

NOTES

1. All dimensions are in metres unless otherwise stated.
2. All chainages are in metres unless otherwise stated.
3. All levels are in metres relative A.O.D.
4. Any anomalies on this drawing should be brought to the attention of Conwy County Borough Council.
5. All dimensions are in millimetres and all levels in metres unless stated otherwise.
6. This drawing is to be read in conjunction with all relevant architect's, engineer's and other specialist drawings.
7. All dimensions shall be confirmed by the Contractor and any discrepancies brought to the attention of the Supervisor as soon as a discrepancy arises.
8. All levels shown on this drawing are nominal and must be checked/agreed prior to construction. All levels to be agreed with the supervisor.

Significant Risks (CDM 2015)

Specific residual risks have been identified on this drawing with the following symbols:

- R1** Localised instability of slope and highway during excavation of existing concrete bag retaining wall - Risk of collapse. Contractor to ensure temporary excavated slope is safe for their proposed sequence of works
- R2** Contact CCBC Engineer if hard drilling conditions are met and the ground cannot be penetrated

KEY

A	Tender Issue	JAC	GRJ	2026-10-07
REV	DETAIL	DRAWN	CHECKED	DATE

PROJECT

Waterloo Cottage Retaining Wall Replacement

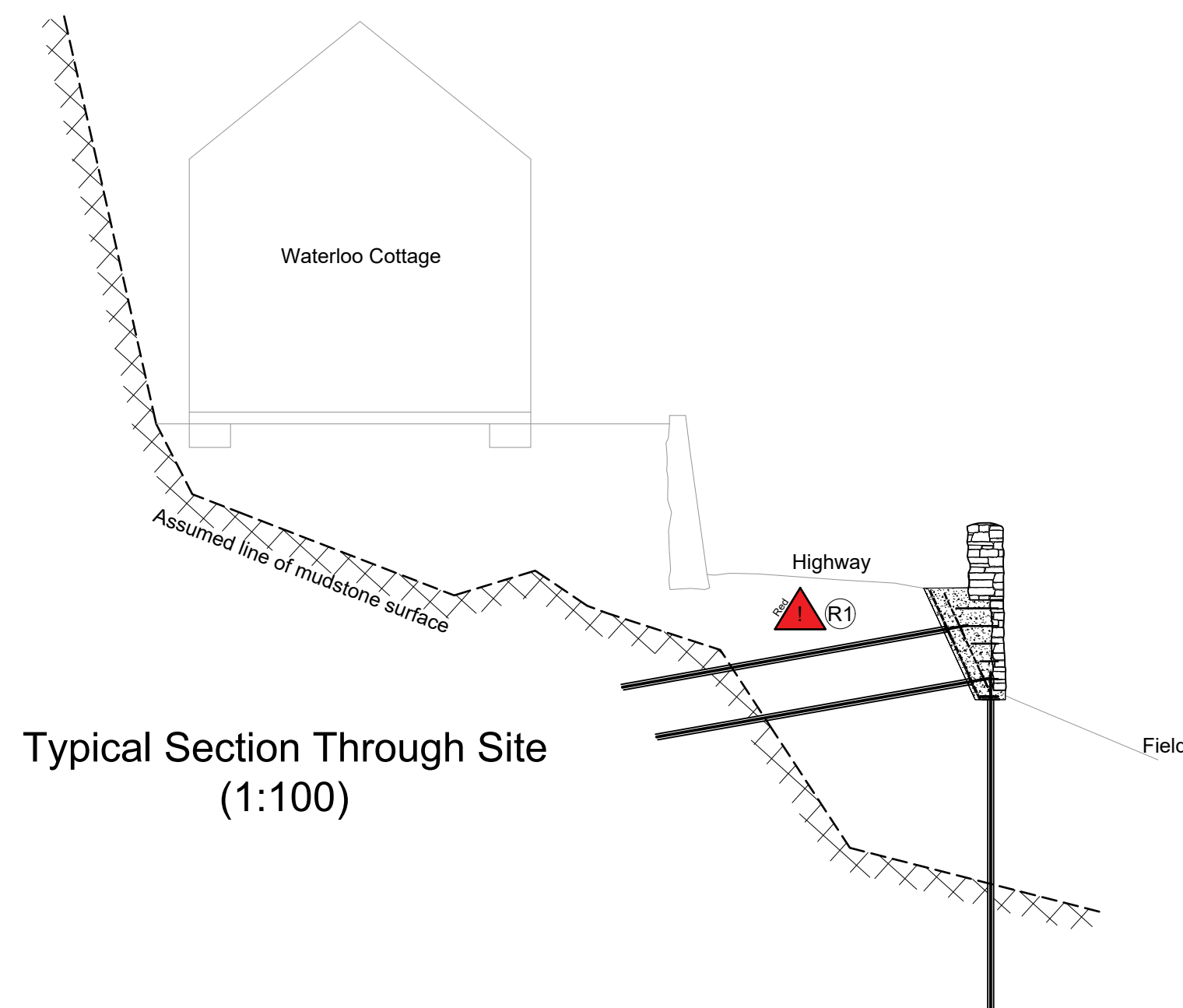
TITLE Proposed Elevation, Sections and Details

