

P1001-OL1D-CIV-0001 - Refurbishment of Pump Station (PS) PS1, PS2 & PS3.



Document Register

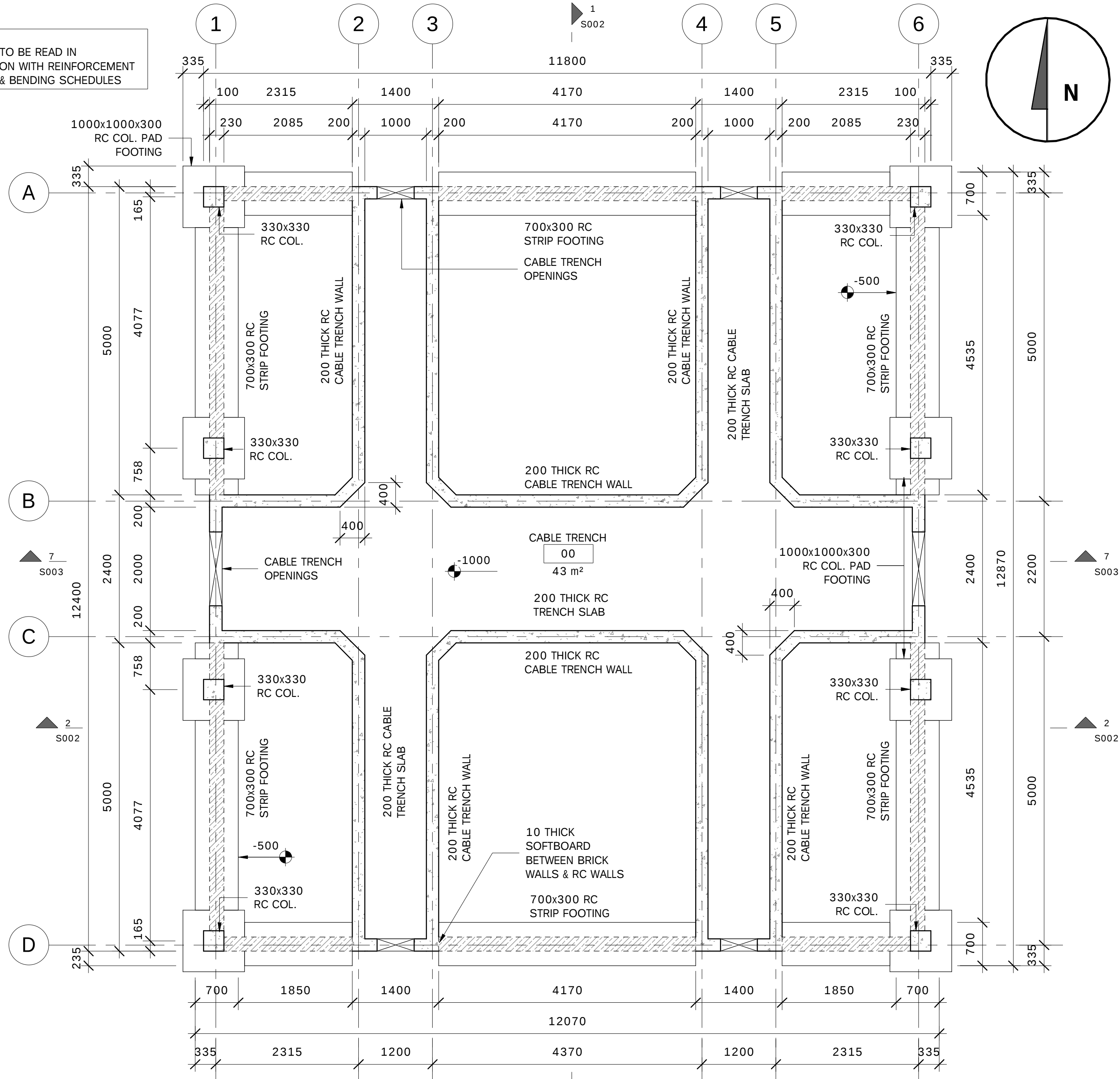
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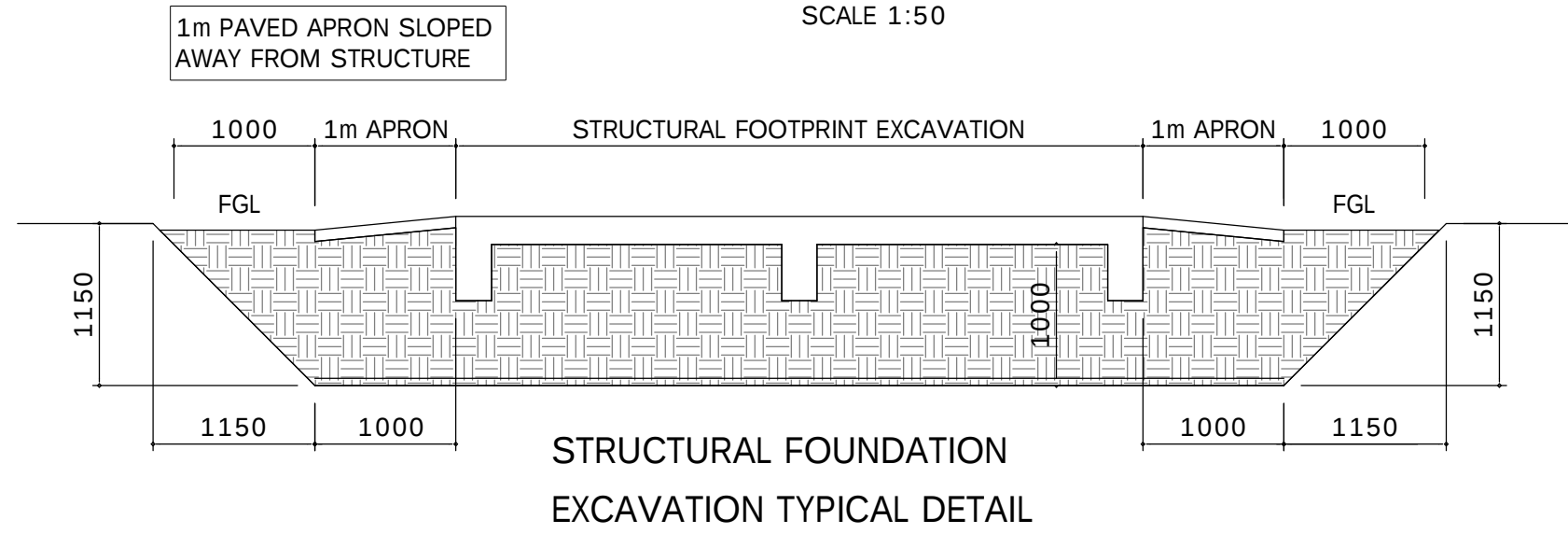
2022/10/25

