

NOTES:

- THIS DRAWING IS BASED UPON:
 - JOB SITE LAYOUT (22/01/19) (FORTEM AMEND);
 - HAYCOCK AND TODD SITE SURVEY DRAWING 510679 DATED OCTOBER 2024;
 - YORKSHIRE WATER RECORDS;
 - ORDNANCE SURVEY MAPS.
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH FORTEM SECTION 104 LAYOUT DRAWING 1223 - 102 AND SECTION 38 LAYOUT DRAWING 1223 - 130.

ADOPTABLE DRAINAGE NOTES:

(THESE NOTES APPLY TO ALL ADOPTABLE DRAINAGE WORKS)

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH DESIGN AND CONSTRUCTION GUIDANCE (DCC) CODE FOR ADOPTION, THE RELEVANT BRITISH / EUROPEAN AND THE ADOPTING WATER AUTHORITIES STANDARDS (REQUIREMENTS) ADDRESSED TO THE MECHANICAL AND ELECTRICAL SPECIFICATIONS AND NOTED THEREIN.

MANHOLE COVERS MUST HAVE A CLEAR OPENING OF 675mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.

THE ADOPTING WATER AUTHORITY IS NOT OBLIGED TO ACCEPT FILTER DRAIN (LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM DIRECTLY OR INDIRECTLY) AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF SHALL 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).

COVER SLABS MUST CARRY THE 80 Kt/MAW OR WILL BE REJECTED BY THE ADOPTING WATER AUTHORITY, WHERE THE CLEAR OPENING OF THE ITEM MARKED 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 x 675mm FOR THE SPECIFIED COVER SIZE. PLEASE REFER TO CONCRETE PIPE SYSTEMS ASSOCIATION (CPSA) TECHNICAL BULLETIN ISSUED AUTUMN 2004 FOR ITEM MARKED COVER SLAB OPENING SIZES.

SULPHATE RESISTANT CEMENT (SR3) AND PRECAST CONCRETE PRODUCTS MUST BE USED ON A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.

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

SEWERS MUST HAVE A METRES CLEARANCE FROM TREES AND HEDGES.

SEWERS TO BE Laid IN CLASS 'S' BEDDING (150mm GRANULAR BED AND SURROUND), WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERTICES OR LESS THAN 900mm IN RODE (KID) LANE ACCESS AREAS THEN CONCRETE SLAB SHOULD BE PROVIDED ABOVE GRANULAR BED AND SURROUND.

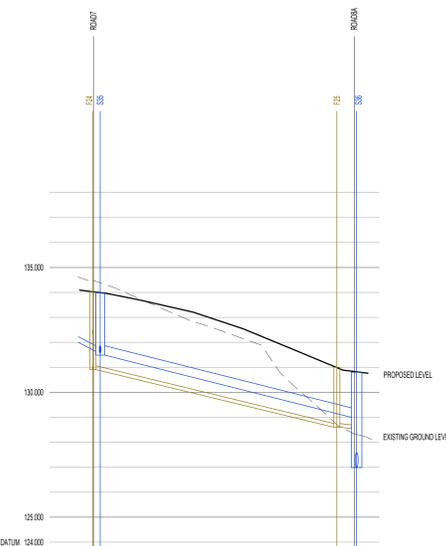
BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A4).

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

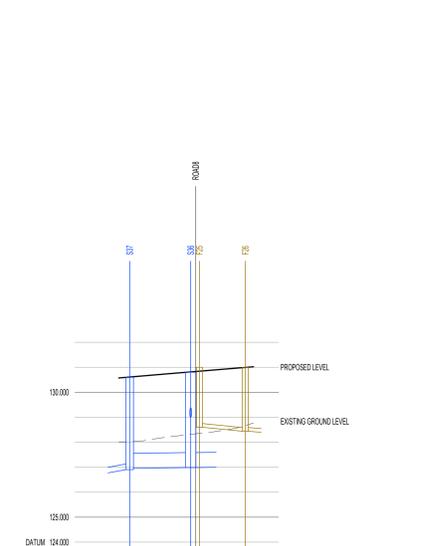
THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 100mm DIA 40kN/m², 150mm DIA 40kN/m², 225mm DIA 45kN/m² AND 300mm DIA 70kN/m². THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE: CLASS 120 TO EN 1195 (BS EN 12012). PLASTIC PIPES SHOULD CONFORM TO BS 4743 AND BS EN 15476.

