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HEALTH AND SAFETY INFORMATION

Hazards, that would not have been foreseen by a reasonably competent contractor, have been identified by the designer ;

- EXCAVATING NEAR LIVE SERVICES
- WORKING ADJACENT TO LIVE TRAFFIC
- DEEP EXCAVATIONS GUARD AGAINST FALLS/TRIPS

DRAINAGE NOTES

1. NO WORK SHOULD COMMENCE ON SITE UNTIL WRITTEN APPROVAL IS RECEIVED FROM THE ADOPTING HIGHWAY AUTHORITY, ADOPTING DRAINAGE COMPANY, NHBC, ENVIRONMENT AGENCY AND/OR ANY OTHER RELEVANT AUTHORITY. WORKS UNDERTAKEN PRIOR TO APPROVAL ARE AT THE DEVELOPER'S RISK AND URBAN VISION PARTNERSHIP WILL NOT BE HELD RESPONSIBLE FOR SUBSEQUENT DELAYS IN APPROVALS, REMEDIAL COSTS OR DELAYS.
2. ALL INVERT LEVELS OF EXISTING FOUL AND SURFACE WATER SYSTEMS ARE TO BE CONFIRMED PRIOR TO THE COMMENCEMENT OF ANY ON SITE DRAINAGE WORKS, ANY DISCREPANCY IN LEVELS IS TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
3. DRAINAGE LAYOUT SUBJECT TO COORDINATION WITH SERVICES AND LANDSCAPING REQUIREMENTS.
4. ALL ADOPTABLE SEWERS, UNLESS OTHERWISE STATED, SHALL BE:
 150MM - 300MM DIA TO BE VITRIFIED CLAY.
 375MM DIA AND GREATER TO BE CLASS 120 CONCRETE PIPES.
5. ALL VITRIFIED CLAY PIPES TO BS EN 295-1:
 ALL CONCRETE PIPES TO BE TO BS EN 1916.
 ALL CONCRETE MANHOLES TO BE TO BS EN1917.
6. FIRST PIPE OUT OF MANHOLES TO BE AS SHORT AS PRACTICABLE SO AS TO PROVIDE A FLEXIBLE JOINT AS CLOSE AS POSSIBLE TO THE OUTSIDE FACE OF THE CONCRETE SURROUND AND CONNECTED TO A ROCKER PIPE.
7. ALL PIPE DIAMETERS GIVEN ARE NOMINAL INTERNAL PIPE DIAMETERS INCLUDING RISING MAINS.
8. ALL ADOPTABLE SEWER WORKS TO COMPLY WITH WRC "SEWERS FOR ADOPTION - 6TH EDITION" UNITED UTILITIES REQUIREMENTS AND KITEMARKED (OR SIMILAR APPROVED) WHERE PRACTICABLE. WHERE CONFLICTING DETAILS OCCUR, UNITED UTILITIES DETAILS SHALL TAKE PRECEDENCE IN ALL CASES.
9. MANHOLE COVERS SHALL / MUST HAVE A CLEAR OPENING OF 600MM AND SHALL BE CLASS D400 TO BS EN 124 WITH 150MM DEEP FRAMES IN HIGHWAYS. CLASS B125 COVERS AND FRAMES TO BE PROVIDED ON ALL OTHER MANHOLES.
10. UNITED UTILITIES IS NOT OBLIGED TO ACCEPT FILTER DRAIN / LAND DRAINAGE RUN OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF LAND DRAINAGE RUN OFF WILL THEREFORE BE REQUIRED AND ANY PROPOSALS MUST BE AGREED WITH THE LOCAL AUTHORITY LAND DRAINAGE SECTION.
11. SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED TO PROVE THAT SUCH PRECAUTIONS ARE NOT REQUIRED.
12. ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1M AND MANHOLES 0.5M FROM KERB FACES AND SERVICE MARGINS.
13. ALL SEWER TRENCHES AND BRANCH CONNECTIONS TO BE BACKFILLED WITH SUITABLE MATERIAL IN LAYERS NOT EXCEEDING 225MM UNCONSOLIDATED THICKNESS THEN FULLY COMPACTED.
14. ADOPTABLE SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS.
15. CLAYWARE CHANNELS SHALL BE USED WITHIN MANHOLES FOR PIPE SIZES UP TO AND INCLUDING 300MM DIAMETER.
16. SEE DWG NO UV004393-0551F-05 TO 11 FOR MANHOLE BASE PLANS, SEE DWG NO UV004393-0551F-03 FOR MANHOLE SCHEDULES, SEE DWG NO UV004393-0551F-04 FOR DRAINAGE LONGSECTIONS.
17. REFER TO UNITED UTILITIES STANDARDS DETAILS FOR FURTHER INFORMATION.
18. A S185 LEGAL AGREEMENT WITH UNITED UTILITIES WILL BE REQUIRED PRIOR TO THE SEWER DIVERSION AND ABANDONMENT. A CCTV SURVEY AND WRITTEN REPORT WILL NEED SUBMITTING BEFORE WORK COMMENCES TO ENSURE NO LIVE CONNECTIONS ARE SEVERED.
19. ABANDONED SEWERS TO BE REMOVED OR GROUTED UP TO CLAUSE 5.2.11(6TH EDITION).
20. NO PROPOSED UTILITIES PLANT IS KNOWN.
21. FOR DETAILS OF PIPE BEDDING AND BACKFILL REFER TO UNITED UTILITIES DRAWING STND05/001, WHERE CONFLICTING DETAILS OCCUR, UNITED UTILITIES DETAILS SHALL TAKE PRECEDENCE IN ALL CASES.
22. FLOW CONTROL SHALL BE THROUGH A HYDRO-BRAKE® SEE SEPERATE DETAILS FOR ALL RELEVANT INFORMATION
23. URS TO UNDERTAKE DIVERSION/ABANDONMENT AND PLOT DRAINAGE AGREEMENTS NECESSARY OUTSIDE THE SCOPE OF THE SECTION 104 AGREEMENT. ALL URS WORKS SHOWN ON THIS DRAWING ARE INDICATIVE ONLY.
24. ANY MATERIAL TYPE OR SPECIFICATION CHANGES PROPOSED, ARE TO BE DISCUSSED WITH THE RELEVANT APPROVAL BODY PRIOR TO ANY MATERIALS BEING ORDERED. THIS MAY ALSO INVOLVE ADDITIONAL DESIGN WORKS AS MIGHT BE REQUESTED BY THE APPROVAL BODY AND SUBSEQUENT RE-DESIGN ASSESSMENT FEES.
25. ALL SLAB LEVELS EG SL 33.333 ARE INDICATIVE AND ARE TO BE CONFIRMED FROM ARCHITECTS DRAWINGS

