

GABION WALL NOTES:

1) DIMENSIONS IN MM, UNLESS OTHERWISE SPECIFIED.
This drawing is based on the information shown on the supplied information and drawings.

2) GABION BASKET SPECIFICATION:
MACCAFERRI HEXAGONAL WOVEN WIRE MESH (POLYMER COATED)

3) INSTALLATION:
Please refer to standard Maccaferri installation guidelines.
Gabions to be constructed in accordance with BS14475:2006(E). Some settlement (compression) gabion units can occur, but a high standard of installation will ensure settlement does not exceed the recommended tolerance of 5%.

A specialist installer, experienced with this system and placing and compacting fill to SFHW Series 600 requirements, should be employed to install the solution.

4) FILL FOR GABION BASKETS:
Class 6G Gabion Stone as described in the 'Series 600', Specification for Highway Works. The stone fill should be hand placed to a high standard according to the manufacturer's instructions.

5) BACKFILL TO GABION WALLS:
The backfill for the walls is to be compacted Class 6N/6F2 granular fill. This material is assumed to have the following characteristics: $\phi_{int} = 35$ degrees, $\gamma_{max} = 18 \text{ kN/m}^3$ and $c' = 0 \text{ kPa}$, compacted in accordance with SFHW Series 600, Table 6/4.

The Principal Contractor is responsible for the selection of this material to ensure compliance with the geotechnical characteristics as shown on the relevant drawings and in the design documents/calculations.

6) FOUNDATION FOR GABION WALL:
To achieve a suitable foundation for the Gabion baskets, excavation must take place down to the levels indicated on the drawing and allow for the placement and compaction of a minimum 150mm thickness of selected granular material (Class 6F2 with assumed properties of $\phi_{int} = 35$ degrees, $\gamma_{max} = 18 \text{ kN/m}^3$ and $c' = 0 \text{ kPa}$).

Formation level assumed to be on competent bearing stratum (original MUDSTONE (angular GRAVEL or stiff CLAY)) with a safe bearing resistance of 160kPa. Soft, loose or unsuitable material (such as organics, alluvium or made ground) to be removed down to competent bearing stratum, and be replaced with compacted Class 6F2 granular fill.

The Contractor must appoint a local geotechnical specialist to inspect and test the foundation stratum to ensure it has a safe bearing resistance of 160kPa.

Suitable testing includes:

- Plate bearing tests carried out to comply with BS1377-9 Incremental load test to C14.1.6.4.2. The plate should be loaded to at least 350kPa in 5 equal increments.
- If original cohesive material is found at foundation level, hand shear vane tests could be carried out to confirm a minimum undrained shear strength (c_u) of 100kPa.

If any material with an undrained shear strength of $<100 \text{ kPa}$ is left in place at or below formation level, excessive settlement and/or global instability may occur.

7) SITE / IN-SITU SOILS :
Retained (assumed to be stiff sandy CLAY or MUDSTONE); these materials are assumed to have the following minimum properties:

$\phi_{int} = 30^\circ$, $\gamma = 20 \text{ kN/m}^3$ and $c' = 0 \text{ kPa}$.

Foundation (assumed to be MUDSTONE (angular GRAVEL or stiff CLAY)); these materials are assumed to have the following minimum properties:

$\phi_{int} = 32^\circ$, $\gamma = 22 \text{ kN/m}^3$ and $c' = 0 \text{ kPa}$.

8) TYPICAL BATTER/ FRONT FACE STEP:
The walls are to be constructed at a 6° batter, with a 150mm step at the face of each course.

9) TEMPORARY EXCAVATIONS:
This solution is for the permanent works only, and is issued on the basis that a safe system of works is provided for construction. The Principal Contractor installer must produce a method statement and risk assessment for the works to be approved by the Client's Consulting Engineer. Temporary stability and design of any temporary works is outside our scope and should be confirmed by a Temporary Works Designer appointed by the Principal Contractor.

