-912-4	206-44-0									
28	pyrene				0.098	mg/kg		0.098	mg/kg	0.0000098 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				0.046	mg/kg		0.046	mg/kg	0.0000046 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				0.086	mg/kg		0.086	mg/kg	0.0000086 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				0.063	mg/kg		0.063	mg/kg	0.0000063 %		
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				0.044	mg/kg		0.044	mg/kg	0.0000044 %		
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				0.054	mg/kg		0.054	mg/kg	0.0000054 %		
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				0.071	mg/kg		0.071	mg/kg	0.0000071 %		
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				0.067	mg/kg		0.067	mg/kg	0.0000067 %		
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				0.082	mg/kg		0.082	mg/kg	0.0000082 %		
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.02 45%		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 17

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
W S17
Sample Depth:
0.7 to 1.4 m
Moisture content:
4.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 4.9% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic trioxide }		21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.00129 %		<LOD
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide }		0.54 mg/kg	1.142	0.617 mg/kg	0.0000617 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		4.4 mg/kg	1.462	6.431 mg/kg	0.000643 %		
	215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }		99 mg/kg	1.126	11.146 mg/kg	0.00111 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate }		22 mg/kg	2.976	65.478 mg/kg	0.00655 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<0.2 mg/kg	1.405	<0.281 mg/kg	<0.0000281 %		<LOD
	034-002-00-8							
13	zinc { zinc chromate }		45 mg/kg	2.774	124.837 mg/kg	0.0125 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X / 216-653-1 / 1634-04-4							
15	benzene		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8 / 200-753-7 / 71-43-2							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
17	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
18	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
20	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
21	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
22	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
23	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
24	phenanthrene				0.041	mg/kg		0.041	mg/kg	0.0000041 %		
		201-581-5	85-01-8									
25	anthracene				0.024	mg/kg		0.024	mg/kg	0.0000024 %		
		204-371-1	120-12-7									
26	fluoranthene				0.089	mg/kg		0.089	mg/kg	0.0000089 %		
		205-912-4	206-44-0									
27	pyrene				0.076	mg/kg		0.076	mg/kg	0.0000076 %		
		204-927-3	129-00-0									
28	benzo[a]anthracene				0.043	mg/kg		0.043	mg/kg	0.0000043 %		
	601-033-00-9	200-280-6	56-55-3									
29	chrysene				0.048	mg/kg		0.048	mg/kg	0.0000048 %		
	601-048-00-0	205-923-4	218-01-9									
30	benzo[b]fluoranthene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
	601-034-00-4	205-911-9	205-99-2									
31	benzo[k]fluoranthene				0.023	mg/kg		0.023	mg/kg	0.0000023 %		
	601-036-00-5	205-916-6	207-08-9									
32	benzo[a]pyrene; benzo[def]chrysene				0.038	mg/kg		0.038	mg/kg	0.0000038 %		
	601-032-00-3	200-028-5	50-32-8									
33	indeno[123-cd]pyrene				0.052	mg/kg		0.052	mg/kg	0.0000052 %		
		205-893-2	193-39-5									
34	dibenz[a,h]anthracene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
	601-041-00-2	200-181-8	53-70-3									
35	benzo[ghi]perylene				0.032	mg/kg		0.032	mg/kg	0.0000032 %		
		205-883-8	191-24-2									
36	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
37	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
38	diesel petroleum group				6200	mg/kg		6200	mg/kg	0.62 %		
			68334-30-5, 68476-34-6, 94114-59-7, 1159170-26-9									
									Total:	0.647 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discountedas this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

diesel petroleum group: (conc.: 0.62%)

Classification of sample: WS18

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS18
Sample Depth:
1.0-2.0 m
Moisture content:
15%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12	mg/kg	1.32	15.844	mg/kg	0.00158 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.5	mg/kg	1.142	1.713	mg/kg	0.000171 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		9.9	mg/kg	1.462	14.469	mg/kg	0.00145 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		30	mg/kg	1.126	33.777	mg/kg	0.00338 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14	mg/kg	1.56	21.837	mg/kg	0.0014 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3	mg/kg	1.5	4.501	mg/kg	0.00045 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35	mg/kg	2.976	104.169	mg/kg	0.0104 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.32	mg/kg	1.405	0.45	mg/kg	0.000045 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		68	mg/kg	2.774	188.642	mg/kg	0.0189 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc.Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0394 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 19

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS 19
Sample Depth:
1.0- 2.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic trioxide }		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide }		2.4 mg/kg	1.142	2.742 mg/kg	0.000274 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		9.8 mg/kg	1.462	14.323 mg/kg	0.00143 %		
	/ 215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { dicopper oxide; copper(I) oxide }		31 mg/kg	1.126	34.903 mg/kg	0.00349 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	16 mg/kg	1.56	24.957 mg/kg	0.0016 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		5.1 mg/kg	1.5	7.651 mg/kg	0.000765 %		
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate }		38 mg/kg	2.976	113.098 mg/kg	0.0113 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.71 mg/kg	1.405	0.998 mg/kg	0.0000998 %		
	034-002-00-8 / /							
13	zinc { zinc chromate }		61 mg/kg	2.774	169.223 mg/kg	0.0169 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
14	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
	/ / TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X / 216-653-1 / 1634-04-4							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				0.034	mg/kg		0.034	mg/kg	0.0000034 %		
		201-581-5	85-01-8									
26	anthracene				0.013	mg/kg		0.013	mg/kg	0.0000013 %		
		204-371-1	120-12-7									
27	fluoranthene				0.021	mg/kg		0.021	mg/kg	0.0000021 %		
		205-912-4	206-44-0									
28	pyrene				0.041	mg/kg		0.041	mg/kg	0.0000041 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				0.023	mg/kg		0.023	mg/kg	0.0000023 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				0.036	mg/kg		0.036	mg/kg	0.0000036 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0396 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS 20
Sample Depth:
1.0-1.6 m
Moisture content:
6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1	mg/kg	1.197	2.514	mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		29	mg/kg	1.32	38.289	mg/kg	0.00383 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.75	mg/kg	1.142	0.857	mg/kg	0.0000857 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		13	mg/kg	1.462	19	mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19	mg/kg	1.126	21.392	mg/kg	0.00214 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	36	mg/kg	1.56	56.153	mg/kg	0.0036 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		40	mg/kg	2.976	119.051	mg/kg	0.0119 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2	mg/kg	1.405	<0.281	mg/kg	<0.0000281 %		<LOD
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		79	mg/kg	2.774	219.158	mg/kg	0.0219 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
16	benzene 601-020-00-8 / 200-753-7 / 71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	toluene 601-021-00-3 / 203-625-9 / 108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
18	ethylbenzene 601-023-00-4 / 202-849-4 / 100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
19	xylene 601-022-00-9 / 202-422-2 [1] / 203-396-5 [2] / 203-576-3 [3] / 215-535-7 [4] / 95-47-6 [1] / 106-42-3 [2] / 108-38-3 [3] / 330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5		<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
21	naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
22	acenaphthylene 205-917-1 / 208-96-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
23	acenaphthene 201-469-6 / 83-32-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
24	fluorene 201-695-5 / 86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
25	phenanthrene 201-581-5 / 85-01-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
26	anthracene 204-371-1 / 120-12-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
27	fluoranthene 205-912-4 / 206-44-0		0.03 mg/kg		0.03 mg/kg	0.000003 %		
28	pyrene 204-927-3 / 129-00-0		0.031 mg/kg		0.031 mg/kg	0.0000031 %		
29	benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		0.029 mg/kg		0.029 mg/kg	0.0000029 %		
30	chrysene 601-048-00-0 / 205-923-4 / 218-01-9		0.048 mg/kg		0.048 mg/kg	0.0000048 %		
31	benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene 205-893-2 / 193-39-5		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene 205-883-8 / 191-24-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
37	phenol 604-001-00-2 / 203-632-7 / 108-95-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB 602-039-00-4 / 215-648-1 / 1336-36-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
					Total:	0.043 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 21

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS 21
Sample Depth:
1.0-1 .6 m
Moisture content:
9.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.6% No Moisture Correction applied(MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
3	boron { diboron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		0.46 mg/kg	1.142	0.525 mg/kg	0.0000525 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38-9		28 mg/kg	1.462	40.924 mg/kg	0.00409 %		
6	chromium in chromium(VI) compounds { chromium (VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		34 mg/kg	1.126	38.28 mg/kg	0.00383 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	23 mg/kg	1.56	35.876 mg/kg	0.0023 %		
9	mercury { mercurydichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		76 mg/kg	2.976	226.196 mg/kg	0.0226 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		0.91 mg/kg	1.405	1.279 mg/kg	0.000128 %		
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		150 mg/kg	2.774	416.122 mg/kg	0.0416 %		
14	TPH (C6 to C40) petroleum group TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				0.032	mg/kg		0.032	mg/kg	0.0000032 %		
		201-581-5	85-01-8									
26	anthracene				0.028	mg/kg		0.028	mg/kg	0.0000028 %		
		204-371-1	120-12-7									
27	fluoranthene				0.044	mg/kg		0.044	mg/kg	0.0000044 %		
		205-912-4	206-44-0									
28	pyrene				0.051	mg/kg		0.051	mg/kg	0.0000051 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				0.041	mg/kg		0.041	mg/kg	0.0000041 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				0.059	mg/kg		0.059	mg/kg	0.0000059 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				0.028	mg/kg		0.028	mg/kg	0.0000028 %		
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				0.043	mg/kg		0.043	mg/kg	0.0000043 %		
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				0.037	mg/kg		0.037	mg/kg	0.0000037 %		
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				0.046	mg/kg		0.046	mg/kg	0.0000046 %		
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0787 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS22

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS22
Sample Depth:
1.0-1.5 m
Moisture content:
5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 5% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18	mg/kg	1.32	23.766	mg/kg	0.00238 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1	mg/kg	3.22	3.22	mg/kg	0.000322 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.5	mg/kg	1.142	1.713	mg/kg	0.000171 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		17	mg/kg	1.462	24.846	mg/kg	0.00248 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		63	mg/kg	1.126	70.931	mg/kg	0.00709 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19	mg/kg	1.56	29.636	mg/kg	0.0019 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.3	mg/kg	1.5	3.45	mg/kg	0.000345 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		45	mg/kg	2.976	133.932	mg/kg	0.0134 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.57	mg/kg	1.405	0.801	mg/kg	0.0000801 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		77	mg/kg	2.774	213.609	mg/kg	0.0214 %		
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
15	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	m g/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/k g		<0.001	mg/kg	<0.0000001 %		<LOD
18	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-476 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/k g		<0.001	mg/kg	<0.0000001 %		<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	m g/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
20	naphthalene	601-052-00-2	202-049-5	91-20-3		0.11	m g/kg		0.11	mg/kg	0.000011 %		
21	acenaphthylene		205-917-1	208-96-8		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthene		201-469-6	83-32-9		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
23	fluorene		201-695-5	86-737		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
24	phenanthrene		201-581-5	85-01-8		0.12	mg/ kg		0.12	mg/kg	0.000012 %		
25	anthracene		204-371-1	120-12-7		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
26	fluoranthene		205-912-4	206-44-0		0.11	mg/kg		0.11	mg/kg	0.000011 %		
27	pyrene		204-927-3	129-00-0		0.11	mg/ kg		0.11	mg/kg	0.000011 %		
28	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
29	chrysene	601-048-00-0	205-923-4	218-01-9		<0.01	mg/ kg		<0.01	mg/kg	<0.000001 %		<LOD
30	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
32	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
33	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/ kg	<0.000001 %		<LOD
34	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	benzo[ghi]perylene		205-883-8	191-24-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	phenol	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
37	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/ kg	<0.0000001 %		<LOD
38	diesel petroleum group			68334-30-5 68476-34-6, 94114-59-7, 1159170-26-9		2500	mg/kg		2500	mg/ kg	0.25 %		
										Total :	0.3 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

diesel petroleum group: (conc.: 0.25%)

Classification of sample: TP14

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP 14
Sample Depth:
0.5-1.0 m
Moisture content:
19%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19% NoMoisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC APPlied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.9	mg/kg	1.197	3.472	mg/kg	0.000347 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12	mg/kg	1.32	15.844	mg/kg	0.00158 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4	mg/kg	1.142	1.599	mg/kg	0.00016 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worstcase) }		215-160-9	1308-38-9		27	mg/kg	1.462	39.462	mg/kg	0.00395 %		
6	chromium in chromium(VI) compounds { chromium (VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		110	mg/kg	1.126	123.848	mg/kg	0.0124 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	32	mg/kg	1.56	49.914	mg/kg	0.0032 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.11	mg/kg	1.353	0.149	mg/kg	0.0000149 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2	mg/kg	1.5	3	mg/kg	0.0003 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		50	mg/kg	2.976	148.813	mg/kg	0.0149 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.61	mg/kg	1.405	0.857	mg/kg	0.0000857 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		110	mg/kg	2.774	305.156	mg/kg	0.0305 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				0.44	mg/kg		0.44	mg/kg	0.000044 %		
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				0.038	mg/kg		0.038	mg/kg	0.0000038 %		
		205-917-1	208-96-8									
23	acenaphthene				0.43	mg/kg		0.43	mg/kg	0.000043 %		
		201-469-6	83-32-9									
24	fluorene				0.43	mg/kg		0.43	mg/kg	0.000043 %		
		201-695-5	86-73-7									
25	phenanthrene				1.8	mg/kg		1.8	mg/kg	0.00018 %		
		201-581-5	85-01-8									
26	anthracene				0.45	mg/kg		0.45	mg/kg	0.000045 %		
		204-371-1	120-12-7									
27	fluoranthene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
		205-912-4	206-44-0									
28	pyrene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				0.8	mg/kg		0.8	mg/kg	0.00008 %		
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				0.67	mg/kg		0.67	mg/kg	0.000067 %		
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				0.73	mg/kg		0.73	mg/kg	0.000073 %		
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				0.23	mg/kg		0.23	mg/kg	0.000023 %		
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				0.67	mg/kg		0.67	mg/kg	0.000067 %		
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				0.27	mg/kg		0.27	mg/kg	0.000027 %		
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				0.076	mg/kg		0.076	mg/kg	0.0000076 %		
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				0.28	mg/kg		0.28	mg/kg	0.000028 %		
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0698 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP15

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP15
Sample Depth:
0.5-1.0 m
Moisture content:
8.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.9% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide } 051-005-00-X / 215-175-0 / 1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		6.5 mg/kg	1.32	8.582 mg/kg	0.000858 %		
3	boron { diboron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		1.2 mg/kg	1.142	1.371 mg/kg	0.000137 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38-9		9.3 mg/kg	1.462	13.592 mg/kg	0.00136 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		13 mg/kg	1.126	14.637 mg/kg	0.00146 %		
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	8.4 mg/kg	1.56	13.102 mg/kg	0.00084 %		
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		25 mg/kg	2.976	74.407 mg/kg	0.00744 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		<0.2 mg/kg	1.405	<0.281 mg/kg	<0.0000281 %		<LOD
13	zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		36 mg/kg	2.774	99.869 mg/kg	0.00999 %		
14	TPH (C6 to C40) petroleum group TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc.Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-476 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.024 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP16

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP16
Sample Depth:
0.6- 1.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% N oMoi sture Correcton applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide}		<2 mg/k g	1.197	<2.394 mg/kg	<0.000239 %		<LOD
	051-005-00 X / 15-175-0 / 1309-64-4							
2	arsenic { arsenic t rioxide}		<1 mg/k g	1.32	<1.32 mg/kg	<0.000132 %		<LOD
	033-003-00-0 / 215 481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		<0.4 mg/k g	3.22	<1.288 mg/kg	<0.000129 %		<LOD
	005-008-00-8 / 215 125 8 / 1303-86-2							
4	cadmium { adm ium oxide}		2.1 mg /kg	1.142	2.399 mg/kg	0.00024 %		
	048-002-00-0 / 15-146-2 / 306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case)}		7.5 m g/kg	1.462	10.962 mg/kg	0.0011 %		
	215-160 9 / 1308-38-9							
6	chromium in chromium(VI) compounds { ch romium(VI) oxide }		<0.5 m g/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
	24-001-00-0 / 5-607-8 / 333-82-0							
7	copper { di copper ox ide; copper(I) oxide }		16 mg/ kg	1.126	18.014 mg/kg	0.0018 %		
	029 002-00-X / 215-270-7 / 1317 39-1							
8	lead { lead chromate }	1	14 mg/ kg	1.56	21.837 mg/kg	0.0014 %		
	082 004-00-2 / 231-846-0 / 7 58 976							
9	mercury { mercury dichloride }		<0.1 mg/ kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080010-00-X / 231299-8 / 487-94-7							
10	molybdenum { molybdenum(VI) oxide }		<2 mg/ kg	1.5	<3 mg/kg	<0.0003 %		<LOD
	042-001-00-9 / 215-204-7 / 1313 27-5							
11	nickel { nickel ch romate}		23 mg/kg	2.976	68.454 mg/kg	0.00685 %		
	028-035 00-7 / 238-766-5 / 14721-18-7							
12	selenium { sele niu mcompounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.22 mg/kg	1.405	0.309 mg/kg	0.0000309 %		
	034-002 00-8							
13	zinc { zinc chromate }		43 mg/kg	2.774	119.288 mg/kg	0.0119 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
14	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
	TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603181-00-X / 216-653-1 / 634-04-4							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
		201-581-5	85-01-8									
26	anthracene				0.018	mg/kg		0.018	mg/kg	0.0000018 %		
		204-371-1	120-12-7									
27	fluoranthene				0.019	mg/kg		0.019	mg/kg	0.0000019 %		
		205-912-4	206-44-0									
28	pyrene				0.024	mg/kg		0.024	mg/kg	0.0000024 %		
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0254 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP17

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP17
Sample Depth:
0.5-1.0 m
Moisture content:
18%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		<1	mg/kg	1.32	<1.32	mg/kg	<0.000132 %		<LOD
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.7	mg/kg	1.142	1.942	mg/kg	0.000194 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		11	mg/kg	1.462	16.077	mg/kg	0.00161 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		26	mg/kg	1.126	29.273	mg/kg	0.00293 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18	mg/kg	1.56	28.077	mg/kg	0.0018 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26	mg/kg	2.976	77.383	mg/kg	0.00774 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2	mg/kg	1.405	<0.281	mg/kg	<0.0000281 %		<LOD
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		57	mg/kg	2.774	158.126	mg/kg	0.0158 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-476 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
23	acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
24	fluorene		201-695-5	86-737		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
25	phenanthrene		201-581-5	85-01-8		0.027	mg/kg		0.027	mg/kg	0.0000027 %		
26	anthracene		204-371-1	120-12-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
27	fluoranthene		205-912-4	206-44-0		0.016	mg/kg		0.016	mg/kg	0.0000016 %		
28	pyrene		204-927-3	129-00-0		0.011	mg/kg		0.011	mg/kg	0.0000011 %		
29	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
30	chrysene	601-048-00-0	205-923-4	218-01-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene		205-883-8	191-24-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
37	phenol	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
										Total :	0.0321 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP18

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP18
Sample Depth:
0.5-1.0 m
Moisture content:
15%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% NoMoisture Correction applied(MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc.Not Used
1	antimony { antimony trioxide}	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		<1	mg/kg	1.32	<1.32	mg/kg	<0.000132 %		<LOD
3	boron { diboron trioxide ;boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3.6	mg/kg	1.142	4.112	mg/kg	0.000411 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		9.6	mg/kg	1.462	14.031	mg/kg	0.0014 %		
6	chromium in chromium(VI) compounds { chromium (VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide;copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		25	mg/kg	1.126	28.147	mg/kg	0.00281 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19	mg/kg	1.56	29.636	mg/kg	0.0019 %		
9	mercury { mercurydichloride }	080-010-00-X	231-299-8	7487-94-7		0.11	mg/kg	1.353	0.149	mg/kg	0.0000149 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickelchromate}	028-035-00-7	238-766-5	14721-18-7		41	mg/kg	2.976	122.027	mg/kg	0.0122 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.2	mg/kg	1.405	0.281	mg/kg	0.0000281 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		46	mg/kg	2.774	127.611	mg/kg	0.0128 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0336 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP19
Sample Depth:
0.5-1.0 m
Moisture content:
25%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 25% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		<1	mg/kg	1.32	<1.32	mg/kg	<0.000132 %		<LOD
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3.2	mg/kg	1.142	3.655	mg/kg	0.000366 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		9.1	mg/kg	1.462	13.3	mg/kg	0.00133 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19	mg/kg	1.126	21.392	mg/kg	0.00214 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19	mg/kg	1.56	29.636	mg/kg	0.0019 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1	mg/kg	1.353	0.135	mg/kg	0.0000135 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35	mg/kg	2.976	104.169	mg/kg	0.0104 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2	mg/kg	1.405	<0.281	mg/kg	<0.0000281 %		<LOD
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		37	mg/kg	2.774	102.643	mg/kg	0.0103 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.000094 2 %		<LOD
21	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
22	acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
23	acenaphthene		201-469-6	83-32-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
24	fluorene		201-695-5	86-73-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
25	phenanthrene		201-581-5	85-01-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
26	anthracene		204-371-1	120-12-7		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
27	fluoranthene		205-912-4	206-44-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
28	pyrene		204-927-3	129-00-0		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
29	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
30	chrysene	601-048-00-0	205-923-4	218-01-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene		205-883-8	191-24-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
37	phenol	604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
										Total:	0.0285 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP20
Sample Depth:
0.5-1.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No MoistureCorrectionapplied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic trioxide }		14 mg/kg	1.32	18.485 mg/kg	0.00185 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide }		0.84 mg/kg	1.142	0.96 mg/kg	0.000096 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		9.1 mg/kg	1.462	13.3 mg/kg	0.00133 %		
	215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { dicopper oxide; copper(I) oxide }		19 mg/kg	1.126	21.392 mg/kg	0.00214 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	30 mg/kg	1.56	46.794 mg/kg	0.003 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		<2 mg/kg	1.5	<3 mg/kg	<0.0003 %		<LOD
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate }		39 mg/kg	2.976	116.074 mg/kg	0.0116 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.46 mg/kg	1.405	0.646 mg/kg	0.0000646 %		
	034-002-00-8							
13	zinc { zinc chromate }		80 mg/kg	2.774	221.932 mg/kg	0.0222 %		
	024-007-00-3 / 236-878-9 / 13530-65-9							
14	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
	TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X / 216-653-1 / 1634-04-4							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0442 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP21

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP21
Sample Depth:
0.6-1.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15	mg/kg	1.32	19.805	mg/kg	0.00198 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.5	mg/kg	1.142	1.713	mg/kg	0.000171 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		14	mg/kg	1.462	20.462	mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		28	mg/kg	1.126	31.525	mg/kg	0.00315 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18	mg/kg	1.56	28.077	mg/kg	0.0018 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.7	mg/kg	1.5	4.051	mg/kg	0.000405 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41	mg/kg	2.976	122.027	mg/kg	0.0122 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.52	mg/kg	1.405	0.731	mg/kg	0.0000731 %		
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		89	mg/kg	2.774	246.899	mg/kg	0.0247 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
16	benzene 601-020-00-8 / 200-753-7 / 71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	toluene 601-021-00-3 / 203-625-9 / 108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
18	ethylbenzene 601-023-00-4 / 202-849-4 / 100-414		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
19	xylene 601-022-00-9 / 202-422-2 [1] / 203-396-5 [2] / 203-576-3 [3] / 215-535-7 [4] / 95-476 [1] / 106-42-3 [2] / 108-38-3 [3] / 330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5		<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
21	naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
22	acenaphthylene 205-917-1 / 208-96-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
23	acenaphthene 201-469-6 / 83-32-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
24	fluorene 201-695-5 / 86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
25	phenanthrene 201-581-5 / 85-01-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
26	anthracene 204-371-1 / 120-12-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
27	fluoranthene 205-912-4 / 206-44-0		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
28	pyrene 204-927-3 / 129-00-0		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
29	benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
30	chrysene 601-048-00-0 / 205-923-4 / 218-01-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
31	benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
34	indeno[123-cd]pyrene 205-893-2 / 193-39-5		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
36	benzo[ghi]perylene 205-883-8 / 191-24-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
37	phenol 604-001-00-2 / 203-632-7 / 108-95-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	polychlorobiphenyls; PCB 602-039-00-4 / 215-648-1 / 1336-36-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
					Total:	0.0481 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP22

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP22
Sample Depth:
0.6-1.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2	mg/kg	1.197	<2.394	mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		<1	mg/kg	1.32	<1.32	mg/kg	<0.000132 %		<LOD
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.3	mg/kg	1.142	1.485	mg/kg	0.000149 %		
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		12	mg/kg	1.462	17.539	mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		10	mg/kg	1.126	11.259	mg/kg	0.00113 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13	mg/kg	1.56	20.278	mg/kg	0.0013 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		<2	mg/kg	1.5	<3	mg/kg	<0.0003 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28	mg/kg	2.976	83.335	mg/kg	0.00833 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2	mg/kg	1.405	<0.281	mg/kg	<0.0000281 %		<LOD
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		47	mg/kg	2.774	130.385	mg/kg	0.013 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15	tert-butyl methyl ether;MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	naphthalene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	polychlorobiphenyls; PCB				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0278 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

indeno [1,2,3-c,d]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

diesel petroleum group (CAS Number: 68334-30-5, 68476-34-6, 94114-59-7, 1159170-26-9)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Skin Irrit. 2 H315 , Acute Tox. 4 H332 , Carc. 2 H351 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony trioxide}

Worst case CLP species based on hazard statements/molecular weight and low solubility. Industrial sources include: flame retardants in electrical apparatus, textiles and coatings

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds

boron {diboron trioxide; boric oxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/ molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass

chromium in chromium (VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected.

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight

molybdenum {molybdenum(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil.

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2021.246.4869.9247 (05 Sep 2021)
HazWasteOnline Database: 2021.246.4869.9247 (05 Sep 2021)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2019 - UK: 2019 No. 720 of 27th March 2019
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
POPs Regulation 2019 - Regulation (EU) 2019/1021 of 20 June 2019

Appendix 4

Excavation Plans

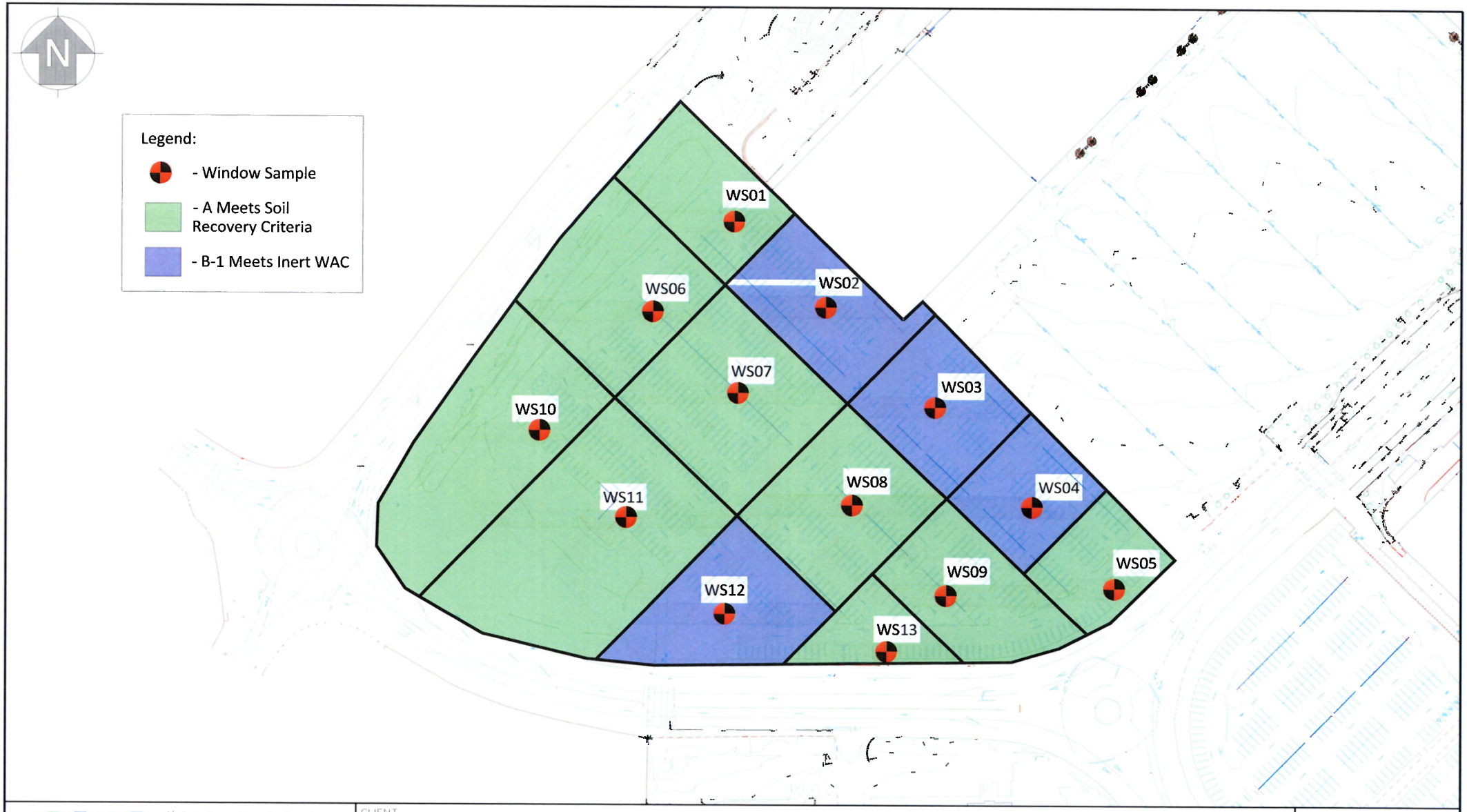

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FIGURE No.

x

TITLE

Excavation Plan (WS01–WS13) 0.0–1.0 mbgl

SCALE

SCALE

REV

A

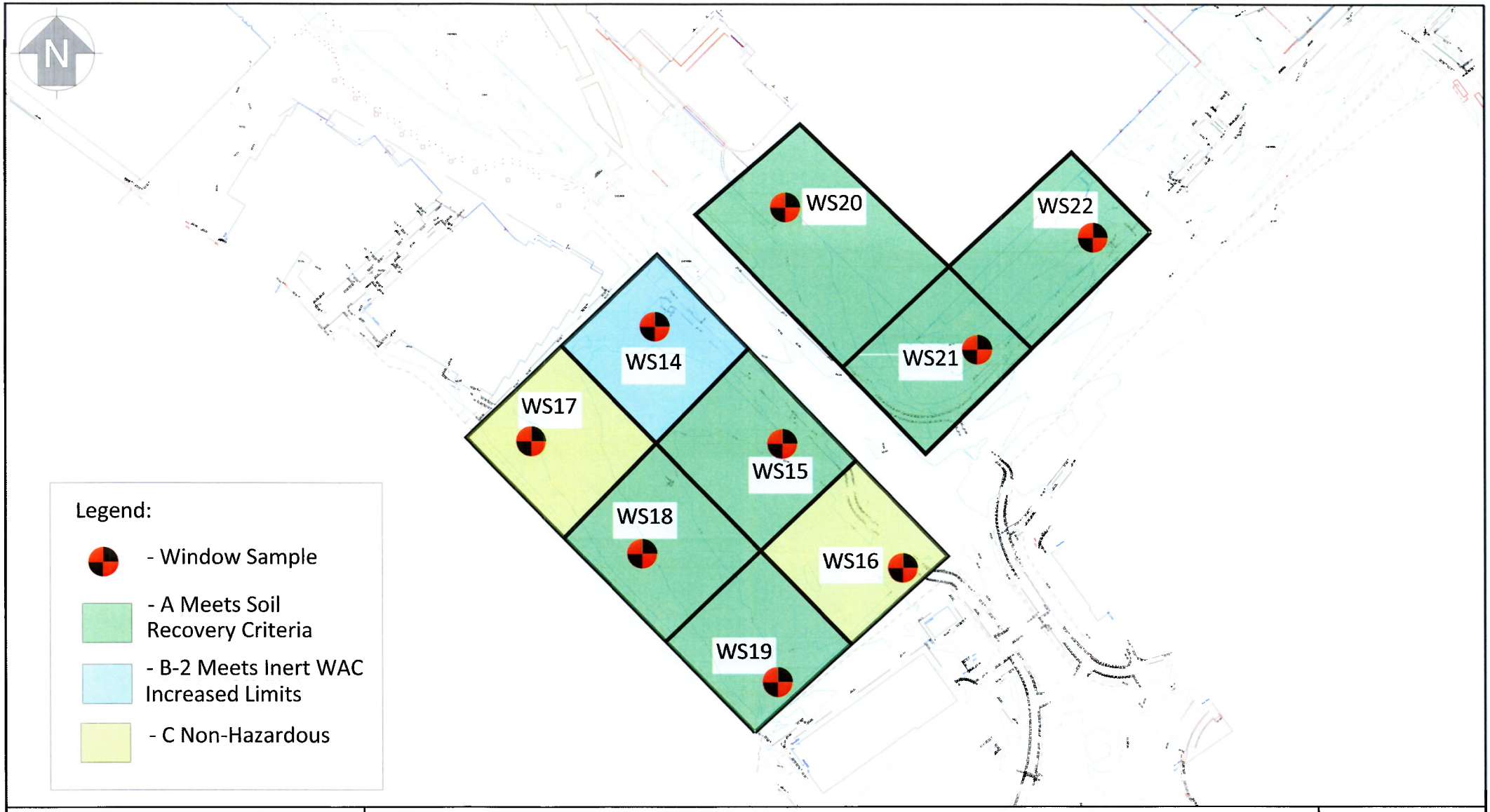

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FIGURE No.

TITLE: Excavation Plan (WS14-WS22) 0.0-1.0 mbgl

SCALE

REV: A

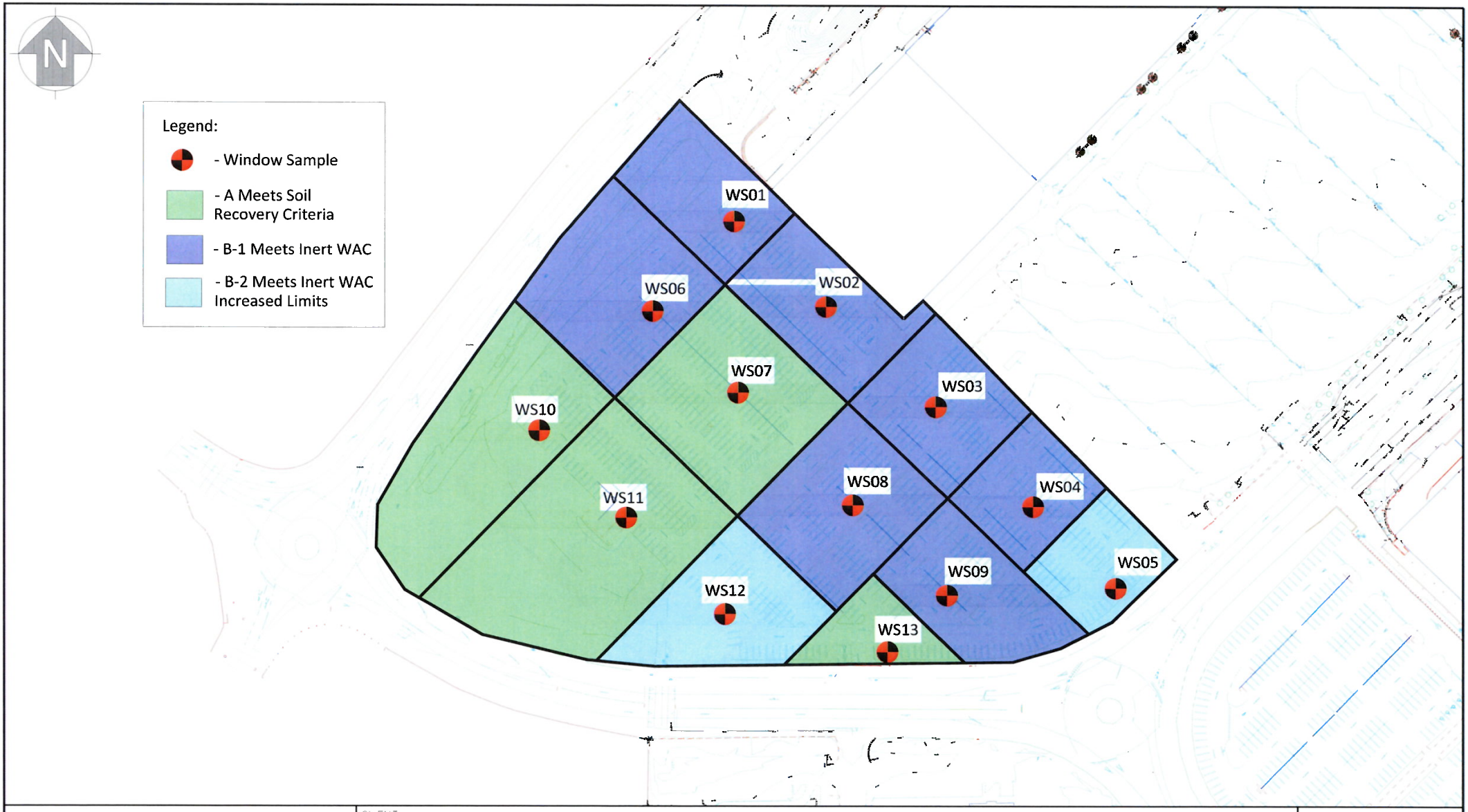

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FIGURE No.

X

TITLE

Excavation Plan (WS01–WS13) 1.0–2.0 mbgl

SCALE

SCALE

REV.

A

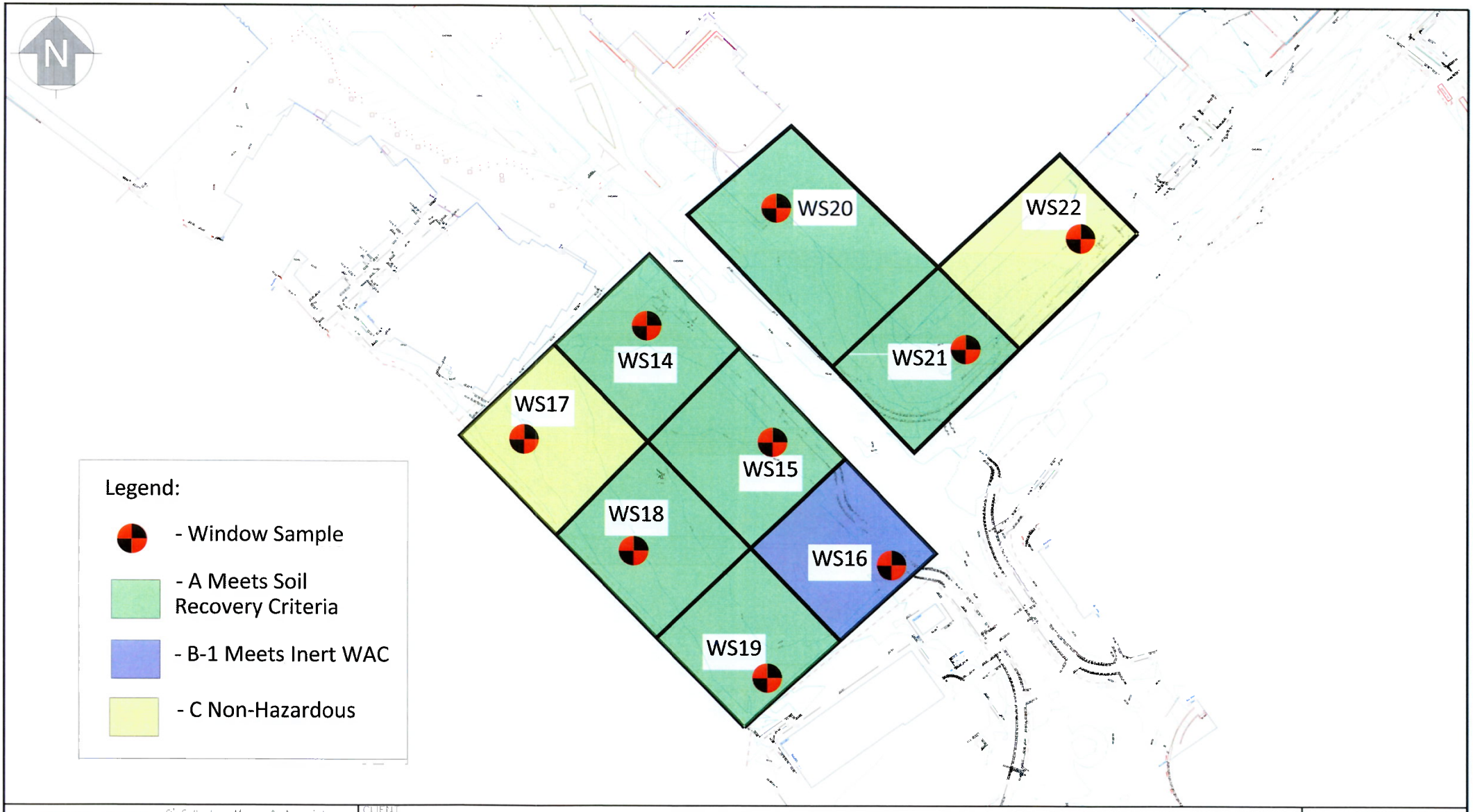

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FIGURE No.
x

TITLE
Excavation Plan (WS14=WS22) 1.0=2.0 mbgl

SCALE
SCALE

REV
A

Appendix D

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PROPG INWARD NOISE IMPACT ASSESSMENT OF PROPOSED SITE B & C MIXED USE DEVELOPMENT, BLANCHARDSTOWN

Technical Report Prepared For

Blanche Retail Nominee Limited

Technical Report Prepared By

Alistair Maclaurin BSc PgDip MIOA

Our Reference

AM/21/12583NR01a

Date of Issue

4 March 2022

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Document History

Document Reference		Original Issue Date	
AM/21/12583NR01a		4 February 2022	
Revision Level	Revision Date	Description	Sections Affected

Record of Approval

Details	Written by	Approved by
Signature		
Name	Alistair Maclaurin	Stephen Smyth
Title	Senior Acoustic Consultant	Associate (Acoustics)
Date	4 March 2022	4 March 2022

EXECUTIVE SUMMARY

AWN Consulting has been commissioned to carry out a study in relation to the potential noise impacts incident to the proposed residential development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 1. The focus of this report is to provide input into the acoustic design of the proposed development, identify any potential noise impacts and provide measures to minimise or mitigate those impacts.

A baseline noise survey has been undertaken at the development site to determine the existing environment at the site. Based on the survey results and a noise model developed of the site the assessment has classified the development site as having noise risk classification of medium risk.

A noise assessment has been undertaken based on the results of the noise model as recommended in the *ProPG: Planning & Noise* guidance document. The assessment concludes that all residents will enjoy a 'Good' internal noise environment when the appropriate enhanced acoustic glazing and mechanical ventilation is employed as Detailed within this document.

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1.0 INTRODUCTION

AWN Consulting has been commissioned to carry out a study in relation to the potential noise impacts incident to the proposed residential development at Site B (Library Car Park) and Site C (Blue Car Park) sites at Road C and Road D, Blanchardstown Town Centre, Coolmine, Dublin 1. The focus of this report is to provide input into the acoustic design of the proposed development, identify any potential noise impacts and provide measures to minimise or mitigate those impacts.

Figure 1 presents the approximate outline of the proposed development site.



Figure 1 Proposed Development Layout

Appendix A presents a glossary of acoustic terminology that is used throughout this report.

2.0 DESIGN CRITERIA

2.1 FCC NAP

The *Fingal County Council Noise Action Plan (NAP) 2018 – 2023* is of relevance here. The NAP indicates that guidance within the *ProPG Planning and Noise: Professional Practice Guidance on Planning and Noise* document should be referred to:

> *"In the scenario where new residential development or other noise sensitive development is proposed in an area with an existing climate of environmental noise, there is currently no clear national guidance on appropriate noise exposure levels. The EPA has suggested in the interim, that Action Planning Authorities should examine planning policy guidance notes, such as ProPG (2017). Such guidance notes have been produced with a view to providing practitioners with guidance on a recommended approach to the management of noise within the planning system."*

In accordance with this NAP policy, the following Acoustic Report has been prepared to comply with the requirements of this policy.

In addition to ProPG, the *Fingal County Council Noise Action Plan 2018 – 2023* has been published in order to address the requirements of the European Noise Directive 2002/49/EC. This NAP produced noise maps in order to determine the population exposure to undesirably high noise levels and also to identify areas with desirably low noise that should be preserved into the future. The NAP defines the following ranges for these descriptions:

> *"Areas with desirable low noise levels are defined as areas with a night time level less than 50 dB(A) and\or a daytime level less than 55 dB(A).*
>
> *Areas with undesirable high noise levels are defined as areas with a night time level greater than 55 dB(A) and a daytime level greater than 70 dB(A)."*

It is important to note that the NAP does not recommend that residential development be restricted within areas identified as having undesirably high noise levels. Rather it recommended a range of noise mitigation measures be required for new residential developments within these areas.

2.2 ProPG: Planning & Noise

The *Professional Guidance on Planning & Noise* (ProPG) document was published in May 2017. The document was prepared by a working group comprising members of the Association of Noise Consultants (ANC), the Institute of Acoustics (IOA) and the Chartered Institute of Environmental Health (CIEH). Although not a government document, since its adoption it has been generally considered as a best practice guidance.

The ProPG outlines a systematic risk-based 2-stage approach for evaluating noise exposure on prospective sites for residential development. The two primary stages of the approach can be summarised as follows:

- Stage 1 - Comprises a high level initial noise risk assessment of the proposed site considering either measured and or predicted noise levels; and,

- Stage 2 – Involves a full detailed appraisal of the proposed development covering four "key elements" that include:

    - Element 1 - Good Acoustic Design Process;
    - Element 2 - Noise Level Guidelines;
    - Element 3 - External Amenity Area Noise Assessment
    - Element 4 - Other Relevant Issues

A key component of the evaluation process is the preparation and delivery of an Acoustic Design Statement (ADS) which is intended for submission to the planning authority. This document is intended to clearly outline the methodology and findings of the Stage 1 and Stage 2 assessments, so as the planning authority can make an informed decision on the permission.

ProPG outlines the following possible recommendations in relation to the findings of the ADS:

Planning consent may be granted without any need for noise conditions:

A. Planning consent may be granted subject to the inclusion of suitable noise conditions;
B. Planning consent should be refused on noise grounds in order to avoid significant adverse effects ("avoid"); or,
C. Planning consent should be refused on noise grounds in order to prevent unacceptable adverse effects ("prevent").

Section 3.0 of the ProPG provides a more detailed guide on decision making to aid local authority planners on how to interpret the findings of an accompanying Acoustic Design Statement (ADS). A summary of the ProPG approach is illustrated in Figure 2.

2.3 BS 8233

There are no statutory guidelines or specific local guidelines relating to appropriate internal noise levels within Libraries. In this instance, reference is made to BS 8233: 2014: *Guidance on sound insulation and noise reduction for buildings.*

BS 8233 sets out recommended internal noise levels for non-domestic buildings from external noise sources such as traffic. The guidance is primarily for use by designers and hence BS 8233 may be used as the basis for an appropriate schedule of noise control measures. The recommended internal noise levels for residential developments are set out below.

Activity	Location	(07:00 to 23:00hrs)	(23:00 to 07:00hrs)
Resti ng	Livi ngroom	35 dB $L_{Aeq,16hr}$	-
Dini ng	Dining room/area	40 dB $L_{Aeq,16hr}$	-
Sleeping (Da ytme Restin g)	Bedroom	35 dB $L_{Aeq,16hr}$	30 dB $L_{Aeq,8hr}$ 45 dB $L_{AFmax,T}$ *

Table 1 Summary of recommended internal noise levels from BS8233

* Note The document comments that the internal $L_{AFmax,T}$ noise level may be exceeded no more than 10 times per night without a significant impact occurring.

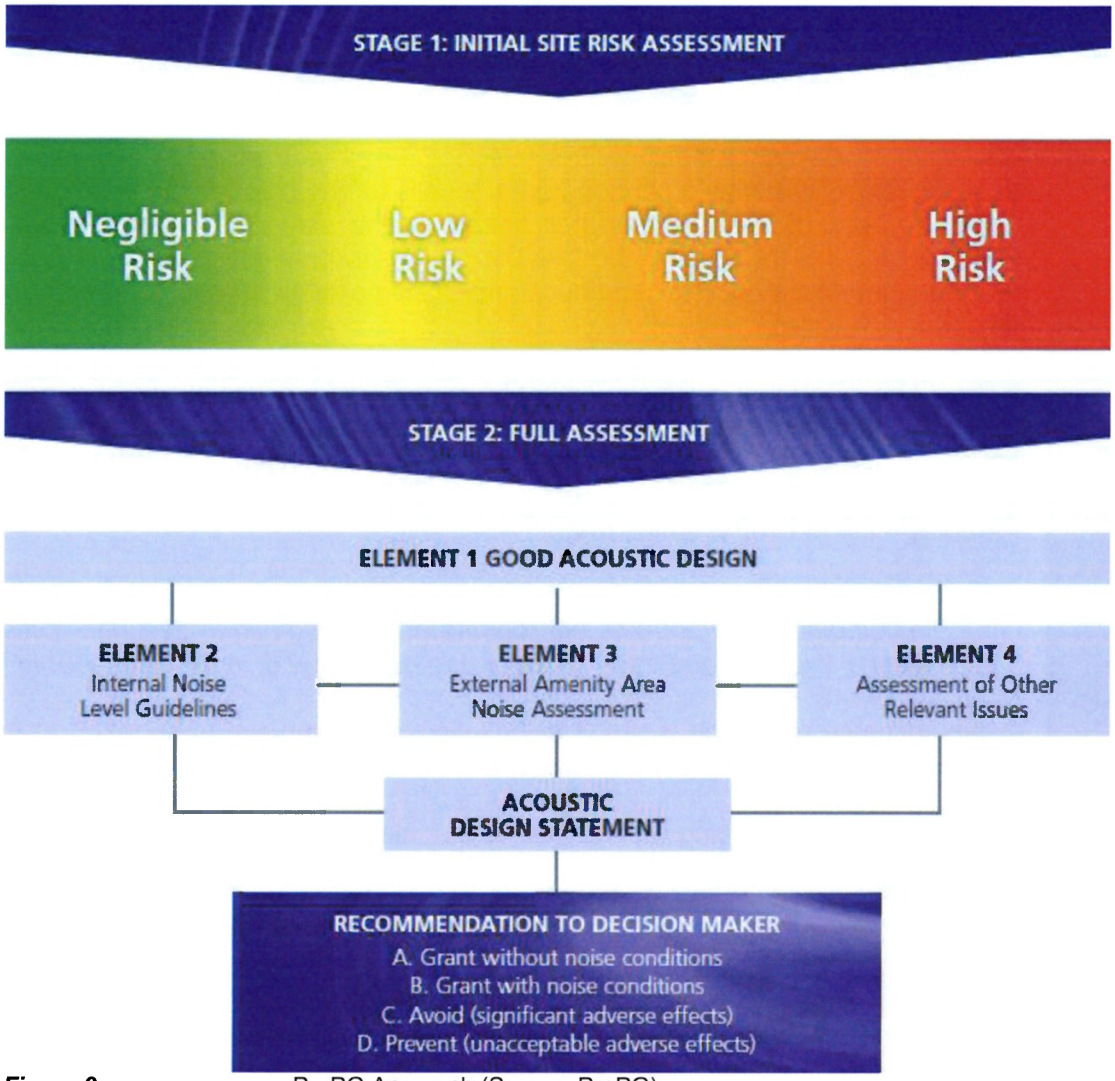


Figure 2 ProPG Approach (Source: ProPG)

3.0 ProPG STAGE 1 – NOISE RISK ASSESSMENT

3.1 Methodology

The initial noise risk assessment is intended to provide an early indication of any acoustic issues that may be encountered. It calls for the categorisation of the site as a negligible, low, medium or high risk based on the pre-existing noise environment. Figure 3 presents the basis of the initial noise risk assessment; it provides appropriate risk categories for a range of continuous noise levels either measured and/or predicted on site.

It should be noted that a site should not be considered a negligible risk if more than 10 L_{AFmax} events exceed 60dB during the night period and the site should be considered a high risk if the L_{AFmax} events exceed 80dB more than 20 times a night.

Paragraph 2.9 of ProPG states that,

> *"The noise risk assessment may be based on measurements or prediction (or a combination of both) as appropriate and should aim to describe noise levels over a "typical worst case" 24 hour day either now or in the foreseeable future."*

In this instance reference is made to baseline noise surveys undertaken at the site. The results of the survey are detailed in Section 3.2.

ProPG states the following with respect to the initial risk assessment:

> *"The risk assessment should not include the impact of any new or additional mitigation measures that may subsequently be included in development proposals for the site and proposed as part of a subsequent planning application. In other words, the risk assessment should include the acoustic effect of any existing site features that will remain (e.g. retained buildings, changes in ground level) and exclude the acoustic effect of any site features that will not remain (e.g. buildings to be demolished, fences and barriers to be removed) if development proceeds."*

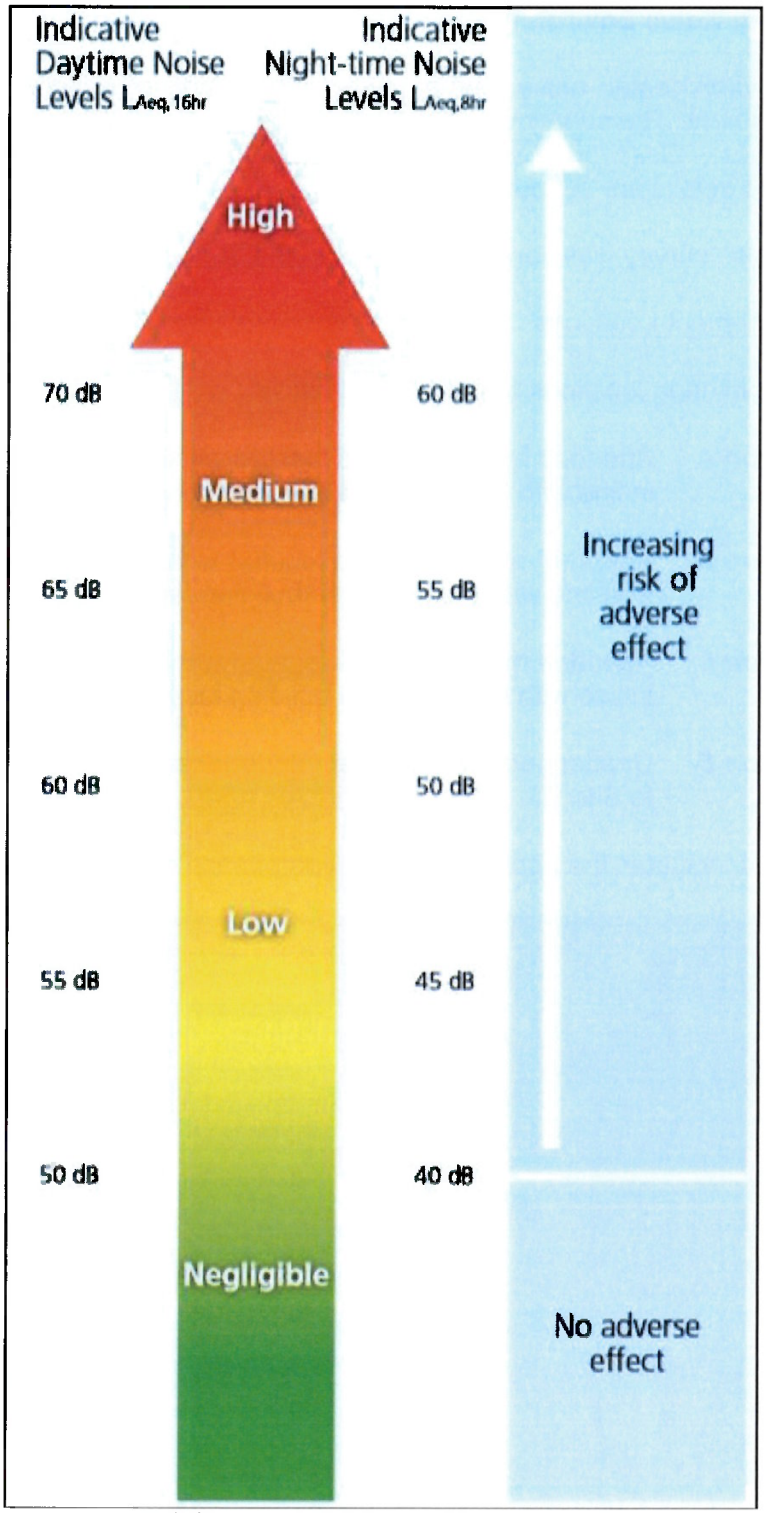


Figure 3 ProPG Stage 1 - Initial Noise Risk Assessment

3.2 Existing Noise Environment

An environmental noise survey was conducted to quantify the existing noise environment. The survey was conducted in general accordance with ISO 1996: 2017: *Acoustics – Description and measurement and assessment of environmental noise*. Specific details are set out below.

The noise survey was conducted between the 26th and 30th November.

3.2.1 Measurement Locations

The monitoring locations are discussed below:

Location A Attended measurements located within the western boundary of Site C in line with the proposed building facade.

Location B Attended measurements located within the southern boundary of Site C in line with the proposed building facade.

Location C Attended measurements located within the eastern boundary of Site B in line with the proposed building facade.

Location D Unattended measurement undertaken on the roof of Penny's adjacent to Site C.

Figure 4 indicates the approximate location of each measurement position.

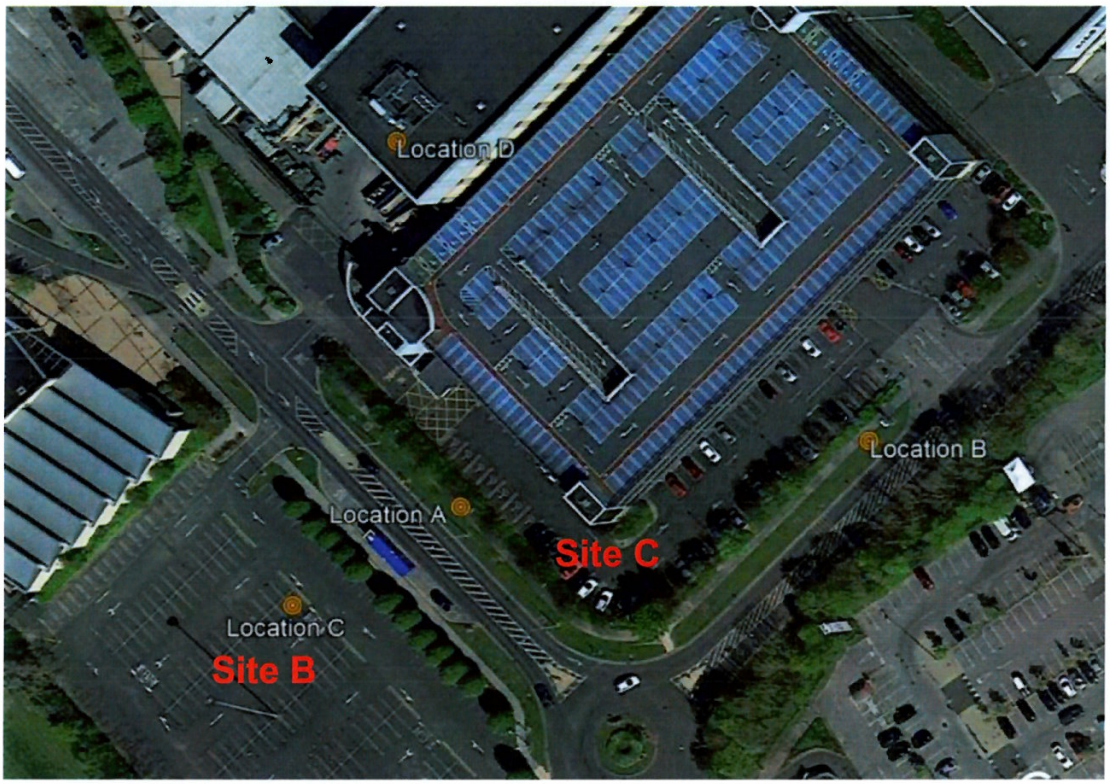


Figure 4 Noise Survey Locations

3.2.2 Measurement Parameters

The noise survey results are presented in terms of the following parameters:

L_{Aeq} is the equivalent continuous sound level. It is a type of average and is used to describe a fluctuating noise in terms of a single noise level over the sample period.

L_{AFMax} is the maximum sound pressure level recorded during the sample period.

The "A" suffix denotes the fact that the sound levels have been "A-weighted" in order to account for the non-linear nature of human hearing. All sound levels in this report are expressed in terms of decibels (dB) relative to $2x10^{-5}$ Pa.

3.2.3 Unattended Survey Results

L_{Aeq} and L_{AFMax} values were measured at 15-minute intervals over the duration of the survey. Figures 5 and 6 present the number of measured $L_{Aeq,15\text{-}min}$ and L_{AFMax} events for each decibel level during the day and night periods for each location.

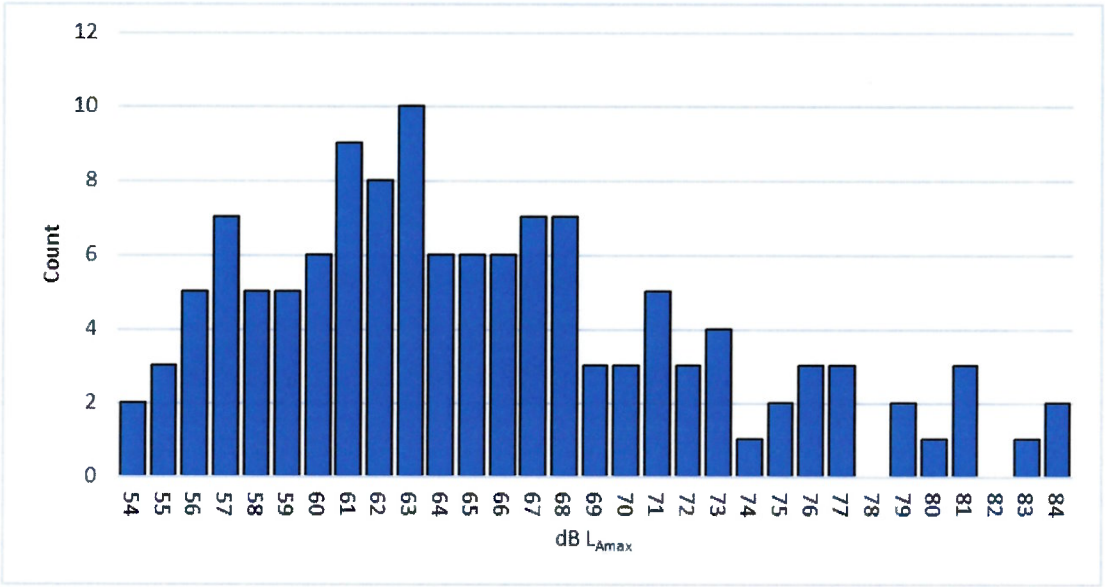


Figure 5 Number of L_{Amax} events at each decibel level measured during the night

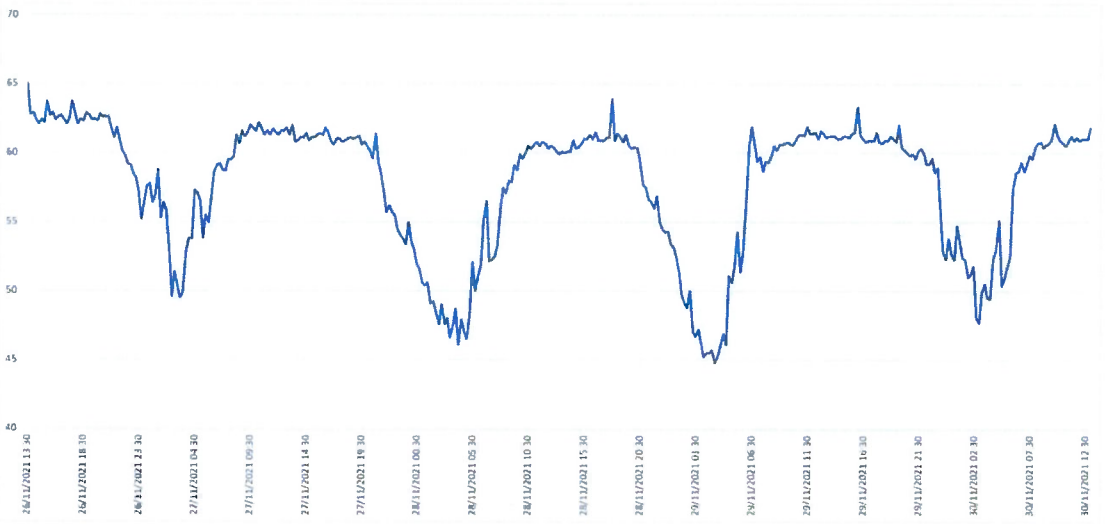


Figure 6 Measured L_{Aeq} over the duration of the survey

3.2.4 Attended Survey Results

Location A

Table 2 presents the average $L_{Aeq,15min}$ noise levels at Location A.

Date and Time	$L_{Aeq,15min}$ dB(A)	$L_{Amax,15min}$ dB(A)
26/11/21 13:58	63.5	81.5
26/11/21 14:19	62.2	71.7
26/11/21 14:40	61.5	70.1
30/11/21 12:44	61.5	85.0
30/11/21 13:05	60.7	87.8
30/11/21 13:25	60.5	70.8

Table 2 Location A Noise Measurement Results

At location A noise was generally attributed to passing road traffic, buses utilising the local bus stop and nearby pedestrian activity. The average measured noise level was 62 dB $L_{Aeq, 15min}$.

Location B

Table 3 presents the average $L_{Aeq,15min}$ noise levels at Location B.

Date and Time	$L_{Aeq,15min}$ dB(A)	$L_{Amax,15min}$ dB(A)
26/11/21 14:57	68.2	82.4
26/11/21 15:37	68.5	81.7
30/11/21 13:25	67.5	76.5
30/11/21 14:07	67.8	81.3
30/11/21 13:25	67.9	75.3

Table 3 Location B Noise Measurement Results

At location B noise was generally attributed to passing road traffic, movements in the car park and nearby pedestrian activity. The average measured noise level was 68 dB $L_{Aeq, 15min}$.

Location C

Table 4 presents the average $L_{Aeq,15min}$ noise levels at Location C.

Date and Time	$L_{Aeq,15min}$ dB(A)	$L_{Amax,15min}$ dB(A)
26/11/21 15:56	67.3	57.6
26/11/21 15:37	67.2	59.6
26/11/21 15:37	66.9	60.0
30/11/21 15:00	61.3	76.9
30/11/21 15:22	61.4	81.3
30/11/21 15:38	62.0	78.0

Table 4 Location C Noise Measurement Results

At location C noise was generally attributed to passing road traffic, buses utilising the local bus stop and nearby pedestrian activity. The average measured noise level was 65 dB $L_{Aeq, 15min}$.

3.3 Noise Risk Assessment Conclusion

Giving consideration to the measured presented in the previous sections the initial site noise risk assessment has concluded that the there is a medium level of risk across the site.

Additionally, the Stage 1 Noise Risk Assessment requires analyses of the L_{AFmax} noise levels. The results indicate that L_{AFmax} noise levels are unlikely to exceed 80dB more than 20 times per night on facades exposed to the on the main site road and hence the maxima levels will not increase the noise risk of the site.

ProPG states the following with respect to medium risks:

Medium Risk — *As noise levels increase, the site is likely to be less suitable from a noise perspective and any subsequent application may be refused unless a good acoustic design process is followed and is demonstrated in an ADS which confirms how the adverse impacts of noise will be mitigated and minimised, and which clearly demonstrate that a significant adverse noise impact will be avoided in the finished development.*

Given the above it can be concluded that the development site may be categorised as *Medium* and as such an Acoustic Design Strategy will be required to demonstrate that suitable care and attention has been applied in mitigating and minimising noise impact to such an extent that an adverse noise impact will be avoided in the final development. It should be noted that ProPG states the following with regard to how the initial site noise risk is to be used,

> *"2.12 It is important that* ***the assessment of noise risk at a proposed residential development site is not the basis for the eventual recommendation to the decision maker****. The recommended approach is intended to give the developer, the noise practitioner, and the decision maker an early indication of the likely initial suitability of the site for new residential development from a noise perspective and the extent of the acoustic issues that would be faced. Thus, a site considered to be high risk will be recognised as presenting more acoustic challenges than a site considered as low risk. A site considered as negligible risk is likely to be acceptable from a noise perspective and need not normally be delayed on noise grounds. A potentially problematical site will be flagged at the earliest possible stage, with an increasing risk indicating the increasing importance of good acoustic design."*

Therefore, following the guidance contained in ProPG does not preclude residential development on sites that are identified as having medium or high-risk noise levels. It merely identifies the fact that a more considered approach will be required to ensure the developments on the higher risk sites are suitably designed to mitigate the noise levels. The primary goal of the approach outlined in ProPG is to ensure that the best possible acoustic outcome is achieved for a particular site.

4.0 ProPG STAGE 2 – ACOUSTIC DESIGN STATEMENT

4.1 Element 1 – Good Acoustic Design Process

4.1.1 ProPG Guidance

In practice, good acoustic design should deliver the optimum acoustic design for a particular site without adversely affecting residential amenity or the quality of life or occupants or compromising other sustainable design objectives. It is important to note that ProPG specifically states that good acoustic design is not equivalent to overdesign or "*gold plating*" of a new development rather that it seeks to deliver the optimum acoustic environment for a given site.

Section 2.23 of the ProPG outlines the following checklist for Good Acoustic Design (GAD):

- Check the feasibility of relocating, or reducing noise levels from relevant sources;
- Consider options for planning the site or building layout;
- Consider the orientation of proposed building(s);
- Select construction types and methods for meeting building performance requirements;
- Examine the effects of noise control measures on ventilation, fire regulation, health and safety, cost, CDM (construction, design and management) etc;
- Assess the viability of alternative solutions; and,
- Assess external amenity area noise.

In the context of the proposed development, each of the considerations listed above have been addressed in the following subsections.

4.1.2 Application of GAD Process to Proposed Application

Relocation or Reduction of Noise from Source

The main site roads are not under the control of the developer and therefore it is beyond the scope of this development to introduce any noise mitigation at source.

Planning, Layout and Orientation

Consideration has been given to the location of both the buildings and external amenity areas. The orientation of the site is such that the buildings themselves screen the common external amenity areas associated with the development, or that the external areas are raised so that the podium itself shield's the amenity area from excessive noise.

Select Construction Types for meeting Building Regulations

Masonry constructions will be used in constructing the external walls of the development. This construction type offers high levels of sound insulation performance. However, as is typically the case the glazed elements and ventilation will be the weakest elements in the façade in terms of sound insulation performance.

Consideration will therefore be given to the provision of upgraded glazing and mechanical ventilation. The proposal here will be to provide dwelling units with glazed

elements that have good acoustic insulation properties so that when the windows are closed the noise levels internally are good.

In order to ensure indoor air quality, a mechanical ventilation system with heat recovery will be utilised as per Part F of the Building Regulations, providing the requisite air changes per hour. The fresh air provided to all the apartments is tempered and filtered as part of the delivery process. Residents will not need to open their windows in terms of providing fresh air. In terms of extract, all of the bathrooms, kitchens and utility spaces will be exhausted to the outside via the mechanical ventilation system on a continuous basis. Inhabitants will be able to open the windows if they wish, however, doing so will increase the internal noise level. This approach to mitigation is supported in ProPG where it states the following:

"2.22 *Using fixed unopenable glazing for sound insulation purposes is generally unsatisfactory and should be avoided; occupants generally prefer the ability to have control over the internal environment using openable windows, even if the acoustic conditions would be considered unsatisfactory when open. Solely relying on sound insulation of the building envelope to achieve acceptable acoustic conditions in new residential development, when other methods could reduce the need for this approach, is not regarded as good acoustic design. Any reliance upon building envelope insulation with closed windows should be justified in supporting documents* "

Note 5 Designing the site layout and the dwellings so that the internal target levels can be achieved with open windows in as many properties as possible demonstrates good acoustic design. Where it is not possible to meet internal target levels with windows open, internal noise levels can be assessed with windows closed, however any façade openings used to provide whole dwelling ventilation (e.g. trickle ventilators) should be assessed in the "open" position and, in this scenario, the internal L_{Aeq} target levels should not normally be exceeded

2.34 *Where the LPA accepts that there is a justification that the internal target noise levels can only be practically achieved with windows closed, which may be the case in urban areas and at sites adjacent to transportation noise sources, special care must be taken to design the accommodation so that it provides good standards of acoustics, ventilation and thermal comfort without unduly compromising other aspects of the living environment. In such circumstances, internal noise levels can be assessed with windows closed but with any façade openings used to provide "whole dwelling ventilation" in accordance with Building Regulations Approved Document F (e.g. trickle ventilators) in the open position (see Supplementary Document 2). Furthermore, in this scenario the internal L_{Aeq} target noise levels should not generally be exceeded.*"

Impact of noise control measures on fire, health and safety etc

The good acoustic design measures that have been implemented on site, e.g. placing outdoor space on the quiet side of buildings, are considered to be cost neutral and do not have any significant impact on other issues.

Assess Viability of Alternative Solutions

Due to the height and location of the proposed buildings it is considered that any acoustic screens along the boundary of the site to attenuate traffic noise would be ineffective.

Assess External Amenity Area Noise

ProPG provides the following advice with regards to external noise levels for amenity areas in the development:

> *"The acoustic environment of external amenity areas that are an intrinsic part of the overall design should always be assessed and noise levels should ideally not be above the range 50 – 55 dB $L_{Aeq,16hr}$."*

Noise levels across external amenity areas associated with the development are presented in Section 4.3.

Summary

Considering the constraints of the site, in so far as possible and without limiting the extent of the development area, the principles of Good Acoustic Design have been applied to the development.

In terms of viable alternatives to acoustic treatment of façade elements, there are no further options for mitigation outside of proprietary acoustic glazing and mechanical ventilation.

4.2 Element 2 – Internal Noise Guidelines

4.2.1 Internal Noise Criteria

Element 2 of the ProPG document sets out recommended internal noise targets derived from BS 8233 and WHO's *Community Noise Guidelines*. The recommended indoor ambient noise levels are set out in Table 5 and are based on annual average data, that is to say they omit occasional events such as New Year's Eve.

Activity	Location	(07:00 to 23:00hrs)	(23:00 to 07:00hrs)
Resting	Living room	35 dB $L_{Aeq,16hr}$	-
Dining	Dining room/area	40 dB $L_{Aeq,16hr}$	-
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq,16hr}$	30 dB $L_{Aeq,8hr}$ 45 dB $L_{Amax,T}$*

Table 5 ProPG Internal Noise Levels

*Note The document comments that the internal $L_{AFmax,T}$ noise level may be exceeded no more than 10 times per night without a significant impact occurring.

Giving consideration to the external noise levels, it will be necessary to use acoustic glazing and mechanical ventilation to meet the recommended internal noise levels.

In terms of the ventilation strategy it is understood that the air supply will be via mechanical ventilation which typically provides a sound insulation performance substantially improved over passive in-frame or wall vents.

4.2.2 Façade Levels

Based on the information outlined in Section 3.2 facades of the proposed development that are predicted to require upgraded sound insulation are highlighted in green and red in Figure 7.



Figure 7 Facades Requiring Upgraded Sound Insulation

4.2.3 Proposed Façade Treatment

The British Standard BS EN 12354-3: 2000: *Building acoustics – Estimation of acoustic performance of buildings from the performance of elements – Part 3: Airborne sound insulation against outdoor sound* provides a calculation methodology for determining the sound insulation performance of the external envelope of a building. The method is based on an elemental analysis of the building envelope and can take into account both the direct and flanking transmission paths.

The Standard allows the acoustic performance of the building to be assessed taking into account the following:

- Construction type of each element (i.e. windows, walls, etc.);
- Area of each element;
- Shape of the façade, and;
- Characteristics of the receiving room.

The principals outlined in BS EN 12354-3 are also referred to in BS8233 and Annex G of BS8233 provides a calculation method to determine the internal noise level within a building using the composite sound insulation performance calculated using the methods outlined in BS EN 12354-3. The methodology outlined in Annex G of BS8233 has been adopted here to determine the required performance of the building facades.

Glazing

As is the case in most buildings, the glazed elements of the building envelope are typically the weakest element from a sound insulation perspective. In this instance it has been calculated that the various facades are to be provided with glazing that, when closed, achieve the minimum sound insulation performance as set out in Table 6 (and assigned to each façade as displayed in Figure 7).

Façade Ref	Nominal R_w (dB)	SRI (dB) per Octave Band Centre Frequency (Hz)					
		125	250	500	1k	2k	4k
RED	40	27	29	36	41	42	52
GREEN	38	26	27	34	40	38	46

Table 6 Sound Insulation Performance Requirements for Glazing, SRI (dB)

Test data should be sought from the supplier of the glazing at detailed design stage to ensure that the acoustic specification is met.

It is important to note that the acoustic performance specifications detailed herein are minimum requirements which apply to the overall glazing system. In the context of the acoustic performance specification the 'glazing system' is understood to include any and all of the component parts that form part of the glazing element of the façade, i.e. glass, frames, seals, openable elements etc.

The assessment has demonstrated that the recommended internal noise criteria can be achieved through consideration of the proposed façade elements at the design stage. The calculated glazing specifications are preliminary and are intended to form the basis for noise mitigation at the detailed design stage. Consequently, these may be subject to change as the project progresses.

Wall Construction

In general, all wall constructions (i.e. block work or concrete) offer a high degree of sound insulation, much greater than that offered by the glazing systems. Therefore, noise intrusion via the wall construction will be minimal. The calculated internal noise levels across the building façade have assumed a minimum sound reduction index of 50dB R_w for this construction.

Ventilation

The ventilation strategy for the development is for mechanical ventilation. Mechanical ventilation systems typically offer a high performance in terms of preventing sound intrusion from external sources, consequently there is no assessment of the ventilation system required for this noise impact assessment.

Internal Noise Levels

Taking into account the external façade levels and the specified building envelope, the internal noise levels have been calculated. In all instances the good internal noise criteria are achieved for daytime and night-time periods.

4.3 Element 3 – External Amenity Area Noise Assessment

In terms of the external amenity areas within the proposed development, balcony spaces overlooking the main local roads are expected to exceed the recommended range of noise levels from ProPG of between 50 – 55dB $L_{Aeq,16hr}$. However, ProPG does provide a way to offset higher than desirable external noise levels in private amenity areas through "*provision of a relatively quiet, protected, nearby, external amenity space for sole use by a limited group of residents as part of the amenity of their dwellings*". For this development there are external podium areas that are elevated some 4m from ground height at Site C. Taking account of the attenuation provided by distance from the road as well as attenuation from the barrier affect due to the removal of line of sight to the road it is expected that the majority of the podium areas will meet the recommended range of noise levels from ProPG. In addition, to the podium areas of Site C, Site B has external amenity areas to the rear of the property shielded from the local roads by the buildings themselves. These areas will experience noise levels within the ProPG recommended levels for external amenity space.

Given both sites provide amenity spaces with noise levels that achieve the recommended ProPG criteria it is considered that the objectives of achieving suitable external noise levels is achieved within the overall site.

4.4 Element 4 – Assessment of Other Relevant Issues

Element 4 gives consideration to other factors that *may* prove pertinent to the assessment, the items that are defined in the document that are relevant here are:

- 4(i) compliance with relevant national and local policy
- 4(ii) magnitude and extent of compliance with ProPG

Each is discussed in turn below.

4.4.1 Compliance with Relevant National and Local Policy

There are no National policy documents relating to the acoustic design of residential dwellings. Locally the *Dublin Agglomoration Noise Action Plan 2018 – 2023* specifies that the guidance contained within ProPG should be used in assessing the noise impact on new residential developments. This Acoustic Design Statement has been prepared in compliance with the requirements of ProPG and therefore complies with the requirements of local policy.

4.4.2 Magnitude and Extent of Compliance with ProPG

As discussed within this report the following conclusions have been drawn with regards to the extent of compliance with ProPG:

- All dwellings as part of the development have been designed to achieve the good level of internal noise levels specified within ProPG.
- The vast majority of shared external amenity areas have been shown to have an external noise level that complies with the recommended criterion set out in ProPG.

Based on the preceding it is concluded that the proposed development is in full compliance with the requirements of ProPG.

4.5 Acoustic Design Statement Conclusion

An initial site noise risk assessment has been carried out on the proposed residential development at Blanchardstown. The assessment has classified the development site as having a medium noise risk. This was determined through measurements of noise levels on site.

Further discussion is presented in terms of the likely noise impact of both the external and internal areas of the proposed development. It has been found that the majority of the inhabitants will have access to a quiet external area that is screened by the development itself from road traffic noise. All habitable rooms will achieve a good internal noise environment with the enhanced acoustic glazing and mechanical ventilation.

APPENDIX A

GLOSSARY OF ACOUSTIC TERMINOLOGY

Ambient noise — The totally encompassing sound in a given situation at a given time, usually composed of sound from many sources, near and far.

Background noise — The steady existing noise level present without contribution from any intermittent sources. The A-weighted sound pressure level of the residual noise at the assessment position that is exceeded for 90 per cent of a given time interval, T ($L_{AF90,T}$).

dB — Decibel - The scale in which sound pressure level is expressed. It is defined as 20 times the logarithm of the ratio between the RMS pressure of the sound field and the reference pressure of 20 micro-pascals (20 μPa).

dB(A) — An 'A-weighted decibel' - a measure of the overall noise level of sound across the audible frequency range (20 Hz – 20 kHz) with A-frequency weighting (i.e. 'A'–weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.

$D_{n,e,w}$ — Weighted element-normalized level difference. This is the value of sound insulation performance of a ventilator measured under laboratory conditions. It is a weighted single figure index that is derived from values of sound insulation across a defined frequency spectrum. Technical literature for acoustic ventilators typically presents sound insulation data in terms of the $D_{n,e,w}$ parameter.

Hertz (Hz) — The unit of sound frequency in cycles per second.

$L_{Aeq,T}$ — This is the equivalent continuous sound level. It is a type of average and is used to describe a fluctuating noise in terms of a single noise level over the sample period (T).The closer the L_{Aeq} value is to either the L_{AF10} or L_{AF90} value indicates the relative impact of the intermittent sources and their contribution. The relative spread between the values determines the impact of intermittent sources such as traffic on the background.

L_{AFN} — The A-weighted noise level exceeded for N% of the sampling interval. Measured using the "Fast" time weighting.

L_{AF90} — Refers to those A-weighted noise levels in the lower 90 percentile of the sampling interval; it is the level which is exceeded for 90% of the measurement period. It will therefore exclude the intermittent features of traffic and is used to estimate a background level. Measured using the "Fast" time weighting.

L_{AF10} — Refers to those A-weighted noise levels in the upper 10 percentile of the sampling interval; it is the level which is exceeded for 10% of the measurement period. It is typically representative of traffic noise levels. Measured using the "Fast" time weighting.

L_{AFmax}	is the instantaneous fast time weighted maximum sound level measured during the sample period.
Octave band	A frequency interval, the upper limit of which is twice that of the lower limit. For example, the 1,000Hz octave band contains acoustical energy between 707Hz and 1,414Hz. The centre frequencies used for the designation of octave bands are defined in ISO and ANSI standards.
R_w	Weighted Sound Reduction Index – This is the value of the sound insulation performance of a partition or element measured under laboratory conditions. It is a weighted single figure index that is derived from values of sound insulation across a defined frequency spectrum. Technical literature typically presents sound insulation data in terms of the R_w parameter.
R'_w	Weighted Apparent Sound Reduction Index – This is similar to R_w but is used to express *in-situ* sound insulation performance, where issues such as flanking issue noise transfer may affect the measured level. As stated previously, technical literature typically uses the R_w parameter. In order to reflect the likely *in-situ* performance of an element an appropriate correction should be applied for the expected reduction in performance. Note that in instances where significant flanking issues are present the *in-situ* performance may be further reduced.

Appendix E

Photomontage Methodology

3D Modelling
2D CAD drawings were supplied by O'Mahony Pike Architects. Visual Lab used these drawings to produce a detailed 3D model of the proposed building and associated landscaping. Existing topographical surveys were also provided by O'Mahony Pike Architects.

Photography
All photographs we taken by BML Media using a high resolution Sony 7R2 35mm Camera with a 24 mm Cannon mark 2 shift lens.

A plumb line was used to mark the position of the centre of the camera and to confirm a camera height of 1.6m. A mark was sprayed on the ground at each camera position and a photograph taken of the camera position for reference. Additional detail photographs of the site area and surrounds were also taken for reference purposes using a variety of lenses.

Survey Information
In all cases the camera positions and control points were surveyed by CSS Surveys. Key static points that were visible in the photographs were also surveyed to serve as control points. The camera positions and control points were then related back and aligned into the Base Model (all at National Grid).

Base Model
The provided topographical survey and proposed model were over-laid and aligned to create a 'Base' model file. This Base model allowed for the accurate alignment of the proposed buildings, camera positions and reference points. This Base model was updated throughout the design process.

Photo matching
Using 3D Studio Max software a virtual camera was positioned using the camera locations from surveyed information and an accurate fit between the camera and the photograph was achieved by precisely matching the surveyed static features (control points) in the rendering to the corresponding points in the background photograph.

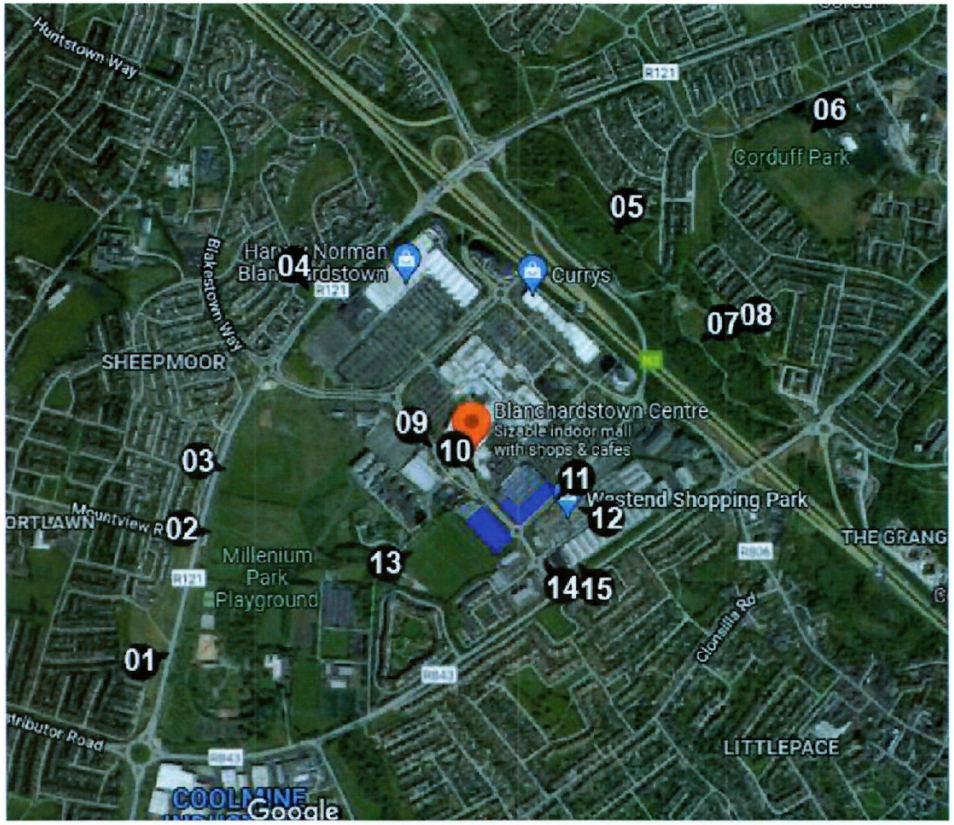
Rendering
The models were textured and rendered using VRAY rendering engine. The materials and lighting were adjusted to try an mimic real work scenarios - building within the scene were used as a reference to obtain valuable visual clues as to how the light would react with the proposed building. A computer image was produced (rendered) and then combined with the background photograph using digital compositing software.
Using the detail photographs for reference the images were then cropped to remove any parts that would be screened by existing trees, topography or buildings, leaving only the parts, which would be visible. The photomontages are presented as "proposed", with additional proposed planting.

Presentation
As photography cannot present what the eye sees in reality, it is intended that the photomontages are used as a tool to aid visual assessment. They should be viewed on site and compared with the real scene.

Each view is presented on 2 sheets:
Sheet 1 - Existing site pre construction
Sheet 2 - Proposed scheme

Conclusion
We have outlined our procedure for the generation of the photo-match. We have re-verified our results and we are confident that these images give a fair and true representation of the proposed development.

Notes
Subject to accurate survey information, the position and scale of a building in a scene can be verified mathematically. Whilst position, height and scale will be objectively accurate, subjective judgement must be used when lighting is being assessed and therefore a definitive and objectively verified agreement on lighting is not possible.
Visual Lab recommends that all parties are mindful that Environmental Statement photomontage should be used as a complement to site based assessment.



Location of Camera's

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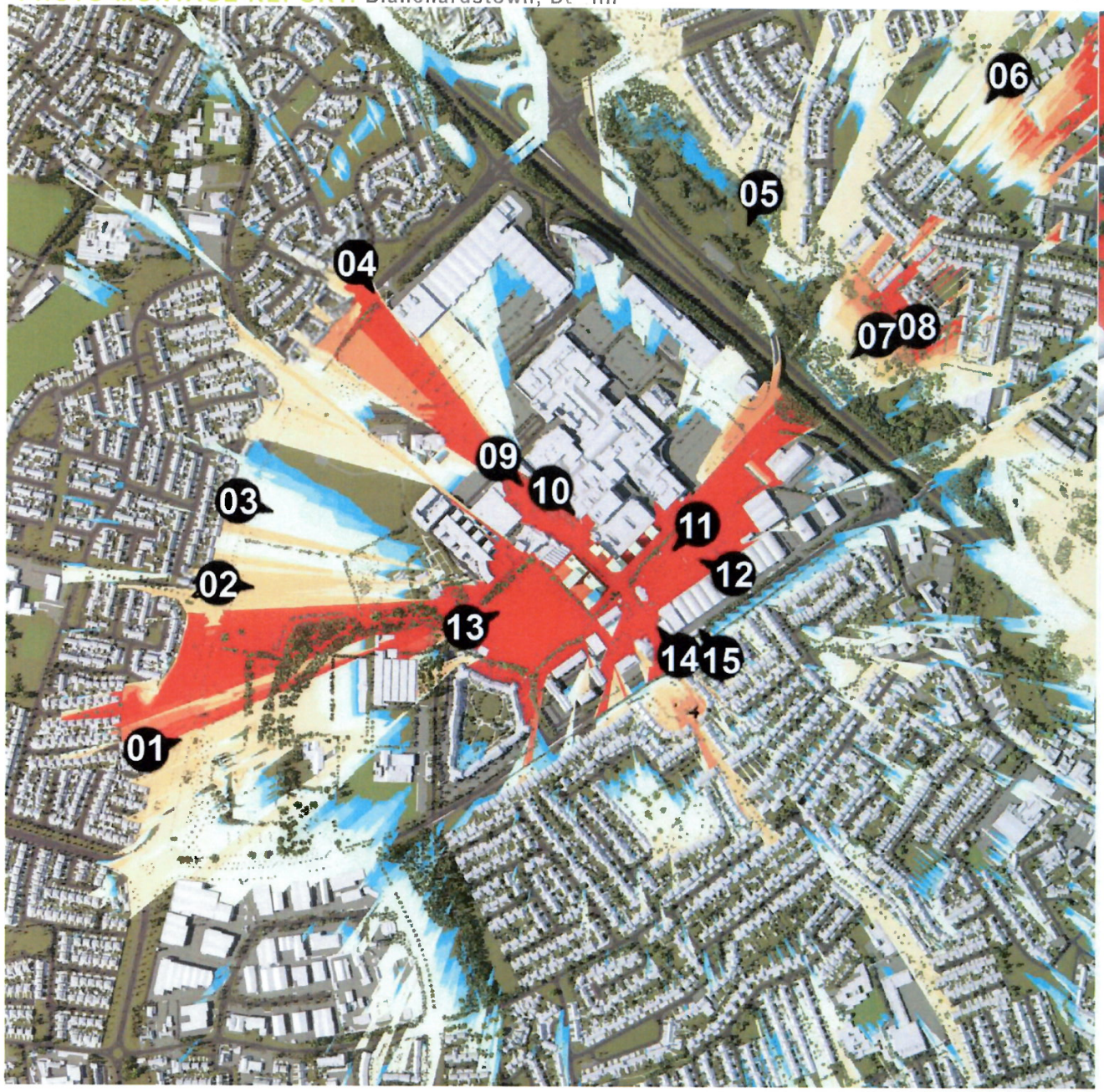
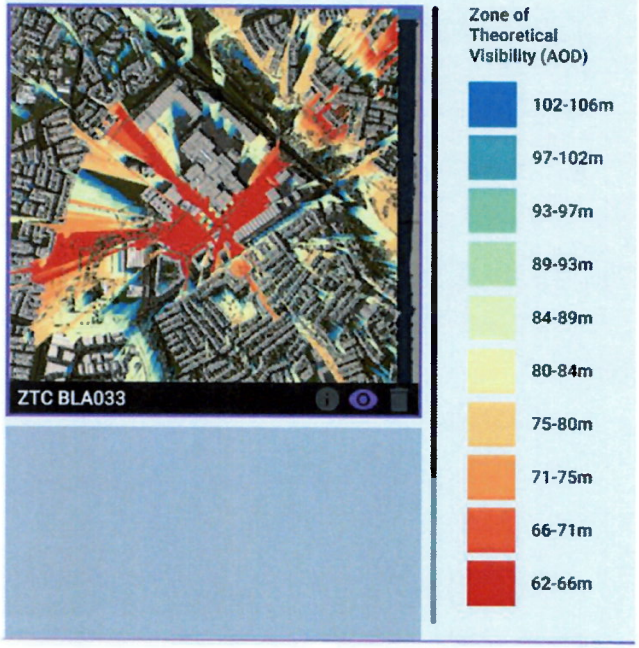


ZTV MAP



ZTV: 24/01/22



visual lab

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 15:19 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.3876773, -6.4022216

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 15:19 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.3876773, -6.4022216

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 03/02/2022 Time: 15:22 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude:53.3903092, -6.40049196

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]in



Date: 03/02/2022 Time: 15:22 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude:53.3903092, -6.40049196

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 16:38 Lens: 24 mm

Field of view for a 50 mm Lens
Field of view for a 24 mm Lens

Latitude & Longitude: 53.39152566, -6.39993375

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]in



Date: 16/07/2021 Time: 16:38 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39152566, -6.39993375

PHOTO:MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 18:44 Lens: 24 mm

Field of view for a 50 mm Lens
Field of view for a 24 mm Lens

Latitude & Longitude: 53.39540222, -6.39728146

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]in



Date: 16/07/2021 Time: 18:44 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39540222, -6.39728146

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin

VIEW 05 EXISTING



Date: 02/02/2022 Time: 14:25 Lens: 24 mm

Field of view for a 50 mm Lens
Field of view for a 24 mm Lens

Latitude & Longitude: 53.39677498, -6.38631591

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin

VIEW 05 PROPOSED



Date: 02/02/2022 Time: 14:25 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39677498, -6.38631591

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 11:43 Lens: 24 mm

Field of view for a 50 mm Lens
Field of view for a 24 mm Lens

Latitude & Longitude: 53.39861865, -6.37907593

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]in



Date: 16/07/2021 Time: 11:43 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39861865, -6.37907593

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 02/02/2022 Time: 14:18 Lens: 24 mm

Field of view for a 50 mm Lens
Field of view for a 24 mm Lens

Latitude & Longitude: 53.3942688, -6.3819438

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 02/02/2022 Time: 14:18 Lens: 24 mm

Field of view for a 50 mm Lens
Field of view for a 24 mm Lens

Latitude & Longitude: 53.3942688, -6.3819438

PHOTO:MONTAGE REPORT: Blanchardstown, Dublin



Date: 02/02/2022 Time: 13:47 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39452669, -6.38134502

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 02/02/2022 Time: 13:47 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39452669, -6.38134502

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 13:23 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39226063, -6.39275274

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]in



Date: 16/07/2021 Time: 13:23 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39226063, -6.39275274

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 13:23 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39226063, -6.39275274

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]in



Date: 16/07/2021 Time: 13:14 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39176069, -6.39144383

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 13:14 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.39176069, -6.39144383

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]in



visual lab

Date: 26/01/2022 Time: 13:21 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude:53.3913261, -6.3875059

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



visual lab

Date: 26/01/2022 Time: 13:21 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude:53.3913261, -6.3875059

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]in



Date: 26/01/2022 Time: 13:13 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude:53.3903862, -6.3870681

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 26/01/2022 Time: 13:13 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude:53.3903862, -6.3870681

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]in



Date: 16/07/2021 Time: 14:24 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude:53.38976513, -6.39335466

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 14:24 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude:53.38976513, -6.39335466

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]lin



Date: 16/07/2021 Time: 13:06 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude: 53.38895201, -6.38780144

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 13:06 Lens: 24 mm

Field of view for a 50 mm Lens
Field of view for a 24 mm Lens

Latitude & Longitude: 53.38895201, -6.38780144

PHOTO-MONTAGE REPORT: Blanchardstown, D[illegible]in



Date: 16/07/2021 Time: 14:11 Lens: 24 mm

Field of view for a 50 mm Lens

Field of view for a 24 mm Lens

Latitude & Longitude:53.38878852, -6.38773885

PHOTO-MONTAGE REPORT: Blanchardstown, Dublin



Date: 16/07/2021 Time: 14:11 Lens: 24 mm

Field of view for a 50 mm Lens
Field of view for a 24 mm Lens

Latitude & Longitude:53.38878852, -6.38773885

Appendix F

gia
CHARTERED SURVEYORS

DAYLIGHT & SUNLIGHT

INTERNAL DAYLIGHT, SUNLIGHT AND OVERSHADOWING REPORT

Blanchardstown - Sites B and C, Dublin

08 March 2022

GIA No: **17965**

PROJECT DATA:

Client	**Blanche Developments Ltd.**
Architect	**O'Mahony Pike**
Project Title	**Blanchardstown - Sites B and C, Dublin**
Project Number	**17965**

REPORT DATA:

Report Title	**Internal Daylight, Sunlight and Overshadowing Assessment**
GIA Department	**Daylight & Sunlight**
Dated	**08 March 2022**

Prepared by	**PDA**
Checked by	**GLE**
Type	**Planning**

Revisions	No:	Date:	Notes:	Signed:
A		08/03/22	Overshodowing update	GLE

DISCLAIMER:

N.B This report has been prepared for Blanche Developments Ltd. by GIA as their appointed Daylight & Sunlight consultants. This report is intended solely for Blanche Developments Ltd.and may contain confidential information. No part or whole of its contents may be disclosed to or relied upon by any Third Parties without the express written consent of GIA. It is accurate as at the time of publication and based upon the information we have been provided with as set out in the report. It does not take into account changes that have taken place since the report was written nor does it take into account private information on internal layouts and room uses of adjoining properties unless this information is publicly available.

