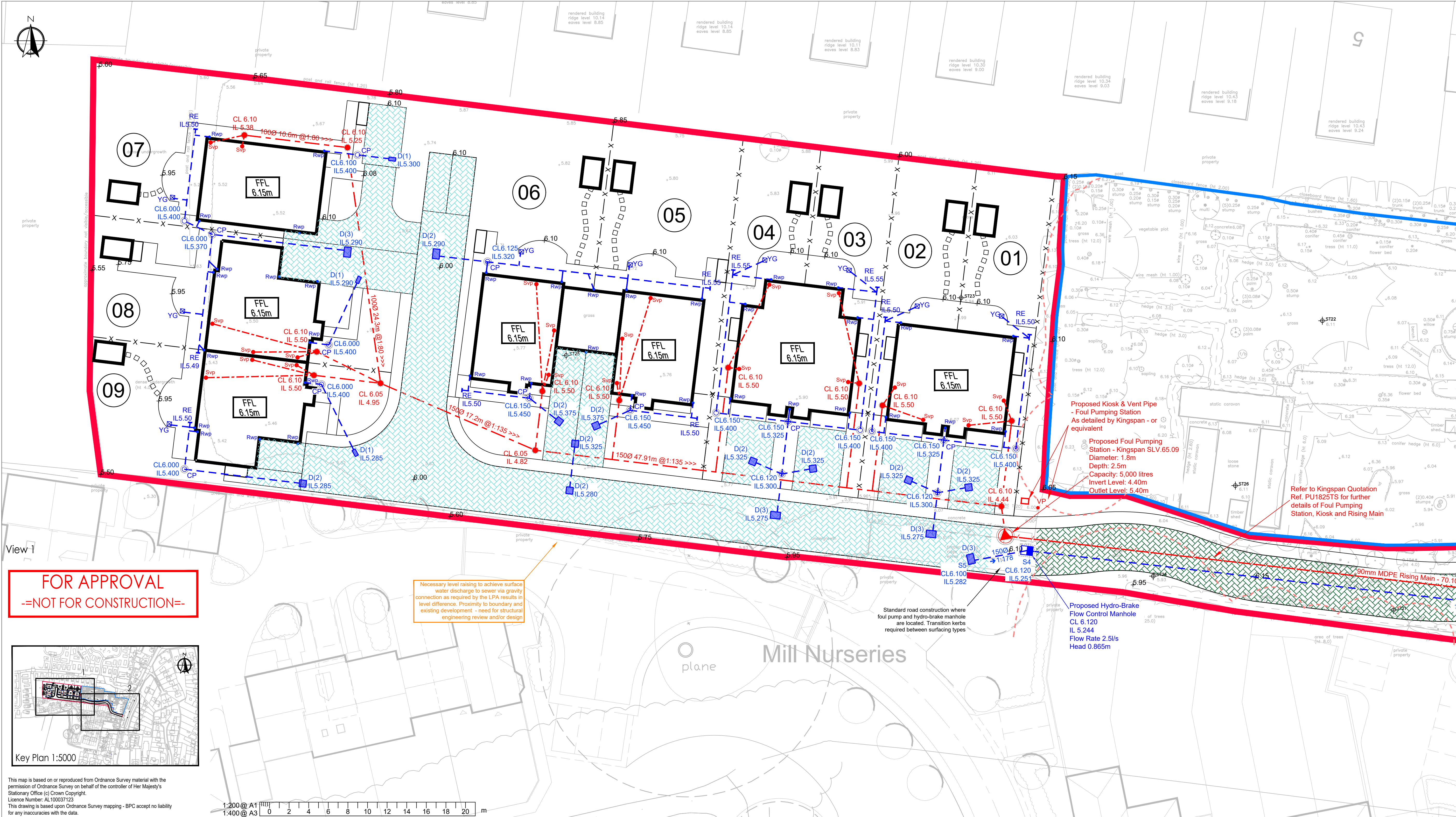




-DRAINAGE KEY-

- Rodding Point (Below Ground)
- Precast Concrete Ring Manhole (Over 1.5m Depth to Soffit, CP denotes Catchpit)
- Precast Concrete Ring Flow Control Manhole (Refer to Construction Details)
- Inspection Chamber (Max 1.2m Depth to invert, CP Denotes Catchpit)
- 450x950 Road Gully & 1500 Lateral (Double gullies must have separate laterals) Yard Gully 600mm pot
- Proposed Diffuser Unit (D(N); N=Number of Permeavoid Diffusers)
- Permeable Paving Tanked Block - 625mm Subbase thickness Root Protection Zone Freedrainage Subbase
- Proposed Foul Pumping Station
- Precast Concrete Ring Manhole
- Inspection Chamber (Max 1.2m Depth to invert)

-SURFACE WATER STRATEGY-

- Surface water disposal should be managed in view of the SuDS hierarchy;
- 1. Infiltration
- 2. Watercourse
- 3. Public Surface Water Sewer(s)
- Strategy is in accordance with RGP Design D1456 FRA 1.1 and design drawings D1456-SK300 and D1456-SK301 dated May 2018.
- Site investigation by YourEnvironment Limited found underlying conditions of London Clay, and groundwater levels of between 0.96-1.70mbgl. Infiltration measures are deemed unviable.
- There is no surface water features or watercourses available for runoff discharge from the site.