10) CONSTRUCTION TRAFFIC OPERATING CLOSE TO THE WALLS:
Construction traffic/machinery should not traffic the unprotected crest area of the walls, as this can cause movement of the Gabions. If construction plant is to traffic at the rear of the walls, a suitable haul road design must be undertaken (by others).

11) PEDESTRIAN PROTECTION:
As per described on FB-001-H- Site Plan." Fence posts to be fully concreted into minimum 1.0m long, 0.3m diameter sleeves installed into the upper gabion baskets during construction. 1.1m metal guard railing to be installed in 0.7m deep void formers. **Any vehicle barrier requirements, impact loads and barrier solutions are to be determined by others.**

12) DRAINAGE
A 150mm diameter perforated drainage pipe must be provided, as indicated on the drawings, discharging to an approved positive outlet point(s). Indeterminate rodding and discharge points must be provided at minimum 40m centres to ensure the full length of drainage can be positively discharged and fully maintained.

Site drainage is to be designed by others in both the permanent and temporary (construction phase) cases. Water must not be allowed to inundate the wall.

Design of the walls against excessive seepage or hydraulic failure modes is outside Maccaferri and Geoman's scope and is the responsibility of the Client's Consulting Engineer.

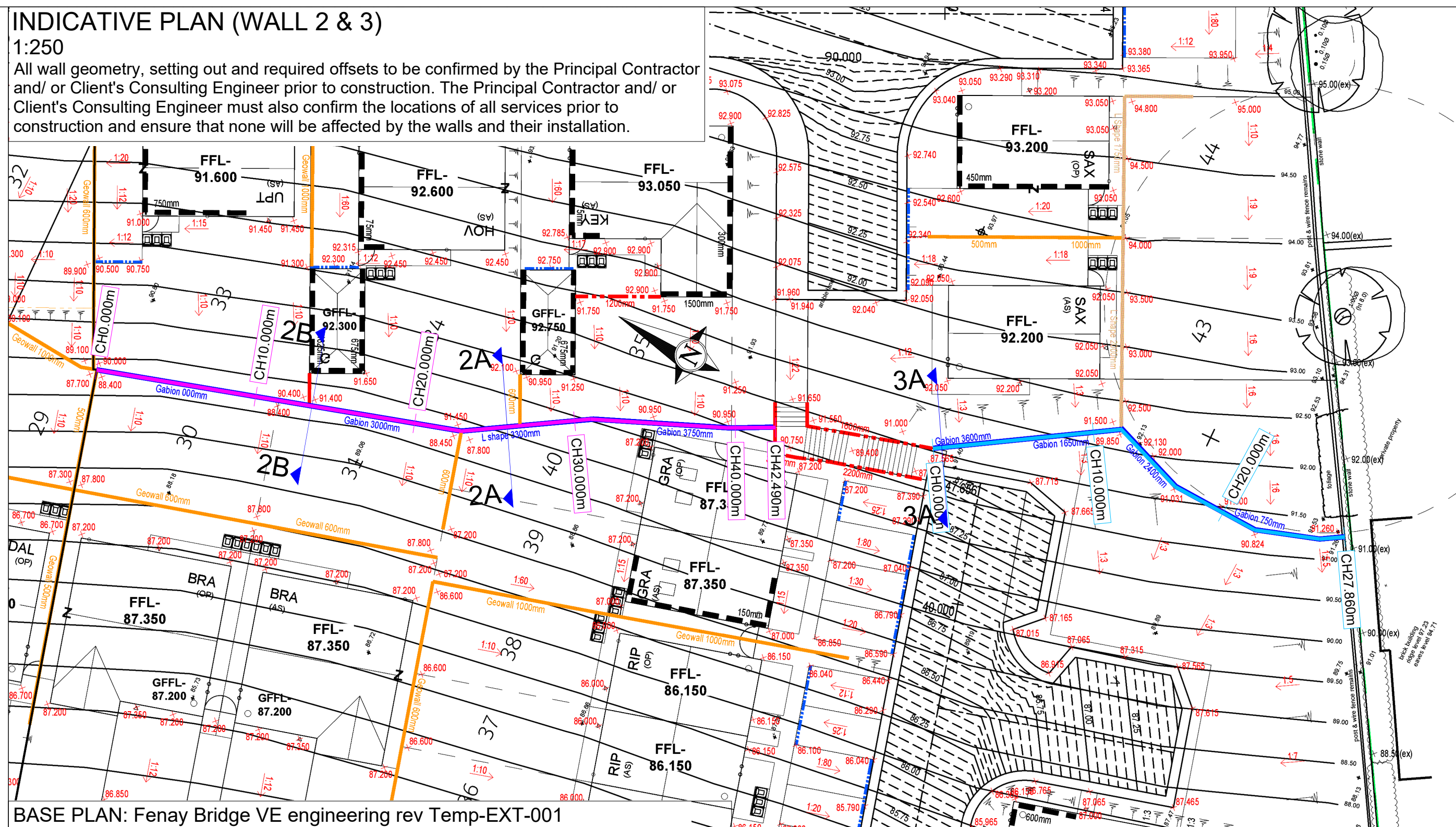
13) SETTING OUT
Setting out of the walls is outside Geoman's scope and is to be provided by the Scheme Designer. The wall line is as per drawings provided. Fenceline is offset from toe as shown on the sections: any required correction to toe line to accommodate to be confirmed prior to construction.