CLIENT

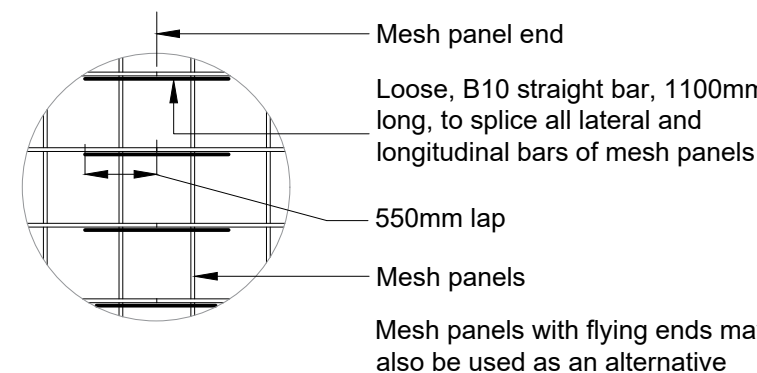
Flood Risk & Infrastructure

SCALE @ A1:	DRAWN: PG	CHECKED: JAC	APPROVED: GRJ	DWG STATUS:
As Shown	DATE: 2026-10-07	DATE: 2026-10-14	DATE: 2026-10-21	Tender

PROJECT Ref: ERCF2509N 05	DRAWING No: T104	REV: A
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Typical Section Through Site
(1:100)



Mesh panel splice detail
(1:20)

Soil Nail Notes
Soil nails to be hot dip galvanised, R32N by Minova (or similar approved) with sacrificial drill bit suited for min 76mm bore, length to suit min 2m embedment in rock, at max 1.5m horizontal centres and max 1.5m vertical centres. Angle of nails to be 10 degrees to the horizontal. Grout to be neat OPC and >40MPa at 28 days. Soil nail to have 200x200x10 domed plate / washer by Minova (or similar approved) to allow articulation in the angle of nail to facing.

Surface water drainage
Min 150mm thick and 450mm wide cast in situ concrete channel (C32/40). Channel to be 50mm deep with battered sides and 300mm wide flat base. Side exit via slots in wall every 10m. Slots to be 150mm high and 300mm wide. Formed with stone lintels externally and Concrete lintels internally. Shrinkage joints to be placed every 3m with =10mm gap filled with polysulphide sealant.

Batter of excavation TBC by Contractor. Steeper slope OK from design perspective

Nail heads (washers, nuts etc.) to receive 2No coats of heavy duty bituminous paint prior to backfilling with no fines. Alternatively a sprayed concrete cover (same spec as facing slab) can be applied with min 30mm cover.

150mm slotted twin wall pipe full length of wall. Exit out of wall at lower end via long radius 90° bend.

Vertically installed soil nails at 1.5m horizontal centres, spec as above

Typical Section - Proposed Wall
(1:25)

Soil Nail Testing
At commencement of site works, 3No suitability tests to be carried out to an axial load of 209 kN prior to the installation of the rest of the soil nails. Location of tests to suit Contractor's method statement.
After works are complete, acceptance tests to be carried out on 3 nails to an axial load of 87 kN. Testing to be carried out in 5No increments, and in accordance with BS EN 14490:2010. CCBC Engineer to be present during installation and loading of both suitability and acceptance tests.
Minimum of two sets (4No cubes / set) of grout to be taken during installation. Each set to have cube tested at 3 days, 7 days and 28 days.

Min 50mm thick ST5 curved concrete coping, jointed every 3.0m with 10mm board, removed after set and filled with polysulphide sealant

1200mm high, 500mm thick squared random coursed natural stone parapet in suitable local stone (To be approved by CCBC Engineer), M6 mortar. Units laid flat for improved vehicle containment.

