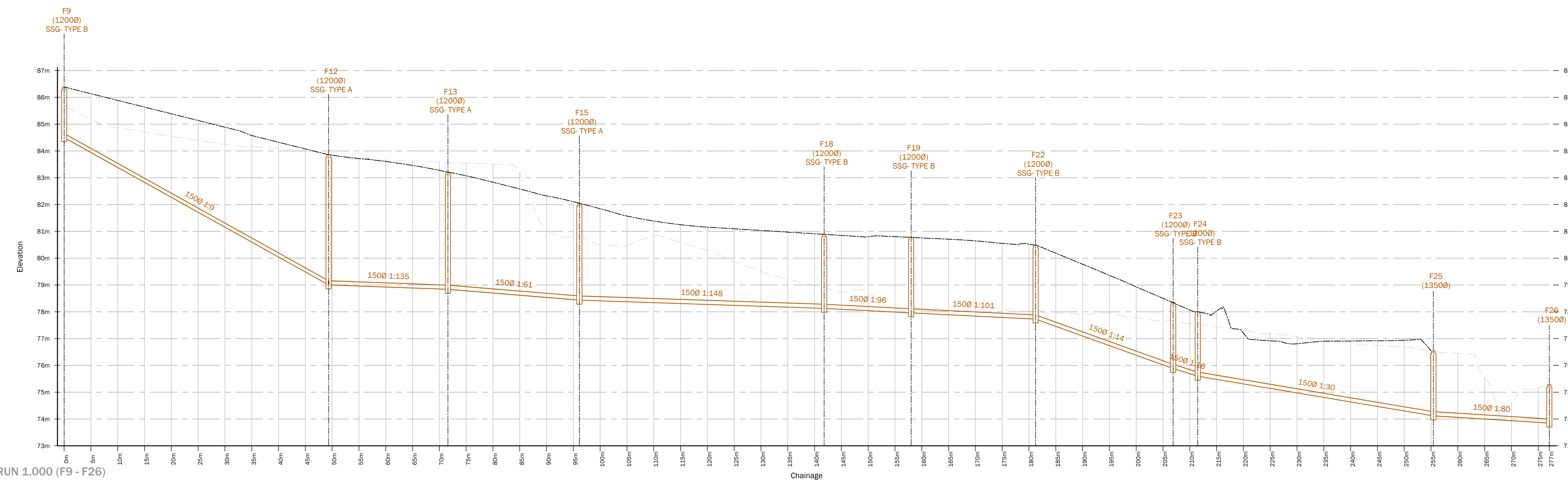
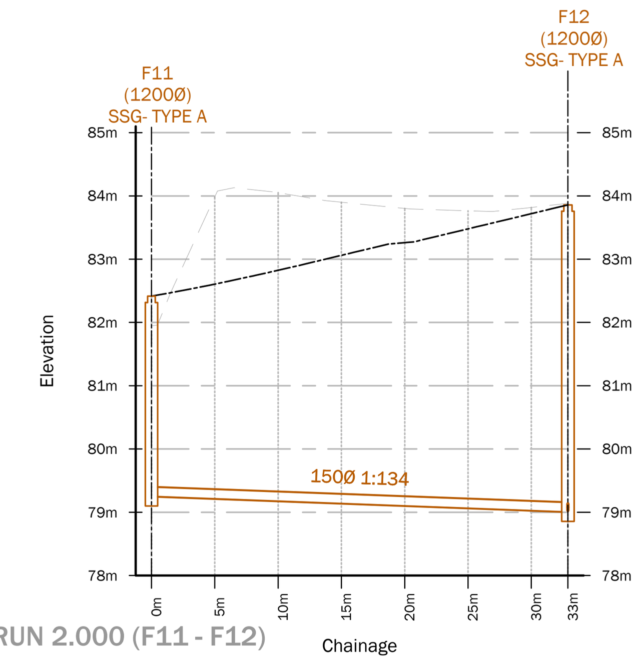


FW RUN 1.000 (F9 - F26)

EXISTING LEVELS	FINISHED LEVELS
86.387	86.387
86.137	86.137
85.887	85.887
85.637	85.637
85.387	85.387
85.137	85.137
84.887	84.887
84.575	84.575
84.325	84.325
84.075	84.075
83.842	83.842
83.716	83.716
83.607	83.607
83.461	83.461
83.277	83.277
83.073	83.073
82.834	82.834
82.581	82.581
82.325	82.325
82.106	82.106
81.844	81.844
81.572	81.572
81.387	81.387
81.249	81.249
81.158	81.158
81.096	81.096
81.034	81.034
80.973	80.973
80.912	80.912
80.848	80.848
80.800	80.800
80.802	80.802
80.755	80.755
80.707	80.707
80.645	80.645
80.551	80.551
80.524	80.524
80.186	80.186
79.774	79.774
79.360	79.360
78.927	78.927
78.503	78.503
78.068	78.068
78.025	78.025
77.205	77.205
76.917	76.917
76.807	76.807
76.901	76.901
76.910	76.910
76.918	76.918
76.937	76.937

