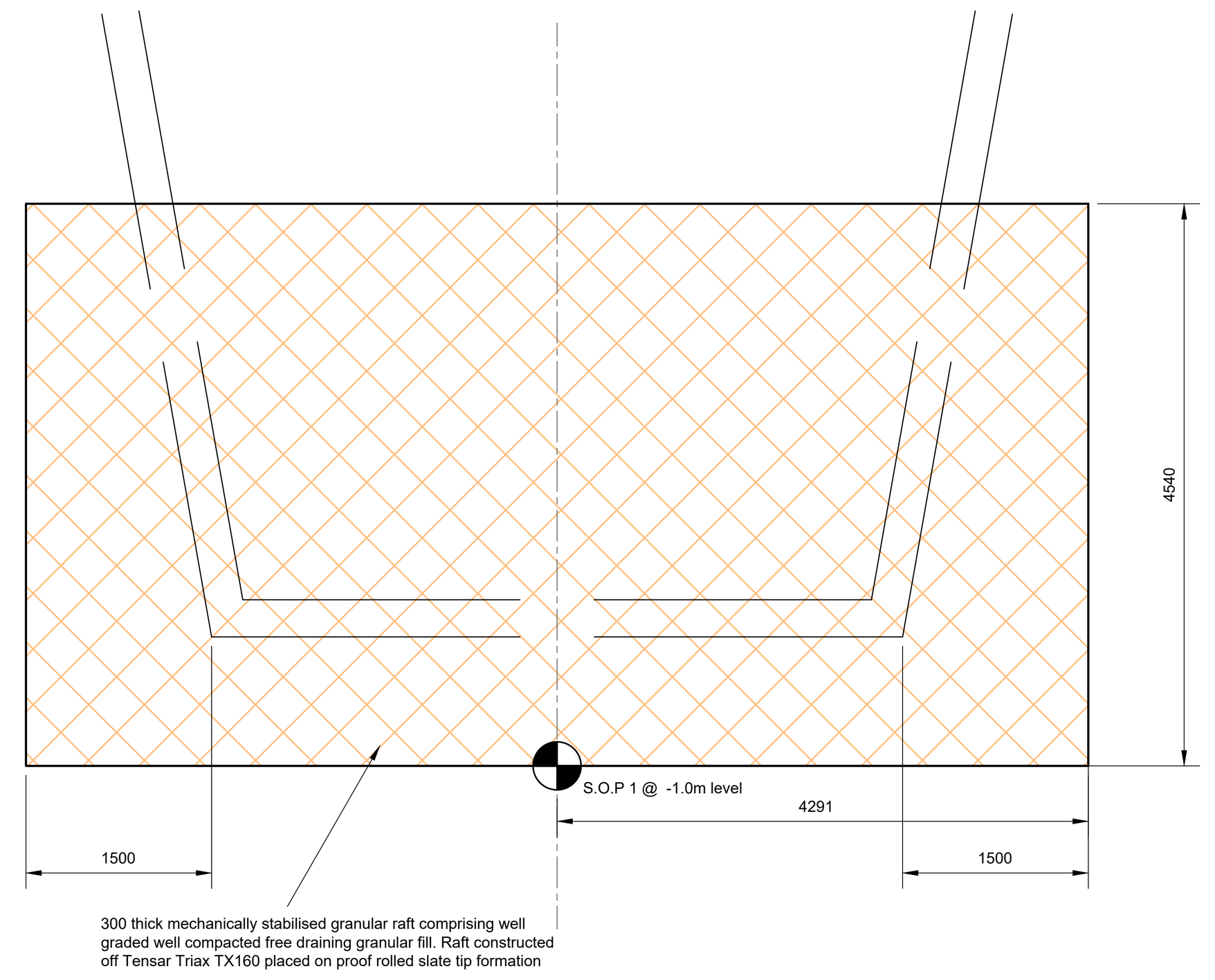
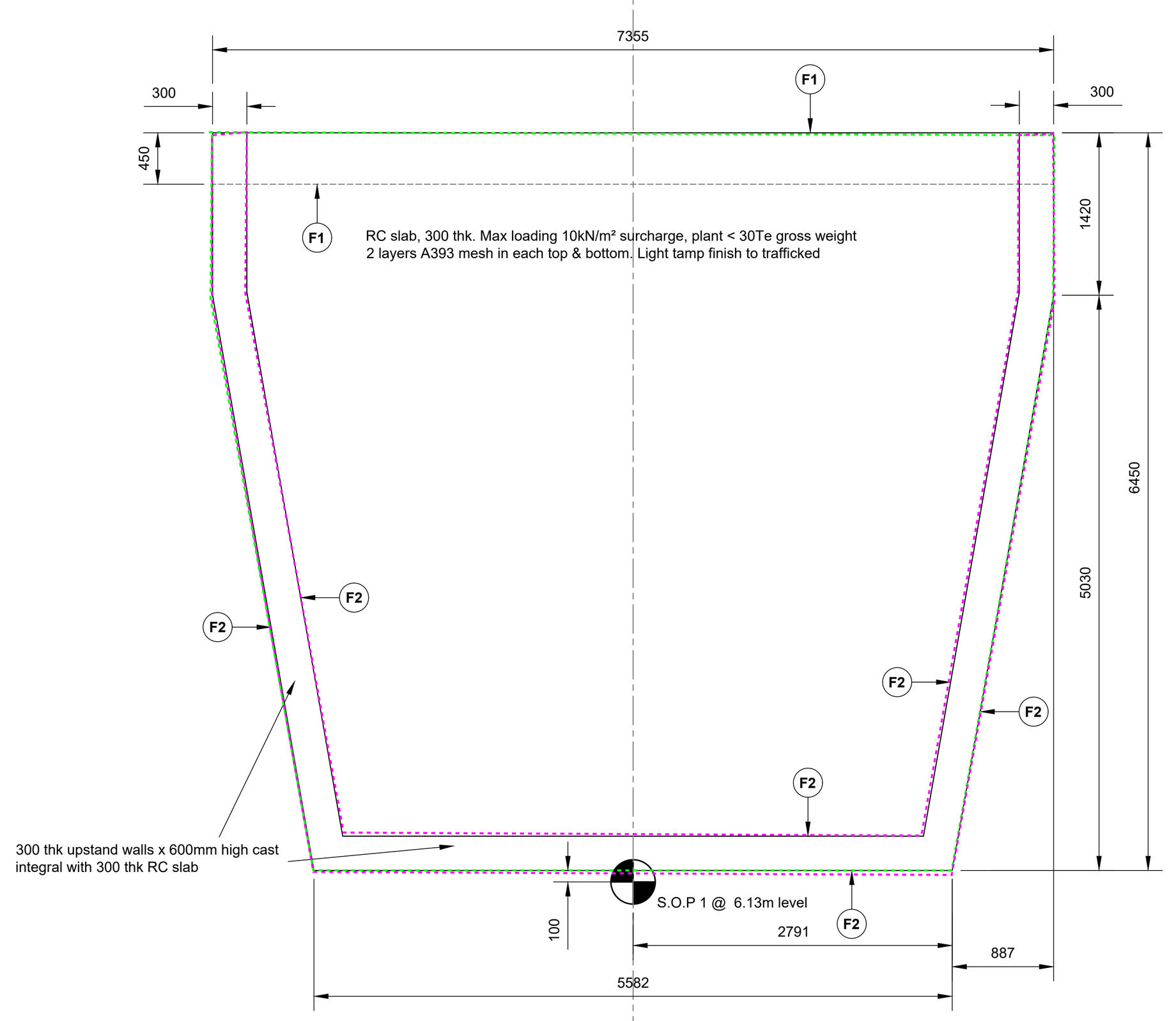