KEY:
- PROPOSED SURFACE WATER SEWER
- PROPOSED ADOPTED S104 MANHOLE
- PROPOSED FOUL SEWER
- PROPOSED FOUL MANHOLE
- PROPOSED COMBINED MANHOLE
- PROPOSED COMBINED SEWER
- HIGHWAY DRAIN
- HIGHWAY MANHOLE
- DRAINAGE EASEMENT
- ABANDONED SEWER
- PRIVATE SEWER
- GULLY / CONNECTION
- UNITED UTILITIES SITE BOUNDARY
- DROPSHAFT

rev	description	date	drawn	chk	app
C01	ISSUED FOR CONSTRUCTION	04:10:16	AD	SB	MJM
DO5	AMENDED TO UU COMMENTS	21:09:16	AD	SB	MJM
DO4	AMENDED TO UU COMMENTS	06:09:16	AD	SB	MJM
DO3	AMENDED TO UU COMMENTS	18:05:16	AD	SB	MJM
DO2	AMENDED TO UU COMMENTS	03:05:16	AD	SB	MJM
DO1	FIRST DESIGN ISSUE	30:03:16	AD	SB	MJM

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client: SOLUTIONS 4 BRUNSWICK

project: BRUNSWICK PFI

drawing: NETWORK 1F S104 LAYOUT

approval status: ○ Feasibility / Sketch ● Design ○ Tender ○ Construction ○ As Built

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