14) BUILDING FOUNDATIONS AT PLOT 34 & 35
All adjacent buildings and structures must be founded at a suitable depth to ensure no loading is imparted onto the Gabion wall and that the foundations do not rely on the wall for any support. Building foundations must be taken down to below the proposed wall formation level. This must be ensured by the building foundation designer prior to construction.

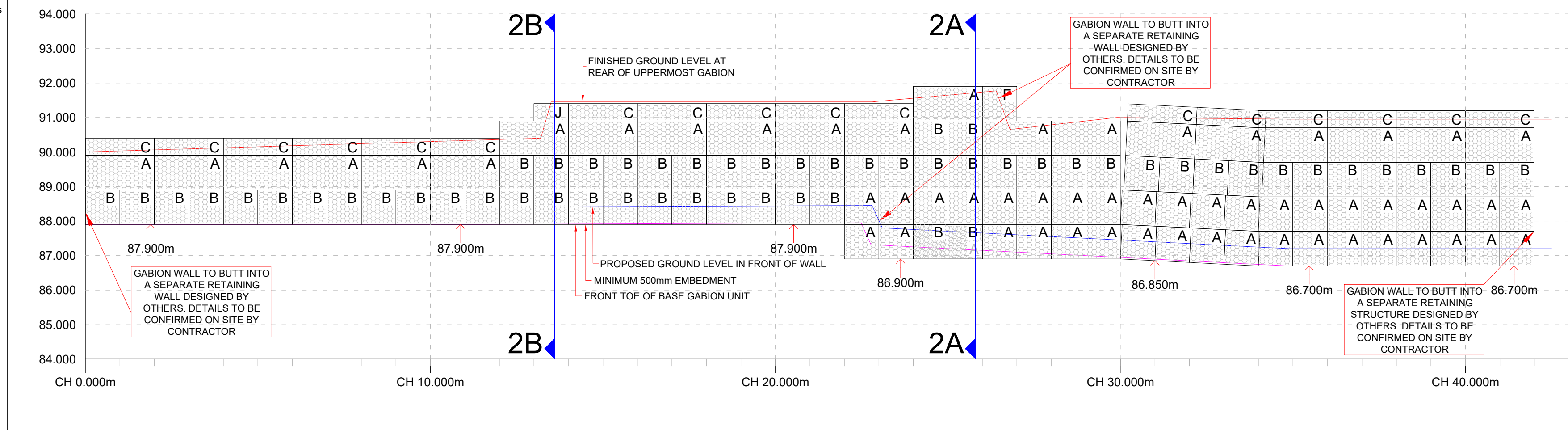
Construction of the wall shall not commence unless and until the Client/ Client's Consulting Engineers has considered the Geoman Design Submission Document (24-6029-F1) to ensure there are no errors, omissions or conflict with the scheme design.

