

HEALTH & SAFETY RISKS

IN ADDITION TO THE STANDARD HAZARDS AND RISKS NORMALLY ASSOCIATED WITH THE TYPE OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING RESIDUAL HEALTH AND SAFETY RISKS:

CONSTRUCTION RISKS

- CR01 GARE TO BE TAKEN AROUND DEEP EXCAVATIONS. PLANT TO BE KEPT AT SAFE DISTANCE.
- CR02 EXISTING DRAINAGE AND SERVICE INFRASTRUCTURE NOT TO BE COMPROMISED. OVERHEAD POWER CABLES.
- CR03 CONSTRUCTION ADJACENT TO TRAFFIC.
- CR04 GARE TO BE TAKEN IN VICINITY OF OVERHEAD CABLES.
- CR05 CONTRACTOR TO TAKE MEASURES TO PROTECT HIS OPERATIVES WITH RESPECT TO THE PRESENCE OF POTENTIAL GAS IN SEWER TRENCHES AND MANHOLES THROUGH THE USE OF GAS MONITORING EQUIPMENT AND BREATHING APPARATUS AS REQUIRED.
- CR06 CONTRACTOR TO TAKE MEASURES TO PROTECT HIS OPERATIVES WITH RESPECT TO POTENTIAL UNKNOWN GROUND CONTAMINATION DURING EXCAVATION. CONTAMINATED MATERIAL TO BE REMOVED TO A LICENSED TIP.

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING IN ACCORDANCE WITH THE REQUIREMENTS DEFINED IN THE REGULATIONS.

GENERAL NOTES:

G01 ALL WORKS SUBJECT TO SECTION 38, SECTION 60(7)(b) AND SECTION 104 AGREEMENTS TO BE APPROVED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF WORKS.

G02 ALL LEVELS ARE IN METRES AND ABOVE CHANGING DATUM UNLESS NOTED OTHERWISE.

G03 ALL WORKS TO BE UNDERTAKEN IN COMPLIANCE WITH BS 800 FOR WORKMANSHIP ON BUILDING SITES.

G04 ABBREVIATIONS: M4 - MANHOLE
 CL - COVER LEVEL
 IL - INVERT LEVEL
 S - SURFACE WATER
 F - FLOW
 SD - DEMARCATION CHAMBER
 FC - FLOW CONTROL CHAMBER
 CONC - CONCRETE
 VC - VITRIFIED CLAY
 FFL - FINISHED FLOOR LEVEL
 DWG - DRAWING

SECTION 104 ADOPTION NOTES:

1. ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH 'CODE FOR ADOPTION', THE RELEVANT BRITISH STANDARD AND THE ADOPTING WATER AUTHORITY'S STANDARD REQUIREMENTS SPECIFICATION TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
2. MANHOLE COVERS SHALL HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 100mm DEEP FRAMES IN HIGHWAYS.
3. FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF THE ADOPTING WATER AUTHORITY BEFORE ANY SEWER WORKS ARE CARRIED OUT.
4. THE ADOPTING WATER AUTHORITY IS NOT OBLIGED TO ACCEPT FILTER DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM DIRECTLY OR INDIRECTLY. AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO CONSULT WITH THE LOCAL AUTHORITY. LAND DRAINAGE SECTION REGARDING THE DISPOSAL OF THE FILTER DRAINAGE RUN-OFF.
5. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.9m FROM KERBS AND SERVICE MARKERS.
6. SEWERS MUST HAVE 3 METRES CLEARANCE FROM TREES AND HEDGES OR THE WIDTH OF THE CANOPY AT MATURE HEIGHT.
7. SEWERS TO BE LAID IN CLASS 'D' BEDDING 100mm GRANULAR BED AND SURROUNDING. WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VESSES OR LESS THAN 100mm IN HOME VEHICULAR ACCESS AREAS THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE GRANULAR BED AND SURROUND.
8. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER MAINS SPECIFICATION (M4) TABLE A2.
9. TYPE '1C' BRICK MANHOLES AND 100mm DIAMETER MANHOLE RINGS ARE NOT PREFERRED. INSTEAD, IT IS PREFERRED THAT YOU USE A TYPE 'B' MANHOLE WITH 100mm DIA. OR 150mm DIAMETER RINGS, WITH THE COVER SET OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1.5m.
10. ADOPTABLE PLASTIC SEWER PIPES TO BE BS KITEMARKED / CERTIFIED TO BS 4763 AND BS EN 12566. ADOPTABLE PLASTIC RINGS TO BE LARGER THAN MAXIMUM METRE LENGTH UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO USE LONGER LENGTHS. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD REQUIRE CLAYWARE CHANNEL IN MANHOLES.
11. THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 100mm DIA. 40N/m², 150mm DIA. 40N/m², 225mm DIA. 45N/m² AND 300mm DIA. 70N/m². THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE CLASS D TO EN 12518 (1:200). PLASTIC PIPES SHOULD CONFORM TO BS 4763 AND BS EN 12566.
12. WHERE A 600mm COVER AND FRAME HAS BEEN PROVIDED, THIS MUST NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREEN COVERS ARE NOT ACCEPTABLE.
13. THERE MUST BE ENOUGH CLEARANCE AT CROSSOVERS TO ACCOMMODATE BEDDING TO BOTH PIPES. APPROX. 100mm OF CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY NEED TO BE INCREASED.

