

DRAINAGE LEGEND

EXISTING FEATURES

- Ex FWD Existing foul water sewer/drain and manhole
- Ex SWD Existing surface water sewer/drain and manhole
- Existing foul/surface water sewer/drain and manhole to be abandoned

PROPOSED FEATURES

- FWD Foul Drainage
- Foul Rising Main
- SWD Surface Water Drainage
- CD Channel drain
- Storm water inspection chamber (4500)
- Storm water catchpit chamber (4500)
- Storm water rodding eye
- Extent of permeable paving with porous sub-base
- Foul water inspection chamber (4500)
- Masonry retaining wall (shown indicatively only)
- Proposed surface level (shown indicatively only)
- Final design to be confirmed at detail design stage
- Finished floor level (assumed - shown indicatively only)

1000 4.5m 1:100
Z BED

ABBREVIATIONS

- MH - MANHOLE
- IC - INSPECTION CHAMBER
- AC - ACCESS CHAMBER
- CP - CATCHPIT
- BC - BRAKE CHAMBER
- RE - RODDING EYE
- IL - INVERT LEVEL
- SL - SUMP LEVEL
- RA - RESTRICTED ACCESS COVER
- CL - COVER LEVEL
- TL - TOP OF CELLULAR SA
- BL - BASE OF CELLULAR SA
- FL - FORMATION LEVEL

DESIGN SUBJECT TO THE APPROVAL OF:
PLANNING AUTHORITY
BUILDING CONTROL
WATER AUTHORITY

DESIGN SUBJECT TO THE CONFIRMATION OF:
EXTERNAL LEVELS DESIGN BY OTHERS
SECTION 106 APPLICATION
LOCATION AND DEPTH OF EXISTING UTILITIES
ROOT PROTECTION AREAS

Site Specific Notes

- The proposed surface water runoff design is based on a desktop study and an assumed infiltration rate. Based on the CCTV survey the surface water runoff from the existing site is currently partially discharged into the ground via infiltration and partially into the existing foul sewers, it is presumed that infiltration may be a feasible method for surface water runoff management.
- Due to the presence of soils with good infiltration potential at shallow depths, it is proposed that all surface water runoff be discharged into the ground via infiltration at an assumed rate of 4 x 10⁻⁵ m/s. The underground soil infiltration rate has been assumed based on CIRIA report C753, table 25.1, which indicates a typical infiltration rate of 1 x 10⁻⁵ x 10⁻⁵ m/s for slightly silty, slightly clayey sand soils. All infiltration units are to be located within the top soil layers and will not be deeper than 1.4m below ground level (BGL).
- All roof areas are to be collected into a positive drainage network before being discharged into the ground through a geocellular soakaway. Hard paved areas are to be freely drained into the ground using porous construction. All infiltration features on site are designed to accommodate a 1-in-100-year storm event plus 45% for climate change. An onsite infiltration test following the BRE365 method will be required to confirm the actual infiltration rate of the soil.
- An on-site BRE365 infiltration test will be conducted at detailed design stage to confirm the actual infiltration rates.



