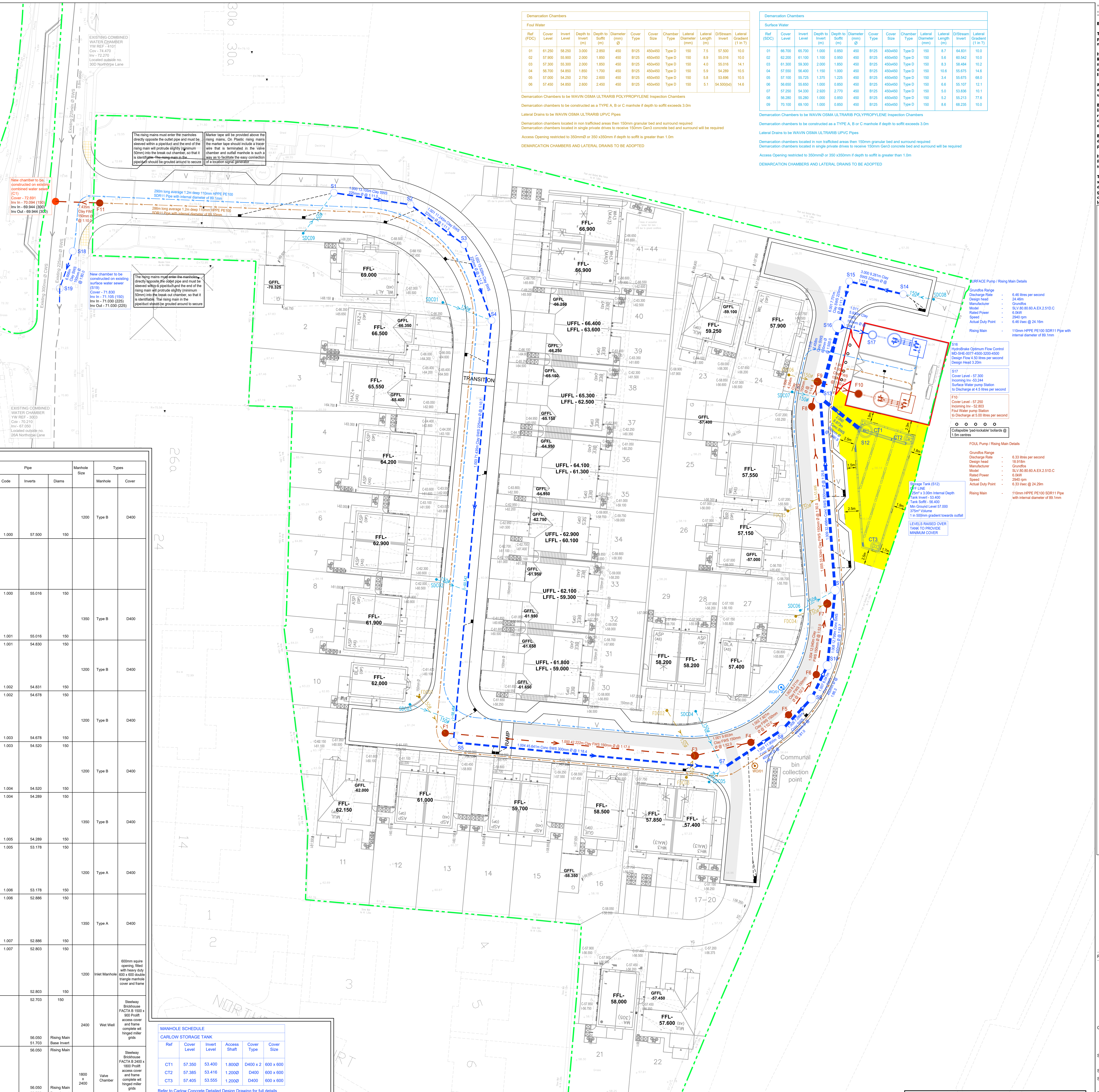
H-3-264-929

Manhole Number / Coordinates	Cover Level / Depth To Soffit	Connections	Pipe	Code	Inverts	Diams	Manhole Size	Types: Manhole	Types: Cover
S1 E. 421446.717 N. 421129.486	69.585 1.200	GY; SDC09 150Ø 68.235	0	1.000	68.160	225	1350	Type C	D400
S2 E. 421459.663 N. 421127.457	68.389 1.200		1 0	1.000 1.001	66.964 66.964	225 225	1200	Type C	D400
S3 E. 421468.713 N. 421120.790	67.393 1.200		1 0	1.001 1.002	65.968 65.968	225 225	1200	Type C	D400
S4 E. 421473.318 N. 421108.069	66.181 1.200	SDC01 150Ø 56.755	1 0	1.002 1.003	64.756 64.756	225 225	1350	Type C	D400
S5 E. 421466.845 N. 421036.928	60.469 2.169		1 0	1.003 1.004	58.075 58.000	225 300	1200	Type B	D400
S7 E. 421512.280 N. 421032.600	57.025 1.200	SDC05 150Ø 53.836; SDC04 150Ø 56.755	1 0	1.004 1.005	55.375 55.375	450 450	1500	Type C	D400
S8 E. 421522.254 N. 421039.090	56.770 1.200		1 0	1.005 1.006	55.120 55.120	450 450	1500	Type C	D400
S9 E. 421527.232 N. 421044.414	56.680 1.200		1 0	1.006 1.007	55.030 55.030	450 450	1500	Type C	D400
S10 E. 421529.861 N. 421049.852	56.610 1.200		1 0	1.007 1.008	54.960 54.960	450 450	1500	Type C	D400
S11 E. 421531.143 N. 421062.586	56.457 1.200	SDC06 150Ø 55.107	1 0	1.008 1.009	54.807 54.807	450 450	1500	Type C	D400
S12 Tank E. N.	57.350 3.350		0	2.000	53.400	600		TANK	
