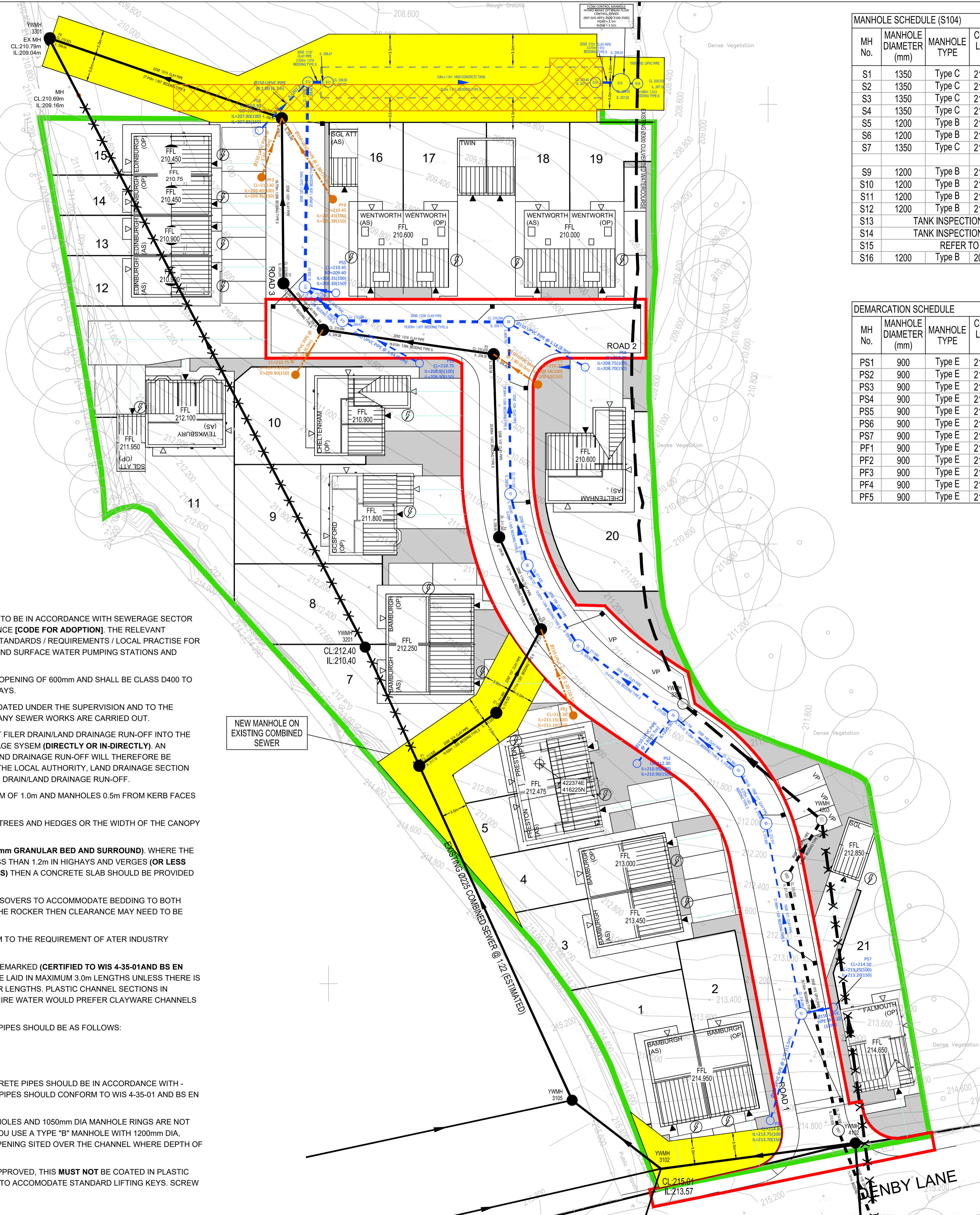
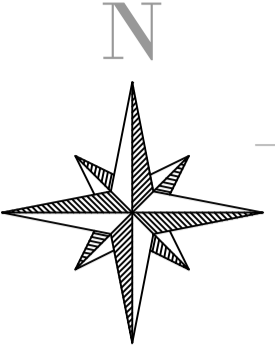


