


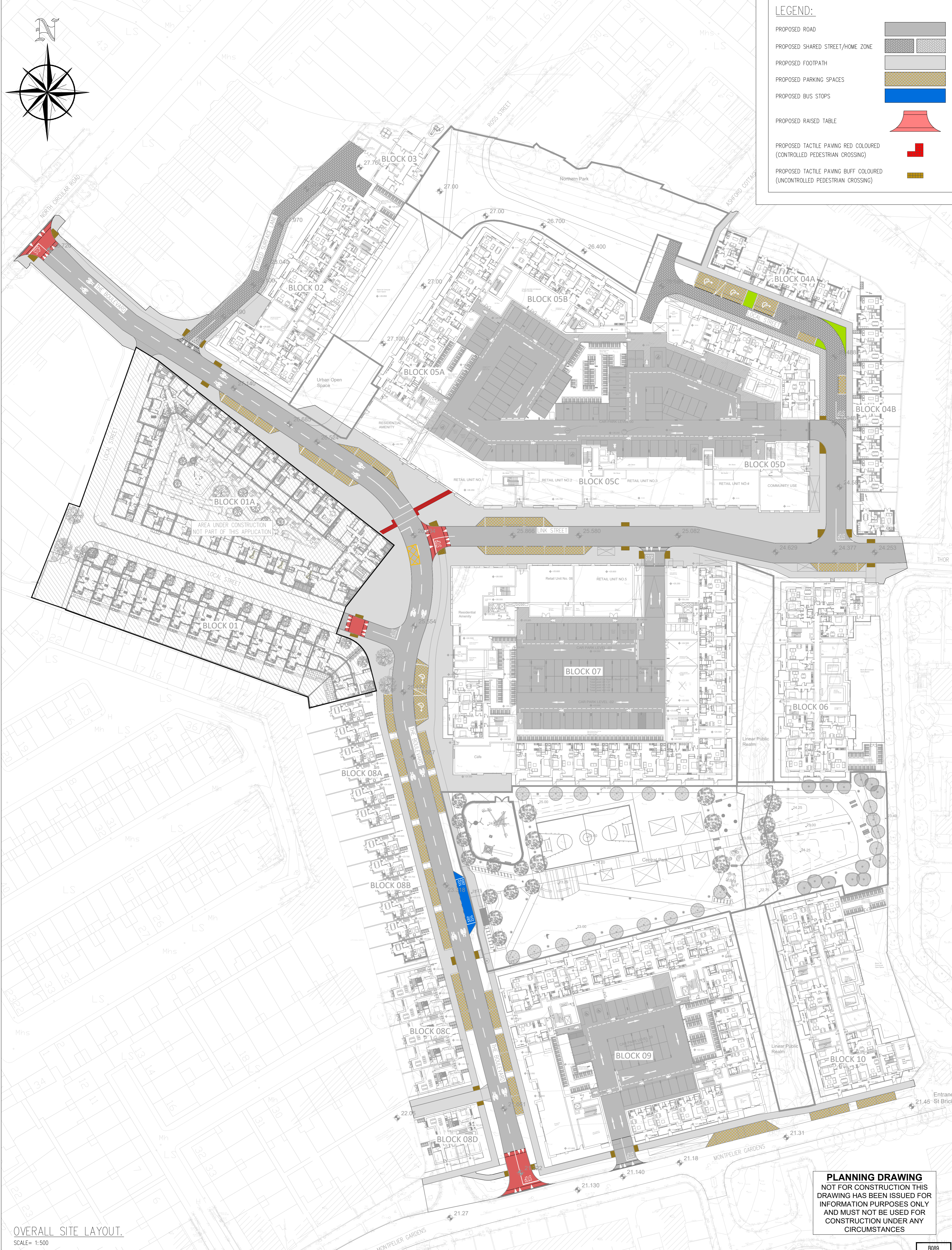
Client:	Bartra ODG Limited.	DOCUMENT SCHEDULE		Cronin & Sutton Consulting 19-22 Dame Street Dublin 2, Ireland Phone: (01) 5480863 / Fax: (01) 9011355 Email: info@csconsulting.ie Web: www.csconsulting.ie
To:	BMA Planning			
FAO:	Louise O'Leary			
From:	Niall Barrett			
Project Title:	Proposed Development At O'Devaney Gardens.	Project No: B089		Planning SHD

Drg/Doc. No.	DOCUMENT/DRAWING TITLE	SCALE	SIZE	Additional Document Data		D	M	Y	24	07	20	2	P1	N	06
ODG-CSC-XX-XX-DR-C-0010	Overall Site Layout	1:500	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0011	Topographical Survey Sheet 1 of 2	1:250	A0						*				P1		
ODG-CSC-XX-XX-DR-C-0012	Topographical Survey Sheet 2 of 2	1:250	A0						*				P1		
ODG-CSC-XX-XX-DR-C-0013	Proposed Drainage Layout (Proposed Foul & Storm Network)	1:500	A1						*				*		
ODG-CSC-XX-XX-DR-C-0014	Proposed Drainage Layout (Basement Foul & Storm Outfall Connection)	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0015	Proposed Watermain	1:500	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0016	Drainage Details Sheet 1 of 5	AS SHOWN	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0017	Drainage Details Sheet 2 of 5	AS SHOWN	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0018	Drainage Details Sheet 3 of 5	AS SHOWN	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0019	Watermain Details Sheet 1 of 2	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0020	Watermain Details Sheet 2 of 2	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0021	Surface Water Profiles Sheet 1 of 2	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0022	Surface Water Profiles Sheet 2 of 2	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0023	Foul Sewer Profiles Sheet 1 of 2	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0024	Foul Sewer Profiles Sheet 2 of 2	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0025	Proposed Road Layout	1:500	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0026	Road Profiles Sheet 1 of 2	AS SHOWN	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0027	Road Profiles Sheet 2 of 2	AS SHOWN	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0028	Proposed Road Markings and Signs.	1:500	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0029	Road Construction Details Sheet 1 of 2	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0030	Road Construction Details Sheet 2 of 2	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0031	Proposed Road Cross Sections	AS SHOWN	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0032	Visibility Splay & Forward Visibility.	AS SHOWN	A0						*				P1		
ODG-CSC-XX-XX-DR-C-0034	Swept Path Analysis Fire Tender	1:500	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0035	Swept Path Analysis Refuse Vehicle	1:500	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0036	Swept Path Analysis Car	1:500	A1						*				P1		
ODG-CSC-XX-XX-DR-C-0039	Proposed Foul Sewer Diversion	1:500	A1						*				*		
ODG-CSC-XX-XX-DR-C-0040	Proposed Parking Arrangement	1:500	A1						*				*		
ODG-CSC-XX-XX-DR-C-0041	Proposed Road Hierarchy	1:500	A1						*				*		
ODG-CSC-XX-XX-DR-C-0042	Proposed Quality Audit	1:500	A1						*				*		
ODG-CSC-XX-XX-DR-C-0043	Swept Path Analysis Carparks	1:500	A1						*				*		
ODG-CSC-XX-XX-DR-C-0044	Drainage Details Sheet 4 of 5	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0045	Drainage Details Sheet 5 of 5	AS SHOWN	A1						*				*		
ODG-CSC-XX-XX-DR-C-0046	Sustainable Urban Drainage Systems Sheet 1 of 2	1:500	A1						*				*		
ODG-CSC-XX-XX-DR-C-0047	Proposed Storm Sewer Diversion	1:500	A1						*				*		
ODG-CSC-XX-XX-DR-C-0048	Sustainable Urban Drainage Systems Sheet 2 of 2	1:500	A1						*				*		
ODG-CSC-XX-XX-DR-C-0049	Sustainable Urban Drainage Systems Typical Details	AS SHOWN	A1						*				*		
ODG-CSC-ZZ-XX-LT-C-0001	DMURS Statement												*		
ODG-CSC-ZZ-XX-RP-C-0002	Site Specific Flood Risk Assessment												P2		
ODG-CSC-ZZ-XX-RP-C-0003	Traffic and Transport Assessment												P3		
ODG-CSC-ZZ-XX-RP-C-0004	Residential Travel Plan Framework												P2		
ODG-CSC-ZZ-XX-RP-C-0005	Outline Construction Management Plan												P6		
ODG-CSC-ZZ-XX-RP-C-0007	Engineering Services Report												P2		

Distribution List:					
BMA Planning		PDF	9		
		PDF			

Issueur's Initials: NB NB

Status of Drawing: PRE = Approval, Comment, Progress Print, Preliminary
 INF = Information, P = Planning, TEN = Tender, CON = Construction



LEGEND:

- PROPOSED ROAD
- PROPOSED SHARED STREET/HOME ZONE
- PROPOSED FOOTPATH
- PROPOSED PARKING SPACES
- PROPOSED BUS STOPS
- PROPOSED RAISED TABLE
- PROPOSED TACTILE PAVING RED COLOURED (CONTROLLED PEDESTRIAN CROSSING)
- PROPOSED TACTILE PAVING BUFF COLOURED (UNCONTROLLED PEDESTRIAN CROSSING)

OVERALL SITE LAYOUT.
SCALE= 1:500

PLANNING DRAWING
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- NOTES**
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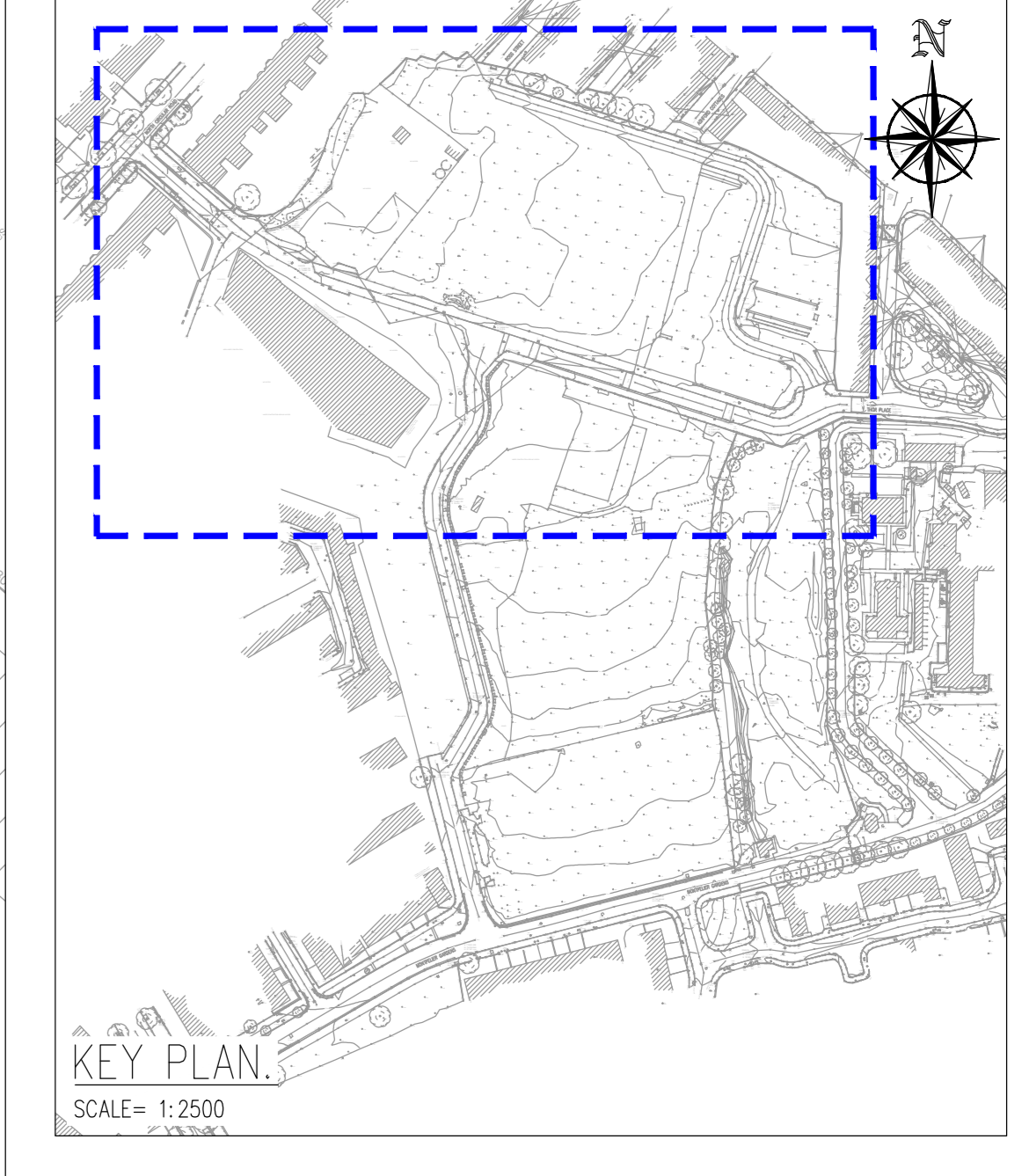
Rev. No	Date	REVISION NOTE	Dim. By	Chkd. By
P1	07.05.2021	REVISED FOR PLANNING	JS	NB

Architect Project	O'Mahony Pike Proposed Development At O'Devaney Gardens
Title	Overall Site Layout
Dwg. No.	ODG-CSC-XX-XX-DR-C-0010
Date	29.05.2020
Dim by	JS
Chkd by	NB
Agred by	DR
Scale	1:500 @A1
Revision	P1

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Quality Environment
NSAI Certified ISO 9001:2008
ISO 14001:2004
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TOPOGRAPHICAL SURVEY.
SCALE= 1:250

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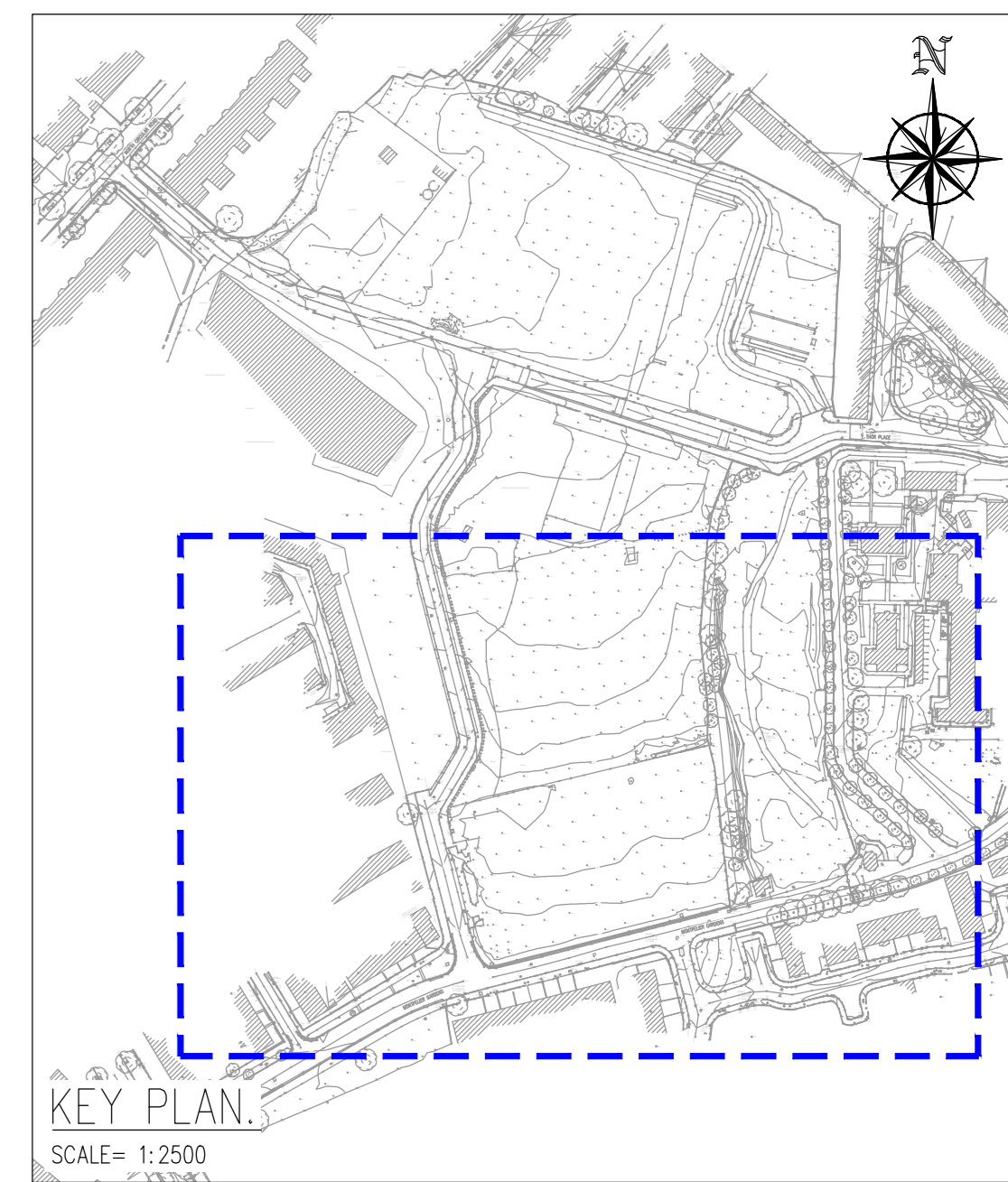
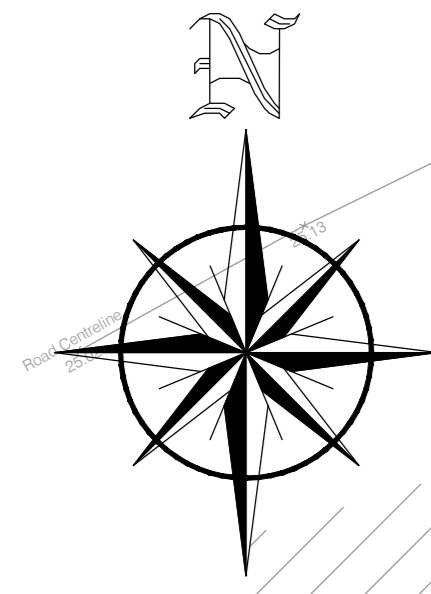
Rev. No	Date	REVISION NOTE	Drn By	Chk By
PI	07.05.2021	REVISED FOR PLANNING	JS	NB

Client	O'Mahony Pike
Project	Proposed Development At O'Donovan Gardens
Title	Topographical Survey Sheet 1 of 2
Drawn No.	ODG-CSC-XX-XX-DR-C-0011
Date	29.05.2020
Drn By	JS
Chk By	NB
App'd By	DR
Scale	1:250 (B4)
Revision	P1

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SCALE= 1:250

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Rev. No	Date	REVISION NOTE	Des. By	Chk. By
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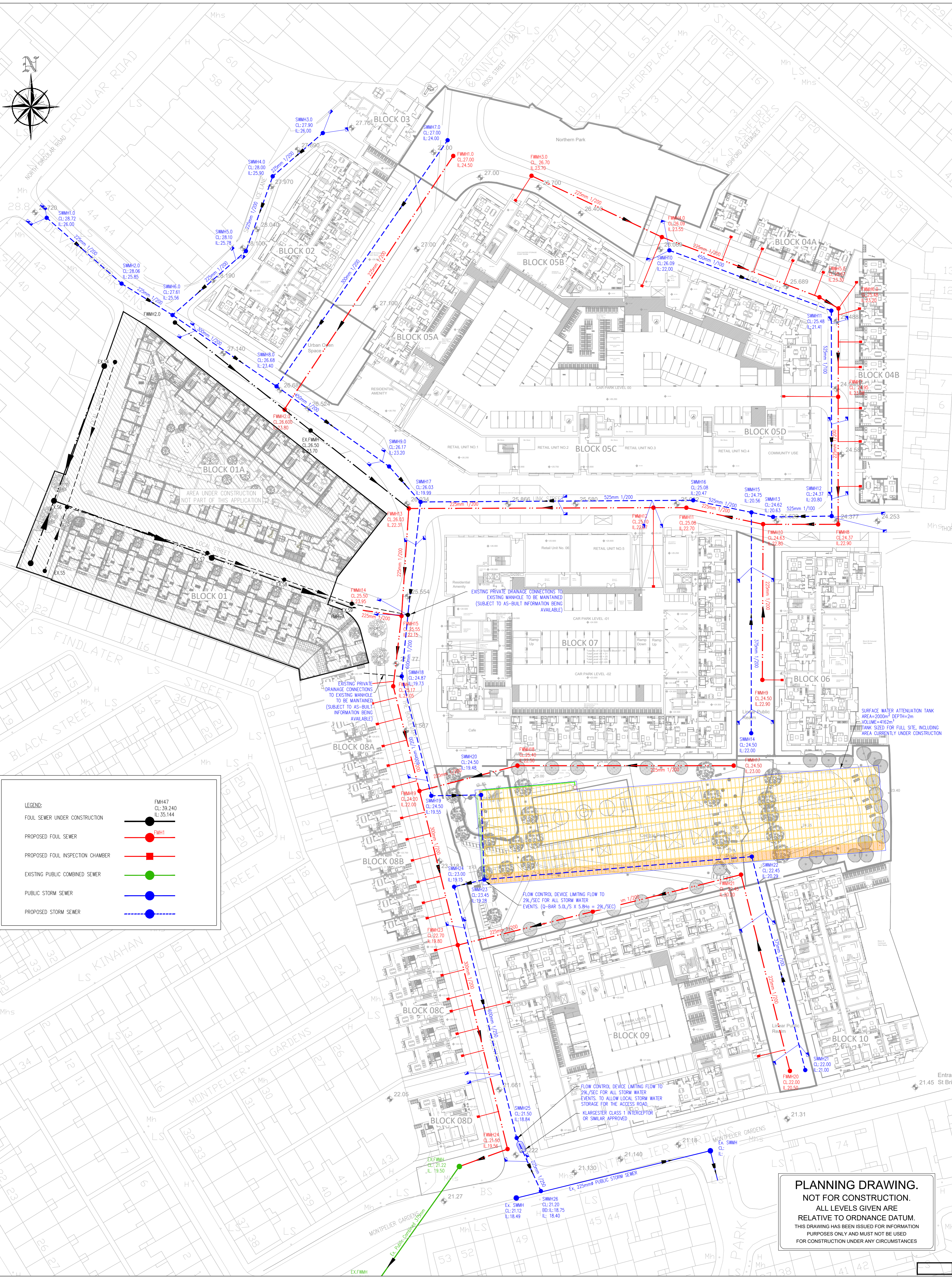
Architect	O'Mahony Pike
Project	Proposed Development At O'Donovan Gardens
Title	Topographical Survey Sheet 2 of 2
Draw. No.	ODG-CSC-XX-XX-DR-C-0012
Date	29.05.2020
Des. By	JS
Chk. By	NB
Appr. By	DR
Scale	1:250 (B4)
Revision	P1

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B089



LEGEND:	
FOUL SEWER UNDER CONSTRUCTION	
PROPOSED FOUL SEWER	
PROPOSED FOUL INSPECTION CHAMBER	
EXISTING PUBLIC COMBINED SEWER	
PUBLIC STORM SEWER	
PROPOSED STORM SEWER	

PLANNING DRAWING.
 NOT FOR CONSTRUCTION.
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 RELATIVE TO ORDNANCE DATUM.
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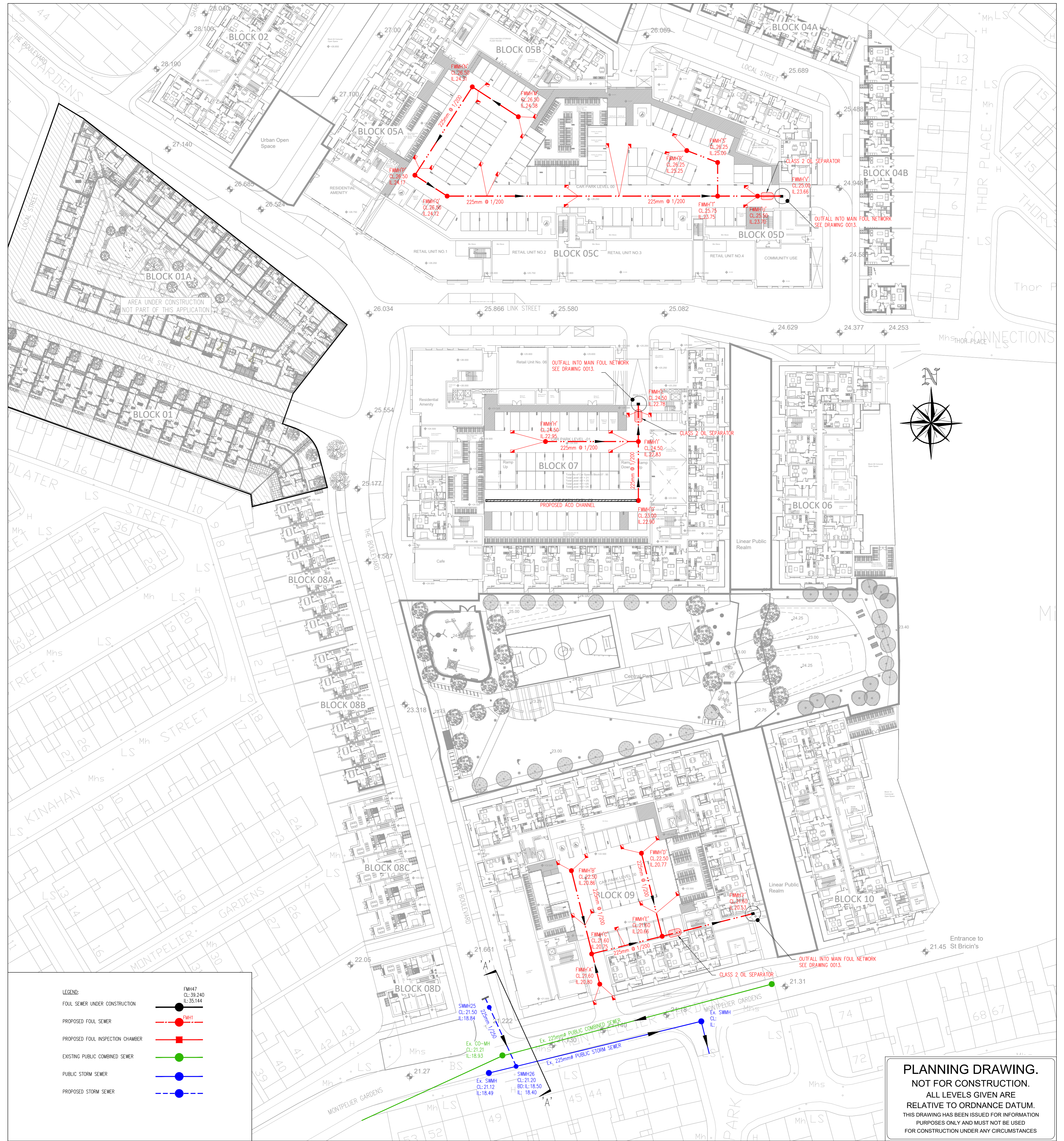
Rev. No.	Date	REVISION NOTE	Drn. By	Chkd. By

Architect	O'Mahony Pike
Project	Proposed Development At O'Devaney Gardens
Title	Proposed Drainage Layout (Proposed Foul & Storm Network)
Dwg. No.	ODG-CSC-XX-XX-DR-C-0013
Date	April 2020
Drn. By	RFM
Chkd. By	RFM
Apprv. By	DR
Scale	1:500 @ A1

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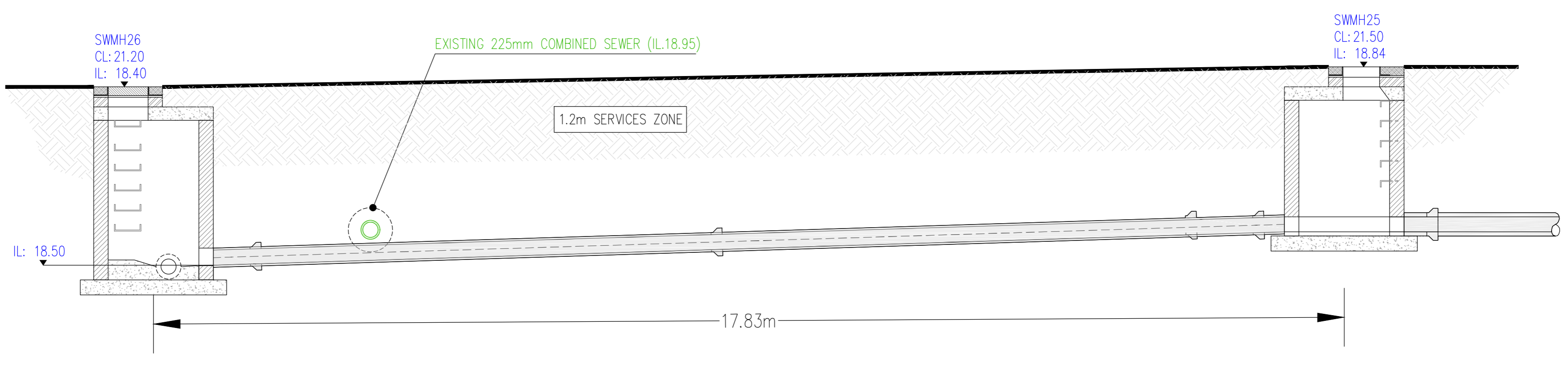
Quality Environment I.S. EN ISO 9001:2008
 Energy I.S. EN ISO 14001:2004
 Health & Safety NSAI Certified I.S. EN ISO 45001:2011
 OHSAS 18001:2007



LEGEND:

FOUL SEWER UNDER CONSTRUCTION		FMH47 CL: 39.240 IL: 35.144
PROPOSED FOUL SEWER		FMH1
PROPOSED FOUL INSPECTION CHAMBER		
EXISTING PUBLIC COMBINED SEWER		
PUBLIC STORM SEWER		
PROPOSED STORM SEWER		

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SECTION A-A. PROPOSED STORM WATER CONNECTION.
 SCALE 1:100

NOTES

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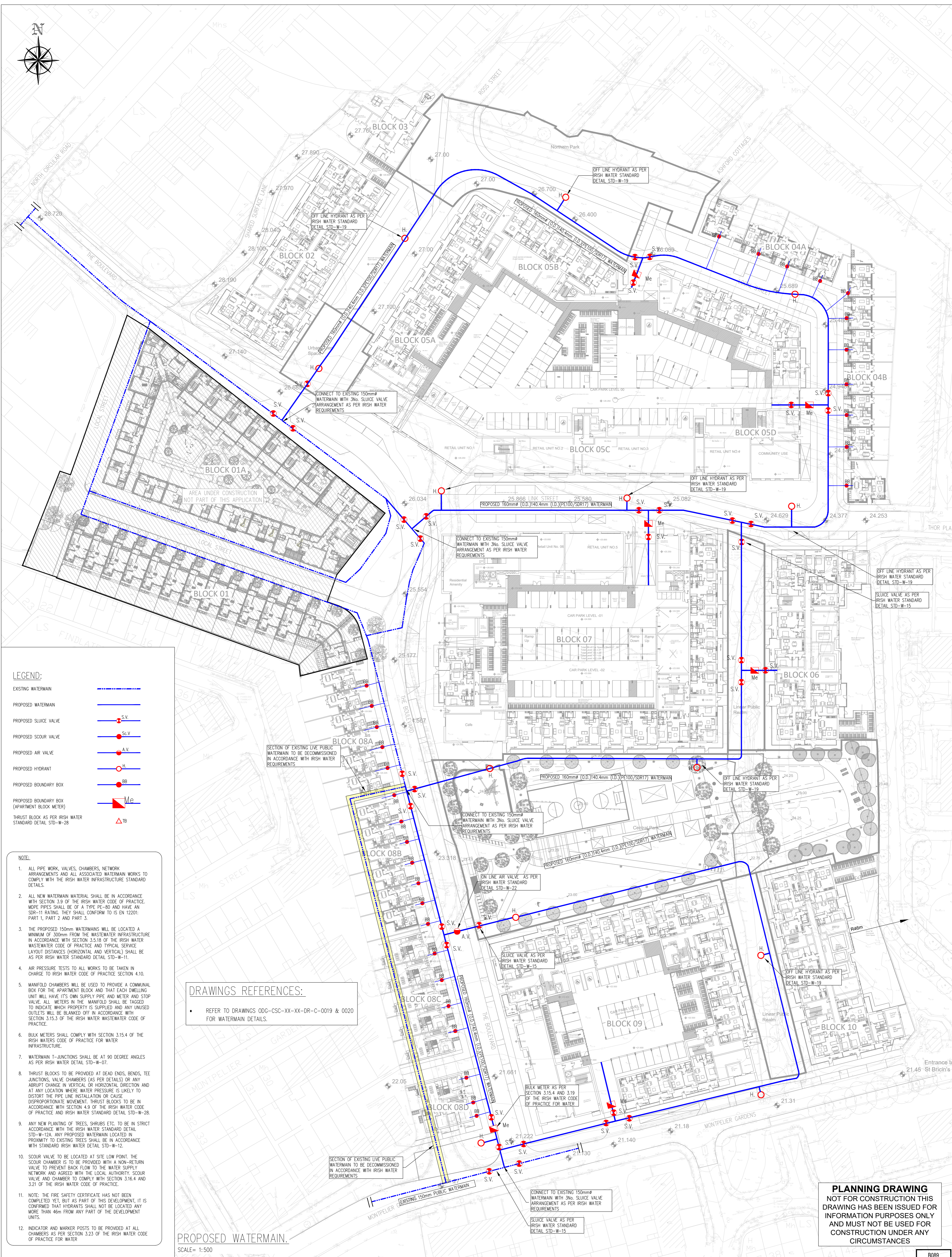
Rev. No.	Date	REVISION NOTE	Drn. By	Chkd. By

Project	O'Mahony Pike Proposed Development At O'Devaney Gardens			
Title	Proposed Drainage Layout (Basement Foul & Storm Outfall Connection)			
Dwg. No.	ODG-CSC-XX-XX-DR-C-0014			
Date	Drn. by	Chkd. by	Apprv. by	Scale
April 2020	RFM	RFM	DR	1:500 (plan) & 1:100 (section) @ A1

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 OHSAS 18001:2007



LEGEND:

EXISTING WATERMAIN	
PROPOSED WATERMAIN	
PROPOSED SLUICE VALVE	
PROPOSED SCOUR VALVE	
PROPOSED AIR VALVE	
PROPOSED HYDRANT	
PROPOSED BOUNDARY BOX	
PROPOSED BOUNDARY BOX (APARTMENT BLOCK METER)	
THRUST BLOCK AS PER IRISH WATER STANDARD DETAIL STD-W-28	

- NOTE:**
1. ALL PIPE WORK, VALVES, CHAMBERS, NETWORK ARRANGEMENTS AND ALL ASSOCIATED WATERMAIN WORKS TO COMPLY WITH THE IRISH WATER INFRASTRUCTURE STANDARD DETAILS.
 2. ALL NEW WATERMAIN MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 3.9 OF THE IRISH WATER CODE OF PRACTICE. PIPE PIPES SHALL BE OF A TYPE PE-80 AND HAVE AN SDR-11 RATING. THEY SHALL CONFORM TO IS EN 12201: PART 1, PART 2 AND PART 3.
 3. THE PROPOSED 150mm WATERMANS WILL BE LOCATED A MINIMUM OF 300mm FROM THE WASTEWATER INFRASTRUCTURE IN ACCORDANCE WITH SECTION 3.5.18 OF THE IRISH WATER WASTEWATER CODE OF PRACTICE AND TYPICAL SERVICE LAYOUT DISTANCES (HORIZONTAL AND VERTICAL) SHALL BE AS PER IRISH WATER STANDARD DETAIL STD-W-11.
 4. AIR PRESSURE TESTS TO ALL WORKS TO BE TAKEN IN CHARGE TO IRISH WATER CODE OF PRACTICE SECTION 4.10.
 5. MANFOLD CHAMBERS WILL BE USED TO PROVIDE A COMMUNAL BOX FOR THE APARTMENT BLOCK AND THAT EACH DWELLING UNIT WILL HAVE ITS OWN SUPPLY PIPE AND METER AND STOP VALVE. ALL METERS IN THE MANFOLD SHALL BE TAGGED TO INDICATE WHICH PROPERTY IS SUPPLIED AND ANY UNUSED OUTLETS WILL BE BLANKED OFF IN ACCORDANCE WITH SECTION 3.15.3 OF THE IRISH WATER WASTEWATER CODE OF PRACTICE.
 6. BULK METERS SHALL COMPLY WITH SECTION 3.15.4 OF THE IRISH WATER CODE OF PRACTICE FOR WATER INFRASTRUCTURE.
 7. WATERMAIN T-JUNCTIONS SHALL BE AT 90 DEGREE ANGLES AS PER IRISH WATER DETAIL STD-W-07.
 8. THRUST BLOCKS TO BE PROVIDED AT DEAD ENDS, BENDS, TEE JUNCTIONS, VALVE CHAMBERS (AS PER DETAILS) OR ANY ABRUPT CHANGE IN VERTICAL OR HORIZONTAL DIRECTION AND AT ANY LOCATION WHERE WATER PRESSURE IS LIKELY TO DISTORT THE PIPE LINE INSTALLATION OR CAUSE DISPROPORTIONATE MOVEMENT. THRUST BLOCKS TO BE IN ACCORDANCE WITH SECTION 4.9 OF THE IRISH WATER CODE OF PRACTICE AND IRISH WATER STANDARD DETAIL STD-W-28.
 9. ANY NEW PLANTING OF TREES, SHRUBS ETC. TO BE IN STRICT ACCORDANCE WITH THE IRISH WATER STANDARD DETAIL STD-W-12A. ANY PROPOSED WATERMAIN LOCATED IN PROXIMITY TO EXISTING TREES SHALL BE IN ACCORDANCE WITH STANDARD IRISH WATER DETAIL STD-W-12.
 10. SCOUR VALVE TO BE LOCATED AT SITE LOW POINT. THE SCOUR CHAMBER IS TO BE PROVIDED WITH A NON-RETURN VALVE TO PREVENT BACK FLOW TO THE WATER SUPPLY NETWORK AND AGREED WITH THE LOCAL AUTHORITY. SCOUR VALVE AND CHAMBER TO COMPLY WITH SECTION 3.16.4 AND 3.21 OF THE IRISH WATER CODE OF PRACTICE.
 11. NOTE: THE FIRE SAFETY CERTIFICATE HAS NOT BEEN COMPLETED YET, BUT AS PART OF THIS DEVELOPMENT, IT IS CONFIRMED THAT HYDRANTS SHALL NOT BE LOCATED ANY MORE THAN 46m FROM ANY PART OF THE DEVELOPMENT UNITS.
 12. INDICATOR AND MARKER POSTS TO BE PROVIDED AT ALL CHAMBERS AS PER SECTION 3.23 OF THE IRISH WATER CODE OF PRACTICE FOR WATER.

DRAWINGS REFERENCES:

- REFER TO DRAWINGS ODG-CSC-XX-XX-DR-C-0019 & 0020 FOR WATERMAIN DETAILS.

PROPOSED WATERMAIN.
SCALE= 1:500

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B089

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Rev. No	Date	REVISION NOTE	Dim. By	Chkd. By
P1	07.05.2021	REVISED FOR PLANNING	JS	RFM

Architect	O'Mahony Pike
Project	Proposed Development At O'Devaney Gardens
Title	Proposed Watermain
Dwg. No.	ODG-CSC-XX-XX-DR-C-0015
Date	29.05.2020
Dim by	DD
Chkd by	RFM
Apprv by	DR
Scale	1:500 @A1
Revision	P1

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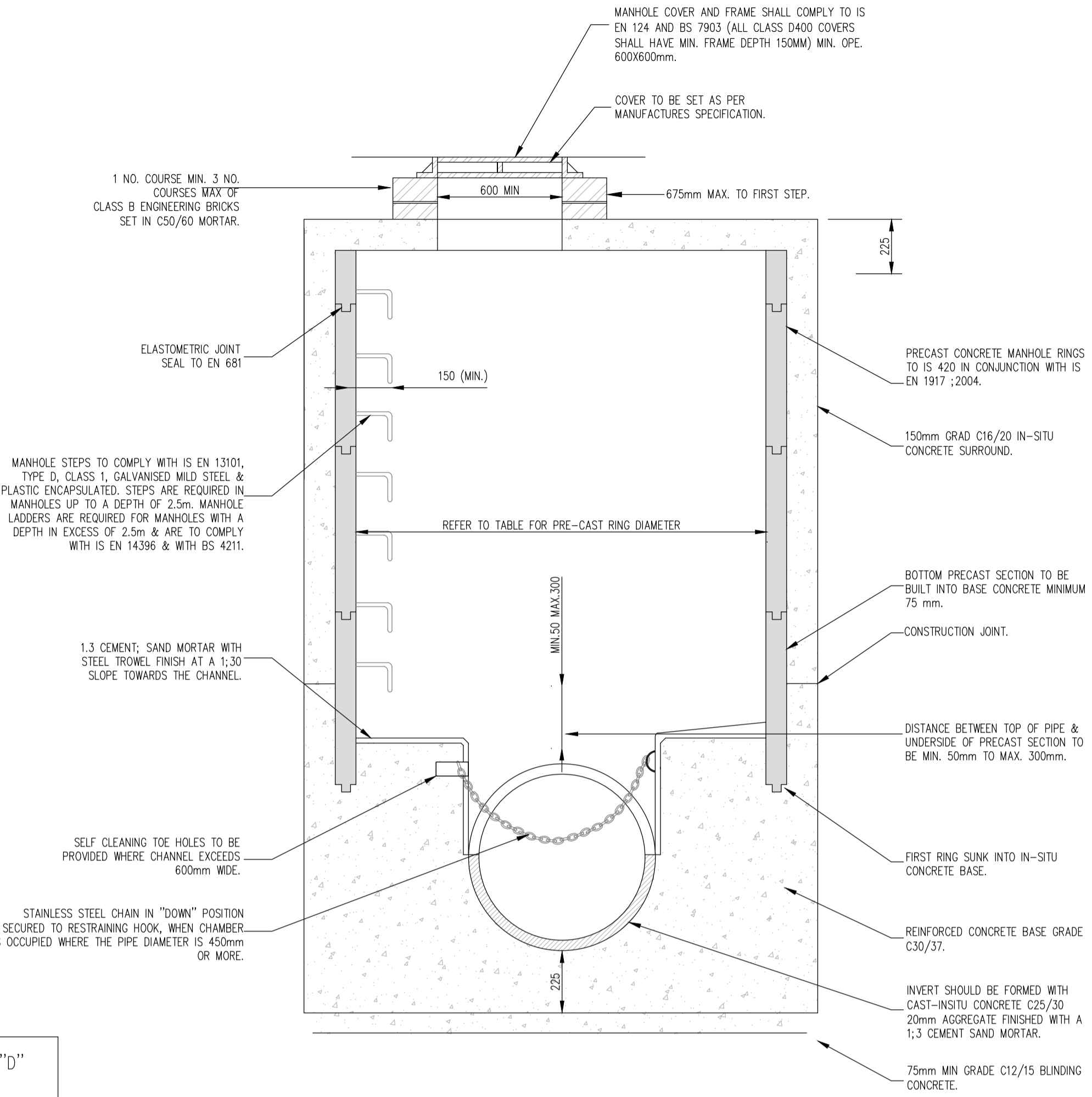
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Quality Environment Health & Safety

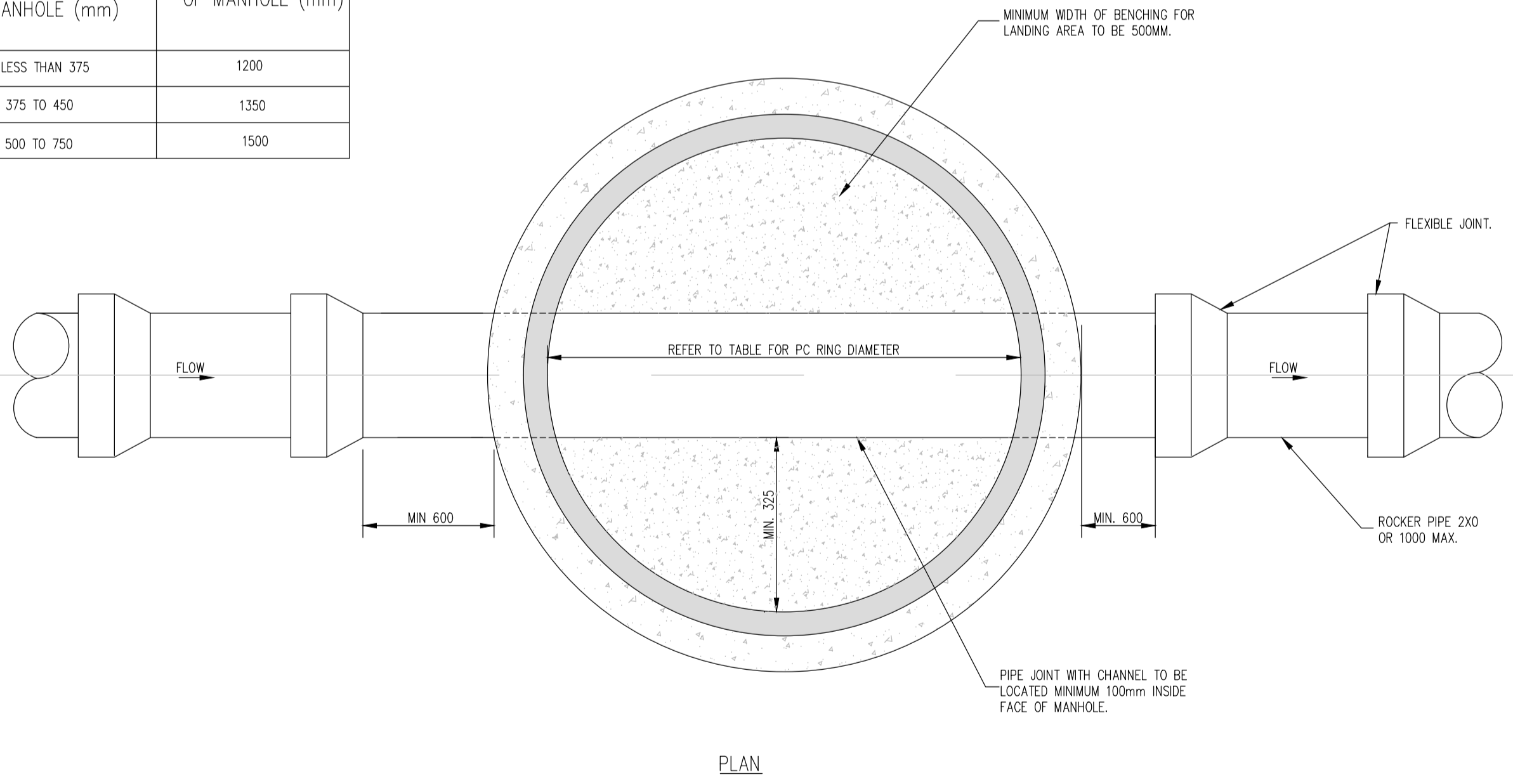
NSAI Certified

IS EN ISO 9001:2008
IS EN ISO 14001:2004
IS EN ISO 50001:2011
OHSAS 18001:2007

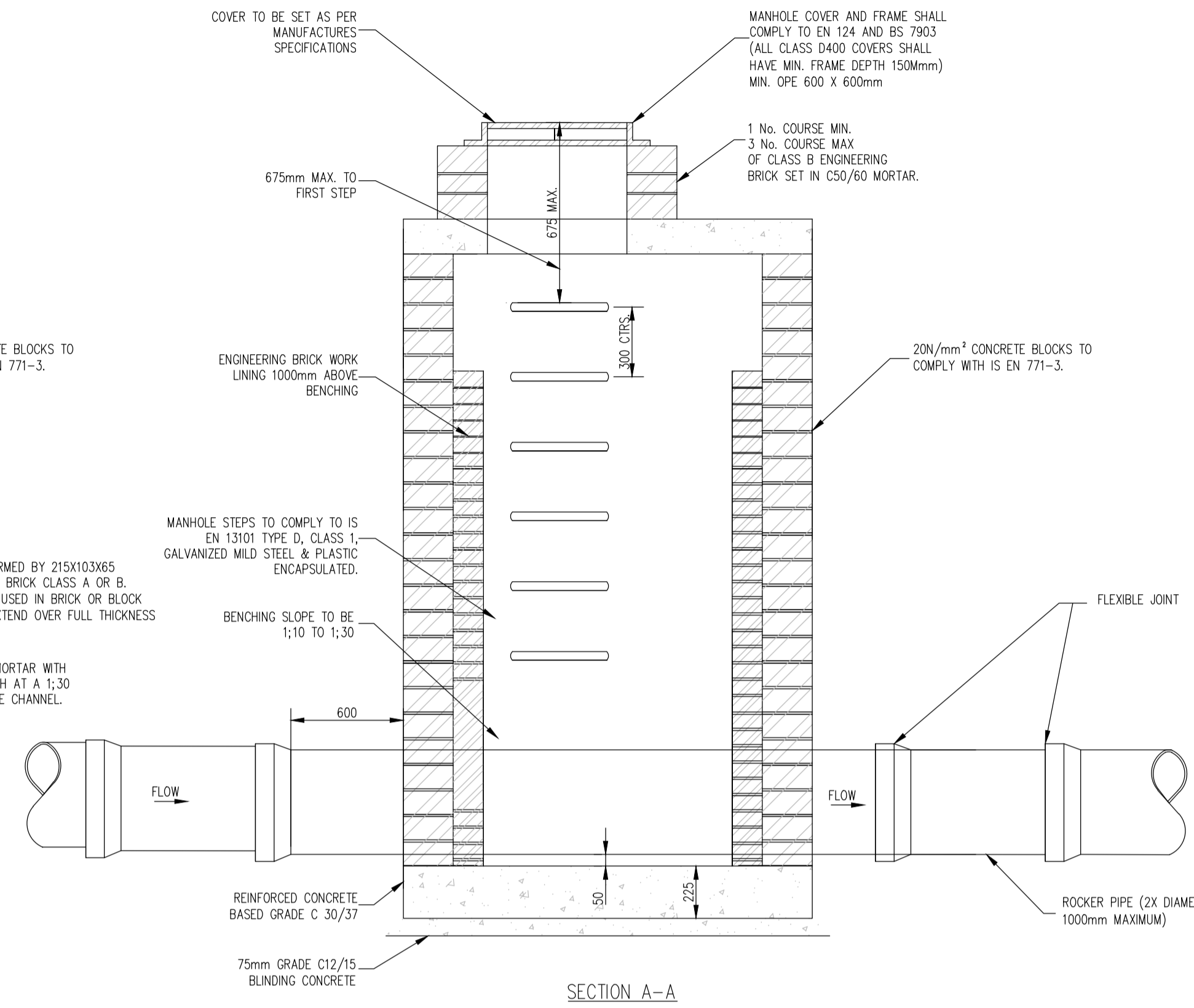
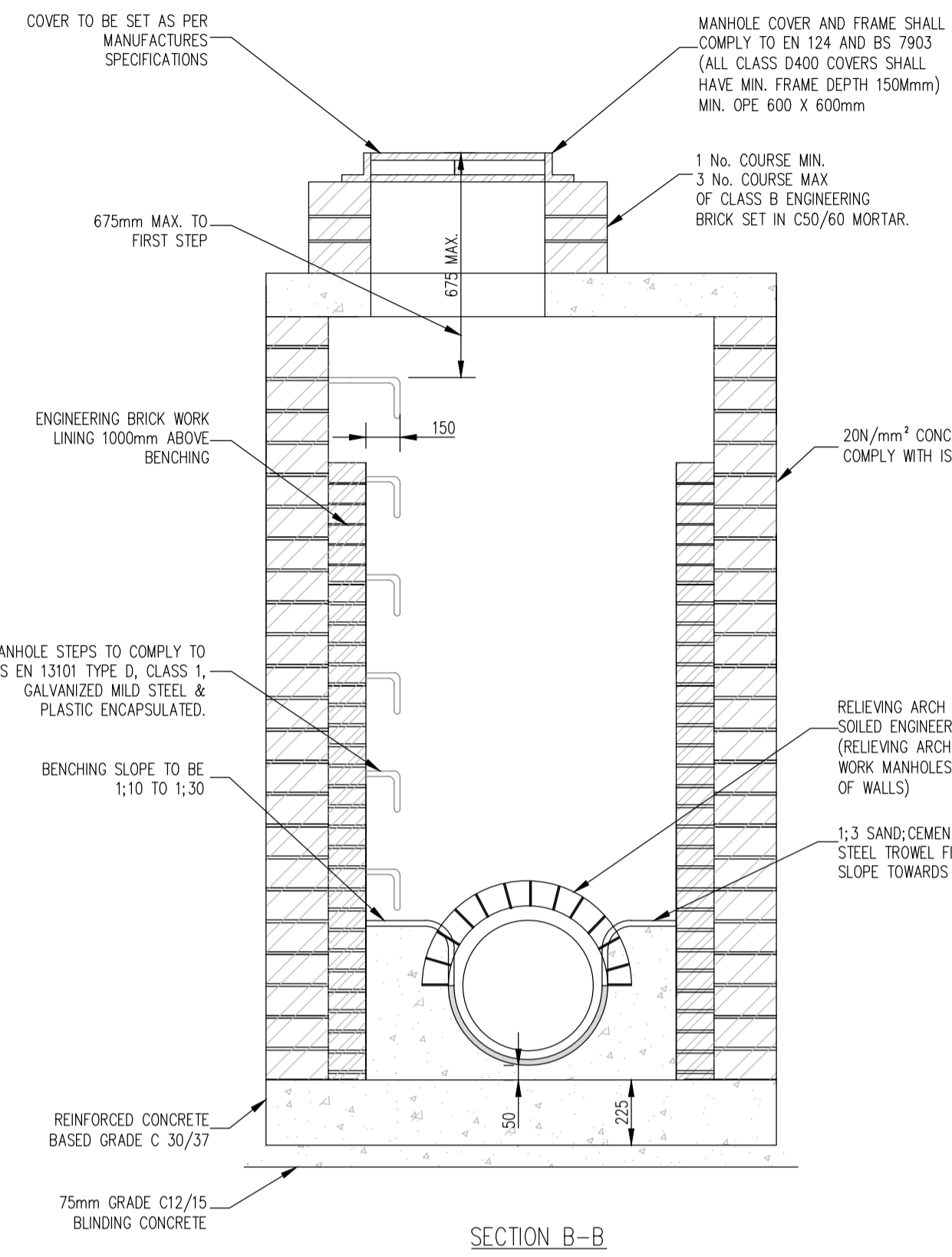
- NOTES:
 PRECAST CONCRETE MANHOLE (<450mm DIA)
 STD-WW-10
1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
 2. PRECAST MANHOLES UNITS, COMPLYING WITH REQUIREMENTS OF IS EN 1917 AND BS 5911-PART 3.
 3. THICKER MANHOLE BASE REQUIRED FOR SEWERS IN EXCESS OF 3m DEEP WHERE THE SIZE IS GREATER THAN THE STANDARD MINIMUM SIZE.
 4. APPROVED PRE-CAST CONCRETE BASES MAY BE USED INCORPORATING CHANNELS, BENCHING ETC. SUBJECT TO IRISH WATER APPROVAL AND COMPLYING WITH BS 5911-PART 4:2002.
 5. STRUCTURAL DESIGN AND REINFORCEMENT DETAILS TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO IRISH WATER FOR REVIEW.
 6. MANHOLES GREATER THAN 3m IN DEPTH WILL REQUIRE A DETAILED STRUCTURAL DESIGN AND BE SUBJECT TO IRISH WATER APPROVAL.
 7. MANHOLE ROOFS SHOULD CONSIST OF RE-INFORCED CONCRETE SLAB OF IN-SITU CONCRETE, C30/37, WITH A MINIMUM THICKNESS OF 225mm DESIGNED TO CARRY ALL LIVE AND DEAD LOADS, ALTERNATIVELY APPROVED PRE-CAST CONCRETE ROOF SLABS MAY BE USED SUBJECT TO IRISH WATER APPROVAL AND COMPLIANCE WITH BS 5911 PART 4, 2002.
 8. COVER AND FRAMES SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS SUBJECT TO APPROVAL FROM IRISH WATER.
 9. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND COVERS IN GREEN AREAS.
 10. ALL CHAMBERS TO BE CHECKED FOR UPLIFT BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE. SHOULD ANTI FLUTATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO APPROVAL FROM IRISH WATER.
 11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206, 2013.



