

Foul Water Network					
Manhole Reference	Invert Level (m)	Cover Level (m)	Depth (m)	Chamber Details	Cover Loading
F01	0.578	2.35	1.77	Pump	B125
F02	1.296	2.35	1.05	PPIC Ø450	A15
F03	0.639	2.32	1.68	PPIC Ø450	B125
F04	0.718	2.32	1.60	PPIC Ø450	B125
F05	1.102	2.35	1.25	PPIC Ø450	B125
F06	1.745	2.35	0.60	PPIC Ø450	B125
F07	1.258	2.35	1.09	PPIC Ø450	A15
F08	1.336	2.35	1.01	PPIC Ø450	B125

Grade 1 in	Pipe DIA (mm)	Length (m)
43.5	100	31.25
80.0	100	4.90
80.0	100	6.30
80.0	100	30.70
60.0	100	38.60
80.0	100	12.50
80.0	100	18.70

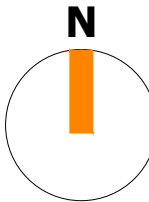
- KEY BUILDERSWORK:**
- (01) REFER TO HILTI FIRE COLLAR SCHEDULE FOR STRAIGHT HILTI FIRE COLLAR (SVP/SS/RWP/DRY RISER)
- (02) REFER TO HILTI FIRE COLLAR SCHEDULE FOR SPECIAL COLLAR - HIGH LEVEL OFFSET (SVP/SS/RWP/DRY RISER)
- (03) 200MM X 200MM BUILDERSWORK HOLE IN WALL FOR HORIZONTAL STACK RUN (SVP/SS/RWP)
- (04) 2500mm x 2235mm BUILDERSWORK HOLE THROUGH FLOOR FOR LIFT SHAFT OPENING
- (05) 400mm x 200mm LETTER BOX DETAIL ABOVE FLAT ENTRANCE FOR M&E SERVICES
- (06) PENETRATION THROUGH FLOOR FOR M&E SERVICE RISERS & ADV SHAFTS TO BE COVERED WITH GRP GRID
- (07) 200mm x 200mm HORIZONTAL BUILDERSWORK HOLE FOR DRY RISER PIPE
- (08) 200mm x 200mm HORIZONTAL BUILDERSWORK HOLE FOR M&E SERVICES
- (09) 100mm x 100mm HORIZONTAL BUILDERSWORK HOLE FOR ELECTRICAL SERVICES
- (10) 300mm x 150mm BUILDERSWORK HOLE IN WALL FOR VENTILATION TERMINAL (INTAKE & EXHAUST)
- (11) 1100mm x 500mm VERTICAL BUILDERSWORK HOLE FOR STAIR LOBBY PERMANENT VENTILATION
- (12) 400mm x 200mm BUILDERSWORK HOLE FOR M&E SERVICES
- (13) 300mm x 100mm HORIZONTAL BUILDERSWORK HOLE FOR M&E SERVICES
- (14) 1300mm x 200mm LETTER BOX ABOVE COMMUNAL DOORS FOR M&E SERVICES

LEGEND:

-  BUILDERSWORK HOLE THROUGH SLAB
-  BUILDERSWORK HOLE THROUGH WALL

- (16) 400mm(W) x 600mm(H) BUILDERSWORK HOLE THROUGH WALL FOR DRY RISER INLET CABINET
- (17) 1684mm x 1684mm BUILDERSWORK HOLE FOR ADV OPENING ROOF VENT FOR STAIRCASE BELOW
- (18) 450mm(W) x 165mm(D) x 2210mm(H) BUILDERSWORK HOLE FOR LIFT CONTROLLER PANEL (SUBJECT TO LIFT SPECIALIST)
- (19) 50mm x 50mm VERTICAL BUILDERSWORK HOLE FOR STAIRCORE LIGHTING
- (20) 300mm x 300mm FLOOR GULLY
- (21) 250MM X 250MM BUILDERSWORK HOLE IN WALL FOR HORIZONTAL STACK RUN (SVP/SS/RWP)
- (22) Ø110MM HORIZONTAL BUILDERSWORK HOLE FOR ELECTRICAL SERVICES
- (23) 300mm x 300mm HORIZONTAL BUILDERSWORK HOLE FOR M&E SERVICES
- (24) 200mm x 150mm HORIZONTAL BUILDERSWORK HOLE FOR ELECTRICAL SERVICES
- (25) 700mm x 150mm HORIZONTAL BUILDERSWORK HOLE FOR M&E SERVICES
- (26) 1100mm x 500mm HORIZONTAL BUILDERSWORK HOLE FOR STAIR LOBBY PERMANENT VENTILATION
- (27) 150MM X 150MM HORIZONTAL BUILDERSWORK HOLE FOR MECHANICAL SERVICES
- (28) 200mm x 250MM HORIZONTAL BUILDERSWORK HOLE FOR ELECTRICAL SERVICES
- (29) 800mm x 200mm HORIZONTAL BUILDERSWORK HOLE FOR ELECTRICAL SERVICES
- (30) 1000mm x 150mm HORIZONTAL BUILDERSWORK HOLE FOR M&E SERVICES
- (31) 500mm x 150mm HORIZONTAL BUILDERSWORK HOLE FOR M&E SERVICES