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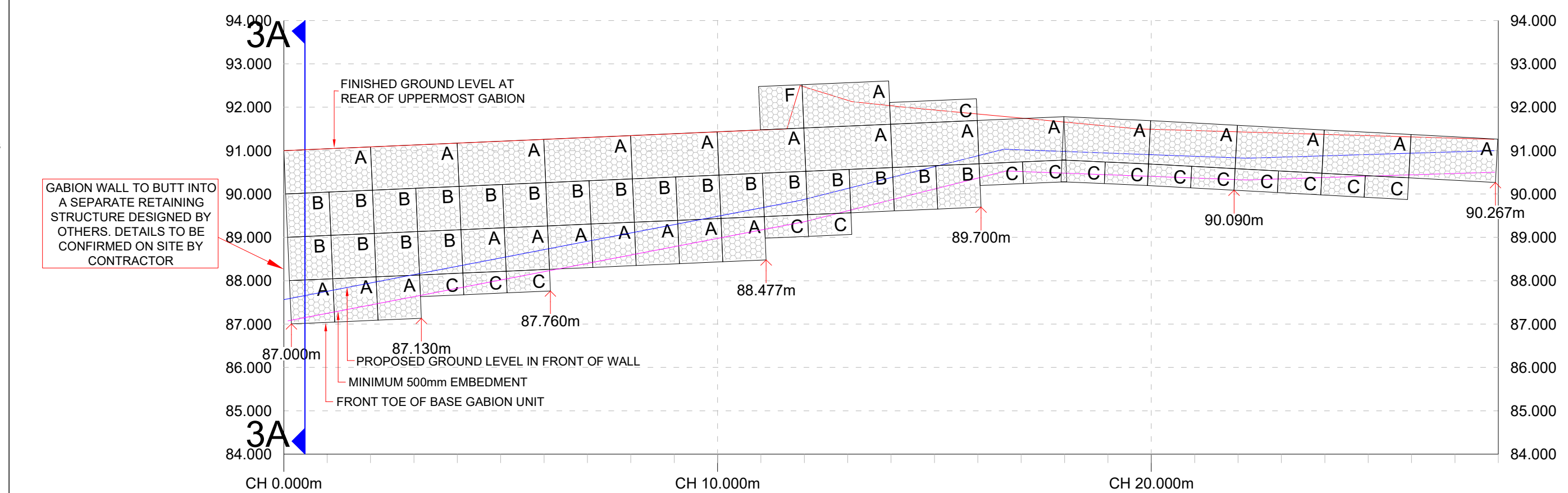
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