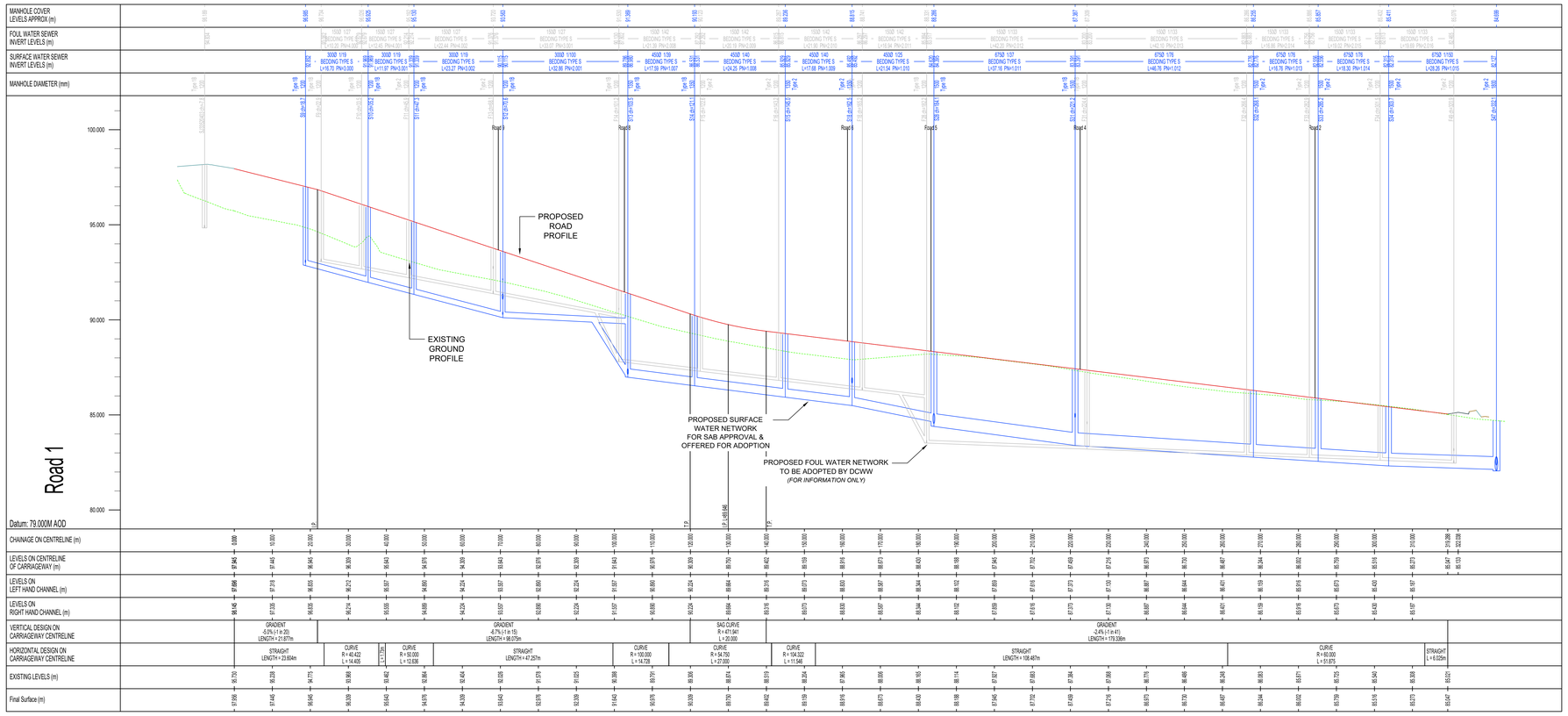
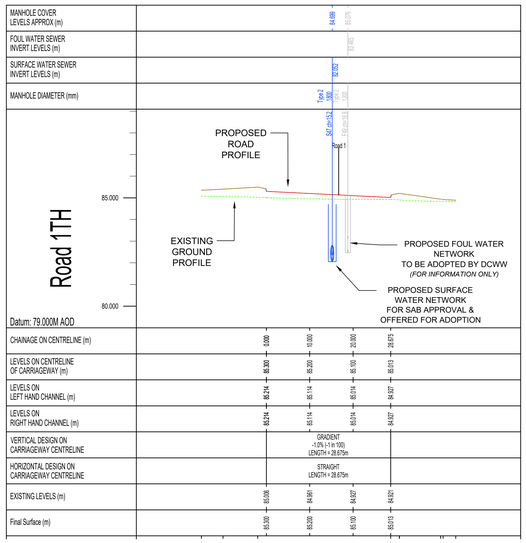
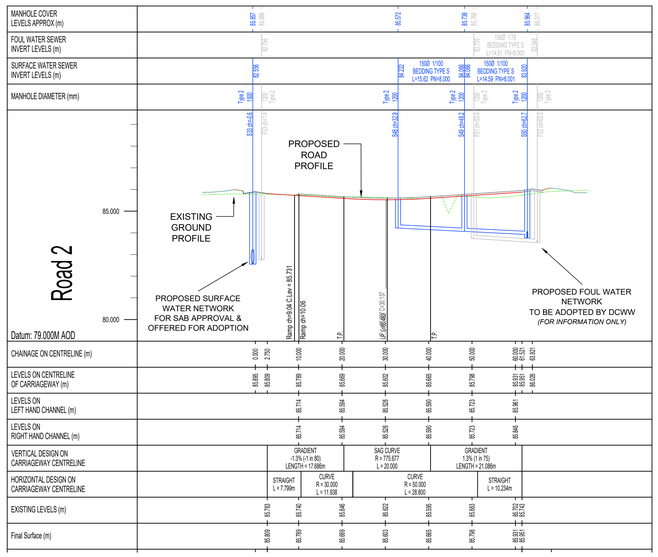
