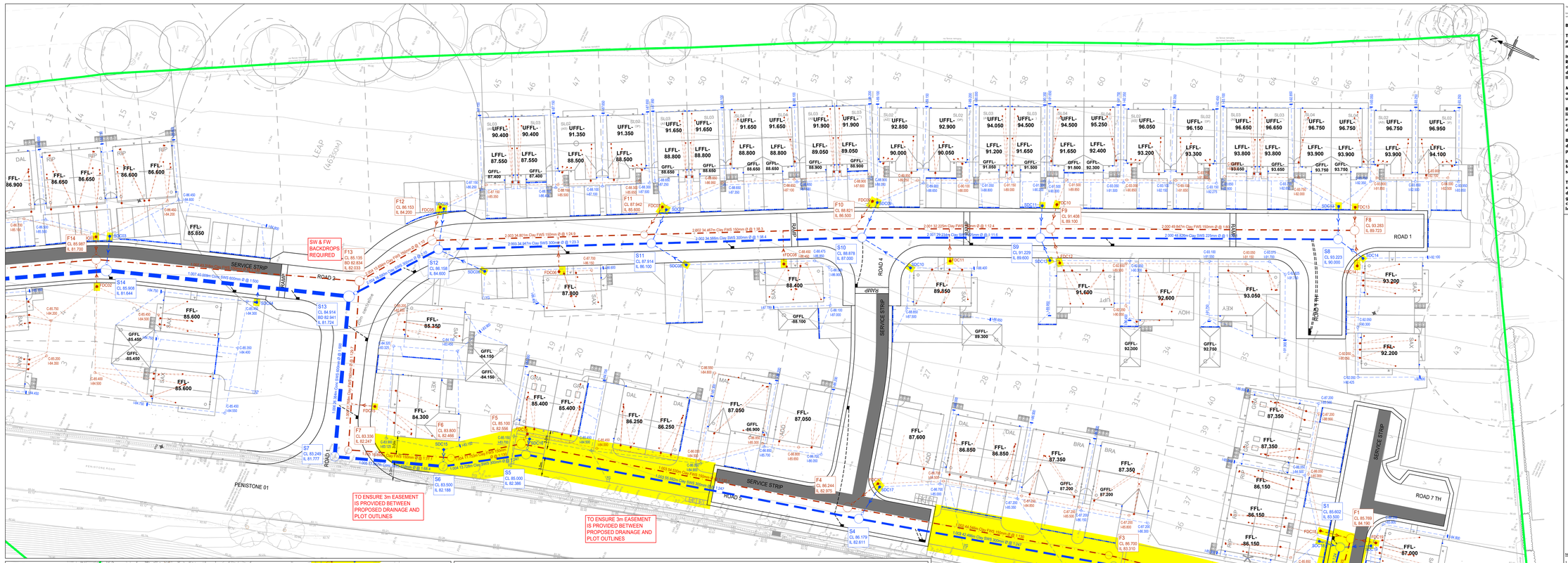
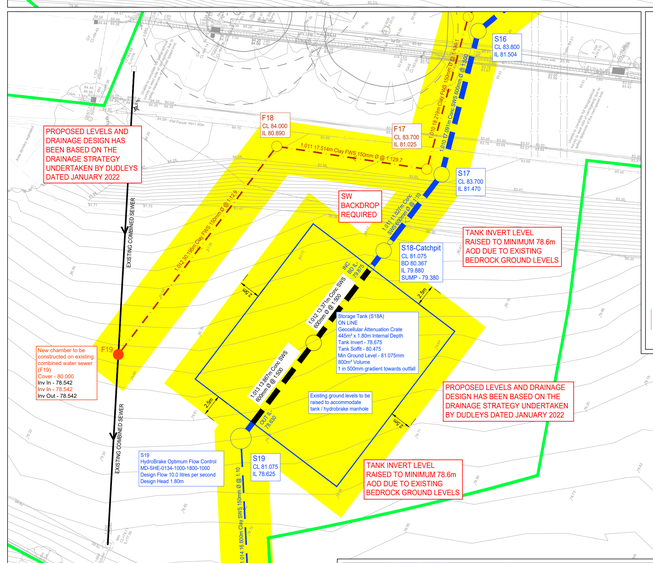




