

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION


IN ADDITION TO THE HAZARDS, RISKS NORMALLY ASSOCIATED WITH THE TYPE OF CONSTRUCTION WORK OR RELATED STRUCTURAL WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RISKS AND INFORMATION.	
RISKS LISTED HERE ARE SIGNIFICANT, AND ASSOCIATED WITH THE CONSTRUCTION WORK OR RELATED STRUCTURAL WORK.	
HAZARDOUS SUBSTANCE - SKIN CONTACT WITH HOT BITUMEN AND CONTENTIOUS	
DUST - AIRBORNE DUST PARTICLES FROM GRANULAR SUB BASE AND CUTTING OF CONCRETE.	
PUBLIC - STRUCK BY MOVING PLANT.	
FOR INFORMATION RELATING TO END USE, MAINTENANCE DEMOLITION, SEE HEALTH AND SAFETY FILE.	
IT IS ASSUMED THAT ALL WORK WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR, WHERE APPROPRIATE TO AN APPROVED METHOD STATEMENT.	
THE TABLE BELOW IDENTIFIES IN MORE DETAIL THE POTENTIAL RISKS ASSOCIATED WITH DIFFERENT TASKS	
ITEM	RECOMMENDATION
1. EXCAVATION ADJACENT TO BOUNDARIES	CARE TO BE TAKEN WITH DEEP EXCAVATIONS IN ORDER TO PREVENT SIDEWALL COLLAPSE / SLIPPAGE. CONTRACTOR TO PROVIDE METHOD STATEMENTS WHERE NECESSARY. EXCAVATIONS TO BE SAFELY CORDONED OFF AND ENSURE SAFE PEDESTRIAN AND VEHICLE ACCESS IS MAINTAINED TO ADJACENT BUILDINGS. ENSURE EXCAVATIONS/PLANT AND MACHINERY ARE MADE SECURE OUTSIDE WORKING HOURS TO PREVENT INJURY TO THE PUBLIC.
2. CONSTRUCTING NEW M.H.S AND ALTERATIONS TO EXISTING MANHOLES	CONTRACTOR TO PROVIDE METHOD STATEMENT FOR SAFE CONSTRUCTION WHEN WORKING IN CONFINED SPACES. ALL PERSONNEL AFFECTED TO BE TRAINED AND BRIEFED ON THE RELEVANT METHOD STATEMENT.
3. PLACING AND HANDLING CUT AND BENT REINFORCEMENT	CONTRACTOR TO ENSURE WEIGHTS OF MATERIALS ARE IN LINE WITH CURRENT REGULATIONS. NO PROJECTING BARS DETAILED. LENGTH OF BARS LIMITED TO MANAGEABLE SECTIONS.
4. EXCAVATION NEAR TO EXISTING SERVICES.	NEW CAVITY WALL LEAVES TO BE CONSTRUCTED SIMULTANEOUSLY THROUGHOUT CONSTRUCTION TO REDUCE RISK OF COLLAPSE AND PREVENTS EXPOSURE OF PROTRUDING WALL TIES. WALLS TO BE CONSTRUCTED IN SUITABLE UFTS TO MAINTAIN FRESH MORTAR STABILITY. ISSUE AVAILABLE SERVICE RECORDS TO THE CONTRACTOR.
5. WORKING NEAR TO LIVE TRAFFIC.	CONTRACTOR TO PROVIDE METHOD STATEMENT FOR TRAFFIC MANAGEMENT/TEMPORARY WORKS. CONTRACTOR TO PROVIDE APPROPRIATE PROTECTION BARRIERS IF REQUIRED. WORKERS TO WEAR HIGH VISIBILITY CLOTHING TO AVOID BEING STRUCK BY PASSING VEHICLES OR PLANT.
6. GENERAL PUBLIC, EXISTING RESIDENTS, OR CHILDREN ON SITE.	ENSURE THAT THE SITE IS PROPERLY SECURE TO PREVENT INJURY FROM SLIPS, TRIPS, FALLS, FALLING FROM HEIGHT, UNCOVERED MANHOLES/TRENCHES. PROVIDE ADVANCE WARNING TO RESIDENTS REGARDING THE START OF CONSTRUCTION. IDENTIFY DIVERSIONS TO PUBLIC RIGHTS OF WAY, ESTABLISHED AND CLEARLY SIGNED IF REQUIRED.
7. NOISE, DUST AND VIBRATION RESULTING FROM CONSTRUCTION WORKS	METHOD STATEMENT TO BE PROVIDED. SITE STAFF TO BE PROVIDED WITH APPROPRIATE PPE. WORK MAY HAVE TO BE UNDERTAKEN AT SPECIFIC TIMES IN SENSITIVE AREAS TO MINIMISE DISRUPTION TO ADJACENT PROPERTIES.
8.0 WORKING NEAR WATER	CONTRACTOR TO PROVIDE DETAILED METHOD STATEMENT IN ACCORDANCE WITH THE APPROVED LAND DRAINAGE CONSENT, TO ENSURE SAFE WORKING ARRANGEMENTS AROUND AREAS OF OPEN OR FLOWING WATER; AND TO ENSURE THAT SUITABLE SITE OPERATION PROCEDURES ARE IN PLACE TO ELIMINATE THE RISK OF POLLUTION TRANSFER TO THE WATER ENVIRONMENT FROM PLANT & SITE MATERIALS.