WHERE BRICK COVER AND FRAMES HAVE BEEN APPROVED, THIS MUST NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUFFICIENTLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS ARE NOT ACCEPTABLE.

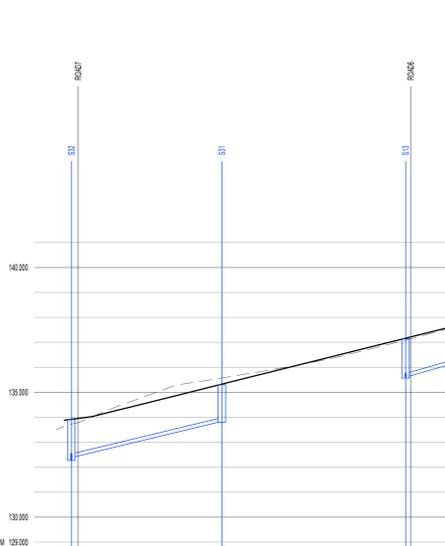
THE CLEARANCE OF THE CROSSOVER POINTS (MIN 300mm) BETWEEN THE SURFACE WATER SEWERS, FOLL WATERS SEWERS, RISING MAINS AND OTHER SERVICES SHOULD BE SUFFICIENT CLEARANCE TO PROVIDE 150mm GRANULAR BED AND SURROUND AROUND BOTH PIPES. THERE SHOULD BE ENOUGH CLEARANCE TO ACCOMMODATE THE BEDDING FOR BOTH PIPES. APPROX. 300mm F CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY BE INCREASED.



ROAD 8		0.00	2.75	7.50	12.25	17.00	21.75	26.50	31.25	36.00	40.75	45.50	50.25	55.00	
CHAINAGE		0.00	2.75	7.50	12.25	17.00	21.75	26.50	31.25	36.00	40.75	45.50	50.25	55.00	
EXISTING GROUND LEVEL		134.477	134.368	134.259	134.150	134.041	133.932	133.823	133.714	133.605	133.496	133.387	133.278	133.169	
CENTRE LINE		133.368	133.259	133.150	133.041	132.932	132.823	132.714	132.605	132.496	132.387	132.278	132.169	132.060	
VERTICAL ALIGNMENT		G ₁ = -4.000%		L = 20.000 K1 = 4.81608				G ₂ = 8.332%		L = 12.0					
HORIZONTAL ALIGNMENT															
LEFT HAND CHANNEL				133.720	133.522	133.324	133.126	132.928	132.730	132.532	132.334	132.136	131.938	131.740	
RIGHT HAND CHANNEL				133.830	133.722	133.614	133.506	133.398	133.290	133.182	133.074	132.966	132.858	132.750	
STORMWATER COVER LEVEL		133.886												133.886	
STORMWATER INVERT		131.480												129.100	
STORMWATER DETAILS				DIA 375 CIRCULAR CONC 1 IN 21											
STORMWATER LENGTHS				51.362											
FOLLWATER COVER LEVEL		134.337												131.001	
FOLLWATER INVERT		134.303												128.800	
FOLLWATER DETAILS				DIA 150 CIRCULAR CLAY 1 IN 21											
FOLLWATER LENGTHS				48.855											