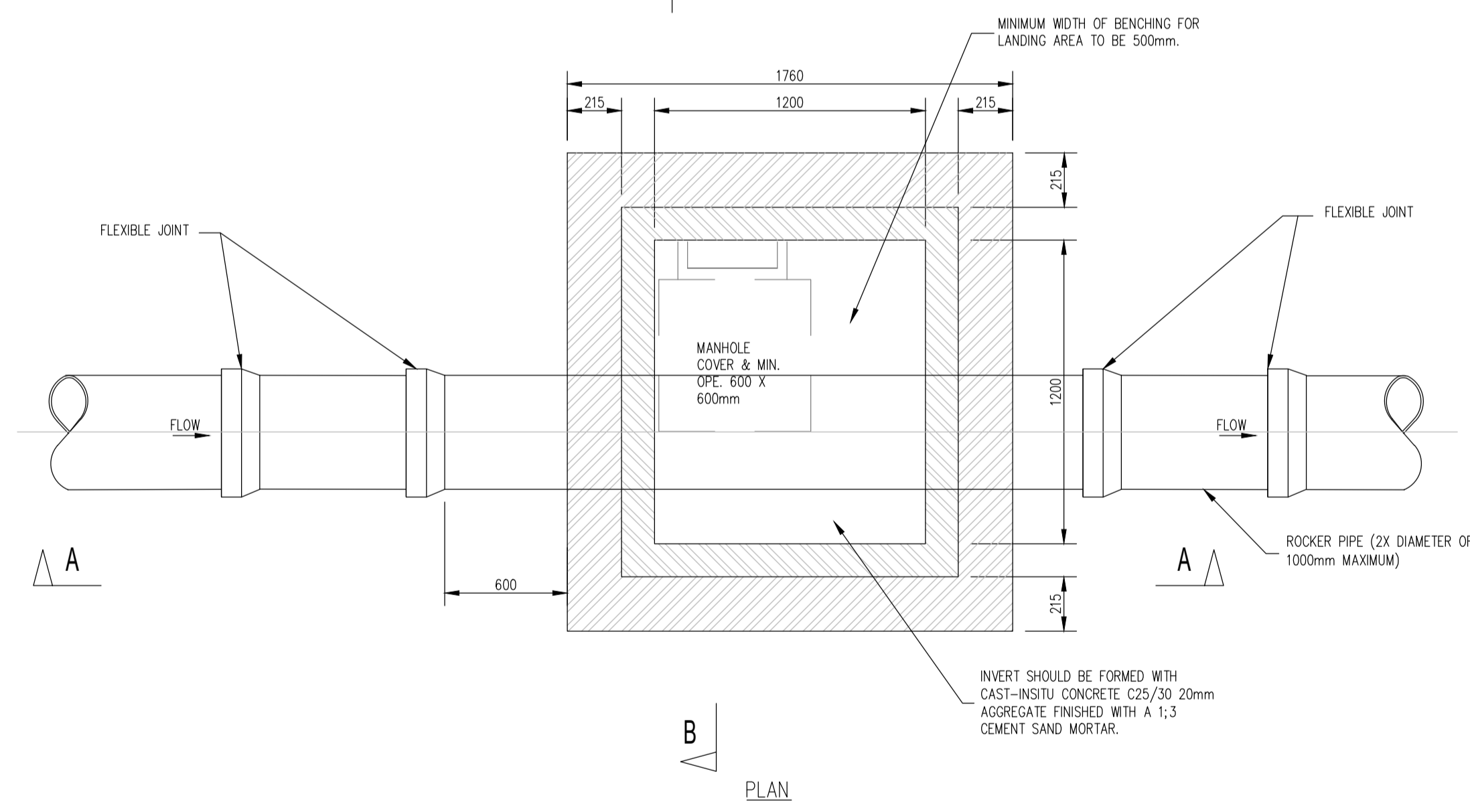
MINIMUM MANHOLE DIAMETERS "D"	
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 TO 450	1350
500 TO 750	1500



PRECAST CONCRETE MANHOLE
 (STD-WW-10)
 SCALE 1:20



- NOTES:
 BLOCKWORK MANHOLE (<450mm DIA)
 STD-WW-09
1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
 2. SOLID BLOCKWORK TO BE OF HIGH STRENGTH (20N/mm²) TO IS EN 771.
 3. MAXIMUM DEPTH OF BLOCK WORK MANHOLE IS 1.20m (THE USE OF BLOCK WORK IN DEEPER MANHOLES WILL BE CONSIDERED BUT SUCH USE WILL REQUIRE DETAILED STRUCTURAL DESIGN AND WRITTEN APPROVAL FROM IRISH WATER).
 4. WALLS TO BE FLUSH POINTED AND NOT PLASTERED INTERNALLY. INTERNAL LINING OF ENGINEERING BRICK TO IS EN 771-1 TO A HEIGHT OF 1M ABOVE BENCHING. ENGINEERING BRICK TO BE BONDED TO BLOCKWORK USING ENGLISH GARDEN WALL BOND.
 5. STRUCTURAL DESIGN AND REINFORCEMENT DETAILS FOR ROOF AND BASE SLABS TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO IRISH WATER FOR REVIEW.
 6. COVERS AND FRAMES SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS SUBJECT TO APPROVAL FROM IRISH WATER.
 7. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND COVERS IN GREEN AREAS.
 8. ALL CHAMBERS TO BE CHECKED FOR UPLIFT BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE. SHOULD ANTI FLUTATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO APPROVAL FROM IRISH WATER.
 9. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206:2013



BLOCKWORK MANHOLE
 (STD-WW-09)
 SCALE 1:20

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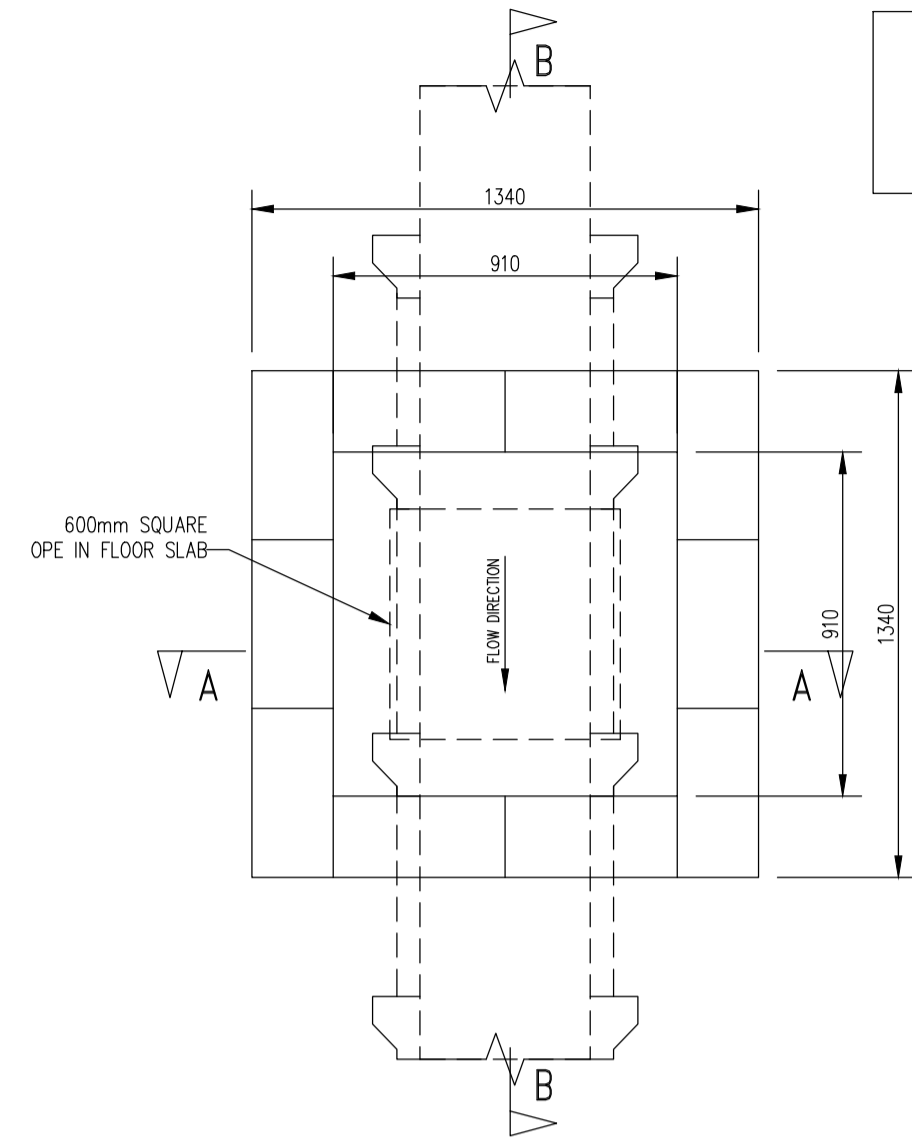
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Rev. No.	Date	REVISION NOTE	Drn. By	Chkd. By
P1	07.05.2021	REVISED FOR PLANNING	JS	NB

Architect	O'Mahony Pike
Project	Proposed Development At O'Devaney Gardens
Title	Drainage Details Sheet 1 of 5
Dwg. No.	ODG-CSC-XX-XX-DR-C-0016
Date	29.05.2020
Drn. by	JS
Chkd. by	DD
Apprv. by	DR
Scale	AS SHOWN @ A1
Revision	P1

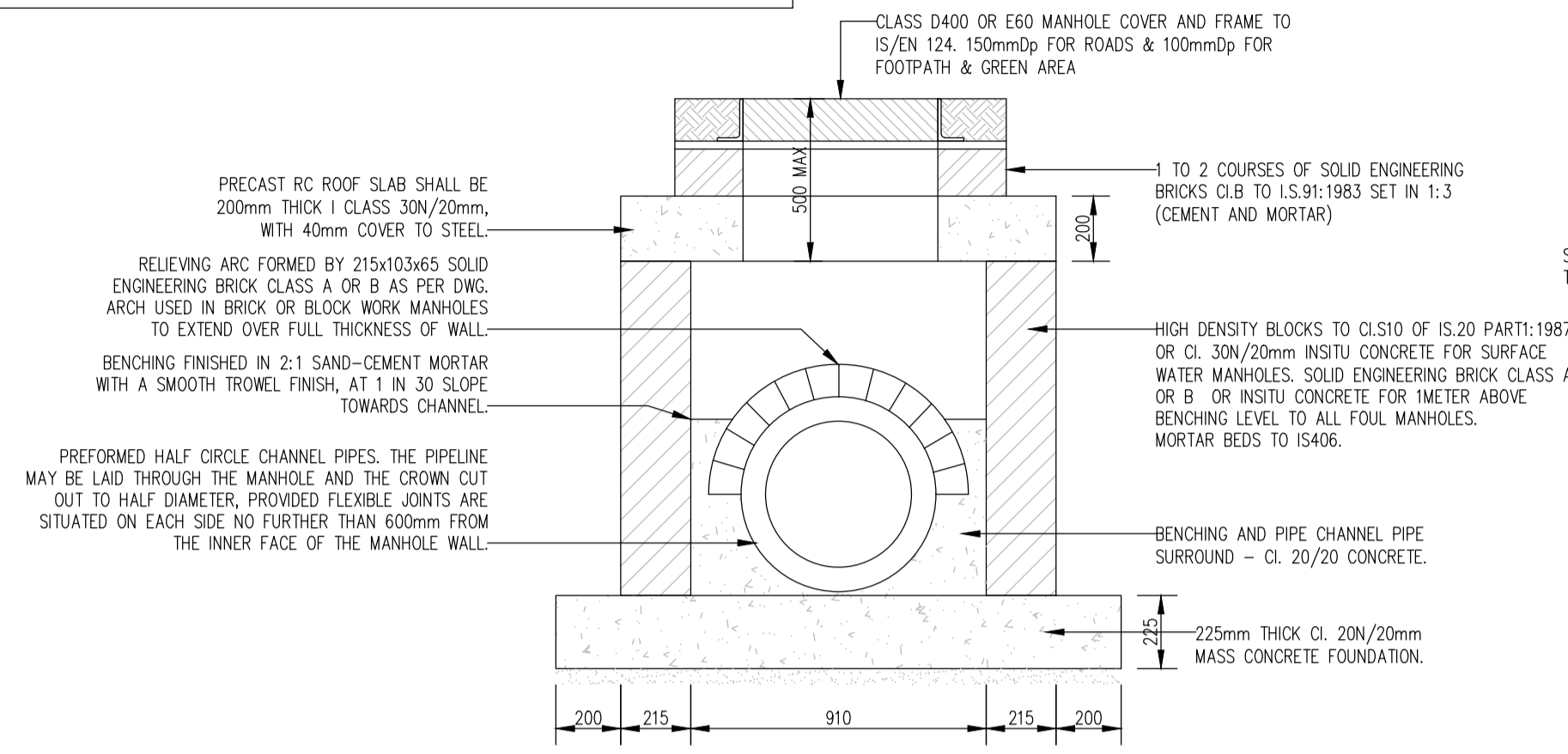
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Quality	ISO EN ISO 9001:2008
Environment	ISO EN ISO 14001:2004
Energy	ISO EN ISO 50001:2011
Health & Safety	OHSA 18001:2007

TYPE A MANHOLE

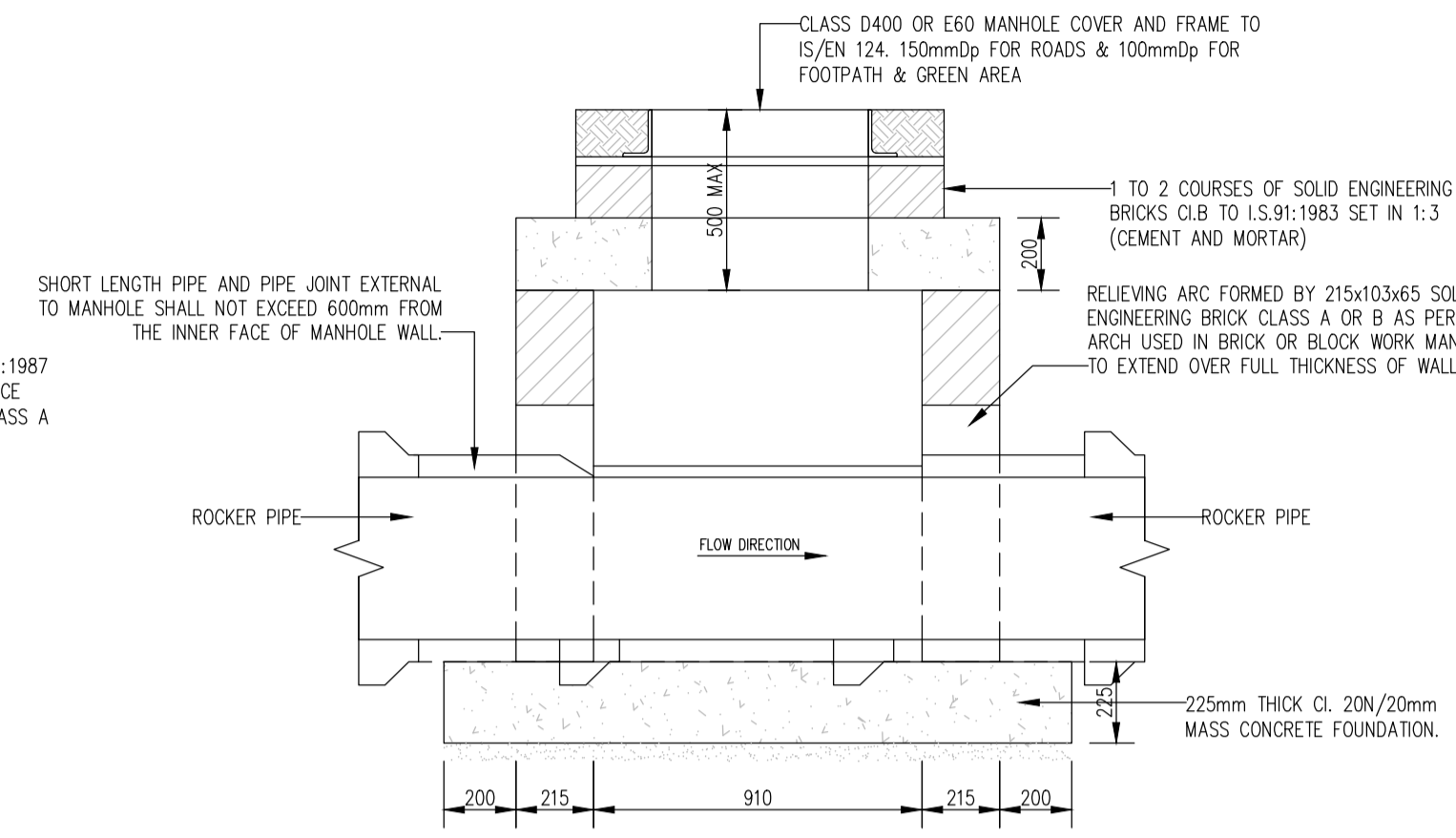


PLAN BELOW ROOF SLAB
SCALE : 1/20

MAHOLE DETAILS FOR PIPE DIAM'S. 150, 225, 300, 375, 450.
DEPTH OF INVERT LEVEL LESS THAN 1.0M

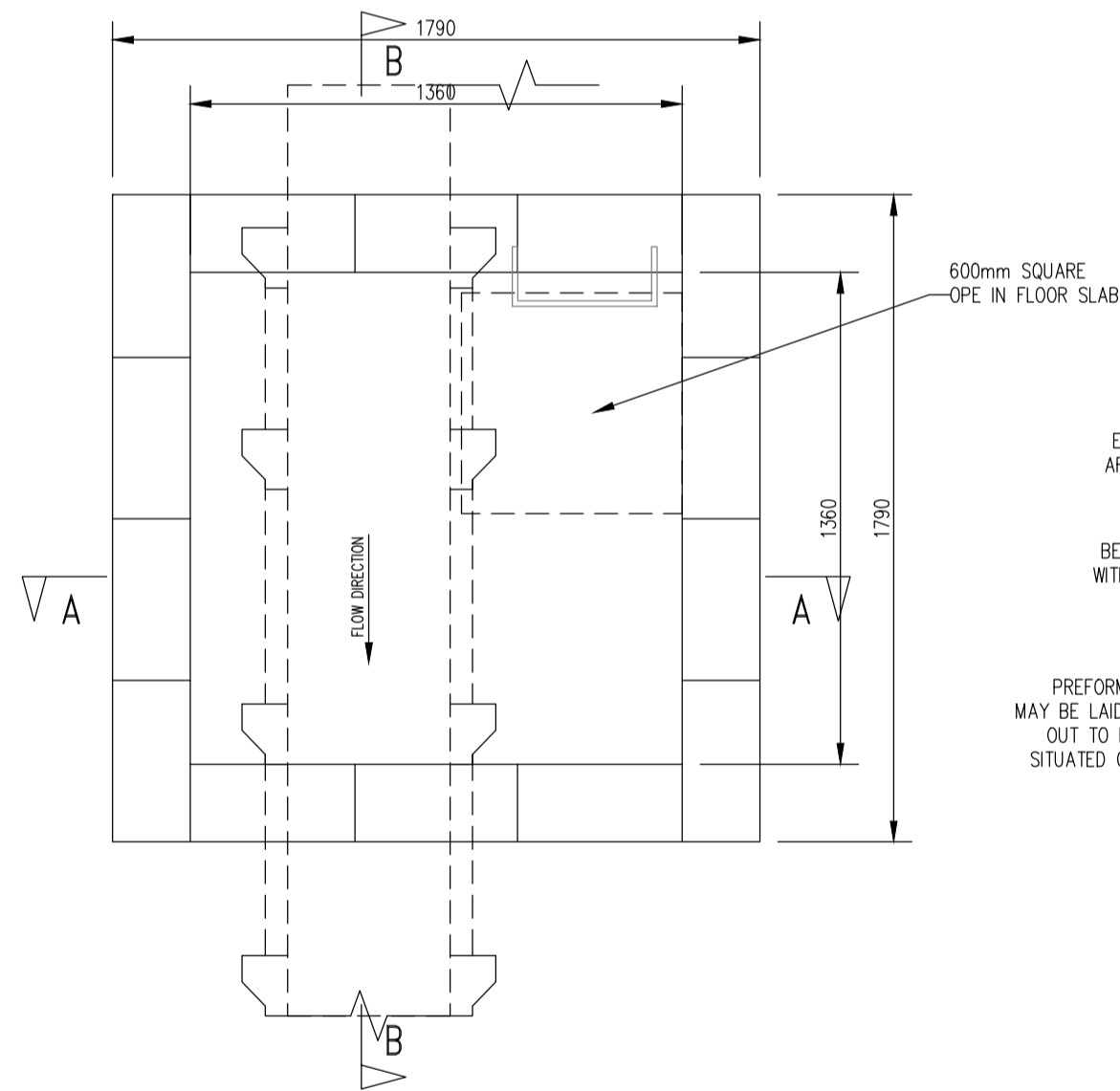


SECTION A-A
SCALE : 1/20



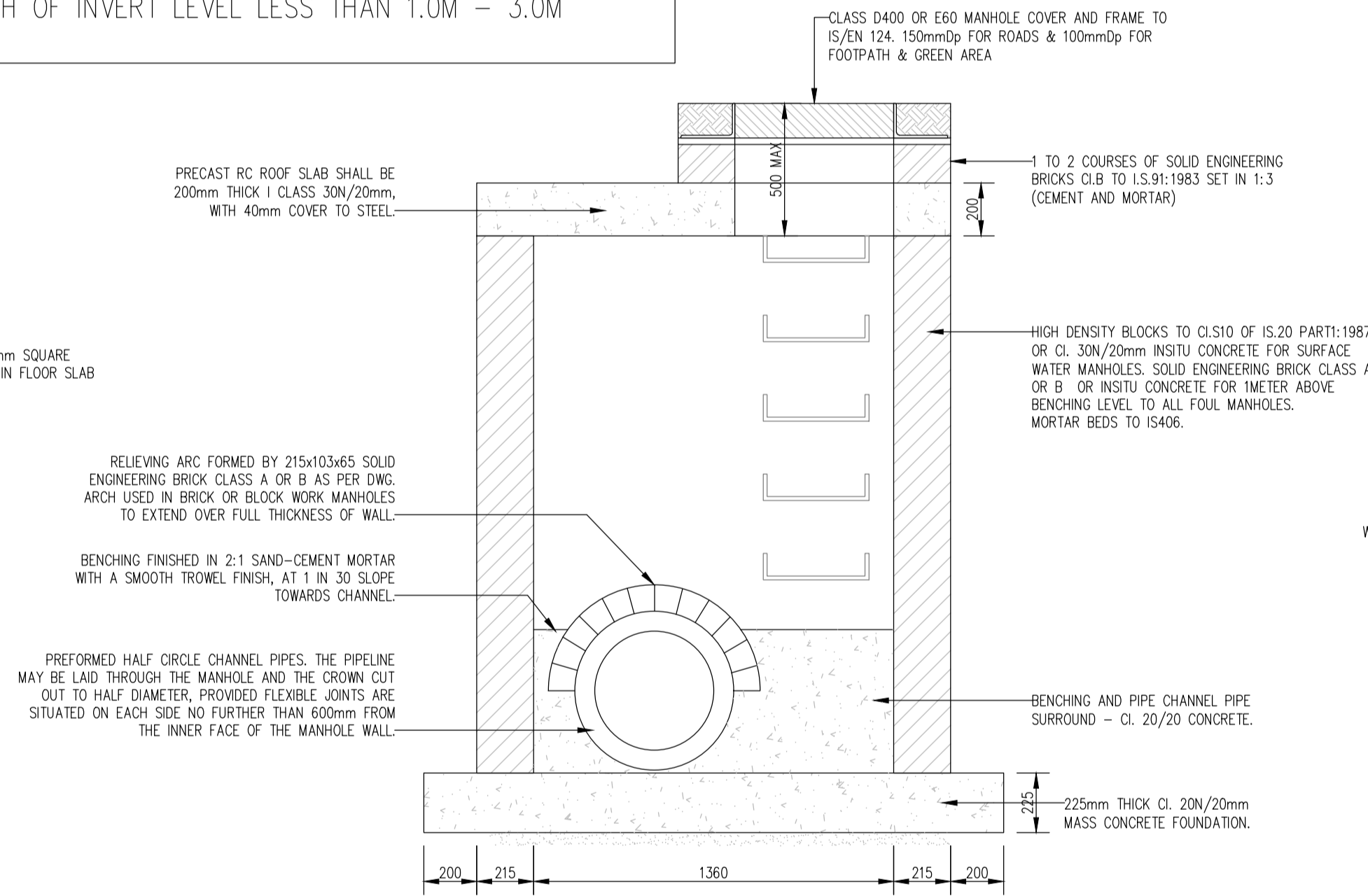
SECTION B-B
SCALE : 1/20

TYPE B MANHOLE

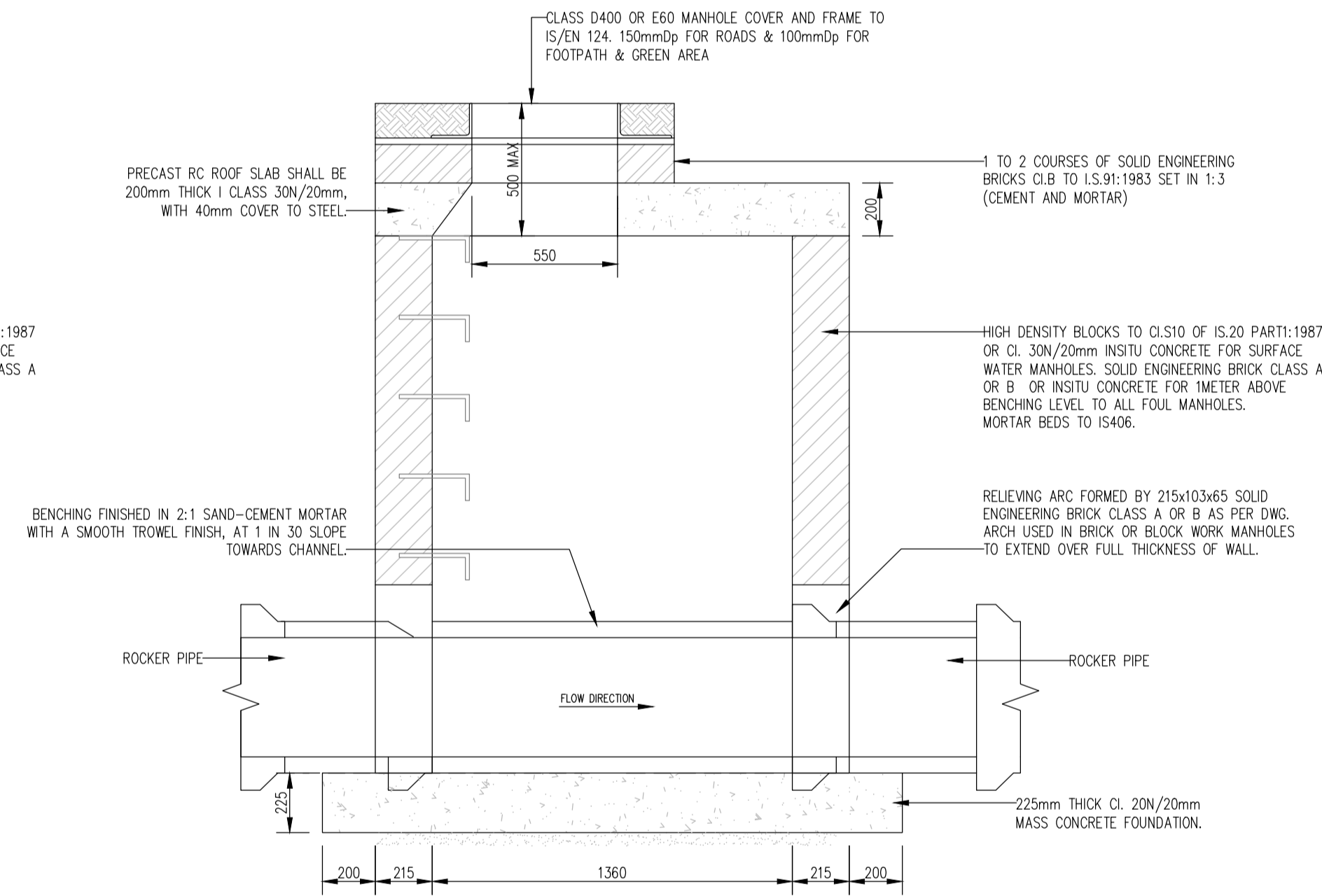


PLAN
SCALE : 1/20

MAHOLE DETAILS FOR PIPE DIAM'S. 225, 300, 375, 450.
DEPTH OF INVERT LEVEL LESS THAN 1.0M - 3.0M



SECTION A-A
SCALE : 1/20



SECTION B-B
SCALE : 1/20

NOTES :

- BRANCH MANHOLES : MANHOLE WIDTH INCREASED BY 300mm ON THE SIDE OF THE BRANCH FOR PIPE DIAMETERS LESS THAN 450mm AND 500mm FOR PIPE DIAMETER GREATER THAN 450mm
- ALL MANHOLES ARE TO BE CONSTRUCTED IN MASS CONCRETE, CL.30/20, UNLESS PREVIOUSLY AGREED WITH CONSULTING ENGINEER.
- PRIOR TO LAYING OF PIPES, MANHOLE FLOORS WILL BE PLACED AND PIPES LAID CONTINUOUSLY THROUGH MANHOLES.
- MIN. COVER TO SURFACE WATER AND SOUL SEWER PIPES ROADS: 1.2m TO TOP OF PIPE DRIVEWAYS & ACCESS: 1.2m FIELDS/FOOTPATHS: 0.9m IF NOT THEN PIPES SHALL BE SURROUNDED IN 150mm CONCRETE 20N/mm² INSITU CONCRETE TO BE USED
- ALL MANHOLE COVERS IN FIELDS/GRASS MARGINS ETC. ARE TO HAVE 200mm WIDE x 150mm DEEP MOWING KERB, STEEL TROWELLED FINISH, CONC. SURROUND.
- AN APPROVED EPOXY MORTAR (E.G. RESIFIX NO. 1:S:BD CORTITE MORTAR : LOCKSET 'D' OR SIMILAR) IS TO BE USED WHEN FIXING MANHOLE RINGS/STEP IRONS AFTER CONSTRUCTION OF THE WALLS. THE CONCRETE IS TO BE DRY, HOLE TOLERANCES TO BE APPROX. 5/10mm ALL ROUND AND CLEANED OUT WITH COMPRESSED AIR AND ALL MANUFACTURER'S RECOMMENDATIONS ARE TO BE FOLLOWED.
- WHERE MANHOLE IS IN CARRIAGEWAY PROVIDE 450mm MIN. COVER BETWEEN ROAD SURFACE AND ROOF SLAB AND USE ENGINEERING BRICK CLASS 'B' TO I.S. 91 1974 IN SHAFT.
- ALL MANHOLE COVERS & FRAMES TO CLASS D400 AND TO COMPLY WITH IS/EN 124 REQUIREMENTS FOR LOAD CLASS & SPECIFICATION.
- REFER TO DUBLIN CORPORATIONS STANDARD MANHOLE DETAILS FOR FULL DETAILS OF MANHOLES.

MANHOLE DIMENSIONS

MAXIMUM DEPTH=6m

DEPTH TO INVERT	PIPE DIA	L	B
0.0 - 1.0	225	910	910
	300	910	910
	375	910	910
1.0 - 3.0	225	1360	1360
	300	1360	1360
	375	1360	1360
3.0 - 6.0	225	1590	1590
	300	1590	1590
	375	1590	1590

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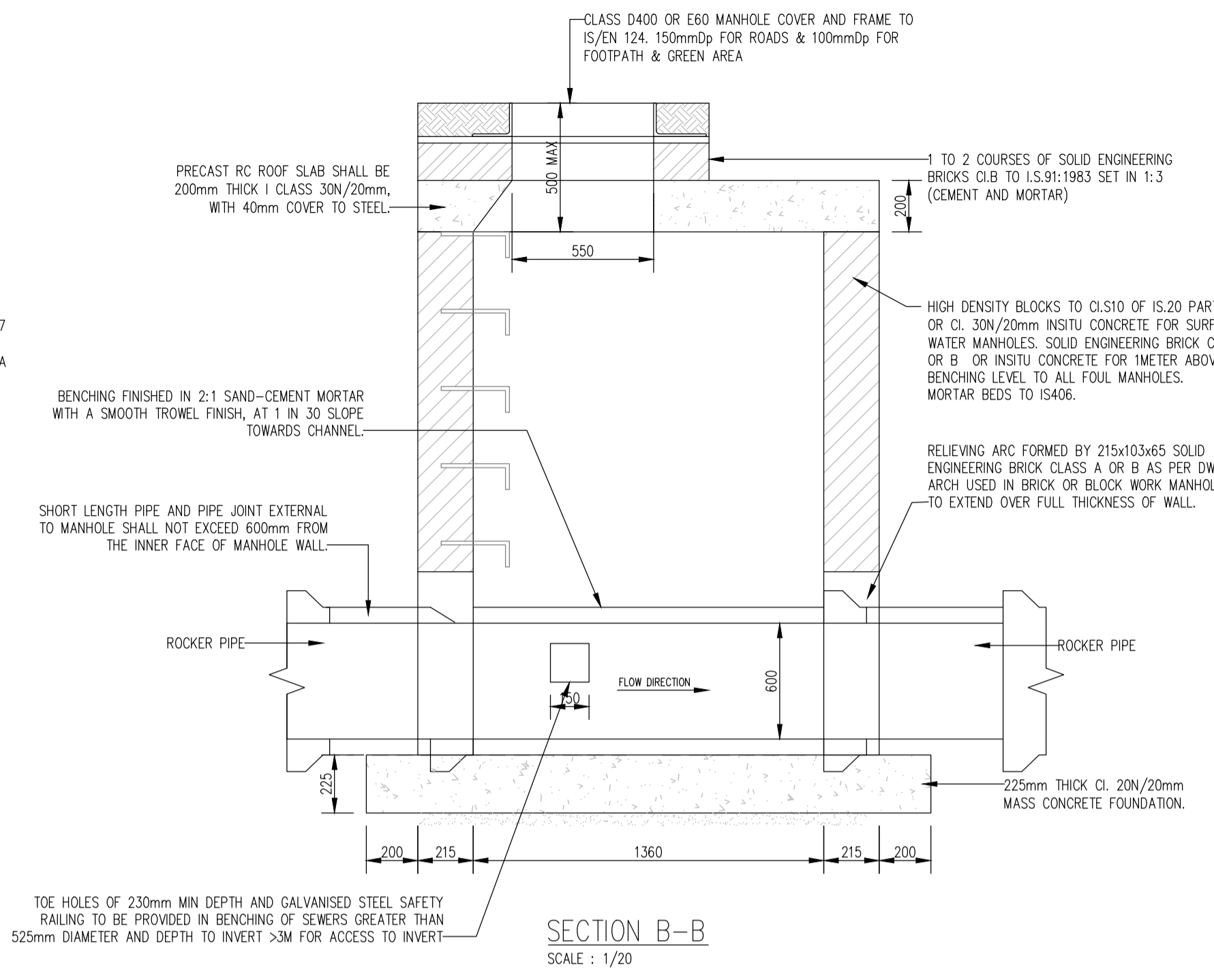
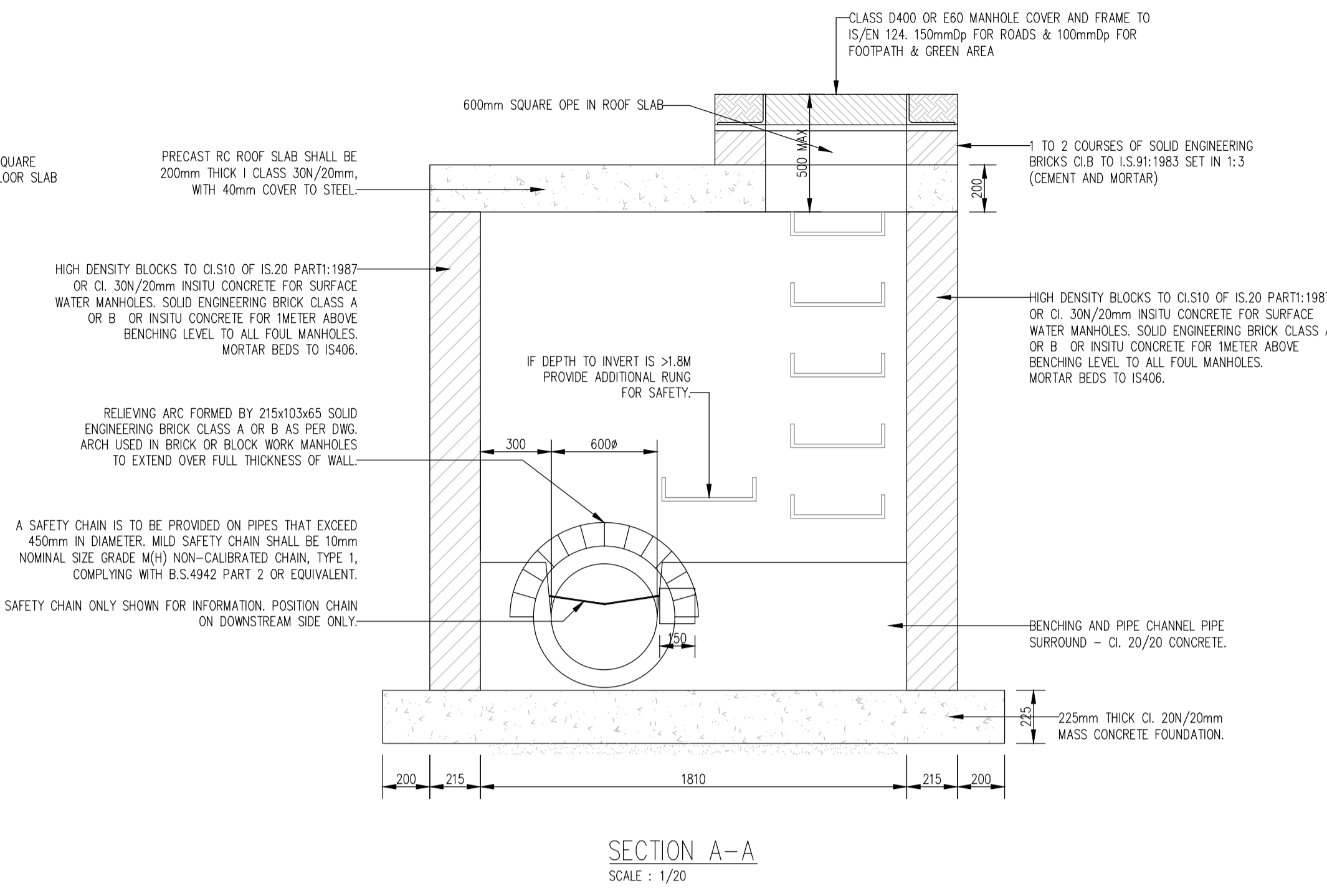
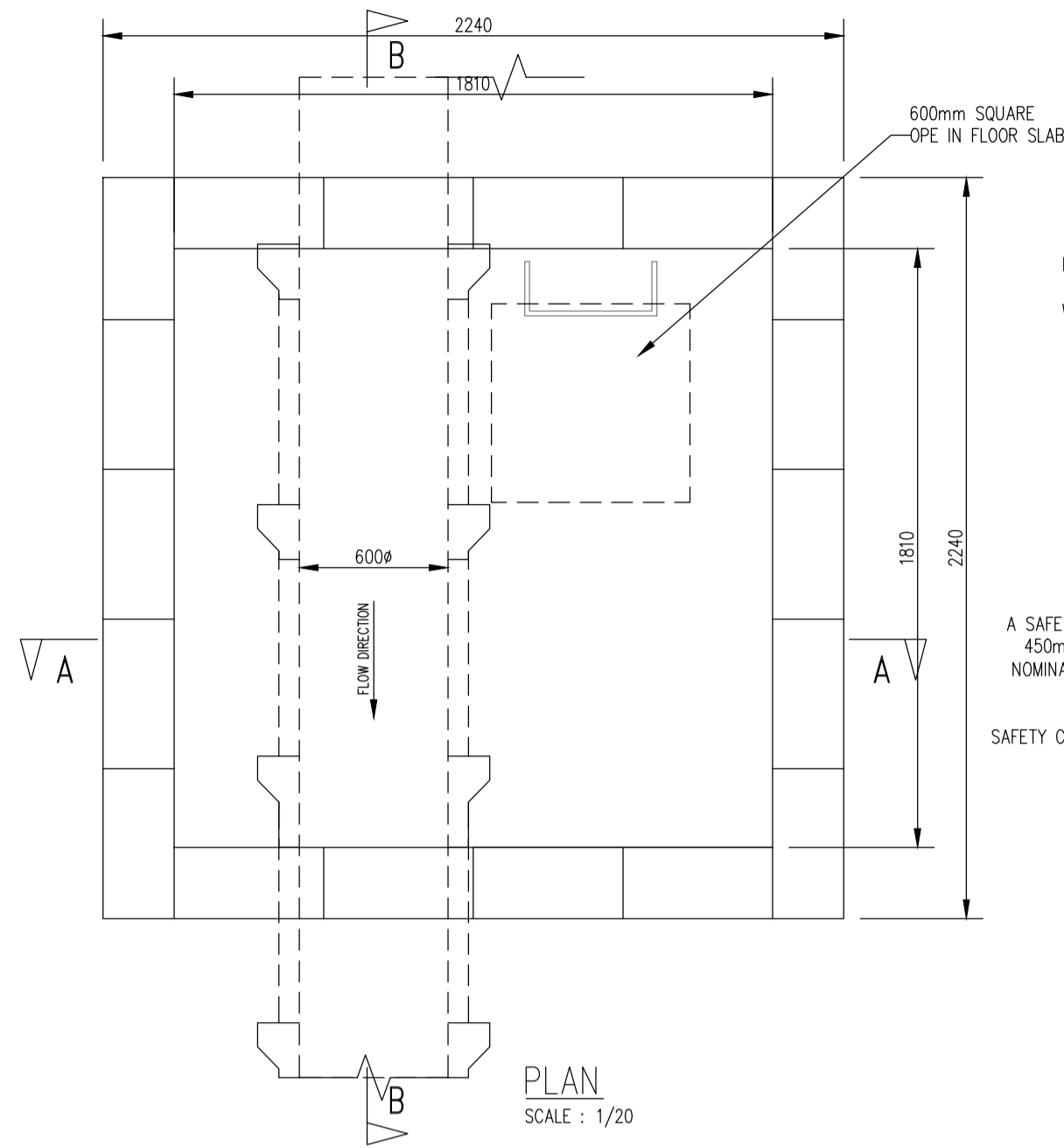
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Rev. No.	Date	REVISION NOTE	Dim. By	Chkd. By
P1	07.05.2021	REVISED FOR PLANNING	JS	DD

Architect	O'Mahony Pike
Project	Proposed Development At O'Devaney Gardens
Title	Drainage Details Sheet 2 of 5
Dwg. No.	ODG-CSC-XX-XX-DR-C-0017
Date	29.05.2020
Dim by	JS
Chkd by	DD
Aprvd by	DR
Scale	AS SHOWN @ A1
Revision	P1

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Health & Safety	OSHAS 18001:2007

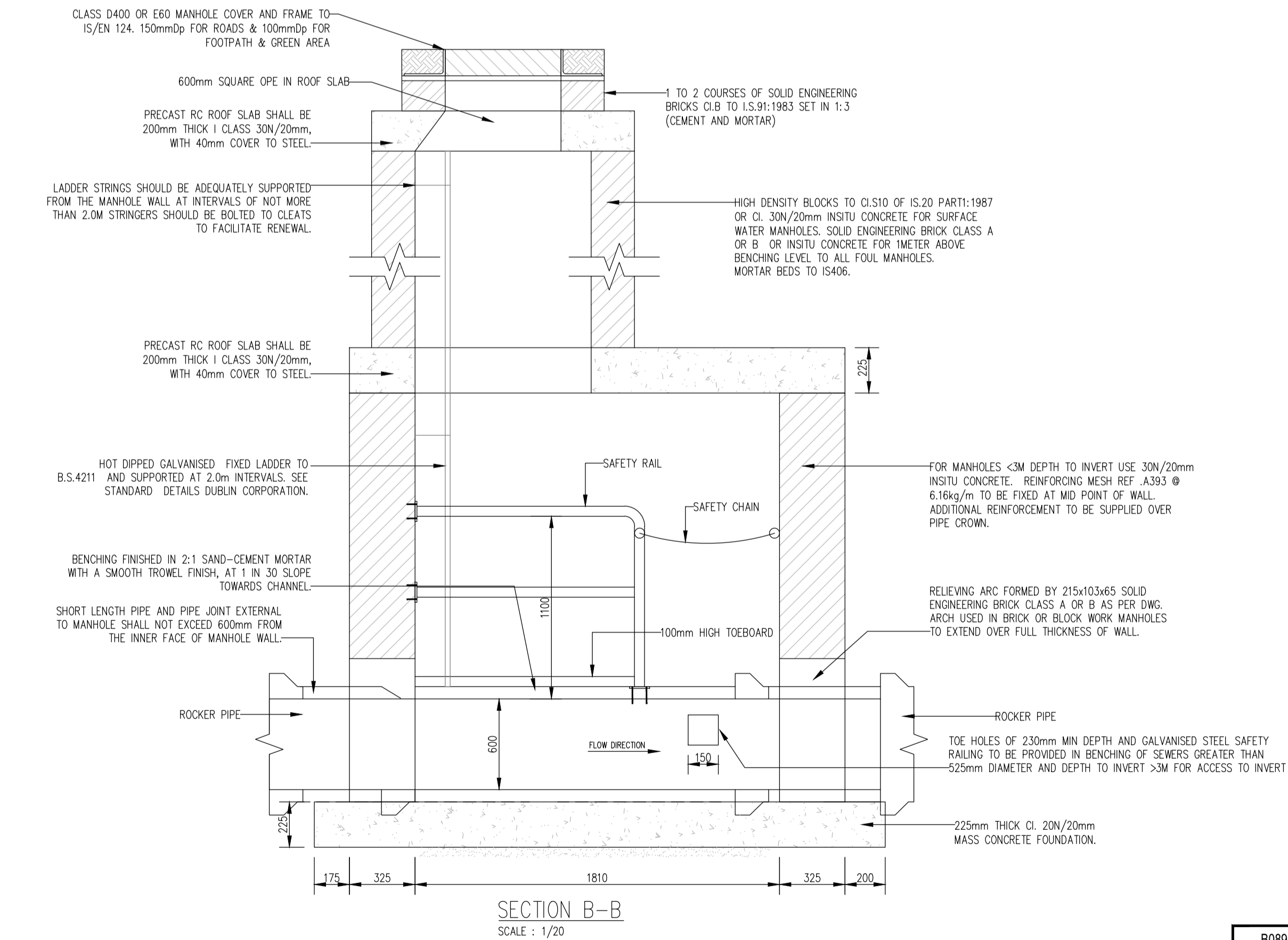
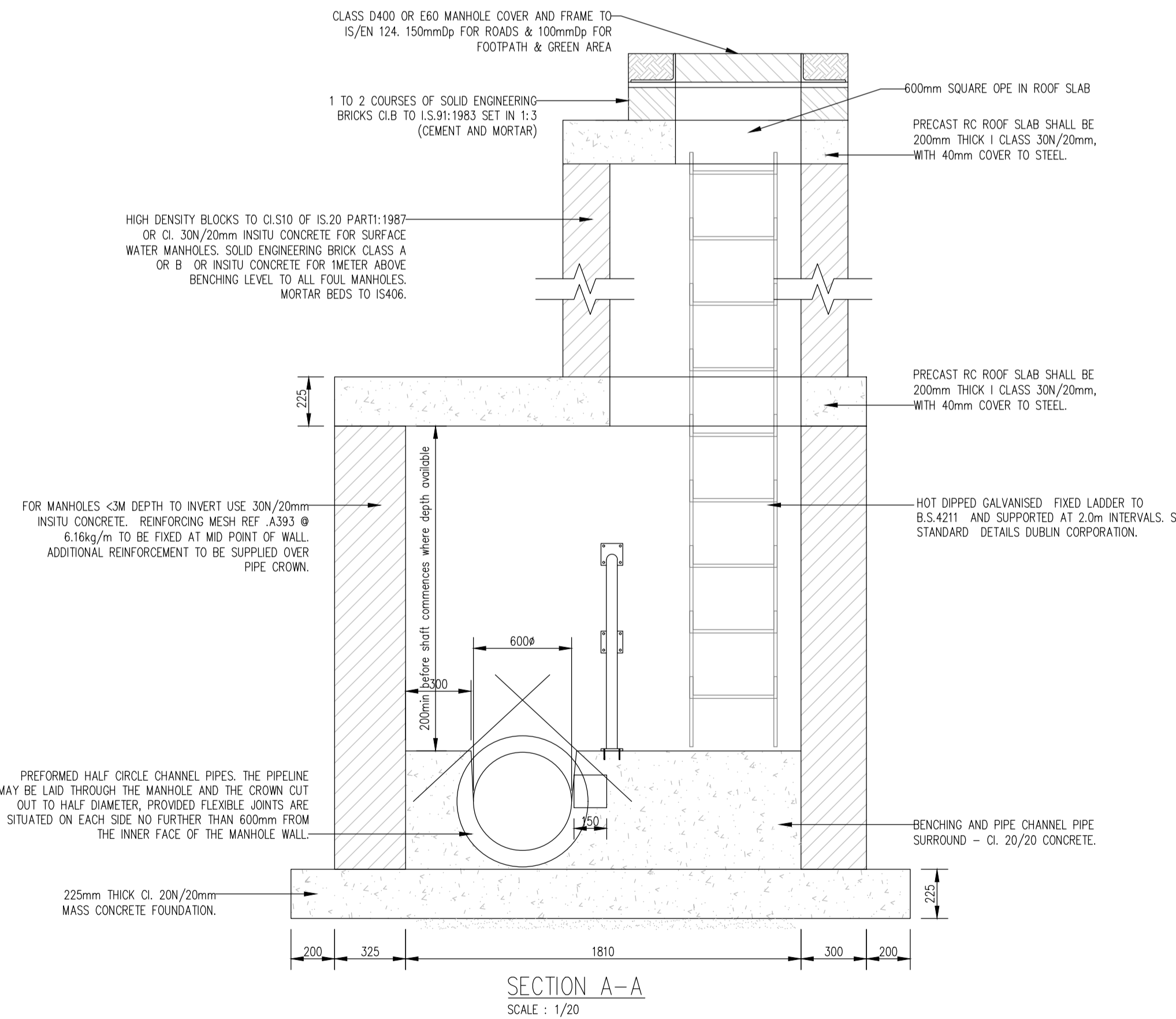
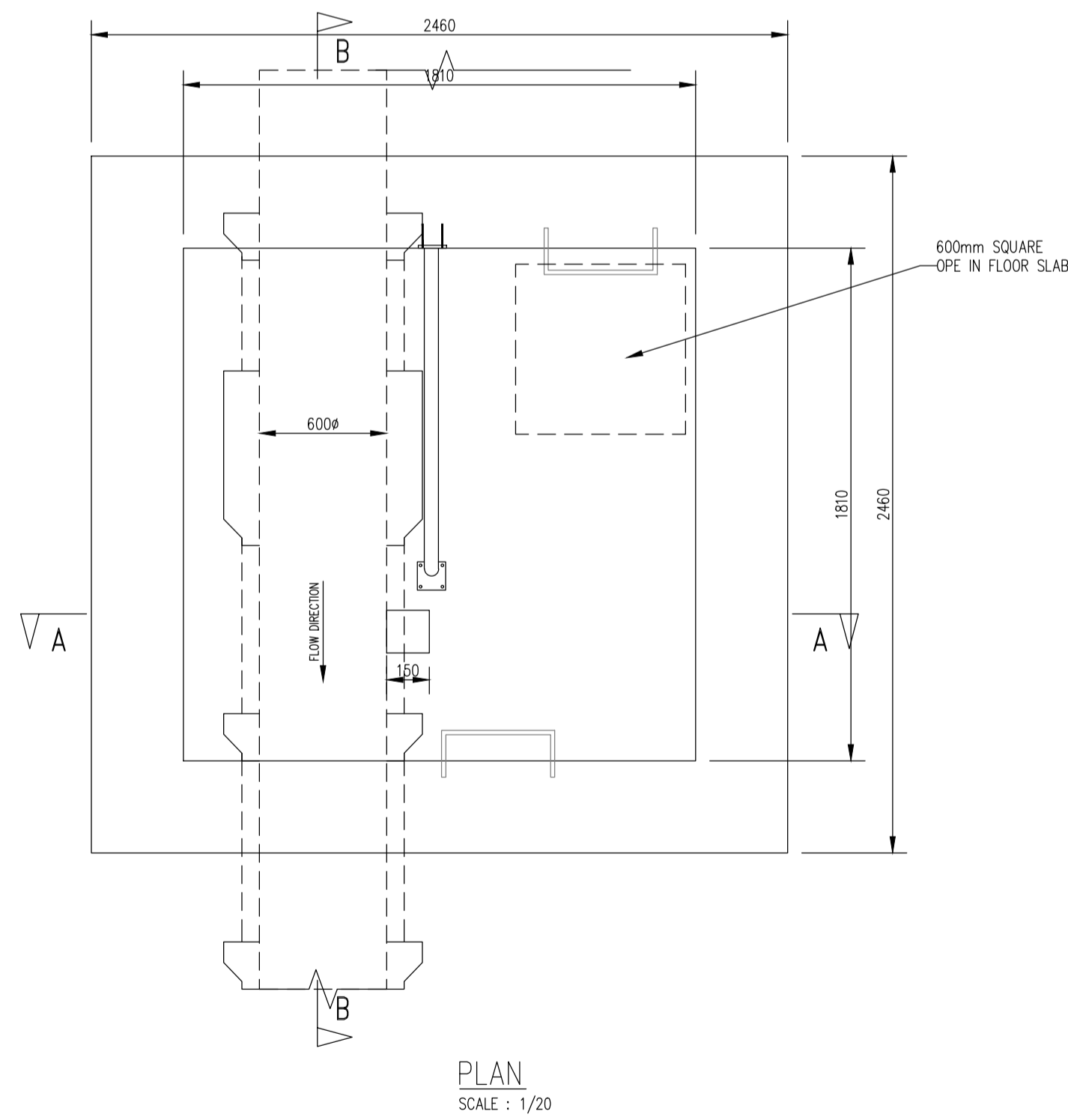
TYPE D MANHOLE



- NOTES:**
- BRANCH MANHOLES: MANHOLE WIDTH INCREASED BY 300mm ON THE SIDE OF THE BRANCH FOR PIPE DIAMETERS LESS THAN 450mm AND 500mm FOR PIPE DIAMETER GREATER THAN 450mm
 - ALL MANHOLES ARE TO BE CONSTRUCTED IN MASS CONCRETE, CL.30/20, UNLESS PREVIOUSLY AGREED WITH CONSULTING ENGINEER.
 - PRIOR TO LAYING OF PIPES, MANHOLE FLOORS WILL BE PLACED AND PIPES LAID CONTINUOUSLY THROUGH MANHOLES.
 - MIN. COVER TO SURFACE WATER AND FOUL SEWER PIPES: ROADS: 1.2m TO TOP OF PIPE DRIVEWAYS & ACCESS: 1.2m FIELDS/FOOTPATHS: 0.9m IF NOT THEN PIPES SHALL BE SURROUNDED IN 150mm CONCRETE 20N/mm² INSITU CONCRETE TO BE USED
 - ALL MANHOLE COVERS IN FIELDS/GRASS MARGINS ETC. ARE TO HAVE 200mm WIDE x 150mm DEEP MOWING KERB, STEEL TROWELLED FINISH, CONC. SURROUND.
 - AN APPROVED EPOXY MORTAR (E.G. RESIFIX NO. 1:5:B.D. CORITTE MORTAR: LOCKSET 'D' OR SIMILAR) IS TO BE USED WHEN FIXING MANHOLE RUNGS/STEP IRONS AFTER CONSTRUCTION OF THE WALLS. THE CONCRETE IS TO BE DRY, HOLE TOLERANCES TO BE APPROX. 5/10mm ALL ROUND AND CLEANED OUT WITH COMPRESSED AIR AND ALL MANUFACTURER'S RECOMMENDATIONS ARE TO BE FOLLOWED.
 - WHERE MANHOLE IS IN CARRIAGEWAY PROVIDE 450mm MIN. COVER BETWEEN ROAD SURFACE AND ROOF SLAB AND USE ENGINEERING BRICK CLASS 'B' TO I.S. 91:1974 IN SHAFT.
 - ALL MANHOLE COVERS & FRAMES TO CLASS D400 AND TO COMPLY WITH IS/EN 124 REQUIREMENTS FOR LOAD CLASS & SPECIFICATION.
 - REFER TO DUBLIN CORPORATIONS STANDARD MANHOLE DETAILS FOR FULL DETAILS OF MANHOLES.

NOTE: MANHOLES TO BE BUILT IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS

TYPE E MANHOLE



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Rev. No.	Date	REVISION NOTE
P1	07.05.2021	REVISED FOR PLANNING

Dr. By	Chkd. By
JS	DD

Architect	Project
O'Mahony Pike Proposed Development At O'Devaney Gardens	Drainage Details Sheet 3 of 5

Dwg. No.	Date	Drn. by	Chkd. by	Apprd. by	Scale	Revision
ODG-CSC-XX-XX-DR-C-0018	29.05.2020	JS	DD	DR	AS SHOWN @ A1	P1

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Environment: I.S. EN ISO 14001:2004
NSAI Certified
Health & Safety: OHSAS 18001:2007

NOTES:

- 1 ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- 2 THE MINIMUM DEPTH OF COVER FROM THE FINISHED SURFACE TO THE EXTERNAL CROWN OF THE PIPE SHALL BE 750mm FOR SERVICE CONNECTIONS, 900mm FOR WATER MAINS. GREATER DEPTHS OF COVER AND/OR PIPE STRENGTH AND/OR A HIGHER CLASS OF BEDDING MATERIAL MAY BE REQUIRED WHERE HIGH TRAFFIC LOADING IS ANTICIPATED. THE MAXIMUM COVER SHOULD NOT EXCEED 1.2M WHERE PRACTICABLE.
- 3 CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE WATER MAIN IS LOCATED IN ROADS, FOOTPATHS OR WHEN THE NEAREST PART OF THE TRENCH IS WITHIN 1M OF THE PAVED EDGE OF THE ROADWAY, CLAUSE 808 IS TO BE COMPACTED AS PER CLAUSE 802 OF THE TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS.
- 4 SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO THE APPROVAL OF IRISH WATER.
- 5 PIPE BEDDING SHALL COMPLY WITH WIS 4-08-02 AND IGN 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm GRADED AGGREGATE OR 10mm SINGLE SIZED AGGREGATE IS EN 13242.
- 6 IN SOFT GROUND CONDITIONS (CBR < 5) THE MATERIAL SHOULD BE EXCAVATED OUT AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS. SHALL REPLACE THE EXCAVATED MATERIAL, WRAPPED IN GEO-TEXTILE WRAPPING, ALTERNATIVELY, SPECIAL PIPE SUPPORT ARRANGEMENTS, INCLUDING PILING ETC. MAY BE REQUIRED WHERE THE DEPTH OF SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO ASSESSMENT BY IRISH WATER BEFORE ADVANCING WITH THE WORK.
- 7 PIPES SHALL NOT BE SUPPORTED ON STONES OR ROCKS, OR ANY HARD OBJECT AT ANY POINT ALONG THE TRENCH. ROCK SHALL BE EXCAVATED TO A DEPTH OF 150mm BELOW

THE ACTUAL DEPTH OF THE TRENCH WITH THE VOID FILLED WITH CLAUSE 804 MATERIAL IN ACCORDANCE WITH THE TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL.