THE INFORMATION ON THIS DRAWING IS FOR APPROVAL PURPOSES ONLY. NO LIABILITY FOR CONSTRUCTION ERRORS OR OMISSIONS CAN BE ACCEPTED. APPROVAL IS NOT GIVEN FROM THE ADOPTING WATER AUTHORITY.

NOTES ON PROTECTION OF EXISTING WATER MAINS APPARATUS

1. ALL EXCAVATION WORKS NEAR TO EXISTING WATER MAINS APPARATUS SHOULD BE BY HAND DIGGING ONLY.
2. BACKFILL WITH A SUITABLE MATERIAL TO A MINIMUM 300mm ABOVE EXISTING WATER MAINS APPARATUS IS REQUIRED.
3. WHERE SURFACE LEVELS ARE TO BE INCREASED OR DECREASED, ALL SURFACE ROUES MUST BE ADJUSTED PRIOR TO THE EXCAVATION.
4. ADEQUATE SUPPORT MUST BE PROVIDED WHERE ANY WORK PASSES UNDER EXISTING WATER MAINS APPARATUS.
5. JOINTING CHAMBERS, LIGHTING COLUMNS AND OTHER STRUCTURES MUST BE INSTALLED IN SUCH A WAY THAT FUTURE REPAIR OR MAINTENANCE WORKS TO WATER MAINS APPARATUS WILL NOT BE HINDERED.
6. APPARATUS SUCH AS RAILINGS, SIGN POSTS, ETC. MUST NOT BE PLACED IN SUCH A WAY THAT THEY PREVENT ACCESS TO OR FULL OPERATION OF CONTROLLING VALVES, STOPVALVES OR SHUT-OFF VALVES. CHAMBER LIDS MUST NOT BE BURIED OR COVERED.
7. CORE DRILLS SHALL NOT BE USED WITHIN 100 METRES OF ANY WATER MAINS APPARATUS OR INSTALLATIONS.
8. VIBRATING PLANT SHOULD NOT BE USED DIRECTLY OVER ANY APPARATUS.
9. UNDER NO CIRCUMSTANCES SHOULD TRUST BORING OR SIMILAR TRENCHLESS TECHNIQUES COMMENCE UNTIL THE ACTUAL POSITION OF WATER MAINS AND SERVICES ALONG THE PROPOSED ROUTE HAVE BEEN CONFIRMED BY TRAIL HOLES.
10. IMPACT PILING MUST NOT TAKE PLACE WITHIN 10m OF WATER MAINS APPARATUS. CORE DRILLING MUST NOT TAKE PLACE WITHIN 5m OF WATER MAINS APPARATUS.
11. ANY DAMAGE CAUSED OR OBSERVED TO WATER MAINS APPARATUS MUST BE IMMEDIATELY REPORTED TO THE RELEVANT AUTHORITIES.
12. SHOULD THE AUTHORITIES INCUR ANY COSTS AS A RESULT OF NON-COMPLIANCE WITH THE ABOVE, COSTS MAY BE RECHARGEABLE.