- Surface water run off from the buildings and handstanding areas will be discharged to the surface water sewer, at a controlled rate of 2.5l/s.
- Surface water run off will be attenuated within a 625mm subbase of tanked permeable block paving.
- The drainage network has been designed for 1-in-100 year storm events, with the allowance of 40% for climate change without no flooding.
- An urban creep allowance of 10% has been considered, with minimal flooding of 0.2m³ in a critical storm event, likely to pool within the permeable pavement area.

-FOUL WATER STRATEGY-

- Foul water disposal should adhere to the following hierarchy;
- 1. Public Sewer
- 2. Private Treatment Plant
- 3. Septic Tank and Drainage Field
- 4. Cesspool
- There is a foul public sewer on Pagham Road.
- The site will be discharged to the public sewer via a foul pumping station and rising main.
- The existing foul infrastructure from the Inglenook public house along the access road will discharge to the network.

EXISTING DRAINAGE ON SITE REQUIRES INVESTIGATION.

THE CONTRACTOR IS RESPONSIBLE FOR DEALING WITH THE EXISTING DRAINAGE INFRASTRUCTURE AND REPORTING CONNECTIVITY & CONDITION TO ENGINEER.

BUILDING FOUNDATION & MAIN SERVICE CORRIDOR 'LINE & LEVEL' SHALL BE DESIGNED TO SUIT THE DRAINAGE STRATEGY.

ARCHITECT TO FINALISE ALL DRAINAGE CONNECTION POINTS & THRESHOLD DRAIN REQUIREMENTS.

Drainage Notes:

- ALL DRAINAGE WORKS TO BE CONSTRUCTED IN STRICT ACCORDANCE WITH SPECIFICATION OF THE LOCAL AUTHORITY, BUILDING REGULATIONS, SEWERS FOR ADOPTION, BS8301 & BSEN 752-1.
- FOR LOCATION AND SETTING OUT OF BUILDING DRAINAGE POINTS REFER TO ARCHITECT'S DRAWINGS.
- ALL PIPES RUNS NEAR BUILDINGS TO COMPLY WITH THE BUILDING REGULATIONS 2022 PART M1. WHERE A PIPE IS WITHIN 1m OF A FOUNDATION THE TRENCH SHALL BE FILLED WITH CLASS GEN3 CONCRETE UP TO THE LOWEST LEVEL OF THE FOUNDATION. WHERE THE TRENCH IS FURTHER THAN 1m FROM THE FOUNDATION, THE TRENCH SHALL BE FILLED WITH CLASS GEN3 CONCRETE TO A LEVEL BELOW THE LOWEST LEVEL FOR THE FOUNDATION EQUAL TO THE DISTANCE FROM THE FOUNDATION LESS 150mm. IN BOTH CASES THE PIPE SHALL BE BEDDED AND SURROUNDED IN 150mm THICK CLASS GEN3 CONCRETE.
- WHERE PIPES, EXTERNAL TO THE STRUCTURES, HAVE A DEPTH TO SOFFIT FROM GROUND LEVEL OF LESS THAN 450mm THEY SHALL HAVE A CLASS GEN3 CONCRETE ENCASEMENT (150mm THICK).
- WHERE A PIPE UNDER A VEHICULAR AREA, HAS A DEPTH OF COVER OF LESS THAN 0.9m THE PIPE SHALL BE LAID IN A CONCRETE BED AND SURROUND.
- IN ANY CIRCUMSTANCES WHERE PIPES ARE BEDDED AND SURROUNDED IN CONCRETE FLEXIBLE JOINTS SHOULD BE PROVIDED. COMPRESSIBLE JOINTS (FIBREBOARD OR POLYSTYRENE) SHALL BE PROVIDED AT A MAXIMUM OF 8m CENTRES (CONCORDING WITH PIPE JOINTS). THE JOINTS SHALL BE PRE-CUT TO PIPE DIAMETER AND TO A HEIGHT AND WIDTH EQUAL TO THE CONCRETE. CROSS SECTION, A BOARD THICKNESS OF 18mm FOR PIPES UP TO 450mm NOMINAL DIAMETER AND 30mm FOR PIPES OVER 450mm NOMINAL DIAMETER.
- ALL PRIVATE BUILDING DRAINAGE SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH BS EN 752-1 UNLESS OTHERWISE SPECIFIED BUILDING DRAINAGE SHALL BE 100mm DIAMETER AND SHALL BE LAID AT A MINIMUM GRADIENT OF (CLUS = 1 IN 400) (LS = 1 IN 80) FOR FOUL DRAINS AND 1 IN 80 FOR SURFACE WATER DRAINS. ALL BUILDING DRAINS SHALL BE LAID IN CONJUNCTION WITH NON ADOPTIVE BEDDING DETAILS (CLASS D, N OR B) UNLESS OTHERWISE SPECIFIED. TWIN WALL PIPES ARE NOT PERMITTED FOR BUILDING DRAINAGE.
- ALL ADAPTABLE SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH 'DESIGN AND CONSTRUCTION GUIDANCE' PUBLISHED BY WATER UK.
- ALL PIPES, BENDS AND JUNCTION FOR PRIVATE BUILDING DRAINAGE SHALL BE UPVC CONFORMING TO BS4609 AND BS5481 AS APPROPRIATE AND SHALL BE LAID IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION. ALL PIPES, BENDS AND JUNCTION MATERIALS FOR ADAPTABLE DRAINAGE SHALL BE VITRIFIED CLAY, EXTRA STRENGTH OR SUPER STRENGTH TO BS EN 296, WITH FLEXIBLE JOINTS AND KITEMARK CERTIFIED.
- ALL BACK INLET GULLIES TO BE RODDABLE OR CONNECTED TO INSPECTION CHAMBERS.
- ALL GULLY CONNECTIONS OTHER THAN AT MANHOLES TO BE 'Y' JUNCTIONS.
- ALL ROAD GULLY CONNECTIONS TO BE 150mm DIAMETER.
- ALL STUB STACKS TO BE FITTED WITH AIR ADMITTANCE VALVES WHERE BRANCH DRAIN EXCEEDS 12m EXCEPT AT THE HEAD OF THE RUN. SOLVENT PIPES LOCATED AT THE HEAD OF A RUN TO TERMINATE TO FRESH AIR.
- ALL CONNECTIONS TO BE SOFFIT TO SOFFIT UNLESS OTHERWISE NOTED.
- ALL CONCRETE AND CONCRETE PRODUCTS TO BE IN ACCORDANCE WITH BRE 363 FOR SULPHATES.
- THE LOCATIONS OF ALL SVPS AND RWPS SHALL BE CROSS REFERENCED AGAINST THE ARCHITECT'S DRAWINGS DURING SETTING OUT.
- THE PRECISE DEPTH AND LOCATION AND SIZE OF EXISTING PIPES OR MANHOLES WHERE CONNECTIONS OR DIVERSION ARE PROPOSED MUST BE CONFIRMED AND REPORTED TO THE ENGINEER BEFORE WORKS START ON SITE.
- ANY WORKS WITHIN AN EXISTING WATERCOURSE TO BE CARRIED OUT IN ACCORDANCE WITH THE 'ORDINARY WATERCOURSE CONSENT' ISSUED BY THE LEAD LOCAL FLOOD AUTHORITY.
- WHERE PRIVATE ACCESS OR INSPECTION COVERS ARE INSTALLED IN AREAS OF BLOCK PAVING OR PAVING SLABS THEY SHALL BE FITTED WITH A RECESSED COVERED INFILLED WITH THE ADJACENT SURFACING MATERIAL.