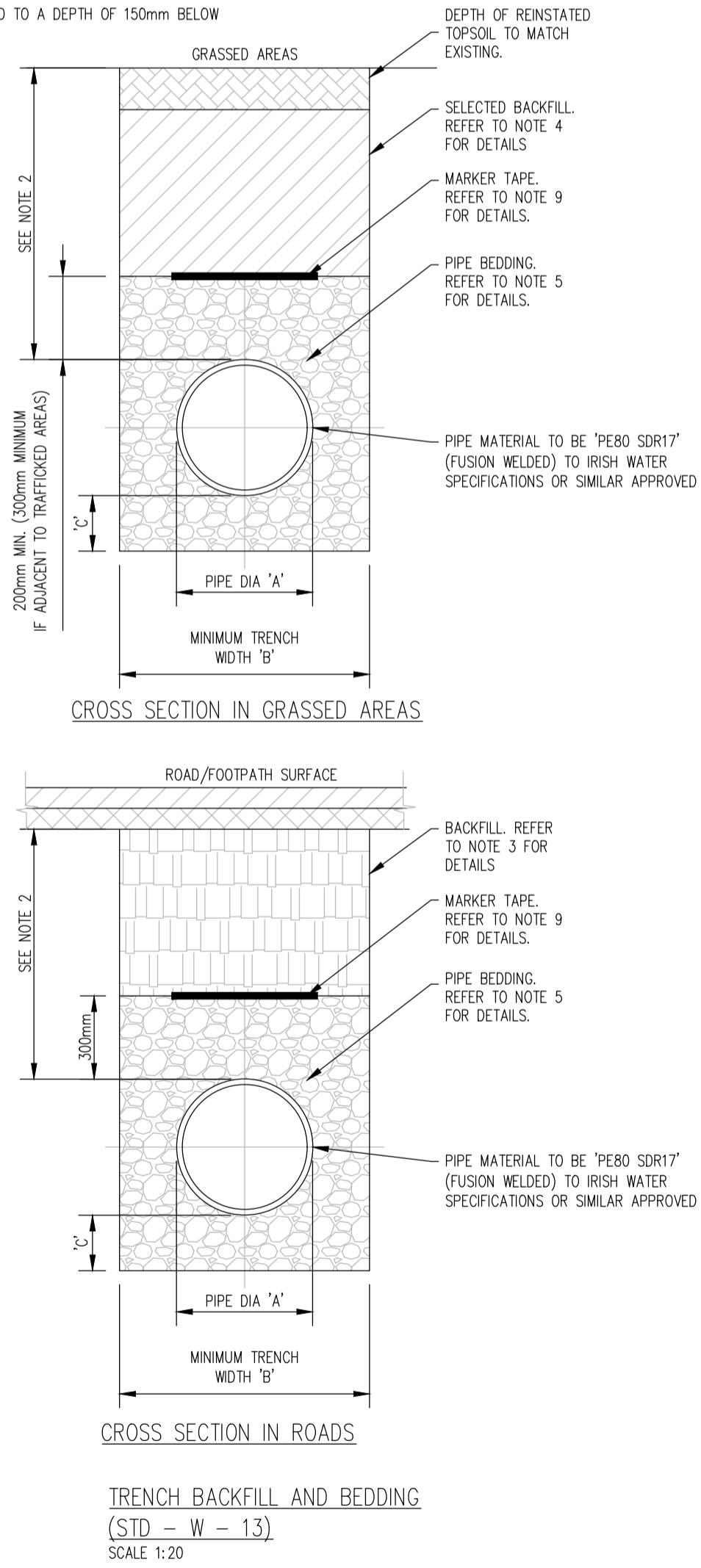
8 SHOULD MINIMUM COVER NOT BE ACHIEVABLE, CONCRETE GRADE C8/10 SHALL BE USED AS BACKFILL MATERIAL.

9 MARKER TAPE TO BE 400mm WIDE BLUE POLYETHYLENE MATERIAL IN ACCORDANCE WITH EN 12163. PLASTIC PIPES SHALL HAVE WARNING TAPE INCORPORATED A REINFORCED BAND BRACING WIRE. SERVICE PIPES SHALL HAVE 200mm WIDE MESH TAPE. MARKER TAPE TO BE LAID AT TOP OF PIPE BEDDING LAYER.

10 TRENCH WIDTHS FOR PIPE SIZES $\leq 300\text{mm}$ MAY BE $\leq 500\text{mm}$, SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.

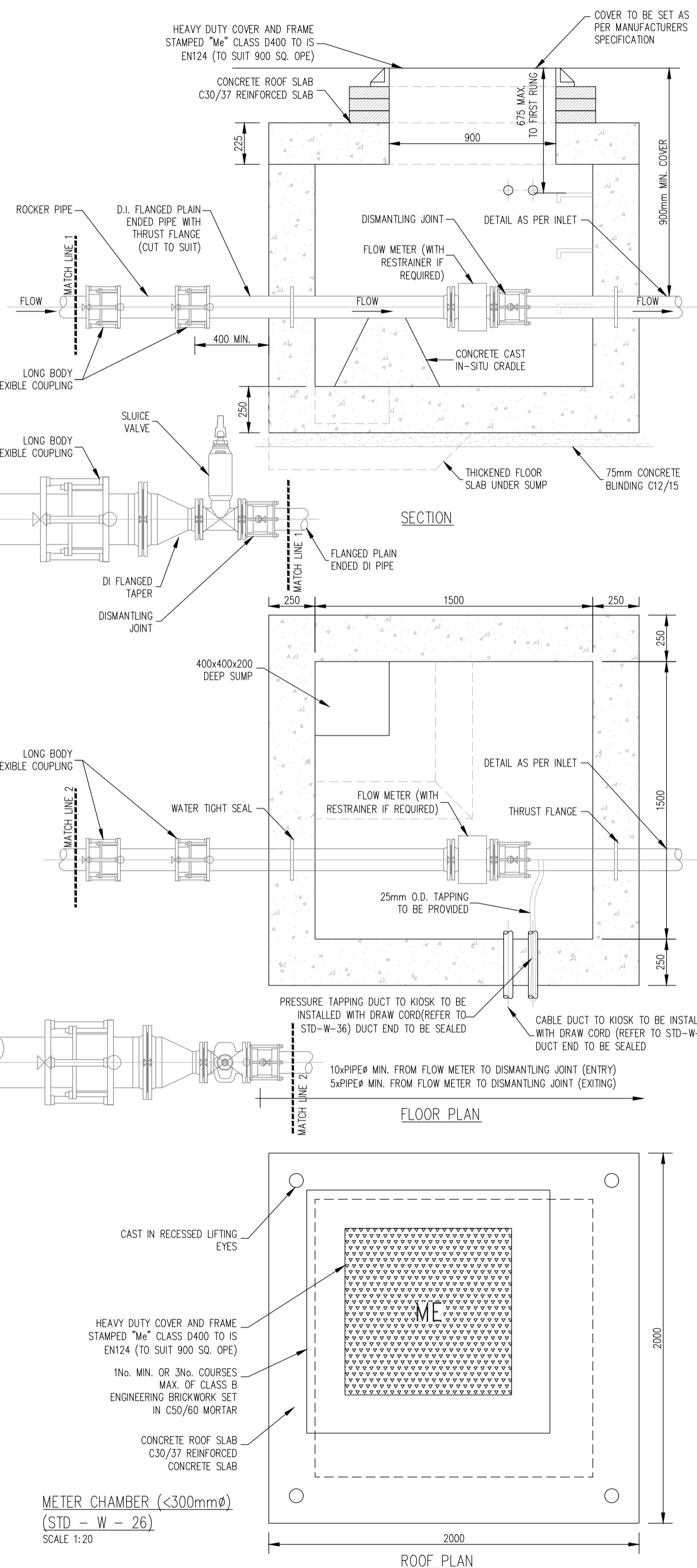
PIPE DIAMETER 'A' (mm)	DEPTH OF BEDDING 'C' (mm)
< 200	150
> 250	200

PIPE DIAMETER 'A' (mm)	TRENCH WIDTH 'B' (mm)
< 80	< SEE NOTE 10.
100	500
150	600
200	600
250	750
300	750
350	750
400	900
450	900



NOTES:

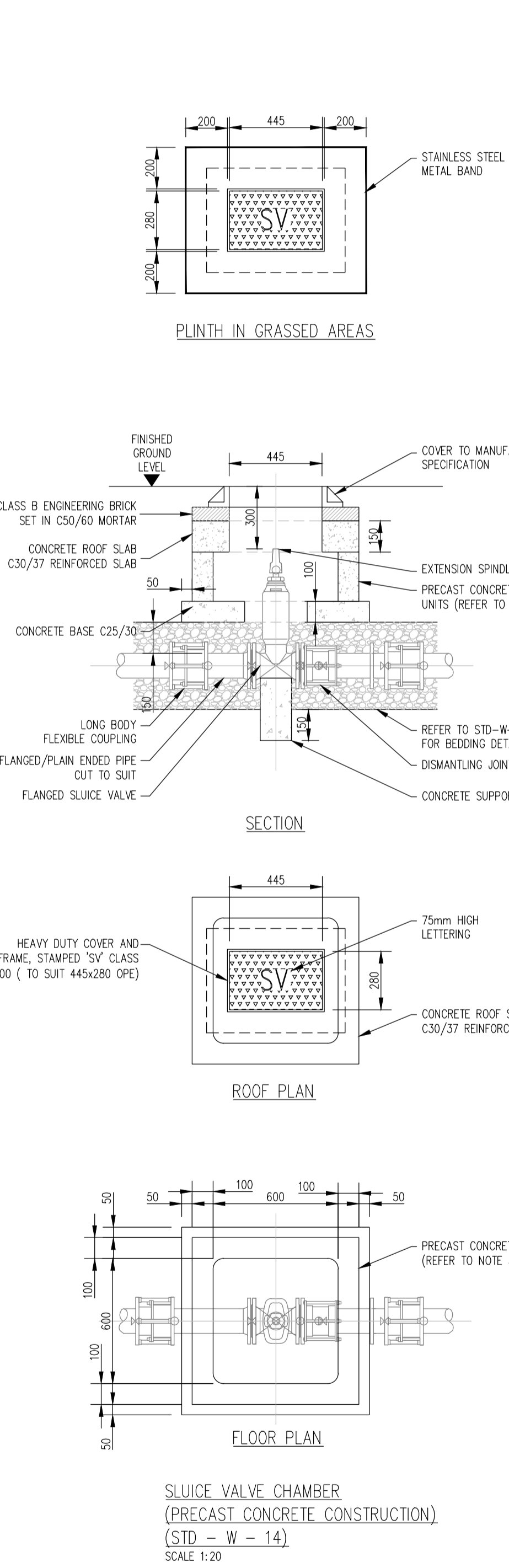
1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. STRUCTURAL DESIGN AND REINFORCEMENT DETAIL TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO IRISH WATER FOR REVIEW.
3. CONCRETE FOR FLOW METER CHAMBER TO BE C30/37
4. PRECAST METER CHAMBER(WITH CONCRETE DETAIL) MAY BE USED SUBJECT TO IRISH WATER APPROVAL.
5. METER CHAMBER SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO



6. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND COVER IN GRASS AREAS.
7. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
8. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 12201:2011.
9. ALL CHAMBERS TO BE CHECKED FOR UPLIFT

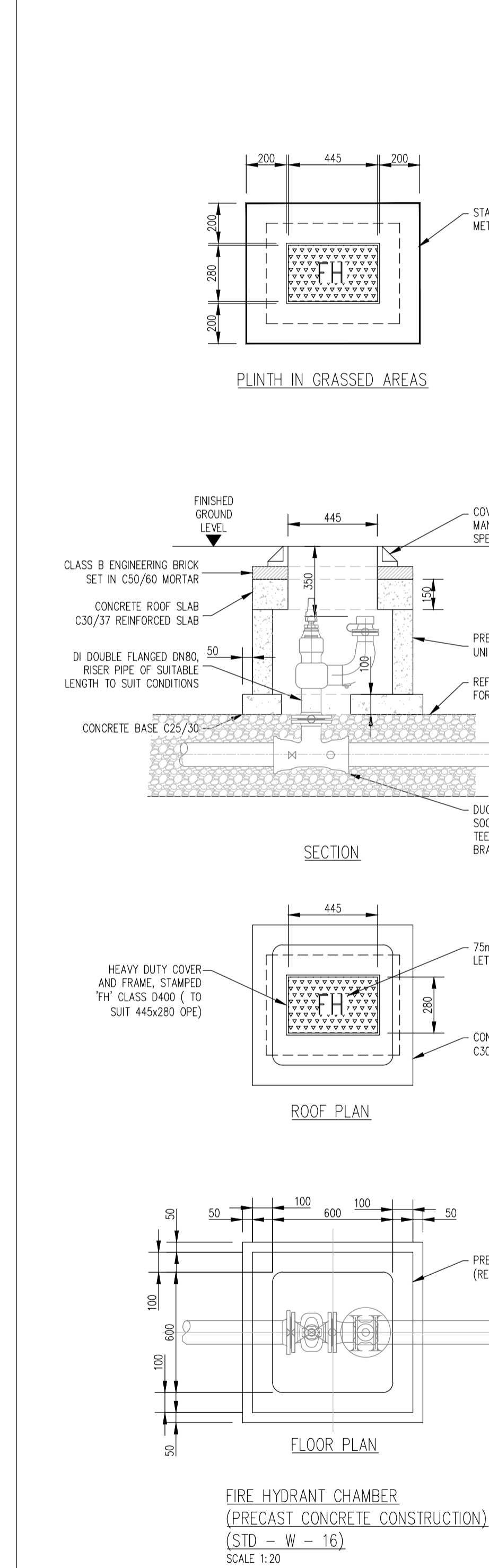
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. SLUICE VALVE CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 OR BS 5834. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF IRISH WATER.
3. SLUICE VALVES SHALL BE RESILIENT SEATED AND SHALL COMPLY WITH BS 5163-1, BS 5163-2, IS EN 1074-1, IS EN 1074-2, OR EQUIVALENT EU SPECIFICATIONS.
4. ALL SLUICE VALVES SHALL BE ANTI-CLOCKWISE CLOSING.
5. VALVE CHAMBER TO BE CONSTRUCTED OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVELY PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED SUBJECT TO APPROVAL FROM IRISH WATER.
6. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER STD-W-13.
7. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545.
8. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND COVER IN GREEN AREAS.
9. THRUST BLOCKS(NOT SHOWN ON DRAWING) TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES AND BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
10. ANTI-CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206
12. ALL THRUST FLANGES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING No. STD-W-28. THRUST BLOCKS NOT SHOWN FOR CLARITY



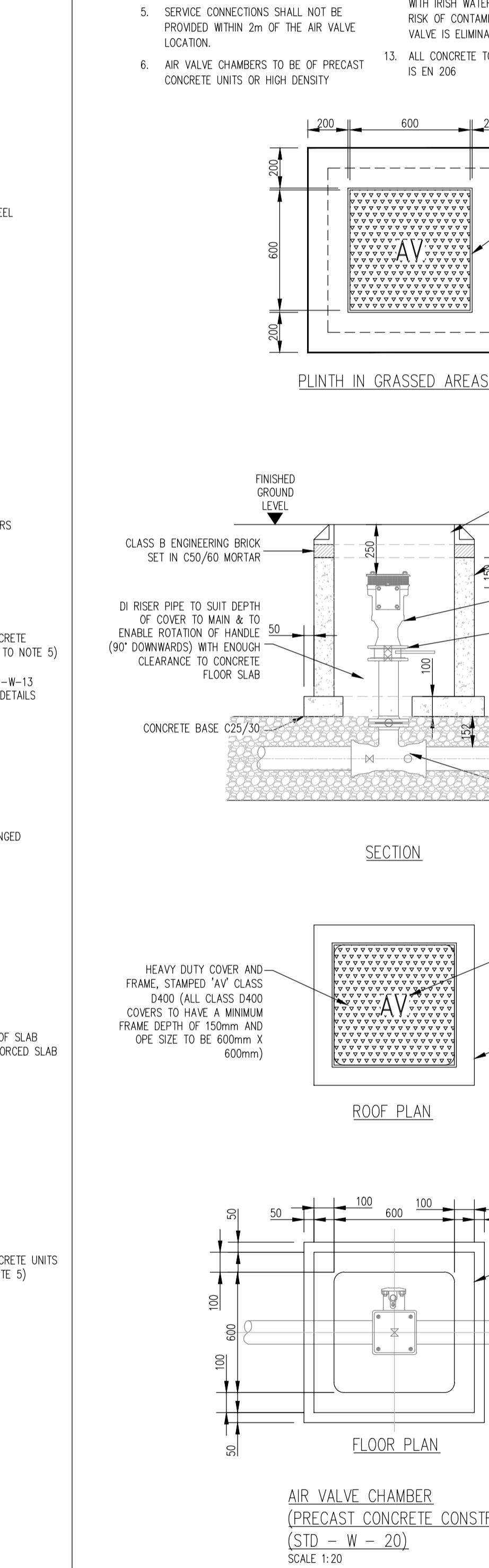
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. HYDRANT CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 OR BS 5834. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF IRISH WATER.
3. ALL HYDRANTS, SURFACE BOX FRAMES AND COVERS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF IS EN 14339. IS EN 1074-6 & BS 750. FIRE HYDRANTS SHALL BE TYPE 2. THE HYDRANT INLET SHALL BE 80mm DIAMETER WITH PN16.
4. ALL HYDRANTS SHALL BE CLOCKWISE CLOSING.
5. VALVE CHAMBER TO BE CONSTRUCTED OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVELY PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED SUBJECT TO APPROVAL FROM IRISH WATER.



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. AIR VALVE CHAMBERS SHALL BE COVERED WITH APPROVED VENTILATED HEAVY DUTY METAL COVERS TO IS EN 124 RATING D400. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF IRISH WATER.
3. AIR VALVES SHALL COMPLY WITH THE REQUIREMENTS OF IS EN 1074-4. AIR VALVES SHALL BE DOUBLE ORIFICE TYPE AND SHALL INCLUDE AN ISOLATING VALVE. THE ISOLATING VALVE SHALL BE A GATE VALVE CONFORMING TO IS EN 1074-2 AND SHALL BE OF A BOLTLESS BONNET DESIGN.
4. THE AIR VALVES SHALL OF BODIES AND COVERS OF CAST IRON TO BS EN 1563 WITH FLANGES DRILLED TO PN 16 IN ACCORDANCE WITH BS EN 1092. EACH VALVE SHALL HAVE A LARGE AND A SMALL AIR ESCAPE ORIFICE WITH AN ISOLATING VALVE.
5. SERVICE CONNECTIONS SHALL NOT BE PROVIDED WITHIN 2m OF THE AIR VALVE LOCATION.
6. AIR VALVE CHAMBERS TO BE OF PRECAST CONCRETE UNITS OR HIGH DENSITY



7. PRECAST CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER STD-W-13.
8. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545.
9. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND COVER IN GREEN AREAS.
10. THRUST BLOCKS(NOT SHOWN ON DRAWING) TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES AND BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
11. ANTI-CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
12. THE LOCATION OF THE AIR VALVE SHALL BE THE SUBJECT OF PARTICULAR AGREEMENT WITH IRISH WATER TO ENSURE THAT THE RISK OF CONTAMINATION THROUGH THE VALVE IS ELIMINATED.
13. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206

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Rev. No.	Date	REVISION NOTE

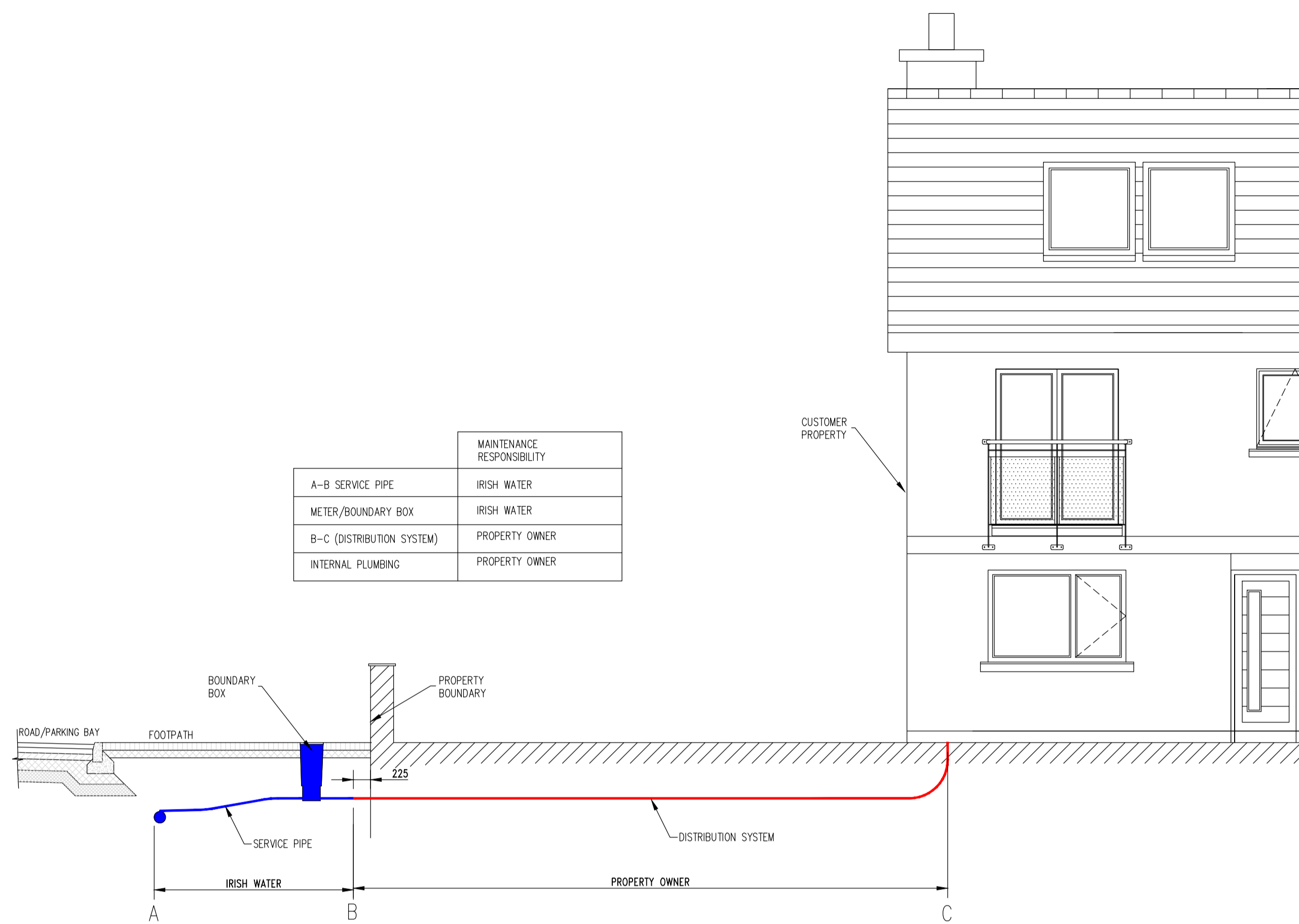
Architect	Project	Title	Dwg. No.	Date	Dm by	Chkd by	Scale	Aprvd by	Scale	Revision
O'Mahony Pike	Proposed Development At O'Devaney Gardens	Watermain Details Sheet 1 of 2	ODG-CSC-XX-XX-DR-C-0019	29.05.2020	JS	RFM	DR	AS SHOWN @ A1		

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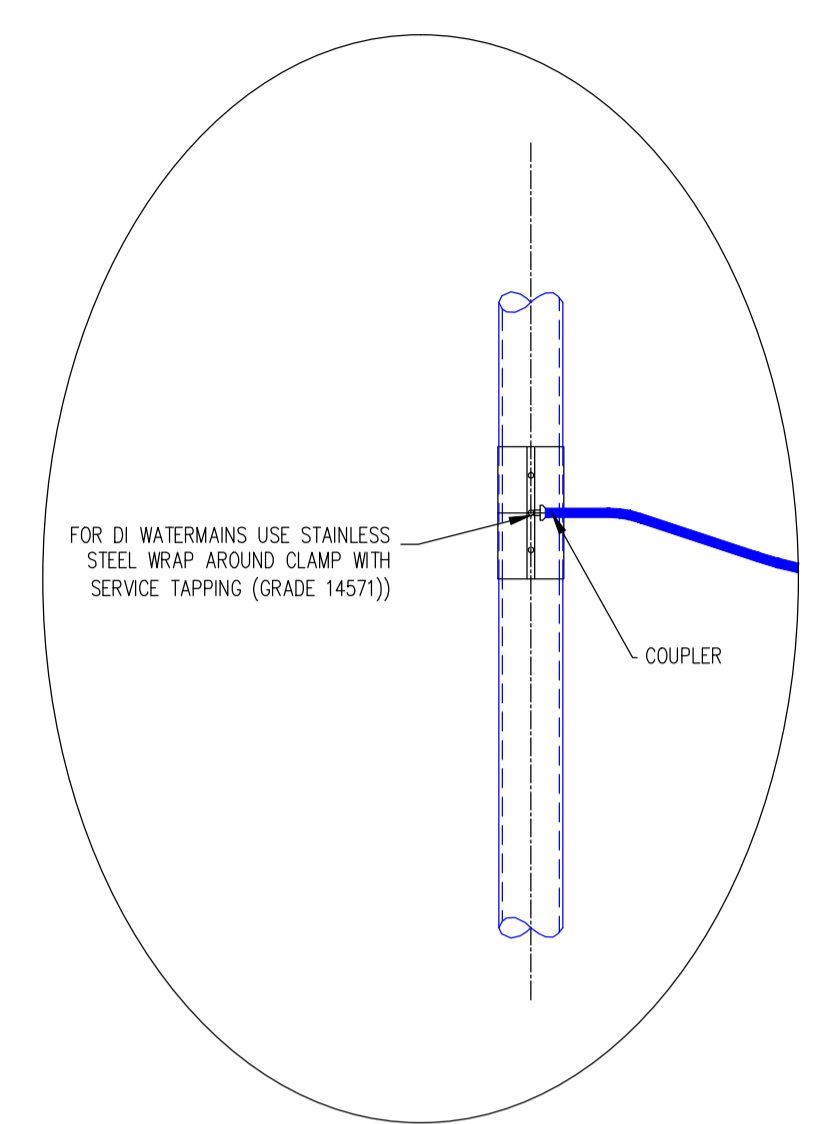
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Quality Environment
Health & Safety

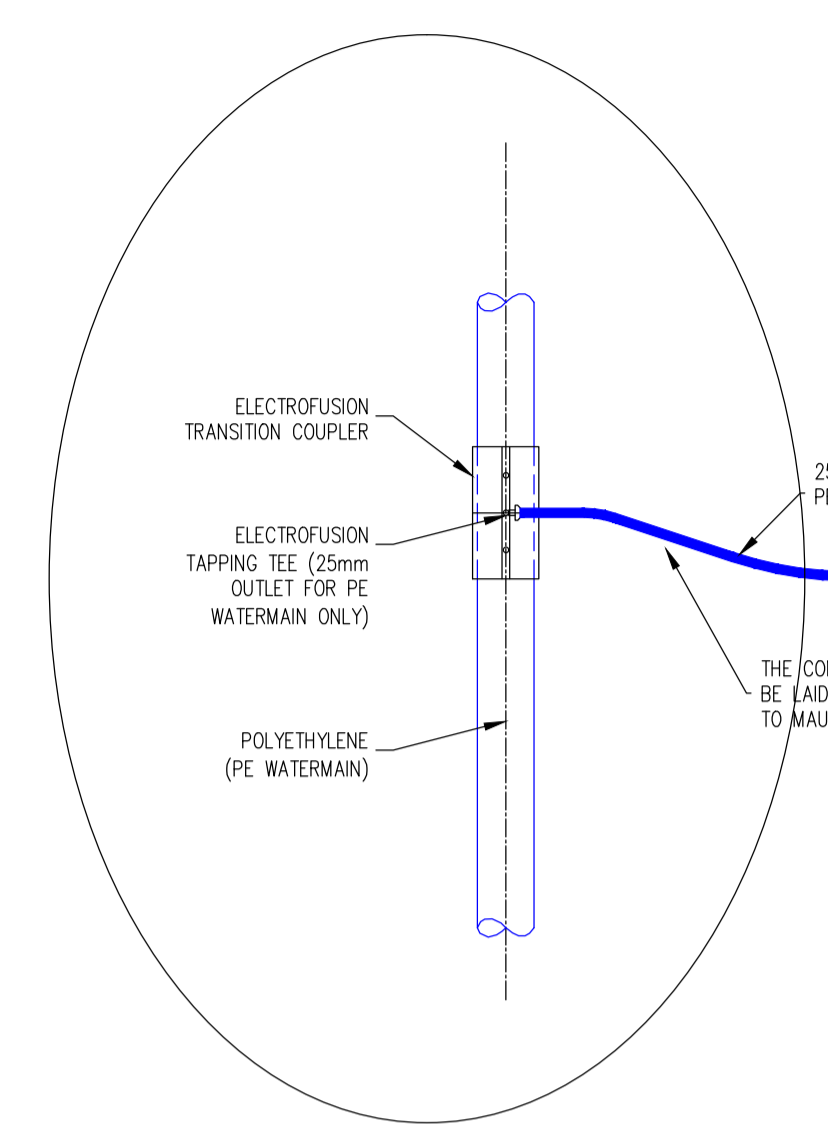
IS. EN ISO 9001:2008
I.S. EN ISO 14001:2004
I.S. EN ISO 50001:2011
OHSAS 18001:2007



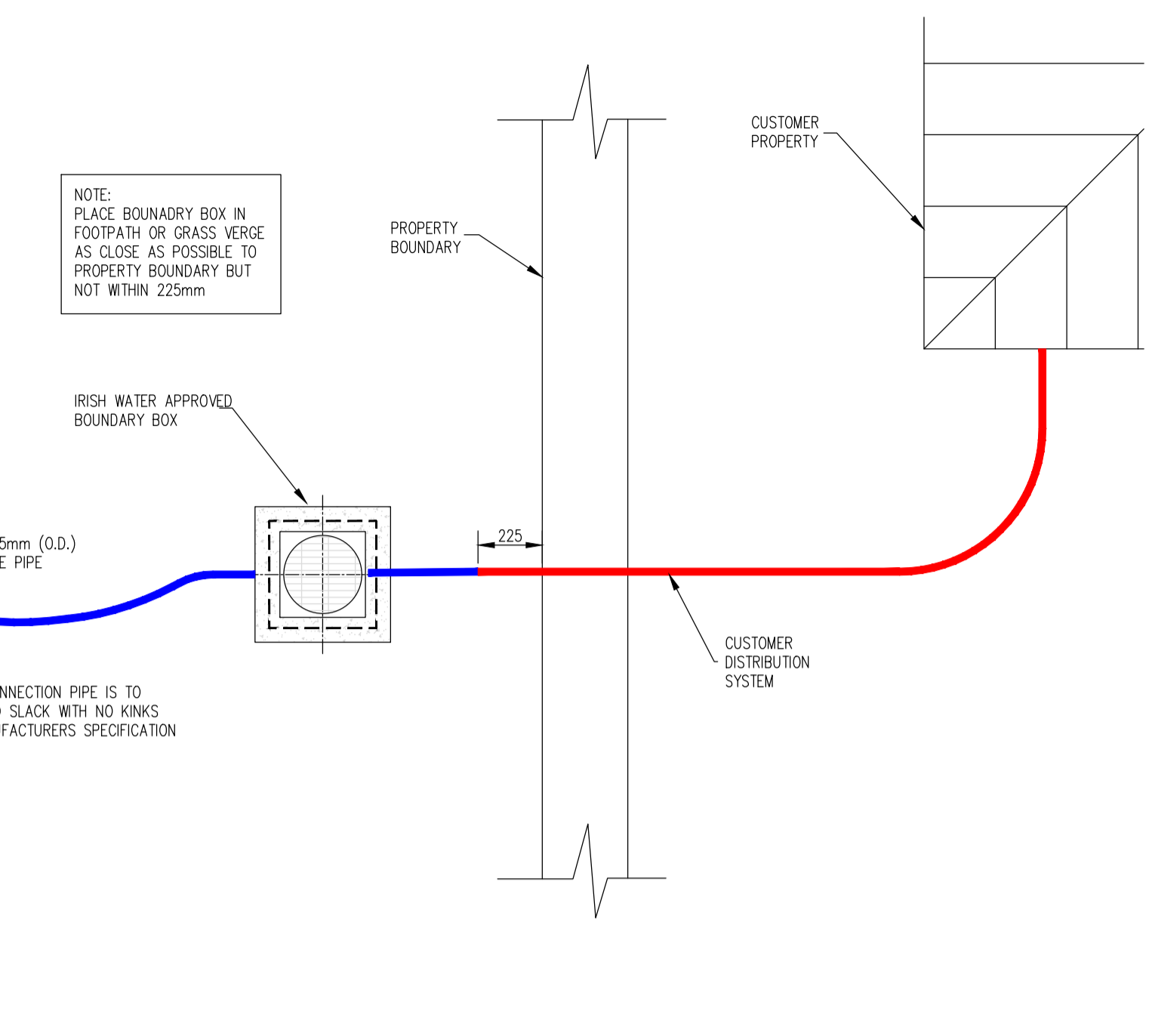
WATER SERVICE CONNECTION RESPONSIBILITY
SCALE 1:50



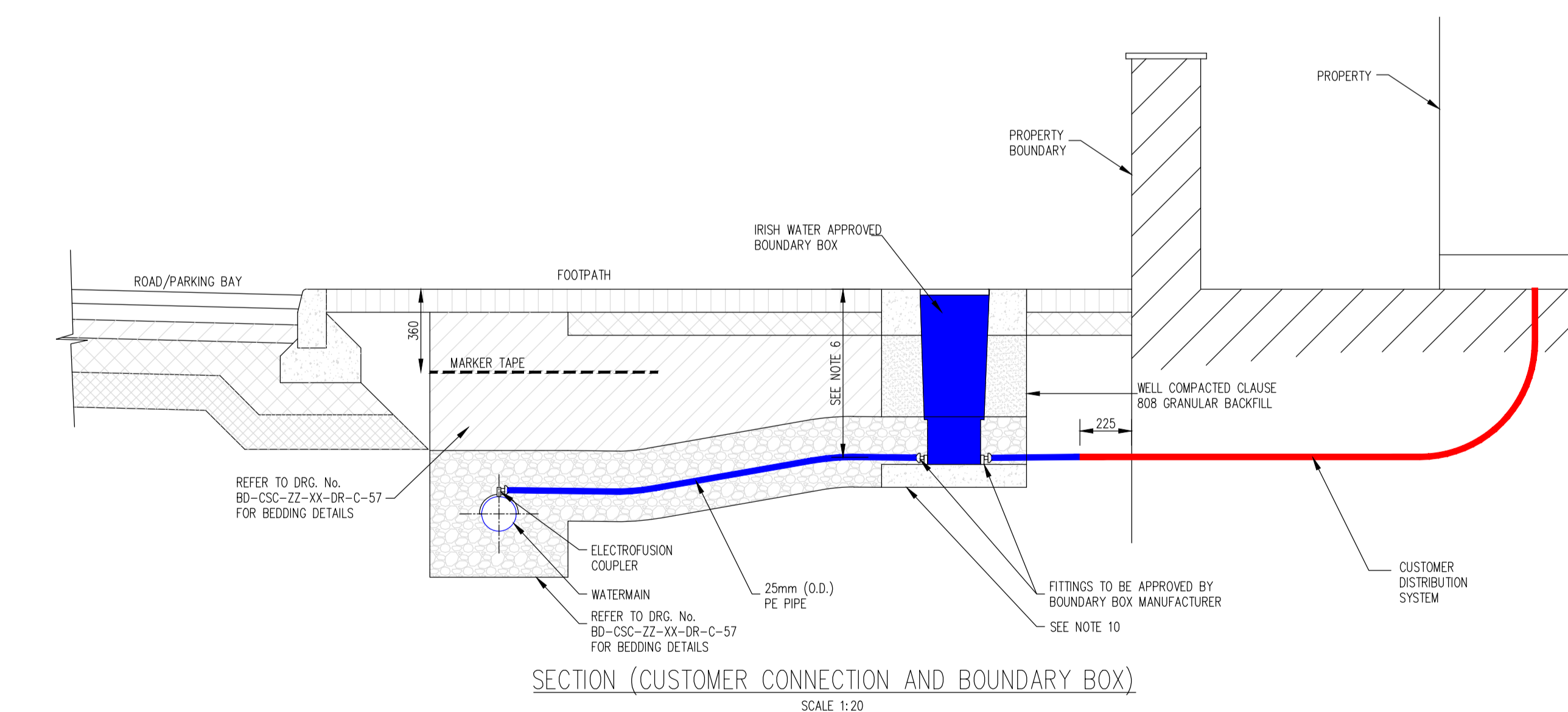
FOR DUCTILE IRON (DI) WATERMAIN ONLY
SCALE 1:20



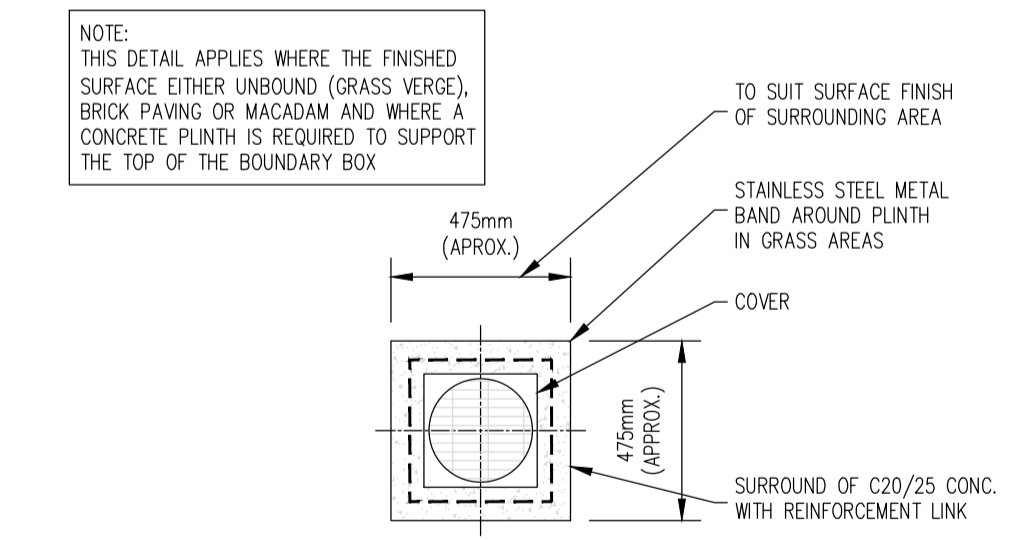
FOR POLYETHYLENE (PE) WATERMAIN ONLY
SCALE 1:20



PLAN (CUSTOMER CONNECTION AND BOUNDARY BOX)
SCALE 1:20



SECTION (CUSTOMER CONNECTION AND BOUNDARY BOX)
SCALE 1:20



PLAN (CONCRETE SURROUND TO BOUNDARY BOX)
SCALE 1:20

- GENERAL NOTES -
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
 - FOR CONNECTION TO AN EXISTING MAIN THE CONNECTION SHALL BE AS PER THE PIPE MANUFACTURER'S SPECIFICATION.
 - ELECTROFUSION COUPLING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN206.
- BOUNDARY BOX NOTES -
- THE BOUNDARY BOX TO BE IN ACCORDANCE WITH THE IRISH WATER SPECIFICATION, INCORPORATING A G.I.S. MANFOLD, STOP-TAP, FROST PULL AND NON RETURN VALVE.
 - THE BOUNDARY BOX SHALL BE POSITIONED IN PUBLIC SPACE AND AS CLOSE AS POSSIBLE TO THE PROPERTY BOUNDARY BUT NO PART OR FITTING TO BE WITHIN 225mm OF THE PROPERTY LINE.
 - THE BOUNDARY BOX SHALL BE LOCATED WHERE IT IS SAFE TO OPEN THE COVER AND ACCESS THE STOP TAP OR VISUALLY READ THE METER, I.E. ON A FOOTPATH OR VERGE AND NOT IN A CARRIAGEWAY.
 - THE SURFACE BOX COVER ON THE BOUNDARY BOX SHOULD BE NOT LESS THAN GRADE C (BS 5834:2-2011), AND THE BOUNDARY BOX SHOULD BE LOCATED SUCH THAT HEAVIER GRADES OF COVER WOULD NOT BE REQUIRED.
 - THE SHAFT OF THE BOUNDARY BOX SHOULD BE INSTALLED VERTICALLY AND THE SURFACE BOX/COVER INCLINED TO MATCH THE SURFACE GRADIENT.
 - THE BOUNDARY BOX IS TO BE INSTALLED AT A MINIMUM DEPTH OF 600mm (+/-25mm) TO THE CROWN OF THE INLET AND THE OUTLET FITTINGS ON THE OUTSIDE OF THE BOX.
 - THE SERVICE CONNECTION PIPE SHALL NOT BE WRAPPED AROUND THE SHAFT OF THE BOUNDARY BOX OR BENT IN ANY RADIUS LESS THAN THAT APPROVED BY THE MANUFACTURER.
 - THE PIPE FITTINGS TO THE BOUNDARY BOX SHALL BE APPROVED BY THE BOUNDARY BOX MANUFACTURER.
 - THE BOUNDARY BOX SHALL BE INSTALLED HYGIENICALLY AND LEFT CLEAN AND FREE OF CONSTRUCTION WASTE OR DIRT FOR LATER METER INSTALLATION BY IRISH WATER.
 - BOX TO BE FOUNDED ON 100mm DEPTH OF C12/15 CONCRETE AND SURROUNDED WITH CLAUSE 808 GRANULAR MATERIAL.
 - THE DESIRABLE MINIMUM DEPTH OF COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF A SERVICE CONNECTION SHALL BE 750mm WITH AN ABSOLUTE MINIMUM DEPTH OF 600mm FOR SHORT DISTANCES (SUBJECT TO IRISH WATER AGREEMENT).

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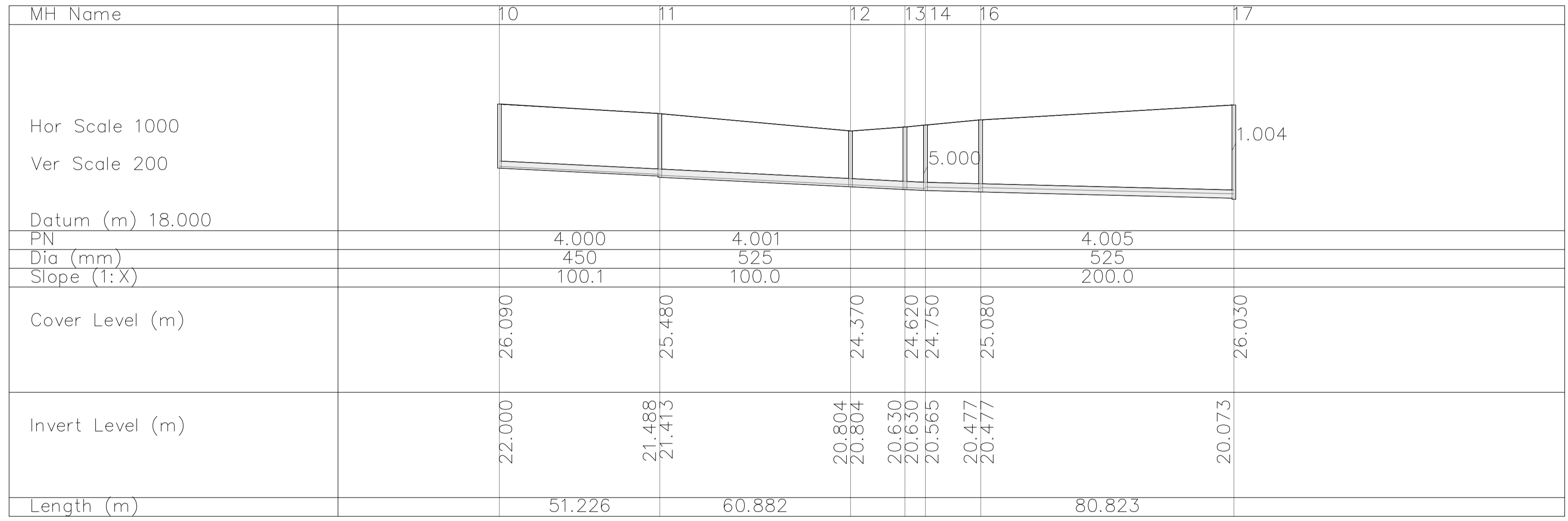
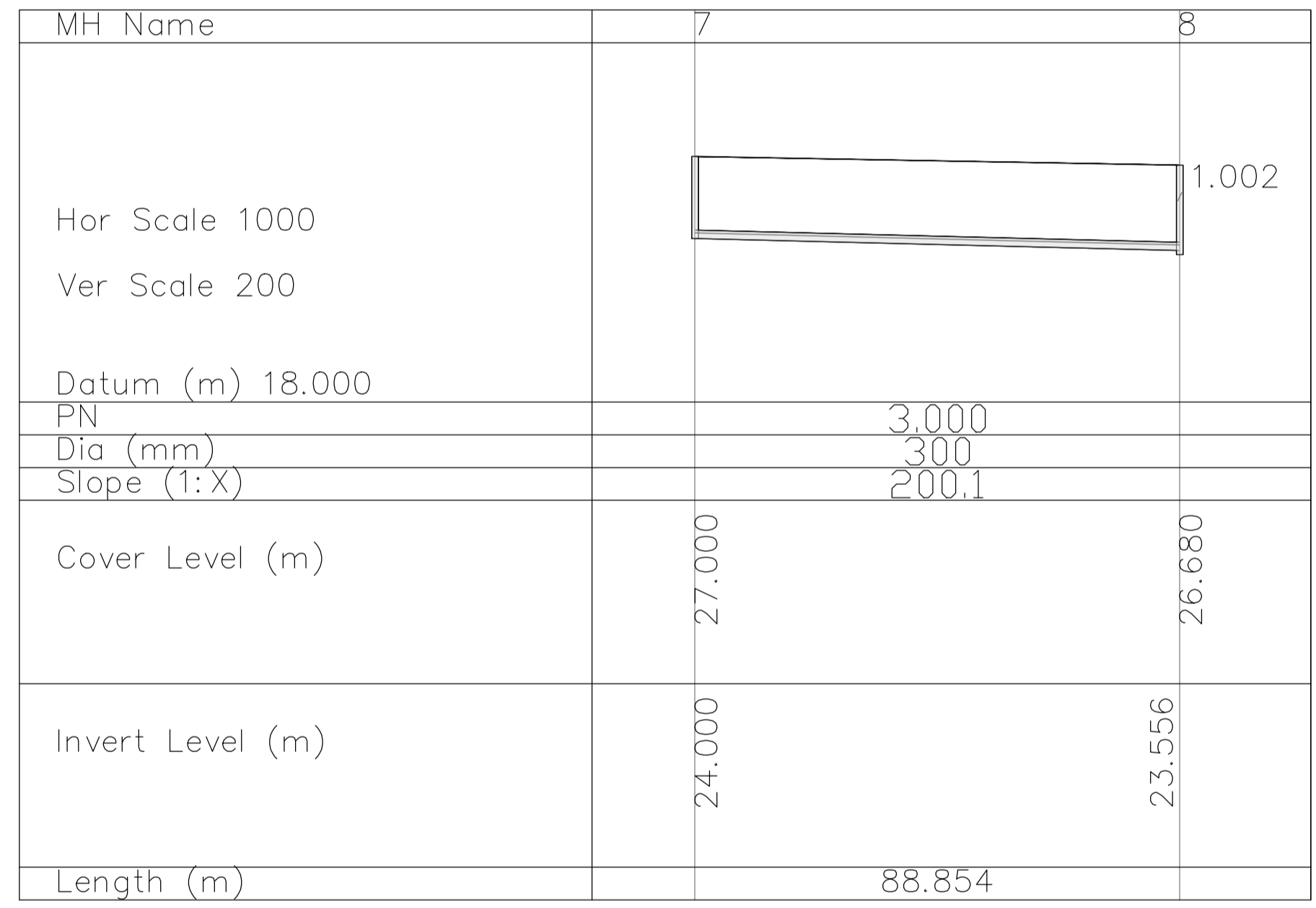
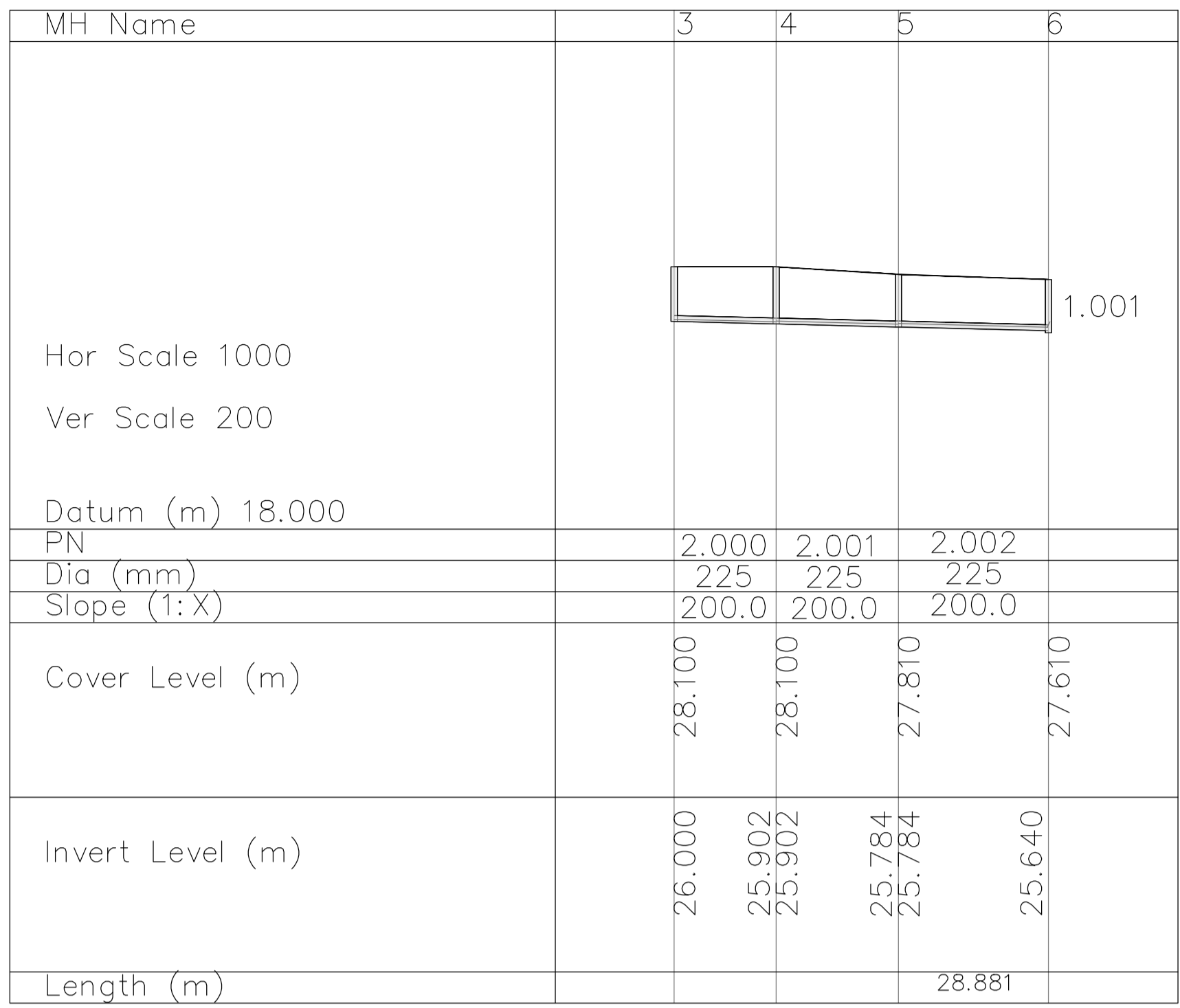
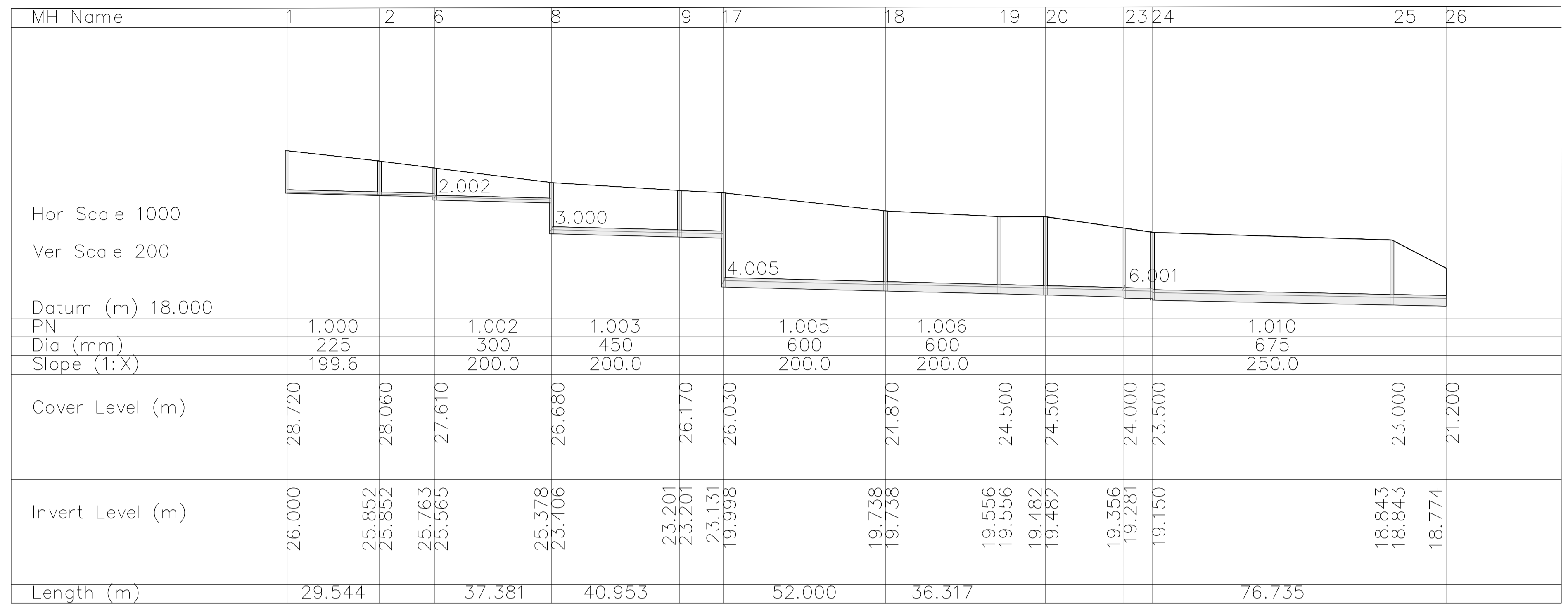
Rev. No.	Date	REVISION NOTE	Dm. By	Chkd. By

Architect	O'Mahony Pike			
Project	Proposed Development At O'Devaney Gardens			
Title	Watermain Details Sheet 2 of 2			
Dwg. No.	ODG-CSC-XX-XX-DR-C-0020			
Date	Dm. by	Chkd. by	Apprv. by	Scale
29.05.2020	JS	RFM	DR	AS SHOWN @ A1

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Rev. No.	Date	REVISION NOTE	Dm. By	Chkd. By

Architect	O'Mahony Pike			
Project	Proposed Development At O'Devaney Gardens			
Title	Surface Water Profiles Sheet 1 of 2			
Dwg. No.	ODG-CSC-XX-XX-DR-C-0021			
Date	Dm. by	Chkd. by	Apprd. by	Scale
29.05.2020	JS	RFM	DR	AS SHOWN @ A1
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MH Name	14	15
Hor Scale 1000		
Ver Scale 200		
Datum (m) 18.000		
PN	5.000	
Dia (mm)	375	
Slope (1:X)	200.1	
Cover Level (m)	24.500	24.750
Invert Level (m)	22.000	21.673
Length (m)	65.447	

MH Name	21	22	23
Hor Scale 1000			
Ver Scale 200			
Datum (m) 18.000			
PN	6.000	6.001	
Dia (mm)	375	375	
Slope (1:X)	100.0	150.0	
Cover Level (m)	22.000	22.450	22.450
Invert Level (m)	21.000	20.296 20.296	19.765
Length (m)	70.401	79.597	