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NOTE:
DRAWINGS TO BE READ IN
CONJUNCTION WITH REINFORCEMENT
DRAWINGS & BENDING SCHEDULES



FOUNDATION PLAN
SCALE 1:50



EARTH MATTRESS CONSTRUCTION (STRUCTURES)
SCALE 1: 50

- S1 EXCAVATE 1m BEYOND ENTIRE FOUNDATION FOOTPRINT USING 1:1 (V:H) SIDE SLOPES.
- S2 RIP AND RE-COMPACT BOTTOM IN SITU LAYER WHEN ESTABLISHED AT 1m BELOW RAFT SLAB.
- S3 CONSTRUCT EARTH MATTRESS IN 150mm LAYERS TO BE COMPACTED AND TESTED AT EACH LAYER USING IMPORTED MATERIAL. COMPACTION TO BE ACHIEVED AT SPECIFIED MOD AASHTO DENSITY AS PER DETAIL PROVIDED. LAYERS SHALL BE CONSTRUCTED TO BENEATH FOUNDATIONS AND AROUND FOOTPRINT TO FGL.
- S4 AN APPROPRIATE WATER MANAGEMENT SYSTEM SHALL BE EMPLOYED WHILE EXCAVATIONS ARE EXPOSED
- S5 ENSURE ALL REQUIRED STEPS DESCRIBED ARE APPROVED BY ENGINEER AT NECESSARY INTERVALS

SPECIFICATIONS - REINFORCED CONCRETE

REINFORCED CONCRETE

- 1 VIBRATED CONCRETE 30 MPA.
- 2 PROVIDE MIX DESIGN.
- 3 MAKE 6 TEST CUBES FOR SLAB & 6 CUBES FOR UPSTAND BEAMS. 3 CUBES EACH FOR 7 & 28 DAY TEST RESULTS RESPECTIVELY. TOP SLAB FINISH TO BE WOODFLOATED.

FORMWORK VERTICAL

- 1 ALL FORMS TO BE NORMAL STEEL SHUTTERS WITH TOP SIDE WAY SUPPORT.
 - 2 UPSTAND BEAMS SHOULD ALSO BE POKER VIBRATED.
 - 3 SIDE FORMS TO BE TREATED WITH FORM RELEASE OIL FOR QUALITY STRIPPING.
- REINFORCING
COVER TO LINKS IN BEAMS AND SLABS = 40mm.

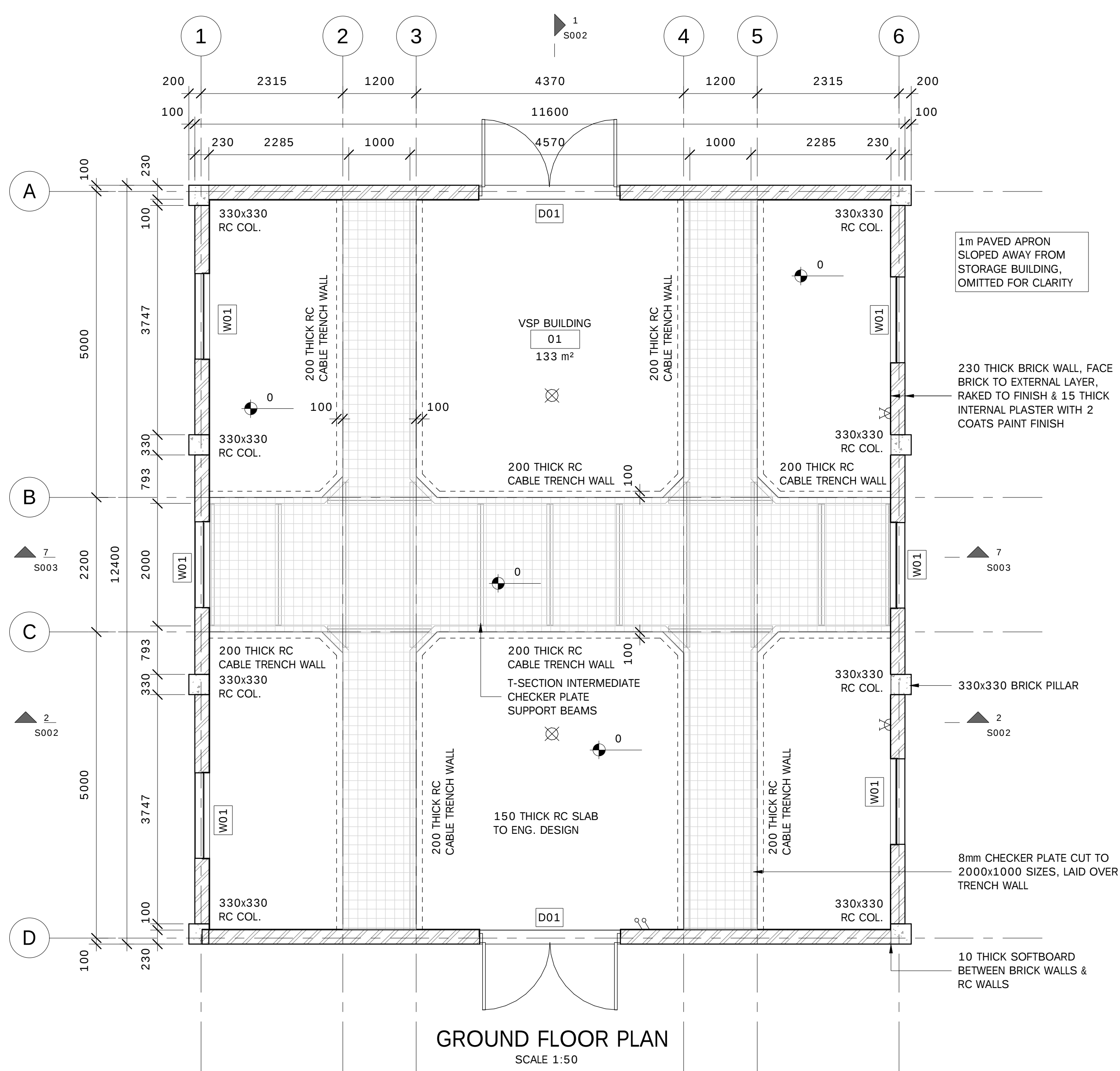
- 2
- 3 REFER TO BENDING SCHEDULES FOR
RAFT SLAB DOWN STAND/EDGE BEAMS AND UPSTAND BEAMS
TOLERANCES