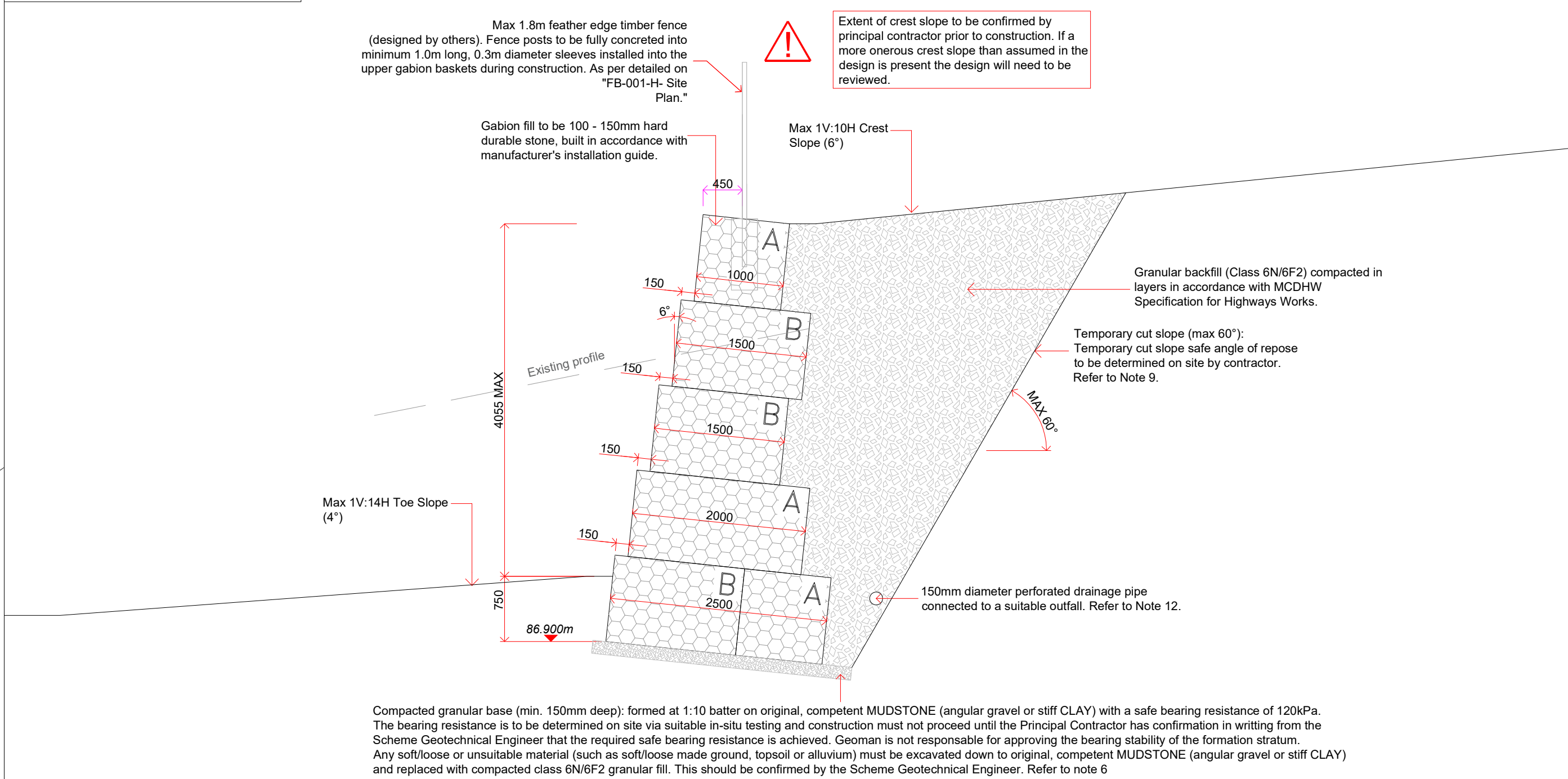
BASE PLAN: Fenay Bridge VE engineering rev Temp-EXT-001
ELEVATION (WALL 2)
1:100