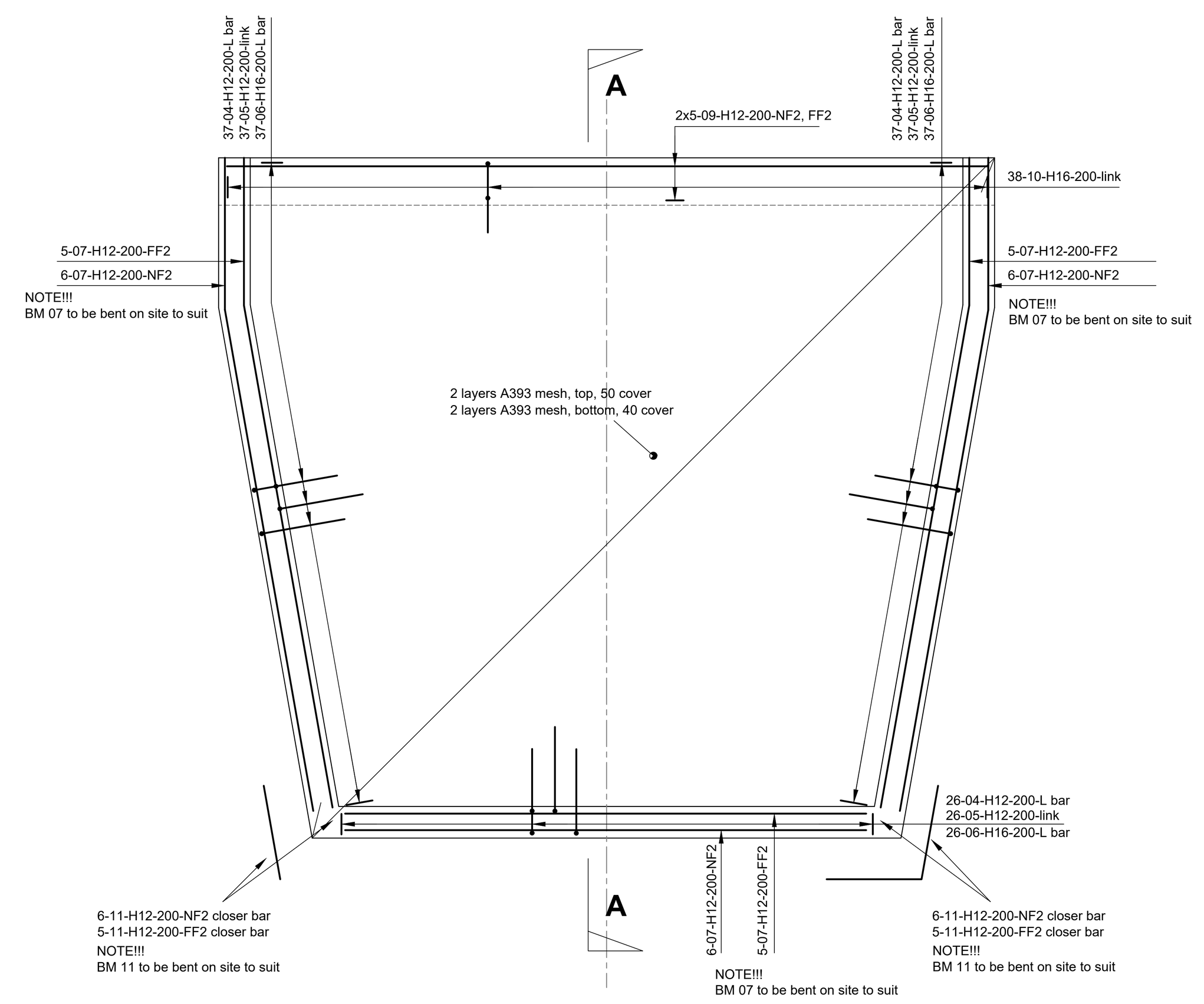


