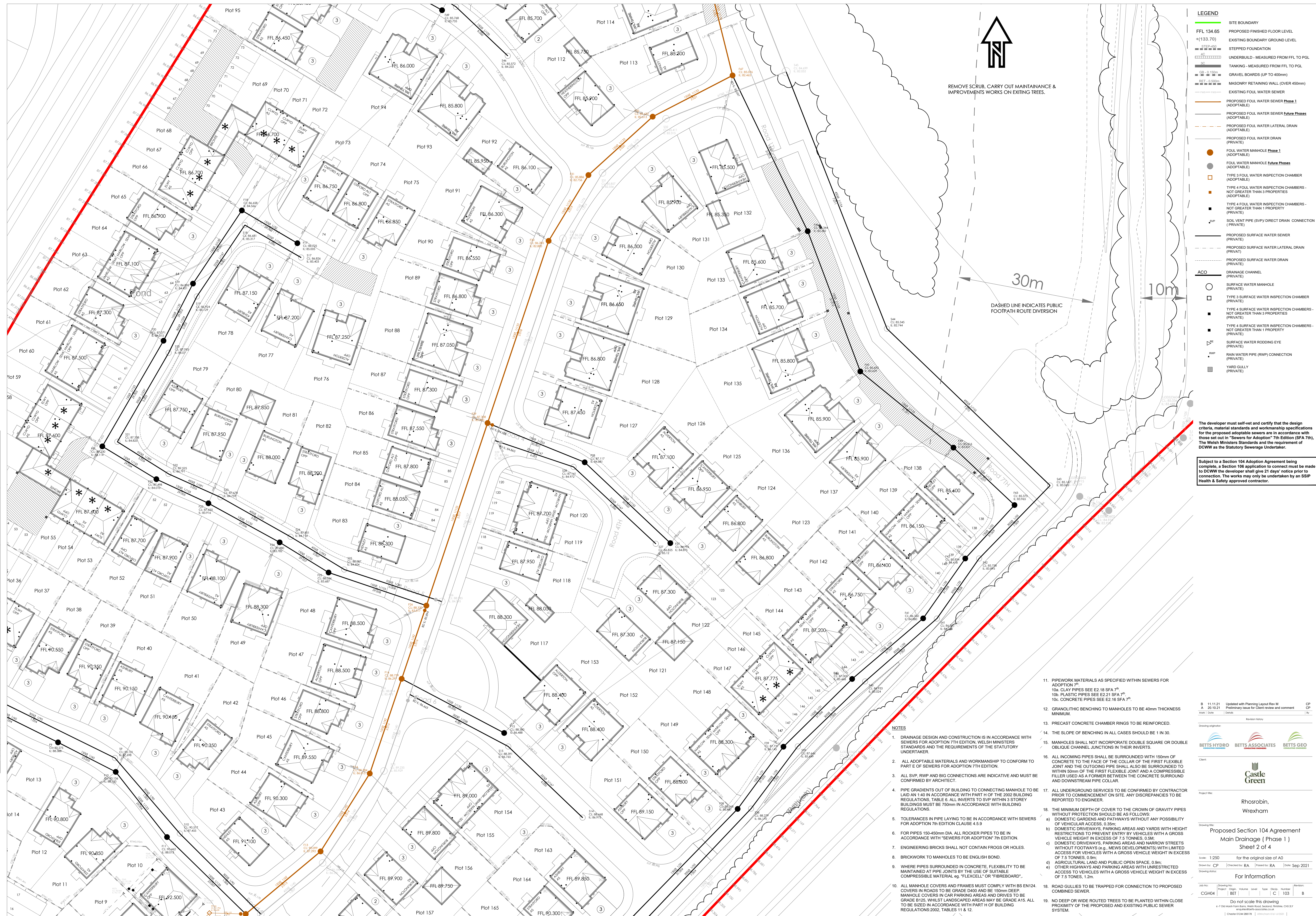




The developer must self-vet and certify that the design criteria, material standards and workmanship specifications for the proposed adoptable sewers are in accordance with those set out in "Sewers for Adoption" 7th Edition (SFA 7th), The Welsh Ministers Standards and the requirement of DCWW as the Statutory Sewerage Undertaker.

Subject to a Section 104 Adoption Agreement being complete, a Section 106 application to connect must be made to DCWW the developer shall give 21 days' notice prior to connection. The works may only be undertaken by an SSIP Health & Safety approved contractor.

1. PIPEWORK MATERIALS AS SPECIFIED WITH SEWERS FOR ADDITION 7th.
 - 10a. CLAY PIPES SEE E2 16 SFA 7th.
 - 10b. PLASTIC PIPES SEE E2 21 SFA 7th.
 - 10c. CONCRETE PIPES SEE E2 16 SFA 7th.
2. GRANULITH BENCHING TO MANHOLES TO BE 40mm THICKNESS MINIMUM.
3. PRECAST CONCRETE CHAMBER RINGS TO BE REINFORCED.
4. THE SLOPE OF BENCHING IN ALL CASES SHOULD BE IN 1:30.
5. MANHOLES SHALL NOT INCORPORATE DOUBLE SQUARE OR DOUBLE OBlique CHANNEL JUNCTIONS IN THEIR INVERTS.
6. 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 WITH 150mm OF THE FIRST FLEXIBLE JOINT AND A COMPRESSIBLE FILLER USED AS A FORMER BETWEEN THE CONCRETE SURROUND AND DOWNSTREAM PIPE COLLAR.
7. ALL UNDERGROUND SERVICES TO BE CONFIRMED BY CONTRACTOR PRIOR TO COMMENCEMENT ON SITE. ANY DISCREPANCIES TO BE REPORTED TO ENGINEER.

