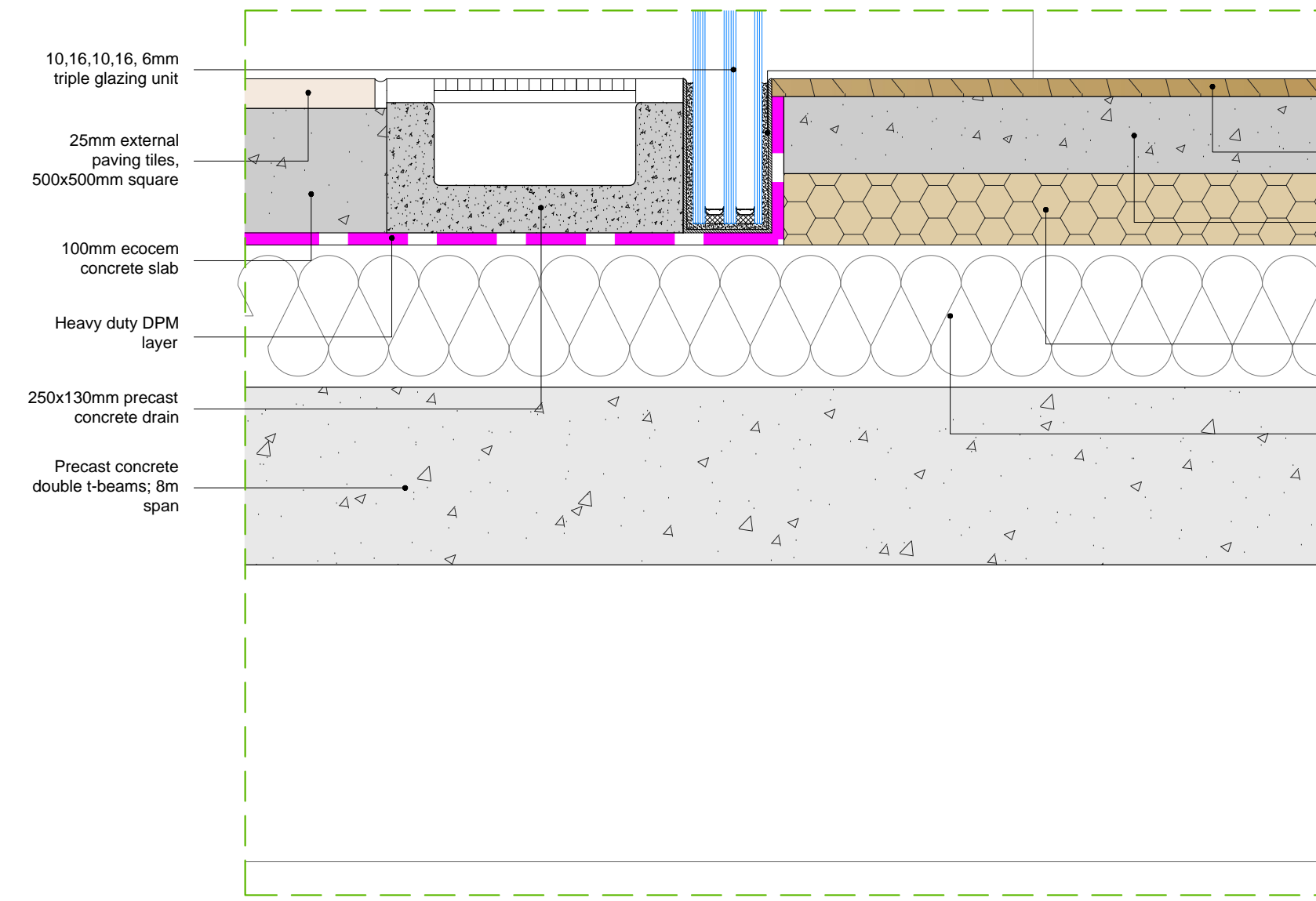


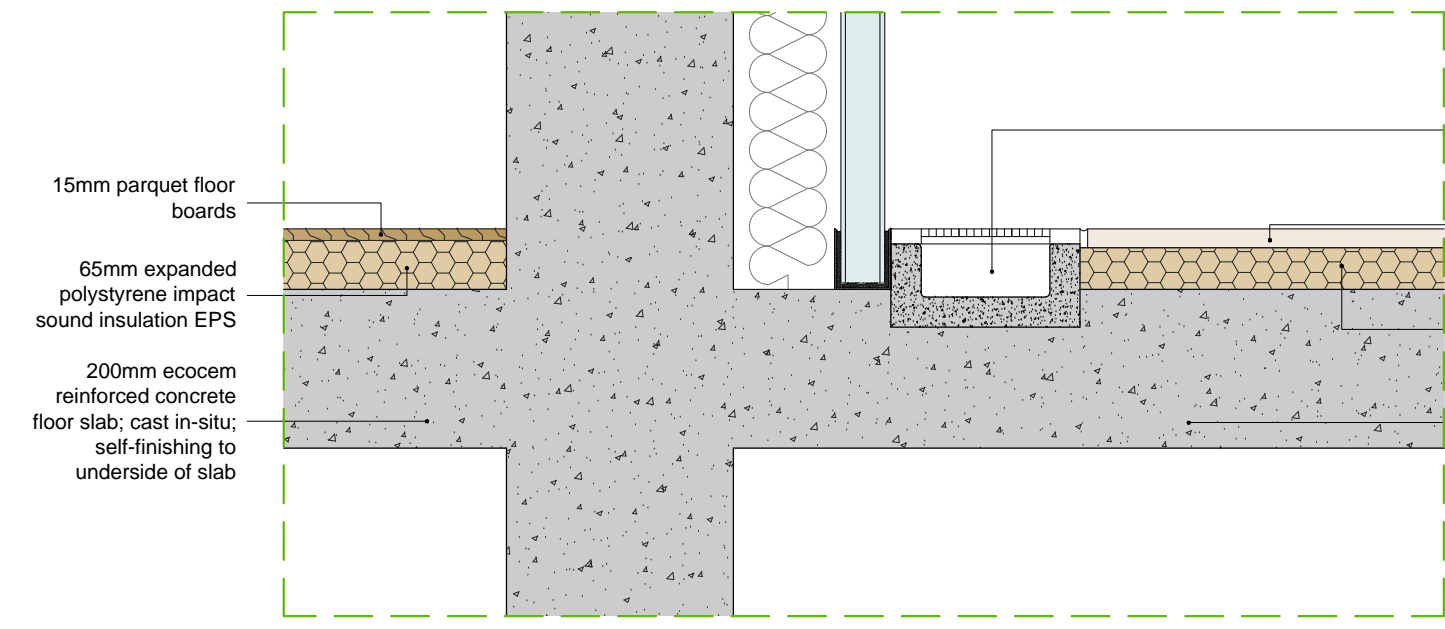
Glazing Detail: DET-V19
Scale 1:10

- 10,16,10,16,6mm triple glazing unit
- Preformed steel capping to protect glazing frames; powder-coated to specified colour
- Steel I-brackets bolted to support floor and glazing
- 58mm thick polycarbonate panel; semi-translucent
- 140mm rockwool insulation