SOURCES OF INFORMATION:

Information Received	**IR-22-17965**
Release Number	**Rel_10_17965_DSD**
Issue Number	**08**
Site Photos	**GIA**
3D models	**VERTEX**
OS Data	**FIND Maps**

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1 EXECUTIVE SUMMARY

The purpose of this report is to ascertain whether the Proposed Blanchardstown Sites B and C Development will provide residential accommodation considered acceptable in terms of daylight and sunlight.

GIA has worked comprehensively with the architects throughout the design process to ensure the scheme performs well in terms of daylight and sunlight amenity. This has resulted in a number of design strategies being incorporated to maximise daylight and sunlight ingress, as discussed in section 5.1.

All habitable rooms within the scheme have been technically assessed for daylight quantity (by means of Average Daylight Factor - ADF) and distribution (by means of No Sky Line – NSL – and Room Depth Criterion – RDC). In addition, all living areas with a southerly aspect have been assessed for their access to sunlight both annually (Annual Probable Sunlight Hours – APSH) and in winter (Winter Probable Sunlight Hours – WPSH). Finally, all outdoor areas of public or communal amenity have been tested for overshadowing through the Sun Hours on Ground metric.

Overall, the results show that:

- 93% (803 out of 861) of the habitable rooms within the Proposed Sites B and C Development will see levels of ADF that either meet or exceed the BRE recommendations, which is considered excellent for a development within an urban location.
- 89% (768) out of 861) of the rooms see levels of NSL (sky visibility) that meet or exceed the BRE recommendation.
- All applicable rooms have been designed with good proportions for daylight distribution in accordance with BRE's RDC.
- 77% of the assessed living areas with a southerly aspect will meet or exceed the levels of annual sunlight (APSH) recommended within the BRE guidance;
- 92% of the assessed living areas with a southerly aspect will meet or exceed the levels of winter sunlight (WPSH) recommended within the BRE guidance.

Most of the areas of communal amenity at ground, podium and roof levels meet or exceed the recommendations for overshadowing and will therefore be well sunlit throughout the year.

Where shortfalls are inevitable compensatory measures have been implemented, in line with the Sustainable Urban Housing: Design Standards for new Apartments, 2020, section 6.7. This is detailed in section 5.1 of this report.

Overall, we consider that the proposed scheme provides high quality accommodation in terms of daylight and sunlight amenity.

2 INTRODUCTION

GIA has been instructed to provide a report upon the potential availability of Daylight and Sunlight to the proposed accommodation within the residential scheme prepared by O'Mahony Pike. GIA was specifically instructed to carry out the following:

- To create a 3D computer model of the proposal based upon drawings prepared by O'Mahony Pike.
- Carry out a daylight assessment using the methodologies set out in the BRE guidance for Average Daylight Factor, No-Sky Line and Room Depth Criterion.
- Carry out a sunlight assessment using the methodologies set out in the BRE guidance for Annual Probable Sunlight Hours (APSH) to the fenestration facing within 90° of due south.
- Carry out an overshadowing assessment using the methodology set out in the BRE guidance for Sun Hours On Ground (SHOG) for all relevant amenity areas.
- Prepare a report setting out the analysis and our findings.

3 BRE GUIDELINES

The Building Research Establishment (BRE) have set out in their handbook 'Site Layout Planning for Daylight and Sunlight a Guide to Good Practice (2011)', guidelines and methodology for the measurement and assessment of daylight and sunlight within proposed buildings.

This document states that it is intended to be used in conjunction with the daylight recommendations found within the British Standard BS8206-2:2008 and The Applications Manual on Window Design of the Chartered Institution of Building Services Engineers (CIBSE. 1999).

The guide also provides advice on site layout planning to determine the quality of daylight and sunlight within open spaces between buildings.

It is important to note, however, that this document is a guide and states that its aim *"is to help rather than constrain the designer"*.

The document provides advice, but also clearly states that it *"is not mandatory and this document should not be seen as an instrument of planning policy."* The report also acknowledges in its introduction that *"in special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."*

It is an inevitable consequence of the built-up urban environment that daylight and sunlight will be more limited in these areas. It is well acknowledged that in such situations there may be many other conflicting and potentially more important planning and urban design matters to consider other than just the provision of ideal levels of daylight and sunlight.

In May 2019 the British Standard BS8206-2:2008 was superseded by the new European Standard on daylight "BS EN 17037:2018 Daylight in buildings". The Standard adopts a new methodology for testing daylight and sunlight in proposed developments based on climatic data as opposed the 'Standard CIE overcast sky' adopted in BS8206-2:2008, and also includes views out and glare.

Following on from the review of the European Standard by a dedicated commission of UK experts (which included the author of the BRE BR209 guidance Dr. Paul Littlefair), the British Standard Institution appended to BS EN 17037:2018 a UK National Annex which brings the recommended light levels in line with those of BS8206-2:2008.

BRE is currently looking to update and re-publish BR209 to align their guidance with the new BS EN 17037:2018 in 2020. Until then, the position of BRE can be summarised from a post by Dr. Littlefair on the LinkedIn Planning Daylight & Sunlight Group (BRE BR209): *"Until BR 209 is rewritten, we are adopting a flexible approach to applying the two standards, for example in assessing the daylight and sunlight available in new buildings. So, for example, if we were reviewing a daylight report for a local authority, we would consider it reasonable to accept either average daylight factor tables using BS 8206 or median daylight factors/median illuminance calculated using EN 17037, provided they were calculated and presented properly".*

Given the above and the reference to the BRE guidance in planning policies, the assessments within this report are carried out with the criteria and methodologies set out in BRE BR209 and BS8206-2:2008. It is not considered that calculations undertaken according to BS EN 17037:2018 would alter the conclusions meaningfully.

3.11 DAYLIGHT

The BRE set out various methods for assessing the daylight within a proposed building within section 2.1 and Appendix C of the handbook. These are summarised below.

Vertical Sky Component (VSC)

This method of assessment can be undertaken using a skylight indicator or a Waldram diagram. It measures from a single point, at the centre of the window (if known at the early design stage), the quantum of sky visible taking into account all external obstructions. Whilst these obstructions can be either other buildings or the general landscape, trees are usually ignored unless they form a continuous or dense belt of obstruction.

The VSC method is a useful 'rule of thumb' but has some significant limitations in determining the true quality of daylight within a proposed building. It does not take into account the size of the window, any reflected light off external obstructions, any reflected light within the room, or the use to which that room is put. Appendix C of the guide goes into more detail on these matters and sets forward alternative methods for assessment to overcome these limitations.

Appendix C of the BRE guide: Interior Daylighting Recommendations, states:

"The British Standard Code of practice for daylighting (BS 8206-2) and the CIBSE Lighting Guide LG 10 Daylighting and window design contain advice and guidance on interior daylighting. The guidance contained in this publication (BR 209) is intended to be used with BS 8206-2 and LG 10. Both these publications refer to BR 209.

For skylight BS 8206-2 and LG 10 put forward three main criteria, based on average daylight factor (ADF); room depth; and the position of the no sky line."

These assessments are set out below.

Average Daylight Factor (ADF)

"If a predominantly daylit appearance is required, then the ADF should be 5% or more if there is no supplementary electric lighting, or 2% or more if supplementary electric lighting is provided. There are additional recommendations for dwellings of 2% for kitchens, 1.5% for living rooms and 1% for bedrooms. These additional recommendations are minimum values of ADF which should be attained even if a predominantly daylit appearance is not achievable."

This method of assessment takes into account the total glazed area to the room, the transmittance quality of the glazing proposed, the total area of the room surfaces including ceilings and floors, and the internal average reflectance for the room being assessed. The method also takes into account the Vertical Sky Component and the quantum of reflected light off external surfaces.

This is, therefore, a significantly more detailed method of assessment than the Vertical Sky Component method set out above.

Room Depth Criterion (RDC)

Where it has access to daylight from windows in one wall only, the depth of a room can become a factor in determining the quantity of light within it. The BRE guidance provides a simple method for examining the ratio of room depth to window area. However, whilst it does take into account internal surface reflections, this method also has significant limitations in that it does not take into account any obstructions outside the window and therefore draws no input from the quantity of light entering the room.

No Sky Line (NSL)

This third method of assessment is a simple test to establish where within the proposed room the sky will be visible through the windows, taking into account external obstructions. The assessment is undertaken at working plane height (850mm above floor level) and the method of calculation is set out in Appendix D of the BRE handbook.

Appendix C of the BRE handbook states *"If a significant area of the working plane (normally more than 20%) lies beyond the no sky line (ie it receives no direct skylight) then the distribution of daylight in*

the room will look poor and supplementary electric lighting will be required." To guarantee a satisfactory daylight uniformity, the area which does not receive direct skylight should not exceed 20% of the floor area, as quantified in the BS 8206 Part 2 2008.

Summary

The Average Daylight Factor gives a more detailed assessment of the daylight within a room and takes into account the highest number of factors in establishing a quantitative output.

However, the conclusion of Appendix C of the BRE guide states:

"[All three of] the criteria need to be satisfied if the whole of the room is to look adequately daylit. Even if the amount of daylight in a room (given by the Average Daylight Factor) is sufficient, the overall daylight appearance will be impaired if its distribution is poor."

In most urban areas it is important to recognise that the distribution of daylight within a room may be difficult to achieve, given the built-up nature of the environment. Consequently, most local authorities seek to ensure that there is sufficient daylight within the room as determined by the Average Daylight Factor calculation. However, the additional recommendations of the BRE and British Standard for residential accommodation, set out above, ought not to be overlooked.

3.2 SUNLIGHT

The BRE provide guidance in respect of sunlight quality for new developments within section 3.1 of the handbook. It is generally acknowledged that the presence of sunlight is more significant in residential accommodation than it is in commercial properties, and this is reflected in the BRE document.

It states, *"in housing, the main requirement for sunlight is in living rooms, where it is valued at any time of the day, but especially in the afternoon. Sunlight is also required in conservatories. It is viewed as less important in bedrooms and in kitchens where people prefer it in the morning rather than the afternoon."*

The BRE guide considers the critical aspects of orientation and overshadowing in determining the availability of sunlight at a proposed development site.

The guide proposes minimizing the number of dwellings whose living room face solely north unless there is some compensating factor such as an appealing view to the north, and it suggests a number of techniques to do so. Furthermore, it discusses massing solutions with a sensitive approach to overshadowing, so as to maximize access to sunlight.

At the same time, it acknowledges that the site's existing urban environment may impose orientation or overshadowing constraints which may not be possible to overcome.

To quantify sunlight access for interiors where sunlight is expected, it refers to the BS 82606-2 criterion of Annual Probable Sunlight Hours. APSH is defined as *"the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness at the location in question."* In line with the recommendation, APSH is measured from a point on the inside face of the window, should the locations have been decided. If these are unknown, sunlight availability is checked at points 1.6m above the ground or the lowest storey level on each main window wall, and no more than 5m apart. If a room has multiple windows on the same wall or on adjacent walls, the highest value of APSH should be taken into account. If a room has two windows on opposite walls, the APSH for each can be added together.

The summary of section 3.1 of the guide states as follows:

"In general, a dwelling or non-domestic building which has a particular requirement for sunlight, will appear reasonably sunlit provided that:

- *At least one main window faces within 90 degrees of due south, and*
- *The centre of at least one window to a main living room can receive 25% of annual probable sunlight hours, including at least 5% of annual probable sunlight hours in the winter months between 21 September and 21 March. "*

In paragraph 3.1.11 the BRE guidance suggests that if a room faces significantly North of due East or West it is unlikely to meet the recommended levels proposed by the BS 8206-2. As such, it is clear that only windows facing within 90 degrees of due South can be assessed using this methodology.

It is also worth noting how paragraph 5.3 of the BS 8206-2 suggests that with regards to sunlight duration *"the degree of satisfaction is related to the expectation of sunlight. If a room is necessarily north facing or if the building is in a densely-built urban area, the absence of sunlight is more acceptable than when its exclusion seems arbitrary"*.

3.3 OVERSHADOWING

The BRE guidance in respect of overshadowing of amenity spaces is set out in section 3.3 of the handbook. Here it states as follows:

"Sunlight in the spaces between buildings has an important impact on the overall appearance and ambiance of a development. It is valuable for a number of reasons, to:

- *provide attractive sunlit views (all year)*
- *make outdoor activities, like sitting out and children's play more pleasant (mainly warmer months)*
- *encourage plant growth (mainly spring and summer)*
- *dry out the ground, reducing moss and slime (mainly in colder months)*
- *melt frost, ice and snow (in winter)*
- *dry clothes (all year)"*

Again, it must be acknowledged that in urban areas the availability of sunlight on the ground is a factor which is significantly controlled by the existing urban fabric around the site in question and so may have very little to do with the form of the development itself. Likewise, there may be many other urban design, planning and site constraints which determine and run contrary to the best form, siting and location of a proposed development in terms of availability of sun on the ground.

The summary of section 3.3 of the guide states as follows:

"3. 3 .17 It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21 March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive two hours of sun on 21 March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable. If a detailed calculation cannot be carried out, it is recommended that the centre of the area should receive at least two hours of sunlight on 21 March."

3.4 FURTHER RELEVANT INFORMATION

Further information can be found in The Daylight in Urban Areas Design Guide (Energy Saving Trust CE257, 2007) which provides the following recommendation with regards to VSC levels in urban areas:

"If 'theta' (Visible sky angle) is greater than 65° (obstruction angle less than 25° or VSC at least 27 percent) conventional window design will usually give reasonable results.

If 'theta' is between 45° and 65° (obstruction angle between 25° and 45°, VSC between 15 and 27 percent), special measures such as larger windows and changes to room layout are usually needed to provide adequate daylight.

If 'theta' is between 25° and 45° (obstruction angle between 45° and 65°, VSC from 5 to 15 percent), it is very difficult to provide adequate daylight unless very large windows are used.

If 'theta' is less than 25° (obstruction angle more than 65°, VSC less than 5 percent) it is often impossible to achieve reasonable daylight, even if the whole window wall is glazed."

4 METHODOLOGY

In order to undertake the daylight and sunlight assessments set out in the previous pages, we have prepared a three dimensional computer model and used specialist lighting simulation software.

The three dimensional representation of the proposed development has been modelled using the scheme drawings provided to us by O'Mahony Pike. This has been placed in the context of its surrounding buildings which have been modelled from survey information, photogrammetry, OS and site photographs. This allows for a precise model, which in turn ensures that analysis accurately represents the amount of daylight and sunlight available to the building facades, internal and external spaces, considering all of the surrounding obstructions and orientation.

Daylight Assessments

Daylight tests are carried out under an overcast condition, meaning that the orientation of the Blocks is not relevant. This represents a typical condition of the local cimate and the worst-case scenario in terms of daylight availability.

All open-plan combined living kitchen dining rooms have been assessed as a whole. The results presented in this report primarily consider the 2% ADF target for ADF, however an additional compliance figure against the 1.5% ADF level for living rooms is also discussed.

Where living rooms falls short of the 1.5% ADF guidance, a supplementary assessment has been carried out. This takes into account the spatial hierachy for daylight and only the front portion, where living and dining areas are located, have been tested. An example of this appraoch is provided in the image below.

Overshadowing

The overshadowing test has been undertaken for the proposed open spaces both at the equinox (21st March), as recommended by the BRE, and in the summer solstice (21st June) to show the likely performance in summer when outdoor spaces are most likely to be enjoyed. The results are presented on a two-colour diagram showing the compliance rate on 21st March and on a falsecolour scale depicting the sunlight exposure on these dates.

4.1 SIMULATION ASSUMPTIONS

Where no values for reflectance, transmittance and maintenance factor were specified by the designer the following values from *BS 8206-2:2008, Annex A, tables A.1-A.6* were used for the calculation of Average Daylight Factor values. These values are shown in Table 1.

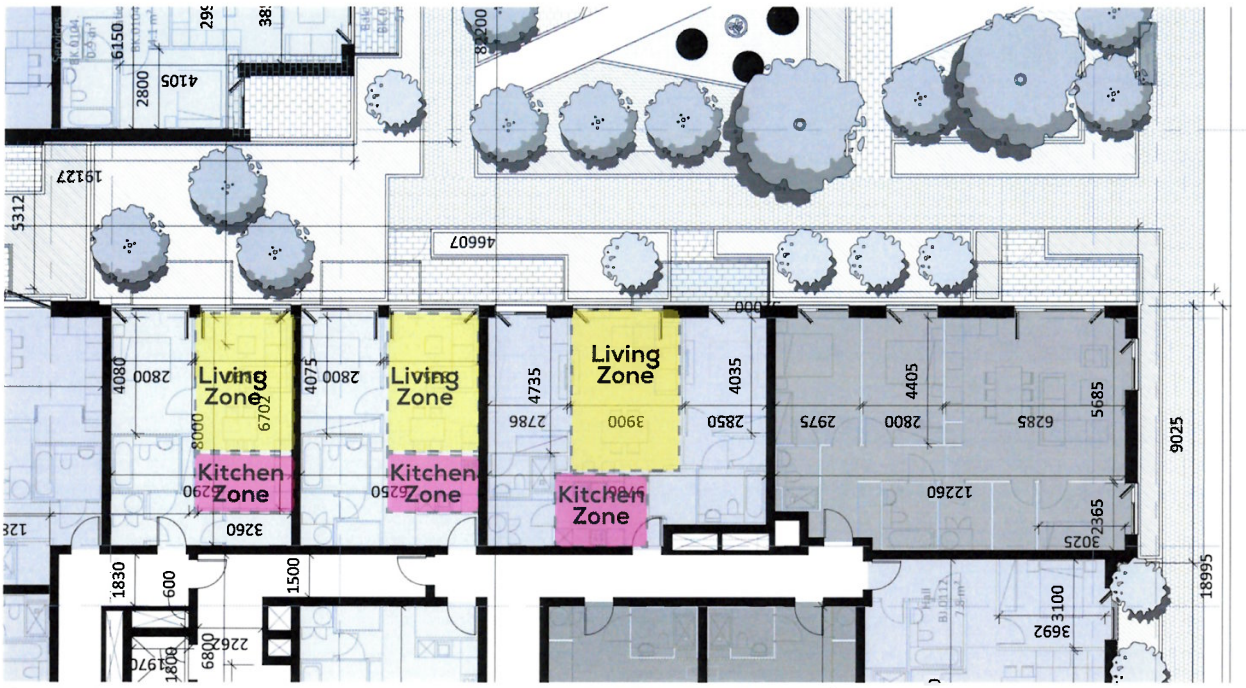


Fig. 01: Supplementary test - Open-plan living/kitchen/dining room spatial hierarchy for daylighting

Table 01: Typical reflectance, transmittance and maintenance factors

REFLECTANCE VALUES:	
Surrounding	0.2
Pavement	0.2
Grass	0.1
Water	0.1
Yellow brick	0.3
Red brick	0.2
Portland Stone	0.6
Concrete	0.4
Internal walls (light grey)	0.68
Internal ceiling (white paint)	0.85
Internal floor (medium veneer)	0.3
Internal floor (light veneer)	0.4

TRANSMITTANCE VALUES	TV
Triple glazing (Low-E): Pilkington K Glass 4/12/4/12/4 Argon filled 90%	0.63
Double glazing (Low-E): Pilkington K Glass 4/16/4 Argon filled 90%	0.75
Single glazing: Pilkington Optifloat Clear 4mm Annealed	0.90
Translucent glazing (Low-E): Pilkington Optifloat Opal - 4mm K /16/4mm Opal	0.74

MAINTENANCE FACTORS: GLAZING TYPE	TV (Normal)	A.3	A.4	A.5	A.6	TV (Total)
Triple Low-E (frames modelled)	0.63	8	1	1	1	0.58
Triple Low-E (frames not modelled)	0.63	8	1	1	0.8	0.46
Triple Low-E (inclined, frames modelled)	0.63	8	2	1	1	0.53
Triple Low-E (inclined, frames not modelled)	0.63	8	2	1	0.8	0.42
Triple Low-E (horizontal, frames modelled)	0.63	8	3	1	1	0.48
Triple Low-E (horizontal, frames not modelled)	0.63	8	3	1	0.8	0.38
Double Low-E (frames modelled)	0.75	8	1	1	1	0.69
Double Low-E (frames not modelled)	0.75	8	1	1	0.8	0.55
Double Low-E (inclined, frames modelled)	0.75	8	2	1	1	0.63
Double Low-E (inclined, frames not modelled)	0.75	8	2	1	0.8	0.50
Double Low-E (horizontal, frames modelled)	0.75	8	3	1	1	0.57
Double Low-E (horizontal, frames not modelled)	0.75	8	3	1	0.8	0.46

5 CONCLUSIONS

5.1 DESIGN EVOLUTION

GIA and the architects, O'Mahony Pike Architects, have worked closely throughout the design process to maximise the ingress of daylight and sunlight within the proposed Sites B and C Blanchardstown development. In terms of daylight, sunlight and overshadowing levels, the primary constraints are typical of any urban development, particularly with courtyards.

The application site is a mixed-use development in the Blanchardstown Town Centre. This area is designated as a Metropolitan Consolidation Town under the Eastern & Midland Regional Assembly Regional Spatial and Economic Strategy (RSES) 2019 and a Level 2 'Major Town Centre' in the Retail Strategy for the Greater Dublin Area

The sites enjoy good daylight and sunlight potential from most orientations. The most constrained areas of the proposed massing are on the lowest floors where blocks face each other. This is typical of any scheme within an urban environment.

In order to respond to the above constraints, GIA has worked alongside the design team to optimise the daylight and sunlight performance of the proposed development through an iterative process of technical assessment, feedback and design amendments. As a result of this collaborative process, the following features have been implemented into the design:

- Fenestration has been enlarged or additional windows have been provided in selected areas, where the daylight and sunlight availability is lowest while balancing overheating requirements;
- The internal layouts have evolved to maximise daylight ingress within living areas, where good daylighting is most valued. As a result, a number living rooms were swapped with their bedrooms to be less obstructed.
- Where rooms are located behind balconies, care has been taken to provide additional windows flush with the façade whenever possible, to increase the daylight and sunlight ingress;
- Units have been designed to give priority in terms of daylight to the living space over the kitchen by locating the kitchen at the rear and using a breakfast bar to help visually separate the spaces, although each spaces has been assessed as an open-plan living/kitchen/dining room.
- Lighter surface finishes have been applied to reflect light deeper into the rooms. This is achieved by the adoption a lighter veneer for the apartments' flooring.

The optimisation process has ensured that the vast majority of habitable rooms achieve the minimum levels of daylight and sunlight as recommended by BRE. Shortfalls are however, an inevitable consequence of any development within an urban context. A degree of flexibility when interpreting the results are generally considered. The Sustainable Urban Housing: Design Standards for new Apartments, 2020, for instance states in section 6.7 that:

"Where an applicant cannot fully meet all of the requirements of the daylight provisions, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, which planning authorities should apply their discretion in accepting taking account of its assessment of specific. This may arise due to a design constraints associated with the site or location and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution."

The design team has therefore ensured that compensatory measures are implemented. This includes:

- Apartment units exceeding the minimum floor area requirements;
- Provision of large private amenity in the form of balconies to all units;
- Apertures maximised to the living rooms width, wherever possible;
- Very good levels of sunlight for all open areas of amenity at ground, podium and roof levels.

Overall, the architects have worked to design a balanced scheme providing future occupants with very good levels of daylight and sunlight. Further details are provided in the following sections.

5.2 CONCLUSIONS ON DAYLIGHT

The final daylight and sunlight assessment results are presented in this report. All habitable rooms within the scheme have been technically assessed for daylight quantity (by means of Average Daylight Factor - ADF) and distribution (by means of No Sky Line – NSL – and Room Depth Criterion – RDC). In addition, all living areas with a southerly aspect have been assessed for their access to sunlight both annually (Annual Probable Sunlight Hours – APSH) and in winter (Winter Probable Sunlight Hours – WPSH). Finally, all outdoor areas of public or communal amenity have been tested for overshadowing through the Sun Hours on Ground metric.

Overall, the results of the technical assessments have shown excellent levels of daylight in the scheme with 93% (803 out of the total 861) of all proposed habitable rooms meeting or exceeding the recommended levels of ADF and 89% with a very good sky visibility. As explained above, where levels of light lower than recommended are seen, this is a result of the reduced daylight potential on the lowest floors and/or on the façades that face other blocks.

Of the total 58 rooms seeing lower levels of daylight ingress, 53 are open plan living/kitchen/dining areas and 5 are bedrooms.

In relation to combined Living/Kitchen/Diners, it should be noted that the ADF target to be used is a subject of frequent discussion. The BRE guidelines suggest that the highest requirement for daylight (2% ADF) is within kitchens whilst living rooms only require 1.5% but where a room serves multiple purposes, the higher target should be taken. This is logical when designing houses where separate kitchens may be expected as they would likely be smaller than living rooms and can have a good-sized window solely dedicated to lighting that room. Within modern high density living, however, one much larger main room which encompasses the living room, kitchen and dining space is often preferred. This creates a problem with applying the BRE targets as the ADF, being an average of the whole space, decreases with increased room size. The effect of the combined Living/Kitchen/Dining space is therefore to decrease the ADF whilst increasing the target.

The solutions for the above are often somewhat limited in a dense development as the window size is restricted to the width of the window wall. In anything but the most unobstructed locations, it follows that to achieve the levels of light recommended by BRE, most good-sized Living/Kitchen/Dining spaces must be either fully dual aspect or with very large areas of glass. Whilst possible in places, this is clearly not something available for every unit without reducing a building's footprint. The additional areas of glazing will also lead to reduced privacy, an increased risk of overheating and limitations on room/flat layouts.

When taking the above into account a further 39 living/kitchen/dining rooms achieve the recommendation of 1.5% ADF for living areas. Should this level of daylight be considered acceptable for living/dining spaces, it could be concluded that nearly all (98%) of all habitable rooms proposed will offer future occupants' good levels of daylight.

A supplementary assessment has been undertaken for all the open-plan living/kitchen/dining rooms where the kitchen can be considered separate to the living area. This applies to 9 out of the 14 remaining LKDs and only considers the extents of the living space at the front of the rooms. All these 9 living spaces were found to achieve ADF levels between 1.3% and 2%. Therefore, whilst these rooms fall short of the recommendation of 2.0% ADF as open-plan spaces, they are considered to offer acceptable daylight to residents where it is most appreciated.

The other five LKDs (labelled 26, 94, 164, 580 and 630) see between 1.3% and 1.4% ADF, are single bedroom units and located in the most constrained areas of the masterplan. These are however, provided with large balconies which, although reducing the daylight ingress into the main habitable room, offers a valuable private amenity.

The remaining rooms falling short of recommendation are five bedrooms, which are located in areas with reduced daylight potential. They all see at least 0.8% ADF which is considered only a marginal shortfall of the recommendation of 1.0% ADF and therefore not likely to be perceptibility different from a room that meets the recommended level.

In any urban environment, the sky visibility is inevitably restricted on the lower floors, as the site and massing context partially obstructs the view of the sky from the rear of the rooms. Nevertheless, 768 of the assessed 861 rooms (89%) meet or exceed the recommended

levels of sly visibility (NSL). In addition, 50 of the rooms falling short of the guidance still offer a view of the sky from at least half of their area. Therefore, the vast majority (818 out of 861) of habitable rooms are considered to have a good view of the sky.

5.3 CONCLUSIONS ON SUNLIGHT

BRE states that sunlight is most appreciated in living areas and the greatest expectation of sunlight is within south facing rooms. Therefore, annual and winter Probable Sunlight Hours (PSH) assessments have been undertaken for all living rooms with a main window facing within 90 degrees of due south.

The results given on pages 19-37 show that overall, 231 (92%) of the 252 combined living kitchen dining rooms assessed meet or exceed the winter levels of PSH recommended by BRE.

Both winter and annual targets are met by 77% of the tested LKDs. Lower levels on the annual recommendation are seen on the lower floors and where balconies act as shading devices, obstructing high-angle summer sunlight and letting low-angle winter sunlight penetrate into the rooms. This is however, viewed as beneficial for passively mitigating the risks of overheating and considered a compensatory measure for the shortfalls.

Overall, we conclude that the proposed development will offer excellent levels of daylight and sunlight amenity to future occupants.

5.4 CONCLUSIONS ON OVERSHADOWING

As suggested by BRE, all proposed communal outdoor areas have been assessed for Sun Hours on Ground. The BRE guidance recommends that for an area to be adequately sunlit throughout the year, at least 50% of its space should receive two or more hours of sunlight on 21st March.

The results of the BRE test are presented on page 62 whilst more detailed sun exposure assessments, which show the number of sunlight hours available in a given area throughout the summer months, are illustrated on pages 63-64.

Overall, 90% of all proposed open space across the scheme would see two or more hours of sunlight on 21st March. In addition, as demonstrated by the sun exposure diagrams, excellent sunlight levels can be enjoyed throughout the summer months, with the vast majority of them seeing at least 4.5 hours of sunlight in June.

With the exception of a small roof terrace in Block J, all proposed open spaces will meet BRE's recommendation, with more than half of their area seeing in excess of two hours of sunlight at the spring equinox.

The roof terrace in Block J is the only area which falls short of recommendation on the 21st March. However, it still receives very good levels of sunlight in June, with circa half of the space seeing in excess of 6 hours of sunlight. This is the time of the year when the terrace is most likely to be used due to warmer and longer days. As such, despite not meeting recommendation, this area is still considered to provide acceptable sunlight amenity.

Therefore, given that the vast majority of the proposed open spaces will be very well sunlit throughout the year, and that the only area seeing lower levels of sunlight is a small roof terrace, it is considered that excellent sunlight amenity will be provided to future residents and users of the spaces overall.

The excellent levels of sunlight across the scheme will compensate the isolated shortfall in the terrace, and so future users will still have access to a variety of well sunlit open spaces. As such, the scheme is considered to provide excellent sunlight amenity overall, and to comply with the objectives of the national, regional and local policy framework.

6 SITE OVERVIEW

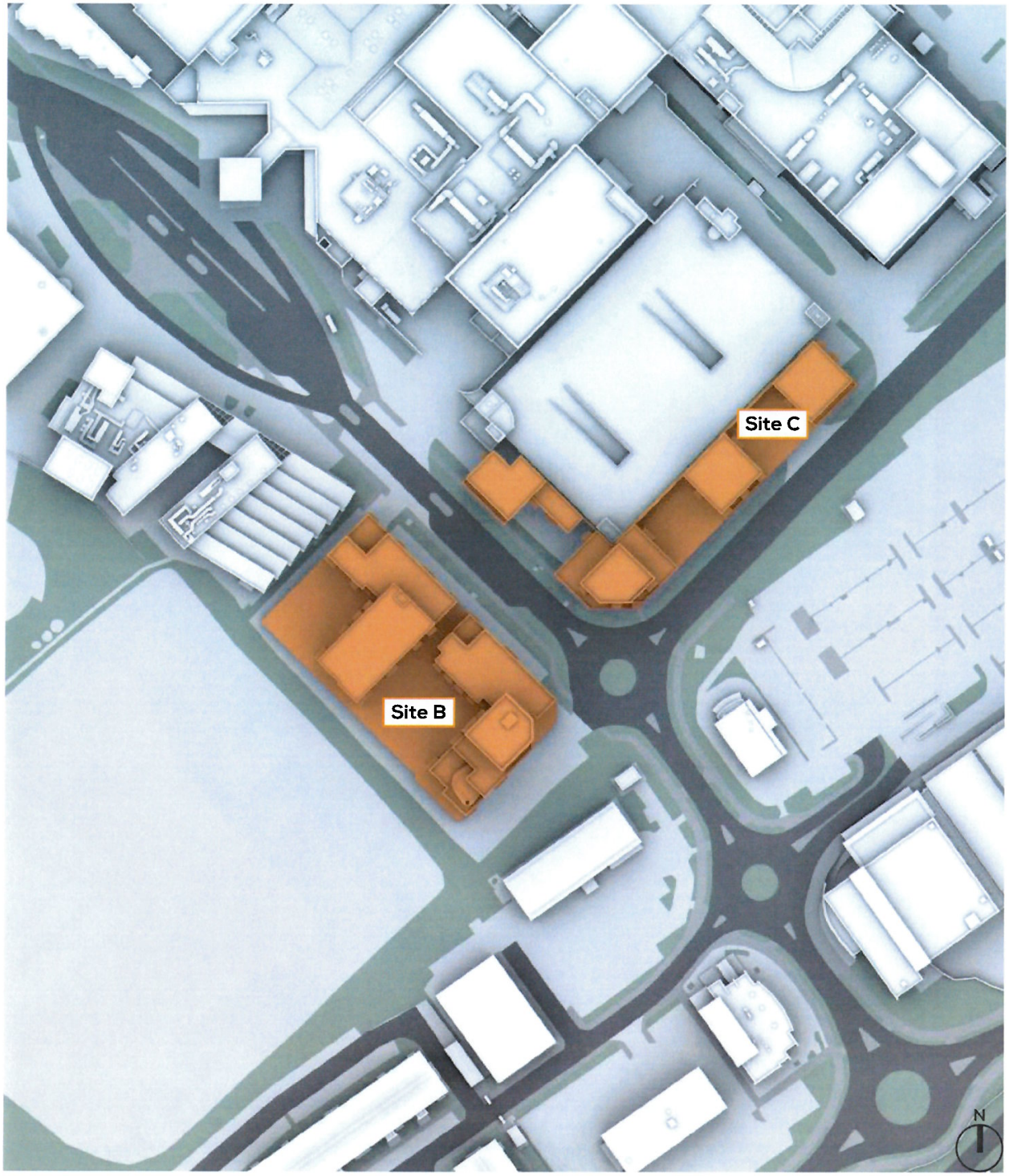


Fig. 02: Top view

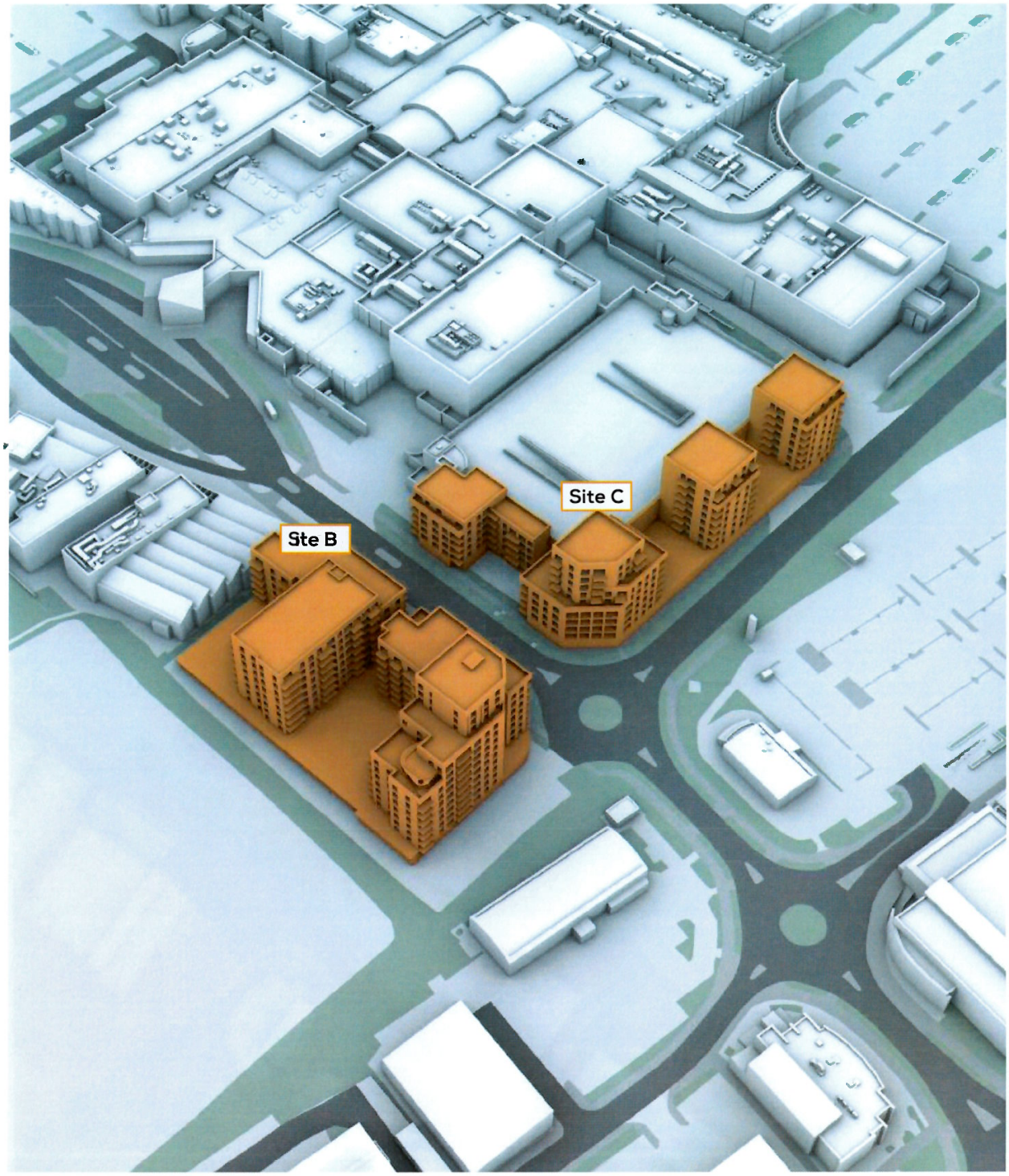


Fig. 03: Perspective view

7 INTERNAL DAYLIGHT AND SUNLIGHT ASSESSMENTS

KEY TO UNDERSTANDING THE TABLES - DAYLIGHT

DAYLIGHT QUANTUM

Average Daylight Factor (ADF)

Refers to the average percentage of daylight flux in a room against an external unobstructed plane.

BRE recommends ADF levels of 2% for rooms with kitchens (including LKDs and studios with kitchens), 1.5% for living rooms and studies, and 1% for bedrooms.

		DAYLIGHT QUANTUM	DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	NSL (%)	RDC	ANNUAL	WINTER
Building C - SIXTH FLOOR						
686	L/K/D	2.8	99	N/A		
687	L/K/D	2.5	100	N/A	78	27
688	Bedroom	1.1	90	MET		
689	Bedroom	1.4	87	MET		
690	Bedroom	1.4	89	MET		
691	Bedroom	2	85	N/A		
692	Bedroom	1.6	82	MET		
693	Bedroom	1.4	95	MET		
694	Bedroom	1.6	98	MET		
695	Bedroom	2.2	93	N/A		
696	Living Room	2.6	100	N/A	56	24
697	Bedroom	2.5	100	N/A		
698	Bedroom	2.3	97	MET		
699	L/K/D	1.3	95	MET	57	28
700	Living Room	1.8	96	N/A	64	27
701	Bedroom	1.4	98	MET		
702	Living Room	1.2	96	MET	39	14

DAYLIGHT DISTRIBUTION

No-SkyLine (NSL)

Refers to the percentage of the room with a view of the sky from a working plane at desk hight.

BRE recommends the NSL to be at least 80% for the room to guarantee satisfactory daylight uniformity.

Room Depth Criterion (RDC)

Defines adequate room proportions that enable good distribution of light. It applies to rooms lit by windows in one wall only.

MET : The room meets the Room Depth criterion

NOT MET: The room does not meet BRE's RDC

N/A (Not Applicable): The room is not lit by windows in one wall only, and cannot be assessed by BRE's RDC

KEY TO UNDERSTANDING THE TABLES - SUNLIGHT

		DAYLIGHT QUANTUM	DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	NSL (%)	RDC	ANNUAL	WINTER
Building C - SIXTH FLOOR						
686	L/K/D	2.8	99	N/A		
687	L/K/D	2.5	100	N/A	78	27
688	Bedroom	1.1	90	MET		
689	Bedroom	1.4	87	MET		
690	Bedroom	1.4	89	MET		
691	Bedroom	2	85	N/A		
692	Bedroom	1.6	82	MET		
693	Bedroom	1.4	95	MET		
694	Bedroom	1.6	98	MET		
695	Bedroom	2.2	93	N/A		
696	Living Room	2.6	100	N/A	56	24
697	Bedroom	2.5	100	N/A		
698	Bedroom	2.3	97	MET		
699	L/K/D	1.3	95	MET	57	28
700	Living Room	1.8	96	N/A	64	27
701	Bedroom	1.4	98	MET		
702	Living Room	1.2	96	MET	39	14

SUNLIGHT QUANTUM

Probable Sunlight Hours (PSH)

Refers to the percentage of total probable hours during a year in which a room receives direct sunlight (%).

BRE states that sunlight is most appreciated in living areas and the greatest expectation of sunlight is within south facing rooms. PSH assessments therefore consider all of the living rooms with a main window facing within 90 degrees of due south.

Annual Probable Sunlight Hours (APSH)

BRE recommends at least 25% of Annual Probable Sunlight Hours for rooms where sunlight is expected.

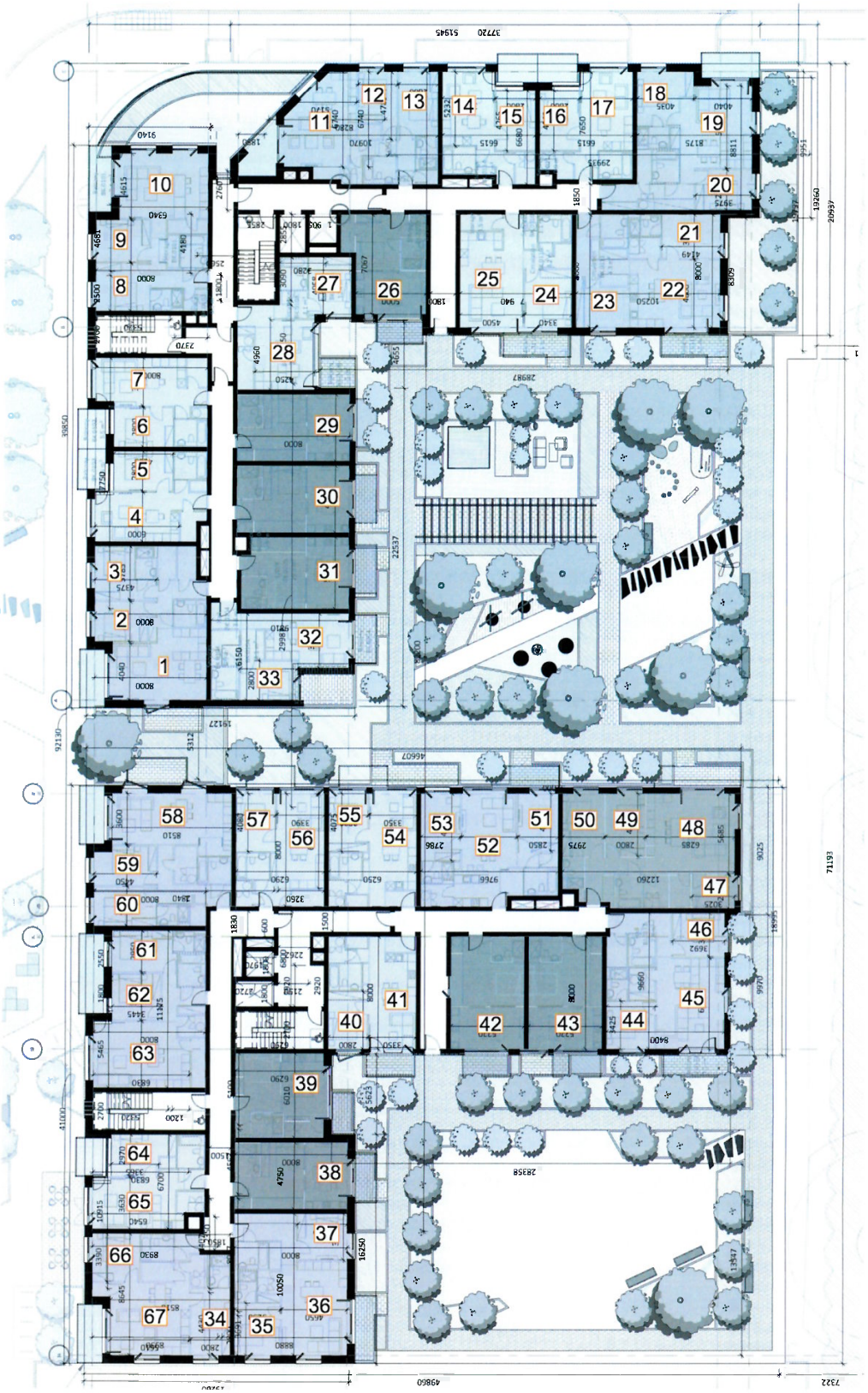
Winter Probable Sunlight Hours (WPSH)

BRE recommends at least 5% of Winter Probable Sunlight Hours for rooms where sunlight is expected.

Site B - Level 1

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 01							
1	L/K/D	1.8		96	N/A		
2	Bedroom	2.9		100	MET		
3	Bedroom	3		97	MET		
4	L/K/D	2.7		100	N/A	15	2
5	Bedroom	1.5		87	MET		
6	Bedroom	1.2		71	MET		
7	L/K/D	2.7		94	N/A		
8	Bedroom	2.6		92	MET		
9	Bedroom	2.9		91	MET		
10	L/K/D	4.7		99	N/A	59	19
11	L/K/D	2.9		95	N/A		
12	Bedroom	3.6		98	MET		
13	Bedroom	3.3		99	MET		
14	L/K/D	3.6		100	MET	66	23
15	Bedroom	1.8		96	MET		
16	Bedroom	1.8		96	MET		
17	L/K/D	3.4		100	MET	65	22
18	Bedroom	3.4		97	MET		
19	L/K/D	3.3		100	N/A	86	28
20	Bedroom	3.9		100	MET		
21	Bedroom	3.4		98	MET		
22	L/K/D	3.5		97	MET	67	22
23	Bedroom	2.9		67	MET		
24	Bedroom	1.4		39	MET		
25	L/K/D	1.6		57	MET		
26	L/K/D	1.3		54	MET		
27	Bedroom	0.8		40	MET		
28	L/K/D	1.7		99	MET	15	4
29	L/K/D	2.5		78	MET	17	6
30	L/K/D	2.8		87	MET	16	8
31	L/K/D	2.6		84	MET	15	10
32	L/K/D	2		97	MET	15	11
33	Bedroom	1.7		85	MET		
34	Bedroom	1.8		99	MET		
35	Bedroom	2.1		99	MET		
36	L/K/D	2.8		96	N/A	28	11
37	Bedroom	3.3		97	MET		
38	L/K/D	2.9		91	MET	25	7
39	L/K/D	3		99	MET	22	5
40	Bedroom	1.7		85	MET		
41	L/K/D	1.8		100	MET		
42	L/K/D	4.1		93	MET		
43	L/K/D	5.9		100	MET		
44	Bedroom	4		98	MET		
45	L/K/D	4		100	N/A	71	23
46	Bedroom	4.3		99	MET		
47	Bedroom	5.9		100	MET		
48	L/K/D	2.9		97	N/A	73	25
49	Bedroom	2.6		81	MET		
50	Bedroom	2.1		70	MET		
51	Bedroom	1.6		40	MET		
52	L/K/D	1.3	1.8	33	N/A	13	9
53	Bedroom	1.6		28	MET		
54	L/K/D	1.6		35	MET	29	11
55	Bedroom	1.6		39	MET		
56	L/K/D	1	1.3	25	MET	19	9
57	Bedroom	1.1		27	MET		
58	L/K/D	2.1		77	N/A	19	7
59	Bedroom	2.7		90	MET		
60	Bedroom	2.7		91	MET		
61	Bedroom	1.6		93	MET		
62	Bedroom	0.9		58	MET		
63	L/K/D	2.4		89	MET	14	2
64	Bedroom	2.3		100	MET		
65	L/K/D	2.8		100	MET	12	2
66	Bedroom	3.1		95	MET		
67	L/K/D	2.8		99	N/A		

Table 02: Assessment Data

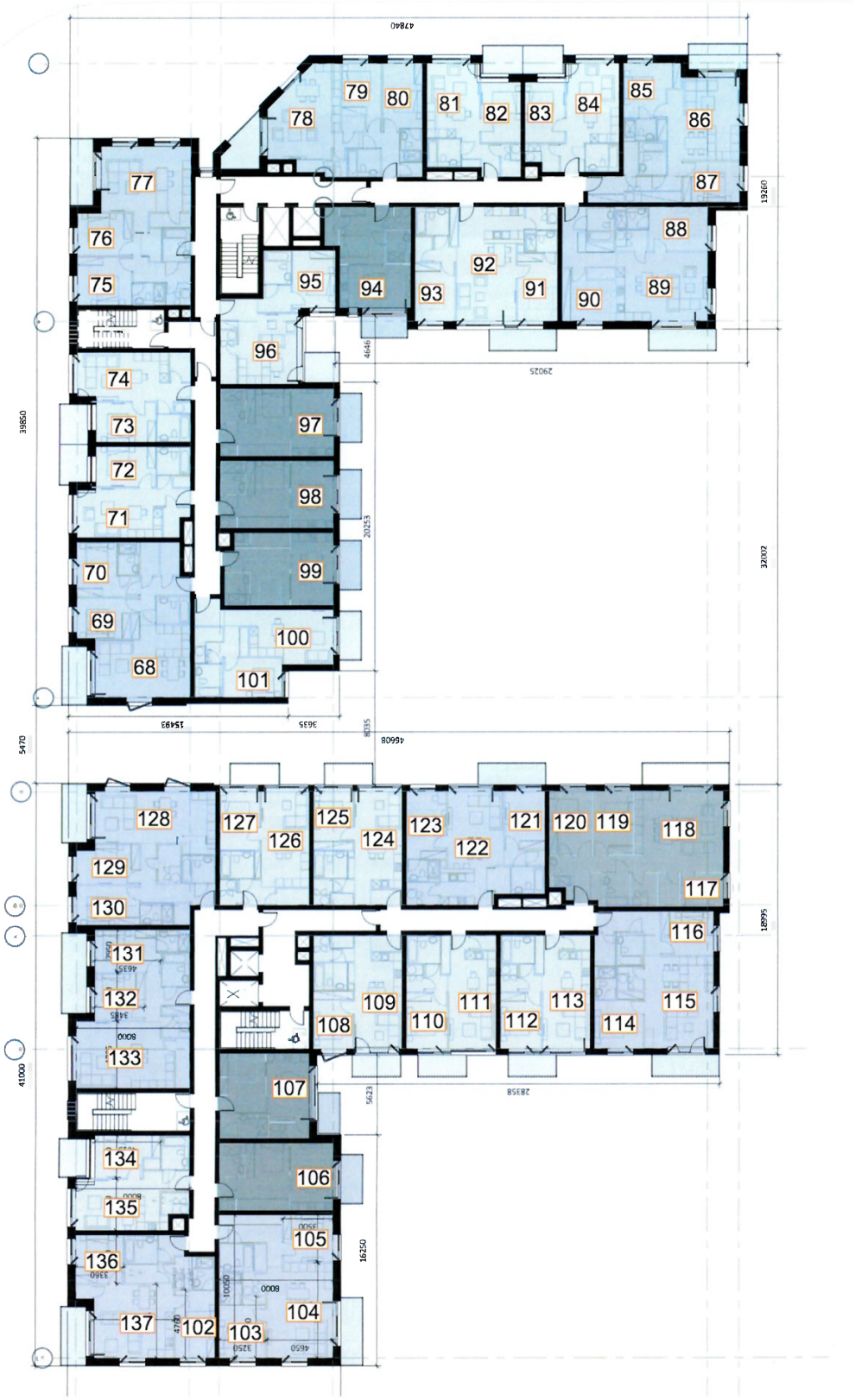




Site B - Level 2

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 02							
68	L/K/D	2		96	N/A		
69	Bedroom	3.1		100	MET		
70	Bedroom	3.2		97	MET		
71	L/K/D	2.9		100	N/A	15	2
72	Bedroom	1.5		99	MET		
73	Bedroom	1.4		90	MET		
74	L/K/D	2.8		98	N/A		
75	Bedroom	2.8		97	MET		
76	Bedroom	2.9		98	MET		
77	L/K/D	4.8		99	N/A	59	19
78	L/K/D	2.9		95	N/A		
79	Bedroom	3.7		98	MET		
80	Bedroom	3.3		99	MET		
81	L/K/D	3.7		100	MET	66	23
82	Bedroom	1.9		96	MET		
83	Bedroom	1.9		96	MET		
84	L/K/D	3.5		100	MET	66	23
85	Bedroom	3.4		97	MET		
86	L/K/D	3.4		100	N/A	87	29
87	Bedroom	3.7		100	MET		
88	Bedroom	3.6		97	MET		
89	L/K/D	3.4		97	MET	67	22
90	Bedroom	3.2		73	MET		
91	Bedroom	1.2		19	MET		
92	L/K/D	1.3	1.9	53	N/A		
93	Bedroom	2		40	MET		
94	L/K/D	1.3		55	MET		
95	Bedroom	0.9		44	MET		
96	L/K/D	1.8		99	MET	15	4
97	L/K/D	2.6		78	MET	17	6
98	L/K/D	2.9		88	MET	16	8
99	L/K/D	2.8		85	MET	17	11
100	L/K/D	2.1		98	MET	15	11
101	Bedroom	1.8		85	MET		
102	Bedroom	2.8		100	MET		
103	Bedroom	3.1		99	MET		
104	L/K/D	3.4		99	N/A	31	11
105	Bedroom	3.5		97	MET		
106	L/K/D	3.1		93	MET	26	7
107	L/K/D	3.2		99	MET	23	5
108	Bedroom	1.9		85	MET		
109	L/K/D	1.9		100	MET		
110	Bedroom	2.4		99	MET		
111	L/K/D	3.1		100	MET		
112	Bedroom	2.8		99	MET		
113	L/K/D	3.3		100	MET		
114	Bedroom	4.1		98	MET		
115	L/K/D	3.9		100	N/A	71	23
116	Bedroom	4.2		99	MET		
117	Bedroom	5.8		100	MET		
118	L/K/D	3.2		97	N/A	73	25
119	Bedroom	2.8		83	MET		
120	Bedroom	2.5		71	MET		
121	Bedroom	1.8		64	MET		
122	L/K/D	1.5		34	N/A	16	10
123	Bedroom	1.7		31	MET		
124	L/K/D	1.7		38	MET	32	12
125	Bedroom	1.7		41	MET		
126	L/K/D	1	1.3	27	MET	20	9
127	Bedroom	1.2		30	MET		
128	L/K/D	2.3		95	N/A	19	7
129	Bedroom	2.9		95	MET		
130	Bedroom	2.9		94	MET		
131	Bedroom	1.7		93	MET		
132	Bedroom	1.7		92	MET		
133	L/K/D	2.5		96	MET		
134	Bedroom	2.5		100	MET		
135	L/K/D	2.9		100	MET	13	2

Table 03: Assessment Data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Site B - Level 3

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 03							
138	L/K/D	2.2		98	N/A		
139	Bedroom	3.3		100	MET		
140	Bedroom	3.4		97	MET		
141	L/K/D	3.1		100	N/A	15	2
142	Bedroom	1.6		99	MET		
143	Bedroom	1.5		92	MET		
144	L/K/D	2.9		100	N/A		
145	Bedroom	2.9		98	MET		
146	Bedroom	3.1		99	MET		
147	L/K/D	4.8		99	N/A	59	19
148	L/K/D	2.8		96	N/A		
149	Bedroom	3.7		98	MET		
150	Bedroom	3.3		99	MET		
151	L/K/D	3.8		100	MET	66	23
152	Bedroom	1.9		96	MET		
153	Bedroom	1.9		96	MET		
154	L/K/D	3.6		100	MET	66	23
155	Bedroom	3.5		97	MET		
156	L/K/D	3.4		100	N/A	87	29
157	Bedroom	3.7		100	MET		
158	Bedroom	3.5		97	MET		
159	L/K/D	3.4		97	MET	67	22
160	Bedroom	3.3		81	MET		
161	Bedroom	1.2		24	MET		
162	L/K/D	1.4	2	54	N/A		
163	Bedroom	2.1		47	MET		
164	L/K/D	1.4		61	MET		
165	Bedroom	0.9		49	MET		
166	L/K/D	1.8		99	MET	15	4
167	L/K/D	2.6		78	MET	18	6
168	L/K/D	3		88	MET	18	9
169	L/K/D	2.9		85	MET	17	11
170	L/K/D	2.2		98	MET	17	13
171	Bedroom	1.9		87	MET		
172	Bedroom	3.1		100	MET		
173	Bedroom	3.5		99	MET		
174	L/K/D	3.6		99	N/A	32	11
175	Bedroom	3.5		97	MET		
176	L/K/D	3.1		93	MET	26	7
177	L/K/D	3.2		99	MET	24	5
178	Bedroom	1.9		85	MET		
179	L/K/D	1.9		100	MET		
180	Bedroom	2.4		99	MET		
181	L/K/D	3.1		100	MET		
182	Bedroom	2.9		99	MET		
183	L/K/D	3.4		100	MET		
184	Bedroom	4.1		99	MET		
185	L/K/D	3.9		100	N/A	71	23
186	Bedroom	4.2		99	MET		
187	Bedroom	5.7		100	MET		
188	L/K/D	3.2		97	N/A	74	25
189	Bedroom	2.8		86	MET		
190	Bedroom	2.6		76	MET		
191	Bedroom	1.9		69	MET		
192	L/K/D	1.5		36	N/A	18	11
193	Bedroom	1.8		38	MET		
194	L/K/D	1.8		40	MET	33	12
195	Bedroom	1.8		48	MET		
196	L/K/D	1.1	1.5	30	MET	20	9
197	Bedroom	1.3		33	MET		
198	L/K/D	2.5		99	N/A	20	7
199	Bedroom	3.1		99	MET		
200	Bedroom	3.1		100	MET		
201	Bedroom	1.8		100	MET		
202	Bedroom	1.9		95	MET		
203	L/K/D	2.6		97	MET		
204	Bedroom	2.7		100	MET		
205	L/K/D	3.1		100	MET	14	2

Table 04: Assessment Data


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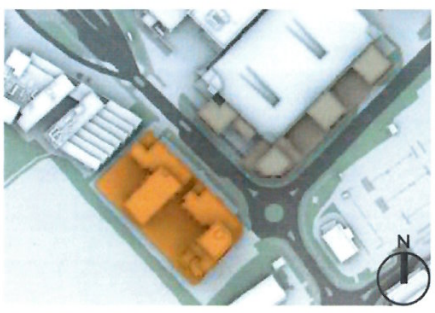
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Site B - Level 4

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 04							
208	L/K/D	2.5		98	N/A		
209	Bedroom	3.4		100	MET		
210	Bedroom	3.5		97	MET		
211	L/K/D	3.2		100	N/A	15	2
212	Bedroom	1.8		99	MET		
213	Bedroom	1.7		93	MET		
214	L/K/D	3.1		100	N/A		
215	Bedroom	3		98	MET		
216	Bedroom	3.2		99	MET		
217	L/K/D	4.9		100	N/A	59	19
218	L/K/D	2.9		96	N/A		
219	Bedroom	3.7		98	MET		
220	Bedroom	3.4		99	MET		
221	L/K/D	3.8		100	MET	65	23
222	Bedroom	2		96	MET		
223	Bedroom	2.1		97	MET		
224	L/K/D	3.6		100	MET	66	23
225	Bedroom	3.5		97	MET		
226	L/K/D	3.5		100	N/A	90	29
227	Bedroom	3.7		100	MET		
228	Bedroom	3.5		97	MET		
229	L/K/D	3.5		97	MET	67	22
230	Bedroom	3.5		93	MET		
231	Bedroom	1.4		39	MET		
232	L/K/D	1.6		58	N/A		
233	Bedroom	2.4		64	MET		
234	L/K/D	1.6		78	MET		
235	Bedroom	1		61	MET		
236	L/K/D	1.9		99	MET	14	4
237	L/K/D	2.8		80	MET	19	6
238	L/K/D	3.2		91	MET	23	10
239	L/K/D	3.1		88	MET	22	12
240	L/K/D	2.4		98	MET	22	14
241	Bedroom	2.1		88	MET		
242	Bedroom	3.3		100	MET		
243	Bedroom	3.6		99	MET		
244	L/K/D	3.8		99	N/A	36	11
245	Bedroom	3.5		97	MET		
246	L/K/D	3.3		93	MET	29	7
247	L/K/D	3.4		99	MET	25	5
248	Bedroom	2.1		85	MET		
249	L/K/D	2.1		100	MET		
250	Bedroom	2.7		100	MET		
251	L/K/D	3.2		100	MET		
252	Bedroom	3.1		100	MET		
253	L/K/D	3.4		100	MET		
254	Bedroom	4.1		99	MET		
255	L/K/D	4		100	N/A	71	23
256	Bedroom	4.2		99	MET		
257	Bedroom	5.7		100	MET		
258	L/K/D	3.3		97	N/A	79	25
259	Bedroom	3		93	MET		
260	Bedroom	2.7		84	MET		
261	Bedroom	2.1		83	MET		
262	L/K/D	1.7		44	N/A	22	11
263	Bedroom	2		48	MET		
264	L/K/D	1.9		46	MET	36	13
265	Bedroom	2.1		67	MET		
266	L/K/D	1.3	1.7	35	MET	23	9
267	Bedroom	1.5		40	MET		
268	L/K/D	2.9		99	N/A	25	7
269	Bedroom	3.3		99	MET		
270	Bedroom	3.2		100	MET		
271	Bedroom	2.1		100	MET		
272	Bedroom	2.1		95	MET		
273	L/K/D	2.7		99	MET		
274	Bedroom	2.9		100	MET		
275	L/K/D	3.2		100	MET	15	2

Table 05: Assessment Data


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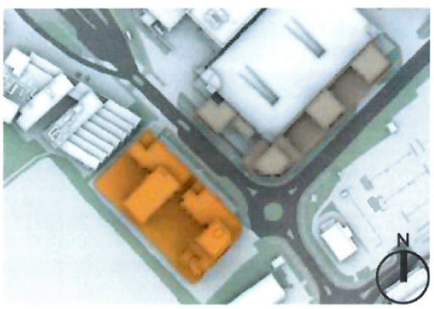
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Site B - Level 5

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 05							
278	L/K/D	2.9		98	N/A		
279	Bedroom	3.5		100	MET		
280	Bedroom	3.6		97	MET		
281	L/K/D	3.3		100	N/A	15	2
282	Bedroom	1.9		99	MET		
283	Bedroom	1.8		93	MET		
284	L/K/D	3.2		100	N/A		
285	Bedroom	3.2		98	MET		
286	Bedroom	3.3		99	MET		
287	L/K/D	5		100	N/A	60	19
288	L/K/D	2.9		96	N/A		
289	Bedroom	3.8		98	MET		
290	Bedroom	3.4		99	MET		
291	L/K/D	3.8		100	MET	65	23
292	Bedroom	2.1		96	MET		
293	Bedroom	2.1		97	MET		
294	L/K/D	3.6		100	MET	66	23
295	Bedroom	3.5		97	MET		
296	L/K/D	3.5		100	N/A	90	29
297	Bedroom	3.8		100	MET		
298	Bedroom	3.3		98	MET		
299	L/K/D	3.7		98	MET	67	22
300	Bedroom	3.9		98	MET		
301	Bedroom	1.8		72	MET		
302	L/K/D	1.9		49	N/A		
303	Bedroom	2.6		88	MET		
304	L/K/D	1.8		89	MET		
305	Bedroom	1.1		84	MET		
306	L/K/D	2		99	MET	13	4
307	Bedroom	2		96	MET		
308	Bedroom	3		92	MET		
309	L/K/D	1.8		98	N/A	25	11
310	L/K/D	3.2		90	MET	25	13
311	L/K/D	2.4		99	MET	26	16
312	Bedroom	2.2		92	MET		
313	Bedroom	3.7		99	MET		
314	L/K/D	4.1		99	N/A	39	13
315	Bedroom	3.7		97	MET		
316	L/K/D	3.4		94	MET	29	7
317	L/K/D	3.5		99	MET	26	6
318	Bedroom	2.3		89	MET		
319	L/K/D	2.2		100	MET		
320	Bedroom	2.8		100	MET		
321	L/K/D	3.3		100	MET		
322	Bedroom	3.2		100	MET		
323	L/K/D	3.4		100	MET		
324	Bedroom	4.1		99	MET		
325	L/K/D	4		100	N/A	71	23
326	Bedroom	4.2		99	MET		
327	Bedroom	5.7		100	MET		
328	L/K/D	3.4		98	N/A	81	25
329	Bedroom	3.1		99	MET		
330	Bedroom	2.9		95	MET		
331	Bedroom	2.3		92	MET		
332	L/K/D	1.9		54	N/A	24	13
333	Bedroom	2.2		60	MET		
334	L/K/D	2.1		58	MET	38	14
335	Bedroom	2.5		71	MET		
336	L/K/D	1.5		44	MET	22	9
337	Bedroom	1.9		53	MET		
338	L/K/D	3.4		99	N/A	38	7
339	Bedroom	3.4		99	MET		
340	Bedroom	3.3		100	MET		
341	Bedroom	2.2		100	MET		
342	Bedroom	2.3		95	MET		
343	L/K/D	2.8		99	MET		
344	Bedroom	3.1		100	MET		
345	L/K/D	5		100	MET	21	2

Table 06: Assessment Data


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Site B - Level 6

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 06							
346	Bedroom	3.1		98	MET		
347	Bedroom	3.6		98	MET		
348	L/K/D	3.4		99	N/A	16	2
349	Bedroom	1.7		96	MET		
350	L/K/D	3.3		100	N/A		
351	Bedroom	3.2		98	MET		
352	Bedroom	3.4		99	MET		
353	L/K/D	5		100	N/A	61	19
354	L/K/D	3		97	N/A		
355	Bedroom	3.8		98	MET		
356	Bedroom	3.4		99	MET		
357	L/K/D	3.8		100	MET	66	23
358	Bedroom	2		96	MET		
359	Bedroom	2		96	MET		
360	L/K/D	3.7		100	MET	66	23
361	Bedroom	3.6		97	MET		
362	L/K/D	3.4		100	N/A	87	29
363	Bedroom	3.7		100	MET		
364	Bedroom	3.5		97	MET		
365	L/K/D	3.7		100	MET	67	22
366	Bedroom	3.9		99	MET		
367	Bedroom	1.9		98	MET		
368	L/K/D	2		66	N/A		
369	Bedroom	3		99	MET		
370	L/K/D	2.2		96	MET		
371	Bedroom	1.3		93	MET		
372	L/K/D	1.9		100	MET	12	4
373	Bedroom	2		96	MET		
374	Bedroom	3.1		94	MET		
375	L/K/D	1.8		98	N/A	26	11
376	L/K/D	3.2		92	MET	26	16
377	L/K/D	2.4		99	MET	26	18
378	Bedroom	2.4		97	MET		
379	Bedroom	3.7		99	MET		
380	L/K/D	4.8		100	N/A	62	16
381	Bedroom	3.8		97	MET		
382	L/K/D	4.5		97	MET	52	9
383	L/K/D	4.6		99	MET	36	6
384	Bedroom	3		99	MET		
385	L/K/D	2.5		100	MET		
386	Bedroom	2.9		100	MET		
387	L/K/D	3.4		100	MET		
388	Bedroom	3.1		100	MET		
389	L/K/D	3.5		100	MET		
390	Bedroom	4.1		99	MET		
391	L/K/D	3.9		100	N/A	71	23
392	Bedroom	4.2		99	MET		
393	Bedroom	5.7		100	MET		
394	L/K/D	3.3		100	N/A	82	26
395	Bedroom	3.2		100	MET		
396	Bedroom	3		98	MET		
397	Bedroom	2.4		96	MET		
398	L/K/D	2.1		76	N/A	31	15
399	Bedroom	2.4		76	MET		
400	L/K/D	2.4		66	MET	44	16
401	Bedroom	2.9		76	MET		
402	L/K/D	1.9		49	MET	31	11
403	Bedroom	2.5		68	MET		
404	L/K/D	4		100	N/A	50	8
405	Bedroom	3.4		99	MET		
406	Bedroom	3.4		100	MET		
407	Bedroom	2.3		100	MET		
408	Bedroom	2.4		95	MET		
409	L/K/D	2.9		99	MET		
410	Bedroom	3.3		100	MET		
411	L/K/D	5.2		100	MET	32	2

Table 07: Assessment Data


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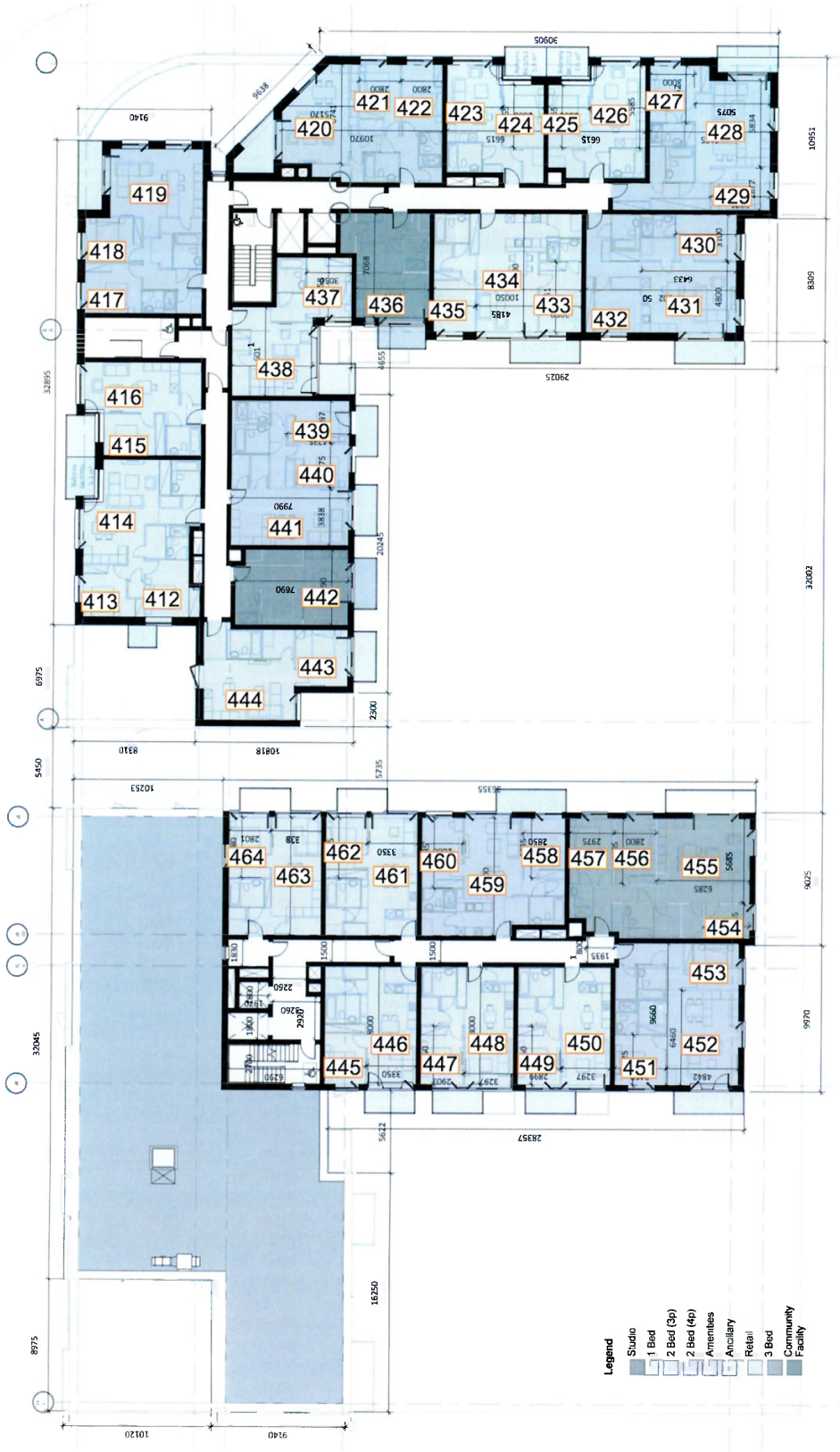
351
352
353
Legend
Studio
1 Bed
2 Bed (3p)
2 Bed (4p)
Amenities
Ancillary
Retail
3 Bed
Community Facility


N

Site B - Level 7

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 07							
412	Bedroom	3.4		98	MET		
413	Bedroom	3.6		98	MET		
414	L/K/D	3.7		99	N/A	18	2
415	Bedroom	2.1		96	MET		
416	L/K/D	3.4		100	N/A		
417	Bedroom	3.3		98	MET		
418	Bedroom	3.5		99	MET		
419	L/K/D	4.9		100	N/A	61	19
420	L/K/D	2.9		97	N/A		
421	Bedroom	3.8		98	MET		
422	Bedroom	3.5		99	MET		
423	L/K/D	3.9		100	MET	66	23
424	Bedroom	2		96	MET		
425	Bedroom	2		96	MET		
426	L/K/D	3.7		100	MET	66	23
427	Bedroom	3.6		97	MET		
428	L/K/D	3.8		100	N/A	96	29
429	Bedroom	3.7		100	MET		
430	Bedroom	3.3		98	MET		
431	L/K/D	4.6		100	MET	67	22
432	Bedroom	4.4		98	MET		
433	Bedroom	2.1		99	MET		
434	L/K/D	2.1		100	N/A		
435	Bedroom	3.2		99	MET		
436	L/K/D	2		96	MET		
437	Bedroom	1.3		95	MET		
438	L/K/D	2.5		100	MET	23	5
439	Bedroom	2.9		98	MET		
440	Bedroom	3.7		95	MET		
441	L/K/D	2.5		98	N/A	48	11
442	L/K/D	4.8		96	MET	56	17
443	Bedroom	5.3		99	MET		
444	L/K/D	2.9		100	N/A	24	6
445	Bedroom	3.9		99	MET		
446	L/K/D	3		100	MET		
447	Bedroom	3.1		100	MET		
448	L/K/D	3.5		100	MET		
449	Bedroom	3.2		100	MET		
450	L/K/D	3.5		100	MET		
451	Bedroom	4.1		99	MET		
452	L/K/D	3.9		100	N/A	71	23
453	Bedroom	4.3		99	MET		
454	Bedroom	5.8		100	MET		
455	L/K/D	3.4		100	N/A	88	27
456	Bedroom	3.3		100	MET		
457	Bedroom	3.1		100	MET		
458	Bedroom	2.5		99	MET		
459	L/K/D	2.3		87	N/A	37	15
460	Bedroom	2.7		93	MET		
461	L/K/D	2.8		84	MET	50	16
462	Bedroom	3.7		100	MET		
463	L/K/D	2.4		63	MET	47	12
464	Bedroom	6.9		100	N/A		

Table 08: Assessment Data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412
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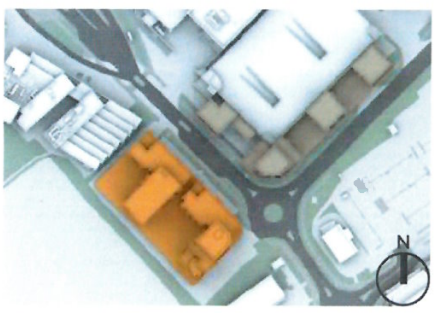
415
416
417
418
419
Legend
Studio
1 Bed
2 Bed (3p)
2 Bed (4p)
Amenities
Ancillary
Retail
3 Bed
Community Facility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Site B - Level 8

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 08							
465	L/K/D	3		97	N/A		
466	Bedroom	3.8		98	MET		
467	Bedroom	3.5		99	MET		
468	Bedroom	5.5		100	MET		
469	Bedroom	3		99	MET		
470	L/K/D	1.9		100	MET	27	16
471	Bedroom	6		100	MET		
472	Bedroom	2.3		98	MET		
473	L/K/D	2.6		98	MET		
474	Bedroom	3.3		97	MET		
475	Bedroom	2.6		100	MET		
476	L/K/D	2		99	MET		
477	Bedroom	3.4		98	MET		
478	Bedroom	4.5		99	MET		
479	L/K/D	4.3		100	MET		
480	Bedroom	4.3		100	MET		
481	L/K/D	4.1		100	MET		
482	Bedroom	4.3		100	MET		
483	L/K/D	4		100	MET		
484	Bedroom	4.2		99	MET		
485	L/K/D	4.7		100	N/A	71	23
486	Bedroom	4.2		99	MET		
487	Bedroom	5.7		100	MET		
488	L/K/D	4.4		100	N/A	96	27
489	Bedroom	3.5		100	MET		
490	Bedroom	3.3		100	MET		
491	Bedroom	3.8		99	MET		
492	L/K/D	2.7		99	N/A	61	19
493	Bedroom	3		93	MET		
494	L/K/D	3.5		99	MET	60	18
495	Bedroom	5.8		100	MET		
496	L/K/D	3.3		99	MET	62	19
497	Bedroom	7.9		100	MET		

Table 09: Assessment Data


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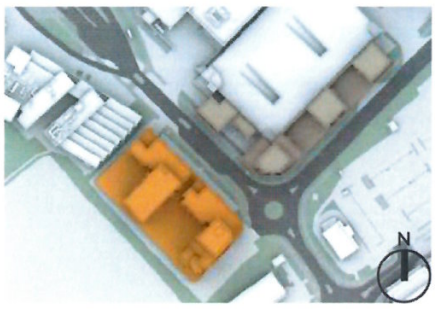
488
489
490
491
492
493
494
495
496
497
Legend
Studio
1 Bed
2 Bed (3p)
2 Bed (4p)
Amenities
Ancillary
Retail
3 Bed
Community Facility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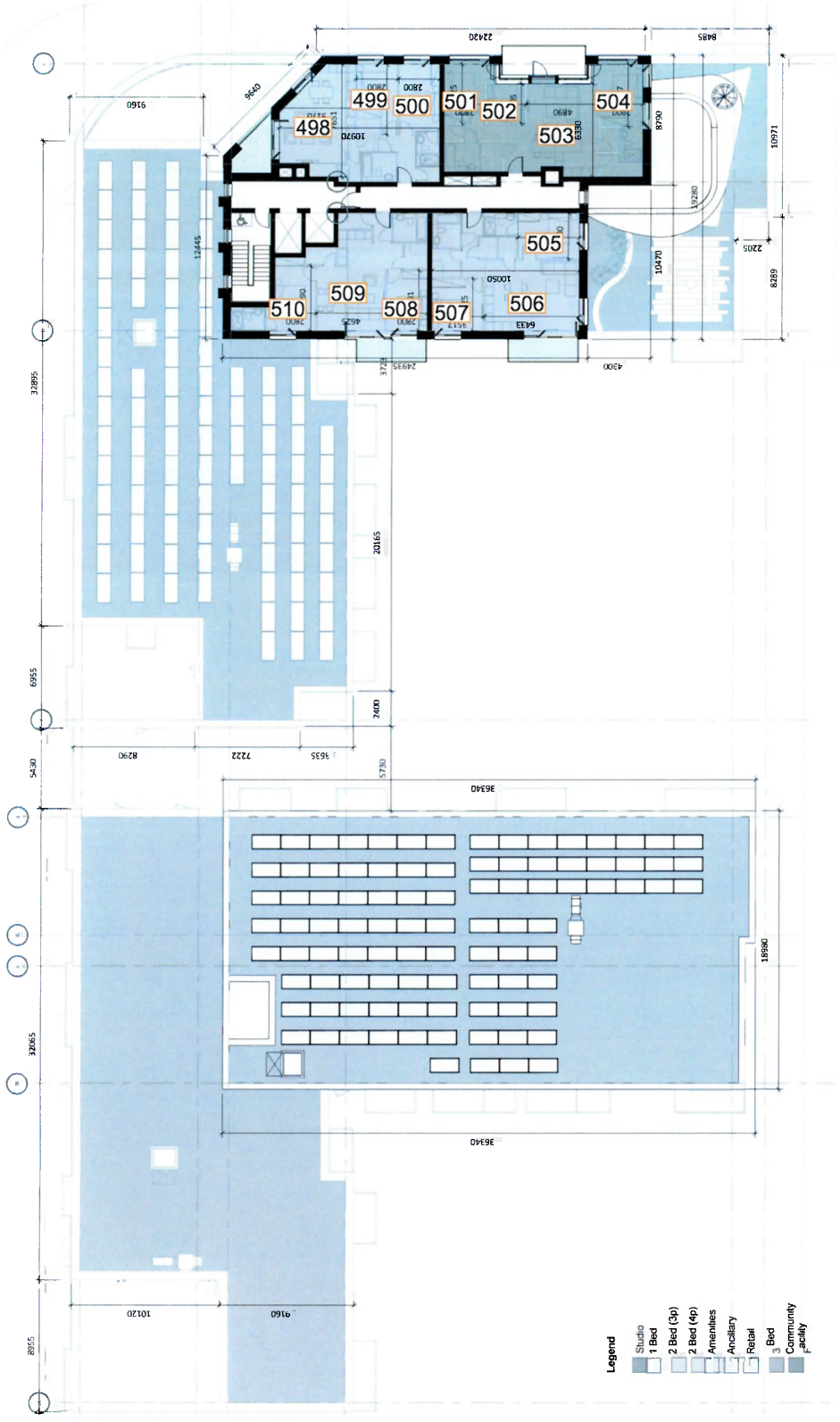
Site B - Level 9

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 09							
498	L/K/D	3.1		97	N/A		
499	Bedroom	3.8		98	MET		
500	Bedroom	3.5		99	MET		
501	Bedroom	5.6		100	MET		
502	Bedroom	3.4		99	MET		
503	L/K/D	2.3		100	MET	36	18
504	Bedroom	9.8		100	MET		
505	Bedroom	3.5		98	MET		
506	L/K/D	5		100	N/A	65	20
507	Bedroom	2.7		97	MET		
508	Bedroom	3.4		99	MET		
509	L/K/D	2.7		98	MET		
510	Bedroom	3.5		98	MET		

Table 10: Assessment Data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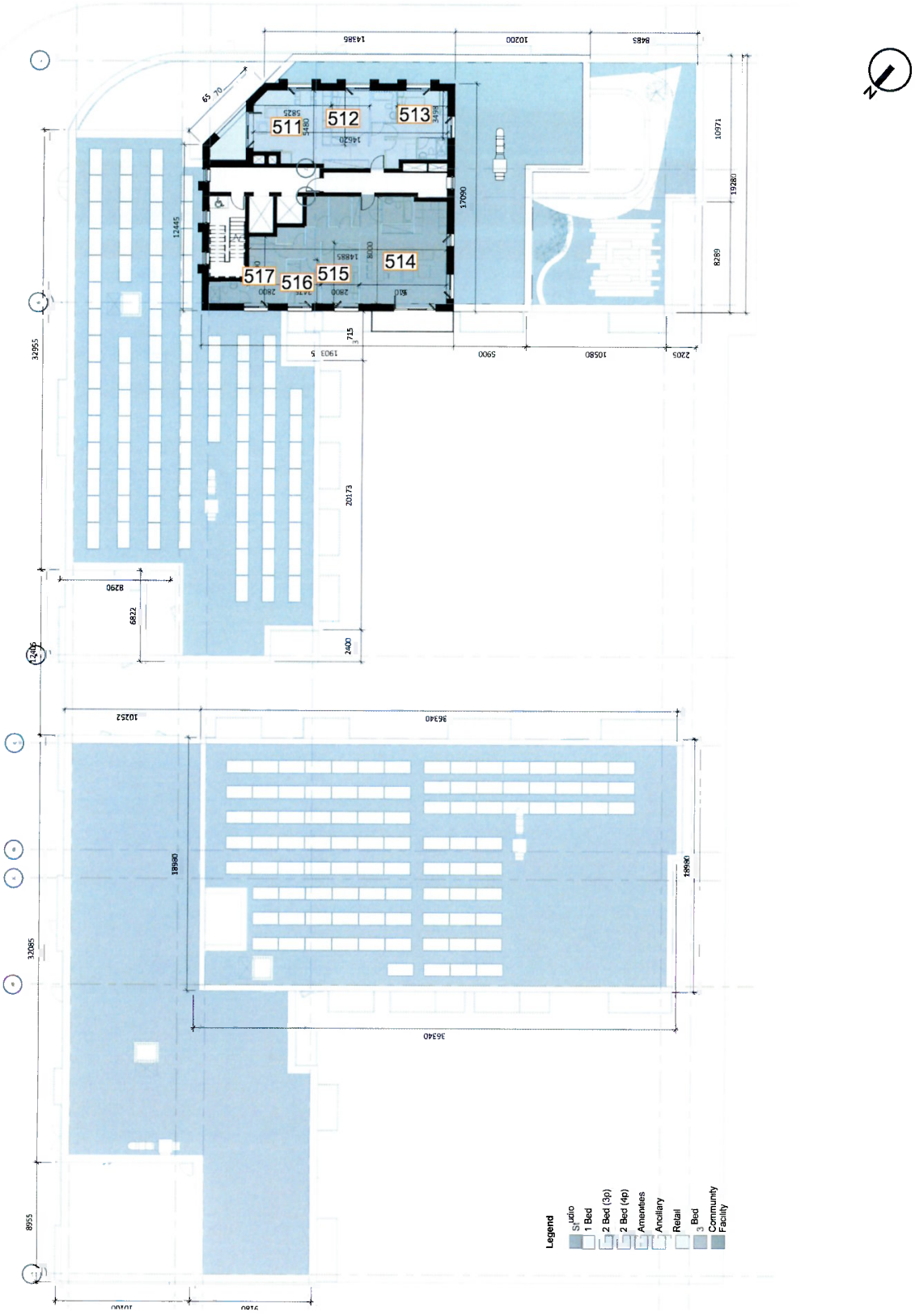
499
500
501
502
503
504
505
506
507
508
509
510
Legend
Studio
1 Bed
2 Bed (3p)
2 Bed (4p)
Amenities
Ancillary
Retail
3 Bed
Community facility

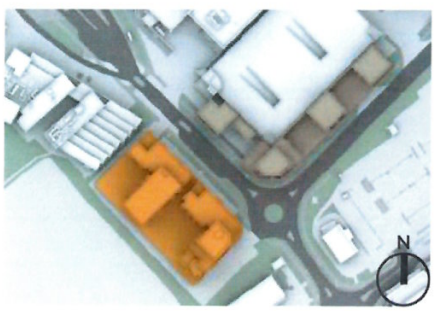

N

Site B - Level 10

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 10							
511	L/K/D	2.6		98	N/A	65	23
512	Bedroom	2.8		98	MET		
513	Bedroom	5.5		98	N/A		
514	L/K/D	3.5		100	N/A	67	22
515	Bedroom	3.3		98	MET		
516	Bedroom	5.1		99	MET		
517	Bedroom	3.3		98	MET		

Table 11: Assessment Data


511
512
513
514
515
516
517
Legend
Studio
1 Bed
2 Bed (3p)
2 Bed (4p)
Amenities
Ancillary
Retail
3 Bed
Community Facility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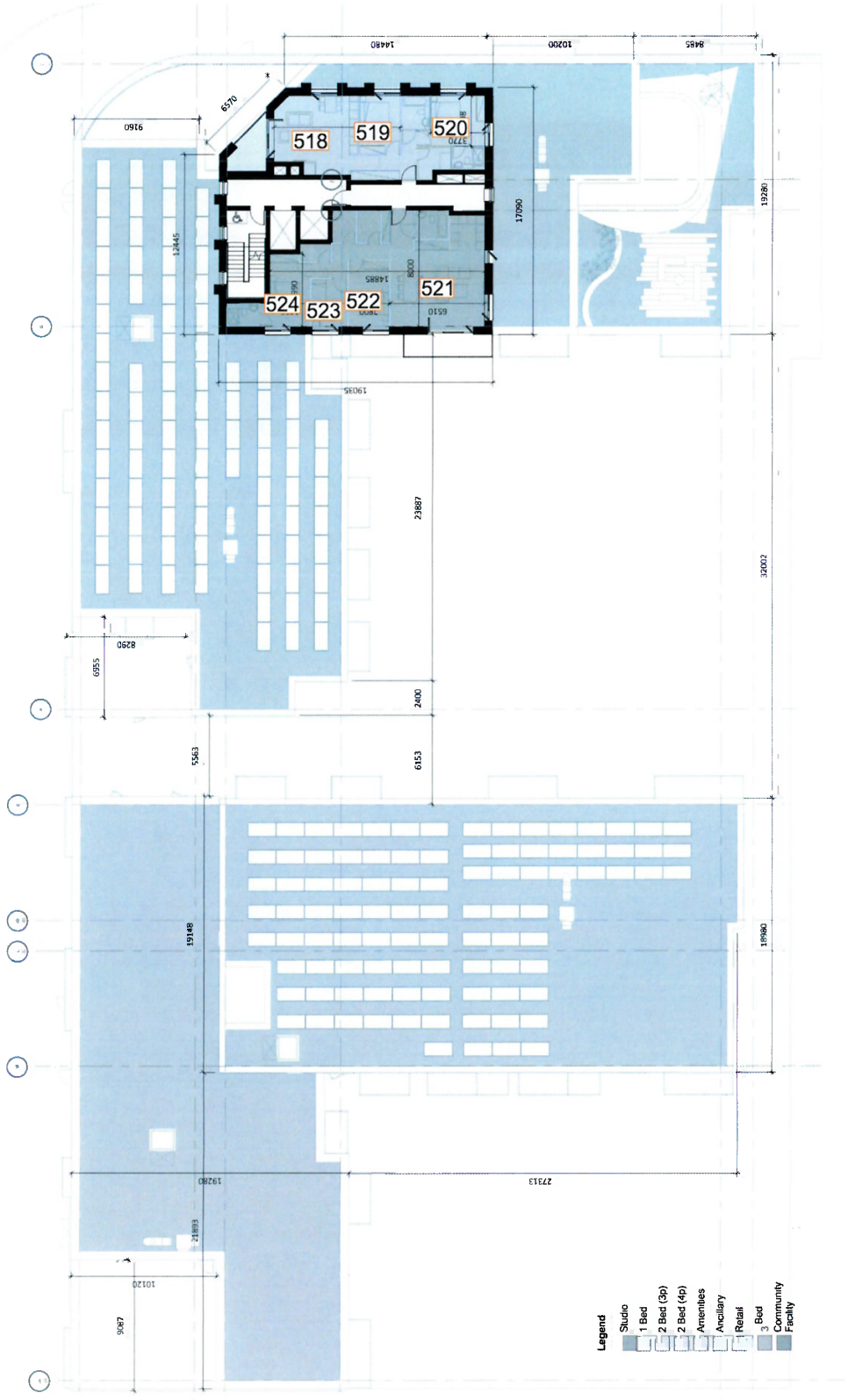
Site B - Level 11

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 11							
518	L/K/D	3		98	N/A	65	23
519	Bedroom	3.4		98	MET		
520	Bedroom	6.1		98	N/A		
521	L/K/D	3.6		100	N/A	67	22
522	Bedroom	3.4		98	MET		
523	Bedroom	5.1		99	MET		
524	Bedroom	3.3		98	MET		

Table 12: Assessment Data

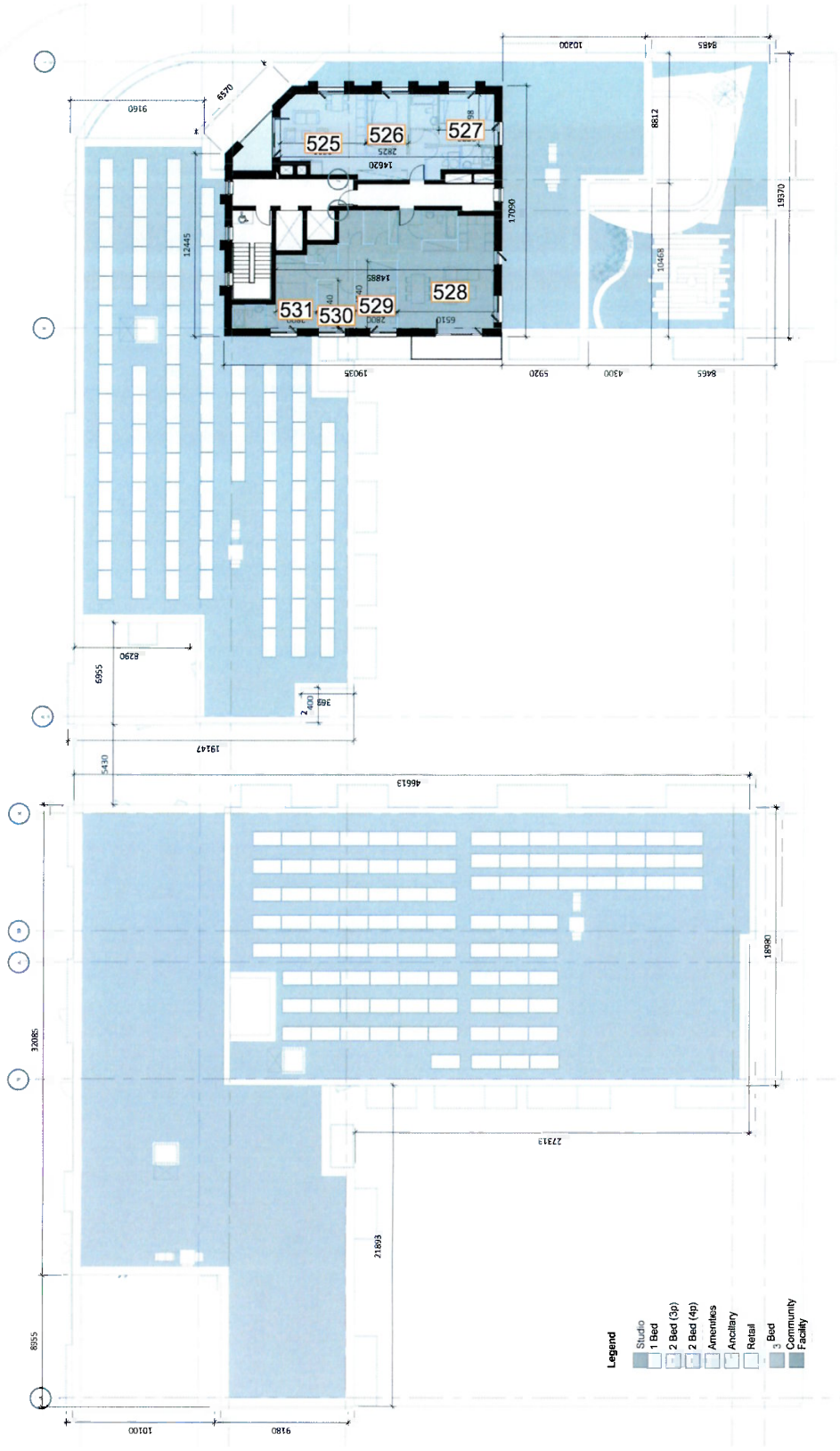

518
519
520
521
522
523
524
Legend
Studio
1 Bed
2 Bed (3p)
2 Bed (4p)
Amenities
Ancillary
Retail
3 Bed
Community Facility


N

Site B - Level 12

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE B - LEVEL 12							
525	L/K/D	2.9		98	N/A	64	23
526	Bedroom	3.4		98	MET		
527	Bedroom	6		98	N/A		
528	L/K/D	4.2		100	N/A	67	22
529	Bedroom	3.4		98	MET		
530	Bedroom	5		99	MET		
531	Bedroom	3.3		98	MET		

