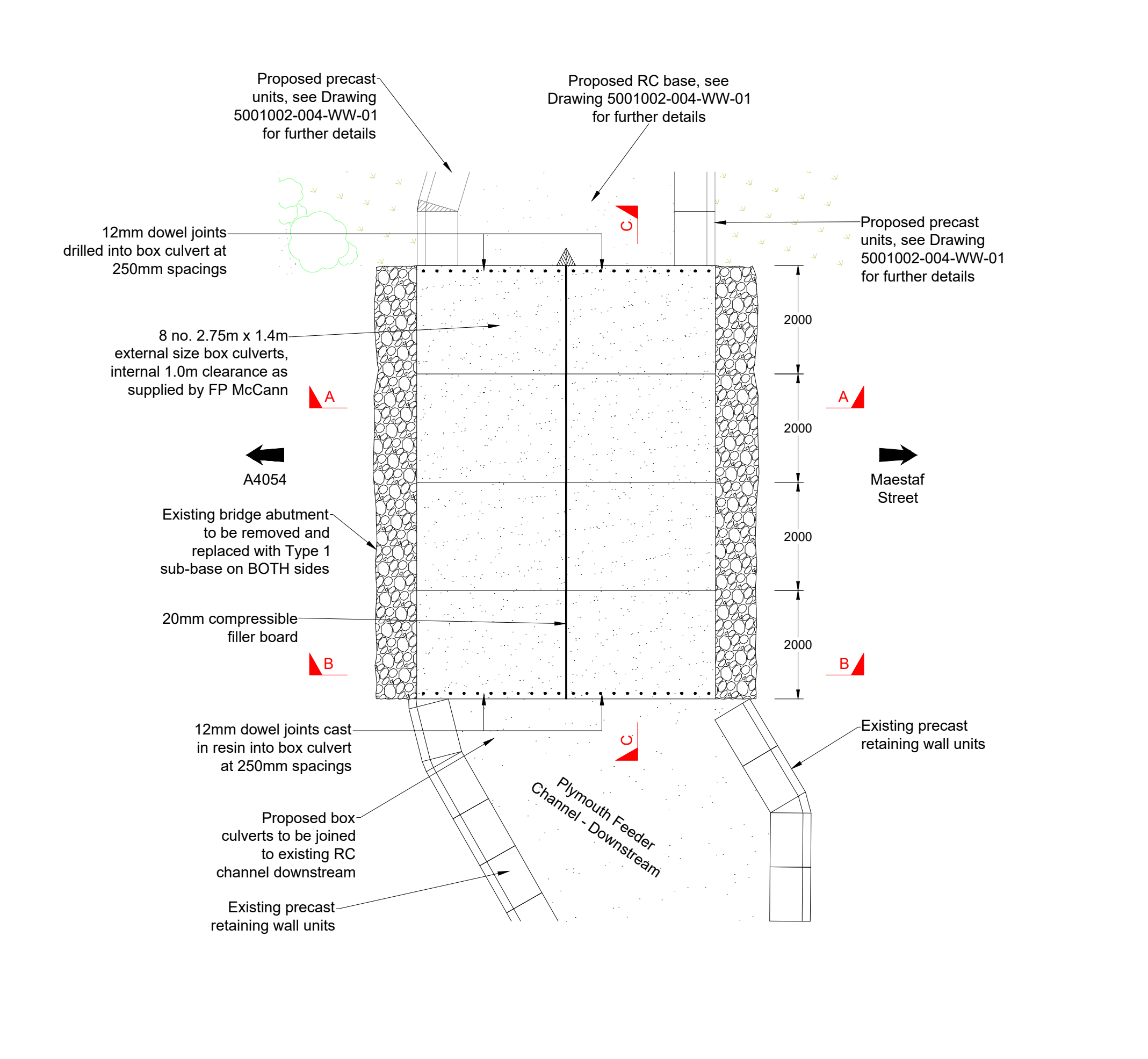


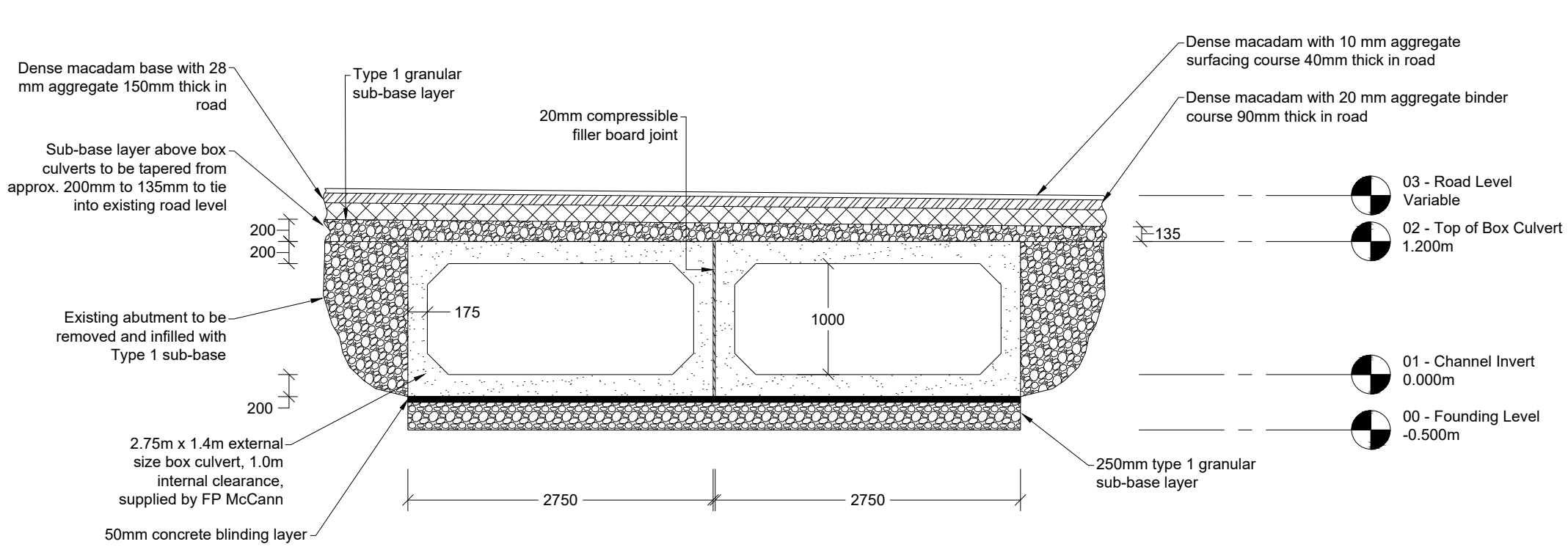
01 Top of Box Culvert

Scale@A1 1:75



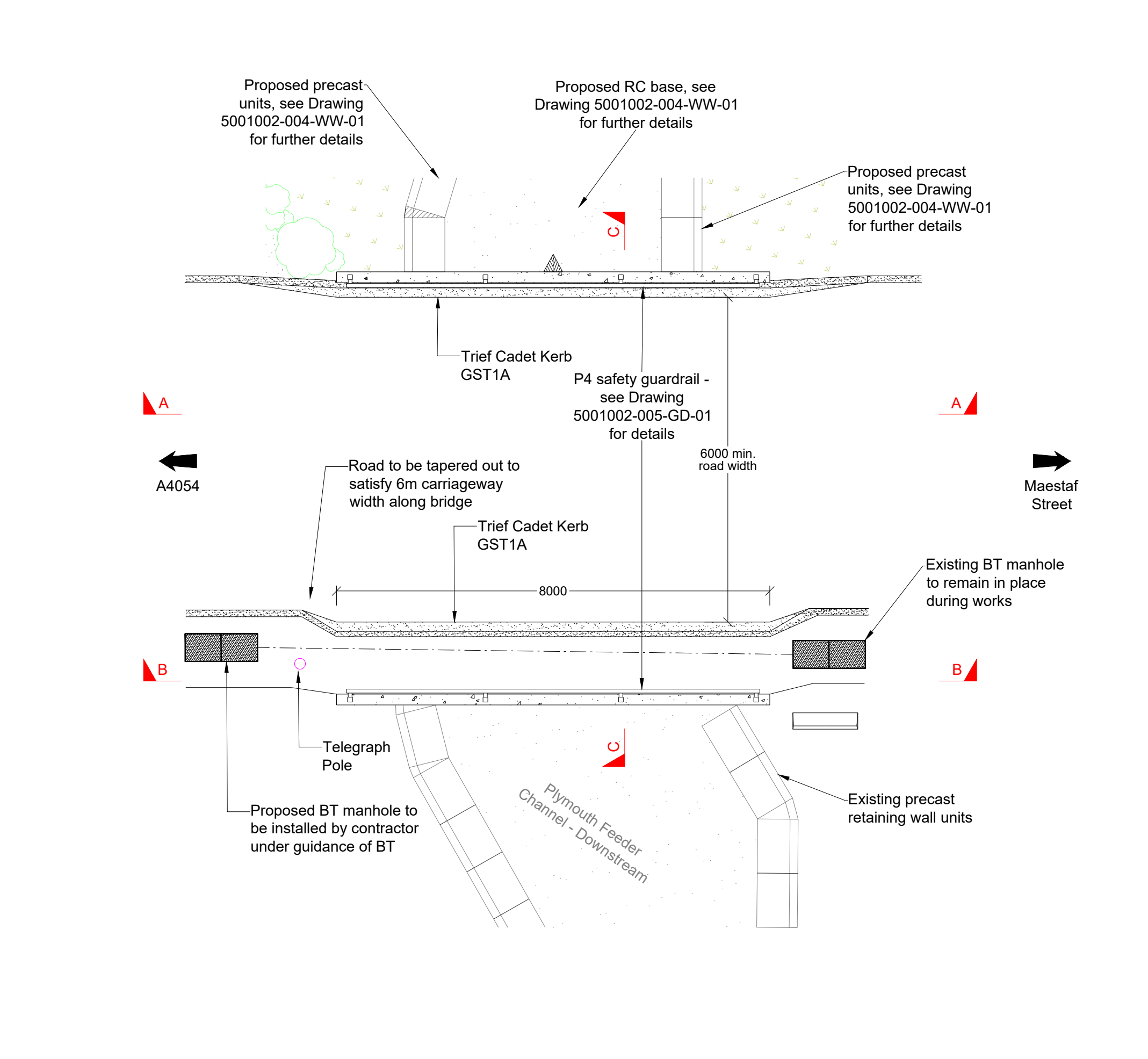
Section A-A

Scale@A1 1:50



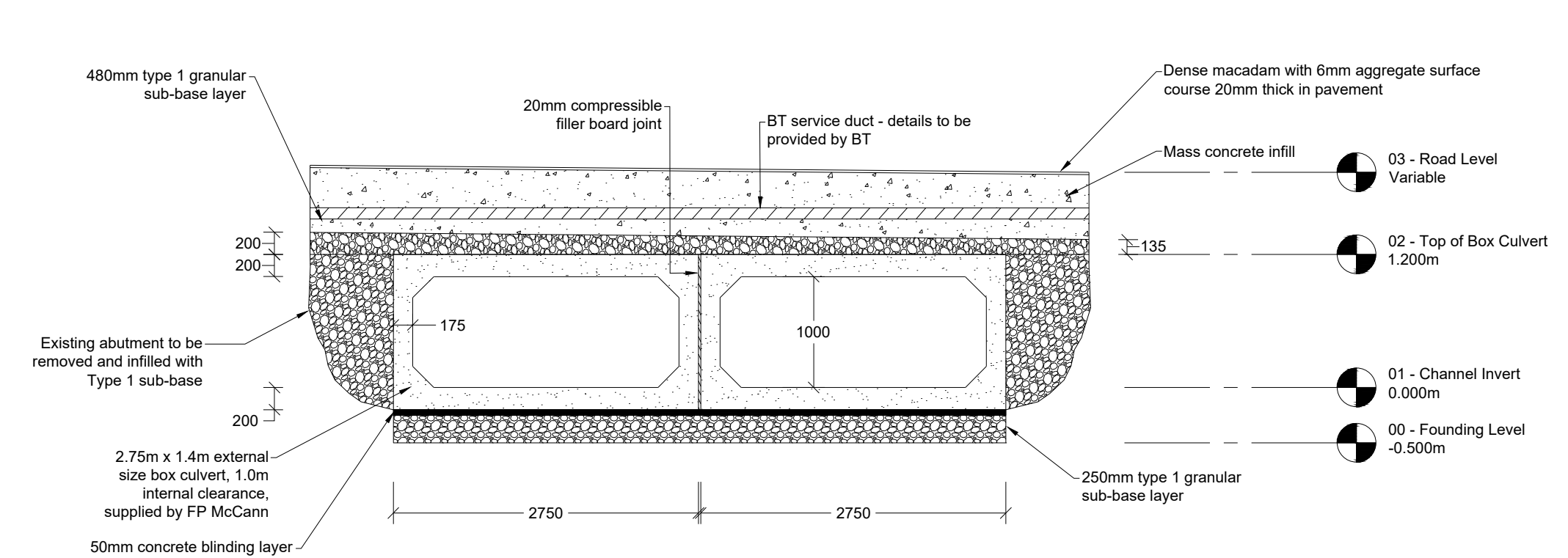
03 Road Level

Scale@A1 1:75



Section B-B

Scale@A1 1:50



SUB-BASE

- The sub-base shall be constructed by Type 1 compacted in layers. Sub-base shall be placed and compacted in layers in accordance with Series 800 of Specification of Highway Works.
- Any trimming of the sub-base shall leave the sub-base homogenous and well compacted.
- The finished surface of the sub base should be within +0,-15mm tolerance.
- Sub-base finished levels should be surveyed on completion by the contractor.

