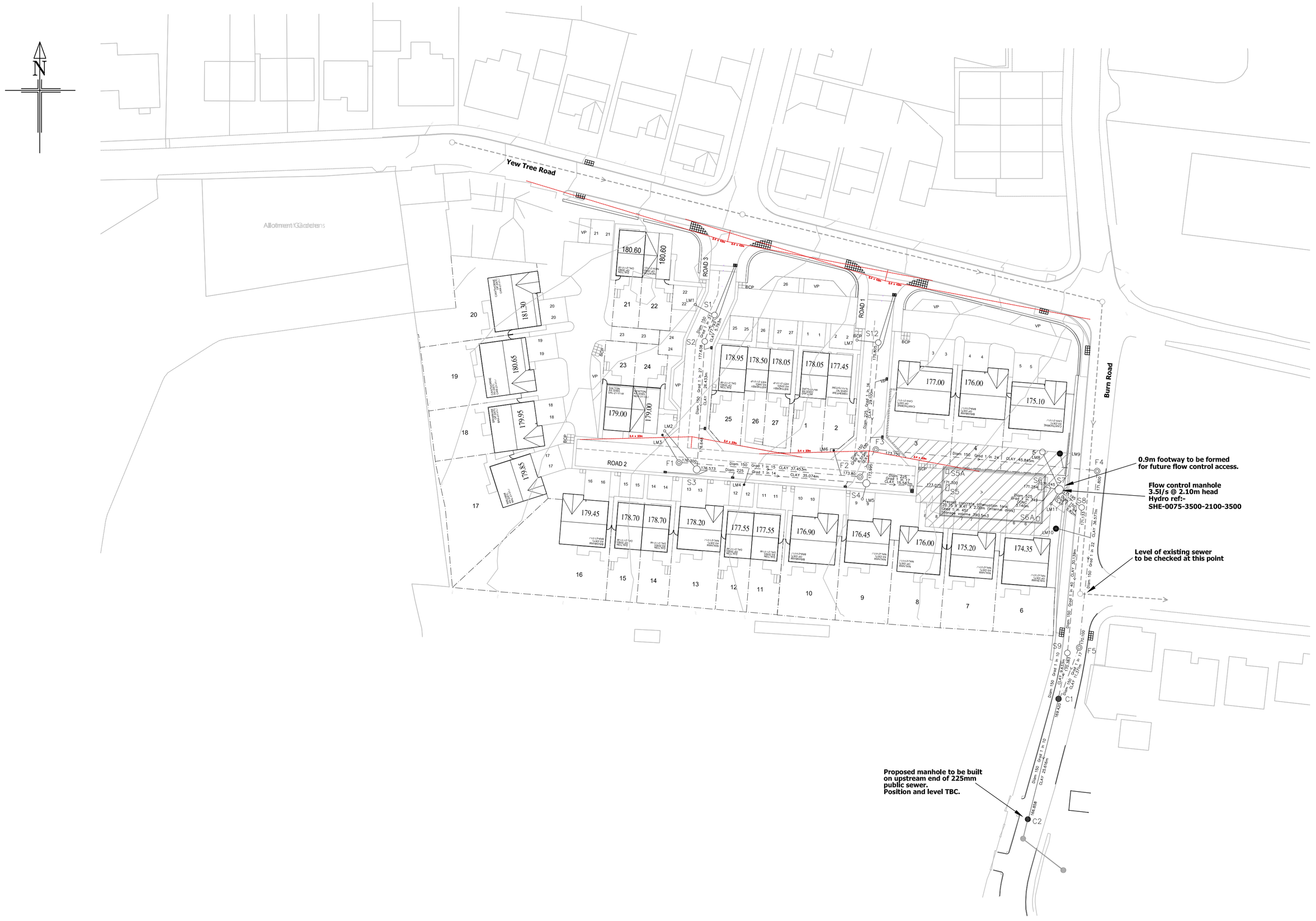
S104-2025-027




## KEY

- Existing Public combined sewer to remain
- Existing Section 104 Surface water sewer to remain
- Proposed adoptable SW sewer
- Proposed adoptable foul sewer
- Proposed adoptable combined sewer
- Proposed foul lateral
- Proposed SW lateral
- Proposed gully
- Tactile paving

## CODE For Adoption Under a Section 104 Agreement

1.All adoptable sewer works and material to be in accordance with "Code for Adoption" , The Relevant British/European and Yorkshire Waters Standards/requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.

2.Manhole covers must have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.

3.Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.

4. Yorkshire Water are 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 land drainage runoff will therefore be required. Please consult with the Local Authority/Land drainage Section.

5. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.

6. Sewers must have 5 metres clearance from trees and hedges or the width of canopy at mature height.

7. Sewers to be laid in Class "S" bedding (150mm granular bed & surround.) Where depth of cover to the top of the sewer is less than 1.2m in Highway and verges (or less than 900mm in non vehicular areas) then a concrete slab should be provided above the granular bed and surround.

8. Bedding and backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2)

9. Yorkshire Water policy is that Type "C" brick manholes and 1050mm dia manhole rings are not preferred. Instead it is preferred that you use a Type "B" manhole with 1200mm dia or 1500mm dia rings with the opening sited over the channel where depth of cover to pipe soffit is 1.0-1.5m

10. Adoptable plastic sewer pipes to be BSI Kitemarked (certified to WIS 4-35-01 and BS/EN13476). Adoptable plastic sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer lengths. Plastic channel sections in manholes are not acceptable. Yorkshire Water require clay channels in manholes.