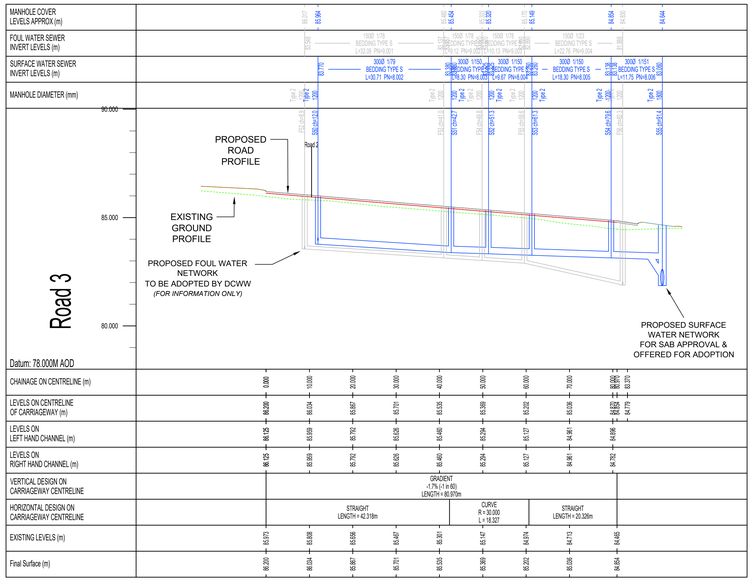
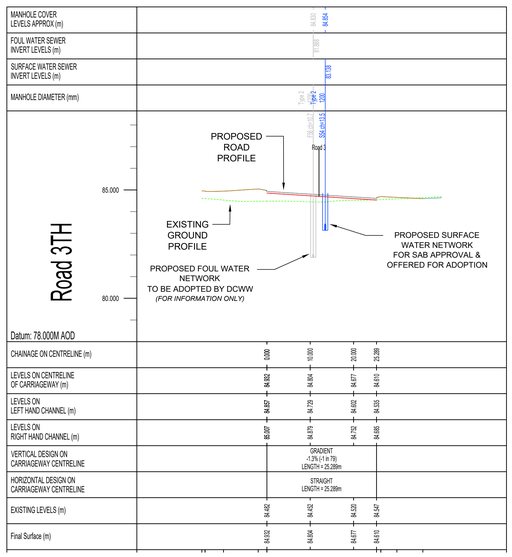