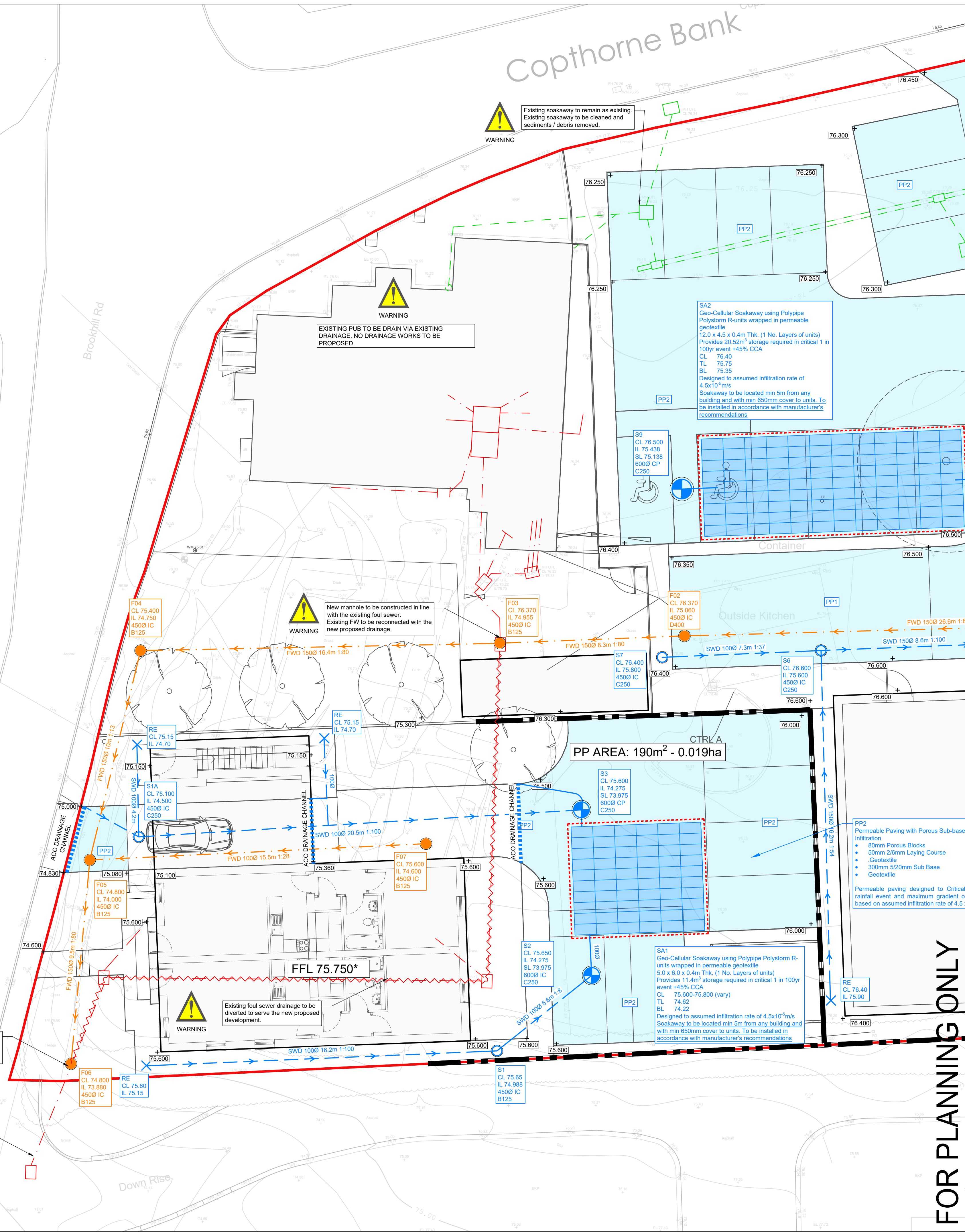
Hillside

regg



New manhole to be constructed in line with the existing foul sewer. Existing FW IL unknown and to be confirmed on site to inform detail design.

Existing foul sewer pipe to be upgraded to 150mmØ, subject to existing manhole outlet pipe diameter. Final FW pipe Ø to be confirmed on site prior works commencing.



