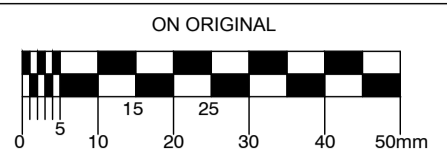


© COPYRIGHT OF THIS DRAWING IS RESERVED BY DBFL CONSULTING ENGINEERS. NO PART SHALL BE REPRODUCED OR TRANSMITTED WITHOUT THEIR WRITTEN PERMISSION.



- NOTES:
- GENERAL NOTES:
1. ALL DRAWINGS TO BE CHECKED BY CONTRACTOR ON SITE AND ENGINEER INFORMED OF DISCREPANCIES BEFORE WORK COMMENCES.
 2. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE ACCURACY OF EXISTING DRAINAGE LEVELS AND LOCATION OF EXISTING SERVICES ON SITE PRIOR TO COMMENCEMENT OF WORKS ON SITE.
 3. ALL DIMENSIONS AND LEVELS ARE IN METERS AND ARE RELATED TO ORDNANCE DATUM. CO-ORDINATES RELATE TO IRISH TRANSVERSE MERCATOR.
 4. ALL FOUL SEWERS, MANHOLES AND CONNECTIONS TO BE CONSTRUCTED IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE AND IRISH WATER WASTEWATER INFRASTRUCTURE STANDARD DETAILS.
 5. ALL FOUL SEWER CONNECTIONS TO BE MIN 100mm UPVC TO IS EN 1401:2009/2012, STIFFNESS CLASS 8kN/m² IN ACCORDANCE WITH IRISH WATER SPECIFICATIONS.
 6. ALL PUBLIC FOUL SEWERS PIPE MATERIAL TO BE IN COMPLIANCE WITH SECTION 3.13 OF IRISH WATER WASTEWATER CODE OF PRACTICE.
 7. ALL PUBLIC SURFACE WATER SEWERS TO BE MINIMUM 225 DIA. CLASS H CONCRETE TO EN1916 & IS 6:2004 IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.
 8. ALL SURFACE WATER CONNECTIONS TO BE MINIMUM 150mm UPVC TO IS EN 1401:2009/2012 IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.
 9. LOCATION AND INVERT LEVELS OF EXISTING MANHOLES OR OUTFALL POINTS, WHERE APPLICABLE, TO BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF DRAINAGE WORKS. ALL COVER LEVELS TO MATCH FINISHED ROAD/VERGE/FOOTPATH/CYCLETRACK LEVELS UNLESS OTHERWISE STATED.
 10. CONTRACTOR TO INCLUDE FOR CCTV SURVEY OF ALL SEWERS UPON COMPLETION OF SAME.
 11. ALL FOUL SEWERS TO BE AIR TESTED IN ACCORDANCE WITH IRISH WATER SPECIFICATIONS.

- LEGEND
- SITE BOUNDARY
 - PROPOSED SURFACE WATER DRAINAGE
 - PROPOSED GULLY
 - PROPOSED ADO CHANNEL
 - PROPOSED FOUL SEWER
 - PROPOSED CAR PARK INCIDENTAL DRAINAGE
 - EX SW SEWER
 - EX MH
 - EX FOUL SEWER
 - EX SW & FOUL SEWER TO BE DECOMMISSIONED
 - PROPOSED ROAD LEVELS
 - EXISTING ROAD LEVELS
 - FINISHED FLOOR LEVEL

ORDNANCE SURVEY IRELAND LICENCE
No EN 0017019
© ORDNANCE SURVEY IRELAND
GOVERNMENT OF IRELAND

REV.	DATE	DESCRIPTION	PJC	CHKD
A	24/10/19	STAGE 3 SUBMISSION TO ABP	PJC	DBR

DESIGNED: NCCG PREPARED: PJC
DATE: MAY 2019 CHECKED: DJR

DBFL Consulting Engineers email: info@dbfl.ie site: www.dbfl.ie

DUBLIN OFFICE: Ormond House, Upper Ormond Quay, Dublin 7, Ireland. PHONE: +353 1 400 4000 FAX: +353 1 400 4050

WATERFORD OFFICE: Unit 2, The Chandery, 1-2 O'Connell Street, Waterford, Ireland. PHONE: +353 51 309 500 FAX: +353 51 844 913