YW REFERENCE:  
S104-2024-042



MH No.	MANHOLE DIAMETER (mm)	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)	COVER SIZE	COVER TYPE	PIPE SIZES	
S1	1350	Type C	214.280	212.900	1.230	422403.754	416196.599	600x600	D400	150	
S2	1350	Type C	212.317	210.900	1.267	422399.763	416218.201	600x600	D400	150/150	
S3	1350	Type C	211.950	210.500	1.300	422396.636	416224.208	600x600	D400	150/150	
S4	1350	Type C	211.754	210.225	1.304	422389.188	416230.463	600x600	D400	150/225	
S5	1200	Type B	211.640	209.925	1.490	422378.408	416238.445	600x600	D400	225/225	
S6	1200	Type B	211.420	209.725	1.470	422372.603	416247.561	600x600	D400	225/225	
S7	1350	Type C	211.103	209.600	1.278	422370.695	416255.678	600x600	D400	225/225	
S9	1200	Type B	210.294	208.710	1.284	422370.508	416275.241	600x600	D400	150/225/300	
S10	1200	Type B	210.689	208.630	1.759	422351.581	416275.390	600x600	D400	300/300	
S11	1200	Type B	210.557	208.600	1.657	422347.316	416279.243	600x600	D400	300/300	
S12	1200	Type B	210.000	208.490	1.210	422347.646	416302.521	600x600	D400	300/300	
S13	TANK INSPECTION CHAMBER - REFER TO TANK SPECIFICATION DRAWING								600x600	D400	TANK
S14	TANK INSPECTION CHAMBER - REFER TO TANK SPECIFICATION DRAWING								600x600	D400	TANK
S15	REFER TO DWG 24017-107						422383.593	416302.371	600x600	D400	225/150
S16	1200	Type B	208.333	207.100	1.083	422388.173	416302.322	600x600	D400	150	

MH No.	MANHOLE DIAMETER (mm)	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)	COVER TYPE	MANUFACTURER
PS1	900	Type E	214.800	213.700	0.950	422400.228	416184.428	B125	WAVIN
PS2	900	Type E	212.300	210.900	1.250	422385.076	416225.034	B125	WAVIN
PS3	900	Type E	210.750	208.900	1.700	422360.334	416270.546	B125	WAVIN
PS4	900	Type E	210.300	207.850	2.300	422342.116	416297.025	B125	WAVIN
PS5	900	Type E	210.450	208.300	2.000	422350.831	416278.554	B125	WAVIN
PS6	900	Type E	210.450	208.700	1.600	422379.186	416270.113	B125	WAVIN
PS7	900	Type E	214.500	213.200	1.150	422407.426	416197.302	B125	WAVIN
PF1	900	Type E	212.300	211.100	1.050	422377.840	416230.514	B125	WAVIN
PF2	900	Type E	210.750	209.900	0.700	422346.237	416269.244	B125	WAVIN
PF3	900	Type E	210.300	209.350	0.800	422342.377	416291.712	B125	WAVIN
PF4	900	Type E	210.450	209.250	1.050	422350.482	416289.204	B125	WAVIN
PF5	900	Type E	210.300	209.400	0.750	422373.824	416268.135	B125	WAVIN