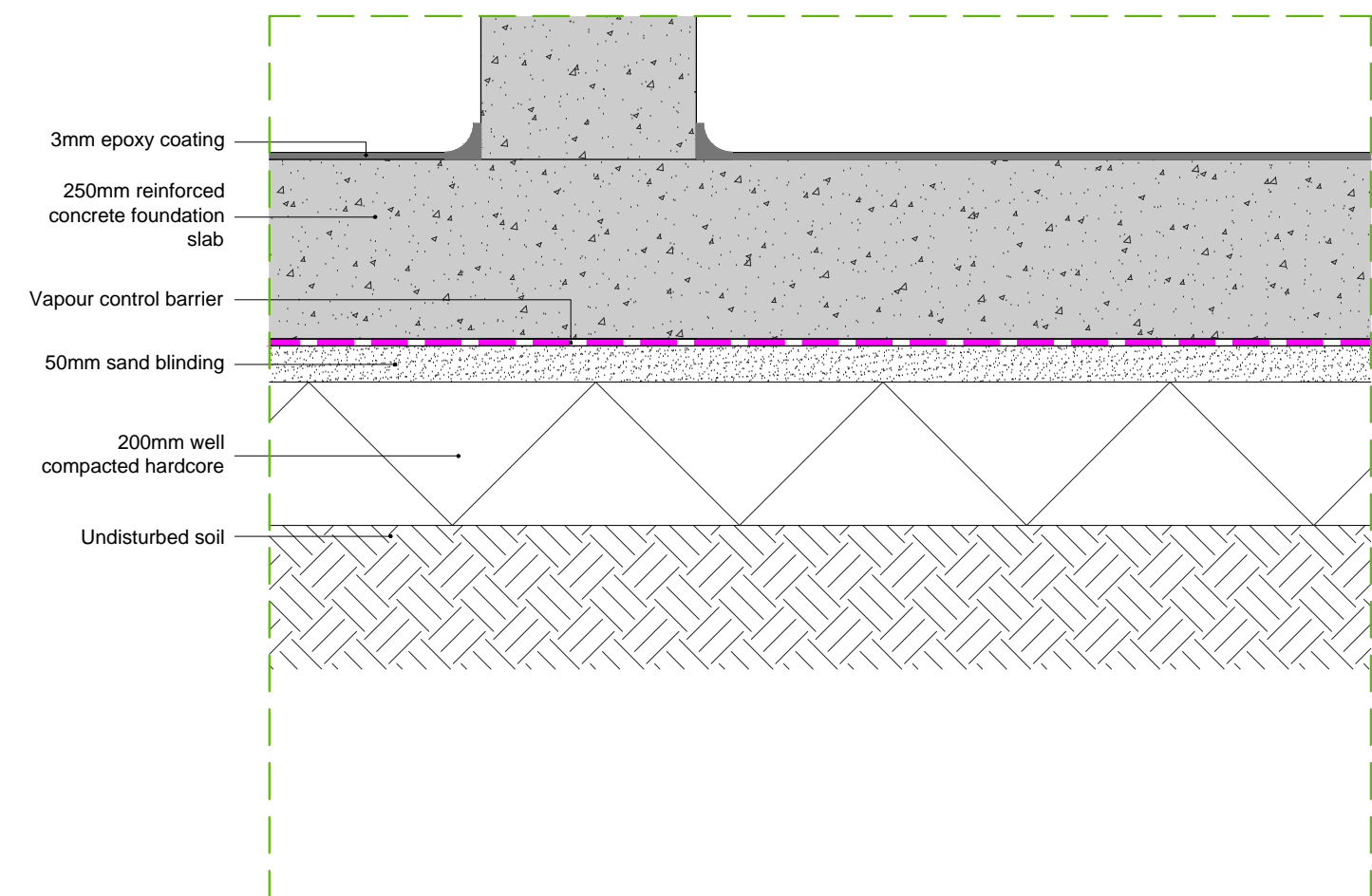
Glazing Detail: DET-V16
Scale 1:5

- 130x75mm concealed steel glazing frame
- 15mm parquet flooring boards
- 65mm self-levelling gypsum based structural screed
- 50mm expanded polystyrene impact sound insulation EPS
- 120mm rigid wood fibre insulation batts