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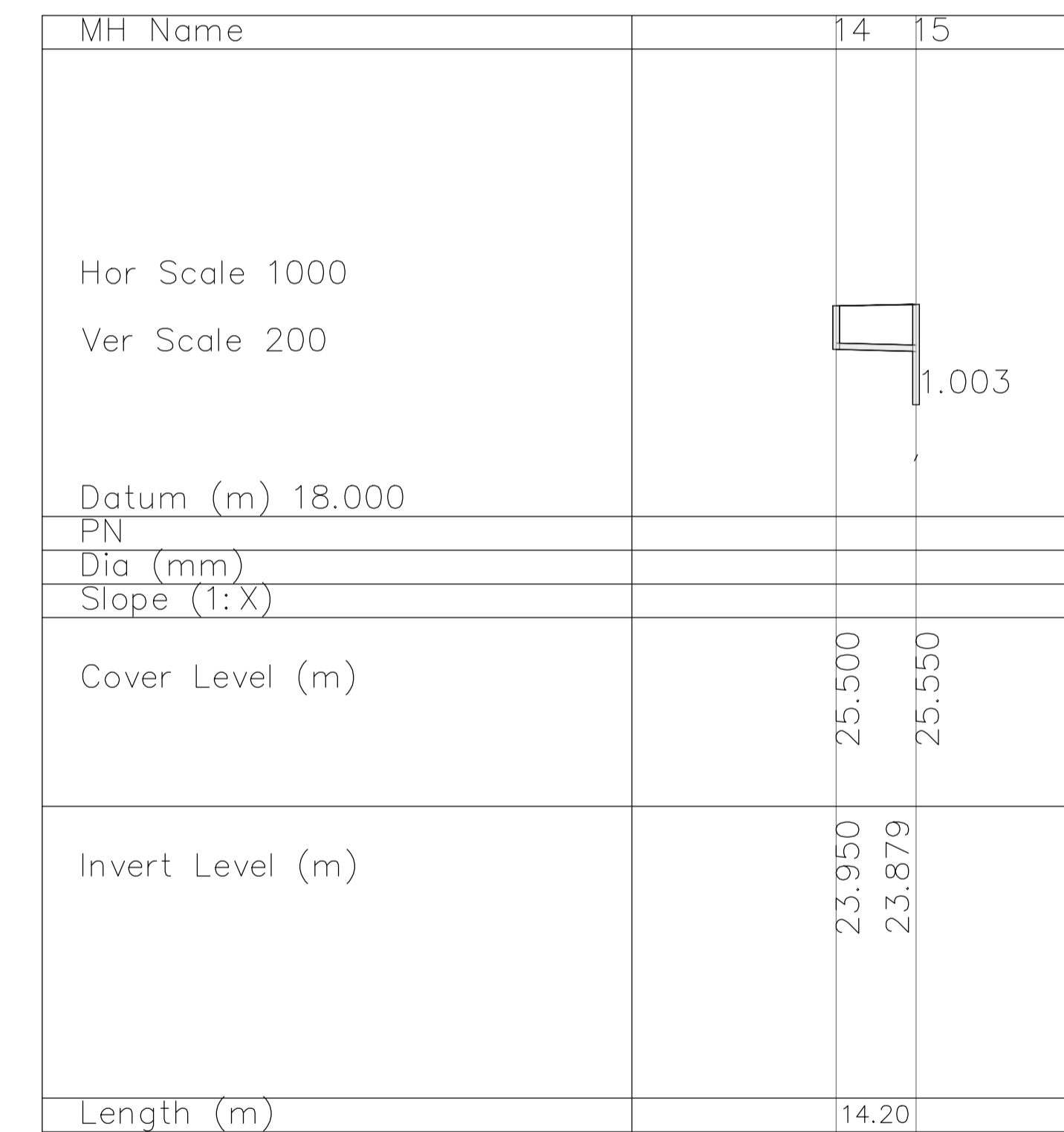
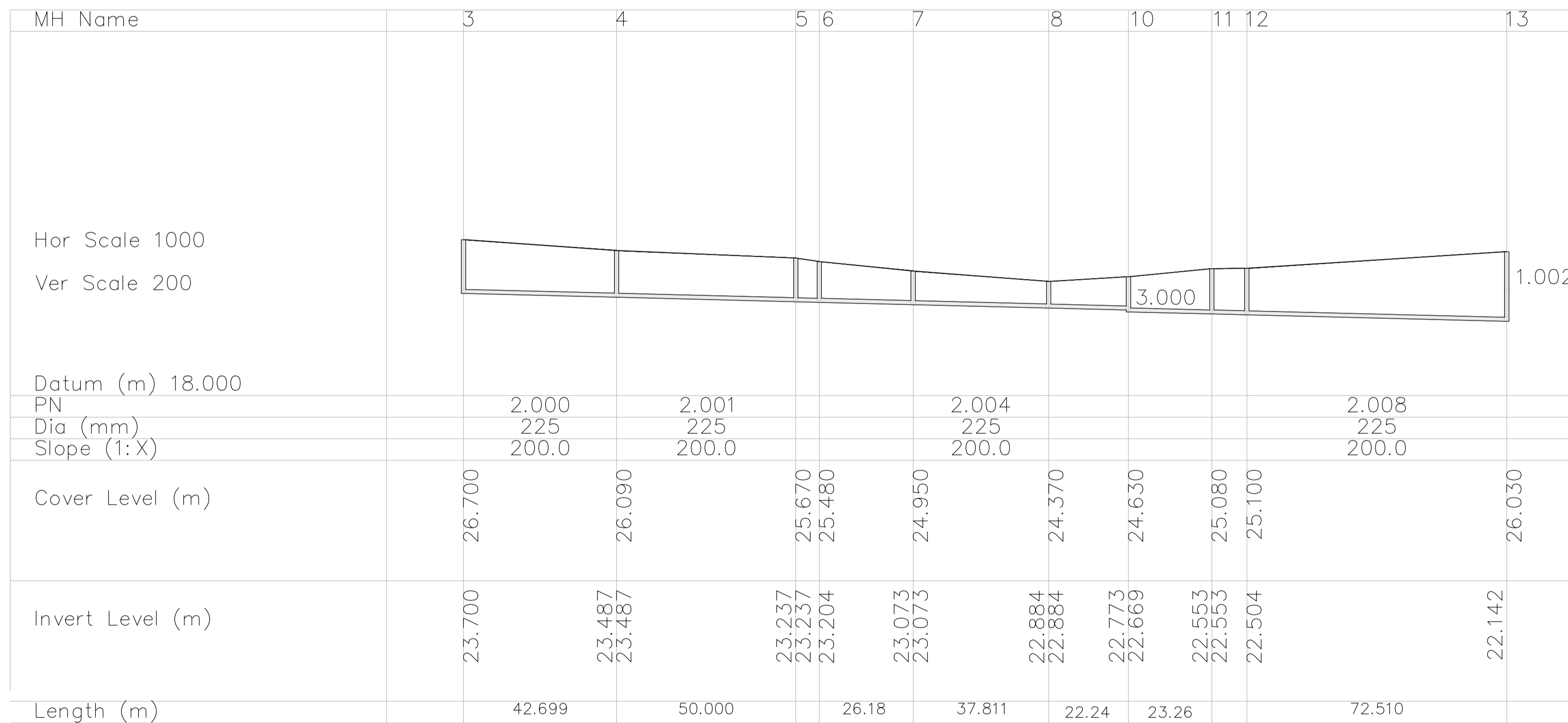
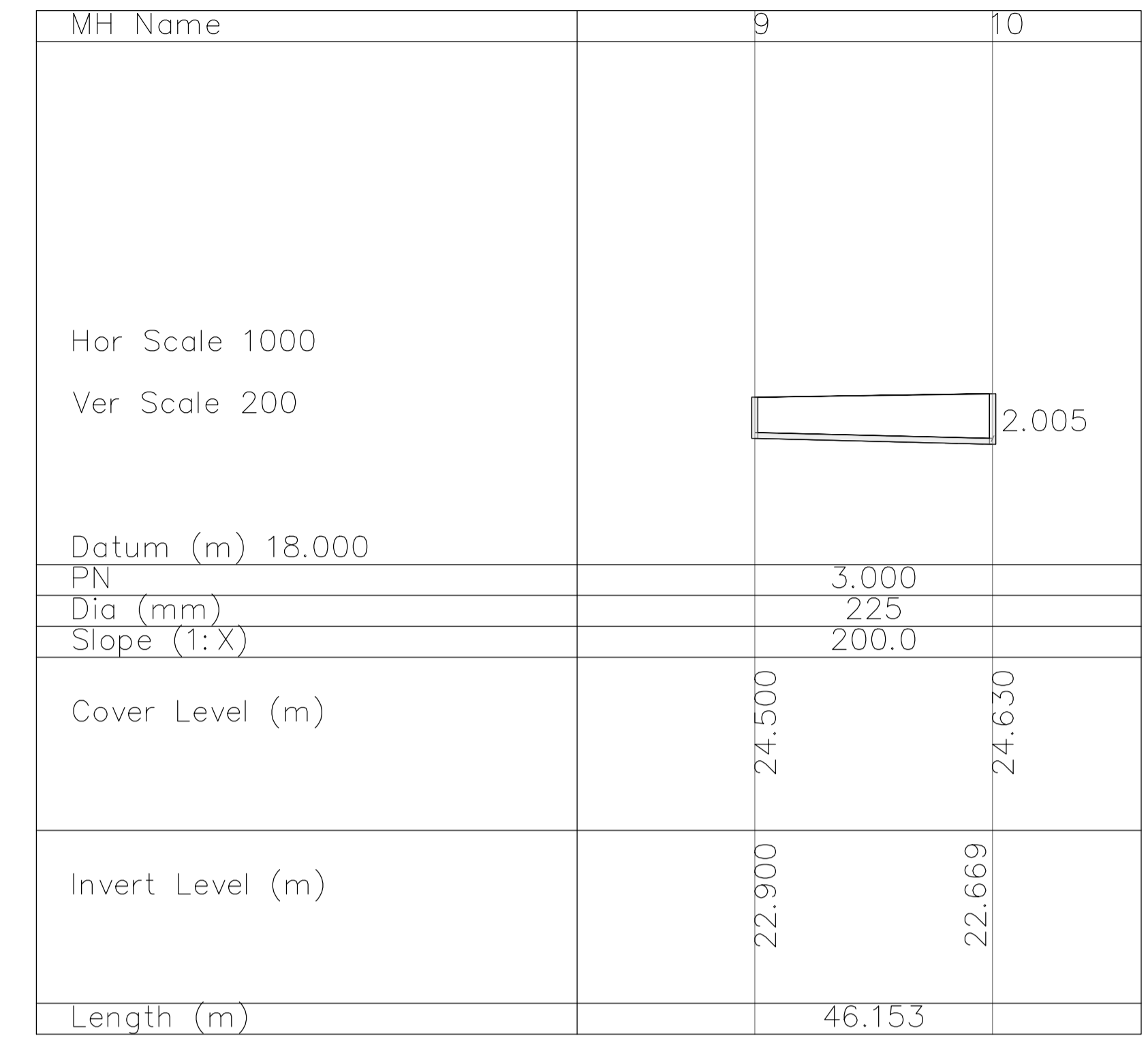
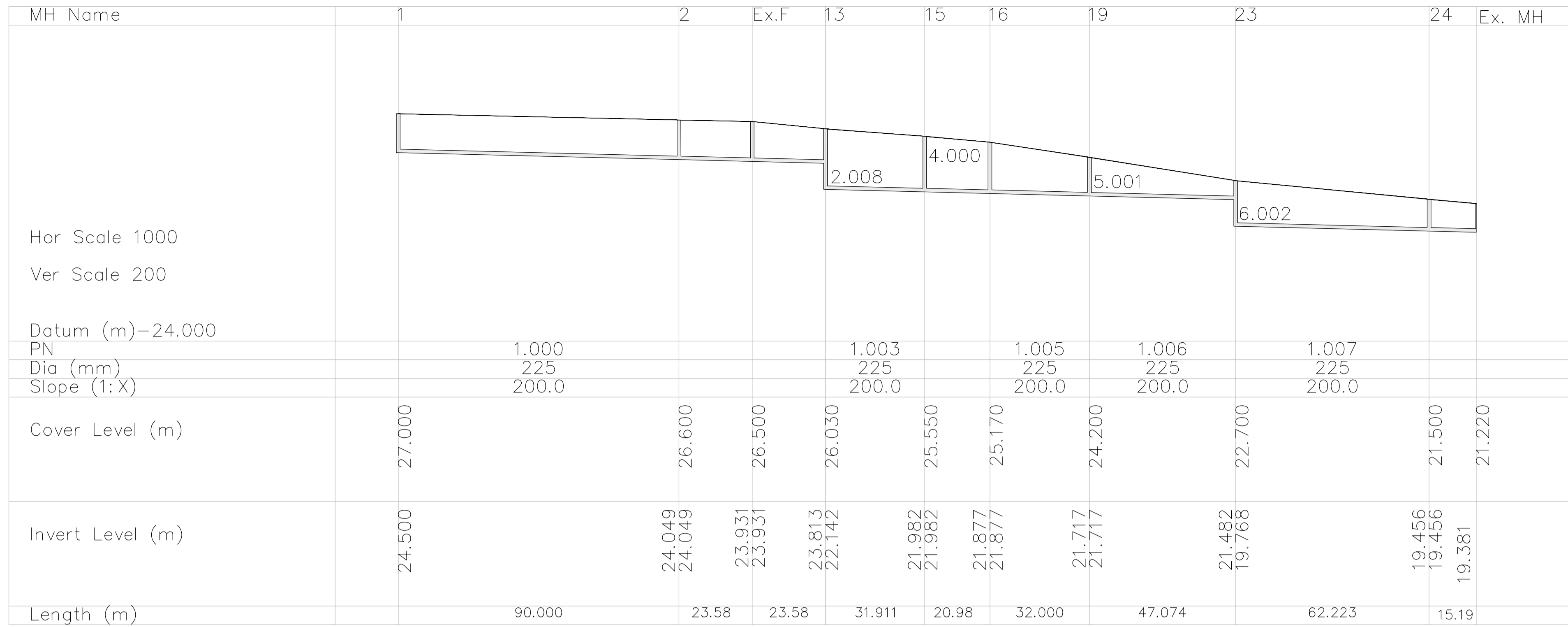
Rev. No.	Date	REVISION NOTE	Dm. By	Chkd. By

Architect	O'Mahony Pike			
Project	Proposed Development At O'Devaney Gardens			
Title	Surface Water Profiles Sheet 2 of 2			
Dwg. No.	ODG-CSC-XX-XX-DR-C-0022			
Date	Dm by	Chkd by	Aprvd by	Scale
29.05.2020	JS	RFM	DR	AS SHOWN @ A1
Revision				

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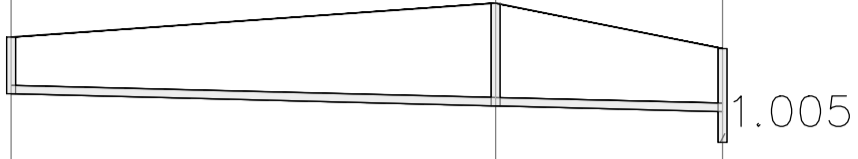
Rev. No.	Date	REVISION NOTE	Dm. By	Chkd. By


Architect	O'Mahony Pike			
Project	Proposed Development At O'Devaney Gardens			
Title	Foul Sewer Profiles Sheet 1 of 2			
Dwg. No.	ODG-CSC-XX-XX-DR-C-0023			
Date	Dm. by	Chkd. by	Apprd. by	Scale
29.05.2020	JS	RFM	DR	AS SHOWN @ A1
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MH Name	17	18	19
Hor Scale 1000 Ver Scale 200			
Datum (m) 18.000			
PN	5.000	5.001	
Dia (mm)	225	225	
Slope (1:X)	200.0	200.0	
Cover Level (m)	24.500	25.400	24.200
Invert Level (m)	23.000	22.679 22.679	22.529
Length (m)	64.101	30.000	

MH Name	20	21	22	23
Hor Scale 1000 Ver Scale 200				
Datum (m) 18.000				
PN	6.000	6.001	6.002	
Dia (mm)	225	225	225	
Slope (1:X)	200.0	200.0	200.0	
Cover Level (m)	22.000	22.450	22.400	22.700
Invert Level (m)	20.500	20.200 20.200	19.974 19.974	19.768
Length (m)	59.957	45.272	41.250	

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Architect	O'Mahony Pike			
Project	Proposed Development At O'Devaney Gardens			
Title	Foul Sewer Profiles Sheet 2 of 2			
Dwg. No.	ODG-CSC-XX-XX-DR-C-0024			
Date	Dm by	Chkd by	Apprd by	Scale
29.05.2020	JS	RFM	DR	AS SHOWN @ A1
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- DRAWINGS REFERENCES:**
- REFER TO DRAWINGS ODG-CSC-XX-XX-DR-C-0026 & 0027 FOR ROAD PROFILES.
 - REFER TO DRAWING ODG-CSC-XX-XX-DR-C-0028 FOR ROAD MARKINGS & TRAFFIC SIGNS.
 - REFER TO DRAWINGS ODG-CSC-XX-XX-DR-C-0029 & 0030 FOR ROAD CONSTRUCTION DETAILS.
 - REFER TO DRAWING ODG-CSC-XX-XX-DR-C-0031 FOR ROAD CROSS SECTIONS.
 - REFER TO DRAWING ODG-CSC-XX-XX-DR-C-0032 FOR VISIBILITY SPLAY & FORWARD VISIBILITY.

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PROPOSED ROAD LAYOUT.
 SCALE= 1:500

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P1	07.05.2021	REVISED FOR PLANNING	JS	NB

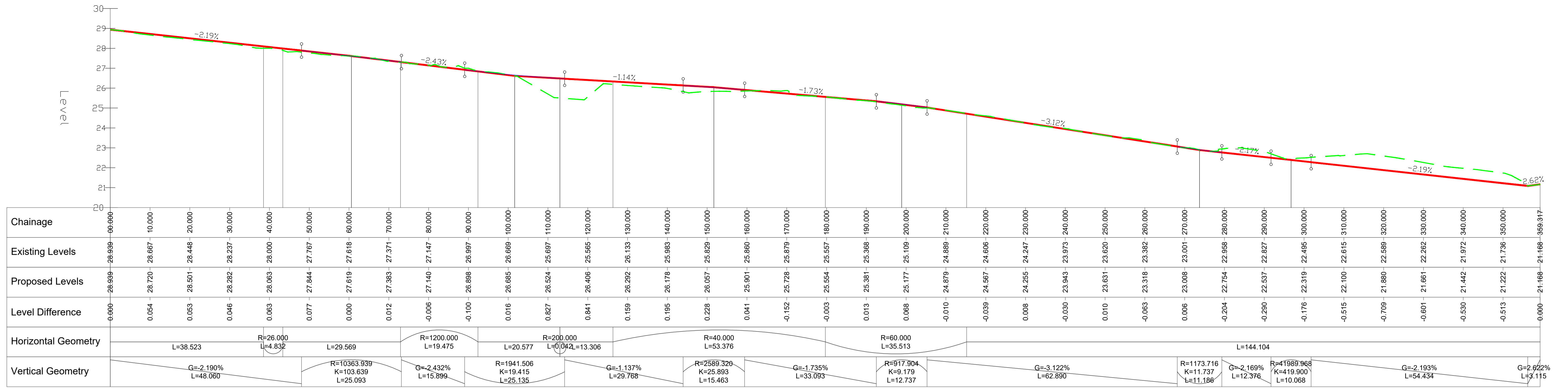
Architect Project	O'Mahony Pike Proposed Development At O'Devaney Gardens
Title	Proposed Road Layout
Dwg. No.	ODG-CSC-XX-XX-DR-C-0025
Date	29.05.2020
Dim. By	JS
Chkd. By	NB
Appr. by	DR
Scale	1:500 @A1
Revision	P1

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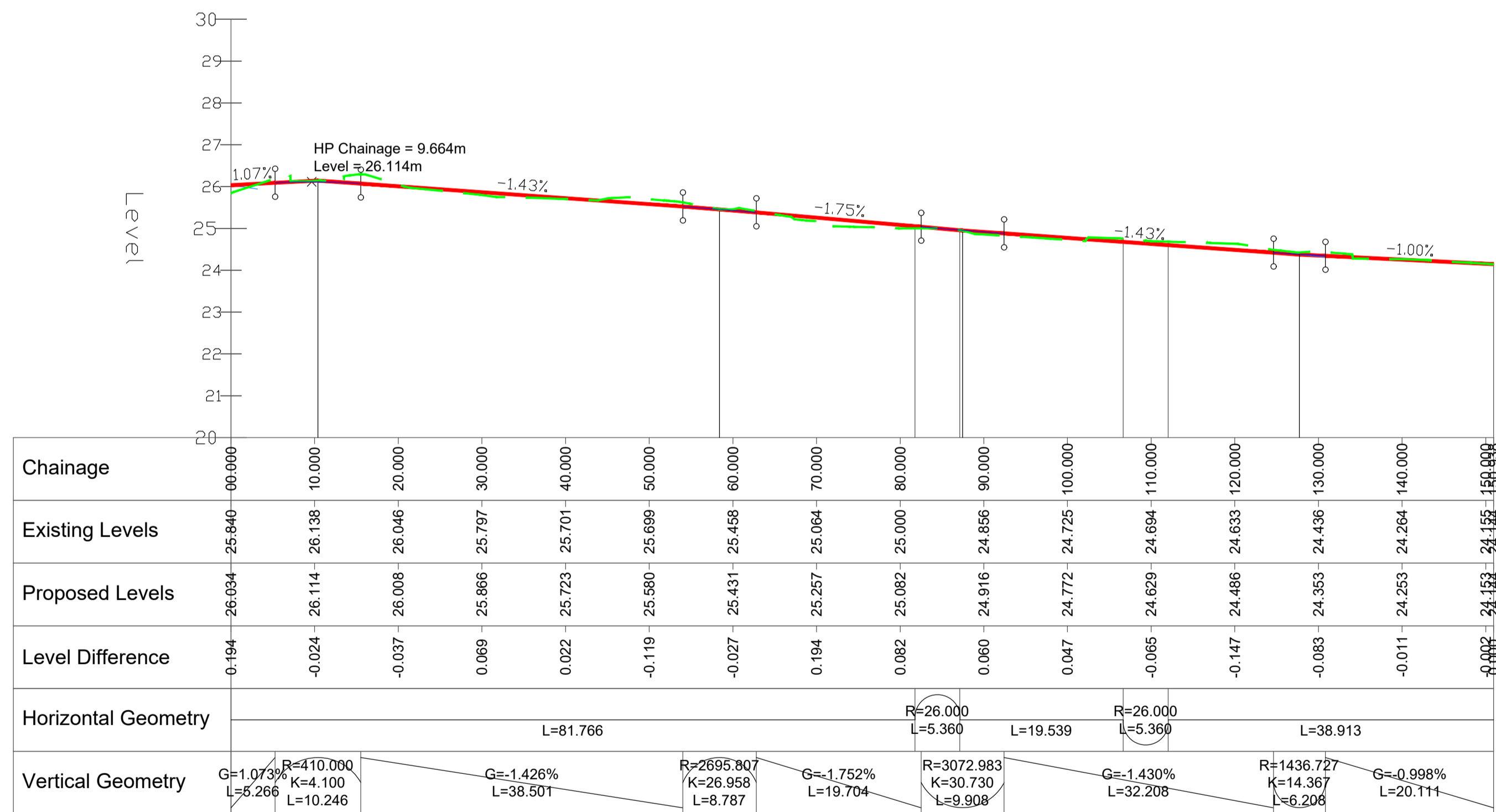
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BOULEVARD - LONGSECTION
SCALE: H 1:500, V 1:100. DATUM: 20.000



LINK STREET - LONGSECTION
SCALE: H 1:500, V 1:100. DATUM: 20.000

DRAWINGS REFERENCES:

- REFER TO DRAWING ODG-CSC-XX-XX-DR-C-0025 FOR ROAD LAYOUT.

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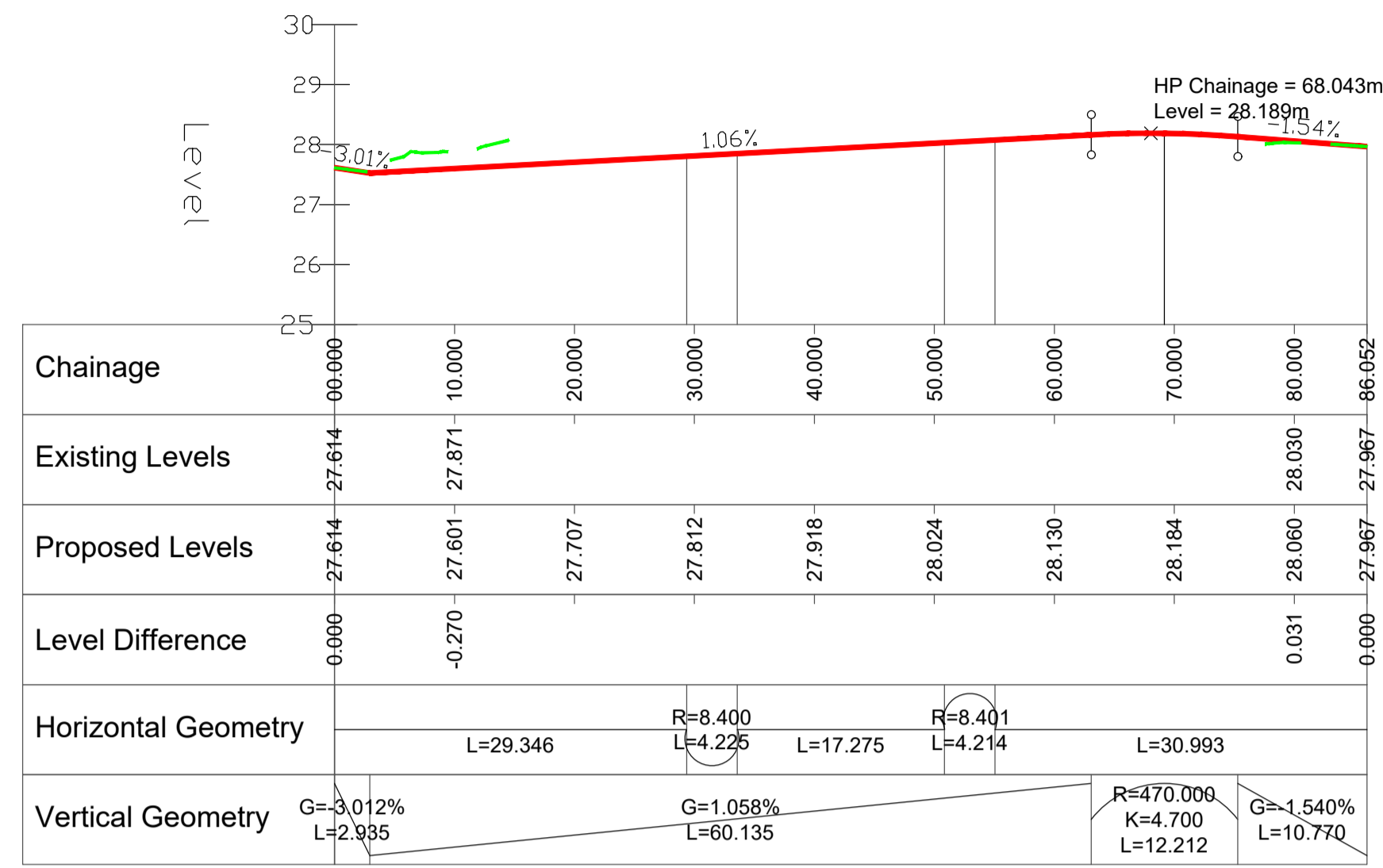
Rev. No.	Date	REVISION NOTE	Drn. By	Chkd. By
P1	07.05.2021	REVISED FOR PLANNING	JS	NB

Architect	O'Mahony Pike			
Project	Proposed Development At O'Devaney Gardens			
Title	Road Profiles Sheet 1 of 2			
Dwg. No.	ODG-CSC-XX-XX-DR-C-0026			
Date	Drn. by	Chkd. by	Apprd. by	Scale
29.05.2020	JS	NB	DR	AS SHOWN @ A1
				Revision
				P1

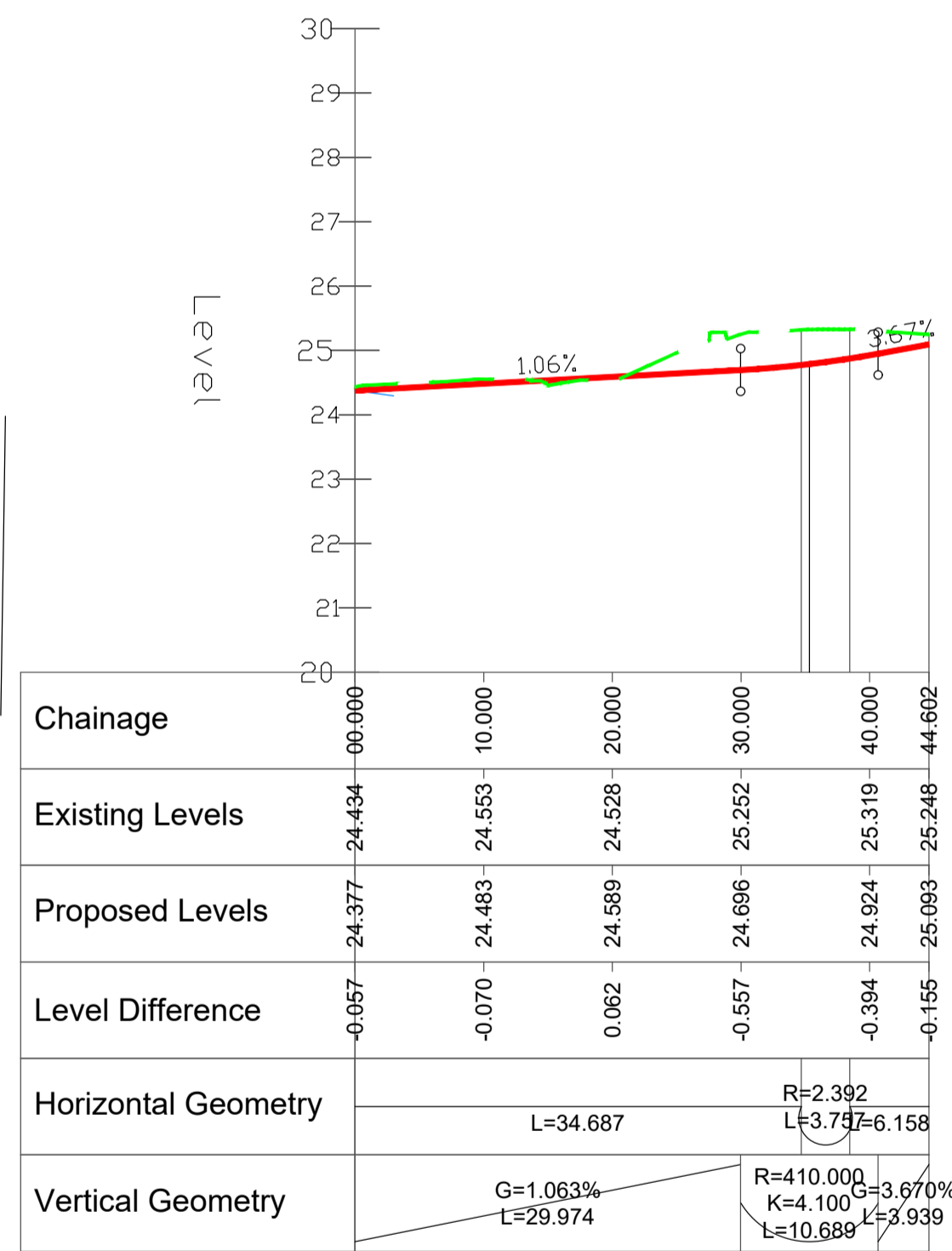
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LOCAL STREET 1 - LONGSECTION
SCALE: H 1:500, V 1:100. DATUM: 25.000



LOCAL STREET 2 - LONGSECTION
SCALE: H 1:500, V 1:100. DATUM: 25.000

DRAWINGS REFERENCES:

- REFER TO DRAWING ODG-CSC-XX-XX-DR-C-0025 FOR ROAD LAYOUT.

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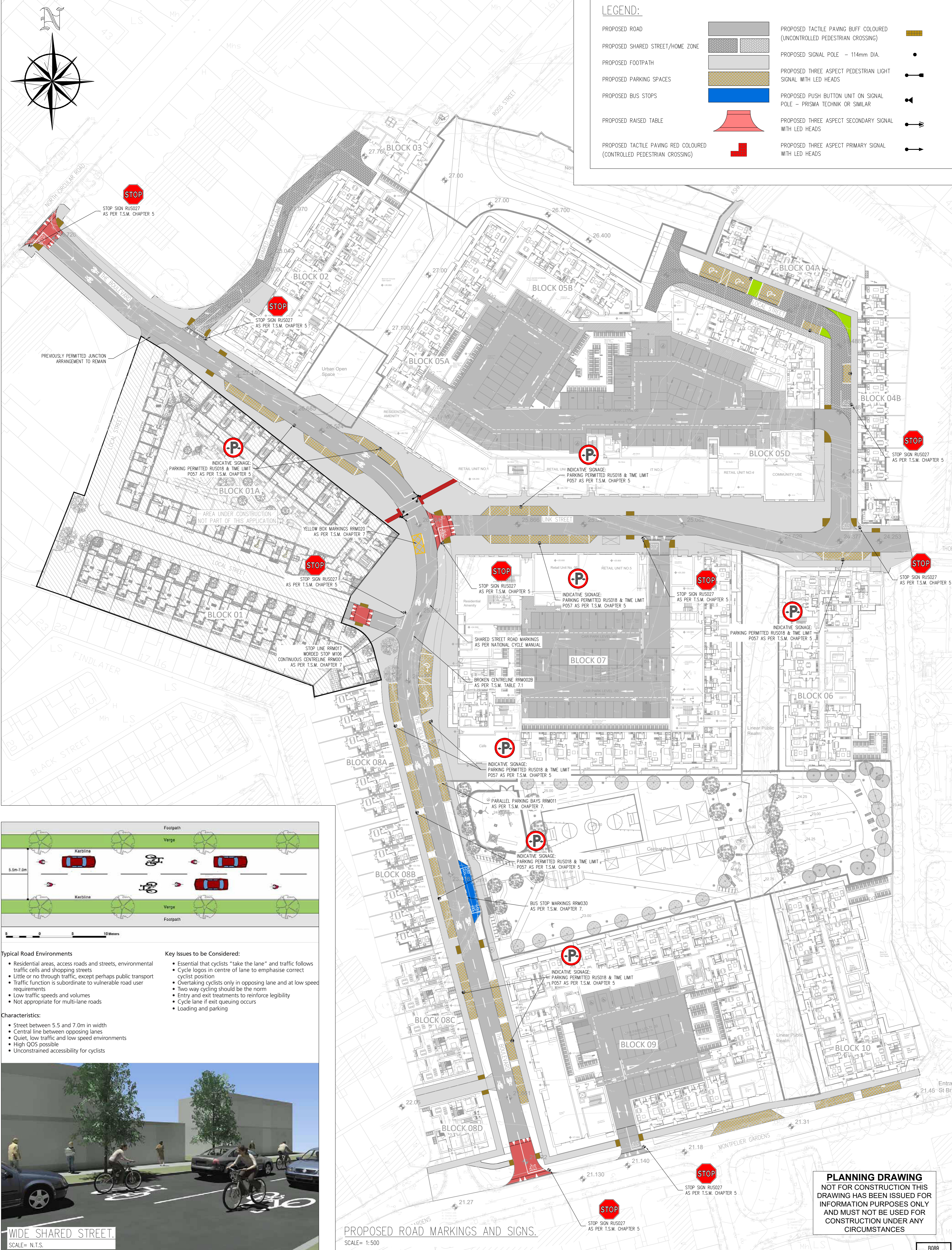
Rev. No.	Date	REVISION NOTE	Dm. By	Chkd. By
P1	07.05.2021	REVISED FOR PLANNING	JS	NB

Architect	O'Mahony Pike			
Project	Proposed Development At O'Devaney Gardens			
Title	Road Profiles Sheet 2 of 2			
Dwg. No.	ODG-CSC-XX-XX-DR-C-0027			
Date	Dm. by	Chkd. by	Apprd. by	Scale
29.05.2020	JS	NB	DR	AS SHOWN @ A1
				Revision
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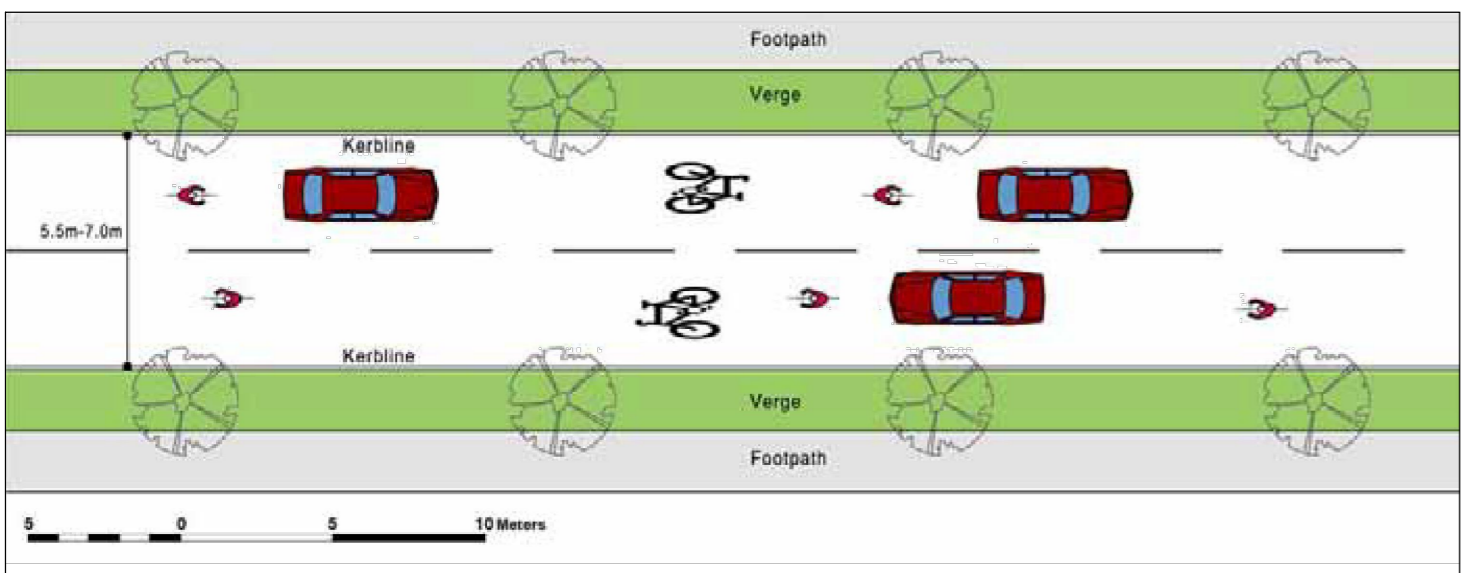
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LEGEND:

PROPOSED ROAD		PROPOSED TACTILE PAVING BUFF COLOURED (UNCONTROLLED PEDESTRIAN CROSSING)	
PROPOSED SHARED STREET/HOME ZONE		PROPOSED SIGNAL POLE - 114mm DIA.	
PROPOSED FOOTPATH		PROPOSED THREE ASPECT PEDESTRIAN LIGHT SIGNAL WITH LED HEADS	
PROPOSED PARKING SPACES		PROPOSED PUSH BUTTON UNIT ON SIGNAL POLE - PRISMA TECHNIK OR SIMILAR	
PROPOSED BUS STOPS		PROPOSED THREE ASPECT SECONDARY SIGNAL WITH LED HEADS	
PROPOSED RAISED TABLE		PROPOSED THREE ASPECT PRIMARY SIGNAL WITH LED HEADS	
PROPOSED TACTILE PAVING RED COLOURED (CONTROLLED PEDESTRIAN CROSSING)			



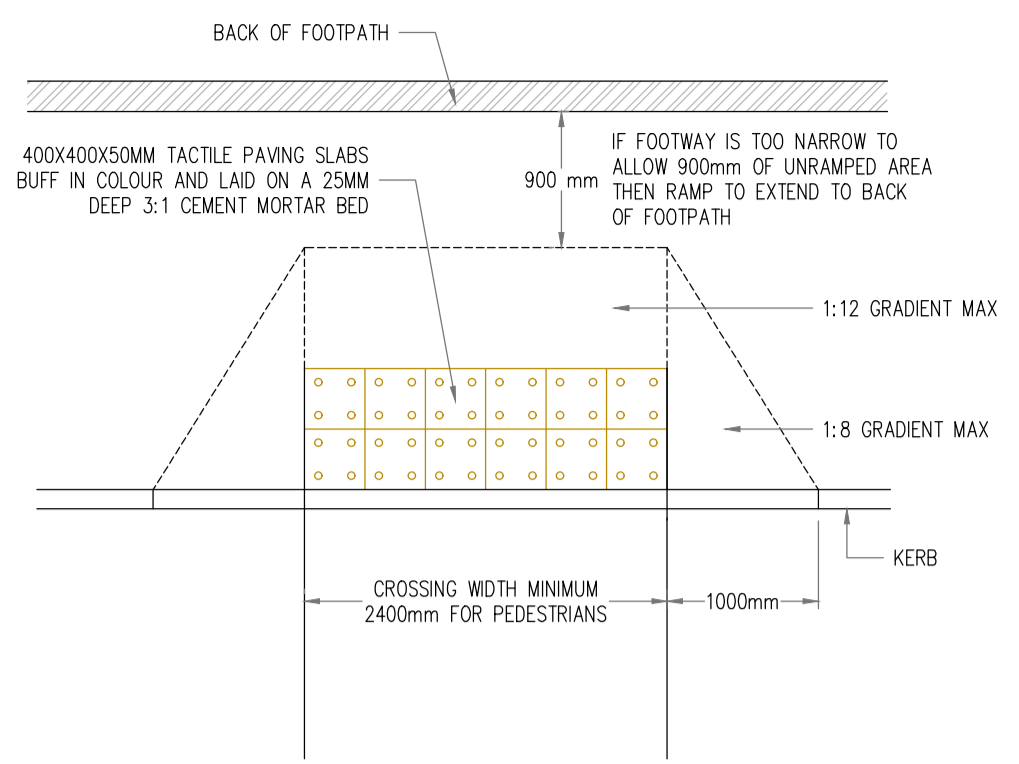
- Typical Road Environments**
- Residential areas, access roads and streets, environmental traffic cells and shopping streets
 - Little or no through traffic, except perhaps public transport
 - Traffic function is subordinate to vulnerable road user requirements
 - Low traffic speeds and volumes
 - Not appropriate for multi-lane roads
- Key Issues to be Considered:**
- Essential that cyclists "take the lane" and traffic follows
 - Cycle logos in centre of lane to emphasise correct cyclist position
 - Overtaking cyclists only in opposing lane and at low speed requirements
 - Two way cycling should be the norm
 - Entry and exit treatments to reinforce legibility
 - Cycle lane if exit queuing occurs
 - Loading and parking
- Characteristics:**
- Street between 5.5 and 7.0m in width
 - Central line between opposing lanes
 - Quiet, low traffic and low speed environments
 - High QOS possible
 - Unconstrained accessibility for cyclists



PROPOSED ROAD MARKINGS AND SIGNS.
SCALE= 1:500

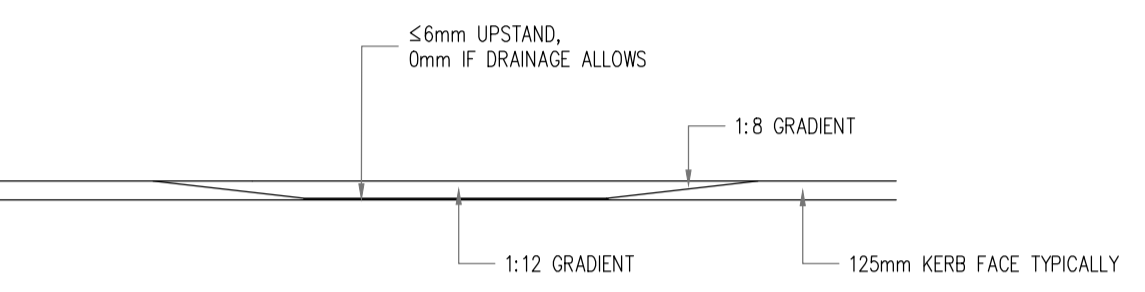
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	P1	07.05.2021	REVISED FOR PLANNING						
JS	NB								
<p>Dwg. No. ODG-CSC-XX-XX-DR-C-0028</p> <p>Date 29.05.2020</p> <p>Dim by JS Chkd by NB</p> <p>Approved by DR Scale 1:500 @A1</p> <p>Revision P1</p>	<p>Quality Environment Health & Safety</p> <p>NSAI Certified</p> <p>ISO 9001:2008 ISO 14001:2004 ISO 50001:2011 OHSAS 18001:2007</p>								

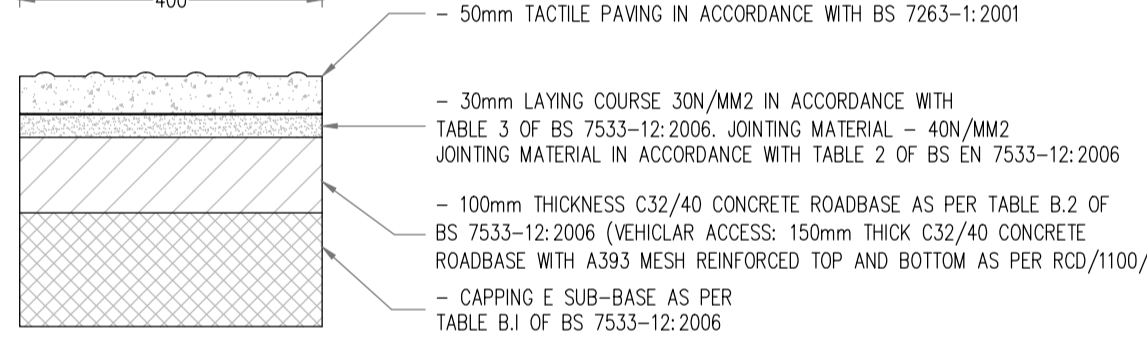
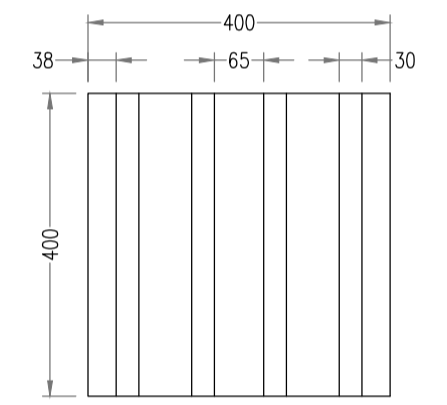
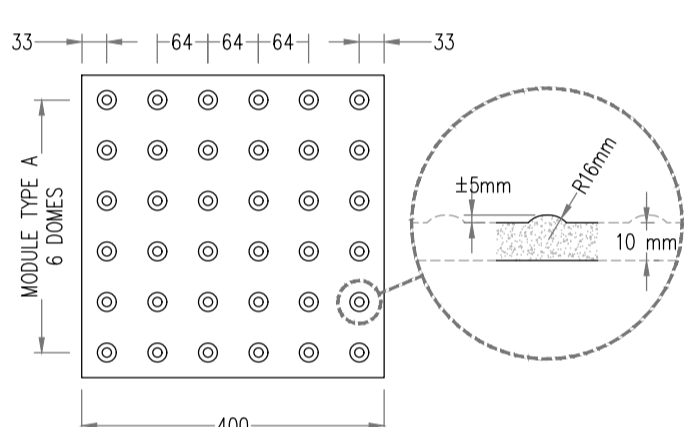


- NOTES: (UNCONTROLLED)**
- TACTILE PAVING SLABS 400x400mm BUFF IN COLOUR.
 - CONFIGURATION TO BE 2 ROWS OF 6 NUMBER WIDE, 400mm sq. TACTILE TILES ON BOTH SIDES OF THE ROAD.
 - THE TACTILE DOMES ON THE TILES MUST BE LINED UP UP TO GIVE THE DIRECTION OF TRAVEL IN ORDER TO CROSS THE ROAD STRAIGHT.
 - UTILITY/SERVICE BOXES SHOULD NOT BE LOCATED IN TACTILE PAVED AREAS WHERE POSSIBLE.
 - TACTILE SLABS SHALL BE CUT SO AS TO MINIMIZE THE CREATION OF SLIVERS ALONG THE KERBLINE.
 - ANY GULLIES IN THE CROSSING TO BE RELOCATED.
 - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
 - ALL CLAUSE REFERENCES RELATE TO VOLUME 1 SPECIFICATION FOR ROAD WORKS (T1).

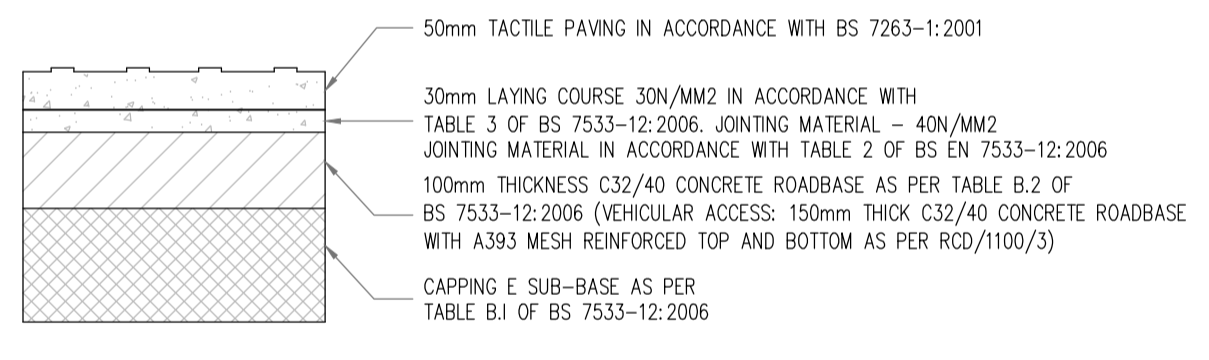
TACTILE PAVING PLAN AT UNCONTROLLED PEDESTRIAN CROSSINGS.
SCALE: 1:50



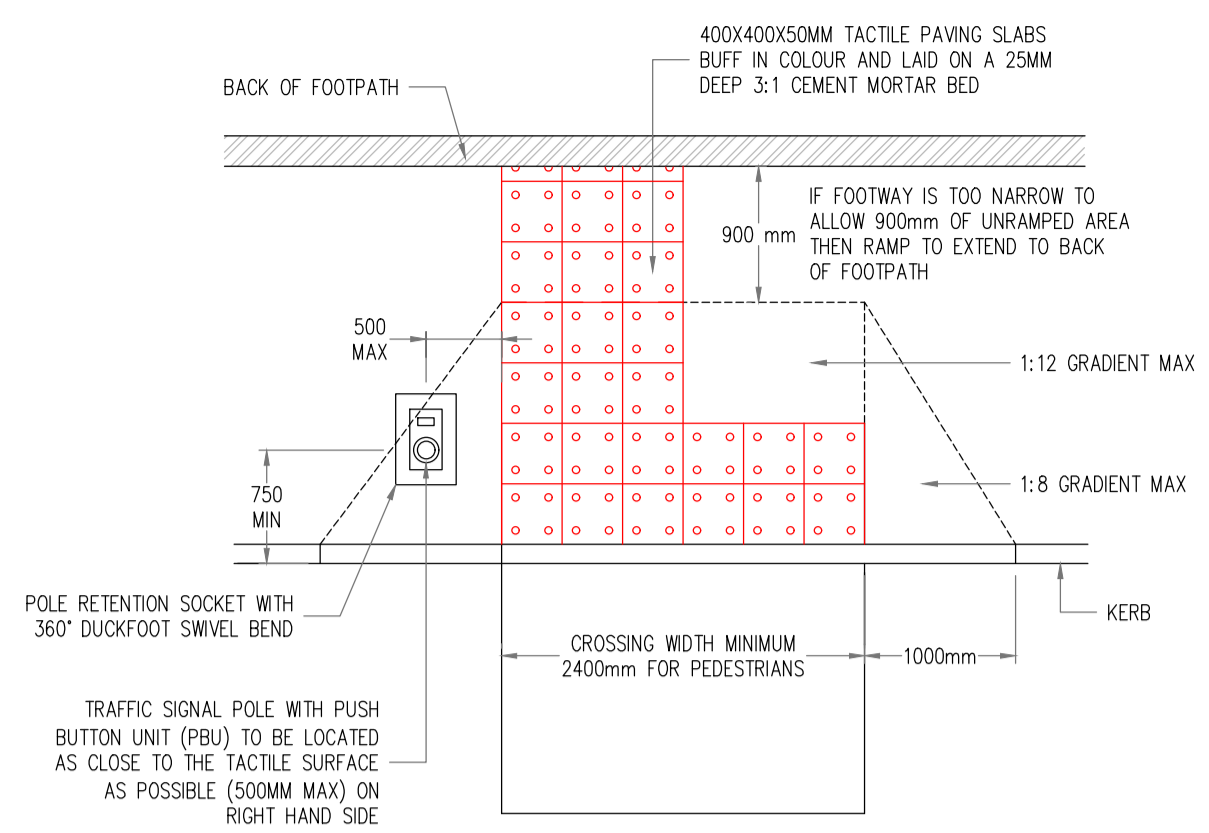
TACTILE PAVING ELEVATION.
SCALE: 1:50



TACTILE PAVING AT CONTROLLED/UNCONTROLLED PEDESTRIAN CROSSINGS
SCALE: 1:10

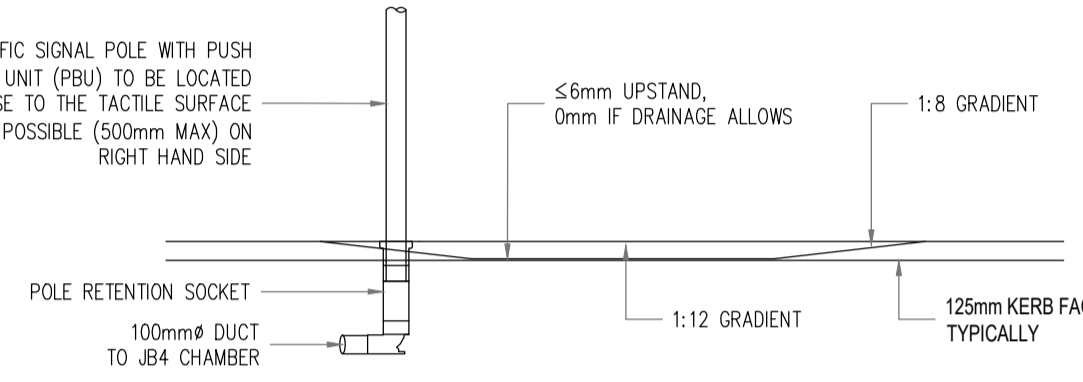


CORDUROY TACTILE PAVING AT CONTROLLED PEDESTRIAN CROSSINGS.
SCALE: 1:10

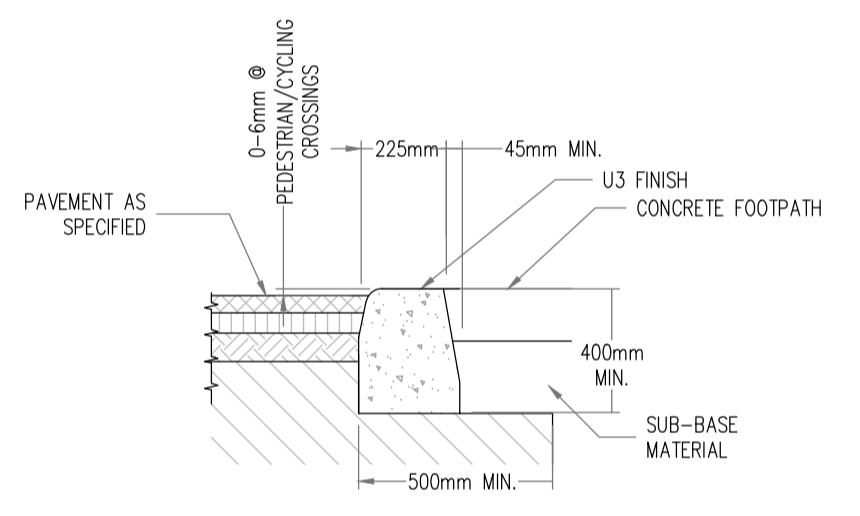


- NOTES:**
- TACTILE PAVING SLABS 400x400mmx50mm IN COLOUR.
 - L SHAPED CONFIGURATION OF TACTILE TILES ON BOTH SIDES OF THE ROAD.
 - LEG OF L TO BE THREE SLABS WIDE TO ENSURE A VISUALLY IMPAIRED PERSON LOCATES THE CROSSING WHEN WALKING ALONG THE PAVEMENT TOP OF L TO BE TWO SLABS WIDE IN THE DISHING.
 - THE TACTILE DOMES ON THE TILES MUST BE LINED UP UP TO GIVE THE DIRECTION OF TRAVEL IN ORDER TO CROSS THE ROAD STRAIGHT.
 - TRAFFIC SIGNAL POLE MUST BE PLACED ON THE VISUALLY IMPAIRED PERSONS RIGHT HAND SIDE WHEN THEY ARE FACING THE ROAD TO CROSS - Max. 500mm FROM THE PERSON (THIS IS TO ENSURE THE POLE CAN BE REACHED WITHOUT MOVING OFF THE TACTILE SURFACE) AND Max. 800mm FROM THE KERB EDGE AND Min. 600mm FROM THE KERB EDGE.
 - UTILITY/SERVICE BOXES SHOULD NOT BE LOCATED IN TACTILE PAVED AREAS WHERE POSSIBLE.
 - ANY GULLIES IN THE CROSSING TO BE RELOCATED.
 - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