RAFT SLAB:

- Horizontal sides and corner to corner across +/- 20mm
Vertical +50 -5
Surface +20 -5

UPSTAND BUND WALL BEAMS:

- Horizontal +/-10
Vertical +/-10



GROUND FLOOR PLAN
SCALE 1:50

METHODOLOGY

- 1) S1
- 2) S2
- 3) OBTAIN MODS FROM THE LABORATORY OF THE IN-SITU MATERIAL IN ORDER TO BE ABLE TO CONDUCT NUCLEAR DENSITY TESTING.
- 4) WHERE THERE IS GLARING EVIDENCE OF UNSATISFACTORY MATERIAL FOR FOUNDING, IMPORT GS MATERIAL AT 200 LAYERS FROM AN APPROVED COMMERCIAL QUARRY. WHERE THERE IS UNCERTAINTY, OBTAIN THE ADVICE OF THE ENGINEER BY FURNISHING PICTORIAL ILLUSTRATIONS OF THE SITE CONDITIONS.
- 5) LAYER TESTING SHOULD BE DONE EVERY 2ND LAYER WHETHER IN-SITU OR IMPORTED MATERIAL ARE BEING USED.
- 6) REINFORCEMENT & SHUTTERING CAN COMMENCE ONCE MATERIAL COMPACTION TESTS ARE PROVEN TO BE IN ORDER.

CONCRETE NOTES:

- 1) REQUEST THE READY MIX PLANT WHEN CASTING THE RAFT BEAMS AND SLAB TO SAMPLE AS FOLLOWS:
 - 3 CUBE MOULDS FOR 7 DAYS CRUSHING
 - 3 CUBE MOULDS FOR 14 DAYS CRUSHING
 - 3 CUBE MOULDS FOR 28 DAYS CRUSHING

2) APPLY CHRYSOCURE WB CURING COMPOUND TO TOP OF SURFACES AS SOON AS CONCRETE IS STURDY ENOUGH TO WALK ON. OBTAIN THE MANUFACTURERS DATA SHEETS TO ACHIEVE THE RECOMMENDED APPLICATION CONDITIONS.

CLIENT:



1 Landros Mare Street
Polokwane Central
Tel: (015) 295 1800
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Website: www.lepeliewater.com

CONSULTANT:



16 Blue Jay
Rooihuiskraal Centurion, 0157
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PROFESSIONAL ENGINEER:

R. OSTROWSKI

PROF. Reg.No:

930381

DATE:

SIGNATURE:

DESIGN BY:

B. MBOYANA

DRAWN BY:

G. MAREDI

CHECKED BY:

B. MBOYANA

APPROVED BY:

R. OSTROWSKI

REVISIONS

REV	DATE	DESCRIPTION	BY
0	23/09/2022	ISSUED FOR TENDER	J.B

PROJECT NAME

UPGRADE OF OLIFANTSPOORT AND EBENEZER WATER
SUPPLY SCHEME

TITLE

PS1 VSD BUILDING FOUNDATION, GROUND PLAN &
DETAILS

PROJECT STATUS:

TENDER DRAWING

DATE

23/09/2022

SCALE

1:50

SHEET

1 of 1

REV

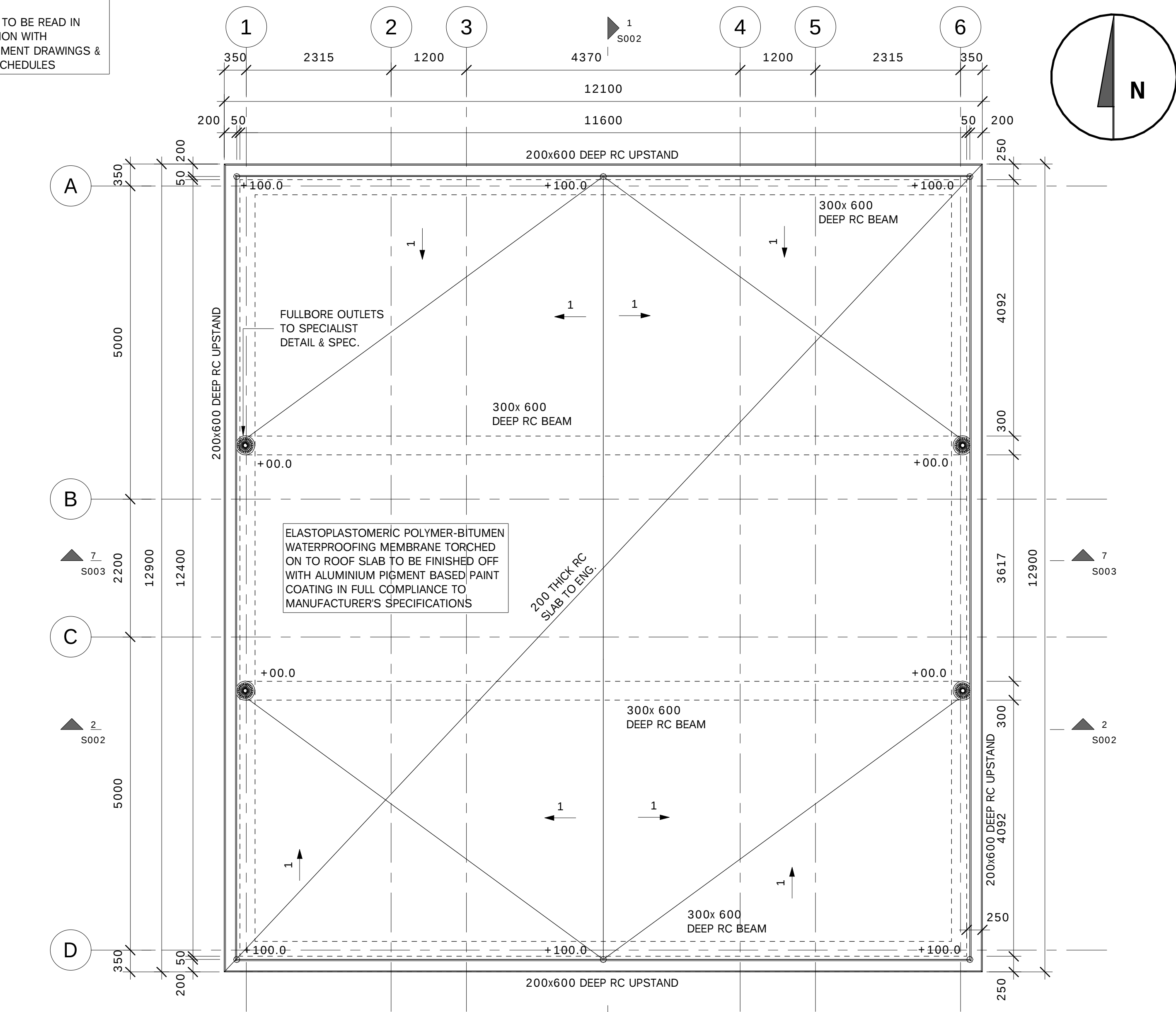
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