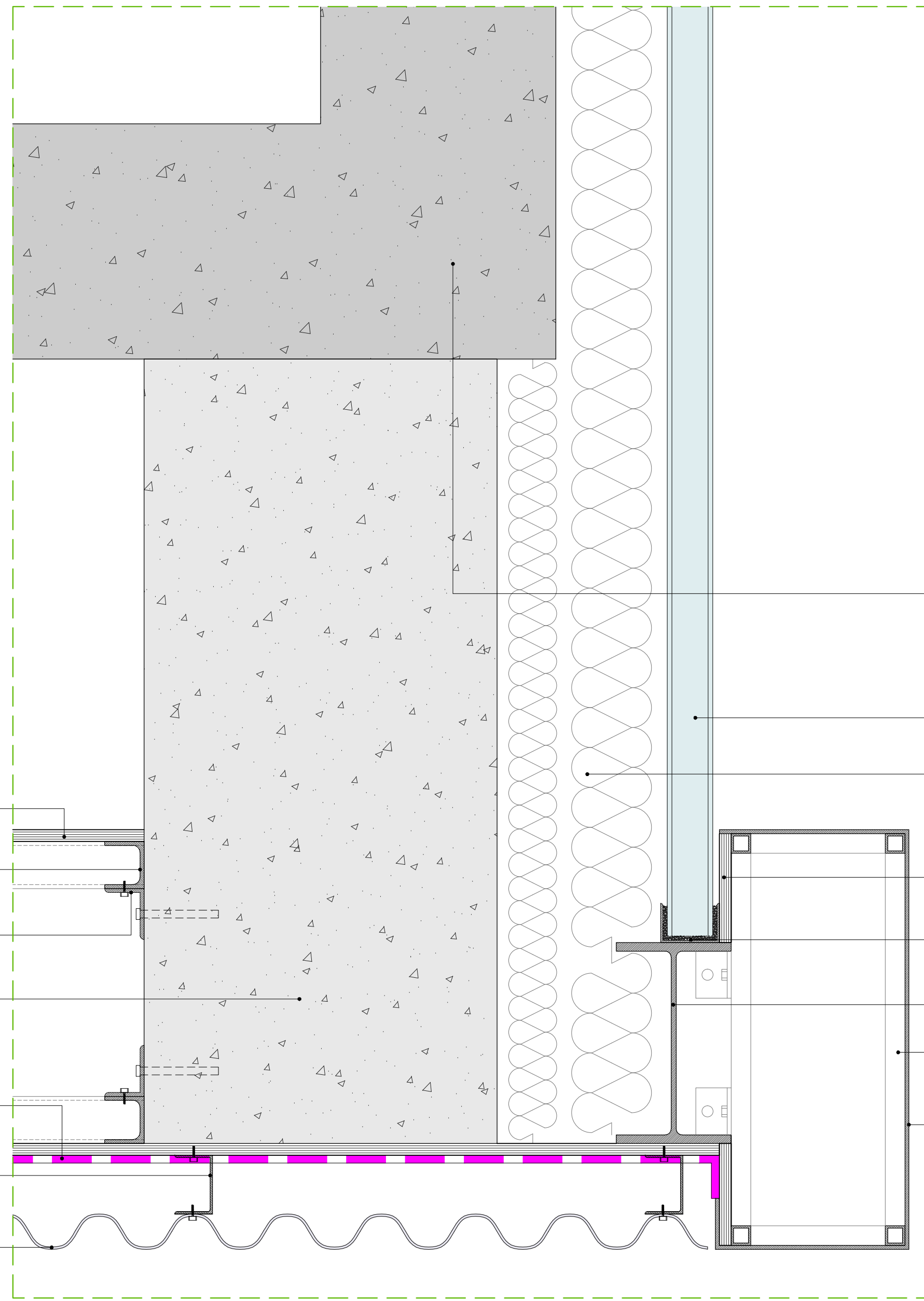
Drain Detail: DET-V20
Scale 1:10

- 250x130mm precast concrete drain
- 25mm external paving tiles, 500x500mm square
- 65mm self-levelling gypsum based structural screed
- 80x75mm concealed steel glazing frame



