

DO NOT SCALE

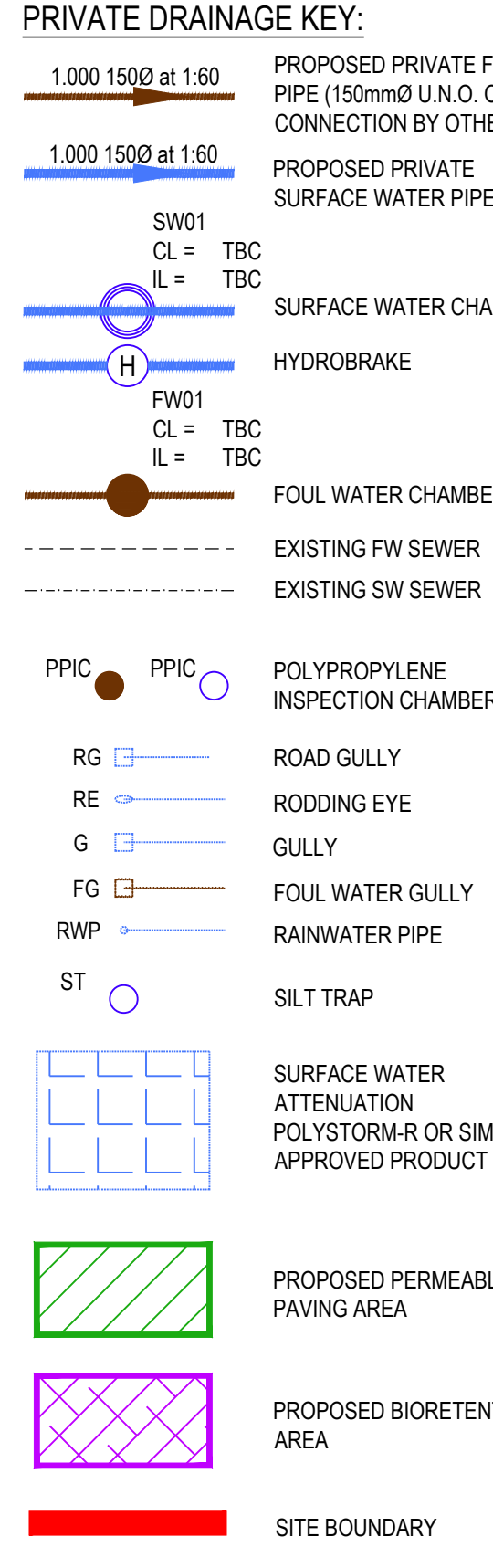
FOR THE AVOIDANCE OF DOUBT NO APPROVALS, REVIEWS, COMMENTS OR INDICATION OF SATISFACTION GIVEN BY ARC ENGINEERS IN TERMS OF SUBCONTRACT DRAWINGS, PRODUCTS OR PROPOSED MATERIALS SHALL BE REDUCED TO THE OBLIGATION OF THE SUB-CONTRACTOR TO SUPPLIER TO ADHERE TO THE SPECIFICATION, GENERAL ARRANGEMENT DRAWINGS, STRUCTURE REQUIREMENTS AND GOOD WORKING PRACTICES. ARC ENGINEERS ACCEPT NO LIABILITY FOR THE SELECTION OF MATERIALS OR WORKMANSHIP IN THE EXECUTION OF THE WORKS.