P2	REVISED TO LATEST DETAILS	21.08.23	JP	JAG	JAG
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Rev	Description	Date	By	Chk	App

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Project: **Proposed Residential Development at Barrow Road, Barton Upon Humber**

Client: **Strata Homes Ltd**

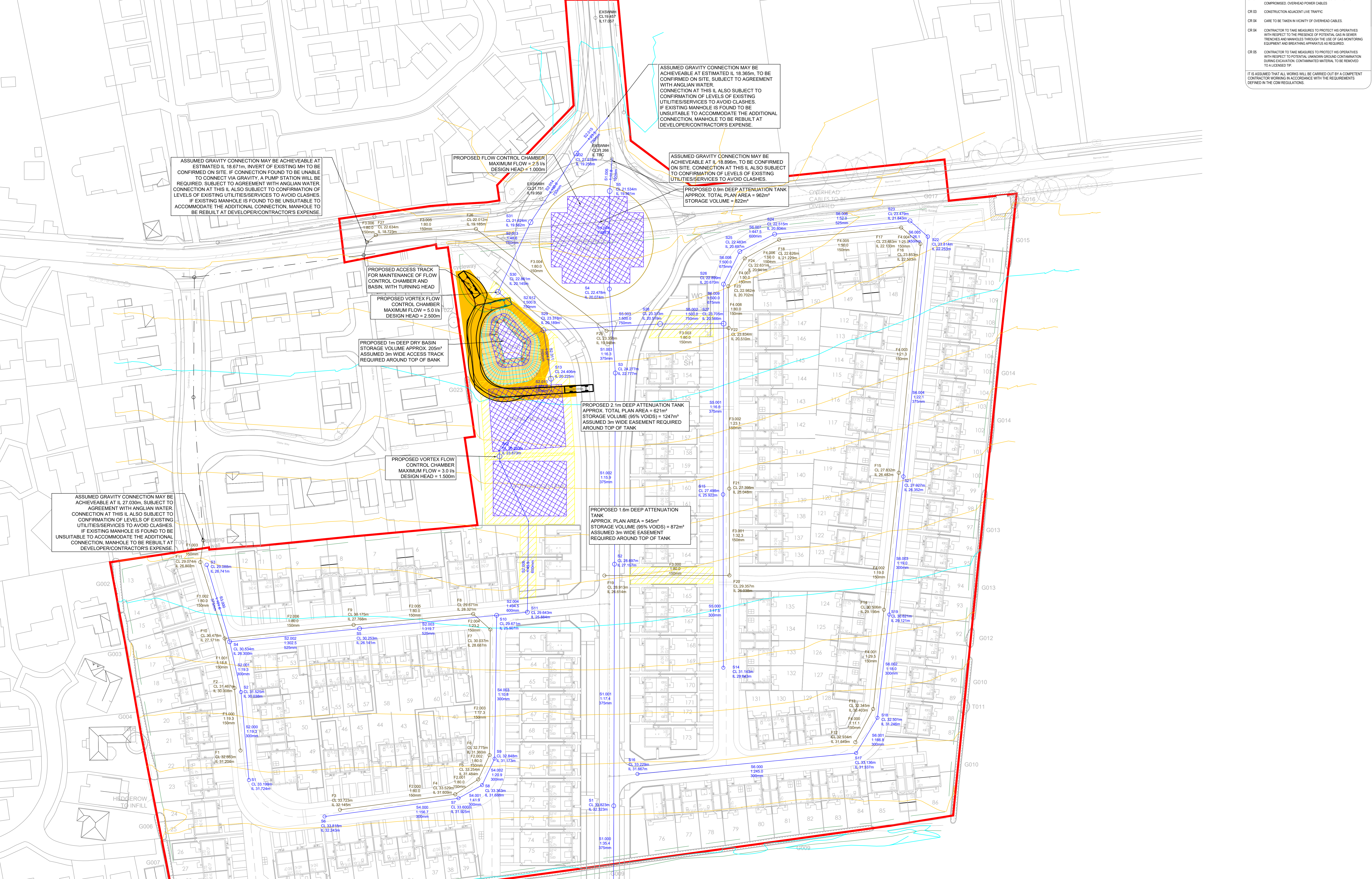
Drawing: **Drainage Feasibility - Option 7B - FW Outfall by Gravity to Canberra View**

Discipline: **CIVIL ENGINEER**

Drawing Status: **PRELIMINARY** Submittal Code: **S3**

Job no. **47658** Scale: **As NOTED** Rev: **P2**

Project: **BRBH - AWP - ZZ - XX - SK - C - 3008**



Section of link road shown beyond the red line boundary to be delivered by others

100mm at A0