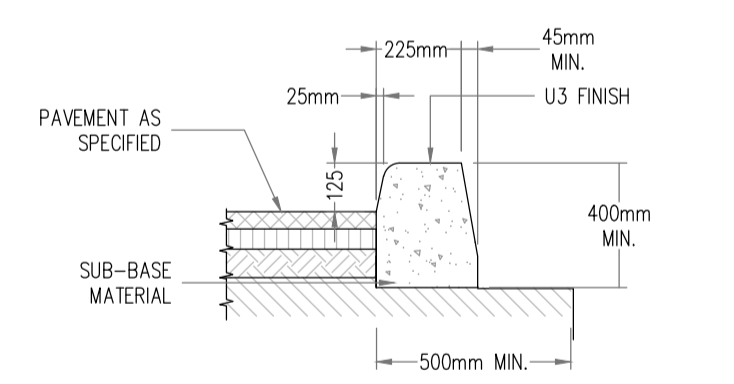
TACTILE PAVING PLAN AT CONTROLLED PEDESTRIAN CROSSING.
SCALE: 1:50



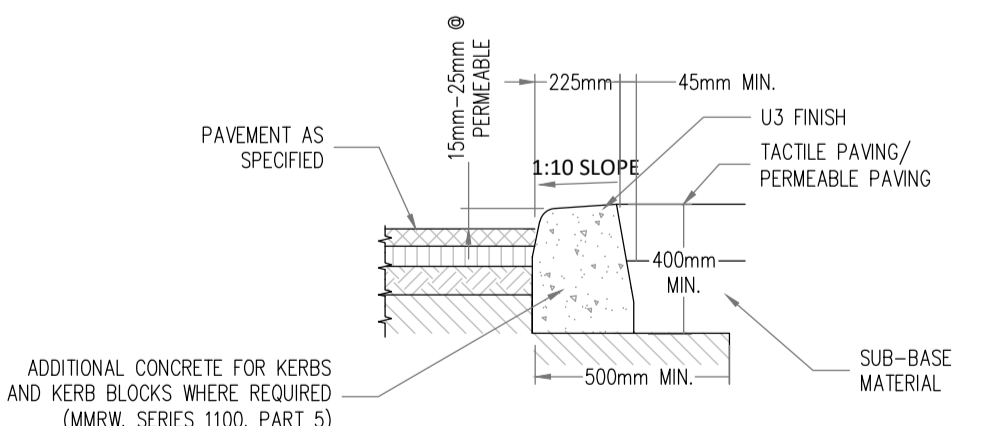
TACTILE PAVING ELEVATION.
SCALE: 1:50



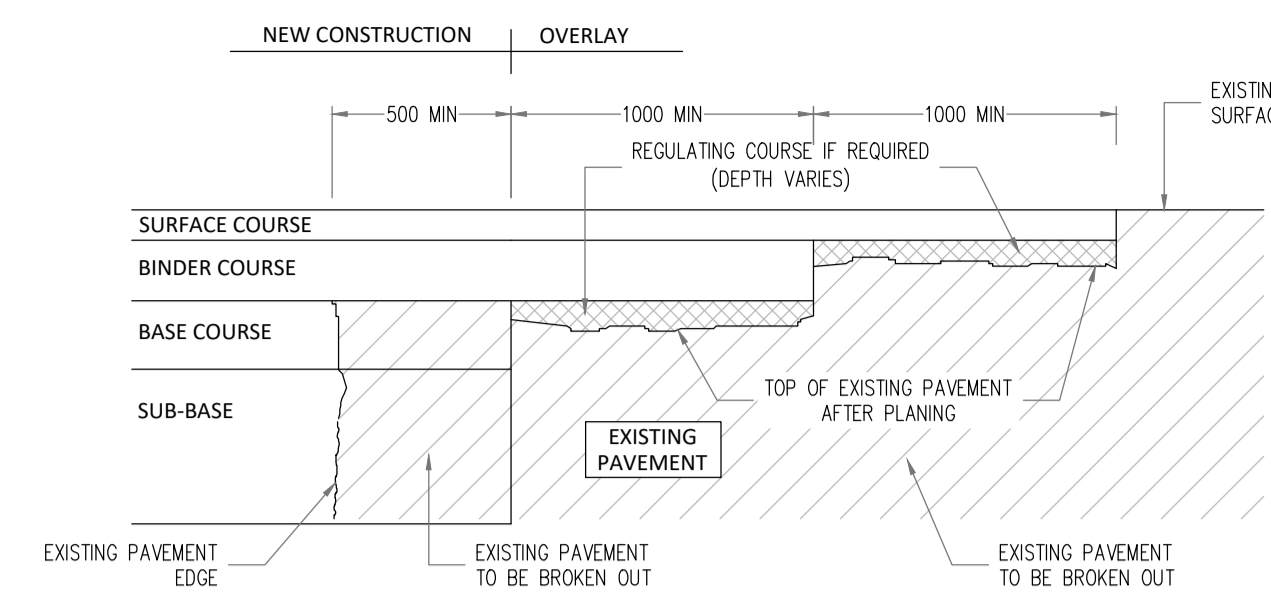
KERB DETAIL AT PEDESTRIAN/CYCLING CROSSINGS.
SCALE: 1:20



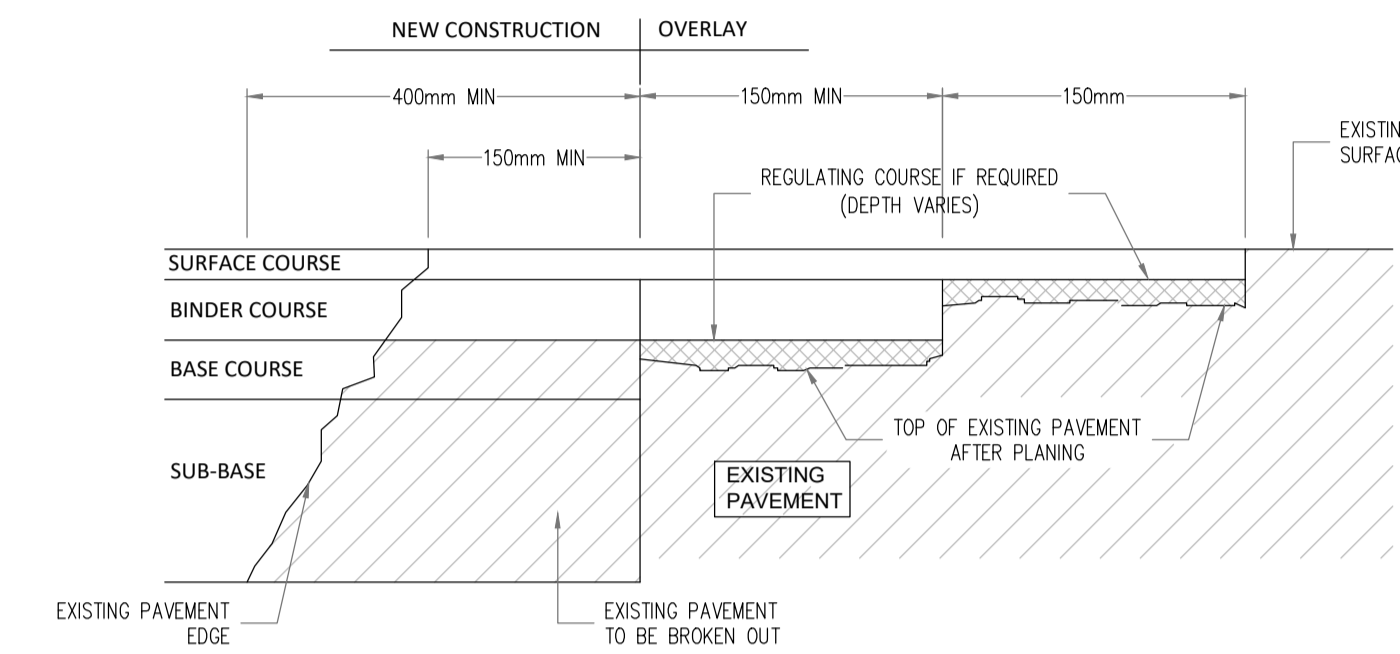
KERB DETAIL AT 125mm SHOW
SCALE: 1:20



KERB DETAIL AT CAR PARKING BAYS
SCALE: 1:20



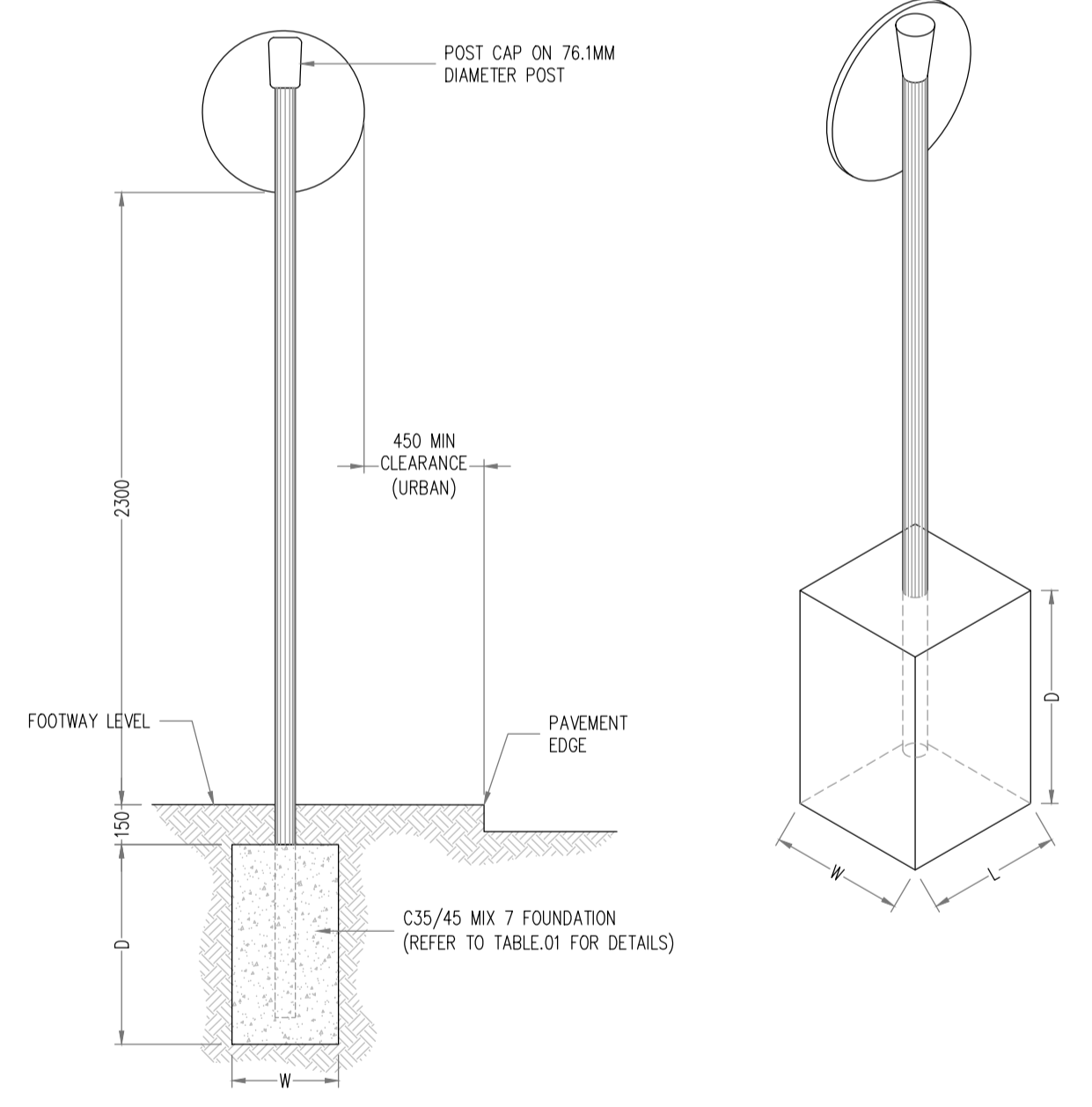
TRANSVERSE JOINT BETWEEN NEW & EXISTING ROAD T11 CC-SCD-00703.
SCALE: 1:25



LONGITUDINAL JOINT BETWEEN NEW AND EXISTING ROAD T11 CC-SCD-00704.
SCALE: 1:25

NOTE:

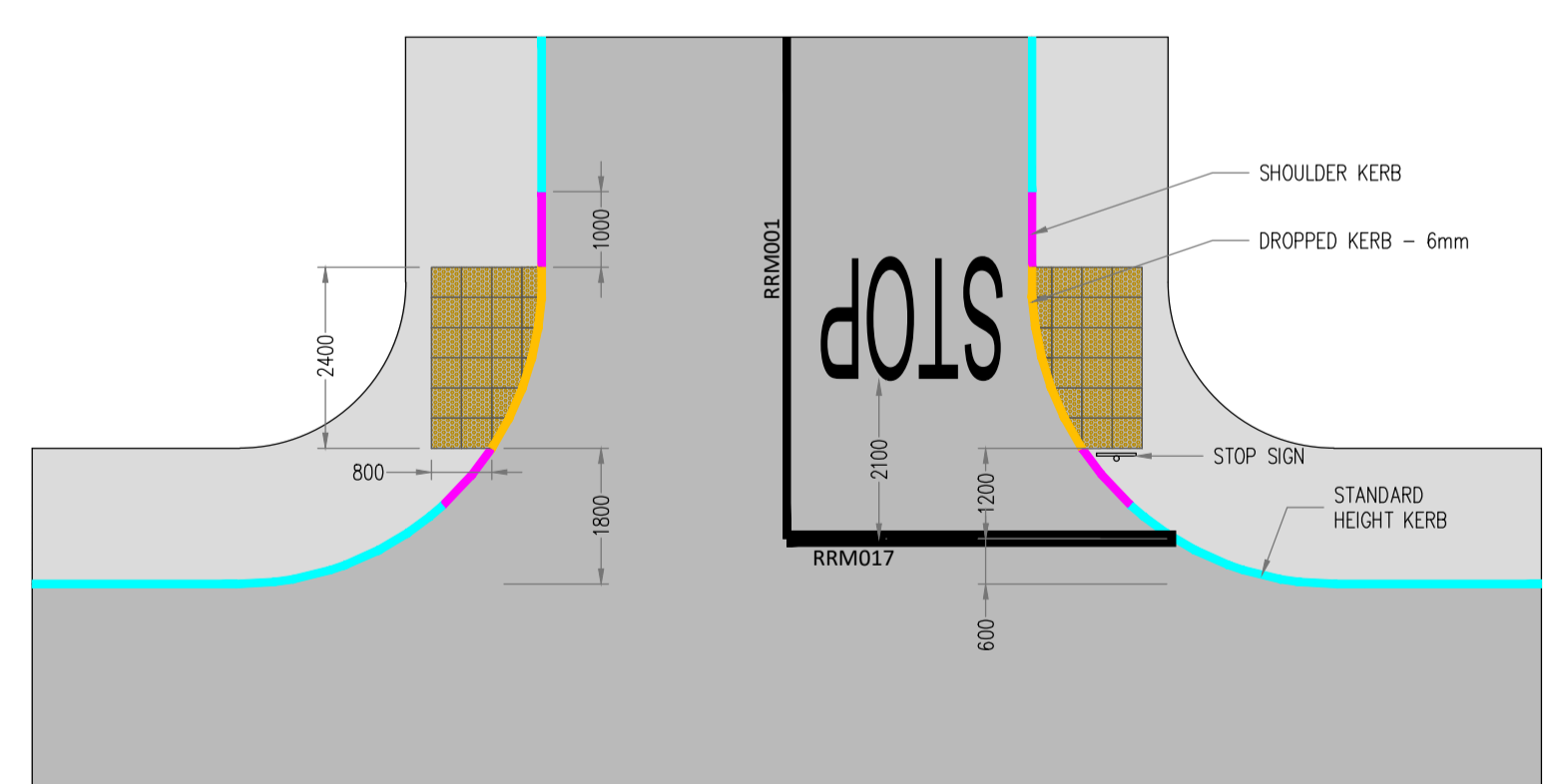
- ALL DIMENSIONS IN MILLIMETERS UNLESS STATED OTHERWISE.
- ALL STEELWORK TO BE GRADE S235 J2 IN ACCORDANCE WITH IS:EN 12899-1.
- ALL STEELWORK TO BE HOT-DIP GALVANIZED IN ACCORDANCE WITH IS:EN ISO 1461.
- CHECK THE UNDERGROUND SERVICES AT AN EARLY STAGE (AND ACCOMMODATE AS MAY BE NECESSARY).
- REFER TO TRAFFIC SIGN MANUAL FOR ALL STANDARD DIMENSION.
- POST EMBEDMENT TO BE 0.75xD
- ORIENTATION OF SIGN:
 - ON A STRAIGHT ROAD - HORIZONTAL AXIS 90° AWAY FROM THE GENERAL ALIGNMENT OF THE LEFT-HAND SIDE OF THE CARRIAGEWAY
 - ON A RIGHT-HAND BENDS - 90° ANGEL TO A LINE TANGENTIAL TO THE LEFT-HAND EDGE OF CARRIAGEWAY
 - ON A LEFT-HAND BENDS - 95° FROM A LINE JOINING THE EDGE OF CARRIAGEWAY 200m IN ADVANCE OF THE SIGN



TRAFFIC SIGN (Single Post)
SCALE: N.T.S

TABLE 01

SUMMARY	TRADITIONAL FOUNDATION OPTION 1			TRADITIONAL FOUNDATION OPTION 2			PLANTED FOUNDATION		POST DETAILS		
	L	W	D	L	W	D	Ø	D	Ø	WALL THICKNESS	TYPE
SIGN FACE AREA											
≤0.283 m² (Ø600mm)	0.75	0.40	0.55	0.55	0.55	0.55	0.40	0.50	76.1	3.2	CHS
0.283<AREA≤0.5625m² (BETWEEN 600Ø & 750x750)	0.75	0.65	0.65	0.70	0.70	0.70	0.40	0.65	76.1	3.2	CHS
0.5625<AREA≤1.189m² (750x750 TO 940x1265m²)	1.00	0.75	0.50	0.80	0.80	0.80	0.40	0.75	76.1	3.2	CHS



RESIDENTIAL DEVELOPMENT. STANDARD T JUNCTION WITH TACTILE PAVING - FOOTPATH
SCALE: 1:100

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Rev. No.	Date	REVISION NOTE	Drn. By	Chk. By

O'Mahony Pike
Proposed Development At O'Devaney Gardens
Road Construction Details
Sheet 1 of 2

Dwg. No. **ODG-CSC-XX-XX-DR-C-0029**

Date: 02.06.2020
Drn. By: JS
Chk. By: NB
Aprvd. By: DR
Scale: AS SHOWN @A1

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I.S. EN ISO 50001:2011
OHSAS 18001:2007

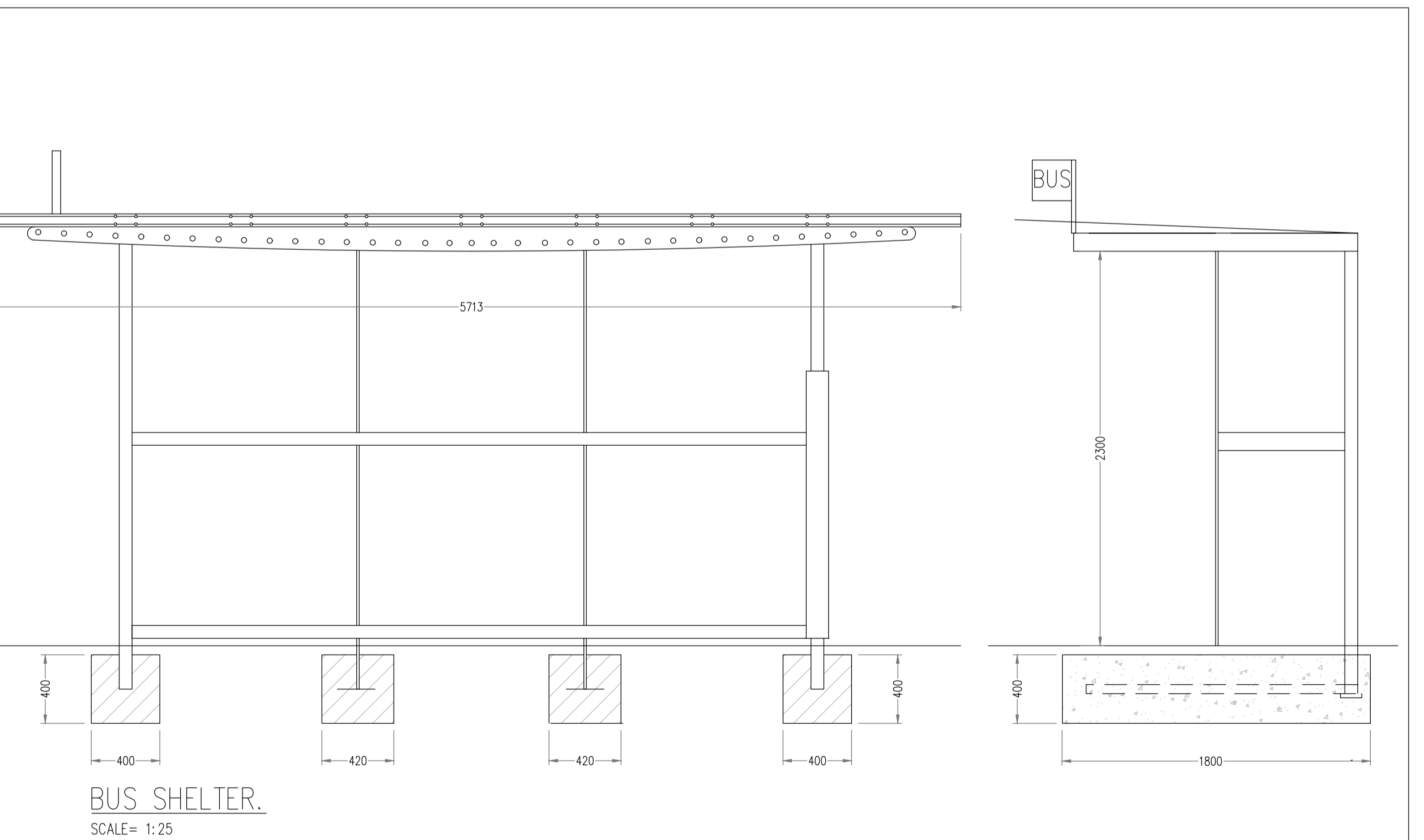
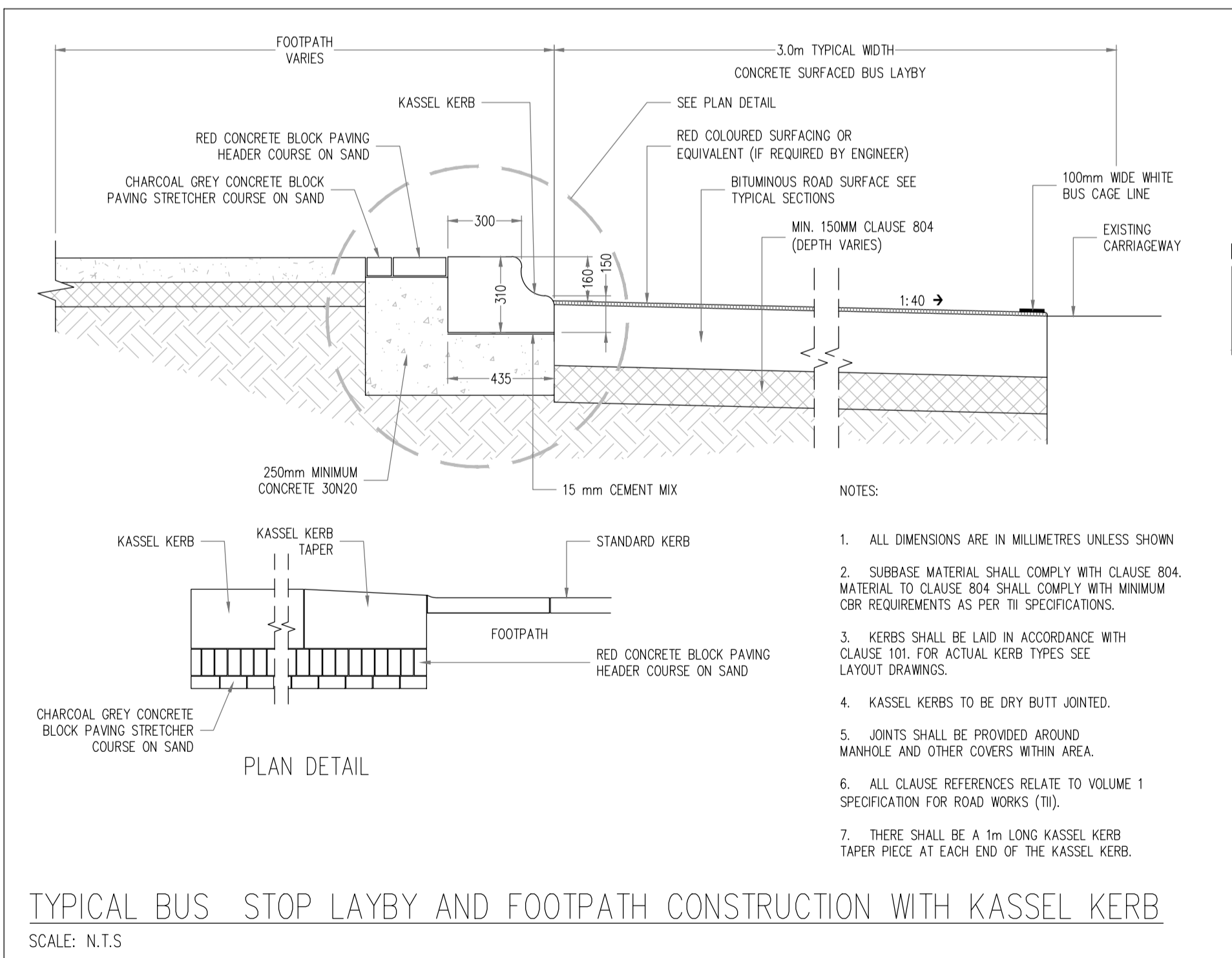
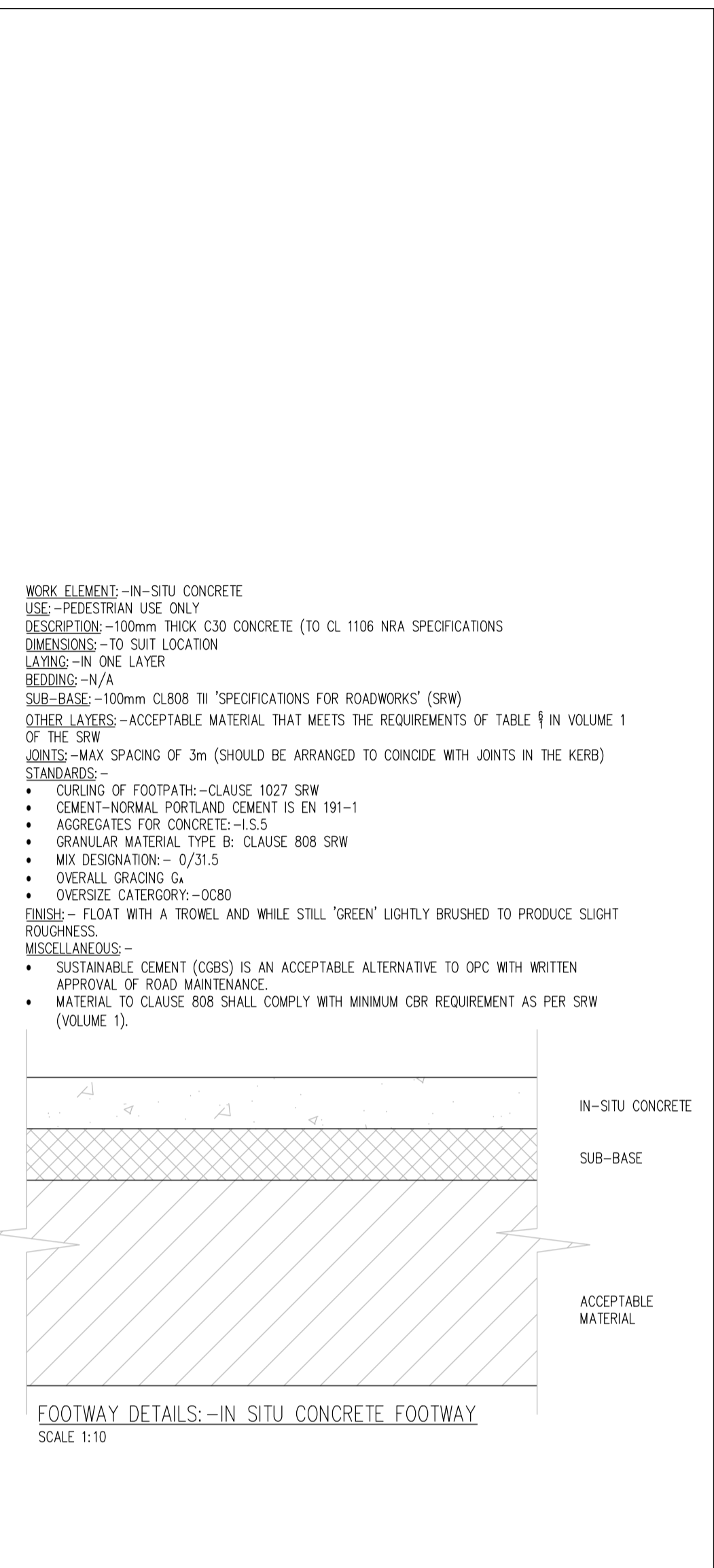
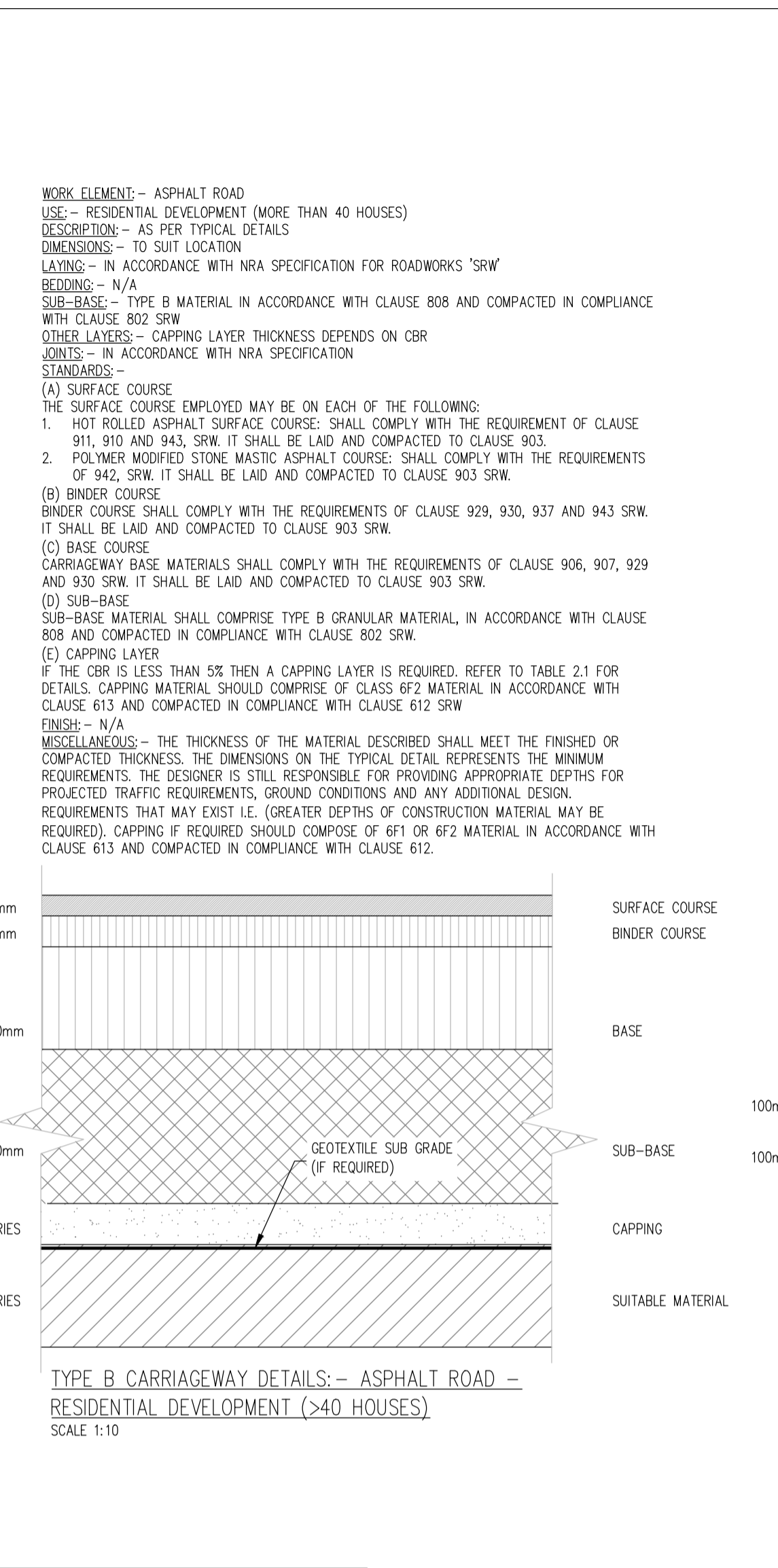
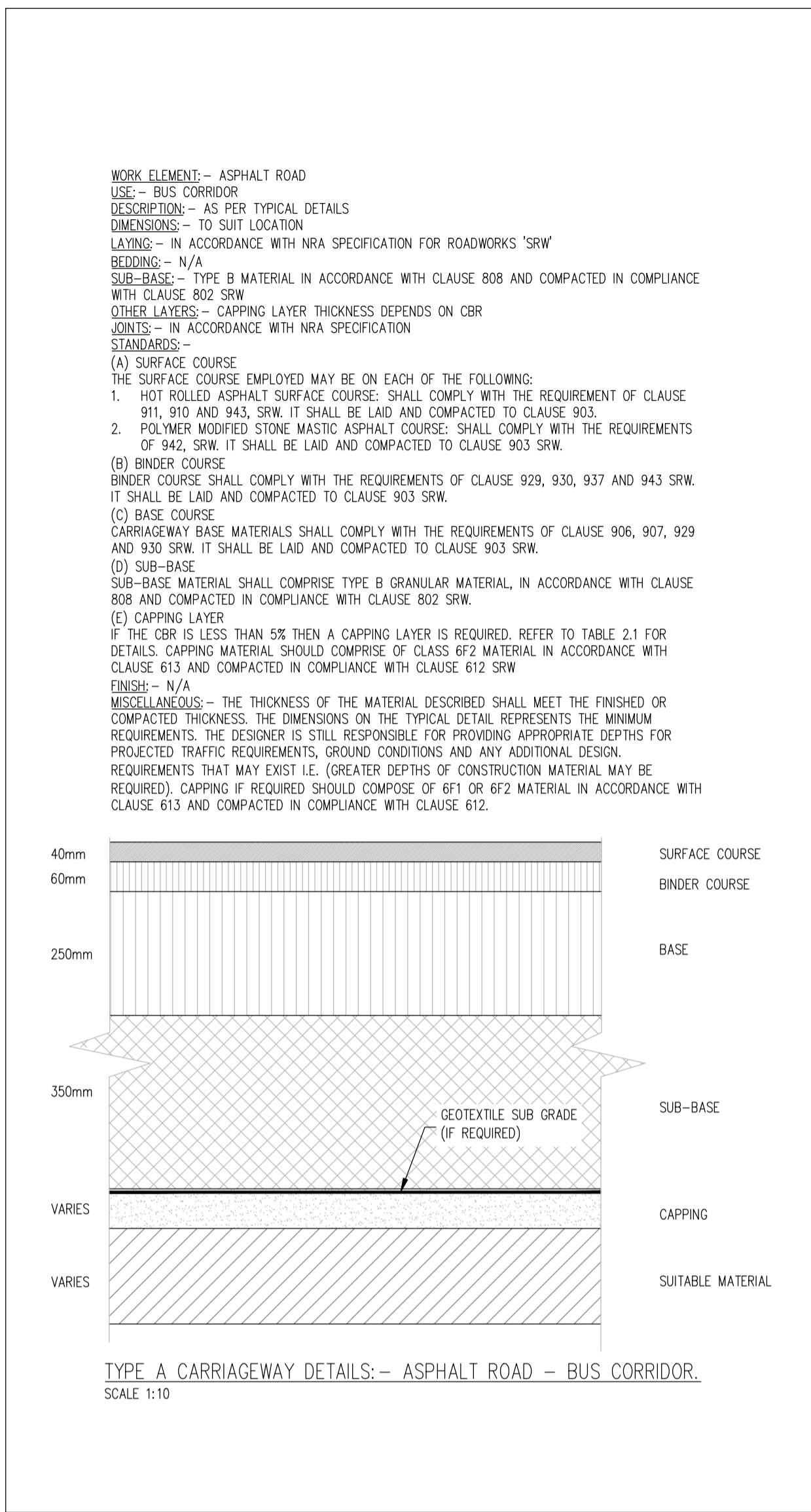
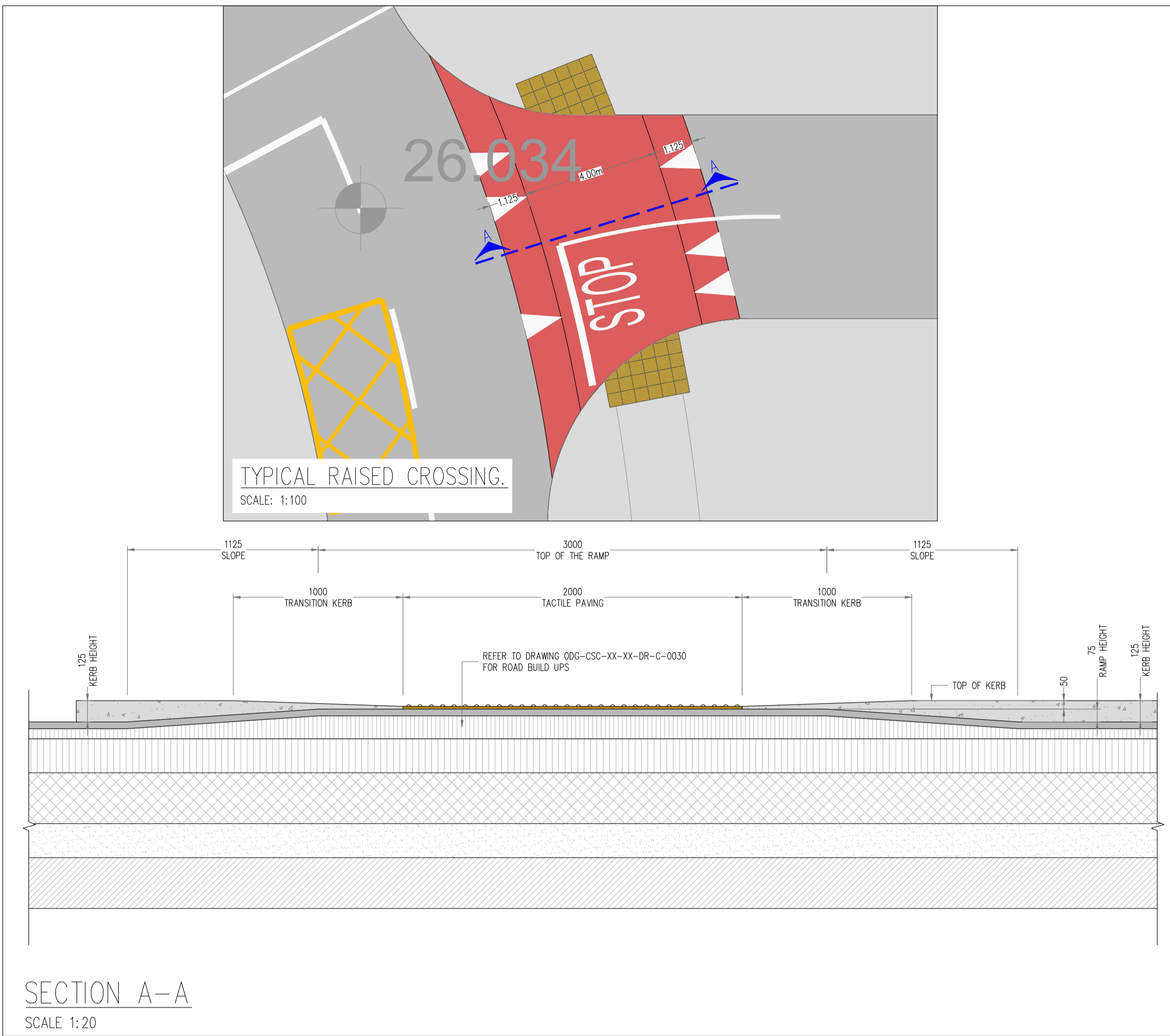


TABLE 1

FLEXIBLE PAVEMENT

THE MINIMUM REQUIRED THICKNESS OF NON-FROST SUSCEPTIBLE CAPPING MATERIAL IS SHOWN HEREUNDER:-

CBR SUBGRADE	BELOW	2 - 5	5 - 15	15+
%	2			
THICKNESS OF CAPPING(mm)	DESIGN	300	150	NO CAPPING

CBR TESTS SHALL BE CARRIED OUT AT A RATE OF ONE TEST PER 100 METERS OF ROAD

ALL ROADS DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS AND WITH REFERENCE TO THE DESIGN MANUAL FOR URBAN ROADS AND STREETS

NOTES:

- FOR AREAS WHERE CBR VALUE IS BELOW 2%, CARRY OUT THE FOLLOWING:
 - THE SOFT AREA IS TO BE EXCAVATED OUT FULLY AND REPLACED WITH A GENERAL FILL MATERIAL (CLASS 1A/1B) TO T11 SPECIFICATION TO THE UNDERSIDE OF A GEGRID LAYER (ENKAGRID TC 40 OR SIMILAR 40kN/m). SEPARATION GEOTEXTILE TO BE PLACED BETWEEN THE SUBGRADE AND CAPPING.
 - AN ENGINEER SHOULD INSPECT THE SOFT AREA WHEN IT HAS BEEN FULLY EXCAVATED OUT PRIOR TO THE FILL /STABILISED MATERIAL BEING PLACED/WORKED.
- FOR AREAS WHERE CBR VALUES ARE BETWEEN 2% AND 5%, CARRY OUT THE FOLLOWING:
 - THE SOIL IS TO BE EXCAVATED OUT FULLY AND REPLACED WITH A CAPPING MATERIAL TYPE 6F1/6F2 TO T11 SPECIFICATIONS. DEPTHS OF CAPPING MATERIAL AS PER TABLE 1. SEPARATION GEOTEXTILE TO BE PLACED BETWEEN THE SUBGRADE AND CAPPING.

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O'Mahony Pike
Proposed Development At O'Devaney Gardens
Road Construction Details
Sheet 2 of 2

Dwg. No. **ODG-CSC-XX-XX-DR-C-0030**

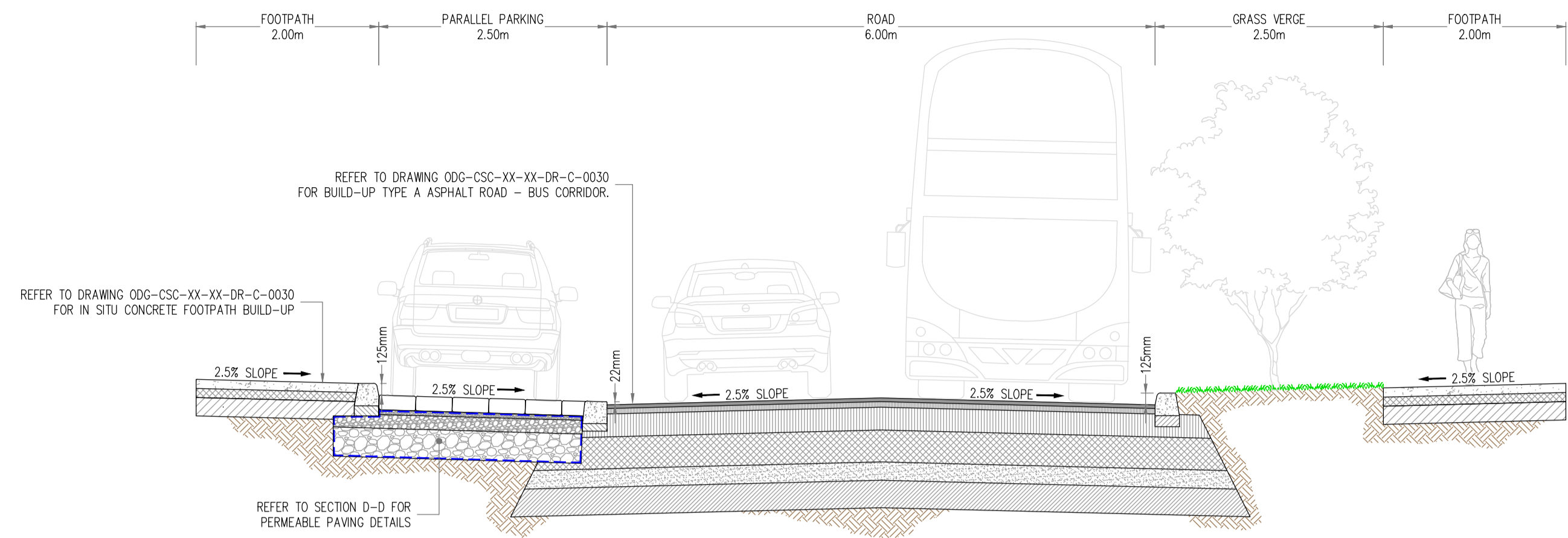
Date: 02.06.2020
Drn. by: JS
Chkd. by: NB
Aprvd. by: DR
Scale: AS SHOWN @A1
Revision:

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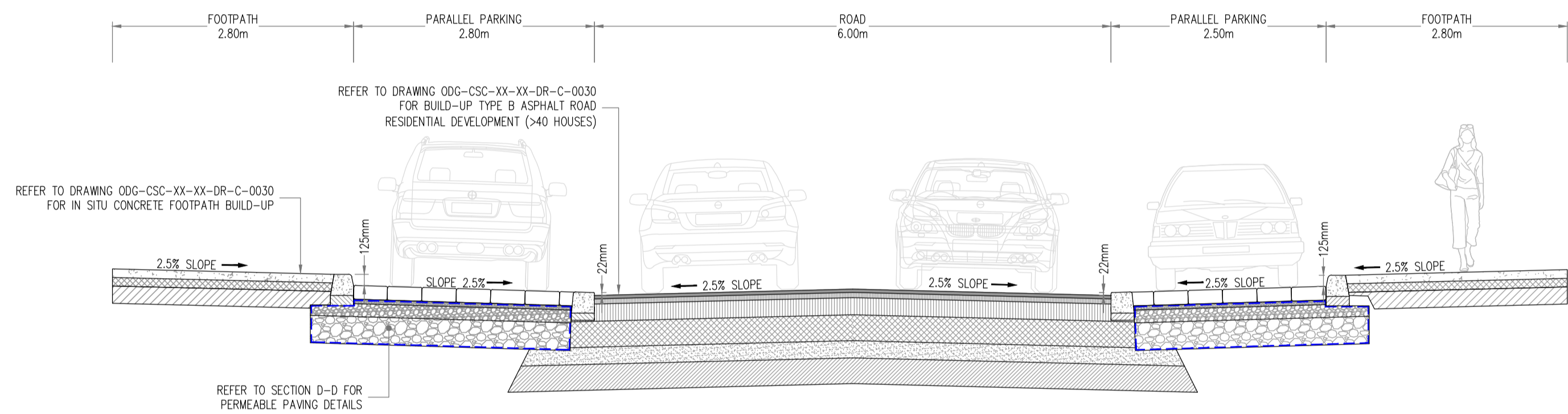
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Energy
Health & Safety

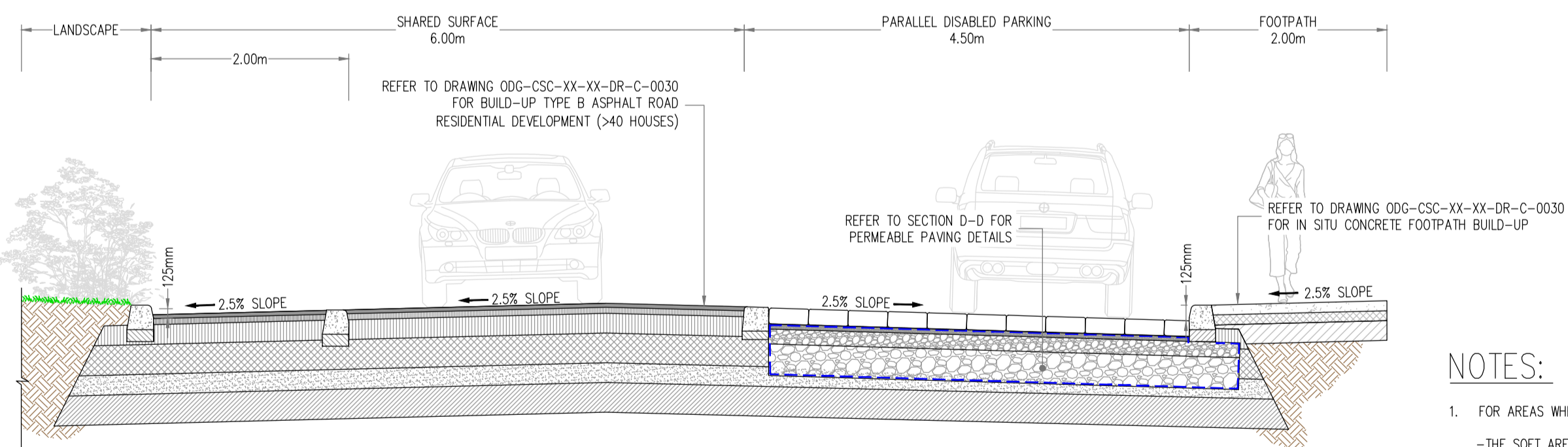
ISO 9001:2008
ISO 14001:2004
ISO 50001:2011
OHSAS 18001:2007



SECTION A-A (BOULEVARD).
SCALE 1:50



SECTION B-B (LINK STREET).
SCALE 1:50



SECTION C-C (LOCAL STREET).
SCALE 1:50

TABLE 1
FLEXIBLE PAVEMENT

THE MINIMUM REQUIRED THICKNESS OF NON-FROST SUSCEPTIBLE CAPPING MATERIAL IS SHOWN HEREUNDER:-

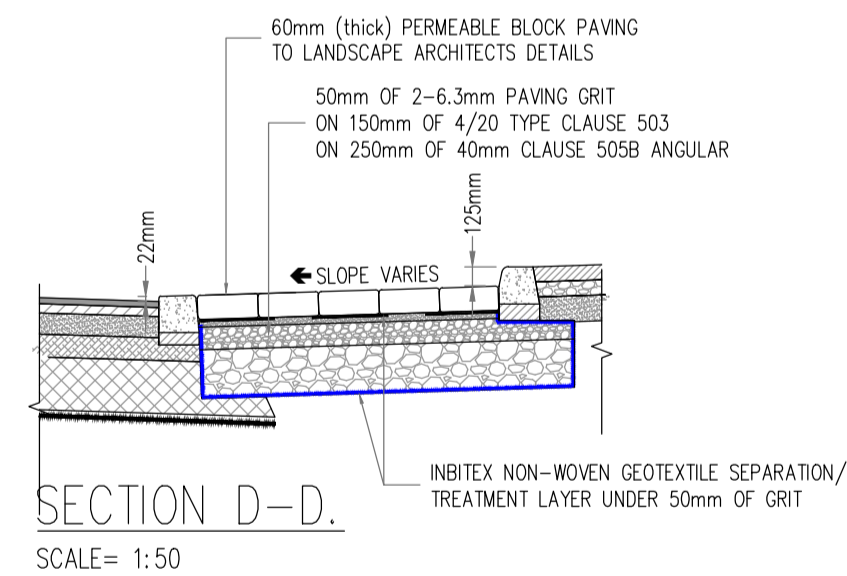
CBR SUBGRADE %	BELOW				
	2	5	15	50	15+
THICKNESS OF GEOTRID	2	5	15	15	NO
THICKNESS OF CAPPING(mm)	DESIGN	300	150	150	CAPPING

CBR TESTS SHALL BE CARRIED OUT AT A RATE OF ONE TEST PER 100 METERS OF ROAD

ALL ROADS DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS AND WITH REFERENCE TO THE DESIGN MANUAL FOR URBAN ROADS AND STREETS

NOTES:

- FOR AREAS WHERE CBR VALUE IS BELOW 2%, CARRY OUT THE FOLLOWING:
-THE SOFT AREA IS TO BE EXCAVATED OUT FULLY AND REPLACED WITH A GENERAL FILL MATERIAL (CLASS 1A/1B) TO THE SPECIFICATION TO THE UNDERSIDE OF A GEOTRID LAYER (ENKAGRID TC 40 OR SIMILAR 40N/m). SEPARATION GEOTEXTILE TO BE PLACED BETWEEN THE SUBGRADE AND CAPPING.
AN ENGINEER SHOULD INSPECT THE SOFT AREA WHEN IT HAS BEEN FULLY EXCAVATED OUT PRIOR TO THE FILL /STABILISED MATERIAL BEING PLACED/WORKED.
- FOR AREAS WHERE CBR VALUES ARE BETWEEN 2% AND 5%, CARRY OUT THE FOLLOWING:
-THE SOIL IS TO BE EXCAVATED OUT FULLY AND REPLACED WITH A CAPPING MATERIAL TYPE 6F1/6F2 TO THE SPECIFICATIONS. DEPTHS OF CAPPING MATERIAL AS PER TABLE 1. SEPARATION GEOTEXTILE TO BE PLACED BETWEEN THE SUBGRADE AND CAPPING.

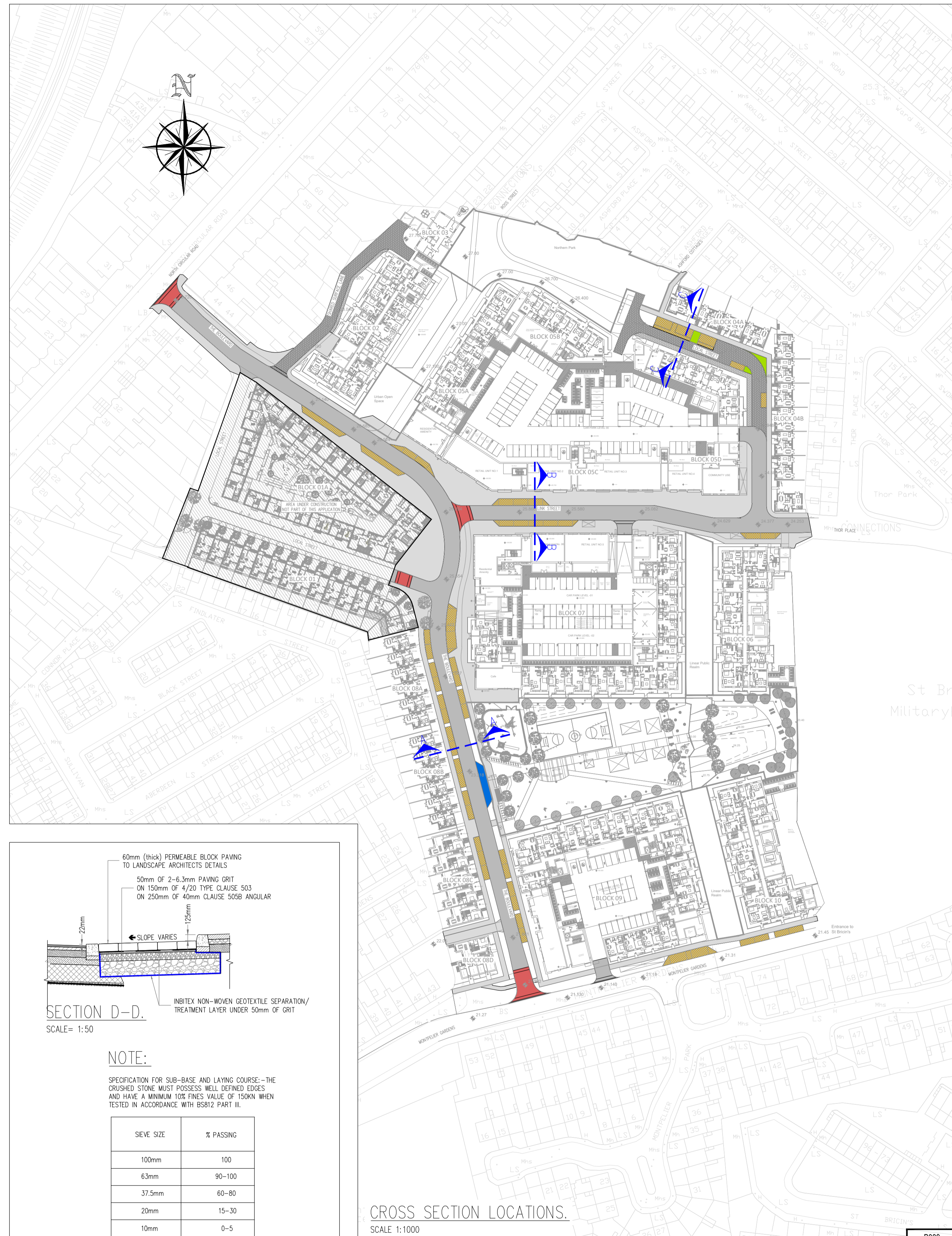


SECTION D-D.
SCALE= 1:50

NOTE:

SPECIFICATION FOR SUB-BASE AND LAYING COURSE:-THE CRUSHED STONE MUST POSSESS WELL DEFINED EDGES AND HAVE A MINIMUM 10% FINES VALUE OF 150KN WHEN TESTED IN ACCORDANCE WITH BS812 PART III.