NOTES

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| | 1. DRAINAGE DESIGN AND CONSTRUCTION IS IN ACCORDANCE WITH SPECIFICATIONS FOR SEWERS FOR ADOPITION 7TH EDITION, WELSH MINISTERS STANDARDS AND THE REQUIREMENTS OF THE STATUTORY UNDERTAKER. | 1. THE SLOPE OF BENCHING IN ALL CASES SHOULD BE 1 IN 30. |
| 2. | 2. ALL ADAPTABLE MATERIALS AND WORKMANSHIP TO CONFORM TO PART E OF SEWERS FOR ADOPITION 7TH EDITION. | 2. MANHOLES SHALL NOT INCORPORATE DOUBLE SQUARE OR DOUBLE OBlique CHANNEL JUNCTIONS IN THEIR INVERTS. |
| 3. | 3. ALL SVP, RWP AND BIG CONNECTIONS ARE INDICATIVE AND MUST BE CONFIRMED BY ARCHITECT. | 3. ALL INCOMING PIPES SHALL BE SURROUNDED WITH 150mm OF FILLER TO THE FIRST FLEXIBLE JOINT OF THE FIRST FLEXIBLE JOINT AND THE OUTGOING PIPE SHALL ALSO BE SURROUNDED WITH 50mm OF THE FIRST FLEXIBLE JOINT AND A COMPRESSIBLE FILLER USED AS A FORMER BETWEEN THE CONCRETE SURROUND AND DOWNSTREAM PIPE COLLAR. |
| 4. | 4. PIPE GRADIENTS OUT OF BUILDING TO CONNECTING MANHOLE TO BE Laid IN A 1:40 IN ACCORDANCE WITH PART H OF THE 2002 BUILDING REGULATIONS, TABLE 6.4. INVERTS OF ALL ABOVE GROUND STOREY BUILDINGS MUST BE 750mm IN ACCORDANCE WITH BUILDING REGULATIONS. | 4. ALL UNDERGROUND SERVICES TO BE CONFIRMED BY CONTRACTOR PRIOR TO COMMENCEMENT ON SITE. ANY DISCREPANCIES TO BE REPORTED TO ENGINEER. |
| 5. | 5. TOLERANCES IN PIPE LAYING TO BE IN ACCORDANCE WITH SEWERS FOR ADOPITION 7TH EDITION clause 4.5.9 | 5. 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 STRIPS 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 UNRESTRICTED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 1.2m. |
| 6. | 6. FOR PIPES 150-450mm DIA. ALL ROCKER PIPES TO BE IN ACCORDANCE WITH "SEWERS FOR ADOPITION 7TH EDITION". | |
| 7. | 7. ENGINEERING BRICKS SHALL NOT CONTAIN FROGS OR HOLES. | |
| 8. | 8. BRICKWORK TO MANHOLES TO BE ENGLISH-BOND. | |
| 9. | 9. WHERE PIPES SURROUNDED IN CONCRETE, FLEXIBILITY TO BE MAINTAINED AT PIPE JOINTS BY THE USE OF SUITABLE COMPRESSIBLE MATERIAL (e.g. "FLEXCELL" OR "FIBREBOARD"). | |
| 10. | 10. ALL MANHOLE COVERS AND FRAMES MUST COMPLY WITH BS EN254. COVERS IN ROADS TO BE GRADE D400 AND BE 150mm DEEP. MANHOLE COVERS IN CAR PARKING AREAS AND DRIVEWAYS TO BE GRADE B125, WHILST LANDSCAPED AREAS MAY BE GRADE A15. ALL TO BE IN ACCORDANCE WITH PART H OF BUILDING REGULATIONS 2002, TABLES 11.8 & 11.9. | 10. ROAD GULLIES TO BE TRAPPED FOR CONNECTION TO PROPOSED COMBINED SEWER. |
| 11. | | 11. NO DEEP OR WIDE ROUTED TREES TO BE PLANTED WITHIN CLOSE PROXIMITY OF THE PROPOSED AND EXISTING PUBLIC SEWER SYSTEM. |

B	11.11.21	Updated with Planning Layout Rev M	CP
A	20.10.21	Preliminary issue for Client review and comment	CP
Mark	Date	Details	By

Drawing originator: _____



BETTS HYDRO BETTS ASSOCIATES BETTS GEO

Client: 

Castle
Green

Project title: _____

Rhosrobin,
Wrexham

Drawing title:
Proposed Section 104 Agreement
Main Drainage (Phase 1)

Scale: 1:250 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:	Revision:
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CGH04	Project	Origin	Volumes	Level	Type	Discip.	Number	
		BET				C	103	B

Do not scale this drawing

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