11. The minimum crushing strength for clay pipes should be as follows: 100mm dia. 40KN/m, 150mm dia. 40KN/m, 225mm dia. 45KN/m, 300mm dia. 72KN/m. The minimum crushing strength for concrete pipes should be - (Class 120 to EN 1916/BS5911-1 2002).
Plastic pipes should conform to WIS 4-35-01 and BS EN13476

12. Where a B125 cover and frame has been approved, this must not be coated in plastic and must have lifting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not acceptable.

13. There must be enough clearance at crossovers to accommodate bedding to both pipes (approx 300mm): If crossover is near the rocker then the clearance needed may need to be increased.

## NOTES

All drainage connection points to be located and checked for position and level prior to the commencement of any works.

Ordnance Survey Grid & Datum

## LATERAL MANHOLE SCHEDULE

| REFERENCE | MH TYPE | DEPTH | MH DIAMETER | PIPE SIZE | PIPE MATERIAL | COVER LEVEL | INVERT LEVEL | LENGTH | GRADIENT | EASTING | NORTHING |
|---|---|---|---|---|---|---|---|---|---|---|---|
| LM1 | TYPE D | 1.35m | 450mm | 150mm | UPVC | 179.35 | 178.00 | 4.56m | 1:22 | | |
| LM2 | TYPE D | 1.00m | 450mm | 150mm | UPVC | 178.60 | 177.60 | 10.45m | 1:11 | | |
| LM3 | TYPE D | 1.80m | 450mm | 100mm | UPVC | 178.60 | 176.90 | 6.56m | 1:12 | | |
| LM4 | TYPE D | 2.00m | 450mm | 100mm | UPVC | 177.55 | 175.55 | 3.64m | 1:24 | | |
| LM5 | TYPE D | 2.00m | 450mm | 150mm | UPVC | 176.40 | 174.40 | 3.29m | 1:10 | | |
| LM6 | TYPE D | 2.30m | 450mm | 100mm | UPVC | 176.90 | 174.60 | 5.40m | 1:10 | | |
| LM7 | TYPE D | 1.40m | 450mm | 150mm | UPVC | 177.40 | 176.00 | 4.60m | 1:21 | | |
| LM8 | TYPE B | 1.80m | 1200mm | 150mm | UPVC | 174.30 | 173.95/172.50 | 8.62m | 1:10 | | |
| LM9 | TYPE B | 1.60m | 1200mm | 100mm | UPVC | 174.00 | 173.55/172.40 | 3.01m | 1:10 | | |
| LM10 | TYPE B | 2.25m | 1200mm | 100mm | UPVC | 173.85 | 172.75/171.60 | 7.38m | 1:20 | | |
| LM11 | TYPE D | 1.93m | 450mm | 150mm | UPVC | 174.10 | 172.17 | 5.56m | 1:10 | | |

A1

| RISK ASSESSMENT: SIGNIFICANT RISKS THAT CANNOT BE DESIGNED OUT | | SUGGESTED ACTION |
|---|---|---|
| RISK | LEVEL OF RISK (H/M) | |
| DEEP EXCAVATIONS ASSOCIATED WITH DEEP DRAINAGE WORKS | HIGH | ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS AND ARE FENCED OFF TO PROTECT FROM FALLS. |
| HANDLING LARGE DIAMETER MANHOLE AND SOAKAWAY RINGS | HIGH | USE CORRECT LIFTING EQUIPMENT AND ENSURE OPERATIVES WEAR THE CORRECT PERSONAL PROTECTIVE EQUIPMENT. |
| CONTACT WITH SEWEAGE/WORKING IN CONFINED SPACES | MEDIUM | USE GAS DETECTORS/BREATHING EQUIPMENT AND ENSURE OPERATIVES WEAR THE CORRECT PERSONAL PROTECTIVE EQUIPMENT. |
| NOISE FROM MACHINERY | MEDIUM | OPERATIVES TO WEAR THE CORRECT EAR PROTECTION. |
| EXCAVATIONS NEAR TO UTILITIES | HIGH | UTILITY MAPS TO BE INSPECTED AND APPARATUS LOCATED USING APPROPRIATE EQUIPMENT PRIOR TO EXCAVATION. |
| EXCAVATIONS IN PUBLIC HIGHWAY | HIGH | ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS AND ARE FENCED OFF TO PROTECT FROM FALLS. ENSURE THE CORRECT SIGNAGE/TRAFFIC CONTROL IS USED. |
| IT IS ASSUMED THAT WORKS ASSOCIATED WITH THIS DESIGN WILL BE UNDERTAKEN BY A PERSON(S) WHO ARE COMPETENT AND HAVE THE REQUIRED LEVEL OF EXPERIENCE AND EXPERTISE. | | |

| Rev | Details | Date | Drwn | Chk. |
|---|---|---|---|---|
| F | Road layout updated | 23-2-26 | AST | |
| E | Gully leads amended at request of YW. S12-S4 extended | 23-12-25 | AST | |
| D | Updated to latest layout | 4-12-25 | AST | |
| C | Gully connections joined at request of YW outside P8 | 25-11-25 | AST | |
| B | Layout updated. Drainage amended | 4-11-25 | AST | |
| A | Layout updated. Drainage amended | 22-7-25 | AST | |

Newett Homes

Yew Tree Road
Birchencliffe, Huddersfield

Engineering Plan

Dwg No. : STE/25/03/01 F

Date : 30-1-25

Scale : 1:500

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