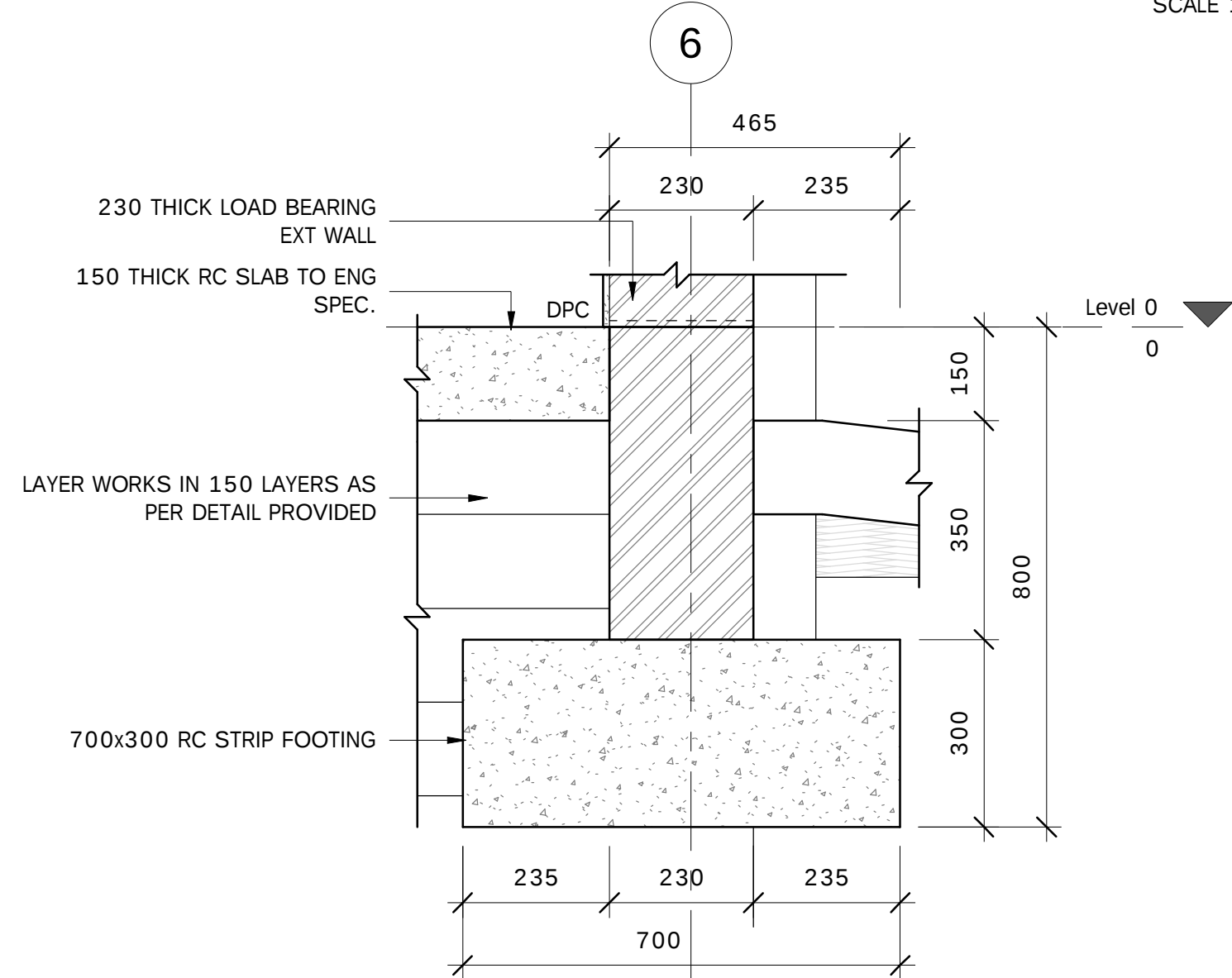
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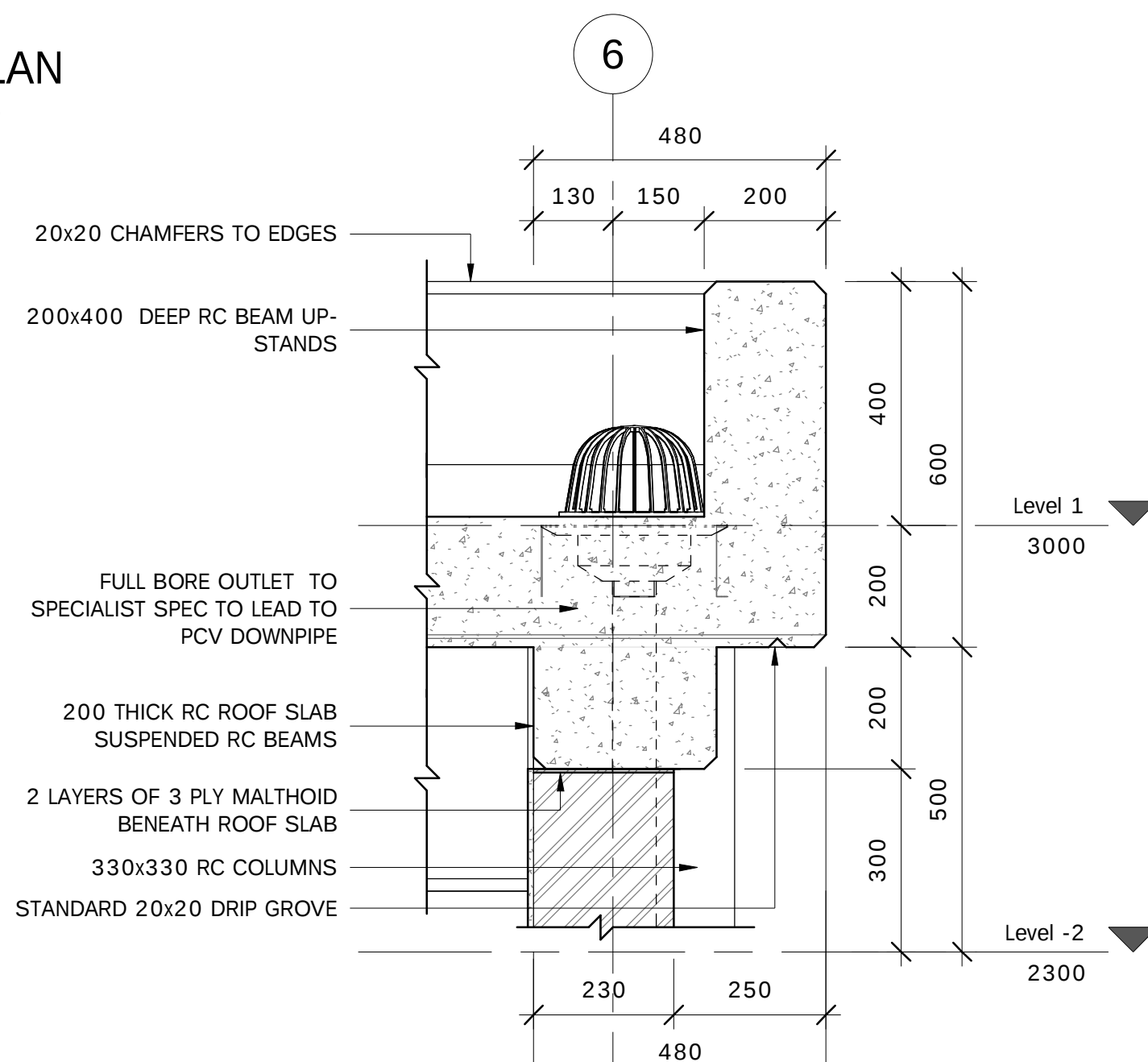