SIEVE SIZE	% PASSING
100mm	100
6.3mm	90-100
37.5mm	60-80
20mm	15-30
10mm	0-5



CROSS SECTION LOCATIONS.
SCALE 1:1000

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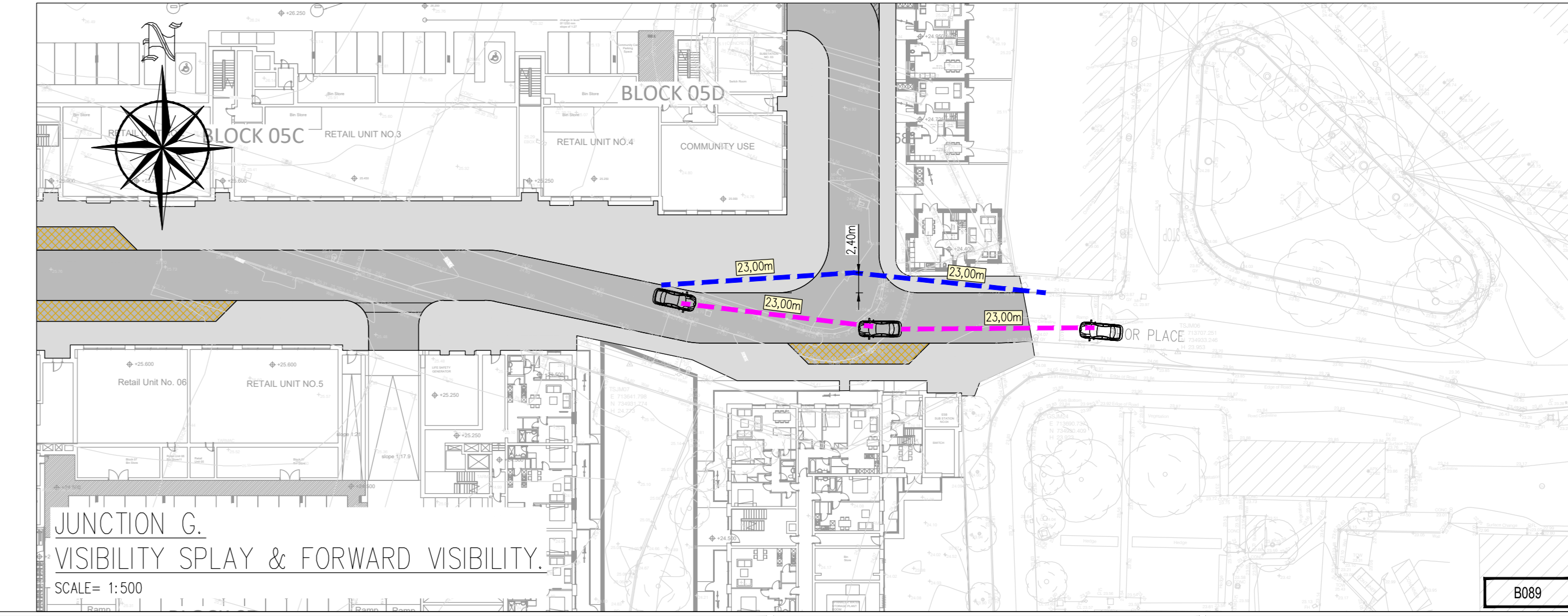
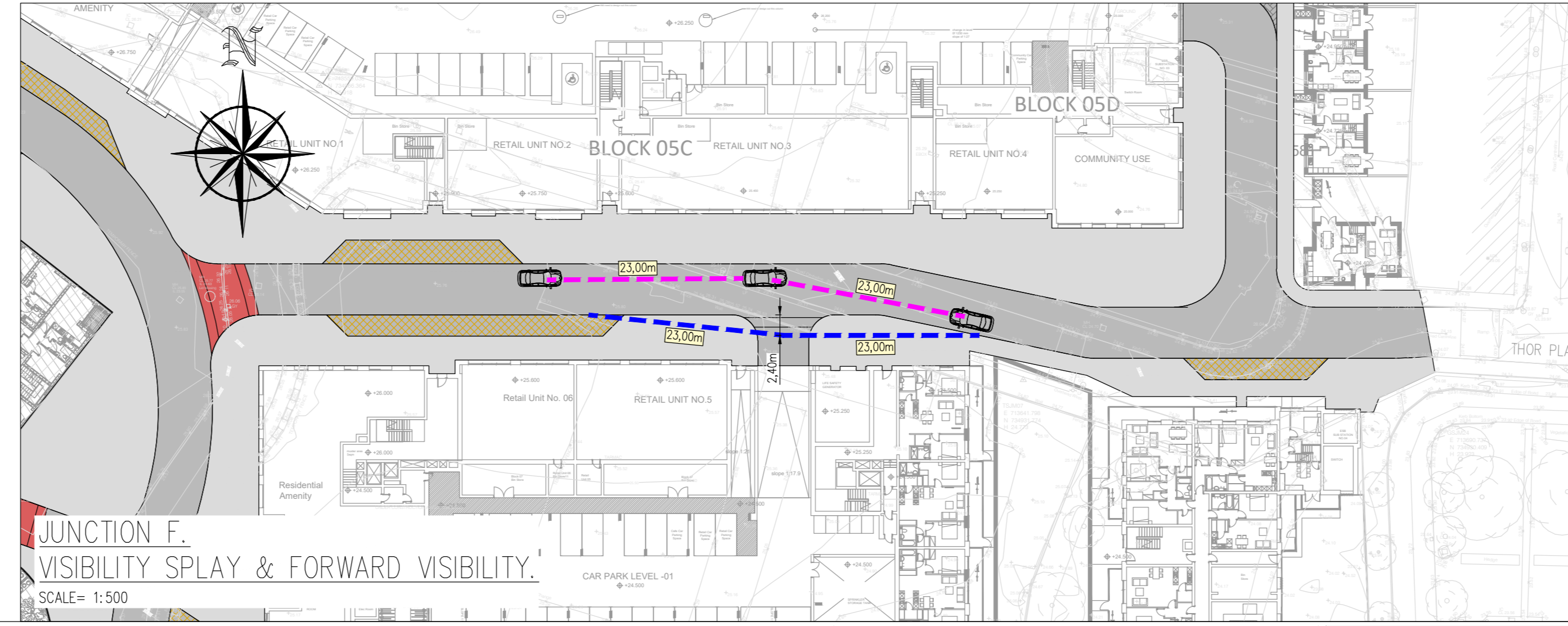
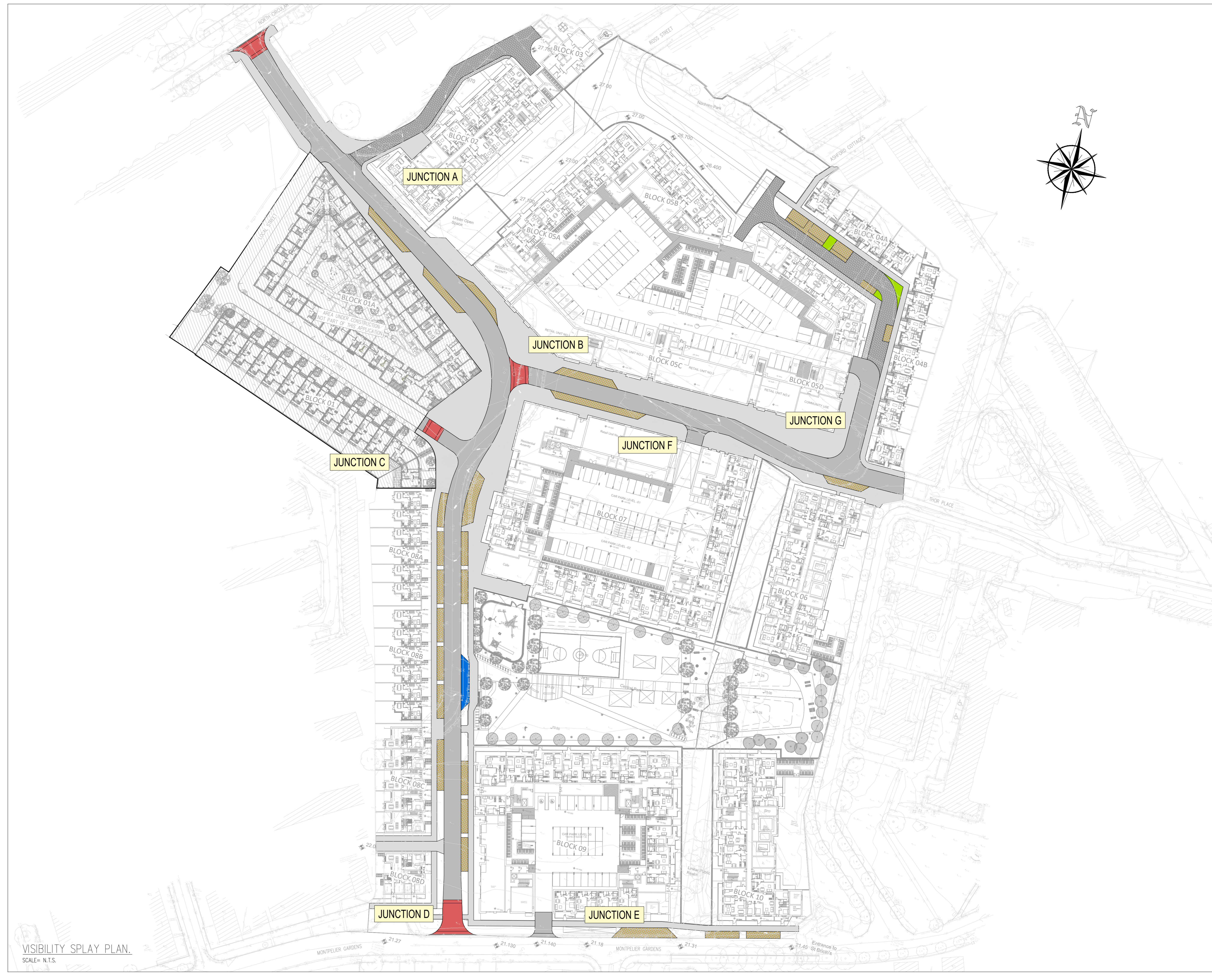
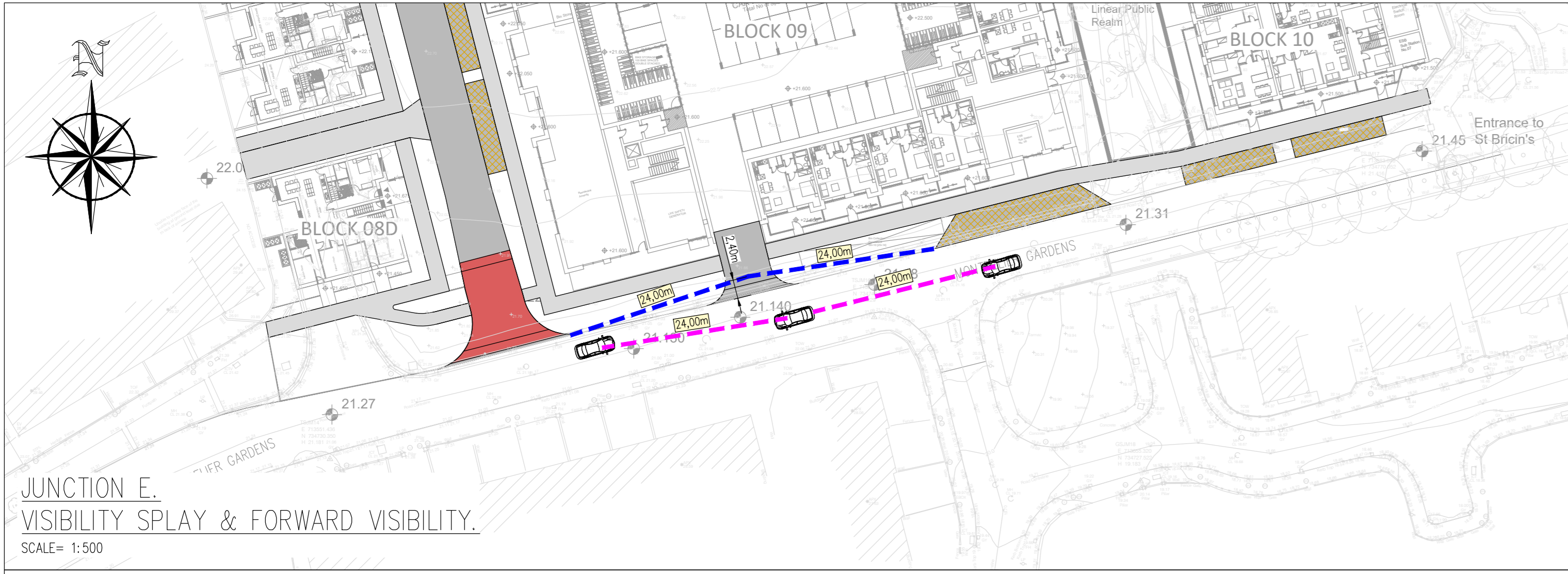
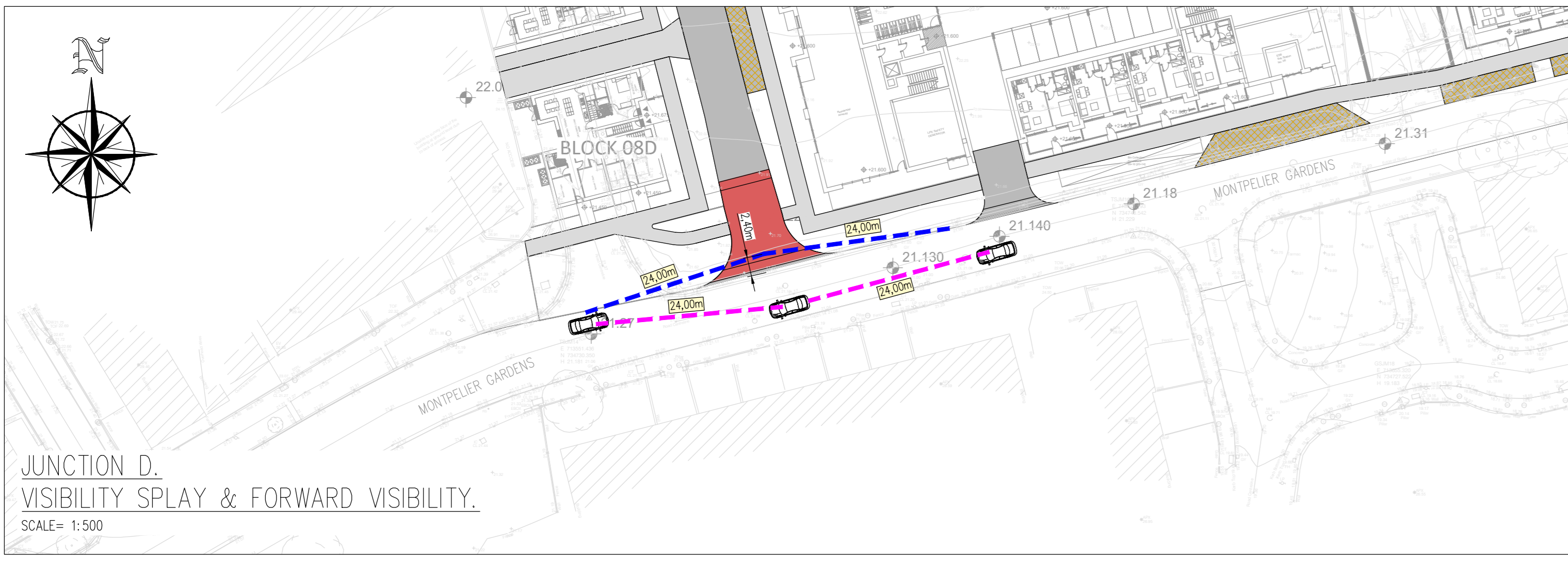
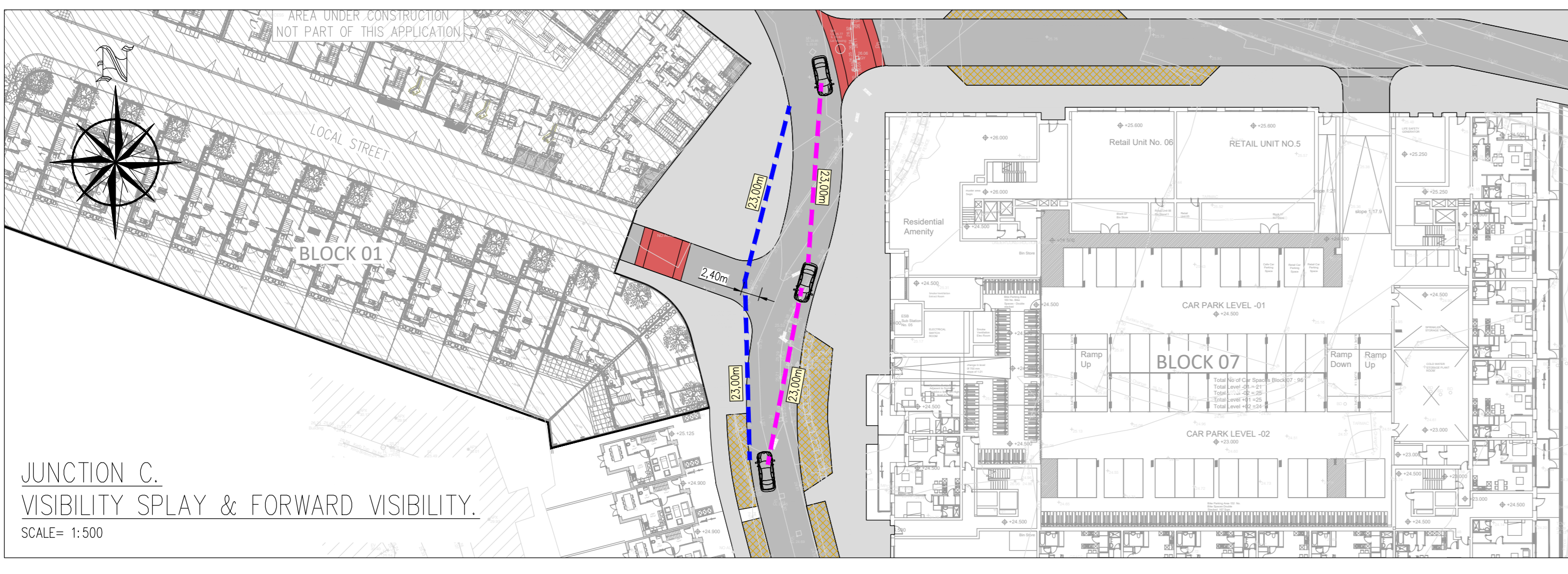
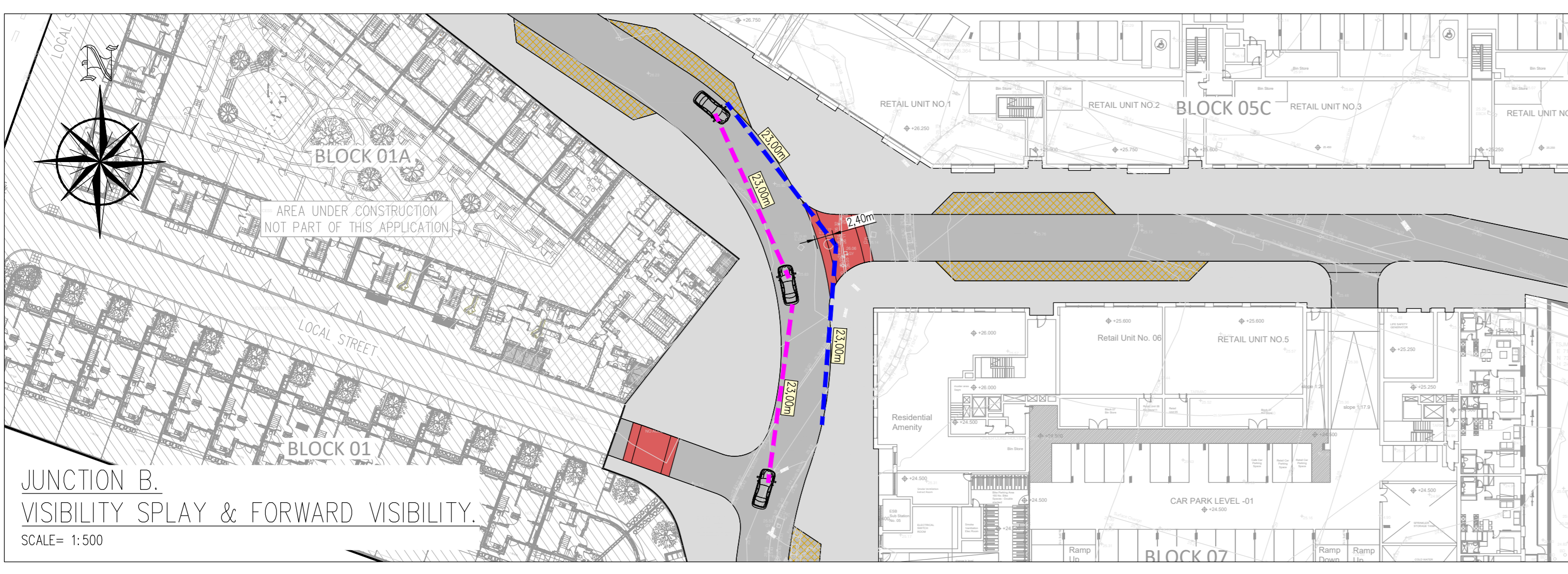
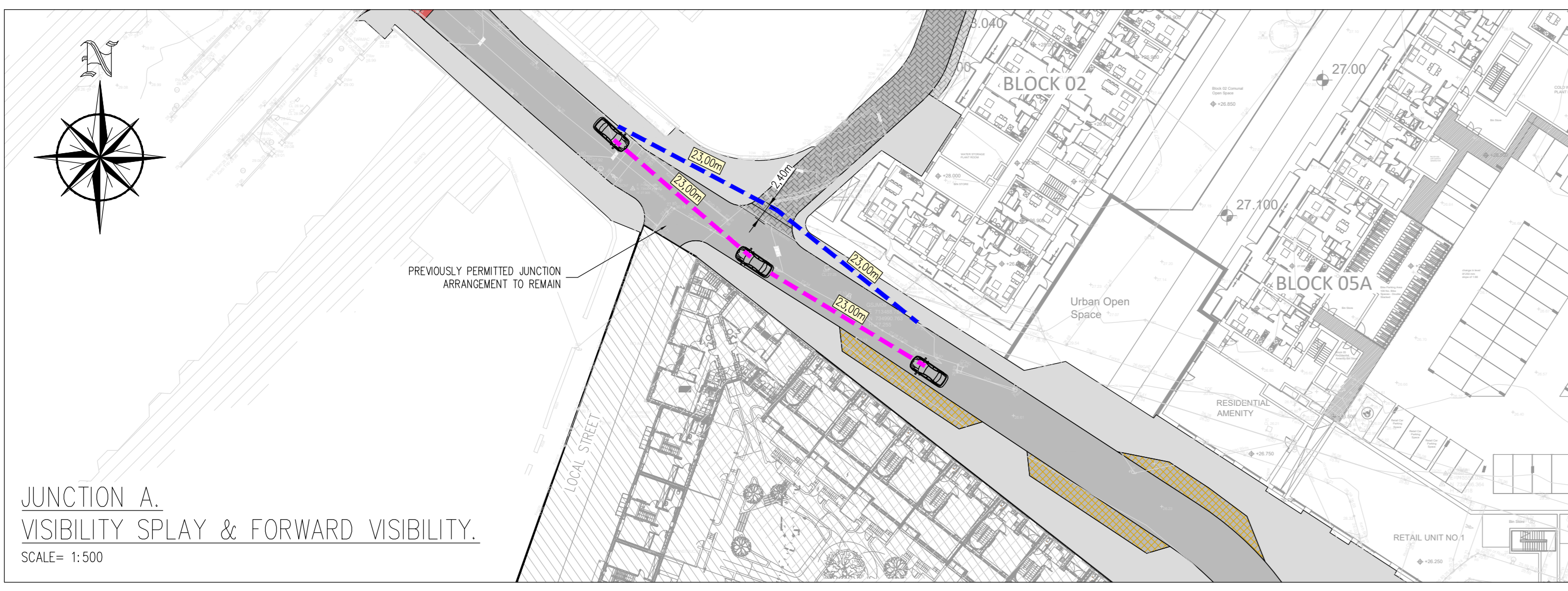
Rev. No.	Date	REVISION NOTE	Drn. By	Chkd. By
P1	07.05.2021	REVISED FOR PLANNING	JS	NB

Architect	Project	Title	Dwg. No.	Date	Drn. By	Chkd. By	Aprvd. By	Scale	Revision
O'Mahony Pike	Proposed Development At O'Devaney Gardens	Proposed Road Cross Sections	ODG-CSC-XX-XX-DR-C-0031	02.06.2020	JS	NB	DR	AS SHOWN @A1	P1

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P1	07/05/2021	REVISED FOR PLANNING	JS	NB	

O'Mahony Pike Proposed Development At O'Devaney Gardens	
Title Visibility Splay & Forward Visibility.	
Dwg No. ODG-CSC-XX-XX-DR-C-0032	
Date 02.06.2020	Scale AS SHOWN (NAS)
Drn By JS	Chk By NB
Rev No. P1	Revision

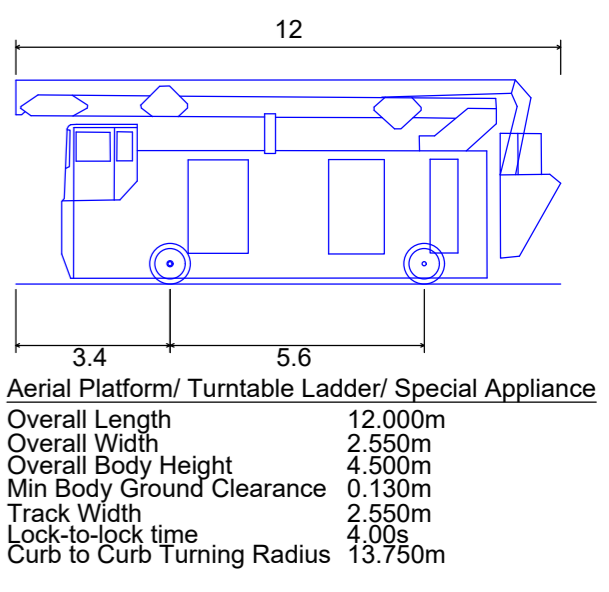
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SWEPT PATH ANALYSIS—FIRE TENDER.
 SCALE= 1:500

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Rev. No.	Date	REVISION NOTE	Dr. By	Chk. By
P1	07.05.2021	REVISED FOR PLANNING	JS	NB

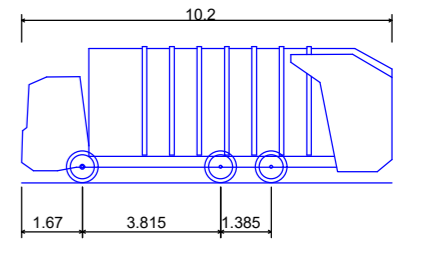
Architect Project	O'Mahony Pike Proposed Development At O'Devaney Gardens
Title	Swept Path Analysis Fire Tender
Dwg. No.	ODG-CSC-XX-XX-DR-C-0034
Date	29.05.2020
Dr. by	JS
Chk. by	NB
Agred by	DR
Scale	1:500@A1
Revision	P1

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Phoenix 2 Duo (P2-12W with Elite 6x4 chassis)
 Overall Length 10.200m
 Overall Width 2.530m
 Overall Body Height 3.751m
 Min Body Ground Clearance 0.304m
 Track Width 2.500m
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 7.800m



SWEPT PATH ANALYSIS-REFUSE VEHICLE.
 SCALE= 1:500

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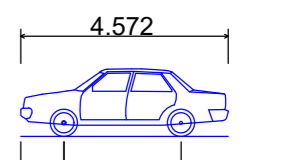
Rev. No	Date	REVISION NOTE	Dr. By	Chk. By
P1	07.05.2021	REVISED FOR PLANNING	JS	NB

Architect Project	O'Mahony Pike Proposed Development At O'Devaney Gardens
Title	Swept Path Analysis Refuse Vehicle
Dwg. No.	ODG-CSC-XX-XX-DR-C-0035
Date	29.05.2020
Dim by	JS
Chkd by	NB
Agred by	DR
Scale	1:500 @A1
Revision	P1

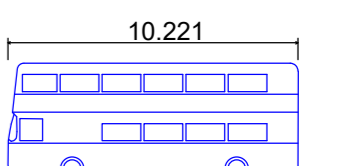
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0.951 2.578
Skoda Octavia
 Overall Length 4.572m
 Overall Width 1.768m
 Overall Body Height 1.488m
 Min Body Ground Clearance 0.249m
 Max Track Width 1.713m
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 5.100m



10.221
 2.271 5.8
Trident II - 10.45m 2-Axle
 Overall Length 10.221m
 Overall Width 2.400m
 Overall Body Height 4.140m
 Min Body Ground Clearance 0.311m
 Track Width 2.363m
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 8.998m



SWEPT PATH ANALYSIS-CAR.
 SCALE= 1:500

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Rev. No.	Date	REVISION NOTE	Dim. By	Chk. By
P1	07.05.2021	REVISED FOR PLANNING	JS	NB

Architect Project	O'Mahony Pike Proposed Development At O'Devaney Gardens Swept Path Analysis Car
Dwg. No.	ODG-CSC-XX-XX-DR-C-0036
Date	29.05.2020
Dim by	JS
Chk by	NB
Appr by	DR
Scale	1:500 @A1
Revision	P1

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NOTES:

M/H	CL	IL	DEPTH
FMH-A	25.45	23.95	1.50
FMH-B	26.45	23.70	2.74
FMH-C	26.15	23.30	2.85
FMH-D	25.85	22.90	2.95
FMH-E	25.45	23.95	1.50
FMH-F	24.40	22.24	2.16
FMH-G	22.93	21.15	1.78

AS PART OF THE DIVERSION WORKS TEMPORARY OVER PUMPING WILL BE REQUIRED FROM MH A/B & D.



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Rev No	Date	REVISION NOTE	Drn. By	Chkd. By

Project	O'Mahony Pike Proposed Development At O'Devaney Gardens			
Title	Proposed Foul Sewer Diversion			
Dwg. No.	ODG-CSC-XX-XX-DR-C-0039			
Date	29.05.2020	Drn. By	DD	Chkd. By
Scale	1:500 @A1	Appr'd by	DR	Scale
Revision				

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LEGEND PARKING/SET-DOWN ARRANGEMENT:

TOTAL CAR SPACES = 276 SPACES

DIVIDED INTO = RESIDENTIAL PARKING	= 184 SPACES	■
NON-RESIDENTIAL PARKING	= 012 SPACES	■
CRECHE SET-DOWN	= 003 SPACES	■
PUBLIC ON STREET PARKING	= 047 SPACES	■
CAR CLUB PARKING	= 030 SPACES	■



PROPOSED PARKING ARRANGEMENT.
SCALE= 1:500

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Rev. No	Date	REVISION NOTE	Dr. By	Chk. By

Architect	O'Mahony Pike	
Project	Proposed Development At O'Devaney Gardens	
Title	Proposed Parking Arrangement	
Dwg. No.	ODG-CSC-XX-XX-DR-C-0040	
Date	30.04.2021	
Dim by	JS	
Chk by	NB	
Appr by	DR	
Scale	1:500 @A1	
Revision		

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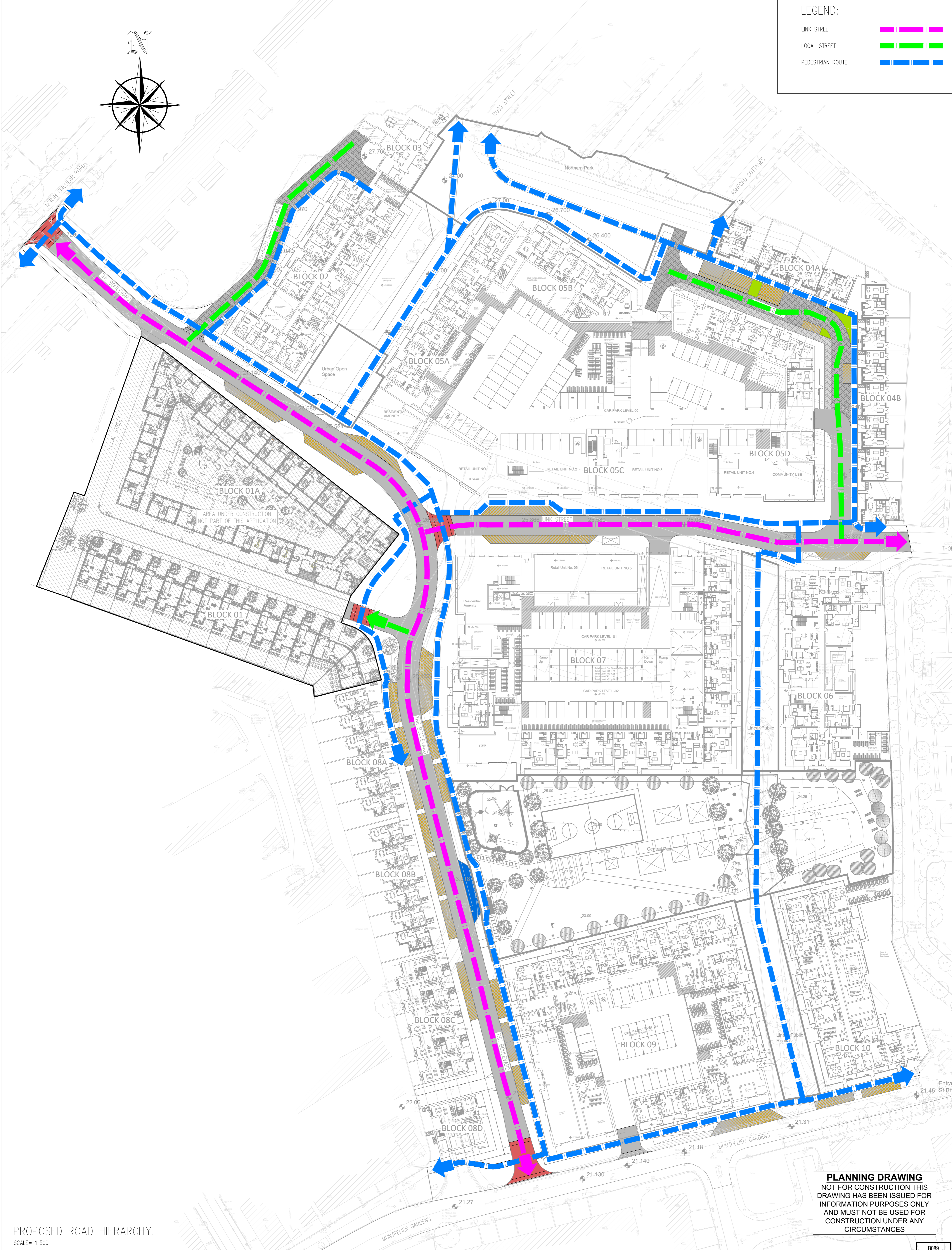
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LEGEND:	
LINK STREET	
LOCAL STREET	
PEDESTRIAN ROUTE	



PROPOSED ROAD HIERARCHY.
SCALE= 1:500

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Rev. No	Date	REVISION NOTE	Dr. By	Chk. By

Architect		O'Mahony Pike	
Project		Proposed Development At O'Devaney Gardens	
Title		Proposed Road Hierarchy	
Dwg. No.	ODG-CSC-XX-XX-DR-C-0041		
Date	Dim by	Chkd by	Appr'd by
30.04.2021	JS	NB	DR
Scale	1:500 @A1		
Revision			

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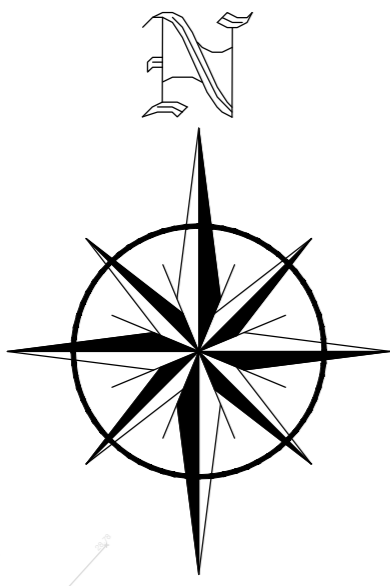
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(QA - 3.3.7)
IN RESPONSE TO ITEM 3.3.7 OF THE QUALITY AUDIT,
BUILD-OUTS AND DIFFERENT MATERIALS PROVIDED TO
CLEARLY IDENTIFY THE DRIVING AREA.

(QA - 3.3.8)
IN RESPONSE TO ITEM 3.3.8 OF THE QUALITY AUDIT,
TRAFFIC CALMING SHUTTLE SYSTEM PROVIDED WITH FORWARD
VISIBILITY MAINTAINED.

(QA - 3.3.1)
IN RESPONSE TO ITEM 3.3.1 OF THE QUALITY AUDIT,
ESTABLISHED JUNCTION CONFIGURATION MAINTAINED.
REMOVAL OF EXISTING MATURE TREES ON NORTH
CIRCULAR ROAD NOT FEASIBLE. TREE FOLIAGE DOES
NOT OBSTRUCT SIGHTLINES.

(QA - 3.3.3)
IN RESPONSE TO ITEM 3.3.3 OF THE QUALITY AUDIT,
PROPOSED SHARED SURFACE HORIZONTAL ALIGNMENT
HAS BEEN STREAM LINED.

(QA - 3.3.2)
IN RESPONSE TO ITEM 3.3.2 OF THE QUALITY AUDIT,
ADEQUATE VISIBILITY SPLAY HAS BEEN PROVIDED.

(QA - 3.3.6)
IN RESPONSE TO ITEM 3.3.6 OF THE QUALITY AUDIT,
TURNING HEAD PROVIDED AND SWEEP PATH
ANALYSIS CARRIED OUT FOR A REFUSE VEHICLE.
REFER TO DRAWING ODG-CSC-XX-XX-DR-C-0035.

(QA - 3.3.16)
IN RESPONSE TO ITEM 3.3.16 OF THE QUALITY AUDIT,
SWEEP PATH ANALYSIS CARRIED OUT TO ENSURE
PARKING SPACES ARE SAFELY ACCESSED/EGRESSED.
REFER TO DRAWING ODG-CSC-XX-XX-DR-C-0043

(QA - 3.3.10)
IN RESPONSE TO ITEM 3.3.10 OF THE QUALITY AUDIT,
PEDESTRIAN CROSSING PROVIDED

(QA - 3.3.11)
IN RESPONSE TO ITEM 3.3.11 OF THE QUALITY AUDIT,
ROAD MARKINGS PROVIDED TO CLEARLY IDENTIFY
TRAFFIC DIRECTION

(QA - 3.3.9)
IN RESPONSE TO ITEM 3.3.9 OF THE QUALITY AUDIT,
ROAD MARKINGS AND VERTICAL STOP SIGN PROVIDED
TO CLEARLY INDICATE THE JUNCTION PRIORITY.

(QA - 3.3.4)
IN RESPONSE TO ITEM 3.3.4 OF THE QUALITY AUDIT,
PROPOSED FOOTPATHS ARE WELL DEFINED AND FREE
OF OBSTACLES THROUGHOUT THE DEVELOPMENT.

(QA - 3.3.15)
IN RESPONSE TO ITEM 3.3.15 OF THE QUALITY AUDIT,
STOP SIGN RELOCATED TO IMPROVE VISIBILITY TO
APPROACHING DRIVERS.

(QA - 3.3.5)
IN RESPONSE TO ITEM 3.3.5 OF THE QUALITY AUDIT,
ROAD MARKINGS AND VERTICAL STOP SIGN PROVIDED
TO CLEARLY INDICATE THE JUNCTION PRIORITY.

(QA - 3.3.14)
IN RESPONSE TO ITEM 3.3.14 OF THE QUALITY AUDIT,
CONTINUOUS WIDTH OF 6.0m MAINTAINED THROUGH RAMP ACCESS.
REFER ALSO TO DRAWING ODG-CSC-XX-XX-DR-C-0043.

(QA - 3.3.11)
IN RESPONSE TO ITEM 3.3.11 OF THE QUALITY AUDIT,
ROAD MARKINGS PROVIDED TO CLEARLY IDENTIFY
TRAFFIC DIRECTION ON EACH RAMP.

(QA - 3.3.19)
IN RESPONSE TO ITEM 3.3.19 OF THE QUALITY AUDIT,
CENTRAL RAMP GRADIENT OF 1:6 WITH TRANSITION
SLOPES AT 1:12

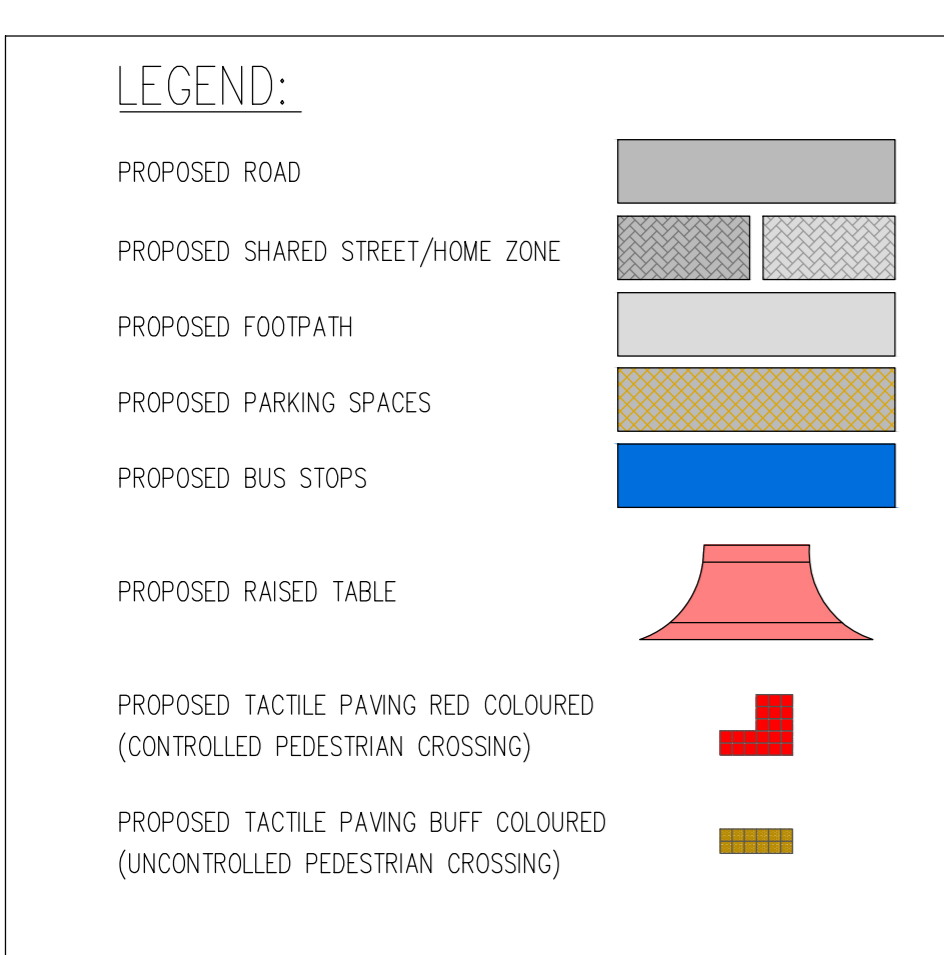
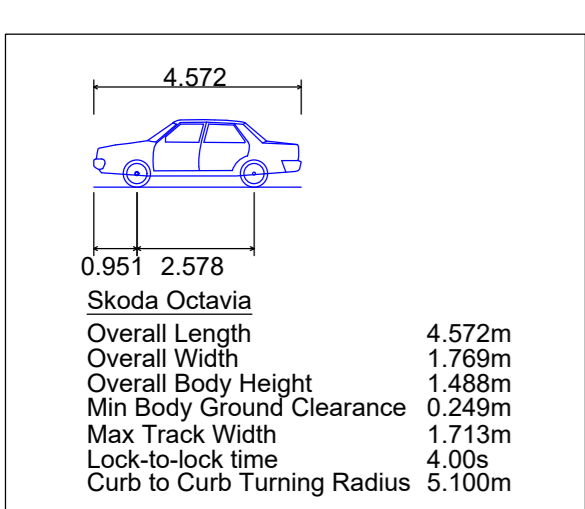
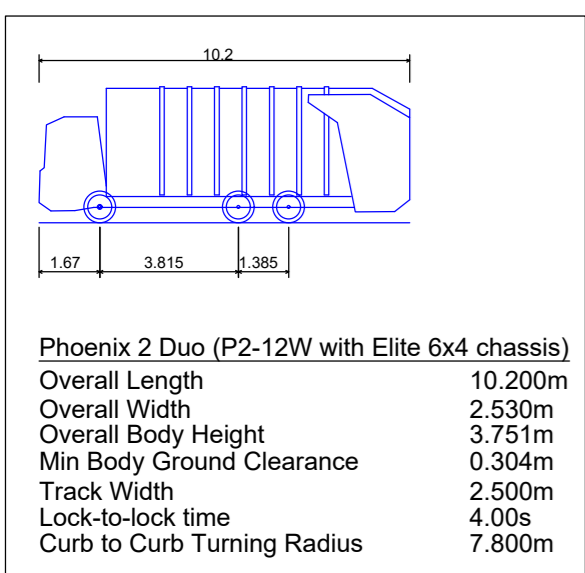
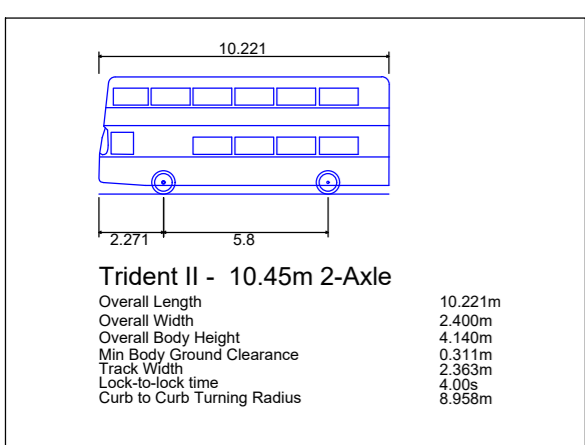
(QA - 3.3.17)
IN RESPONSE TO ITEM 3.3.17 OF THE QUALITY AUDIT,
APPROPRIATE EDGE PROTECTION TO BE PROVIDED.

(QA - 3.3.12)
IN RESPONSE TO ITEM 3.3.12 OF THE QUALITY AUDIT,
SWEEP PATH ANALYSIS FOR DOUBLE DECKER BUSES SHOWS
NO INTRUSION INTO OPPOSING LANE OR ADJACENT FOOTPATH

(QA - 3.3.10)
IN RESPONSE TO ITEM 3.3.10 OF THE QUALITY AUDIT,
PEDESTRIAN CROSSING PROVIDED

(QA - 3.3.13)
IN RESPONSE TO ITEM 3.3.13 OF THE QUALITY AUDIT,
APPROPRIATE REGULATORY PARKING SIGNAGE TO BE
PROVIDED AT ALL ON STREET PARKING SPACES.
REFER TO DRAWING ODG-CSC-XX-XX-DR-C-0028.

(QA - 3.3.11)
IN RESPONSE TO ITEM 3.3.11 OF THE QUALITY AUDIT,
ROAD MARKINGS PROVIDED TO CLEARLY IDENTIFY
TRAFFIC DIRECTION AND JUNCTION PRIORITY.



QUALITY AUDIT.
SCALE= 1:500

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Rev No	Date	REVISION NOTE	Dim. By	Chkd. By

Project	O'Mahony Pike Proposed Development At O'Devaney Gardens
Title	Proposed Quality Audit
Dwg. No.	ODG-CSC-XX-XX-DR-C-0042
Date	30.04.2021
Dim by	JS
Chkd by	NB
Appr'd by	DR
Scale	1:500 @A1
Revision	

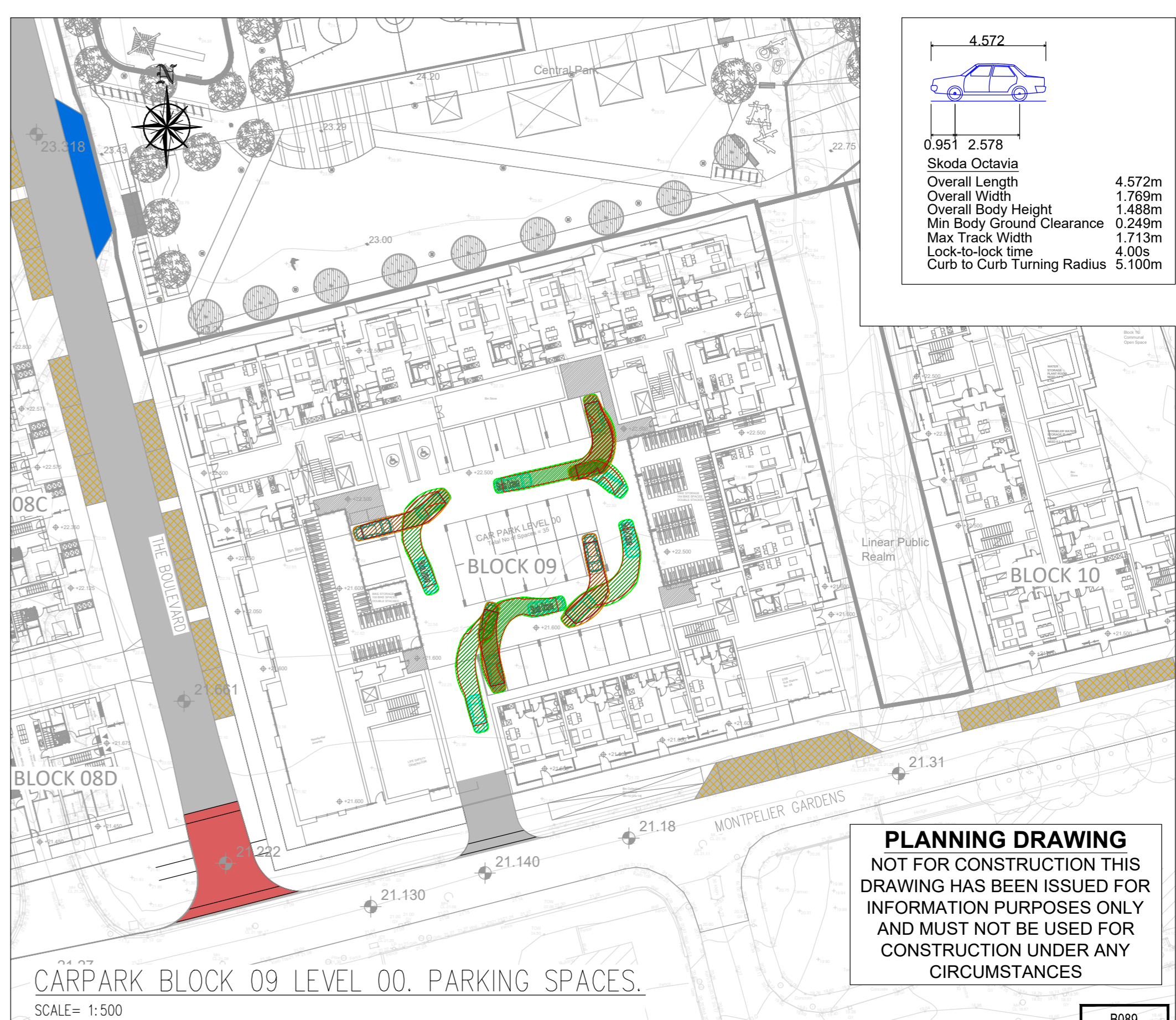
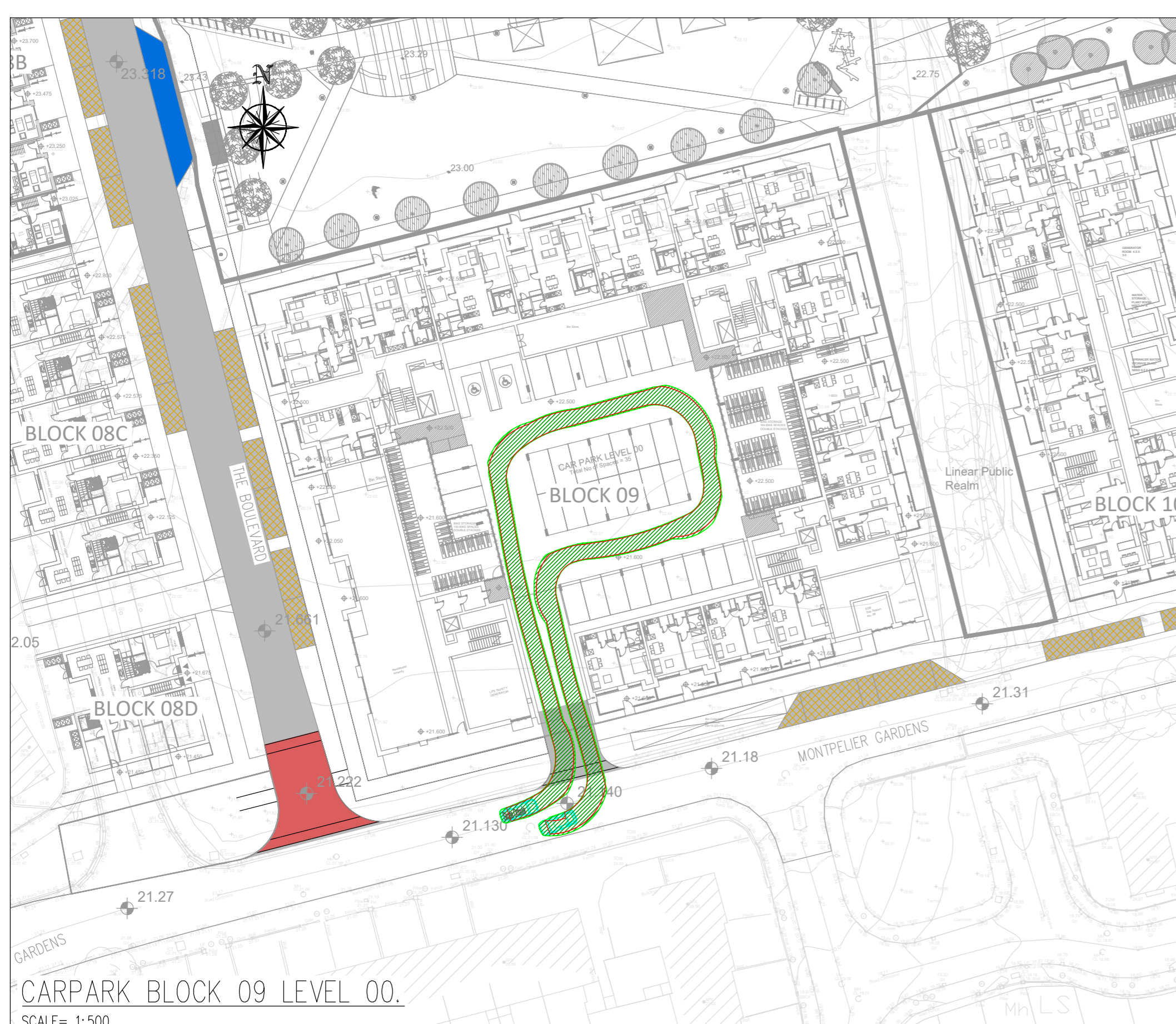
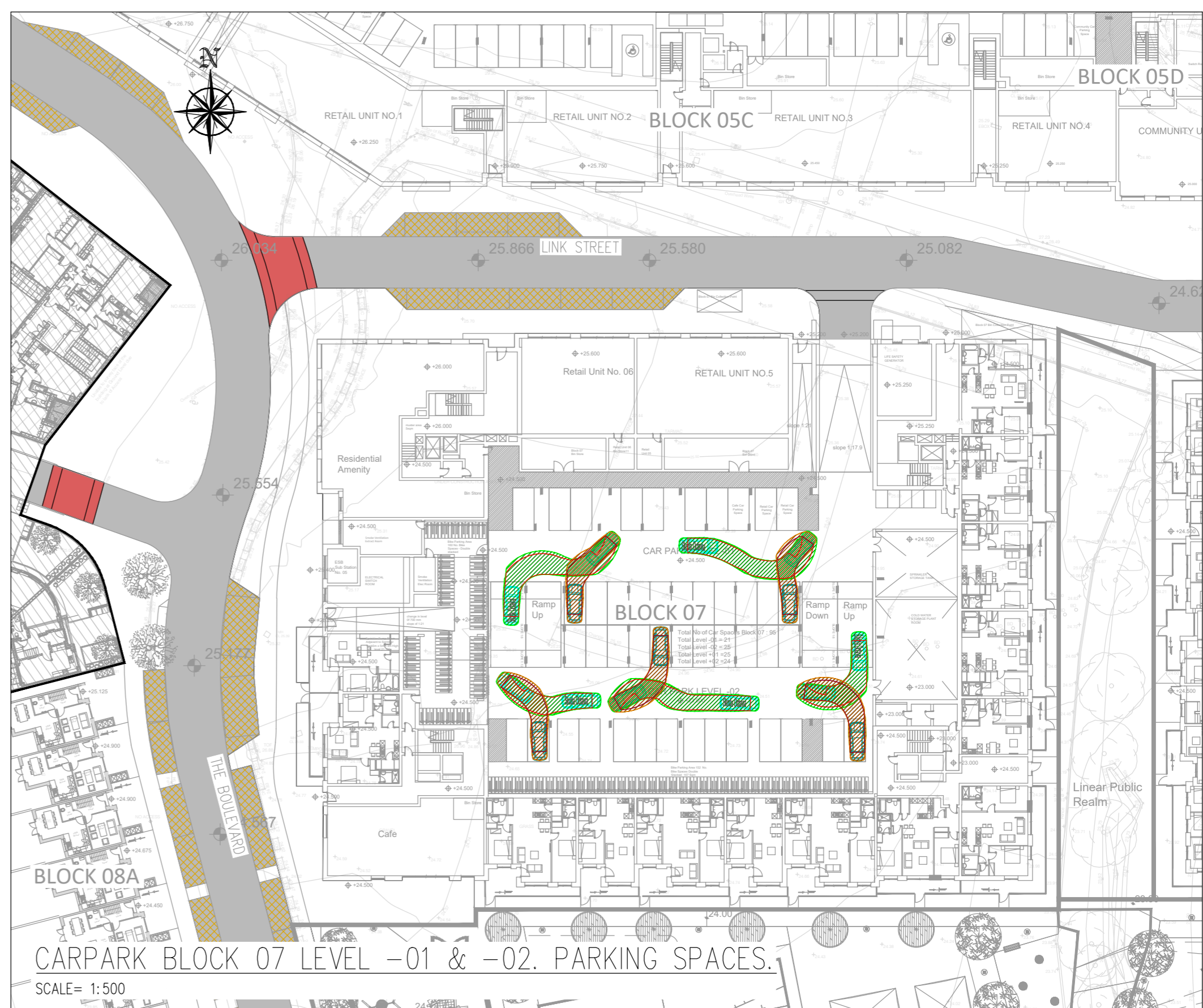
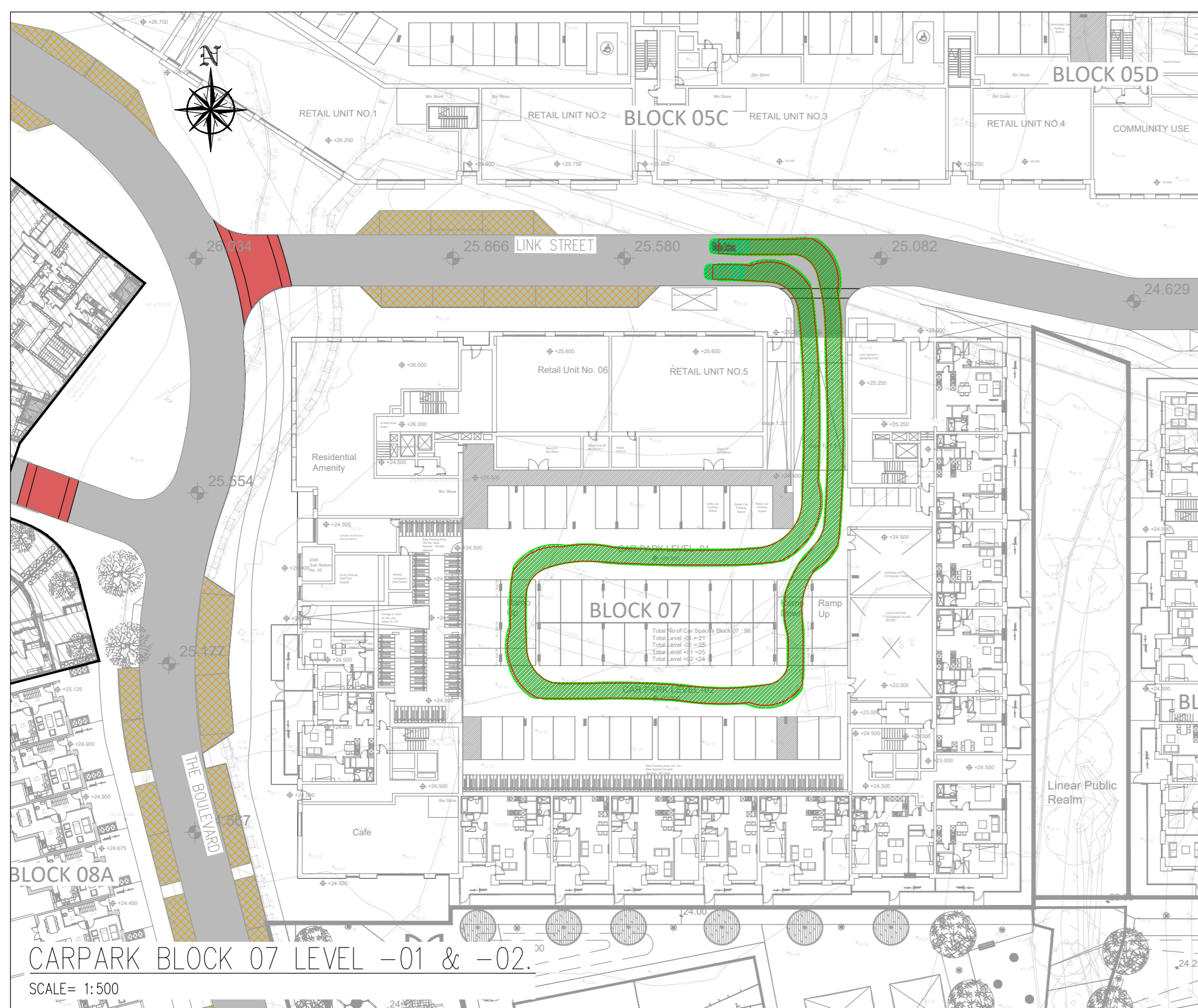
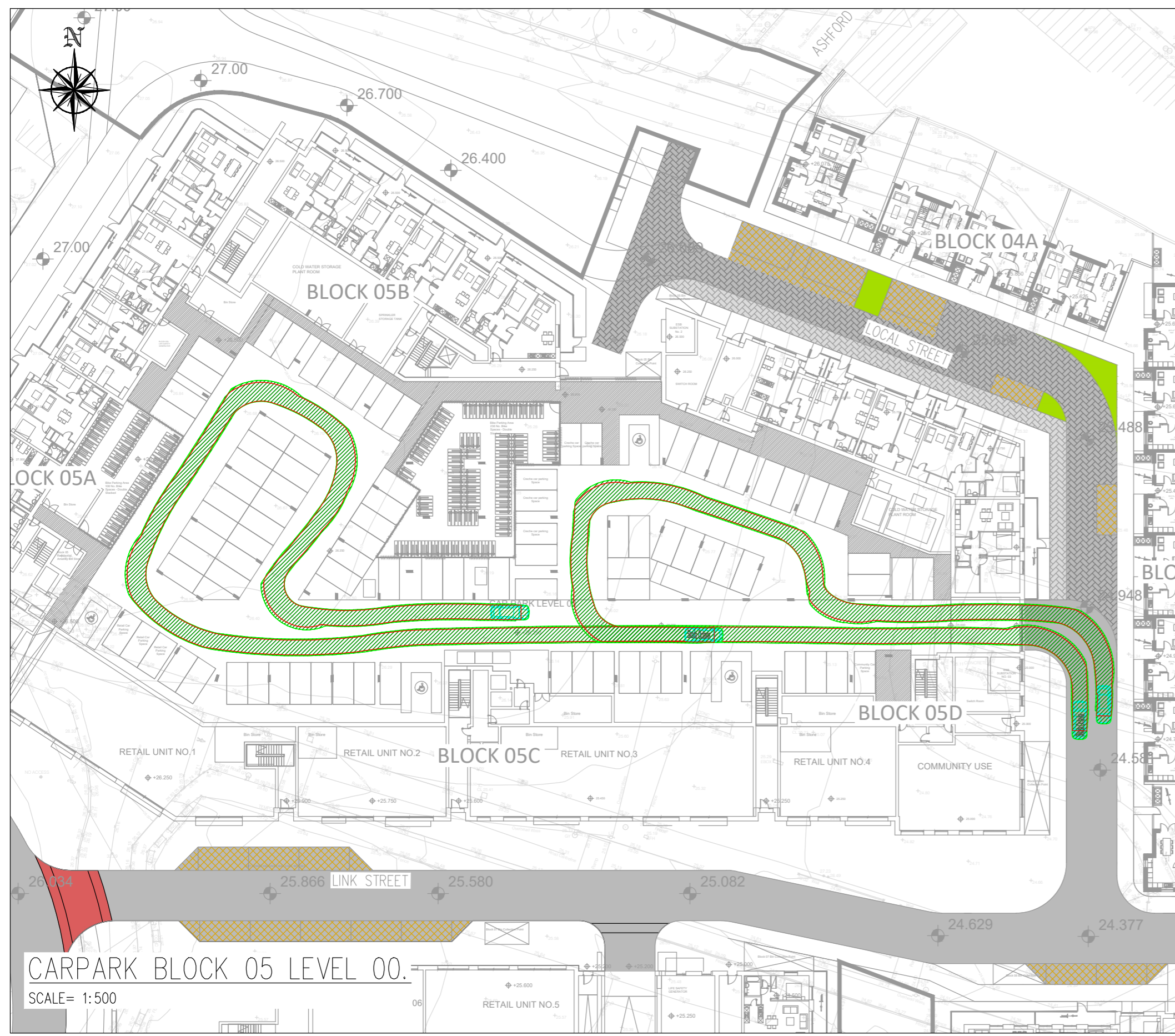
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4.572	
0.951	2.578
Skoda Octavia	
Overall Length	4.572m
Overall Width	1.769m
Overall Body Height	1.488m
Min Body Ground Clearance	0.249m
Max Track Width	1.713m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.100m