DEMARCATION CHAMBERS SCHEDULES

Demarcation Chambers

Surface Water

Ref (SDC)	Cover Level	Invert Level	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 7)
01	87.100	86.100	1.000	0.850	450	B125	450x450	Type D	150	5.0	85.600bd	10.0
02	86.450	82.280bd	4.170	4.020	1200	D400	600x600	Type A	150	4.0	81.880	10.0
03	86.100	84.400	1.700	1.550	450	B125	450x450	Type D	150	4.5	83.950bd	10.0
04	85.450	82.291bd	3.159	3.009	1200	D400	600x600	Type A	150	3.0	81.991	10.0
05	86.600	85.430	1.170	1.020	450	D400	450x450	Type D	150	6.8	84.750	10.0
06	86.850	85.580	1.270	1.120	450	D400	450x450	Type D	150	8.3	84.750	10.0
07	88.075	86.750	1.325	1.175	450	B125	450x450	Type D	150	8.0	86.250	12.0
08	89.100	86.550	1.525	1.375	450	D400	450x450	Type D	150	6.7	86.250	22.3
09	89.450	87.780	1.370	1.220	450	B125	450x450	Type D	150	6.3	87.150	10.0
10	89.450	87.300	2.150	2.000	450	B125	450x450	Type D	150	9.0	87.150	60.0
11	91.400	90.270	1.130	0.980	450	B125	450x450	Type D	150	5.2	89.790	10.0
12	91.500	89.800	1.700	1.550	450	D400	450x450	Type D	150	4.0	89.750	80.0
13	93.360	92.200	1.160	1.010	450	D400	450x450	Type D	150	5.3	91.670bd	10.0
14	93.050	90.140	2.910	2.760	450	B125	450x450	Type D	150	5.0	90.075	76.9
15	84.000	83.000	1.000	0.850	450	B125	450x450	Type D	150	3.0	82.800bd	15.0
16	85.400	83.850	1.750	1.600	450	D400	450x450	Type D	150	3.0	83.350bd	10.0
17	86.540	84.890	1.650	1.540	450	B125	450x450	Type D	150	6.2	84.230bd	10.0
18	85.700	83.925	1.775	1.625	450	B125	450x450	Type D	150	3.5	83.575	10.0
19	85.900	83.640	2.260	2.110	450	B125	450x450	Type D	150	4.7	83.575	72.3

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

Foul Water

Ref (FDC)	Cover Level	Invert Level	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 7)
01	87.100	85.700	1.400	1.250	450	B125	450x450	Type D	150	5.1	85.190bd	10.0
02	85.900	84.000	1.900	1.750	450	B125	450x450	Type D	150	4.3	83.570bd	10.0
03	86.125	83.900	2.225	2.075	450	D400	450x450	Type D	150	3.7	83.530bd	10.0
04 N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
05	88.600	84.600	2.000	1.850	450	D400	450x450	Type D	150	5.0	84.200	12.5
06	87.800	85.650	2.150	2.000	450	B125	450x450	Type D	150	5.9	85.060	10.0
07	88.075	86.050	2.025	1.875	450	D400	450x450	Type D	150	4.8	85.600	10.7
08	88.000	86.300	1.700	1.550	450	B125	450x450	Type D	150	5.6	86.165	48.7
09	89.125	86.980	2.145	1.995	450	B125	450x450	Type D	150	4.8	86.500	10.0
10	91.600	89.430	2.170	2.020	450	B125	450x450	Type D	150	3.3	89.100	10.0
11	90.000	87.930	2.070	2.820	450	B125	450x450	Type D	150	5.3	88.960	75.7
12	91.650	89.300	2.350	2.200	450	B125	450x450	Type D	150	5.1	89.150	25.5
13	93.400	91.700	1.700	1.550	450	B125	450x450	Type D	150	3.8	91.320bd	10.0
14	93.050	89.780	3.350	3.200	1200	B125	600x600	Type A	150	5.1	89.723	80.0
15	83.750	81.700	2.050	1.900	450	B125	450x450	Type D	150	5.6	81.140	10.0
16	85.400	83.00	2.400	2.250	450	B125	450x450	Type D	150	3.0	82.700bd	10.0
17	85.500	84.350	1.150	1.000	450	B125	450x450	Type D	150	5.5	83.800bd	10.0
18	85.700	84.500	1.200	1.050	450	B125	450x450	Type D	150	4.3	84.190	13.8
19	85.900	84.250	1.650	1.500	450	B125	450x450	Type D	150	3.1	84.190	51.6