ROAD 8A		0.00	10.00	20.00	30.00	40.00	50.00	60.00	70.00	
CHAINAGE		0.00	10.00	20.00	30.00	40.00	50.00	60.00	70.00	
EXISTING GROUND LEVEL		130.573	130.742	130.911	131.080	131.249	131.418	131.587	131.756	
CENTRE LINE		130.573	130.742	130.911	131.080	131.249	131.418	131.587	131.756	
VERTICAL ALIGNMENT		G = 1.851% 1: 80.0								
HORIZONTAL ALIGNMENT										
LEFT HAND CHANNEL		130.206	130.173	130.140	130.107	130.074	130.041	130.008	129.975	
RIGHT HAND CHANNEL		130.621	130.588	130.555	130.522	130.489	130.456	130.423	130.390	
STORMWATER COVER LEVEL		130.366							130.366	
STORMWATER INVERT		129.266							129.266	
STORMWATER DETAILS			DIA 600 CIRCULAR CONC 1 IN 40							
STORMWATER LENGTHS			12.212							
FOLLWATER COVER LEVEL			131.001						131.001	
FOLLWATER INVERT			129.800						129.800	
FOLLWATER DETAILS			DIA 150 CIRCULAR CLAY 1 IN 7.5							
FOLLWATER LENGTHS			12.666							