- GENERAL NOTES
1. THESE NOTES ARE INTENDED TO AUGMENT DRAWINGS AND SPECIFICATIONS WHERE CONFLICT OF REQUIREMENTS EXISTS...
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND ARCHITECTS DRAWINGS...
3. DRAWINGS NOT TO BE SCALED...
4. ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR...
5. DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER/ARCHITECT...
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION OF COMMERCIAL AND SECURITY AND ENSURE THAT THE BUILDING AND ITS COMPONENTS ARE SAFE DURING CONSTRUCTION...
7. THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT & PERMANENT DIVISION WORKS, AS NECESSARY TO ALL EXISTING SERVICES...
8. THE CONTRACTOR SHALL ALLOW FOR ALL TRAFFIC MANAGEMENT IN CONNECTION WITH ROAD & SEWER WORKS...
9. THE CONTRACTOR SHALL ALLOW FOR KEEPING SEWER TRENCHES & EXCAVATIONS AS DRY AS PRACTICABLE BY PUMPING FROM TEMPORARY SUMPS & DE-WATERING AS APPROPRIATE...
10. CONCRETE PIPES TO BE CLASS 5 UNLESS NOTED OTHERWISE...
11. MANHOLE COVERS & FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN124...
12. MANHOLE COVERS & FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN124...
13. BACKFILL & REINSTATEMENT TO TRENCHES IN PUBLIC HIGHWAYS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS & SPECIFICATIONS OF THE ADOPTING AUTHORITY...
14. FILLED GROUND MUST BE FILLED & CONSOLIDATED UNDER THE SUPERVISION & SATISFACTION OF BUILDING CONTROL/LOCAL AUTHORITY BEFORE ANY SEWER WORKS ARE CARRIED OUT...
15. CONTRACTOR TO TAKE MEASURES TO PROTECT HIS OPERATIVES WITH RESPECT TO THE PRESENCE OF GAS IN SEWER TRENCHES & MANHOLES...
16. CONTRACTOR TO APPLY FOR SEWER PERMITS & LIFTING PERMITS AS NECESSARY FROM THE APPROPRIATE AUTHORITIES...
17. STATUTORY UNDERTAKER / UTILITIES PROVIDER IS NOT OBLIGATED TO ACCEPT FILLER DRAINAGE DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK...
18. COVER SLABS MUST CARRY BS1 KITEMARK OR WILL BE REJECTED BY STATUTORY UNDERTAKER / UTILITIES PROVIDER...
19. SULPHATE RESISTANT CEMENT (C20-C22) & PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED...
20. THE ADOPTED SEWERS SHOULD BE A MINIMUM OF 1m & MANHOLES 0.5m FROM CURB LINES & SERVICE MARGINS...
21. SEWERS MUST HAVE 5m CLEARANCE FROM TREES & HEDGES...
22. THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED...
23. SEWERS TO BE LAID IN CLASS 'S' BEDDING...
24. WHERE DEPTH OF COVER TO TOP OF SEWER IS LESS THAN 1.2m IN HIGHWAYS & VEGES (OR LESS 500mm IN PRIVATE VEHICULAR AREAS OR 750mm IN LANDSCAPING AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE THE GRANULAR SURROUND...

SAFETY, HEALTH & ENVIRONMENTAL INFORMATION
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following risks and information.
Risks listed here are not exhaustive. Refer to Risk Assessment Register: 23047
Construction:
ADD PROJECT NOTES HERE
Demolition:
No Unusual hazards/risks
For information relating to Use, Cleaning and Maintenance see Health & Safety File
It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.
INDICATES A RESIDUAL RISK REQUIRING A COMPULSORY ACTION
INDICATES A RESIDUAL RISK FOR INFORMATION
INDICATES A RESIDUAL RISK REQUIRING PROHIBITIVE ACTION
INDICATES A RESIDUAL RISK AS A WARNING