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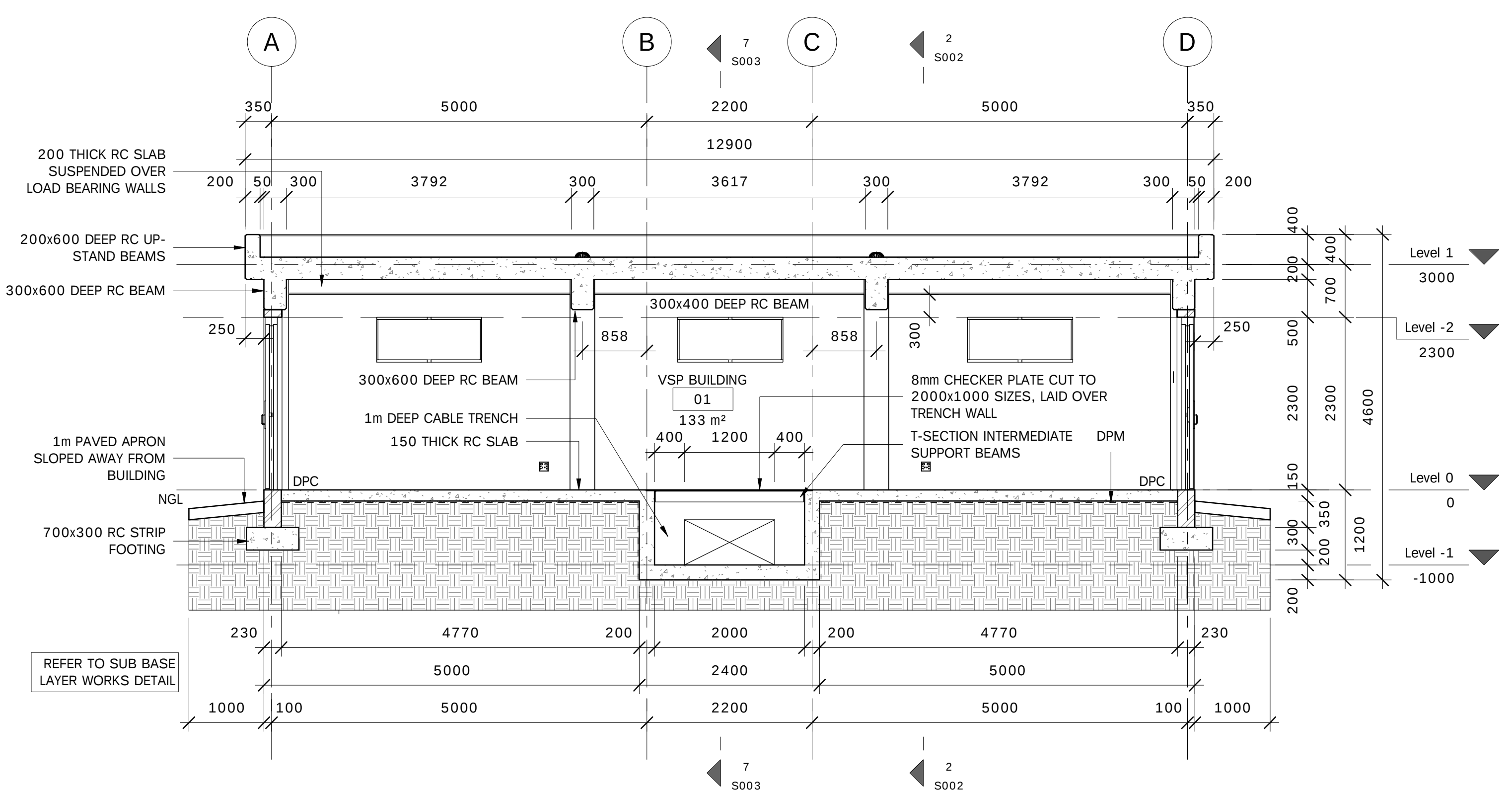
ROOF PLAN
SCALE 1:50