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Rev No	Date	REVISION NOTE	Dim. By	Chkd. By

Architect	O'Mahony Pike			
Project	Proposed Development At O'Devaney Gardens			
Title	Swept Path Analysis Carparks			
Dwg. No.	ODG-CSC-XX-XX-DR-C-0043			
Date	Dim by	Chkd by	Appr'd by	Scale
30.04.2021	JS	NB	DR	1:500 @A1

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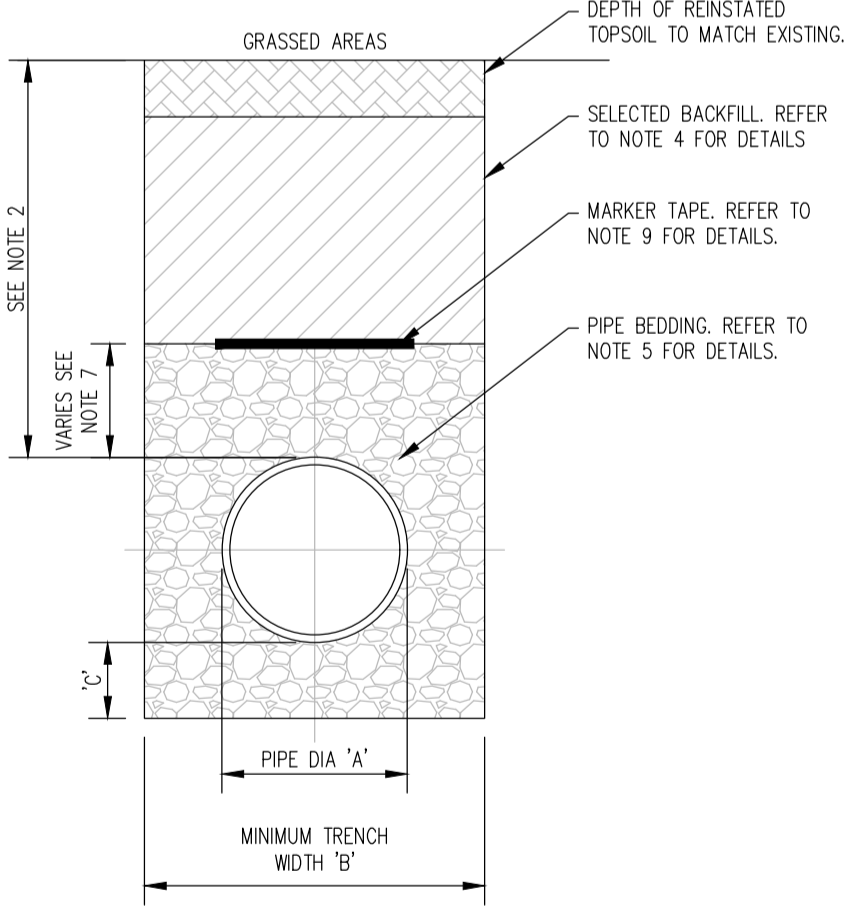
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IS EN ISO 14001:2004
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NOTES:

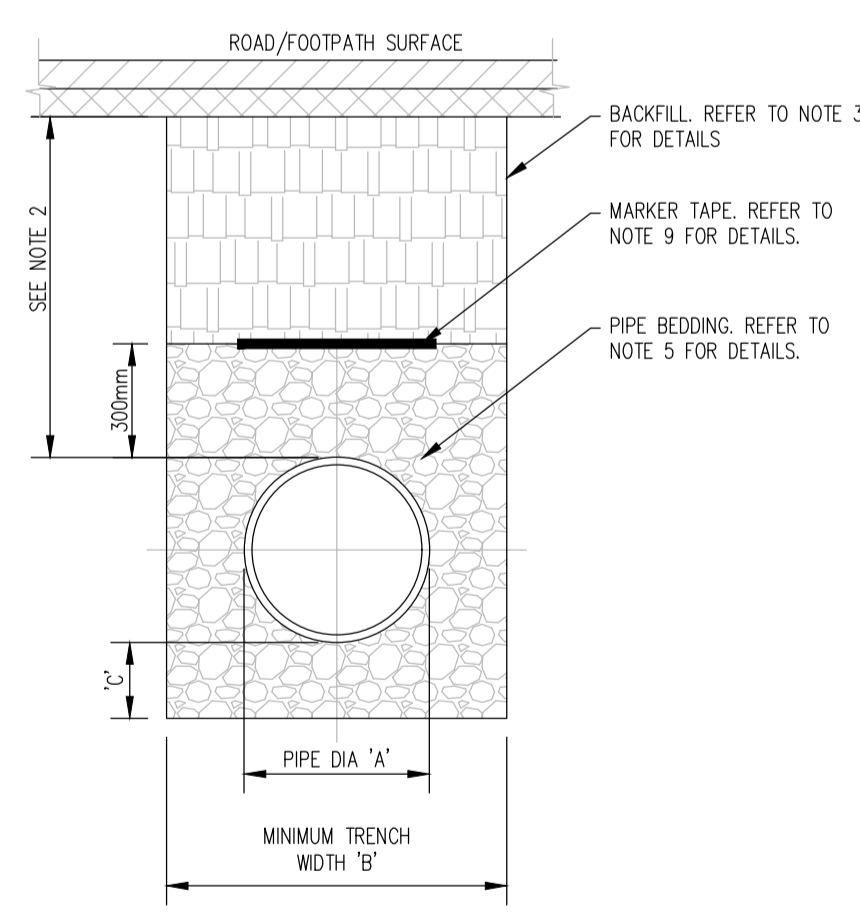
- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- THE MINIMUM DEPTH OF COVER FROM THE FINISHED SURFACE TO THE CROWN OF GRAVITY PIPES WITHOUT PROTECTION SHOULD BE AS FOLLOWS:
 - GARDENS AND PATHWAYS WITHOUT ANY POSSIBILITY OF VEHICULAR ACCESS - DEPTH NOT LESS THAN 0.5M (THIS WOULD NORMALLY RELATE TO DRAINS IN PRIVATE PROPERTY, SHALLOW PIPES OF THIS NATURE ARE UNDESIRABLE AND SHOULD BE INSTALLED IN ACCORDANCE WITH THE CURRENT BUILDING REGULATIONS).
 - DRIVEWAYS, PARKING AREAS AND YARDS WITH HEIGHT RESTRICTIONS TO PREVENT ENTRY BY VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES - DEPTH NOT LESS THAN 0.75m.
 - DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITHOUT FOOTWAYS (EG MEWS DEVELOPMENTS) WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES - DEPTH NOT LESS THAN 0.9m.
 - DEPTHS OF SEWERS IN GATED ESTATES SHALL BE SIMILAR TO THAT OUTLINED ABOVE.
 - AGRICULTURAL LAND AND PUBLIC OPEN SPACE - DEPTH NOT LESS THAN 0.9m.
 - OTHER HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES - DEPTH NOT LESS THAN 1.2m.
- CLAUDE 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE SEWER MAIN IS LOCATED IN ROADS, FOOTPATHS OR WHEN THE NEAREST PART OF THE TRENCH IS WITHIN 1M OF THE PAVED EDGE OF THE ROADWAY. CLAUDE 808 IS TO BE COMPACTED AS PER CLAUDE 802 OF THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS.
- SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO THE APPROVAL OF IRISH WATER.
- PIPE BEDDING SHALL COMPLY WITH WS 4-08-02 AND ION 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm GRADED AGGREGATE OR 10MM SINGLE SIZED AGGREGATE IS EN 1242. CONCRETE BED, HAUNCH & SURROUND, WHERE REQUIRED, SHALL BE TO STD-WW-08.
- IN SOFT GROUND CONDITIONS (CBR < 5) THE MATERIAL SHOULD BE EXCAVATED AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLAUDE 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS SHALL REPLACE THE EXCAVATED MATERIAL, WRAPPED IN GEO-TEXTILE WRAPPING; ALTERNATIVELY, SPECIAL PIPE SUPPORT ARRANGEMENTS, INCLUDING PILING ETC. MAY BE REQUIRED WHERE THE DEPTH OF SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO ASSESSMENT BY IRISH WATER BEFORE ADVANCING WITH THE WORK.
- IN GREEN FIELD AREAS, TYPE B BACKFILL (SELECTED EXCAVATED MATERIAL) WILL BE ALLOWED ABOVE THE SIDE HAUNCH GRANULAR MATERIAL IN THE CASE OF RIGID PIPES. A GRANULAR SURROUND OF A MINIMUM DEPTH OF 150mm ABOVE THE CROWN OF THE PIPE IS REQUIRED FOR FLEXIBLE PIPES, AND TYPE B MATERIAL MAY BE USED AS BACKFILL ABOVE THIS. ALL RISING MAINS IN GREENFIELD AREAS SHALL HAVE A MINIMUM COVER OF 300mm OF GRANULAR MATERIAL ABOVE THE EXTERNAL CROWN OF THE PIPE.
- PIPES SHALL NOT BE SUPPORTED ON STONES, ROCKS OR ANY HARD OBJECTS AT ANY POINT ALONG THE TRENCH. ROCK SHALL BE EXCAVATED TO A DEPTH OF 150mm BELOW THE ACTUAL DEPTH OF THE TRENCH WITH THE VOID FILLED WITH CLAUDE 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL.
- NON DEGRADABLE MARKER TAPE SHOULD BE INSTALLED AT TOP OF PIPE BEDDING LAYER. IN THE CASE OF NON-METAL PIPE MATERIAL, THE MARKER TAPE SHOULD INCORPORATE A TRACE WIRE WHICH IS LINKED TO FITTINGS AND TERMINATED AT THE WASTE WATER PUMPING STATION AND THE DISCHARGE MANHOLE.
- TRENCH WIDTHS FOR PIPE SIZES <80mm MAY BE <500mm, SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.

PIPE DIAMETER 'A' (mm)	DEPTH OF BEDDING 'C' (mm)
< 80 RISING MAIN	< SEE NOTE 10.
< 100	100
150 - 450	200

PIPE DIAMETER 'A' (mm)	TRENCH WIDTH 'B' (mm)
< 80 RISING MAIN	< SEE NOTE 10.
100	500
150	600
200	600
250	750
300	750
350	750
400	900
450	900

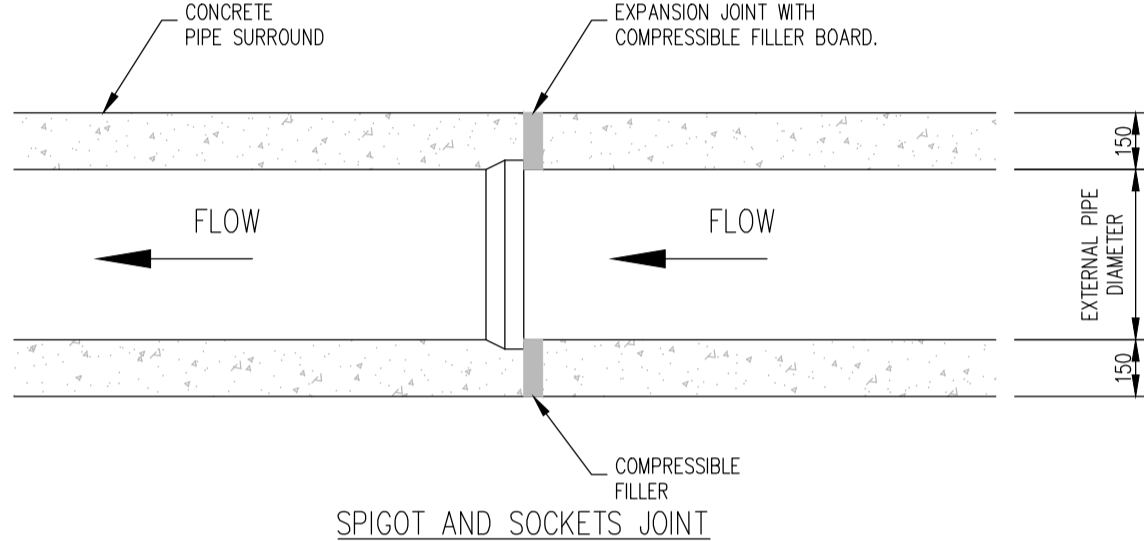
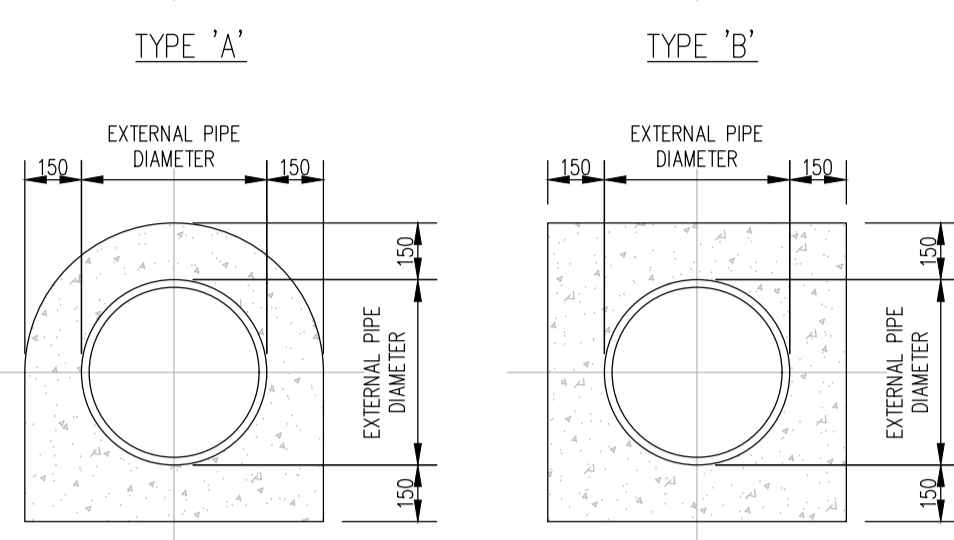
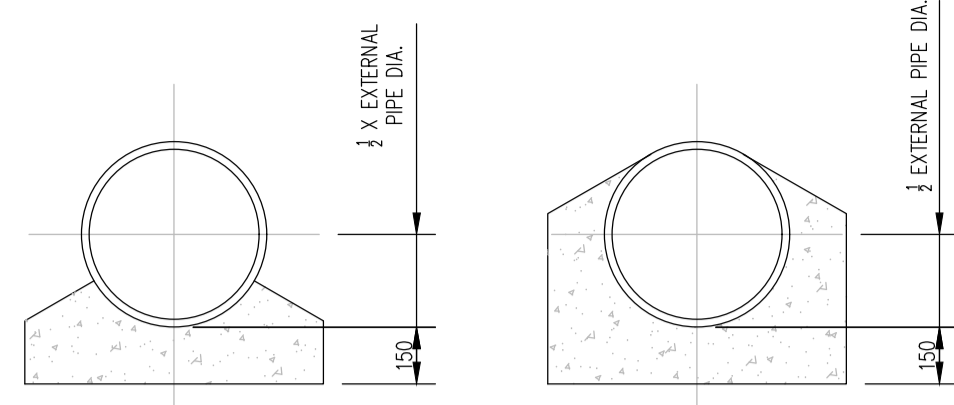


CROSS SECTION IN GRASSED AREAS



CROSS SECTION IN ROADS

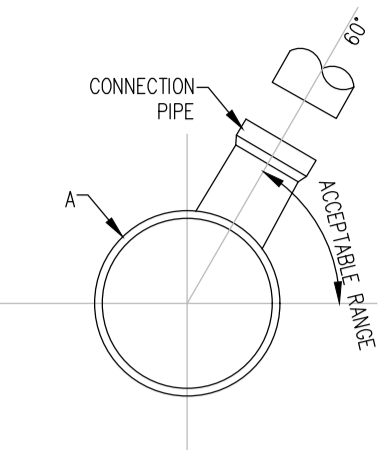
TRENCH BACKFILL AND BEDDING (STD - WW - 07) SCALE 1:20



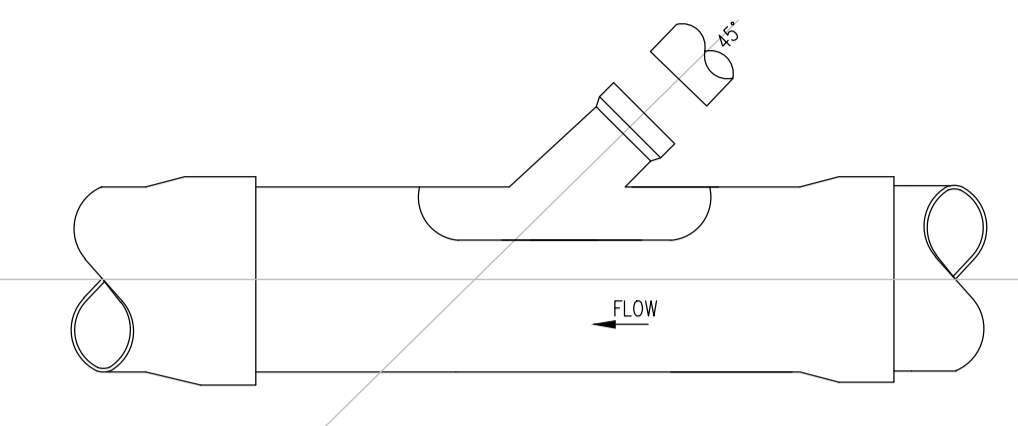
CONCRETE BED, HAUNCH AND SURROUND TO WASTEWATER PIPES. (STD-WW-08) SCALE 1:20

NOTES:

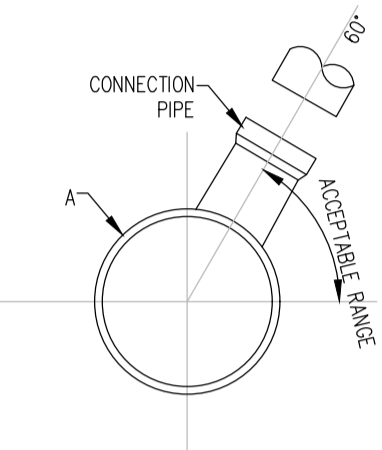
- ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE.
- CONCRETE PIPELINE BEDS AND HAUNCHES MAY BE REQUIRED TO ADDRESS MINIMUM COVER SITUATIONS AND SHALL BE SUBJECT TO SUBMISSION AND ASSESSMENT BY IRISH WATER BEFORE ADVANCING WITH THE WORKS.
- CONCRETE PIPE BEDS AND HAUNCHES SHALL HAVE A MINIMUM THICKNESS OF 150MM WITH AN ABSOLUTE MINIMUM DEPTH OF COVER ABOVE THE EXTERNAL CROWN OF THE PIPE OF 750MM.
- CONCRETE TO BE IN ACCORDANCE WITH IS EN 206 AND TO BE CLASSIFIED C16/20.
- THE HAUNCHES AND SURROUNDINGS TO BE FORMED USING FORM WORK TO PROVIDE A ROUGH CAST FINISH.
- EXPANSION JOINTS IN THE CONCRETE SHALL BE PROVIDED AT ALL PIPE JOINTS TO ALLOW FOR PIPE FLEXIBILITY. COMPRESSIBLE FILLER BOARD TO BE IN ACCORDANCE WITH BS EN 622-1 AND BS EN 622-4, AND TO BE 18mm THICK.
- POLYETHYLENE PIPES SHALL BE WRAPPED IN PLASTIC SHEETING HAVING A COMPETITION WITH ACCORDANCE WITH BS6076 BEFORE BEING CAST INTO CONCRETE.
- BITUMINOUS MATERIAL SHALL NOT BE PUT IN CONTACT WITH PE OR PVC PIPES.



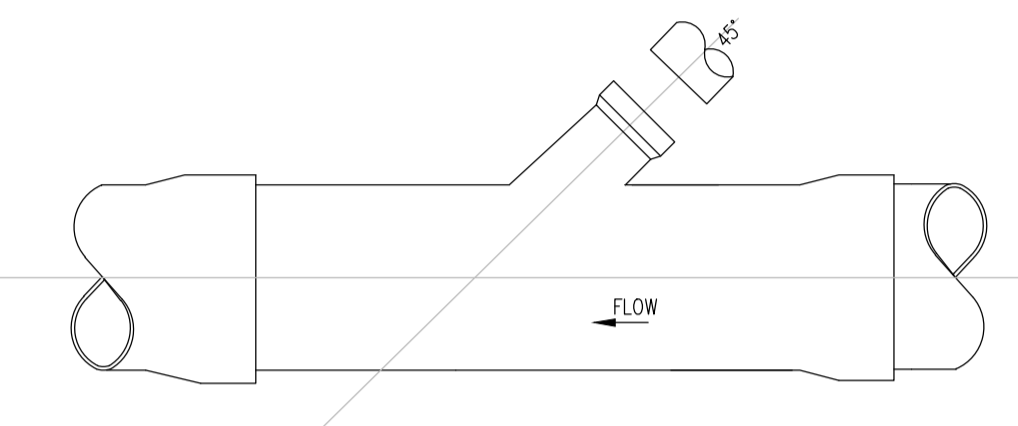
CROSS-SECTIONAL VIEW OF SEWER



APPROVED 45° SADDLE CONNECTION



CROSS-SECTIONAL VIEW OF SEWER

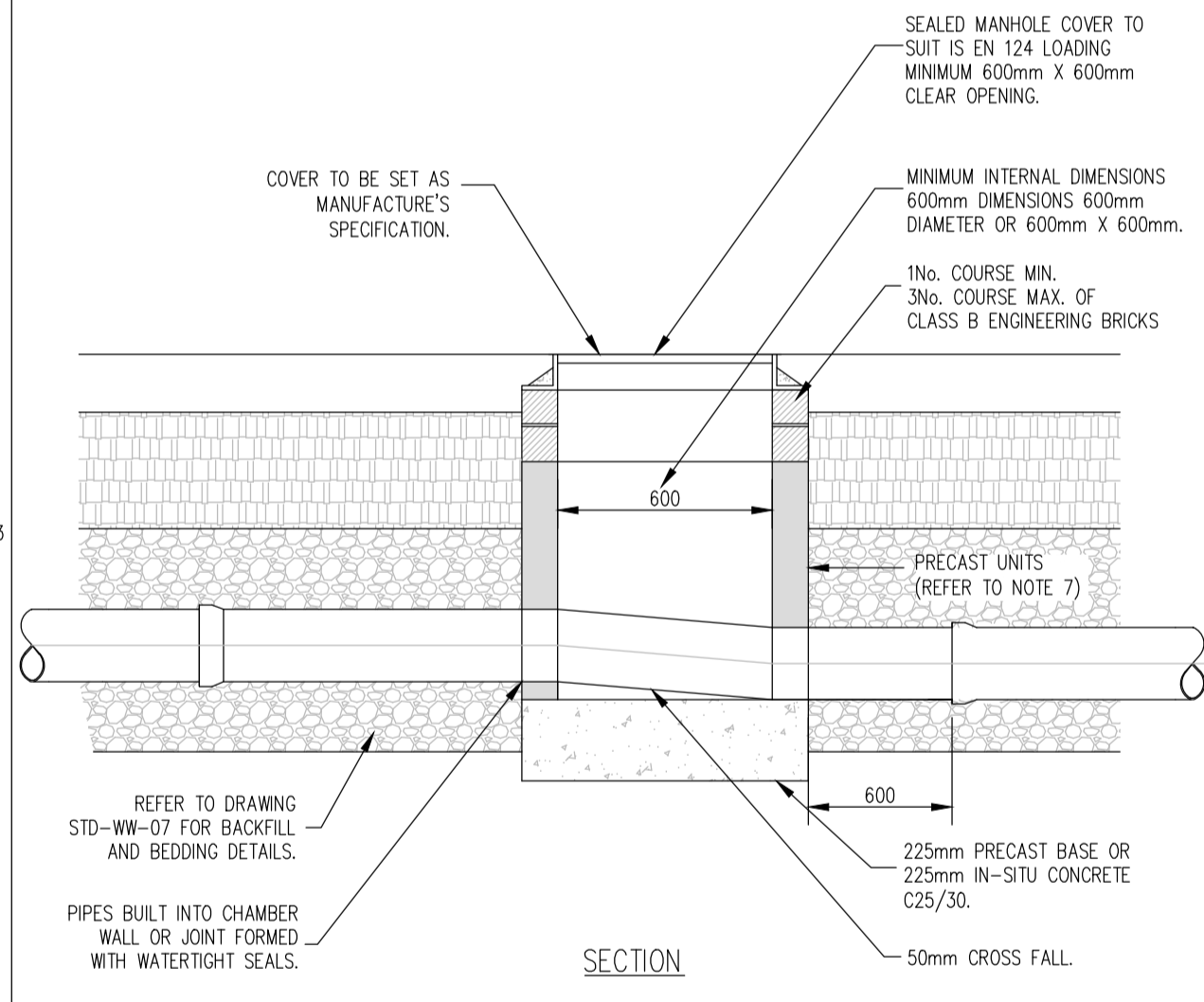


APPROVED 45° SADDLE CONNECTION

TYPICAL SEWER/SERVICE PIPE (STD-WW-04) SCALE 1:20

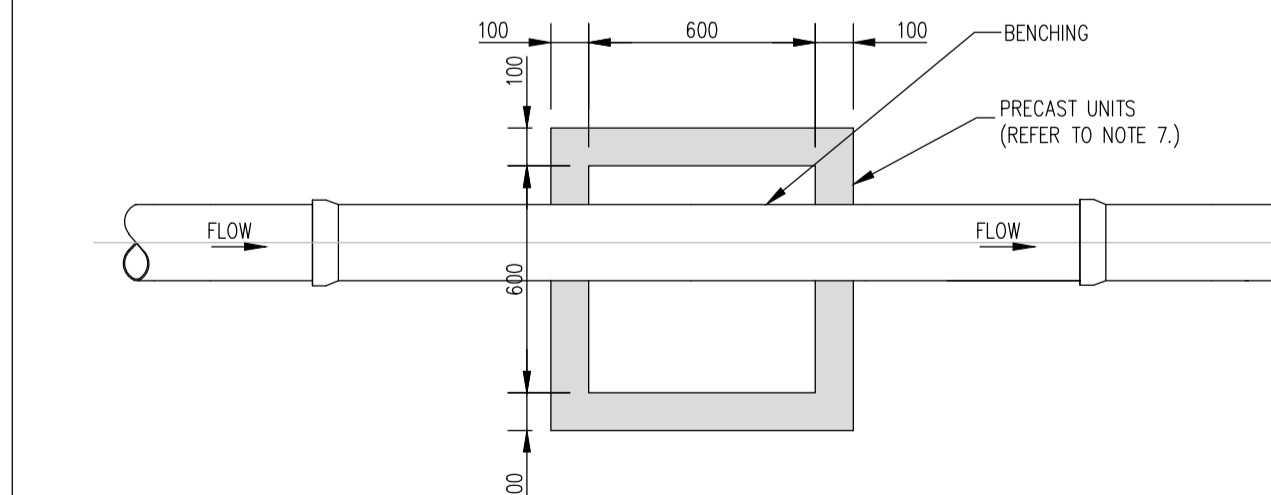
NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE.
- AS FAR AS PRACTICABLE, JUNCTION AND SERVICE CONNECTION SHALL BE BUILT IN FOR ALL PLANNED USERS WHEN THE SEWER IS BEING CONSTRUCTED. WHETHER IT IS NECESSARY TO MAKE A POST-CONSTRUCTION CONNECTION THE DEVELOPER SHALL BRING THE SEWER TO THE INSPECTION CHAMBER, INSTALL THE INSPECTION CHAMBER AND SEAL THE UPSTREAM END UNTIL THE CONNECTION IS REQUIRED.
- THE VERTICAL ANGLE BETWEEN THE SERVICE CONNECTING PIPE AND THE HORIZONTAL SHALL BE GREATER THAN 0° AND NOT MORE THAN 60°.
- WHERE THE CONNECTION IS BEING MADE TO A SEWER WITH A NORMAL INTERNAL DIAMETER OF 300mm DIAMETER OR LESS, CONNECTIONS SHALL BE MADE USING 45° ANGLE JOINTS.
- WHERE THE CONNECTION IS BEING MADE TO A SEWER WITH NORMAL INTERNAL DIAMETER GREATER THAN 300mm:
 - IF THE DIAMETER OF THE CONNECTION PIPE IS GREATER THAN HALF THE DIAMETER OF THE SEWER, AN ACCESS MANHOLE SHALL BE CONSTRUCTED TO FORM THE CONNECTION POINT; OR
 - IF THE DIAMETER OF THE CONNECTION PIPE IS LESS THAN OR EQUAL TO HALF THE DIAMETER OF THE SEWER, THE CONNECTION SHALL BE MADE USING A PREFORMED SADDLE FITTING WITH A SLOW BEND BETWEEN THE SADDLE AND THE CONNECTION SEWER/DRAIN.
- CONNECTIONS MADE WITH THE SADDLE FITTINGS SHALL BE MADE BY CUTTING AND SAFELY REMOVING A CORE FROM THE PIPE AND JOINING THE SADDLE FITTING TO THE PIPE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS TO ENSURE A WATER TIGHT JOINT. THE CONNECTING PIPE SHALL NOT PROTRUDE INTO THE SEWERS.



NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE.
- AN INSPECTION CHAMBER SHOULD BE LOCATED AT OR WITHIN 1m OF THE PROPERTY BOUNDARY AT THE UPSTREAM END OF EACH SERVICE CONNECTION ON THE PRIVATE SIDE OF THE CURTILAGE, IF PRACTICABLE.
- ANY PIPE AND ASSOCIATED ACCESS UPSTREAM OF THE POINT OF CONNECTION TO A PUBLIC SEWER IS A PRIVATE DRAIN AND SHOULD BE CONSTRUCTED IN ACCORDANCE WITH THE BUILDING REGULATIONS.
- ACCESS POINTS SHOULD BE LOCATED SO THAT THEY ARE ACCESSIBLE AND APPARENT TO THE MAINTAINER AT ALL TIMES FOR USE. THEY SHOULD AVOID REAR GARDENS OR ENCLOSED LOCATIONS AND THEY SHOULD NEVER BE OVERLAIN WITH SURFACE DRESSING, TOPSOIL, ETC.
- COVERS AND FRAMES SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS SUBJECT TO APPROVAL FROM IRISH WATER.
- 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND COVERS IN GREEN AREAS.
- PROPERLY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED SUBJECT TO APPROVAL FROM IRISH WATER.
- CONCRETE CHAMBER SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUDE 804 OR CLAUDE 808 MATERIAL AS PER STD-WW-07.



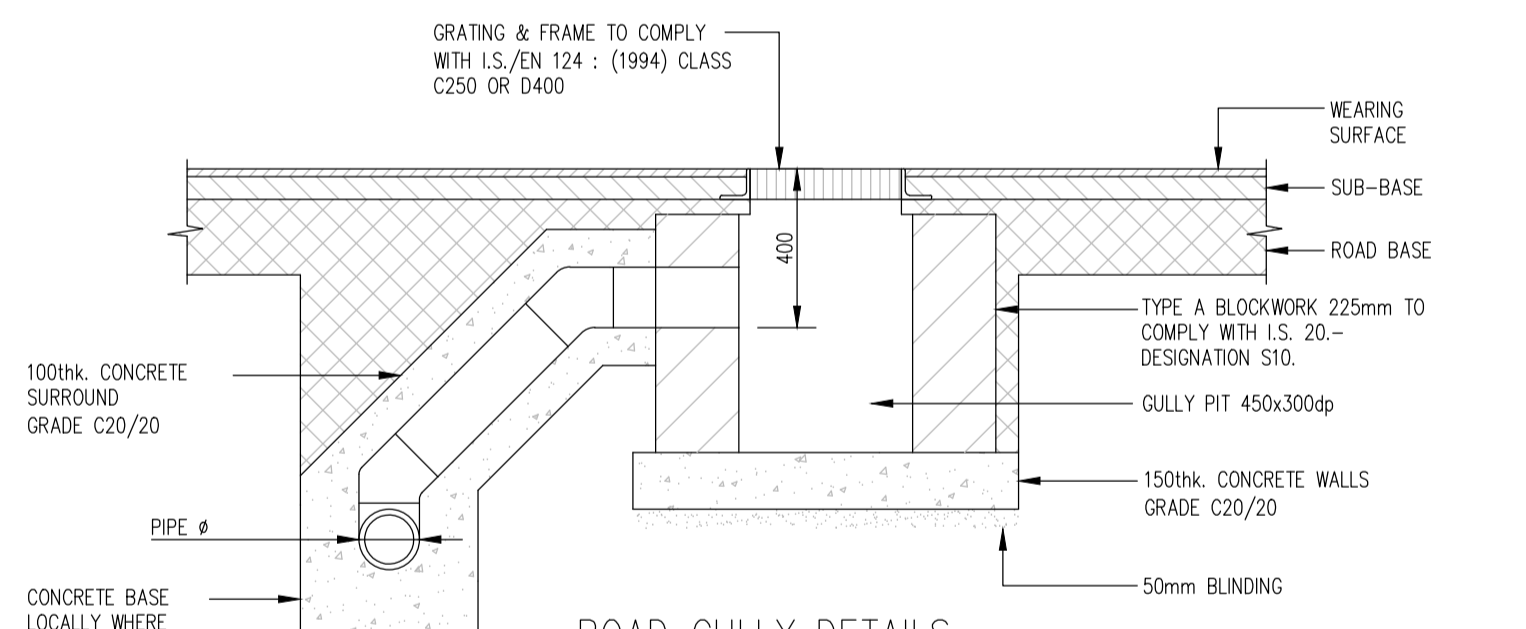
NOTES:

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Rev. No.	Date	REVISION NOTE

NOTES :

- THE MINIMUM DEPTH FROM THE TOP OF THE GRATING TO THE BOTTOM OF THE GULLY OUTLET IS TO BE 400mm. WHEN THE CONNECTING PIPE IS UNDER A CARRIAGEWAY AND 600mm ELSEWHERE.
- WHEN AN INSITU CAST GULLY HAS A TRAP, THE STOPPERS SHALL COMPLY WITH THE REQUIREMENTS OF BS 5911 : PART 2.

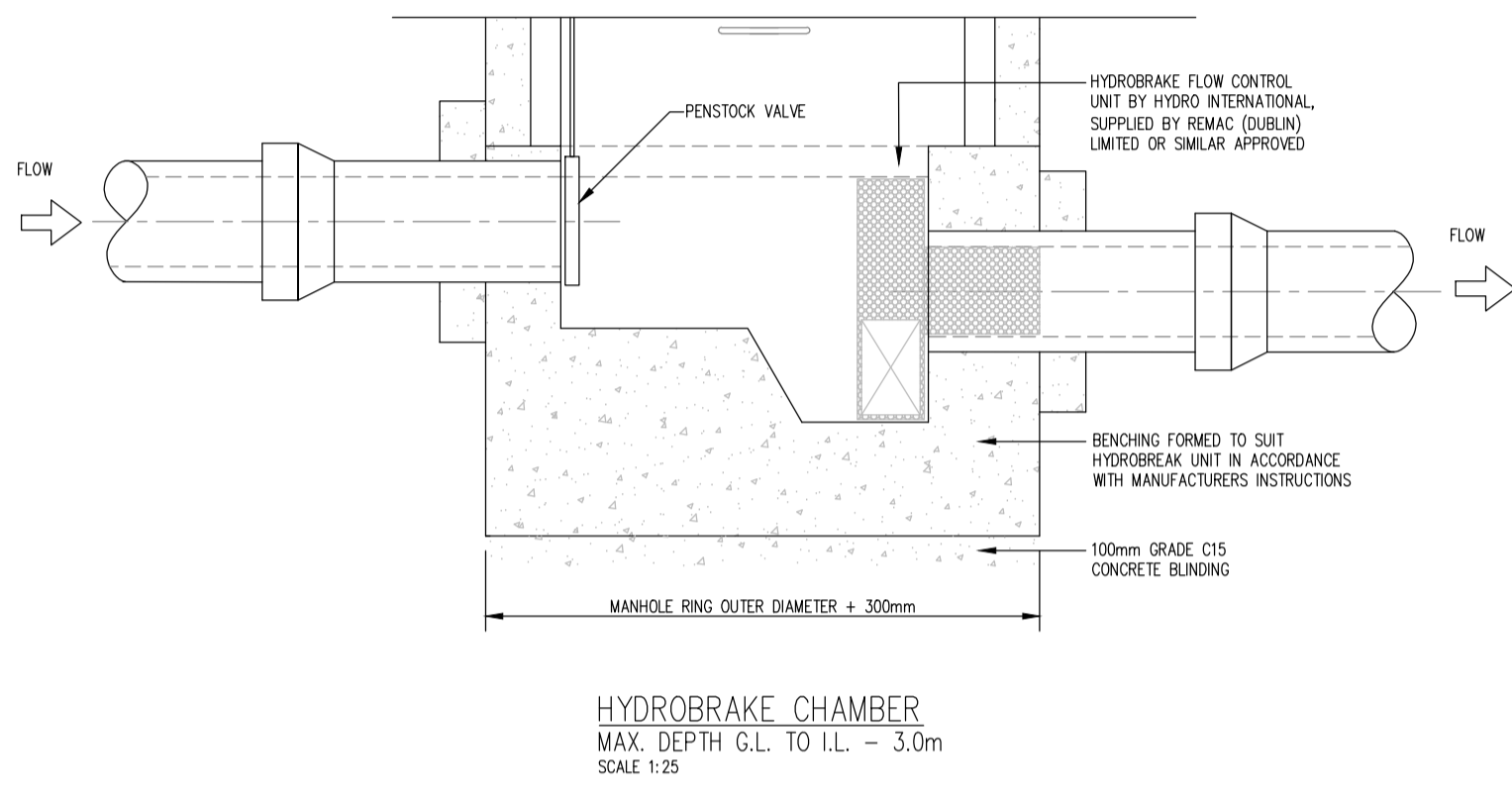
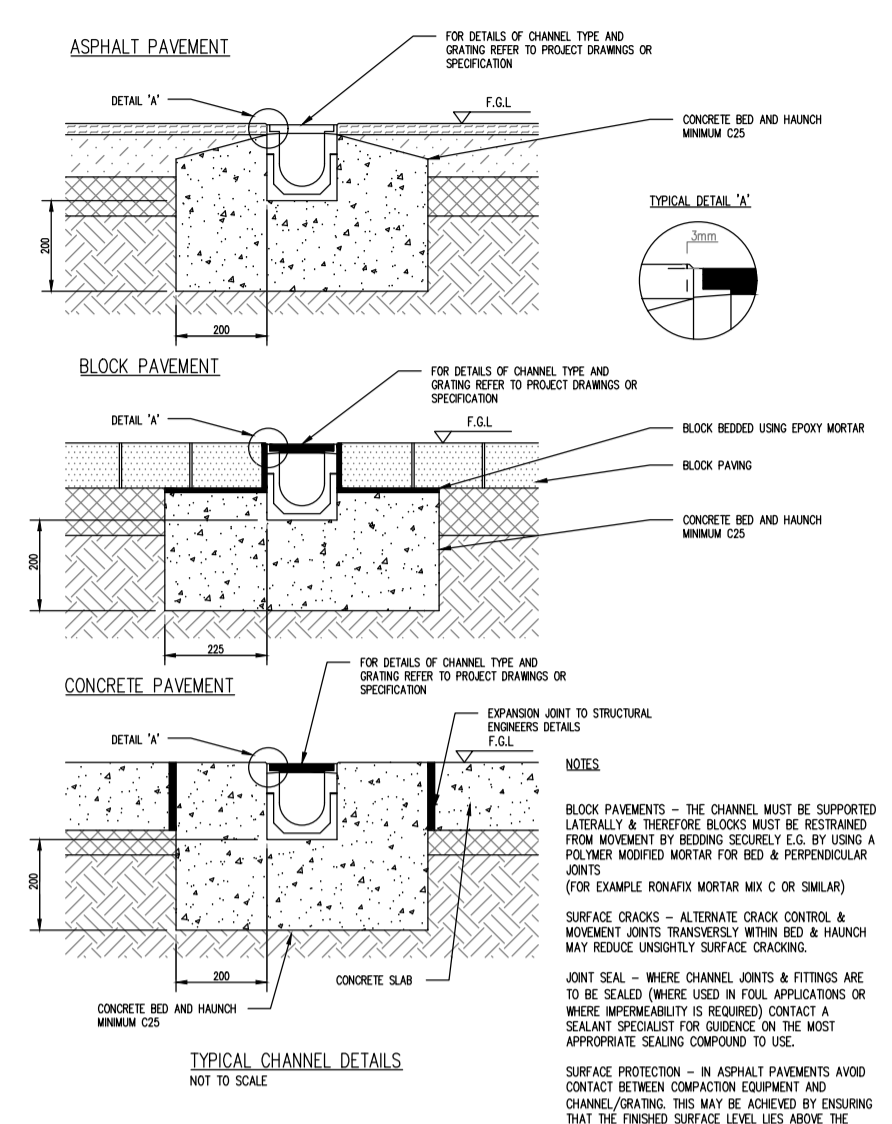
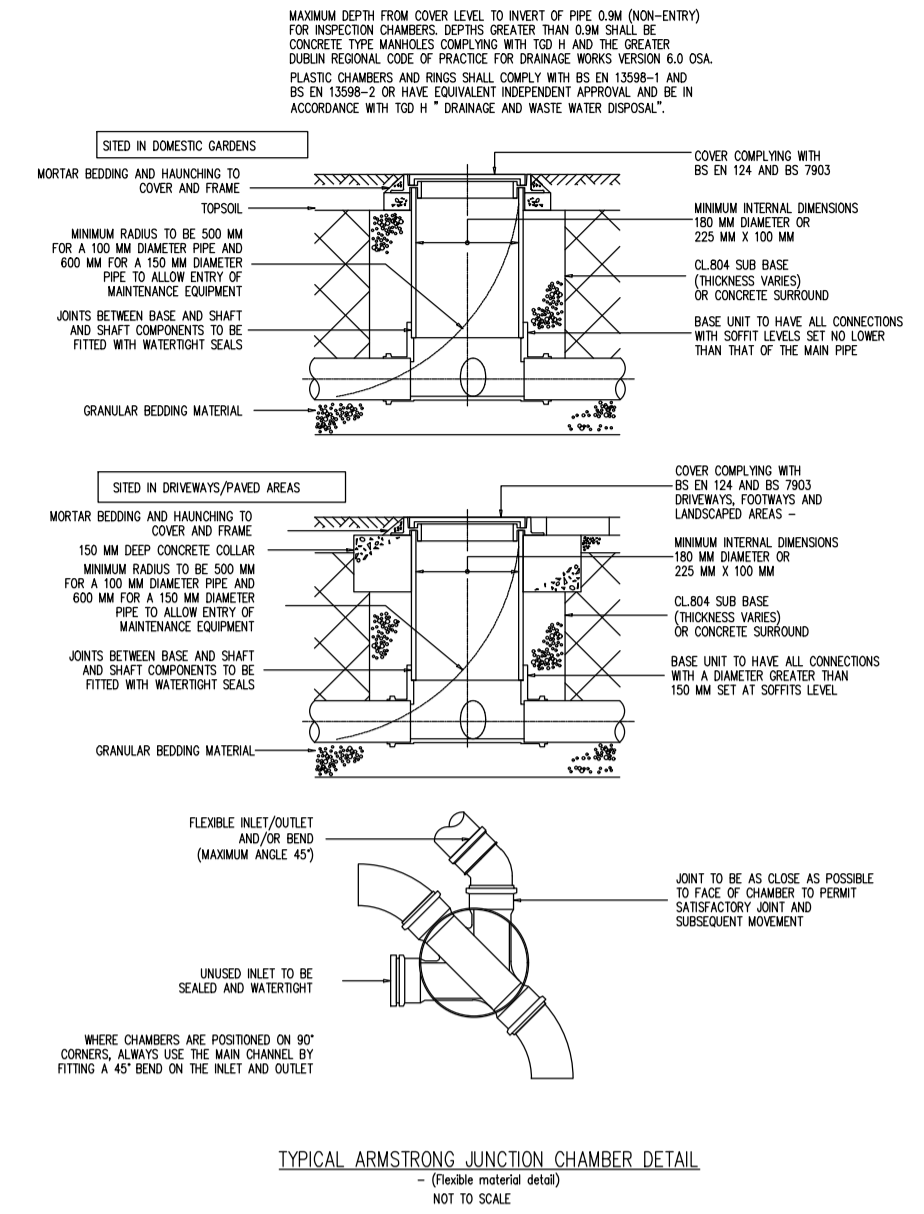


