



RESIDUAL EXTRA-ORDINARY OR UNEXPECTED HAZARDS			
HAZARD REF.	HAZARD	MEASURES TAKEN	RESIDUAL RISK
H1.1	GROUND CONDITIONS	BARRIER PIPE SPECIFIED BY CLIENT.	CONTAMINATION MAY STILL BE PRESENT. RISK TO BURIED PIPES.
H2.1	HAZARDOUS ENVIRONMENT	DETERMINE NATURE AND EXTENT OF CONTAMINATION USING DESK STUDY, TRIAL PITS AND LABORATORY TESTING. CONTRACTOR TO DEVELOP AND IMPLEMENT AN APPROPRIATE SAFE METHOD OF WORKING.	RESIDUAL RISK IS DEPENDENT ON COMPLIANCE WITH SAFE METHOD OF WORKING.
H4.1	EXISTING SERVICES	CONTRACTOR TO CONDUCT APPROPRIATE SERVICE RECORD CHECKS AND ON SITE CHECKS PRIOR TO COMMENCEMENT OF CONSTRUCTION.	ACCEPTABLE.
H7.1	PROXIMITY TO OTHER ACTIVITIES	CONTRACTOR TO ENSURE THAT ALL PERSONNEL ARE SUITABLY TRAINED AND COMPETENT TO WORK ON A CONSTRUCTION SITE. ADHERE TO SITE PROCEDURES, AND UTILISE SAFETY MEASURES E.G. PIPE TO BE EMPLOYED AT ALL TIMES.	THE MEASURES TAKEN BY THE CONTRACTOR WILL ENSURE THAT THE RISKS ARE MANAGED DURING THE CONSTRUCTION PHASE. FOR RISKS TO FUTURE USERS SEE SECTION ON RESIDUAL RISK TO FUTURE USERS BELOW.
H20.1	RESIDUAL RISK TO FUTURE USERS	HOUSE HOLDERS TO BE ADVISED OF CONTAMINATED GROUND AND THAT BARRIER PIPE IS REQUIRED FOR ANY FUTURE SERVICE INSTALLATIONS OR REPLACEMENTS.	ADVICE NOT HEEDED OR PASSED ON IN FUTURE.

**CONTAMINATED LAND**  
AS THE SITE HAS BEEN SHOWN TO HAVE A DEGREE OF CONTAMINATION PRESENT, OUR PROPOSALS INVOLVE THE LAYING OF MAINS AND/OR SERVICES USING AN APPROVED BARRIER PIPE SYSTEM WHICH WILL PROTECT WATER SUPPLIES FROM INGRESS OF ANY CONTAMINANTS. ALL PIPES AND FITTINGS TO BE INSTALLED BY THAMES WATER AND THE DEVELOPER MUST BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION TO FORM A COMPLETE APPROVED BARRIER PIPE SYSTEM.

**SERVICE CONNECTIONS**  
ALL SERVICES AND METERS FROM NEW MAINS TO BE INSTALLED BY DORCHESTER LIVING.  
ALL SERVICE PIPES TO BE 25MM UNLESS STATED OTHERWISE.  
25 / 32MM SERVICE PIPES MUST BE INSTALLED IN A CONTINUOUS UN-JOINTED LENGTH LEAVING ENOUGH PIPE COILED AT THE BOUNDARY OR AGREED POINT OF DELIVERY TO ENABLE A CONNECTION DIRECTLY INTO THE WATER MAIN. THE SUPPLY PIPE MUST HAVE A CONTINUOUS LENGTH OF BLUE TRACING MESH INSTALLED ABOVE IT FROM THE POINT OF ENTRY UP TO THE PROPERTY BOUNDARY OR AGREED POINT OF DELIVERY. ANY COILED PIPES LEFT OUT FOR CONNECTION MUST BE ADEQUATELY PROTECTED TO ENSURE THE SUPPLY INTO THE MAIN REMAINS UNJOINTED. PRIOR TO CONNECTION TO THE WATER MAIN, SUPPLY PIPES MUST BE CLEARLY LABELED SHOWING WHICH PROPERTY THEY SERVE AND SHOULD BE SEALED WITH A MECHANICAL WATERTIGHT STOP END.

**METERING DETAILS**  
CONTAMINATED SITES MUST COMPLY WITH WIS-4-37-01 PROTECTALINE  
IT IS THAMES WATER'S POLICY THE SLO MUST INSTALL WATER METERS TO THAMES WATER'S SPECIFICATIONS. METERS ARE NORMALLY PLACED IN BOUNDARY BOXES AT THE BACK EDGE OF THE FOOTPATH.  
QUALIFICATIONS FOR THIS ELEMENT OF WORKS WOULD BE EITHER: REGISTRATION ON WIRS,  
UNIT 236 OF NVO LEVEL 2 PUBLIC UTILITIES DISTRIBUTION  
WATER NETWORK CONSTRUCTION QUALIFICATION.