PLAN ON MECHANICALLY STABILISED GRANULAR RAFT FOUNDATION AT LOWER LEVEL, 1:50
(-1.0m level)



PLAN ON RC SLAB AT LOADING LEVEL, 1:50
(+6.13m level)



DETAIL C - PLAN ON RC SLAB AT LOADING LEVEL SHOWING REINFORCEMENT DETAILS, 1:50 (+6.13m level)

Notes:

Do not scale from this drawing.

All dimensions to be verified by site measurement.

This drawing to be read in conjunction with all other relevant contract drawings & specifications.

All work to be carried out in accordance with the Specification for Highway Works (current edition)

Structural Concrete to slab bases & upstand walls:

Designed mix:
- 50 year design life
- Exposure class XC3/4, XD3, XF4 to BS8500-1:2015
- Min cover, 40mm walls, 50mm top of slab
- Strength grade; C35/45
- Max aggregate size; 20mm
- Freeze-thaw resisting aggregates, BS8500:2:2015, **4.3.2**
- Coarse aggregate to BS EN 12620 & PD 6682-1
- Fine aggregate to BS EN 12620 & PD 6682-1
- Max W/C ratio; 0.40
- 4.5% air entrainment
- Minimum cement content; 380 Kg/m²
- Cement type IIIA, IIB-V
- For type IIIA cement, GGBFS shall not exceed 50%
- Slump class; S3
- Min cover, top 50mm
- Min cover, bottom 40mm
- Side faces 40mm

Concrete blinding under slab bases where required:

Designated mix, reference GEN3 to BS 8500-1:2006
- Slump class; S3

Formwork: (specification for highway works, clause 1708, SHW)