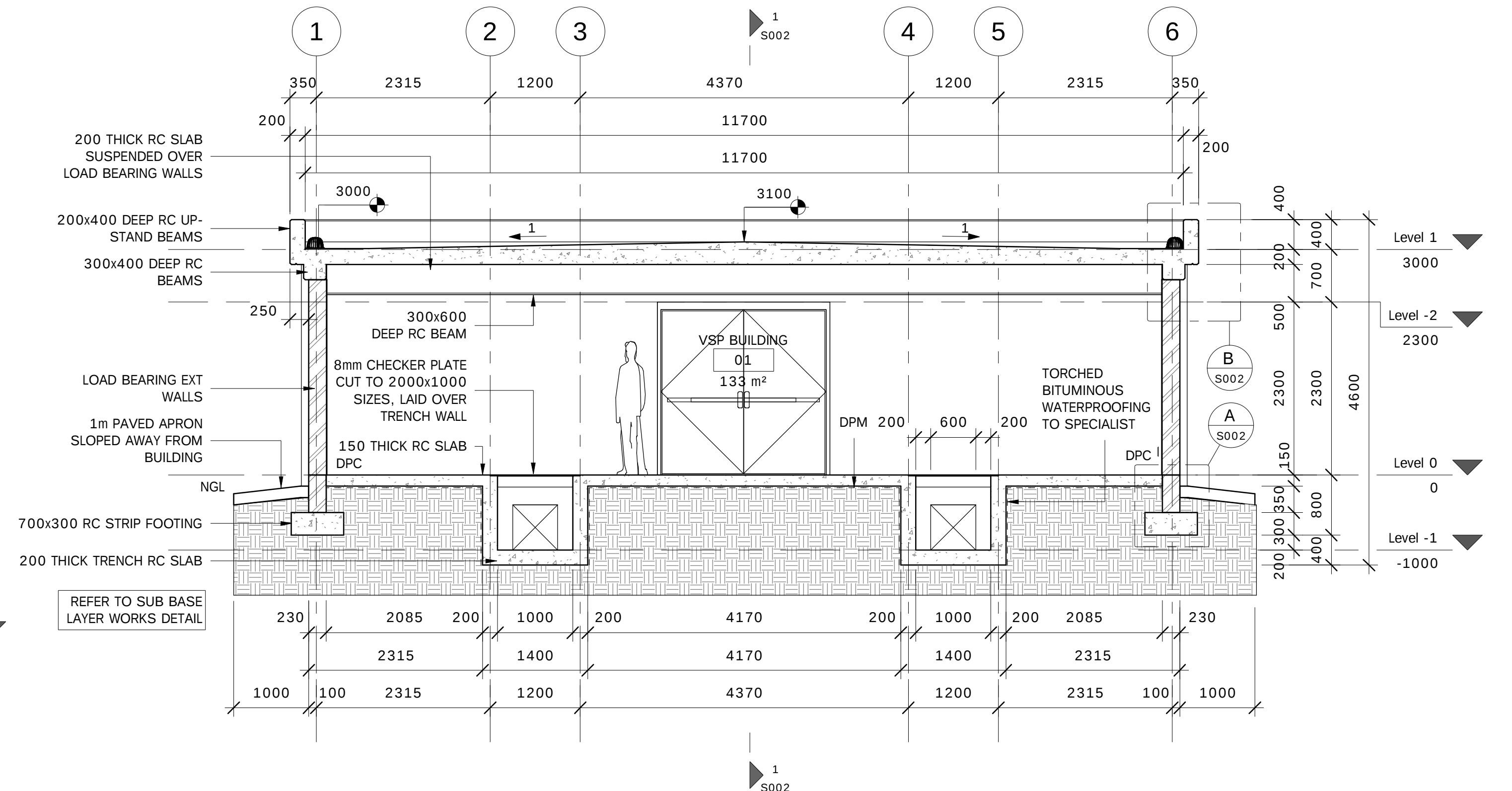
RAFT BEAM DETAIL A
SCALE 1:10



ROOF DETAIL B
SCALE 1:10



SECTION 1-1
SCALE 1:50



SECTION 2-2
SCALE 1:50

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UPGRADE OF OLIFANTSPOORT AND EBENEZER WATER
SUPPLY SCHEME

TITLE

PS1 VSD BUILDING SECTIONS & DETAILS

