



- This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
- Do not scale from this drawing in either paper or digital form. Use written dimensions only. To check drawing has been printed to the intended scale the above bar should be 100mm
- Abbreviations:-
 - CL - Cover Level
 - IL - Invert Level
 - MH - Manhole
 - OD - Outer Diameter
 - RWP - Rainwater Pipe
 - SVP - Soil Vent Pipe
 - UTL - Unable To Lift
- The contractor is to execute all repair works and recommendations associated with drainage to be retained and reused outlined in the Anglo Surveys CCTV report.

Drainage Key

- Proposed SW drain run
- Proposed FW drain run
- Proposed CW drain run
- Proposed Pumped Rising Main
- Existing SW drain run
- Existing FW drain run
- Existing CW drain run
- Existing Pumped Rising Main
- Public sewer
- High level drainage by others
- Proposed Channel Drain
- Redundant drain run

- RWP - Proposed / Existing Rain Water Pipe
- SVP - Proposed / Existing Soil Vent Pipe
- RE - Proposed / Existing Rodding Eye
- DP - Proposed / Existing Drainage Point
- SS - Proposed / Existing Stub Stack
- G - Proposed / Existing Gully

- Proposed SW Manhole
- Proposed FW Manhole
- Proposed CW Manhole
- Proposed Public Sewer Manhole
- Existing Manhole

Notes:

- All drainage shall comply with the typical drainage construction details and the requirements of BS EN 752.
- Access covers and frames shall comply with the loadings specified and to BS EN 124 and kitemarked or if recessed covers are specified then in accordance with FACTA association equivalent.
- The proposed building outlines shown on this drawing are for information only. Refer to Architects plans for precise location setting out information and details.
- All drainage pipework shown shall be 100mm diameter unless noted otherwise.
- All underslab drainage shall be laid at gradients of 1:40 min. for foul pipework and 1:80 min. for surface water unless noted otherwise.
- All underslab drainage shall be clear of foundations unless shown otherwise with long radius bends kept to a minimum and used where unavoidable.
- At least one soil pipe at the head of each foul run shall be vented to the atmosphere.
- All gutters shall be fitted with a leaf filter at each outlet to reduce the risk of blockage.
- All rainwater and foulwater downpipes shall be accessible above ground for rodding purposes.
- Any part of the existing drainage system to be retained as part of the new scheme shall be cleaned and inspected by CCTV survey. Any structural defects shall be repaired or replaced as may be required using appropriate and approved methods.
- Where existing access locations are to be retained the cover and frames shall be checked to ensure they are of a suitable duty for reuse and levels adjusted to suit proposed finished ground levels.
- All internal access covers shall be recessed, double sealed and lockable.
- Cover levels shown on this drawing are approximate and shall be adjusted to suit finished pavement levels on site by Contractor. Covers shall be orientated to suit pavement finishes where appropriate.
- All private drainage pipework for foul and surface water systems have been designed on the basis of UPVC to BS EN 1401-1, unless noted otherwise.
- Concrete encasement of the pipework shall be required where the vertical clearance between two pipes crossing is less than 300mm
- All existing drainage shall be assumed to be 'live' and shall be maintained at all times during the works. Existing drainage shall be reconnected to the new drainage system unless proven to be redundant for abandonment. All existing drainage to be abandoned shall be sealed by appropriate means.
- All drainage connecting to the public sewer network shall not commence until receipt of the approval from the drainage authority and shall comply with requirements using vitrified clay pipework to BS EN 295 with plain sleeved or socketed flexible joints subject to their approval.
- Upon completion all new drainage installation together with any existing drainage retained shall be jetted and CCTV surveyed. Contractor to ensure that the drainage system is fully operational, free of excess debris/silt and all identified faults rectified.
- The contractor is to execute all repair works and recommendations associated with drainage to be retained and reused.
- HEALTH & SAFETY: Future works shall be carried out by specialist competent and experienced contractors. All operatives shall have received full and appropriate training with appropriate qualifications for the operations they are required to undertake. All work shall be carried out in accordance with the relevant Health & Safety Regulations.
- Pumps and GRP chambers specifications are TBC by relevant specialists.
- For existing and demolition drainage general arrangements refer to HTS drainage drawings.
- Allow for breaking out of existing slab to form new drainage connections. Existing slabs to be reinstated following drainage installation.
- Proposed drain runs to pass under existing foundations. Existing foundation arrangements TBC by site. Any discrepancies to be reported to engineer.

Existing manhole schedule

Ref	Cover level	Invert level	Chamber size	Construction
EMH10	22.640	21.310	-	Brick and render

Proposed manhole schedule

Ref	Cover level	Invert level	Chamber size	MH Material / Type	Cover Class	Cover Size	Cover Type
FWMH4	22.600	21.835	750 x 675	Cast in situ	A15	750 x 675	Recessed, bolted & double sealed
FWMH5	22.600	21.750	1000 x 675	Cast in situ	A15	750 x 675	Recessed, bolted & double sealed

T2	20.03.18	RG	RG	Revised Tender Issue
T1	02.03.18	JH	AC	Tender Issue
Rev	Date	By	Eng	Amendments

HEYNE TILLET STEEL STRUCTURAL ENGINEERS
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Job Name
The Hope Project

Drawing Title
Proposed Ground Floor Drainage Sheet