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 - NO DIMENSIONS TO BE SCALED FROM THIS DRAWING.
 - THE LOCATION AND LEVELS OF EXISTING DRAINAGE PIPES AND CULVERTS MUST BE CHECKED ON-SITE PRIOR TO CONSTRUCTION.
 - DRAINAGE TO BE CONSTRUCTED USING IN ACCORDANCE WITH UNITED UTILITIES STANDARD DETAILS.
 - ALL ADAPTABLE FOUL AND SURFACE WATER DRAINAGE TO BE CONSTRUCTED IN ACCORDANCE WITH CURRENT BUILDING REGULATIONS, INCLUDING APPROVED DOCUMENT H, BS EN 752:2008 AND OTHER RELEVANT STANDARDS.
 - ALL ADAPTABLE DRAINAGE TO COMPLY WITH REQUIREMENTS OF UNITED UTILITIES AND SEWERS FOR ADOPTION (6TH EDITION), UNLESS OTHERWISE STATED.
 - COVER LEVELS INDICATED ON THE DRAWING OR WITHIN THE MANHOLE SCHEDULE ARE NOMINAL AND MAY BE ADJUSTED TO SUIT FINISHED LEVELS AS NECESSARY.
 - WHERE DRAINS PASS THROUGH FOUNDATIONS OR OTHER RIGID STRUCTURES A LINTEL OR SLEEVE IS TO BE USED AND PROVISION FOR FLEXIBILITY IS TO BE MADE TO ROCKER PIPES.
 - BACKFILLING OF DRAIN TRENCHES ADJACENT TO BUILDINGS TO BE IN ACCORDANCE WITH BS EN 752 (2008).
 - DRAINS WITHIN AREAS OF MADE GROUND TO BE CONSTRUCTED BY FIRST MAKING UP THE AREA TO APPROXIMATE FINISHED LEVEL AND THEN EXCAVATED THROUGH THE FILL MATERIAL INTO UNDISTURBED GROUND. THE DRAIN TRENCH IS THEN TO BE BACKFILLED TO FORMATION LEVEL USING SUITABLE GRANULAR FILL MATERIAL, WELL COMPACTED IN LAYERS NOT EXCEEDING 225mm.
 - CONCRETE PROTECTION TO PIPES WHERE DEPTH OF PIPE FROM GROUND LEVEL TO BARREL IS <0.35m WITH NON-TRAFFICKED AREAS; <0.3m WITHIN DOMESTIC DRIVEWAYS; <0.9m PARKING AREA; <1.2m WITHIN THE PUBLIC HIGHWAY. OTHERWISE SEWERS TO BE LAID IN CLASS 3 BEDDING (160mm GRANULAR BED & SURROUND).
 - SEWERS MUST HAVE 6m CLEARANCE FROM TREES AND HEDGES.
 - BEDDING AND BACKFILL TO CONFORM TO THE REQUIREMENTS OF THE WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE 2).
 - THE POSITION OF SVPS, SUB STACKS, WC OUTLETS AND RAINWATER DOWN PIPES ARE ACCURATELY LOCATED FROM THE ARCHITECTS DRAWINGS.
 - SURFACE WATER CONNECTIONS FROM PLOTS 1, 2 AND 3 INTO PIPE SW 1.003 TO BE FORMED USING SADDLE CONNECTIONS.
 - FOUL CONNECTIONS FROM PLOTS 1, 2 AND 3 INTO ADAPTABLE SEWER TO BE FORMED USING SADDLE CONNECTIONS.

- KEY:
- PROPOSED SURFACE WATER SEWER
 - PROPOSED FOUL SEWER
 - PROPOSED COMBINED SEWER
 - PROPOSED COMBINED MANHOLE
 - PROPOSED FOUL MANHOLE
 - EXISTING MANHOLE
 - EXISTING MANHOLE
 - EXISTING SEWER
 - SITE BOUNDARY

MANHOLE SCHEDULE							
MANHOLE	CL	IL	DEPTH TO SOFFIT	MANHOLE DIA	CHAMBER TYPE	COVER TYPE	
S1	189.500	188.327	1.173	600	PPIC	A15	
S2	188.750	187.100	1.650	600	PPIC	A15	
S3	189.000	187.420	1.580	600	PPIC	A15	
S4	188.250	186.600	1.650	600	PPIC	A15	
S5	188.250	186.074	2.176	1200	TYPE B	A15	
S6	188.500	186.556	1.944	600	PPIC	A15	
S7	188.000	186.034	1.970	600	PPIC	A15	
S8	188.000	186.131	1.869	600	PPIC	A15	
S9	188.000	186.052	1.948	1200	TYPE B	A15	
S10 FLOW CONTROL	188.000	186.012	1.988	1200	TYPE B	D400	
	F1	189.500	188.715	0.785	450	PPIC	D400
	F2	188.750	187.485	1.265	450	PPIC	D400
	F3	189.000	187.934	1.066	450	PPIC	A15
F4	188.250	187.334	0.916	450	PPIC	A15	
F5	188.250	187.248	1.002	450	PPIC	A15	
F6	188.500	186.958	1.542	450	PPIC	A15	
F7	188.500	186.571	1.929	450	PPIC	A15	
F8	188.000	186.418	1.582	450	PPIC	A15	
C1	188.000	185.988	2.012	1200	TYPE B	D400	

A	PRIVATE DRAINAGE SYSTEM	02/01/2018	CV
REVISION	COMMENT	DATE	BY
CLIENT: Pendle Borough Council		DATE: 21.09.17	
PROJECT: Proposed Residential Development, Bamford Street, Nelson		DRAWN BY: CV	
DRAWING TITLE: Surface Water / Foul Drainage Layout		SCALE: 1:250	
DRAWING REFERENCE: 2017 - 085 - 01		SIZE: A1	
		REVISION: /	



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