RESIDUAL HAZARDS

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, note the following:

- Buried services. Contractor to refer to record drawings and use CAT to locate existing services and undertake necessary precautions and investigation prior to excavating.
- Working in live traffic. Contractor to ensure traffic management is designed, erected and maintained to protect the workforce and the public. Contractor to undertake necessary precautions and ensure suitable traffic management is in place prior to commencement.
- Working in live sewers. Contractor to ensure operatives are familiar and competent with the dangers of working in live sewers.
- Excavations close to existing structures. Contractor to prepare method statement to ensure protection of roots underneath the existing compacted access road surface.
- Stability of existing structure unknown.
- Working within root protection zones, contractor to prepare method statement to ensure protection of roots underneath the existing compacted access road surface.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement

NOTES

- This drawing is to be read in conjunction with all other BPC drawings, and with all relevant Architect's and Engineer's drawings and specification. Any discrepancies found are to be reported immediately to the Engineer.
- BPC accepts no responsibility for inaccuracies in data provided by third parties such as topographic surveys or Ordnance Survey mapping.
- Do not scale, work to figured dimensions only. All dimensions are in millimeters unless noted otherwise and all levels are in metres from the topographic survey datum.
- Any information given regarding existing underground services is given in good faith after consultation with the relevant authority, however accuracy is not certain. The main contractor is responsible for checking all information on site prior to work commencing and taking due care whilst undertaking the works.
- All dimensions to be checked on site. All details and dimensions relating to sub-contractor work must be checked and agreed between the sub-contractor or supplier and the general contractor.
- The electronic information from this drawing can not be guaranteed as dimensionally drawn exact. Figured dimensions must be used for setting out and detailing. BPC logos and company information must be removed from copies if information is re-used.
- The main contractor is responsible for the design of all temporary works, and is also responsible for the safe maintenance and stability of existing buildings at all times.
- The main contractor is responsible for dealing with all occurrences of ground water during the construction period.
- The contractor must comply with all current legislation relating to health & safety.
- All products specified shall be installed in strict accordance with the manufacturers recommendations and instructions. If there are discrepancies between that information and the details on any BPC drawings, the manufacturers instructions must be used.
- All Earthworks in accordance with the Specification for Highway Works.

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Drawing Status: **FOR APPROVAL**

Client: **Future Group Development Ltd**

Project: **Land at The Inglenook
Pagham Road, Bognor Regis PO21 3QB**

Drawing Title: **Proposed Drainage Arrangement
Sheet 1 of 2**

Scale: **1:200** Date: **May 2021** Drawn By: **DJL** Checked By: **MJA**

Drawing No: **D1966-103.1** Rev: **-**