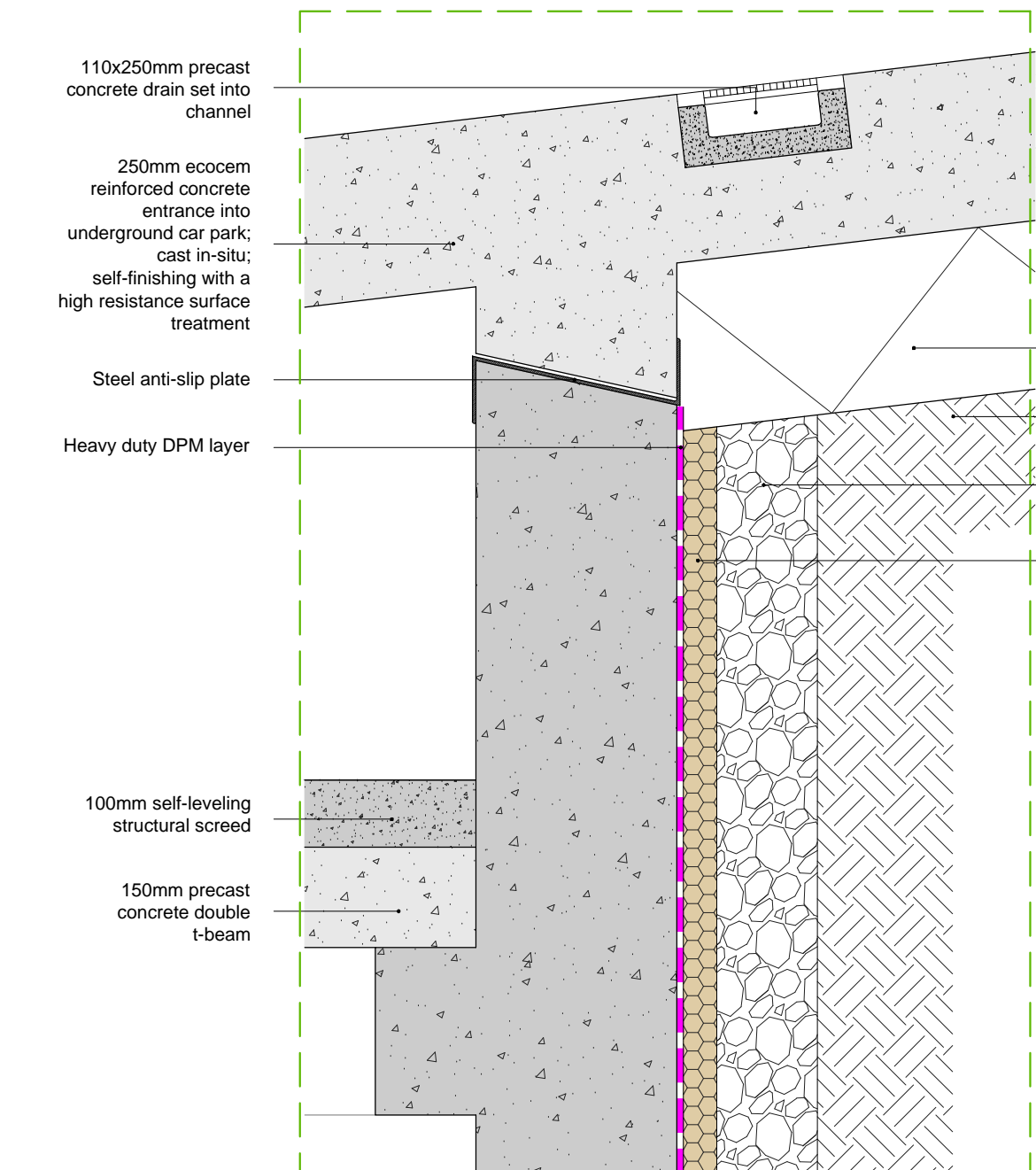
Ground Detail: DET-V21
Scale 1:10

- 3mm epoxy coating
- 250mm reinforced concrete foundation slab
- Vapour control barrier
- 50mm sand blinding
- 200mm well compacted hardcore
- Undisturbed soil



