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DO NOT SCALE

NOTES

Y.W. REF:

1. ALL GULLY CONNECTIONS TO BE 150 DIA WITH CONCRETE SURROUND.

2. ALL FUTURE STUBS TO BE SEALED WITH CIRCULAR PLY CUT TO SIZE AND CONCRETE IN.

3. ALL COVER LEVELS TO MANHOLES ARE APPROXIMATE & ARE TO SUIT ARCHITECTS FINISHED LEVEL SCHEME.

4. ALL LEVELS RELATE TO OSBM ON RAILWAY BRIDGE OVER HIGHAM LANE, VALUE 134.78m AOD

5. REFER TO BARNSLEY METROPOLITAN BOROUGH COUNCIL (B.M.B.C.) DRAWINGS FOR DETAILS OF DRAINAGE TO BYPASS

YORKSHIRE WATER NOTES:

1. ALL ADOPTABLE SEWER WORKS & MATERIAL TO BE IN ACCORDANCE WITH "SEWERS FOR ADOPTION" 5th EDITION & YORKSHIRE WATER'S REQUIREMENTS.

2. MANHOLE COVERS SHALL HAVE A CLEAR OPENING OF 600mm & SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.

3. FILLED GROUND MUST BE FILLED & CONSOLIDATED UNDER THE SUPERVISION & TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.

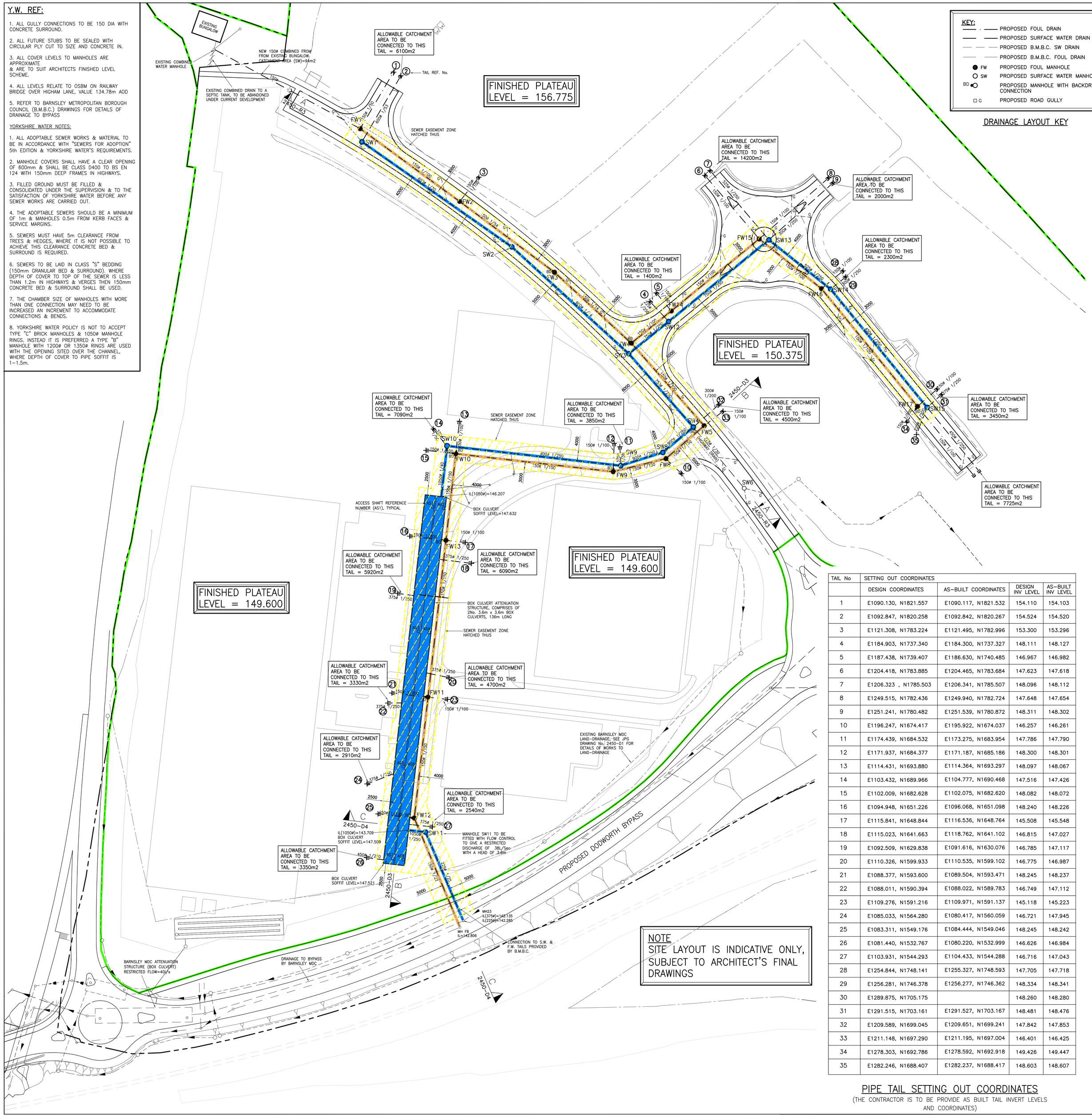
4. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m & MANHOLES 0.5m FROM KERB FACES & SERVICE MARGINS.