Demarcation Chambers to be WAVIN OSMA ULTRARIB POLYPROPYLENE Inspection Chambers

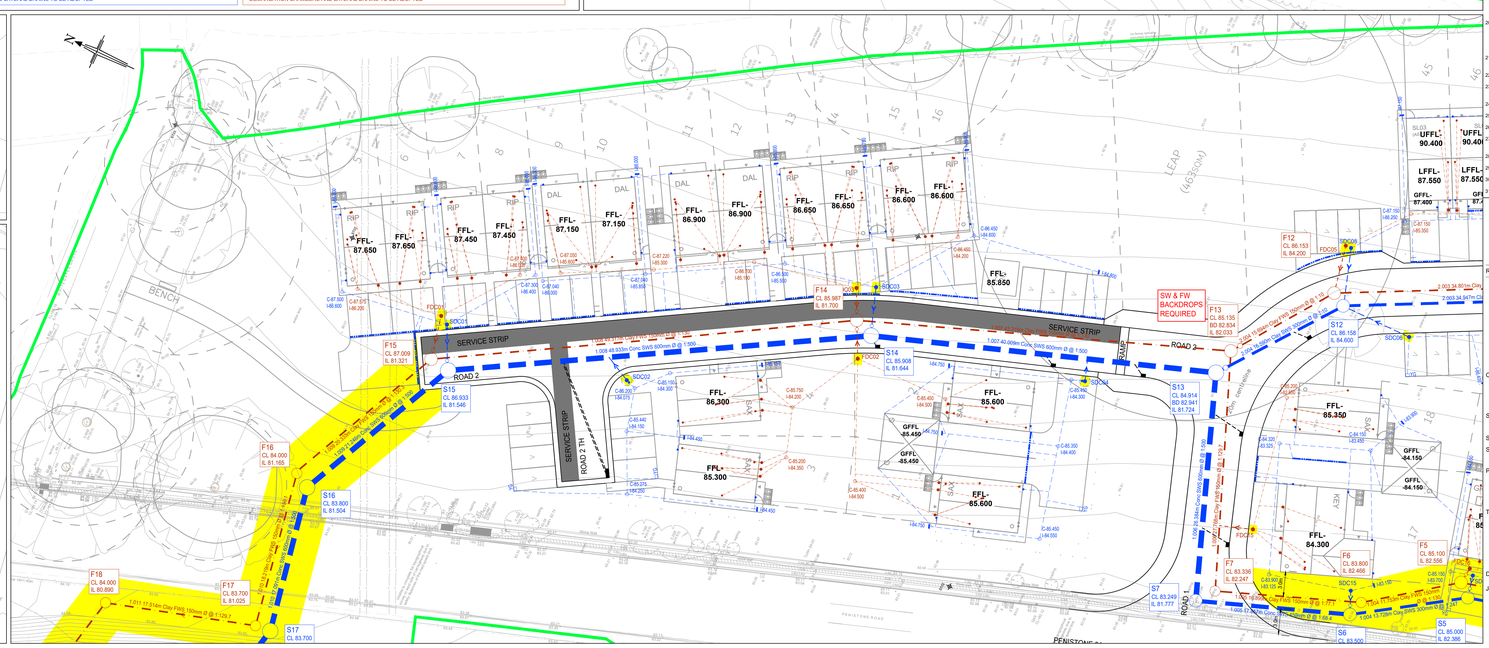
Demarcation chambers to be constructed as a TYPE A, B or C manhole if depth to soffit exceeds 3.0m

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



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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
- Proposed Surface Water Lateral Drain and Demarcation Chamber (Greater than 3.0m deep)
- Proposed Surface Water Lateral Drain and Demarcation Chamber with Backdrop
- 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
- Concrete Dished Channel and gully
- Proposed Foul Water Sewer and Manhole
- Proposed Foul Water Sewer and Manhole and Backdrop
- Proposed Foul Water Lateral Drain and Demarcation Chamber (Greater than 3.0m deep)
- Proposed Foul Water Lateral Drain and Demarcation Chamber with Backdrop
- 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 Highway Drain and Manhole
- Proposed Highway Gully and 150mm Ø Connection
- Proposed Easement

NOTES:

1. All statutory undertakers equipment in footway and carriageway to be located and diverted before work commences.
2. A pedestrian route through the works shall be maintained at all times and clearly defined by suitable barriers and lights where necessary.
3. The contractor is obliged to obtain necessary road opening and/or sewer connection licence's prior to commencement of the works.
4. One vertical joint per course of brick work shall be left open to allow drainage during construction.
5. All statutory undertakers covers and frames to be adjusted to suit new carriageway levels prior to surfacing.
6. All existing gullies and drain runs to be cleaned of detritus and high pressure water jetted prior to commencement of works.
7. The existing sewers and culverts shown on this drawing are taken from various archives, drainage plans and sewer records. Some of this information is contradictory and the locations shown are interpreted using existing features and manhole locations shown on the survey. The exact depth and location should be verified on-site prior to commencing construction.
8. All adoptable sewer works and material to be in accordance with Sewer Sector Guidance (SSG) / DCG, and the Water Authorities requirements and Kitemark.
9. All drainage works that shall be adopted by the Water Authority to be subject to their approval prior to commencement on site.
10. All hard standing and impermeable areas outside the adopted highway boundary to be drained and collected in private drainage systems and discharged into the surface water sewer before water encroaches onto the public highway.
11. Gullies should not be located in the area of dropped crossings.
12. The chamber size of manholes with more than one connection in them may need to be increased and increment to accommodate the connections and bends.
13. Sewers to be laid in Class 'B' bedding (150mm granular bed and surround). Where depth of cover to top of the sewer is less than 1.2m in highways and verges (or less than 900mm in none vehicular access areas) then a concrete slab should be provided above granular bed and surround. Refer to Sewer Sector Guidance (SSG) / DCG for protection measures.
14. Granular bedding for pipes shall consist of aggregates from natural sources complying with the relevant provisions of BS 882 sized in accordance with the table across.
15. All pipes with a diameter larger or equal to 375mm shall be concrete. Pipes with a diameter less than 375mm shall be clay or ductile iron.
16. Vitrified clay pipes and fittings for sewers shall have flexible mechanical joints. Pipes for foul Sewers and surface water Sewers shall comply with relevant requirements of BS EN295 and BS 65 (surface water pipes only).
17. Manhole covers shall/must have a clear opening of 675mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
18. Filled ground must be filled and consolidated under the supervision and to the satisfaction of the Water Authority before any sewer works are carried out.
19. The Water Authority is not obliged to accept filter drain/land drainage runoff into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the land drainage runoff will need to be agreed with the Local Authority. Land Drainage Section with regard to the disposal of the filter drain/land drainage runoff.
20. Cover slabs must carry the BSI Kitemark or will be rejected by the Water Authority Inspectors. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 675mm to suit the frame for the five Water Authorities specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), "Technical Bulletin" issued Autumn 2004 for Kitemarked cover slab opening sizes.
21. Sulphate Resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
22. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
23. Sewers must have 5.0m clearance from trees and hedges. (refer to Sewer Sector Guidance (SSG) / DCG for restrictions on tree planting adjacent to sewers).
24. All private work to be in accordance with current building regulations.
25. Drains passing through buildings to be protected with lintel cover.
26. No building to take place within 3.0m of an adoptable sewer.
27. Where adoptable pipes have 150mm concrete bed and surround protection, all joints to be provided with 18mm thick flexible filter.
28. No services to be sited over or within 1.0m of an adoptable sewer.
29. Private drainage connections not direct to manholes are to be made via a 45 degree junction and not saddles.
30. Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
31. Any proposed sewers located within 5 meters of the public sewer shall be ductile iron pipe work.

Rev:	Date:	Amendment:	DRN	CHK	APR
E	24.10.24.	Updated as per Icosa comments dated 15.10.24.	NB	IE	
D	22.02.24.	Details reviewed and amended following VE excersise from Newett Homes dated 05.02.24.	NB	IE	
C	05.12.23.	Lateral dashes removed, private drainage updated	NB	IE	

BRYAN G HALL
CONSULTING CIVIL & TRANSPORTATION PLANNING ENGINEERS
LEEDS T 0113 246 1555
LONDON T 0203 5532336
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: NB | Chkd: IE | Apprvd:

Project: Residential Development
Penistone Road, Fenay Bridge

Title: Drainage

Drawing No: 22/491/500/001 | Revision: E
Job No: 22-491 | Date: 06.02.23

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