- (32) 400mm x 150mm HORIZONTAL BUILDERSWORK HOLE FOR M&E SERVICES
- (33) 500mm x 200mm HORIZONTAL BUILDERSWORK HOLE FOR ELECTRICAL SERVICES
- (34) 2000mm x 300mm VERTICAL BUILDERSWORK HOLE FOR ELECTRICAL SERVICES
- (35) 150mm x 150mm VERTICAL BUILDERSWORK HOLE FOR M&E SERVICES
- (36) 700mm x 200mm VERTICAL BUILDERSWORK HOLE FOR M&E SERVICES
- (37) 50mm x 50mm HORIZONTAL BUILDERSWORK HOLE FOR M&E SERVICES
- (38) 600mm x 600mm HORIZONTAL BUILDERSWORK HOLE FOR GENERATOR FLUE
- (39) 600mm x 600mm VERTICAL BUILDERSWORK HOLE FOR GENERATOR FLUE
- (40) 300mm x 150mm HORIZONTAL BUILDERSWORK HOLE FOR MECHANICAL SERVICES
- (41) Ø150mm HORIZONTAL BUILDERSWORK HOLE FOR ELECTRICAL SERVICES
- (42) 100mm x 100mm VERTICAL BUILDERSWORK HOLE FOR MECHANICAL SERVICES
- (43) 50mm x 100mm VERTICAL BUILDERSWORK HOLE FOR ELECTRICAL SERVICES
- (44) 100MM X 100MM HORIZONTAL BUILDERSWORK HOLE FOR MECHANICAL SERVICES
- (45) 200mm x 100mm VERTICAL BUILDERSWORK HOLE FOR MECHANICAL SERVICES
- (46) Ø300mm HORIZONTAL BUILDERSWORK HOLE FOR FUTURE DISTRICT HEATING NETWORK CONNECTION
- (47) Ø50mm VERTICAL DUCT THROUGH CONCRETE FOR EARTH ROD AS PER EARTHING POCKET DETAIL
- (48) Ø110mm BUILDERSWORK HOLE IN WALL FOR HORIZONTAL STACK RUN (SVP/SS/RWP)
- (49) Ø150mm BUILDERSWORK HOLE IN WALL FOR HORIZONTAL STACK RUN (SVP/SS/RWP)
- (50) Ø110 MM HORIZONTAL BUILDERSWORK HOLE FOR MECHANICAL SERVICES
- (51) Ø75 MM HORIZONTAL BUILDERSWORK HOLE FOR ELECTRICAL SERVICES
- (52) Ø75 MM HORIZONTAL BUILDERSWORK HOLE FOR MECHANICAL SERVICES



BURIED UTILITIES RISK NOTE

- Buried utilities are present on and in the vicinity of the site.
- The Contractor must satisfy themselves that they have seen utility returns for the area and that appropriate Risk Assessment Method Statement (RAMS) are in place and implemented to ensure that buried and/or overhead services are located prior to any works taking place.
- Any RAMS shall address safe procedures for protection and working in the proximity of services.

Construction Note

It is essential that new drainage associated with the development is laid from the outfall(s) into the site. This is essential to avoid unforeseen obstructions where encountered (such as services). If the drainage is laid from the site out to the outfall it can result in significant abortive works to relay and overcome such obstructions.