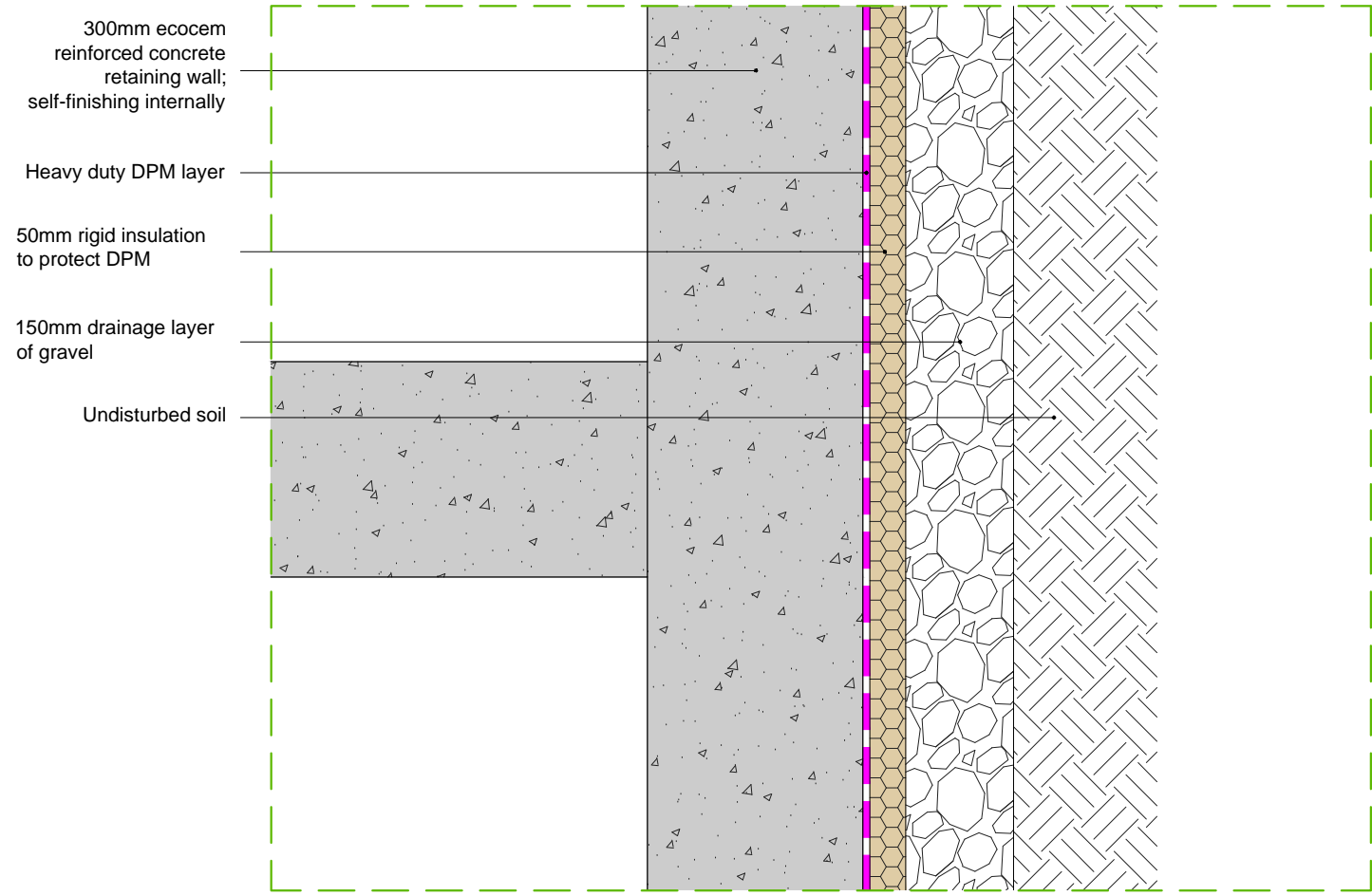
Wall Corner Detail: DET-H4
Scale 1:5

- 300mm ecocem reinforced concrete retaining wall; self-finishing internally
- 58mm thick polycarbonate panel; semi-translucent
- 220mm rockwool insulation
- 15mm marine plywood
- 60x50mm steel u-bracket
- 65x50mm steel I-bracket bolted to concrete column
- 1000x450mm reinforced concrete column
- Heavy duty DPM layer
- 45x75mm steel u-bracket supporting the corrugated steel cladding
- 45mm corrugated steel sheeting; bolted to sub-structure; painted