DRAINAGE NOTES

- 1. All drainage works shall be carried out in accordance with the Sewer Sector Guidance, Appendix C - Design and Construction Guidance...
2. Position size & depth of all existing sewers & services shall be established prior to commencement on site...
3. The Contractor shall allow for the protection, temporary & permanent support & temporary & permanent division works, as necessary to all existing services...
4. The Contractor shall allow for all traffic management in connection with road & sewer works...
5. The Contractor shall allow for keeping sewer trenches & excavations as dry as practicable by pumping from temporary sumps & de-watering as appropriate...
6. Concrete pipes to be Class 5 unless noted otherwise...
7. Ventilated pipes & fittings shall comply with the relevant provisions of BS EN252 & BS 65 respectively & be kitemarked...
8. Manhole covers & frames shall comply with the relevant provisions of BS EN124...
9. Gully grates & frames shall comply with the relevant provisions of BS EN124 & be of a non-rocking design...
10. Cover slabs shall be provided where cover to the pipe barrel is less than 1.2m in vehicular trafficked areas & 0.5m elsewhere...
11. Selected backfill material shall consist of uniform material free from stones larger than 40mm, clay lumps larger than 75mm, tree roots, organic matter & frozen soil...
12. General backfill material to be free from stones larger than 40mm...
13. Backfilling & reinstatement to trenches in public highways shall be in accordance with the requirements & specifications of the adopting authority...
14. Filled ground must be filled & consolidated under the supervision & satisfaction of Building Control/Local Authority before any sewer works are carried out...
15. Contractor to take measures to protect his operatives with respect to the presence of gas in sewer trenches & manholes...
16. Contractor to apply for sewer permits & lifting permits as necessary from the appropriate authorities...
17. Statutory Undertaker / Utilities Provider is not obligated to accept filler drainage drainage run-off into the public sewer network...
18. Cover slabs must carry BS1 Kitemark or will be rejected by Statutory Undertaker / Utilities Provider...
19. Sulphate resistant cement (C20-C22) & precast concrete products must be used or a laboratory report provided...
20. The adopted sewers should be a minimum of 1m & manholes 0.5m from curb lines & service margins...
21. Sewers must have 5m clearance from trees & hedges...
22. The chamber size of manholes with more than one connection in them may need to be increased...
23. Sewers to be laid in Class 'S' bedding...
24. Where depth of cover to top of sewer is less than 1.2m in highways & veges (or less 500mm in private vehicular areas or 750mm in landscaping areas) then a concrete slab should be provided above the granular surround...



GREASE TRAPS
NOTE: GREASE TRAPS TO BE CONSIDERED FOR ALL KITCHEN AREAS. THESE MAY BE INTERNAL AND PART OF THE KITCHEN SUPPLIERS WORKS, OR EXTERNAL, WITH SIZE AND LOCATION TO BE ADVISED BY SPECIALIST SUPPLIER FOR INDICATIVE INCLUSION ON ENGINEERS DRAWINGS.

FLOW CONTROL CHAMBER DETAILS
MHS19
1500x9 PCC
FLOW CONTROL
HYDROBRAKE C/SHE:2063-2000-1350-2000
DESIGN HEAD = 1.30m
DESIGN FLOW = 2.0 l/s
DESIGN FLOW UP TO 1 IN 10 YEAR STORM EVENT
WATER LEVEL = 80.551m
WEIR
DESIGN WIDTH = 0.45m
DESIGN DEPTH = 0.45m
LEVEL = 80.600m
FOR FLOWS ABOVE 1 IN 10 YEAR STORM EVENT UP TO 1 IN 100 YEAR STORM - CLIMATE CHANGE.
CL.81.869
IL.79.382
D.2.487



Revision table with columns: NO, DESCRIPTION, DATE, BY, CHECKED, DATE.
P5 SECTION 38 BOUNDARY ALTERED TO INCLUDE FOOTWAY
P4 DRAINAGE UPDATED TO SUIT CURRENT SITE PLAN AND S104 DRAINAGE ALTERED TO SUIT CHAMBERS
P3 SITE PLAN UPDATED TO CURRENT
P2 BIORETENTION AREAS ADDED TO CAPE PATIO AREA, ACCEPTABLE DRAINAGE REQUIRED
P1 INITIAL ISSUE
REV DETAIL BY DATE

ArcEngineers logo and contact information: CONSULTING STRUCTURAL AND CIVIL ENGINEERS, 3 CADMAN COURT, LEEDS, LS27 0PX, Phone: 0113 253 3904, www.arc-engineers.co.uk. Project title: PROPOSED EXTRA CARE DEVELOPMENT KINGSMERE, BICESTER. Drawing title: PROPOSED PRIVATE DRAINAGE GENERAL ARRANGEMENT. Drawing status: PRELIMINARY. Issue: SEPT 23. Scale: 1:200. Project number: 23047-ARC-XX-XX-DR-C-5000-P5.