Location of Public Sewers have been taken from record drawings which should be fully substantiated by the contractor prior to commencing works on site

All manholes covers located within carriageways shall have no slip covers to prevent motorcycles/cycles losing control

Manhole schedules - Invert level shown related to the deepest pipe within the chamber

Unless noted otherwise all proposed drainage pipes are 100mmØ

- All drainage to be plastic
- Drain runs, manhole chambers and pump chambers to be hung from basement slab due to the risk of settlement within a tidal substrate

ALL DROP POINTS TO BE CONSTRUCTED IN LINE WITH PUDLO WATERPROOFING DETAILS

SURFACE WATER DESIGN IN ABEYANCE. M&E AND LANDSCAPING INFORMATION REQUIRED

TOPOGRAPHIC SURVEY INFORMATION REQUIRED

ALL INTERNAL CHAMBERS TO HAVE RECESSED BOLT DOWN, DOUBLE SEALED COVERS

NOTES:

- All dimensions and levels are in metres unless otherwise noted
- This drawing is to be read in conjunction with the relevant Architect's/Engineer's drawings, specifications and CDM documentation
- This drawings has been produced electronically and may have been photo reduced or enlarged when copied. Work to figured dimensions only (DO NOT SCALE). All dimensions to be checked on site. Any errors or omissions to be reported to the engineer immediately.
- This drawing contains coloured lines / information that may not be clear if reproduced in black and white.
- Digital copies of this plan can only be considered accurate if supplied directly by Iesis Special Structures Limited.

DESIGNERS CDM NOTE - RESIDUAL RISKS IDENTIFIED

The design Engineer(s) have analysed this design as the scheme has been developed, in order to identify if there are any significant residual risk hazards (i.e. unusual, unexpected, abnormal or difficult).

Residual risks **HAVE** been identified and are therefore shown on this drawing. These risks have not been possible to remove by design.

This statement assumes that a competent Contractor with the appropriate qualified staff will be employed for the works, and that they will be familiar with site wide construction risks and hazards that they can reasonably be expected to encounter as part of their work.

Drainage Key

Sewers

- Foul water drain (private/non adoptable)
- Surface water drain (private/non adoptable)
- Foul water sewer (Adoptable)
- Surface water sewer (Adoptable)
- Highway drain (Adoptable)
- Existing highway drain
- Foul rising main
- Existing foul water drain (private/non adopted)
- Existing surface water drain (private/non adopted)
- Existing foul water sewer (Adopted)
- Existing surface water sewer (Adopted)
- Existing combined water sewer (Adopted)
- Redundant sewer

Chamber Key

FW/SW

- Mini access chamber (mac) - 300mmØ
- PPIC - 475mmØ*
- P.C.C. units/brick*
- Adoptable demarcation manhole within 1m of boundary
- Manhole Depth: 1.25m to 1.5m* Depth: 1.55m to 3.0m*
- Foul pumping station

* General note (Refer to standard details & longitudinal sections for chamber sizes. Size may need to increase dependant on number of incoming pipes/size of incoming pipes)

- Surface water rodding eye
- Rain water down pipe (roddable access)
- Soil vent pipe/soil stack
- Silt Trap (ST) with removable silt bucket
- Manhole reference number
- Yard gully (150mm - 200mmØ trapped)
- Road gully (trapped) D400
- Floor gully (trapped)
- Surface water sump unit
- Foul water linear drainage channel
- Cellular storage (refer to drawing for sizes)
- RWP cellular discharge/collection unit (DU) (Permavoid or similar)
- Headwall
- Tree root protection zone (RPT)
- Impermeable barrier to stop lateral movement of water
- Baffle to prevent rapid through flow of water through permeable paving

- Finished Floor Level (FFL)
- Flood exceedance routing
- Pile Cap

AS BUILT DRAWING (THIS DRAWING IS THE FINAL CONSTRUCTION ISSUE AND DOES NOT PURPORT TO BE A SURVEY OF THE WORKS AS CONSTRUCTED)

HG AS BUILT DRAWING
HG CONSTRUCTION LIMITED

FC1 10.10.25 NJ/RJW FINAL CONSTRUCTION ISSUE
REV DATE DRAWN/CHK REVISION INFO
STATUS:

FINAL CONSTRUCTION

CLIENT:
HG CONSTRUCTION

PROJECT:
**Freewharf
Shoreham-by-Sea
BN43 6RE**

DRAWING TITLE:
**Drainage Design Lower Ground Floor
(Sheet 1 of 1)**

JOB NUMBER: SE2002 SCALE AT A1: 1:200 REV. STATUS: A

DRAWING NUMBER: ISS-XX-02-DR-C-3302 REVISION: FC1

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NOTE

Final Construction based upon notations provided by HG Construction. HG Construction to confirm layout correctly reflects works carried out on site

PHASE 3 WORKS TBC