Facing slab to be 225mm thick, Two layers A393 mesh, 75mm cover to rear mesh, 50mm cover to front mesh. Concrete to be C40/50 or equivalent strength gunnite mix

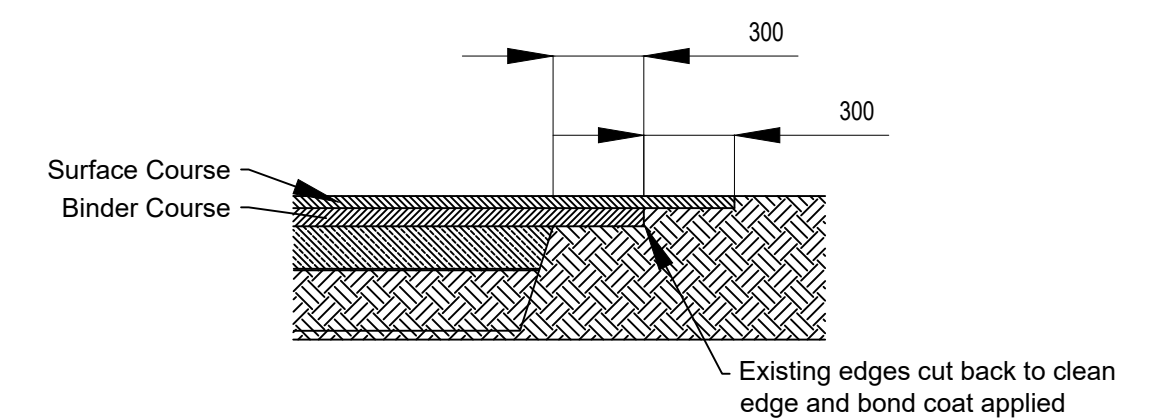
400mm long, 6mm dia deformed stainless steel wall ties with 100mm dia hook at each end. Embedment of wall tie into bed joint of cladding to be 150mm. Wall ties to be at 450mm vertical centres and 900mm horizontal centres (or roughly evenly spaced with 2.5 ties per m²).

200mm thick random coursed stone cladding in suitable local stone (To be approved by CCBC Engineer), M6 mortar. Backfill concrete to be lean no fines mix

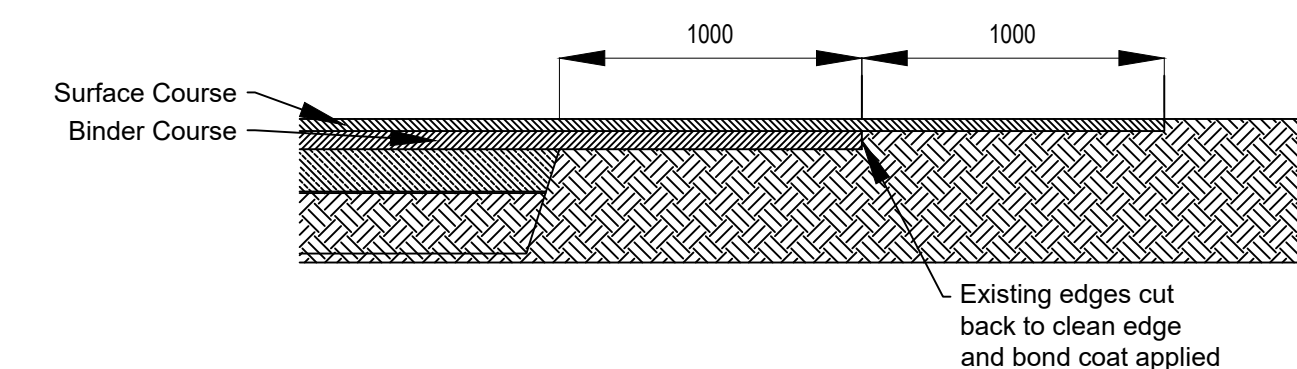
Min 300mm thick mass concrete foundation, C40/50, stepped to suit rising profile of land. Steps to be 900mm long as shown on elevation.

Red line denotes existing wall profile

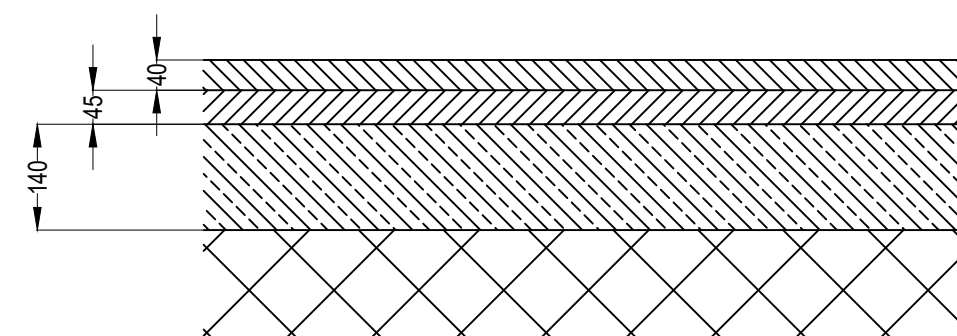
50mm diameter slotted PVC weep pipes to be positioned at 1500mm horizontal centres, bottom row 300mm above finished lower ground level, and top row 1300mm above lower ground level. Weep holes to extend through the no fines concrete into the embankment soil. Ensure cover for reinforcement around weep hole is not less than 50mm.