5. SEWERS MUST HAVE 5m CLEARANCE FROM TREES & HEDGES, WHERE IT IS NOT POSSIBLE TO ACHIEVE THIS CLEARANCE CONCRETE BED & SURROUND IS REQUIRED.

6. SEWERS TO BE LAID IN CLASS "S" BEDDING (150mm GRANULAR BED & SURROUND). WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS & VERGES THEN 150mm CONCRETE BED & SURROUND SHALL BE USED.

7. THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE CONNECTIONS & BENDS.

8. YORKSHIRE WATER POLICY IS NOT TO ACCEPT TYPE "C" BRICK MANHOLES & 1050ø MANHOLE RINGS, INSTEAD IT IS PREFERRED A TYPE "B" MANHOLE WITH 1200ø OR 1350ø RINGS ARE USED WITH THE OPENING SITED OVER THE CHANNEL, WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1–1.5m.



KEY:

- PROPOSED FOUL DRAIN
- PROPOSED SURFACE WATER DRAIN
- PROPOSED B.M.B.C. SW DRAIN
- PROPOSED B.M.B.C. FOUL DRAIN
- FW PROPOSED FOUL MANHOLE
- SW PROPOSED SURFACE WATER MANHOLE
- BD PROPOSED MANHOLE WITH BACKDROP CONNECTION
- G PROPOSED ROAD GULLY