S13 E. 421528.645 N. 421094.989	57.117 3.131		1 2 0	1.009 2.000 1.010	53.536 53.386 53.386	450 600 600	1800	Type A	D400
S14 E. 421542.640 N. 421112.470	56.563 1.200	SDC08 150Ø 55.213; GY; GY	0	3.000	55.138	225	1200	Type C	D400
S15 E. 421533.591 N. 421114.531	57.334 2.708		1 0	3.000 3.001	54.401 54.401	225 225	1200	Type B	D400
S16 Flow Control E. 421531.744 N. 421107.055	57.280 3.819		1 2 0	3.001 1.010 1.011	53.736 53.361 53.311	225 600 150	2100	Flow Control refer to dwg no. 22/223/500/005 for details	D400
S17 Inlet MH E. 421537.472 N. 421105.560	57.300 3.906		1 0	1.011	53.244 53.244	150 150	1200	Inlet Manhole	600mm squire opening, fitted with heavy duty 600 x 600 double triangle manhole cover and frame
SWW	57.300		1 0		53.144 56.100 52.044	150 Rising Main Base Invert	2100	Wet Well	Steelway Brickhouse FACTA B 1500 x 900 Prolift access cover and frame complete wit hinged miller grids
SVC	57.300		1 0		56.100 55.800	Rising Main Rising Main Base Invert	1800 x 2400	Valve Chamber	Steelway Brickhouse FACTA B 2400 x 1800 Prolift access cover and frame complete wit hinged miller grids
S18 E. 421402.814 N. 421119.661	72.300 0.965		1 0	RM	71.235 71.185	RM 150	1200	Type C	D400
S19 E. 421400.621 N. 421113.412	71.830 0.515		1 2 0	Existing Existing	71.030 71.105 71.030	225 150 225	1200	Tyoe C	D400