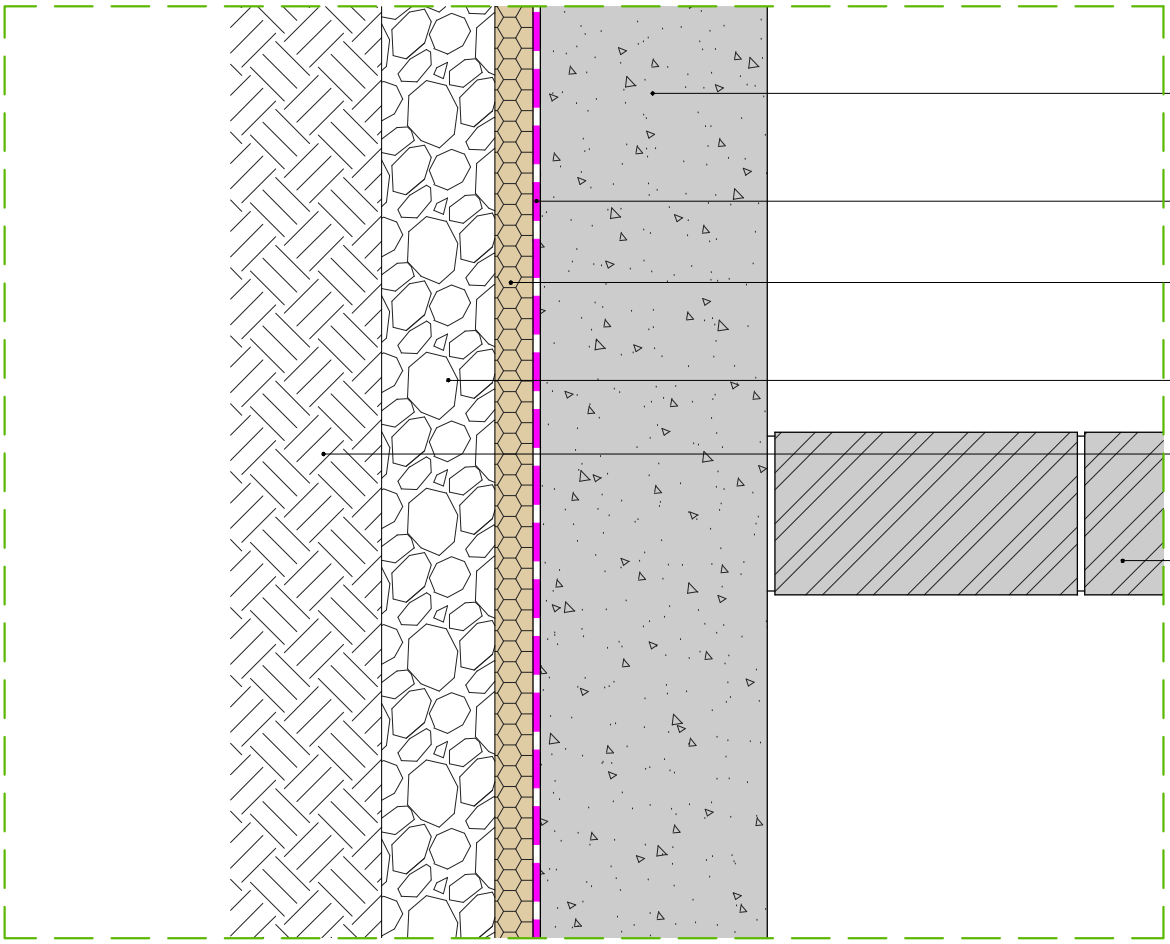
Entrance Ramp Detail: DET-V7
Scale 1:10

- 200mm well compacted hardcore
- Undisturbed soil
- 150mm drainage layer of gravel
- 50mm rigid insulation to protect DPM layer



Internal Wall Detail: DET-H1
Scale 1:10

- 300mm ecocem reinforced concrete retaining wall; self-finishing internally
- Heavy duty DPM layer
- 50mm rigid insulation to protect DPM
- 150mm drainage layer of gravel
- Undisturbed soil



Internal Wall Detail: DET-H2
Scale 1:10

- 300mm ecocem reinforced concrete retaining wall; self-finishing internally
- Heavy duty DPM layer
- 50mm rigid insulation to protect DPM
- 150mm drainage layer of gravel
- Undisturbed soil
- 215mm lightweight concrete block wall; paint finish on both sides

NOTES:

- USE FIGURED DIMENSIONS ONLY - DO NOT SCALE
- ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION

WALL BUILD-UP:

45mm CORRUGATED, GALVANISED STEEL SHEETING, PAINTED TO APPROPRIATE COLOUR AND BOLTED TO STEEL SUB-FRAME. ON 48x75mm STEEL U-BRACKET AT 600mm CENTRES, BOLTED TO MARINE PLYWOOD. DPM WATER-PROOFING LAYER ON 15mm MARINE PLYWOOD ON 50x63mm STEEL SUN-FRAME BOLTED TO MAIN STEEL I-BEAMS; 300mm ROCKWOOL INSULATION IN BETWEEN 15mm MARINE PLYWOOD. INTERNAL CLADDING TO BE 1200x300mm TILES FIXED TO THE PLYWOOD USING HIDDEN FIXINGS