DRAINAGE LAYOUT KEY

TAIL No	SETTING OUT COORDINATES			
	DESIGN COORDINATES	AS–BUILT COORDINATES	DESIGN INV LEVEL	AS–BUILT INV LEVEL
1	E1090.130, N1821.557	E1090.117, N1821.532	154.110	154.103
2	E1092.847, N1820.258	E1092.842, N1820.267	154.524	154.520
3	E1121.308, N1783.224	E1121.495, N1782.996	153.300	153.296
4	E1184.903, N1737.340	E1184.300, N1737.327	148.111	148.127
5	E1187.438, N1739.407	E1186.630, N1740.485	146.967	146.982
6	E1204.418, N1783.885	E1204.465, N1783.684	147.623	147.618
7	E1206.323 , N1785.503	E1206.341, N1785.507	148.096	148.112
8	E1249.515, N1782.436	E1249.940, N1782.724	147.648	147.654
9	E1251.241, N1780.482	E1251.539, N1780.872	148.311	148.302
10	E1196.247, N1674.417	E1195.922, N1674.037	146.257	146.261
11	E1174.439, N1684.532	E1173.275, N1683.954	147.786	147.790
12	E1171.937, N1684.377	E1171.187, N1685.186	148.300	148.301
13	E1114.431, N1693.880	E1114.364, N1693.297	148.097	148.067
14	E1103.432, N1689.966	E1104.777, N1690.468	147.516	147.426
15	E1102.009, N1682.628	E1102.075, N1682.620	148.082	148.072
16	E1094.948, N1651.226	E1096.068, N1651.098	148.240	148.226
17	E1115.841, N1648.844	E1116.536, N1648.764	145.508	145.548
18	E1115.023, N1641.663	E1118.762, N1641.102	146.815	147.027
19	E1092.509, N1629.838	E1091.616, N1630.076	146.785	147.117
20	E1110.326, N1599.933	E1110.535, N1599.102	146.775	146.987
21	E1088.377, N1593.600	E1089.504, N1593.471	148.245	148.237
22	E1088.011, N1590.394	E1088.022, N1589.783	146.749	147.112
23	E1109.276, N1591.216	E1109.971, N1591.137	145.118	145.223
24	E1085.033, N1564.280	E1080.417, N1560.059	146.721	147.945
25	E1083.311, N1549.176	E1084.444, N1549.046	148.245	148.242
26	E1081.440, N1532.767	E1080.220, N1532.999	146.626	146.984
27	E1103.931, N1544.293	E1104.433, N1544.288	146.716	147.043
28	E1254.844, N1748.141	E1255.327, N1748.593	147.705	147.718
29	E1256.281, N1746.378	E1256.277, N1746.362	148.334	148.341
30	E1289.875, N1705.175		148.260	148.280
31	E1291.515, N1703.161	E1291.527, N1703.167	148.481	148.476
32	E1209.589, N1699.045	E1209.651, N1699.241	147.842	147.853
33	E1211.148, N1697.290	E1211.195, N1697.004	146.401	146.425
34	E1278.303, N1692.786	E1278.592, N1692.918	149.426	149.447
35	E1282.246, N1688.407	E1282.237, N1688.417	148.603	148.607

PIPE TAIL SETTING OUT COORDINATES

(THE CONTRACTOR IS TO BE PROVIDE AS BUILT TAIL INVERT LEVELS AND COORDINATES)

MH REF.	INVERT LEVELS	COVER LEVELS	DEPTH TO SOFFIT	TYPE	SIZE	COVER TYPE	SET–OUT COORDINATES
SW1	① 153.993	157.270	2.677	A	1500ø CONC.	D400	E1076.069, N1797.706
SW2	① 151.753	155.617	3.264	A	1500ø CONC.	D400	E1133.579, N1757.372
SW3	① 147.474 ② 147.624	152.667	4.443	A	1800ø CONC.	D400	E1176.215, N1718.504
SW4	① 147.182 ② 147.332 ③ 147.782 ④ 148.632(BD)	151.475	3.393	A	2100ø CONC.	D400	E1200.243, N1691.173
SW5	OMITTED						
SW6	① 149.595	151.320	1.500	B	1200ø CONC.	D400	E1214.638, N1673.324
SW7	① 147.649 ② 147.874	OMITTED	1.238	2.989	B	1500ø CONC.	D400 E1207.586, N1682.351
SW8	① 147.128	149.600	1.572	B	2100ø CONC.	D400	E1189.053, N1681.859
SW9	① 147.064 ② 147.589	149.600	1.636	B	2100ø CONC.	D400	E1173.579, N1676.983
SW10	① 146.671 ② 146.821 ③ 147.346	149.600	1.879	B	2400ø CONC.	D400	E1109.816, N1684.254
SW11	① 143.684	149.600	4.866	A	2100ø CONC.	D400	E1101.895, N1542.360
SW12	① 147.550 ② 148.075	152.315	4.015	A	1800ø CONC.	D400	E1191.181, N1729.938
SW13	① 147.740 ② 147.965 ③ 148.190	151.558	3.068	A	2100ø CONC.	D400	E1228.011, N1759.955
SW14	① 148.081 ② 148.156 ③ 148.306	151.141	2.535	B	1500ø CONC.	D400	E1250.701, N1741.829
SW15	① 148.378 ② 148.453 ③ 148.603	150.831	2.003	B	1500ø CONC.	D400	E1286.117, N1698.389