Table 13: Assessment Data


525
526
527
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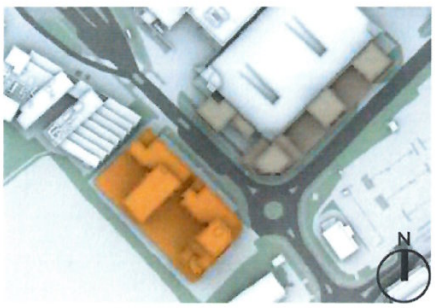
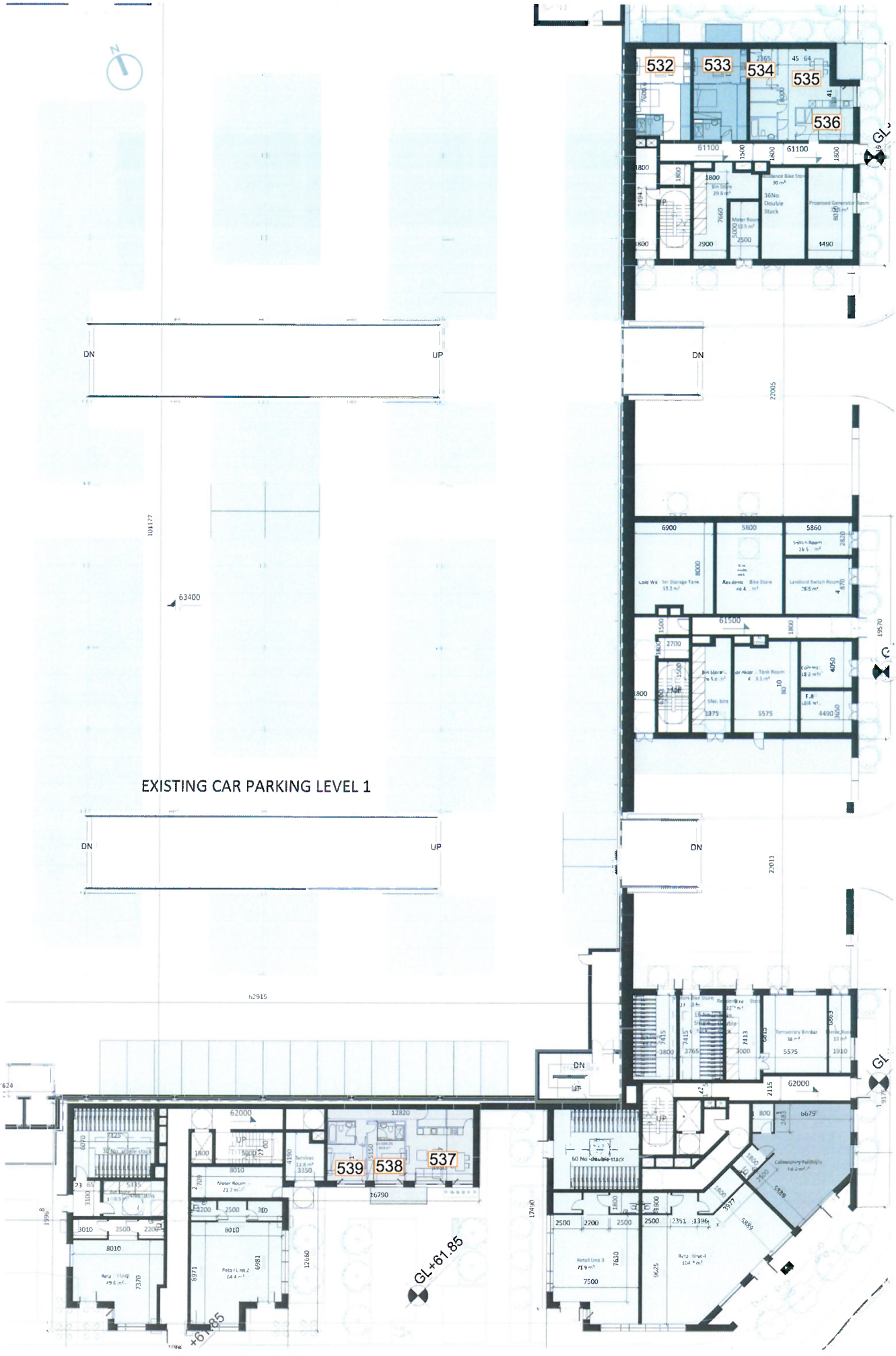
530
531
Legend
Studio
1 Bed
2 Bed (3p)
2 Bed (4p)
Amenities
Ancillary
Retail
3 Bed
Community Facility


N

Site C - Level 0

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE C - LEVEL 00							
532	L/K/D	3		91	MET		
533	L/K/D	3.6		98	MET		
534	Bedroom	3.6		100	MET		
535	L/K/D	4.9		100	N/A	64	22
536	Bedroom	3.4		100	MET		
537	L/K/D	2.5		90	MET	32	2
538	Bedroom	2.5		95	MET		
539	Bedroom	2.9		96	MET		

Table 14: Assessment Data


532
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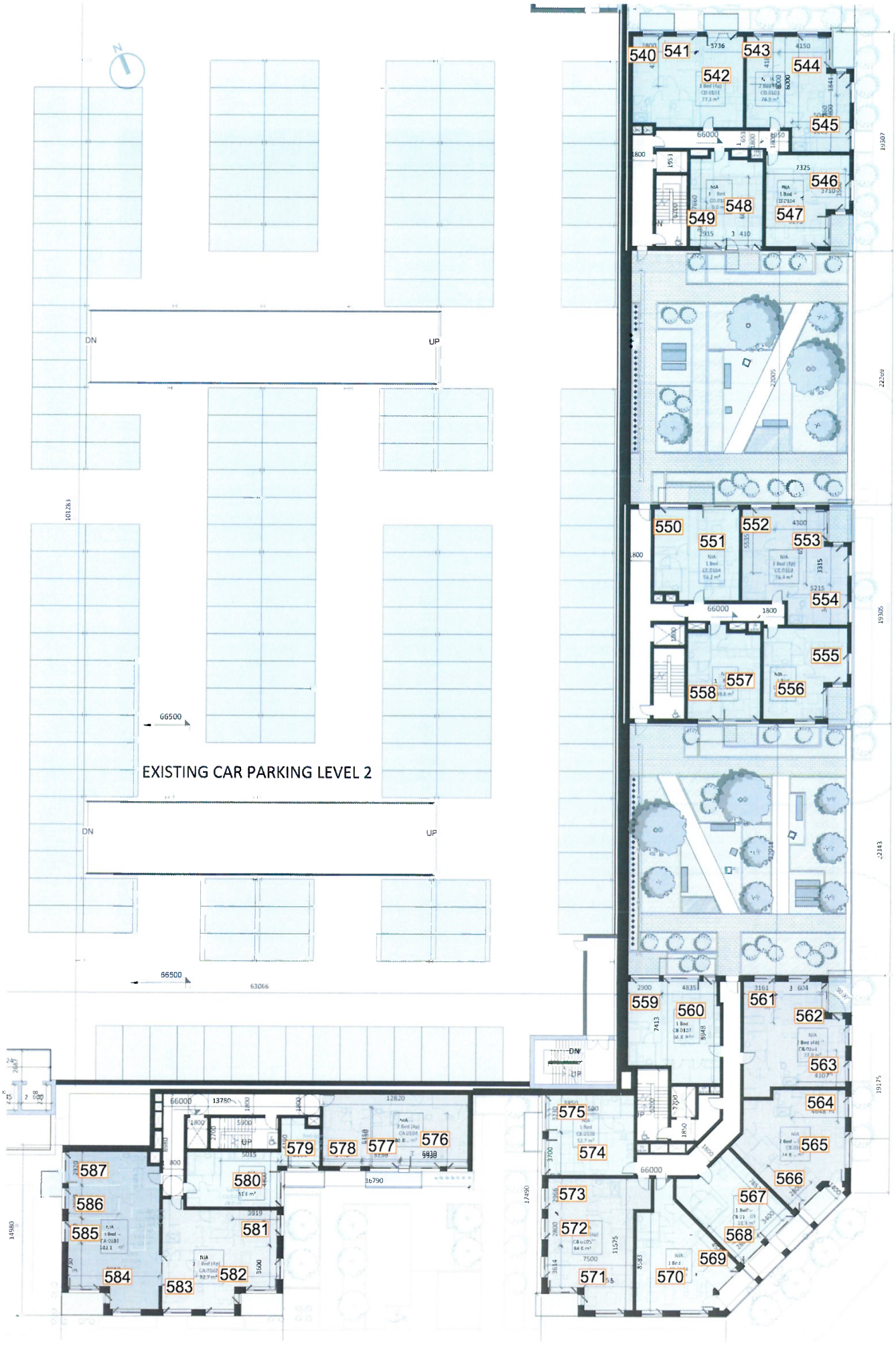
536
DN
UP
EXISTING CAR PARKING LEVEL 1
539
538
537
GL+61.85

Site C - Level 1

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE C - LEVEL 01							
540	Bedroom	2		100	MET		
541	Bedroom	3.4		99	MET		
542	L/K/D	1.9		100	MET		
543	Bedroom	4.4		99	MET		
544	L/K/D	5.2		100	N/A	66	23
545	Bedroom	4.1		98	MET		
546	Bedroom	4.7		99	MET		
547	L/K/D	3.6		99	N/A	54	23
548	L/K/D	2.4		77	MET	40	16
549	Bedroom	1.7		84	MET		
550	Bedroom	1.8		81	MET		
551	L/K/D	1.8		70	MET		
552	Bedroom	3.2		86	MET		
553	L/K/D	4.5		99	N/A	66	23
554	Bedroom	3.8		99	MET		
555	Bedroom	4.5		99	MET		
556	L/K/D	3.4		99	N/A	57	23
557	L/K/D	2.4		74	MET	44	17
558	Bedroom	1.7		83	MET		
559	Bedroom	1.8		69	MET		
560	L/K/D	1.5		71	MET		
561	Bedroom	2.7		88	MET		
562	L/K/D	4.6		100	N/A	66	23
563	Bedroom	3.4		100	MET		
564	Bedroom	3.3		100	MET		
565	L/K/D	3.4		99	N/A	65	23
566	Bedroom	2.2		100	MET		
567	L/K/D	1.5		100	MET	14	14
568	Bedroom	2.4		100	MET		
569	Bedroom	2.3		98	MET		
570	L/K/D	2.2		91	N/A	54	19
571	L/K/D	2.9		99	N/A	46	10
572	Bedroom	2		70	MET		
573	Bedroom	1.7		71	MET		
574	L/K/D	1.1	1.4	49	MET		
575	Bedroom	0.8		49	MET		
576	L/K/D	2.7		91	N/A	38	5
577	Bedroom	2.3		95	MET		
578	Bedroom	2.4		91	MET		
579	Bedroom	2		95	MET		
580	L/K/D	1.3		79	MET	27	7
581	Bedroom	1.8		58	MET		
582	L/K/D	2.9		98	N/A	57	11
583	Bedroom	3		57	MET		
584	L/K/D	2.3		89	N/A	49	5
585	Bedroom	5.1		100	MET		
586	Bedroom	3		98	MET		
587	Bedroom	3.2		100	MET		

Table 15: Assessment Data


EXISTING CAR PARKING LEVEL 2
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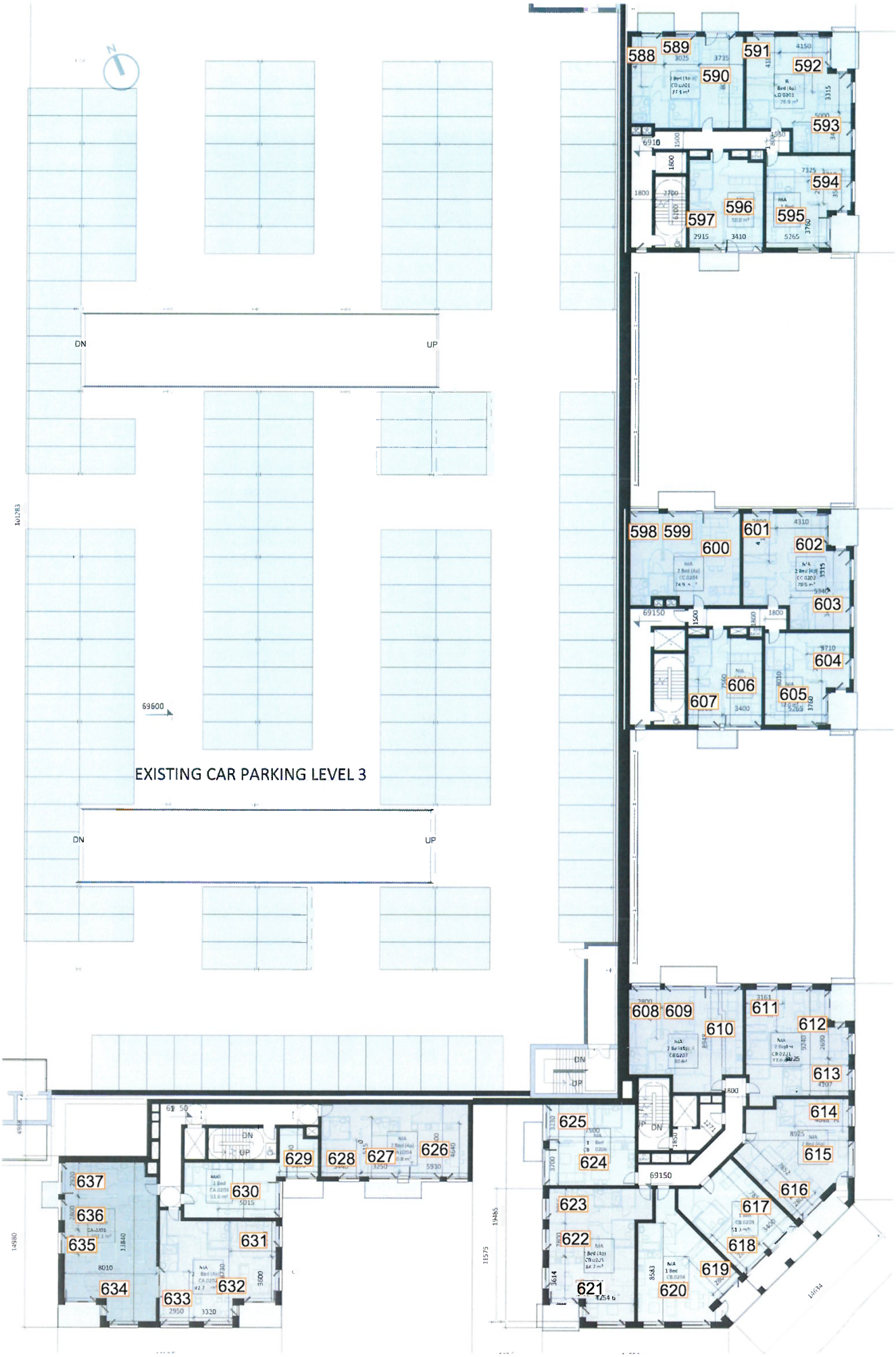
Site C - Level 2

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE C - LEVEL 02							
588	Bedroom	2.3		100	MET		
589	Bedroom	4		99	MET		
590	L/K/D	2		100	MET		
591	Bedroom	4.5		99	MET		
592	L/K/D	5.2		100	N/A	66	23
593	Bedroom	4.1		98	MET		
594	Bedroom	4.8		99	MET		
595	L/K/D	3.6		99	N/A	58	23
596	L/K/D	2.6		91	MET	44	16
597	Bedroom	1.9		88	MET		
598	Bedroom	2.2		93	MET		
599	Bedroom	2.3		98	MET		
600	L/K/D	2.3		89	MET		
601	Bedroom	3.6		86	MET		
602	L/K/D	4.8		99	N/A	66	23
603	Bedroom	3.9		98	MET		
604	Bedroom	4.7		99	MET		
605	L/K/D	3.6		99	N/A	61	23
606	L/K/D	2.7		87	MET	48	17
607	Bedroom	2.2		92	MET		
608	Bedroom	2.1		92	MET		
609	Bedroom	2		95	NOT MET		
610	L/K/D	1.8		85	MET		
611	Bedroom	2.9		88	MET		
612	L/K/D	4.7		100	N/A	66	23
613	Bedroom	3.5		100	MET		
614	Bedroom	3.4		100	MET		
615	L/K/D	3.5		99	N/A	66	23
616	Bedroom	2.4		100	MET		
617	L/K/D	1.6		100	MET	14	14
618	Bedroom	2.4		100	MET		
619	Bedroom	2.4		98	MET		
620	L/K/D	2.4		92	N/A	58	19
621	L/K/D	3.2		99	N/A	50	11
622	Bedroom	2.3		77	MET		
623	Bedroom	2		80	MET		
624	L/K/D	1.3	1.6	53	MET		
625	Bedroom	1		50	MET		
626	L/K/D	3		94	N/A	40	5
627	Bedroom	2.5		97	MET		
628	Bedroom	2.6		95	MET		
629	Bedroom	2.2		97	MET		
630	L/K/D	1.4		82	MET	30	8
631	Bedroom	2		65	MET		
632	L/K/D	3.2		99	N/A	65	12
633	Bedroom	3.2		64	MET		
634	L/K/D	2.5		92	N/A	53	7
635	Bedroom	5.1		100	MET		
636	Bedroom	2.8		98	MET		
637	Bedroom	3.7		100	MET		

Table 16: Assessment Data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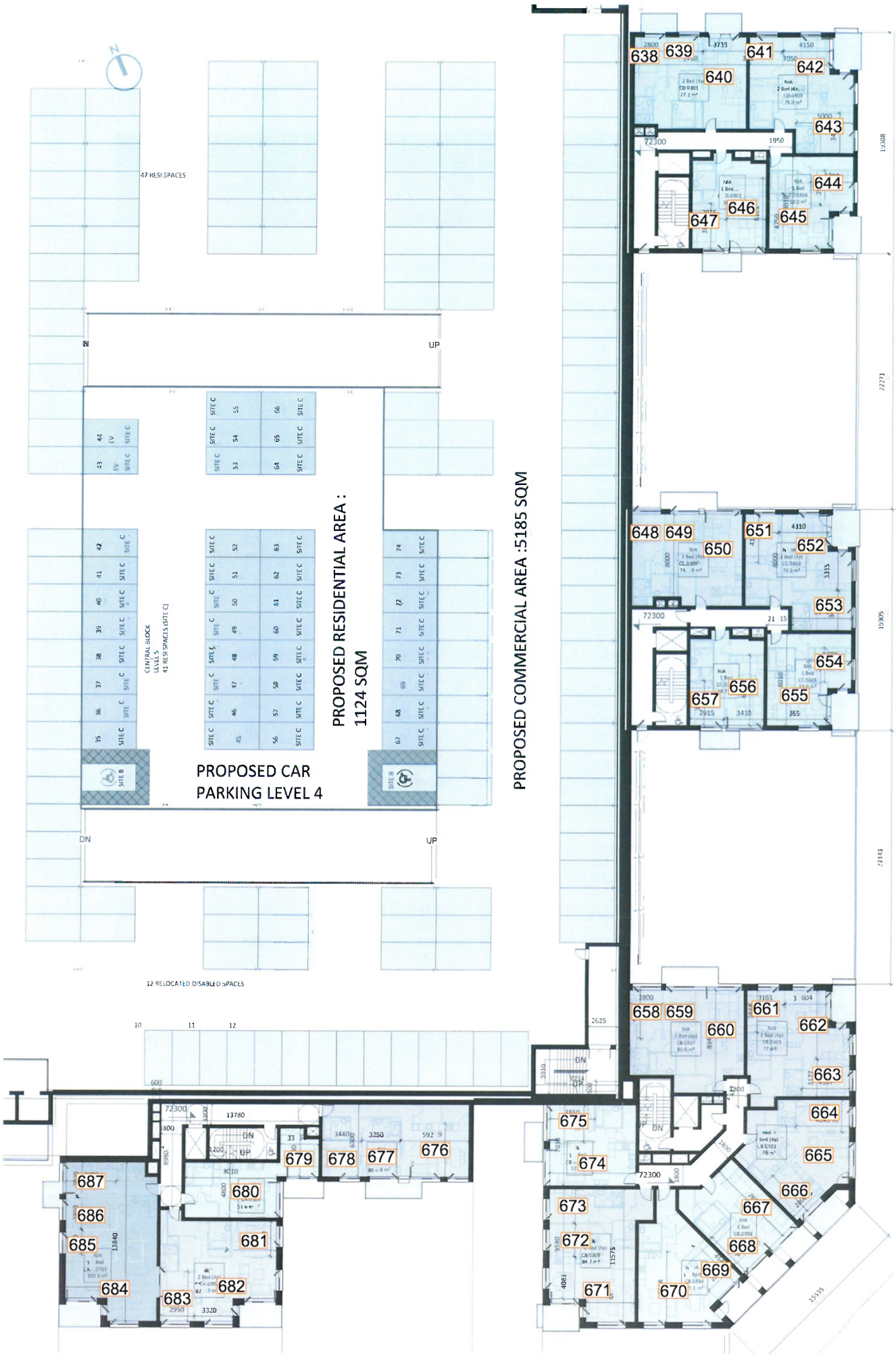
UP
EXISTING CAR PARKING LEVEL 3
69600
69150

Site C - Level 3

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE C - LEVEL 03							
638	Bedroom	2.6		100	MET		
639	Bedroom	3.8		98	MET		
640	L/K/D	2		100	MET		
641	Bedroom	4.5		99	MET		
642	L/K/D	5.2		100	N/A	66	23
643	Bedroom	4.1		98	MET		
644	Bedroom	4.8		99	MET		
645	L/K/D	3.7		99	N/A	64	23
646	L/K/D	2.8		92	MET	52	16
647	Bedroom	2.1		88	MET		
648	Bedroom	2.9		97	MET		
649	Bedroom	2.8		98	MET		
650	L/K/D	2.6		89	MET		
651	Bedroom	3.8		87	MET		
652	L/K/D	4.8		99	N/A	66	23
653	Bedroom	3.9		98	MET		
654	Bedroom	4.8		99	MET		
655	L/K/D	3.6		99	N/A	67	23
656	L/K/D	2.8		91	MET	54	16
657	Bedroom	2.2		87	MET		
658	Bedroom	2.7		98	MET		
659	Bedroom	2.5		95	NOT MET		
660	L/K/D	2		87	MET		
661	Bedroom	3		88	MET		
662	L/K/D	4.7		100	N/A	66	23
663	Bedroom	3.5		100	MET		
664	Bedroom	3.4		100	MET		
665	L/K/D	3.5		99	N/A	68	23
666	Bedroom	2.5		100	MET		
667	L/K/D	1.6		100	MET	14	14
668	Bedroom	2.5		100	MET		
669	Bedroom	2.4		98	MET		
670	L/K/D	2.6		94	N/A	61	19
671	L/K/D	3.5		98	N/A	55	11
672	Bedroom	2.8		91	MET		
673	Bedroom	2.4		94	MET		
674	L/K/D	1.6		66	MET		
675	Bedroom	1.8		98	MET		
676	L/K/D	3.3		97	N/A	45	7
677	Bedroom	2.7		99	MET		
678	Bedroom	2.8		96	MET		
679	Bedroom	2.4		99	MET		
680	L/K/D	1.5		88	MET	32	9
681	Bedroom	2.2		79	MET		
682	L/K/D	3.5		99	N/A	71	14
683	Bedroom	3.5		76	MET		
684	L/K/D	2.6		95	N/A	55	9
685	Bedroom	5.3		100	MET		
686	Bedroom	2.9		99	MET		
687	Bedroom	4		100	MET		

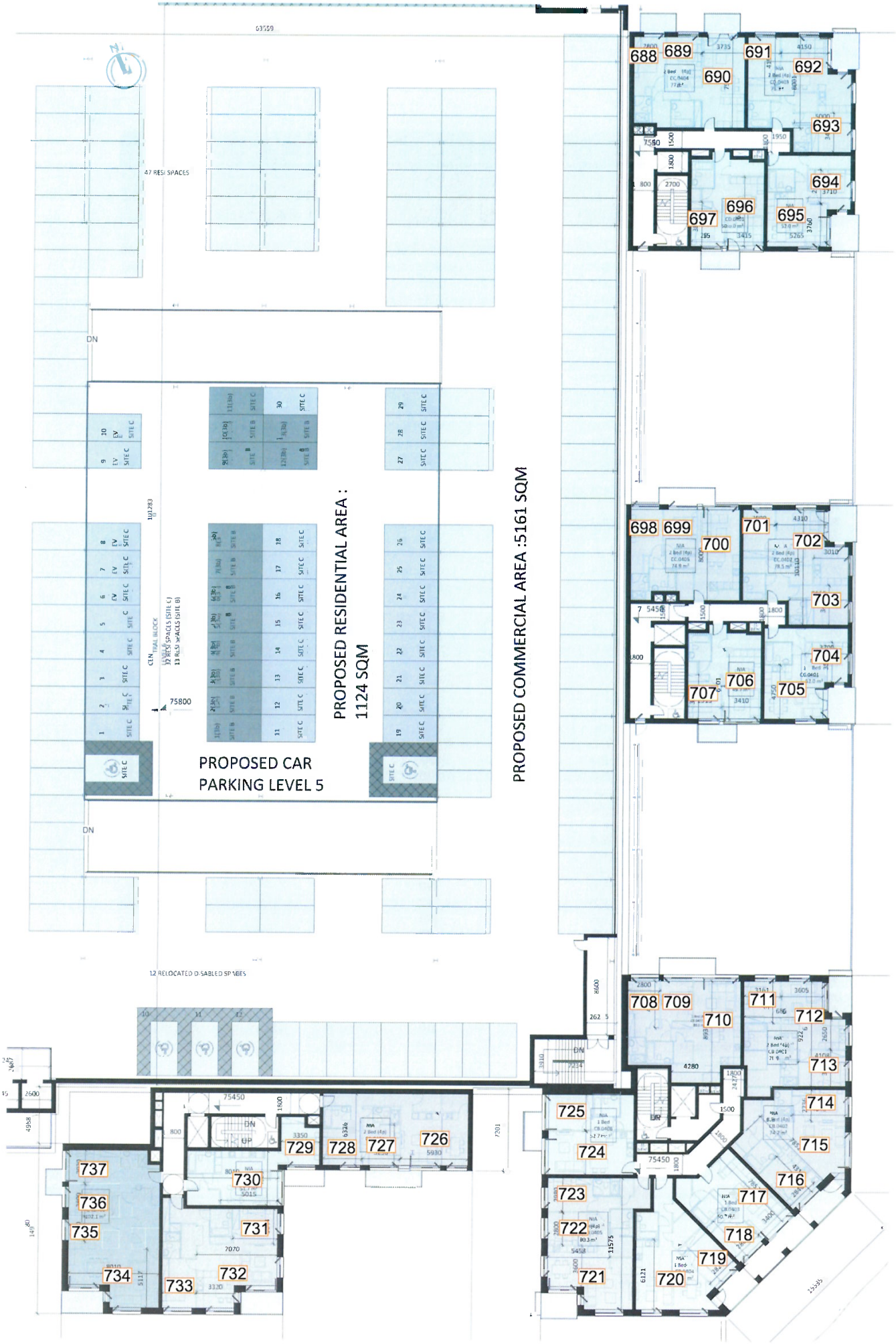
Table 17: Assessment Data


47 RESI SPACES
UP
DN
PROPOSED RESIDENTIAL AREA : 1124 SQM
PROPOSED COMMERCIAL AREA :5185 SQM
PROPOSED CAR PARKING LEVEL 4
CENTRAL BLOCK LEVEL 5 41 RESI SPACES (SITE C)
12 RELOCATED DISABLED SPACES
638 639 640 641 642 643 644 645 646 647
648 649 650 651 652 653 654 655 656 657
658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687

Site C - Level 4

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE C - LEVEL 04							
688	Bedroom	2.7		100	MET		
689	Bedroom	3.8		99	MET		
690	L/K/D	2.1		100	MET		
691	Bedroom	4.6		99	MET		
692	L/K/D	5.3		100	N/A	66	23
693	Bedroom	4.1		98	MET		
694	Bedroom	4.8		99	MET		
695	L/K/D	3.7		99	N/A	69	24
696	L/K/D	2.9		92	MET	56	17
697	Bedroom	2.3		88	MET		
698	Bedroom	4.4		100	MET		
699	Bedroom	3.3		98	MET		
700	L/K/D	2.7		89	MET		
701	Bedroom	3.9		90	MET		
702	L/K/D	4.9		99	N/A	66	23
703	Bedroom	4		98	MET		
704	Bedroom	4.8		99	MET		
705	L/K/D	3.7		99	N/A	70	24
706	L/K/D	3		91	MET	58	17
707	Bedroom	2.4		91	MET		
708	Bedroom	3.9		97	MET		
709	Bedroom	3.1		96	NOT MET		
710	L/K/D	2.2		87	MET		
711	Bedroom	3.1		89	MET		
712	L/K/D	4.9		100	N/A	66	23
713	Bedroom	3.5		100	MET		
714	Bedroom	3.4		100	MET		
715	L/K/D	3.5		99	N/A	68	23
716	Bedroom	2.5		100	MET		
717	L/K/D	1.6		100	MET	14	14
718	Bedroom	2.5		100	MET		
719	Bedroom	2.4		99	MET		
720	L/K/D	2.8		96	N/A	63	19
721	L/K/D	4		100	N/A	57	12
722	Bedroom	3.1		99	MET		
723	Bedroom	2.9		100	MET		
724	L/K/D	2.4		81	MET		
725	Bedroom	4.8		100	MET		
726	L/K/D	4		99	N/A	53	13
727	Bedroom	4.6		99	MET		
728	Bedroom	3.2		97	MET		
729	Bedroom	2.8		99	MET		
730	L/K/D	1.8		89	MET	34	11
731	Bedroom	2.7		96	MET		
732	L/K/D	3.8		99	N/A	73	13
733	Bedroom	3.8		97	MET		
734	L/K/D	2.8		98	N/A	58	12
735	Bedroom	5.4		100	MET		
736	Bedroom	3.1		99	MET		
737	Bedroom	4.4		100	MET		

Table 18: Assessment Data


PROPOSED RESIDENTIAL AREA : 1124 SQM
PROPOSED COMMERCIAL AREA :5161 SQM
PROPOSED CAR PARKING LEVEL 5
47 RESI SPACES
12 RELOCATED DISABLED SPACES
688 689 690 691 692 693 694 695 696 697
698 699 700 701 702 703 704 705 706 707
708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725
726 727 728 729 730 731 732 733 734 735 736 737

Site C - Level 5

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE C - LEVEL 05							
738	Bedroom	6		100	MET		
739	Bedroom	3.8		99	MET		
740	L/K/D	2.1		100	MET		
741	Bedroom	4.6		99	MET		
742	L/K/D	5.3		100	N/A	66	23
743	Bedroom	4.1		98	MET		
744	Bedroom	4.9		99	MET		
745	L/K/D	3.7		99	N/A	72	24
746	L/K/D	3.2		93	MET	57	16
747	Bedroom	2.4		88	MET		
748	Bedroom	8.1		100	MET		
749	Bedroom	3.5		98	MET		
750	L/K/D	2.9		90	MET		
751	Bedroom	4.1		97	MET		
752	L/K/D	5		100	N/A	66	23
753	Bedroom	3.9		98	MET		
754	Bedroom	4.9		99	MET		
755	L/K/D	3.8		100	N/A	73	24
756	L/K/D	2.7		85	MET	59	17
757	Bedroom	2.9		99	MET		
758	Bedroom	6.9		97	N/A		
759	Bedroom	3.2		96	NOT MET		
760	L/K/D	2.3		88	MET		
761	Bedroom	3.3		91	MET		
762	L/K/D	4.9		100	N/A	66	23
763	Bedroom	3.5		100	MET		
764	Bedroom	3.5		100	MET		
765	L/K/D	2.2		100	N/A	68	25
766	Bedroom	2.3		100	MET		
767	L/K/D	1.7		100	MET	42	24
768	Bedroom	2.8		99	MET		
769	Bedroom	3.2		95	N/A		
770	L/K/D	4.9		100	N/A	35	13
771	L/K/D	4.5		99	MET	54	14
772	Bedroom	4.4		99	MET		
773	L/K/D	3.3		96	N/A	84	17
774	Bedroom	2.7		96	MET		
775	L/K/D	3		97	N/A	64	18
776	Bedroom	5.8		100	MET		
777	Bedroom	3.8		100	MET		
778	Bedroom	4.8		100	MET		

Table 19: Assessment Data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Site C - Level 6

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE C - LEVEL 06							
779	Bedroom	6		100	MET		
780	Bedroom	3.8		99	MET		
781	L/K/D	2.1		100	MET		
782	Bedroom	4.6		99	MET		
783	L/K/D	5.3		100	N/A	66	23
784	Bedroom	4.1		98	MET		
785	Bedroom	4.9		99	MET		
786	L/K/D	3.8		99	N/A	73	24
787	L/K/D	3.2		93	MET	61	18
788	Bedroom	2.7		95	MET		
789	Bedroom	8.5		100	MET		
790	Bedroom	3.9		100	MET		
791	L/K/D	3.1		93	MET		
792	Bedroom	4.3		99	MET		
793	L/K/D	5.1		100	N/A	66	23
794	Bedroom	4.9		99	MET		
795	L/K/D	3.9		100	N/A	74	24
796	L/K/D	3.4		100	MET	62	19
797	Bedroom	2.8		98	MET		
798	Bedroom	7.3		98	N/A		
799	Bedroom	4.7		96	NOT MET		
800	L/K/D	2.8		89	MET		
801	Bedroom	3.5		97	MET		
802	L/K/D	5		100	N/A	66	23
803	Bedroom	3.5		100	MET		
804	Bedroom	3.5		100	MET		
805	L/K/D	4		100	N/A	82	25
806	Bedroom	3.1		100	MET		
807	L/K/D	2.8		100	MET	48	25
808	Bedroom	3.7		99	MET		
809	Bedroom	3.5		95	N/A		
810	L/K/D	5.2		100	N/A	43	17

Table 20: Assessment Data


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Site C - Level 7

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE C - LEVEL 07							
811	Bedroom	7		100	N/A		
812	Bedroom	4.2		99	MET		
813	L/K/D	2.7		100	MET		
814	Bedroom	5.4		99	MET		
815	L/K/D	5.5		100	N/A	66	22
816	Bedroom	3.5		98	MET		
817	Bedroom	3.5		99	MET		
818	L/K/D	6.1		100	N/A	95	24
819	L/K/D	3.9		99	MET	69	22
820	Bedroom	3.9		99	MET		
821	Bedroom	8.4		100	N/A		
822	Bedroom	3.9		100	MET		
823	L/K/D	3.2		100	MET		
824	Bedroom	5		99	MET		
825	L/K/D	4.4		100	N/A	66	22
826	Bedroom	2.2		98	MET		
827	Bedroom	3.2		99	MET		
828	Bedroom	4.8		100	N/A		
829	L/K/D	3.6		100	MET	65	21
830	Bedroom	2.8		99	MET		
831	L/K/D	5.1		100	N/A	40	21
832	Bedroom	4.5		98	MET		
833	Bedroom	2.7		99	MET		
834	Bedroom	5.1		100	MET		
835	Bedroom	4.7		100	MET		
836	L/K/D	4.4		100	N/A	67	21
837	Bedroom	4.9		98	MET		

Table 21: Assessment Data


811
812
813
814
815
816
817
818
819
820
85050


20005
821
822
823
824
825
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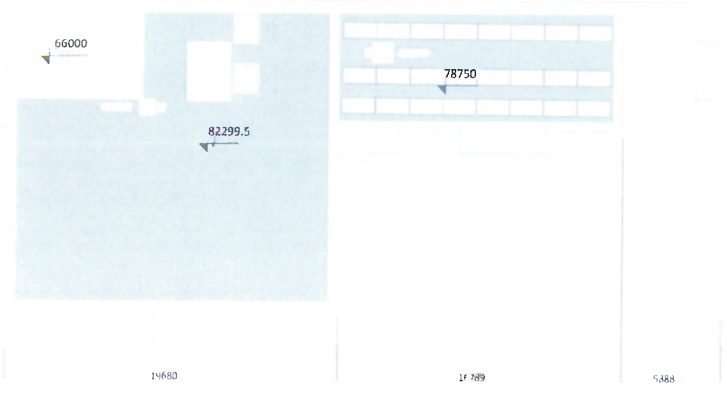
837
78750


66000
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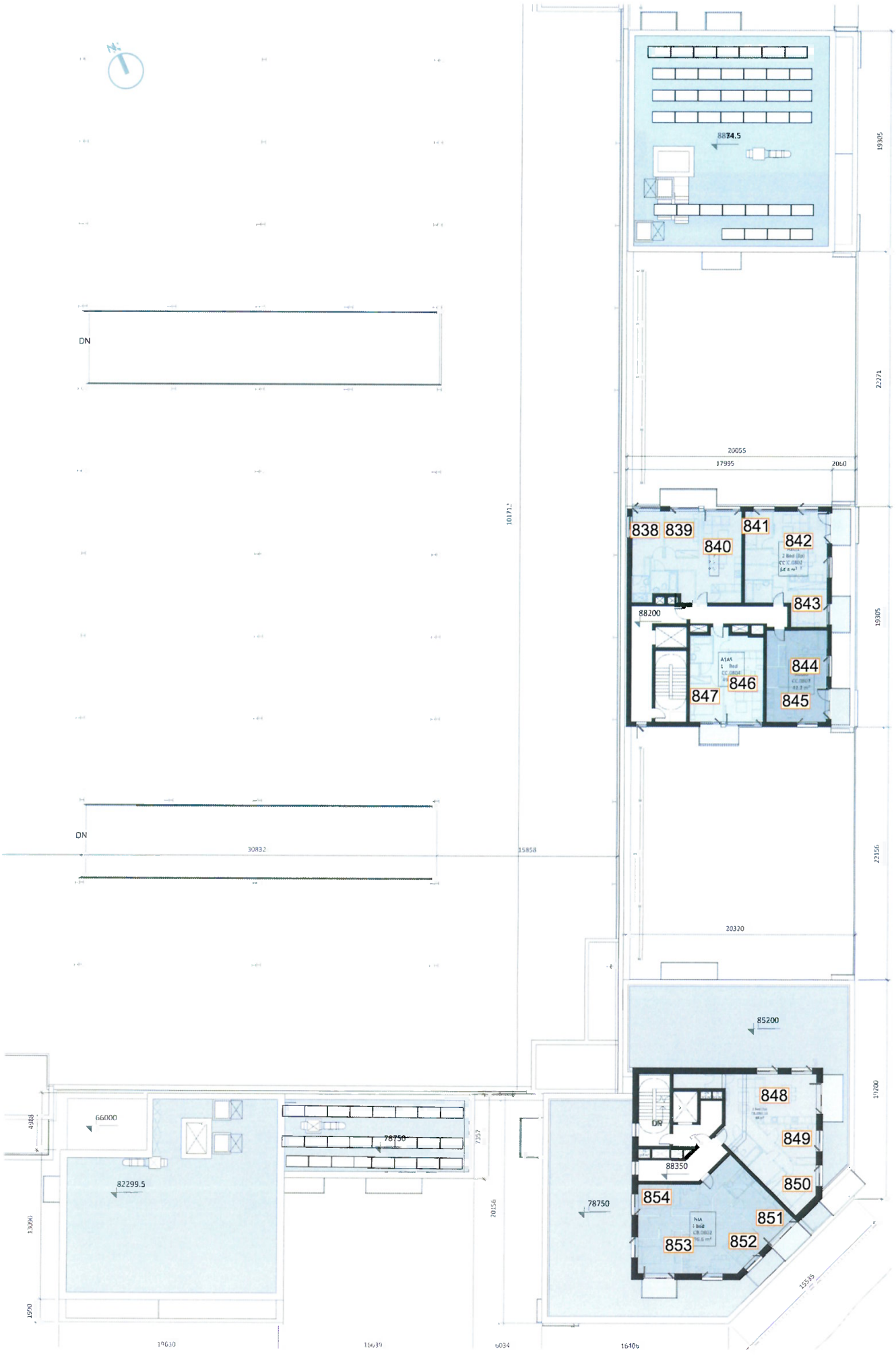
78750

Site C - Level 8

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE C - LEVEL 08							
838	Bedroom	8.8		100	N/A		
839	Bedroom	5.7		100	MET		
840	L/K/D	3.7		100	MET		
841	Bedroom	5.2		99	MET		
842	L/K/D	6.5		100	N/A	67	23
843	Bedroom	4.7		98	MET		
844	Bedroom	4.2		99	MET		
845	Bedroom	7.3		100	N/A		
846	L/K/D	4.3		100	MET	69	22
847	Bedroom	4		99	MET		
848	L/K/D	4.8		100	N/A	40	21
849	Bedroom	3.7		98	MET		
850	Bedroom	3.5		99	MET		
851	Bedroom	5.1		100	MET		
852	Bedroom	4.7		100	MET		
853	L/K/D	4.4		100	N/A	67	21
854	Bedroom	4.9		98	MET		

Table 22: Assessment Data



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DN
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854
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66000
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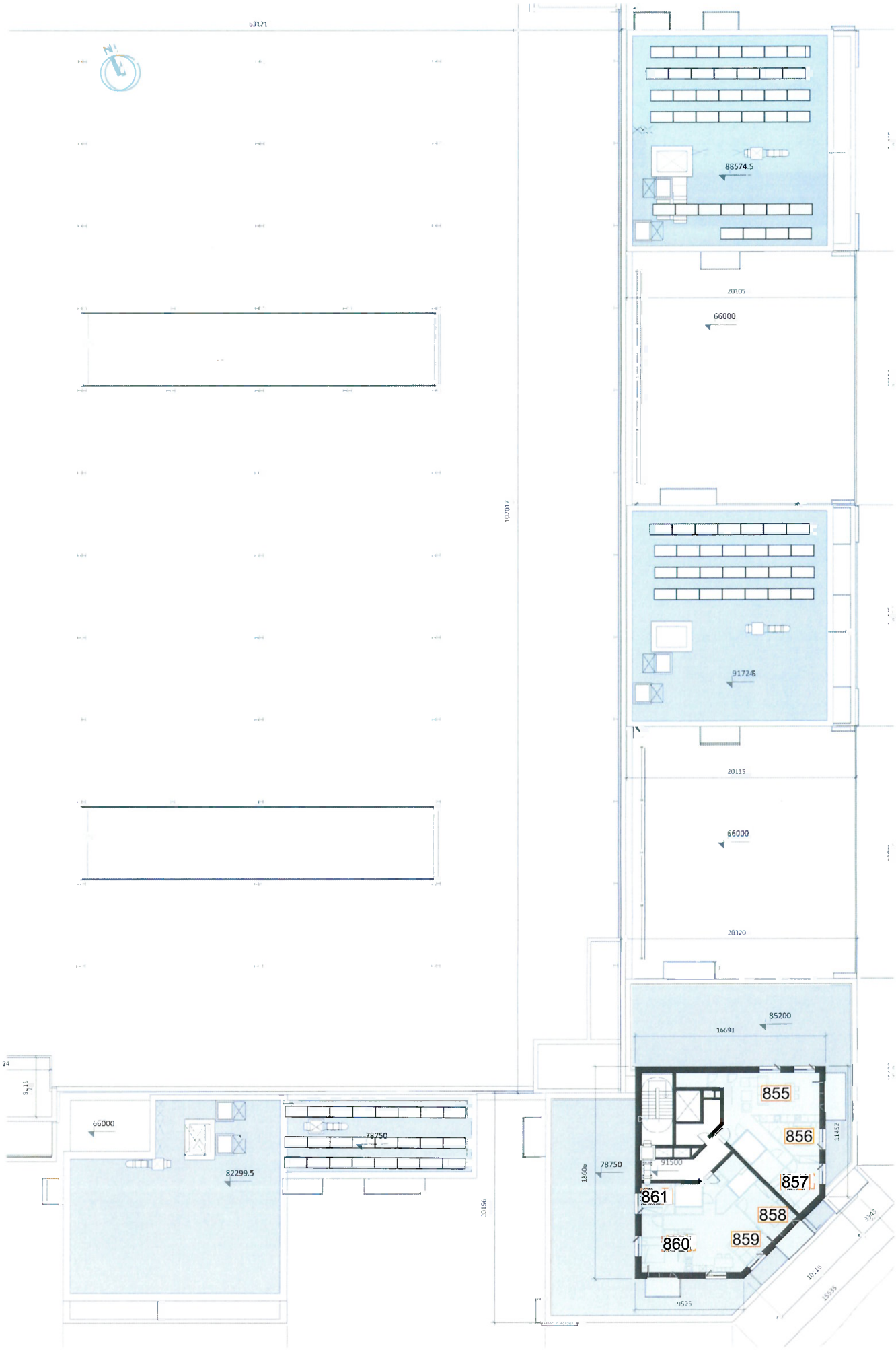
17995
2060
20320
30832
15858
19305
22271
22156
19200
15535
19630
16039
6034
16406

Site C - Level 9

		DAYLIGHT QUANTUM		DAYLIGHT DISTRIBUTION		SUNLIGHT QUANTUM (PROBABLE SUNLIGHT HOURS)	
ROOM REF.	ROOM USE	ADF (%)	ADF (%) living room	NSL (%)	RDC	ANNUAL	WINTER
SITE C - LEVEL 09							
855	L/K/D	5.6		100	N/A	67	23
856	Bedroom	3.9		98	MET		
857	Bedroom	3.6		99	MET		
858	Bedroom	7.3		100	MET		
859	Bedroom	5.2		100	MET		
860	L/K/D	5.3		100	N/A	68	22
861	Bedroom	5.1		98	MET		

Table 23: Assessment Data



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861
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78750
78750
66000
82299.5
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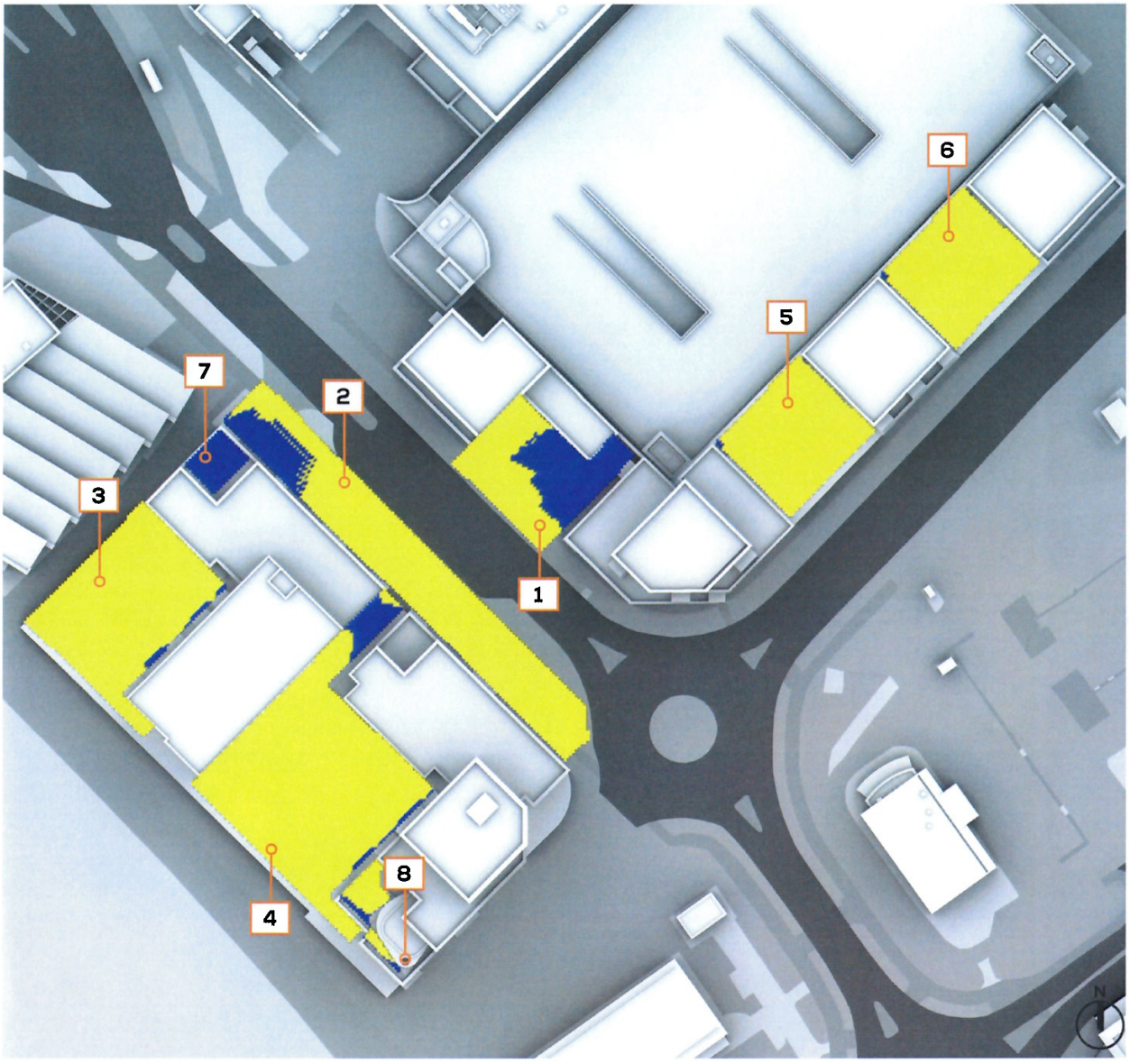
8 OVERSHADOWING ASSESSMENTS

OVERSHADOWING ASSESSMENT - PUBLIC AND COMMUNAL AMENITY AREAS
SUN EXPOSURE ON GROUND - 21ST MARCH



(BRE RECOMMENDS 2+ HOURS OF SUNLIGHT ON 21ST MARCH FOR AT LEAST 50% OF THE OPEN SPACE)

AREA 1 / GROUND LEVEL: 56%
AREA 2 / GROUND LEVEL: 88%

AREA 3 / PODIUM: 98%
AREA 4 / PODIUM: 93%
AREA 5 / PODIUM: 100%
AREA 6 / PODIUM: 100%

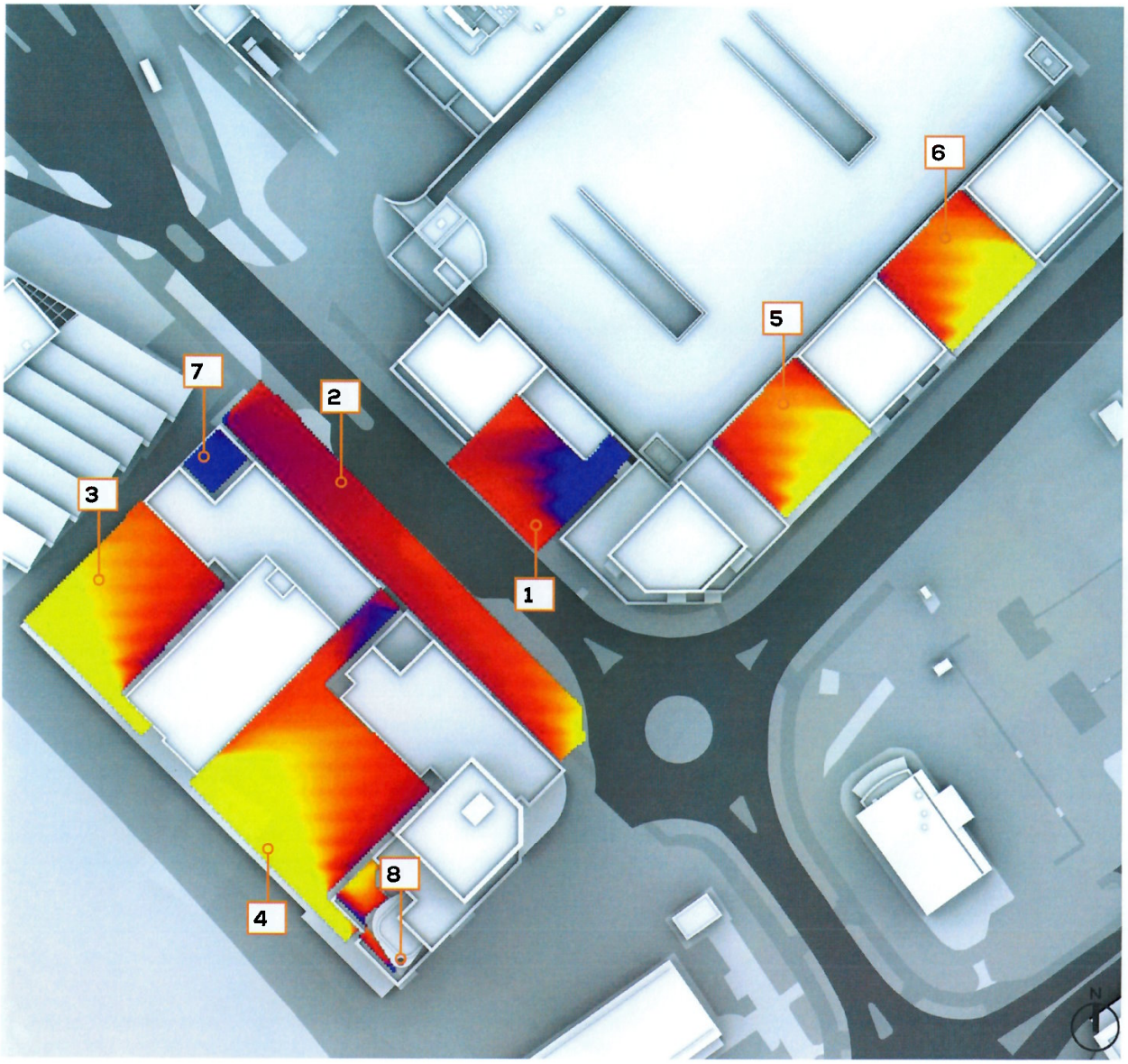
AREA 7 / ROOF-TERRACE: 0%
AREA 8 / ROOF-TERRACE: 81%

COMBINED COMPLIANCE: 90%

SUN HOURS ON GROUND
BRE TEST - 21ST MARCH



OVERSHADOWING ASSESSMENT - PUBLIC AND COMMUNAL AMENITY AREAS
SUN EXPOSURE ON GROUND - 21ST MARCH



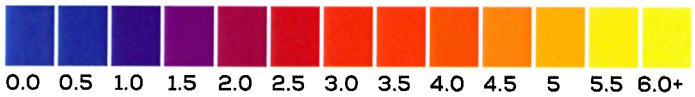
21st MARCH
(SPRING EQUINOX)

DUBLIN

Latitude:	53.3
Longitude:	-6.2
Sunrise:	06:24 GMT
Sunset:	18:40 GMT

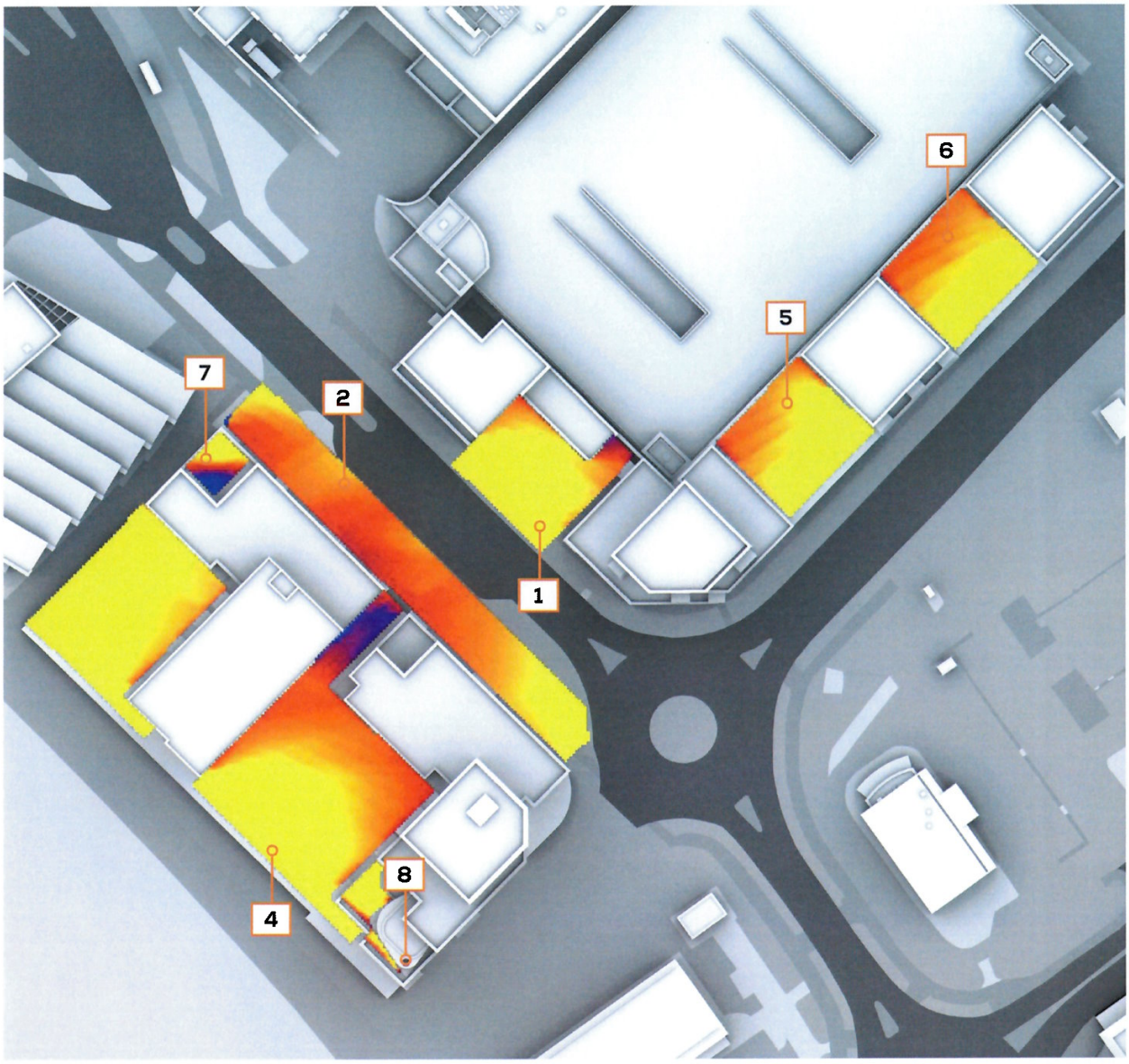
Total Available Sunlight:
12hrs 16mins

SUN EXPOSURE
TOTAL HOURS



OVERSHADOWING ASSESSMENT - PUBLIC AND COMMUNAL AMENITY AREAS

SUN EXPOSURE ON GROUND - 21ST JUNE



21st JUNE
(SUMMER SOLSTICE)

DUBLIN

Latitude:	53.3
Longitude:	-6.2
Sunrise:	04:56 DST
Sunset:	21:57 DST

Total Available Sunlight:
17hrs 1min

SUN EXPOSURE
TOTAL HOURS

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5 5.5 6.0+

gia
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E hello@giasurveyors.ie

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Dublin Ireland
D02 XE80

Appendix G

gia
CHARTERED SURVEYORS

DAYLIGHT & SUNLIGHT

TRANSIENT OVERSHADOWING ASSESSMENT

Blanchardstown - Sites B and C, Dublin

17 February 2022

GIA No: **17965**

PROJECT DATA:

Client	**Blanche Developments Ltd.**
Architect	**O'Mahony Pike**
Project Title	**Blanchardstown - Sites B and C, Dublin**
Project Number	**17965**

REPORT DATA:

Report Title	**Transient Overshadowing Assessment**
GIA Department	**Daylight & Sunlight**
Dated	**17 February 2022**

Prepared by	**GLE**
Checked by	**KF**
Type	**Planning**

Revisions	No:	Date:	Notes:	Signed:

DISCLAIMER:

N.B This report has been prepared for Blanche Developments Ltd. by GIA as their appointed Daylight & Sunlight consultants. This report is intended solely for Blanche Developments Ltd. and may contain confidential information. No part or whole of its contents may be disclosed to or relied upon by any Third Parties without the express written consent of GIA. It is accurate as at the time of publication and based upon the information we have been provided with as set out in the report. It does not take into account changes that have taken place since the report was written nor does it take into account private information on internal layouts and room uses of adjoining properties unless this information is publicly available.

SOURCES OF INFORMATION:

Information Received	**IR-16-17-17965**
Release Number	**Rel_09_17965_DSD**
Issue Number	**06**
Site Photos	**GIA**
3D models	**VERTEX**
OS Data	**FIND Maps**

Map data © Crown copyright and database rights 2017. OS 100047514

CONTENTS

1. TRANSIENT OVERSHADOWING ASSESSMENT 2

1.1 21st March 2

1.1 21st June 8

1.1 21st December 16

TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH (08:00 - 11:00 GMT)

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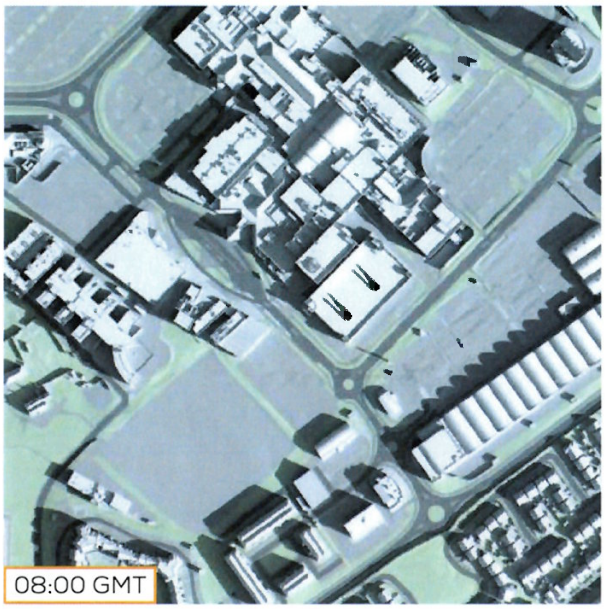



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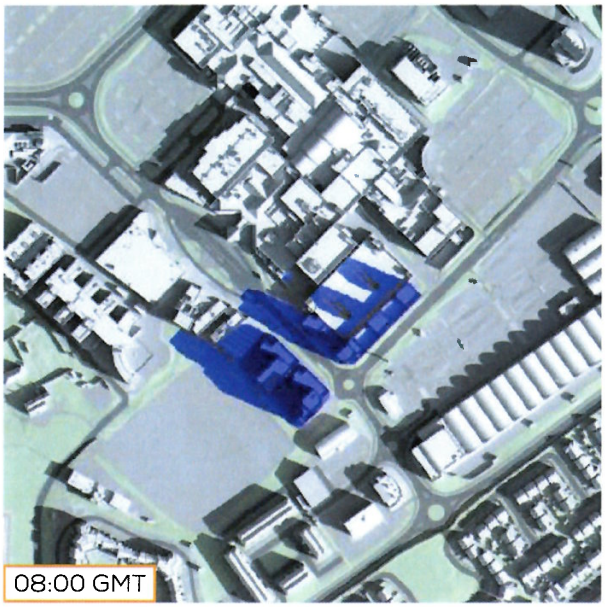



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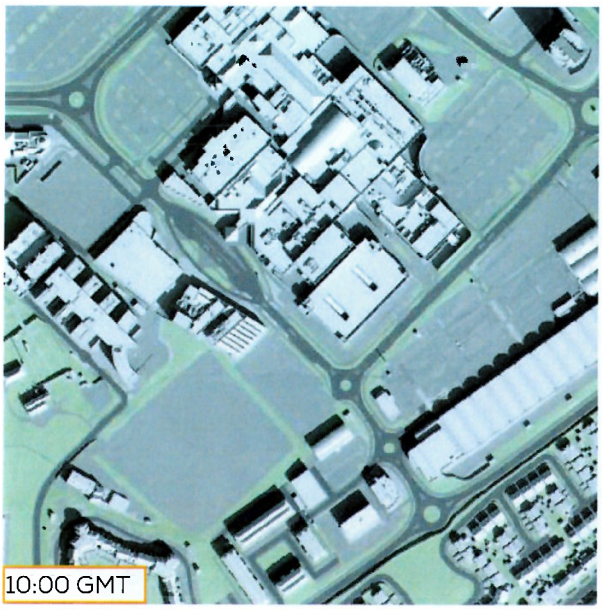



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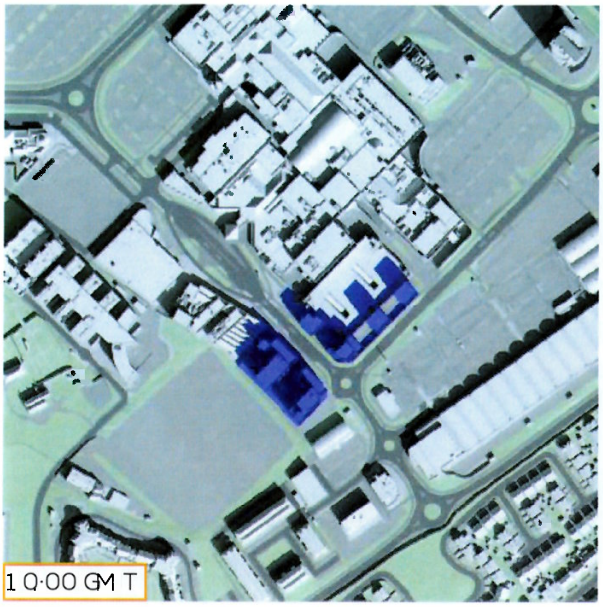



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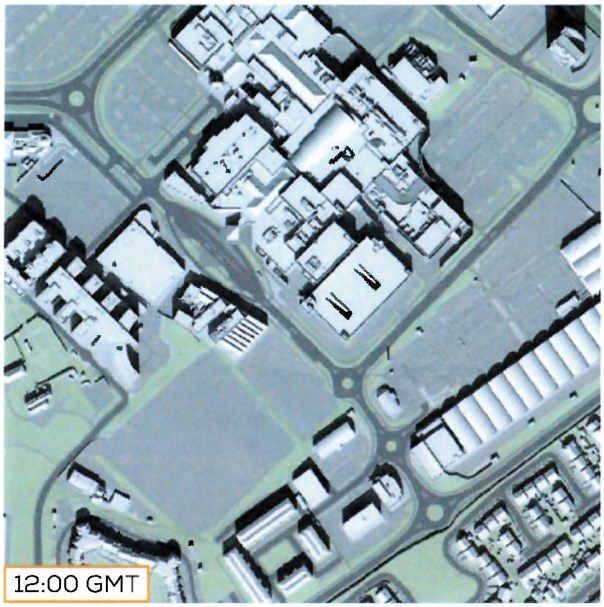

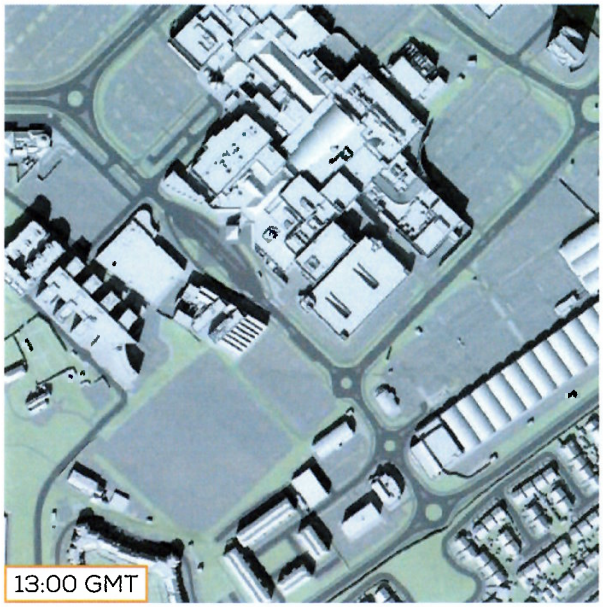

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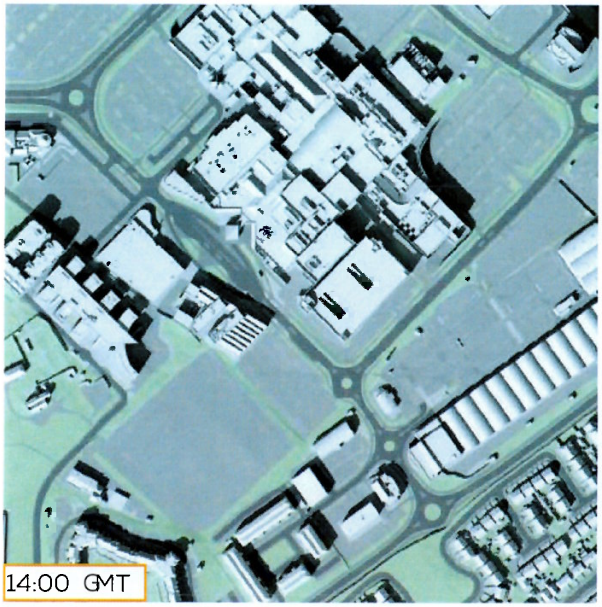

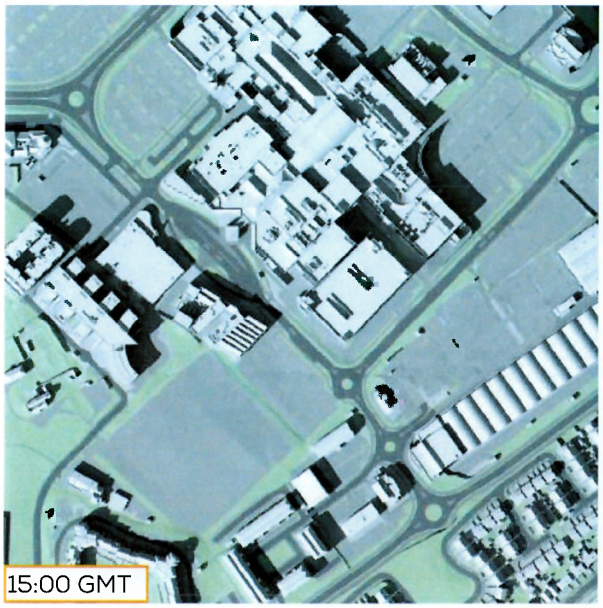

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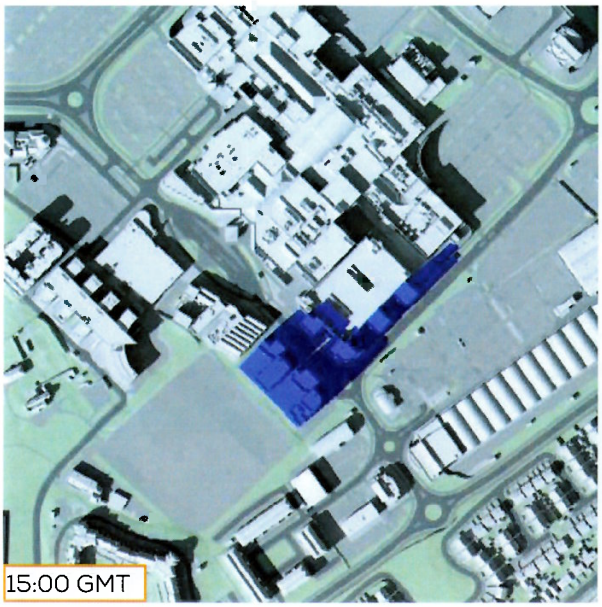

TRANSIENT OVERSHADOWING ASSESSMENT
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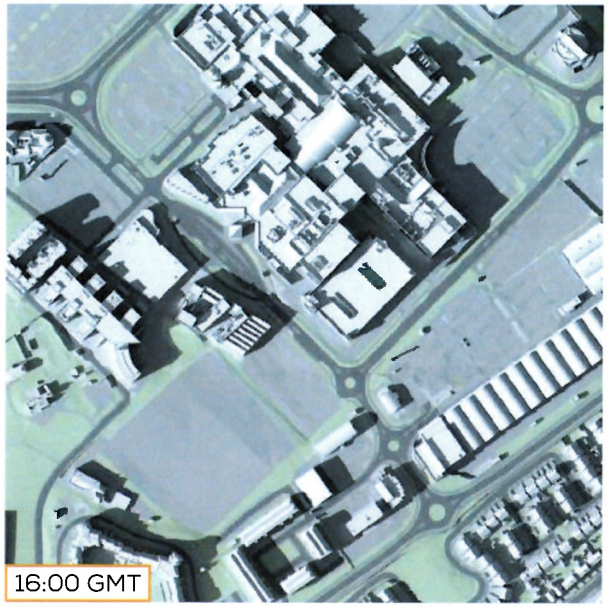

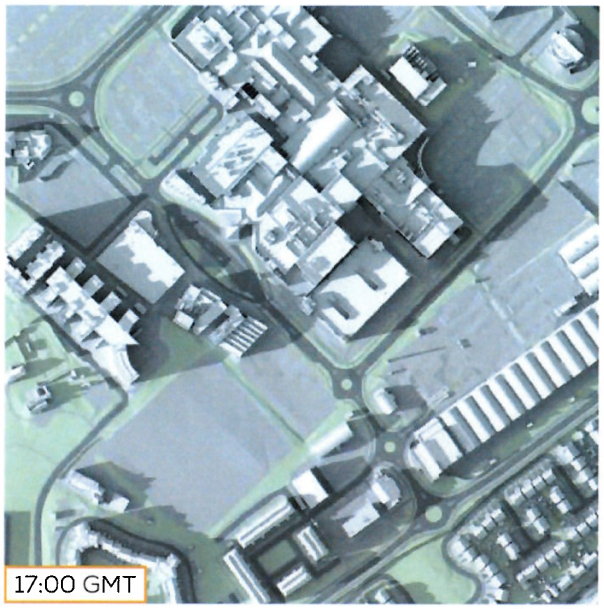

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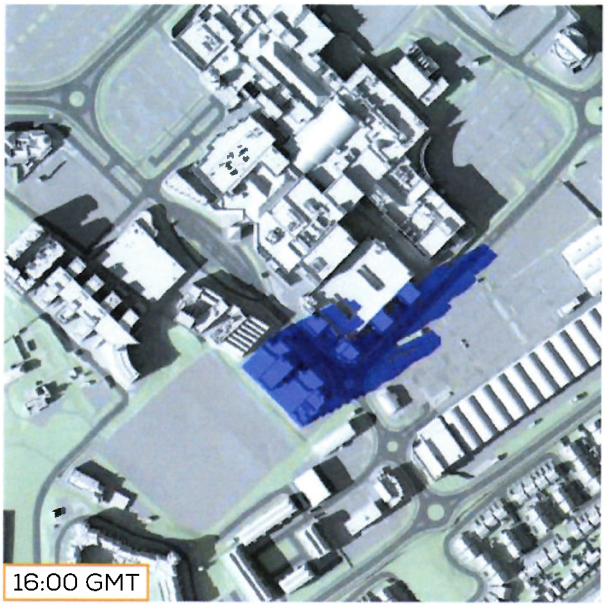

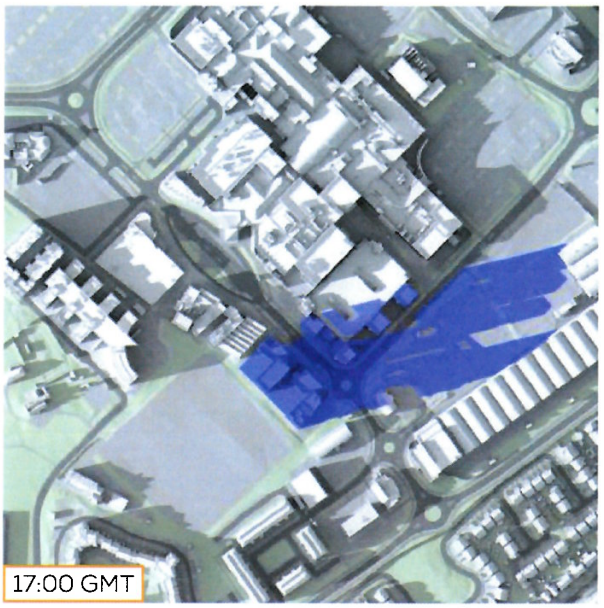

TRANSIENT OVERSHADOWING ASSESSMENT
21ST JUNE (06:00 - 09:00 BST)

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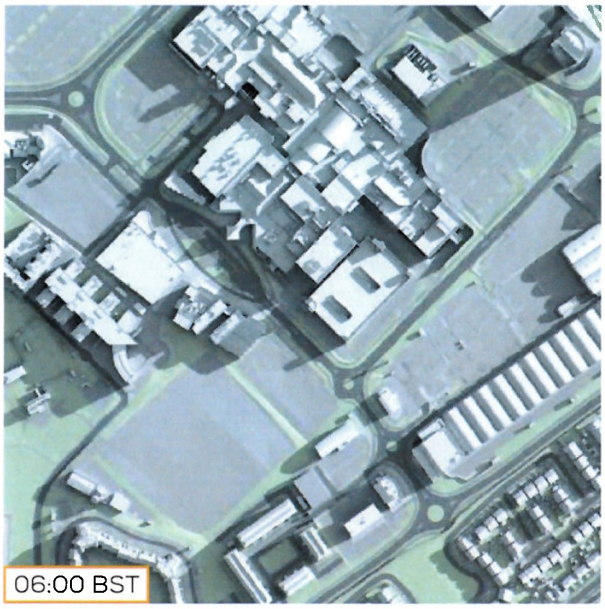

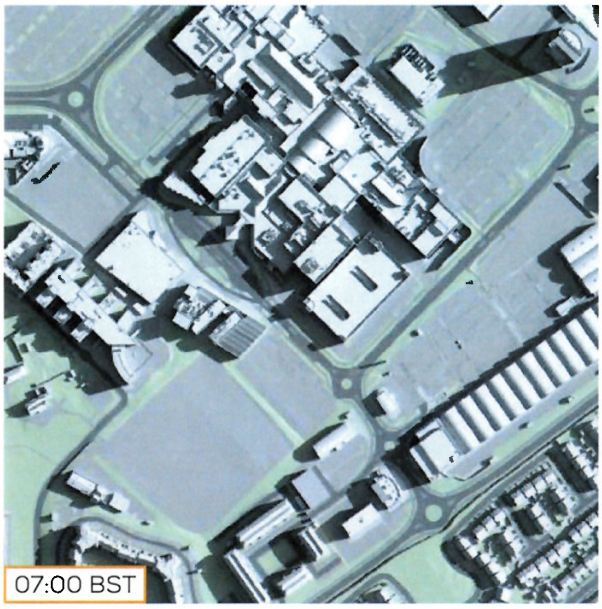

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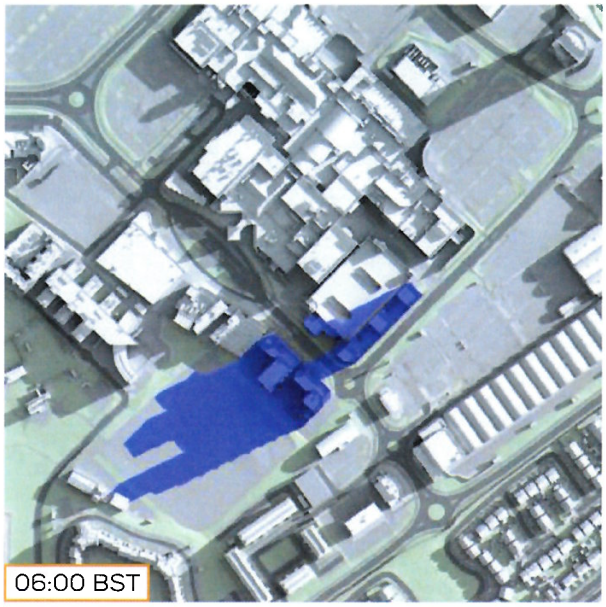

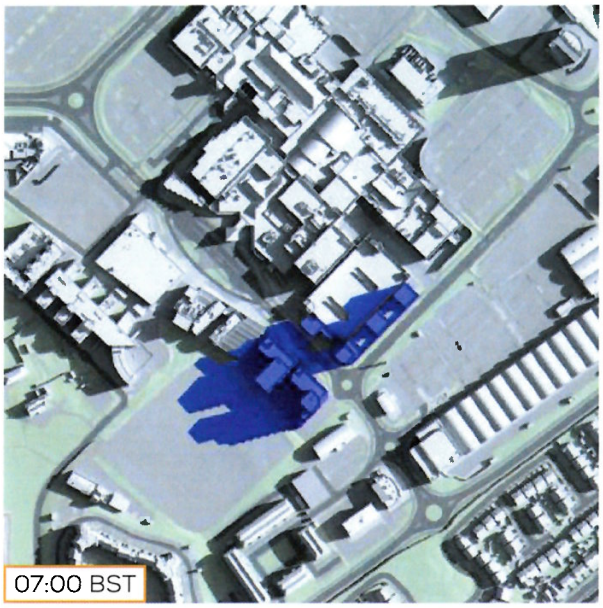

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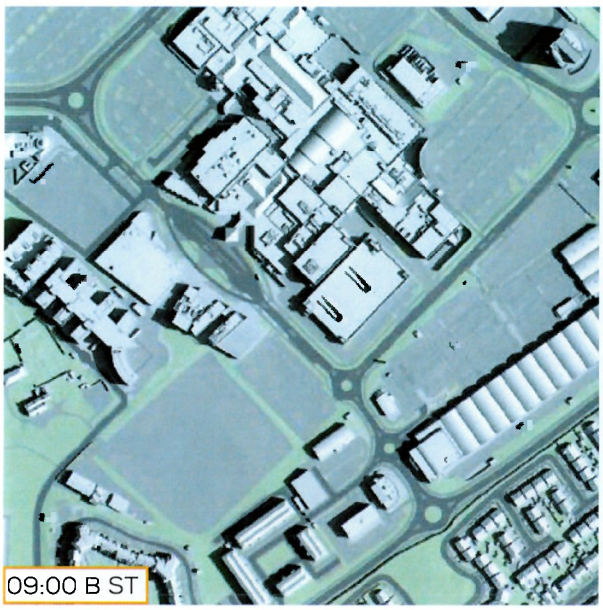

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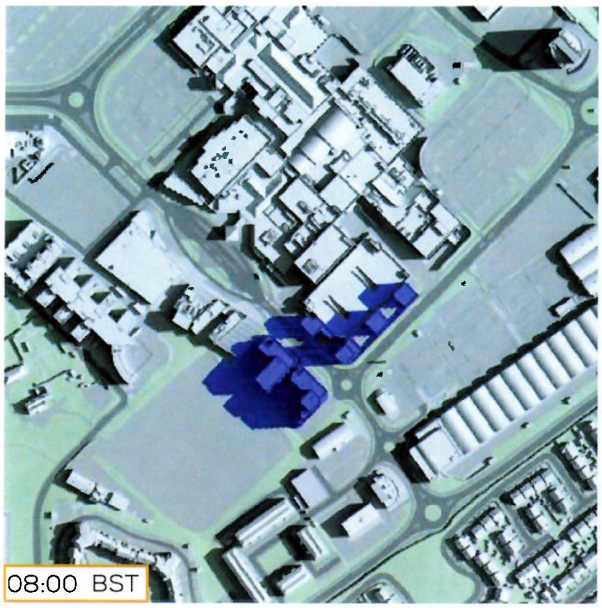



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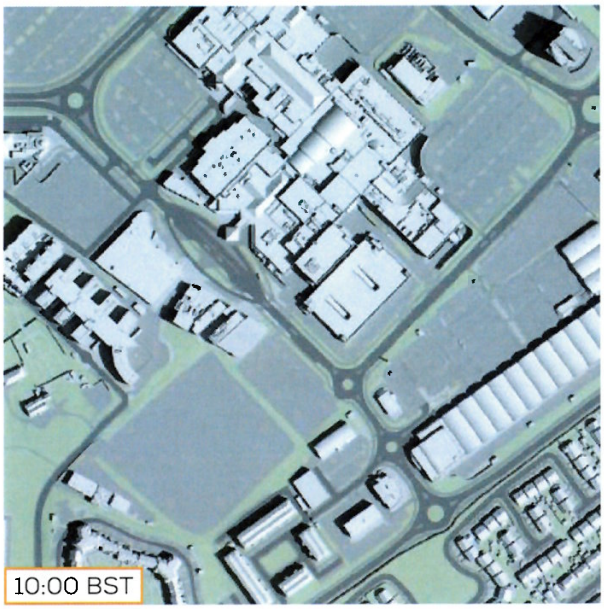

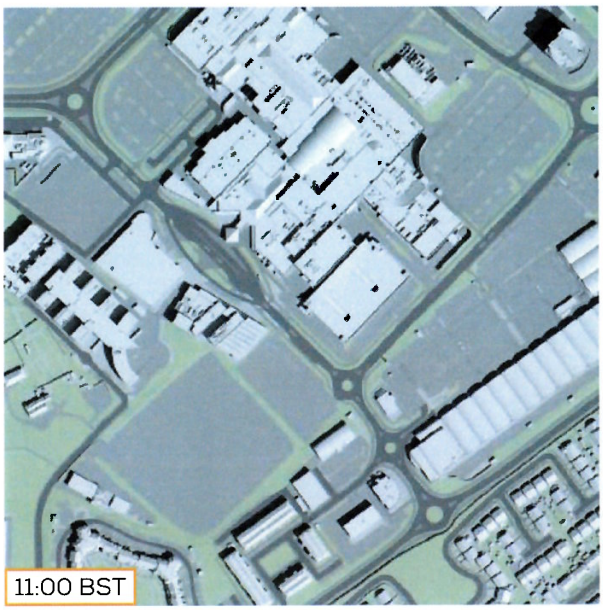

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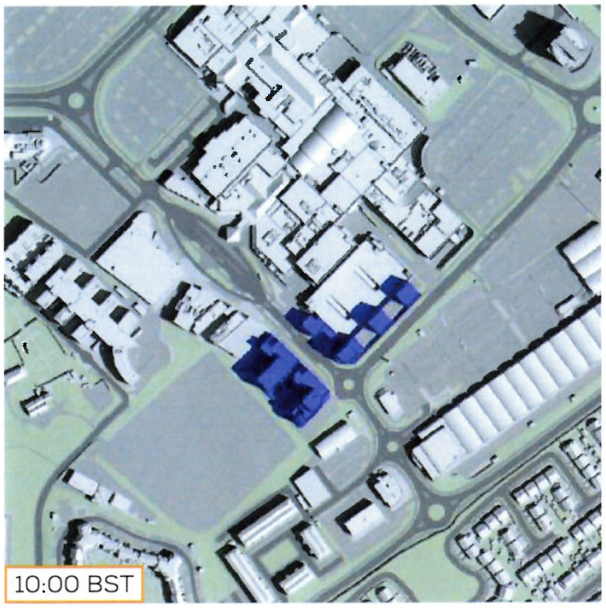

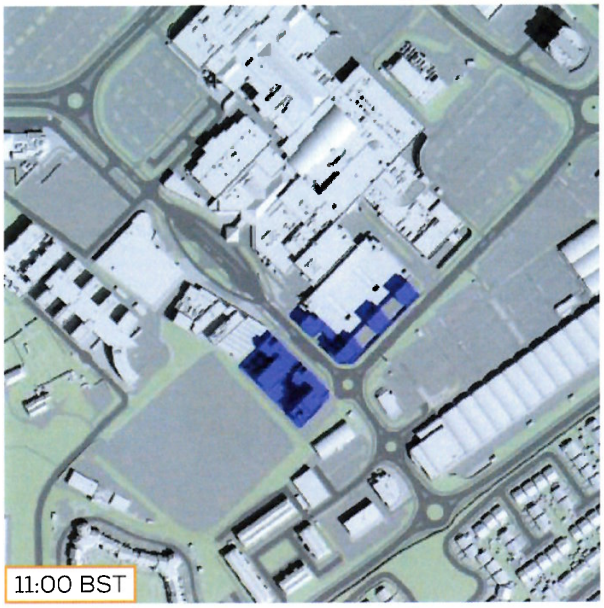

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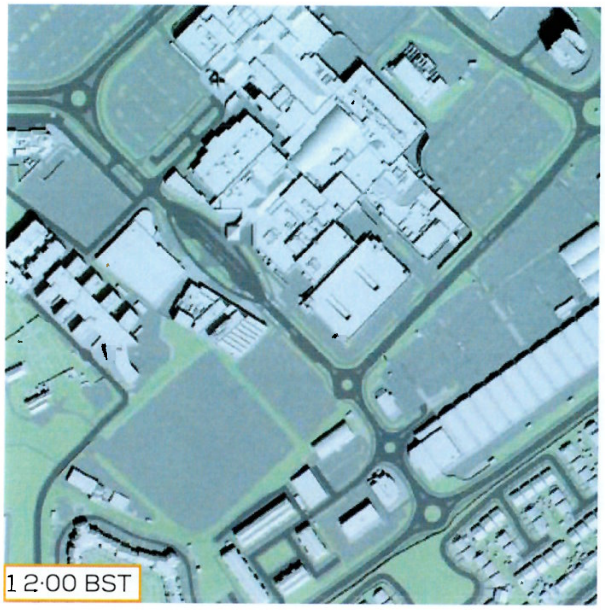

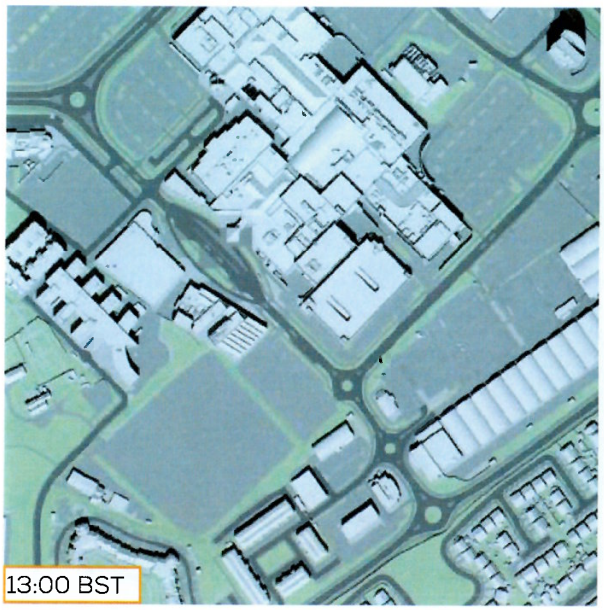

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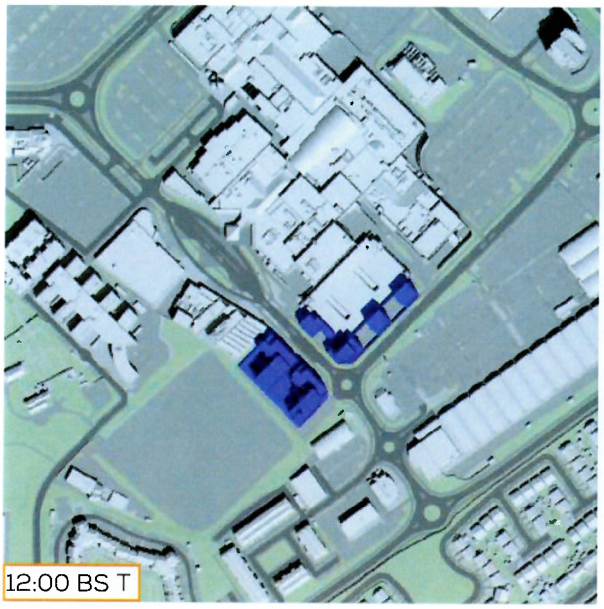

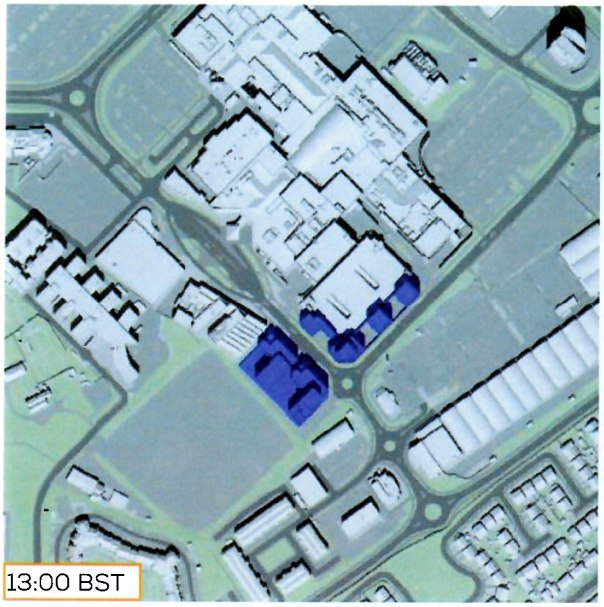

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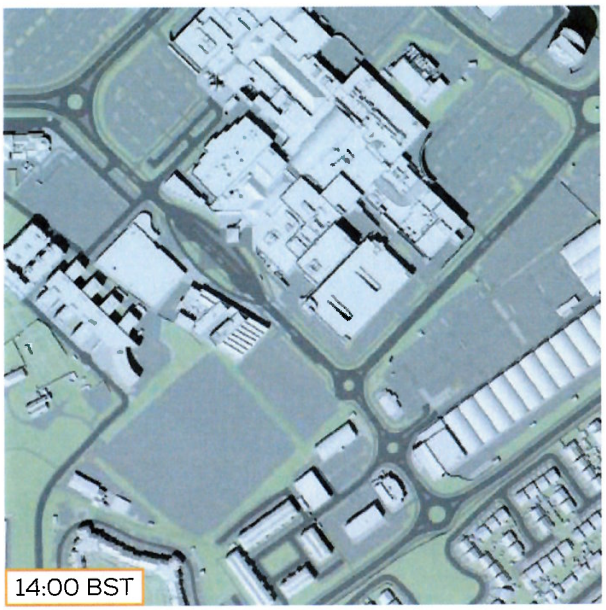

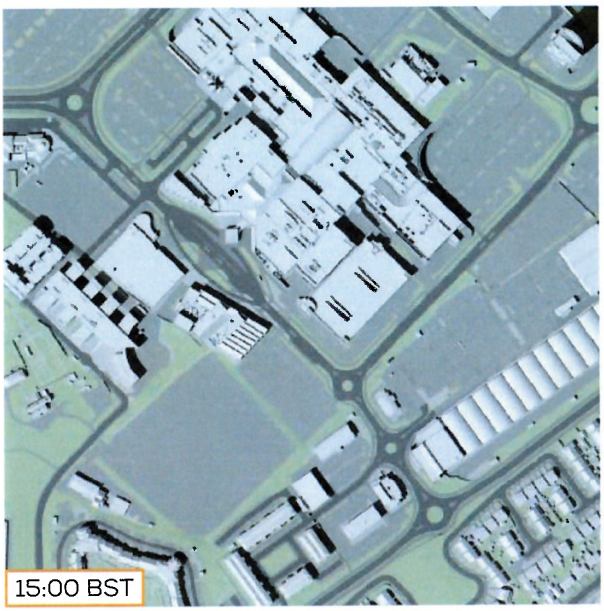

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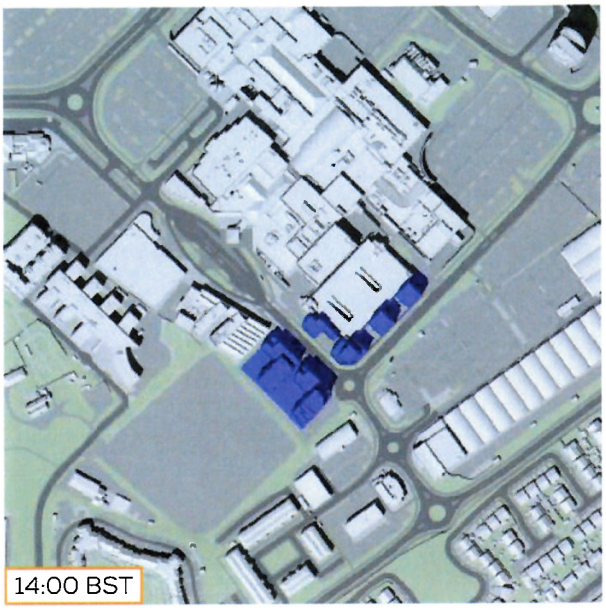

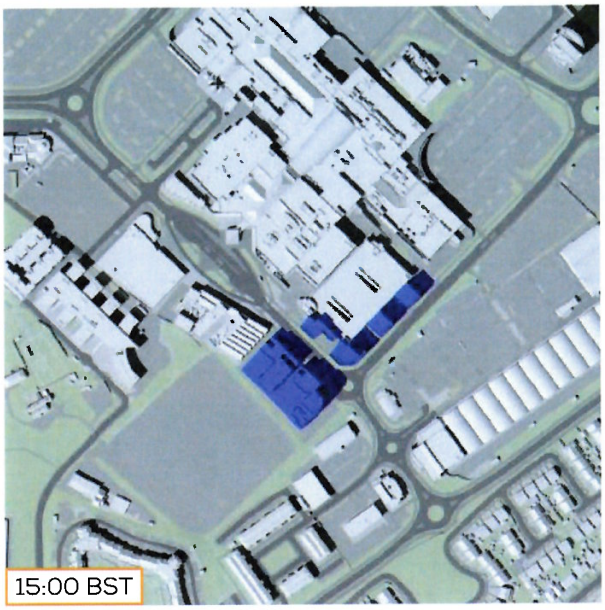

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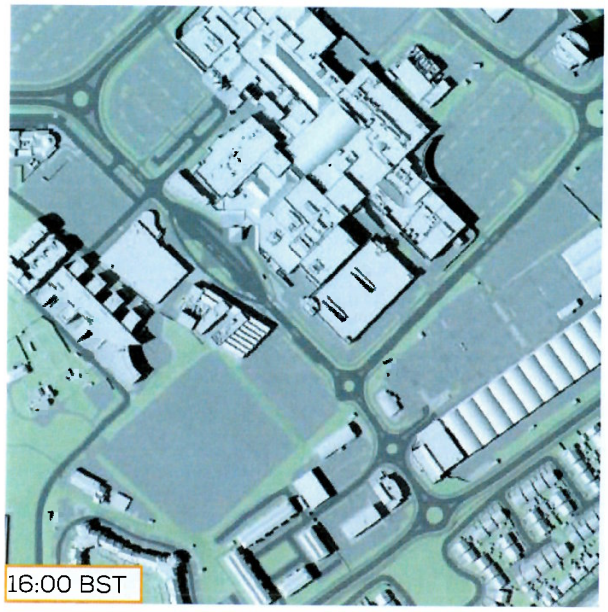