- Exposed faces, vertical & formed to be class F2
- Buried faces, vertical & formed to be class F1
- Exposed faces, unformed, top of walls to be class U3
- Light tamp finish to trafficked surface

All exposed external arrises to have min 25x25mm chamfer

Reinforcement:

For reinforcement, see bar bending schedule No. EWP5949/s(20)L001/01

Laps in reinforcement shall not be less than 40 x smaller bar diameter in lap

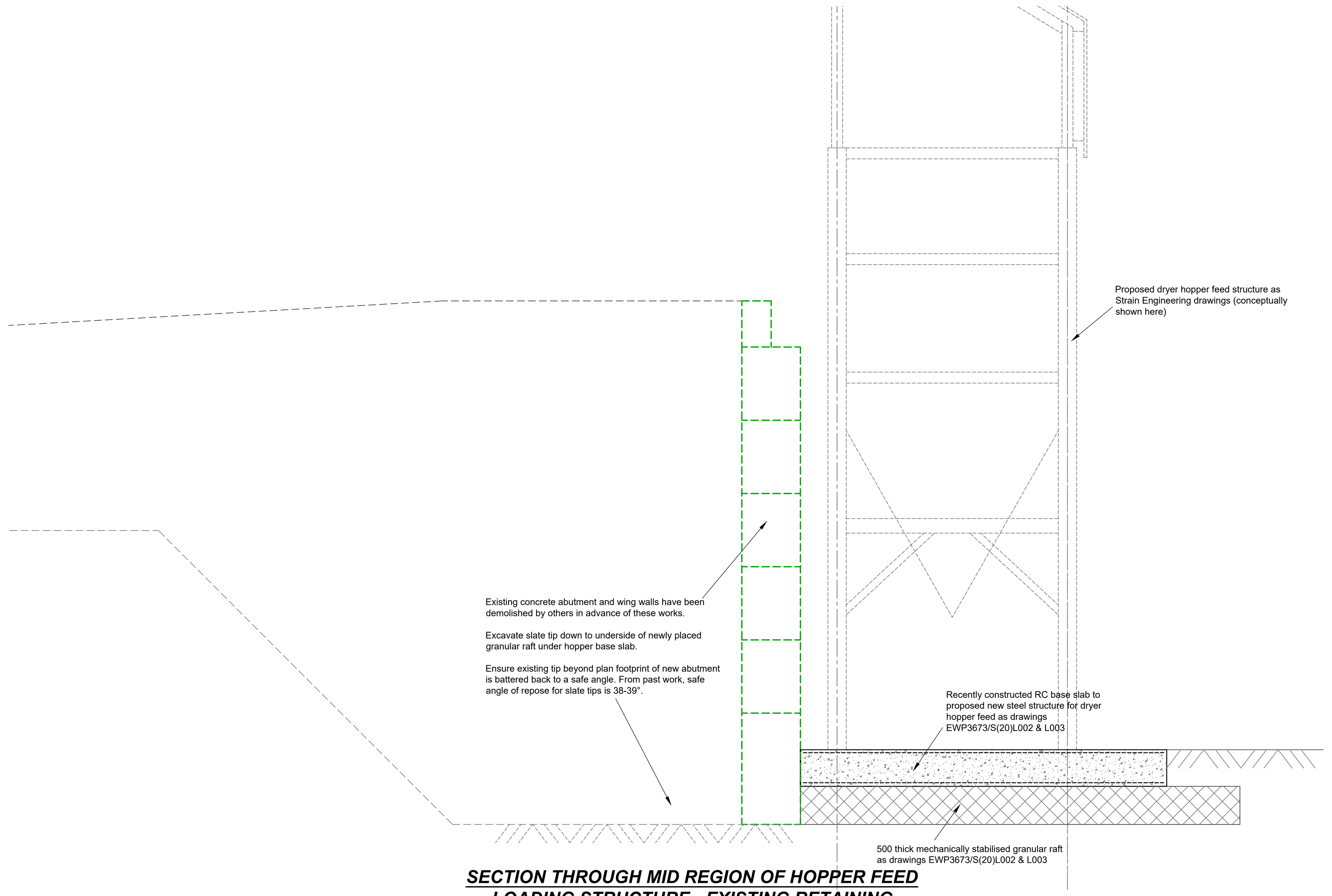
All reinforcement to be free of damage & excessive rusting