SURFACE WATER SCHEDULE

MH REF.	INVERT LEVELS	COVER LEVELS	DEPTH TO SOFFIT	TYPE	SIZE	COVER TYPE	SET–OUT COORDINATES
FW1	① 153.643	157.340	3.547	A	1200ø CONC.	D400	E1080.531, N1799.367
FW2	① 153.193	155.700	2.357	B	1200ø CONC.	D400	E1114.445, N1774.036
FW3	① 150.885 ② 152.385(BD)	153.985	2.950	B	1200ø CONC.	D400	E1149.256, N1748.035
FW4	① 146.711 ② 148.211(BD)	152.625	5.764	A	1200ø CONC.	D400	E1177.915, N1721.519
FW5	① 146.311	151.375	4.914	A	1200ø CONC.	D400	E1204.231, N1691.650
FW6	① 147.451	OMITTED	3.751	A	1200ø CONC.	D400	E1206.355, N1689.025
FW7	① 147.605	OMITTED	4.451	A	1200ø CONC.	D400	E1215.879, N1676.959
FW8	① 146.185	149.600	3.265	A	1200ø CONC.	D400	E1190.183, N1679.594
FW9	① 146.052 ② 148.204(BD)	149.600	3.398	A	1200ø CONC.	D400	E1170.842, N1674.779
FW10	① 145.666 ② 147.972(BD)	149.600	3.784	A	1500ø CONC.	D400	E1113.004, N1681.375
FW11	① 145.060 ② 148.100(BD)	149.600	4.390	A	1500ø CONC.	D400	E1102.818, N1591.953
FW12	① 144.760 ② 148.100(BD)	149.600	4.690	A	1200ø CONC.	D400	E1097.758, N1547.529
FW13	① 145.450 ② 148.100(BD)	149.600	4.000	A	1500ø CONC.	D400	E1109.383, N1649.580
FW14	① 146.901	152.234	5.183	A	1200ø CONC.	D400	E1192.162, N1733.841
FW15	① 147.321	151.566	4.095	A	1500ø CONC.	D400	E1224.450, N1760.287
FW16	① 147.610	151.198	3.438	A	1200ø CONC.	D400	E1247.326, N1742.012
FW17	① 148.165 ② 149.360(BD)	150.779	2.464	B	1200ø CONC.	D400	E1282.600, N1698.747

FOUL WATER MANHOLE SCHEDULE

NOTE:
THIS DRAWING TO BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWING:
2450–D3 – DRAINAGE LONG–SECTON
2450–D4 – DRAINAGE LONG–SECTION
2450–D5 – S.W. MANHOLE DETAILS
2450–D6 – FOUL WATER MANHOLE DETAILS
2450–D7 – DRAINAGE CONSTRUCTION DETAILS
2450–D8 – S.W. STORAGE STRUCTURE DETAILS
2450–D9 – G.A. OF MANHOLE SW11 (FLOW CONTROL CHAMBER)
2450–D10 – BOX CULVERT ACCESS LADDER
2450–D11 – MANHOLE DETAIL (PIPES > 900mm)
2450–R3 – ACCESS ROAD – LONG–SECTION

REV	DESCRIPTION	DATE	BY
F	AS BUILT TAIL CO–ORDINATES AND LEVELS ADDED	01.06.06	RAK
E	CONSTRUCTION ISSUE	08.11.05	AMF
D	SCHEDULE UPDATED TO SUIT REVISED SITE ROAD ALIGNMENT	26.10.05	PY
C	HIGHWAY DRAIN NOTE ADDED (SW4–SW6).	20.10.05	AMF
B	EASEMENT ZONES UPDATED TAIL COORDS 28–33 ADDED	03.10.05	AMF
A	DRAINAGE ADDED TO OFFICE PLOT	30.09.05	AMF

Job Title
PROPOSED DEVELOPMENT
JUNCTION 37, M1
BARNSLEY

Drawing Title
DRAINAGE LAYOUT

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	21.08.05	1:500	A0	PY

Drawing No 2450–D2 F