Foul Pipe Details	Invert Levels		Length @ Gradient	Foul Pipe Material & Bedding Data
C1 F1.000 150∅	84.500	79.005	49.3m @ 1:8.98	Circular PVC Cover Min-1.7 / Max-4.7 Type S Bed & Surround
C1 F1.001 150∅	79.005	78.840	22.3m @ 1:134.95	Circular PVC Cover Min-4.2 / Max-4.7 Type S Bed & Surround
C1 F1.002 150∅	78.840	78.437	24.5m @ 1:60.84	Circular PVC Cover Min-3.5 / Max-4.2 Type S Bed & Surround
C1 F1.003 150∅	78.437	78.129	45.7m @ 1:148.25	Circular PVC Cover Min-2.6 / Max-3.5 Type S Bed & Surround
C1 F1.004 150∅	78.129	77.960	16.2m @ 1:96.05	Circular PVC Cover Min-2.6 / Max-2.7 Type S Bed & Surround
C1 F1.005 150∅	77.960	77.730	23.2m @ 1:100.95	Circular PVC Cover Min-2.6 / Max-2.7 Type S Bed & Surround
C1 F1.006 150∅	77.730	75.885	25.7m @ 1:13.91	Circular PVC Cover Min-2.3 / Max-2.6 Type S Bed & Surround
C1 F1.007 150∅	75.885	75.599	4.6m @ 1:16.01	Circular PVC Cover Min-2.2 / Max-2.3 Type S Bed & Surround
C1 F1.008 150∅	75.599	74.120	44.0m @ 1:29.73	Circular PVC Cover Min-1.5 / Max-2.6 Type S Bed & Surround
C1 F1.009 150∅	74.120	73.850	21.6m @ 1:80.10	Circular PVC Cover Min-0.0 / Max-0.0 Type S Bed & Surround



FW RUN 2.000 (F11 - F12)

EXISTING LEVELS	FINISHED LEVELS
82.415	82.415
82.606	82.606
82.824	82.824
83.061	83.061
83.262	83.262
83.479	83.479
83.719	83.719
83.858	83.858

STORM PIPE DETAILS	Invert Levels		Length @ Gradient	STORM PIPE MATERIAL
C1 F2.001 150∅	79.250	79.005	32.9m @ 1:134.24	Circular PVC Cover Min-3.0 / Max-4.7 Type S Bed & Surround

DO NOT SCALE FROM THIS DRAWING

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER HBL DRAWINGS ISSUED FOR THIS PROJECT

ADOPTABLE DRAINAGE NOTES:

1. THIS DRAWING IS SUBJECT TO APPROVAL BY LOCAL AUTHORITY, BUILDING CONTROL AND / OR SEWERAGE UNDERTAKER. ANY WORKS UNDERTAKEN PRIOR TO THE GRANTING OF THESE APPROVALS IS CARRIED OUT AT AT RISK TO OTHERS.
2. PRIOR TO COMMENCING WORK ON THE DRAINAGE, ALL EXISTING DRAINS, SEWERS MANHOLES AND OUTFALLS TO REMAIN SHALL BE LOCATED, IDENTIFIED AND A CCTV CONDITION SURVEY CARRIED OUT. WHERE NECESSARY, PROTECTION TO THE EXISTING DRAINAGE INFRASTRUCTURE SHALL BE PROVIDED.
3. ALL EXISTING SEWERS AND MANHOLES ABANDONED DUE TO THE PROPOSED WORKS ARE TO BE EITHER REMOVED, AND SUITABLY BACKFILLED OR GROUTED UP.
4. ALL MANHOLE COVERS TO COMPLY WITH BS.EN.124, AND BE KITEMARKED
5. COVER LEVELS FOR MANHOLES ARE APPROXIMATE ONLY AND SHOULD BE ADJUSTED TO MATCH SURROUNDING LEVELS.
6. IN BLOCK PAVED AREAS 'INFILL' TYPE COVERS SHOULD NOT BE USED, AND FRAMES MUST BE 150MM DEEP.
7. ALL MANHOLE AND DRAINAGE COVERS SHALL COMPLY WITH BS.EN124, BS.EN13598-1 AND HA104/09.
   COVER STRENGTHS TO BE:-
   CLASS E600 IN AREAS OF HEAVY LOADING.
   CLASS D400 IN ALL TRAFFICKED AREAS (ROADS, HARD SHOULDER, PARKING AREAS AND SERVICES YARDS). MANHOLE COVERS ON FOUL ONLY SEWERS SHALL BE OF LOW LEAKAGE TYPES IN ORDER TO PREVENT EXCESSIVE SURFACE WATER INGRESS.
8. DRAINAGE PIPES 100MM Ø UNLESS STATED OTHERWISE. PIPES TO BE :- VITRIFIED CLAY TO BS EN 295 OR CONCRETE TO BS 5911 OR UPVC PIPES TO BS EN 1452 OR THERMOPLASTIC STRUCTURED WALL PIPES COMPLYING WITH WIS 4-35-01. BSI KITEMARKED. CLASS 8KM/M² NOMINAL SHORT TERM RING STIFFNESS.
9. ALL SEWER PIPES 300MM DIAMETER OR LARGER, TO BE CONCRETE PIPES, TO BS.5911, UNLESS NOTED OTHERWISE
10. ALL PIPES TO BE LAID WITH SOFFITS LEVEL, UNLESS NOTED OTHERWISE.
11. WHERE COVER TO PIPES IS LESS THAN 1200MM UNDER CARRIAGEWAY - CONCRETE BED AND SURROUND OR CONCRETE PROTECTION SLAB IS REQUIRED.
12. ALL CONCRETE TO DRAINAGE, MANHOLES BASES, SURROUNDS ETC TO BE IN ACCORDANCE WITH THE BRE SPECIAL DIGEST 1 - CONCRETE IN AGGRESSIVE GROUND. REFER TO SITE INVESTIGATION REPORT FOR SULPHATE REQUIREMENTS.
13. ALL MANHOLES, PIPE TRENCHES ETC. TO BE BACKFILLED WITH IMPORTED GRANULAR FILL TO CLASS 6F1-6F5 (CAPPING MATERIAL) TO (SHW) TABLE 6/1 & COMPACTED IN ACCORDANCE WITH TABLE 6/4.
14. ALL PIPELINES SHALL BE TESTED BOTH BEFORE AND AFTER BACKFILLING, USING EITHER AIR TEST OR WATER TEST, IN ACCORDANCE WITH BS EN 1610.
15. UPON COMPLETION OF THE DRAINAGE WORKS ALL DRAINS SHALL BE FLUSHED OUT AND CCTV SURVEYED AND SHOWN TO BE FREE OF ALL SILT AND DEBRIS AND TO HAVE NO JOINT DISPLACEMENTS OR OTHER DEFECTS. A COPY OF THE WRITTEN REPORT AND VIDEO IS TO BE FORWARDED TO THE ENGINEERS FOR COMMENT. ANY DEFECTS SHALL BE ATTRIBUTABLE TO THE CONTRACTOR FOR RECTIFICATION UNLESS INDICATED OTHERWISE BY THE CCTV REPORT AND AGREED WITH THE ENGINEERS.
16. ADOPTABLE DEMARCATION MANHOLES AND LATERAL DRAINS NEED TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT WATER UK/WRC "SEWERAGE SECTOR GUIDANCE - APPENDIX C".
17. ALL WORKS TO SEWERS/MANHOLES BEING OFFERED FOR ADOPTION OR ON EXISTING PUBLIC SEWERS SHOULD BE IN ACCORDANCE WITH "SEWERAGE SECTOR GUIDANCE - APPENDIX C" AND THE ADOPTING WATER AUTHORITIES RECOMMENDATIONS.

REV.	DATE	DRAWN	DESCRIPTION	CHKD	APPRD
P02	06.03.26	SP	ISSUED FOR TECHNICAL APPROVAL	AC	RJ
P01	06.11.25	AC	ISSUED FOR TENDER	RJ	RJ

STATUS DESCRIPTION: FOR TECHNICAL APPROVAL

STATUS: S4

HBL
Craig House,
33 Ballbrook Avenue,
Manchester M20 3JG
+44 (0)161 432 9977 | www.hbl.ltd
Consulting Civil & Structural Engineers

PROJECT: WOOLLEY COLLIERY

DRAWING TITLE: SECTION 104 DRAINAGE LONGSECTIONS NORTH CATCHMENT FOUL WATER

CLIENT: MJ GLEESON

HBL REF.	DATE	SCALE(S)	
10701	H - 1:500 V - 1:100	OCT 25	A1

DRAWN	CHECKED	APPROVED
AC	RJ	RJ

DRAWING No.	REV.
10701-HBL-XX-XX-DR-C-5512	P02