Notations

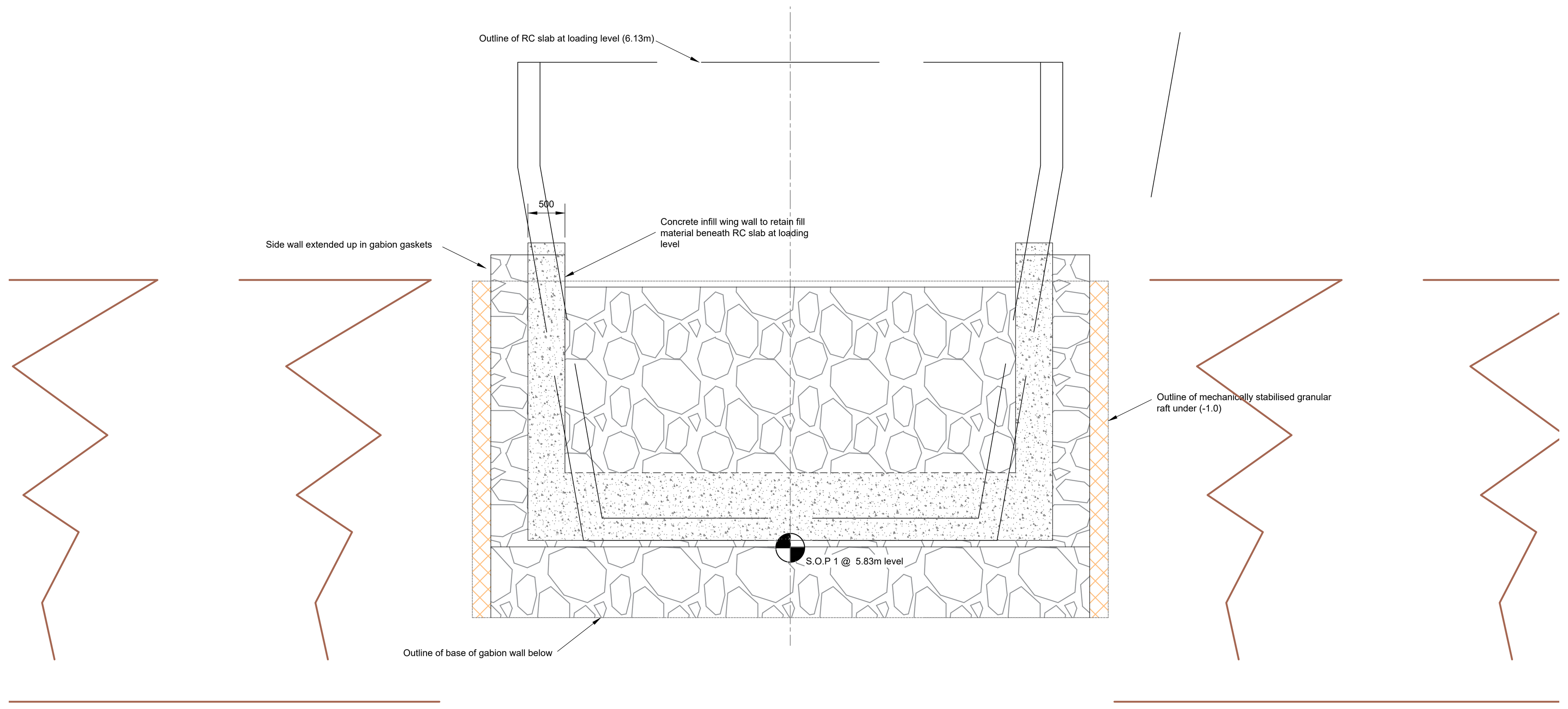
EF	Each face	ABR	Alternate bars reversed
FF	Far face	EQ SPD	equally spaced
NF	Near face		
T	Top		
B	Bottom		

Where the rebar is denoted T1 etc, the number 1 refers to the outermost layer etc