STANDARD DRAINAGE NOTES

- DO NOT SCALE FROM THIS DRAWING. REFER TO FIGURED DIMENSIONS ONLY. THE CONTRACTOR SHOULD CHECK ALL DIMENSIONS ON SITE.
- ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS ARE IN METERS UNLESS NOTED OTHERWISE.
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT AND ENGINEERING DETAILS, DRAWINGS AND SPECIFICATIONS.
- ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT AND/OR ENGINEER IMMEDIATELY, SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO THE COMMENCEMENT OF WORK.
- BEFORE COMMENCING CONSTRUCTION THE CONTRACTOR MUST CHECK THE INVERT LEVELS OF EXISTING SEWERS TO WHICH CONNECTIONS ARE MADE. IN ADDITION THE CONTRACTOR MUST LOCATE AND DETERMINE INVERT LEVELS OF THE EXISTING SPURS TO WHICH CONNECTIONS ARE PROPOSED. ANY DISCREPANCIES ARE TO BE NOTIFIED TO THE ENGINEER IMMEDIATELY, PRIOR TO CONSTRUCTION.
- ALL DRAINAGE WORKS SHOULD COMMENCE AT THE PROPOSED DOWNSTREAM CONNECTION POINT. THE WORKS CONTINUING UPSTREAM FOLLOWING CONFIRMATION OF THE TIE-IN INVERT LEVELS TO THE ENGINEER. CONNECTIONS TO MANHOLES OR LARGER SIZED PIPES ETC. SHOULD BE SOFFIT TO SOFFIT UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER, IF THIS IS NOT POSSIBLE INFORM THE ENGINEER IMMEDIATELY.
- COVER LEVELS SHOWN ARE APPROXIMATE. COVERS AND FRAMES SHALL BE SET TO FINISHED GROUND LEVELS AND FALLS.
- ALL UN-REFERENCED PIPES ARE TO BE 100mm DIA.
- ALL PIPES TO BE ADOPTED, OR CONNECTING TO ADOPTED SEWERS, TO BE VITRIFIED CLAY TO BS EN 295 AND BS85 (SWS ONLY), OR CONCRETE PIPES TO BE EN 1916 AND BS5911-PART 1.
- ROAD GULLY OUTLET PIPES ARE TO BE 150mm DIA. WITH CONCRETE SURROUND AND FLEXIBLE JOINTS. ALL GULLIES SHALL BE FITTED WITH GRADE D400 GRATINGS AND FRAMES TO BS EN124, UNLESS OTHERWISE STATED.
- ALL ADOPTABLE SEWERS SHALL BE CONSTRUCTED TO THE STANDARDS AND SPECIFICATION LAID DOWN DOWN IN SEWERS FOR ADOPTION 6th EDITION, WITH A VIEW TO ADOPTION UPON COMPLETION OF WORKS.
- ALL PRIVATE DRAINAGE TO BE IN ACCORDANCE WITH THE BUILDING REGULATIONS APPROVED DOCUMENT PART-H, AND TO THE SATISFACTION OF THE BUILDING CONTROL INSPECTOR.
- THE CONTRACTOR IS TO KEEP A RECORD OF ANY VARIATIONS MADE ON SITE, INCLUDING THE RELOCATION OF SEWERS OR DRAINS, SO THAT AN AS CONSTRUCTED DRAWING CAN BE PREPARED UPON COMPLETION OF THE PROJECT.
- STUB CONNECTIONS TO ADOPTABLE MANHOLES SHALL BE MADE FROM VITRIFIED CLAY AND CONSIST OF TWO ROCKER PIPES LAID AT THE SAME GRADIENT AS THE UP OR DOWNSTREAM PIPE.
- IF ANY SUB SOIL DRAINAGE SYSTEMS ARE UNCOVERED DURING THE WORKS CONTACT THE ENGINEER FOR INSTRUCTIONS. SUB SOIL DRAINS ARE TO BE DIVERTED AROUND NEW WORKS AND CONNECTED INTO THE SURFACE WATER.
- NO PRIVATE AREAS ARE TO DRAIN INTO ADOPTABLE AREAS AND VICE VERSA.
- ALL EXISTING MANHOLE COVER'S, GULLIES, ETC. ARE TO BE RAISED/LOWERED TO SUIT NEW LEVELS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THE LOCATION AND DEPTH OF ALL EXISTING SERVICES AND UTILITIES THAT MAY BE PRESENT.
- UPON COMPLETION BUT PRIOR TO HANDOVER, CONTRACTOR TO CARRY OUT FULL CCTV SURVEY OF DRAINAGE SYSTEM WHICH IS TO BE REVIEWED BY ENGINEER TO ENSURE SATISFACTORY INSTALLATION
- MANHOLE AND CHAMBER COVER GRADES:

- 'A15' IN ALL LANDSCAPED AREAS AND ON FOOTPATHS
- 'B125' IN ALL DRIVEWAYS
- 'C250' IN PRIVATE PARKING AREAS
- 'D400' IN CARRIAGEWAY/ACCESS ROAD

Prefixed to drawing numbers shall signify the following:-

- PL = PLANNING **Shall not be used for contract or construction purposes**
- P = PRELIMINARY **Shall not be used for contract or construction purposes**
- T = TENDER **Shall not be used for construction purposes**
- C = CONSTRUCTION These are the only drawings that shall be used for construction purposes
- R = RECORD Record of actual completed work

P-	14.10.24	PRELIMINARY ISSUE	TZ	CS	CS
REV	DATE	DESCRIPTION	BY	CHK	APP

cgs civils Consulting Civil Engineers				
CLIENT WESTCOAST DEVELOPMENTS				
ARCHITECT UAN ARCHITECTURE				
JOB TITLE PRINCE ALBERT, COPTHORNE BANK COPTHORNE, CRAWLEY, RH10 3QX				
DRAWING TITLE PROPOSED SW & FW DRAINAGE PLAN SHEET 2				
DRAWN TZ	ENGINEER TZ	CHECKED CS	APPROVED CS	
DATE SEPT 2024		SCALE @ A1 1:100		
JOB No. C3261	STATUS P	DRAWING No. 202		REV. P-

FOR PLANNING ONLY