

DRAINAGE NOTES

1. THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT AND DIVERSION WORKS AS NECESSARY, TO ALL EXISTING SERVICES.
2. THE CONTRACTOR SHALL ALLOW FOR DEALING WITH SURFACE WATER RUN-OFF INTO EXCAVATIONS AND FROM GROUNDWATER BY MEANS OF SUMPS, PUMPING AND DE-WATERING AS APPROPRIATE, IN ORDER TO KEEP THE EXCAVATION AS REASONABLY DRY AS POSSIBLE DURING THE CONSTRUCTION OF THE WORKS.
3. ALL PRIVATE DRAINAGE WITHIN THE SITE IS TO COMPLY WITH THE REQUIREMENTS OF BSEN752 AND BUILDING REGULATIONS PART H.
4. ALL PRIVATE DRAINAGE PIPES TO BE LAID IN TRENCHES BEDDED CLASS 'B' ON SINGLE SIZED AGGREGATE AND BACKFILLED WITH APPROVED SELECTED FILL (40mm DOWN) REUSED FROM EXCAVATED MATERIAL UNDER BUILDINGS AND WHERE COVER TO INVERT IS LESS THAN 1200mm UNDER TRAFFICKED AREAS & 900mm IN NONE TRAFFICKED AREAS DRAINAGE PIPES TO BE CAST IN CONCRETE (CLASS Z BEDDING).
6. SELECTED BACKFILL MATERIAL SHALL CONSIST OF UNIFORM EXCAVATED MATERIAL, FREE FROM STONES LARGER THAN 40mm, CLAY LUMPS LARGER THAN 75mm, TREE ROOTS, CONTAMINATED MATERIAL. SELECTED BACKFILL MATERIAL IS TO BE PLACED IN LAYERS NOT EXCEEDING 150mm THICKNESS. THE MATERIAL SHALL BE COMPACTED TO ACHIEVE NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN LABORATORY COMPACTION TESTS. SUFFICIENT TESTING SHALL BE CARRIED OUT, BY THE CONTRACTOR, TO DEMONSTRATE THIS IS ACHIEVED (NUMBER AND FREQUENCY OF TESTING TO BE AGREED WITH SHD). WHERE THE MOISTURE CONTENT OF THE MATERIAL PROHIBITS COMPLIANCE WITH THE ABOVE 6F1 OR SIMILAR IMPORTED MATERIAL SHALL BE USED.
7. CLASS Z CONCRETE ENCASEMENT REQUIRED WHERE VERTICAL CLEARANCE BETWEEN PIPE CROSSINGS IS LESS THAN 300mm.
8. ALL PIPEWORK WITHIN MANHOLES ARE TO BE LAID SOFFIT TO SOFFIT. ALL CHAMBER INVERT LEVELS ARE FOR THE OUTGOING PIPE LEVELS. BACKDROP PIPEWORK SHALL BE CONNECTED AT SOFFIT TO SOFFIT WITH THE RODDING ACCESS LEVEL SPECIFIED.
9. ALL DRAINS TO BE LAID ACCURATELY TO LINE AND LEVEL IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
10. CO-ORDINATE SETTING OUT INFORMATION FOR MANHOLES IS TO THE INTERSECTION OF THE DRAINS AND NOT THE CENTRE OF THE MANHOLE.
11. GULLY GRATINGS AND STEEL CHANNEL COVERS ARE TO BE IN ACCORDANCE WITH BSEN124 AS FOLLOWS:
a) AREAS SUBJECT TO VEHICULAR OVERRUN: CLASS D400 MINIMUM.
14. ALL BRICKWORK IN CONNECTION WITH DRAINAGE IS TO BE SOLID CLASS B ENGINEERING BRICK TO BS3921.
15. ALL PRECAST CONCRETE PIPES, CHAMBER PRODUCTS AND ROAD GULLIES SHALL BE TO BS5911 AND BE KITEMARKED.
16. ALL DRAINAGE INSITU CONCRETE SHALL BE GEN3.
17. ALL INSITU AND CONCRETE PRODUCTS SHALL COMPLY WITH THE REQUIREMENTS FOR SULPHATE EXPOSURE IN ACCORDANCE WITH BRE SPECIAL DIGEST 1, CONCRETE IN AGGRESSIVE GROUND (2001) PART 1: TABLE 2.
18. UPON COMPLETION OF THE WORKS THE CONTRACTOR SHALL CLEAN ALL DRAINAGE BY JETTING, REMOVING ALL DEBRIS FROM SITE. NO DEBRIS SHALL BE PERMITTED TO ENTER THE EXISTING DRAINAGE SYSTEM.
19. CONSTRUCTION JOINTS IN CONCRETE SURROUND MUST NOT BE WITHIN 150MM OF CHAMBER/SHAFT RING JOINTS. ROCKER PIPES TO BE SURROUNDED WITH CONCRETE LOCATED 150mm MINIMUM 200mm MAXIMUM FROM THE FIRST FLEXIBLE JOINT TO THE MANHOLE WALL.
20. SOFT SPOTS IN THE TRENCH FORMATION SHALL BE REMOVED AND REPLACED WITH GRANULAR BEDDING UNLESS INSTRUCTED OTHERWISE.
21. LATERAL CONNECTIONS IN BETWEEN MANHOLE RUNS SHALL BE FORMED BY USING PURPOSE MADE JUNCTION FITTINGS. BEND FITTINGS SHALL BE PROVIDED WHERE APPROPRIATE TO DIRECT THE FLOW INTO MAIN RUNS.
22. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO LIAISE WITH BUILDING CONTROL FOR APPROVALS, INTERIM INSPECTION, SNAGGING AND FINAL INSPECTIONS OF THEIR WORK.
23. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING STATUTORY UNDERTAKERS APPARATUS AND SERVICE CONNECTIONS ADJACENT TO AND CROSSING THE WORKS BY TRIAL PITS PRIOR TO COMMENCING MACHINE DIG.
24. AT THE CONCLUSION OF THE WORKS THE CONTRACTOR SHALL PROVIDE A MARKED UP DRAWING TO RECORD ANY AS BUILT VARIATIONS NOT SHOWN ON THE DRAWINGS.
25. ALL PRIVATE SURFACE WATER DRAINAGE TO BE 1500 UNLESS STATED OTHERWISE. ALL PRIVATE FOUL WATER PIPES TO BE 1000 UNLESS STATED OTHERWISE. ALL PRIVATE DRAINAGE TO BE TWIN WALLED PLASTIC PIPE.
26. VENTING REQUIRED FOR FULL RETENTION SEPARATORS AND ATTENUATION TANKS. POSITION TO BE AGREED WITH ARCHITECT.
27. ALL EXISTING DRAINAGE NOT SHOWN WITHIN SITE BOUNDARY TO BE ABANDONED. REFER TO EXISTING DRAINAGE DRAWING. ABANDONED DRAINAGE TO BE GRUBBED OR GROUTED UP.