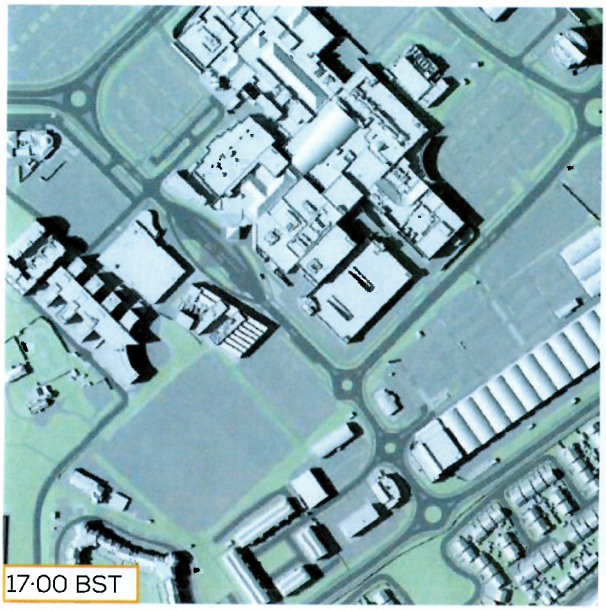

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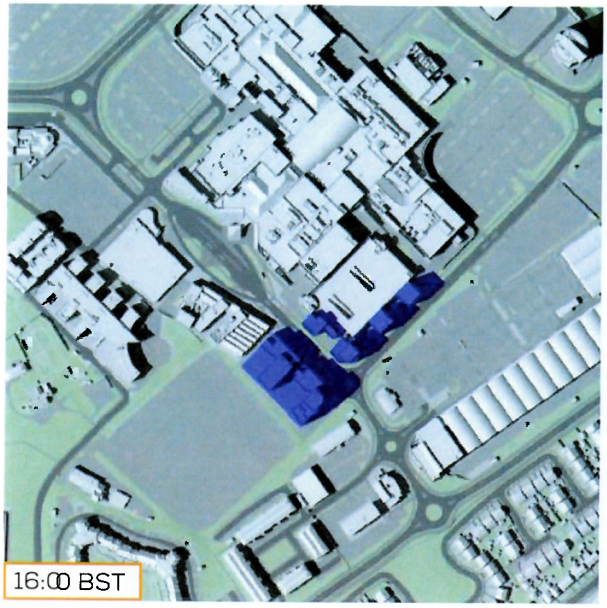
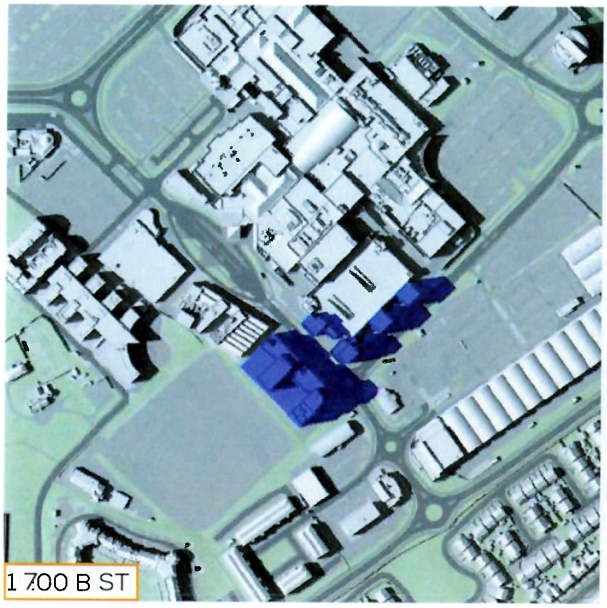
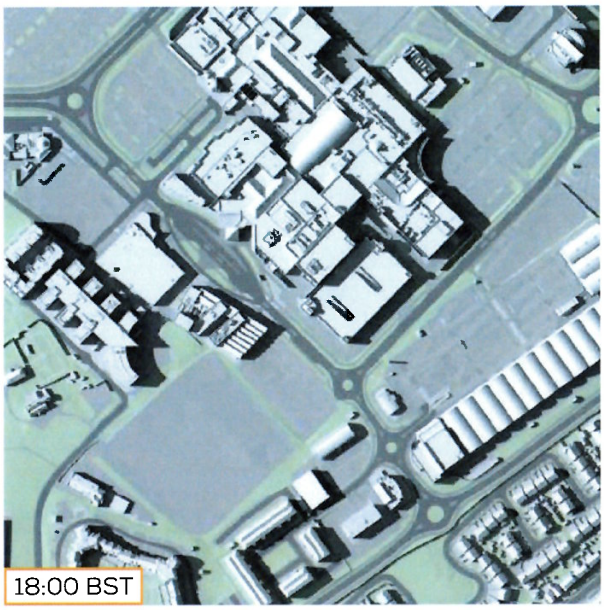
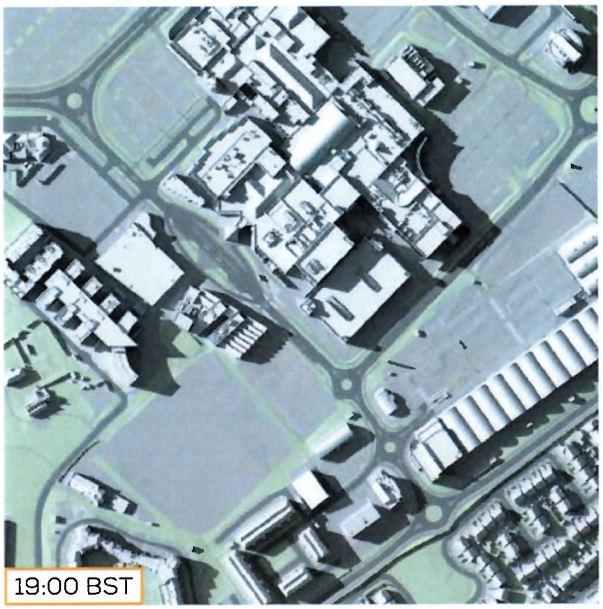




TRANSIENT OVERSHADOWING ASSESSMENT
21ST JUNE (18:00 - 20:00 BST)

EXISTING





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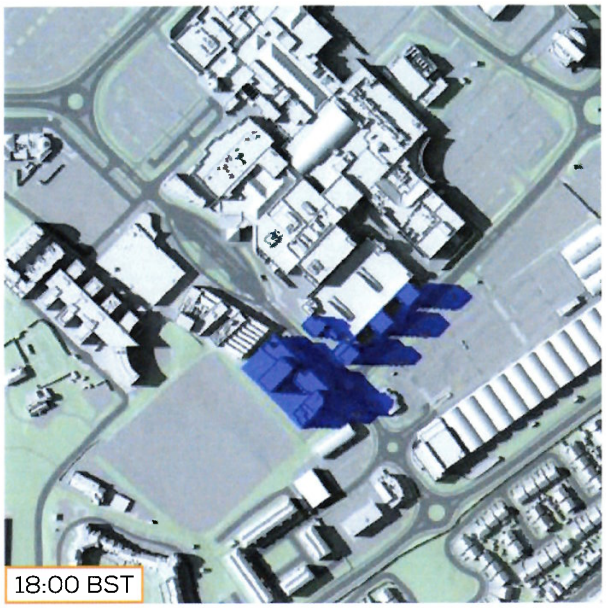

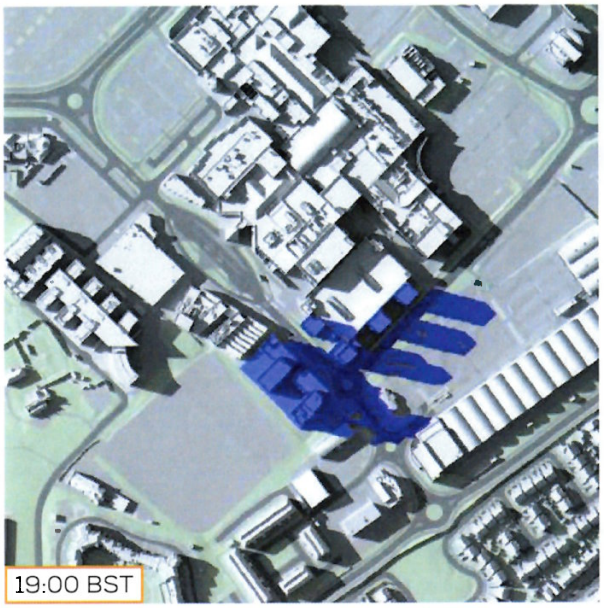

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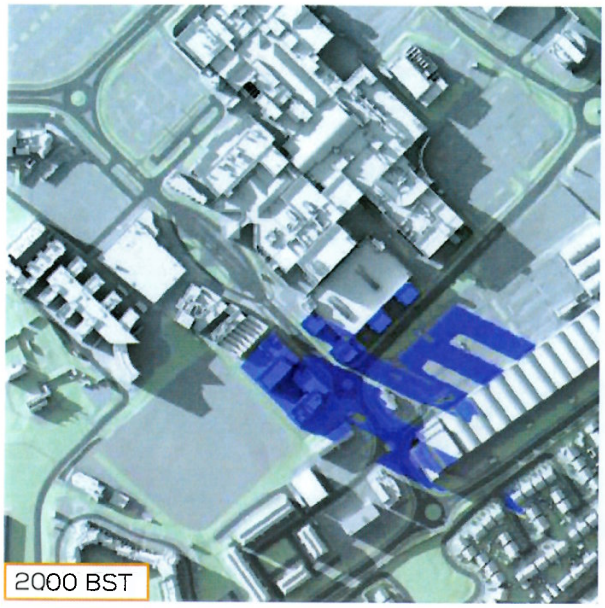
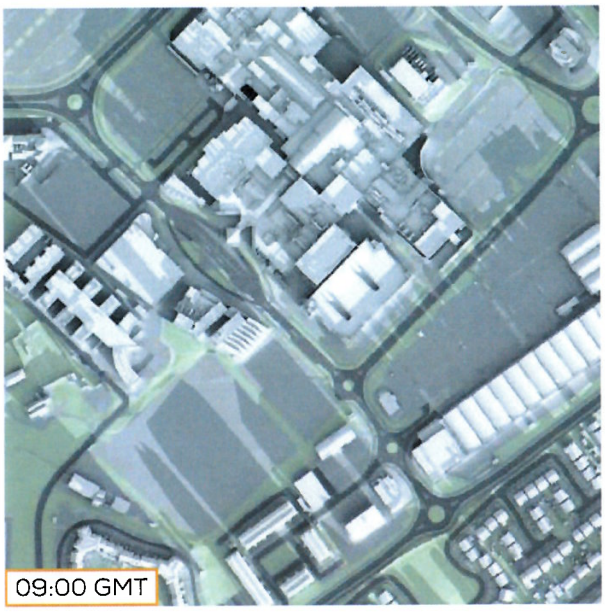
PROPOSED



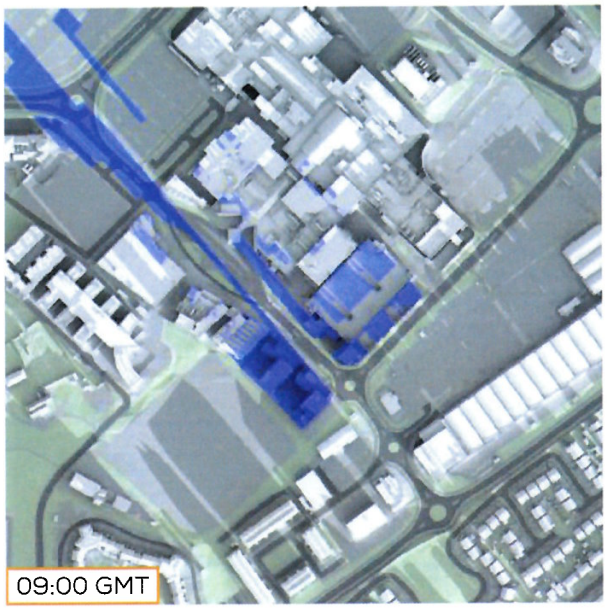
TRANSIENT OVERSHADOWING ASSESSMENT
21ST DECEMBER (09:00 - 12:00 GMT)

EXISTING





PROPOSED





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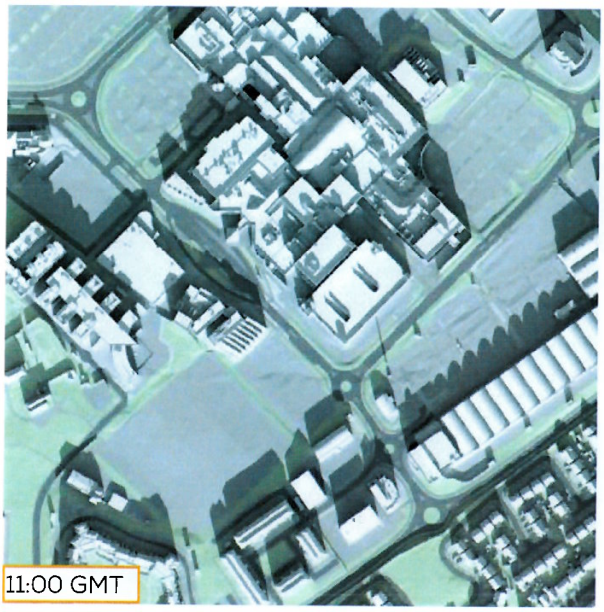




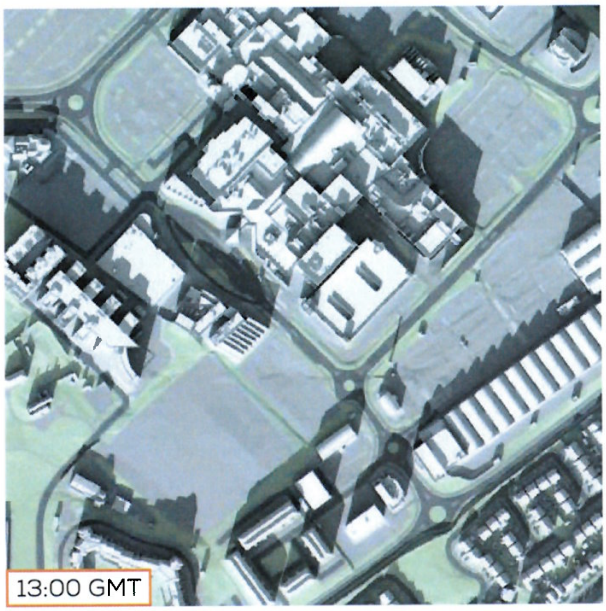
PROPOSED





TRANSIENT OVERSHADOWING ASSESSMENT
21ST DECEMBER (13:00 - 15:00 GMT)

EXISTING





PROPOSED





gia
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Dublin Ireland
D02 XE80

Appendix H

Calculation Reference: AUDIT-441201-220308-0307

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	BK	BARKING	1 days
	BM	BROMLEY	1 days
	HG	HARINGEY	1 days
	HM	HAMMERSMITH AND FULHAM	2 days
	HO	HOUNSLOW	2 days
	NH	NEWHAM	1 days
	SK	SOUTHWARK	1 days
	TH	TOWER HAMLETS	1 days
02	SOUTH EAST		
	HF	HERTFORDSHIRE	1 days
05	EAST MIDLANDS		
	LE	LEICESTERSHIRE	1 days
09	NORTH		
	CB	CUMBRIA	1 days
15	GREATER DUBLIN		
	DL	DUBLIN	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 12 to 255 (units:)
Range Selected by User: 6 to 493 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 30/06/21

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	5 days
Wednesday	2 days
Thursday	5 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	15 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	6
Neighbourhood Centre (PPS6 Local Centre)	9

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	15 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

20,001 to 25,000	2 days
25,001 to 50,000	7 days
50,001 to 100,000	4 days
100,001 or More	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	2 days
500,001 or More	10 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	2 days
0.6 to 1.0	10 days
1.1 to 1.5	3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	5 days
No	10 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	5 days
1b Very poor	1 days
3 Moderate	3 days
5 Very Good	2 days
6a Excellent	3 days
6b (High) Excellent	1 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 BK-03-C-01 BLOCKS OF FLATS BARKING
NORTH STREET
BARKING

Town Centre
No Sub Category
Total No of Dwellings: 40
Survey date: *THURSDAY* *10/09/20* Survey Type: *MANUAL*

2 BM-03-C-01 BLOCKS OF FLATS BROMLEY
RINGER'S ROAD
BROMLEY

Town Centre
Built-Up Zone
Total No of Dwellings: 160
Survey date: *MONDAY* *12/11/18* Survey Type: *MANUAL*

3 CB-03-C-01 BLOCK OF FLATS CUMBRIA
KING STREET
CARLISLE

Town Centre
Built-Up Zone
Total No of Dwellings: 40
Survey date: *THURSDAY* *12/06/14* Survey Type: *MANUAL*

4 DL-03-C-11 BLOCK OF FLATS DUBLIN
WYCKHAM WAY
DUBLIN
DUNDRUM
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 96
Survey date: *TUESDAY* *10/09/13* Survey Type: *MANUAL*

5 DL-03-C-13 BLOCK OF FLATS DUBLIN
SANDYFORD ROAD
DUBLIN

Neighbourhood Centre (PPS6 Local Centre)
Built-Up Zone
Total No of Dwellings: 52
Survey date: *TUESDAY* *10/09/13* Survey Type: *MANUAL*

6 HF-03-C-04 BLOCKS OF FLATS HERTFORDSHIRE
OXHEY DRIVE
WATFORD
SOUTH OXHEY
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 84
Survey date: *THURSDAY* *10/06/21* Survey Type: *MANUAL*

7 HG-03-C-01 BLOCKS OF FLATS HARINGEY
BREAM CLOSE
TOTTENHAM HALE

Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 255
Survey date: *TUESDAY* *18/06/19* Survey Type: *MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 HM-03-C-01 BLOCK OF FLATS HAMMERSMITH AND FULHAM
VANSTON PLACE
FULHAM

Town Centre
High Street
Total No of Dwellings: 42
Survey date: WEDNESDAY *16/07/14* *Survey Type: MANUAL*

9 HM-03-C-02 BLOCKS OF FLATS HAMMERSMITH AND FULHAM
GLENTHORNE ROAD
HAMMERSMITH

Town Centre
Built-Up Zone
Total No of Dwellings: 194
Survey date: TUESDAY *30/04/19* *Survey Type: MANUAL*

10 HO-03-C-02 BLOCK OF FLATS HOUNSLOW
HIGH STREET
BRENTFORD

Town Centre
Built-Up Zone
Total No of Dwellings: 86
Survey date: WEDNESDAY *03/09/14* *Survey Type: MANUAL*

11 HO-03-C-04 BLOCKS OF FLATS HOUNSLOW
LONDON ROAD
ISLEWORTH

Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 203
Survey date: TUESDAY *03/07/18* *Survey Type: MANUAL*

12 LE-03-C-01 BLOCK OF FLATS LEICESTERSHIRE
NEW STREET
LEICESTER
OADBY
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 19
Survey date: FRIDAY *16/10/20* *Survey Type: MANUAL*

13 NH-03-C-01 BLOCK OF FLATS NEWHAM
ARTHINGWORTH STREET
STRATFORD

Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 12
Survey date: THURSDAY *14/11/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

14	SK-03-C-03 MARITIME STREET SURREY QUAYS	BLOCKS OF FLATS		SOUTHWARK
	Neighbourhood Centre (PPS6 Local Centre) Development Zone Total No of Dwellings:		233	
	Survey date: THURSDAY		*14/11/19*	*Survey Type: MANUAL*
15	TH-03-C-04 LEVEN ROAD POPLAR ABERFELDY VILLAGE	BLOCK OF FLATS		TOWER HAMLETS
	Neighbourhood Centre (PPS6 Local Centre) No Sub Category Total No of Dwellings:		83	
	Survey date: FRIDAY		*21/06/19*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	107	0.031	15	107	0.106	15	107	0.137
08:00 - 09:00	15	107	0.036	15	107	0.105	15	107	0.141
09:00 - 10:00	15	107	0.043	15	107	0.049	15	107	0.092
10:00 - 11:00	15	107	0.039	15	107	0.049	15	107	0.088
11:00 - 12:00	15	107	0.039	15	107	0.041	15	107	0.080
12:00 - 13:00	15	107	0.040	15	107	0.053	15	107	0.093
13:00 - 14:00	15	107	0.034	15	107	0.039	15	107	0.073
14:00 - 15:00	15	107	0.034	15	107	0.043	15	107	0.077
15:00 - 16:00	15	107	0.053	15	107	0.043	15	107	0.096
16:00 - 17:00	15	107	0.071	15	107	0.039	15	107	0.110
17:00 - 18:00	15	107	0.080	15	107	0.037	15	107	0.117
18:00 - 19:00	15	107	0.094	15	107	0.049	15	107	0.143
19:00 - 20:00	6	152	0.060	6	152	0.036	6	152	0.096
20:00 - 21:00	6	152	0.030	6	152	0.024	6	152	0.054
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.684			0.713			1.397

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected:	12 - 255 (units:)
Survey date date range:	01/01/13 - 30/06/21
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-441201-180730-0732

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : M - MIXED SHOPPING MALLS

VEHICLES

Selected regions and areas:

01	**GREATER LONDON**		
	HO	HOUNSLOW	1 days
04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	1 days
13	**MUNSTER**		
	TI	TIPPERARY	1 days
15	**GREATER DUBLIN**		
	DL	DUBLIN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 5485 to 18950 (units: sqm)
Range Selected by User: 482 to 35000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 16/10/16

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Thursday	1 days
Saturday	2 days
Sunday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	1
Edge of Town Centre	3

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Development Zone	1
Built-Up Zone	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

A1	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days
100,001 or More	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
125,001 to 250,000	2 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	4 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	3 days
3 Moderate	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	**CA-01-M-01**	**SHOPPING CENTRE**		**CAMBRIDGESHIRE**
	VIERSEN PLATZ			
	PETERBOROUGH			
	Edge of Town Centre			
	Built-Up Zone			
	Total Gross floor area:		19750 sqm	
	Survey date: SUNDAY		*16/10/16*	*Survey Type: MANUAL*
2	**DL-01-M-02**	**SHOPPING MALL**		**DUBLIN**
	CUSTOM HOUSE QUAY			
	DUBLIN			
	DOCKLANDS			
	Edge of Town Centre			
	Development Zone			
	Total Gross floor area:		8410 sqm	
	Survey date: THURSDAY		*20/05/10*	*Survey Type: MANUAL*
3	**HO-01-M-01**	**SHOPPING CENTRE**		**HOUNSLOW**
	TILLEY ROAD			
	FELTHAM			
	Town Centre			
	Built-Up Zone			
	Total Gross floor area:		16856 sqm	
	Survey date: SATURDAY		*15/12/12*	*Survey Type: MANUAL*
4	**TI-01-M-01**	**SHOPPING CENTRE**		**TIPPERARY**
	DAVIES ROAD			
	CLONMEL			
	Edge of Town Centre			
	Built-Up Zone			
	Total Gross floor area:		12077 sqm	
	Survey date: SATURDAY		*25/06/11*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

VEHICLES

Calculation factor: 100 sqm

Estimated TRIP rate value per 109 SQM shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	3	10644	0.194	0.212	3	10644	0.059	0.065	3	10644	0.253	0.277
08:00 - 09:00	3	10644	0.445	0.485	3	10644	0.175	0.191	3	10644	0.620	0.676
09:00 - 10:00	4	12721	0.755	0.823	4	12721	0.287	0.313	4	12721	1.042	1.136
10:00 - 11:00	4	12721	1.185	1.292	4	12721	0.786	0.857	4	12721	1.971	2.149
11:00 - 12:00	4	12721	1.250	1.362	4	12721	1.036	1.129	4	12721	2.286	2.491
12:00 - 13:00	**4**	**12721**	**1.594**	**1.737**	4	12721	1.446	1.577	4	12721	3.040	3.314
13:00 - 14:00	4	12721	1.545	1.684	**4**	**12721**	**1.568**	**1.709**	**4**	**12721**	**3.113**	**3.393**
14:00 - 15:00	4	12721	1.203	1.311	4	12721	1.423	1.551	4	12721	2.626	2.862
15:00 - 16:00	4	12721	0.959	1.045	4	12721	1.226	1.337	4	12721	2.185	2.382
16:00 - 17:00	4	12721	0.487	0.531	4	12721	1.034	1.127	4	12721	1.521	1.658
17:00 - 18:00	3	10644	0.451	0.492	3	10644	0.802	0.874	3	10644	1.253	1.366
18:00 - 19:00	3	10644	0.307	0.335	3	10644	0.467	0.509	3	10644	0.774	0.844
19:00 - 20:00	2	13224	0.189	0.206	2	13224	0.389	0.424	2	13224	0.578	0.630
20:00 - 21:00	2	13224	0.110	0.120	2	13224	0.204	0.223	2	13224	0.314	0.343
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			10.674	11.635			10.902	11.886			21.576	23.521

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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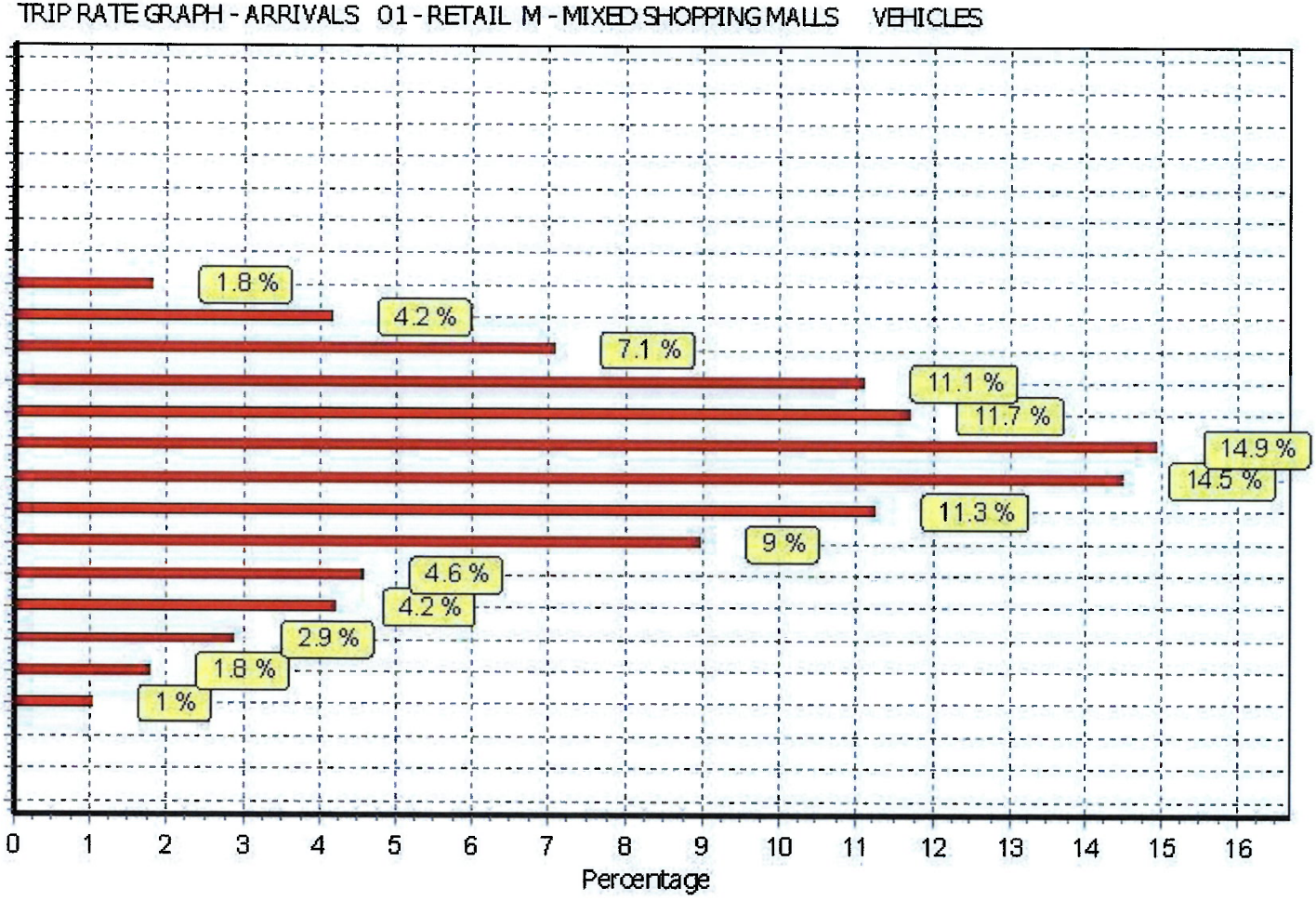
Parameter summary

Trip rate parameter range selected:	5485 - 18950 (units: sqm)
Survey date date range:	01/01/10 - 16/10/16
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	2
Number of Sundays:	1
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

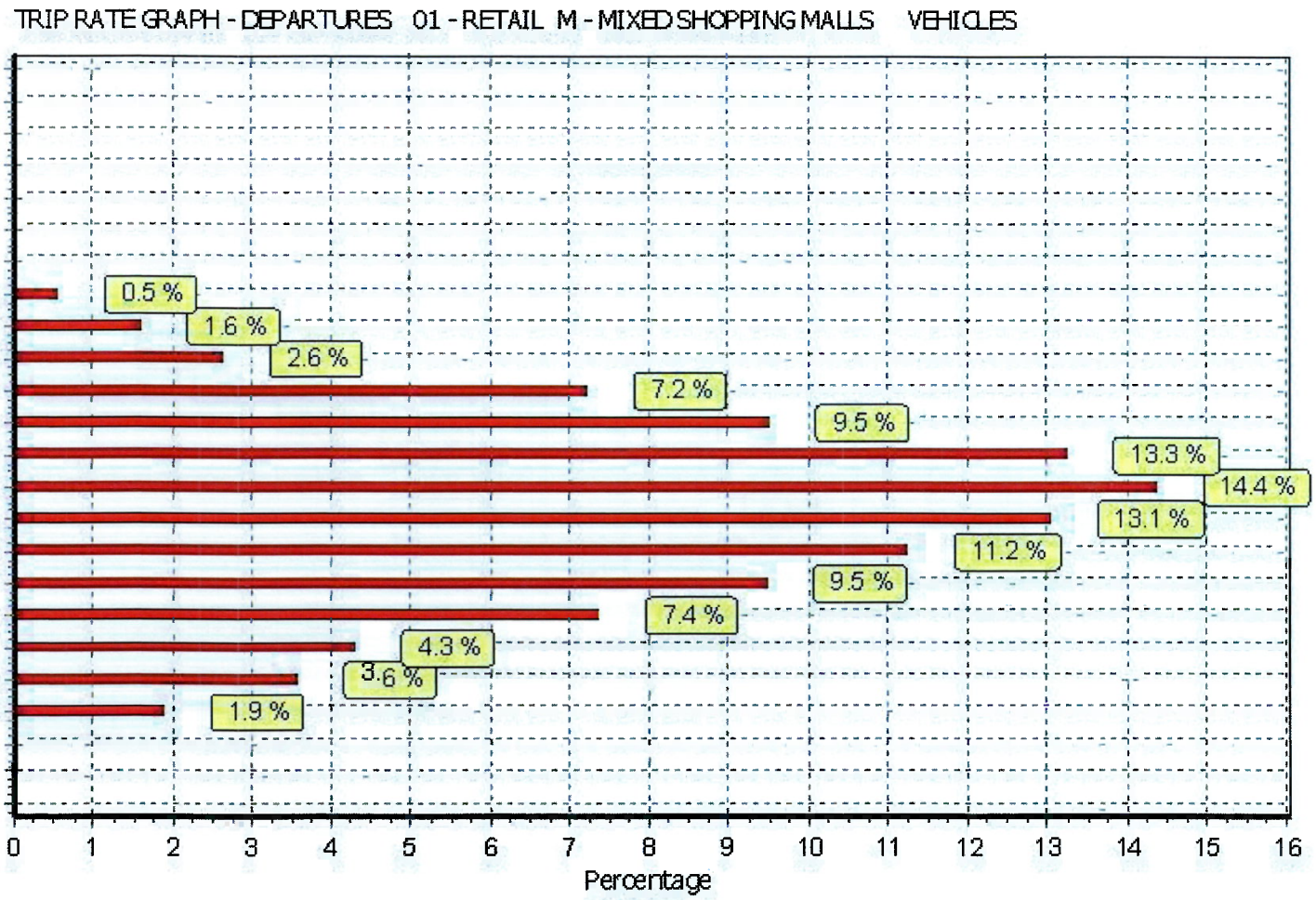
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.194	1.8
08:00-09:00	0.445	4.2
09:00-10:00	0.755	7.1
10:00-11:00	1.185	11.1
11:00-12:00	1.250	11.7
12:00-13:00	1.594	14.9
13:00-14:00	1.545	14.5
14:00-15:00	1.203	11.3
15:00-16:00	0.959	9.0
16:00-17:00	0.487	4.6
17:00-18:00	0.451	4.2
18:00-19:00	0.307	2.9
19:00-20:00	0.189	1.8
20:00-21:00	0.110	1.0
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.059	0.5
08:00-09:00	0.175	1.6
09:00-10:00	0.287	2.6
10:00-11:00	0.786	7.2
11:00-12:00	1.036	9.5
12:00-13:00	1.446	13.3
13:00-14:00	1.568	14.4
14:00-15:00	1.423	13.1
15:00-16:00	1.226	11.2
16:00-17:00	1.034	9.5
17:00-18:00	0.802	7.4
18:00-19:00	0.467	4.3
19:00-20:00	0.389	3.6
20:00-21:00	0.204	1.9
21:00-22:00		
22:00-23:00		
23:00-24:00		



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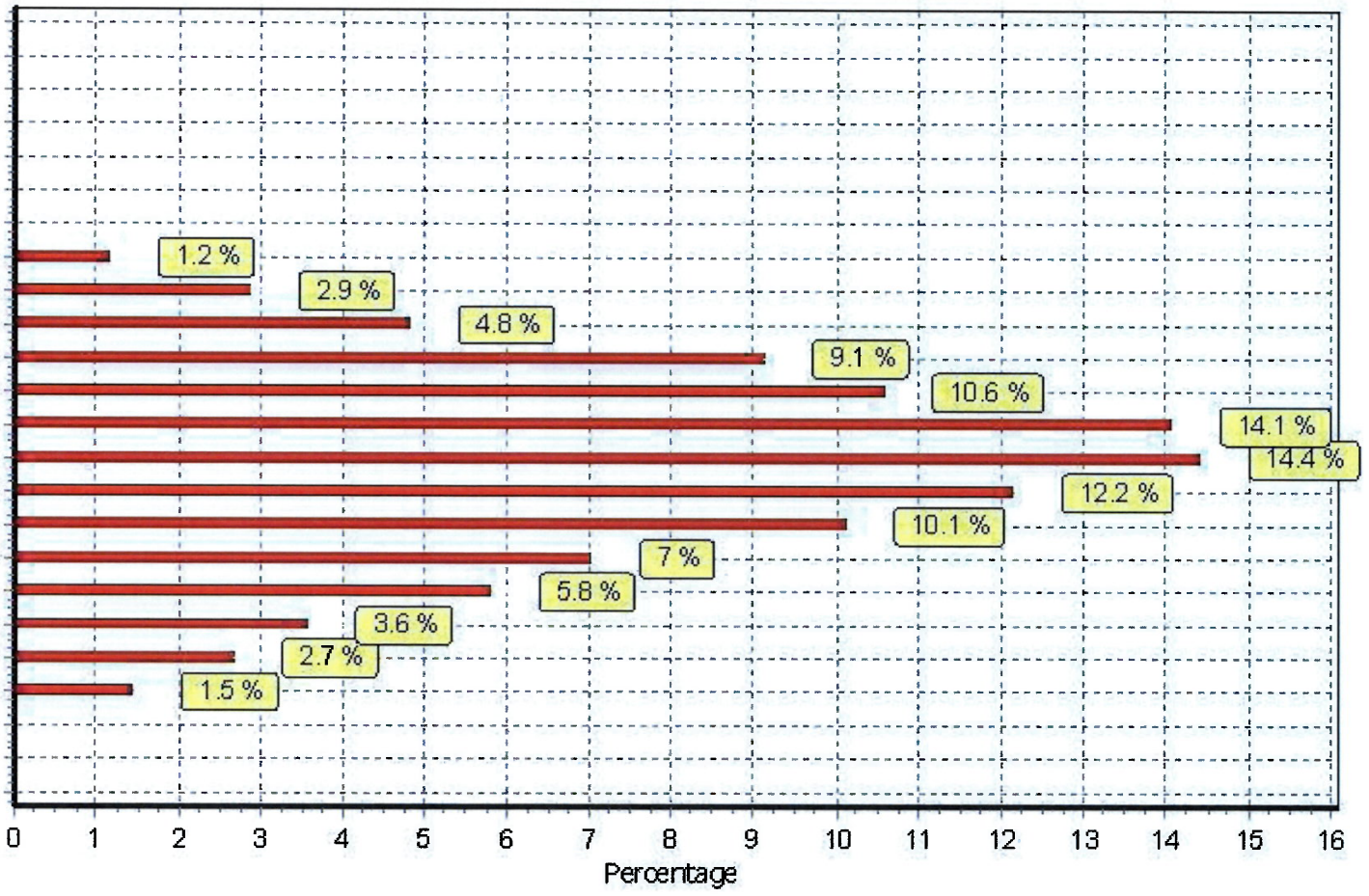
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.253	1.2
08:00-09:00	0.620	2.9
09:00-10:00	1.042	4.8
10:00-11:00	1.971	9.1
11:00-12:00	2.286	10.6
12:00-13:00	3.040	14.1
13:00-14:00	3.113	14.4
14:00-15:00	2.626	12.2
15:00-16:00	2.185	10.1
16:00-17:00	1.521	7.0
17:00-18:00	1.253	5.8
18:00-19:00	0.774	3.6
19:00-20:00	0.578	2.7
20:00-21:00	0.314	1.5
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

TAXIS

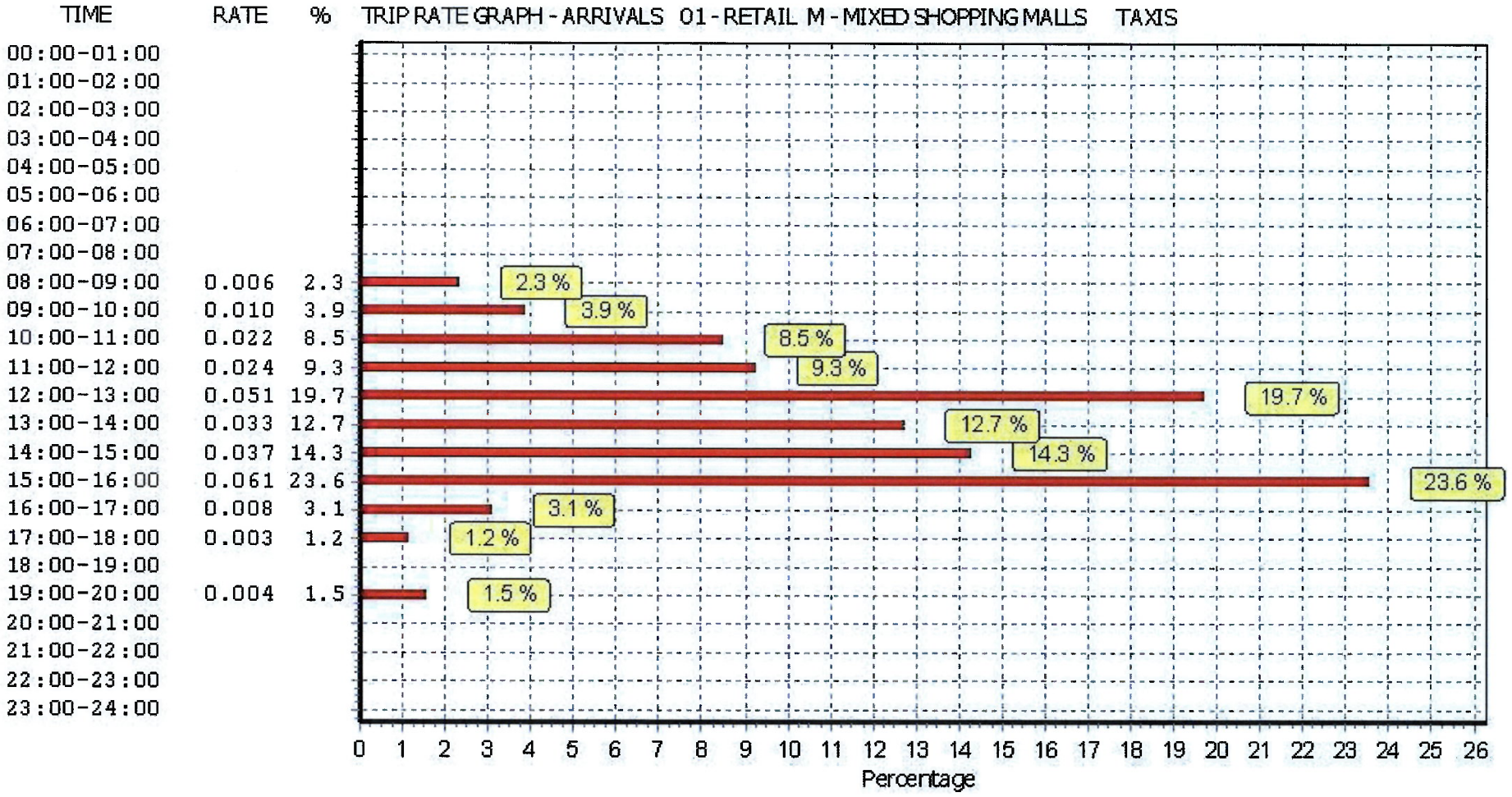
Calculation factor: 100 sqm

Estimated TRIP rate value per 109 SQM shown in shaded columns
BOLD print indicates peak (busiest) period

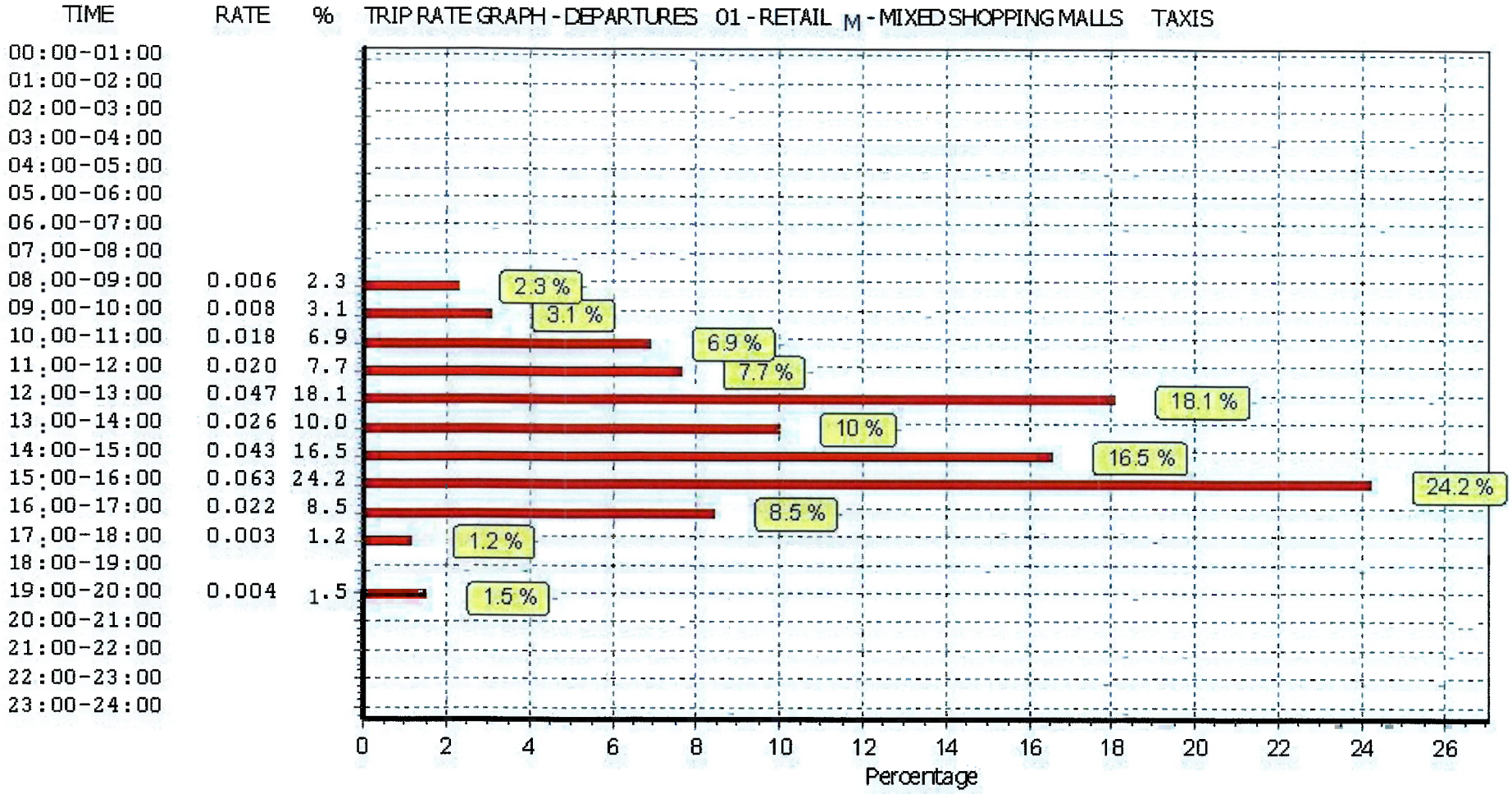
	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	3	10644	0.000	0.000	3	10644	0.000	0.000	3	10644	0.000	0.000
08:00 - 09:00	3	10644	0.006	0.007	3	10644	0.006	0.007	3	10644	0.012	0.014
09:00 - 10:00	4	12721	0.010	0.011	4	12721	0.008	0.009	4	12721	0.018	0.020
10:00 - 11:00	4	12721	0.022	0.024	4	12721	0.018	0.019	4	12721	0.040	0.043
11:00 - 12:00	4	12721	0.024	0.026	4	12721	0.020	0.021	4	12721	0.044	0.047
12:00 - 13:00	4	12721	0.051	0.056	4	12721	0.047	0.051	4	12721	0.098	0.107
13:00 - 14:00	4	12721	0.033	0.036	4	12721	0.026	0.028	4	12721	0.059	0.064
14:00 - 15:00	4	12721	0.037	0.041	4	12721	0.043	0.047	4	12721	0.080	0.088
15:00 - 16:00	**4**	**12721**	**0.061**	**0.066**	**4**	**12721**	**0.063**	**0.069**	**4**	**12721**	**0.124**	**0.135**
16:00 - 17:00	4	12721	0.008	0.009	4	12721	0.022	0.024	4	12721	0.030	0.033
17:00 - 18:00	3	10644	0.003	0.003	3	10644	0.003	0.003	3	10644	0.006	0.006
18:00 - 19:00	3	10644	0.000	0.000	3	10644	0.000	0.000	3	10644	0.000	0.000
19:00 - 20:00	2	13224	0.004	0.004	2	13224	0.004	0.004	2	13224	0.008	0.008
20:00 - 21:00	2	13224	0.000	0.000	2	13224	0.000	0.000	2	13224	0.000	0.000
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.259	0.288			0.260	0.282			0.519	0.565

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

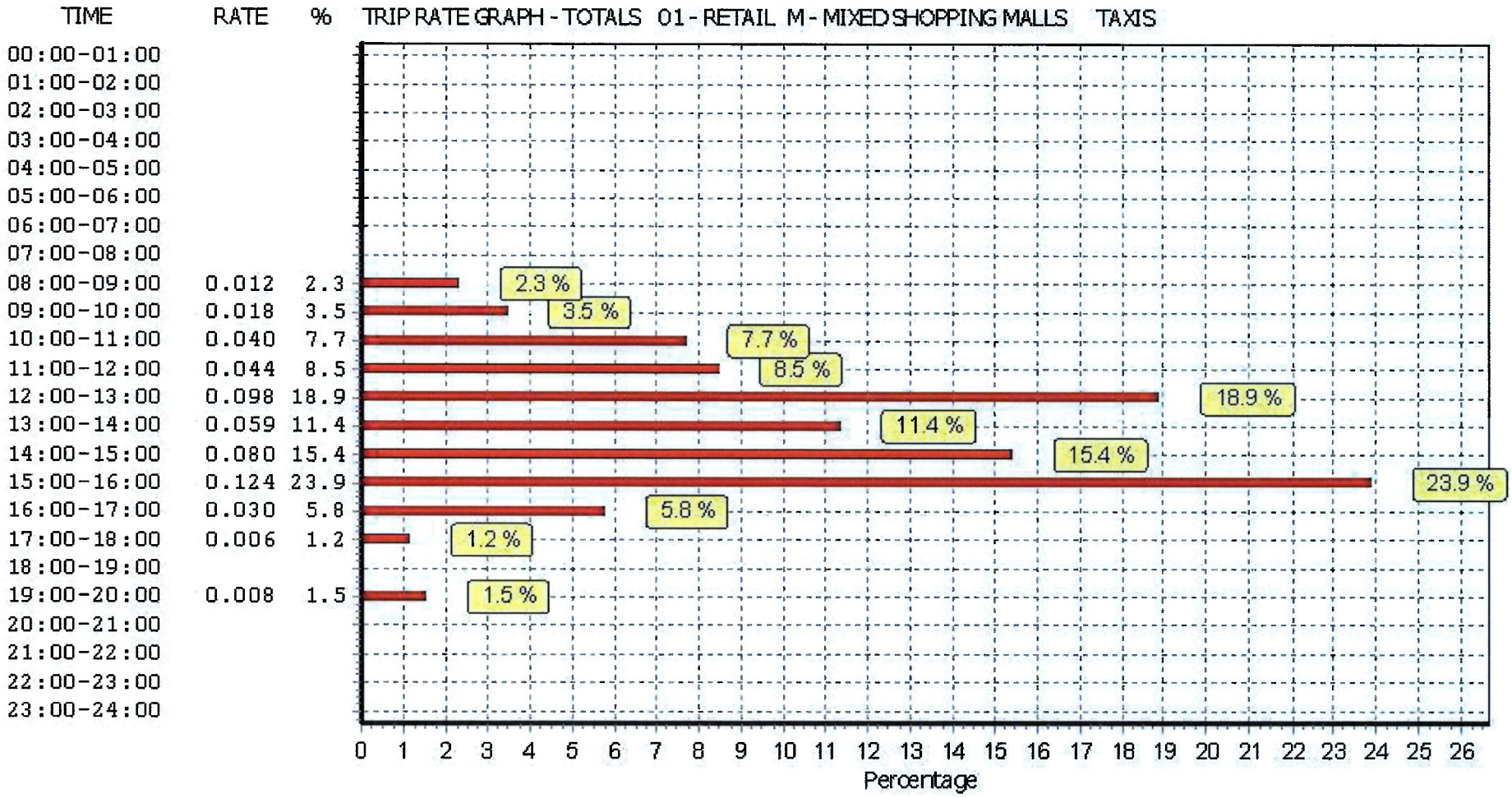
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



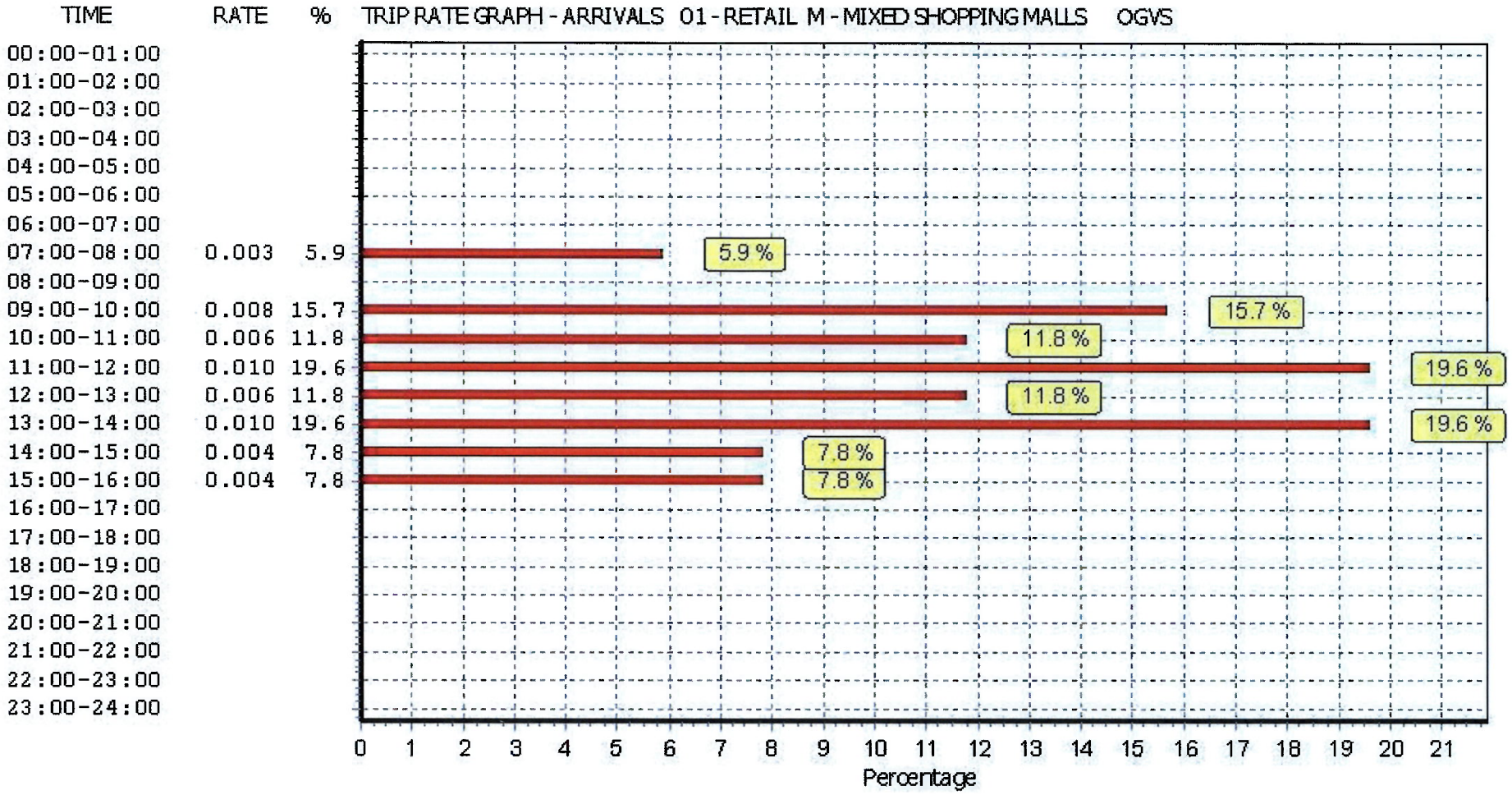
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS
OGVS
Calculation factor: 100 sqm
Estimated TRIP rate value per 109 SQM shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Ra nge	No. Days	Ave. GFA	Trip Rate	Estimated Tri pRate	No. Days	Ave. GFA	Trip Rate	Estimated TripRate	No. Da ys	Ave. GFA	Trip Rate	Estimated Trip Rate
00.00 - 01.00												
01:00 - 02:00												
02: 00 - 03.00												
03:00 - 04:00												
04.00 - 05:00												
05:00 - 06:00												
06: 00 - 07:00												
07:00 - 08:00	3	10 644	0.003	00 03	3	10644	0.000	0.000	3	10644	0.003	0.003
08.00 - 09:00	3	10644	0.000	0.000	3	10644	0.003	0.003	3	10644	0.003	0.003
09:00 - 10:00	4	12721	0.0 0 8	0.009	**4**	**12721**	**0.016**	**0.017**	**4**	**12721**	**0.024**	**0.026**
1 0 00 - 11.00	4	12721	0.006	0.006	4	12721	0.004	0.004	4	12721	0.010	0.010
11:00 - 12:00	**4**	**12721**	**0.010**	**0.011**	4	12721	0.008	0.009	4	12721	0.018	0.020
12 00 - 13.00	4	12 721	0.006	0.006	4	12721	0.002	0.002	4	12721	0.008	0.008
13:00 - 14:00	4	12 721	0 0 10	0.011	4	12721	0.008	0.009	4	12721	0.018	0.020
14: 00 - 15:00	4	12721	0.004	0.004	4	12721	0.004	0.004	4	12721	0.008	0.008
15:00 - 16:00	4	12721	0 004	0.004	4	12721	0.002	0.002	4	12721	0.006	0.006
1 6 00 - 17:00	4	12721	0.000	0.000	4	12721	0.008	0.009	4	12721	0.008	0.009
17:00 - 18:00	3	10644	0 000	0.000	3	10644	0.000	0.000	3	10644	0.000	0.000
1 8:00 - 19:00	3	10644	0.000	0.000	3	10644	0.000	0.000	3	10644	0.000	0.000
19:00 - 20:00	2	1 3224	0 000	0.000	2	13224	0.000	0.000	2	13224	0.000	0.000
2 0:00 - 21:00	2	13224	0.000	0.000	2	13224	0.000	0.000	2	13224	0.000	0.000
21:00 - 22:00												
22.00 - 23:00												
23:00 - 24 :00												
Tota l Rates:			0.051	0.054			0.055	0.059			0.106	0.113

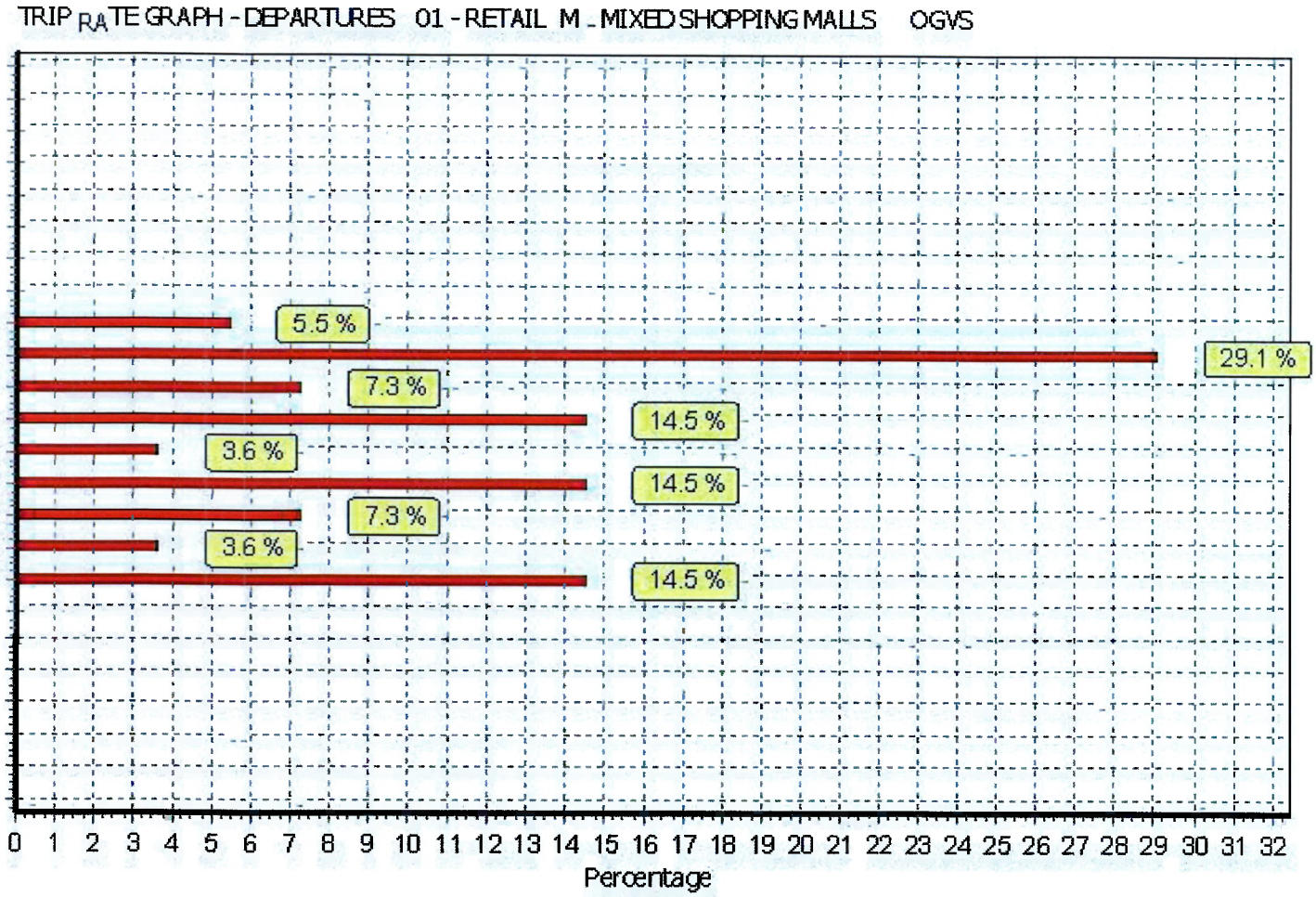
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*



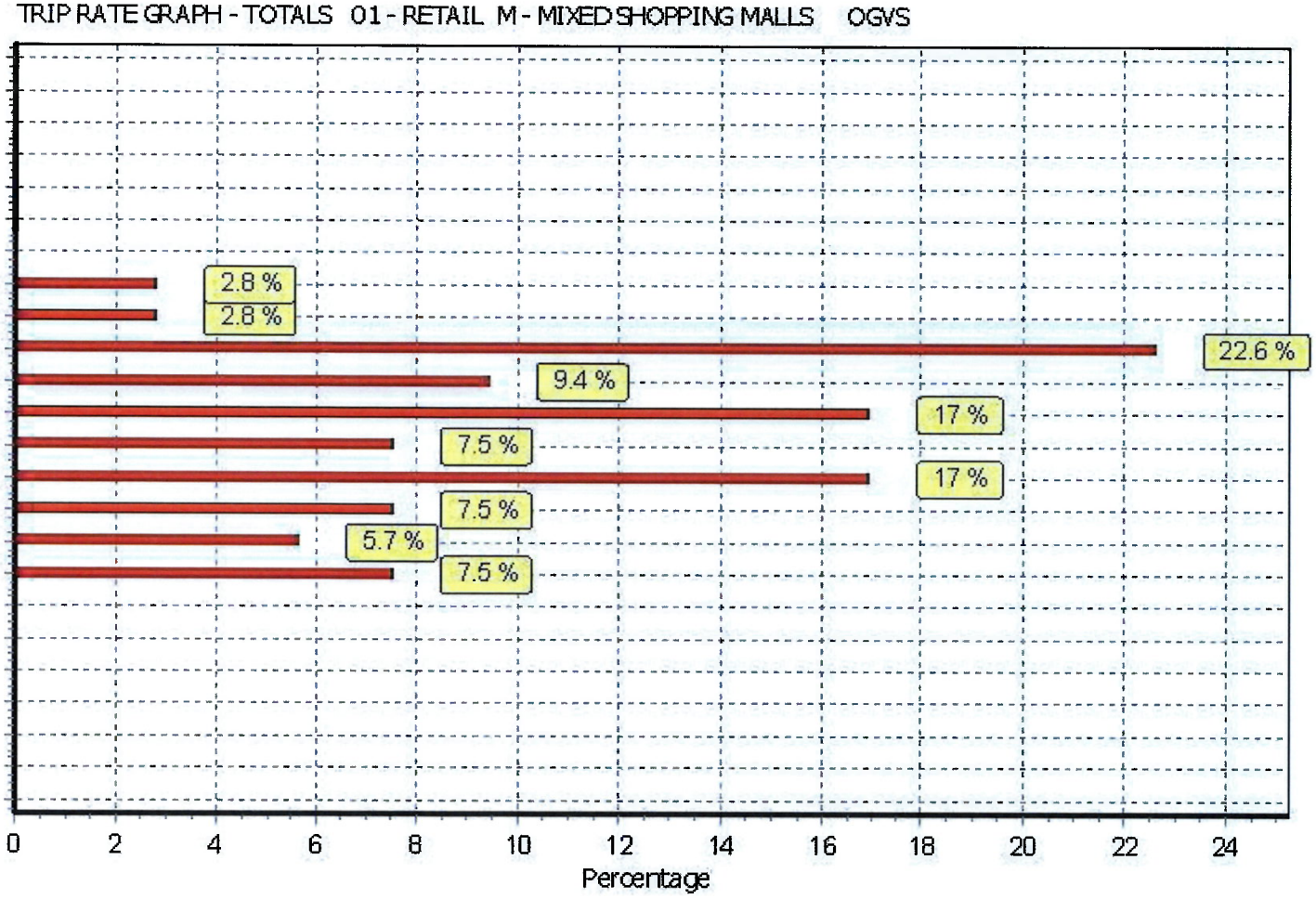
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00		
08:00-09:00	0.003	5.5
09:00-10:00	0.016	29.1
10:00-11:00	0.004	7.3
11:00-12:00	0.008	14.5
12:00-13:00	0.002	3.6
13:00-14:00	0.008	14.5
14:00-15:00	0.004	7.3
15:00-16:00	0.002	3.6
16:00-17:00	0.008	14.5
17:00-18:00		
18:00-19:00		
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.003	2.8
08:00-09:00	0.003	2.8
09:00-10:00	0.024	22.6
10:00-11:00	0.010	9.4
11:00-12:00	0.018	17.0
12:00-13:00	0.008	7.5
13:00-14:00	0.018	17.0
14:00-15:00	0.008	7.5
15:00-16:00	0.006	5.7
16:00-17:00	0.008	7.5
17:00-18:00		
18:00-19:00		
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



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TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

CYCLISTS

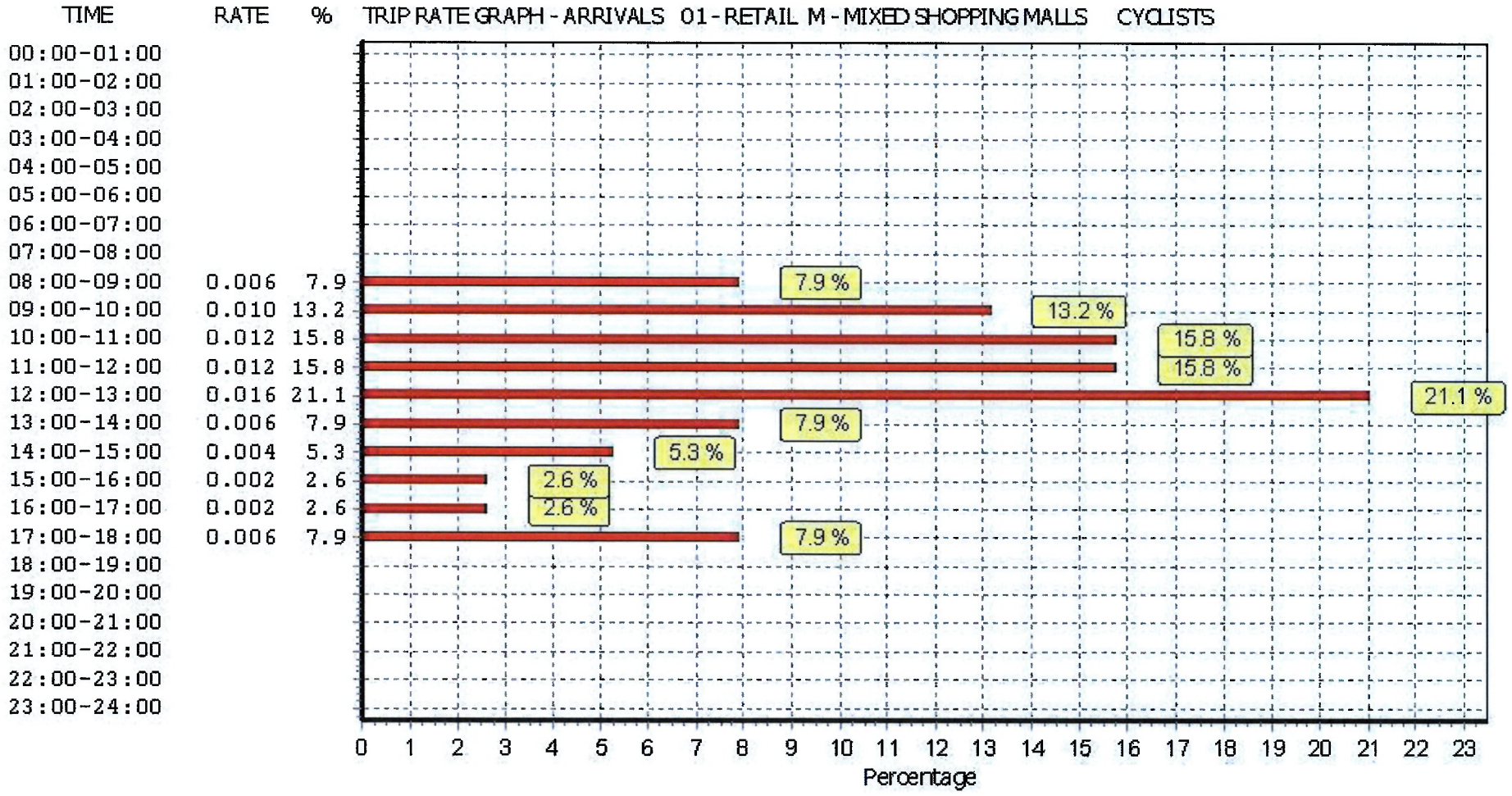
Calculation factor: 100 sqm

Estimated TRIP rate value per 109 SQM shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Ra nge	No. Days	Ave. GFA	Trip Rate	Estimated Tri pRate	No. Days	Ave. GFA	Trip Rate	Estimated TripRate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00.00 - 01.00												
01: 00 - 02:00												
02.00 - 03.00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06.00 - 07.00												
07:00 - 08:00	3	10644	0.000	0.000	3	10644	0.000	0.000	3	10644	0.000	0.000
08:00 - 09:00	3	10644	0006	0.007	3	10644	0.006	0.007	3	10644	0.012	0.014
09:00 - 10:00	4	12721	0010	0.011	4	12721	0.004	0.004	4	12721	0.014	0.015
10.00 - 11.00	4	12721	0.012	0.013	4	12721	0.002	0.002	4	12721	0.014	0.015
11:00 - 12:00	4	12721	0.012	0.013	4	12721	0.008	0.009	4	12721	0.020	0.022
12.00 - 13:00	**4**	**12721**	**0.016**	**0.017**	4	12721	0.010	0.011	**4**	**12721**	**0.026**	**0.028**
13:00 - 14:00	4	1 2721	0 006	0.006	4	12721	0.004	0.004	4	12721	0.010	0.010
14:00 - 15:00	4	12721	0.004	0.004	4	12721	0.010	0.011	4	12721	0.014	0.015
15:00 - 16:00	4	12721	0.002	0.002	**4**	**12721**	**0.016**	**0.017**	4	12721	0.018	0.019
16:00 - 17:00	4	12721	0002	0.002	4	12721	0.008	0.009	4	12721	0.010	0.011
17:00 - 18 :00	3	10644	0006	0.007	3	10644	0.0 06	0.007	3	10644	0.012	0.014
18:00 - 19:00	3	10644	0.000	0.000	3	10644	0.003	0.003	3	10644	0.003	0.003
19:00 - 20:00	2	13224	0.000	0.000	2	13224	0.000	0.000	2	13224	0.000	0.000
20:00 - 21:00	2	13224	0000	0.000	2	1 3224	0.000	0.000	2	13224	0.000	0.000
21:00 - 22:00												
22.00 - 23:00												
23:00 - 24:00												
TotalRates:			0.076	0.082			0.077	0.084			0.153	0.166

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

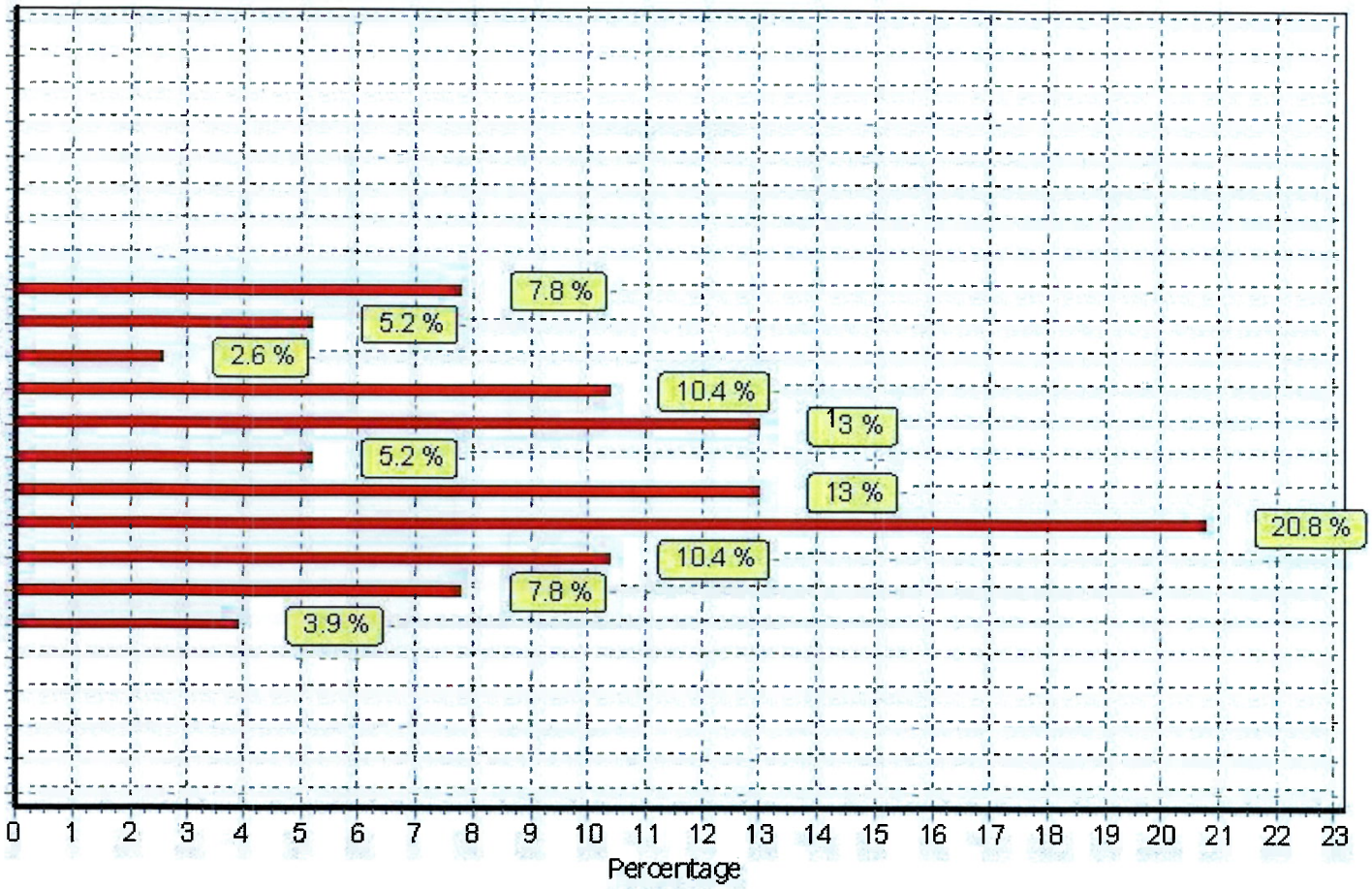
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - DEPARTURES 01 - RETAIL M - MIXED SHOPPING MALLS CYCLISTS

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00		
08:00-09:00	0.006	7.8
09:00-10:00	0.004	5.2
10:00-11:00	0.002	2.6
11:00-12:00	0.008	10.4
12:00-13:00	0.010	13.0
13:00-14:00	0.004	5.2
14:00-15:00	0.010	13.0
15:00-16:00	0.016	20.8
16:00-17:00	0.008	10.4
17:00-18:00	0.006	7.8
18:00-19:00	0.003	3.9
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



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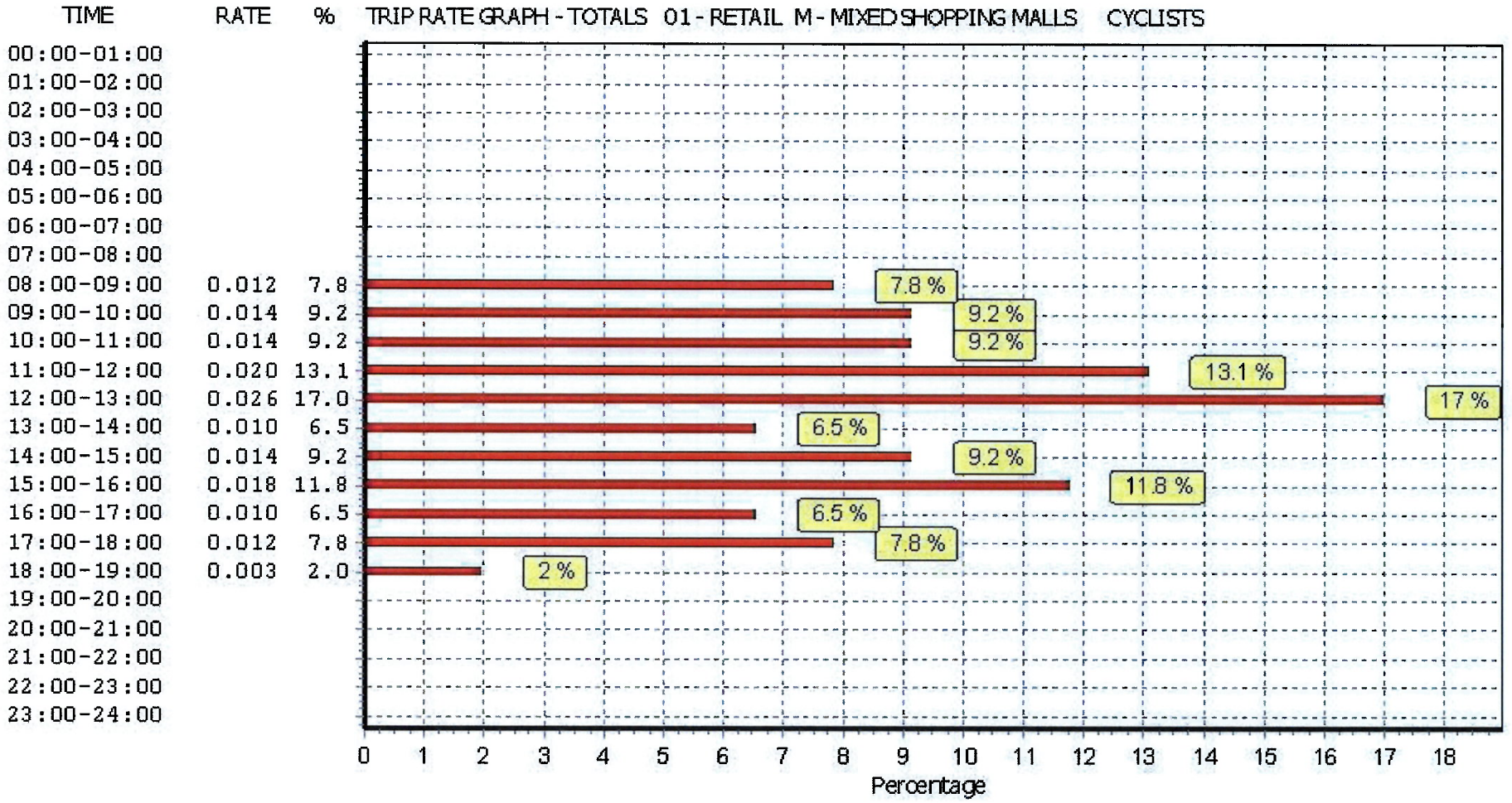


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



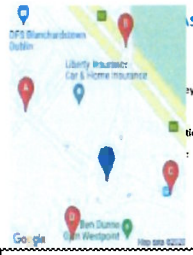
Name: 256 19344 Bus Connects Route 5[illegible]

Site 5-11

tion: L3020/Unnamed Road

: Thu 28-Nov-2019

	A => A										A => B										A => C										A => D									
TIME	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2	2	0	0	0	0	1	0	0	3	2.2	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	3	3	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	1	7	7	5	0	0	0	0	1	0	2	8	7.2	0	0	0	0	0	0	0	1	0	0	1	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	3	3	3	3
02:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	1	1
02:15	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	4	2	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	1	1	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	2	1	0	0	0	0	1	0	0	2	1.2	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0
H /TOT	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	2	2	2	0	0	0	1	0	1	6	5.2	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	1	1	1	1	1
05:15	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	1	0	0	0	0	1	1.5	1	0	0	0	0	0	0	1	2	2	2	0	0	0	0	0	0	0	2	2	1	0	0	0	1	0	0	0	0	0	2	2.5
05:45	0	0	0	0	0	0	0	0	0	0	2	1	0	1	0	0	1	0	5	5.5	6	0	0	1	0	1	0	2	10	9.7	3	0	0	0	0	0	0	0	3	3	3	3
H/TOT	1	0	0	1	0	0	0	0	2	2.5	4	1	0	1	0	0	1	1	8	8.5	10	1	0	1	0	1	0	2	15	14.7	4	0	0	1	0	0	0	1	6	6.5	6	6.5
06:00	0	0	0	0	0	0	0	0	0	0	3	1	0	1	0	0	1	0	6	6.5	6	0	0	0	0	0	0	1	7	7	2	2	0	0	0	0	0	0	4	4	4	4
06:15	0	0	0	0	0	0	0	0	0	0	2	2	0	1	0	0	1	0	6	6.5	4	1	0	0	0	0	0	1	6	6	2	0	0	0	0	0	0	0	2	2	2	2
06:30	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	1	0	7	7	9	0	0	0	0	0	2	0	11	11	2	1	0	0	0	0	0	0	3	3	3	3
06:45	0	0	0	0	0	0	0	0	0	0	11	3	0	0	1	0	1	0	16	17.3	3	1	0	3	0	0	1	1	9	10.5	2	2	0	0	0	0	0	0	4	4	4	4
H/TOT	0	0	0	0	0	0	0	0	0	0	21	7	0	2	1	0	4	0	35	37.3	22	2	0	3	0	0	3	3	33	34.5	8	5	0	0	0	0	0	0	13	13	13	13
07:00	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	0	0	0	13	15.6	20	0	0	1	0	0	0	0	21	21.5	4	0	0	0	0	0	0	1	5	5	5	5
07:15	0	0	0	0	0	0	0	0	0	0	11	1	1	0	0	0	1	0	14	13.4	15	2	0	0	0	3	1	0	21	18.6	2	1	0	0	1	0	0	0	4	5.3	4	5.3
07:30	0	0	0	0	0	0	0	0	0	0	12	4	0	0	0	0	1	0	17	17	30	2	0	0	0	0	0	2	34	34	3	0	0	0	1	0	0	0	4	5.3	4	5.3
07:45	0	0	0	0	0	0	0	0	0	0	29	1	0	1	2	0	0	3	36	39.1	31	3	1	0	0	3	1	1	40	37	13	1	0	0	0	0	0	1	15	15	15	15
H/TOT	0	0	0	0	0	0	0	0	0	0	61	8	1	1	4	0	2	3	80	85.1	96	7	1	1	0	6	2	3	118	111.1	22	2	0	0	2	0	0	2	28	30.6	28	30.6
08:00	0	0	0	0	0	0	0	0	0	0	19	2	0	0	0	0	1	3	25	25	28	1	0	0	0	0	4	5	38	38	18	1	0	0	1	0	0	0	20	21.3	20	21.3
08:15	0	0	0	0	0	0	0	0	0	0	14	10	0	5	0	0	1	1	31	33.5	31	1	0	1	0	0	0	1	34	34.5	20	1	0	0	0	0	0	0	21	21.3	21	21.3
08:30	0	0	0	0	0	0	0	0	0	0	18	1	0	2	1	0	0	2	24	26.3	41	3	0	1	0	1	2	8	56	55.7	31	0	0	1	1	0	0	0	33	34.8	33	34.8
08:45	2	0	0	0	0	0	0	0	2	2	22	4	0	0	0	0	0	3	32	32	49	3	0	0	0	0	1	3	56	56	36	3	0	0	0	1	0	1	41	40.2	41	40.2
H/TOT	2	0	0	0	0	0	0	0	2	2	73	17	0	7	1	0	5	9	112	116.8	149	8	0	2	0	1	7	17	184	184.2	105	5	0	1	2	1	0	1	115	118.3	115	118.3
09:00	2	0	0	0	0	0	0	0	2	2	15	1	0	3	0	0	1	5	25	26.5	33	2	0	4	0	0	4	0	43	45	20	0	0	1	0	0	0	0	21	21.5	21	21.5
09:15	0	0	0	0	0	0	0	0	0	0	15	3	0	0	0	0	2	2	22	22	42	4	0	1	0	0	0	4	51	51.9	26	1	1	1	0	0	0	2	31	30.9	31	30.9
09:30	0	0	0	0	0	0	0	0	0	0	30	12	0	2	3	0	0	4	51	55.9	27	3	0	2	0	0	0	2	34	35	35	1	1	0	0	1	0	0	38	36.6	38	36.6
09:45	3	0	0	0	0	0	0	0	3	3	30	2	0	1	0	0	0	2	35	35.5	35	1	0	1	0	0	2	2	41	41.9	39	1	0	0	0	0	0	1	41	41.1	41	41.1
H/TOT	5	0	0	0	0	0	0	0	5	5	90	18	0	6	3	0	3	13	133	139.9	137	10	0	8	0	0	6	8	169	173	120	3	2	2	0	1	0	3	131	130	131	130
10:00	0	0	0	0	0	0	0	0	0	0	37	5	0	1	0	0	0	2	45	45.5	43	4	0	0	1	0	1	1	50	51.3	41	0	0	0	0	0	0	1	42	42	42	42
10:15	0	0	0	0	0	0	0	0	0	0	48	6	0	1	0	0	0	0	55	55.5	20	7	0	0	0	0	2	0	29	29	59	1	0	0	0	1	0	0	61	60.2	61	60.2
10:30	0	0	0	0	0	0	0	0	0	0	56	8	0	1	0	0	0	0	65	65.5	42	0	0	0	0	0	0	1	43	43	51	1	0	0	0	0	0	0	52	52	52	52
10:45	0	0	0	0	0	0	0	0	0	0	48	6	0	0	0	0	0	3	57	57	39	9	0	1	0	0	1	4	54	54.5	56	0	0	1	0	0	0	4	61	61.5	61	61.5
H/TOT	0	0	0	0	0	0	0	0	0	0	189	25	0	3	0	0	0	5	222	223.5	144	20	0	1	1	0	4	6	176	177.8	207	2	0	1	0	1	0	5	216	215.7	216	215.7
11:00	1	0	0	0	0	0	0	0	1	1	71	6	1	0	0	1	0	2	81	79.6	39	3	0	1	0	0	1	3	47	51.5	45	3	0	1	0	0	0	1	50	50.5	50	50.5
11:15	0	0	0	0	0	0	0	0	0	0	51	6	2	1	0	0	1	1	62	61.3	41	1	0	1	0	0	0	3	46	46.5	55	0	0	0	0	0	0	0	55	55	55	55
11:30	0	0	0	0	0	0	0	0	0	0	82	3	0	1	0	0	0	4	90	90.5	14	1	0	0	1	0	1	0	47	48.3	49	3	0	0	0	1	0	1	54	53.2	54	53.2
11:45	0	0	0	0	0	0	0	0	0	0	94	4	0	1	1	0	0	4	104	105.8	46	3	0	0	0	0	1	2	52	52	57	1	0	0	0	0	0	0	58	58	58	58
H/TOT	1	0	0	0	0	0	0	0	1	1	298	19	3	3	1	1	1	11	337	337.2	194	8	0	2	1	0	3	8	186	188	206	7	0	1	0	1	0	2	217	216.7	217	216.7
12:00	0	0	0	0	0	0	0	0	0	0	71	7	0	1	0	0	0	0	79	79.5	47	3	0	0	0	0	2	2	54	54	41	2	0	1	0	0	0	2	46	46.5	46	46.5
12:15	0	0	0	0	0	0	0	0	0	0	80	5	0	1	1	0	0	2	89	90.8	39	1	0	0	0	1	0	2	43	42.1	57	4	1	0	0	0	0	0	62	61.4	62	61.4
12:30	0	0	0	0	0	0	0	0	0	0	76	5	0	1	1	0	0	2	85	86.8	64	4	0	0	0	0	0	3	71	71	47	2	0	0	0	1	0	1	51	50.2	51	50.2
12:45	0	0	0	0	0	0	0	0	0	0	79	4	1	1	1	0	0	4	90	91.2	49	1	0	0	0	0	1	3	54	54	56	4	0	0	0	0	0	0	60	60	60	60
H/TOT	0	0	0	0	0	0	0	0	0	0	306	21	1	4	3	0	0	8	343	348.3	199	9	0	0	0	1	3	10	222	221.2	201	12	1	1	0	1	0	3	219	218.1	219	218.1



ASO

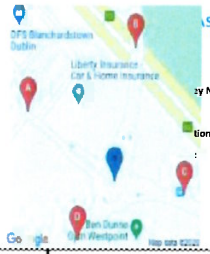
y Name: 256 19344 Bus Connects Route 5

Site 5-11

tion: L3020/Unnamed Road

: Thu 28-Nov-2019

	A => A										A => B										A => C										A => D									
TIME	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU
13:00	0	0	0	0	0	0	0	0	0	0	89	7	0	0	0	0	0	3	99	99	50	3	0	0	0	0	0	1	54	54	34	4	0	0	0	0	1	1	40	40
13:15	0	0	0	0	0	0	0	0	0	0	90	5	0	0	0	0	0	4	99	99	49	2	0	2	0	0	1	0	54	55	29	5	0	0	0	1	0	0	35	34.2
13:30	0	0	0	0	0	0	0	0	0	0	72	9	0	0	0	0	0	4	85	85	53	2	0	0	1	0	1	2	59	60.3	59	1	0	0	0	1	0	0	61	60.2
13:45	0	0	0	0	0	0	0	0	0	0	96	3	0	0	0	0	0	1	100	100	61	3	0	1	0	0	0	0	65	65.5	36	1	1	0	0	0	0	1	39	38.4
H/TOT	0	0	0	0	0	0	0	0	0	0	347	24	0	0	0	0	0	12	383	383	213	10	0	3	1	0	2	3	232	234.8	158	11	1	0	0	2	1	2	175	172.8
14:00	0	0	0	0	0	0	0	0	0	0	95	3	0	0	0	0	0	2	100	100	46	1	0	0	0	0	0	1	48	48	51	3	0	0	0	0	0	2	56	56
14:15	0	0	0	0	0	0	0	0	0	0	97	7	0	2	0	0	0	5	111	112	53	0	0	0	0	0	1	0	54	54	43	2	0	1	0	0	0	1	47	47.5
14:30	0	0	0	0	0	0	0	0	0	0	88	7	0	0	0	0	0	3	98	98	52	0	0	0	0	1	0	0	53	52.2	56	2	0	0	0	0	0	0	58	58
14:45	0	0	0	0	0	0	0	0	0	0	91	6	0	0	1	0	0	5	103	104.3	54	4	0	0	0	0	3	3	64	64	37	2	0	0	0	0	0	1	40	40
H/TOT	0	0	0	0	0	0	0	0	0	0	371	23	0	2	1	0	0	15	412	414.3	205	5	0	0	0	1	4	4	219	218.2	187	9	0	1	0	0	0	4	201	201.5
15:00	0	0	0	0	0	0	0	0	0	0	89	8	0	2	0	0	0	2	101	102	38	1	0	0	0	0	1	3	43	43	49	1	0	0	0	0	0	2	52	52
15:15	0	0	0	0	0	0	0	0	0	0	102	8	0	0	0	1	0	4	115	114.2	44	2	0	0	0	1	0	2	49	48.2	45	5	1	0	0	0	0	1	52	51.4
15:30	0	0	0	0	0	0	0	0	0	0	100	4	0	0	0	0	0	1	105	105	44	0	0	0	0	0	1	3	48	48	51	3	1	0	0	0	0	1	56	55.4
15:45	0	0	0	0	0	0	0	0	0	0	87	6	0	0	0	0	0	2	95	95	43	2	0	0	0	0	0	4	49	49	46	3	0	0	0	0	0	0	49	49
H/TOT	0	0	0	0	0	0	0	0	0	0	378	26	0	2	0	1	0	9	416	416.2	169	5	0	0	0	1	2	12	189	188.2	191	12	2	0	0	0	0	4	209	207.8
16:00	0	0	0	0	0	0	1	0	1	1	92	7	0	0	0	0	0	2	101	101	48	0	0	0	0	0	1	2	51	51	42	4	0	0	0	0	0	1	47	47
16:15	0	0	0	0	0	0	0	0	0	0	81	7	0	1	0	0	0	0	89	89.5	56	1	0	0	0	0	0	2	59	59	40	0	0	0	0	0	0	1	41	41
16:30	0	0	0	0	0	0	0	0	0	0	117	6	1	0	0	0	0	1	125	124.4	40	2	0	0	0	0	0	0	42	42	34	1	0	0	0	0	0	0	35	35
16:45	0	0	0	0	0	0	0	0	0	0	111	3	0	0	0	0	0	0	114	114	38	2	0	1	0	1	1	1	44	43.7	42	0	1	0	0	0	0	0	43	42.4
H/TOT	0	0	0	0	0	0	1	0	1	1	401	23	1	1	0	0	0	3	429	428.9	182	5	0	1	0	1	2	5	196	195.7	158	5	1	0	0	0	0	2	166	165.4
17:00	0	0	0	0	0	0	0	0	0	0	87	6	0	0	0	0	0	4	97	97	40	1	0	0	0	0	1	1	43	43	44	2	0	0	0	1	0	3	50	49.2
17:15	0	0	0	0	0	0	0	0	0	0	69	4	0	1	0	0	0	1	75	75.5	41	2	0	0	0	0	1	0	44	44	16	3	0	0	0	0	0	1	20	20
17:30	0	0	0	0	0	0	0	0	0	0	74	5	2	0	0	0	1	0	82	80.8	48	5	2	0	0	1	0	1	57	55	24	0	0	0	0	0	0	0	24	24
17:45	0	0	0	0	0	0	0	0	0	0	110	3	1	0	0	0	0	1	115	114.4	60	0	0	0	0	3	1	1	65	62.6	30	1	0	0	0	0	0	1	32	32
H/TOT	0	0	0	0	0	0	0	0	0	0	340	18	3	1	0	0	1	6	369	367.7	189	8	2	0	0	4	3	3	209	204.6	114	6	0	0	0	1	0	5	126	125.2
18:00	0	0	0	0	0	0	0	0	0	0	106	3	0	0	0	0	0	0	109	109	55	1	0	0	0	1	1	1	59	58.2	28	1	0	0	0	0	0	0	29	29
18:15	0	0	0	0	0	0	0	0	0	0	108	4	0	0	0	0	0	0	112	112	64	2	0	0	0	0	1	0	67	67	35	1	0	0	0	0	0	0	36	36
18:30	0	0	0	0	0	0	0	0	0	0	91	1	0	0	0	0	1	0	93	93	44	1	0	0	0	0	0	1	46	46	41	0	1	0	0	0	0	0	42	41.4
18:45	0	0	0	0	0	0	0	0	0	0	89	4	0	0	0	0	0	0	93	93	24	0	0	0	0	0	2	0	26	26	44	2	0	0	0	0	0	0	46	46
H/TOT	0	0	0	0	0	0	0	0	0	0	394	12	0	0	0	0	1	0	407	407	187	4	0	0	0	1	4	2	198	197.2	148	4	1	0	0	0	0	0	153	152.4
19:00	0	0	0	0	0	0	0	0	0	0	85	2	1	0	0	0	0	0	88	87.4	44	3	0	0	0	0	1	2	50	50	61	1	0	0	0	0	0	0	62	62
19:15	0	0	0	0	0	0	0	0	0	0	71	5	0	1	0	0	0	0	77	77.5	51	1	0	0	0	0	0	1	53	53	37	1	0	0	0	0	0	0	38	38
19:30	0	0	0	0	0	0	0	0	0	0	64	3	0	0	0	0	0	0	67	67	32	2	0	1	0	0	1	0	36	36.5	44	0	0	0	0	0	0	0	44	44
19:45	0	0	0	0	0	0	0	0	0	0	81	2	0	0	0	0	0	1	84	84	37	0	0	1	0	0	0	0	38	38.5	53	1	0	0	0	0	0	0	54	54
H/TOT	0	0	0	0	0	0	0	0	0	0	301	12	1	1	0	0	0	1	316	315.9	164	6	0	2	0	0	2	3	177	178	195	3	0	0	0	0	0	0	198	198
20:00	0	0	0	0	0	0	0	0	0	0	92	4	0	0	0	0	0	0	96	96	49	1	0	0	0	0	1	0	51	51	50	1	0	0	0	0	0	0	51	51
20:15	0	0	0	0	0	0	0	0	0	0	91	6	0	0	0	0	0	0	97	97	28	1	0	0	0	0	0	0	29	29	54	0	0	0	0	0	0	2	56	56
20:30	0	0	0	0	0	0	0	0	0	0	102	4	0	1	0	0	0	2	109	109.5	40	2	0	0	0	0	1	2	45	45	39	0	0	0	0	0	0	0	39	39
20:45	0	0	0	0	0	0	0	0	0	0	93	3	0	0	0	0	0	0	96	96	28	2	0	0	0	0	0	0	30	30	40	0	0	0	0	0	0	0	40	40
H/TOT	0	0	0	0	0	0	0	0	0	0	378	17	0	1	0	0	0	2	398	398.5	145	6	0	0	0	0	2	2	155	155	183	1	0	0	0	0	0	2	186	186
21:00	0	0	0	0	0	0	0	0	0	0	68	1	0	0	0	0	0	0	69	69	38	0	0	0	0	0	0	0	38	38	22	0	1	0	0	0	0	2	25	24.4
21:15	0	0	0	0	0	0	0	0	0	0	91	3	0	1	0	0	0	0	95	95.5	32	1	0	0	0	0	0	3	36	36	29	0	0	0	0	0	0	0	29	29
21:30	0	0	0	0	0	0	0	0	0	0	38	1	0	0	0	0	0	0	39	39	15	0	0	0	0	0	2	2	19	19	16	0	0	0	0	0	0	1	17	17
21:45	0	0	0	0	0	0	0	0	0	0	40	1	0	0	0	0	0	0	41	41	25	0	0	0	0	0	0	1	26	26	5	0	0	0	0	0	0	1	6	6
H/TOT	0	0	0	0	0	0	0	0	0	0	237	6	0	1	0	0	0	0	244	244.5	110	1	0	0	0	0	2	6	119	119	72	0	1	0	0	0	0	4	77	76.4
22:00	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	1	23	23	18	1	0	0	0	0	0	2	21	21	4	0	0	0	0	0	0	1	5	5
22:15	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	1	12	12	14	0	0	0	0	1	1	2	18	17.2	3	0	0	0	0	0	0	0	3	3
22:30	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	18	18	7	0	0	0	0	0	1	0	8	8	2	0	0	0	0	0	0	0	2	2
22:45	0	0	0	0	0	0	0	1	1	1	10	0	0	0	0	0	0	1	11	11	10	0	0	1	0	0	0	1	12	12.5	1	0	0	0	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	1	1	1	61	0	0	0	0	0	0	3	64	64	49	1	0	1	0	1	2	5	59	58.7	10	0	0	0	0	0	0	1	11	11
23:00	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7	7	5	0	0	0	0	1	0	1	7	6.2	0	0	0	0	0	0	0	1	1	1
23:15	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	4	4	0	0	0	0	1	0	0	5	4.2	2	0	0	0	0	0	0	0	2	2
23:30	1	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	1	0	3	3	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
H/TOT	1	0	0	0	0	0	0	0	1	1	14	0	0	0	0	0	0	0	14	14	11	0	0	0	0	2	1	1	15	13.4	3	0	0	0	0	0	0	1	4	4
24 TOT	10	0	0	1	0	0	1	1	13	13.5	4276	278	10	36	14	2	18	103	4737	4766	2555	118	3	25	3	22	54	107	2887	2884	2295	87	9	8	4	8	1	44	2456	2453