Tie in detail
(cross section showing longitudinal joint where edge of new
carriageway abuts an existing road)
(1:25)

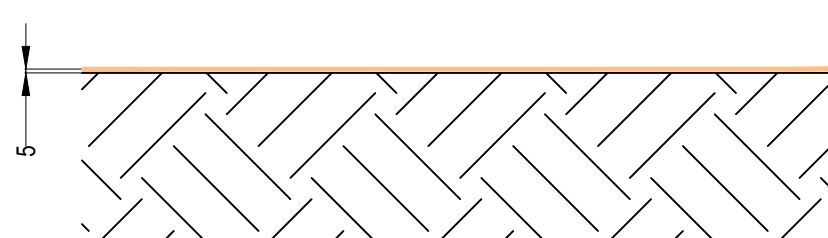


Tie in detail
(Longitudinal section showing transverse joint across carriageway
where new road extends an existing road)
(1:25)



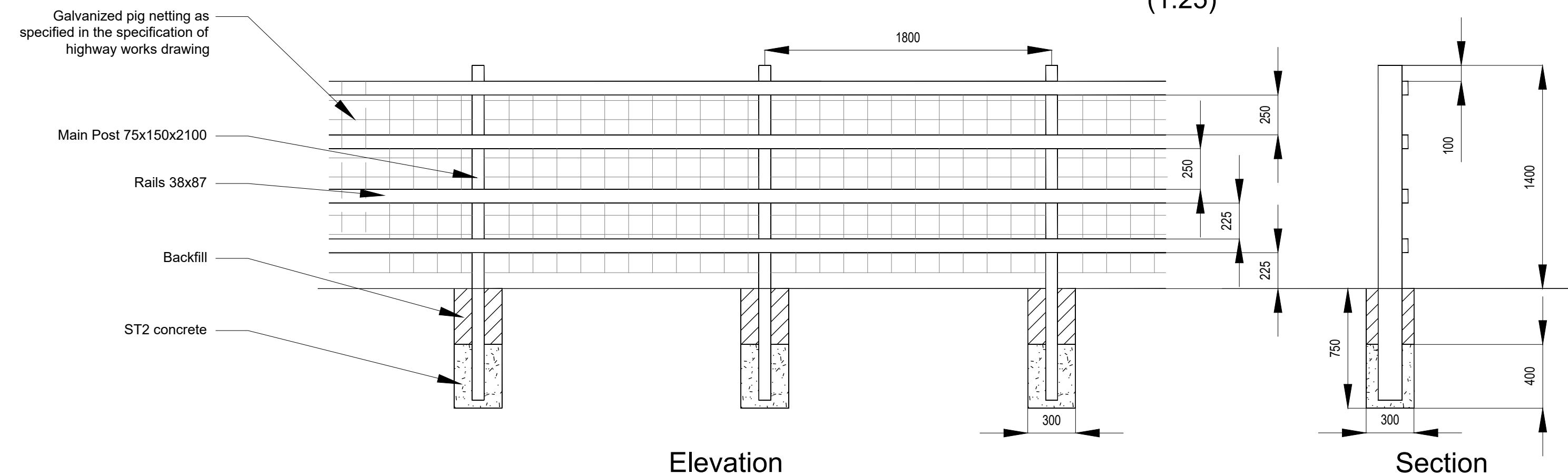
- Surface Course 40mm Hot Rolled Asphalt high stone content 55PSV 125 pen 10mm aggregate
- Binder Course 60mm Dense Bitumen Macadam 125 pen 20mm aggregate
- Base Layer 140mm Dense Bitumen Macadam 125 pen 32mm aggregate
- Foundation min 150mm Type 1 Sub-base (Ref. Cl. 803 of SHW)
- Bond Coat between between the compacted base course and the binder course, and again between the binder course and the surface course

P1 Pavement Construction
Full Construction
(1:10)



- Surface Course 5mm HFS to DMRB Clause 924 cold applied, color buff HAPAS type 1

High Surface Friction
Scale 1:10



Elevation

Section

Timber Post and 4 Rail with Stock Proof Netting
(1:25)