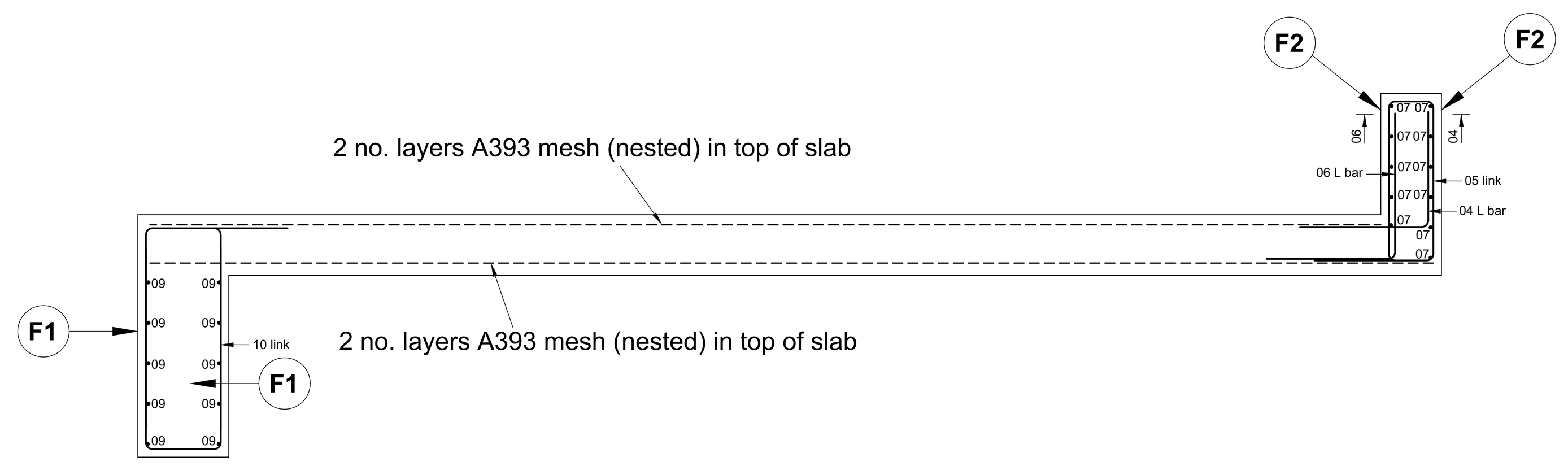
All rebar to conform with BS 4449: 2005, H being the designation of grade B500A, B500B or B500C meeting this standard except designation X which shall be plain round mild steel, grade 250 to BS4449