ALL LEVELS ARE TO GPS CO-ORDINATES

- YORKSHIRE WATER NOTES**
- ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE [CODE FOR ADOPTION], THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATERS STANDARDS / REQUIREMENTS / LOCAL PRACTISE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED.
  - MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.
  - FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
  - YORKSHIRE WATER IS **NOT** OBLIGED TO ACCEPT FILER DRAIN/LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (**DIRECTLY OR IN-DIRECTLY**). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION WITH REGARD TO THE DISPOSAL OF THE FILTER DRAIN/LAND DRAINAGE RUN-OFF.
  - THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1.0m AND MANHOLES 0.5m FROM KERB FACES AND SERVICES MARGINS.
  - SEWERS MUST HAVE A 5.0m CLEARANCE FROM TREES AND HEDGES OR THE WIDTH OF THE CANOPY AT MATURE HEIGHT.
  - SEWERS TO BE LAID IN CLASS "S" BEDDING (150mm GRANULAR BED AND SURROUND) WHERE THE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERGES (OR LESS THAN 900mm IN NON-VEHICULAR ACCESS AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE GRANULAR BED AND SURROUND.
  - THERE MUST BE ENOUGH CLEARANCE AT CROSSOVERS TO ACCOMMODATE BEDDING TO BOTH PIPES, APPROX 300mm : IF CROSSOVER IS ER THE ROCKER THEN CLEARANCE MAY NEED TO BE INCREASED.
  - BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF ATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).
  - ADOPTABLE PLASTIC SEWER PIPES TO BE BSI KITEMARKED (CERTIFIED TO WIS 4-35-01AND BS EN 13476). ADOPTABLE PLASTIC SEWER PIPES TO BE LAID IN MAXIMUM 3.0m LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD PREFER CLAYWARE CHANNELS IN MANHOLES.
  - 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 IN ACCORDANCE WITH - (CLASS 120 TO EN 1916/BS5911-12002), PLASTIC PIPES SHOULD CONFORM TO WIS 4-35-01 AND BS EN 13476.
  - YORKSHIRE WATER POLCY IS THAT BRICK MANHOLES AND 1050mm DIA MANHOLE RINGS ARE NOT PREFERRED. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200mm DIA, 1350mm DIA OR 1500mm DIA RINGS, WITH THE OPENING SITED OVER THE CHANNEL WHERE DEPTH OF THE COVER TO PIPE SOFFIT IS 1.0m - 1.5m.
  - 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.

- NOTES**
- THIS DRAWING IS PRODUCED FOR USE IN THIS PROJECT ONLY AND MAY NOT BE USED FOR ANY OTHER PURPOSE. THE CONSULTING ENGINEERS ACCEPT NO LIABILITY FOR THE USE OF THIS DRAWING OTHER THAN THE PURPOSE FOR WHICH IT WAS INTENDED IN CONNECTION WITH THIS PROJECT AS RECORDED ON THE TITLE BLOCK FIELDS 'PURPOSE FOR ISSUE' AND 'FILE STATUS CODE'.
  - THIS DRAWING MAY NOT BE REPRODUCED IN ANY FORM WITHOUT PRIOR WRITTEN AGREEMENT FROM ADVANT ENGINEERS.
  - DO NOT SCALE FROM THE DRAWING. USE WRITTEN DIMENSIONS ONLY.
  - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
  - DISCREPANCIES MUST BE REPORTED BACK TO THE ENGINEER PRIOR TO CONSTRUCTION.
  - THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ADVANT ENGINEERS DRAWINGS AND SPECIFICATIONS.

- KEY**
- EXISTING COMBINED SEWER
  - EXISTING SURFACE WATER SEWER
  - DIVERTED COMBINED SEWER
  - PROP S104 SURFACE WATER SEWER
  - ✕✕✕✕ SEWER TO BE ABANDONED
  - SITE BOUNDARY
  - SEWER EASEMENT
  - YW ACCESS ROAD

REV	DESCRIPTION	BY	DATE
I	UPDATED TO LLFA COMMENTS	MJM	13.12.24
H	UPDATED TO YW COMMENTS	MJM	01.10.24
G	DRAINAGE UPDATED	MJM	22.07.24
F	LAYOUT UPDATED	MJM	12.07.24
E	LEVELS UPDATED	MJM	03.07.24
D	DRAINAGE DIVERSIONS UPDATED	MJM	28.05.24
C	DRAINAGE & LAYOUT UPDATED	MJM	20.05.24
B	FOUL SEWER DIVERSION UPDATED	MJM	15.05.24
A	INITIAL ISSUE	MJM	20.03.24
REV	AMENDMENTS	BY	DATE

**FOR APPROVAL**

STATUS	CHK'D
PRELIMINARY	MJM
FOR COMMENT	MJM
FOR APPROVAL	MJM
FOR CONSTRUCTION	
AS BUILT	

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CLIENT  
**ORION HOMES LTD**

CONTRACT  
**DENBY LANE GRANGE MOOR**

TITLE  
**S104 DRAINAGE LAYOUT**

DRAWN	MJM	CHK'D	MJM
SCALE	1:250 @ A1	DATE	20.03.24
JOB No	24017	DRG No	101
REV	I		