BLINDING CONCRETE

- Use ST2/C10 concrete mix with 10 Newton/28 day strength as blinding concrete layer.

EXPANSION JOINT

- 20mm compressible filler board and sealed with polysulphide flexible sealant (waterproof sealant) or equivalent.

CONCRETE

- Proposed concrete is C40/50. Class of concrete for the work based on 28 days minimum compressive strength. Concrete exposure class to be XC3/4, XD3, XF4, AC 2.
- Maximum water cement ratio (W/C) shall be 0.45.
- Slump test to be performed on all concrete batches at point of discharge from delivery truck.
- Slump shall be measured in accordance with BS EN 12350-2/relevant standards. Flow shall be measured in accordance with BS EN 12350-5. Slump flow shall be measured in accordance with BS EN 12350-8.
- Number of Slump tests to taken shall be determined by the contractor.
- The sampling and testing of concrete shall comply with requirement given in Annex B of BS EN 206-1 and Annex B of BS 8500-1.
- Aggregates - (1) Use coarse natural maximum 20mm size aggregate; (2) Freeze-thaw resisting aggregate to be used; (3) Aggregates to be free from impurities.
- Prior to the supply of concrete, the contractor and the concrete supplier should agree the admixture type, admixture addition time and method, concrete mixing and checking procedure. No site mixing of admixture shall be allowed. No water to be added to concrete on site.
- Concrete to be transported in compliance with Clause 14 of BS 8500-2: 2015.
- Fresh concrete shall not be placed against in situ concrete that has been position for more than 30 minutes, unless a construction joint is formed.
- Concreting operations shall not displace reinforcement, or damage formwork where applicable.
- Concrete shall be thoroughly compacted by vibration during the operation of placing, and thoroughly worked around the reinforcement and into corners of the formwork to form a solid mass free from voids. The placing and vibration of concrete including cold & hot weather work to be in accordance with relevant specifications.

BOX CULVERT

- Box culvert dimensions and type are subject to change based on manufacturer specification.
- Box culvert used in drawing is based on box culvert specifications provided by FP McCann. Further information regarding box culvert specifications can be found in the accompanying FP McCann document, reference "22.01.20 Merthyr Tydfil 283025".
- Box culvert installation to be undertaken in accordance with the FP McCann installation guide, reference "FPM Box Culvert Installation Guide".

Rev.	Amendment	Date	Drawn	Ck'd

- General Notes**
- All dimensions in millimetres unless otherwise stated. Do not scale from this drawing.
 - All dimensions of foundation to be taken in principle; All levels and dimensions to be checked and confirmed by the contractor prior to the start of any works on site. Any errors or discrepancies are to be brought to the attention of the engineer.
 - Similarly, design to be confirmed by engineer once the superstructure layout and materials have been finalised, either through the timber specialist, architect, or appointed contractor.
 - This drawing shall be read in conjunction with all architectural, setting out drawings and other relevant drawings and documentation, including the specification, appendices, and pre construction information, and ground investigation report.
 - 250mm sub-base (with boulders) shall be placed and constructed by Type 1 compacted in layers. Where excavation can't be benched due to a lack of space, temporary works shall be used.
 - All buried concrete surfaces in permanent contact with soil will have two coats of cut back bitumen. Removal of water from the concrete surface prior to laying protection.
 - Prior to commencement of any works contractor to carry out investigation to identify and confirm all utilities present on site.
 - All excavated material to be backfilled with 6N/6P acceptable granular material and compact as per specification.
 - Manufacturers instructions regarding use, care, installation, etc. of materials and products to be strictly adhered to unless otherwise instructed by the architect/designer.
 - Temporary excavation slopes should not be steeper than 1V:1.5H.
 - Excavation for foundation is likely to be above or within groundwater level, and so groundwater control will be necessary.
 - Foundation level to be proof rolled prior to casting blinding concrete.
 - The earthworks shall be carried out in accordance with the series 600 of the specification of highway works.



Cynor Bwrdeistref Sirol
MERTHYR TYDFIL
County Borough Council

MERTHYR TYDFIL
COUNTY BOROUGH COUNCIL
ENGINEERING DIVISION

UNIT 5
TRIANGLE BUSINESS PARK
PENTREBACH
MERTHYR TYDFIL
CF48 4TQ

PROJECT TITLE: Maestaf Bridge Replacement Pentrebach Merthyr Tydfil			
DRAWING TITLE: General Arrangement			
DRAWN: AP		APPROVED: GJ	
CHECKED: GJ	DATE: 26/11/21	SCALE: --	© A1
PROJECT NO.: 5001002	DRAWING NO.: 003-GA-01	REV.: 01	

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