SECTION THROUGH MID REGION OF HOPPER FEED LOADING STRUCTURE - EXISTING RETAINING WALL/NEW TOWER FOUND, 1:50

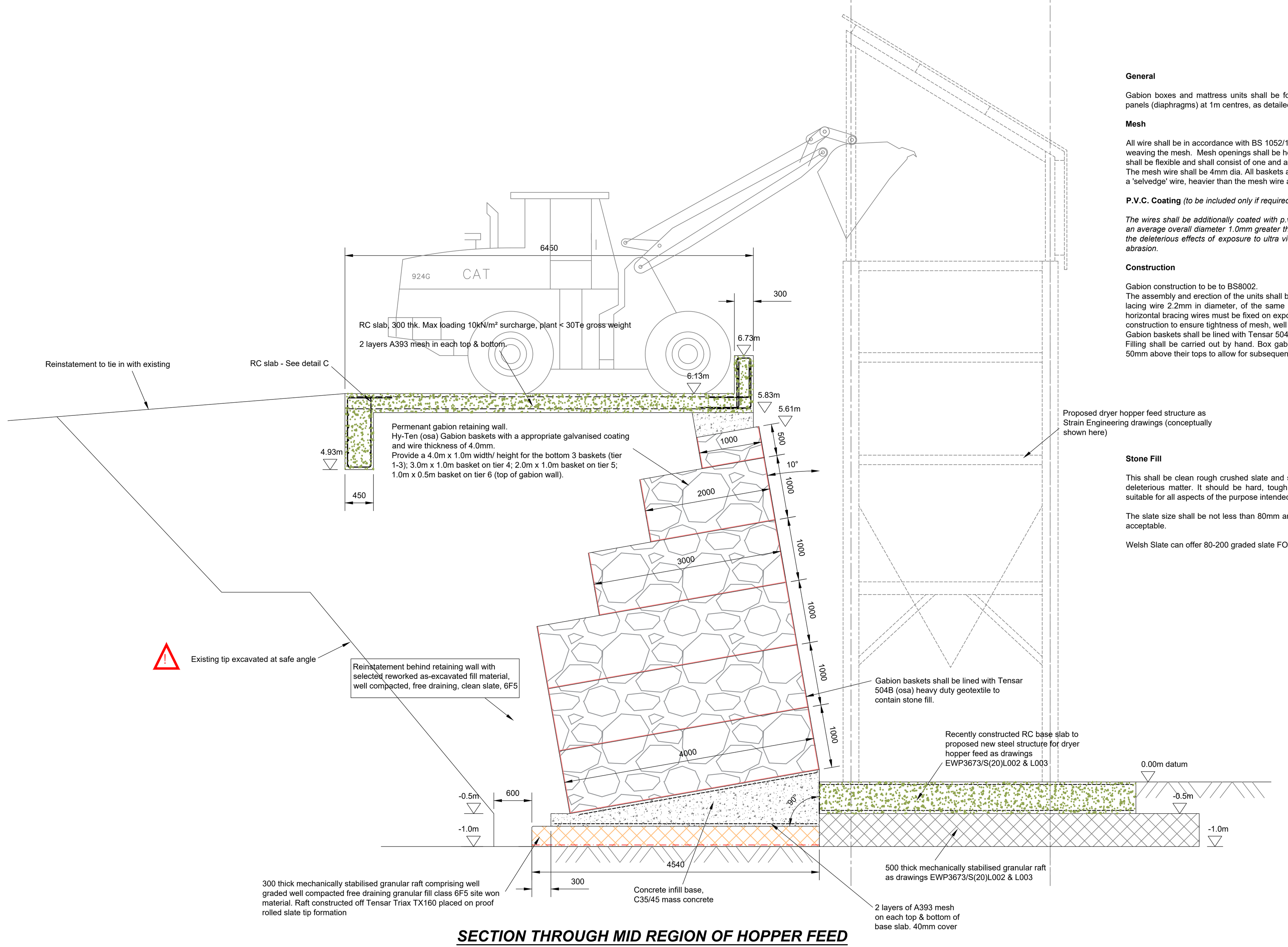


PLAN ON TOP TIER OF GABION WALL, 1:50
(+5.83m level)



see bar bending schedule EWP5949/s(20)L001/01 for reinforcement

SECTION A-A, 1:25



SECTION THROUGH MID REGION OF HOPPER FEED LOADING STRUCTURE - PROPOSED RETAINING STRUCTURE, 1:50

General

Gabion boxes and mattress units shall be formed from hexagonal woven steel wire mesh, divided by partition panels (diaphragms) at 1m centres, as detailed on the drawings.

Mesh

All wire shall be in accordance with BS 1052/1980 heavily galvanised with a zinc coating to BS 443/1982 prior to weaving the mesh. Mesh openings shall be hexagonal in shape, nominally 80 x 100mm (Type 8). Mesh joints shall be flexible and shall consist of one and a half turns of wire. (This mesh is often called double or triple twist). The mesh wire shall be 4mm dia. All baskets are to be tied together; All edges of the mesh shall be reinforced with a 'selvedge' wire, heavier than the mesh wire and not less than 3.40mm diameter for mesh type 8/2.

P.V.C. Coating *(to be included only if required)*

The wires shall be additionally coated with p.v.c. sheathing grey in colour, of mean wall thickness 0.50mm, giving an average overall diameter 1.0mm greater than the zinc coated core wire. The p.v.c. shall be capable of resisting the deleterious effects of exposure to ultra violet light, immersion in sea water, normally occurring pollutants and abrasion.