Survey Name: 256 19344 Bus Connects Route 5

Site 5-11

Location: L3020/Unnamed Road

Date: Thu 28-Nov-2019

TIME	B => A										B => B										B => C										B => D									
	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	6	0	0	0	0	0	0	0	6	6	2	0	0	0	0	0	0	0	2	2
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	13	0	0	0	0	0	0	1	14	14	2	0	0	0	0	0	0	0	2	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	3	2.2	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	1.2	0	1	0	0	0	0	0	0	1	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	1.2	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	3	0	1	8	5.6	0	1	0	0	0	0	0	0	1	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	1.2	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	1.2
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02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	3	2.2	1	0	0	0	0	1	0	0	2	1.2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	2.2	1	1	0	0	0	0	0	0	2	2
03:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	2	2	1	0	0	0	1	0	3	7	6.2	2	1	0	0	0	0	0	0	3	3
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
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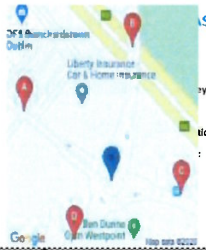
04:45	1	1	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	3	2.2	1	1	0	0	0	0	0	0	2	2
H/TOT	1	2	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	6	4	0	0	0	1	0	2	13	12.2	2	1	0	0	0	0	0	0	2	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	1	2	2
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1.4	1	0	0	0	0	0	0	0	1	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9	9	7	0	0	0	0	0	0	0	7	7
05:45	2	0	0	2	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0	0	14	3	0	0	1	1	0	0	19	19.5	4	0	0	0	0	0	0	0	4	4
H/TOT	2	0	0	2	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0	0	26	3	1	0	1	1	0	0	32	31.5	13	0	0	0	0	0	0	1	14	14
06:00	0	0	0	0	2	0	0	0	2	4.6	0	0	0	0	0	0	0	0	0	0	11	1	0	2	0	1	0	0	15	15.4	22	0	0	0	0	0	0	0	22	22
06:15	0	0	0	0	1	0	0	0	1	2.3	0	0	0	0	0	0	0	0	0	0	15	0	0	1	0	1	0	0	17	16.7	16	1	0	0	0	0	0	0	17	17
06:30	8	0	0	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	25	2	0	0	0	0	0	0	27	27	12	2	0	0	0	0	0	0	14	14
06:45	3	0	0	0	0	0	1	0	4	4	0	0	0	0	0	0	0	0	0	0	25	4	1	0	0	3	1	0	34	31	24	0	0	0	0	0	0	0	24	24
H/TOT	11	0	0	0	3	0	1	0	15	18.9	0	0	0	0	0	0	0	0	0	0	76	7	1	3	0	5	1	0	93	89.9	74	3	0	0	0	0	0	0	77	77
07:00	3	1	0	0	1	0	0	0	5	5.8	0	0	0	0	0	0	0	0	0	0	35	0	1	1	0	3	1	0	41	38.5	14	0	0	0	0	0	0	0	14	14
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	3	0	0	0	1	1	0	40	39.2	11	0	0	0	0	0	0	0	11	11
07:30	4	0	0	1	0	0	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0	45	5	0	0	0	1	1	0	52	51.2	24	2	0	0	0	0	0	1	27	27
07:45	19	0	0	1	0	0	1	0	21	21.5	0	0	0	0	0	0	0	0	0	0	46	1	0	0	0	0	0	0	47	47	37	2	0	0	0	0	0	0	39	39
H/TOT	26	1	0	2	1	0	1	0	31	33.3	0	0	0	0	0	0	0	0	0	0	161	9	1	1	0	5	3	0	180	175.9	86	4	0	0	0	0	0	1	91	91
08:00	4	0	0	3	0	0	2	1	10	11.5	0	0	0	0	0	0	0	0	0	0	52	2	1	0	0	3	0	1	59	56	49	2	0	0	0	0	0	0	51	51
08:15	6	1	0	0	0	0	0	2	9	9	0	0	0	0	0	0	0	0	0	0	34	4	0	0	1	1	1	4	45	45.5	66	1	0	1	0	0	0	0	68	68.5
08:30	12	0	0	0	0	0	0	1	13	13	0	0	0	0	0	0	0	0	0	0	45	4	0	0	0	1	1	0	51	50.2	57	2	0	0	0	0	0	0	59	59
08:45	4	0	0	0	0	0	0	3	7	7	0	0	0	0	0	0	0	0	0	0	52	2	0	0	1	1	1	3	60	60.5	65	3	0	0	0	0	0	0	68	68
H/TOT	26	1	0	3	0	0	2	7	39	40.5	0	0	0	0	0	0	0	0	0	0	183	12	1	0	2	6	3	8	215	212.2	237	8	0	1	0	0	0	0	246	246.5
09:00	15	0	0	0	0	0	5	0	20	20	0	0	0	0	0	0	0	0	0	0	42	0	0	0	1	1	1	1	46	46.5	76	4	0	1	0	0	0	0	81	81.5
09:15	25	0	0	1	1	0	0	0	28	29.8	0	0	0	0	0	0	0	0	0	0	41	0	0	1	3	0	0	3	48	52.4	83	2	0	3	0	0	0	0	88	89.5
09:30	31	1	0	1	0	0	0	0	33	33.5	0	0	0	0	0	0	0	0	0	0	17	3	0	0	0	1	1	3	25	24.2	79	0	0	0	0	0	0	0	79	79
09:45	24	0	0	2	0	0	1	3	30	31	0	0	0	0	0	0	0	0	0	0	36	0	0	2	0	1	0	2	41	41.2	70	2	0	0	0	0	0	0	72	72
H/TOT	96	1	0	4	1	0	6	3	111	114.3	0	0	0	0	0	0	0	0	0	0	136	3	0	3	4	3	2	9	160	164.3	308	8	0	4	0	0	0	0	320	322
10:00	40	0	0	0	0	0	2	2	44	44	0	0	0	0	0	0	0	0	0	0	23	1	0	1	1	0	0	1	27	28.8	26	1	0	0	0	0	0	0	27	27
10:15	30	3	0	1	0	0	1	0	35	35.5	0	0	0	0	0	0	0	0	0	0	39	1	0	1	1	0	0	3	45	46.8	43	3	1	2	0	1	0	0	50	49.6
10:30	32	0	0	0	0	0	0	0	32	32	0	0	0	0	0	0	0	0	0	0	29	4	0	1	3	0	1	5	43	47.4	70	3	0	0	0	0	0	0	73	73
10:45	52	3	0	0	0	0	0	1	55	55	0	0	0	0	0	0	0	0	0	0	32	1	0	1	0	1	1	3	39	38.7	17	1	0	1	0	0	0	0	19	19.5
H/TOT	153	6	0	1	1	0	3	3	166	166.5	0	0	0	0	0	0	0	0	0	0	123	7	0	4	5	1	2	12	154	161.7	156	8	1	3	0	1	0	0	169	169.1
11:00	14	2	0	0	0	0	2	0	18	18	0	0	0	0	0	0	0	0	0	0	25	6	0	2	0	0	0	1	32	33	57	1	0	1	0	0	0	1	60	60.5
11:15	5	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	36	2	0	1	0	0	1	1	41	41.5	62	4	0	0	0	0	0	1	67	67
11:30	14	0	0	0	0	0	0	1	15	15	0	0	0	0	0	0	0	0	0	0	29	2	0	1	0	0	0	1	33	33.5	61	2	0	0	0	0	0	0	63	63
11:45	1	0	0	1	0	0	0	2	4	4.5	0	0	0	0	0	0	0	0	0	0	31	0	0	1	1	1	0	5	39	40	67	2	0	0	0	0	0	0	69	69
H/TOT	40	2	0	1	0	0	2	3	42	43.5	0	0	0	0	0	0	0	0	0	0	119	10	0	5	1	1	1	8	145	148	247	9	0	1	0	0	0	2	259	259.5
12:00	4	1	0	0	0	0	1	1	7	7	0	0	0	0	0	0	0	0	0	0	33	1	0	1	0	1	1	2	39	38.7	55	4	0	0	0	0	0	0	59	59
12:15	10	3	0	1	1	0	0	1	16	16.8	0	0	0	0	0	0	0	0	0	0	35	1	0	1	3	0	1	2	43	42.4	80	1	0	0	0	0	0	0	81	81
12:30	13	3	0	0	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	13	0	0	1	1	1	0	3	19	20	76	2	0	0	0	0	0	0	78	78
12:45	25	0	0	0	0	0	0	0	25	25	0	0	0	0	0	0	0	0	0	0	36	5	0	0	1	1	0	0	43	43.5	56	1	0	1	0	0	0	0	58	58.5
H/TOT	52	7	0	1	1	0	1	2	64	65.8	0	0	0	0	0	0	0	0	0	0	117	7	0	3	5	3	2	7	144	149.6	267	8	0	1	0	0	0	0	276	276.5



Survey Name: 256 19344 Bus Connects Route 5

Site 5-11

Location: L3020/Unnamed Road

Date: Thu 28-Nov-2019

	B => A										B => B										B => C										B => D									
TIME	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU
13:00	1	0	0	1	1	0	2	0	5	6.8	0	0	0	0	0	0	0	0	0	0	48	1	0	2	0	1	1	0	53	53.2	79	3	0	0	0	0	0	1	83	83
13:15	3	3	0	1	0	0	0	1	8	8.5	0	0	0	0	0	0	0	0	0	0	33	1	0	0	0	0	0	2	36	36	61	0	0	0	0	0	0	0	61	61
13:30	5	0	0	0	0	0	0	2	7	7	0	0	0	0	0	0	0	0	0	0	21	2	1	0	3	0	1	2	30	33.3	58	2	0	0	0	0	0	0	60	60
13:45	6	2	0	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	19	3	0	0	0	0	1	3	26	26	57	0	0	0	1	0	0	0	58	59.3
H/TOT	15	5	0	2	1	0	2	3	28	30.3	0	0	0	0	0	0	0	0	0	0	121	7	1	2	3	1	3	7	145	148.5	255	5	0	0	1	0	0	1	282	283.3
14:00	6	1	0	1	0	0	1	2	11	11.5	0	0	0	0	0	0	0	0	0	0	56	3	0	1	1	1	0	2	64	65	41	0	0	0	0	0	0	0	41	41
14:15	2	0	0	1	1	0	0	0	4	5.8	0	0	0	0	0	0	0	0	0	0	24	3	0	3	0	0	1	3	34	35.5	62	0	0	0	0	0	0	0	62	62
14:30	7	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	30	1	0	0	0	1	0	5	37	36.2	57	5	0	0	0	0	0	0	62	62
14:45	5	0	0	1	0	0	0	0	6	6.5	0	0	0	0	0	0	0	0	0	0	37	3	0	0	0	0	1	3	44	44	57	1	0	0	0	0	0	0	58	58
H/TOT	20	1	0	3	1	0	1	2	28	30.8	0	0	0	0	0	0	0	0	0	0	147	10	0	4	1	2	2	13	179	180.7	217	6	0	0	0	0	0	0	223	223
15:00	3	2	0	0	0	0	3	2	10	10	0	0	0	0	0	0	0	0	0	0	34	4	1	0	1	1	0	1	42	41.9	63	2	0	0	0	0	0	0	65	65
15:15	8	3	0	0	0	0	0	1	12	12	0	0	0	0	0	0	0	0	0	0	21	2	0	0	0	1	0	4	28	27.2	72	0	0	0	0	0	0	0	72	72
15:30	5	3	1	0	0	0	0	0	9	8.4	0	0	0	0	0	0	0	0	0	0	38	2	0	1	0	1	0	0	42	41.7	52	2	0	0	0	1	0	1	56	55.2
15:45	3	0	1	1	0	0	0	0	5	4.9	0	0	0	0	0	0	0	0	0	0	36	5	0	0	0	0	0	5	46	46	78	3	0	0	0	3	0	2	86	83.6
H/TOT	19	8	2	1	0	0	3	3	36	35.3	0	0	0	0	0	0	0	0	0	0	129	13	1	1	1	3	0	10	158	156.8	265	7	0	0	0	4	0	3	279	275.8
16:00	21	4	0	0	0	0	1	0	26	26	0	0	0	0	0	0	0	0	0	0	28	4	0	1	0	2	1	2	38	36.9	51	1	0	0	0	0	0	1	53	53
16:15	4	0	0	1	0	0	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0	36	3	0	0	0	1	0	1	41	40.2	55	2	0	0	0	0	0	0	57	57
16:30	8	2	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	36	2	0	0	0	2	1	0	41	39.4	75	3	1	0	0	0	0	3	82	81.4
16:45	5	4	1	0	0	0	0	4	14	13.4	0	0	0	0	0	0	0	0	0	0	34	3	0	0	0	1	0	0	38	37.2	90	1	0	0	0	0	0	0	91	91
H/TOT	38	10	1	1	0	0	1	4	55	54.9	0	0	0	0	0	0	0	0	0	0	134	12	0	1	0	6	2	3	158	153.7	271	7	1	0	0	0	0	4	283	282.4
17:00	6	1	0	1	0	0	1	2	11	11.1	0	0	0	0	0	0	0	0	0	0	61	0	0	0	0	1	2	0	64	63.2	51	2	0	0	0	0	0	0	53	53
17:15	4	0	0	0	0	0	1	0	5	5	0	0	0	0	0	0	0	0	0	0	65	3	0	0	1	1	0	1	71	71.5	66	2	0	0	0	0	0	0	68	68
17:30	7	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	69	6	0	1	0	1	2	2	81	80.7	88	3	0	0	0	0	0	0	91	91
17:45	2	1	0	0	0	0	1	0	4	4	0	0	0	0	0	0	0	0	0	0	66	0	0	0	0	0	0	3	69	69	83	3	0	0	0	1	0	0	87	86.2
H/TOT	19	2	0	1	0	0	3	2	27	27.5	0	0	0	0	0	0	0	0	0	0	261	9	0	1	1	3	4	6	285	284.4	288	10	0	0	0	1	0	0	299	298.2
18:00	6	0	0	0	0	0	1	0	7	7	0	0	0	0	0	0	0	0	0	0	69	5	0	0	0	0	0	2	76	76	60	1	1	0	0	0	0	0	62	61.4
18:15	1	0	0	0	0	0	2	0	3	3	0	0	0	0	0	0	0	0	0	0	65	5	0	1	0	0	0	2	73	73.5	49	3	0	0	0	0	0	1	53	53
18:30	4	0	0	0	0	0	1	0	5	5	0	0	0	0	0	0	0	0	0	0	68	1	0	1	0	0	1	0	71	71.5	51	2	0	0	0	0	1	0	54	53.2
18:45	4	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	42	5	0	0	0	1	3	0	51	50.2	48	1	0	0	0	0	0	2	51	51
H/TOT	15	0	0	0	0	0	4	0	19	19	0	0	0	0	0	0	0	0	0	0	244	16	0	2	0	1	4	4	271	271.2	208	7	1	0	0	1	0	3	220	218.6
19:00	2	0	0	0	0	0	1	0	3	3	0	0	0	0	0	0	0	0	0	0	76	0	1	0	0	0	0	0	77	76.4	41	2	0	0	0	0	0	6	49	49
19:15	6	0	0	0	0	0	2	0	8	8	0	0	0	0	0	0	0	0	0	0	30	1	0	0	0	3	0	0	34	31.6	62	0	0	0	0	0	0	3	65	65
19:30	6	1	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	47	3	0	0	0	1	0	0	51	50.2	39	0	0	0	0	0	0	3	42	42
19:45	4	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	1	0	28	28	47	1	0	0	0	0	0	1	49	49
H/TOT	18	1	0	0	0	0	3	0	22	22	0	0	0	0	0	0	0	0	0	0	180	4	1	0	0	4	1	0	190	186.2	189	3	0	0	0	0	0	13	205	205
20:00	5	3	0	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	34	4	0	0	0	1	0	1	40	39.2	34	0	0	0	0	0	0	0	34	34
20:15	3	0	0	1	0	0	1	0	5	5.5	0	0	0	0	0	1	0	0	1	2.3	33	0	0	0	0	1	1	0	35	34.2	23	2	0	0	0	0	0	1	26	26
20:30	2	1	0	0	0	0	1	0	4	4	0	0	0	0	0	0	0	0	0	0	30	0	0	1	0	0	0	0	31	31.5	9	0	0	0	0	0	0	5	14	14
20:45	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	31	1	0	0	0	0	0	3	35	35	4	1	0	0	0	0	0	0	5	5
H/TOT	12	4	0	1	0	0	2	0	19	19.5	0	0	0	0	0	1	0	0	0	1	2.3	128	5	0	1	0	2	1	4	141	139.9	70	3	0	0	0	0	0	6	79	79
21:00	1	1	0	0	0	0	1	0	3	3	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	1	3	36	36	3	1	0	0	0	0	0	0	4	4
21:15	6	0	0	0	0	0	1	1	8	8	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	1	27	27	2	1	0	0	0	0	0	0	3	3
21:30	5	0	0	0	0	0	1	0	6	6	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	1	23	23	1	0	0	1	0	0	0	0	2	2.5
21:45	6	0	0	0	0	0	0	1	7	7	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	0	1	2	12	12	8	1	0	0	0	0	0	0	9	9
H/TOT	18	1	0	0	0	0	3	2	24	24	0	0	0	0	0	0	0	0	0	0	88	1	0	0	0	0	2	7	98	98	14	3	0	1	0	0	0	0	18	18.5
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22:15	0	0	0	0	0	0	1	1	2	2	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	1	0	2	14	13.2	7	0	0	0	0	0	0	0	7	7
22:30	1	0	0	0	0	0	1	0	2	2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	4	4	1	0	0	0	0	0	0	0	1	1
22:45	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	1	1	6	1	0	0	0	0	0	2	9	9	3	0	0	0	0	0	0	0	3	3
H/TOT	3	0	0	0	0	0	2	2	7	7	1	0	0	0	0	0	0	0	1	1	24	1	0	0	0	2	0	6	33	31.4	20	1	0	0	0	0	0	0	21	21
23:00	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	0	1	7	6.2	3	0	0	0	0	0	0	0	3	3
23:15	2	0	0	0	0	0	1	0	3	3	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	1	2	6	6	1	0	0	0	0	0	0	0	1	1
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	5	2	0	0	0	0	0	0	0	2	2
H/TOT	3	0	0	0	0	0	1	0	4	4	0	0	0	0	0	0	0	0	0	0	17	1	0	0	0	1	1	3	23	22.2	6	0	0	0	0	0	0	0	6	6
24 TOT	381	52	3	23	8	0	41	36	744	764.1	2	1	0	0	1	0	0	1	5	6.3	2438	144	7	31	24	56	34	115	2849	2847	3197	103	3	11	1	8	0	34	3357	3356



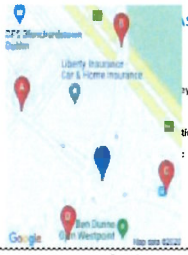
y Name: 256 19344 Bus Connects Route 5

Site 5-11

tion: L3020/Unnamed Road

: Thu 28-Nov-2019

	A => A										A => B										A => C										A => D									
TIME	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU
00:00	2	1	0	0	0	0	0	0	3	3	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	1	9	9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
00:30	3	0	0	0	0	0	0	0	3	3	3	0	0	0	0	0	0	2	5	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
00:45	3	0	0	0	0	0	0	0	3	3	3	1	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
H/TOT	8	1	0	0	0	0	0	0	9	9	15	2	0	0	0	0	0	3	20	20	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	3
01:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	1	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
01:45	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
H/TOT	2	0	0	0	0	0	0	0	2	2	6	0	0	1	0	0	0	0	7	7.5	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
02:00	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2.3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
02:45	2	0	1	0	0	0	0	0	3	2.4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	3	0	1	0	0	0	0	0	4	3.4	1	0	0	0	1	0	0	0	2	3.3	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
04:00	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1.5
04:30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	2.5
04:45	4	1	0	0	2	1	0	0	8	6.4	1	0	0	0	1	0	0	0	2	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	4	2	0	0	2	1	0	0	9	7.4	4	1	0	0	1	0	0	1	7	8.3	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	3	4
05:00	2	0	0	1	0	1	0	1	5	4.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
05:15	1	0	0	1	0	1	0	0	3	2.7	2	0	1	0	0	0	0	1	4	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2.3
05:30	2	1	0	1	0	0	0	0	4	4.5	1	1	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	1	1	0	0	1	1	0	1	5	5.5	5	0	0	0	0	0	0	1	6	6	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	4
H/TOT	6	2	0	3	1	3	0	2	17	17.4	8	1	1	0	0	0	0	2	12	11.4	0	0	0	0	0	0	0	0	0	0	11	0	0	0	1	0	0	0	12	13.3
06:00	2	1	0	0	0	0	0	0	3	3	5	0	0	1	0	0	0	0	6	6.5	0	0	0	0	0	0	0	0	0	0	7	2	0	1	1	0	0	0	11	12.8
06:15	2	1	0	1	2	0	0	0	6	9.1	7	1	0	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	1	0	0	9	9
06:30	2	0	0	1	0	1	1	1	6	5.7	4	1	1	0	0	1	0	0	7	5.6	0	0	0	0	0	0	1	0	1	1	8	0	0	0	0	0	1	0	9	9
06:45	9	3	0	0	1	0	0	1	14	5.3	5	2	0	0	0	0	0	2	9	9	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11	11
H/TOT	15	5	0	2	3	1	1	2	29	33.1	21	4	1	1	0	1	0	2	30	29.1	0	0	0	0	0	0	1	0	1	1	34	2	0	1	1	0	1	1	40	41.8
07:00	9	0	0	1	0	0	2	1	13	13.5	5	2	0	0	0	0	0	1	8	8	1	0	0	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	5	5
07:15	12	3	0	0	1	1	1	1	19	9.5	6	1	0	2	0	0	0	0	9	10	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	0	15	15
07:30	20	0	0	0	1	0	1	2	24	9.5	5	2	0	0	1	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	1	12	12
07:45	23	0	0	1	0	0	3	1	28	8.5	17	1	0	0	0	0	0	0	18	18	0	0	0	0	0	0	1	0	1	1	14	0	0	0	0	0	0	1	15	15
H/TOT	64	3	0	2	2	1	7	5	84	68	33	6	0	2	1	1	0	1	44	45.5	1	0	0	0	0	0	1	0	0	2	2	44	1	0	0	0	0	0	2	47	47
08:00	18	2	0	0	0	0	0	0	20	20	20	0	0	0	0	2	4	0	0	26	25.4	2	0	0	0	0	0	0	0	0	2	2	20	1	0	0	0	0	0	0	21	21
08:15	14	4	0	0	0	1	0	3	22	22	25	3	0	0	3	0	0	0	31	34.9	5	1	0	0	0	0	0	0	0	0	6	6	28	1	0	0	0	0	0	2	31	31
08:30	11	4	0	0	0	0	1	0	16	16	8	0	0	1	0	0	0	2	11	15	0	0	0	0	0	0	0	0	0	0	0	0	45	1	0	0	0	0	1	2	49	49
08:45	46	3	0	0	0	1	3	1	54	32	8	2	0	1	0	0	0	1	12	12.5	0	0	0	0	0	0	0	0	0	0	0	0	50	4	0	0	0	0	0	2	56	56
H/TOT	89	13	0	0	0	2	4	4	112	110.4	61	5	0	2	5	4	0	3	80	84.3	7	1	0	0	0	0	0	0	0	0	8	8	143	7	0	0	0	0	1	6	157	157
09:00	58	0	1	1	2	1	2	2	67	68.7	2	0	0	1	0	1	0	1	5	4.7	0	2	0	1	0	0	0	0	3	3.5	50	1	0	0	0	0	0	1	52	52
09:15	55	3	1	2	0	2	0	3	66	64.8	2	1	0	1	0	0	0	0	4	4.5	0	1	0	0	0	0	0	1	2	2	68	2	0	0	0	0	0	1	71	71
09:30	66	6	0	1	0	0	1	5	79	99.5	6	0	0	0	0	0	1	0	7	7	0	0	0	1	0	0	0	0	1	1.5	57	0	0	1	1	1	0	1	61	62
09:45	65	2	0	0	0	0	1	0	68	58	1	4	0	3	2	1	1	2	14	13	0	0	0	0	0	0	0	0	0	0	65	2	0	0	0	0	0	0	67	67
H/TOT	244	11	2	4	2	3	4	10	280	281	11	5	0	5	2	2	2	3	30	31.5	0	3	0	2	0	0	0	1	6	7	240	5	0	1	1	1	0	3	251	252
10:00	27	4	0	1	0	1	0	0	33	32	32	2	0	0	0	0	0	1	35	35	0	0	0	0	0	0	0	0	0	0	82	1	0	0	0	0	0	1	84	84
10:15	59	7	1	0	0	0	0	4	71	70.4	7	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	69	3	0	0	0	0	0	2	74	74
10:30	38	5	0	0	0	0	2	4	49	49	8	0	1	1	0	0	0	3	13	12.9	0	0	0	0	0	0	0	0	0	0	56	1	0	0	0	0	0	1	58	58
10:45	31	4	0	3	0	0	3	1	42	43.5	21	1	0	0	0	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0	93	4	0	0	0	0	0	2	99	99
H/TOT	155	20	1	4	0	1	5	9	195	195.6	68	3	1	1	0	0	0	4	77	76.9	0	0	0	0	0	0	0	0	0	0	300	9	0	0	0	0	0	6	315	315
11:00	75	1	0	0	0	0	1	2	79	79	14	3	0	1	1	0	0	2	21	21.8	0	0	0	0	0	0	0	0	0	0	47	2	0	1	0	0	0	1	51	51.5
11:15	64	9	1	2	0	1	2	3	82	81.6	20	0	0	0	0	0	0	1	21	21	0	0	0	0	0	0	0	0	0	0	50	4	0	0	0	0	1	3	68	68
11:30	70	3	0	0	0	0	0	2	75	75	21	1	0	1	2	1	0	2	28	30.3	0	0	0	0	0	0	0	0	0	0	59	2	0	0	0	0	0	0	61	61
11:45	88	4	0	0	0	0	2	2	96	96	5	2	0	0	0	1	0	1	9	9.2	0	0	0	0	0	0	0	0	0	0	58	1	0	0	0	0	0	3	62	62
H/TOT	297	17	1	2	0	1	5	9	332	331.6	60	6	0	2	3	2	0	6	79	82.3	0	0	0	0	0	0	0	0	0	0	224	9	0	1	0	0	1	7	242	242
12:00	71	3	0	1	0	0	1	4	80	80.5	8	1	0	1	1	0	0	0	11	12.8	0	0	0	0	0	0	0	0	0	0	60	4	0	1	0	0	0	0	65	65.5
12:15	95	1	0	0	1	0	1	2	100	101.3	3	7	0	1	1	1	0	0	13	14	0	0	0	0	0	0	0	0	0	0	47	1	0	1	0	2	0	2	53	51.9
12:30	88	2	0	0	0	0	1	2	93	93	12	2	0	0	2	1	0	2	19	20.8	0	0	0	0	0	0	0	0	0	0	59	1	0	0	0	0	0	1	61	61
12:45	69	3	0	1	0	0	2	3	78	78.5	6	0	0	1	0	0	0	1	8	8.5	0	0	0	0	0	0	0	0	0	0	50	4	0	0	0	0	0	0	54	54
H/TOT	323	9	0	2	1	0	5	11	351	353.3	29	10	0	3	4	2	0	3	51	56.1	0	0	0	0	0	0	0	0	0	0	216	10	0	2	0	2	0	3	233	232.4



ASO

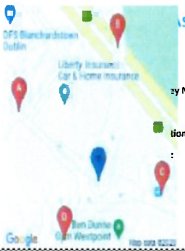
Survey Name: 256 19344 Bus Connects Route 5

Site 5-11

Location: L3020/Unnamed Road

Date: Thu 28-Nov-2019

	C => A										C => B										C => C										C => D									
TIME	**CAR**	**LGV**	**M/C**	**OGV1**	**OGV2**	**P/C**	**SV(BU**	**TAXI**	**TOT**	**PCU**	**CAR**	**LGV**	**M/C**	**OGV1**	**OGV2**	**P/C**	**SV(BU**	**TAXI**	**TOT**	**PCU**	**CAR**	**LGV**	**M/C**	**OGV1**	**OGV2**	**P/C**	**SV(BU**	**TAXI**	**TOT**	**PCU**	**CAR**	**LGV**	**M/C**	**OGV1**	**OGV2**	**P/C**	**SV(BU**	**TAXI**	**TOT**	**PCU**
13:00	78	3	0	0	0	2	1	0	84	82.4	3	2	0	0	1	0	0	1	7	8.3	0	0	0	0	0	0	0	0	0	0	58	2	0	0	0	0	0	2	62	62
13:15	70	0	0	0	0	0	1	4	75	75	9	2	1	0	3	1	0	0	16	18.5	0	0	0	0	0	0	0	0	0	0	63	3	0	0	0	0	0	0	66	66
13:30	70	6	0	0	0	0	1	1	78	78	3	2	1	0	2	1	0	0	9	10.2	0	0	0	0	0	0	0	0	0	0	46	3	0	0	0	0	0	1	50	50
13:45	66	3	0	0	0	0	1	3	73	73	3	0	0	1	1	0	1	0	6	7.8	1	0	0	0	0	0	0	0	1	1	47	3	0	0	0	0	0	1	51	51
H/TOT	284	12	0	0	0	2	4	8	310	308.4	18	6	2	1	7	2	1	1	38	44.8	1	0	0	0	0	0	0	0	1	1	214	11	0	0	0	0	0	4	229	229
14:00	62	8	0	1	0	0	1	2	74	74.3	2	0	0	0	0	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	41	3	0	1	0	0	0	4	49	49.3
14:15	73	4	0	0	0	0	3	2	82	82	2	0	0	1	0	1	0	0	4	3.7	0	1	0	0	0	0	0	0	1	1	60	5	0	0	0	0	0	1	66	66
14:30	82	2	0	0	0	0	0	4	88	88	4	2	0	0	0	0	0	1	7	7	0	0	0	0	0	0	0	0	0	0	34	4	0	0	0	0	0	1	39	39
14:45	68	4	0	0	0	0	2	5	79	79	6	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	37	2	0	0	0	0	0	1	40	40
H/TOT	285	18	0	1	0	0	6	13	323	323.3	14	2	0	1	0	1	0	2	20	19.7	0	1	0	0	0	0	0	0	1	1	172	14	0	1	0	0	0	7	194	194.3
15:00	62	6	0	0	0	0	1	0	69	69	6	1	0	1	0	0	0	0	8	8.5	0	0	0	0	0	0	0	0	0	0	69	3	1	0	0	0	0	2	75	74.4
15:15	68	3	0	0	0	0	2	0	73	73	7	4	0	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	56	3	0	0	0	0	0	2	61	61
15:30	38	2	0	0	0	0	1	1	42	42	31	3	0	0	0	0	0	1	35	35	0	0	0	0	0	0	0	0	0	0	51	1	0	0	0	0	0	1	53	53
15:45	51	3	0	0	0	0	3	4	61	61	18	1	0	2	1	0	1	0	23	15.3	0	0	0	0	0	0	0	0	0	0	45	2	1	0	0	0	0	1	49	48.4
H/TOT	219	14	0	0	0	0	7	5	245	245	62	9	0	3	1	0	1	1	77	79.8	0	0	0	0	0	0	0	0	0	0	221	9	2	0	0	0	0	5	238	236.8
16:00	72	5	0	0	0	0	0	1	78	78	32	1	0	1	0	0	0	0	34	34.5	0	0	0	0	0	0	0	0	0	0	47	4	0	0	0	0	0	0	51	51
16:15	54	1	0	0	0	0	2	1	58	58	31	4	0	0	1	0	0	1	37	38.3	0	0	0	0	0	0	0	0	0	0	36	2	0	1	0	0	0	0	39	39.5
16:30	59	2	0	0	0	0	2	2	65	65	52	4	1	0	0	0	0	0	57	56.4	0	0	0	0	0	0	0	0	0	0	34	1	0	0	1	1	0	0	37	37.5
16:45	67	1	0	0	0	0	3	0	71	71	10	5	0	2	0	0	1	0	18	19	0	0	0	0	0	0	0	0	0	0	38	2	0	0	0	0	0	1	41	41
H/TOT	252	9	0	0	0	0	7	4	272	272	125	14	1	3	1	0	1	1	146	148.2	0	0	0	0	0	0	0	0	0	0	155	9	0	1	1	1	0	1	168	169
17:00	68	1	0	0	0	0	2	0	71	71	16	4	0	0	0	0	0	1	21	21	1	0	0	0	0	0	0	0	1	1	46	5	0	0	0	0	0	1	52	52
17:15	52	3	0	0	0	0	0	2	57	57	10	0	2	0	1	2	0	3	18	16.5	2	0	0	0	0	0	0	0	2	2	45	3	0	0	0	0	0	1	49	49
17:30	92	7	0	0	0	0	1	4	104	104	5	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	38	1	0	0	0	2	0	0	41	39.4
17:45	83	5	0	0	0	0	4	1	93	93	12	3	1	0	0	1	1	0	18	16.6	0	0	0	0	0	0	0	0	0	0	29	1	0	0	0	0	0	0	30	30
H/TOT	295	16	0	0	0	0	7	7	325	325	43	7	3	0	1	3	1	4	62	59.1	3	0	0	0	0	0	0	0	3	3	158	10	0	0	0	2	0	2	172	170.4
18:00	70	0	0	0	0	0	2	0	72	72	31	1	0	0	0	0	0	2	34	34	0	0	0	0	0	0	0	0	0	0	38	1	0	0	0	0	0	0	39	39
18:15	83	0	0	0	0	1	0	0	84	83.2	31	6	0	0	1	1	0	4	43	43.5	0	0	0	0	0	0	0	0	0	0	50	2	0	0	0	0	0	0	52	52
18:30	87	1	0	0	0	0	2	0	90	90	17	2	0	0	0	0	0	2	21	21	0	0	0	0	0	0	0	0	0	0	48	3	0	0	0	0	1	0	52	52
18:45	82	4	0	0	0	0	2	0	88	88	26	2	0	0	0	0	0	0	28	28	0	0	0	0	0	0	0	0	0	0	31	1	0	0	0	0	0	0	32	32
H/TOT	322	5	0	0	0	1	6	0	334	333.2	105	11	0	0	1	1	0	8	126	126.5	0	0	0	0	0	0	0	0	0	0	167	7	0	0	0	0	1	0	175	175
19:00	80	2	0	0	0	0	1	0	83	83	4	0	0	0	0	0	1	2	7	7	0	0	0	0	0	0	0	0	0	0	50	1	0	0	0	0	0	1	52	52
19:15	94	1	0	0	0	0	2	0	97	97	5	3	0	1	0	0	0	3	12	12.5	0	0	0	0	0	0	0	0	0	0	43	3	0	1	0	0	0	0	47	47.5
19:30	102	3	0	1	0	0	1	0	107	107.5	7	0	0	0	0	1	0	0	8	7.2	0	0	0	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	39	39
19:45	71	3	0	0	0	0	0	1	75	75	28	0	0	0	0	0	0	1	29	29	0	0	0	0	0	0	0	0	0	0	32	1	0	0	0	0	0	1	34	34
H/TOT	347	9	0	1	0	0	4	1	362	362.2	44	3	0	1	0	1	1	6	56	55.7	0	0	0	0	0	0	0	0	0	0	164	5	0	1	0	0	0	2	172	172.5
20:00	45	3	0	0	0	0	2	2	52	52	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	28	2	0	0	0	0	0	1	31	31
20:15	67	1	1	0	0	0	2	0	71	70.4	5	2	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	1	30	30
20:30	32	0	0	0	0	0	0	0	32	32	4	1	0	0	0	1	0	0	6	5.2	0	0	0	1	0	0	0	0	1	1.5	23	0	0	0	0	0	1	24	24
20:45	21	0	0	0	0	0	2	2	25	25	9	0	0	0	0	0	1	0	10	10	0	0	0	0	0	0	0	0	0	0	18	1	0	1	0	0	0	1	21	21.5
H/TOT	165	4	1	0	0	0	6	4	180	179.4	20	3	0	0	0	1	1	0	25	24.2	0	0	0	1	0	0	0	0	1	1.5	98	3	0	1	0	0	0	4	106	106.5
21:00	25	0	0	0	1	0	0	3	29	30.3	4	1	0	1	0	0	0	0	6	6.5	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	2	20	20
21:15	21	0	0	0	0	0	2	1	24	24	7	2	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	1	0	15	15
21:30	11	0	0	0	0	0	0	0	11	11	24	1	0	0	0	0	0	1	26	26	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	0	0	0	11	11
21:45	15	0	0	0	0	0	1	0	16	16	16	1	0	0	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	0	8	8
H/TOT	72	0	0	0	1	0	3	4	80	81.3	51	5	0	1	0	0	0	1	58	58.5	0	0	0	0	0	0	0	0	0	0	48	3	0	0	0	0	1	2	54	54
22:00	4	0	0	1	0	0	0	0	5	5.5	10	0	0	0	0	0	0	1	11	11	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11	11
22:15	4	0	0	0	0	0	1	1	6	6	15	0	0	0	0	0	0	0	15	15	0	0	0	0	0	0	0	1	0	1	6	0	0	0	0	0	0	2	8	8
22:30	3	0	0	0	0	0	1	1	5	5	14	0	0	0	0	0	0	2	16	16	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
22:45	5	0	0	0	0	0	1	0	6	6	9	0	0	0	0	0	0	1	10	10	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
H/TOT	16	0	0	1	0	0	3	2	22	22.5	48	0	0	0	0	0	0	4	52	52	0	0	0	0	0	0	1	0	1	1	20	0	0	0	0	0	0	2	22	22
23:00	3	0	0	0	0	0	0	0	3	3	14	0	0	0	0	1	0	0	15	14.2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	3
23:15	5	0	0	0	0	0	1	1	7	7	10	1	0	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	3
23:30	3	0	0	0	0	0	0	0	3	3	9	0	0	0	0	0	0	1	10	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
23:45	1	0	0	0	0	0	0	1	2	2	2	1	0	0	0	0	0	1	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	12	0	0	0	0	0	1	2	15	15	35	2	0	0	0	1	0	2	40	39.2	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7	7
24 TOT	3479	170	6	22	10	17	86	102	3892	3899	862	105	9	27	28	22	8	58	1139	1166	13	5	0	3	0	0	3	1	25	26.3	2644	114	2	11	4	6	5	58	2844	2849



Survey Name: 256 19344 Bus Connects Route 5

Site 5-11

Location: L3020/Unnamed Road

Date: Thu 28-Nov-2019

TIME	D => A										D => B										D => C										D => D									
	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	4	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	3	4.3	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	8	0	0	0	1	0	0	0	9	10.3	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
01:15	1	0	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
01:30	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	1	0	0	0	0	0	1	4	4	1	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
02:00	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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04:30	0	1	0	0	0	0	0	1	2	2	1	0	0	1	0	1	0	0	3	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1	2	2	3	0	0	1	0	1	0	0	5	4.7	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
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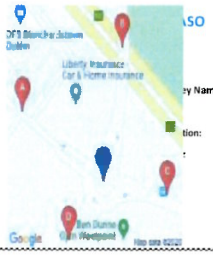
H/TOT	2	1	0	1	0	0	0	0	4	4.5	4	4	0	0	0	0	0	0	8	8	1	1	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	1	1	1	5	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	1	2.3	0	0	0	0	0	0	0	0	0	0
06:15	1	0	0	0	0	0	0	0	1	1	4	2	0	1	0	0	0	0	7	7.5	2	1	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
06:30	1	0	0	1	0	0	0	0	2	2.5	9	0	0	0	2	0	0	0	11	13.6	6	1	0	0	1	0	0	0	8	9.3	0	0	0	0	0	0	0	0	0	0
06:45	1	0	0	0	0	0	0	0	1	1	19	5	0	0	0	0	0	1	25	25	9	3	0	0	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	0	1	0	0	0	1	5	5.5	37	7	0	1	2	0	0	1	48	51.1	17	5	0	0	2	0	0	0	24	26.6	0	0	0	0	0	0	0	0	0	0
07:00	2	0	0	0	0	0	0	0	2	2	25	2	0	0	0	1	0	0	28	27.2	13	2	0	0	0	1	0	1	17	16.2	0	0	0	0	0	0	0	0	0	0
07:15	2	0	0	0	0	0	0	0	2	2	31	3	0	1	0	0	0	0	35	35.5	19	1	0	1	0	0	0	0	21	21.5	0	0	0	0	0	0	0	0	0	0
07:30	3	1	0	1	1	0	0	0	6	7.8	45	3	0	2	0	0	0	0	50	51	29	1	0	0	0	0	0	0	30	30	0	1	0	1	0	0	0	0	2	2.5
07:45	4	3	0	0	0	1	0	0	8	7.2	54	4	0	0	1	0	0	1	60	61.3	23	2	0	0	0	0	0	1	26	26	0	0	0	0	0	0	0	0	0	0
H/TOT	11	4	0	1	1	1	0	0	18	19	155	12	0	3	1	1	0	1	173	175	84	6	0	1	0	1	0	2	94	93.7	0	1	0	1	0	0	0	0	2	2.5
08:00	6	0	0	1	0	0	0	3	10	10.5	52	8	0	1	0	1	0	0	62	61.7	26	3	0	0	0	0	0	0	29	29	1	0	0	0	0	0	0	0	1	1
08:15	5	0	0	0	1	0	0	0	6	7.3	60	5	1	1	0	0	0	2	69	68.9	35	2	0	0	0	0	0	1	38	38	0	0	0	0	0	0	0	0	0	0
08:30	7	1	0	0	0	0	0	0	8	8	66	5	0	4	0	0	0	3	78	80	30	4	0	0	0	0	0	1	35	35	0	0	0	0	0	0	0	0	0	0
08:45	11	1	0	1	0	2	0	0	15	13.9	37	5	1	1	1	0	0	0	45	46.2	33	2	0	0	0	0	0	2	37	37	0	0	0	0	0	0	0	0	0	0
H/TOT	29	2	0	2	1	2	0	3	39	39.7	215	23	2	7	1	1	0	5	254	256.8	124	11	0	0	0	0	0	4	139	139	1	0	0	0	0	0	0	0	1	1
09:00	22	2	0	1	0	1	0	1	27	26.7	45	4	0	1	0	0	0	0	50	50.5	18	2	0	0	0	0	0	3	23	23	0	0	0	0	0	0	0	0	0	0
09:15	21	0	0	1	0	1	0	0	23	22.7	31	3	0	3	0	1	0	1	39	39.7	20	0	0	0	0	0	0	2	22	22	0	0	0	0	0	0	0	0	0	0
09:30	8	2	0	0	0	0	0	1	11	11	36	0	0	0	1	0	0	2	39	40.3	14	2	0	1	0	0	0	1	18	18.5	0	0	0	0	0	0	0	0	0	0
09:45	27	2	0	2	0	0	0	2	33	34	46	5	0	0	1	0	1	2	55	56.3	18	0	0	1	0	0	0	2	21	21.5	0	0	0	0	0	0	0	0	0	0
H/TOT	78	6	0	4	0	2	0	4	94	94.4	158	12	0	4	2	1	1	5	183	186.8	70	4	0	2	0	0	0	8	84	85	0	0	0	0	0	0	0	0	0	0
10:00	24	1	0	0	0	0	0	1	26	26	51	3	0	2	0	1	0	2	59	59.2	17	0	0	0	0	0	0	3	20	20	1	0	0	0	0	0	0	1	1	1
10:15	26	3	0	1	0	0	0	2	32	32.5	61	5	0	2	0	0	0	1	69	70	17	1	0	0	0	0	0	3	21	21	1	0	0	0	0	0	0	1	1	1
10:30	24	0	0	0	0	0	0	0	24	24	61	7	0	1	0	0	0	3	72	72.5	18	0	0	1	0	0	0	0	19	19.5	1	0	0	0	0	0	0	1	1	1
10:45	42	0	0	0	0	0	0	2	44	44	62	1	0	1	0	0	0	3	67	67.5	18	1	0	2	0	0	0	4	25	26	0	0	0	0	0	0	0	0	0	0
H/TOT	116	4	0	1	0	0	0	5	126	126.5	235	16	0	6	0	1	0	9	267	269.2	70	2	0	3	0	0	0	10	85	86.5	3	0	0	0	0	0	0	3	3	3
11:00	26	4	0	3	0	0	0	0	33	34.5	88	6	0	3	1	0	0	6	104	106.8	29	1	0	2	0	0	0	2	34	35	0	0	0	0	0	0	0	0	0	0
11:15	39	4	0	1	0	0	0	0	44	44.5	88	4	0	2	0	1	0	3	98	98.2	28	0	0	1	0	0	0	1	30	30.5	1	0	0	0	0	0	0	1	1	1
11:30	37	2	0	1	0	0	0	1	41	41.5	124	6	1	2	0	1	1	5	140	139.6	41	1	0	0	0	0	0	1	43	43	1	0	0	0	0	0	0	1	1	1
11:45	31	0	0	0	0	0	0	2	33	33	92	5	0	1	0	0	0	12	110	110.5	20	0	0	0	0	0	0	4	24	24	0	0	0	0	0	0	0	0	0	0
H/TOT	133	10	0	5	0	0	0	3	151	153.5	392	21	1	8	1	2	1	26	452	453	118	2	0	3	0	0	0	8	131	132.5	2	0	0	0	0	0	0	2	2	2
12:00	33	1	0	1	1	0	0	0	36	37.8	92	5	0	0	0	1	0	4	102	103.3	33	3	0	0	0	0	0	1	37	37	1	0	0	0	0	0	0	1	1	1
12:15	35	1	0	0	0	1	0	1	38	37.2	157	2	0	0	0	0	0	0	159	159	33	1	0	0	0	0	0	6	40	40	1	0	0	0	0	0	0	1	1	1
12:30	29	2	0	1	0	0	0	3	35	35.5	123	4	0	0	0	0	0	0	127	127	45	2	0	1	0	0	0	5	53	53.5	2	0	0	0	0	0	0	2	2	2
12:45	30	2	0	0	0	0	0	1	33	33	132	9	0	1	0	0	0	0	142	143	54	2	0	0	0	0	0	3	59	59	3	0	0	0	0	0	0	3	3	3
H/TOT	127	6	0	2	1	1	0	5	142	143.5	504	20	0	1	1	0	0	4	530	538	165	8	0	1	0	0	0	15	189	189.5	7	0	0	0	0	0	0	7	7	7



y Name: 256 19344 Bus Connects Route 5

Site 5-11

tion: L3020/Unnamed Road

Thu 28-Nov-2019

	D => A										D => B										D => C										D => D									
TIME	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU	CAR	LGV	M/C	OGV1	OGV2	P/C	SV(BU	TAXI	TOT	PCU
13:00	17	2	0	0	0	0	0	1	20	20	113	7	0	2	0	0	0	3	125	126	30	3	0	0	0	0	0	1	34	34	6	0	0	0	0	0	0	0	6	6
13:15	23	1	0	0	1	0	0	0	25	26.3	122	5	0	1	0	0	0	3	131	131.5	37	1	0	0	0	0	0	0	38	38	0	0	0	0	0	0	0	0	0	0
13:30	22	3	0	1	0	0	0	1	27	27.5	140	6	0	0	0	0	1	0	147	147	48	1	0	0	0	0	0	2	51	51	1	0	0	0	0	0	0	0	1	1
13:45	20	1	0	0	0	0	0	0	21	21	153	6	0	0	0	0	0	0	159	159	36	2	0	0	0	0	0	2	40	40	0	1	0	0	0	0	0	0	1	1
H/TOT	82	7	0	1	1	0	0	2	93	94.8	528	24	0	3	0	0	1	6	562	563.5	151	7	0	0	0	0	0	5	163	163	7	1	0	0	0	0	0	0	8	8
14:00	31	3	1	0	0	0	0	1	36	35.4	121	7	0	3	0	0	0	1	132	133.5	39	1	0	0	0	0	0	1	41	41	2	0	0	0	0	0	0	0	2	2
14:15	26	0	0	0	0	0	0	1	27	27	113	4	0	4	2	0	0	0	123	127.6	47	3	0	0	0	0	0	3	53	53	2	0	0	0	0	0	0	0	2	2
14:30	26	2	0	0	1	0	0	0	29	30.3	120	8	0	0	0	0	0	0	128	128	43	1	0	0	0	0	0	4	48	48	2	0	0	0	0	0	0	0	2	2
14:45	21	2	0	0	0	0	0	0	23	23	97	6	0	0	0	0	0	0	103	103	58	2	0	1	0	0	0	0	61	61.5	3	0	0	0	0	0	0	0	3	3
H/TOT	104	7	1	0	1	0	0	2	115	115.7	451	25	0	7	2	0	0	1	486	492.1	187	7	0	1	0	0	0	8	203	203.5	9	0	0	0	0	0	0	0	9	9
15:00	32	0	0	0	0	0	0	1	33	33	140	4	0	1	0	1	0	1	147	146.7	42	3	0	0	0	0	0	0	45	45	1	0	0	0	0	0	0	0	1	1
15:15	21	1	0	1	0	0	0	2	25	25.5	148	6	0	0	0	0	0	6	160	160	32	2	0	1	0	0	0	4	39	39.5	0	0	0	0	0	0	0	0	0	0
15:30	28	3	0	0	1	0	0	0	32	33.3	135	2	0	0	0	0	0	7	144	144	34	3	0	0	0	0	0	1	38	38	0	0	0	0	0	0	0	0	0	0
15:45	35	0	0	0	0	0	0	0	35	35	130	8	0	1	0	0	1	2	142	142.5	30	2	0	0	0	0	0	5	37	37	1	0	0	0	0	0	0	0	1	1
H/TOT	116	4	0	1	1	0	0	3	125	126.8	553	20	0	2	0	1	1	16	593	593.2	138	10	0	1	0	0	0	10	159	159.5	2	0	0	0	0	0	0	0	2	2
16:00	20	0	0	0	0	0	0	1	21	21	141	3	0	0	0	0	0	0	144	144	53	3	0	0	0	1	0	3	60	59.2	0	1	0	0	0	0	0	0	1	1
16:15	18	0	0	0	0	0	0	0	18	18	144	4	0	0	0	1	0	3	152	151.2	62	3	0	1	0	0	1	0	67	67.5	1	0	0	0	0	0	0	0	1	1
16:30	20	2	0	1	1	0	0	1	25	26.8	132	5	0	0	0	0	0	1	138	138	47	2	0	0	0	0	0	1	50	50	0	0	0	0	0	0	0	0	0	0
16:45	16	1	0	0	0	0	0	1	18	18	118	1	0	1	0	0	0	0	120	120.5	58	1	0	0	0	0	0	1	60	60	0	0	0	0	0	0	0	0	0	0
H/TOT	74	3	0	1	1	0	0	3	82	83.8	535	13	0	1	0	1	0	4	554	553.7	220	9	0	1	0	1	1	5	237	236.7	1	1	0	0	0	0	0	0	2	2
17:00	15	1	0	0	0	0	0	1	17	17	155	2	0	0	0	0	0	2	159	159	33	1	0	0	0	1	0	1	36	35.2	1	0	0	0	0	0	0	0	1	1
17:15	19	1	0	0	1	0	0	0	21	22.3	168	2	0	0	0	0	0	1	171	171	38	2	0	0	0	0	0	1	41	41	1	0	0	0	0	0	0	0	1	1
17:30	18	0	0	0	0	0	0	0	18	18	156	2	0	0	0	0	0	1	159	159	33	1	0	0	0	0	0	1	35	35	0	0	0	0	0	0	0	0	0	0
17:45	13	1	0	0	0	0	0	1	15	15	156	1	0	0	0	0	0	1	158	158	25	0	0	0	0	0	0	0	25	25	1	1	0	0	0	0	0	0	2	2
H/TOT	65	3	0	0	1	0	0	2	71	72.3	635	7	0	0	0	0	0	5	647	647	129	4	0	0	0	1	0	3	137	136.2	3	1	0	0	0	0	0	0	4	4
18:00	22	0	0	0	0	0	0	0	22	22	135	1	2	0	0	0	0	1	139	137.8	29	0	0	0	0	0	0	1	30	30	1	0	0	0	0	0	0	0	1	1
18:15	13	1	0	0	0	0	0	2	16	16	133	5	0	0	0	0	0	1	139	139	27	1	0	0	0	0	0	1	29	29	0	0	0	0	0	0	0	0	0	0
18:30	22	0	0	0	1	0	0	0	23	24.3	109	1	0	0	0	0	0	0	110	110	31	0	0	0	0	0	0	2	33	33	0	0	0	0	0	0	0	0	0	0
18:45	23	2	0	0	0	0	0	1	26	26	97	1	2	0	0	0	1	0	101	99.8	34	1	0	0	0	0	0	2	37	37	1	0	0	0	0	0	0	0	1	1
H/TOT	80	3	0	0	1	0	0	3	87	88.3	474	8	4	0	0	0	1	2	489	486.6	121	2	0	0	0	0	0	6	129	129	2	0	0	0	0	0	0	0	2	2
19:00	20	1	0	0	0	0	0	0	21	21	100	1	0	0	0	0	0	0	101	101	29	2	0	0	0	0	0	3	34	34	3	0	0	0	0	0	0	0	3	3
19:15	17	1	0	0	0	0	0	1	19	19	105	3	0	0	0	0	0	0	108	108	21	0	0	0	0	0	0	1	22	22	0	0	0	0	0	0	0	0	0	0
19:30	12	0	0	0	1	0	0	0	13	14.3	128	4	0	0	0	0	0	1	133	133	30	1	0	0	0	0	0	3	34	34	1	1	0	0	0	0	0	0	2	2
19:45	13	3	0	0	0	0	0	0	16	16	123	4	0	0	0	0	0	0	127	127	28	1	0	0	0	0	0	0	29	29	2	0	0	0	0	0	0	0	2	2
H/TOT	62	5	0	0	1	0	0	1	69	70.3	456	12	0	0	0	0	0	1	469	469	108	4	0	0	0	0	0	7	119	119	6	1	0	0	0	0	0	0	7	7
20:00	9	1	0	0	0	0	0	0	10	10	119	5	0	1	0	0	0	0	125	125.5	34	2	0	0	0	0	0	5	41	41	0	0	0	0	0	0	0	0	0	0
20:15	11	0	0	0	0	0	0	1	12	12	147	2	0	0	0	0	0	2	151	151	47	0	1	0	0	0	0	1	49	48.4	1	0	0	0	0	0	0	0	1	1
20:30	15	0	0	0	0	0	0	1	16	16	122	1	0	0	0	0	0	1	124	124	39	1	0	0	0	0	0	1	41	41	0	0	0	0	0	0	0	0	0	0
20:45	8	0	0	0	1	0	0	0	9	10.3	151	1	0	0	0	0	0	0	152	152	48	0	0	0	0	0	0	2	50	50	1	0	0	0	0	0	0	0	1	1
H/TOT	43	1	0	0	1	0	0	2	47	48.3	539	9	0	1	0	0	0	3	552	552.5	168	3	1	0	0	0	0	9	181	180.4	2	0	0	0	0	0	0	0	2	2
21:00	9	0	0	0	0	0	0	0	9	9	208	1	0	0	0	0	0	0	209	209	38	1	0	0	0	0	0	2	41	41	0	0	0	0	0	0	0	0	0	0
21:15	6	0	0	0	0	0	0	0	6	6	117	2	0	0	0	0	1	0	120	120	29	2	0	0	0	0	1	0	32	32	0	0	0	0	0	0	0	0	0	0
21:30	2	0	0	0	0	0	0	1	3	3	52	1	0	0	0	1	0	2	56	55.2	12	0	0	0	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0
21:45	6	0	0	0	0	0	0	0	6	6	44	0	0	0	0	1	0	1	46	45.2	14	0	0	0	0	0	0	1	15	15	0	0	0	0	0	0	0	0	0	0
H/TOT	23	0	0	0	0	0	0	1	24	24	421	4	0	0	0	2	1	3	431	429.4	93	3	0	0	0	0	1	3	100	100	0	0	0	0	0	0	0	0	0	0
22:00	2	0	0	0	0	0	0	0	2	2	36	1	0	0	0	0	0	2	39	39	16	0	0	0	0	0	0	1	17	17	0	0	0	0	0	0	0	0	0	0
22:15	4	0	0	0	0	0	0	0	4	4	19	1	0	0	0	0	0	0	20	20	13	0	0	0	0	0	0	1	14	14	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	24	1	0	0	0	0	0	0	25	25	13	0	0	0	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0
22:45	2	0	0	0	0	1	0	1	4	3.2	12	1	0	0	1	0	0	0	14	15.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	8	0	0	0	0	1	0	1	10	9.2	91	4	0	0	1	0	0	2	98	99.3	42	0	0	0	0	0	0	2	44	44	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	1	1	0	0	0	0	0	0	2	2	6	0	0	0	1	0	0	1	8	9.3	3	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
23:30	1	0	0	0	0	0	0	0	1	1	5	0	0	0	0	0	0	1	6	6	4	0	0	0	0	0	0	1	5	5	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	2	1	0	0	0	0	0	0	3	3	19	0	0	0	1	0	0	2	22	23.3	8	0	0	0	0	0	0	1	9	9	0	0	0	0	0	0	0	0	0	0
24 TOT	1161	69	1	20	11	7	0	43	1312	1330	6416	241	7	45	13	11	6	97	6836	6862	2018	89	1	13	2	3	2	106	2234	2240	45	5	0	1	0	0	0	0	51	51.5



iDASO

Survey Name : ISM 13568 Sat Connect5 Week 5

Site : Site 5 20

Location : Unnamed Road

Date : Thu 19/Nov/2020

	A -> A								A -> B								A -> C								A -> D							
TIME	P/SM/CCAR	TAXI	LGV		HGV1	HGV2	V/BUS	TOT	PED	P/SM/CCAR	TAXI	LGV		HGV1	HGV2	V/BUS	TOT	PED	P/SM/CCAR	TAXI	LGV		HGV1	HGV2	V/BUS	TOT	PED	P/SM/CCAR	TAXI	LGV		HGV1	HGV2	V/BUS	TOT	PED
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12:45																																
H/TOT																																



IDAS©

Survey Name: ITAS 28/44 Bus Connects Route 1

Site: Site 138

Location: Unnamed Road

Date: Thu 28/Nov/2013

	A => A									A => B										A => C										A => D									
TIME	P/C	M/C	CAR	TAXI	LGV	HGV1	HGV2	HGV3	HGV4	P/C	M/C	CAR	TAXI	LGV	HGV1	HGV2	HGV3	HGV4		P/C	M/C	CAR	TAXI	LGV	HGV1	HGV2	HGV3	HGV4		P/C	M/C	CAR	TAXI	LGV	HGV1	HGV2	HGV3	HGV4	
13:00	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	0	8	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	11	0	2	0	0	0	0	13	0	0	4	0	1	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	1
13:30	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	1
13:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	3	0	1	0	0	0	0	4	0	0	0	1	2	0	0	1	0	0	0	4
H/TOT	0	0	0	0	0	0	0	0	0	0	0	28	0	3	0	0	0	0	30	0	0	14	0	2	0	0	0	0	16	0	0	0	2	3	0	0	1	0	0	0	6
14:00	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7	0	0	3	0	1	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	1
14:15	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	6	0	0	1	1	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	2
14:30	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	0	0	4	0	0	0	1	0	0	5	0	0	1	0	0	0	0	0	0	0	0	1
14:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	22	2	1	0	0	0	0	25	0	0	10	1	1	0	1	0	0	13	0	0	2	0	2	0	0	0	0	0	0	3
15:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
15:30	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	1	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	31	0	1	0	1	0	0	33	0	0	5	0	0	0	0	0	0	5	0	0	2	1	0	0	0	0	0	0	0	3
16:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0	2	0	1	0	0	0	0	3	0	0	2	0	0	0	0	0	0	0	0	2
16:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10	0	0	3	0	1	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	21	1	0	0	0	0	0	22	0	0	8	0	1	0	0	0	0	9	0	0	3	0	0	0	0	0	0	0	0	3
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17:15	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9	0	0	6	0	0	0	0	0	0	6	0	0	3	0	0	0	0	0	0	0	0	3
17:30	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10	0	0	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	13	1	0	0	0	0	0	14	0	0	2	1	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	38	5	1	0	0	0	0	44	0	0	18	2	0	0	0	0	0	20	0	0	6	0	0	0	0	0	0	0	0	6
18:00	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13	0	0	2	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	1
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	44	0	0	0	0	0	0	44	0	0	5	0	0	0	0	0	0	5	0	0	0	2	0	0	0	0	0	0	0	2
19:00	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	0	0	3	0	0	0	0	0	0	3	0	0	1	1	0	0	0	0	0	0	0	2
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19:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	25	1	0	0	0	0	0	26	0	0	9	0	0	0	0	0	0	9	0	0	4	0	0	0	0	0	0	0	0	4
20:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
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20:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	12	0	0	12	2	1	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	28	2	0	0	0	0	0	30	0	0	12	1	0	0	0	0	0	13	0	0	1	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	0	0	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
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23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
24:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT	0	0	0	0	0	0	0	0	0	0	0	266	16	6	0	1	0	0	289	0	0	106	5	3	0	1	0	0	115	0	0	24	3	5	0	0	2	0	0	0	34



IDAS

Survey Name 756_17544 Bus Junction Report 1

Site A14 S/B

Location Huntingdon Road

Date Thu 23 Nov 17 15

	A -> A												A -> B												A -> C												A -> D											
TIME	PC	M/C	CAR	TAX	LGV	HGV1	HGV2	HGV3	V1B		TOT	PC	M/C	CAR	TAX	LGV	HGV1	HGV2	HGV3	V1B		TOT	PC	M/C	CAR	TAX	LGV	HGV1	HGV2	HGV3	V1B		TOT	PC	M/C	CAR	TAX	LGV	HGV1	HGV2	HGV3	V1B		TOT
00:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
00:15	1	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
00:30	0	0	1	0	0	0	0	0	0		1	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
00:45	0	1	1	0	0	0	0	0	0		2	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	1	2	0	0	0	0	0	0		3	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
01:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
01:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
01:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
01:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
02:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
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02:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
02:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
03:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
03:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
03:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
03:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
04:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
04:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
04:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
04:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
05:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
05:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
05:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
05:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
06:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
06:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
06:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
06:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
07:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
07:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
07:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
07:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
08:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
08:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
08:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
08:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
09:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
09:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
09:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
09:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
10:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
10:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
10:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
10:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
11:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
11:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
11:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
11:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
12:00	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
12:15	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
12:30	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
12:45	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0
H/TOT	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0



IDASO

Survey Name	250-10944-Sept Comments Rawtn 1
Site	Site 5.00
Location	Liverpool Road
Date	Thu, 22Nov-2012

	A >> B								B >> A								A >> C								C >> A							
TIME	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V1BUS	TOT	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V1BUS	TOT	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V1BUS	TOT	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V1BUS	TOT
13:00	0	0	4	0	1	0	0	5	0	0	3	0	0	0	0	3	1	0	63	2	1	0	1	1	70	0	0	4	0	0	0	1	5
13:15	0	0	5	0	0	0	0	5	0	0	3	0	0	0	0	3	0	0	75	4	3	1	0	1	84	0	0	3	2	0	0	0	5
13:30	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3	0	0	71	3	0	1	0	0	81	0	0	3	0	0	0	1	4
13:45	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	2	2	0	70	2	0	0	0	0	80	0	0	1	3	0	0	1	5
H/TOT	0	0	13	0	1	0	0	14	0	0	11	0	0	0	0	11	3	0	353	11	10	2	1	3	380	0	0	11	5	0	0	3	19
14:00	0	0	4	0	0	0	0	4	0	0	3	0	0	0	0	3	0	0	67	4	0	0	0	0	75	0	0	0	0	0	0	0	0
14:15	0	0	4	0	0	0	0	4	0	0	4	0	0	0	0	4	0	0	79	3	3	1	0	1	87	0	0	2	0	0	0	1	3
14:30	0	0	3	1	0	0	0	4	0	0	5	0	0	0	0	5	0	0	67	1	1	0	0	1	71	0	0	1	0	0	0	0	1
14:45	0	0	1	0	0	1	0	2	0	0	5	0	0	0	0	5	0	0	79	1	1	0	0	1	87	0	0	0	1	0	0	1	2
H/TOT	0	0	12	1	0	1	0	14	0	0	17	0	0	0	0	17	0	0	292	9	4	1	0	3	320	0	0	3	0	0	0	2	6
15:00	0	0	6	0	0	0	0	6	0	0	2	0	0	0	0	2	0	0	67	3	0	0	0	0	70	0	0	1	0	0	0	0	1
15:15	0	0	7	0	0	0	0	7	0	0	2	0	0	0	0	2	1	0	61	1	4	0	0	2	69	0	0	1	2	0	0	0	3
15:30	0	0	2	0	1	0	0	3	0	0	1	0	0	0	0	1	1	0	66	1	4	0	0	0	72	0	0	1	2	0	0	1	4
15:45	1	0	0	0	1	0	0	2	0	0	2	0	1	0	0	3	1	0	68	0	3	1	0	0	73	0	0	3	0	0	0	2	5
H/TOT	1	0	15	0	2	0	0	18	0	0	7	0	1	0	0	8	3	0	262	5	11	1	0	2	284	0	0	6	4	0	0	3	13
16:00	0	0	5	0	0	0	0	5	0	0	7	0	0	0	0	7	0	1	86	0	3	0	1	1	91	0	0	2	0	0	0	0	2
16:15	0	0	4	0	0	0	0	4	0	0	5	0	0	1	0	6	0	0	58	2	4	0	0	3	67	1	0	3	0	0	0	0	4
16:30	0	0	5	0	1	0	0	6	0	0	3	0	1	0	0	4	2	1	72	2	3	1	2	1	84	0	0	4	3	0	0	1	8
16:45	0	0	4	1	0	0	0	5	0	0	2	0	0	0	0	2	0	1	67	1	0	0	0	2	71	0	0	2	1	0	0	1	4
H/TOT	0	0	18	1	1	0	0	20	0	0	17	0	1	1	0	19	2	3	283	5	10	1	3	7	313	1	0	11	4	0	0	2	18
17:00	0	0	9	4	0	0	0	13	0	0	2	0	0	0	0	2	2	1	57	1	4	0	0	3	68	0	0	4	0	0	0	0	4
17:15	0	0	8	2	0	0	0	10	0	0	1	0	0	0	0	1	1	0	67	1	5	2	0	1	76	1	0	1	5	0	1	0	8
17:30	0	0	14	0	1	0	0	15	0	0	0	0	0	0	0	0	2	0	76	5	5	0	0	0	87	0	0	5	2	0	0	0	7
17:45	0	0	9	1	0	0	0	10	0	0	0	0	0	0	0	0	1	0	57	0	5	0	1	0	70	0	0	0	0	0	0	1	1
H/TOT	0	0	40	7	1	0	0	48	0	0	3	0	0	0	0	3	5	1	257	7	19	2	1	4	301	1	0	10	7	0	1	1	20
18:00	0	0	11	0	0	0	0	11	0	0	3	0	0	0	0	3	0	0	76	1	2	0	0	2	81	0	0	4	0	0	0	0	4
18:15	0	0	10	0	1	0	0	11	0	0	3	0	0	0	0	3	0	0	75	1	2	0	0	2	80	0	0	4	0	0	0	0	4
18:30	0	0	11	1	0	0	0	12	0	0	2	0	0	0	0	2	1	0	72	1	2	0	1	1	80	0	0	4	0	0	0	0	4
18:45	0	0	7	1	0	0	0	8	0	0	2	0	0	0	0	2	0	0	81	4	0	0	0	0	85	0	0	3	0	0	0	0	3
H/TOT	1	0	39	2	1	0	0	43	0	0	10	0	0	0	0	10	1	0	299	6	6	0	1	5	326	0	0	15	0	0	0	0	15
19:00	0	0	3	1	0	0	0	4	0	0	3	0	0	0	0	3	0	0	75	0	2	0	1	1	84	1	0	1	0	0	0	1	3
19:15	0	0	6	1	0	0	0	7	0	0	1	0	0	0	0	1	1	0	84	2	4	0	0	7	93	0	0	0	0	0	0	1	1
19:30	0	0	10	1	0	0	0	11	0	0	2	0	0	0	0	2	0	1	79	0	1	1	1	1	84	0	0	5	0	0	0	0	5
19:45	0	0	5	1	0	0	0	6	0	0	2	0	0	0	0	2	0	0	69	1	3	0	1	0	74	0	0	3	0	0	0	1	4
H/TOT	0	0	24	4	0	0	0	28	0	0	8	0	0	0	0	8	1	1	311	3	10	1	3	9	335	1	0	9	1	0	0	3	13
20:00	0	0	1	0	1	0	0	2	0	0	2	0	0	0	0	2	0	0	72	3	4	0	0	1	80	0	0	0	0	0	0	1	1
20:15	0	0	5	0	0	0	0	5	0	0	2	1	0	0	0	3	0	1	76	2	2	0	0	2	86	0	0	0	0	0	0	1	1
20:30	0	1	5	0	0	0	0	6	0	0	2	0	0	0	0	2	0	0	58	2	3	0	0	1	64	0	0	1	0	0	0	0	1
20:45	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	2	1	0	71	0	1	0	0	1	73	0	0	2	1	0	0	1	4
H/TOT	0	1	13	0	1	0	0	15	0	0	8	1	0	0	0	9	1	1	277	7	10	0	0	5	303	0	0	3	1	0	0	3	7
21:00	0	0	4	0	0	0	0	4	0	0	3	1	0	0	0	4	0	0	101	1	4	1	0	1	108	0	0	0	0	0	0	0	0
21:15	0	0	5	0	0	0	0	5	0	0	2	0	0	0	0	2	0	0	45	1	1	0	0	2	49	0	0	0	0	0	0	1	1
21:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	27	2	0	1	0	1	31	0	0	4	0	0	0	0	4
21:45	0	2	2	0	0	0	0	4	0	0	1	0	0	0	0	1	0	0	21	2	0	0	0	1	24	0	0	0	0	0	0	0	0
H/TOT	1	2	11	0	0	0	0	14	0	0	6	1	0	0	0	7	0	0	194	6	5	2	0	4	211	0	0	4	0	0	0	1	5
22:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	20	0	0	0	0	1	21	0	0	2	0	0	0	0	2
22:15	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	2	9	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	6	0	0	0	0	0	6	0	0	0	0	0	0	1	1
22:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	0	0	1	0	0	0	0	1
H/TOT	0	0	2	0	1	1	0	4	0	0	3	0	0	0	0	3	0	0	38	2	0	0	0	3	43	0	0	3	0	0	0	1	4
23:00	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	0	0	1	0	0	0	0	1
23:15	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1	0	0	3	0	1	0	0	2	6	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1	0	0	10	1	1	0	0	2	14	0	0	1	0	0	0	0	1
24 TOT	3	3	202	18	10	2	0	238	0	0	126	4	1	1	0	132	15	8	3798	111	122	14	11	82	4166	15	1	111	30	4	0	36	197



IDASO

Survey Name: 24037344 Bus Connects Route 5

Site: Site 548

Location: Unnamed Road

Date: Thu 19/Nov/2020

	A => A									A => B										A => C										A => D									
TIME	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	V/RIG	TOT	PED	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	V/RIG	TOT	PED	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	V/RIG	TOT	PED	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	V/RIG	TOT	PED
00:00	0	0	0	1	0	0	0	1	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	0	1	0	0	9	2	0	1	0	0	12	0	0	1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



ID4 SO

Survey Name: 256 19344 Dual Comments Route 5

Site: Site 330

Location: Unnamed Road

Date: Thu 23Nov2023

	E => A										E => B										E => C										E => D									
TIME	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	HGV3	VIBC	TOT	PCU	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	HGV3	VIBC	TOT	PCU	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	HGV3	VIBC	TOT	PCU	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	HGV3	VIBC	TOT	PCU
13:00	0	0	0	0	0	0	0	0	0	0	0	0	78	0	5	0	0	1	84	84	0	0	2	1	0	0	0	0	3	3	1	0	10	1	1	0	0	1	13	16
13:15	0	0	4	0	0	0	0	0	4	4	0	0	93	2	5	0	0	0	100	100	0	0	2	0	0	0	0	0	2	2	0	0	14	1	0	0	0	0	15	20
13:30	0	0	3	0	0	0	0	0	3	3	0	0	122	2	5	0	1	1	131	131	0	0	3	0	0	0	0	0	3	3	0	0	7	3	1	0	0	1	12	19
13:45	0	0	5	1	2	0	0	0	8	8	0	0	186	1	2	0	0	0	189	189	0	0	2	0	0	0	0	0	2	2	0	0	6	1	1	0	0	0	8	12
H/TOT	0	0	12	1	2	0	0	0	15	15	0	0	479	5	17	0	1	2	504	504	0	0	9	1	0	0	0	0	10	10	1	0	37	5	3	0	0	2	48	67
14:00	0	0	0	0	0	0	0	0	0	0	0	0	116	3	3	0	0	1	123	123	0	0	3	1	0	0	0	0	4	4	0	0	8	2	0	0	0	0	10	14
14:15	0	0	2	0	0	0	0	0	2	2	0	0	96	0	5	1	0	0	102	102	0	0	3	0	1	0	0	0	4	4	0	0	6	2	1	0	0	0	9	13
14:30	0	0	2	1	0	0	0	0	3	3	0	0	107	1	5	0	1	0	114	114	0	0	0	1	0	0	0	0	1	1	0	0	8	1	0	0	0	0	9	10
14:45	0	0	2	2	0	0	0	0	4	4	0	0	91	1	4	0	0	2	98	98	0	0	3	0	0	0	0	0	3	3	0	0	1	1	0	0	0	0	2	5
H/TOT	0	0	6	3	0	0	0	0	9	9	0	0	410	5	18	1	1	3	436	436	0	0	9	2	1	0	0	0	12	12	0	0	23	5	1	0	0	0	29	42
15:00	0	0	0	0	0	0	0	0	0	0	0	0	109	10	2	0	0	1	122	122	0	0	5	0	0	0	0	0	5	5	0	0	6	1	0	0	0	0	7	10
15:15	0	0	0	0	0	0	0	0	0	0	0	1	124	4	6	0	0	0	135	135	0	0	0	1	0	0	0	0	1	1	0	0	1	0	1	0	0	0	2	3
15:30	0	0	3	2	0	0	0	0	5	5	0	0	87	4	4	0	0	2	97	97	0	0	5	0	0	0	0	0	5	5	0	0	7	0	1	0	0	0	8	13
15:45	0	0	1	1	0	0	0	0	2	2	0	0	111	1	1	0	0	0	113	113	0	0	3	0	0	0	0	0	3	3	0	0	5	0	0	0	0	0	5	7
H/TOT	0	0	4	3	0	0	0	0	7	7	0	1	431	19	13	0	0	3	467	467	0	0	13	1	0	0	0	0	14	14	0	0	19	1	1	0	0	0	22	33
16:00	0	0	4	0	0	0	0	0	4	4	0	0	135	4	5	0	0	1	145	145	0	0	0	0	0	0	0	0	0	0	1	0	6	1	0	0	0	0	8	11
16:15	0	0	0	2	0	0	0	0	2	2	0	0	126	1	4	0	1	0	134	134	0	0	0	0	0	1	0	0	1	1	0	0	4	0	0	0	0	0	4	5
16:30	0	0	1	3	0	0	0	0	4	4	0	0	82	0	2	1	0	0	85	85	0	0	2	0	0	0	0	0	2	2	0	0	0	1	0	0	0	0	1	7
16:45	0	0	5	0	0	0	0	0	5	5	0	0	99	3	6	0	0	1	109	109	0	0	1	0	0	0	0	0	1	1	0	0	7	1	0	0	0	0	8	14
H/TOT	0	0	10	5	0	0	0	0	15	15	0	0	442	8	17	1	1	2	473	473	0	0	3	0	0	1	0	0	4	4	0	0	25	3	0	0	0	0	28	37
17:00	0	0	2	0	1	0	0	0	3	3	1	0	90	2	6	0	1	1	101	101	0	0	3	0	0	0	0	0	3	3	0	0	12	0	0	0	0	0	12	15
17:15	0	0	0	2	0	0	0	0	2	2	0	0	66	0	2	0	0	2	70	70	0	0	1	0	0	0	0	0	1	1	0	0	16	0	1	0	0	0	17	20
17:30	0	0	0	0	0	0	0	0	0	0	0	0	68	1	4	0	1	0	74	74	0	0	0	0	1	0	0	0	1	1	0	0	2	0	1	0	0	0	3	4
17:45	0	0	0	0	0	1	0	0	1	1	0	0	98	2	2	0	0	1	103	103	0	0	1	0	0	0	0	0	1	1	0	0	6	1	0	0	0	0	7	9
H/TOT	0	0	2	2	1	1	0	0	6	6	1	0	322	5	14	0	2	4	348	348	0	0	5	0	1	0	0	0	6	6	0	0	36	2	2	0	0	0	40	48
18:00	0	0	1	0	0	0	0	0	1	1	0	0	106	1	5	0	0	1	113	113	0	0	4	0	1	0	0	0	5	5	0	0	1	0	0	0	0	0	1	7
18:15	0	0	5	2	0	0	0	0	7	7	0	0	101	0	4	0	0	1	106	106	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8
18:30	0	0	5	0	0	0	0	0	5	5	0	0	92	3	5	0	0	1	101	101	0	0	3	1	0	0	0	0	4	4	0	0	3	1	0	0	0	0	4	9
18:45	0	0	5	4	0	0	0	0	9	9	0	0	82	0	3	0	0	2	87	87	0	0	3	0	1	0	0	0	4	4	0	0	3	0	1	0	0	0	4	13
H/TOT	0	0	16	6	0	0	0	0	22	22	0	0	381	4	17	0	0	5	407	407	0	0	10	1	2	0	0	0	13	13	0	0	8	1	1	0	0	0	10	45
19:00	0	0	6	0	0	0	0	0	6	6	1	0	100	4	5	0	0	1	111	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
19:15	0	0	2	2	0	0	0	0	4	4	0	0	96	1	2	0	1	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	0	9	13
19:30	0	0	0	0	0	0	0	0	0	0	0	0	96	2	2	1	1	1	103	103	0	0	3	0	0	0	0	0	3	3	0	0	4	2	0	0	0	0	6	9
19:45	0	0	0	0	0	0	0	0	0	0	0	0	87	1	2	1	0	0	91	91	0	0	2	1	0	0	0	0	3	3	0	0	4	1	0	0	0	0	5	8
H/TOT	0	0	8	2	1	0	0	0	10	10	1	0	379	8	11	2	2	2	405	405	0	0	5	1	0	0	0	0	6	6	0	0	20	3	1	0	0	0	24	36
20:00	0	0	1	1	0	0	0	0	2	2	0	0	122	1	5	0	0	1	129	129	0	0	3	0	0	0	0	0	3	3	0	0	6	0	0	0	0	0	6	11
20:15	0	0	0	0	1	0	0	0	1	1	0	0	126	0	4	0	0	0	130	130	0	0	2	0	0	0	0	0	2	2	0	0	11	0	1	0	0	0	12	15
20:30	0	0	2	1	0	0	0	0	3	3	0	0	117	2	2	0	0	1	122	122	0	0	1	0	0	0	0	0	1	1	0	0	7	3	1	0	0	0	11	15
20:45	0	0	2	2	0	0	0	0	4	4	0	0	90	1	3	0	0	0	94	94	0	0	3	1	0	0	0	0	4	4	0	0	4	2	0	0	0	0	6	10
H/TOT	0	0	5	4	1	0	0	0	10	10	0	0	455	4	14	0	0	2	475	475	0	0	9	1	0	0	0	0	10	10	0	0	28	5	2	0	0	0	35	51
21:00	0	0	0	1	0	0	0	0	1	1	0	1	51	2	0	0	0	0	54	54	0	0	2	0	0	1	0	0	3	3	0	0	15	3	0	0	0	3	21	25
21:15	0	0	5	3	0	0	0	0	8	8	0	0	35	1	3	1	0	0	40	40	0	0	2	0	0	0	0	0	2	2	0	0	13	0	0	0	0	2	15	25
21:30	0	2	4	2	0	0	0	0	8	8	0	0	27	2	3	0	1	2	35	35	0	0	4	1	0	0	0	0	5	5	0	0	2	1	0	0	0	0	3	16
21:45	0	2	1	2	0	0	0	0	5	5	0	0	47	1	3	0	0	0	51	51	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	6
H/TOT	0	4	10	8	0	0	0	0	22	22	0	1	160	6	9	1	1	2	180	180	0	0	8	1	0	1	0	0	10	10	0	0	31	4	0	0	0	5	40	72
22:00	0	0	1	1	0	0	0	0	2	2	0	0	29	1	1	0	0	0	31	31	0	0	1	0	0	0	0	0	1	1	0	0	3	0	0	0	0	0	3	6
22:15	0	0	0	1	0	0	0	0	1	1	0	0	20	1	0	0	0	1	22	22	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
22:30	0	0	2	0	0	0	0	0	2	2	0	0	18	0	0	0	0	1	19	19	0	0	3	1	0	0	0	0	4	4	0	0	1	0	0	0	0	0	1	7
22:45	0	0	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	3	2	0	0	0	0	5	5	0	0	82	3	1	0	1	2	89	89	0	0	5	1	0	0	0	0	6	6	0	0	5	0	0	0	0	0	5	16
23:00	0	0	0	0	0	0	0	0	0	0	0	0	52	1	0	0	0	0	53	53	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
23:15	0	0	1	0	0	0	0	0	1	1	0	0	41	0	0	0	0	0	41	41	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
23:30	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	1	41	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	1	2	0	0	0	0	3	3	0	0	35	0	0	0	0	0	35	35	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
H/TOT	0	0	2	2	0	0	0	0	4	4	0	0	168	1	0	0	0	1	170	170	0	0	1	0	0	0	0	0	1	1	0	0	3	0	0	0	0	0	3	8
24 TOT	4	5	133	67	15	1	1	1	226	226	2	5	3010	136	300	21	10	75	3559	3559	0	0	113	22	13	7	1	4	160	160	3	1	282	47	21	1	1	7	363	909



Survey Name : [illegible]

Site : [illegible]

Location : [illegible]

Date : [illegible]

TIME	A -> A		A -> B		A -> C		A -> D	
	P/M/C/CAR TAXI LGV HGV1 HGV2 V1	PED	P/M/C/CAR TAXI LGV HGV1 HGV2 V2	PED	P/M/C/CAR TAXI LGV HGV1 HGV2 V1B	PED	P/M/C/CAR TAXI LGV HGV1 HGV2 V1B	PED
00:00	0 0 0 0 2 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 2 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
00:15	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 3 0 0 0 0 1	0	0 0 0 0 0 0 0 0 0	0
00:30	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 2 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
00:45	0 0 1 0 0 0 0 0 0	1	0 0 1 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 1 0 2 0 0 0 0	1	0 0 1 0 0 0 0 0 0	0	0 0 0 5 0 0 0 0 1	0	0 0 0 0 0 0 0 0 0	0
01:00	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
01:15	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
01:30	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
01:45	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
02:00	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
02:15	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
02:30	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
02:45	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
03:00	0 0 1 0 0 0 0 0 0	1	0 0 0 0 1 0 0 0 0	1	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
03:15	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
03:30	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
03:45	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 1 0 0 0 0 0 0	1	0 0 0 0 1 0 0 0 0	1	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
04:00	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
04:15	0 0 0 1 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
04:30	0 0 1 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
04:45	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 1 1 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
05:00	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
05:15	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
05:30	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
05:45	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
06:00	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
06:15	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
06:30	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
06:45	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
07:00	0 0 0 1 1 0 0 0 0	0	0 0 0 0 2 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
07:15	0 0 1 0 0 0 0 0 0	0	0 0 0 0 4 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
07:30	0 0 1 1 1 0 0 0 0	0	0 0 0 0 3 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
07:45	0 0 3 0 0 0 0 0 0	0	0 0 0 0 10 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 5 2 0 0 0 0 0	0	0 0 0 0 19 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
08:00	0 0 5 2 0 0 0 0 0	0	0 0 0 0 9 1 1 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
08:15	0 0 3 2 0 0 0 0 0	0	0 0 0 0 11 0 0 0 0	0	0 0 0 25 2 3 0 0 0	0	0 0 0 0 0 0 0 0 0	0
08:30	0 0 2 1 1 0 0 0 0	0	0 0 0 0 36 4 4 0 0	0	0 0 0 18 1 4 0 0 0	0	0 0 0 0 0 0 0 0 0	0
08:45	0 0 0 2 0 0 0 0 0	0	0 0 0 0 18 4 4 0 0	0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 10 7 1 0 0 0 0	0	0 0 0 0 74 9 9 0 0	0	0 0 0 43 3 7 0 0 0	0	0 0 0 0 0 0 0 0 0	0
09:00	0 0 2 2 0 0 0 0 0	0	0 0 0 0 61	0	0 0 0 33 3	0	0 0 0 0 0 0 0 0 0	0
09:15	0 0 2 2 0 0 0 0 0	0	0 0 0 1 77 2 0 0 0	0	0 0 0 42 4 5 1 0 2	0	0 0 0 0 0 0 0 0 0	0
09:30	0 0 1 1 0 0 0 0 0	0	0 0 0 1 71 3 3 2 0	0	0 0 0 28 1 6 0 0 1	0	0 0 0 0 0 0 0 0 0	0
09:45	0 0 0 4 0 0 0 0 0	0	0 0 0 0 58 4 4 0 0	0	0 0 0 47 1 1 0 0 1	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 5 9 0 0 0 0 0	0	0 0 0 2 277 13 8 2 0	0	0 0 0 150 9 12 1 0 4	0	0 0 0 0 0 0 0 0 0	0
10:00	0 0 0 2 1 0 0 0 0	0	0 0 0 0 47 0 4 0 0	0	0 0 0 53 3 0 1 0 4	0	0 0 0 0 0 0 0 0 0	0
10:15	0 0 0 0 0 0 0 0 0	0	0 0 0 0 58 1 0 0 0	0	0 0 0 38 3 1 2 0 3	0	0 0 0 0 0 0 0 0 0	0
10:30	0 0 5 3 0 1 0 0 0	0	0 0 0 0 68 0 2 0 0	0	0 0 0 51 2 1 1 0 2	0	0 0 0 0 0 0 0 0 0	0
10:45	0 0 4 2 1 0 0 0 0	0	0 0 0 0 96 3 4 0 0	0	0 0 0 42 1 4 0 0 4	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 9 7 2 1 0 0 0	0	0 0 0 0 269 4 10 0 0	0	0 0 0 184 9 6 4 0 11	0	0 0 0 0 0 0 0 0 0	0
11:00	0 0 0 3 1 0 1 0 0	0	0 0 0 0 54 2 5 1 0	0	0 0 0 45 0 2 0 0 4	0	0 0 0 0 0 0 0 0 0	0
11:15	0 0 0 1 0 0 0 0 0	0	0 0 0 0 53 2 1 0 0	0	0 0 0 36 2 1 1 1 1	0	0 0 0 0 0 0 0 0 0	0
11:30	0 0 0 1 2 0 0 0 0	0	0 0 0 0 48 2 2 0 0	0	0 0 0 34 2 0 0 0 5	0	0 0 0 0 0 0 0 0 0	0
11:45	0 0 0 12 0 0 0 0 0	0	0 0 0 0 42 1 0 0 0	0	0 0 0 47 1 3 0 0 0	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 0 17 3 0 1 0 0	0	0 0 0 0 197 7 8 1 0	0	0 0 0 162 5 6 1 0 10	0	0 0 0 0 0 0 0 0 0	0
12:00	0 0 0 18 0 0 0 0 0	0	0 0 0 0 60 1	0	0 0 0 55 2 4 0 0 4	0	0 0 0 0 0 0 0 0 0	0
12:15	0 0 0 20 1 0 1 0 0	0	0 0 0 0 46 2 5 0 0 0	0	0 0 0 57 0 1 1 0 0	0	0 0 0 0 0 0 0 0 0	0
12:30	0 0 0 9 2 1 0 1 0	0	0 0 0 0 34 0 7 0 1 0	0	0 0 0 46 1 1 3 0 2	0	0 0 0 0 0 0 0 0 0	0
12:45	0 0 0 4 0 0 0 0 0	0	0 0 0 0 59 1 2 1 0 0	0	0 0 0 55 0 1 1 0 4	0	0 0 0 0 0 0 0 0 0	0
H/TOT	0 0 0 51 3 1 1 1 0	0	0 0 0 0 199 4 14 1 1 0	0	0 0 0 213 3 7 5 0 10	0	0 0 0 0 0 0 0 0 0	0



IDASO

Survey Name: 250 18044 Bus Connects Route 5

Site: Site 538

Location: Unnamed Road

Date: Thu 23Nov2018

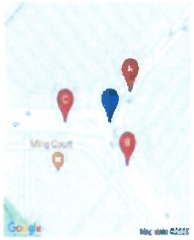
	D => A										D => B										D => C										D => D									
TIME	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	WIBUS	TOT	PCU	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	WIBUS	TOT	PCU	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	WIBUS	TOT	PCU	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	WIBUS	TOT	PCU
13:00	0	0	11	0	0	1	0	12	13	0	0	46	0	4	0	0	1	51	52	0	0	49	4	5	0	0	2	60	60	0	0	0	0	0	0	1	1	1
13:15	0	0	7	2	1	0	0	10	10	0	0	37	1	5	0	0	0	43	43	0	0	50	4	5	0	0	0	59	59	0	0	0	0	0	0	1	1	1
13:30	0	0	5	0	0	0	0	6	6	0	0	39	4	2	0	0	0	45	45	0	0	42	1	2	1	0	5	51	51	0	0	0	0	0	0	1	1	1
13:45	0	0	3	0	0	1	0	4	4.5	0	0	35	0	1	0	0	0	36	36	0	0	30	3	2	0	0	4	39	39	0	0	0	0	0	0	3	3	3
H/TOT	0	0	27	3	1	2	0	33	34	0	0	167	5	12	0	0	1	185	186	0	0	171	12	14	1	0	11	209	209	0	0	0	0	0	0	5	5	5
14:00	0	0	1	0	0	0	0	1	1	0	0	38	1	1	0	0	1	41	41	0	0	34	1	5	0	0	2	42	42	0	0	0	0	0	0	2	2	2
14:15	0	0	2	1	0	1	0	4	4.5	0	0	53	2	2	1	0	0	58	58	0	0	49	0	7	1	0	2	59	59	0	0	0	0	0	0	1	1	1
14:30	0	0	3	0	0	0	0	3	3	0	0	53	2	5	0	0	0	60	60	0	1	41	2	0	0	0	3	48	48	0	0	0	0	0	0	1	1	1
14:45	0	0	1	0	0	0	0	1	1	0	0	48	0	1	0	0	0	49	49	0	0	30	0	4	0	0	1	44	44	0	0	0	0	0	0	3	3	3
H/TOT	0	0	11	1	0	1	0	13	13	0	0	204	11	11	1	0	1	228	228	0	1	152	4	16	1	0	8	192	192	0	0	0	0	0	0	7	7	7
15:00	0	0	2	0	0	0	0	2	2	0	0	47	3	4	0	0	0	54	54	0	0	57	3	7	0	0	2	69	69	0	0	1	0	0	0	1	1	1
15:15	0	0	3	1	0	0	0	4	4	0	0	49	0	2	0	0	0	51	51	0	0	44	4	4	0	0	3	55	55	0	0	0	0	0	0	2	2	2
15:30	0	0	6	2	0	0	0	8	8	1	0	56	4	1	0	0	0	62	62	0	0	18	2	4	0	0	1	25	25	0	1	0	0	0	0	1	1	1
15:45	0	0	2	0	0	0	0	2	2	0	0	26	2	2	0	0	0	30	30	0	0	44	2	1	0	0	4	51	51	0	0	0	0	0	0	3	3	3
H/TOT	0	0	12	3	0	0	0	16	16	1	0	178	9	11	0	0	0	199	199	0	0	163	12	16	0	0	10	201	201	0	1	1	0	0	0	7	7	7
16:00	0	0	2	0	0	0	0	2	2	0	0	30	4	3	0	0	0	37	37	0	1	48	4	5	0	0	3	61	60	0	0	0	0	0	0	2	2	2
16:15	0	0	3	0	0	0	0	3	3	0	0	27	3	5	0	0	0	35	35	0	0	50	0	3	0	0	3	56	56	0	0	0	0	0	0	0	0	0
16:30	0	0	7	0	0	0	0	7	7	0	0	37	5	3	1	0	0	46	46	0	0	24	3	5	0	0	2	34	34	0	0	0	0	0	0	0	0	0
16:45	0	0	6	1	1	0	0	8	8	0	0	43	0	3	0	0	0	46	46	0	0	34	0	2	0	0	3	39	39	0	0	0	0	0	0	2	2	2
H/TOT	0	0	18	1	1	0	0	20	20	0	0	135	12	14	1	0	0	164	164	0	1	156	7	15	0	0	11	190	189	0	0	0	0	0	0	4	4	4
17:00	0	0	5	0	0	0	0	5	5	0	0	27	1	4	0	0	0	32	32	0	0	32	0	0	0	0	2	34	34	0	0	0	0	0	0	3	3	3
17:15	0	0	3	0	0	0	0	3	3	0	0	14	2	2	0	0	0	18	18	0	0	32	0	1	0	0	0	33	33	0	0	0	0	0	0	0	0	0
17:30	0	0	2	1	0	0	0	3	3	0	0	22	1	2	0	0	1	26	26	0	0	21	0	0	0	0	4	25	25	0	0	0	0	0	0	2	2	2
17:45	0	0	5	0	0	0	0	5	5	0	0	30	0	2	0	0	0	32	32	0	0	25	0	1	0	0	4	30	30	0	0	0	0	0	0	2	2	2
H/TOT	0	0	17	1	0	0	0	18	18	0	0	101	4	10	0	0	1	116	116	0	0	110	0	2	0	0	10	122	122	0	0	0	0	0	0	7	7	7
18:00	0	0	5	0	0	0	0	5	5	0	0	22	0	1	0	0	0	23	23	0	0	28	2	2	0	0	4	36	36	0	0	0	0	0	0	1	1	1
18:15	0	0	6	0	0	0	0	6	6	0	0	43	2	3	0	0	0	48	48	0	0	29	0	0	0	0	0	29	29	0	0	0	0	0	0	5	5	5
18:30	0	0	4	0	0	0	0	4	4	0	0	35	0	0	0	0	0	35	35	0	0	32	1	3	0	0	4	44	44	0	0	0	0	0	0	1	1	1
18:45	0	0	9	0	0	0	0	9	9	0	0	40	2	1	0	0	0	43	43	0	0	44	0	0	0	0	0	44	44	0	0	0	0	0	0	3	3	3
H/TOT	0	0	24	0	0	0	0	24	24	0	0	140	4	5	0	0	0	149	149	0	0	133	3	5	0	0	12	153	153	0	0	0	0	0	0	10	10	10
19:00	0	0	6	0	0	0	0	6	6	0	0	35	2	2	0	0	0	39	39	0	0	33	0	2	0	0	4	39	39	0	0	0	0	0	0	4	4	4
19:15	0	0	2	0	0	0	0	2	2	0	0	38	0	1	0	0	0	41	41	0	0	34	0	3	0	0	3	40	40	0	0	0	0	0	0	3	3	3
19:30	0	0	2	0	1	0	0	3	3	0	0	41	0	0	0	0	0	41	41	0	0	42	0	1	0	0	0	43	43	0	0	0	0	0	0	1	1	1
19:45	0	0	4	0	0	0	0	4	4	0	0	21	0	1	0	0	0	22	22	0	0	39	0	1	0	0	4	44	44	0	0	0	0	0	0	3	3	3
H/TOT	0	0	14	0	1	0	0	15	15	0	0	135	2	4	0	0	0	143	143	0	0	148	0	7	0	0	11	166	166	0	0	0	0	0	0	11	11	11
20:00	0	0	3	0	0	0	0	3	3	0	0	26	0	0	0	0	0	26	26	0	0	52	1	2	0	0	3	58	58	0	0	0	0	0	0	1	1	1
20:15	0	0	1	0	0	0	0	1	1	0	0	22	0	1	0	0	0	23	23	0	0	28	2	0	0	0	2	32	32	0	0	0	0	0	0	1	1	1
20:30	0	0	1	0	0	0	0	1	1	0	0	5	0	1	0	0	0	6	6	0	0	30	1	0	0	0	1	32	32	0	0	0	0	0	0	2	2	2
20:45	0	0	1	0	0	0	0	1	1	0	0	7	0	1	0	0	0	8	8	0	0	19	1	0	0	0	1	21	21	0	0	0	0	0	0	2	2	2
H/TOT	0	0	6	0	0	0	0	6	6	0	0	60	0	3	0	0	0	63	63	0	0	129	4	2	0	0	7	142	142	0	0	0	0	0	0	6	6	6
21:00	0	0	4	0	0	0	0	4	4	0	0	21	0	2	0	0	0	23	23	0	0	21	1	2	0	0	0	24	24	0	0	0	0	0	0	0	0	0
21:15	0	0	3	1	0	0	0	4	4	0	0	6	3	0	0	0	0	9	9	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	2	2	2
21:30	0	0	2	0	0	0	0	2	2	0	0	2	1	0	0	0	0	3	3	0	0	9	0	0	0	0	1	10	10	0	0	0	0	0	0	1	1	1
21:45	0	0	5	0	0	0	0	5	5	0	0	5	0	0	0	0	0	5	5	0	0	8	0	0	1	0	0	9	9	0	0	0	0	0	0	2	2	2
H/TOT	0	0	14	1	0	0	0	15	15	0	0	34	4	2	0	0	0	40	40	0	0	44	1	2	1	0	0	48	48	0	0	0	0	0	0	5	5	5
22:00	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12	12	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	1	1	1
22:15	0	0	2	0	0	0	0	2	2	0	0	8	1	0	0	0	0	9	9	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	1	1	1
22:30	0	0	2	1	0	0	0	3	3	0	0	8	1	0	0	0	0	9	9	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	1	1	1
22:45	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	1	1	1
H/TOT	0	0	4	1	0	0	0	5	5	0	0	35	2	0	0	0	0	37	37	0	0	35	0	0	0	0	0	35	35	0	0	0	0	0	0	4	4	4
23:00	0	0	1	1	0	0	0	2	2	0	0	1	0	0	0	0	0	1	1	0	0	5	0	0	0	1	0	6	7	0	0	0	0	0	0	1	1	1
23:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	1	1	1
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	3	3	0	0	0	0	0	0	1	1	1
H/TOT	0	0	3	1	0	0	0	4	4	0	0	1	0	0	0	0	0	1	1	0	0	14	0	0	0	1	0	15	16	0	0	0	0	0	0	2	2	2
24:00	0	0	200	41	7	8	0	256	264	4	0	2013	88	138	10	7	12	2272	2264	4	0	2218	84	146	10	9	182	2653	2648	0	7	7	0	0	0	138	138	138



iDASO

Survey Name: 256 19344 Bus Connects Route 5
Site: Site 58
Location: Unnamed Road
Date: Thu 28Nov2019

