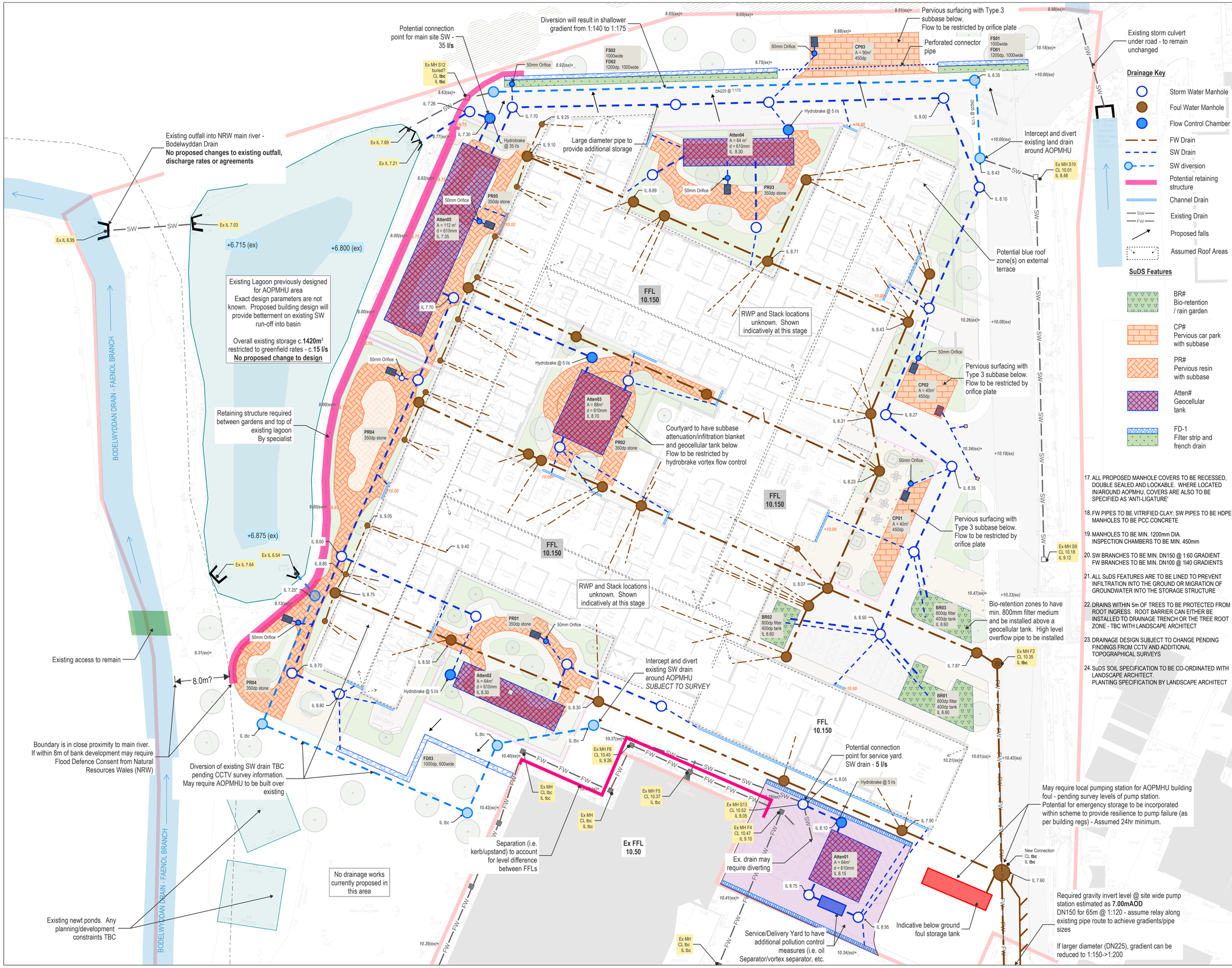

Drainage Key

- Storm Water Manhole
- Foul Water Manhole
- Flow Control Chamber
- FW Drain
- SW Drain
- SW diversion
- Potential retaining structure
- Channel Drain
- Existing Drain
- Proposed falls
- Assumed Roof Areas

SuDS Features

- BR# Bio-retention / rain garden
- CP# Pervious car park with subbase
- PR# Pervious resin with subbase
- Atten# Geocellular tank
- FD-1 Filter strip and french drain