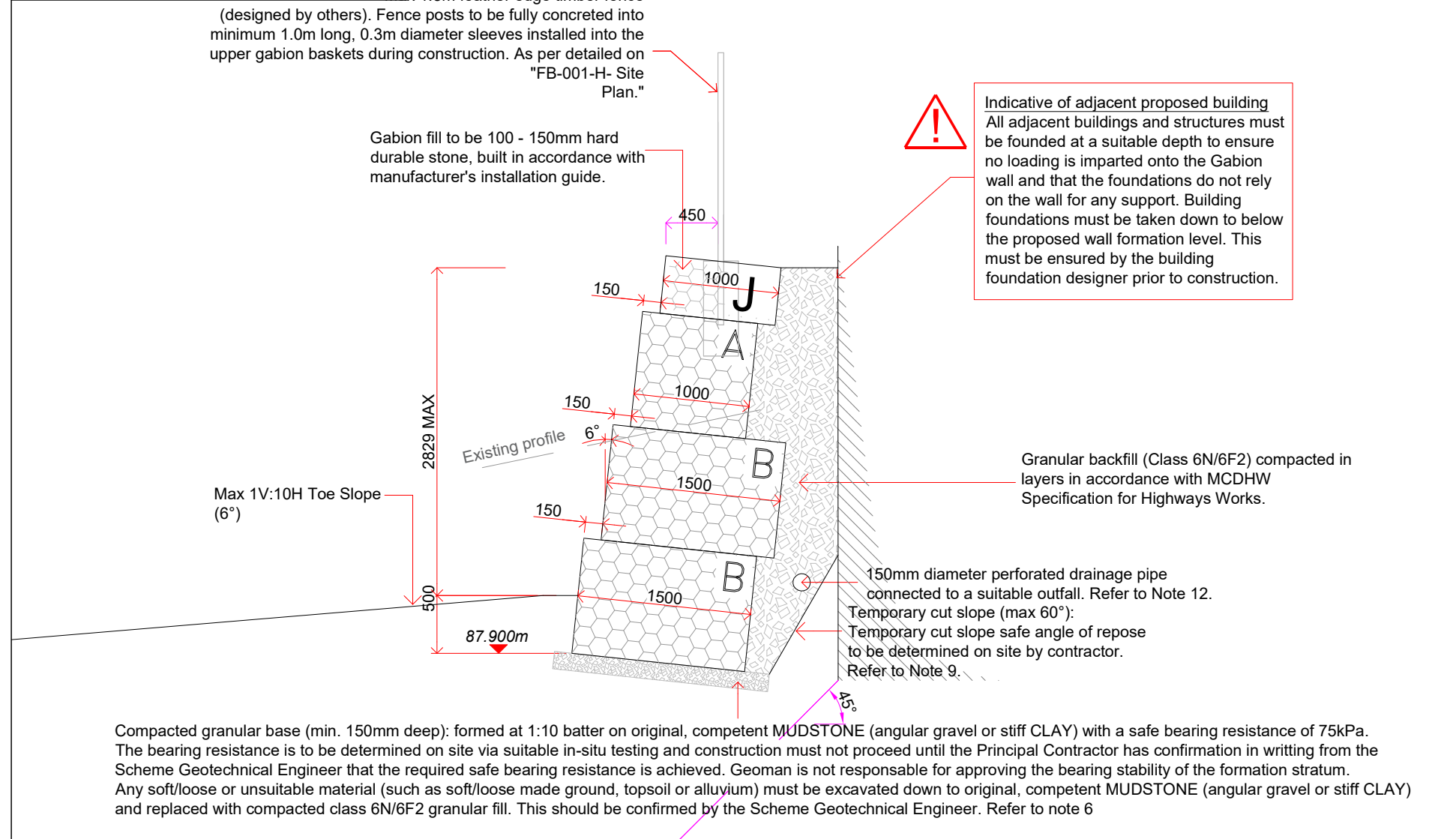
ELEVATION (WALL 3)
1:100



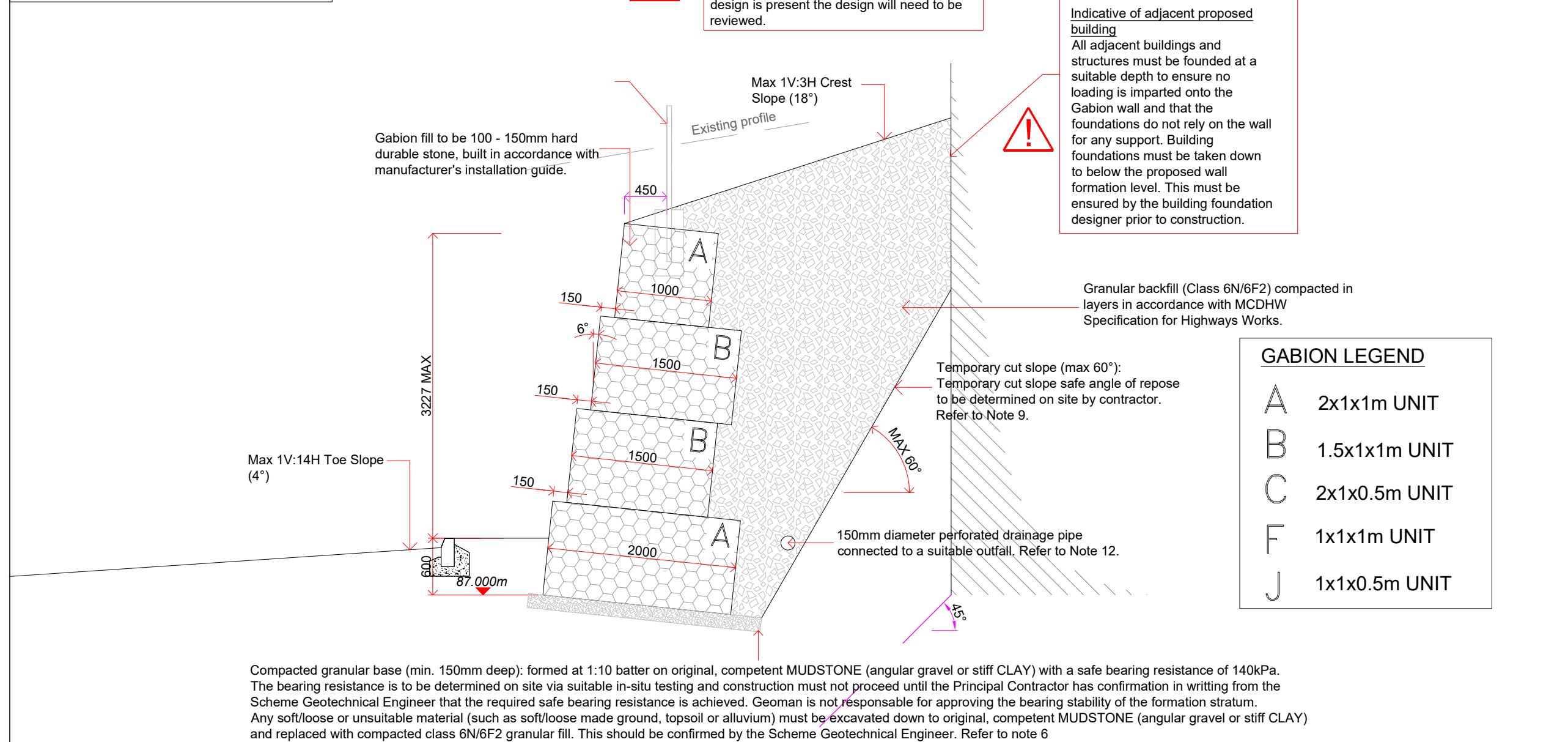
SECTION 2A
1:50



SECTION 2B
1:50



SECTION 3A
1:50



Drawing Title: GABION RETAINING WALL 2 & 3				Designed: DC	Date: 30/10/2024	Project Title: FENAY BRIDGE	MACCAFERRI T: 01865 770555 E: technical.uk@maccaferri.com E: construction.uk@maccaferri.com	Approved Designer: GEOMAN T: +44 (0)2890 664 941 E: geoman@geoman.co.uk	Maccaferri Ltd will not be liable for any loss or damage resulting from your use of or reliance on this document. Maccaferri Ltd assumes no responsibility for drawings and calculations provided, as they must be intended as a general indication to suggest the proper use of its products. This drawing, or design proposal, remains the copyright of Maccaferri Ltd and is not to be copied or disclosed to any persons other than the person to whom it is originally intended.
Scale @ A3:	Unit:	Project Number:		Drawn: DC	Date: 30/10/2024	Client: WILLIAMS WALLING LTD			
Drawing Number:				Approved: GM	Date: 30/10/2024	Drawing Status: CONCEPT/PRELIMINARY ONLY ☐ FOR APPROVAL ☐ FOR CONSTRUCTION ☐ AS BUILT ☐			
AS SHOWN	MM	24-6029-F1							
Revision: A									
DC	GM	12/11/2024							
DC	GM	30/10/2024							
Drawn:	App:	Date:							
REVA									
REV0									
Status/Rev:	Description:								