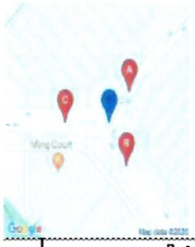
	A => A										A=> B										A => C									
TIM	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V (BU	TOT	PC U	P/CM	/C	CAR	TAXI	LGV	OGV	OGV2	V(BU	TOT	PCU	P/CM	C	CAR	TAXI	LGV	OGV1	OGV2	V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	5	0	1	0	0	2	8	8
00:1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	4	0	0	0	0	1	5	5
00:3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2	2
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	4	1	0	0	0	0	5	5
1/TO	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	0	5	5	0	0	15	1	1	0	0	3	20	20
01:0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1
01:1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1
01:3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
01:4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1 /TO	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	4	0	0	0	0	0	4	4
02:0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
02:1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
02: 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1 /TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
03: 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
03: 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03: 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03: 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
04: 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04: 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1
04: 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
04. 45	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1
1/TO	0	0	1	0	0	0	0	0	1	1	0	0	1	0	1	0	0	0	2	2	0	0	7	0	0	0	0	0	7	7
05:00	0	0	0	0	0	0	0	1	1	1	0	0	0	0	2	0	0	0	2	2	0	0	2	0	0	0	0	0	2	2
05: 15	0	0	3	0	0	1	0	0	4	4.5	0	0	0	0	1	1	0	0	2	2. 5	1	0	2	0	1	0	0	0	4	3.2
05 :30	0	0	4	0	0	0	0	0	4	4	0	0	2	1	0	0	0	0	3	3	0	0	3	0	0	0	0	0	3	3
05 :45	0	0	1	0	0	0	0	1	2	2	0	0	2	0	0	0	0	0	2	2	0	0	6	0	0	0	0	0	6	6
1/TO	0	0	8	0	0	1	0	2	11	11.5	0	0	4	1	3	1	0	0	9	9.5	1	0	13	0	1	0	0	0	15	14. 2
06:00	0	0	1	1	0	0	0	1	3	3	0	0	0	0	1	0	0	0	1	1	0	0	2	2	0	0	0	1	5	5
06: 15	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
0 6:30	0	0	3	0	0	0	0	3	6	6	0	0	0	1	0	0	0	0	1	1	0	0	3	0	1	0	1	0	5	6.3
0 6:45	0	0	11	0	0	0	0	3	14	14	0	0	4	0	0	0	0	0	4	4	0	0	7	0	1	0	0	0	8	8
1/ TO	0	0	16	1	0	0	0	7	24	24	0	0	4	1	1	0	0	0	6	6	0	0	14	2	2	0	1	1	20	21.3
0 7:00	0	0	3	1	0	0	0	1	5	5	0	0	3	0	0	1	0	0	4	4.5	0	0	11	0	2	0	0	4	17	1 7
07:1	0	0	8	0	3	0	0	4	15	15	0	0	4	1	0	0	1	0	6	7.3	0	0	17	0	0	0	0	3	20	2 0
07:3	0	0	3	0	3	0	0	0	6	6	0	0	1	0	0	0	0	0	1	1	0	0	9	1	0	0	0	1	11	1 1
07:45	0	0	11	0	1	0	1	2	15	16.3	0	0	3	0	0	0	0	1	4	4	0	0	13	0	0	1	0	3	17	17 .5
1/TO	0	0	25	1	7	0	1	7	41	42.3	0	0	11	1	0	1	1	1	15	16.8	0	0	50	1	2	1	0	11	65	65.5
08:0	0	0	2	0	1	0	0	1	4	4	0	0	5	0	0	0	0	0	5	5	1	0	20	2	1	0	0	2	26	25 2
08:1	0	0	9	0	0	0	0	3	12	12	0	0	10	1	1	1	0	0	13	13. 5	1	0	21	4	1	0	0	3	30	29 .2
08:3	0	0	9	0	3	0	0	1	13	13	0	1	11	2	1	0	0	0	15	14. 4	1	0	21	1	3	0	0	1	27	26.2
08:4	0	0	14	0	3	0	0	1	18	18	0	0	20	2	3	1	0	0	26	26. 5	0	0	21	2	3	0	0	4	30	30
1/TO	0	0	34	0	7	0	0	6	47	47	0	1	46	5	5	2	0	0	59	59. 4	3	0	83	9	8	0	0	10	113	111
09:0	0	0	1	1	0	0	0	2	4	4	0	0	20	3	2	0	0	1	26	26	0	0	11	4	3	0	0	2	20	20
09:1	0	0	2	0	0	0	0	1	3	3	0	0	27	3	0	0	0	1	31	31	0	0	15	4	2	1	0	3	25	25.5
09: 30	0	0	0	0	0	0	0	1	1	1	0	0	23	3	1	0	0	0	27	27	0	0	25	2	4	0	0	3	34	34
09:4	0	0	0	0	0	0	0	1	1	1	0	0	34	2	2	0	0	1	39	39	0	0	33	2	4	2	1	3	45	47.3
1/TO	0	0	3	1	0	0	0	5	9	9	0	0	1 04	11	5	0	0	3	123	123	0	0	84	12	13	3	1	11	124	127
10:00	0	0	3	0	0	0	0	0	3	3	0	0	37	0	1	0	0	0	38	38	0	0	40	2	5	0	0	4	51	51
10: 15	0	0	1	0	0	0	0	2	3	3	0	0	37	2	3	2	0	0	44	45	1	0	39	4	2	1	0	4	51	50.7
10: 30	0	0	1	0	0	0	0	1	2	2	0	0	39	4	2	0	0	0	45	45	0	0	39	3	2	0	0	2	46	46
10: 45	0	0	1	0	0	0	0	2	3	3	0	0	46	3	2	0	0	0	51	51	0	0	53	2	3	0	0	2	60	60
1/TO	0	0	6	0	0	0	0	5	11	11	0	0	159	9	8	2	0	0	178	179	1	0	171	11	12	1	0	12	208	208
11 00	0	0	1	1	1	0	0	1	4	4	0	0	53	0	2	1	1	0	57	58.8	0	0	45	1	3	0	0	6	55	55
11: 15	0	0	1	0	0	0	0	1	2	2	0	0	35	4	1	0	0	0	40	40	0	0	58	0	6	1	0	5	70	70.5
11: 30	0	0	1	0	1	0	0	1	3	3	0	0	31	1	2	1	0	0	35	35.5	0	0	70	3	2	0	0	2	77	77
11:45	0	0	2	0	1	0	0	1	4	4	0	1	31	3	2	1	0	0	38	37.9	0	0	74	0	3	0	0	3	80	80
1/TO	0	0	5	1	3	0	0	4	13	13	0	1	150	8	7	3	1	0	170	172	0	0	247	4	14	1	0	16	282	283
12. 00	0	0	0	0	0	0	0	0	0	0	0	0	46	3	3	0	0	1	53	53	0	1	67	4	1	1	0	2	76	5.9
12: 15	0	0	3	0	0	0	0	2	5	5	0	0	41	0	0	1	1	0	43	44.8	0	0	54	3	2	0	0	6	65	65
12·.30	0	0	3	0	0	0	0	0	3	3	0	0	43	1	2	1	0	0	47	47.5	0	0	70	4	3	1	0	1	79	79.5
1 2:45	0	0	3	0	0	0	0	0	3	3	0	0	46	1	1	0	1	1	50	51.3	0	0	77	2	2	1	0	4	86	86.5
1/TO	0	0	9	0	0	0	0	2	11	11	0	0	176	5	6	2	2	2	193	197	0	1	268	13	8	3	0	13	306	307



IDASO

Survey Name: 256 19344 Bus Connects Route 5
Site: Site 58
Location: Unnamed Road
Date: Thu 28Nov2019

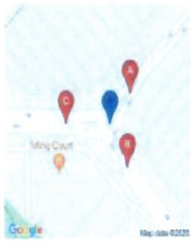
	A => A										A => B										A => C									
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(BU	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(BU	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(BU	TOT	PCU
13:00	0	0	0	0	0	0	0	1	1	1	0	0	41	1	1	0	0	0	43	43	0	0	79	0	1	0	0	2	82	82
13:15	0	0	1	0	0	0	0	1	2	2	0	0	43	4	4	0	0	0	51	51	0	0	96	0	4	0	0	6	106	106
13:30	0	0	2	0	0	0	0	2	4	4	0	0	44	1	1	1	0	0	47	47.5	0	0	82	3	8	0	0	2	95	95
13:45	0	0	2	0	0	0	0	1	3	3	0	0	32	3	0	0	0	0	35	35	0	0	92	0	5	0	0	4	101	101
1/TO	0	0	5	0	0	0	0	5	10	10	0	0	160	9	6	1	0	0	176	177	0	0	349	3	18	0	0	14	384	384
14:00	0	0	0	0	0	0	0	0	0	0	0	0	38	1	1	0	1	0	41	42.3	0	1	83	4	5	0	0	2	95	94.4
14:15	0	0	0	0	0	0	0	1	1	1	0	0	41	2	1	1	0	0	45	45.5	0	0	91	1	3	1	0	6	102	103
14:30	0	0	0	0	0	0	0	1	1	1	0	0	33	0	1	0	0	0	34	34	0	0	62	1	3	1	1	3	71	72.8
14:45	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	40	40	0	0	73	2	4	1	0	3	83	83.5
1/TO	0	0	0	0	0	0	0	2	2	2	0	0	152	3	3	1	1	0	160	162	0	1	309	8	15	3	1	14	351	353
15:00	0	0	3	0	0	0	0	1	4	4	0	0	38	2	4	0	0	0	44	44	0	0	85	1	7	0	0	4	97	97
15:15	0	0	3	1	1	0	0	1	6	6	0	0	34	3	3	0	0	0	40	40	0	0	70	2	2	0	0	7	81	81
15:30	0	0	1	0	0	0	0	1	2	2	0	0	33	4	4	0	0	0	41	41	0	0	58	1	2	0	0	0	61	61
15:45	0	0	0	0	0	0	0	2	2	2	0	0	35	2	3	1	0	0	41	41.5	0	0	71	0	6	1	0	3	81	81.5
1/TO	0	0	7	1	1	0	0	5	14	14	0	0	140	11	14	1	0	0	166	167	0	0	284	4	17	1	0	14	320	321
16:00	0	0	0	0	0	0	0	2	2	2	0	1	49	1	2	0	1	0	54	54.7	0	1	65	0	6	0	0	3	75	74.4
16:15	0	0	3	0	1	0	0	1	5	5	0	0	38	1	1	0	0	1	41	41	0	0	70	1	5	0	0	5	81	81
16:30	0	0	1	0	0	0	0	1	2	2	0	0	24	3	0	0	1	0	28	29.3	0	0	57	1	5	1	0	1	65	65.5
16:45	0	0	0	0	0	0	0	0	0	0	0	0	36	1	1	0	0	0	38	38	1	1	40	0	2	0	0	5	49	47.6
1/TO	0	0	4	0	1	0	0	4	9	9	0	1	147	6	4	0	2	1	161	163	1	2	232	2	18	1	0	14	270	269
17:00	0	0	0	0	0	0	0	1	1	1	0	0	35	0	3	0	0	0	38	38	0	0	49	1	0	0	0	4	54	54
17:15	0	0	2	0	0	0	0	2	4	4	0	0	36	1	1	0	0	0	38	38	0	0	52	0	7	1	0	3	63	63.5
17:30	0	0	0	0	0	0	0	2	2	2	0	0	37	2	0	0	0	0	39	39	0	0	51	3	2	0	0	2	58	58
17:45	0	0	2	0	0	0	0	5	7	7	0	0	31	0	2	0	0	0	33	33	0	0	54	1	2	0	0	3	60	60
1/TO	0	0	4	0	0	0	0	10	14	14	0	0	139	3	6	0	0	0	148	148	0	0	206	5	11	1	0	12	235	236
18:00	0	0	2	0	0	0	0	5	7	7	0	0	32	1	3	0	0	0	36	36	0	0	55	1	3	0	0	1	60	60
18:15	0	0	1	0	0	0	0	1	2	2	0	0	26	1	1	0	0	1	29	29	0	0	60	0	1	0	0	5	66	66
18:30	0	0	3	0	0	0	0	4	7	7	0	0	34	1	6	0	1	0	42	43.3	1	0	61	0	2	0	0	8	72	71.2
18:45	0	0	3	0	0	0	0	2	5	5	0	0	41	2	1	0	0	0	44	44	0	1	68	1	2	0	0	2	74	73.4
1/TO	0	0	9	0	0	0	0	12	21	21	0	0	133	5	11	0	1	1	151	152	1	1	244	2	8	0	0	16	272	271
19:00	0	0	1	0	0	0	0	0	1	1	0	0	29	2	4	0	0	1	36	36	0	0	67	0	2	0	0	6	75	75
19:15	0	0	0	0	0	0	0	1	1	1	0	0	37	1	1	0	0	0	39	39	0	0	64	1	6	0	0	5	76	76
19:30	0	0	0	0	0	0	0	1	1	1	0	0	42	0	0	0	0	0	42	42	0	1	61	2	1	0	0	6	71	70.4
19:45	0	0	4	0	0	0	0	1	5	5	0	0	29	1	2	0	0	0	32	32	0	0	72	0	5	0	0	1	78	78
1/TO	0	0	5	0	0	0	0	3	8	8	0	0	137	4	7	0	0	1	149	149	0	1	264	3	14	0	0	18	300	299
20:00	0	0	0	0	0	0	0	1	1	1	0	0	40	3	2	0	0	0	45	45	0	0	69	3	3	0	0	4	79	79
20:15	0	0	1	0	0	0	0	0	1	1	0	0	28	3	1	0	0	0	32	32	0	0	79	1	3	0	0	3	86	86
20:30	0	0	1	1	0	0	0	1	3	3	0	0	32	2	1	0	0	0	35	35	0	0	80	0	1	0	0	3	84	84
20:45	0	0	0	0	1	0	0	0	1	1	1	0	22	2	0	0	0	0	25	24.2	0	0	85	1	2	0	0	4	92	92
1/TO	0	0	2	1	1	0	0	2	6	6	1	0	122	10	4	0	0	0	137	136	0	0	313	5	9	0	0	14	341	341
21:00	0	0	0	0	0	0	0	1	1	1	0	1	28	1	0	1	1	0	32	33.2	0	0	125	1	4	0	0	4	134	134
21:15	0	0	2	0	0	0	0	0	2	2	0	0	35	3	0	0	0	1	39	39	0	0	59	1	1	0	0	3	64	64
21:30	0	0	0	0	0	0	0	1	1	1	0	0	10	1	0	0	0	0	11	11	0	0	34	2	1	0	0	3	40	40
21:45	0	0	0	0	0	0	0	2	2	2	0	0	18	0	0	0	0	0	18	18	0	0	35	2	1	0	0	3	41	41
1/TO	0	0	2	0	0	0	0	4	6	6	0	1	91	5	0	1	1	1	100	101	0	0	253	6	7	0	0	13	279	279
22:00	0	0	0	0	0	0	0	1	1	1	0	0	9	2	1	0	0	0	12	12	0	1	36	1	0	0	0	2	40	39.4
22:15	0	0	1	1	0	0	0	0	2	2	0	0	5	0	0	0	0	0	5	5	0	0	29	1	0	0	0	4	34	34
22:30	0	0	0	0	0	0	0	1	1	1	0	0	5	0	0	0	0	0	5	5	0	0	17	2	0	0	0	3	22	22
22:45	0	0	0	0	0	0	0	1	1	1	0	0	4	0	0	0	0	0	4	4	1	0	14	0	0	0	0	4	19	18.2
1/TO	0	0	1	1	0	0	0	3	5	5	0	0	23	2	1	0	0	0	26	26	1	1	96	4	0	0	0	13	115	114
23:00	0	0	0	0	0	0	0	1	1	1	0	0	7	0	0	0	0	0	7	7	0	0	18	1	0	0	0	0	19	19
23:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	10	0	1	0	0	4	15	15
23:30	0	0	0	0	0	0	0	1	1	1	0	0	3	0	0	0	0	0	3	3	0	0	8	1	0	0	0	3	12	12
23:45	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4	4	0	0	5	0	0	0	0	2	7	7
1/TO	0	0	0	0	0	0	0	2	2	2	0	0	18	1	0	0	0	0	19	19	0	0	41	2	1	0	0	9	53	53
4 TO	0	0	146	7	20	1	1	90	265	267	1	4	1921	101	94	15	9	10	2155	2171	8	7	3551	98	179	15	3	228	4089	4090



IDASO

Survey Name: 256 19344 Bus Connects Route 5
Site: Site 58
Location: Unnamed Road
Date: Thu 28Nov2019

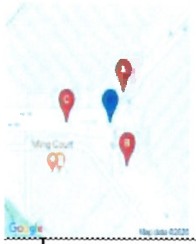
	B=> A										B=> B										B=> C									
TIM E	P/C	M /C	CAR	TAXI	LGV	OGV1	OGV 2	V(BU	TOT	PCU	P/C	M/CC	AR	TAXI	LGV	OG V1	OGV2	V(BU	TO T	PCU	P/C	M /C	CAR	TAXI	LGV	OGV1	OGV 2	V(BU	TOT	PCU
00: 00	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	18	1	0	0	0	0	19	19
00: 15	0	0	0	1	1	0	0	0	2	2	0	0	1	0	0	0	0	0	1	1	0	0	15	1	1	0	0	0	17	17
00: 30	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	1	12	2	1	0	0	0	17	15 .6
00. 45	0	0	3	1	0	0	0	0	4	4	0	0	2	0	0	0	0	0	2	2	0	0	7	2	0	0	0	0	9	9
1/TO	0	0	6	4	1	0	0	0	11	11	0	0	3	0	0	0	0	0	3	3	1	1	52	6	2	0	0	0	62	60 6
01 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
01: 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
01: 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
01 :45	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
1/TO	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5
02: 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02 .30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
02 :45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	4	3.2
1/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	1	1	0	0	0	10	9.2
03 :00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
03: 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
03 :30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0 3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.2
1/ TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	1	0	0	0	0	8	7.2
0 4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3	3.5
04: 15	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0 4.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/TO	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	5	5.5
0 5:00	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	4	4
05:1 5	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2	2
0 5:30	0	0	3	1	1	2	0	0	7	8	0	0	0	0	0	0	0	0	0	0	0	0	5	1	1	0	0	0	7	7
0 5:45	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	6	6
1/TO	0	0	6	1	2	2	0	0	11	12	0	0	1	0	0	0	0	0	1	1	0	0	11	4	4	0	0	0	19	19
0 6:00	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7
06:1 5	0	0	2	1	2	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	0	4	4.5
0 6:30	0	0	1	0	1	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3
06:45	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	1	3	1	1	1	0	0	7	6.9
1/TO	0	0	7	1	4	0	0	1	13	13	0	0	0	0	0	0	0	0	0	0	0	1	13	2	3	2	0	0	21	21.4
07:00	0	0	5	1	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	1	0	8	2	1	1	0	0	13	12 7
07:1 5	0	0	6	0	1	0	1	0	8	9.3	0	0	0	0	0	0	0	0	0	0	0	0	12	2	3	1	2	0	20	23.1
07:3 0	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	16	1	0	1	0	0	18	18.5
07:45	0	0	9	0	0	0	0	2	11	11	0	0	0	0	0	0	0	0	0	0	0	0	11	1	2	0	0	0	14	14
1/ TO	0	0	23	1	2	0	1	2	29	30.3	0	0	0	0	0	0	0	0	0	0	1	0	47	6	6	3	2	0	65	68.3
08:00	0	0	4	0	1	1	0	0	6	6 5	0	0	0	0	0	0	0	0	0	0	0	0	13	1	1	2	0	0	17	18
08:1 5	0	0	7	0	3	0	0	0	10	10	0	0	1	0	0	0	0	0	1	1	0	0	18	2	7	0	0	0	27	27
08:3 0	0	0	11	1	3	1	0	0	16	16.5	0	0	1	1	0	0	0	0	2	2	0	0	21	3	2	0	0	1	27	27
08:4 5	0	0	22	0	4	0	1	0	27	28.3	0	0	0	0	0	0	0	0	0	0	0	0	29	4	2	0	0	0	35	35
1 /TO	0	0	44	1	11	2	1	0	59	61.3	0	0	2	1	0	0	0	0	3	3	0	0	81	10	12	2	0	1	106	107
09:0 0	0	0	17	2	2	0	0	0	21	21	0	0	2	0	0	0	0	0	2	2	2	0	19	1	5	0	0	1	28	26.4
09:1 5	0	0	18	1	0	1	0	0	20	20.5	0	0	4	0	1	0	0	0	5	5	0	0	26	3	2	0	0	0	31	31
09:3 0	1	0	35	1	2	0	0	0	39	38.2	0	0	4	0	1	0	0	0	5	5	0	0	44	2	4	1	0	0	51	5 1.5
09:4 5	0	0	28	0	2	0	0	0	30	30	0	0	4	0	0	0	0	0	4	4	1	1	36	1	2	0	0	0	41	39.6
1 /TO	1	0	98	4	6	1	0	0	110	11 0	0	0	14	0	2	0	0	0	16	16	3	1	125	7	13	1	0	1	151	149
10:0 0	0	0	29	1	0	0	0	1	31	31	0	0	1	0	0	0	0	0	1	1	1	1	49	2	3	0	0	0	56	54.6
10:1 5	0	0	32	0	1	0	0	1	34	34	0	0	3	0	0	0	0	0	3	3	0	0	53	5	1	0	0	0	59	59
10:3 0	0	0	39	1	0	0	0	0	40	40	0	0	3	0	3	0	0	0	6	6	0	0	58	3	7	2	0	0	70	71
10:4 5	0	0	59	0	4	1	1	0	65	66.8	0	0	5	0	1	0	0	0	6	6	1	0	60	8	7	0	0	0	76	75.2
1/TO	0	0	159	2	5	1	1	2	170	172	0	0	12	0	4	0	0	0	16	16	2	1	220	18	18	2	0	0	261	260
11:0 0	0	0	39	0	0	0	1	0	40	41. 3	0	0	7	0	0	0	0	0	7	7	1	0	60	5	3	1	0	0	70	69.7
11:1 5	0	1	48	1	0	0	0	0	50	49. 4	0	0	6	0	0	0	0	0	6	6	1	0	75	4	4	0	0	0	84	83.2
11:3 0	0	1	36	2	1	1	0	0	41	40. 9	0	0	3	0	0	0	0	0	3	3	0	0	91	9	4	0	0	0	104	104
11:4 5	0	0	51	1	2	0	1	0	55	56. 3	0	0	5	0	0	0	0	0	5	5	0	0	74	6	6	0	0	0	86	86
1/TO	0	2	1 4	4	3	1	2	0	186	188	0	0	21	0	0	0	0	0	21	21	2	0	300	24	17	1	0	0	344	343
12:00	0	0	39	0	5	0	0	0	44	44	0	0	4	0	2	0	0	0	6	6	0	0	82	2	6	1	0	1	92	92.5
12: 15	0	0	49	0	4	1	0	0	54	54. 5	0	0	6	1	0	0	0	0	7	7	0	2	79	8	4	1	0	0	94	9 3.3
12: 30	0	0	47	1	4	1	1	0	54	55.8	0	0	7	0	0	0	0	0	7	7	0	0	73	5	3	1	0	0	82	82.5
12: 45	0	0	44	1	3	0	0	1	49	49	0	0	3	0	1	0	0	0	4	4	0	0	97	3	3	0	0	0	103	103
1 /TO	0	0	179	2	16	2	1	1	201	203	0	0	20	1	3	0	0	0	24	24	0	2	331	18	16	3	0	1	371	371



IDASO

Survey Name: 256 19344 Bus Connects Route 5
Site: Site 58
Location: Unnamed Road
Date: Thu 28Nov2019

	B => A										B => B										B => C									
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(BU	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(BU	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(BU	TOT	PCU
13:00	0	0	48	1	2	0	0	0	51	51	0	0	3	0	0	0	0	0	3	3	0	0	86	6	5	0	0	1	98	98
13:15	0	0	43	2	3	1	1	0	50	51.8	0	0	4	0	0	0	0	0	4	4	0	0	107	2	6	1	0	0	116	117
13:30	0	0	40	2	1	0	0	0	43	43	0	0	4	0	0	0	0	0	4	4	0	0	110	4	4	1	0	1	120	121
13:45	0	0	46	0	1	0	0	0	47	47	0	0	6	0	0	0	0	0	6	6	0	0	83	6	5	0	0	0	94	94
H/TO	0	0	177	5	7	1	1	0	191	193	0	0	17	0	0	0	0	0	17	17	0	0	386	18	20	2	0	2	428	429
14:00	0	0	51	1	2	0	0	1	55	55	0	0	5	0	0	0	0	0	5	5	0	0	93	2	4	0	0	0	99	99
14:15	0	0	41	1	4	0	0	0	46	46	0	0	7	0	0	0	0	0	7	7	0	0	111	5	3	0	0	0	119	119
14:30	0	0	36	0	1	0	1	0	38	39.3	0	0	2	2	0	0	0	0	4	4	0	1	112	5	4	1	0	1	124	124
14:45	0	0	37	0	1	0	0	0	38	38	0	0	4	0	0	0	0	0	4	4	0	0	85	4	6	0	0	1	96	96
H/TO	0	0	165	2	8	0	1	1	177	178	0	0	18	2	0	0	0	0	20	20	0	1	401	16	17	1	0	2	438	438
15:00	0	0	47	0	1	0	0	1	49	49	0	0	2	0	1	0	0	0	3	3	1	0	110	7	3	0	0	0	121	120
15:15	0	0	35	4	2	0	0	0	41	41	0	0	5	0	0	0	0	0	5	5	1	1	70	2	3	0	0	1	78	76.6
15:30	0	0	26	2	3	0	0	0	31	31	0	0	0	0	0	0	0	0	0	0	0	0	87	6	5	0	0	0	98	98
15:45	0	0	28	1	1	0	0	0	30	30	0	0	3	0	0	0	0	0	3	3	0	0	94	6	4	0	0	0	104	104
H/TO	0	0	136	7	7	0	0	1	151	151	0	0	10	0	1	0	0	0	11	11	2	1	361	21	15	0	0	1	401	399
16:00	0	0	36	0	0	0	0	0	36	36	0	0	3	1	0	0	0	0	4	4	0	0	101	3	3	0	0	1	108	108
16:15	0	0	36	0	1	0	1	0	38	39.3	0	0	2	0	0	0	0	0	2	2	0	0	106	2	7	0	0	1	116	116
16:30	0	0	30	0	1	0	0	1	32	32	0	0	4	0	0	0	0	0	4	4	0	0	97	3	3	1	0	1	105	106
16:45	0	0	38	0	0	0	0	0	38	38	0	0	2	0	0	0	0	0	2	2	0	0	44	0	1	0	0	0	45	45
H/TO	0	0	140	0	2	0	1	1	144	145	0	0	11	1	0	0	0	0	12	12	0	0	348	8	14	1	0	3	374	375
17:00	0	0	23	0	2	0	1	0	26	27.3	0	0	0	0	0	0	0	0	0	0	0	0	68	0	0	0	0	0	68	68
17:15	0	0	24	0	2	0	0	2	28	28	0	0	3	0	0	0	0	0	3	3	1	0	70	0	3	0	0	0	74	73.2
17:30	0	0	30	0	1	0	0	0	31	31	0	0	1	0	0	0	0	0	1	1	0	0	42	1	5	1	0	0	49	49.5
17:45	0	0	34	1	0	0	0	0	35	35	0	0	1	0	0	0	0	0	1	1	0	0	51	0	2	1	0	0	54	54.5
H/TO	0	0	111	1	5	0	1	2	120	121	0	0	5	0	0	0	0	0	5	5	1	0	231	1	10	2	0	0	245	245
18:00	0	0	34	0	2	0	0	0	36	36	0	0	1	0	0	0	0	0	1	1	0	0	60	0	5	0	0	0	65	65
18:15	0	0	41	1	3	0	0	0	45	45	0	0	1	0	0	0	0	0	1	1	0	0	71	2	2	0	0	0	75	75
18:30	0	1	36	0	2	0	0	0	39	38.4	0	0	5	0	0	0	0	0	5	5	0	0	82	1	5	0	0	0	88	88
18:45	1	0	33	1	2	0	0	0	37	36.2	0	0	3	0	0	0	0	0	3	3	1	0	81	2	1	0	0	0	85	84.2
H/TO	1	1	144	2	9	0	0	0	157	156	0	0	10	0	0	0	0	0	10	10	1	0	294	5	13	0	0	0	313	312
19:00	0	0	30	0	1	0	0	0	31	31	0	0	6	0	0	0	0	0	6	6	3	0	102	0	2	0	0	0	107	105
19:15	0	0	24	1	0	0	1	1	27	28.3	0	0	2	0	0	0	0	0	2	2	0	0	91	2	5	0	0	0	98	98
19:30	0	0	34	1	2	1	0	0	38	38.5	0	0	4	0	0	0	0	0	4	4	1	0	96	1	2	0	0	0	100	99.2
19:45	0	0	43	0	1	0	0	0	44	44	0	0	2	0	0	0	0	0	2	2	0	0	94	2	7	0	0	0	103	103
H/TO	0	0	131	2	4	1	1	1	140	142	0	0	14	0	0	0	0	0	14	14	4	0	383	5	16	0	0	0	408	405
20:00	0	0	47	0	2	0	0	0	49	49	0	0	5	0	0	0	0	0	5	5	0	0	102	0	3	0	0	0	105	105
20:15	0	0	44	0	2	0	0	1	47	47	0	0	7	0	2	0	0	0	9	9	0	0	107	2	4	0	0	0	113	113
20:30	0	0	44	1	2	0	0	1	48	48	0	0	5	1	0	0	0	0	6	6	0	0	114	4	3	0	0	0	121	121
20:45	0	0	24	1	2	0	0	0	27	27	0	0	3	0	0	0	0	0	3	3	1	0	136	1	5	0	0	0	143	142
H/TO	0	0	159	2	8	0	0	2	171	171	0	0	20	1	2	0	0	0	23	23	1	0	459	7	15	0	0	0	482	481
21:00	0	0	37	1	1	1	0	0	40	40.5	0	0	7	0	0	0	0	0	7	7	0	0	150	2	5	0	0	0	157	157
21:15	0	0	23	0	3	1	0	0	27	27.5	0	0	6	0	0	0	0	0	6	6	0	0	116	1	1	0	0	0	118	118
21:30	0	0	16	2	0	0	1	0	19	20.3	0	0	3	0	0	0	0	0	3	3	0	0	78	0	2	0	0	0	80	80
21:45	0	0	14	1	0	0	0	0	15	15	0	0	2	0	0	0	0	0	2	2	0	0	48	1	0	0	0	0	49	49
H/TO	0	0	90	4	4	2	1	0	101	103	0	0	18	0	0	0	0	0	18	18	0	0	392	4	8	0	0	0	404	404
22:00	0	0	10	2	0	0	1	0	13	14.3	0	0	1	0	0	0	0	0	1	1	0	0	76	3	2	1	0	0	82	82.5
22:15	0	0	10	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	47	3	3	0	0	0	53	53
22:30	0	0	9	1	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	53	2	0	0	0	0	55	55
22:45	1	0	6	0	0	0	0	0	7	6.2	0	0	2	0	0	0	0	0	2	2	0	0	29	2	0	1	0	0	32	32.5
H/TO	1	0	35	3	0	0	1	0	40	40.5	0	0	3	0	0	0	0	0	3	3	0	0	205	10	5	2	0	0	222	223
23:00	0	0	3	2	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	37	1	0	0	0	0	38	38
23:15	0	0	5	0	0	0	0	0	5	5	0	0	1	0	0	0	0	0	1	1	0	0	29	1	0	0	0	0	30	30
23:30	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	23	23
23:45	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2	2	0	0	12	0	0	0	0	0	12	12
H/TO	0	0	11	2	0	0	0	0	13	13	0	0	3	0	0	0	0	0	3	3	0	0	101	2	0	0	0	0	103	103
4 TO	3	3	1995	50	106	13	13	14	2197	2216	0	0	202	6	12	0	0	0	220	220	20	8	4769	194	225	23	2	11	5252	5245



IDASO

Survey Name: 256 19344 Bus Connects Route 5
Site: Site 58
Location: Unnamed Road
Date: Thu 28Nov2019

	C => A										C => B										C => C									
TI	MP	/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(B	TO	T	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V	(BU	TOT	PCU	/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(B	TOT	PCU
00:0		0	0	2	0	1	0	0	0	3	3		0	0	5	3	0	0	0	0		8	8	0	0	2	0	0	0	0		2	2
00:1		0	0	0	0	0	0	0	0	0	0		0	0	2	3	0	0	0	0		5	5	0	0	5	1	0	0	0	0	6	6
00:3		0	0	0	0	0	0	0	0	0	0		0	0	6	2	0	0	0	0		8	8	0	0	5	0	0	0	0	0	5	5
00:4		0	0	0	1	0	0	0	0	1	1		0	0	2	3	1	0	0	0		6	6	0	0	2	0	0	0	0	0	2	2
/TO		0	0	2	1	1	0	0	0	4	4		0	0	15	11	1	0	0	0		27	27	0	0	14	1	0	0	0	0	15	15
01:0		0	0	0	0	0	0	0	0	0	0		0	0	2	2	1	0	0	0		5	5	0	0	0	0	0	0	0	0	0	0
01:1		0	0	0	0	0	0	0	0	0	0		0	0	0	4	0	0	0	0		4	4	0	0	3	0	0	0	0	0	3	3
01: 3		0	0	0	1	0	0	0	0	1	1		0	0	2	1	0	0	0	0		3	3	0	0	1	0	0	0	0	0	1	1
01: 4		0	0	2	0	0	0	0	0	2	2		0	0	1	1	0	0	0	0		2	2	0	0	1	0	0	0	0	0	1	1
/TO		0	0	2	1	0	0	0	0	3	3		0	0	5	8	1	0	0	0		14	14	0	0	5	0	0	0	0	0	5	5
02: 0		0	0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0		1	1	0	0	1	0	0	0	0	0	1	1
02: 1		0	0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0		1	1	0	0	1	0	0	0	0	0	1	1
02: 3		0	0	0	0	0	0	0	0	0	0		0	0	0	2	0	1	0	0		3	3.5	0	0	0	0	0	0	0	0	0	0
02: 4		0	0	1	0	0	0	0	0	1	1		0	0	1	0	0	0	0	0		1	1	0	0	0	0	1	0	0	0	1	1
/TO		0	0	1	0	0	0	0	0	1	1		0	0	1	4	0	1	0	0		6	6.5	0	0	2	0	1	0	0	0	3	3
03: 0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
03: 1		0	0	0	1	0	0	0	0	1	1		0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
03: 3		0	0	0	1	0	0	0	0	1	1		0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
03: 4		0	0	2	0	0	0	0	0	2	2		0	0	3	0	0	0	0	0		3	3	0	0	0	0	0	0	0	0	0	0
/TO		0	0	2	2	0	0	0	0	4	4		0	0	3	0	0	0	0	0		3	3	0	0	0	0	0	0	0	0	0	0
04 0		0	0	0	1	0	0	0	0	1	1		0	0	0	1	0	0	0	0		1	1	0	0	1	0	0	0	0	0	1	1
04: 1		0	0	1	1	0	0	0	0	2	2		0	0	2	0	0	0	0	0		2	2	0	0	1	1	0	0	0	0	2	2
04: 3		0	0	0	0	0	2	0	0	2	3		0	0	0	0	0	1	0	0		1	1.5	0	0	1	1	0	0	0	0	2	2
04 :4		0	0	1	0	1	0	0	0	2	2		0	0	1	1	0	0	0	0		2	2	0	0	0	0	0	0	0	0	0	0
/TO		0	0	2	2	1	2	0	0	7	8		0	0	3	2	0	1	0	0		6	6.5	0	0	3	2	0	0	0	0	5	5
05 :0		0	0	3	0	0	0	0	0	3	3		0	0	2	2	0	1	0	0		5	5.5	0	0	0	0	0	0	0	0	0	0
05: 1		0	0	1	0	0	0	0	0	1	1		0	0	1	0	0	0	0	0		1	1	0	0	0	0	0	0	0	0	0	0
0 5:3		0	0	4	2	1	0	0	0	7	7		1	0	5	1	0	0	0	0		7	6.2	0	0	0	0	1	0	1	0	2	3.3
0 5:4		0	0	10	1	3	0	0	4	18	18		0	0	10	2	1	0	0	0		13	13	0	0	2	0	0	0	0	0	2	2
/TO		0	0	18	3	4	0	0	4	29	29		1	0	18	5	1	1	0	0		26	25.7	0	0	2	0	1	0	1	0	4	5.3
0 6:0		0	0	8	0	2	0	0	3	13	13		0	0	15	4	1	1	0	0		21	21 5	0	0	2	0	0	0	0	0	2	2
0 6:1		0	0	7	2	2	0	0	4	15	15		0	0	10	3	2	0	0	0		15	5	0	0	4	0	0	0	0	0	4	4
0 6:3		0	0	12	0	3	0	0	2	17	17		1	0	7	3	1	1	0	0		13	12.7	0	0	2	1	0	0	0	0	3	3
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/TO		0	0	42	4	11	1	0	11	69	9.5		1	0	44	11	4	2	0	0		62	62 2	0	0	14	3	1	0	0	0	18	18
07:0		0	0	28	1	4	2	0	5	40	41		1	0	12	2	0	1	0	0		16	15. 7	0	0	10	0	10	0	0	0	20	20
07:1		2	0	25	4	4	0	0	7	42	40.4		1	0	24	2	1	0	0	0		28	27 2	0	0	10	0	2	2	0	0	14	15
07:3		0	0	41	0	5	2	0	5	53	54		3	0	28	1	1	0	0	0		33	30 6	0	0	8	0	5	0	0	0	13	13
07:4		2	0	55	1	4	0	0	8	70	68.4		3	0	53	4	4	1	0	0		65	63 1	0	0	4	0	1	0	0	0	5	5
/TO		4	0	149	6	17	4	0	25	205	20		8	0	117	9	6	2	0	0		142	137	0	0	32	0	18	2	0	0	52	53
08:0		0	0	46	5	3	1	1	8	64	5.8		0	1	43	1	5	1	0	0		51	50 9	0	0	11	0	3	0	0	0	14	14
08:1		0	0	51	5	7	0	0	5	68	68		0	0	84	4	5	0	0	1		94	94	0	0	14	1	4	0	0	0	19	19
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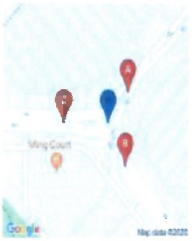
10: 3		0	0	42	2	3	2	0	4	53	54		0	0	115	5	10	1	0	0		131	132	0	0	33	3	6	0	0	0	42	42
10:4		0	0	39	3	3	3	0	3	51	52. 5		0	1	121	7	3	0	0	0		132	131	0	0	21	4	0	0	0	0	25	25
/TO		0	0	154	10	7	6	0	17	194	1 97		1	1	482	25	25	2	1	0		537	538	0	0	100	9	10	1	0	0	120	121
11: 0		0	1	37	4	3	2	0	6	53	53.4		0	0	99	3	6	1	0	0		109	110	0	0	33	6	2	0	0	0	41	41
11: 1		0	0	32	3	2	1	0	3	41	41.5		0	0	109	17	1	0	0	0		127	127	0	0	38	2	2	0	0	0	42	42
11: 3		0	0	34	2	3	0	0	5	44	44		0	0	98	13	5	1	0	1		118	11 9	0	0	28	2	2	1	1	0	34	35.8
11: 4		1	0	46	0	2	2	0	4	55	55.2		0	1	117	7	7	2	1	0		135	137	0	0	46	5	4	0	0	0	55	55
/TO		1	1	149	9	10	5	0	18	193	194		0	1	423	40	19	4	1	1		489	492	0	0	145	15	10	1	1	0	172	174
12: 0		0	0	39	3	4	1	0	5	52	52 5		0	0	123	11	4	1	0	0		139	140	0	0	43	1	4	0	0	0	48	48
12: 1		0	0	33	0	2	0	0	3	38	38		0	1	115	10	4	1	0	0		131	131	0	0	59	1	2	0	0	0	62	62
12: 3		0	1	37	1	4	0	0	5	48	47.4		0	1	121	9	5	0	0	0		136	135	0	0	52	0	3	0	0	0	55	55
12 :4		0	0	46	0	5	0	0	5	56	56		0	0	91	2	6	1	0	0		100	10	1	0	52	4	4	1	0	0	62	61.7
/TO		0	1	155	4	15	1	0	18	194	194		0	2	450	32	19	3	0	0		506	506	1	0	206	6	13	1	0	0	227	227



iDASO

Survey Name: 256 19344 Bus Connects Route 5
Site: Site S8
Location: Unnamed Road
Date: Thu 28Nov2019

	C => A										C => B										C => C									
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(BU	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(BU	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	V(BU	TOT	PCU
13:00	0	0	26	3	7	0	0	3	39	39	2	0	116	3	6	0	0	0	127	125	0	0	54	6	5	0	0	0	65	65
13:15	0	0	49	2	3	0	0	4	58	58	0	0	102	10	3	2	0	1	118	119	0	0	54	5	3	3	0	0	65	66.5
13:30	0	0	39	1	5	0	0	8	53	53	1	0	112	8	4	0	0	0	125	124	0	0	50	8	5	0	0	0	63	63
13:45	0	0	47	3	2	0	0	4	56	56	4	1	94	11	5	0	0	0	115	111	0	0	87	5	3	0	0	1	96	96
H/TO	0	0	161	9	17	0	0	19	206	206	7	1	424	32	18	2	0	1	485	480	0	0	245	24	16	3	0	1	289	291
14:00	1	0	35	6	2	0	0	3	47	46.2	1	0	92	15	6	0	0	0	114	113	0	0	74	0	6	0	0	0	80	80
14:15	0	0	35	0	3	1	0	3	42	42.5	0	0	82	3	3	0	0	0	88	88	0	0	74	7	4	0	0	0	85	85
14:30	0	0	33	2	2	0	0	6	43	43	0	0	98	8	4	0	0	0	110	110	0	0	51	6	3	0	0	0	60	60
14:45	0	1	32	1	1	0	0	7	42	41.4	0	0	111	12	6	1	0	0	130	131	2	0	54	5	0	0	0	0	61	59.4
H/TO	1	1	135	9	8	1	0	19	174	173	1	0	383	38	19	1	0	0	442	442	2	0	253	18	13	0	0	0	286	284
15:00	0	0	30	8	1	2	0	1	42	43	0	0	118	7	5	1	0	0	131	132	0	0	38	0	3	0	0	0	41	41
15:15	0	0	41	0	3	0	0	3	47	47	1	0	108	10	1	2	0	0	122	122	0	0	41	1	4	0	0	0	46	46
15:30	0	0	23	2	0	0	0	4	29	29	0	0	104	9	5	0	0	1	119	119	1	0	50	2	0	0	0	0	53	52.2
15:45	0	0	29	2	1	0	0	5	37	37	0	0	111	4	2	1	0	0	118	119	0	0	40	5	5	0	0	0	50	50
H/TO	0	0	123	12	5	2	0	13	155	156	1	0	441	30	13	4	0	1	490	491	1	0	169	8	12	0	0	0	190	189
16:00	0	0	30	3	6	0	0	4	43	43	0	0	87	11	3	2	0	0	103	104	0	0	48	1	2	0	0	0	51	51
16:15	0	0	34	2	1	0	0	4	41	41	0	0	97	4	5	0	0	0	106	106	0	0	35	1	4	0	0	0	40	40
16:30	0	0	28	0	0	1	0	4	33	33.5	0	0	97	13	6	0	0	0	116	116	0	0	39	1	0	0	0	0	40	40
16:45	0	0	44	1	1	0	0	6	52	52	0	0	58	10	3	0	0	0	71	71	0	0	48	0	2	0	0	0	50	50
H/TO	0	0	136	6	8	1	0	18	169	170	0	0	339	38	17	2	0	0	396	397	0	0	170	3	8	0	0	0	181	181
17:00	0	0	46	0	3	0	0	4	53	53	0	1	81	4	1	0	0	0	87	86.4	0	0	38	0	5	1	0	0	44	44.5
17:15	0	0	26	0	2	0	0	1	29	29	0	1	58	0	14	0	0	0	73	72.4	0	0	51	3	1	0	0	0	55	55
17:30	0	0	39	0	1	0	0	0	40	40	0	0	62	5	6	1	0	0	74	74.5	0	0	40	0	0	0	0	0	40	40
17:45	0	0	33	1	0	1	0	8	43	43.5	0	0	69	3	5	0	0	0	77	77	0	0	35	2	3	0	0	0	40	40
H/TO	0	0	144	1	6	1	0	13	165	166	0	2	270	12	26	1	0	0	311	310	0	0	164	5	9	1	0	0	179	180
18:00	0	0	26	0	1	0	0	2	29	29	0	0	126	8	3	0	0	0	137	137	0	0	25	0	1	0	0	0	26	26
18:15	0	0	38	3	2	0	0	4	47	47	0	0	109	5	1	0	0	0	115	115	0	0	21	0	1	0	0	0	22	22
18:30	0	0	35	1	1	0	0	5	42	42	0	0	113	1	4	0	0	0	118	118	0	0	45	1	1	0	0	0	47	47
18:45	0	0	34	2	2	0	0	4	42	42	0	0	96	5	4	0	0	0	105	105	0	0	47	0	1	0	0	0	48	48
H/TO	0	0	133	6	6	0	0	15	160	160	0	0	444	19	12	0	0	0	475	475	0	0	138	1	4	0	0	0	143	143
19:00	0	0	32	1	2	0	0	5	40	40	0	0	113	9	9	0	0	0	131	131	0	0	49	2	2	0	0	0	53	53
19:15	0	0	28	0	0	0	0	4	32	32	0	0	122	7	5	0	0	0	134	134	0	1	48	4	1	0	0	0	54	53.4
19:30	0	0	31	1	0	0	0	5	37	37	0	0	106	11	3	0	0	0	120	120	0	0	58	1	3	0	0	0	62	62
19:45	0	0	32	1	2	0	0	4	39	39	1	0	96	8	4	0	0	0	109	108	0	0	43	1	1	0	0	0	45	45
H/TO	0	0	123	3	4	0	0	18	148	148	1	0	437	35	21	0	0	0	494	493	0	1	198	8	7	0	0	0	214	213
20:00	0	0	44	1	1	0	0	3	49	49	0	0	77	6	5	0	0	0	88	88	0	0	27	0	4	0	0	0	31	31
20:15	0	0	26	0	1	0	0	7	34	34	0	0	68	4	3	0	0	0	75	75	0	0	33	2	2	0	0	0	37	37
20:30	0	0	20	1	0	0	0	3	24	24	0	0	50	6	3	1	0	0	60	60.5	0	0	42	0	1	0	0	0	43	43
20:45	0	0	20	1	0	0	0	2	23	23	0	0	65	12	3	0	0	0	80	80	0	0	54	1	0	0	0	0	55	55
H/TO	0	0	110	3	2	0	0	15	130	130	0	0	260	28	14	1	0	0	303	304	0	0	156	3	7	0	0	0	166	166
21:00	0	0	14	2	0	0	0	2	18	18	0	0	47	6	0	0	0	0	53	53	0	0	47	2	0	0	0	0	49	49
21:15	0	0	14	3	0	0	0	5	22	22	0	0	52	6	1	1	0	0	60	60.5	0	0	42	0	0	0	0	0	42	42
21:30	0	0	9	3	0	0	0	4	16	16	1	0	39	12	2	0	0	0	54	53.2	0	0	36	0	1	0	0	1	38	38
21:45	0	0	12	3	1	0	0	3	19	19	0	0	40	4	1	0	1	0	46	47.3	0	0	28	0	0	1	0	0	29	29.5
H/TO	0	0	49	11	1	0	0	14	75	75	1	0	178	28	4	1	1	0	213	214	0	0	153	2	1	1	0	1	158	159
22:00	0	0	9	5	0	0	0	3	17	17	0	0	33	8	1	0	0	0	42	42	0	0	22	1	1	0	0	0	24	24
22:15	0	0	7	1	0	0	0	5	13	13	1	0	15	5	1	0	0	0	22	21.2	0	0	7	0	0	0	0	0	7	7
22:30	0	0	4	0	0	0	0	3	7	7	0	0	14	5	0	0	0	0	19	19	0	0	19	2	1	0	0	0	22	22
22:45	0	0	5	0	0	0	0	3	8	8	0	0	15	6	0	0	0	0	21	21	0	0	14	0	0	0	0	0	14	14
H/TO	0	0	25	6	0	0	0	14	45	45	1	0	77	24	2	0	0	0	104	103	0	0	62	3	2	0	0	0	67	67
23:00	0	0	1	1	0	0	0	2	4	4	0	1	15	3	0	0	0	0	19	18.4	0	0	10	0	2	0	0	0	12	12
23:15	0	0	2	0	0	0	0	4	6	6	0	0	12	6	1	0	0	0	19	19	0	0	7	0	1	0	0	0	8	8
23:30	0	0	1	0	0	0	0	3	4	4	0	0	7	4	0	0	0	0	11	11	0	0	3	0	0	0	0	0	3	3
23:45	0	0	3	1	0	0	0	1	5	5	0	0	7	1	0	0	0	0	8	8	0	0	2	0	0	0	0	0	2	2
H/TO	0	0	7	2	0	0	0	10	19	19	0	1	41	14	1	0	0	0	57	56.4	0	0	22	0	3	0	0	0	25	25
4 TO	6	3	2278	142	155	32	2	308	2926	2938	29	11	5808	489	263	35	3	7	6645	6637	4	1	2352	116	151	12	2	3	2641	2646



Survey Name: 250 25944 Bus connects Research 3

Date: Tue 17

Location: [illegible] Blanchard Grinnell Road South, Chesapeake Road, Blackstown Way

Time: Tue 15Nov 2016

TIME	A => A										A => B										A => C										A => D									
	P/M	C	M/C	CAR	TAXI	LGV	1GV3	HGV	2 V	V/B	TOT	PED	P/M	C	M/C	CAR	TAXI	LGV	1GV3	HGV2	V/B	TOT	PED	P/M	C	M/C	CAR	TAXI	LGV	1GV3	HGV2	V/B	TOT	PED	P/M	C	M/C	CAR	TAXI	LGV	1GV3	HGV2	V/B	TOT	PED
08:00	0	0	0	0	0	0	0	0			0	0	0	2	1	0	0	0	0	0		3	0	0	0	21	0	0	0	0	0	0		22	0	0	0	12	4	1	0	0	0	0		17	0
08:15	1	0	0	0	0	0	0	0			1	0	0	0	0	0	0	0	0	0		0	0	0	0	28	0	2	0	0	0	0		30	0	0	0	5	4	2	0	0	0	0		11	0
08:30	0	0	0	0	0	0	0	0			0	0	0	3	0	0	0	0	0	0		3	0	0	0	11	0	2	0	0	0	0		13	0	0	0	10	1	1	0	0	0	0		12	0
08:45	0	0	0	0	0	0	0	0			0	0	0	1	1	0	0	0	0	0		2	0	0	0	11	0	2	0	0	0	0		13	0	0	0	4	2	1	0	0	0	0		7	0
H /TOT	1	0	0	0	0	0	0	0			1	0	0	6	2	0	0	0	0	0		8	0	0	0	71	0	6	0	0	0	0		77	0	0	0	31	11	5	0	0	0	0		47	0
09:00	0	0	0	0	0	0	0	0			0	0	0	1	1	0	0	0	0	0		2	0	0	0	16	0	0	0	0	0	0		16	0	0	0	4	1	1	0	0	0	0		6	0
09:15	1	0	0	0	0	0	0	0			1	0	0	0	1	1	0	0	0	0		2	0	0	0	4	2	0	0	0	0	0		6	0	0	0	2	1	0	0	0	0	0		3	0
09:30	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	7	3	1	0	0	0	0		11	0	0	0	5	2	0	0	0	0	0		7	0
09:45	1	0	0	0	0	0	0	0			1	0	0	0	0	0	0	0	0	0		0	0	0	0	4	0	0	0	0	0	0		4	0	0	0	2	1	0	0	0	0	0		3	0
H /TOT	2	0	0	0	0	0	0	0			2	0	0	1	2	0	0	0	0	0		3	0	0	0	31	5	1	0	0	0	0		37	0	0	0	13	5	2	0	0	0	0		20	0
10:00	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	6	3	0	0	0	0	0		9	0	0	0	1	0	0	0	0	0	0		1	0
10:15	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	4	2	0	0	0	0	0		6	0	0	0	2	1	0	0	0	0	0		3	0
10:30	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	5	2	0	0	0	0	0		7	0	0	0	2	1	0	0	0	0	0		3	0
10:45	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	2	1	0	0	0	0	0		3	0	0	0	0	0	0	0	0	0	0		0	0
H /TOT	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	17	7	0	0	0	0	0		24	0	0	0	5	2	0	0	0	0	0		7	0
11:00	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	13	5	0	0	0	0	0		18	0	0	0	3	2	0	0	0	0	0		5	0
11:15	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	8	3	0	0	0	0	0		11	0	0	0	2	1	0	0	0	0	0		3	0
11:30	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	10	3	0	0	0	0	0		13	0	0	0	3	1	0	0	0	0	0		4	0
11:45	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	6	2	0	0	0	0	0		8	0	0	0	1	0	0	0	0	0	0		1	0
H /TOT	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	37	13	0	0	0	0	0		50	0	0	0	9	4	0	0	0	0	0		13	0
12:00	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	6	3	0	0	0	0	0		9	0	0	0	1	0	0	0	0	0	0		1	0
12:15	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	4	1	0	0	0	0	0		5	0	0	0	2	1	0	0	0	0	0		3	0
12:30	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	5	2	0	0	0	0	0		7	0	0	0	2	1	0	0	0	0	0		3	0
12:45	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	2	1	0	0	0	0	0		3	0	0	0	0	0	0	0	0	0	0		0	0
H /TOT	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0		0	0	0	0	17	7	0	0	0	0	0		24	0	0	0	5	2	0	0	0	0	0		7	0



Survey Name: J34 19044 Sat Connects Rev4.5

Site: Site 57

Location: Bleaches Brown Road South/Unnamed Road/Blakestown Way

Date: Thu 19Nov2015

TIME	A -> A										A -> B										A -> C										A -> D									
	P/C	M/CCAR	TAXI	LGV	HGV3	HGV2	V1BU	TOT	PCU	P/C	M/CCAR	TAXI	LGV	HGV3	HGV2	V1BU	TOT	PCU	P/C	M/CCAR	TAXI	LGV	HGV3	HGV2	V1BU	TOT	PCU	P/C	M/CCAR	TAXI	LGV	HGV3	HGV2	V1BU	TOT	PCU
13:00	0	0	1	0	0	0	0	1	1.0	0	0	89	3	10	0	0	1	103	103	1	1	106	7	15	3	1	2	136	142	0	0	39	2	9	1	0	0	51	61
13:15	0	0	0	0	0	2	1	0	3.0	0	0	86	2	3	0	0	0	91	98	0	0	86	7	12	5	0	2	114	131	0	0	27	3	9	0	0	4	43	61
13:30	0	0	1	0	0	0	0	0	1.0	0	0	93	2	8	0	0	0	103	103	0	0	90	3	15	6	0	1	115	113	0	0	22	1	4	2	0	0	29	39
13:45	0	0	2	0	1	0	0	0	3	0	0	82	1	3	0	0	0	86	89	0	0	91	6	22	2	0	7	128	127	0	0	16	3	8	0	0	0	27	37
H/TOT	0	0	4	0	1	2	1	1	10.0	0	0	348	8	22	0	0	1	383	393	1	1	373	23	62	16	1	11	488	513	0	0	104	9	30	3	0	4	150	198
14:00	0	0	1	0	0	1	1	0	3.5	0	0	72	2	5	0	0	1	81	91	1	0	79	5	22	3	0	3	113	131	0	0	24	4	5	3	0	0	36	50
14:15	0	0	0	1	0	0	1	0	2.5	0	0	67	1	4	1	0	0	73	80	1	0	106	6	19	1	0	0	133	133	0	0	27	1	2	0	0	2	32	50
14:30	0	0	1	1	0	0	0	0	2	1	0	57	2	5	0	0	0	65	74	0	0	81	9	16	3	0	2	111	113	0	0	31	1	2	2	0	1	37	54
14:45	0	0	1	0	0	0	1	0	2.5	0	0	71	1	3	0	0	0	75	80	0	0	89	7	12	2	0	2	112	115	0	0	30	2	7	0	0	0	39	50
H/TOT	0	0	4	1	2	1	2	0	10.5	1	0	267	6	20	1	0	1	294	325	2	0	355	27	69	10	0	7	469	471	0	0	112	8	16	5	0	3	144	187
15:00	0	0	2	0	2	0	0	0	4	0	0	76	2	5	0	0	1	86	98	0	1	95	1	17	2	1	3	120	122	0	1	36	4	4	2	0	1	48	66
15:15	0	0	1	0	1	0	0	0	2	0	0	65	1	5	1	0	0	73	82	0	1	117	8	18	4	1	1	150	153	0	1	36	3	11	0	0	1	51	70
15:30	0	0	2	0	2	0	1	0	4.5	0	0	68	1	4	0	0	1	81	88	0	2	136	7	16	6	2	0	169	173	0	0	34	2	2	1	0	1	40	48
15:45	0	0	1	1	0	0	0	0	2	0	0	62	2	7	1	0	0	72	80	0	1	122	9	17	4	0	3	156	157	0	0	24	2	5	0	0	0	31	39
H/TOT	0	0	6	1	3	0	1	0	12.5	0	0	271	6	21	2	0	2	312	348	0	4	470	25	68	16	4	7	595	605	0	2	129	11	22	3	0	3	170	223
16:00	0	0	2	0	0	0	0	0	2	0	0	88	3	5	1	0	1	98	106	0	0	124	13	14	3	1	2	157	162	0	0	40	0	9	1	0	0	50	66
16:15	0	0	1	0	0	0	0	0	1	0	0	77	2	2	0	0	0	81	85	0	1	148	5	20	3	0	2	179	180	0	0	32	1	5	0	0	1	39	50
16:30	0	0	1	0	0	0	0	0	1	0	0	74	3	1	2	0	0	80	84	0	0	115	4	16	2	0	1	138	141	0	1	48	3	8	2	0	0	60	80
16:45	0	0	3	0	0	0	0	0	3	0	0	79	2	5	0	0	0	86	92	0	2	164	5	25	1	0	1	198	198	0	1	31	0	5	2	0	0	40	48
H/TOT	0	0	7	0	0	0	0	0	7.0	0	0	318	8	14	3	0	1	345	367	0	3	551	27	75	10	1	6	672	681	0	2	151	4	28	5	0	1	189	244
17:00	0	0	1	0	0	0	0	0	1	0	0	68	1	2	0	0	0	71	73	0	1	194	3	20	0	0	1	219	218	0	0	25	1	10	2	0	0	38	53
17:15	0	0	1	0	0	1	0	0	2.5	0	0	63	1	8	0	0	0	72	80	0	0	186	0	15	1	0	0	202	203	0	0	29	1	7	0	0	0	37	50
17:30	0	0	2	0	0	0	1	0	4.5	0	0	53	0	4	1	0	0	58	68	0	2	219	3	28	4	0	0	256	257	0	0	17	0	6	0	0	1	24	39
17:45	0	0	2	0	0	0	0	0	4	0	0	67	0	2	0	0	0	69	73	0	0	198	2	19	4	0	2	225	225	0	0	22	0	6	0	0	2	30	46
H/TOT	0	0	6	0	0	1	1	0	11.5	0	0	251	2	16	1	0	0	270	294	0	3	804	8	82	15	0	3	902	903	0	0	93	2	29	2	0	4	129	188
18:00	0	0	1	0	0	0	0	0	1	0	0	68	1	3	0	0	0	72	76	0	0	183	10	0	0	0	1	194	195	0	0	17	1	5	0	0	0	23	34
18:15	0	0	1	0	0	0	0	0	1	0	0	73	1	4	0	0	1	79	83	0	3	198	5	25	4	0	1	236	237	0	0	25	0	8	3	0	0	36	54
18:30	0	0	0	0	0	0	0	0	0	0	0	84	1	1	0	0	0	86	86	0	1	164	1	24	1	0	1	192	194	0	0	22	0	4	0	0	1	27	34
18:45	0	0	0	0	0	0	1	0	1.5	0	0	63	1	5	0	0	0	69	77	0	0	177	3	18	0	0	0	198	197	0	0	18	0	5	0	0	1	24	32
H/TOT	0	0	2	0	0	0	1	0	4.0	0	0	282	4	13	0	0	1	306	322	0	4	722	19	67	5	0	2	820	823	0	0	82	1	22	3	0	2	110	154
19:00	0	0	0	0	0	0	0	0	0	0	0	72	0	0	0	0	0	72	72	0	2	164	1	15	3	0	2	187	187	0	0	34	1	4	0	1	0	41	46
19:15	0	0	0	0	0	0	0	0	0	0	0	88	0	2	0	0	1	91	93	0	0	178	2	17	1	0	1	199	199	0	0	33	0	4	0	0	0	37	50
19:30	0	0	0	0	0	0	0	0	0	0	0	62	1	1	0	0	1	65	68	0	0	122	1	10	3	0	1	137	139	0	0	32	1	2	0	0	0	35	39
19:45	0	0	1	0	0	0	0	0	1	0	0	67	2	2	0	0	0	71	73	0	0	135	2	11	0	0	1	149	149	0	0	30	1	5	0	0	1	37	50
H/TOT	0	0	1	0	0	0	0	0	1.0	0	0	289	3	5	0	0	2	299	306	0	2	599	6	53	7	0	5	672	674	0	0	129	3	15	0	1	1	149	185
20:00	0	0	0	0	0	0	0	0	0	0	0	52	1	2	0	0	0	55	55	0	0	81	0	9	4	0	1	95	97	0	0	44	7	6	0	0	0	57	70
20:15	0	0	1	0	0	0	0	0	1	0	0	63	1	4	0	0	0	68	69	0	0	121	0	8	0	0	1	130	131	0	0	45	3	7	1	0	0	56	70
20:30	0	0	0	0	0	0	0	0	0	0	0	38	0	1	0	0	1	40	42	0	0	86	0	5	0	0	1	92	92	0	0	53	1	7	0	0	0	61	66
20:45	0	0	0	0	0	0	0	0	0	0	0	31	1	0	0	0	0	32	32	0	0	86	0	12	2	0	2	102	102	0	0	32	0	4	0	0	0	36	38
H/TOT	0	0	1	0	0	0	0	0	1.0	0	0	185	3	7	0	0	1	196	198	0	0	374	0	34	6	0	5	419	422	0	0	174	5	24	1	0	0	210	244
21:00	0	0	1	0	0	0	0	0	1	0	0	54	0	0	0	0	0	54	54	0	0	80	0	7	0	0	0	87	86	0	0	50	1	5	0	0	0	56	62
21:15	0	0	1	0	1	0	0	0	2	0	0	30	1	0	1	0	0	32	34	0	0	66	0	7	0	0	1	74	74	0	0	52	2	9	0	0	1	64	74
21:30	0	0	1	0	0	0	0	0	1	0	0	28	2	0	0	0	1	31	32	0	0	56	0	7	0	0	0	63	64	0	0	23	1	2	1	0	0	27	34
21:45	0	0	1	0	1	0	0	0	2	0	0	24	1	0	1	0	0	26	28	0	0	61	0	4	1	0	0	66	67	0	1	31	0	3	0	0	0	35	40
H/TOT	0	0	4	0	2	0	0	0	6	0	0	136	4	0	2	0	2	144	148	0	0	263	0	25	1	0	1	290	291	0	1	156	4	19	1	0	1	182	210
22:00	0	0	1	0	0	0	0	0	1	0	0	15	1	3	0	0	0	19	20	0	0	57	0	7	0	0	0	64	63	0	0	23	1	0	0	1	0	25	26
22:15	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5	0	0	49	1	1	2	0	1	54	55	0	0	26	0	1	0	0	0	27	29
22:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	1	8	8	0	0	40	0	0	0	0	1	41	41	0	0	19	1	3	0	0	0	23	25
22:45	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11	0	0	31	0	4	1	0	1	37	36	0	1	13	2	1	0	0	0	17	18
H/TOT	0	0	1	0	0	0	0	0	1.0	0	0	38	2	3	0	0	1	44	44	0	0	177	1	12	3	0	2	195	195	0	1	81	4	5	0	0	0	91	98
23:00	0	0	0	0	0	0	0	0	0	0	0	11	1	2	0	0	0	14	14	0	0	35	1	3	0	0	1	40	40	0	0	19	2	0	0	0	0	21	23
23:15	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	0	0	40	0	3	0	0	0	43	43	0	0	11	0	0	0	0	0	11	11
23:30	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	0	0	35	0	2	0	0	1	38	38	0	0	8	0	1	0	0	0	9	9
23:45	0	0	1	0	0	0	0	0	1	0	0	3	0	0	0	0	0	3	3	0	0	18	2	1	0	0	1	22	21	0	0	9	1	0	0	0	0	10	10
H/TOT	0	0	1	0	0	0	0	0	1.0	0	0	24	1	3	0	0	0	28	28	0	0	128	3	9	0	0	3	143	142	0	0	47	3	1	0	0	0	51	53
24 HOUR	0	0	36	2	8	3	2	1	52.0	1	0	2284	47	142	6	0	9	2489	2577	4	17	4218	185	570	106	14	61	5155	5215	0	4	1024	111	287	43	4	24	1497	2001



Survey Name

Site

Location

Date

TIM	A => A										A => B										A => C										A => D									
	IN/C	M/CCAR	TAXI	LGV	HGV1	HGV2	V1BU	TOT	PED	IN/C	M/CCAR	TAXI	LGV	HGV1	HGV2	V1BU	TOT	PED	IN/C	M/CCAR	TAXI	LGV	HGV1	HGV2	V1BU	TOT	PED	IN/C	M/CCAR	TAXI	LGV	HGV1	HGV2	V1BU	TOT	PED
00:00																																							
00:15																																							
00:30																																							
00:45																																							
H /TOT																																							
01:00																																							
01:15																																							
01:30																																							
01:45																																							
H /TOT																																							
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H/TOT																																							
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08:00																																							
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H/TOT																																							
11:00																																							
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H/TOT																																							
12:00																																							
12:15																																							
12:30																																							
12:45																																							
H/TOT																																							



Survey Name: 256 17514 Bus Comments Round 5

Site: Site 17

Location: Alencon Way/Lower Road South/Unnamed Area/Wallasean Way

Date: Thu 19/Nov/2020

	A => A										A => B										A => C										A => D									
TIME	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V/RIG	TOT	PHF	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V/RIG	TOT	PHF	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V/RIG	TOT	PHF	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V/RIG	TOT	PHF
13:00	0	0	113	6	10	0	0	129		0	0	0	0	0	0	0	0		0	0	79	4	0	0	0	2	85		0	0	49	4	1	0	0	1	55	
13:15	0	0	123	7	7	2	0	139	0.90	0	0	1	0	0	0	0	1	0.25	0	0	95	2	2	0	0	3	102	0.84	0	0	41	3	2	0	0	2	48	0.88
13:30	0	0	123	4	3	1	0	131		0	0	0	0	0	0	0	0		0	0	86	8	0	0	0	0	102		1	0	42	0	5	0	0	2	50	
13:45	0	0	107	6	8	1	0	122		0	0	2	0	0	0	0	2		0	0	99	5	3	0	0	0	107		0	0	52	3	3	0	0	4	62	
H/TOT	0	0	466	23	28	4	0	521		0	0	3	0	0	0	0	3		0	0	359	19	13	0	0	5	396		2	0	184	10	11	0	0	9	215	
14:00	0	0	131	5	4	0	0	140		0	0	2	0	0	0	0	2		0	0	104	1	4	0	0	4	113		1	0	41	0	2	0	0	4	48	
14:15	0	0	130	3	5	1	0	140	0.94	0	0	1	0	0	0	0	1	0.13	0	0	93	10	5	0	0	3	111	0.91	0	0	52	1	2	1	0	1	57	0.89
14:30	0	0	97	2	5	2	1	108		0	0	0	0	0	0	0	0		0	0	90	6	5	0	0	1	102		0	1	61	2	1	0	0	2	67	
14:45	0	1	80	3	7	0	0	91		0	0	2	0	0	0	0	2		0	0	88	4	7	0	0	3	102		0	0	49	1	2	0	0	0	52	
H/TOT	0	1	442	15	25	3	1	494		0	0	5	0	0	0	0	5		0	0	375	21	19	0	0	9	428		2	1	203	4	7	1	0	7	225	
15:00	0	0	98	3	5	1	0	108		0	0	2	0	0	0	0	2		0	0	87	6	6	0	0	3	102		0	0	56	2	1	0	0	2	61	
15:15	0	0	80	2	7	1	0	92		0	0	1	0	0	0	0	1		0	0	82	1	1	0	0	3	88		0	1	49	3	0	0	0	2	55	
15:30	0	0	89	5	4	1	0	99		0	0	0	0	0	0	0	0		0	0	68	0	0	0	0	3	71		0	0	42	2	3	0	0	1	48	
15:45	0	0	90	2	8	0	0	100		0	0	1	0	0	0	0	1		0	0	90	7	3	0	0	0	100		0	1	48	2	4	1	0	2	58	
H/TOT	0	0	357	12	24	3	0	396		0	0	4	0	0	0	0	4		0	0	327	14	10	0	0	11	362		0	2	195	9	8	1	0	7	222	
16:00	0	0	99	0	9	0	0	108		0	0	0	0	0	0	0	0		0	0	85	6	6	0	0	1	98		0	0	47	3	2	0	0	1	53	
16:15	0	0	99	4	11	0	0	114	0.88	0	0	1	0	0	0	0	1	0.25	0	0	83	1	1	0	0	3	89	0.92	0	0	59	1	0	2	0	2	64	0.83
16:30	0	0	74	6	6	0	0	87		0	0	1	0	0	0	0	1		0	0	66	6	0	0	0	0	72		0	0	52	0	4	0	0	0	56	
16:45	0	0	38	2	3	0	0	43		0	0	0	0	0	0	0	0		0	0	90	7	3	0	0	0	100		1	1	52	0	1	3	0	2	60	
H/TOT	0	0	310	12	29	0	0	351		0	0	2	0	0	0	0	2		0	0	324	20	11	0	0	4	359		1	1	210	4	7	3	0	5	233	
17:00	0	0	61	1	1	1	0	64		0	0	0	0	0	0	0	0		0	0	85	2	1	0	0	1	89		1	0	57	1	4	0	0	4	67	
17:15	0	0	47	2	4	0	0	53	0.91	0	0	1	0	0	0	0	1	0.25	0	0	58	1	2	0	0	1	64	0.91	0	1	62	0	5	0	0	0	68	0.93
17:30	0	0	29	0	0	0	0	29		0	0	0	0	0	0	0	0		0	0	61	3	3	1	0	1	69		0	0	72	0	7	1	0	0	80	
17:45	1	0	32	1	5	0	0	39		0	0	0	0	0	0	0	0		0	0	53	1	1	0	0	0	55		0	1	71	0	1	1	0	3	77	
H/TOT	1	0	169	4	10	1	0	185		0	0	1	0	0	0	0	1		0	0	257	7	6	1	0	2	276		1	1	262	1	16	2	0	7	291	
18:00	0	0	42	0	1	0	0	43		0	0	0	0	0	0	0	0		0	0	49	1	4	0	0	0	54		0	0	58	0	10	2	0	0	70	
18:15	1	0	43	2	2	0	0	48	0.90	0	0	2	0	0	0	0	2	0.50	0	0	61	2	2	0	0	0	65	0.83	0	0	67	0	8	0	0	3	78	0.89
18:30	0	0	69	2	0	0	0	71		0	0	1	0	0	0	0	1		0	0	68	3	4	0	0	0	75		0	0	54	0	4	1	0	4	63	
18:45	0	0	62	4	1	0	0	67		0	0	0	0	0	0	0	0		0	0	62	7	3	0	0	0	72		0	0	80	0	7	0	0	7	94	
H/TOT	1	0	216	8	4	0	0	229		0	0	3	0	0	0	0	3		0	0	240	13	13	0	0	0	266		0	0	259	0	29	3	0	7	305	
19:00	2	0	77	1	3	0	0	83		0	0	1	0	0	0	0	1		0	0	96	1	2	0	0	0	99		1	1	56	0	1	0	0	2	61	
19:15	0	0	58	3	5	0	0	66	0.91	0	0	1	0	0	0	0	1	0.25	0	0	73	2	3	0	0	2	80	0.93	0	0	59	2	4	0	0	3	68	0.85
19:30	0	0	69	3	2	0	0	74		0	0	0	0	0	0	0	0		0	0	86	2	1	0	0	0	89		0	0	64	1	4	1	0	4	74	
19:45	0	1	90	3	7	0	0	101		0	0	1	0	0	0	0	1		0	0	82	2	3	0	0	0	87		0	0	59	0	1	0	0	1	61	
H/TOT	2	1	292	10	18	0	0	323		0	0	3	0	0	0	0	3		0	0	337	7	9	0	0	2	356		1	1	238	3	10	1	0	9	263	
20:00	1	0	100	0	6	0	0	107		0	0	0	0	0	0	0	0		0	0	89	4	3	0	0	1	97		0	0	46	1	0	4	0	3	54	
20:15	0	0	100	5	5	0	0	110	0.91	0	0	1	0	0	0	0	1	0.25	0	0	76	2	3	0	0	0	81	0.84	0	0	42	0	4	0	0	3	49	0.91
20:30	1	0	105	1	4	0	0	111		0	0	0	0	0	0	0	0		0	0	87	1	3	1	0	1	93		0	0	36	3	0	0	0	1	40	
20:45	0	0	124	2	6	0	0	132		0	0	1	0	0	0	0	1		0	0	109	3	5	0	0	0	117		0	0	46	1	1	0	0	2	50	
H/TOT	2	0	427	8	21	0	0	458		0	0	2	0	0	0	0	2		0	0	361	10	14	1	0	2	388		0	0	170	5	5	4	0	6	193	
21:00	0	0	137	0	0	0	0	137		0	0	1	0	0	0	0	1		0	0	110	1	2	0	0	0	113		0	0	58	0	1	0	0	1	60	
21:15	0	0	131	2	1	0	0	134	0.93	0	0	0	0	0	0	0	0	0.00	0	0	104	1	2	0	0	0	107	0.90	0	0	46	0	1	0	0	2	49	0.82
21:30	0	0	93	0	4	0	0	97		0	0	0	0	0	0	0	0		0	0	58	2	0	0	0	1	61		0	0	21	3	0	0	0	1	25	
21:45	0	0	58	1	0	0	0	59		0	0	0	0	0	0	0	0		0	0	42	1	0	0	0	1	44		0	0	12	1	2	0	0	2	17	
H/TOT	0	0	419	3	5	0	0	427		0	0	1	0	0	0	0	1		0	0	314	5	4	0	0	3	325		0	0	137	4	4	0	0	6	151	
22:00	0	0	52	0	0	0	0	52		0	0	1	0	0	0	0	1		0	0	62	2	2	0	0	0	66		0	0	18	0	0	0	0	0	18	
22:15	0	0	49	0	1	0	0	50	0.96	0	0	0	0	0	0	0	0	0.00	0	0	46	2	1	0	0	0	49	0.74	0	0	26	1	2	0	0	3	32	0.78
22:30	0	0	53	0	0	0	0	53		0	0	0	0	0	0	0	0		0	0	34	0	1	0	0	0	35		0	0	14	0	1	0	0	0	15	
22:45	0	0	37	0	0	0	0	37		0	0	0	0	0	0	0	0		0	0	28	1	0	0	0	1	30		0	0	7	1	0	0	0	0	8	
H/TOT	0	0	191	0	1	0	0	192		0	0	1	0	0	0	0	1		0	0	170	4	4	0	0	1	179		0	0	65	2	3	0	0	0	70	
23:00	0	0	27	0	2	0	0	29		0	0	0	0	0	0	0	0		0	0	34	2	1	0	0	0	37		0	0	14	1	0	0	0	0	15	
23:15	0	0	26	0	2	0	0	28		0	0	0	0	0	0	0	0		0	0	15	1	0	0	0	0	16		0	0	11	1	0	0	0	2	14	
23:30	0	0	23	1	0	0	0	24		0	0	0	0	0	0	0	0		0	0	17	1	0	0	0	1	19		0	0	7	0	0	0	0	2	9	
23:45	0	0	9	2	0	0	0	11		0	0	0	0	0	0	0	0		0	0	4	0	0	0	0	0	4		0	0	3	0	0	0	0	1	4	
H/TOT	0	0	86	3	4	0	0	93		0	0	0	0	0	0	0	0		0	0	70	4	1	0	0	1	76		0	0	35	2	0	0	0	3	40	
24 TOT	4	2	4206	178	259	18	4	4671		0	0	26	1	4	0	0	31		0	0	4029	189	147	3	0	79	4447		6	4	2060	106	130	20	4	93	2423	



Survey Name: 154 13544 Bus Lanes to Route 5

Site: Site 17 - 7

Location: Bilton Road (Uptown Road) Westbound, Chelmsford Road, Bilton Uptown Ways

Date: Thu 23/05/2019

	C => A												C => B												C => C												C => D											
TIME	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V6	TOT	PCU	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V6	TOT	PCU	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V6	TOT	PCU	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	V6	TOT	PCU
00:00	0	15	2	0	0	0	1	18	18	0	2	1	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
00:15	0	18	0	0	0	0	0	18	18	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
00:30	0	15	3	0	0	0	0	18	18	0	3	2	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5
00:45	0	13	1	0	0	0	0	14	14	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
H/TOT	0	61	6	0	0	0	1	68	68	0	10	4	1	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	0	12	12
01:00	0	9	1	0	0	0	0	10	10	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
01:15	0	6	1	0	0	2	0	9	11	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
01:30	0	6	1	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	26	3	1	0	2	0	32	34	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
02:00	0	4	2	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	2	0	0	0	0	0	2	2	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	13	2	1	0	0	0	16	16	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:00	0	6	0	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	15	0	1	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	14	0	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	38	2	1	0	0	0	41	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	7	4	2	0	0	1	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	17	1	1	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
04:30	0	11	3	2	1	0	0	17	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	9	1	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	44	10	5	1	0	1	60	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
05:00	0	23	2	6	1	0	0	32	34	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
05:15	0	29	0	5	2	0	0	36	38	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	2	44	1	4	0	0	0	51	53	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
05:45	1	58	4	2	1	0	0	66	70	0	9	0	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	3	154	23	17	4	0	0	201	215	0	21	1	1	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
06:00	3	62	9	12	0	0	0	86	90	0	9	1	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
06:15	2	86	3	26	1	0	0	118	122	0	13	2	3	0	0	1	19	19	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3
06:30	2	144	3	35	3	0	0	187	195	0	14	1	1	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5
06:45	1	190	4	36	2	0	1	234	241	0	21	0	1	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5
H/TOT	8	424	19	109	6	0	1	565	598	0	57	4	5	0	0	1	67	67	0	0	0	0	0	0	0	0	0	0	0	14	0	2	0	0	0	16	16
07:00	1	146	7	23	1	0	0	178	180	0	18	1	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
07:15	1	183	8	15	0	1	1	209	208	0	15	5	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	6	6
07:30	5	183	8	25	2	0	1	224	224	0	23	4	0	1	0	0	28	28	0	0	0	0	0	0	0	0	0	0	0	4	1	2	0	0	0	7	7
07:45	2	208	8	21	1	0	1	241	239	0	20	4	1	0	0	0	25	25	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6
H/TOT	8	715	31	84	4	1	3	852	851	0	76	14	2	1	0	0	93	93	0	0	0	0	0	0	0	0	0	0	0	20	1	2	1	0	0	24	24
08:00	4	179	8	17	2	0	0	210	208	0	20	6	1	0	0	0	27	27	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6
08:15	1	172	6	5	5	2	0	191	196	0	16	3	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
08:30	4	161	6	16	4	1	1	193	196	0	16	4	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
08:45	0	142	6	20	5	0	1	174	174	0	13	3	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
H/TOT	9	654	27	58	16	3	2	768	774	0	65	16	2	0	0	0	83	83	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	18	18
09:00	3	133	7	13	3	1	0	160	164	0	12	1	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
09:15	2	113	5	9	4	1	0	134	138	0	12	1	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	5	1	2	1	0	0	9	9
09:30	8	121	3	10	4	0	1	147	144	0	10	1	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	0	5	5
09:45	0	91	3	21	2	2	0	119	119	0	9	1	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
H/TOT	13	458	18	53	13	4	1	560	565	0	43	4	1	0	0	0	48	48	0	0	0	0	0	0	0	0	0	0	0	14	2	3	1	0	0	20	20
10:00	8	84	4	19	3	0	1	119	119	0	10	2	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
10:15	8	84	2	18	5	1	0	118	118	0	8	2	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
10:30	1	91	0	19	5	0	0	116	116	0	7	1	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
10:45	0	89	0	20	2	0	0	111	111	0	9	1	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	17	348	6	76	15	1	1	464	464	0	34	6	0	0	0	0	40	40	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7
11:00	5	75	6	15	4	0	0	105	105	0	8	2	0	1	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
11:15	0	85	2	13	1	0	1	102	102	0	8	3	0	1	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
11:30	2	63	1	17	6	0	1	90	92	0	8	2	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	7	223	9	45	11	0	2	297	299	0	24	7	0	2	0	0	33	33	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
12:00	2	86	2	15	5	0	1	111	112	0	8	3	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
12:15	1	84	1	18	2	0	0	106	106	0	6	3	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
12:30	1	92	5	7	3	1	1	110	109	0	6	2	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
12:45	0	90	5	15	2	2	0	114	114	0	6	1	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3
H/TOT	5	322	13	55	12	3	2	411	411	0	26	9	0	0	0	0	35	35	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	0	10	10



Survey Name: 254 18344 Bus Connectiv Route 5

Site: Site 57

Location: Bitrichio between Reed South/unnamed Road/Barstaple Way

Date: Thu 19/Nov/2019

	E >> A										E >> B										E >> C										E >> D									
TIME	P/E	M/C	CAR	TAXI	LGV	HGV1	HGV2	HGV3	PED		P/E	M/C	CAR	TAXI	LGV	HGV1	HGV2	HGV3	PED		P/E	M/C	CAR	TAXI	LGV	HGV1	HGV2	HGV3	PED		P/E	M/C	CAR	TAXI	LGV	HGV1	HGV2	HGV3	PED	
13:00	1	1	72	2	19	4	0	0	99	0	0	0	66	6	6	0	0	1	79	0	0	0	0	0	0	0	0	0	0	0	0	0	11	1	0	1	0	0	13	13
13:15	1	0	77	0	5	5	0	0	94	0	0	0	82	14	6	0	0	0	102	102	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	17	17
13:30	0	1	84	5	23	5	2	0	120	120	0	0	88	10	3	0	0	0	101	101	0	0	0	0	0	0	0	0	0	0	1	0	14	0	1	0	0	0	16	16
13:45	0	0	109	5	10	7	0	0	131	131	0	0	97	13	9	0	1	0	120	120	0	0	0	0	0	0	0	0	0	0	0	0	10	1	4	0	0	0	15	15
H/TOT	2	2	340	12	57	21	2	0	436	440	0	0	282	43	24	0	1	1	402	404	0	0	0	0	0	0	0	0	0	0	1	0	52	2	5	1	0	0	61	61
14:00	0	0	95	4	10	0	0	0	109	109	0	0	92	8	5	0	0	1	106	106	0	0	0	0	0	0	0	0	0	0	0	0	10	0	2	1	0	0	13	13
14:15	0	0	99	4	15	3	0	0	121	121	0	0	71	9	3	0	0	1	85	85	0	0	0	0	0	0	0	0	0	0	0	0	9	1	1	0	0	1	12	13
14:30	0	1	105	3	19	4	1	0	133	133	0	0	75	1	9	1	0	0	86	86	0	0	0	0	0	0	0	0	0	0	0	0	12	1	1	0	0	0	14	14
14:45	0	0	91	7	15	1	0	0	114	114	1	0	70	3	9	3	0	0	86	86	0	0	0	0	0	0	0	0	0	0	0	0	13	1	3	0	0	0	17	17
H/TOT	0	1	363	15	70	13	1	0	482	474	1	0	317	21	26	4	0	1	379	383	0	0	0	0	0	0	0	0	0	0	0	0	44	3	7	1	0	1	55	56
15:00	0	1	93	6	10	1	0	2	113	113	0	0	82	3	6	0	0	0	91	91	0	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	0	16	16
15:15	0	1	92	5	16	4	0	0	118	118	0	0	57	8	5	0	0	1	71	71	0	0	0	0	0	0	0	0	0	0	0	0	11	0	4	0	0	1	16	17
15:30	0	1	97	6	24	2	0	0	130	130	0	0	68	8	4	0	0	0	80	80	0	0	0	0	0	0	0	0	0	0	0	0	16	1	2	0	0	0	19	19
15:45	0	0	116	3	18	3	0	0	141	141	0	0	58	1	2	0	0	0	61	61	0	0	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	0	17	17
H/TOT	0	3	398	20	68	10	0	2	502	502	0	0	265	20	17	0	0	1	303	303	0	0	0	0	0	0	0	0	0	0	0	0	58	3	6	0	0	1	68	69
16:00	0	1	93	4	10	1	0	0	110	110	0	0	85	2	6	0	0	2	95	95	0	0	0	0	0	0	0	0	0	0	0	0	20	1	1	0	0	0	22	22
16:15	0	1	123	5	21	3	0	0	153	154	1	0	22	4	4	1	0	3	35	36	0	0	0	0	0	0	0	0	0	0	0	0	15	0	2	1	0	0	18	18
16:30	0	0	120	3	18	2	1	0	144	144	0	0	24	1	3	0	0	1	29	29	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	1	0	14	15
16:45	0	0	112	6	17	3	1	0	140	140	0	0	22	0	4	0	0	2	28	28	0	0	0	0	0	0	0	0	0	0	0	0	20	2	0	0	0	0	22	22
H/TOT	0	2	448	18	66	9	2	0	547	548	1	0	153	7	17	1	0	8	187	188	0	0	0	0	0	0	0	0	0	0	0	0	66	4	3	1	0	0	76	77
17:00	0	0	133	3	14	0	0	0	150	150	0	1	29	2	2	0	0	0	34	34	0	0	0	0	0	0	0	0	0	0	0	0	17	0	2	0	0	0	19	19
17:15	1	0	143	4	16	2	0	0	167	167	0	0	8	0	3	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	21	0	2	0	0	0	23	23
17:30	0	0	147	5	9	3	0	2	166	166	0	0	6	7	0	1	1	0	15	16	0	0	0	0	0	0	0	0	0	0	0	0	12	1	3	0	0	0	16	16
17:45	0	0	123	5	17	0	0	1	146	146	1	1	19	4	4	0	0	3	32	32	0	0	0	0	0	0	0	0	0	0	0	0	26	0	2	1	0	0	29	29
H/TOT	1	0	546	17	56	5	0	3	629	629	1	2	62	13	9	1	1	3	92	93	0	0	0	0	0	0	0	0	0	0	0	0	75	1	9	1	0	0	87	86
18:00	0	0	126	3	6	0	0	0	135	135	0	0	8	0	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	17	17
18:15	0	0	123	8	9	4	0	0	144	144	0	1	33	0	5	0	0	4	43	43	0	0	0	0	0	0	0	0	0	0	0	0	17	3	0	0	0	0	20	20
18:30	0	0	102	2	10	2	0	0	116	116	0	0	58	1	2	0	0	3	64	64	0	0	0	0	0	0	0	0	0	0	0	0	10	1	2	1	0	0	22	22
18:45	0	0	100	0	13	0	0	0	113	113	0	0	30	10	0	1	0	0	41	41	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	21	21
H/TOT	0	0	453	13	38	6	0	0	508	508	0	1	130	23	16	1	0	12	183	183	0	0	0	0	0	0	0	0	0	0	0	0	64	5	2	1	0	0	72	80
19:00	0	1	102	2	5	2	0	0	112	112	0	0	66	4	3	0	0	3	76	76	0	0	0	0	0	0	0	0	0	0	0	0	19	1	0	0	0	0	21	21
19:15	0	0	113	1	6	1	0	1	122	122	0	1	58	4	4	0	0	2	69	68	0	0	0	0	0	0	0	0	0	0	0	0	23	0	1	1	0	0	25	25
19:30	0	0	101	1	13	0	0	0	115	115	0	0	68	0	5	1	0	2	76	76	0	0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	0	0	27	27
19:45	0	0	92	1	10	2	0	0	105	105	0	0	65	3	1	0	0	2	71	71	0	0	0	0	0	0	0	0	0	0	0	0	25	0	1	0	0	0	26	26
H/TOT	0	1	408	5	34	5	0	1	454	454	0	1	257	9	13	1	0	9	292	291	0	0	0	0	0	0	0	0	0	0	0	0	93	2	1	0	0	0	100	99
20:00	0	1	77	4	8	3	0	0	93	93	0	0	75	0	6	1	0	4	86	86	0	0	0	0	0	0	0	0	0	0	0	0	10	0	5	0	0	0	15	15
20:15	0	0	84	0	4	0	0	0	88	88	0	0	39	4	2	0	0	5	50	49	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	19	19
20:30	0	0	64	0	8	3	0	0	75	75	0	0	33	3	2	0	0	1	39	39	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	18	18
20:45	0	0	45	0	2	0	0	1	48	48	0	0	44	0	0	0	0	0	44	44	0	0	0	0	0	0	0	0	0	0	0	0	19	1	1	0	0	0	21	21
H/TOT	0	1	270	4	22	6	0	1	304	304	0	0	191	16	10	1	0	10	219	218	0	0	0	0	0	0	0	0	0	0	0	0	66	1	6	0	0	0	73	73
21:00	0	1	58	0	3	0	0	0	62	62	0	0	45	1	2	0	0	2	50	50	0	0	0	0	0	0	0	0	0	0	0	0	19	0	2	0	0	0	21	21
21:15	0	0	42	1	4	0	0	0	47	47	0	0	32	0	0	0	0	4	36	36	0	0	0	0	0	0	0	0	0	0	0	0	15	1	2	0	0	0	18	18
21:30	0	0	47	3	1	0	0	0	51	51	1	0	14	5	2	0	0	0	22	21	0	0	0	0	0	0	0	0	0	0	0	0	15	1	3	0	0	0	19	19
21:45	0	0	41	2	1	0	0	0	44	44	0	0	37	0	0	0	0	2	39	39	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12	12
H/TOT	0	1	194	6	9	0	0	0	209	209	1	0	128	6	4	0	0	8	147	146	0	0	0	0	0	0	0	0	0	0	0	0	61	2	5	0	0	0	68	70
22:00	0	0	53	2	2	0	0	1	58	58	0	0	37	0	2	0	0	0	39	39	0	0	0	0	0	0	0	0	0	0	0	0	5	0	2	0	0	0	7	7
22:15	0	0	47	0	1	0	0	0	48	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7
22:30	0	1	22	2	1	2	0	0	28	28	0	0	11	2	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	0	12	12
22:45	0	0	19	0	0	0	0	0	19	19	0	0	12	2	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10	10
H/TOT	0	1	141	4	4	2	0	1	153	153	0	0	60	4	2	0	0	0	66	66	0	0	0	0	0	0	0	0	0	0	0	0	36	2	3	0	0	0	41	41
23:00	0	0	26	1	0	0	0	0	27	27	0	0	11	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
23:15	0	0	28	0	1	0	0	0	29	29	0	0	4	2	0	0	0	1	7	7	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7
23:30	0	0	15	3	2	0	0	0	20	20	0	0	3	1	0	0	0	1	5	5	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8
23:45	0	0	14	3	2	0	0	1	20	20	0	0	4	1	0	0	0	1	6	6	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
H/TOT	0	0	84	7	5	0	0	1	97	96	0	0	22	4	0	0	0	3	29	29	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	24	24
24 HT	4	11	2139	108	465	86	5	9	2817	2815	3	4	1465	160	131	7	1	40	1811	1811	0	0	0	0	0	0	0	0	0	0	1	0	566	40	80	14	2	1	704	704