ROAD GULLY DETAILS

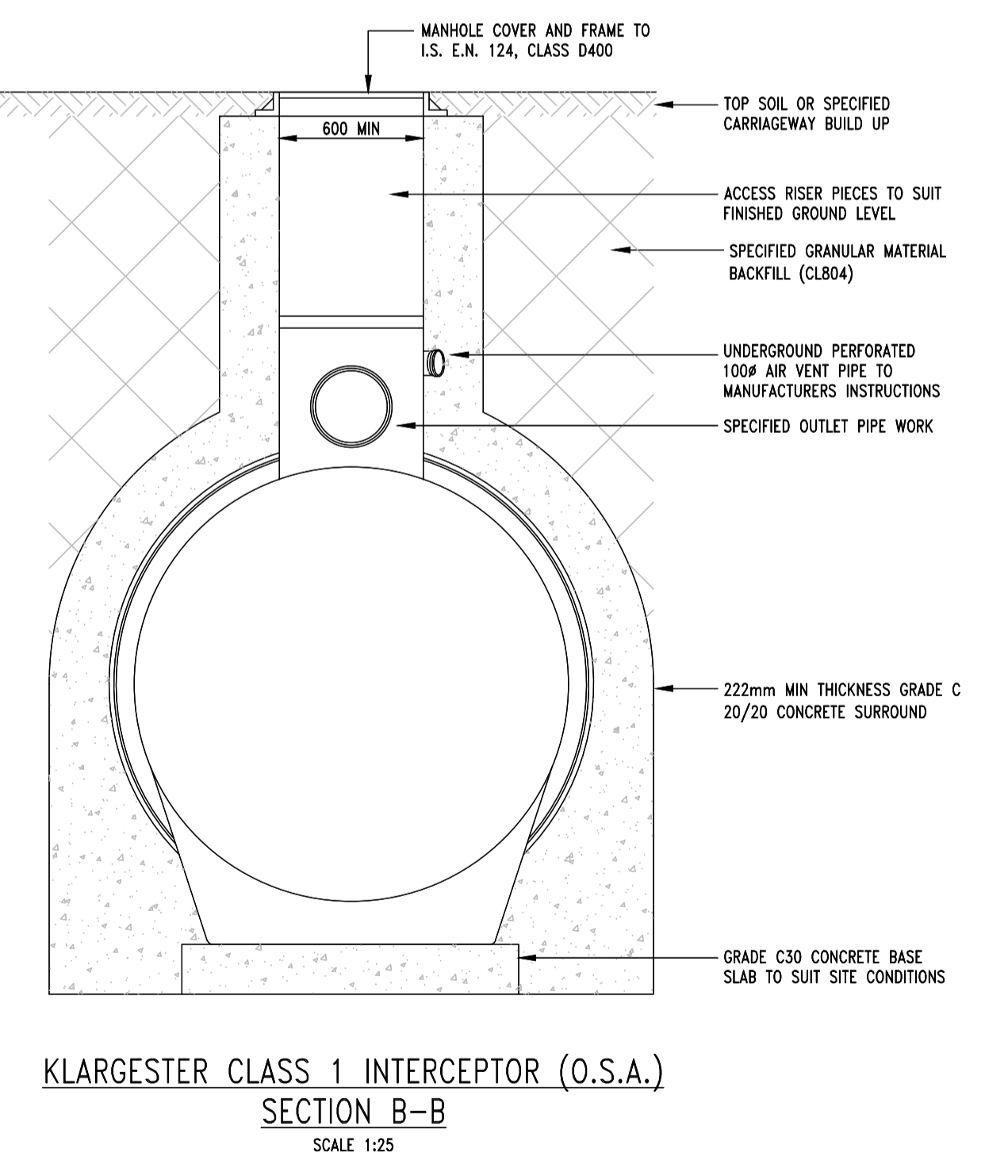
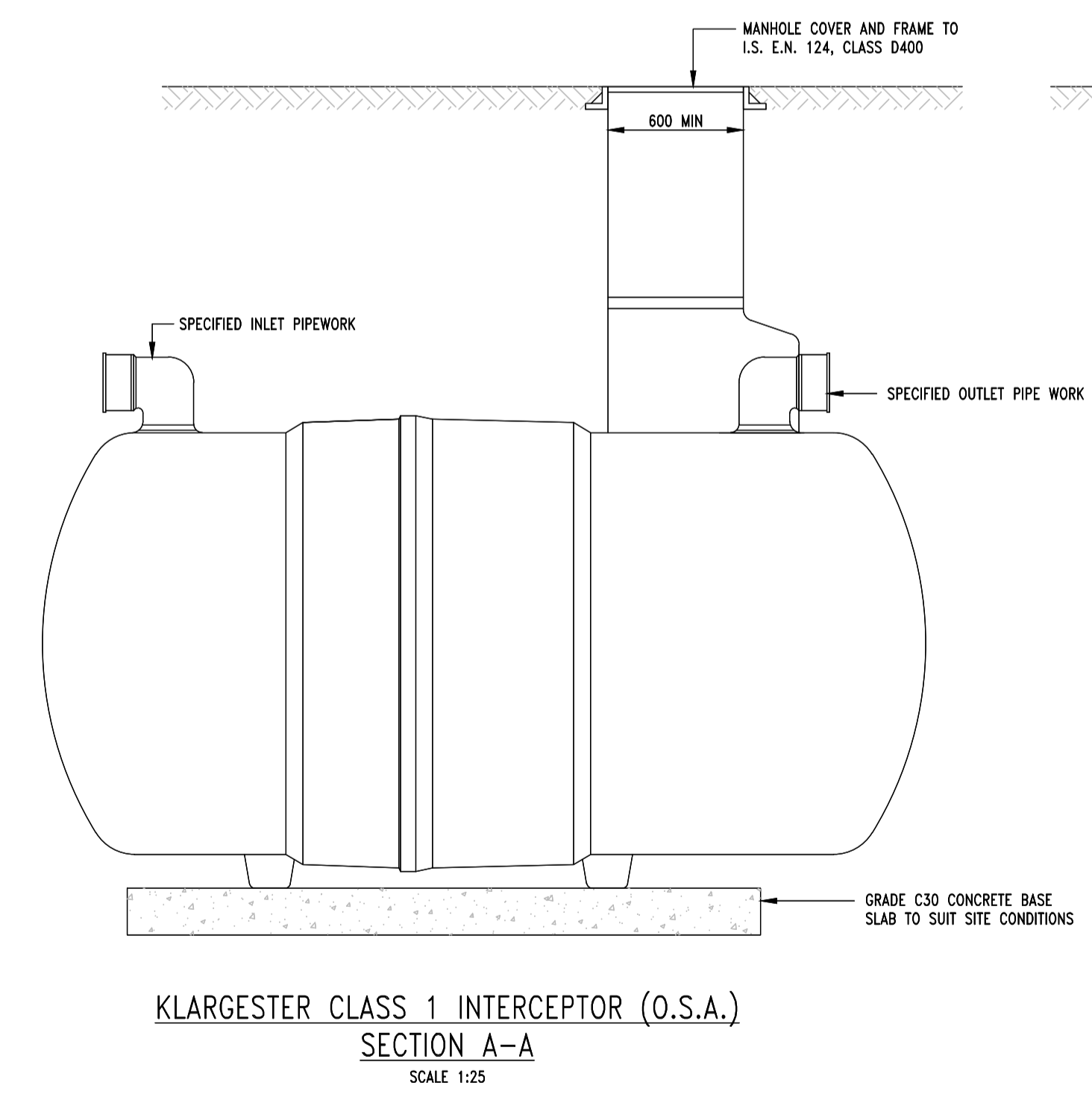
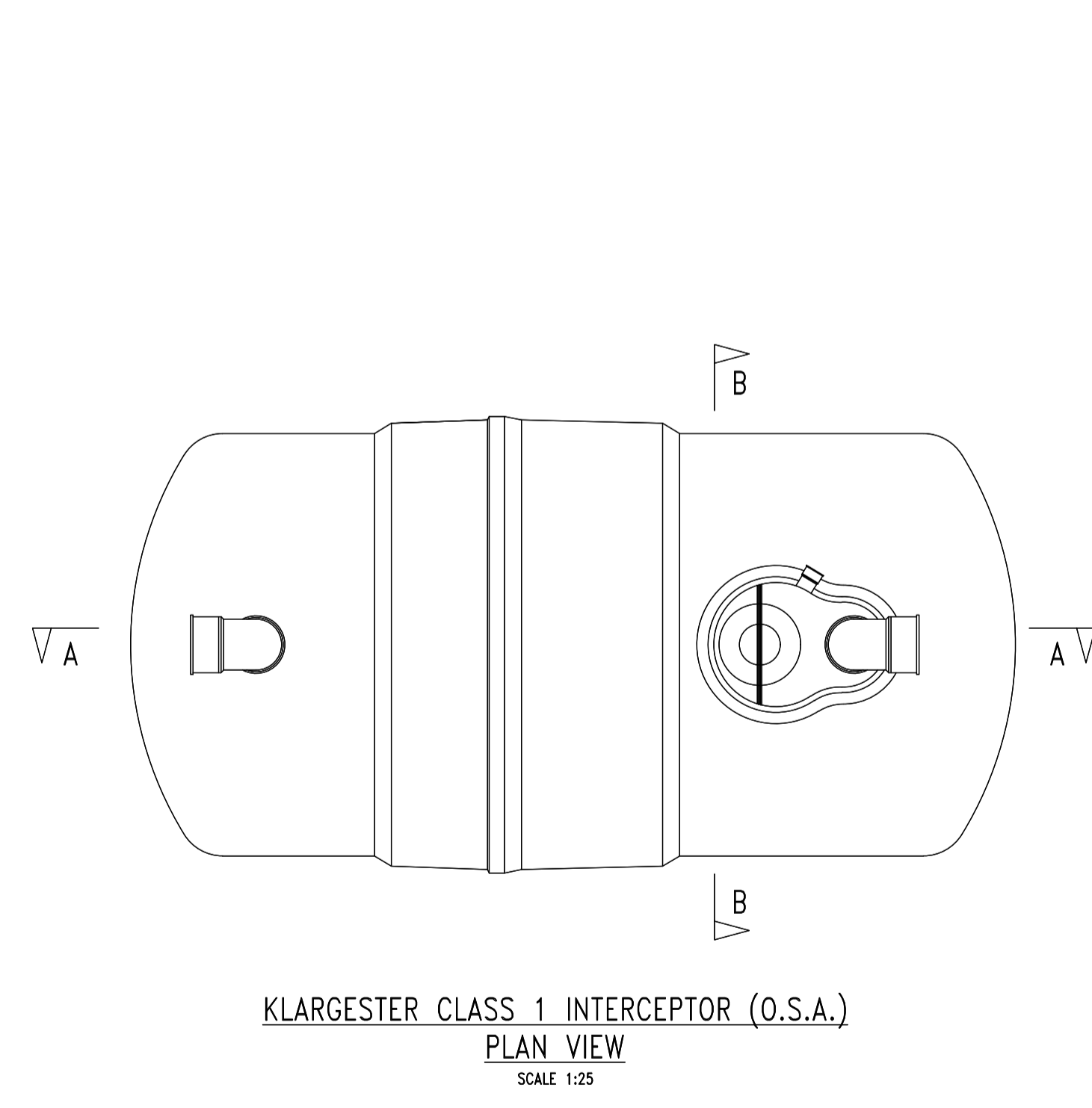
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B089

Architect	O'Mahony Pike	Project	Proposed Development At O'Devaney Gardens								
Title	Drainage Details Sheet 4 of 5										
Dwg. No.	ODG-CSC-XX-XX-DR-C-0044	Date	04.05.2021	Drn by	JS	Chkd by	DD	Apprd by	DR	Scale	AS SHOWN @ A1
CS Consulting Group		DUBLIN LONDON LIMERICK		Head Office		19-22 Dame Street, Dublin 2.		T: +353 (0)1 5480863 F: +353 (0)1 9011355		e: info@csconsulting.ie	
NSAI Certified		Quality Environment Health & Safety		I.S. EN ISO 9001:2008		I.S. EN ISO 14001:2004		I.S. EN ISO 50001:2011		OHSAS 18001:2007	



- NOTES :**
- DO NOT SCALE FROM THIS DRAWING USE STATED DIMENSIONS ONLY. IF IN DOUBT CONSULT THE ENGINEER.
 - LEVELS REFER TO O.S. DATUM MALIN HEAD.
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OF THE CONTRACT DOCUMENTS IN PARTICULAR THE ARCHITECT'S, LANDSCAPE ARCHITECT'S AND SERVICE ENGINEER'S SITE LAYOUT DRAWINGS.
 - ALL CIVIL WORKS SHALL BE COMPLETED IN ACCORDANCE WITH SPECIFICATIONS.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR LOCATING, PROTECTING AND MAINTAINING ALL EXISTING SERVICES WITHIN THE SITE BOUNDARY. THE ENGINEER HAS SHOWN KNOW SERVICES ON THE DRAWINGS BUT GIVES NO GUARANTEE THAT THESE ARE THE ONLY SERVICES WITHIN THE SITE BOUNDARY. THE CONTRACTOR SHALL CONTACT THE RELEVANT STATUTORY AND PRIVATE UTILITY COMPANIES AND CONFIRM THE LOCATION OF THEIR PLANT FOR HIMSELF.
 - THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF THE NAME AND LOCATION OF ALL TIPS USED FOR THE DISPOSAL OF MATERIAL OFF SITE.
 - THE CONTRACTOR SHALL ENSURE THAT ADEQUATE PROVISIONS ARE IN PLACE TO PREVENT THE SPREAD OF DIRT, MUD AND SITE MATERIAL ON THE PUBLIC ROAD. THE CONTRACTOR SHALL ENSURE THAT THE PUBLIC ROADS AROUND THE SITE ARE CLEANED ON A REGULAR BASIS, OR AS DIRECTED BY THE ENGINEER, WITH A MECHANICAL SUCTION SWEEPER.
 - THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THAT NOISE AND DUST ARE MINIMISED.
 - BLINDING CONCRETE SHALL BE GRADE 15N20. BLINDING SHALL BE A MINIMUM OF 100MM THICK. ALL STRUCTURAL CONCRETE SHALL BE GRADE 30N20 UNLESS SPECIFIED OTHERWISE ELSEWHERE.
 - ALL EXPOSED CONCRETE FINISHES SHOULD BE FAIR FACED FINISHES UNLESS SPECIFIED OTHERWISE ELSEWHERE.
 - HANDRAILS SHALL BE GRADE 316 STAINLESS STEEL. SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO MANUFACTURE.



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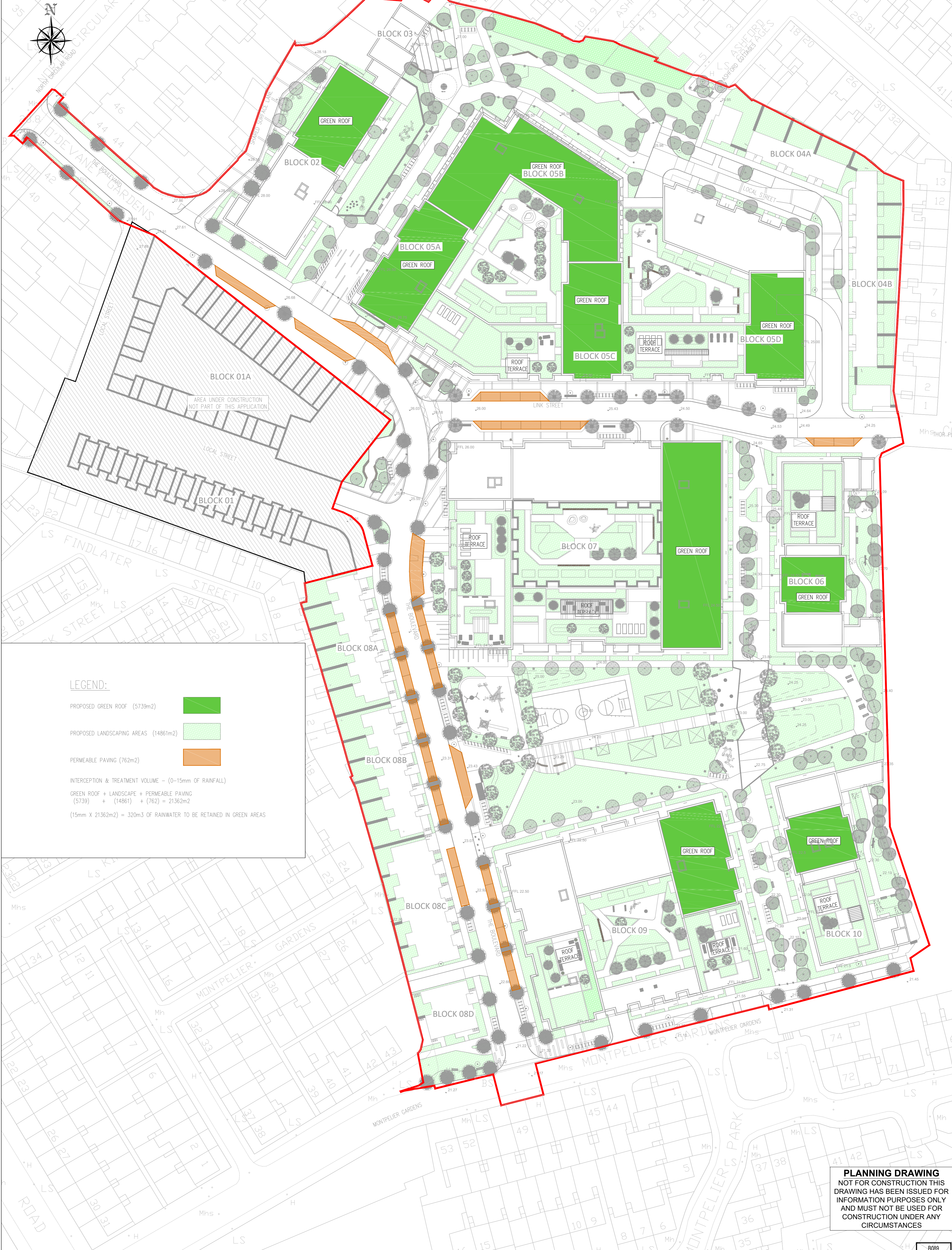
Architect	O'Mahony Pike
Project	Proposed Development At O'Devaney Gardens
Title	Drainage Details Sheet 5 of 5
Dwg. No.	ODG-CSC-XX-XX-DR-C-0045
Date	04.05.2021
Dm. By	JS
Chkd. By	DD
Apprv. by	DR
Scale	AS SHOWN @ A1
Revision	

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I.S. EN ISO 50001:2011
OHSAS 18001:2007



LEGEND:

- PROPOSED GREEN ROOF (5739m²)
- PROPOSED LANDSCAPING AREAS (14861m²)
- PERMEABLE PAVING (762m²)

INTERCEPTION & TREATMENT VOLUME - (0-15mm OF RAINFALL)
 GREEN ROOF + LANDSCAPE + PERMEABLE PAVING
 (5739) + (14861) + (762) = 21362m²
 (15mm X 21362m²) = 320m³ OF RAINWATER TO BE RETAINED IN GREEN AREAS

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Rev. No.	Date	REVISION NOTE	Drn. By	Chkd. By

Architect	O'Mahony Pike
Project	Proposed Development At O'Devaney Gardens
Title	Sustainable Urban Drainage Systems Sheet 1 of 2
Dwg. No.	ODG-CSC-XX-XX-DR-C-0046
Date	30.04.2021
Drn. By	JS
Chkd. By	NB
Apprvd. By	DR
Scale	1:500 @A1
Revision	

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NOTE:
EXISTING SURFACE WATER SEWER
INFORMATION IS INDICATIVE ONLY.
AREA UNDER CONSTRUCTION
NOT PART OF THIS APPLICATION

EXISTING STORMWATER DRAINAGE SYSTEM
TO BE DECOMMISSIONED AND DIVERTED
INTO PROPOSED NEW STORM WATER
SYSTEM: SEE DRAWING 0013 FOR DETAILS.

EXISTING ATTENUATION TANK

PLANNING DRAWING
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NOTES
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Rev No	Date	REVISION NOTE	Drn. By	Chkd. By

Architect	O'Mahony Pike			
Project	Proposed Development At O'Devaney Gardens			
Title	Proposed Storm Sewer Diversion			
Dwg No.	ODG-CSC-XX-XX-DR-C-0047			
Date	29.05.2020	Drn. by	DD	Chkd. by
			RFM	DR
			1:500	@A1
Scale	1:500	Scale	@A1	Revision

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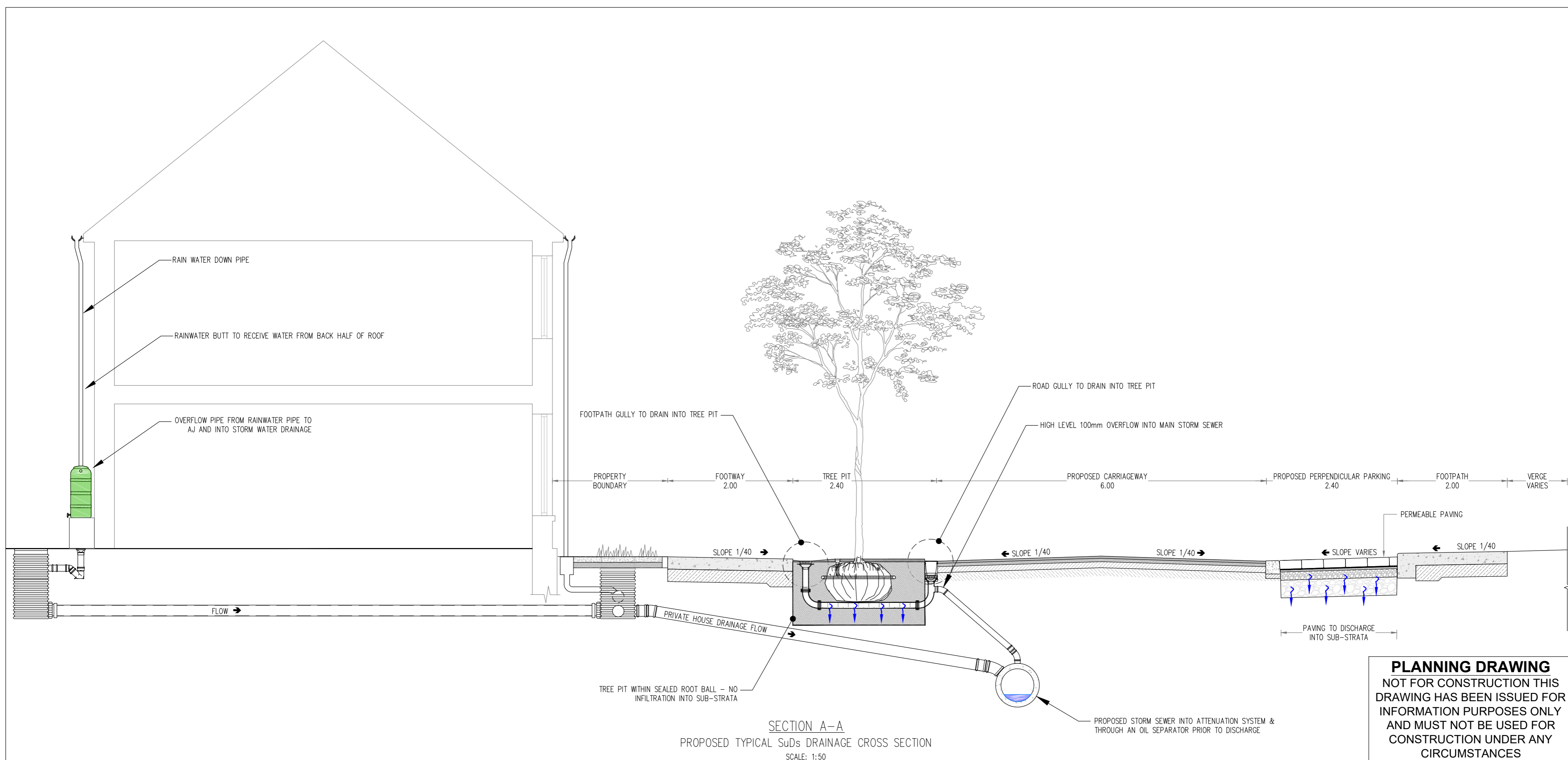
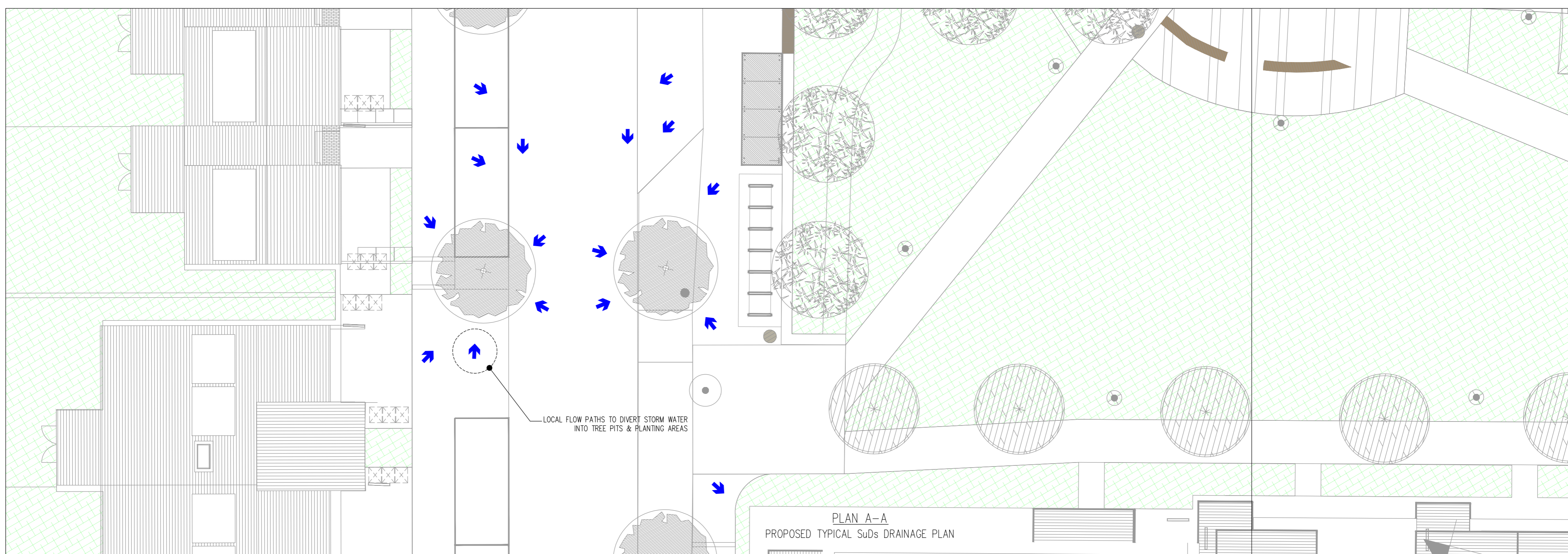


BAUDER
TECHNICAL DATA SHEET
 Date: 11-02-2005

Xero Flor sedum blanket system – Construction and Saturated loading
 Insulated with roof fall of 1%–2%

Specification Build up	Thickness/mm	Weight kgs/m ²
Vapour barrier – DS1 DUO	3.5	4.3
Insulation	140	5.32
G4E Underlayer	4	4.8
Plant-E capping sheet	5	6.0
SDF Mat	20	0.6
XF301 sedum blanket	33	43.8
System build-up	185.5	
Overall saturated weight in kgs/m²		64.06

PROPOSED GREEN ROOF MAKE UP



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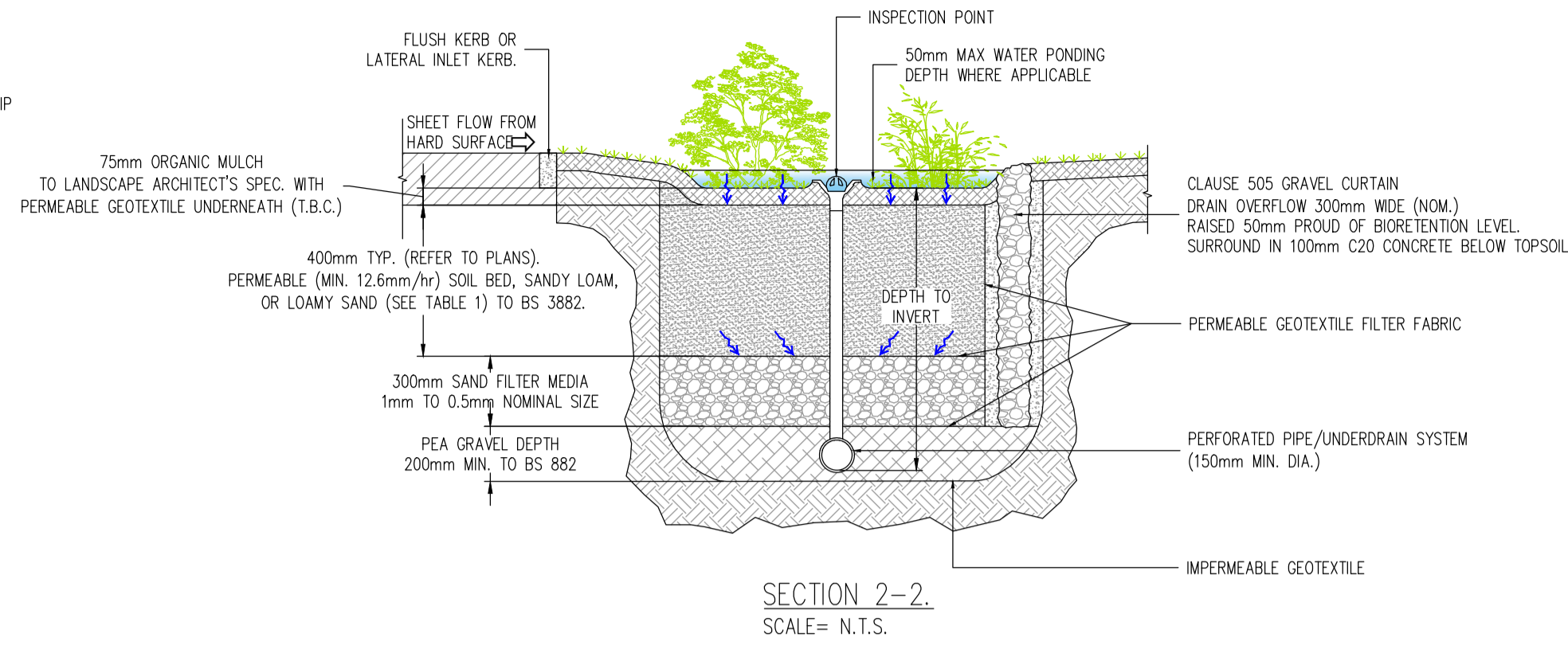
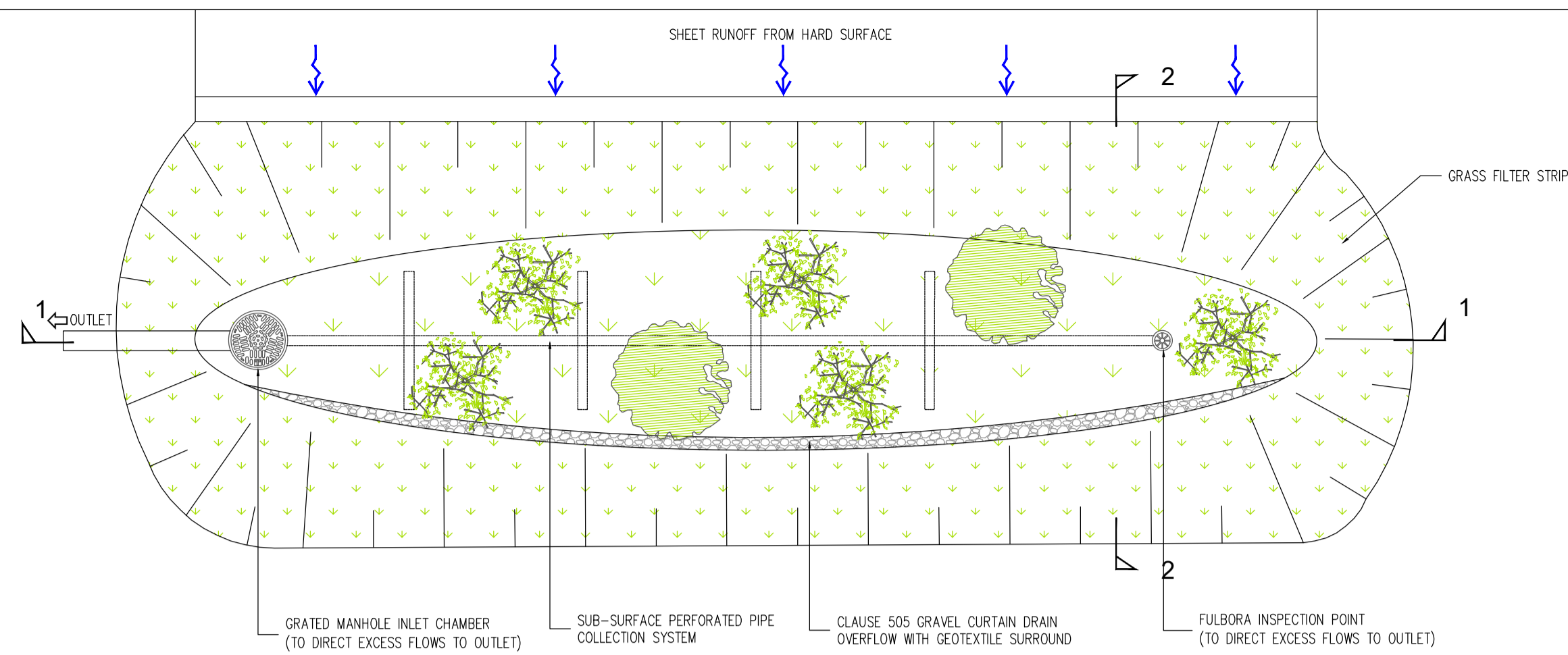
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Rev. No.	Date	REVISION NOTE	Drn. By	Chkd. By

Architect Project: O'Mahony Pike
 Proposed Development At O'Devaney Gardens
 Title: Sustainable Urban Drainage Systems
 Sheet 1 of 2
 Dwg. No.: ODG-CSC-XX-XX-DR-C-0048
 Date: 30.04.2021
 Dim by: JS
 Chkd by: NB
 Aprvd by: DR
 Scale: 1:50 @A1
 Revision:

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 Energy I.S. EN ISO 14001:2004
 Health & Safety OHSAS 18001:2007



- NOTES:**
- C20/25 CONCRETE TO HAVE A MINIMUM CEMENT CONTENT OF 280kg/m³, MAXIMUM WATER/CEMENT RATIO OF 0.65 & SLUMP CLASS S2.
 - C25/30 CONCRETE TO HAVE A MINIMUM CEMENT CONTENT OF 280kg/m³, MAXIMUM WATER/CEMENT RATIO OF 0.65 & SLUMP CLASS S2.
 - C40/50 CONCRETE TO HAVE A MINIMUM CEMENT CONTENT OF 400kg/m³, MAXIMUM WATER/CEMENT RATIO OF 0.45 & SLUMP CLASS S3.
 - WHERE CLASS 6F1/6F2 CAPPING MATERIAL IS PROPOSED WITHIN 500mm OF CONCRETE OR STEEL, CLASS 6N TO BE USED INSTEAD.

- NOTES:**
- ALL WORKS & SPECIFICATIONS TO BE UNDERTAKEN IN ACCORDANCE WITH:
- NRA SPECIFICATIONS FOR ROADWORKS
 - GREATER DUBLIN CODE OF PRACTICE FOR DRAINAGE WORKS.
 - RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS.

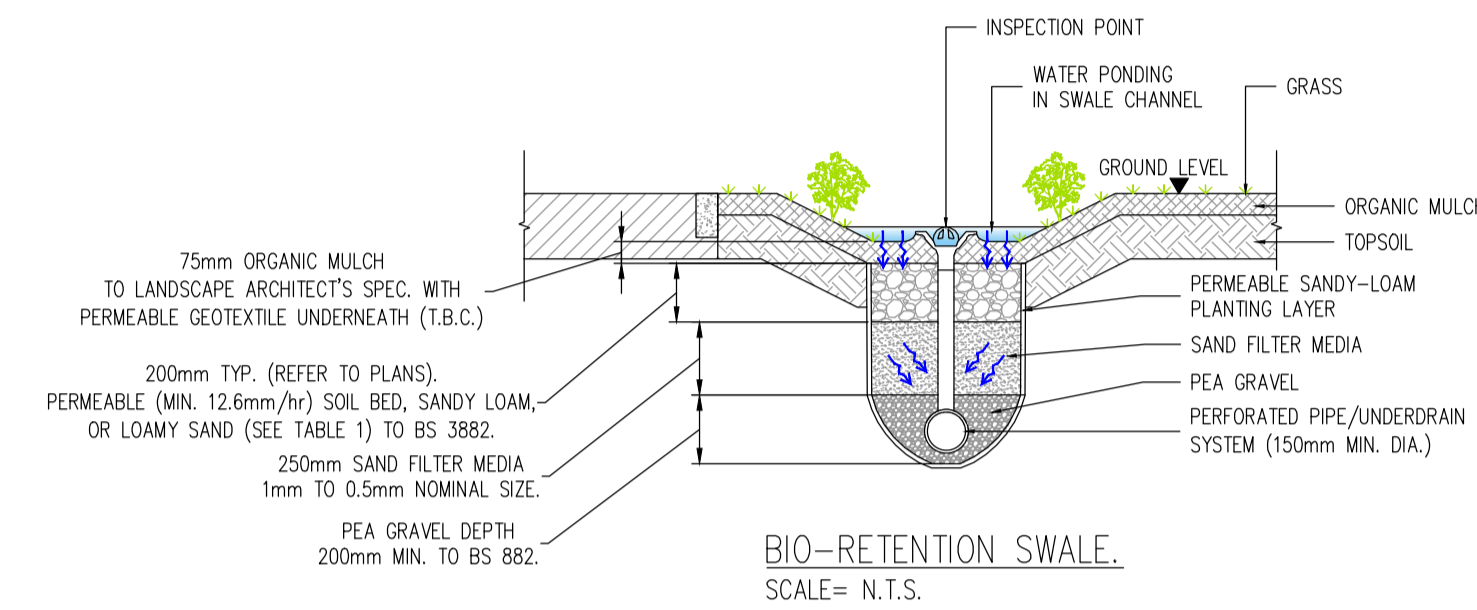
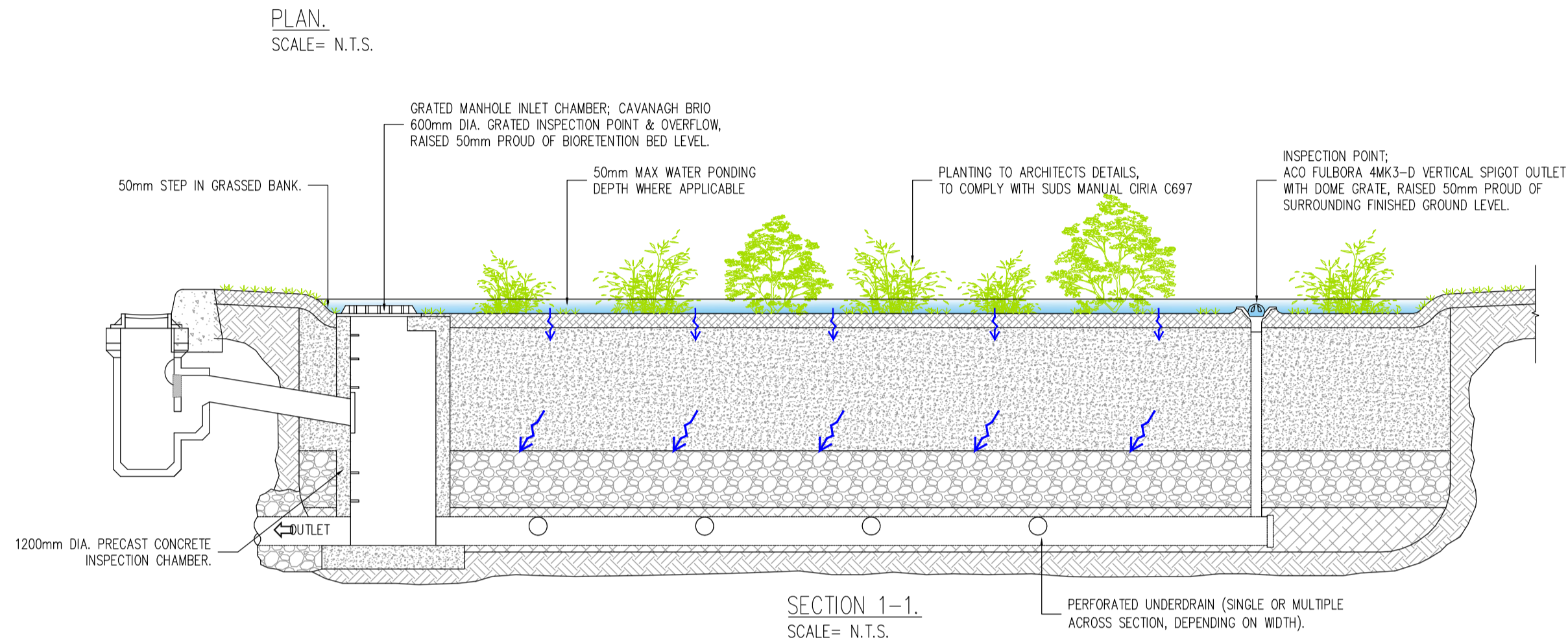
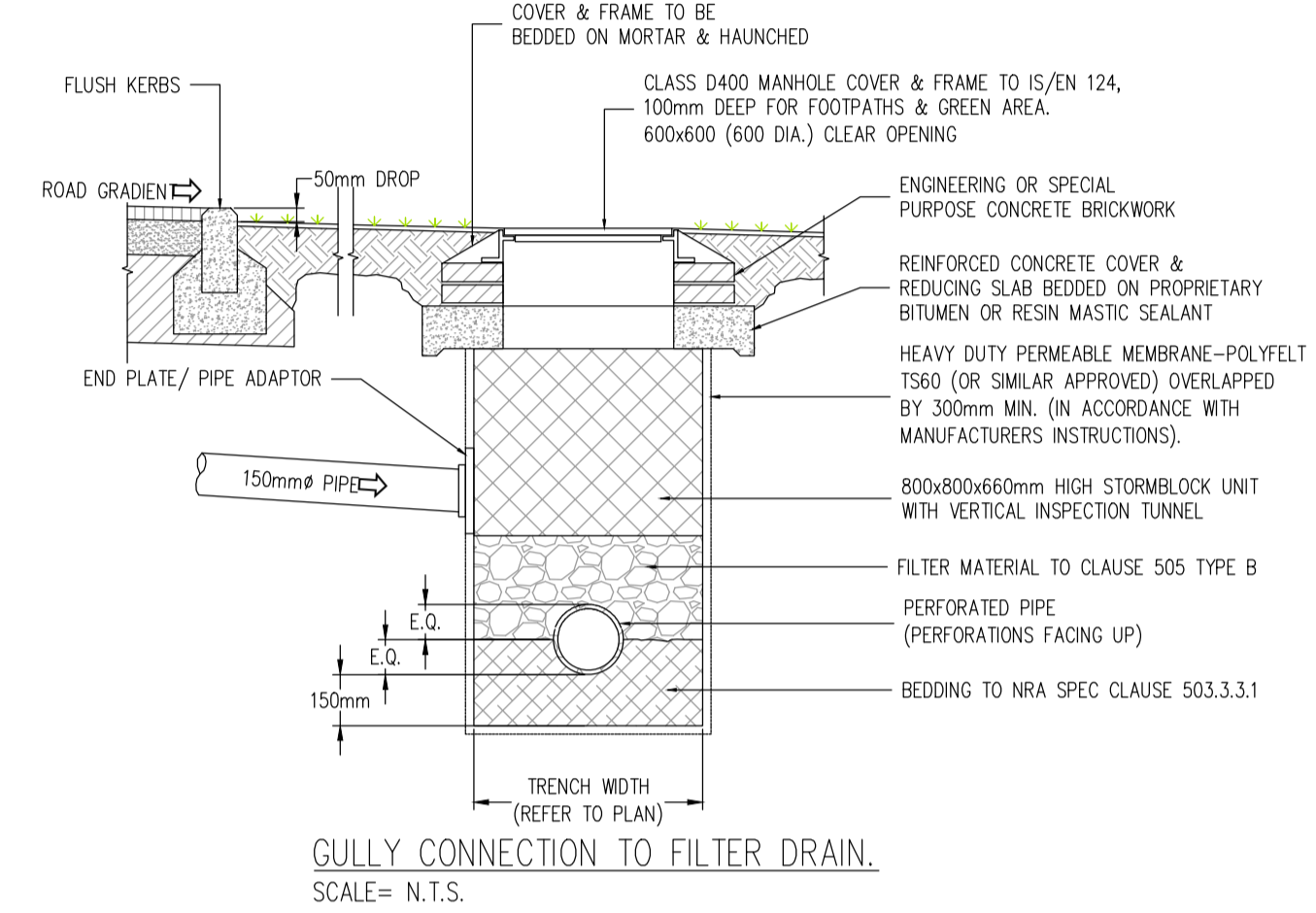
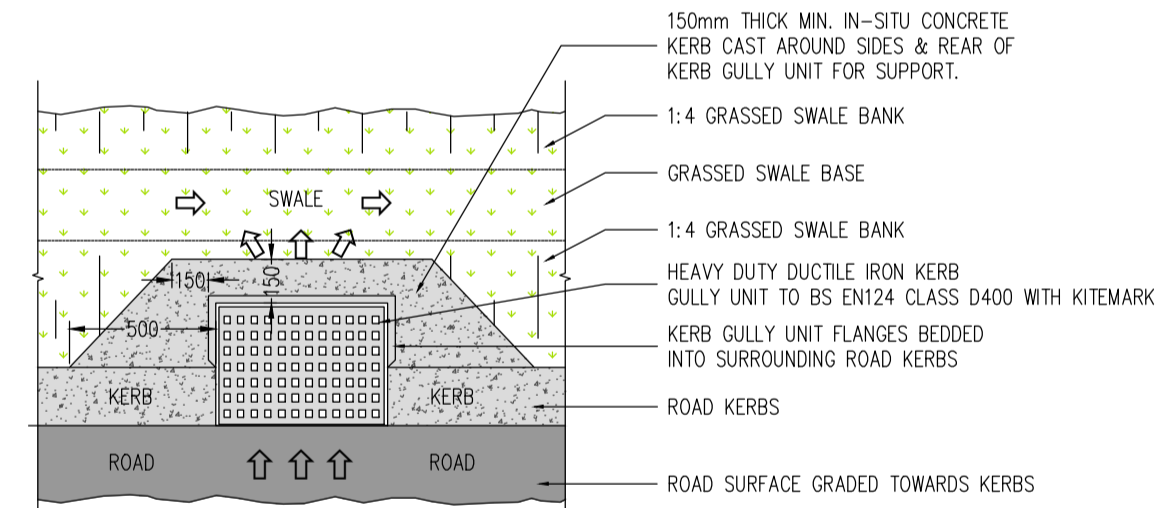
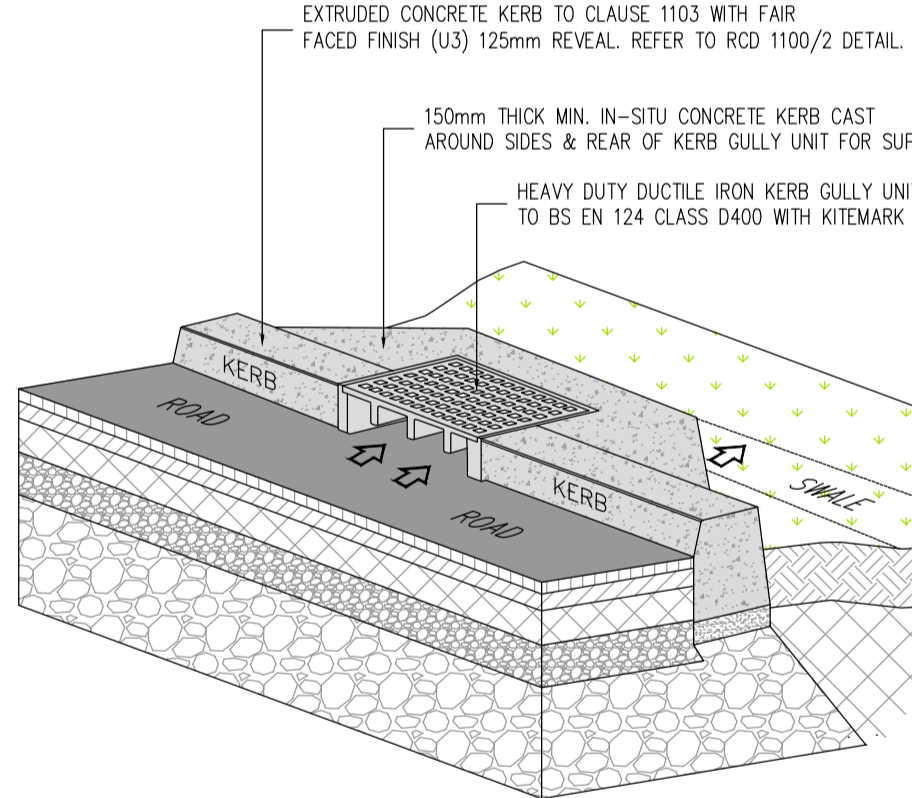


TABLE 1

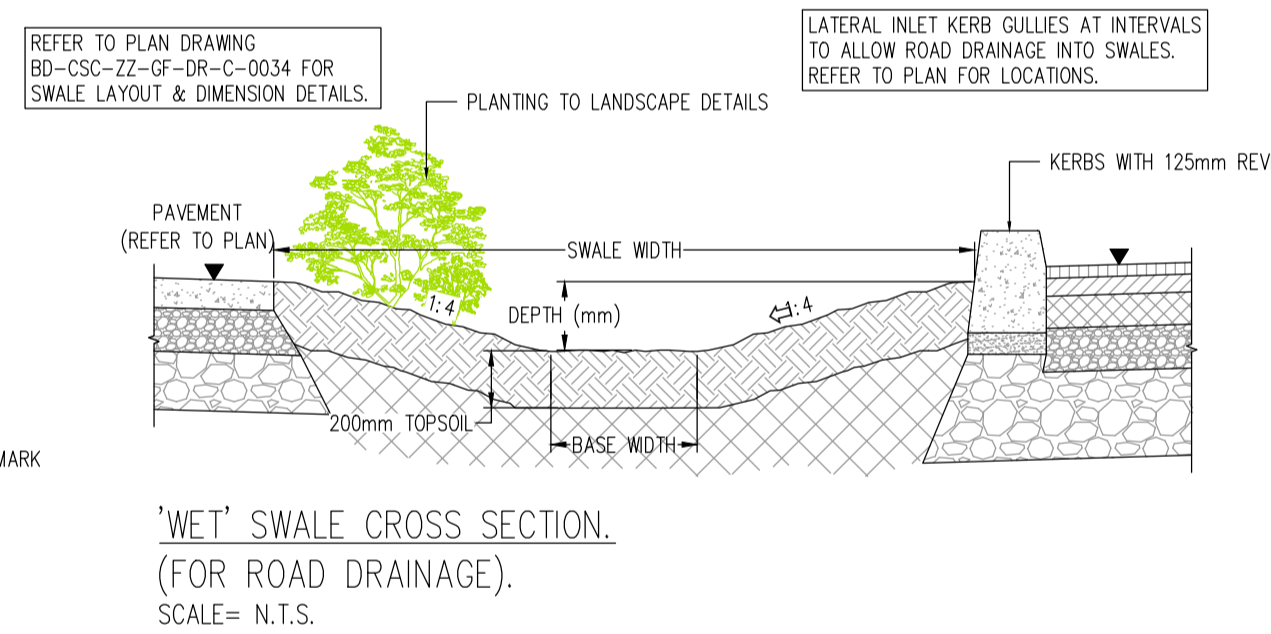
COMPONENT	PERCENTAGE MIXTURE
SAND	35-60%
SILT	30-50%
CLAY	10-25%
ORGANIC MATTER	0-4%
TOP SOIL	-



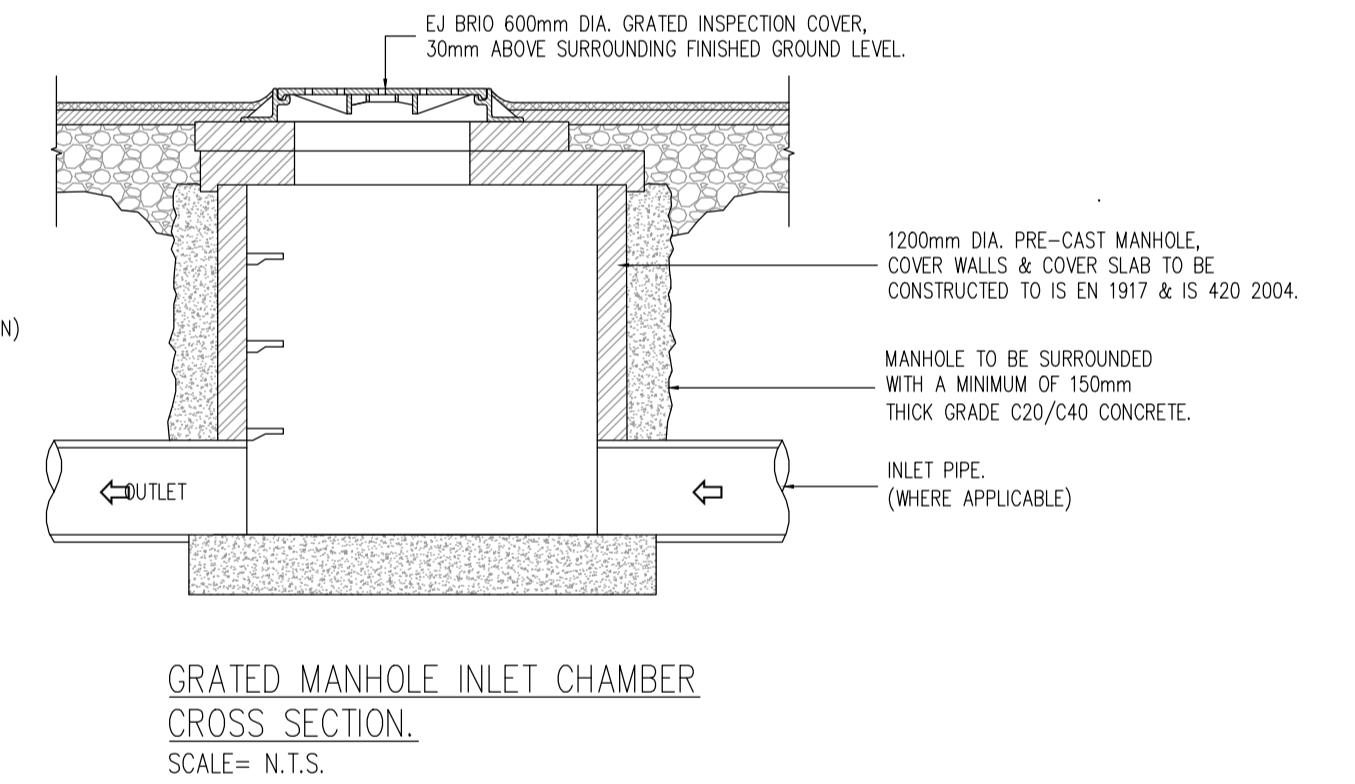
BIORETENTION AREA - SCHEMATIC LAYOUT.
SCALE= N.T.S.



LATERAL INLET KERB GULLY-PLAN.
(FOR ROAD DRAINAGE).
SCALE= N.T.S.

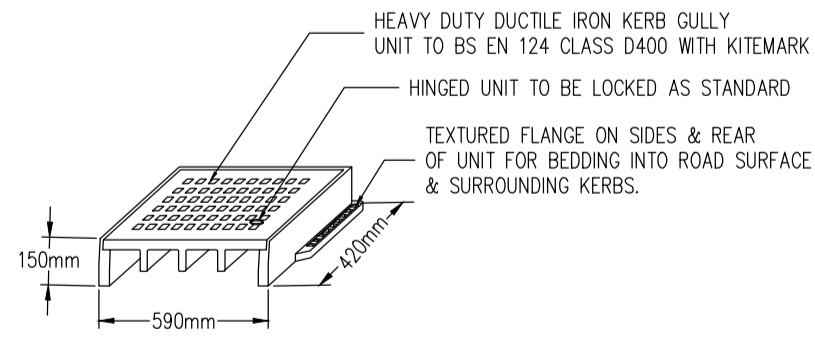


'WET' SWALE CROSS SECTION.
(FOR ROAD DRAINAGE).
SCALE= N.T.S.

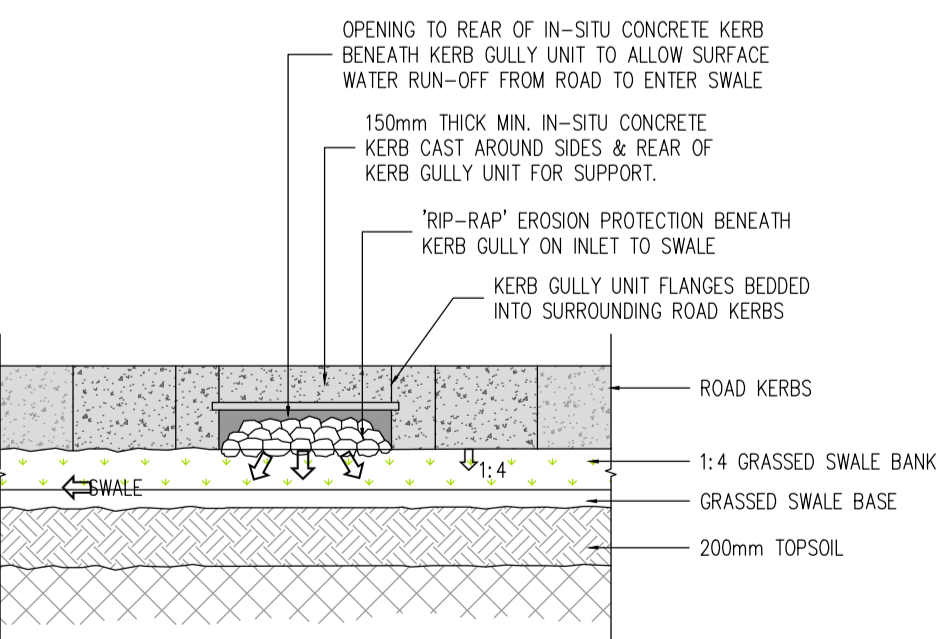


GRATED MANHOLE INLET CHAMBER CROSS SECTION.
SCALE= N.T.S.

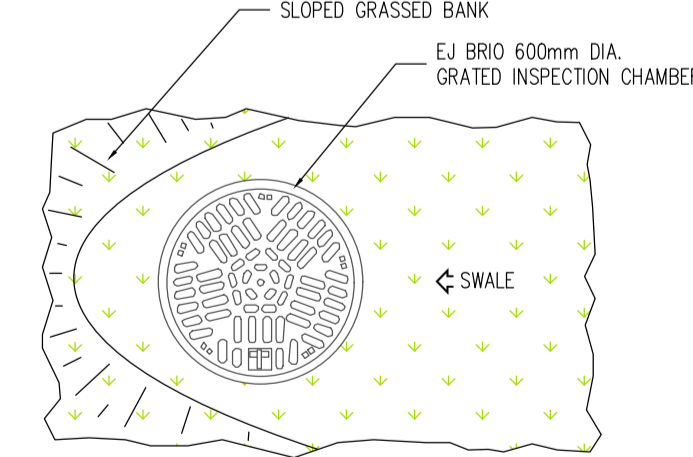
LATERAL INLET KERB GULLY SCHEMATIC.
(FOR ROAD DRAINAGE).
SCALE= N.T.S.



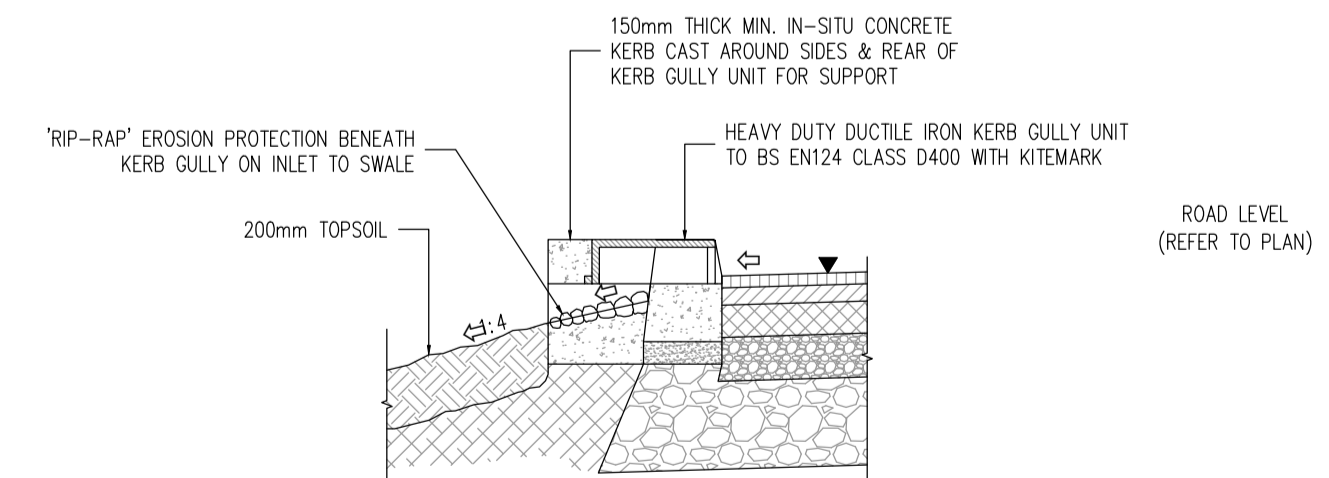
LATERAL INLET KERB GULLY DETAIL.
(LOCATED ALONG KERBLINES TO ALLOW ROAD SURFACE WATER RUN-OFF INTO SWALES).
SCALE= N.T.S.



LATERAL INLET KERB GULLY TO SWALE-REAR ELEVATION.
(FOR ROAD DRAINAGE).
SCALE= N.T.S.



PLAN.
SCALE= N.T.S.



LATERAL INLET KERB GULLY TO SWALE CROSS SECTION.
(FOR ROAD DRAINAGE).
SCALE= N.T.S.

- NOTES**
- For setting out refer to Architect's drawings.
 - This drawing to be read in conjunction with all other Architectural and Engineering drawings and all other relevant drawings and Specifications.
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Rev. No.	Date	REVISION NOTE	Drn. By	Chkd. By

Architect	O'Mahony Pike
Project	Proposed Development At O'Devaney Gardens
Title	Sustainable Urban Drainage Systems Typical Details
Dwg. No.	ODG-CSC-XX-XX-DR-C-0049
Date	MAY 2021
Drn. by	JS
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Apprd. by	NB
Scale	AS SHOWN @A1
Revision	

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IS EN ISO 14001:2004
IS EN ISO 50001:2011
OHSAS 18001:2007

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