ROAD 9		0.00	2.75	5.50	8.25	11.00	13.75	16.50	19.25	22.00	24.75	27.50	30.25	33.00	35.75	38.50	41.25	44.00	46.75	49.50	52.25	55.00	57.75	60.50	63.25	66.00	68.75	71.50	74.25	77.00	79.75	82.50	85.25	88.00	90.75	93.50	96.25	99.00	101.75	104.50	107.25	110.00	112.75	115.50	118.25	121.00	123.75	126.50	129.25	132.00	134.75	137.50	140.25	143.00	145.75	148.50	151.25	154.00	156.75	159.50	162.25	165.00	167.75	170.50	173.25	176.00	178.75	181.50	184.25	187.00	189.75	192.50	195.25	198.00	200.75	203.50	206.25	209.00	211.75	214.50	217.25	220.00	222.75	225.50	228.25	231.00	233.75	236.50	239.25	242.00	244.75	247.50	250.25	253.00	255.75	258.50	261.25	264.00	266.75	269.50	272.25	275.00	277.75	280.50	283.25	286.00	288.75	291.50	294.25	297.00	299.75	302.50	305.25	308.00	310.75	313.50	316.25	319.00	321.75	324.50	327.25	330.00	332.75	335.50	338.25	341.00	343.75	346.50	349.25	352.00	354.75	357.50	360.25	363.00	365.75	368.50	371.25	374.00	376.75	379.50	382.25	385.00	387.75	390.50	393.25	396.00	398.75	401.50	404.25	407.00	409.75	412.50	415.25	418.00	420.75	423.50	426.25	429.00	431.75	434.50	437.25	440.00	442.75	445.50	448.25	451.00	453.75	456.50	459.25	462.00	464.75	467.50	470.25	473.00	475.75	478.50	481.25	484.00	486.75	489.50	492.25	495.00	497.75	500.50	503.25	506.00	508.75	511.50	514.25	517.00	519.75	522.50	525.25	528.00	530.75	533.50	536.25	539.00	541.75	544.50	547.25	550.00	552.75	555.50	558.25	561.00	563.75	566.50	569.25	572.00	574.75	577.50	580.25	583.00	585.75	588.50	591.25	594.00	596.75	599.50	602.25	605.00	607.75	610.50	613.25	616.00	618.75	621.50	624.25	627.00	629.75	632.50	635.25	638.00	640.75	643.50	646.25	649.00	651.75	654.50	657.25	660.00	662.75	665.50	668.25	671.00	673.75	676.50	679.25	682.00	684.75	687.50	690.25	693.00	695.75	698.50	701.25	704.00	706.75	709.50	712.25	715.00	717.75	720.50	723.25	726.00	728.75	731.50	734.25	737.00	739.75	742.50	745.25	748.00	750.75	753.50	756.25	759.00	761.75	764.50	767.25	770.00	772.75	775.50	778.25	781.00	783.75	786.50	789.25	792.00	794.75	797.50	800.25	803.00	805.75	808.50	811.25	814.00	816.75	819.50	822.25	825.00	827.75	830.50	833.25	836.00	838.75	841.50	844.25	847.00	849.75	852.50	855.25	858.00	860.75	863.50	866.25	869.00	871.75	874.50	877.25	880.00	882.75	885.50	888.25	891.00	893.75	896.50	899.25	902.00	904.75	907.50	910.25	913.00	915.75	918.50	921.25	924.00	926.75	929.50	932.25	935.00	937.75	940.50	943.25	946.00	948.75	951.50	954.25	957.00	959.75	962.50	965.25	968.00	970.75	973.50	976.25	979.00	981.75	984.50	987.25	990.00	992.75	995.50	998.25	1001.00	1003.75	1006.50	1009.25	1012.00	1014.75	1017.50	1020.25	1023.00	1025.75	1028.50	1031.25	1034.00	1036.75	1039.50	1042.25	1045.00	1047.75	1050.50	1053.25	1056.00	1058.75	1061.50	1064.25	1067.00	1069.75	1072.50	1075.25	1078.00	1080.75	1083.50	1086.25	1089.00	1091.75	1094.50	1097.25	1100.00	1102.75	1105.50	1108.25	1111.00	1113.75	1116.50	1119.25	1122.00	1124.75	1127.50	1130.25	1133.00	1135.75	1138.50	1141.25	1144.00	1146.75	1149.50	1152.25	1155.00	1157.75	1160.50	1163.25	1166.00	1168.75	1171.50	1174.25	1177.00	1179.75	1182.50	1185.25	1188.00	1190.75	1193.50	1196.25	1199.00	1201.75	1204.50	1207.25	1210.00	1212.75	1215.50	1218.25	1221.00	1223.75	1226.50	1229.25	1232.00	1234.75	1237.50	1240.25	1243.00	1245.75	1248.50	1251.25	1254.00	1256.75	1259.50	1262.25	1265.00	1267.75	1270.50	1273.25	1276.00	1278.75	1281.50	1284.25	1287.00	1289.75	1292.50	1295.25	1298.00	1300.75	1303.50	1306.25	1309.00	1311.75	1314.50	1317.25	1320.00	1322.75	1325.50	1328.25	1331.00	1333.75	1336.50	1339.25	1342.00	1344.75	1347.50	1350.25	1353.00	1355.75	1358.50	1361.25	1364.00	1366.75	1369.50	1372.25	1375.00	1377.75	1380.50	1383.25	1386.00	1388.75	1391.50	1394.25	1397.00	1399.75	1402.50	1405.25	1408.00	1410.75	1413.50	1416.25	1419.00	1421.75	1424.50	1427.25	1430.00	1432.75	1435.50	1438.25	1441.00	1443.75	1446.50	1449.25	1452.00	1454.75	1457.50	1460.25	1463.00	1465.75	1468.50	1471.25	1474.00	1476.75	1479.50	1482.25	1485.00	1487.75	1490.50	1493.25	1496.00	1498.75	1501.50	1504.25	1507.00	1509.75	1512.50	1515.25	1518.00	1520.75	1523.50	1526.25	1529.00	1531.75	1534.50	1537.25	1540.00	1542.75	1545.50	1548.25	1551.00	1553.75	1556.50	1559.25	1562.00	1564.75	1567.50	1570.25	1573.00	1575.75	1578.50	1581.25	1584.00	1586.75	1589.50	1592.25	1595.00	1597.75	1600.50	1603.25	1606.00	1608.75	1611.50	1614.25	1617.00	1619.75	1622.50	1625.25	1628.00	1630.75	1633.50	1636.25	1639.00	
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