Survey Name: 15033344 Sat Jnwood R Junct 1

Site: Site 1 1

Location: Blanchardstown Road South, Jnwood Road, Blanchardstown Wes

Date: Thu 23/Mar/2023

TIME	D => A										D => B										D => C										D => D									
	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	WIBUS	TOT	PCU	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	WIBUS	TOT	PCU	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	WIBUS	TOT	PCU	P/C	M/CCAR	TAXI	LGV	HGV1	HGV2	WIBUS	TOT	PCU
08:00	0	0	0	0	0	0	0	0	0	5	0	2	1	1	0	0	0	8	5	0	2	1	0	0	0	8	7	0	1	0	0	0	0	0	0	1	1
08:15	1	0	0	0	0	0	0	1	1	7	0	3	2	0	0	0	0	12	8	0	2	1	0	0	0	11	10	0	1	0	0	0	0	0	0	1	1
08:30	0	0	2	2	0	0	0	4	4	6	0	2	1	0	0	0	0	9	8	0	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	5	0	2	1	2	0	0	0	10	7	0	2	1	0	0	0	10	9	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	2	2	0	0	0	5	5	25	0	9	5	3	0	0	0	39	28	0	7	3	0	0	0	39	35	0	2	0	0	0	0	0	0	2	2
09:00	0	0	0	1	1	0	0	2	2	5	0	3	1	0	0	0	0	9	6	0	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	1	0	0	0	1	1	6	0	3	2	0	0	0	0	11	7	0	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	9	0	5	0	0	0	0	0	14	9	0	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0
09:45	0	0	2	0	0	0	0	2	2	7	0	2	1	0	0	0	0	10	8	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	2	0	0	0	4	4	27	0	13	3	0	0	0	0	44	30	0	3	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	3	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	12	0	4	0	0	0	0	0	16	12	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
20:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	0	6	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	0	0	20	16	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0



Survey Name: 156 10164 Bus Connects Route 5

Site: Site 57

Location: Glasnevin Church Road South/Ormonde Road/Botanic Ave

Date: Thu 10/Nov/2016

	O => A										O => B										O => C										O => D									
TIME	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	HGV3	V/RIG	TOT	PCU	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	HGV3	V/RIG	TOT	PCU	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	HGV3	V/RIG	TOT	PCU	P/C	M/CAR	TAXI	LGV	HGV1	HGV2	HGV3	V/RIG	TOT	PCU
13:00	0	0	38	2	1	1	2	0	43	46	0	0	45	0	2	1	0	1	49	49	1	0	18	0	0	0	0	0	19	20	0	0	0	0	0	0	0	0	0	0
13:15	0	1	37	1	5	1	1	0	47	48	0	0	27	0	1	0	0	4	32	32	0	0	23	3	5	0	0	0	31	31	0	0	0	0	0	0	0	0	0	0
13:30	0	0	47	1	13	1	0	1	63	66	0	0	19	3	1	0	0	2	25	25	0	0	36	6	2	0	0	0	44	44	0	0	0	0	0	0	0	0	0	0
13:45	0	0	44	1	3	0	0	0	50	50	0	1	49	0	2	0	0	1	53	53	0	0	11	1	5	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	163	5	10	3	3	1	210	217	0	1	140	3	6	1	0	8	159	159	1	0	88	10	12	0	0	0	111	113	0	0	0	0	0	0	0	0	0	0
14:00	0	0	58	3	11	0	0	1	73	73	1	0	38	5	0	0	0	2	46	46	1	0	39	6	4	0	0	0	50	49	0	0	0	0	0	0	0	0	0	0
14:15	0	0	35	5	0	3	0	0	44	44	0	0	18	0	1	0	0	2	21	21	1	0	30	1	0	0	0	0	32	31	0	0	0	0	0	0	0	0	0	0
14:30	0	0	46	2	7	0	0	2	57	57	0	0	48	6	4	0	0	1	61	61	1	0	30	0	2	1	0	0	34	35	0	0	0	0	0	0	0	0	0	0
14:45	0	0	39	2	2	1	0	0	74	74	0	0	35	6	1	0	0	1	43	43	0	1	21	1	4	0	0	0	27	28	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	178	12	20	4	0	3	248	248	1	0	147	18	6	0	0	6	179	179	3	1	120	8	10	1	0	0	143	143	0	0	0	0	0	0	0	0	0	0
15:00	0	0	46	4	10	4	0	0	64	66	0	0	26	7	2	0	1	0	36	36	0	0	21	1	2	0	0	1	25	25	0	0	0	0	0	0	0	0	0	0
15:15	0	0	43	4	5	3	0	1	56	56	1	0	33	0	0	0	0	3	37	38	2	0	16	5	4	0	0	0	27	28	0	0	0	0	0	0	0	0	0	0
15:30	0	0	39	4	3	1	0	2	69	69	0	0	32	1	2	0	0	1	36	36	0	0	35	5	2	0	0	0	42	42	0	0	0	0	0	0	0	0	0	0
15:45	0	0	38	0	4	1	0	0	43	43	1	0	52	3	1	1	0	3	61	60	0	0	14	6	2	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	166	12	22	9	0	3	232	234	2	0	143	11	5	1	0	7	170	170	2	0	86	17	10	0	0	1	116	117	0	0	0	0	0	0	0	0	0	0
16:00	0	0	36	3	5	2	0	1	67	68	0	0	38	6	1	0	0	1	46	46	1	0	2	2	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0
16:15	0	0	57	1	5	1	0	1	65	65	0	0	56	6	0	0	0	4	66	66	0	0	5	0	1	0	0	1	7	7	0	0	0	0	0	0	0	0	0	0
16:30	0	0	39	1	4	0	0	1	47	47	0	0	58	1	1	0	0	1	61	61	0	0	5	0	3	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
16:45	0	0	49	1	7	1	0	1	59	59	0	0	49	1	1	0	0	3	54	54	0	1	2	0	4	0	0	0	7	6	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	201	6	21	4	0	4	238	240	0	0	201	14	3	0	0	9	227	227	1	1	14	2	8	0	0	1	27	26	0	0	0	0	0	0	0	0	0	0
17:00	0	0	48	0	3	1	0	0	52	52	0	0	44	0	1	0	0	0	45	45	0	0	4	0	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
17:15	0	0	51	1	2	1	0	0	58	58	0	0	42	0	3	0	0	1	46	46	0	0	4	0	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
17:30	0	0	44	0	2	0	0	0	47	47	1	0	48	0	1	0	0	0	50	49	0	0	3	0	3	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
17:45	0	0	41	2	6	1	0	0	50	50	0	0	56	0	1	0	0	1	62	62	0	0	5	1	7	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	180	3	17	3	0	0	205	206	1	0	192	0	6	0	0	4	203	202	0	1	16	4	16	0	0	0	37	36.4	0	0	0	0	0	0	0	0	0	0
18:00	0	0	54	1	3	0	0	0	63	63	0	0	60	6	1	0	0	0	67	67	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
18:15	0	0	47	1	2	0	0	0	47	47	0	0	53	3	0	0	0	1	57	57	0	0	6	0	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0
18:30	0	0	49	2	6	0	0	0	57	57	0	0	43	4	2	0	0	0	49	49	0	0	9	0	2	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0
18:45	0	0	43	0	2	0	0	0	46	46	0	0	56	6	0	0	0	0	62	62	0	0	7	0	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	193	5	13	1	0	0	213	213	0	0	212	19	3	0	0	1	235	235	0	0	29	1	4	0	0	0	34	34	0	0	0	0	0	0	0	0	0	0
19:00	0	0	52	3	3	1	0	0	57	57	0	0	38	1	0	0	0	1	42	42	0	0	13	1	4	0	0	0	24	24	0	0	0	0	0	0	0	0	0	0
19:15	0	0	38	1	2	0	0	0	41	41	0	0	58	6	0	0	0	1	65	65	0	0	14	4	0	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0
19:30	0	0	42	3	4	2	1	1	53	55	0	0	47	5	2	0	0	4	58	58	0	0	18	5	2	0	0	1	23	23	0	0	0	0	0	0	0	0	0	0
19:45	0	0	49	0	2	0	0	0	51	51	0	0	55	5	2	0	0	4	66	66	0	0	6	1	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	181	7	11	3	1	1	202	204	0	0	198	17	4	0	0	10	229	229	0	0	51	11	6	0	0	1	72	72	0	0	0	0	0	0	0	0	0	0
20:00	0	0	36	0	2	0	0	0	38	38	0	0	73	4	2	0	0	0	89	89	0	0	13	4	4	0	0	0	31	31	0	0	0	0	0	0	0	0	0	0
20:15	0	0	43	0	3	2	0	1	49	50	0	0	36	0	1	0	0	1	40	40	0	0	6	3	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0
20:30	0	0	32	1	3	0	0	0	36	36	0	0	21	2	0	0	0	1	24	24	0	0	13	1	5	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0
20:45	0	0	36	0	2	0	0	0	38	38	0	0	16	0	0	0	0	2	18	18	0	0	19	10	2	0	0	0	31	31	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	147	1	10	2	0	2	161	162	0	0	146	6	3	0	0	4	171	171	0	0	51	18	11	0	0	0	91	91	0	0	0	0	0	0	0	0	0	0
21:00	0	0	28	1	1	0	0	0	30	30	0	0	24	4	0	0	0	0	28	28	0	0	8	0	3	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0
21:15	0	0	34	0	2	0	0	0	36	36	0	0	12	3	1	0	0	2	18	18	0	0	22	3	1	0	0	0	26	26	0	0	0	0	0	0	0	0	0	0
21:30	0	0	19	1	1	0	0	0	21	21	0	0	26	2	0	0	0	2	30	30	0	0	7	7	3	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0
21:45	0	0	12	2	1	0	0	0	15	15	0	0	18	1	0	0	0	0	19	19	0	0	4	2	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	93	4	5	0	0	0	102	102	0	0	81	10	1	0	0	4	95	95	0	0	41	16	6	0	0	0	65	65	0	0	0	0	0	0	0	0	0	0
22:00	0	0	24	0	1	0	0	1	26	28	0	0	12	7	0	0	0	2	21	21	0	0	6	2	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0
22:15	0	0	18	1	0	0	0	0	19	19	0	0	9	5	0	0	0	0	14	14	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
22:30	0	0	18	1	0	0	0	0	19	19	0	0	5	2	0	0	0	2	9	9	0	0	12	0	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0
22:45	0	0	8	1	2	0	0	1	12	13	0	0	6	4	0	0	0	1	11	11	0	0	12	0	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	68	2	3	0	0	2	76	79	0	0	32	18	0	0	0	5	55	55	0	0	35	2	2	0	0	0	40	40	0	0	0	0	0	0	0	0	0	0
23:00	0	0	13	1	0	0	0	0	14	14	0	0	1	3	0	0	0	2	6	6	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
23:15	0	0	14	1	0	0	0	0	15	15	0	0	4	2	0	0	0	1	7	7	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
23:30	0	0	7	1	0	0	0	0	8	8	0	0	5	1	0	0	0	2	8	8	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
23:45	0	0	8	0	0	0	0	0	8	8	0	0	4	2	0	0	0	0	6	6	0	0	1	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	42	2	0	0	0	0	45	45	0	0	14	8	0	0	0	5	27	27	0	0	14	0	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0
24:TOT	0	0	1020	48	102	25	7	14	1216	1228	4	1	1016	105	30	2	0	41	1199	1196	8	3	605	107	105	2	0	3	833	833	0	0	0	0	0	0	0	0	0	0



Survey Name 256 19344 Bus Connects Route 5

Site Site 748

Location Blanchardstown Road N, Millmead Road

Date Thu 28N W2019

	A => A								A => B								A => C								A=> D							
TI	MB/CM/C	CARTAX	LGV	JGV:	V(B	TOT:	PCL	P/B	M/C	CARTAX	LGV	JGV:	V(B	TOT:	PCL	P/C	M2	CARTAX	LGV	JGV:	V(B	TOT:	PCL	P/C	M/C	CARTAX	LGV	JGV	V(	B	TOT:	PCL
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	3	0	0	0	15	15	0	0	5	0	0	0	1	0	6	7.5
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13	0	0	6	0	1	2	1	0	10	12
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	2	0	0	0	0	0	2	2
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	1	0	0	9	9	0	0	3	0	1	0	0	0	4	4
/TO	0	0	0	10	00	0	0	0	0	0	0	30	00	0	0	0	0	35	6	1	0	0	42	42	0	0	16	0	2	2	2	0	22	26
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	0	1	1
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4	0	0	1	0	0	0	0	0	1	1
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	2	0	1	0	0	0	3	3
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	2	0	0	0	18	18	0	0	4	0	1	0	0	0	5	5
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	1	0	2	3.3
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	5	5.5	0	0	2	0	1	0	1	0	4	5.3
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	0	1	1
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	3	0	0	0	1	0	4	5.3
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	1	0	13	14	0	0	7	0	1	0	3	0	11	15
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	2	0	0	0	0	0	2	2
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IDAS©

Survey Name: 258 19344 Bus Connects Route 5
Site: Site 54
Location: Blanchardstown Road N/Unnamed Road
Date: Thu 28Nov2019

TIME	A => A										A => B										A => C										A => D									
	P/CM/C	CARTAX	LGV3GV	3GV	V(B	TOT		PCU	P/CM/C	CARTAX	LGV3GV	3GV	V(B	TOT		PCU	P/CM/C	CARTAX	LGV3GV	3GV	V(B	TOT		PCU	P/CM/C	CARTAX	LGV3GV	3GV	V(B	TOT		PCU
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22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	1	23	23	0	0	26	0	0	0	0	0	26	26
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	27	2	1	0	0	0	31	30	0	0	13	0	1	0	0	0	14	14
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	132	4	4	0	0	2	148	143	0	0	121	1	2	0	0	0	124	124
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	2	0	0	0	0	28	28	0	0	11	0	1	1	0	0	13	14
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	2	0	0	0	0	26	26	0	0	11	0	1	0	0	0	12	12
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	1	1	0	0	0	20	20	0	0	9	0	0	0	0	0	9	9
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10	10	0	0	6	0	0	0	0	0	6	6
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	4	1	0	0	0	84	84	0	0	37	0	2	1	0	0	40	41
4TO	0	0	3	0	0	0	0	3	3	1	0	0	0	0	0	0	4	1.2	42	23	###	256	693	164	16	6	###	###	0	0	8	###	50	373	76	123	10	###	###



IDASO

Survey Name 256 19344 Pub Connects Route 5

Site: Site 448

Location: Blanchardstown Road N, Finglas Road

Date: Thu 28Nov2019

TIME	B => A									B => B										B => C										B => D									
	P/M/C	CAR	TAX	LGV	HGV	PSV	V(B)	TOT	PCU	P/M/C	CAR	TAX	LGV	HGV	PSV	V(B)	TOT	PCU	P/M/C	CAR	TAX	LGV	HGV	PSV	V(B)	TOT	PCU	P/M/C	CAR	TAX	LGV	HGV	PSV	V(B)	TOT	PCU
07:00	0	0	16	1	0	0	1	18	19	0	0	0	0	0	0	0	0	0	0	0	22	1	1	0	0	0	24	24	0	0	0	0	0	0	0	1	1	1
07:15	0	0	11	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	20	1	2	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0
07:30	0	0	12	1	1	0	1	0	15	16	0	0	0	0	0	0	0	0	0	0	20	1	2	0	0	0	23	23	0	0	1	0	0	0	0	1	1	1
07:45	0	1	11	0	1	0	0	0	13	12	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0
TOT	0	1	50	2	2	0	2	1	58	60	0	0	0	0	0	0	0	0	0	0	78	4	5	0	0	0	87	87	0	0	1	0	0	0	0	1	2	2
08:00	0	0	10	0	0	1	0	1	12	13	0	0	0	0	0	0	0	0	0	0	16	2	2	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0
08:15	0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
08:30	0	0	19	0	3	1	1	0	24	25	0	0	0	0	0	0	0	0	0	0	13	0	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0
08:45	0	0	5	0	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	0	0	1	0	0	0	0	1	1	1
TOT	0	0	41	0	4	2	1	1	49	51	0	0	0	0	0	0	0	0	0	0	42	2	4	0	0	0	48	48	0	0	1	0	0	0	0	1	1	1
09:00	0	0	5	1	0	1	0	0	7	7.5	0	0	0	0	0	0	0	0	0	1	8	0	0	1	0	0	10	9.9	0	0	0	0	0	0	0	0	0	0
09:15	0	0	10	1	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
09:30	0	0	5	1	0	1	0	0	7	7.5	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
09:45	0	0	10	0	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
TOT	0	0	30	3	1	2	0	0	36	37	0	0	0	0	0	0	0	0	0	1	21	1	0	1	0	0	24	24	0	0	0	0	0	0	0	0	0	0
10:00	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
10:15	0	0	5	1	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	3	0	1	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0
10:30	0	0	9	0	0	1	0	0	10	11	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
10:45	1	0	8	0	0	0	0	1	10	11	0	0	0	0	0	0	0	0	0	0	4	0	1	0	1	0	6	7.3	0	0	0	0	0	0	0	0	0	0
TOT	1	1	26	1	1	1	0	1	31	33	0	0	0	0	0	0	0	0	0	0	16	0	3	1	1	0	21	23.3	0	0	0	0	0	0	0	0	0	0
11:00	0	0	9	0	3	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
11:15	0	0	6	1	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
11:30	0	0	8	0	2	1	1	0	12	14	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	8	8	0	0	0	0	0	0	1	1	1	1
11:45	0	0	8	2	2	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	2	0	0	0	0	0	0	1	1	1	1
TOT	0	0	31	3	7	1	1	0	43	45	0	0	0	0	0	0	0	0	0	0	18	1	1	0	0	1	21	21	0	0	0	0	0	0	2	2	2	2
12:00	0	0	7	2	0	1	0	0	10	11	0	0	0	0	0	0	0	0	0	0	7	2	1	1	0	0	11	12	0	0	0	0	0	0	1	1	1	1
12:15	0	0	9	0	2	0	1	0	12	13	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	3	10	10	0	0	0	0	0	0	1	1	1	1
12:30	0	0	14	0	2	2	1	0	19	21	0	0	0	0	0	0	0	0	0	0	13	3	2	0	0	4	22	22	0	0	0	0	0	0	0	0	0	0
12:45	0	0	20	1	3	2	1	2	29	31	0	0	0	0	0	0	0	0	0	0	6	0	0	1	0	1	8	8.5	0	0	0	0	0	0	2	2	2	2
TOT	0	0	50	3	7	5	3	2	70	76	0	0	0	0	0	0	0	0	0	0	33	5	3	2	0	8	51	52	0	0	0	0	0	0	4	4	4	4
13:00	0	0	15	0	1	0	0	1	17	17	0	0	0	0	0	0	0	0	0	0	15	0	1	2	2	3	23	27	0	0	1	0	0	0	0	1	1	1
13:15	0	0	36	0	7	1	1	2	47	49	0	0	0	0	0	0	0	0	0	0	21	0	1	0	0	5	27	27	0	0	1	0	0	0	0	1	2	2
13:30	0	0	43	0	9	2	3	2	59	64	0	0	0	0	0	0	0	0	0	0	8	0	5	0	0	4	17	17	0	0	0	0	0	0	0	1	1	1
13:45	0	1	72	1	6	3	1	3	87	89	0	0	0	0	0	0	0	0	0	0	26	0	7	1	0	8	42	43	0	0	0	0	0	0	0	2	2	2
TOT	0	1	166	1	23	6	5	8	210	219	0	0	0	0	0	0	0	0	0	0	70	0	14	3	2	20	109	113	0	0	2	0	0	0	4	6	6	6
14:00	0	0	18	2	4	1	1	1	68	70	0	0	0	0	0	0	0	0	0	0	19	3	6	2	2	7	39	43	0	0	0	0	0	0	2	2	2	2
14:15	0	0	95	1	21	4	1	4	126	129	0	0	0	0	0	0	0	0	0	0	22	3	4	0	0	6	35	35	0	0	1	0	0	0	2	3	3	3
14:30	0	1	112	0	14	4	3	3	137	142	0	0	0	0	0	0	0	0	0	0	23	2	5	2	0	6	38	39	0	0	2	0	0	0	1	3	3	3
14:45	0	2	144	1	15	1	3	4	170	173	0	0	0	0	0	0	0	0	0	0	36	0	9	0	0	4	49	49	0	0	1	0	0	0	4	5	5	5
TOT	0	3	369	4	54	10	8	13	501	514	0	0	0	0	0	0	0	0	0	0	100	8	24	4	2	23	161	166	0	0	4	0	0	0	9	13	13	13
15:00	0	1	14	2	11	1	1	4	144	145	0	0	0	0	0	0	0	0	0	0	53	2	11	1	0	3	70	71	0	0	1	0	0	0	3	4	4	4
15:15	0	3	168	4	20	4	3	3	205	209	0	0	0	0	0	0	0	0	0	1	57	5	5	2	0	3	73	73	0	0	1	1	0	0	2	4	4	4
15:30	1	3	105	3	6	4	1	4	127	128	0	0	0	0	0	0	0	0	0	0	58	0	8	1	1	4	72	74	0	0	0	0	0	0	1	1	1	1
15:45	2	1	135	4	10	2	1	3	158	158	0	0	0	0	0	0	0	0	0	1	43	3	5	2	0	0	54	54	0	0	1	0	1	0	0	4	5	6
TOT	3	8	532	13	47	11	6	14	634	640	0	0	0	0	0	0	0	0	0	2	211	10	29	6	1	10	269	272	0	0	3	1	1	0	10	13	15	15
16:00	1	2	99	5	8	6	3	2	126	131	0	0	0	0	0	0	0	0	0	0	43	1	11	2	0	3	60	61	0	0	1	0	0	0	1	2	2	2
16:15	1	1	103	7	16	5	5	2	139	147	0	0	0	0	0	0	0	0	0	0	52	4	8	4	3	3	74	80	0	0	1	0	0	0	2	3	3	3
16:30	0	0	93	10	24	4	3	4	138	144	0	0	0	0	0	0	0	0	0	0	35	7	7	2	2	1	54	58	0	0	0	1	0	0	2	3	3	3
16:45	1	1	80	11	16	4	4	2	119	125	0	0	0	0	0	0	0	0	0	0	43	3	3	2	1	2	64	66	0	0	0	0	1	0	0	5	6	6
TOT	2	4	375	33	64	19	15	10	522	547	0	0	0	0	0	0	0	0	0	0	173	15	29	10	6	9	241	255	0	0	2	1	1	0	10	13	14	14
17:00	1	1	55	5	16	1	5	4	86	92	0	0	0	0	0	0	0	0	0	0	40	0	9	3	0	1	53	55	0	0	1	0	0	0	1	2	2	2
17:15	1	1	64	2	16	10	2	3	98	105	0	0	0	0	0	0	0	0	0	0	43	4	6	6	0	1	60	63	0	0	0	0	0	0	2	2	2	2
17:30	0	0	57	6	15	5	3	4	90	96	0	0	0	0	0	0	0	0	0	0	40	2	8	2	0	2	54	55	0	0	0	0	0	0	2	2	2	2
17:45	0	0	63	3	12	5	5	2	90	99	0	0	0	0	0	0	0	0	0	0	45	4	15	0	1	2	67	68	0	0	2	1	0	0	3	6	6	6
TOT	1	2	239	16	59	21	15	11	364	392	0	0	0	0	0	0	0	0	0	0	168	10	38	11	1	6	234	241	0	0	3	1	0	0	8	12	12	12
18:00	0	0	49	2	18	5	1	3	78	82	0	0	0	0	0	0	0	0	0	1	42	3	12	3	0	1	62	63	0	0	0	0	0	0	1	1	1	1
18:15	0	0	55	7	14	3	1	3	83	86	0	0	0	0	0	0	0	0	0	0	52	3	8	3	1	1	68	71	0	0	3	0	1	0	0	2	1	1
18:30	0	1	62	3	15	5	6	2	94	104	0	0	0	0	0	0	0	0	0	0	52	6	5	5	2	2	72	77	0	0	4	0	0	0	0	1	5	5
18:45	0	0	75	4	19	5	4	1	108	116	0	0	0	0	0	0	0	0	0	0	59	4	10	2	0	1	76	77	0	0	3	0	1	1	0	5	10	11
TOT	0	1	241	16	66	18	12	9	363	387	0	0	0	0	0	0	0	0	0	1	205	16	35	13	3	5	278	288	0	0	10	0	2	1	0	9	22	23
19:00	0	0	66	7	15	5	2	3	98	103	0	0	0	0	0	0	0	0	0	0	62	2	13	4	0	2	83	85	0	0	2	0	0	0	0	1	3	3
19:15	0	0	49	6	16	9	2	4	86	93	0	0	0	0	0	0	0	0	0	1	55	3	10	2	3	3	77	81	0	0	4	0	0	0	0	1	5	5
19:30	0	1	53	9	21	8	4	2	98	107	0	0	0	0	0	0	0	0	0	1	55	3	10	2	2	1	74	77	0	0	5	0	0	0	0	2	7	7
19:45	0	0	61	4	12	6	2	5	90	96	0	0	0	0	0	0	0	0	0	0	60	5	10	3	1	1	80	83	0	0	3	0	0	0	0	4	8	7.2
TOT	0	1	229	26	64	28	10	14	372	399	0	0	0	0	0	0	0	0	0	2	232	13	43	11	6	7	314	326	0	0	14	0	0	0	0	8	23	22



IDASO

Survey Name: 258 19344 Bus Connects Route 5
Site: Site 54
Location: Blanchardstown Road N/Unnamed Road
Date: Thu 28Nov2019

	B => A										B => B										B => C										B => D									
TIME	P/CM/C	CARTAX	LGV	JGV:	JGV:	V(B	TOT:	PCU	P/CM/C	CARTAX	LGV	JGV:	JGV:	V(B	TOT:	PCU	P/CM/C	CARTAX	LGV	JGV	JGV:	V(B	TOT:	PCU	P/CM/C	CARTAX	LGV	JGV	JGV:	V(B	TOT:	PCU
13:00	0	0	63	5	11	7	2	2	90	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	6	17	2	0	3	92	93	0	0	4	0	1	1	0	2	8	8.5
13:15	0	0	76	8	18	15	1	3	121	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	7	16	5	0	3	111	114	0	0	1	0	0	0	0	1	2	2
13:30	0	0	89	8	18	8	5	2	130	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	3	10	7	0	1	96	100	0	0	3	0	1	0	0	2	6	6
13:45	0	1	65	10	29	11	0	5	121	126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	6	19	2	0	4	99	100	0	0	3	0	0	0	0	3	6	6
TOTS	0	1	293	31	76	41	8	12	462	492	0	0	0	0	0	0	0	0	0	0	0	0	0	0	287	22	62	16	0	11	398	406	0	0	11	0	2	1	0	8	22	23
14:00	0	0	86	4	21	8	1	4	124	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	5	16	4	0	1	101	103	0	0	1	0	0	0	0	2	3	3
14:15	0	0	68	5	18	4	2	3	100	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	5	9	1	0	1	95	96	0	0	3	0	1	0	0	2	6	6
14:30	0	0	78	5	17	2	1	3	106	108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	4	12	2	0	2	89	90	0	0	0	0	0	0	0	2	2	2
14:45	0	0	90	9	18	7	1	3	128	133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	4	18	1	0	2	104	105	0	0	0	0	1	0	0	1	2	2
TOTS	0	0	322	23	74	21	5	13	458	475	0	0	0	0	0	0	0	0	0	0	0	0	0	0	302	18	55	8	0	6	389	393	0	0	4	0	2	0	0	7	13	13
15:00	0	1	96	8	16	5	2	2	130	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	3	16	2	0	1	98	98	0	0	1	4	1	0	0	3	9	9
15:15	0	0	68	10	22	4	2	5	111	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	6	20	1	0	1	122	123	0	0	0	1	1	0	0	3	5	5
15:30	0	0	64	10	17	3	0	3	97	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	6	12	2	1	0	101	103	0	0	4	1	2	0	0	2	9	9
15:45	0	1	53	2	19	2	2	3	82	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	6	11	1	0	3	90	90	0	0	4	1	1	0	0	4	10	10
TOTS	0	2	281	30	74	14	6	13	420	434	0	0	0	0	0	0	0	0	0	0	0	0	0	0	314	21	59	6	1	5	411	414	0	0	9	7	5	0	0	12	33	33
16:00	3	0	72	5	14	2	0	3	99	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	8	12	4	1	2	122	123	1	0	5	0	0	0	0	4	10	9.2
16:15	0	3	56	1	18	1	0	4	83	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	1	15	2	0	1	120	120	0	0	3	1	1	0	0	0	5	5
16:30	0	0	61	3	16	1	1	1	83	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89	3	18	6	1	1	120	123	0	0	4	0	1	0	0	1	6	6
16:45	0	1	74	0	5	3	1	4	88	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	2	14	1	0	2	108	105	1	0	7	0	2	0	0	2	12	11
TOTS	3	4	263	9	53	7	2	12	353	354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	369	14	59	13	2	6	468	471	2	0	19	1	4	0	0	7	33	31
17:00	0	1	63	0	12	0	0	3	79	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96	2	21	4	0	1	128	129	0	0	9	0	0	0	0	5	14	12
17:15	0	2	58	1	10	1	0	1	73	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107	1	20	1	0	1	134	132	0	1	8	0	0	0	0	1	10	9.4
17:30	0	1	66	1	12	0	2	2	84	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113	4	16	1	0	0	135	135	0	0	4	1	0	0	0	1	6	6
17:45	0	1	59	0	15	1	0	7	83	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	3	21	1	0	6	118	117	1	0	4	0	1	0	0	4	10	9.2
TOTS	0	5	246	2	49	2	2	13	319	320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	401	10	78	7	0	10	515	513	1	1	25	1	1	0	0	9	38	37
18:00	0	1	53	1	13	1	0	4	73	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	0	21	1	0	1	132	132	0	0	9	0	1	0	0	4	14	14
18:15	0	1	70	3	11	2	0	0	87	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105	4	21	2	0	3	139	138	0	0	3	0	0	0	0	5	8	8
18:30	0	1	46	0	9	3	0	6	65	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	5	19	1	0	2	129	128	0	0	7	0	0	0	0	1	8	8
18:45	0	0	72	2	12	3	0	3	92	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	4	12	0	0	3	113	113	0	0	2	0	1	0	0	4	7	7
TOTS	0	3	241	6	45	9	0	13	317	320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	400	18	73	4	0	11	514	511	0	0	21	0	2	0	0	14	37	37
19:00	1	1	60	5	8	1	0	2	78	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101	4	11	1	1	2	122	123	0	0	1	0	1	0	0	6	8	8
19:15	0	0	72	3	10	0	1	5	91	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112	3	12	0	0	1	128	128	0	0	4	0	0	0	0	4	8	8
19:30	0	1	64	2	12	1	0	4	84	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	4	8	1	0	1	121	121	0	0	4	1	1	0	0	0	6	6
19:45	0	1	65	2	6	0	2	2	78	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	6	11	1	0	1	115	115	0	0	4	0	1	0	0	4	9	9
TOTS	1	3	261	12	36	2	3	13	331	333	0	0	0	0	0	0	0	0	0	0	0	0	0	0	414	17	42	3	1	5	486	486	0	0	13	1	3	0	0	14	31	31
20:00	0	1	63	3	6	0	0	2	75	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	3	12	2	0	1	84	85	0	0	1	0	0	0	0	2	3	3
20:15	0	1	70	3	4	2	0	4	84	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99	3	5	2	0	1	111	111	0	0	6	0	0	0	0	1	7	7
20:30	0	0	47	0	5	1	0	4	57	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96	7	4	0	0	1	109	108	0	1	5	1	0	0	0	2	9	8.4
20:45	0	0	58	1	3	1	0	1	64	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	1	11	0	0	2	90	90	0	0	7	0	0	0	0	4	11	11
TOTS	0	2	238	7	18	4	0	11	280	281	0	0	0	0	0	0	0	0	0	0	0	0	0	0	337	14	32	4	0	5	394	394	0	1	19	1	0	0	0	9	30	29
21:00	0	0	62	3	2	1	0	2	70	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	4	4	0	0	1	89	88	0	0	3	0	0	0	0	0	3	3
21:15	0	0	64	1	4	0	3	1	73	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	3	3	1	0	1	94	95	0	0	2	0	0	0	0	2	4	4
21:30	1	0	47	4	4	0	0	2	58	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	5	3	1	0	1	63	64	0	0	2	0	0	0	0	2	4	4
21:45	1	0	38	4	2	2	0	4	51	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	1	3	1	0	3	68	67	0	0	2	0	0	0	0	2	4	4
TOTS	2	0	211	12	12	3	3	9	252	256	0	0	0	0	0	0	0	0	0	0	0	0	0	0	276	13	13	3	0	6	314	314	0	0	9	0	0	0	0	6	15	15
22:00	0	0	34	2	5	0	2	2	45	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	3	3	0	0	0	46	46	0	0	3	1	0	0	0	1	5	5
22:15	0	0	33	2	3	0	1	2	41	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	4	2	1	0	1	59	59	0	0	0	0	0	0	0	1	1	1
22:30	0	0	26	1	2	0	0	2	31	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	1	2	0	0	1	41	41	0	0	0	0	0	0	0	2	2	2
22:45	0	0	31	0	1	0	1	2	35	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	3	4	1	0	3	38	39	0	0	1	0	0	0	0	2	3	3
TOTS	0	0	124	5	11	0	4	8	152	157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154	11	11	2	0	5	184	184	0	0	4	1	0	0	0	6	11	11
23:00	0	0	24	0	1	0	0	4	29	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	1	2	0	0	1	50	50	0	0	1	0	0	0	0	1	2	2
23:15	0	0	25	1	0	0	0	0	25	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	0	1	0	0	0	40	40	0	0	3	0	0	0	0	1	4	4
23:30	0	0	32	0	1	0	2	3	38	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	0	1	28	28	0	0	0	0	0	0	0	2	2	2
23:45	0	0	22	0	2	1	1	1	27	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	1	1	0	0	1	28	28	0	0	1	0	0	0	0	1	2	2
TOTS	0	0	103	1	4	1	3	8	120	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	136	3	4	0	0	3	146	146	0	0	5	0	0	0	0	4	10	10
4TOT	12	42	###	259	851	228	114	209	###	###	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	38	###	246	716	128	26	184	###	###	4	2	179	15	23	2	0	162	387	384



Survey Name: 256 19344 Bus Connects Route 5
Site: Site 54
Location: Blanchardstown Road N/Diffrarned Road
Date Thu 28/Nov/2019

	C => A										C => B										C => C										C => D									
TIME	P/M/C	CARTAX	LGV	HGV	>HGV:	V(B	TOT:	PCU	P/M/C	CARTAX	LGV	HGV	>HGV:	V(B	TOT:	PCU	P/M/C	CARTAX	LGV	HGV	>HGV:	V(B	TOT:	PCU	P/M/C	CARTAX	LGV	HGV	>HGV:	V(B	TOT:	PCU
10:00	0	0	25	0	0	0	0	2	27	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	2	0	0	0	16	16
10:15	0	0	23	0	0	0	0	1	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5
10:30	0	0	17	2	1	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6
10:45	0	0	13	3	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
TOT:	0	0	78	5	1	0	0	3	87	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	4	0	0	0	28	28
11:00	0	0	8	1	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
11:15	0	0	10	0	0	2	0	0	12	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
11:30	0	0	7	2	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
11:45	0	0	12	0	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT:	0	0	37	3	1	2	0	0	43	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7
12:00	0	0	6	0	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:15	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
12:30	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
12:45	0	0	6	0	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
TOT:	0	0	21	0	2	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5
13:00	0	0	12	1	0	2	0	0	15	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
13:15	0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	12	0	1	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	20	0	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT:	0	0	51	1	1	2	0	0	55	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
14:00	0	0	10	0	2	1	0	0	13	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	1	0	15	1	1	0	1	0	19	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2
14:30	1	0	30	0	1	0	0	0	32	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
14:45	2	0	34	0	1	1	0	0	40	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
TOT:	4	0	89	1	7	2	1	0	104	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6
15:00	0	0	34	0	6	2	0	0	42	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4
15:15	2	0	35	2	6	2	0	0	47	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3
15:30	2	1	76	1	7	5	0	1	93	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	2	0	5	4.2
15:45	1	0	85	1	13	4	0	0	104	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6
TOT:	5	1	230	4	32	13	0	1	286	286	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	4	0	0	0	18	17
16:00	3	0	115	0	16	2	0	0	136	136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	8	8
16:15	2	1	138	0	25	1	0	0	167	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8
16:30	2	1	217	0	39	4	0	0	263	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	1	0	10	11
16:45	3	0	201	2	37	2	1	1	247	247	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	4	0	0	1	18	18
TOT:	10	2	671	2	117	9	1	1	813	810	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	0	6	0	1	1	44	45
17:00	0	0	224	1	42	4	0	1	272	274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	9	0	1	1	31	32
17:15	1	1	226	3	25	1	2	1	260	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	7	1	0	0	35	36
17:30	0	0	252	2	33	4	1	1	299	299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	1	1	0	0	32	33
17:45	1	4	243	3	30	7	0	2	290	290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	7	0	1	0	33	34
TOT:	2	11	945	9	130	16	3	5	###	###	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	0	24	2	2	1	131	135
18:00	2	2	256	16	43	4	1	1	330	329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	11	5	4	1	51	44
18:15	2	3	217	17	24	4	1	1	269	269	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	33	2	3	2	1	42	44
18:30	4	3	213	13	24	7	1	2	267	267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	1	4	2	0	41	42
18:45	6	2	238	18	26	9	0	0	299	298	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	25	1	6	0	35	34
TOT:	17	10	924	64	117	24	3	6	###	###	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	2	123	9	17	5	1	162	163
19:00	3	3	206	13	18	3	1	2	249	248	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	30	2	5	2	0	40	40
19:15	1	1	174	20	21	2	3	1	223	227	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	2	0	1	0	29	30
19:30	0	1	142	19	27	7	0	1	197	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	1	3	2	0	35	36
19:45	1	0	148	9	26	8	2	2	196	202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	2	7	1	0	43	44
TOT:	5	5	670	61	92	20	6	6	865	876	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	117	7	15	6	0	144	149
20:00	0	0	134	11	28	4	2	2	181	186	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	1	2	0	0	26	26
20:15	0	0	130	9	26	6	1	3	175	179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	1	2	3	0	30	32
20:30	0	1	131	10	25	9	0	1	177	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	0	4	1	0	49	50
20:45	1	2	145	1	5	29	8	2	3	205	210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	3	3	1	0	59	60
TOT:	1	3	540	45	108	27	3	9	738	755	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	142	5	11	5	0	164	167
21:00	0	0	118	7	20	5	0	0	150	153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	1	1	0	0	45	49
21:15	0	1	120	8	20	5	1	2	157	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	0	4	0	0	51	52
21:30	0	0	135	10	21	6	1	1	174	178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	43	0	3	1	0	49	48
21:45	1	0	122	12	21	3	1	1	161	163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	0	6	1	0	56	57
TOT:	1	1	495	37	82	19	3	4	642	654	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	182	1	18	2	0	205	206
22:00	1	2	113	10	19	6	0	2	153	154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	0	6	3	1	65	68
22:15	0	1	146	15	25	4	0	1	192	193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	1	4	1	0	62	64
22:30	1	1	129	9	12	5	1	2	160	162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	0	5	0	0	53	53
22:45	0	2	155	16	15	3	2	1	194	197	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	2	4	0	1	59	60
TOT:	2	6	543	50	71	18	3	6	699	707	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	211	3	19	4	2	239	245



IDAS©

Survey Name: 256 19344 Bus Connects Route 5
Site: Site 54
Location: Blanchardstown Road N/Unnamed Road
Date: Thu 28/Nov/2019

	C => A										C => B										C => C										C => D									
TIME	P/C	M/C	CARTAX	LGV	3GV	4GV	V(8	TOT	PCU	P/C	M/C	CARTAX	LGV	3GV	4GV	V(8	TOT	PCU	P/C	M/C	CARTAX	LGV	3GV	4GV	V(8	TOT	PCU	P/C	M/C	CARTAX	LGV	3GV	4GV	V(8	TOT	PCU				
13:00	1	1	134	6	22	2	2	1	169	171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	2	1	3	0	0	75	77				
13:15	1	1	170	9	16	6	2	0	205	209	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	82	0	5	2	0	1	91	91				
13:30	6	0	180	13	34	6	1	1	241	241	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	3	4	3	1	1	85	88				
13:45	0	0	183	12	25	7	0	0	227	231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	6	3	1	0	0	80	81				
/TOT	8	2	667	40	97	21	5	2	842	851	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	294	11	13	9	1	2	331	336				
14:00	0	0	191	14	35	5	0	2	247	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	1	7	1	0	0	84	85				
14:15	0	0	132	13	18	5	0	1	169	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	123	1	7	1	0	2	134	135				
14:30	2	0	162	10	26	7	1	5	213	216	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	1	4	0	1	0	84	85				
14:45	0	0	155	15	30	3	1	3	207	210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	0	6	0	0	1	91	91				
/TOT	2	0	640	52	109	20	2	11	836	847	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	360	3	24	2	1	3	393	399				
15:00	2	1	147	7	28	13	0	2	200	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	4	3	0	0	0	94	94				
15:15	0	2	140	7	19	4	0	0	172	173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	3	9	1	0	1	93	94				
15:30	0	1	163	10	21	2	1	3	201	203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	2	6	1	0	0	90	91				
15:45	0	0	160	10	19	5	0	0	194	197	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	1	10	0	0	0	89	89				
/TOT	2	4	610	34	87	24	1	5	767	776	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	323	10	28	2	0	3	366	367				
16:00	0	0	161	5	19	3	1	7	196	199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	1	6	0	0	1	96	96				
16:15	2	0	160	11	27	3	0	2	205	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	1	9	1	0	1	84	85				
16:30	0	0	159	6	16	2	0	0	183	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	2	10	1	0	0	91	92				
16:45	0	0	138	3	16	2	0	2	161	162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	1	7	0	0	0	77	77				
/TOT		0	618	25	78	10		11	745	750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	307	5	32	2	0	1	346	350				
17:00	0	0	140	3	8	2	0	2	155	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96	2	7	0	0	1	106	106				
17:15	0	0	136	2	8	4	0	1	151	153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	3	12	1	0	1	112	113				
17:30	0	0	140	3	5	4	0	2	154	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82	2	9	0	0	0	93	93				
17:45	0	0	136	2	16	1	0	1	156	157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	83	1	6	0	0	0	91	90				
/TOT	0	0	552	10	37	11	0	6	616	622	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	356	8	34	1	0	2	402	402				
18:00	0	1	137	0	12	1	0	0	151	154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	1	3	0	0	0	89	89				
18:15	0	2	128	0	4	3	0	4	141	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	1	7	0	0	0	74	74				
18:30	1	0	153	2	12	0	0	2	170	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	1	2	1	0	1	82	83				
18:45	0	1	134	3	14	1	0	4	157	157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	0	4	0	0	0	75	75				
/TOT	1	4	552	6	42	5	0	12	619	621	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	299	3	16	1	0	1	320	321				
19:00	0	0	166	1	6	2	0	3	178	179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	0	6	0	0	0	98	98				
19:15	0	0	150	1	7	0	0	1	159	159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	79	1	4	0	0	0	85	84				
19:30	0	0	165	1	13	0	0	2	181	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	0	3	0	1	1	79	80				
19:45	0	0	164	3	10	2	0	0	179	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83	0	6	0	0	0	89	89				
/TOT	0	0	645	6	36	4	0	6	697	699	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	328	1	19	0	1	1	351	352				
20:00	0	0	145	6	10	2	0	0	163	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	1	6	1	0	0	73	74				
20:15	1	0	139	5	9	2	0	3	159	159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	1	4	0	0	0	90	90				
20:30	0	0	124	7	7	3	0	0	141	143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	0	6	0	0	1	80	80				
20:45	0	0	104	7	6	0	0	1	118	118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105	1	6	0	0	0	112	112				
/TOT	1	0	512	25	32	7	0	4	581	584	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	328	3	22	1	0	1	351	352				
21:00	0	1	127	3	9	2	0	3	145	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	2	2	0	0	0	112	112				
21:15	0	0	118	3	6	0	0	1	128	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	1	2	0	0	0	101	101				
21:30	1	0	99	5	6	0	0	0	111	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	0	1	0	0	0	64	64				
21:45	0	0	63	3	4	0	0	0	70	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	0	2	0	0	1	50	50				
/TOT	1	1	407	14	25	2	0	4	454	453	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	316	3	7	0	0	1	327	327				
22:00	0	0	92	0	3	1	0	1	97	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0	1	54	54				
22:15	0	0	86	0	2	0	0	2	90	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0	0	1	0	0	30	31				
22:30	0	0	62	1	1	2	0	0	66	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	1	0	0	0	1	37	37				
22:45	0	0	56	0	0	0	0	1	57	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	2	1	0	0	25	26				
/TOT	0	0	296	1	6	3	0	4	310	312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139	1	2	2	0	2	146	147				
23:00	0	0	45	0	1	0	0	0	46	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	20				
23:15	0	0	51	0	2	0	0	1	54	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	21	21				
23:30	0	0	38	1	1	0	0	0	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	1	1	0	0	1	14	14				
23:45	0	0	22	2	2	0	0	2	28	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	9				
/TOT	0	0	156	3	6	0	0	3	168	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	1	1	0	0	0	64	64				
4 TO	64	50	###	498	###	250	34	109	###	###	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	7	###	75	317	44	9	28	###	###				



Survey Name: 256 19448 Bus Connects Route 5
Site: Site 48
Location: Blanchardstown Road N, Unnamed Road
Date: Thu 28/Nov/2019

	D => A								D => B								D => C								D => D							
	IMB	P/C	M/C	CAR	TAX	LGV	JGV	V(B	TOT	PCU	P/C	M/C	CAR	TAX	LGV	JGV	V(B	TOT	PCU	P/C	M/C	CAR	TAX	LGV	JGV	V	(B	TOT	PCU
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2	0	0	0	0



IDAS©

Survey Name: 256 19344 Bus Connects Route 5
Site: Site 54
Location: Blanchardstown Road N/unnamed Road
Date: Thu 28/Nov/2019

	D => A										D => B										D => C										D => D									
TIME	P/C	M/C	CAR	TAX	LGV	JGV:	3GV:	V(B	TOT:	PCU	P/C	M/C	CAR	TAX	LGV	JGV:	3GV:	V(B	TOT:	PCU	P/C	M/C	CAR	TAX	LGV	JGV:	3GV:	V(B	TOT:	PCU	P/C	M/C	CAR	TAX	LGV	JGV:	3GV:	V(B	TOT:	PCU
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
/TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 TO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3	1.6	0	0	0	0	0	0	0	0	0	0



Survey Name: 256 19344 Bus Connects Route 5

Site: Site 5 2

Location: Blanchardstown Road N/Unnamed Road

Date: Thu 28 Nov 2019

	A => A												A => B												A => C												A => D												A => E											
TIME	P/C	M/C	CAR	TAX	LGV	JGV	OGV	V(	BC	TOT	PCU	P/C	M/C	CAR	TAX	LGV	JGV	OGV	V(	BC	TOT	PCU	P/C	M/C	CAR	TAX	LGV	JGV	OGV	V(	BC	TOT	PCU	P/C	M/C	CAR	TAX	LGV	JGV	OGV	V(	BC	TOT	PCU	P/C	M/C	CAR	TAX	LGV	JGV	OGV	V(	BC	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	0	9	9	0	0	11	3	0	1	0	0	15	16	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	1	0	8	1	0	3	0	0	13	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	2	1	1	0	0	0	4	4	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	2	0	0	0	19	19	1	0	25	5	2	4	0	0	37	38	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	1	0	5	6.5	0	0	4	1	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	3.5	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3	3.5	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	3	1	2	0	12	15	0	0	17	1	0	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3	0	0	5	0	0	1	0	0	6	6.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	5	0	1	1	0	0	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	1	0	0	5	5.5	0	0	15	0	1	2	0	0	18	19	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	3	0	3	0	1	0	0	0	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	3	0	2	0	0	0	0	0	5	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0	2	0	0	0	7	7	1	0	6	1	0	0	0	0	8	7.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	0	3	0	0	0	10	10	4	0	27	1	1	2	0	0	35	31	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	4	1	0	2	0	0	0	0	0	3	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	2	0	6	6	1	0	4	1	2	0	0	0	8	7.5	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	2	1	0	0	9	9.5	0	0	4	1	2	0	0	0	7	7	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	1	6	1	1	0	30	32	2	0	11	2	4	0	0	0	19	17	1	0	1	0	2	0	0	0	4	3.5	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	0	10	10	0	0	4	0	0	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9	0	0	0	0	10	9.5	0	0	8	0	2	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	1	6	0	0	24	27	0	0	8	0	1	1	0	0	11	11	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	5	2	0	0	35	36	0	0	13	1	2	0	0	0	16	16	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	63	1	6	8	0	0	79	82	0	0	33	1	5	2	0	0	0	41	42	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	4	0	0	0	32	34	0	0	22	1	1	3	0	0	28	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	38	0	7	5	0	0	51	53	1	0	20	0	4	2	2	0	29	32	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
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06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	0	14	3	0	0	75	76	0	0	29	2	6	0	5	0	42	49	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	1	179	3	40	10	2	1	236	245	1	0	94	3	18	5	7	0	129	136	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0
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07:30	0	0	0	0	0	0	0	0	0	0	0	0	1	81	5	15	3	1	1	0	107	109	0	0	60	1	13	4	4	1	83	90	0	0	0	0	0	1	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	94	2	12	3	2	0	0	113	110	1	0	58	3	14	1	1	3	81	82	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0
1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	2	305	12	61	12	8	4	405	419	1	0	196	5	41	8	11	8	270	288	0	0	1	0	1	0	2	2	6	6	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	1	1	111	4	11	4	2	0	134	137	2	0	88	5	16	4	0	2	117	117	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	93	5	17	5	4	0	0	124	132	4	0	57	5	8	5	2	5	86	88	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0
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1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	3	399	19	48	17	10	1	498	518	9	0	313	22	39	18	4	7	416	428	0	0	10	0	2	0	1	0	13	14	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	79	4	9	6	3	2	104	100	0	0	63	5	17	5	1	1	92	96	0	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	93	6	12	6	4	0	122	108	1	0	72	9	16	4	3	1	107	112	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	6	10	7	3	0	98	105	0	0	59	2	12	7	0	2	82	86	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0
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1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	2	305	20	43	25	13	2	410	399	2	0	264	21	57	19	7	4	375	392	0	0	18	2	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	50	3	10	2	3	0	69	93	0	0	60	5	13	1	1	1	81	83	0	0	4	2	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0
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1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	2	229	16	50	19	10	1	327	348	0	0	237	17	55	9	7	3	328	342	0	0	17	3	3	1	1	0	25	27	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	0	13	3	3	1	79	84	0	2	55	3	8	4	3	0	75	80	1	0	7	1	2	0	0	0	11	10	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	5	7	6	3	0	79	65	0	0	53	6	8	2	2	0	71	75	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	1	14	5	0	0	77	79	1	0	51	2	5	6	0	1	66	68	0	0	6	0	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	4	10	6	6	0	90	90	0	0	57	6	12	2	2	1	80	88	0	0	5	0	2	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0
1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	1	237	10	44	17	9	1	319	316	1	2	216	21	33	14	7	2	296	310	1	0	22	1	5	0	0	0	29	28	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	7	13	1	3	0	89	93	0	0	95	1	14	3	1	0	114	117	0	0	6	2	1	1	0	0	10	11	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	3	13	1	2	0	91	94	0	0	59	5	15	4	1	0	84	87	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	4	10	6	1	0	102	106	0	1	83	5	12	4	5	0	111	118	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	73	0	12	6	2	0	94	99	0	0	78	4	16	4	3	0	105	111	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0
1/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	1	291	14	48	14	8	0	376	393	0	1	315	15	57	15	10	0	413	433	0	0	15	3	1	1	0	0	20	21	0	0	0	0	0	0	0	0	0	0	0	0



IDASO

Survey Name: 256 19344 Bus Connects Route 5

Site: Site 5 2

Location: Blanchardstown Road N/Unnamed Road

Date: Thu 28 Nov 2019

	A => A										A => B										A => C										A => D										A => E									
TIME	P/C	M/C	CARTAX	LGV	JGV	JGV:	V(B	TOT:	PCU		P/C	M/C	CARTAX	LGV	JGV	JGV:	V(B	TOT:	PCU		P/C	M/C	CARTAX	LGV	JGV	JGV:	V(B	TOT:	PCU		P/C	M/C	CARTAX	LGV	JGV	JGV:	V(B	TOT:	PCU		P/C	M/C	CARTAX	LGV	JGV	JGV:	V(B	TOT:	PCU	
13:00	0	0	0	0	0	0	0	0	0	0	1	0	70	3	17	2	0	3	96	96	1	0	104	3	7	1	2	0	118	120	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	76	4	17	3	5	0	105	113	1	0	68	3	9	2	3	0	86	90	0	0	11	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	54	1	11	5	4	0	75	83	1	0	51	3	9	1	5	0	70	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	52	4	9	4	1	0	70	73	0	0	74	6	15	4	3	0	102	108	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	1	0	252	12	54	14	10	3	346	365	3	0	297	15	40	8	13	0	376	395	0	0	20	0	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	1	66	6	11	4	0	1	89	90	0	0	57	8	9	4	3	1	82	88	0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	82	3	13	6	4	0	108	116	0	1	84	8	12	0	3	0	108	111	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	60	4	7	3	1	0	75	78	4	0	63	6	11	1	3	0	88	89	1	0	3	1	0	0	0	0	5	4.2	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	1	70	2	13	5	3	0	94	100	1	0	80	5	11	0	4	1	102	106	0	0	8	0	3	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	0	2	278	15	44	18	8	1	366	384	5	1	284	27	43	5	13	2	380	395	1	0	22	1	3	0	0	0	27	26	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	1	88	6	20	2	2	2	121	124	1	0	75	3	11	6	4	0	100	107	0	0	5	1	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	1	77	5	12	5	4	0	104	111	0	1	90	2	9	5	2	0	109	114	0	1	3	1	0	0	0	0	5	4.4	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	1	0	74	1	14	4	2	1	97	101	0	2	114	7	18	7	2	1	151	156	0	0	8	0	2	0	1	0	11	12	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	75	3	15	3	4	1	101	108	0	0	108	6	22	3	3	0	142	147	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	1	2	314	15	61	14	12	4	423	444	1	3	387	18	60	21	11	1	502	524	0	1	18	2	3	0	1	0	25	26	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	83	7	10	4	3	1	108	114	0	0	118	7	21	1	2	0	149	152	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	1	93	4	11	3	2	0	114	118	0	0	136	1	12	3	0	0	152	154	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
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16:45	0	0	0	0	0	0	0	0	0	0	0	2	80	5	6	1	1	1	96	97	1	2	172	3	12	0	0	0	190	188	0	0	7	0	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	1	4	362	16	34	8	7	2	434	444	6	2	560	14	56	6	3	0	647	648	0	0	16	0	1	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	1	0	86	3	9	2	0	1	102	102	0	0	150	3	23	1	0	1	178	179	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	69	2	2	0	0	1	74	74	3	1	173	4	14	0	0	0	195	192	3	1	2	0	1	0	0	0	7	4	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	110	2	4	0	0	0	116	116	5	0	174	2	21	3	0	0	205	203	1	0	3	0	1	0	0	0	5	4.2	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	95	2	6	0	0	1	104	104	2	1	173	4	9	2	0	0	191	190	1	0	4	0	0	0	1	0	6	6.9	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	1	0	360	9	21	2	0	3	396	396	10	2	670	13	67	6	0	1	769	763	5	1	13	0	2	0	1	0	22	19	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	105	3	6	0	1	0	115	116	0	1	144	3	14	8	0	0	170	173	2	1	6	0	0	0	0	0	9	6.8	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	1	1	98	2	5	0	0	1	106	105	2	1	125	1	9	4	0	0	142	142	1	0	5	0	1	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	70	1	5	0	0	1	77	77	1	0	131	6	8	0	0	0	146	145	1	0	1	0	1	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	1	69	3	2	2	0	0	73	73	1	1	125	0	6	1	1	0	135	135	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	1	2	336	9	18	2	1	2	371	371	4	3	525	10	37	13	1	0	593	596	4	1	15	0	2	0	0	0	22	18	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	1	0	71	0	6	2	0	1	81	81	0	0	121	4	14	1	1	0	141	143	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	0	1	0	80	1	3	1	1	0	87	88	1	0	133	1	9	1	1	0	146	147	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	1	1	50	0	7	0	0	0	59	58	1	0	95	2	3	1	0	0	102	102	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	48	1	2	0	1	0	52	53	2	0	62	1	7	0	2	0	74	75	1	0	6	0	0	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	3	1	249	2	18	3	2	1	279	280	4	0	411	8	33	3	4	0	463	467	1	0	21	0	0	0	0	0	22	21	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	42	1	3	0	0	0	46	46	1	0	64	4	3	0	0	0	72	71	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	0	0	0	34	1	1	1	1	0	38	40	4	0	60	1	8	0	0	0	73	70	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
20:30	0	0	0	0	0	0	0	0	0	0	0	0	39	0	0	0	0	0	39	39	0	0	52	5	4	0	1	0	62	63	1	0	4	0	0	0	0	0	5	4.2	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	0	0	0	0	45	0	2	0	0	0	47	47	0	0	45	0	3	1	0	0	49	50	1	0	5	0	0	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	0	0	160	2	6	1	1	0	170	172	5	0	221	10	18	1	1	0	256	254	2	0	19	0	1	0	0	0	22	20	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	34	1	3	0	1	2	41	42	0	0	53	0	6	1	2	0	62	65	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	34	2	3	0	0	0	39	39	0	1	62	1	2	0	0	0	66	65	1	0	4	0	0	0	0	0	5	4.2	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	32	0	2	0	0	0	34	34	0	1	47	1	4	0	0	0	53	52	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	21	0	2	1	0	0	24	25	0	0	41	0	4	1	0	0	46	47	2	0	3	0	0	0	0	0	5	3.4	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	0	0	121	3	10	1	1	2	138	140	0	2	203	2	16	2	2	0	227	229	3	0	11	0	0	0	0	0	14	12	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	19	3	1	1	0	0	24	25	2	0	51	2	2	0	0	0	57	55	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	10	3	0	0	0	0	13	13	2	1	24	1	1	0	0	0	29	27	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	1	7	7	0	0	25	1	0	0	0	0	26	26	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	9	0	2	0	1	0	12	13	0	0	21	1	1	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	0	0	43	6	4	1	1	1	56	58	4	1	121	5	4	0	0	0	135	131	0	0	4	1	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0	1	0	0	14	15	0	0	15	0	1	1	0	0	17	18	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6	0	0	15	2	1	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	0	12	12	1	0	22	1	0	0	0	0	24	23	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/TOT	0	0	0	0	0	0	0	0	0	0	0	0	35	1	2	1	0	0	39	40	1	0	60	3	2	1	0	0	67	67	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
14 TOT	0	0	0	0	0	0	0	0	0	0	12	24	###	189	626	258	106	29	##	###	70	20	###	239	689	162	101	28	##	###	18	3	253	13	29	2	6	2	326	316	0	0	0	0	0	0	0	0	0	0



Survey Name: 256 19344 Bus Connects Route 5

Site: Site 5 2

Location: Blanchardstown Road N/Unnamed Road

Date Thu 28-Nov-2019

TIME	B => A										B => B										B => C										B => D										B => E									
	P/B	C	CARTAX	LGV	JGV	V(	B	TOT	PCU	P/B	C	CARTAX	LGV	JGV	V(	B	TOT	PCU	P/B	C	CARTAX	LGV	JGV	V(	B	TOT	PCU	P/B	C	CARTAX	LGV	JGV	V(	B	TOT	PCU	P/B	C	CARTAX	LGV	JGV	V(	B	TOT	PCU
00 00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
00 15	0	0	2	0	1	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	5	5	1	0	3	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
00 30	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
00 45	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/ TOT	0	0	5	2	1	0	0	11	9	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	8	8	1	0	6	6	0	0	0	13	12	0	0	0	0	0	0	0	0	0	0
01 00	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
01 15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
01 30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	2	0	1	0	0	3	3	0	0	0	0	0	0	0	0	0	0
02 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02 15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02 30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03 30	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
04 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0
04 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04 30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	6	6	0	0	1	0	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0
05 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
05 15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
05 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
05 45	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	1	0	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H /TOT	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8	1	1	3	0	1	0	0	6	6	0	0	0	0	0	0	0	0	0	0
06 00	0	0	7	1	0	1	0	9	9	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	5	5	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
06 15	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	1	7	8.5	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
06 30	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	4	4	1	1	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
06 45	1	1	5	0	1	0	0	8	8.8	0	0	0	0	0	0	0	0	0	0	0	6	0	0	1	0	7	8.3	0	0	4	0	2	0	0	6	6	0	0	0	0	0	0	0	0	0	0
H/ TOT	1	1	19	2	1	1	0	25	24	0	0	0	0	0	0	0	0	0	0	0	18	0	2	1	2	23	26	1	1	9	0	2	0	0	13	12	0	0	0	0	0	0	0	0	0	0
07 00	0	0	7	1	1	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	2	13	16	0	0	5	0	2	0	0	7	7	0	0	0	0	0	0	0	0	0	0
07 15	0	0	7	0	0	1	0	8	8.5	0	0	0	0	0	0	0	0	0	0	0	8	0	0	2	0	10	11	1	0	4	0	1	0	0	6	5.2	0	0	0	0	0	0	0	0	0	0
07 30	1	0	17	0	1	0	0	19	18	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12	1	0	7	0	1	0	0	9	8.2	0	0	0	0	0	0	0	0	0	0
07 45	0	0	20	1	2	1	1	25	27	0	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	6	7.3	1	0	19	1	1	0	0	22	21	0	0	0	0	0	0	0	0	0	0
H/T OT	1	0	51	2	4	2	1	0	81	63	0	0	0	0	0	0	0	0	0	0	35	0	1	2	3	0	81	46	3	0	35	1	5	0	0	0	44	42	0	0	0	0	0	0	0	0	0	0
08 00	2	0	15	2	1	0	0	20	18	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11	2	0	18	0	3	0	2	0	25	26	0	0	0	0	0	0	0	0	0	0
08 15	0	0	21	2	5	0	0	0	28	28	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10	2	0	25	0	4	0	3	0	34	36	0	0	0	0	0	0	0	0	0	0
08 30	0	0	21	2	0	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	8	0	1	1	0	0	10	10	0	0	36	0	0	2	0	0	38	39	0	0	0	0	0	0	0	0	0	0
08 45	0	0	12	1	2	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	14	0	1	1	1	0	17	19	1	0	19	1	4	1	0	1	27	27	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	69	7	8	0	0	0	86	84	0	0	0	0	0	0	0	0	0	0	43	0	2	2	1	0	88	86	5	0	98	1	11	3	5	1	124	126	0	0	0	0	0	0	0	0	0	0
09 00	0	0	17	1	1	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0	10	0	0	0	1	0	12	13	0	0	21	1	0	1	0	0	23	24	0	0	0	0	0	0	0	0	0	0
09 15	0	1	10	0	2	0	0	0	13	12	0	0	0	0	0	0	0	0	0	0	5	0	1	1	0	0	7	7.5	0	0	28	0	0	0	0	1	29	29	0	0	0	0	0	0	0	0	0	0
09 30	1	0	16	0	0	0	0	1	18	17	0	0	0	0	0	0	0	0	0	0	9	0	3	1	2	0	15	18	0	0	19	1	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0
09 45	0	0	14	0	1	1	0	0	16	17	0	0	0	0	0	0	0	0	0	0	27	0	4	1	1	0	33	35	1	0	21	1	4	1	1	0	29	30	0	0	0	0	0	0	0	0	0	0
H/TOT	1	1	57	1	4	1	0	1	66	65	0	0	0	0	0	0	0	0	0	0	51	0	8	3	4	0	67	73	1	0	89	3	4	2	1	1	101	103	0	0	0	0	0	0	0	0	0	0
10 00	0	0	11	0	0	1	0	0	12	13	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	18	18	0	0	18	1	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0	0
10 15	0	0	20	1	0	1	0	0	22	23	0	0	0	0	0	0	0	0	0	0	16	1	0	1	0	0	18	19	0	0	25	0	1	0	0	0	26	26	0	0	0	0	0	0	0	0	0	0
10 30	0	0	22	0	0	5	0	0	0	27	27	0	0	0	0	0	0	0	0	0	1	14	1	0	0	0	16	15	0	0	22	2	1	0	0	0	25	25	0	0	0	0	0	0	0	0	0	0
10 45	0	0	22	0	0	4	0	0	0	26	27	0	0	0	0	0	0	0	0	0	0	22	0	1	4	0	27	29	0	0	33	0	1	0	0	0	34	34	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	77	2	5	3	0	0	87	89	0	0	0	0	0	0	0	0	0	0	1	70	2	1	5	0	79	81	0	0	98	3	3	0	0	1	104	104	0	0	0	0	0	0	0	0	0	0
11 00	0	0	20	0	4	1	0	0	25	26	0	0	0	0	0	0	0	0	0	0	35	1	2	2	1	0	41	43	0	0	29	3	0	0	0	0	32	33	0	0	0	0	0	0	0	0	0	0
11 15	0	0	17	3	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	35	0	5	2	0	0	42	43	1	1	35	1	4	1	0	0	43	2	0	0	0	0	0	0	0	0	0	0
11 30	0	1	32	2	0	3	0	0	38	39	0	0	0	0	0	0	0	0	0	0	57	1	3	0	0	0	61	61	0	0	33	1	2	0	1	0	37	38	0	0	0	0	0	0	0	0	0	0
11 45	0	0	29	5	0	0	0	0	34	34	0	0	0	0	0	0	0	0	0	0	36	0	2	0	0	0	38	38	0	0	32	4	0	0	1	0	37	38	0	0	0	0	0	0	0	0	0	0
H /TOT	0	1	98	10	5	4	0	0	118	119	0	0	0	0	0	0	0	0	0	0	163	2	12	4	1	0	182	185	1	1	29	9	6	1	2	0	49	51	0	0	0	0	0	0	0	0	0	0
12 00	0	0	32	1	4	1	0	0	38	39	0	0	0	0	0	0	0	0	0	0	43	2	2	1	0	0	48	49	0	0	22	1	3	1	1	0	28	30	0	0	0	0	0	0	0	0	0	0
12 15	0	0	27	0	2	0	0	0	29	29	0	0	0	0	0	0	0	0	0	0	42	0	4	1	0	0	47	48	0	0	35	2	1	1	1	0	40	42	0	0	0	0	0	0	0	0	0	0
12 30	0	0	32	0	3	0	0	0	35	35	0	0	0	0	0	0	0	0	0	0	55	1	2	0	0	0	58	58	0	0	17	2	1	0	2	0	22	25	0	0	0	0	0	0	0	0	0	0
12 45	0	0	31	0	2	0	0	0	33	33	0	0	0	0	0	0	0	0	0	0	58	0	3	0	1	0	62	63	0	0	31	2	1	1	0	0	35	36	0	0	0	0	0	0	0	0	0	0
H/ TOT	0	0	122	1	11	1	0	0	135	136	0	0	0	0	0	0	0	0	0	0	198	3	11	2	1	0	215	217	0	0	105	7	6	3	4	0	125	132	0	0	0	0	0	0	0	0	0	0



IDASO

Survey Name: 256 19344 Bus Connects Route 5

Site: Site 5 2

Location: Blanchardstown Road N/Unnamed Road

Date: Thu 28 Nov 2019

	B => A										B => B										B => C										B => D										B => E									
TIME	P/C	M/C	CAR	TAX	LGV	2GV	3GV	V(B	TOT	PCU	P/C	M/C	CAR	TAX	LGV	2GV	3GV	V(B	TOT	PCU	P/C	M/C	CAR	TAX	LGV	2GV	3GV	V(B	TOT	PCU	P/C	M/C	CAR	TAX	LGV	2GV	3GV	V(B	TOT	PCU	P/C	M/C	CAR	TAX	LGV	2GV	3GV	V(B	TOT	PCU
13:00	0	0	36	0	0	0	0	0	36	36	0	0	0	0	0	0	0	0	0	0	0	0	52	2	2	1	0	0	57	58	0	0	30	1	2	0	0	0	33	33	0	0	0	0	0	0	0	0	0	0
13:15	0	0	30	3	2	0	0	0	35	35	0	0	0	0	0	0	0	0	0	0	0	0	50	0	2	0	0	0	52	52	1	1	35	2	1	0	2	0	42	43	0	0	0	0	0	0	0	0	0	0
13:30	1	0	46	1	3	0	0	0	51	50	0	0	0	0	0	0	0	0	0	0	0	0	51	1	6	0	0	0	58	58	0	0	37	2	0	0	3	0	42	46	0	0	0	0	0	0	0	0	0	0
13:45	0	0	29	4	0	0	0	0	33	33	0	0	0	0	0	0	0	0	0	0	0	0	67	0	4	0	0	0	71	71	1	0	24	3	1	1	0	1	31	31	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	141	8	5	0	0	0	155	154	0	0	0	0	0	0	0	0	0	0	0	0	220	3	14	1	0	0	238	239	2	1	126	8	4	1	5	1	148	153	0	0	0	0	0	0	0	0	0	0
14:00	0	0	38	2	3	1	0	0	44	45	0	0	0	0	0	0	0	0	0	0	0	0	49	1	1	0	0	0	51	51	0	0	38	1	1	0	0	0	40	40	0	0	0	0	0	0	0	0	0	0
14:15	0	0	33	1	1	1	0	0	36	37	0	0	0	0	0	0	0	0	0	0	0	0	38	0	2	2	0	0	42	43	0	0	37	0	1	4	1	0	43	46	0	0	0	0	0	0	0	0	0	0
14:30	0	0	41	0	0	0	0	0	41	41	0	0	0	0	0	0	0	0	0	0	0	0	73	1	4	0	0	0	78	78	0	0	49	5	4	0	0	0	58	58	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	1	138	4	5	3	0	0	151	152	0	0	0	0	0	0	0	0	0	0	0	0	204	2	9	4	0	0	219	221	0	0	149	8	7	4	1	0	169	172	0	0	0	0	0	0	0	0	0	0
15:00	0	0	33	0	1	0	0	0	34	34	0	0	0	0	0	0	0	0	0	0	0	0	59	1	0	0	0	0	60	60	0	0	52	0	2	1	0	0	55	56	0	0	0	0	0	0	0	0	0	0
15:15	0	0	32	1	2	1	0	0	36	37	0	0	0	0	0	0	0	0	0	0	0	0	109	3	4	0	0	0	116	116	0	0	31	0	1	0	0	0	32	32	0	0	0	0	0	0	0	0	0	0
15:30	0	0	35	1	1	0	0	0	37	37	0	0	0	0	0	0	0	0	0	0	0	0	66	0	2	0	0	0	68	68	0	0	34	3	0	0	0	0	37	37	0	0	0	0	0	0	0	0	0	0
15:45	0	0	31	1	1	0	0	0	33	33	0	0	0	0	0	0	0	0	0	0	0	0	52	0	7	1	1	0	61	63	0	0	26	3	0	1	0	0	30	31	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	131	3	5	1	0	0	140	141	0	0	0	0	0	0	0	0	0	0	0	0	286	4	13	1	1	0	305	307	0	0	143	6	3	2	0	0	154	155	0	0	0	0	0	0	0	0	0	0
16:00	0	0	39	2	2	0	0	0	43	43	0	0	0	0	0	0	0	0	0	0	0	0	62	0	5	1	0	0	68	69	0	0	42	1	2	0	0	0	45	45	0	0	0	0	0	0	0	0	0	0
16:15	0	0	39	1	2	0	0	0	42	42	0	0	0	0	0	0	0	0	0	0	0	0	69	1	4	1	0	0	75	76	0	0	31	0	5	0	0	0	36	36	0	0	0	0	0	0	0	0	0	0
16:30	1	0	34	1	4	0	0	0	40	39	0	0	0	0	0	0	0	0	0	0	0	0	66	0	1	0	0	0	67	67	0	0	48	1	2	0	0	0	51	51	0	0	0	0	0	0	0	0	0	0
16:45	0	0	47	0	1	0	0	0	48	48	0	0	0	0	0	0	0	0	0	0	0	0	59	0	3	0	0	0	62	62	0	0	29	0	0	0	0	0	29	29	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	159	4	9	0	0	0	173	172	0	0	0	0	0	0	0	0	0	0	0	0	256	1	13	2	0	0	272	273	0	0	150	2	9	0	0	0	161	161	0	0	0	0	0	0	0	0	0	0
17:00	0	1	34	0	2	0	0	0	37	36	0	0	0	0	0	0	0	0	0	0	0	0	63	1	2	0	0	0	66	66	0	0	26	0	1	1	0	0	28	29	0	0	0	0	0	0	0	0	0	0
17:15	0	0	30	0	0	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	55	1	4	0	0	0	60	60	0	0	41	2	1	0	0	0	44	44	0	0	0	0	0	0	0	0	0	0
17:30	0	0	35	0	0	0	0	0	35	35	0	0	0	0	0	0	0	0	0	0	0	1	59	0	7	2	0	0	69	69	1	0	34	0	1	0	0	0	36	35	0	0	0	0	0	0	0	0	0	0
17:45	0	0	40	0	0	0	0	0	40	40	0	0	0	0	0	0	0	0	0	0	0	0	56	0	1	0	0	0	57	57	0	0	43	0	2	0	0	0	45	45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	139	0	2	0	0	0	142	141	0	0	0	0	0	0	0	0	0	0	0	1	233	2	14	2	0	0	252	252	1	0	144	2	5	1	0	0	153	153	0	0	0	0	0	0	0	0	0	0
18:00	0	0	31	0	2	0	0	0	33	33	0	0	0	0	0	0	0	0	0	0	0	0	59	0	0	0	0	0	59	59	0	0	44	0	1	0	0	0	45	45	0	0	0	0	0	0	0	0	0	0
18:15	0	0	38	0	5	0	0	0	43	43	0	0	0	0	0	0	0	0	0	0	0	0	71	0	2	0	1	0	74	75	0	0	43	0	3	0	0	0	46	46	0	0	0	0	0	0	0	0	0	0
18:30	0	0	37	0	0	0	0	0	37	37	0	0	0	0	0	0	0	0	0	0	0	0	49	0	1	0	0	0	50	50	0	0	31	0	2	0	0	0	33	33	0	0	0	0	0	0	0	0	0	0
18:45	0	0	37	0	0	0	0	0	37	37	0	0	0	0	0	0	0	0	0	0	0	0	58	0	2	0	0	0	60	60	1	0	33	1	1	0	0	0	36	35	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	143	0	7	0	0	0	150	150	0	0	0	0	0	0	0	0	0	0	0	0	237	0	5	0	1	0	243	244	1	0	151	1	7	0	0	0	160	159	0	0	0	0	0	0	0	0	0	0
19:00	0	0	35	1	0	0	0	0	36	36	0	0	0	0	0	0	0	0	0	0	0	0	47	0	1	0	0	1	49	49	0	0	35	0	2	0	0	0	37	37	0	0	0	0	0	0	0	0	0	0
19:15	0	0	18	0	0	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0	0	0	52	0	4	0	0	0	56	56	0	0	34	0	1	0	0	0	35	35	0	0	0	0	0	0	0	0	0	0
19:30	0	0	29	0	1	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	66	0	1	0	0	0	67	67	0	0	33	0	2	0	0	0	35	35	0	0	0	0	0	0	0	0	0	0
19:45	0	0	27	0	2	0	0	0	29	29	0	0	0	0	0	0	0	0	0	0	0	0	56	0	1	0	0	0	57	57	0	0	38	0	0	0	0	0	38	38	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	109	1	3	0	0	0	113	113	0	0	0	0	0	0	0	0	0	0	0	0	221	0	7	0	0	1	229	229	0	0	140	0	5	0	0	0	145	145	0	0	0	0	0	0	0	0	0	0
20:00	0	0	33	2	2	0	0	0	37	37	0	0	0	0	0	0	0	0	0	0	0	0	64	0	5	0	0	0	69	69	0	0	30	0	1	0	0	0	31	31	0	0	0	0	0	0	0	0	0	0
20:15	0	0	28	1	2	0	0	0	31	31	0	0	0	0	0	0	0	0	0	0	0	0	67	0	1	0	0	0	68	68	0	0	33	3	3	0	0	0	39	39	0	0	0	0	0	0	0	0	0	0
20:30	1	0	24	0	1	0	0	0	26	25	0	0	0	0	0	0	0	0	0	0	0	0	55	1	2	0	0	0	58	58	0	0	36	1	2	0	0	0	39	39	0	0	0	0	0	0	0	0	0	0
20:45	0	0	22	1	0	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	0	0	73	0	3	1	0	0	77	78	0	0	30	1	0	0	0	0	31	31	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	107	4	5	0	0	0	117	116	0	0	0	0	0	0	0	0	0	0	0	0	259	1	11	1	0	0	272	273	0	0	129	5	6	0	0	0	140	140	0	0	0	0	0	0	0	0	0	0
21:00	0	0	44	2	0	0	0	0	46	46	0	0	0	0	0	0	0	0	0	0	0	0	69	0	2	0	0	0	71	71	0	0	37	2	1	1	0	0	41	42	0	0	0	0	0	0	0	0	0	0
21:15	0	0	36	1	1	0	0	0	38	38	0	0	0	0	0	0	0	0	0	0	0	0	62	0	2	0	0	0	64	64	0	0	20	2	2	1	0	0	25	26	0	0	0	0	0	0	0	0	0	0
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21:45	0	0	20	2	0	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0	0	0	30	0	1	0	0	0	31	31	1	0	9	1	1	0	0	0	12	11	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	125	6	2	0	0	0	133	133	0	0	0	0	0	0	0	0	0	0	0	0	186	0	7	0	0	0	193	193	1	0	83	6	4	2	0	0	96	96	0	0	0	0	0	0	0	0	0	0
22:00	0	0	16	1	1	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	26	26	0	0	13	1	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0
22:15	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	20	0	0	7	1	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0
22:30	0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	15	15	0	0	8	2	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0
22:45	0	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	0	12	12	0	0	8	0	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	33	2	1	0	0	0	36	36	0	0	0	0	0	0	0	0	0	0	0	0	72	0	1	0	0	0	73	73	0	0	36	4	2	0	0	0	42	42	0	0	0	0	0	0	0	0	0	0
23:00	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	9	1	0	4	2	0	0	0	0	7	8.2	0	0	0	0	0	0	0	0	0	0
23:15	0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	9	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
23:30	0	0	3	2	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
23:45	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	16	2	0	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0	0	0	22	1	0	0	0	0	23	23	1	0	12	2	2	0	0	0	17	18	0	0	0	0	0	0	0	0	0	0
24 TOT	8	5	###	62	83	16	1	1	###	###	0	0	0	0	0	0	0	0	0	0	1	2	###	21	132	30	16	1	###	###	19	4	###	74	93	20	18	3	###	###	0	0	0	0	0	0	0	0	0	0



Survey Name: 256 19344 Bus Connects Route 5

Site: Site 5 2

Location: Blanchardstown Road N / Ashtamead Road

Date: Thu 28 Nov 2019

TIME	C => A										C => B										C => C										C => D										C => E									
	P/C	M/C	CAR	TAX	LGV	3GV	4GV	V(B	TOT	PCU	P/C	M/C	CAR	TAX	LGV	3GV	4GV	V(B	TOT	PCU	P/C	M/C	CAR	TAX	LGV	3GV	4GV	V(B	TOT	PCU	P/C	M/C	CAR	TAX	LGV	3GV	4GV	V(B	TOT	PCU	P/C	M/C	CAR	TAX	LGV	3GV	4GV	V(B	TOT	PCU
00:00	0	0	16	0	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
00:15	0	0	8	0	0	0	0	0	8	8	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
00:30	0	0	16	0	1	0	1	0	18	19	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
00:45	0	0	7	0	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0
H/T	0	0	47	0	2	0	1	0	50	51	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	24	6	2	0	0	0	32	32	0	0	0	0	0	0	0	0	0	0
01:00	0	0	6	0	0	1	0	1	8	8.5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
01:15	0	0	7	0	0	0	0	0	7	7	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
01:30	0	0	10	0	1	0	1	0	12	13	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	10	3	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0
01:45	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	29	0	1	1	1	1	33	35	0	0	2	1	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	23	4	1	0	0	0	28	28	0	0	0	0	0	0	0	0	0	0
02:00	0	0	2	0	1	0	0	0	3	3	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	1	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
02:15	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
02:30	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	7	7.5	0	0	0	0	0	0	0	0	0	0
02:45	0	0	7	0	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	15	0	2	0	0	0	17	17	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	19	4	1	1	0	0	25	26	0	0	0	0	0	0	0	0	0	0
03:00	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
03:15	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
03:30	0	0	5	0	0	0	1	0	6	7.5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
03:45	0	0	12	0	0	0	0	0	12	12	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	0	0	0	5	5.4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	24	0	1	0	1	0	26	28	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	11	6	2	0	0	0	19	17	0	0	0	0	0	0	0	0	0	0
04:00	0	0	10	0	1	0	0	0	11	11	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3	1	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
04:15	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
04:30	1	0	16	1	1	1	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	1	0	5	6.3	0	0	0	0	0	0	0	0	0	0
04:45	0	0	16	0	1	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	45	1	4	1	0	0	52	52	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	10	7	4	0	1	0	22	23	0	0	0	0	0	0	0	0	0	0
05:00	1	0	12	0	1	0	0	0	14	13	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0
05:15	0	0	10	0	4	1	1	0	16	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
05:30	0	0	30	0	2	2	1	1	36	38	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	1	0	0	8	8.5	0	0	0	0	0	0	0	0	0	0
05:45	0	0	25	0	8	1	2	1	37	40	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	2	0	1	21	22	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	77	0	15	4	4	2	103	109	0	0	13	0	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	20	2	3	4	0	1	30	32	0	0	0	0	0	0	0	0	0	0
06:00	3	0	27	0	1	1	0	0	32	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
06:15	3	0	57	0	9	0	1	1	71	70	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	14	0	2	1	0	0	17	18	0	0	0	0	0	0	0	0	0	0
06:30	0	0	76	1	14	1	2	0	94	97	0	0	11	0	4	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	0	0	18	1	4	1	2	0	26	29	0	0	0	0	0	0	0	0	0	0
06:45	0	2	93	1	19	4	1	2	122	124	1	0	10	0	6	0	0	0	17	16	0	0	0	0	0	0	0	0	0	0	0	0	37	1	4	1	1	1	45	47	0	0	0	0	0	0	0	0	0	0
H/TOT	6	2	253	2	43	6	4	1	319	324	1	0	25	0	11	0	0	0	37	36	0	0	0	0	0	0	0	0	0	0	0	0	76	2	11	3	3	1	96	101	0	0	0	0	0	0	0	0	0	0
07:00	0	0	87	1	16	2	1	0	107	109	0	0	16	0	6	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0	0	0	22	1	3	1	1	0	28	30	0	0	0	0	0	0	0	0	0	0
07:15	1	0	139	1	22	4	1	2	170	173	0	0	16	1	4	1	0	0	22	23	0	0	0	0	0	0	0	0	0	0	0	0	34	0	8	0	1	0	43	44	0	0	0	0	0	0	0	0	0	0
07:30	0	1	146	0	17	5	1	0	170	173	0	0	14	0	3	1	1	0	19	19	0	0	0	0	0	0	0	0	0	0	0	0	43	0	2	0	2	0	47	50	0	0	0	0	0	0	0	0	0	0
07:45	0	0	178	1	21	3	0	0	203	205	0	0	22	0	1	1	0	1	25	26	0	0	0	0	0	0	0	0	0	0	0	0	46	1	7	1	3	0	60	64	0	0	0	0	0	0	0	0	0	0
H/TOT	1	1	550	3	76	14	3	2	650	660	0	0	68	1	12	3	1	1	86	89	0	0	0	0	0	0	0	0	0	0	0	0	147	2	20	2	7	0	178	188	0	0	0	0	0	0	0	0	0	0
08:00	5	0	162	5	17	3	1	0	193	192	0	0	17	5	0	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0	0	0	65	3	7	3	1	2	83	85	0	0	0	0	0	0	0	0	0	0
08:15	3	2	176	4	16	3	2	0	206	207	0	0	11	1	2	1	0	0	15	16	0	0	0	0	0	0	0	0	0	0	0	0	60	5	8	2	1	0	76	78	0	0	0	0	0	0	0	0	0	0
08:30	3	2	130	5	7	7	2	3	159	162	0	1	17	1	4	0	1	2	26	27	0	0	0	0	0	0	0	0	0	0	0	0	57	3	1	2	0	0	63	64	0	0	0	0	0	0	0	0	0	0
08:45	4	3	171	5	14	3	1	0	201	199	0	0	10	0	2	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	0	90	4	9	2	0	1	107	107	0	0	0	0	0	0	0	0	0	0
H/TOT	15	7	639	19	54	16	6	3	759	759	0	1	55	7	8	1	1	2	75	76	0	0	0	0	0	0	0	0	0	0	0	0	272	15	25	9	2	3	329	334	0	0	0	0	0	0	0	0	0	0
09:00	2	2	121	10	11	6	2	0	154	157	0	0	11	2	2	1	0	0	16	17	0	0	0	0	0	0	0	0	0	0	0	0	57	1	4	2	1	2	70	70	0	0	0	0	0	0	0	0	0	0
09:15	1	1	110	6	15	2	5	0	140	146	0	0	11	1	0	2	1	0	15	17	0	0	0	0	0	0	0	0	0	0	0	0	45	4	5	2	0	1	57	58	0	0	0	0	0	0	0	0	0	0
09:30	0	2	104	8	23	4	3	1	145	150	0	0	11	2	2	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	0	0	49	6	10	2	0	1	68	69	0	0	0	0	0	0	0	0	0	0
09:45	1	0	87	8	21	6	4	0	127	136	0	0	12	1	4	1	0	0	18	19	0	0	0	0	0	0	0	0	0	0	0	0	39	5	6	2	1	1	54	56	0	0	0	0	0	0	0	0	0	0
H/TOT	4	5	422	32	70	18	14	1	566	589	0	0	45	6	8	4	1	0	64	67	0	0	0	0	0	0	0	0	0	0	0	0	190	16	25	8	2	5	246	254	0	0	0	0	0	0	0	0	0	0
10:00	1	1	88	5	20	1	3	0	119	122	0	0	8	1	3	0	1	1	14	15	0	0	0	0	0	0	0	0	0	0	0	0	34	1	9	0	2	0	46	49	0	0	0	0	0	0	0	0	0	0
10:15	0	1	75	5	16	9	7	1	114	127	0	0	8	0	2	0	1	0	11	12	0	0	0	0	0	0	0	0	0	0	0	0	29	2	3	1	0	1	36	37	0	0	0	0	0	0	0	0	0	0
10:30	0	0	60	2	17	9	3	1	92	100	0	0	10	0	3	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	38	3	7	1	1	0	50	52	0	0	0	0	0	0	0	0	0	0
10:45	1	0	87	7	28	6	5	2	136	145	0	0	12	2	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0	41	1	3	3	0	1	50	52	0	0	0	0	0	0	0	0	0	0
H/TOT	2	2	310	19	81	25	18	4	461	494	0	0	38	3	6	0	2	1	52	53	0	0	1	0	0	0	0	0	0	0	1	1	142	7	22	5	3	3	182	188	0	0	0	0	0	0	0	0	0	0
11:00	0	0	59	3	13	8	1	0	84	89	0	0	6	1	3	1	0	0	11	12	0	0	0	0	0	0	0	0	0	0	0	0	38	1	11	1	0	0	51	52	0	0	0	0	0	0	0	0	0	0
11:15	0	0	70	4	13	41	0	0	128	49	0	0	7	3	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	27	3	4	0	0	0	34	34	0	0	0	0	0	0	0	0	0	0
11:30	0	0	64	4	21	5	6	1	101	111	0	0	12	0	2	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0	45	1	8	2	2	1	60	63	0	0	0	0	0	0	0	0	0	0
11:45	2	0	73	4	25	6	1	0	111	111	0	0	13	0	1	1	0	0	15	16	0	0	0	0	0	0	0	0	0	0	0	0	52	1	4	1	2	0	60	63	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	266	15	72	60	8	1	424	463	0	0	38	4	7	2	0	0	51	52	0	0	0	0	0	0	0	0	0	0	0	0	162	6	27	4	4	1	205	211	0	0	0	0	0	0	0	0	0	0
12:00	1	0	57	5	12	5	3	0	83	89	0	0	16	2	3	2	0	0	25	25	0	0	1	0	0	0	0	0	0	0	1	1	50	5	6	1	2	1	65	68	0	0	0	0	0	0	0	0	0	0
12:15	0	0	59	8	19	5	2	1	94	99	0	0	12	0	3	1	0	0	16	17	0	0	0	0	0	0	0	0	0	0	0	0	56	5	5	2	0	0	68	69	0	0	0	0	0	0	0	0	0	0
12:30	1	2	71	4	22	7	4	1	112	119	0	0	14	1	5	0	0	1	21	21	0	0	0	0	0	0	0	0	0	0	0	0	34	4	6	3	0	1	48	50	0	0	0	0	0	0	0	0	0	0
12:45	0	2	84	8	12	6	3	1	116	122	0	0	7	2	2	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	70	3	4	1	0	1	81	80	0	0	0	0	0	0	0	0	0	0
H/TOT	2	4	271	25	65	23	12	3	405	429	0	0	51	5	13	3	0	1	73	75	0	0	1	0	0	0	0	0	0	0	1	1	210	17	21	7	2	3	262	267	0	0	0	0	0	0	0	0	0	0



Survey Name 256 19344 Bus Connects Route 5

Site: Site 5 2

Location Blanchardstown Road N/Unnamed Road

Date Thu 28 Nov 2019

	C => A										C => B										C => C										C => D										C => E									
TIME	P/C	M/C	CARTAX	LGV	HGV:	HGV:	V(B	TOT:	PCU		P/C	M/C	CARTAX	LGV	HGV:	HGV:	V(B	TOT:	PCU		P/C	M/C	CARTAX	LGV	HGV:	HGV:	V(B	TOT:	PCU		P/C	M/C	CARTAX	LGV	HGV:	HGV:	V(B	TOT:	PCU		P/C	M/C	CARTAX	LGV	HGV:	HGV:	V(B	TOT:	PCU	
13:00	3	0	76	1	13	6	2	0	101	104	0	0	15	1	3	1	1	0	22	24	0	0	0	0	0	0	0	0	0	0	0	39	3	8	1	0	0	51	52	0	0	0	0	0	0	0	0	0	0
13:15	3	0	95	7	16	16	1	0	140	148	0	0	12	2	3	1	0	0	18	19	0	0	0	0	0	0	0	0	0	0	0	48	0	6	1	0	0	55	56	0	0	0	0	0	0	0	0	0	0
13:30	7	0	121	6	24	8	5	0	171	176	0	0	19	1	8	1	0	0	29	30	0	0	0	0	0	0	0	0	0	0	0	42	4	8	2	0	1	57	58	0	0	0	0	0	0	0	0	0	0
13:45	1	1	103	10	31	10	0	1	157	161	0	0	18	1	3	1	0	0	23	24	0	0	0	0	0	0	0	0	0	0	0	52	3	16	4	0	0	75	77	0	0	0	0	0	0	0	0	0	0
H/TOT	14	1	395	24	84	42	8	1	569	589	0	0	65	5	17	4	1	0	92	95	0	0	0	0	0	0	0	0	0	0	0	181	10	38	8	0	1	238	242	0	0	0	0	0	0	0	0	0	0
14:00	0	0	93	2	20	6	1	1	123	127	0	0	15	0	3	1	0	0	19	20	0	0	0	0	0	0	0	0	0	0	0	62	1	11	3	0	1	78	80	0	0	0	0	0	0	0	0	0	0
14:15	3	0	87	6	26	4	2	0	128	130	0	0	14	1	3	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0	0	48	3	11	3	0	0	65	67	0	0	0	0	0	0	0	0	0	0
14:30	2	1	93	2	17	4	1	3	123	124	0	0	20	0	4	1	0	0	25	26	0	0	0	0	0	0	0	0	0	0	0	53	3	15	1	0	1	73	74	0	0	0	0	0	0	0	0	0	0
14:45	0	0	88	7	15	6	1	0	117	121	0	0	17	3	0	1	1	0	22	24	0	0	0	0	0	0	0	0	0	0	0	45	6	9	3	0	0	63	65	0	0	0	0	0	0	0	0	0	0
H/TOT	5	1	361	17	78	20	5	4	491	503	0	0	66	4	10	3	1	0	84	87	0	0	0	0	0	0	0	0	0	0	0	208	13	46	10	0	2	279	284	0	0	0	0	0	0	0	0	0	0
15:00	1	2	101	3	21	7	1	0	136	139	0	0	16	0	2	1	0	0	13	14	0	0	0	0	0	0	0	0	0	0	0	60	7	12	3	1	1	84	87	0	0	0	0	0	0	0	0	0	0
15:15	0	0	94	4	12	5	2	1	118	123	0	0	13	2	2	0	0	0	17	17	0	0	1	0	0	0	0	0	0	1	1	0	0	34	10	13	1	0	1	59	60	0	0	0	0	0	0	0	0	0	0
15:30	0	0	86	8	13	3	1	1	112	115	0	0	17	0	1	0	0	0	18	18	0	0	1	0	1	0	0	0	0	2	2	0	0	51	4	11	2	0	1	69	70	0	0	0	0	0	0	0	0	0	0
15:45	0	1	92	6	13	3	2	1	118	122	0	0	13	1	3	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	1	40	3	10	1	0	1	56	56	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	3	373	21	59	18	6	3	484	498	0	0	59	3	8	1	0	0	65	66	0	0	2	0	1	0	0	0	0	3	3	0	1	185	24	46	7	1	4	269	272	0	0	0	0	0	0	0	0	0	0
16:00	5	1	76	2	11	2	1	3	101	99	0	0	9	2	0	1	0	1	13	14	0	0	0	0	0	0	0	0	0	0	0	7	0	59	3	9	1	0	1	80	75	0	0	0	0	0	0	0	0	0	0
16:15	3	2	72	1	14	1	0	3	96	93	0	0	14	1	6	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	0	1	1	46	1	15	1	0	0	65	64	0	0	0	0	0	0	0	0	0	0
16:30	1	0	88	1	13	1	2	0	106	108	0	0	13	2	2	1	0	0	18	19	0	0	0	0	0	0	0	0	0	0	0	1	51	3	10	0	0	0	65	64	0	0	0	0	0	0	0	0	0	0	0
16:45	2	0	73	0	8	3	1	2	89	90	0	0	11	0	0	1	0	0	12	13	0	0	0	0	0	0	0	0	0	0	0	0	0	41	1	6	1	0	2	51	52	0	0	0	0	0	0	0	0	0	0
H/TOT	11	3	309	4	46	7	4	8	392	390	0	0	47	5	8	3	0	1	64	66	0	0	0	0	0	0	0	0	0	0	0	8	2	197	8	40	3	0	3	261	255	0	0	0	0	0	0	0	0	0	0
17:00	2	1	70	3	11	0	1	0	85	84	0	0	9	0	1	1	0	0	11	12	0	0	0	0	0	0	0	0	0	0	0	1	0	36	3	6	0	0	1	47	46	0	0	0	0	0	0	0	0	0	0
17:15	0	1	71	0	10	2	0	0	84	84	0	0	17	0	4	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	0	0	2	40	3	4	1	0	1	51	50	0	0	0	0	0	0	0	0	0	0
17:30	1	1	78	1	9	0	2	1	93	94	0	0	11	1	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	7	4	0	0	71	73	0	0	0	0	0	0	0	0	0	0
17:45	0	1	67	0	14	2	0	1	85	85	0	0	6	0	2	0	0	0	8	8	0	0	1	0	0	0	0	0	0	1	1	0	0	37	1	7	0	0	0	45	45	0	0	0	0	0	0	0	0	0	0
H/TOT	3	4	286	1	44	4	3	2	347	348	0	0	43	1	7	1	0	0	52	53	0	0	1	0	0	0	0	0	0	1	1	1	2	173	7	24	5	0	2	214	213	0	0	0	0	0	0	0	0	0	0
18:00	0	0	64	0	6	1	0	0	71	72	0	0	13	1	2	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	1	59	0	9	0	0	3	72	71	0	0	0	0	0	0	0	0	0	0
18:15	0	1	75	0	6	1	0	1	84	84	0	0	8	1	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	48	0	4	1	0	2	55	56	0	0	0	0	0	0	0	0	0	0
18:30	3	1	70	0	9	1	0	1	85	83	0	0	11	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	1	39	0	6	2	0	1	49	49	0	0	0	0	0	0	0	0	0	0
18:45	0	1	92	0	11	2	0	0	106	106	0	0	12	1	1	0	1	0	15	16	0	0	0	0	0	0	0	0	0	0	0	0	0	44	0	5	1	0	1	51	52	0	0	0	0	0	0	0	0	0	0
H/TOT	3	3	301	0	32	5	0	2	346	344	0	0	44	3	3	0	1	0	51	52	0	0	0	0	0	0	0	0	0	0	0	0	2	190	0	24	4	0	7	227	228	0	0	0	0	0	0	0	0	0	0
19:00	0	0	79	0	5	3	0	0	87	89	0	0	14	0	1	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	0	0	1	42	0	5	0	0	2	50	49	0	0	0	0	0	0	0	0	0	0
19:15	2	0	85	0	9	0	1	0	97	97	0	0	10	1	1	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	1	0	51	1	6	0	0	1	60	59	0	0	0	0	0	0	0	0	0	0
19:30	0	0	91	0	14	1	0	0	106	107	0	0	8	0	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	42	0	5	1	0	1	49	50	0	0	0	0	0	0	0	0	0	0
19:45	0	0	79	0	3	0	2	2	86	89	0	0	11	2	2	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	46	0	6	0	0	0	52	52	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	334	0	31	4	3	2	376	380	0	0	43	3	5	0	0	0	51	51	0	0	0	0	0	0	0	0	0	0	0	0	1	181	1	22	1	0	4	211	210	0	0	0	0	0	0	0	0	0	0
20:00	1	0	77	0	9	1	0	0	88	88	0	1	17	0	2	0	0	0	20	19	0	0	0	0	0	0	0	0	0	0	0	0	0	53	0	1	1	0	0	55	56	0	0	0	0	0	0	0	0	0	0
20:15	2	0	96	0	4	3	0	0	105	105	0	0	11	0	1	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	0	1	59	0	4	0	0	2	66	65	0	0	0	0	0	0	0	0	0	0
20:30	0	0	60	0	4	3	0	1	68	70	0	0	14	2	2	1	0	0	19	20	0	0	0	0	0	0	0	0	0	0	0	0	0	43	0	3	0	0	0	46	46	0	0	0	0	0	0	0	0	0	0
20:45	0	0	62	0	2	0	0	0	64	64	0	0	10	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	35	0	2	1	0	0	38	39	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	295	0	19	7	0	1	325	326	0	1	52	2	5	1	0	0	61	61	0	0	0	0	0	0	0	0	0	0	0	0	1	190	0	10	2	0	2	205	206	0	0	0	0	0	0	0	0	0	0
21:00	0	0	82	1	5	2	0	0	90	91	0	0	20	0	3	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	0	0	0	41	0	1	0	0	2	44	44	0	0	0	0	0	0	0	0	0	0
21:15	1	1	64	0	5	0	3	0	74	77	0	0	17	0	2	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	49	1	1	0	0	1	52	52	0	0	0	0	0	0	0	0	0	0
21:30	1	0	69	1	2	0	0	0	73	72	0	0	10	0	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	1	0	29	0	2	0	0	0	32	31	0	0	0	0	0	0	0	0	0	0
21:45	1	0	47	0	2	2	0	0	52	52	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	1	0	0	0	26	26	0	0	0	0	0	0	0	0	0	0
H/TOT	3	1	262	2	14	4	3	0	289	292	0	0	52	0	6	0	0	0	58	58	0	0	0	0	0	0	0	0	0	0	0	0	1	144	1	5	0	0	3	154	153	0	0	0	0	0	0	0	0	0	0
22:00	0	0	44	2	6	0	0	0	52	52	1	0	2	1	0	0	0	0	4	3.2	0	0	0	0	0	0	0	0	0	0	0	0	1	24	0	1	0	1	1	28	29	0	0	0	0	0	0	0	0	0	0
22:15	0	0	42	1	4	0	2	1	50	53	0	0	9	2	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	23	1	1	0	0	1	26	26	0	0	0	0	0	0	0	0	0	0
22:30	0	0	26	1	2	0	0	0	29	29	0	0	6	1	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	17	1	1	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0
22:45	0	0	34	0	2	0	1	0	37	38	0	0	1	1	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	2	0	0	1	23	23	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	146	4	14	0	3	1	168	172	1	0	18	5	2	0	0	0	26	25	0	0	0	0	0	0	0	0	0	0	0	0	1	84	2	5	0	1	3	96	97	0	0	0	0	0	0	0	0	0	0
23:00	0	0	29	0	1	0	0	0	30	30	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	1	0	14	15	0	0	0	0	0	0	0	0	0	0
23:15	1	0	23	0	0	0	0	0	24	23	0	0	5	0	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	1	20	20	0	0	0	0	0	0	0	0	0	0
23:30	1	0	23	0	0	0	2	0	26	28	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	22	1	2	0	0	0	26	25	0	0	0	0	0	0	0	0	0	0
23:45	0	0	21	0	1	0	1	0	23	24	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	1	1	0	0	7	0	3	1	0	0	11	12	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	96	0	2	0	3	0	101	105	0	0	8	0	3	0	0	0	11	11	0	0	1	0	0	0	0	0	0	1	1	0	1	60	1	6	1	1	1	71	72	0	0	0	0	0	0	0	0	0	0
24 TOT	81	37	###	189	909	279	110	44	###	###	2	2	835	58	140	26	8	6	###	###	0	0	6	0	1	0	0	0	7	7	17	15	###	158	428	84	27	50	###	###	0	0	0	0	0	0	0	0	0	0