**PRINCIPAL LENGTHS**  
160MM PE100 TYPE A BARRIER PIPE SDR17 150 METRES (EXISTING LAID BY DORCHESTER LIVING APPROX.)  
160MM PE100 TYPE A BARRIER PIPE SDR17 390 METRES  
110MM PE100 TYPE A BARRIER PIPE SDR17 360 METRES  
63MM PE80 TYPE A BARRIER PIPE SDR11 110 METRES  
32MM PE80 TYPE A BARRIER PIPE SDR11 163 METRES  
25MM PE80 TYPE A BARRIER PIPE SDR11 150 METRES

HOUSE TYPE SCHEDULE			
TYPE	BED ACCOMMODATION / DWELLING TYPE	STOREY HEIGHT	No OF UNITS
DL1	2 BEDROOM SEMI / TERRACED HOUSE	2	775
DL2	3 BEDROOM SEMI / TERRACED HOUSE	2	857
DL3	3 BEDROOM SEMI DETACHED HOUSE	2	851
DL4	2 BEDROOM SEMI DETACHED HOUSE	2	710
DL6	3 BEDROOM SEMI / TERRACED HOUSE	2	857
DL7	3 BEDROOM SEMI DETACHED LINKED HOUSE	2	1015
DL7A	3 BEDROOM SEMI DETACHED LINKED HOUSE	2	1015
AF2	2 BEDROOM SEMI / TERRACED HOUSE	2	777
AF3	3 BEDROOM SEMI / TERRACED HOUSE	2	910
TOTAL NO. OF DWELLINGS			71

Table 1 - Excavation widths and pipe bed & surround thickness					
Diameter of main	63mm	90mm	110mm	160mm	315mm
Nominal excavation width	350mm	400mm	400mm	500mm	600mm
Pipe bed and surround (compacted)	50mm	75mm	75mm	100mm	150mm

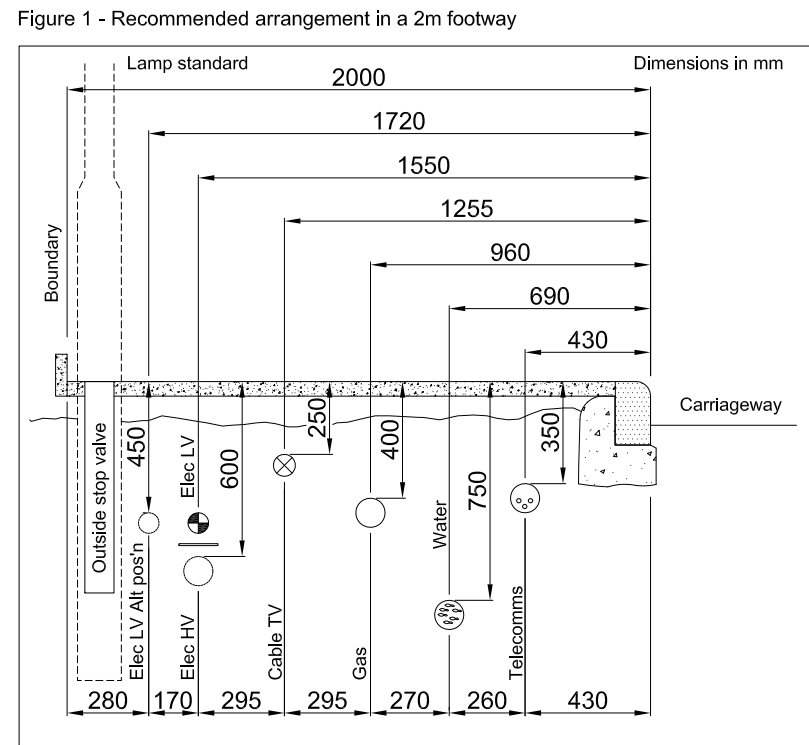


Figure 1 - Recommended arrangement in a 2m footway

Scale: 1:500

REPRODUCED FROM OS MASTERMAP 1:2500 SCALE BY PERMISSION OF ORDNANCE SURVEY ON BEHALF OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE. © CROWN COPYRIGHT. ALL RIGHTS RESERVED. LICENCE NUMBER 100043718.