Construction

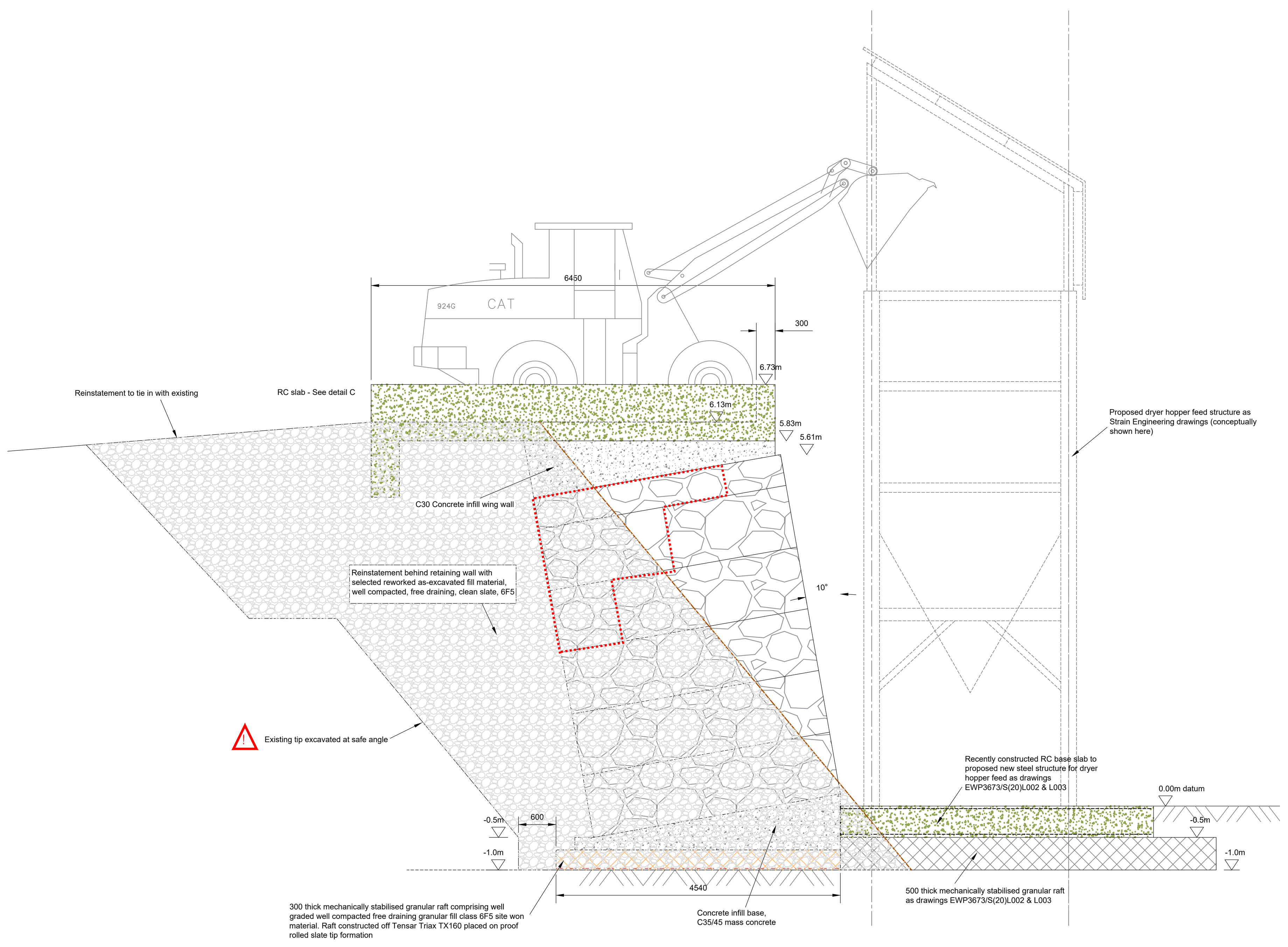
Gabion construction to be to BS8002.
The assembly and erection of the units shall be generally in accordance with the manufacturer's instructions, using lacing wire 2.2mm in diameter, of the same specification as the mesh wire. All lacing must be continuous and horizontal bracing wires must be fixed on exposed faces of box gabions. Particular care shall be taken throughout construction to ensure tightness of mesh, well packed filling with minimum voids, and secure lacing.
Gabion baskets shall be lined with Tensar 504B (osa) heavy duty geotextile to contain stone fill.
Filling shall be carried out by hand. Box gabions shall be filled whilst under tension and over-filled by 25mm to 50mm above their tops to allow for subsequent settlement; 100mm filling material may be used for this purpose.

Stone Fill

This shall be clean rough crushed slate and shall be essentially free from dust, clay vegetative matter and other deleterious matter. It should be hard, tough, durable and dense, resistant to the action of air and water and suitable for all aspects of the purpose intended.

The slate size shall be not less than 80mm and not greater than 200mm. A tolerance of 5% of smaller material is acceptable.

Welsh Slate can offer 80-200 graded slate FOC.



ELEVATION OF HOPPER FEED LOADING STRUCTURE - PROPOSED RETAINING STRUCTURE, 1:50

DESIGN STATUS
- Preliminary, not for construction
- Awaiting Client approval
- Final, issued for construction

A	Specification for gabion retaining walls added	Mar 2018

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Project
Dryer feed system, Powders Plant, Blaenau Ffestiniog

Title
Alternative gabion retaining wall scheme and High level hopper loading bay structure

Original Scale	Drawn	Checked
1:50	RGLR	JE
	Date May 2018	Date May 2018

Drawing Number ***EWP5949/s(20)L001*** ***A0*** Rev ***A***

DO NOT SCALE