Manhole Number / Coordinates	Cover Level / Depth To Soffit	Connections	Pipe	Code	Inverts	Diams	Manhole Size	Types: Manhole	Types: Cover
F1 E. 421465.504 N. 421038.523	60.629 2.979		0	1.000	57.500	150	1200	Type B	D400
F3 E. 421507.557 N. 421034.736	57.280 2.114		1 0	1.000 1.001	55.016 55.016	150 150	1350	Type B	D400
F4 E. 421516.953 N. 421036.950	56.863 1.903		1 0	1.001 1.002	54.830 54.831	150 150	1200	Type B	D400
F5 E. 421523.338 N. 421041.848	56.766 1.940		1 0	1.002 1.003	54.678 54.678	150 150	1200	Type B	D400
F6 E. 421528.013 N. 421048.398	56.664 1.994		1 0	1.003 1.004	54.520 54.520	150 150	1200	Type B	D400
F7 E. 421529.815 N. 421060.302	56.516 2.077		1 0	1.004 1.005	54.289 54.289	150 150	1350	Type B	D400
F8 E. 421527.215 N. 421093.525	57.113 3.785		1 0	1.005 1.006	53.178 53.178	150 150	1200	Type A	D400
F9 E. 421528.204 N. 421097.872	57.189 4.153		1 0	1.006 1.007	52.886 52.886	150 150	1350	Type A	D400
F10 Inlet MH E. 421534.809 N. 421095.854	57.250 4.297		1 0	1.007	52.803 52.803	150 150	1200	Inlet Manhole	600mm squire opening, fitted with heavy duty 600 x 600 double triangle manhole cover and frame
FWW	57.250		1 0		52.703 56.050 51.703	150 Rising Main Base Invert	2400	Wet Well	Steelway Brickhouse FACTA B 1000 x 900 Prolift access cover and frame complete wit hinged miller grids
FVC	57.250		1 0		56.050 56.050 55.750	Rising Main Rising Main Base Invert	1800 x 2400	Valve Chamber	Steelway Brickhouse FACTA B 2400 x 1800 Prolift access cover and frame complete wit hinged miller grids
F11 E. 421407.046 N. 421127.762	72.515 1.528		1 0	RM	70.887 70.837	RM 150	1200	Type C	D400
C1 E. 421399.617 N. 421128.058	72.691 2.447		1 2 0	Existing 150 Existing	69.944 70.094 69.944	300 150 300	1200	Type B	D400



Demarcation Chambers

Foul Water

Ref (FDC)	Cover Level	Invert Level (m)	Depth to Invert (m)	Depth to Soffit (m)	Diameter (mm) Ø	Cover Type	Cover Size	Chamber Type	Lateral Diameter (mm)	Lateral Length (m)	D/Stream Invert	Lateral Gradient (1 in ?)
01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
05	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Demarcation Chambers to be WAVIN OSMA ULTRARIB POLYPROPYLENE Inspection Chambers

Demarcation chambers to be constructed as a TYPE A, B or C manhole if depth to soffit exceeds 3.0m

Lateral Drains to be WAVIN OSMA ULTRARIB UPVC Pipes

Demarcation chambers located in non trafficked areas then 150mm granular bed and surround required
Demarcation chambers located in single private drives to receive 150mm Gen3 concrete bed and surround will be required

Access Opening restricted to 350mmØ or 350 x350mm if depth to soffit is greater than 1.0m

DEMARCATION CHAMBERS AND LATERAL DRAINS TO BE ADOPTED

Demarcation Chambers

Surface Water

Ref (SDC)	Cover Level	Invert Level (m)	Depth to Invert (m)	Depth to Soffit (m)	Diameter (mm) Ø	Cover Type	Cover Size	Chamber Type	Lateral Diameter (mm)	Lateral Length (m)	D/Stream Invert	Lateral Gradient (1 in ?)
01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
05	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
06	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
08	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
09	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Demarcation Chambers to be WAVIN OSMA ULTRARIB POLYPROPYLENE Inspection Chambers

Demarcation chambers to be constructed as a TYPE A, B or C manhole if depth to soffit exceeds 3.0m

Lateral Drains to be WAVIN OSMA ULTRARIB UPVC Pipes

Demarcation chambers located in non trafficked areas then 150mm granular bed and surround required
Demarcation chambers located in single private drives to receive 150mm Gen3 concrete bed and surround will be required

Access Opening restricted to 350mmØ or 350 x350mm if depth to soffit is greater than 1.0m

DEMARCATION CHAMBERS AND LATERAL DRAINS TO BE ADOPTED

MANHOLE SCHEDULE

CARLOW STORAGE TANK

Ref	Cover Level	Invert Level	Access Shaft	Cover Type	Cover Size
CT1	57.350	53.400	1.800Ø	D400 x 2	600 x 600
CT2	57.385	53.416	1.200Ø	D400	600 x 600
CT3	57.405	53.555	1.200Ø	D400	600 x 600

Refer to Carlow Concrete Detailed Design Drawing for full details

CHAMBER SCHEDULE

SURFACE WATER RISING MAIN

Ref	Cover Level	Invert Level	Base / Sump Level	Depth to Base	Access Shaft	Cover Type	Cover Size
WO/O1	56.850	54.934	54.634	2.216	1.800Ø	D400	2x600x600

CHAMBER SCHEDULE

FOUL WATER RISING MAIN

Ref	Cover Level	Invert Level	Base / Sump Level	Depth to Base	Access Shaft	Cover Type	Cover Size
WO/O1	56.820	54.682	54.382	2.138	1.800Ø	D400	2x600x600

THE HOUSING LAYOUT SHOWN ON THIS PLAN IS TAKEN FROM EDWARD ARCHITECTURES PROPOSED SITE LAYOUT REFERENCED 089-EA-A-P002-DD DATED 17 MARCH 2021

THE TOPOGRAPHICAL SURVEY SHOWN ON THIS PLAN IS TAKEN FROM ZS SURVEYS TOPOGRAPHICAL SURVEY REFERENCED 2106 SHEET 1 OF 2 & 2 of 2 DATED 10 FEBRUARY 2021

ALL LEVELS RELATED OSTN15 GRID PROJECTION.