- GENERAL NOTES
1. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS, ENGINEERS, ARCHITECTS & SERVICES DRAWINGS, INCLUDING APPROVED BUILDERS WORK DRAWINGS. CONTRACTOR TO NOTIFY ENGINEER OF DISCREPANCIES BETWEEN STRUCTURAL DRAWINGS AND SPECIFICATIONS OR OTHER DRAWINGS.
 2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 3. DO NOT SCALE FROM THIS DRAWING. WORK TO DIMENSIONS OR CO-ORDINATES PROVIDED. ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE NOTED. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS, SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY.
 4. INFORMATION CONTAINED ON THIS DRAWING IS SCHEME DESIGN ONLY AND REQUIRES FURTHER DETAILED DESIGN AND CO-ORDINATION WITH THE CONTRACTOR, DESIGN TEAM AND APPROPRIATE SUB-CONTRACTORS.

- KEY
- BOUNDARY FOR REVISED DRAINAGE
 - PROPOSED SURFACE WATER SEWER
 - PROPOSED SURFACE WATER INSPECTION CHAMBER / MANHOLE
 - PROPOSED FOUL WATER SEWER
 - PROPOSED FOUL WATER INSPECTION CHAMBER / MANHOLE
 - PROPOSED SLOT DRAIN
 - PROPOSED CHANNEL DRAIN
 - PROPOSED PETROL INTERCEPTOR
 - PROPOSED ATTENUATION TANK
 - PROPOSED YARD GULLY
 - EXISTING UU COMBINED SEWER & MANHOLE
 - EXISTING UU SW SEWER & MANHOLE
 - EXISTING PRIVATE FW SEWER & MANHOLE
 - EXISTING PRIVATE SW SEWER & MANHOLE
 - EXISTING GULLY & SEWER

DRAFT

P1	23.08.19	MF	MF	DRAFT
No	DATE	DRAWN	REV'D ENG.	AMENDMENT

STATUS	PURPOSE OF ISSUE
D2	TENDER

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CLIENT	KEYWORKER HOMES
PROJECT	GARSTANG BUSINESS CENTRE

DRAFTER	MF	ENGINEER	MF
TITLE	PROJECT REFERENCE: 3396		

PROPOSED DRAINAGE

SCALE	SHEET	DRAWING No	REV
1-250	A1	GAR-SHD-00-ZZ-DR-C-0201	P1

BLOCK PAVING DRAINAGE ARRANGEMENTS
TBC DEPENDING ON EXACT PLANTING
LOCATIONS.

NEW UU MANHOLE, S106
AGREEMENT REQUIRED PRIOR TO
CONSTRUCTION

FW & SW PROPOSED DRAINAGE POTENTIALLY
ENCROACH TREE PROTECTION ZONE. ADVICE
ON IMPACT TO BE OBTAINED FROM
ARBORICULTURIST.

APPROXIMATE LINE OF EXISTING
DRAIN TO BE DIVERTED INTO THE
UU SEWER, VIA F1.03.

SMALL AREA OF HARDSTANDING
TO DRAIN INTO SOFT PLANTING
AREAS OR THE PRIVATE ROAD
DRAINAGE NETWORK.

B6430

RIVER
WYRE