- NOTES**
- ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS SHOWN OTHERWISE.
  - THIS DESIGN IS PROPOSED ON THE BASIS OF CLIENT BRIEF, SPECIFICATIONS, BEST PRACTICE AND RISK REDUCTION / ELIMINATION. THE DESIGNER MUST BE CONSULTED ON ANY PROPOSED CHANGES, BEFORE THEY ARE CONSIDERED FOR IMPLEMENTATION.
  - ANY PROPOSED CHANGES TO THE WATER NETWORKS TO BE CHECKED FOR CLASHES WITH SEWERAGE.
  - GROUND CONTAMINATION PRESENT THROUGHOUT SITE - ALL MAINS AND SERVICE PIPES TO BE "PROTECTALINE" PE80 (UP TO AND INCLUDING 63MM BP) AND PE100 (90MM BP AND ABOVE), COMPLY WITH WIS 4-32-19 AND LATEST VERSION OF THAMES WATER COMPANY SPECIFIC ADDENDUM.
  - ALL PIPES TO BE LAID IN ACCORDANCE WITH WRC SELF-LAYING OF WATER MAINS AND SERVICES A CODE OF PRACTICE FOR ENGLAND AND WALES 2ND EDITION.
  - MINIMUM TRENCH WIDTH TO BE 550MM. TYPE A GRANULAR BED AND SURROUND WELL COMPACTED - TYPE 'A' GRANULAR BED AND SURROUND TO PIPES SHALL BE UNCRUSHED GRAVEL, OR CRUSHED STONE OR CRUSHED GRAVEL. THE GRADING OF WHICH COMPLIES WITH TABLE 4 OF B.S. 882 FOR NOMINAL SIZE OF SINGLE SIZED AGGREGATES. WHEN TESTED IN ACCORDANCE WITH B.S.812, THE 10% FINES VALUE SHALL NOT BE LESS THAN 50KN AND FOR THAT PORTION OF A SAMPLE RETAINED ON A 6MM SIEVE THE INDEX OF FLAKINESS SHALL NOT EXCEED 45%. MATERIAL GRADING TO BE 10MM NOMINAL SIZE OF SINGLE SIZED AGGREGATES.
  - TREES TO BE CONFIRMED - TYPES AND PROXIMITY TO WATER MAINS.
  - WATER MAINS & SUPPLY PIPES TO BE LAID AT DEPTH AS RECOMMENDED IN NJUG PUBLICATION NUMBER 7.
  - TEST PRESSURE TO BE CONFIRMED BY THAMES WATER.

- LEGEND WATER SUPPLY**
- EXISTING WATER MAIN
  - EXISTING WATER SERVICE SINGLE METER
  - EXISTING WATER SERVICE WITHIN DUCT
  - NEW POTABLE WATER MAIN - BLUE PE BP SEE NOTE 3
  - NEW POTABLE WATER SERVICE SINGLE METER - BLUE PE BP SEE NOTE 3
  - SERVICE CONNECTION MANIFOLD WITH NO. OF PORTS
  - NEW POTABLE WATER SERVICE DUCT PROVIDED BY CLIENT
  - DIAMETER CHANGE
  - NEW POTABLE WATER SLUICE VALVE
  - NEW POTABLE WATER WASHOUT
  - NEW TEMPORARY WASHOUT
  - NEW POTABLE WATER FIRE HYDRANT
  - PROPOSED TREES
  - EXISTING TREES TO BE REMOVED
  - EXISTING TREES AND SHRUBS

**CAUTION:** THE MANAGEMENT AND DESIGN OF ANY AND ALL TEMPORARY WORKS REQUIRED TO EXECUTE THIS DESIGN ARE THE RESPONSIBILITY OF THE CONTRACTOR.

**REFERENCES**  
GRID REFERENCE: 451714, 228096  
DEVELOPER/SLO - DORCHESTER LIVING

R01	14/05/15	FIRE HYDRANTS ADDED FROM FIRE AUTHORITY CONSULTATION RECEIVED 13TH MAY 2015	TF	DRD	TM
R00	29/04/15	APPROVAL	TF	DRD	TM

REV.	DATE	DESCRIPTION	DRAWN	CHK'D	APP'D
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**SCHEME**  
UPPER HEYFORD, OXFORD

**TITLE**  
WATER SUPPLY  
PHASE 2  
SHEET 1 OF 2

**STATUS**  
APPROVAL

DRAWN (ORIG.)	CHECKED	APPROVED	SCALE / SHEET SIZE
TF	DRD	TM	1:500 / A1

CLIENT REFERENCE	DATE
-	22/04/2015

DRAWING NO.	REV
w4028-d08	R01