KEY:

- Existing Surface Water Sewer and Manhole
- Existing Foul Water Sewer and Manhole
- Existing Combined Sewer and Manhole
- Proposed Surface Water Sewer and Manhole
- Proposed Surface Water Sewer and Manhole and Backdrop
- Proposed Surface Water Flow Control Manhole
- Greater than 3.0m deep
- Proposed Surface Water Lateral Drain and Demarcation Chamber
- Proposed Private Surface Water Drain and Inspection Chamber (100mm Ø at 1 in 80 unless specified otherwise)
- Rainwater Down Pipe
- Rodding Eye
- Yard Gully
- ACO drainage Channel or Similar
- Air Valve / Wash Out — Proposed Surface Water Rising Main
- Proposed Foul Water Sewer and Manhole
- Proposed Foul Water Sewer and Manhole and Backdrop
- Greater than 3.0m deep
- Proposed Surface Water Lateral Drain and Demarcation Chamber
- Air Valve / Wash Out — Proposed Foul Water Rising Main
- Proposed Private Foul Water Drain and Inspection Chamber (100mm Ø at 1 in 40m at top of run and 1 in 80 minimum elsewhere unless specified otherwise)
- Proposed Private Foul Water Mini Inspection Chamber
- Soil Vent Pipe or Foul Direct Connection
- Proposed Combined Water Sewer and Manhole
- Proposed Combined Water Sewer and Manhole and Backdrop
- Proposed Highway Drain and Manhole
- Proposed Highway Drain and Manhole and Backdrop
- Proposed Highway Gully and 150mm Ø Connection
- Proposed Easement

YORKSHIRE WATER NOTES:

1. All adoptable sewer works and material to be in accordance with Sewerage Sector Guidance Design and Construction Guidance [Code for Adoption]. [illegible]
2. Manhole covers shall/must have a clear opening of 600mm [illegible]
3. Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water [illegible]
4. Yorkshire Water is not obliged to accept filter drain/land drainage run-off into the public sewer network [illegible]
5. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
6. Sewers must have 3 metres clearance from trees and hedges or the width of the canopy at mature height.
7. Sewers to be laid in Class "S" Bedding [illegible]
8. There must be enough clearance at crossovers to accommodate bedding to both pipes [illegible]
9. Bedding and backfill material to conform to the requirement of Water Industry Specification [illegible]
10. Adoptable plastic sewer pipes to be [illegible]
11. The minimum crushing strength for clay pipes should be as follows [illegible]
12. Yorkshire Water policy is that Type "C" brick manholes and 1050mm dia. manhole rings are not preferred [illegible]
13. Where a B125 cover and frame has been approved, this must not be [illegible]

Rev.	Date:	Amendment:	DRN	CHK	APR
D	17.04.23	Revised to Yorkshire Water comments 17 April 2023	IE		
C	16.03.23	Revised to Yorkshire Water comments 15 March 2023	IE		
B	23.02.23	Revised to Yorkshire Water comments 7 February 2023	IE		
A	18.01.23	Architects layout updated	IE		

BRYAN G HALL

CONSULTING CIVIL & TRANSPORTATION PLANNING ENGINEERS

LEEDS | 0113 246 1555 LONDON | 0203 5322336

Suite E15 | Josephs Well Hanover Walk | LEEDS | LS3 1AB

W www.bryanghall.co.uk
E transportleeds@bryanghall.co.uk

Client: Newett Homes

Status:

Scale: 1:250 Size: A0 - 1189 x 841 Drawn: IE Chkd: NB Apprd:

Project: Residential Development Northorpe Lane, Mirfield

Title: Drainage Layout

Drawing No: 22/223/500/001 Revision: D

Job No: 22-223 Date: 21.11.22

twitter.com/BryanghallI
Bryan G Hall