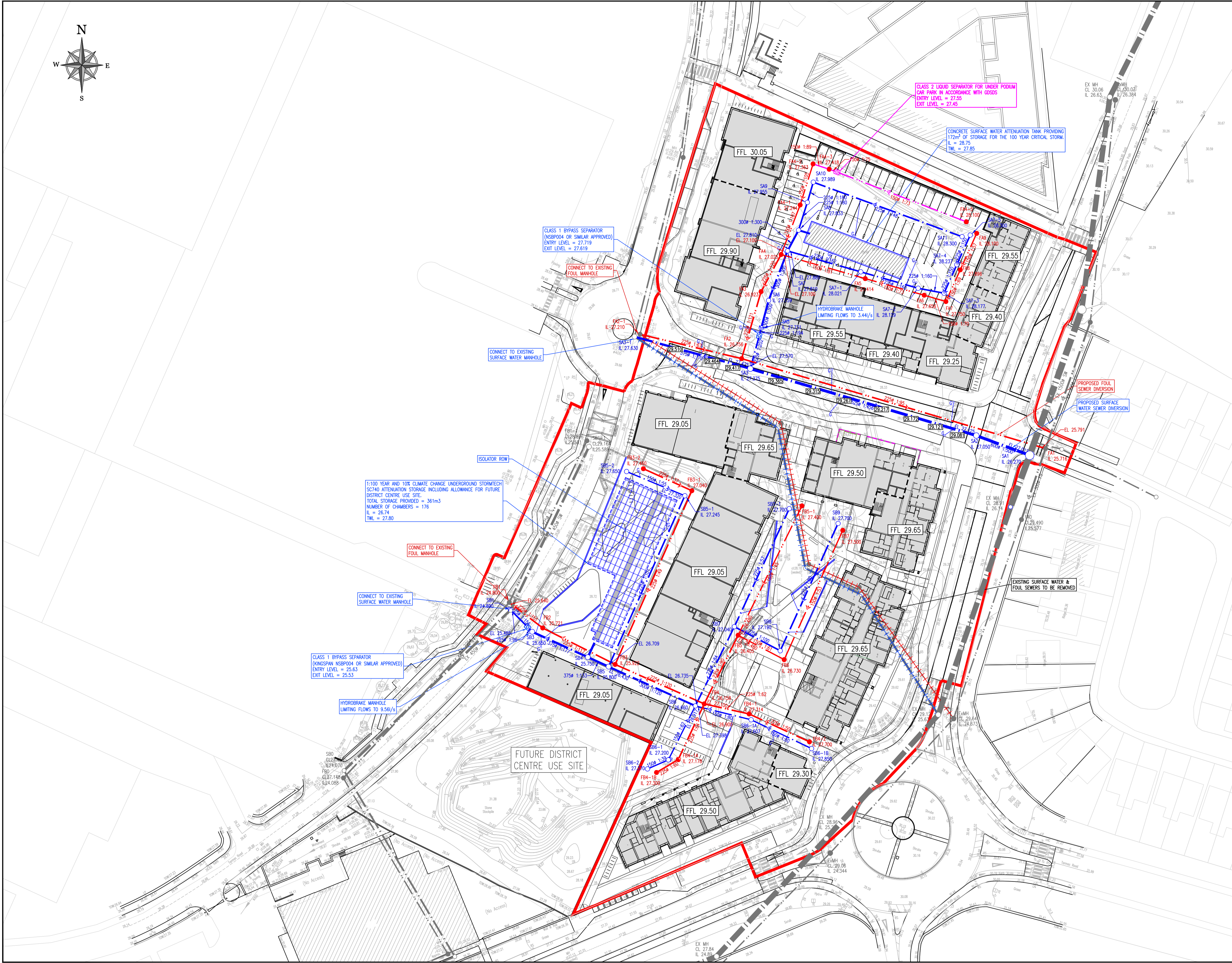


PROJECT
KNOCKNACARRA DISTRICT CENTRE, RAHOON, GALWAY.

DRG. TITLE
SITE SERVICES LAYOUT

ARCHITECT
REDDY ARCHITECTS

SCALE: 1:500 @A1 FILE REF: 180191-3000
DRG. NO. 180191-3000 A



1:100 YEAR AND 10% CLIMATE CHANGE UNDERGROUND STORMTECH SC740 ATTENUATION STORAGE INCLUDING ALLOWANCE FOR FUTURE DISTRICT CENTRE USE SITE.
TOTAL STORAGE PROVIDED = 361m³
NUMBER OF CHAMBERS = 176
IL = 26.74
TWL = 27.80

CLASS 1 BYPASS SEPARATOR (NSBP004 OR SIMILAR APPROVED)
ENTRY LEVEL = 27.719
EXIT LEVEL = 27.619

CLASS 2 LIQUID SEPARATOR FOR UNDER PODIUM CAR PARK IN ACCORDANCE WITH GDSOS
ENTRY LEVEL = 27.55
EXIT LEVEL = 27.45

CONCRETE SURFACE WATER ATTENUATION TANK PROVIDING 172m³ OF STORAGE FOR THE 100 YEAR CRITICAL STORM.
IL = 28.75
TWL = 27.85

HYDROBRAKE MANHOLE
LIMITING FLOWS TO 3.44l/s
IL 28.119

CLASS 1 BYPASS SEPARATOR (KINGSPAN NSBP004 OR SIMILAR APPROVED)
ENTRY LEVEL = 25.63
EXIT LEVEL = 25.53

HYDROBRAKE MANHOLE
LIMITING FLOWS TO 9.56l/s

FUTURE DISTRICT CENTRE USE SITE

EXISTING SURFACE WATER & FOUL SEWERS TO BE REMOVED