GLAZED WALLS:

CLEAR GLAZING TO BE TRIPLE GLAZED (10,16,10,16,6) UNITS FIXED INTO STEEL FRAMES, HIDDEN WITHIN CONSTRUCTION (SEE DETAILS). GLASS TO HAVE A FAINT TINT (TO PROTECT FROM THE HARSH SOUTH AFRICAN SUN).

SEMI-TRANSLUCENT GLAZING TO BE 58mm THICK; DOUBLE-SKINNED POLYCARBONATE PANELS WITH STEEL FRAMES, TO FIT INTO SAME SPACINGS AS CLEAR GLAZING CONCRETE:

ALL CONCRETE TO INCLUDE 50% GGBS UNLESS OTHERWISE STATED.

GGBS IS GROUND GRANULATED BLASTFURNACE SLAG AND IS A BY-PRODUCT OF THE STEEL INDUSTRY. IT IS RAPIDLY COOLED WITH WATER AND GROUND DOWN TO A POWDER. USED IN CONJUNCTION WITH OPC.

ALL CONCRETE WALLS AND FLOOR SLABS TO BE POURED IN-SITU USING SMOOTH FORMWORK, AS IT WILL BE SELF-FINISHING

BLOCKWORK:

ALL BLOCKWORK TO BE LOW CARBON CONCRETE BLOCKS. THESE ARE BLOCKS MADE WITH THE SAME ECOCEM CEMENT AS THE CAST IN-SITU WALLS AND FLOOR SLABS.

ROOF:

MAIN ROOF BEAMS TO BE CUSTOM EASI-JOIST MANUFACTURED TIMBER BEAMS TO SPAN 55m. GALVANISED STEEL WEBS SUPPORT TWO TIMBER STRINGS ON TOP AND BOTTOM.

ROOF BUILD-UP:

45mm CORRUGATED, GALVANISED STEEL SHEETING, PAINTED TO APPROPRIATE COLOUR AND BOLTED TO STEEL SUB-FRAME. ON 77mm STEEL T-BRACKET BOLTED TO 60x85mm STEEL I-BRACKET. ON 60x115mm STEEL BOX-SECTION GRID ON STEEL UPRIGHTS ON STEEL UPRIGHTS FIXED TO PRIMARY STEEL FRAME; 4mm TWO LAYER TPO ROOF SEAL ON 200mm SLOPING POLYSTYRENE RIGID-FOAM THERMAL INSULATION ON 140mm CORRUGATED STEEL SHEETING ON 305x305x116 STEEL I-BEAM ON 1935x295mm EASI-JOIST MANUFACTURED TIMBER BEAM

BALUSTRADES:

25x10mm TIMBER SLATS SCREWED ONTO 25mm SQUARE STEEL UPRIGHTS BOLTED TO CONCRETE EDGING

INTERNAL FINISHINGS:

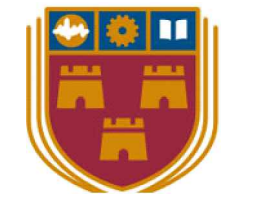
ALL FLOOR COVERINGS IN PUBLIC AREAS TO BE EITHER 300x300mm CERAMIC TILES OR 15mm THICK PARQUET FLOOR BOARDS.

PLAZA COVERING TO BE 500x500mm CERAMIC TILES.

FLOORS IN THE WORKSHOP AREAS TO THE REAR OF THE BUILDING TO BE POLISHED CONCRETE.

No.	DATE	REMARKS

Institute of Technology, Carlow
Architectural Technology Year 4
2009-2010



PROJECT TITLE
Project Three - Thesis

DRAWING TITLE
Theatre - Proposed Construction Details

LECTURER:
Allan Read, Dan O'Sullivan

DRAWN:
Eric Stilwell

CHECKED:

SCALE:
As Shown

DATE:
11.04.2010

DRAWING NUMBER
Y4-Q3-THESIS-013

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