LEGEND

- EXISTING GROUND PROFILE
- PROPOSED ROAD PROFILE
- PROPOSED FOUL WATER SEWER (DCWW - SECTION 104)
- PROPOSED SURFACE WATER SEWER (FOR SAB APPROVAL & OFFERED FOR ADOPTION)

NOTES

1. DRAINAGE DESIGN AND CONSTRUCTION IS IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION, WELSH MINISTERS STANDARDS AND THE REQUIREMENTS OF THE STATUTORY UNDERTAKER.
2. ALL SVP, RWP AND BIG CONNECTIONS ARE INDICATIVE AND MUST BE CONFIRMED BY ARCHITECT.
3. PIPE GRADIENTS OUT OF BUILDING TO CONNECTING MANHOLE TO BE LAID AN 1:40 IN ACCORDANCE WITH PART H OF THE 2002 BUILDING REGULATIONS, TABLE 6. ALL INVERTS TO SVP WITHIN 3 STOREY BUILDINGS MUST BE 750mm IN ACCORDANCE WITH BUILDING REGULATIONS.
4. TOLERANCES IN PIPE LAYING TO BE IN ACCORDANCE WITH SEWERS FOR ADOPTION 7th EDITION CLAUSE 4.5.9
5. FOR PIPES 150-450mm DIA. ALL ROCKER PIPES TO BE IN ACCORDANCE WITH "SEWERS FOR ADOPTION" 7th EDITION.
6. ENGINEERING BRICKS SHALL NOT CONTAIN FROGS OR HOLES.
7. BRICKWORK TO MANHOLES TO BE ENGLISH BOND.
8. WHERE PIPES SURROUNDED IN CONCRETE, FLEXIBILITY TO BE MAINTAINED AT PIPE JOINTS BY THE USE OF SUITABLE COMPRESSIBLE MATERIAL eg. "FLEXCELL" OR "FIBREBOARD",.
9. ALL MANHOLE COVERS AND FRAMES MUST COMPLY WITH BS EN124. COVERS IN ROADS TO BE GRADE D400 AND BE 150mm DEEP. MANHOLE COVERS IN CAR PARKING AREAS AND DRIVES TO BE GRADE B125, WHILST LANDSCAPED AREAS MAY BE GRADE A15. ALL TO BE SIZED IN ACCORDANCE WITH PART H OF BUILDING REGULATIONS:2002, TABLES 11 & 12.
10. PIPEWORK MATERIALS AS SPECIFIED WITHIN SEWERS FOR ADOPTION 7th:
 10a. CLAY PIPES SEE E2.18 SFA 7th.
 10b. PLASTIC PIPES SEE E2.21 SFA 7th.
 10c. CONCRETE PIPES SEE E2.16 SFA 7th.
11. GRANOLITHIC BENCHING TO MANHOLES TO BE 40mm THICKNESS MINIMUM.
12. PRECAST CONCRETE CHAMBER RINGS TO BE REINFORCED.
13. THE SLOPE OF BENCHING IN ALL CASES SHOULD BE 1 IN 30.
14. MANHOLES SHALL NOT INCORPORATE DOUBLE SQUARE OR DOUBLE OBLIQUE CHANNEL JUNCTIONS IN THEIR INVERTS.
15. ALL INCOMING PIPES SHALL BE SURROUNDED WITH 150mm OF CONCRETE TO THE FACE OF THE COLLAR OF THE FIRST FLEXIBLE JOINT AND THE OUTGOING PIPE SHALL ALSO BE SURROUNDED TO WITHIN 50mm OF THE FIRST FLEXIBLE JOINT AND A COMPRESSIBLE FILLER USED AS A FORMER BETWEEN THE CONCRETE SURROUND AND DOWNSTREAM PIPE COLLAR.
16. ALL UNDERGROUND SERVICES TO BE CONFIRMED BY CONTRACTOR PRIOR TO COMMENCEMENT ON SITE. ANY DISCREPANCIES TO BE REPORTED TO ENGINEER.
17. THE MINIMUM DEPTH OF COVER TO THE CROWN OF GRAVITY PIPES WITHOUT PROTECTION SHOULD BE AS FOLLOWS:
 a) DOMESTIC GARDENS AND PATHWAYS WITHOUT ANY POSSIBILITY OF VEHICULAR ACCESS, 0.35m;
 b) DOMESTIC DRIVEWAYS, PARKING AREAS AND YARDS WITH HEIGHT RESTRICTIONS TO PREVENT ENTRY BY VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.5M;
 c) DOMESTIC DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITHOUT FOOTWAYS (e.g., MEWS DEVELOPMENTS) WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.9m;
 d) AGRICULTURAL LAND AND PUBLIC OPEN SPACE, 0.9m;
 e) OTHER HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONES, 1.2m.
18. ROAD GULLIES TO BE TRAPPED FOR CONNECTION TO PROPOSED COMBINED SEWER.
19. NO DEEP OR WIDE ROUTED TREES TO BE PLANTED WITHIN CLOSE PROXIMITY OF THE PROPOSED AND EXISTING PUBLIC SEWER SYSTEM.

Mark	Date	Details	By
C	16.12.21	Minor amendments to FW following DCWW comment	CP
B	25.11.21	Updated with Layout Rev N	CP
A	07.10.21	First issue to Wrexham for SAB review	CP

Revision history

Drawing originator:

BETTS HYDRO CONSULTING ENGINEERS | BETTS ASSOCIATES CONSULTING ENGINEERS | BETTS GEO CONSULTING ENGINEERS

Client:

Castle Green

Project title:

Rhosrobin,
Wrexham

Drawing title:

Sustainable Drainage (SAB)
Surface Water Drainage
Long Sections

Scale: 1:500H:1:100V for the original size of A0

Drawn by: CP | Checked by: RA | Passed by: RA | Date: Sep 2021

Drawing status:

For Information

Job No:	Drawing No: Project	Origin	Volume	Level	Type	Discip	Number	Revision:
CGH04		BET				C	148	C

Do not scale this drawing

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