17. ALL PROPOSED MANHOLE COVERS TO BE RECESSED, DOUBLE SEALED AND LOCKABLE. WHERE LOCATED IN/AROUND AOPMHU, COVERS ARE ALSO TO BE SPECIFIED AS 'ANTI-LIGATURE'
18. FW PIPES TO BE VITRIFIED CLAY; SW PIPES TO BE HDPE; MANHOLES TO BE PCC CONCRETE
19. MANHOLES TO BE MIN. 1200mm DIA. INSPECTION CHAMBERS TO BE MIN. 450mm
20. SW BRANCHES TO BE MIN. DN150 @ 1:60 GRADIENT FW BRANCHES TO BE MIN. DN100 @ 1\40 GRADIENTS
21. ALL SuDS FEATURES ARE TO BE LINED TO PREVENT INFILTRATION INTO THE GROUND OR MIGRATION OF GROUNDWATER INTO THE STORAGE STRUCTURE
22. DRAINS WITHIN 5m OF TREES TO BE PROTECTED FROM ROOT INGRESS. ROOT BARRIER CAN EITHER BE INSTALLED TO DRAINAGE TRENCH OR THE TREE ROOT ZONE - TBC WITH LANDSCAPE ARCHITECT
23. DRAINAGE DESIGN SUBJECT TO CHANGE PENDING FINDINGS FROM CCTV AND ADDITIONAL TOPOGRAPHICAL SURVEYS
24. SuDS SOIL SPECIFICATION TO BE CO-ORDINATED WITH LANDSCAPE ARCHITECT. PLANTING SPECIFICATION BY LANDSCAPE ARCHITECT

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Notes

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
3. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
5. THIS SKETCH HAS BEEN CREATED USING THE FOLLOWING DRAWINGS:
   - LANDSCAPE GA *2078302-SBC-00-XX-DR-L-001 Rev PR01*
   - EXISTING DRAINAGE RECORD DRAWINGS
6. THE PROPOSED SURFACE WATER NETWORK HAS BEEN DESIGNED TO DISCHARGE AT THE PREDEVELOPMENT 1-1YR BROWNFIELD RATES FOR ALL STORMS UP TO AND INCLUDING M100 YR +40% CLIMATE CHANGE DESIGN FLOW = **40.0 l/s** (tbc pending detailed design and consultations)
7. THE REQUIRED SW STORAGE VOLUMES FOR AOPMHU HAVE BEEN ESTIMATED BETWEEN **325-555m³** USING HYDRAULIC SOFTWARE and DISCHARGE = 40.0 l/s
8. THE DESIGN OF THE EXISTING DRAINAGE LAGOON AND FINAL OUTFALL ARE TO REMAIN AS EXISTING AND THERE ARE NO PROPOSALS TO UNDERTAKE ANY WORKS IN THE AREA - EXCEPT MAKING A FINAL CONNECTION INTO THE EXISTING HEADWALLS
9. THIS DESIGN IS SUBJECT TO APPROVAL BY THE LLFA AND SAB AS WELL AS ACCEPTANCE FROM DCWW FOR WASTEWATER FLOWS
10. THE FOUL DRAINAGE NETWORK IS NOT DESIGNED FOR ANY SPECIALIST WASTE (I.E. RADIOACTIVE OR CHEMICAL WASTEWATER)
11. LEVELS AND LOCATIONS OF DRAINS AND PIPES ARE INDICATIVE AND ARE TO BE CO-ORDINATED WITH THE LANDSCAPE LAYOUT, TREE LOCATIONS, BUILDING SUBSTRUCTURE AND MEP SERVICES
12. EXTERNAL HARDSTANDING AREAS ARE LIKELY TO REQUIRE ADDITIONAL DRAINAGE ELEMENTS SUCH AS GULLIES AND CHANNELS THAT ARE NOT SHOWN ON THIS SKETCH
13. FOUL POPULATION IS REQUIRED TO BE ABLE TO ASSESS THE AVERAGE DAILY WASTEWATER LOADS FROM AOPMHU.
    FOLLOWING RESULTS OF CCTV CONNECTIVITY AND CONDITION SURVEY, A FINAL CONNECTION DESIGN INTO THE EXISTING ON-SITE PRIVATE PUMP STATION CAN BE MADE.
    AT THIS STAGE, ALLOWANCE FOR FOUL WATER TO BE PUMPED FROM AOPMHU INTO EXISTING WET-WELL
14. BELOW GROUND DRAINAGE CONNECTIVITY/LEVELS ARE INDICATIVE AND SUBJECT TO SIZING AND LOCATIONS OF RWPs AND FOUL POP-UPS - TBC WITH MEP ENGINEER
15. IT IS ASSUMED THAT INFILTRATION IS NOT POSSIBLE DUE TO THE PRESENCE OF UNDERLYING CLAY AND PERCHED GROUNDWATER. THIS IS TBC DURING THE GROUND INVESTIGATION.
    IF INFILTRATION IS PROVEN TO BE VIABLE, THE CAR-PARKS AND BIO-RETENTION AREAS SHALL BE ADAPTED.
    IT WOULD NOT BE RECOMMENDED TO INFILTRATE FOR THE COURTYARD AREAS DUE TO PROXIMITY TO BUILDINGS/FOUNDATIONS
16. EXTERNAL DRAINAGE SUBJECT TO DETAILED LANDSCAPE LEVELS AND TIE-IN WITH EXISTING

Rev	Description	Date	By	Chk	App
P01	DRAFT FOR COMMENT	03/02 2023	GS	-	-

S2 - FOR INFORMATION

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AOPMHU PROPOSED BELOW GROUND DRAINAGE STRATEGY

Project No:	Scale (@A1):	Drawn:	Date:
1620007255	NTS / 1:200	GS	JAN '23

Drawing No: AOPMHU-RAM-ZZ-XX-SK-C-00004 Rev: P01

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