Survey Name: 256 19344 Bus Connects Route 5

Site: Site 5 2

Location: Blanchardstown Road N, /Ravens Road

Date: Thu 28 Nov 2019

	D => A										D => B										B => C										D => D										D => E									
TIME	P/C	M/C	CAR	TAX	LGV	3GV	3GV:	V(B	TOT:	PCU	P/B	M/C	CAR	TAX	LGV	3GV	3GV:	V(	B	TOT:	PCU	P/C	M/C	CAR	TAX	LGV	3GV	3GV:	V(B	TOT:	PCU	P/C	M/C	CAR	TAX	LGV	3GV	3GV:	V(	B	TOT:	PCU	P/B	M/C	CAR	TAX	LGV	3GV	3GV:	V(	B	TOT:	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	6	0	0	4	1	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	1	0	0	0	2	0	3	5.6	0	0	3	2	0	0	0	0	0	5	5	0	0	5	1	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	1	0	1	0	0	0	2	2	0	0	1	1	0	0	0	0	0	2	2	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	1	0	0	0	0	0	1	1	1	0	3	2	0	0	0	0	0	6	5.2	0	0	5	1	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	1	0	2	0	6	8.6	1	0	13	5	0	0	0	0	0	19	18	0	0	17	3	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	3	3	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	2	0	0	0	0	0	2	2	1	0	0	1	0	0	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	1	0	0	0	1	1	1	0	1	1	0	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	1	0	1	0	0	0	2	2	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	2	0	0	0	5	5	2	0	2	1	3	0	0	0	0	10	8.4	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	4	3.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	1	0	0	0	1	0	2	2	1	0	0	0	0	0	0	0	0	1	0.2	0	0	1	0	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	1	0	0	1	1	0	0	2	0	0	0	0	0	0	2	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	1	1	0	3	4.8	2	0	5	1	0	0	0	0	0	8	6.4	0	0	2	0	0	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	0	6	6	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	2	0	0	1	1	0	4	5.8	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	1	3	0	0	0	0	0	4	4	2	0	1	1	0	0	0	0	0	2	2	0	0	1	2	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	5	0	0	1	1	0	6	9.2	2	0	4	2	0	0	0	0	0	10	8	0	0	4	4	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	1	0	0	0	2	1.4	0	0	1	0	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	1	0	0	0	0	0	1	1	0	0	3	2	1	0	0	0	0	6	5	0	0	2	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	1	9	0	3	0	0	0	1	12	3	0	12	2	5	0	0	0	0	20	19	1	0	4	3	1	0	0	0	9	8.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	2	0	0	0	0	0	2	2	0	0	2	1	0	0	0	0	0	3	3	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	2	0	4	0	2	0	0	0	8	6.4	0	0	5	0	0	0	0	0	0	5	5	0	0	5	0	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	3	1	3	0	1	1	0	0	9	6.5	1	0	14	1	2	0	0	0	0	18	17	0	0	9	0	2	1	0	0	12	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	8	0	0	1	0	0	9	9.5	0	0	19	3	4	1	1	0	0	28	30	0	0	15	1	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	5	1	17	0	3	2	0	0	28	24.1	1	0	40	5	6	1	1	0	0	54	55	0	0	30	1	3	1	0	0	55	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	6	0	2	0	1	0	9	10.1	1	0	42	0	3	1	2	0	0	49	51	0	0	18	0	3	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	14	0	1	0	0	0	15	15.0	0	0	40	0	7	1	1	2	0	51	53	0	0	15	0	2	1	0	1	19	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	6	0	4	0	0	0	10	10.1	2	0	83	0	10	3	1	2	0	102	103	0	0	18	0	2	0	1	0	21	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	5	0	2	2	0	0	9	10.0	0	0	91	1	20	1	0	4	0	117	118	1	0	12	1	5	2	0	0	21	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	31	0	9	2	1	0	43	45.2	2	0	256	1	40	6	4	6	1	316	324	1	0	63	1	12	3	1	1	82	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	20	0	2	0	0	0	24	24	2	0	106	2	29	2	1	2	0	144	145	0	0	18	0	4	1	0	1	24	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	8	0	2	0	0	0	10	10	0	0	92	1	21	3	0	6	0	123	125	0	0	23	0	8	0	0	0	31	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	7	0	2	0	1	0	10	11.2	0	0	126	1	21	6	0	3	0	159	160	0	0	38	0	5	1	0	1	45	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	1	0	16	1	2	0	0	0	20	19.0	0	0	108	2	4	0	2	6	0	122	125	1	0	52	0	3	0	2	1	59	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	33	1	8	0	1	0	44	45.4	4	0	432	6	75	11	3	17	0	548	554	1	0	131	0	20	2	2	3	159	162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1	0	16	1	1	0	0	0	19	18.2	1	1	87	3	9	1	1	6	0	110	110	0	0	44	0	8	1	0	0	53	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	16	0	1	0	2	0	19	22.0	0	1	81	1	4	1	1	6	0	95	96	2	0	53	1	5	0	0	1	62	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	1	0	14	1	4	0	0	1	21	0	1	1	89	2	9	0	0	5	0	107	106	2	0	70	2	8	0	0	1	83	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	2	0	12	0	0	0	0	0	14	2	0	1	79	1	3	0	1	2	0	87	88	1	0	60	4	4	1	1	0	71	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	4	0	58	2	6	0	2	1	73	72	3	4	336	7	25	2	3	19	0	399	399	5	0	227	7	25	2	1	2	269	267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	14	0	1	1	2	1	19	22.1	1	1	96	3	5	1	1	6	0	114	114	0	0	79	3	7	1	0	0	90	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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09:30	0	0	19	1	4	1	2	0	27	30	1	0	101	2	6	0	0	4	0	114	113	0	0	103	4	5	4	0	1	117	119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	26	0	1	3	0	0	30	32	1	0	107	4	1	2	0	3	0	118	118	0	0	100	6	9	4	0	0	119	121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	73	1	8	5	4	1	91	98.3	2	2	407	10	15	6	3	14	0	460	464	0	0	364	13	28	9	0	1	415	420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	8	1	6	0	0	1	16	16.2	0	0	62	4	2	1	1	3	0	73	75	0	0	75	1	3	0	1	1	81	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	16	0	4	1	1	1	23	25.0	1	1	81	2	2	1	2	1	0	90	93	0	0	76	2	8	4	0	0	90	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	19	0	6	2	0	0	27	28	0	0	106	4	6	0	2	2	0	120	123	0	0	103	5	4	3	3	1	119	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	10	0	3	0	0	0	13	13.1	1	0	76	4	5	2	0	5	0	93	93	0	0	88	3	2	0	0	0	93	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	53	1	19	3	1	2	79	82.1	1	1	325	14	15	4	5	11	0	376	383	0	0	342	11	17	7	4	2	383	392	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	20	1	2	1	0	1	25	26.0	0	0	82	4	12	2	0	2	0	102	103	0	0	74	3	2	0	0	1	80	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	11	1	1	1	1	0	15	17.0	1	1	87	1	4	1	0	3	0	97	97	0	0	77	0	2	2	0	1	82	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	11	0	2	3	0	0	16	18.0	0	1	73	4	0	3	0	1	0	82	83	0	0	71	5	7	0	0	1	84	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	11	52	1	1	1	0	66	68.1	1	0	80	3	5	1	1	5	0	96	97	0	0	90	3	7	1	1	0	102	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	53	54	6	6	2	1	122	128.1	2	2	322	12	21	7	1	11	0	377	380	0	0	312	11	18	3	1	3	348	351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	3	0	1	1	0	0	5	5.1	0	0	68	0	5	0	1	1	0	76	77	0	0	63	0	3	3	1	1	71	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	13	0	1	1	1	0	16	18.0	0	0	97	3	6	1	2	1	0	110	113	0	0	81	4	4	2	0	2	93	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	21	0	1	2	2	1	27	31.1	0	0	69	5	7	0	1	4	0	87	88	0	0	89	8	10	0	0	0	107	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	17	0	3	0	1	0	21	22.1	0	0	82	1	5	0	1	1	0	91	92	0	0	78	3	6	0	0	0	87	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	54	0	6	4	4	1	69	76.3	1	0	316	9	23	1	5	7	0	364	369	0	1	311	15	23	5	1	3	359	362	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



IDASO

Survey Name: 256 18344 Bus Connects Route 5

Site: Site S 2

Location: Blanchardstown Road N/Unnamed Road

Date: Thu 28 Nov 2019

	D => A										D => B										D => C										D => D										D => E									
TIME	P/C	M/C	CART	AX	LGV	JGV:	JGV:	V(B	TOT:	PCU	P/C	M/C	CART	AX	LGV	JGV:	JGV:	V(B	TOT:	PCU	P/C	M/C	CART	AX	LGV	JGV:	JGV:	V(B	TOT:	PCU	P/C	M/C	CART	AX	LGV	JGV:	JGV:	V(B	TOT:	PCU	P/C	M/C	CART	AX	LGV	JGV:	JGV:	V(B	TOT:	PCU
13:00	0	0	9	0	0	0	2	0	11	14	0	1	102	2	8	3	1	3	120	122	0	0	78	3	14	3	0	1	99	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	13	0	4	0	1	0	18	19	0	0	62	2	4	0	0	4	72	72	0	0	69	3	3	1	0	1	77	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	13	0	1	1	2	0	17	20	0	2	73	3	2	0	3	2	85	88	0	0	71	3	3	1	0	0	78	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	12	1	1	0	0	0	14	14	0	0	63	3	5	0	1	1	73	74	0	0	73	4	4	0	1	1	83	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	47	1	6	1	5	0	60	67	0	3	300	10	19	3	5	10	350	356	0	0	291	13	24	5	1	3	337	341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	10	0	3	1	0	1	15	16	0	0	85	2	5	1	1	3	97	99	1	0	62	2	6	1	3	1	76	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	17	2	1	0	1	0	21	22	0	0	66	6	3	5	1	2	83	87	1	0	57	1	7	1	0	1	68	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	11	0	1	0	1	0	13	14	0	0	68	2	7	0	0	3	80	80	0	0	56	5	3	2	0	0	66	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	48	2	5	1	3	1	60	64	0	0	301	12	20	7	2	11	353	359	2	0	239	10	25	5	3	2	286	291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	8	0	1	2	2	0	13	17	1	0	70	2	10	1	1	2	87	88	0	0	67	4	5	1	0	1	78	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	18	0	2	0	0	0	20	20	1	0	79	6	5	0	0	2	93	92	0	0	85	7	10	0	2	2	106	109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	15	0	3	0	1	0	19	20	1	1	74	2	7	0	0	2	87	86	0	0	69	2	7	0	0	0	78	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	16	1	0	0	1	0	18	19	1	1	91	5	9	2	0	1	110	110	0	0	82	3	6	1	2	2	96	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	57	1	6	2	4	0	70	76	4	2	314	15	31	3	1	7	377	375	0	0	303	16	28	2	4	5	358	364	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	13	0	2	1	1	0	17	19	2	0	83	3	13	0	0	4	105	103	0	0	95	3	7	0	0	1	106	108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	1	0	14	0	1	0	0	0	16	15	0	1	73	3	6	1	0	0	84	84	0	0	74	2	7	0	1	2	86	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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16:45	0	0	18	4	0	0	0	0	22	22	0	0	106	0	7	0	0	2	115	115	0	0	101	4	11	1	0	0	117	118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	50	5	6	1	1	0	64	65	2	1	340	7	33	2	0	10	395	394	0	1	344	10	30	4	1	3	393	398	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	2	0	52	3	11	2	1	0	71	72	1	1	401	5	23	3	1	11	446	447	0	3	408	3	44	2	0	3	463	462	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	65	3	9	0	0	0	77	77	1	1	344	5	20	1	1	10	383	383	0	2	347	7	23	2	0	2	383	383	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	55	1	0	0	0	2	58	58	2	0	308	3	10	0	0	6	329	327	0	0	277	5	13	1	0	3	299	300	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	43	0	1	0	1	0	45	46	3	0	167	5	6	2	0	7	190	189	0	0	200	3	27	2	0	1	233	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	30	1	1	0	2	0	34	37	0	1	105	6	1	0	0	9	122	121	0	0	117	5	5	0	0	1	128	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	9	0	0	0	0	1	10	10	2	0	63	6	3	0	0	2	76	74	0	0	61	1	3	1	0	0	66	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	11	0	0	0	0	1	12	12	1	0	29	7	1	0	0	1	39	38	0	0	34	0	1	0	0	0	35	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24 TOT	13	4	860	76	114	31	36	11	###	###	40	20	###	162	395	59	35	171	###	###	10	7	###	142	370	57	19	38	###	###	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0



Survey Name 256 19044 Bus Connects Route 5

Site Sit 8 2

Location Blanchardstow R ath Rd/Ratheamed R oad

Date Thu 28 Nov 2019

	E => A									E => B									E => C									E => D									E => E								
TIME	P/CM/C	CARTAX	LGVJGV:	JGV: V(	BITOT:	PCU	P/M/C	CARTAX	LGVJGV:	JGV: V(	BITOT:	PCU	P/M/C	CARTAX	LGVJGV	JGV: V(	BITOT:	PCU	P/M/C	CARTAX	LGVJGV:	JGV: V(	BITOT:	PCU	P/M/C	CARTAX	LGVJGV:	JGV: V(	BITOT:	PCU	P/M/C	CARTAX	LGVJGV:	JGV: V(	BITOT	TPCU
00 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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11 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



IDAO

Survey Name: 256 19344 Bus Connects Route 5

Site: Site 5 2

Location: Blanchardstown Road N/Unnamed Road

Date Thu 28 Nov 2019

	E => A										E => B										E => C										E => D										E => E									
TIME	P/C	M/C	CAR	TAX	LGV	3GV:	3GV:	V(B	TOT:	PCU	P/C	M/C	CAR	TAX	LGV	3GV:	3GV:	V(B	TOT:	PCU	P/C	M/C	CAR	TAX	LGV	3GV:	3GV:	V(B	TOT:	PCU	P/C	M/C	CAR	TAX	LGV	3GV:	3GV:	V(B	TOT:	PCU	P/C	M/C	CAR	TAX	LGV	3GV:	3GV:	V(B	TOT:	PCU
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24 TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



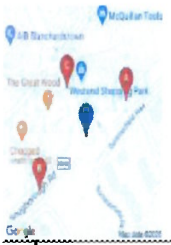
Survey Name 0086 (20) 19344 - Bus Connects Survey - Route 3, 5 & 7 (Feb additions)

Site Site 5 B3

Location Swiftbrook Rd, Ballinclashtown

Date Thu 13 Feb 2020

	A => A										A => B										A => C									
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	19	1	0	0	0	0	20	20	0	0	5	0	0	0	0	0	5	5
00:15	0	0	0	0	0	0	0	0	0	0	0	0	6	4	1	1	0	0	12	12.5	0	0	4	3	0	0	0	0	7	7
00:30	0	0	0	0	0	0	0	0	0	0	1	0	8	0	0	0	0	0	9	9	0	0	4	3	0	0	0	0	7	7
00:45	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	13	13	0	0	2	0	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	45	6	1	1	0	0	54	53.7	0	0	15	6	0	0	0	0	21	21
01:00	0	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	0	12	12	0	0	1	0	0	0	0	0	1	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	0	0	2	1	1	0	0	0	4	4
01:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	0	0	2	0	0	0	0	0	2	2
01:45	0	0	0	0	0	0	0	0	0	0	0	0	5	2	1	0	0	0	8	8	0	0	1	2	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	26	4	2	0	0	0	32	32	0	0	6	3	1	0	0	0	10	10
02:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4	0	0	2	1	0	0	0	0	3	3
02:15	0	0	0	0	0	0	0	0	0	0	0	0	6	2	0	0	0	0	8	8	0	0	3	0	0	0	0	0	3	3
02:30	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7	1	0	2	0	1	0	0	0	4	4
02:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	18	2	2	0	0	0	22	22	1	0	7	1	1	0	0	0	10	9.5
03:00	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	8	8	0	0	1	0	0	0	0	0	1	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3	3.5	0	0	1	0	0	0	0	0	1	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	2	0	1	0	0	3	3.5
03:45	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	2	0	0	5	6	0	0	1	0	1	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	11	3	0	3	0	0	17	18.5	0	0	3	2	1	1	0	0	7	7.5
04:00	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4	4	0	0	1	0	1	0	0	0	2	2
04:15	0	0	0	0	0	0	0	0	0	0	0	0	4	1	1	1	0	0	7	7.5	0	0	3	0	0	1	0	0	4	4.5
04:30	0	0	0	0	0	0	0	0	0	0	0	0	5	2	1	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	5	1	1	0	0	0	7	7	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	17	5	3	2	0	0	27	28	0	0	5	0	1	1	0	0	7	7.5
05:00	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	1	0	1	11	12.5	0	0	2	1	1	0	0	0	4	4
05:15	0	0	0	0	0	0	0	0	0	0	0	0	11	1	1	1	0	0	14	14.5	0	0	0	1	0	0	0	1	2	3
05:30	0	0	0	0	0	0	0	0	0	0	1	0	8	2	0	4	0	0	15	16.2	0	0	1	0	0	0	0	0	1	1
05:45	0	0	0	0	0	0	0	0	0	0	0	0	16	1	2	0	0	0	19	19	1	0	2	2	0	2	0	0	7	7.2
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	43	4	4	6	0	1	59	62.2	1	0	5	4	1	2	0	1	14	15.2
06:00	0	0	0	0	0	0	0	0	0	0	0	1	28	1	4	1	0	1	36	36.9	0	0	5	0	1	0	0	0	6	5
06:15	0	0	0	0	0	0	0	0	0	0	0	0	12	1	4	0	0	1	19	19.4	0	0	4	0	2	1	0	0	7	7.5
06:30	0	0	0	0	0	0	0	0	0	0	0	1	15	1	2	1	0	3	23	25.9	0	0	1	0	2	2	0	0	5	6
06:45	0	0	0	0	0	0	0	0	0	0	0	1	28	0	9	1	0	0	39	38.9	0	0	5	3	4	1	0	0	13	13.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	83	3	19	3	0	5	117	121.1	0	0	15	3	9	4	0	0	31	33
07:00	0	0	0	0	0	0	0	0	0	0	0	0	23	0	1	1	1	1	29	32.8	0	0	3	0	1	1	0	0	5	5.5
07:15	0	0	0	0	0	0	0	0	0	0	0	0	35	1	2	1	0	1	40	41.5	0	0	8	1	3	2	0	0	14	15
07:30	0	0	0	0	0	0	0	0	0	0	0	0	35	0	5	1	1	0	42	43.8	0	0	10	1	1	2	0	0	14	15
07:45	0	0	0	0	0	0	0	0	0	0	0	0	45	2	5	0	0	2	55	55.7	1	0	13	1	1	0	0	0	16	15.2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	138	3	14	5	2	4	166	173.1	1	0	34	3	6	5	0	0	49	50.7
08:00	0	0	0	0	0	0	0	0	0	0	0	0	58	4	1	0	1	0	64	65.3	0	0	18	0	2	0	0	0	20	20
08:15	0	0	0	0	0	0	0	0	0	0	1	0	63	5	6	5	0	1	81	83.7	0	0	25	2	3	2	0	0	32	33
08:30	0	0	0	0	0	0	0	0	0	0	0	0	50	2	0	0	0	1	53	54	0	0	22	5	1	0	0	0	28	28
08:45	0	0	1	0	1	0	0	0	2	2	0	0	40	1	11	2	0	0	54	55.5	0	0	39	3	2	1	0	0	45	45.5
H/TOT	0	0	1	0	1	0	0	0	2	2	1	0	211	12	18	7	1	2	252	258	0	0	104	10	8	3	0	0	125	126.5
09:00	0	0	0	0	0	0	0	0	0	0	0	1	55	2	10	0	1	0	69	69.7	0	0	46	4	4	1	0	0	55	55.5
09:15	0	0	0	0	0	0	0	0	0	0	0	1	65	0	5	1	0	0	72	71.9	0	0	55	4	2	0	0	0	61	61
09:30	0	0	0	0	0	0	0	0	0	0	0	0	42	7	6	3	0	0	58	59.5	0	0	60	1	2	0	0	0	63	63
09:45	0	0	0	0	0	0	0	0	0	0	1	0	45	4	7	0	0	0	57	56.2	0	0	64	0	4	0	0	0	68	68
H/TOT	0	0	0	0	0	0	0	0	0	0	1	2	207	13	28	4	1	0	256	257.3	0	0	225	9	12	1	0	0	247	247.5
10:00	0	0	0	0	0	0	0	0	0	0	0	1	32	4	3	0	0	0	40	39.4	0	1	52	3	3	1	0	0	60	59.9
10:15	0	0	0	0	0	0	0	0	0	0	0	1	34	3	9	2	0	0	49	49.4	0	0	70	4	7	0	0	0	81	81
10:30	0	0	0	0	0	0	0	0	0	0	0	0	52	4	7	4	0	0	67	69	0	0	59	0	3	1	0	0	63	63.5
10:45	0	0	0	0	0	0	0	0	0	0	0	0	31	4	13	2	2	0	52	55.6	0	0	80	1	4	2	0	0	87	88
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	149	15	32	8	2	0	208	213.4	0	1	261	8	17	4	0	0	291	292.4
11:00	0	0	0	0	0	0	0	0	0	0	1	0	36	0	7	3	0	0	47	47.7	0	0	66	1	4	1	0	0	72	72.5
11:15	0	0	0	0	0	0	0	0	0	0	0	0	35	1	5	2	0	0	43	44	0	0	59	4	8	1	0	0	72	72.5
11:30	0	0	0	0	0	0	0	0	0	0	0	0	18	3	14	4	0	1	40	43	0	0	64	1	0	0	0	0	65	65
11:45	0	0	1	0	0	0	0	0	1	1	0	1	45	1	10	2	0	0	59	59.4	0	0	63	0	6	0	0	0	69	69
H/TOT	0	0	1	0	0	0	0	0	1	1	1	1	134	5	36	11	0	1	189	194.1	0	0	252	6	18	2	0	0	278	279
12:00	0	0	0	0	0	0	0	0	0	0	0	0	46	2	5	6	0	0	59	62	0	0	76	7	5	0	0	0	88	88
12:15	0	0	0	0	0	0	0	0	0	0	0	0	43	1	9	0	0	0	53	53	0	0	56	3	4	0	0	0	63	63
12:30	0	0	0	0	0	0	0	0	0	0	1	0	43	5	8	4	1	0	62	64.5	0	0	54	2	4	0	0	0	60	60
12:45	0	0	0	0	0	0	0	0	0	0	0	0	44	5	2	2	0	0	53	54	0	0	63	6	8	1	0	0	78	78.5
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	176	13	24	12	1	0	227	233.5	0	0	249	18	21	1	0	0	289	289.5



IDASO

Survey Name: 008 (20) 19544 - Bus Connects Survey - Route 3, 5 & 7 (Feb additions)

Site: Site 5-B3

Location: Snugborough Rd, Blanchardstown

Date: Thu 13-Feb-2020

	A => A										A => B										A => C									
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
13:00	0	0	0	0	0	0	0	0	0	0	0	0	33	0	8	1	0	0	42	42.5	0	0	68	2	6	2	0	1	79	81
13:15	0	0	1	0	0	0	0	0	1	1	1	0	49	1	4	1	0	0	56	55.7	1	0	55	3	3	0	0	0	62	61.2
13:30	0	0	0	0	1	0	0	0	1	1	1	0	34	2	10	3	1	0	51	53	0	0	65	2	6	0	0	0	73	73
13:45	0	0	0	0	0	0	0	0	0	0	0	0	36	2	11	1	0	0	50	50.5	0	0	67	3	3	0	0	0	73	73
H/TOT	0	0	1	0	1	0	0	0	2	2	2	0	152	5	33	6	1	0	199	201.7	1	0	255	10	18	2	0	1	287	288.2
14:00	0	0	0	0	0	0	0	0	0	0	0	0	38	0	5	2	1	0	46	48.3	0	0	66	3	2	2	0	0	73	74
14:15	0	0	0	0	0	0	0	0	0	0	0	0	51	1	9	1	0	0	62	62.5	0	0	61	1	3	1	0	0	66	66.5
14:30	0	0	0	0	0	0	0	0	0	0	0	0	50	2	8	1	0	0	61	61.5	0	0	48	2	5	0	0	0	55	55
14:45	0	0	0	0	0	0	0	0	0	0	0	0	40	1	6	2	0	0	49	50	0	0	65	4	8	0	0	0	77	77
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	179	4	28	6	1	0	218	222.3	0	0	240	10	18	1	0	0	271	277.5
15:00	0	0	0	0	0	0	0	0	0	0	1	0	44	1	11	0	0	0	57	58.2	0	0	63	1	5	0	0	0	69	69
15:15	0	0	0	0	0	0	0	0	0	0	0	2	49	2	10	1	0	1	65	65.3	0	1	60	1	5	1	0	0	68	67.9
15:30	0	0	0	0	0	0	0	0	0	0	0	0	56	1	11	2	0	0	70	71	0	0	68	1	4	0	0	0	73	73
15:45	0	0	0	0	0	0	0	0	0	0	0	0	67	2	5	1	0	0	75	75.5	0	0	54	3	8	0	0	0	65	65
H/TOT	0	0	0	0	0	0	0	0	0	0	1	2	216	6	37	4	0	1	267	268	0	1	245	6	22	1	0	0	275	274.9
16:00	0	0	0	0	0	0	0	0	0	0	0	0	51	3	12	5	0	0	71	73.5	1	0	64	4	3	0	0	0	72	71.2
16:15	0	0	1	0	0	0	0	0	1	1	1	0	55	0	4	2	0	0	62	62.2	0	0	48	2	11	0	0	0	61	61
16:30	0	0	0	0	0	0	0	0	0	0	1	0	49	0	9	1	0	0	60	59.7	0	0	47	5	3	0	0	0	55	55
16:45	0	0	0	0	0	0	0	0	0	0	2	1	50	2	9	0	0	0	64	61.8	0	1	57	1	5	0	0	0	64	63.4
H/TOT	0	0	1	0	0	0	0	0	1	1	4	1	205	5	34	8	0	0	257	257.2	1	1	216	12	22	0	0	0	252	250.6
17:00	0	0	0	0	0	0	0	0	0	0	2	0	33	2	4	1	0	0	42	40.9	0	1	31	1	8	1	0	0	42	41.9
17:15	0	0	2	0	0	0	0	0	2	2	0	0	44	1	3	0	0	0	48	48	0	1	48	1	1	0	0	0	51	50.4
17:30	0	0	0	0	0	0	0	0	0	0	0	1	59	0	6	1	0	0	67	66.9	1	0	34	0	1	0	0	0	36	35.2
17:45	0	0	0	0	0	0	0	0	0	0	1	0	38	0	6	1	0	0	46	45.7	0	0	47	3	3	0	0	0	53	53
H/TOT	0	0	2	0	0	0	0	0	2	2	3	1	174	3	19	3	0	0	203	201.5	1	2	160	5	13	1	0	0	182	180.5
18:00	0	0	0	0	0	0	0	0	0	0	1	0	40	0	2	1	0	0	44	43.7	1	0	37	3	0	0	0	0	41	40.2
18:15	0	0	0	0	0	0	0	0	0	0	0	1	64	1	3	0	0	0	69	68.4	0	0	44	4	4	0	0	0	52	52
18:30	0	0	0	0	0	0	0	0	0	0	1	0	54	1	7	1	0	0	64	63.7	0	0	41	3	1	1	0	0	46	46.5
18:45	0	0	0	0	0	0	0	0	0	0	0	0	52	1	6	0	0	0	59	59	0	0	36	1	3	0	0	0	40	40
H/TOT	0	0	0	0	0	0	0	0	0	0	2	1	210	3	18	2	0	0	236	234.8	1	0	158	11	8	1	0	0	179	178.7
19:00	0	0	0	0	0	0	0	0	0	0	0	0	71	0	7	1	0	0	79	79.5	0	0	63	5	2	1	0	0	71	71.5
19:15	0	0	0	0	0	0	0	0	0	0	1	1	65	1	1	0	0	0	69	67.6	0	1	57	3	7	0	0	0	68	67.4
19:30	0	0	0	0	0	0	0	0	0	0	0	2	64	1	3	0	0	0	70	68.8	0	0	67	0	3	0	0	0	70	70
19:45	0	0	0	0	0	0	0	0	0	0	0	0	58	1	2	1	0	0	62	62.5	0	0	48	2	3	1	0	0	54	54.5
H/TOT	0	0	0	0	0	0	0	0	0	0	1	3	258	3	13	2	0	0	280	278.4	0	1	235	10	15	2	0	0	263	263.4
20:00	0	0	0	0	0	0	0	0	0	0	0	0	52	1	2	0	0	0	55	55	0	0	40	1	2	0	0	0	43	43
20:15	0	0	0	0	0	0	0	0	0	0	0	0	57	4	6	1	0	0	68	68.5	0	0	36	2	2	0	0	0	40	40
20:30	0	0	0	0	0	0	0	0	0	0	2	0	53	4	4	0	0	0	63	61.4	0	1	34	1	3	0	0	0	39	38.4
20:45	0	0	0	0	0	0	0	0	0	0	1	0	46	1	2	0	0	0	50	49.2	0	0	33	2	1	0	0	0	36	36
H/TOT	0	0	0	0	0	0	0	0	0	0	3	0	208	10	14	1	0	0	236	234.1	0	1	143	6	8	0	0	0	158	157.4
21:00	0	0	0	1	0	0	0	0	1	1	0	0	45	1	3	0	0	0	49	49	0	0	20	1	3	0	0	0	24	24
21:15	0	0	0	0	0	0	0	0	0	0	0	0	44	0	1	0	0	0	45	45	0	0	18	1	2	0	0	0	21	21
21:30	0	0	1	0	1	0	0	0	2	2	0	0	40	2	2	1	0	0	45	45.5	0	0	19	1	1	0	0	0	21	21
21:45	0	0	1	0	0	0	0	0	1	1	0	0	34	1	1	0	0	0	36	36	1	0	18	6	0	0	0	0	25	24.2
H/TOT	0	0	2	1	1	0	0	0	4	4	0	0	163	4	7	1	0	0	175	175.5	1	0	75	9	5	0	0	0	91	90.2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	43	4	1	0	0	0	48	48	1	0	18	2	0	0	0	0	21	20.2
22:15	0	0	0	0	0	0	0	0	0	0	1	0	40	2	2	0	0	0	45	44.2	0	0	21	1	0	0	0	0	22	22
22:30	0	0	0	0	0	0	0	0	0	0	0	0	27	1	2	0	0	0	30	30	0	0	16	1	1	0	0	0	18	18
22:45	0	0	1	0	0	0	0	0	1	1	1	0	18	3	1	1	0	0	24	23.7	0	0	3	1	0	0	0	0	4	4
H/TOT	0	0	1	0	0	0	0	0	1	1	2	0	128	10	6	1	0	0	147	145.9	1	0	58	5	1	0	0	0	65	64.2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	22	1	1	0	0	0	24	24	0	0	13	0	0	0	0	0	13	13
23:15	0	0	1	0	0	0	0	0	1	1	1	1	24	1	2	1	0	0	30	29.1	0	0	8	1	0	0	0	0	9	9
23:30	0	0	0	0	0	0	0	0	0	0	0	0	14	0	4	1	0	0	19	19.5	0	0	7	0	0	0	0	0	7	7
23:45	0	0	0	0	0	0	0	0	0	0	0	0	13	1	0	0	0	0	14	14	0	0	6	2	0	0	0	0	8	8
H/TOT	0	0	1	0	0	0	0	0	1	1	1	1	73	3	7	2	0	0	87	86.6	0	0	34	3	0	0	0	0	37	37
24 TOT	0	0	10	1	3	0	0	0	14	14	25	18	3224	144	399	98	9	14	3931	3975	9	7	3000	150	227	34	0	2	3439	3447



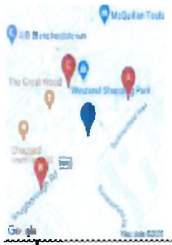
Survey Name: 008 (20) 19344 Bus Connects Survey Route 3 5 & 7 (Feb ad Flush)

Site: Site 5 B3

Location: Snugborough Rd Blanchardstown

Date: Thu 13 Feb 2020

	B => A										B => B										B => C									
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
00:00	0	0	5	1	0	1	0	0	7	7.5	0	0	0	0	0	0	0	0	0	0	0	0	7	3	0	0	0	0	10	10
00:15	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	5	5
00:30	0	0	3	0	1	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
H/ TOT	0	0	12	1	1	2	0	0	16	17	0	0	0	0	0	0	0	0	0	0	0	0	13	6	0	0	0	0	19	19
01:00	0	0	3	2	1	1	0	0	7	7.5	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
01:15	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4	4
01:30	0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/T OT	0	0	15	2	1	1	0	0	19	19.5	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	7	7
02:00	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
02:45	0	0	1	1	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	6	1	2	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
03:00	0	0	0	1	2	1	0	0	4	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:15	0	0	6	0	1	0	0	0	7	7	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
03:30	0	0	3	0	2	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	8	0	0	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	17	1	5	2	0	0	25	26	0	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	1
04:00	0	0	7	0	1	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	1	5	1	0	2	0	0	9	9.4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
04:30	0	0	8	0	0	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	8	3	2	1	0	0	14	14.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	0	1	28	4	3	5	0	0	41	42.9	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
05:00	0	0	9	0	3	1	0	0	13	13.5	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
05:15	0	0	13	0	2	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
05:30	5	0	23	1	6	0	1	0	36	33.3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	4	4.5
05:45	0	0	30	1	6	1	0	0	38	38.5	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
H/TOT	5	1	75	2	17	2	1	0	102	100.3	0	0	0	0	0	0	0	0	0	0	0	0	9	1	0	1	0	0	11	11.9
06:00	0	0	26	2	5	2	0	0	35	36	0	0	0	0	0	0	0	0	0	0	0	0	8	1	1	0	0	0	10	10
06:15	0	2	62	3	12	0	0	1	80	79.8	0	0	0	0	0	0	0	0	0	0	3	0	12	0	1	0	0	0	16	19.6
06:30	0	1	77	4	17	2	0	0	101	101.4	0	0	0	0	0	0	0	0	0	0	2	0	18	0	3	0	0	0	23	21.4
06:45	0	0	73	2	21	3	0	0	99	100.5	0	0	0	0	0	0	0	0	0	0	4	0	21	0	11	0	0	0	36	32.8
H/TOT	0	3	238	11	55	7	0	1	315	317.7	0	0	0	0	0	0	0	0	0	0	9	0	59	1	16	0	0	0	85	77.8
07:00	1	1	67	2	18	1	0	0	90	89.1	0	0	0	0	0	0	0	0	0	0	3	0	33	0	4	0	0	0	40	37.6
07:15	0	0	71	0	13	0	1	0	85	86.3	0	0	0	0	0	0	0	0	0	0	1	1	39	0	6	1	1	0	49	49.4
07:30	6	0	66	0	11	1	0	0	84	89.7	0	0	0	0	0	0	0	0	0	0	2	0	60	1	4	0	0	0	67	65.4
07:45	0	1	65	3	13	1	0	0	83	82.9	0	0	0	0	0	0	0	0	0	0	0	1	77	2	12	0	0	0	92	91.4
H /TOT	7	2	269	5	55	3	1	0	342	338	0	0	0	0	0	0	0	0	0	0	6	2	209	3	26	1	1	0	248	238
08:00	0	2	60	1	4	1	0	0	68	67.3	0	0	0	0	0	0	0	0	0	0	6	0	84	2	7	0	0	0	99	94.2
08:15	0	2	54	3	3	2	1	0	65	66.1	0	0	0	0	0	0	0	0	0	0	2	0	89	2	3	1	0	0	97	95.9
08:30	2	0	57	0	4	3	1	0	67	68.2	0	0	0	0	0	0	0	0	0	0	2	0	100	2	5	0	0	0	109	107.4
08:45	1	0	43	0	2	2	0	0	48	48.2	0	0	0	0	0	0	0	0	0	0	1	0	105	3	3	1	0	0	113	112.7
H/TOT	3	4	14	4	13	8	2	0	248	249.8	0	0	0	0	0	0	0	0	0	0	11	0	378	9	18	2	0	0	418	410.2
09:00	1	0	32	1	5	0	0	0	39	38.2	0	0	0	0	0	0	0	0	0	0	4	0	121	4	4	0	0	0	133	129.8
09:15	0	0	36	1	5	0	0	0	42	42	0	0	0	0	0	0	0	0	0	0	1	0	108	4	2	0	0	0	115	114.2
09:30	0	1	38	2	10	2	0	0	53	53.4	0	0	0	0	0	0	0	0	0	0	1	0	99	2	5	1	0	0	108	107.7
09:45	1	0	33	5	9	3	1	0	52	54	0	0	0	0	0	0	0	0	0	0	0	0	104	2	1	0	0	1	108	109
H/T OT	2	1	139	9	29	5	1	0	186	187.6	0	0	0	0	0	0	0	0	0	0	6	0	432	12	12	1	0	1	464	460.7
10:00	0	0	34	1	9	1	0	0	45	45.5	0	0	0	0	0	0	0	0	0	0	0	0	106	6	6	0	0	0	114	114
10:15	0	0	42	0	5	3	0	0	50	51.5	0	0	0	0	0	0	0	0	0	0	0	0	96	6	6	0	0	0	108	108
10:30	1	0	26	1	6	1	1	1	37	39	0	0	0	0	0	0	0	0	0	0	0	1	103	5	7	0	0	0	116	115.4
10:45	0	2	27	2	0	1	0	0	32	31.3	0	0	0	0	0	0	0	0	0	0	0	0	94	5	4	3	0	0	106	107.5
H/TOT	1	2	129	4	20	6	1	1	164	167.3	0	0	0	0	0	0	0	0	0	0	0	1	399	18	23	3	0	0	444	444.9
11:00	0	0	39	1	7	3	0	0	50	51.5	0	0	0	0	0	0	0	0	0	0	1	0	114	4	2	2	0	0	123	123.2
11:15	0	0	27	2	6	1	0	0	36	36.5	0	0	0	0	0	0	0	0	0	0	4	0	109	1	1	2	0	0	117	114.8
11:30	0	0	32	2	8	3	0	0	45	46.5	0	0	0	0	0	0	0	0	0	0	0	0	98	1	6	0	0	0	105	105
11:45	0	0	29	3	4	2	0	0	38	39	0	0	0	0	0	0	0	0	0	0	0	0	140	3	4	0	0	0	111	111
H/TOT	0	0	127	8	25	9	0	0	169	173.5	0	0	0	0	0	0	0	0	0	0	5	0	425	9	13	4	0	0	456	454
12:00	2	0	30	4	5	0	0	0	41	39.4	0	0	0	0	0	0	0	0	0	0	0	0	100	6	5	0	0	0	111	111
12:15	0	2	26	0	4	0	0	0	32	30.8	0	0	0	0	0	0	0	0	0	0	2	1	99	3	4	0	0	0	109	106.8
12:30	0	0	23	3	7	2	0	0	35	36	0	0	0	0	0	0	0	0	0	0	1	0	98	2	3	0	0	0	104	103.2
12:45	0	0	16	2	3	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	2	0	86	1	4	1	0	0	94	92.9
H/TOT	2	2	95	9	19	2	0	0	129	127.2	0	0	0	0	0	0	0	0	0	0	5	1	383	12	16	1	0	0	418	413.9



IDASO

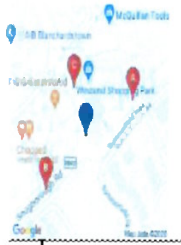
Survey Name: 008 (20) 19344 - Bus Connects Survey - Route 3, 5 & 7 (Feb additions)

Site: Site 5-83

Location: Snugborough Rd, Blanchardstown

Date: Thu 13 Feb 2020

	A => A										A => B										A => C									
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
13:00	0	0	32	1	5	0	0	0	38	38	0	0	0	0	0	0	0	0	0	0	3	0	108	3	2	0	0	0	116	113.6
13:15	0	0	28	0	4	0	0	0	32	32	0	0	0	0	0	0	0	0	0	0	0	0	104	3	6	0	0	0	113	113
13:30	0	1	36	1	2	1	1	0	42	43.2	0	0	0	0	0	0	0	0	0	0	4	0	90	3	6	0	0	0	103	99.8
13:45	0	0	30	1	2	0	0	0	33	33	0	0	0	0	0	0	0	0	0	0	2	0	105	4	7	0	0	0	118	116.4
H/TOT	0	1	126	3	13	1	1	0	145	146.2	0	0	0	0	0	0	0	0	0	0	9	0	407	13	21	0	0	0	450	442.8
14:00	0	0	24	2	4	3	1	0	34	36.8	0	0	0	0	0	0	0	0	0	0	1	0	90	6	10	0	0	0	107	106.2
14:15	0	0	27	1	6	1	0	0	35	35.5	0	0	0	0	0	0	0	0	0	0	2	0	94	0	6	0	0	0	102	100.4
14:30	0	0	28	1	2	2	0	0	33	34	0	0	0	0	0	0	0	0	0	0	1	0	95	3	2	0	0	0	101	100.2
14:45	2	0	21	2	5	1	0	0	31	29.9	0	0	0	0	1	0	0	0	1	1	1	0	99	1	3	1	0	0	105	104.7
H/TOT	2	0	100	6	17	7	1	0	133	136.2	0	0	0	0	1	0	0	0	1	1	5	0	378	10	21	1	0	0	415	411.5
15:00	0	0	23	0	11	0	0	0	34	34	0	0	0	0	0	0	0	0	0	0	0	0	108	2	6	0	0	0	116	116
15:15	0	0	31	3	4	1	0	0	39	39.5	0	0	0	0	0	0	0	0	0	0	0	0	78	6	6	0	0	2	92	94
15:30	0	0	23	3	5	0	0	0	31	31	0	0	0	0	0	0	0	0	0	0	2	0	111	2	5	0	0	0	120	118.4
15:45	1	1	27	2	5	0	0	0	36	34.6	0	0	0	0	0	0	0	0	0	0	8	0	119	7	6	0	0	0	140	133.6
H/TOT	1	1	104	8	25	1	0	0	140	139.1	0	0	0	0	0	0	0	0	0	0	10	0	416	17	23	0	0	2	468	462
16:00	0	0	36	0	4	0	0	0	40	40	0	0	2	0	0	0	0	0	2	2	2	0	85	3	4	1	0	0	95	93.9
16:15	0	0	34	0	5	0	0	0	39	39	0	0	0	0	0	0	0	0	0	0	0	0	107	3	8	0	0	0	118	118
16:30	0	0	25	1	3	2	0	0	31	32	0	0	0	0	0	0	0	0	0	0	2	0	87	1	4	1	0	0	95	93.9
16:45	0	0	23	1	1	1	0	0	26	26.5	0	0	1	0	0	0	0	0	1	1	1	0	89	4	3	0	0	0	97	96.2
H/TOT	0	0	118	2	13	3	0	0	136	137.5	0	0	3	0	0	0	0	0	3	3	5	0	368	11	19	2	0	0	405	402
17:00	0	0	19	0	3	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0	0	0	92	0	5	0	0	0	97	97
17:15	1	0	24	1	5	1	0	0	32	31.7	0	0	0	0	0	0	0	0	0	0	3	0	83	0	4	0	0	0	90	87.6
17:30	1	0	33	0	2	0	0	0	36	35.2	0	0	0	0	0	0	0	0	0	0	1	0	79	2	4	0	0	0	86	85.2
17:45	0	0	17	1	3	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	3	0	66	1	2	0	0	0	72	69.6
H/TOT	2	0	93	2	13	1	0	0	111	109.9	0	0	0	0	0	0	0	0	0	0	7	0	320	3	15	0	0	0	345	339.4
18:00	0	0	16	0	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	40	1	1	0	0	0	42	42
18:15	0	1	24	0	4	0	0	0	29	28.4	0	0	0	0	0	0	0	0	0	0	2	0	76	1	2	0	0	0	81	79.4
18:30	0	0	34	1	4	1	0	0	40	40.5	0	0	0	0	0	0	0	0	0	0	0	0	119	2	7	0	0	0	128	128
18:45	0	0	22	0	2	0	0	0	24	24	0	0	0	0	0	0	0	0	0	0	0	0	85	3	5	0	0	0	93	93
H/TOT	0	1	96	1	10	1	0	0	109	108.9	0	0	0	0	0	0	0	0	0	0	2	0	320	7	15	0	0	0	344	342.4
19:00	0	0	34	1	1	0	1	0	37	38.3	0	0	0	0	0	0	0	0	0	0	2	0	99	2	1	1	0	0	105	103.9
19:15	0	0	36	0	3	0	0	0	39	39	0	0	0	0	0	0	0	0	0	0	1	0	91	2	6	1	0	0	101	100.7
19:30	0	1	39	0	1	0	0	0	41	40.4	0	0	0	0	0	0	0	0	0	0	0	0	83	3	7	0	0	0	93	93
19:45	0	0	32	1	3	0	0	0	36	36	0	0	0	0	0	0	0	0	0	0	1	0	88	3	2	0	0	0	94	93.2
H/TOT	0	1	141	2	8	0	1	0	153	153.7	0	0	0	0	0	0	0	0	0	0	4	0	361	10	16	2	0	0	393	390.8
20:00	0	0	38	1	0	0	0	1	40	41	0	0	1	0	0	0	0	0	1	1	0	0	78	4	3	0	0	0	85	85
20:15	0	0	29	3	4	0	0	0	36	36	0	0	0	0	0	0	0	0	0	0	0	0	62	1	2	0	0	0	65	65
20:30	0	0	32	0	1	2	0	0	35	36	0	0	0	0	0	0	0	0	0	0	1	0	50	7	4	0	0	0	62	61.2
20:45	0	0	37	1	5	0	0	0	43	43	0	0	0	0	0	0	0	0	0	0	0	0	15	2	4	2	0	0	23	24
H/TOT	0	0	136	5	10	2	0	1	154	156	0	0	1	0	0	0	0	0	1	1	1	0	205	14	13	2	0	0	235	235.2
21:00	0	0	37	2	4	0	0	0	43	43	0	0	0	0	0	0	0	0	0	0	0	0	23	0	1	0	0	0	24	24
21:15	0	0	41	1	0	0	0	0	42	42	0	0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	0	0	11	11
21:30	0	0	24	0	1	0	0	0	25	25	0	0	1	0	0	0	0	0	1	1	0	0	21	1	0	0	0	0	22	22
21:45	0	0	24	1	1	1	0	0	27	27.5	0	0	0	0	0	0	0	0	0	0	0	0	20	0	1	0	0	0	21	21
H/TOT	0	0	126	4	6	1	0	0	137	137.5	0	0	1	0	0	0	0	0	1	1	0	0	74	1	3	0	0	0	78	78
22:00	0	0	23	2	1	1	0	0	27	27.5	0	0	0	0	0	0	0	0	0	0	1	0	17	0	1	0	0	0	19	18.2
22:15	0	0	19	1	2	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	14	14
22:30	0	0	18	0	2	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7
22:45	0	0	14	0	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6
H/TOT	0	0	74	3	5	1	0	0	83	83.5	0	0	0	0	0	0	0	0	0	0	1	0	44	0	1	0	0	0	46	45.2
23:00	0	0	6	2	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	1	0	6	1	0	0	0	0	8	7.2
23:15	0	0	15	0	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5
23:30	0	0	4	1	0	0	0	1	6	7	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
23:45	0	0	4	2	1	1	0	0	8	8.5	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4	4
H/TOT	0	0	29	5	2	1	0	1	38	39.5	0	0	0	0	0	0	0	0	0	0	1	0	15	4	0	0	0	0	20	19.2
24 TOT	25	19	2507	102	367	71	9	4	3104	3124	0	0	5	1	1	0	0	0	7	7	87	4	5221	166	271	20	1	3	5773	5715



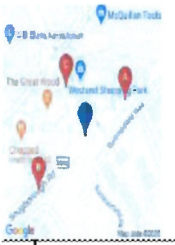
Survey Name 008 (20) 19344 Bus Connects Survey Route 3 ,5 & 7 (Feb additions)

Site Site 5 B3

Location Snugborough Rd Blanchardstown

Date Thu 13 Feb 2020

	C => A										C => B										C => C									
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	P SV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	P SV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
00 00	0	0	9	0	1	0	0	0	10	10	1	0	11	0	0	0	0	0	12	11.2	0	0	0	0	0	0	0	0	0	0
00 15	0	0	9	1	0	0	0	0	10	10	0	1	5	0	0	0	0	0	6	5.4	0	0	0	0	0	0	0	0	0	0
00 30	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
00 45	0	0	2	0	0	0	0	0	2	2	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/ TOT	0	0	21	1	1	0	0	0	23	23	1	1	19	0	0	0	0	0	21	19.6	0	0	0	0	0	0	0	0	0	0
01 00	0	0	2	1	0	0	0	0	3	3	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
01 15	0	0	2	1	2	0	0	0	5	5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
01 30	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
01 45	0	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	8	3	2	0	0	0	13	13	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
02 00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
02 15	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02 30	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
02 45	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	1	1	0	0	0	4	4	0	0	3	0	0	0	0	0	3	3	0	0	0	1	0	0	0	0	1	1
03 00	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03 15	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03 30	0	0	1	0	0	0	0	0	1	1	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
03 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	1	0	0	0	0	4	4	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
04 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04 15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
04 30	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04 45	0	0	1	1	0	0	0	0	2	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	1	1	0	0	0	4	4	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
05 00	0	0	2	0	0	2	0	0	4	5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
05 15	0	0	3	0	1	1	0	0	5	5.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
05 30	1	0	2	0	1	1	0	0	5	4.7	0	0	4	2	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
05 45	0	0	1	1	0	0	0	0	2	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	8	1	2	4	0	0	16	17.2	0	0	8	2	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0
06 00	0	0	3	0	1	1	0	0	5	5.8	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
06 15	0	0	4	1	0	0	0	0	5	5	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
06 30	1	0	5	0	1	1	0	0	8	7.7	1	0	4	0	1	0	0	0	6	7	0	0	0	0	1	0	0	0	1	1
06 45	2	0	10	0	5	0	0	0	17	15.4	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
H /TOT	3	0	22	1	7	2	1	0	36	35.9	1	0	15	0	2	0	0	0	18	17.2	0	0	0	0	1	0	0	0	1	1
07 00	3	0	10	0	2	0	0	0	15	12.6	0	0	13	0	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0
07 15	1	0	10	1	3	0	0	0	15	14.2	2	0	7	1	0	0	0	0	10	8.4	0	0	0	0	0	0	0	0	0	0
07 30	1	0	13	1	1	0	0	0	16	15.2	0	0	15	1	1	1	0	0	18	18.5	0	0	0	0	0	0	0	0	0	0
07 45	3	0	22	0	0	0	0	0	25	22.6	1	0	24	0	4	2	0	0	31	31.2	0	0	0	0	0	0	0	0	0	0
H/ TOT	8	0	55	2	6	0	0	0	71	64.6	3	0	59	2	5	3	0	0	72	71.1	0	0	0	0	0	0	0	0	0	0
08 00	5	0	16	0	3	0	0	0	24	20	1	0	38	3	0	0	0	0	42	31.2	0	0	0	0	0	0	0	0	0	0
08 15	4	1	14	1	2	1	0	0	23	19.7	2	0	89	0	6	1	0	0	98	96.9	0	0	0	0	0	0	0	0	0	0
08 30	5	0	38	0	3	1	0	0	47	43.5	1	0	78	1	5	1	0	0	86	85.7	0	0	0	0	0	0	0	0	0	0
08 45	5	0	17	1	0	1	1	0	25	22.8	1	0	59	1	3	2	0	1	67	68.2	0	0	0	0	0	0	0	0	0	0
H/ TOT	19	1	85	2	8	3	1	0	119	106	5	0	264	5	14	4	0	1	293	292	0	0	0	0	0	0	0	0	0	0
09 00	4	0	20	1	4	0	0	0	29	25.8	0	0	40	2	6	2	0	0	50	51	0	0	0	0	0	0	0	0	0	0
09 15	1	0	26	4	1	2	0	0	34	34.2	0	0	31	3	4	2	0	0	40	41	0	0	0	0	0	0	0	0	0	0
09 30	0	0	18	2	5	0	0	0	25	25	0	0	38	2	4	1	0	0	45	45.5	0	0	0	0	0	0	0	0	0	0
09 45	0	0	19	1	0	0	0	0	20	20	1	0	48	3	2	0	0	0	54	53.2	0	0	1	0	0	0	0	0	1	1
H/TOT	5	0	83	8	10	2	0	0	108	105	1	0	157	10	16	5	0	0	189	190.7	0	0	1	0	0	0	0	0	1	1
10 00	0	0	29	1	2	0	0	0	32	32	0	0	45	2	5	1	0	0	53	53.5	0	0	0	0	0	0	0	0	0	0
10 15	0	0	22	1	2	2	0	0	27	28	0	0	58	2	5	0	0	0	65	65	0	0	0	0	0	0	0	0	0	0
10 30	0	0	39	0	6	1	0	0	46	46.5	0	0	67	2	9	1	0	0	79	79.5	0	0	0	0	0	0	0	0	0	0
10 45	0	0	43	1	1	0	0	0	46	46.5	0	1	80	3	3	0	0	0	87	86.4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	133	3	11	4	0	0	151	153	0	1	250	9	22	2	0	0	284	284.4	0	0	0	0	0	0	0	0	0	0
11 00	0	0	31	2	5	2	0	0	40	41	2	0	87	7	4	1	0	0	101	99.9	0	0	0	0	0	0	0	0	0	0
11 15	1	0	33	0	3	0	0	0	37	36.2	0	0	87	2	5	1	0	0	95	95.5	0	0	1	0	0	0	0	0	1	1
11 30	0	0	47	3	4	2	0	0	56	57	0	0	93	4	5	1	0	0	103	103.5	0	0	1	0	0	0	0	0	1	1
11 45	1	1	50	2	2	0	0	0	56	54.6	0	0	96	5	3	0	0	0	104	104	0	0	1	0	0	0	0	0	1	1
H/TOT	2	1	161	7	14	4	0	0	189	188.8	2	0	363	18	17	3	0	0	403	402.9	0	0	3	0	0	0	0	0	3	3
12 00	1	0	50	0	3	0	0	0	54	53.2	0	0	96	3	6	0	0	0	105	105	0	0	1	0	0	0	0	0	1	1
12 15	0	0	32	1	8	1	0	0	42	42.5	1	0	120	5	4	0	0	0	130	129.2	0	0	2	0	0	0	0	0	2	2
12 30	0	0	48	1	4	0	0	0	53	53	1	0	100	3	7	1	0	0	112	111.7	0	0	1	0	0	0	0	0	1	1
12 45	0	0	35	0	2	1	0	0	38	38.5	0	0	126	4	7	1	0	0	138	138.5	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	165	2	17	2	0	0	187	187.2	2	0	447	15	24	2	0	0	485	484.4	0	0	4	0	0	0	0	0	4	4



IDASO

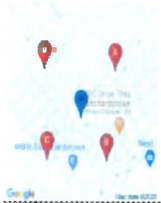
Survey Name: 008 (20) 19344 - Bus Connects Survey - Route 3, 5 & 7 (Feb addit ons)

Site: Site S 83

Location. Snugborough Rd, Blanchardstown

Date: Thu 13 Feb 2020

	C => A									C => B									C => C								
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
13:00	0	0	55	0	5	0	0	0	60	60	0	1	109	2	4	1	0	0	117	116.9	0	0	0	0	0	0	0	0	0	0
13:15	1	0	47	5	1	0	0	0	54	53.2	1	0	105	4	7	1	0	0	118	117.7	0	0	0	0	0	0	0	0	0	0
13:30	0	0	57	3	5	0	0	0	65	65	1	0	114	2	5	1	0	0	123	122.7	0	0	0	0	0	0	0	0	0	0
13:45	0	0	53	0	5	1	0	0	59	59.5	1	0	123	6	4	1	0	0	135	134.7	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	212	8	16	1	0	0	238	237.7	3	1	451	14	20	4	0	0	493	492	0	0	0	0	0	0	0	0	0	0
14:00	0	0	43	0	5	0	0	0	48	48	1	0	105	4	8	0	0	0	118	117.2	0	0	1	0	0	0	0	0	1	1
14:15	1	0	43	3	3	0	0	0	50	49.2	2	0	123	7	3	0	0	0	135	133.4	0	0	1	0	0	0	0	0	1	1
14:30	0	0	42	0	0	0	0	0	42	42	2	0	89	2	5	0	0	0	98	96.4	0	0	0	0	0	0	0	0	0	0
14:45	1	0	30	0	3	0	0	0	34	33.2	0	0	93	3	5	0	0	0	101	101	0	0	1	0	0	0	0	0	1	1
H/TOT	2	0	158	3	11	0	0	0	174	172.4	5	0	410	16	21	0	0	0	452	448	0	0	3	0	0	0	0	0	3	3
15:00	0	0	28	3	6	2	0	0	39	40	0	0	106	2	6	1	0	0	115	115.5	0	0	0	0	0	0	0	0	0	0
15:15	0	0	33	1	3	1	0	0	38	38.5	0	0	118	4	6	0	0	0	128	128	0	0	1	0	0	0	0	0	1	1
15:30	0	0	40	1	2	0	0	0	43	43	1	0	107	4	11	0	0	0	123	122.2	0	0	0	0	0	0	0	0	0	0
15:45	1	0	36	1	6	0	0	0	44	43.2	2	0	119	4	7	0	0	0	132	130.4	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	137	6	17	3	0	0	164	164.7	3	0	450	14	30	1	0	0	498	496.1	0	0	1	0	0	0	0	0	1	1
16:00	2	0	38	2	1	0	0	0	43	41.4	4	0	96	7	1	0	0	0	108	104.8	0	0	0	0	0	0	0	0	0	0
16:15	0	0	42	1	3	1	0	0	47	47.5	2	0	111	4	4	0	0	0	121	119.4	0	0	0	0	0	0	0	0	0	0
16:30	0	0	42	0	4	0	0	0	46	46	2	0	119	2	6	0	0	0	129	127.4	0	0	0	0	0	0	0	0	0	0
16:45	0	0	30	1	2	0	0	0	33	33	1	0	124	0	7	1	0	0	133	132.7	0	0	1	0	0	0	0	0	1	1
H/TOT	2	0	152	4	10	1	0	0	169	167.9	9	0	450	13	18	1	0	0	491	484.3	0	0	1	0	0	0	0	0	1	1
17:00	0	1	33	1	3	0	0	0	38	37.4	4	0	134	3	8	0	0	0	149	145.8	0	0	0	0	0	0	0	0	0	0
17:15	0	0	44	1	2	0	0	0	47	47	4	0	129	1	4	0	0	0	138	134.8	0	0	0	0	0	0	0	0	0	0
17:30	0	1	44	0	2	0	0	0	47	46.4	0	0	107	0	9	0	0	0	116	116	0	0	0	0	0	0	0	0	0	0
17:45	0	0	39	0	3	0	0	0	42	42	0	0	107	1	7	0	0	0	115	115	0	0	0	0	0	0	0	0	0	0
H/TOT	0	2	160	2	10	0	0	0	174	172.8	8	0	477	5	28	0	0	0	518	511.6	0	0	0	0	0	0	0	0	0	0
18:00	0	0	52	1	1	0	0	0	54	54	3	0	104	0	6	0	0	0	113	110.8	0	0	0	0	0	0	0	0	0	0
18:15	0	0	40	0	2	1	0	0	43	43.5	1	0	128	0	4	0	0	0	133	132.2	0	0	0	0	0	0	0	0	0	0
18:30	0	0	33	0	1	0	0	0	34	34	0	0	109	1	4	0	0	0	114	114	0	0	0	0	0	0	0	0	0	0
18:45	0	0	19	2	2	0	0	0	23	23	0	0	133	3	2	0	0	0	138	138	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	144	3	6	1	0	0	154	154.5	4	0	474	4	16	0	0	0	498	494.8	0	0	1	0	0	0	0	0	1	1
19:00	0	0	29	3	0	1	0	0	33	33.5	0	0	102	1	6	1	0	0	110	110.5	0	0	0	0	0	0	0	0	0	0
19:15	0	0	48	2	0	0	0	0	50	50	1	0	103	1	1	1	0	0	107	106.7	0	0	0	0	0	0	0	0	0	0
19:30	0	0	32	1	1	0	0	0	34	34	2	0	112	1	2	1	0	0	118	116.9	0	0	1	0	0	0	0	0	1	1
19:45	0	0	32	2	5	0	0	0	39	39	2	0	113	0	4	0	0	0	119	117.4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	141	8	6	1	0	0	156	156.5	5	0	430	3	13	3	0	0	454	451.5	0	0	1	0	0	0	0	0	1	1
20:00	0	0	43	3	4	0	0	0	50	50	0	0	99	1	1	0	0	0	101	101	0	0	0	0	0	0	0	0	0	0
20:15	0	0	46	1	4	0	0	0	51	51	1	0	132	1	6	0	0	0	140	139.2	0	0	0	0	0	0	0	0	0	0
20:30	0	0	47	2	3	0	0	0	52	52	0	0	89	1	6	0	0	0	96	96	0	0	0	0	0	0	0	0	0	0
20:45	0	0	39	3	1	0	0	0	43	43	0	0	99	0	4	1	0	0	104	104.5	0	0	0	0	1	0	0	0	1	1
H/TOT	0	0	175	9	12	0	0	0	196	196	1	0	419	3	17	1	0	0	441	440.7	0	0	0	0	1	0	0	0	0	1
21:00	0	0	48	2	2	0	0	0	52	52	0	0	94	0	2	0	0	0	96	96	0	0	0	0	0	0	0	0	0	0
21:15	0	0	37	2	0	0	0	0	39	39	1	0	42	0	1	0	0	0	44	43.2	0	0	0	0	0	0	0	0	0	0
21:30	0	0	14	0	2	0	0	0	16	16	2	0	34	1	2	0	0	0	39	37.4	0	0	0	0	0	0	0	0	0	0
21:45	0	0	15	2	0	0	0	0	17	17	1	0	44	0	1	0	0	0	46	45.2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	114	6	4	0	0	0	124	124	4	0	214	1	6	0	0	0	225	221.8	0	0	0	0	0	0	0	0	0	0
22:00	0	0	20	3	0	0	0	0	23	23	0	0	35	0	1	0	0	0	36	36	0	0	0	0	0	0	0	0	0	0
22:15	0	0	15	0	0	0	0	0	15	15	0	0	14	1	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0
22:30	0	1	22	1	0	0	0	0	24	23.4	0	0	14	0	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0
22:45	0	0	14	1	0	0	0	0	15	15	0	0	15	0	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	71	5	0	0	0	0	77	76.4	0	0	78	1	1	0	0	0	80	80	0	0	0	0	0	0	0	0	0	0
23:00	0	0	4	1	0	0	0	0	5	5	0	0	10	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0
23:15	0	0	12	0	2	0	0	0	14	14	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
23:30	0	0	3	0	0	0	0	0	3	3	0	0	2	0	0	0	0	0	2	2	0	0	0	1	0	0	0	0	1	1
23:45	0	0	6	0	0	0	0	0	6	6	1	0	8	0	0	0	0	0	9	8.2	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	25	1	2	0	0	0	28	28	1	0	22	0	0	0	0	0	23	22.2	0	0	0	3	0	0	0	0	3	3
24 TOT	45	5	2237	88	174	28	2	0	2579	2557	58	3	5462	135	272	29	0	1	5960	5927	0	0	15	5	1	0	0	0	21	21



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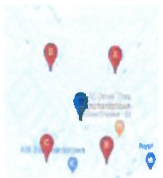

Survey Name: 0001 JDS 25 SW Bus Community Survey - Revote 5, 5 & 7 Pitch additions) - route 5 summary

Site: Site 5 v02

Location: Manchester Science Park Roundabout

Date: Thu 19 Feb 2026

	A => A										A => B										A => C										A => D									
TIME	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU
13:00	0	0	0	0	0	0	0	0	0	0	0	1	88	6	2	0	0	0	97	93.4	0	0	0	0	0	0	0	0	0	0	0	0	33	4	3	0	0	0	40	40
13:15	0	0	1	0	3	0	0	0	2	2	0	0	82	5	2	0	0	0	89	89	0	0	5	0	0	0	0	0	5	5	0	0	29	1	0	0	0	0	33	31
13:30	0	0	1	0	0	0	0	0	1	1	0	0	94	4	1	0	0	0	99	99	0	0	4	0	3	0	0	0	7	7	0	0	28	0	0	1	0	0	29	28.5
13:45	0	0	1	0	0	0	0	0	1	1	0	0	82	2	0	1	0	0	86	86.5	0	0	0	0	0	0	0	0	0	0	0	0	25	1	1	0	0	0	27	27
H/TOT	0	0	2	0	1	0	0	0	4	4	0	1	344	17	5	1	0	0	368	367.9	0	0	9	0	3	0	0	0	12	12	0	0	115	7	4	1	0	0	127	127.5
14:00	0	0	0	0	0	0	0	0	0	0	0	0	74	5	1	0	0	0	80	80	0	0	3	2	1	0	0	0	6	6	0	0	23	1	0	0	0	0	24	24
14:15	0	0	0	0	0	0	0	0	0	0	0	0	78	4	2	0	0	0	84	84	0	0	1	0	0	0	0	0	1	1	0	0	33	1	1	0	0	0	35	36
14:30	0	0	0	1	0	0	0	0	1	1	0	0	78	4	3	1	0	0	86	86.5	0	0	0	0	0	0	0	0	0	0	0	0	34	2	1	0	0	0	37	37
14:45	0	0	1	0	0	0	0	0	1	1	0	0	78	3	2	0	0	0	83	83	0	0	10	0	0	0	0	0	10	10	0	0	30	2	0	0	0	0	32	32
H/TOT	0	0	1	1	0	0	0	0	2	2	0	0	308	16	8	1	0	0	333	332.5	0	0	14	2	1	0	0	0	17	17	0	0	116	6	4	1	0	0	128	130
15:00	0	0	1	0	0	0	0	0	1	1	0	0	74	0	0	1	0	0	81	81.5	0	0	5	0	1	0	0	0	6	6	0	0	30	2	2	0	0	0	34	34
15:15	0	0	2	0	0	0	0	0	2	2	0	0	80	3	3	0	0	0	86	86	0	0	10	0	0	0	0	0	10	10	0	0	26	1	2	0	0	0	29	29
15:30	0	0	1	0	0	0	0	0	1	1	0	0	81	4	1	0	0	0	86	86	0	0	7	0	0	0	0	0	7	7	0	0	22	1	0	0	0	0	23	23
15:45	0	0	1	0	0	0	0	0	1	1	0	0	84	2	0	0	0	0	86	86	0	0	7	0	2	0	0	0	9	9	0	1	31	1	0	0	0	0	33	30.4
H/TOT	0	0	5	0	0	0	0	0	5	5	0	0	319	9	4	1	0	0	339	339.5	0	0	29	0	3	0	0	0	32	32	0	1	111	5	4	1	0	0	119	116.4
16:00	0	0	0	0	0	0	0	0	0	0	0	0	69	3	2	1	0	0	75	75.5	0	0	6	1	0	0	0	0	7	7	0	0	28	2	4	0	0	0	34	37.7
16:15	0	0	0	0	0	0	0	0	0	0	1	0	70	3	1	0	0	0	74	73.2	0	0	7	0	0	0	0	0	7	7	0	0	28	0	4	0	0	0	32	30
16:30	0	0	0	1	0	0	0	0	1	1	0	0	85	4	0	0	0	0	89	89	1	0	7	0	0	0	0	0	8	7.2	0	0	33	2	1	1	0	0	37	37.6
16:45	0	0	1	0	0	0	0	0	1	1	0	0	81	3	0	0	0	0	84	84	0	0	4	1	0	0	1	0	6	7.3	0	2	31	0	7	0	0	0	40	36.8
H/TOT	0	0	1	1	0	0	0	0	2	2	1	0	305	13	3	1	0	0	332	329.7	1	0	24	2	1	0	1	0	29	28.5	0	2	122	10	16	1	1	0	151	141.4
17:00	0	0	1	0	0	0	0	0	1	1	0	1	86	3	1	0	0	0	91	90.4	0	0	3	0	0	0	0	0	3	3	0	0	31	0	2	0	0	0	33	33
17:15	0	0	0	0	0	0	0	0	0	0	0	0	104	3	1	0	0	0	107	107	0	0	9	2	1	0	0	0	12	12	0	0	30	2	0	0	0	0	32	32
17:30	0	0	1	0	0	0	0	0	1	1	1	0	82	4	0	0	0	0	87	86.2	0	0	5	0	1	0	0	0	6	6	0	0	28	2	2	0	0	1	33	34
17:45	0	0	1	0	0	0	0	0	1	1	0	0	87	0	1	0	0	0	91	91	0	0	6	1	0	0	0	0	7	8	0	0	22	0	0	0	0	0	22	22
H/TOT	0	0	3	0	0	0	0	0	3	3	1	1	359	12	3	0	0	0	376	374.8	0	0	23	4	4	0	0	0	31	30	0	0	111	4	4	0	0	1	120	123
18:00	0	0	0	0	0	0	0	0	0	0	1	1	82	4	0	0	0	0	88	86.5	0	0	4	1	0	0	0	0	5	5	0	0	22	0	0	0	0	0	22	23
18:15	0	0	0	0	0	0	0	0	0	0	0	0	118	6	0	0	0	0	124	124	0	0	0	2	1	0	0	0	3	3	0	0	33	1	0	0	0	0	34	34
18:30	0	0	0	0	0	0	0	0	0	0	0	0	82	3	1	0	0	0	87	87	0	0	4	0	0	0	0	0	4	4	0	1	21	0	1	0	0	0	23	22.6
18:45	0	0	0	1	0	0	0	0	1	1	0	0	77	3	0	0	0	0	80	80	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	25	25
H/TOT	0	0	0	1	0	0	0	0	1	1	1	0	360	16	1	0	0	0	378	377.8	0	0	8	3	1	0	0	0	12	12	0	1	101	1	1	0	0	0	104	104.6
19:00	0	0	0	0	0	0	0	0	0	0	0	0	101	3	2	0	0	0	106	106	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	17	17
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19:30	0	0	1	0	0	0	0	0	1	1	0	0	73	3	0	1	0	0	77	77.5	0	0	4	2	1	0	0	0	7	7	2	0	29	0	0	0	0	0	31	29.4
19:45	0	0	2	0	0	0	0	0	2	2	0	0	36	1	1	0	0	0	38	38	0	0	0	1	0	1	0	0	2	2.3	0	0	36	0	1	0	0	0	40	40
H/TOT	0	0	3	0	0	0	0	0	3	3	0	0	321	10	4	1	0	0	336	336.5	0	0	6	3	1	1	0	0	11	14.3	2	0	133	0	1	0	0	0	136	134.4
20:00	0	0	2	0	0	0	0	0	2	2	0	0	80	2	3	0	0	0	85	85	0	0	3	2	0	0	0	0	5	5	0	0	28	0	0	0	0	0	28	30
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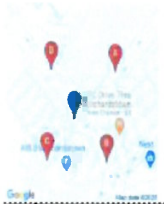
H/TOT	0	0	5	0	0	0	0	0	5	5	0	0	282	8	6	0	0	0	296	298	0	0	7	3	3	0	0	0	13	13	0	0	116	1	0	0	0	0	117	117
21:00	0	0	0	0	0	0	0	0	0	0	0	0	54	2	1	0	0	0	57	57	0	0	0	1	0	0	0	0	1	1	0	0	23	0	0	1	0	0	14	24.9
21:15	0	0	0	0	0	0	0	0	0	0	0	0	32	1	1	0	0	0	34	34	0	0	1	1	1	0	0	0	3	3	0	0	21	0	0	0	0	0	21	21
21:30	0	0	1	0	0	0	0	0	1	1	0	0	16	1	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16	16
21:45	0	0	0	0	0	0	0	0	0	0	1	0	19	0	0	1	0	0	21	20.7	0	0	0	1	1	0	0	0	2	2	0	0	11	1	0	0	0	0	12	12
H/TOT	0	0	1	0	0	0	0	0	1	1	1	0	121	4	2	1	0	0	129	128.7	0	0	1	3	2	0	0	0	6	6	0	0	71	1	1	1	0	0	73	73.5
22:00	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16	16	0	0	0	1	0	0	0	0	1	1	0	0	14	0	0	0	0	0	14	14
22:15	0	0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	0	11	11	0	0	2	0	0	0	0	0	2	2	0	0	5	0	0	0	0	0	5	5
22:30	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	0	0	1	0	0	0	0	0	1	1	0	0	3	0	0	0	0	0	3	3
22:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	37	2	0	0	0	0	39	39	0	0	3	1	0	0	0	0	4	4	0	0	25	1	0	0	0	0	27	27
23:00	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	4	3.2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
23:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	1	0.2	0	0	2	0	0	0	0	0	2	2
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	6	0	0	0	0	0	7	6.2	1	0	0	0	0	0	0	0	1	0.2	0	0	7	0	0	0	0	0	7	7
24 TOT	0	0	28	6	1	1	1	0	37	38.8	20	3	4197	197	70	26	8	0	4523	4506.2	2	0	231	35	15	2	1	0	306	306.7	2	6	1404	72	44	15	4	12	1559	1578.5



Survey Name

Site

Location

Date:

TIME	A => A									B => B										B => C										B => D									
	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	T OT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU
08:00	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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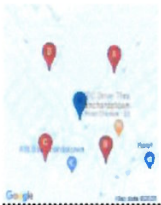
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Survey Name: 0108 | 081 13 068 Bus Connects Swinny Route 6 S & T (Feb additions) route 3 summary

Site: Mid 5:45

Location: Blanchardstown (Temple Unit Nutley Park roundabout)

Date: Thur 13-Feb-2020

TIME	A => A										A => B										A => C										A => D									
	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU
13 00	0	0	83	3	4	2	0	0	92	93	0	0	1	0	0	0	0	0	1	1	0	0	13	0	0	0	0	0	13	13	0	0	78	7	1	0	0	1	79	86
13 15	0	0	80	4	1	0	0	0	85	85	0	0	1	0	0	0	0	0	1	1	0	0	19	0	0	0	0	0	19	19	5	0	65	3	6	0	0	0	75	74.2
13 30	0	0	89	0	3	0	0	0	92	90	0	0	0	0	0	0	0	0	0	0	0	0	13	2	2	0	0	0	17	17	2	0	69	5	0	0	0	0	82	80.4
13 45	1	0	106	3	5	0	0	0	114	113.2	0	0	2	0	0	0	0	0	2	2	0	0	14	0	0	0	0	0	14	14	3	0	66	3	1	0	0	0	73	72.2
H/TOT	1	0	358	16	13	2	0	0	389	389.2	0	0	4	0	0	0	0	0	4	4	0	0	59	2	2	0	0	0	63	63	4	0	272	18	14	0	0	1	309	308.8
14 00	0	0	97	6	3	1	0	0	107	103.5	0	0	1	0	0	0	0	0	1	1	0	0	14	1	1	0	0	0	16	16	3	0	71	6	4	0	0	0	83	81.4
14 15	0	0	76	4	2	1	0	0	83	83.5	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16	16	1	0	67	3	2	0	0	0	73	70.2
14 30	0	0	86	4	3	0	0	0	93	92	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	0	12	12	0	0	66	4	4	0	0	0	78	75
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H/TOT	0	0	350	19	9	2	0	0	380	367	0	0	1	0	0	0	0	0	1	1	0	0	57	1	2	0	0	0	60	60	6	0	283	15	15	1	0	0	317	312.3
15 00	0	0	93	7	3	0	0	0	103	103	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	14	14	0	0	66	4	1	0	0	0	71	71
15 15	0	0	84	3	0	0	0	0	87	87	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16	16	5	1	59	4	5	0	0	1	72	72.6
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H/TOT	0	0	350	17	3	0	0	0	370	368	0	0	0	0	0	0	0	0	0	0	0	0	68	1	1	0	0	0	70	70	5	1	276	18	14	0	0	1	312	312.6
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16 15	0	0	98	7	3	0	0	0	108	108	0	0	0	0	0	0	0	0	0	0	0	0	19	1	1	0	0	0	21	21	1	0	77	3	1	0	0	0	82	79.2
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16 45	0	0	79	3	6	0	0	0	88	86	0	0	1	0	0	0	0	0	1	1	0	0	16	1	0	0	0	0	17	17	1	0	78	3	0	0	0	0	82	79.2
H/TOT	0	0	369	21	15	2	0	0	407	388	0	0	2	1	0	0	0	0	3	3	0	0	64	3	3	0	0	0	71	71	7	0	283	15	4	0	0	0	313	307.4
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18 00	0	0	41	1	0	0	0	0	42	42	0	0	1	0	0	0	0	0	1	1	0	0	8	0	1	0	0	0	9	9	3	0	45	1	2	0	0	0	56	48.4
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H/TOT	0	1	263	9	6	0	0	0	279	276.4	0	0	4	0	0	0	0	0	4	4	0	0	45	4	2	0	0	0	51	51	8	2	204	15	8	0	0	0	236	227.2
19 00	1	0	96	5	1	1	0	0	105	104.7	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12	12	1	0	62	1	3	1	0	0	68	67.7
19 15	0	0	106	5	3	0	0	0	114	108	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	17	17	1	1	68	5	5	1	0	0	81	80.1
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19 45	0	0	83	0	0	0	0	0	93	86	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	1	0	0	6	6.5	1	0	62	2	0	0	0	0	70	69.2
H/TOT	1	0	362	11	6	1	0	0	382	372.7	0	0	0	0	0	0	0	0	0	0	0	0	49	1	1	1	0	0	52	53.5	3	1	251	16	13	2	0	0	286	284
20 00	0	1	85	1	1	0	0	0	88	87.4	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7	1	0	57	5	1	0	0	0	64	63.2
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20 30	0	0	65	0	0	0	0	0	65	65	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	6	6	2	1	52	7	12	0	0	0	74	71.6
20 45	1	0	36	1	0	1	0	0	38	37	0	0	0	0	0	1	0	0	1	1	0	0	3	0	0	0	0	0	3	3	0	0	53	4	5	0	0	0	63	61
H/TOT	1	1	265	2	1	1	0	0	271	269.4	0	0	0	0	0	1	0	0	1	1	0	0	20	1	1	0	0	0	22	22	3	1	223	17	20	0	0	0	264	259
21 00	0	0	41	0	0	1	0	0	42	42.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	29	6	4	1	0	0	40	40.5
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21 45	0	0	14	0	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	2	6	1	0	0	28	28.5
H/TOT	0	0	82	0	1	1	0	0	84	84.5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3	3	1	0	94	14	16	2	0	0	127	127.2
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22 15	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	25	1	5	0	0	0	32	33.2
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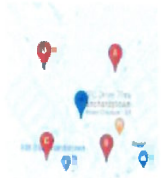
22 45	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	2	0	0	0	9	9
H/TOT	0	0	29	1	1	0	0	0	31	31	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	70	5	14	0	0	0	91	93.6
23 00	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	4	0	0	0	12	12
23 15	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	9
23 30	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	1	0	0	0	10	10
23 45	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	3	0	0	0	9	9
H/TOT	0	0	8	0	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0	13	0	0	0	45	40
24 TOT	10	4	4332	218	112	35	0	0	4901	4863.3	0	0	26	1	4	0	0	0	25	25	5	5	789	32	19	3	0	0	751	753.5	44	11	3434	240	249	25	0	5	4006	3983.3



survey Name	[illegible]
Site	[illegible]
Location	[illegible]
Date	[illegible]

TIME	A >> B P/C	A >> B M/C	A >> B CAR	A >> B LGV	A >> B TAXI	A >> B OGV1	A >> B OGV2	A >> B PSV	A >> B TOT	A >> B PCU	B >> A P/C	B >> A M/C	B >> A CAR	B >> A LGV	B >> A TAXI	B >> A OGV1	B >> A OGV2	B >> A PSV	B >> A TOT	B >> A PCU	A >> C P/C	A >> C M/C	A >> C CAR	A >> C LGV	A >> C TAXI	A >> C OGV1	A >> C OGV2	A >> C PSV	A >> C TOT	A >> C PCU	C >> A P/C	C >> A M/C	C >> A CAR	C >> A LGV	C >> A TAXI	C >> A OGV1	C >> A OGV2	C >> A PSV	C >> A TOT	C >> A PCU	B >> C P/C	B >> C M/C	B >> C CAR	B >> C LGV	B >> C TAXI	B >> C OGV1	B >> C OGV2	B >> C PSV	B >> C TOT	B >> C PCU	C >> B P/C	C >> B M/C	C >> B CAR	C >> B LGV	C >> B TAXI	C >> B OGV1	C >> B OGV2	C >> B PSV	C >> B TOT	C >> B PCU
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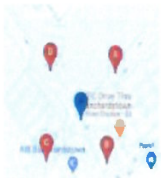

Survey Name	008 '285 25344 Bus Connectivity Surveys Rewild 2, 3 & 7- Feb additional route 5 summary
Site	Site 5 R2
Location	Blanchardstown (Inbound) Blanchardstown Park (outbound)
Date	Thu 13-Feb-2020

	C => A									C => B									C => C									C => D								
TIME	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU
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H/TOT	0	0	27	1	1	0	0	0	30	30	0	0	39	0	1	0	0	0	40	40	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
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H/TOT	0	0	26	3	0	0	0	0	29	29	0	0	27	1	2	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
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H/TOT	0	0	22	1	1	0	0	0	24	24	0	0	34	1	0	0	0	0	35	35	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
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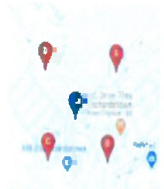
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
24 TOT	0	0	336	17	7	0	1	0	361	362.3	0	0	451	13	10	1	0	0	475	475.5	0	0	0	0	0	0	0	0	0	0	0	0	71	0	0	0	0	0	71	71



Survey Name:

Site:

Location:

Date:

TIME	B => A								B => B								D => C								D => D							
	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU
00 00	0	0	1	0	0	0	0	0	1	1	0	0	6	0	4	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00 15	0	0	2	0	1	0	0	0	3	3	0	0	5	0	6	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00 30	0	0	2	1	1	0	0	0	4	4	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00 45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	1	1	0	0	0	5	5	0	0	12	0	11	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01 00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01 15	0	0	0	0	1	0	0	0	1	1	0	0	1	1	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01 45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	1	0	0	0	1	1	0	0	5	1	7	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02 15	0	0	1	0	0	0	0	0	1	1	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02 30	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	1	0	0	0	0	2	2	0	0	1	0	4	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	0	0	1	1	0	0	0	0	2	2	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04 00	0	0	0	0	2	1	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04 15	1	0	1	0	0	0	0	0	2	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04 30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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H/TOT	1	0	3	0	2	1	0	0	7	8.2	1	0	7	0	1	0	0	0	9	9.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05 00	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	2	0	0	8	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05 15	0	0	6	1	1	0	0	0	8	8	1	0	3	0	2	0	0	0	6	6.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05 30	0	0	4	1	0	0	0	0	5	5	0	0	3	1	3	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05 45	1	0	8	4	0	1	0	0	14	13.7	0	0	6	0	0	2	0	0	8	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	20	6	3	1	0	0	36	36.7	1	0	18	1	5	2	0	0	28	30.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06 00	0	0	7	2	1	0	0	0	10	10	1	0	7	1	1	0	0	0	11	9.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06 15	0	0	19	3	1	0	0	0	23	23	1	0	12	1	0	0	0	0	14	13.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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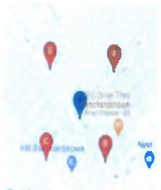
06 45	1	0	18	2	0	3	0	0	23	25.2	0	0	12	0	1	0	0	0	13	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	58	9	2	6	0	0	74	77.2	11	0	53	4	3	0	0	0	69	66.2	0	0	1	1	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0
07 00	0	0	26	1	2	1	0	0	32	32.5	0	0	27	2	1	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07 15	0	0	24	1	2	0	0	0	27	27	4	2	59	4	0	0	0	0	69	64.6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	3
07 30	1	0	27	1	1	0	0	0	40	39.2	2	0	69	3	2	2	0	0	78	77.4	0	0	1	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0
07 45	1	0	27	2	3	1	0	0	34	33.7	2	0	46	6	1	0	0	1	56	53.4	0	0	2	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0	1	2
H/TOT	2	0	104	5	8	2	0	0	133	132.8	8	0	200	15	4	2	0	1	231	225.6	0	0	3	0	0	0	0	0	0	0	5	4	1	0	1	0	0	1	3	4
08 00	0	0	32	1	1	0	0	0	34	34	5	0	61	1	5	0	0	0	72	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
08 15	0	0	27	0	4	0	0	0	31	31	1	0	56	6	7	1	0	0	71	70.7	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0
08 30	0	0	22	0	2	0	0	0	24	24	0	0	50	0	3	0	0	0	57	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08 45	0	0	24	0	7	0	0	1	42	43	0	0	32	2	0	0	0	0	34	34	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	1	1
H/TOT	0	0	115	1	14	0	0	1	131	132	6	0	199	13	15	1	0	0	234	229.7	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	2	3	5
09 00	0	0	28	1	1	0	0	0	30	30	1	0	21	2	3	0	0	0	27	26.4	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	1	1	2
09 15	1	0	32	4	2	0	0	0	39	38.2	0	0	57	5	2	1	0	0	65	63.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09 30	0	0	36	1	3	0	0	0	40	40	0	0	47	4	1	2	0	0	54	55	0	0	3	0	1	0	0	0	0	0	4	4	0	0	0	0	0	1	1	2
09 45	0	0	25	3	3	0	0	0	29	29	0	1	50	6	4	0	0	0	70	69.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
H/TOT	1	0	121	9	9	0	0	0	138	137.2	1	1	214	17	10	3	0	0	246	244.1	0	0	3	1	1	0	0	0	0	0	8	8	0	0	0	0	0	2	3	5
10 00	0	0	37	1	4	1	0	0	43	43.1	0	0	69	2	5	1	0	0	77	77.5	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	2
10 15	0	0	38	3	3	0	0	0	44	44	1	1	64	1	3	0	0	0	70	68.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
10 30	0	0	40	3	5	1	0	0	49	49.5	0	0	61	3	3	1	0	0	68	68.5	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	2
10 45	0	0	37	3	3	0	0	0	43	43	0	1	55	1	4	0	0	0	71	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
H/TOT	1	0	152	10	15	2	0	0	180	180	1	2	249	7	15	2	0	0	286	284	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3	3	6
11 00	0	0	34	0	8	0	0	0	42	42	0	0	61	2	4	0	0	1	68	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
11 15	0	0	39	1	6	3	0	1	50	51	0	0	73	5	5	1	0	0	84	84.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 30	0	0	38	3	5	0	0	0	46	46	0	0	69	0	3	1	0	0	73	73.5	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
11 45	0	0	36	3	12	0	1	0	52	53	1	2	76	6	3	0	0	0	88	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	147	7	31	3	1	1	190	192	1	2	279	13	15	2	0	1	313	314	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0



Survey Route:

Site:

Location:

Date:

ONE - 2D TRAM Bus / Domestic Survey - Round 2, 3, & 4 (+V2 additions) - route 5 surveyors

Site 5-43

Blenchley (eastern) Tyrrell End Splash Park road debouch

Thu 13-Feb-2020

TIME	D => A									D => B									D => C									D => D								
	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	TAXI	OGV1	OGV2	PSV	TOT	PCU
13:00	0	0	32	1	4	0	0	0	37	37	0	0	65	4	6	1	0	0	76	76.5	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
13:15	0	0	28	0	3	1	0	0	32	32.5	0	0	64	2	10	0	0	0	76	76	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
13:30	0	0	39	1	5	0	0	0	46	46	0	0	65	5	2	1	0	0	73	73.5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	3	4
13:45	0	0	35	1	2	0	0	0	38	38	0	0	76	2	4	1	0	0	83	82.5	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	134	2	15	1	0	0	153	153.5	0	0	270	13	22	2	0	0	308	309.5	0	0	6	1	1	0	0	0	8	8	0	0	0	1	1	0	0	1	3	4
14:00	0	0	33	2	3	0	0	0	38	38	0	0	61	4	6	0	0	0	71	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	1	0	47	1	6	1	0	0	56	56.5	1	0	58	2	6	0	0	0	67	66.5	0	0	4	1	0	0	0	0	1	1	0	0	0	0	0	0	1	1	2	3
14:30	0	0	37	2	5	0	0	0	44	44	1	0	52	1	4	0	0	0	58	57.5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
14:45	0	0	34	2	10	0	0	0	46	46	1	0	65	4	3	0	0	0	73	72.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	3
H/TOT	1	0	151	7	24	1	0	0	184	184.5	2	0	236	11	19	0	0	0	269	268.5	0	0	5	1	0	0	0	0	2	2	0	0	0	0	1	0	0	2	5	7
15:00	0	0	36	1	7	0	0	0	45	45	0	0	56	3	8	1	0	0	68	68.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
15:15	0	0	34	1	3	1	0	0	42	42.5	1	0	57	3	4	0	0	0	65	64.5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:30	0	0	40	0	7	0	0	0	47	47	2	0	56	4	2	0	0	0	64	62.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	1	0	0	1	1	2
15:45	0	0	28	1	7	0	0	0	36	36	0	0	73	2	3	0	0	0	78	78	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	137	2	24	1	0	0	170	170.5	3	0	242	12	17	1	0	0	275	273.5	0	0	4	0	0	0	0	0	4	4	0	0	0	1	1	0	0	1	3	4
16:00	0	1	42	3	2	0	0	0	48	47.5	0	0	71	2	4	0	0	0	77	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	31	2	5	0	0	0	38	38	0	0	76	1	4	0	0	0	81	81	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	39	2	5	0	0	0	46	46	1	0	61	4	2	0	0	0	70	69.5	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
16:45	0	0	36	2	4	0	0	0	42	42	0	0	64	7	2	1	0	0	73	73.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	148	9	17	0	0	0	174	174.0	1	0	272	14	12	1	0	0	301	300.5	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0
17:00	0	0	42	1	2	0	0	1	46	47	0	1	72	4	6	0	0	0	83	82.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
17:15	0	0	32	2	2	0	0	0	36	36	0	0	70	4	3	0	0	0	77	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	38	2	1	0	0	0	41	41	1	1	56	6	3	0	0	0	67	66.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	2
17:45	0	0	38	3	4	0	0	0	45	46	0	0	64	4	4	0	0	0	82	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	150	8	9	0	0	1	168	169	1	1	262	18	16	0	0	0	310	308	0	0	2	0	0	0	0	0	2	2	0	0	0	0	1	0	0	1	2	3
18:00	0	0	25	3	1	0	0	0	29	28	0	1	55	5	3	0	0	0	64	63.5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
18:15	0	0	21	0	3	0	0	0	24	24	0	0	66	2	1	0	0	0	69	68	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	1	1	1	2
18:30	0	0	32	1	4	0	0	1	38	39	0	0	53	2	0	0	0	0	55	56	0	0	1	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
18:45	0	0	45	1	4	0	0	0	50	50	0	0	76	0	1	0	0	0	77	77	0	0	2	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	123	4	12	0	0	1	140	141	0	1	250	9	5	0	0	0	265	264.5	0	0	7	1	1	0	0	0	11	11	0	0	0	0	1	0	0	1	2	3
19:00	0	0	44	0	2	0	0	0	46	46	0	0	62	3	6	2	0	0	73	74	0	0	2	0	0	0	0	0	1	2	0	0	0	0	0	0	1	1	1	2
19:15	0	1	37	0	4	0	0	0	42	41.5	0	1	61	1	1	0	0	0	64	63.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	40	1	0	0	0	0	41	41	1	0	70	0	7	0	0	0	78	77.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	41	1	4	0	0	1	47	48	1	0	52	3	2	0	0	0	58	57.5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	162	2	10	0	0	1	176	176.5	2	1	245	7	16	2	0	0	273	271.0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	1	1	2
20:00	0	1	21	0	1	0	0	0	23	22.4	0	0	59	1	7	0	0	0	67	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
20:15	0	0	30	0	0	0	0	0	30	30	0	1	66	5	1	0	0	0	73	73.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	23	1	3	0	0	0	27	27	0	0	54	5	5	0	0	0	64	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	23	0	0	1	0	0	24	24.0	0	0	42	3	1	0	0	0	47	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	97	1	4	1	0	0	104	103.8	0	2	221	13	14	0	0	0	251	250.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
21:00	0	0	20	0	3	0	0	0	23	23	0	0	39	3	3	0	0	0	45	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	18	0	1	1	0	0	20	20.5	0	0	29	0	4	0	0	0	33	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	16	0	0	0	0	0	16	16	0	0	23	1	1	0	0	0	27	27	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
21:45	0	0	7	0	2	0	0	0	9	9	0	0	21	1	4	0	0	0	26	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	81	0	6	1	0	0	88	88.5	0	0	112	5	12	0	0	0	131	131	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
22:00	0	0	16	1	0	0	0	0	19	19	0	0	26	1	3	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
22:15	0	0	4	0	0	0	0	0	4	4	0	0	20	0	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	7	0	0	0	0	0	7	7	0	0	26	0	0	0	0	0	26	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	6	0	0	0	0	0	6	6	0	0	13	0	3	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	33	1	3	0	0	0	36	36	0	0	85	1	7	0	0	0	93	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
23:00	0	0	2	0	0	0	0	0	2	2	0	0	4	0	4	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	2	0	0	0	0	0	2	2	0	0	9	2	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	2	0	0	0	0	0	2	2	0	0	2	0	3	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	6	0	0	0	0	0	6	6	0	0	19	2	9	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
24 HR	7	3	1922	92	205	19	1	1	2264	2272.4	40	12	3413	182	247	23	0	2	3919	3893.3	0	0	65	5	4	0	0	0	74	74	0	0	13	2	3	1	0	13	32	45.5

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