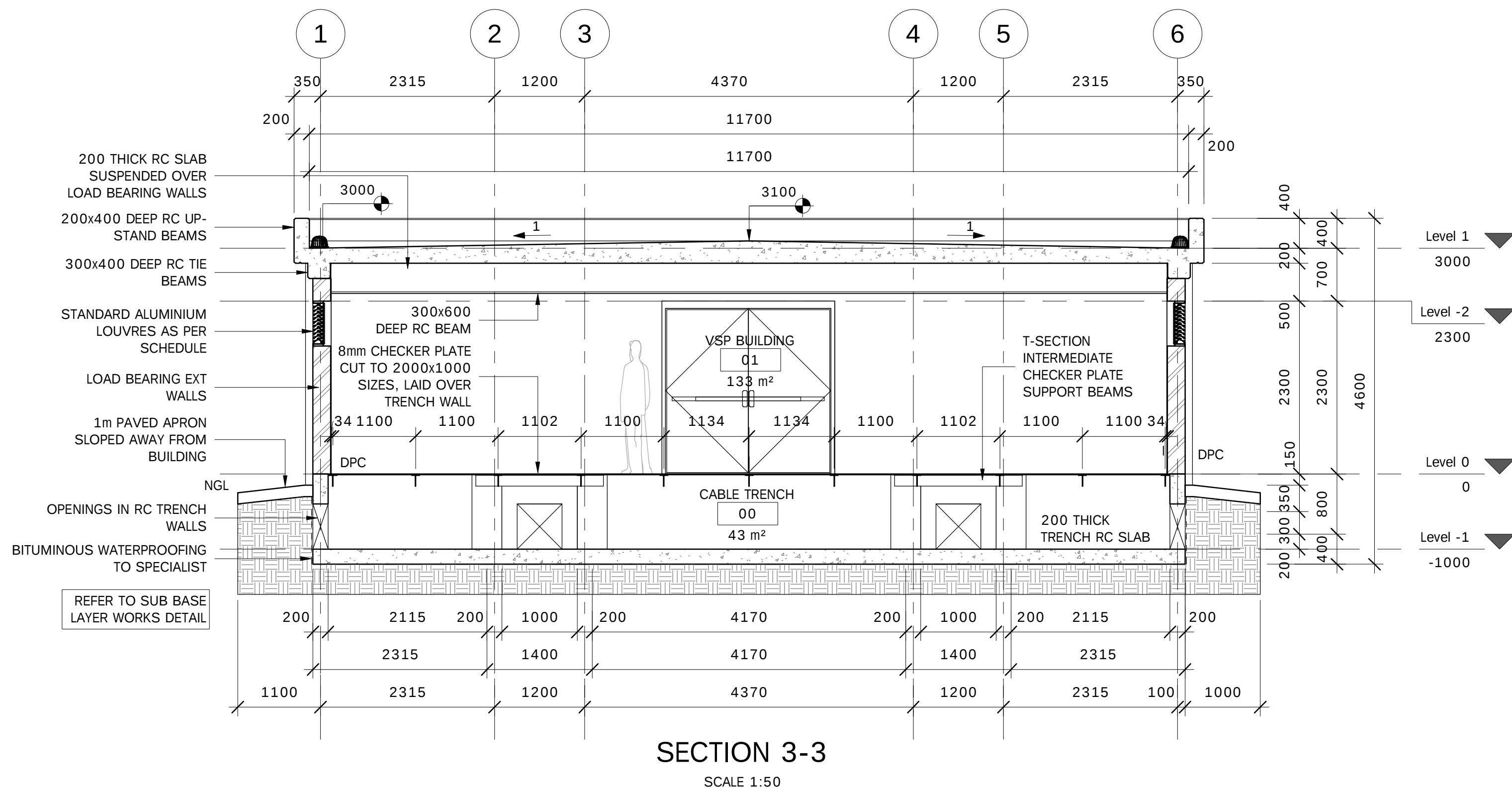
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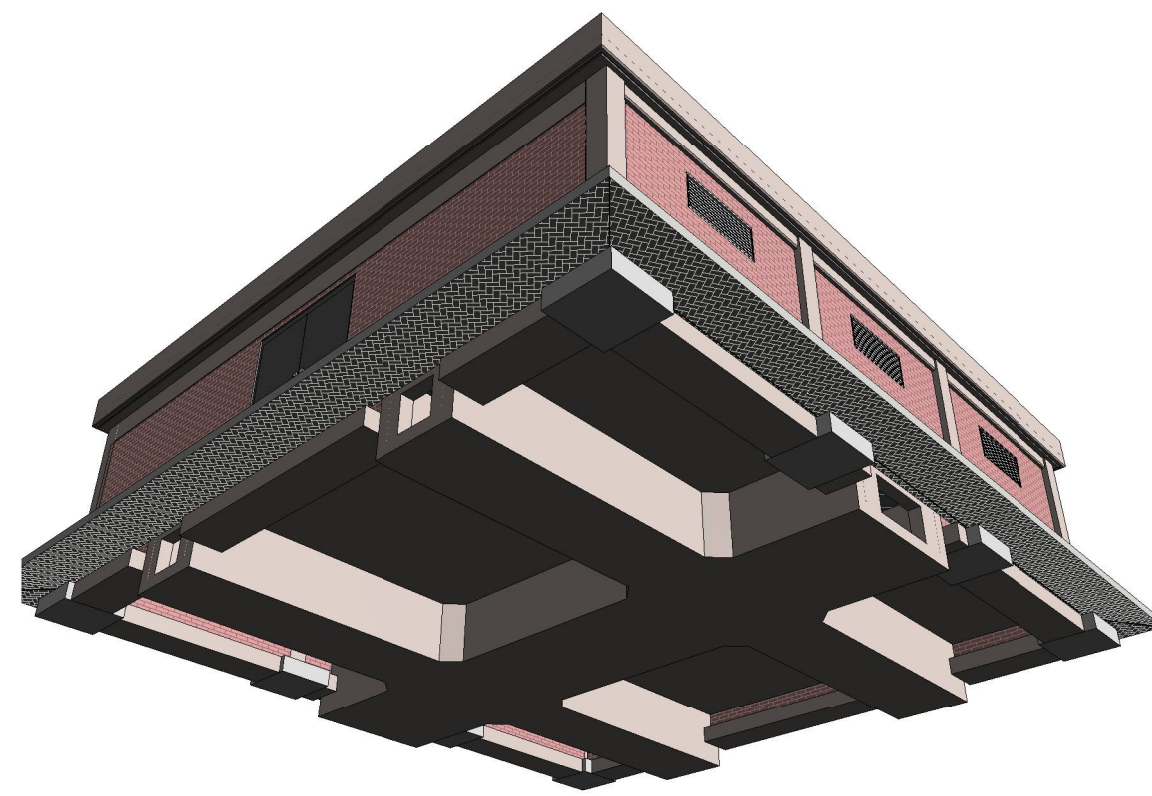
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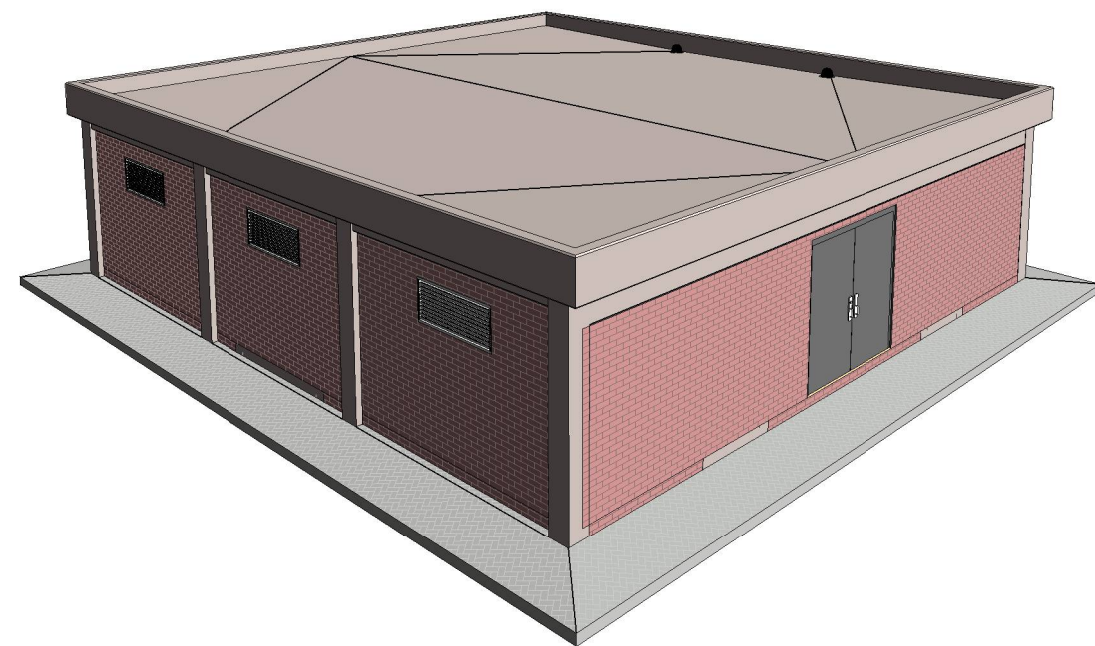
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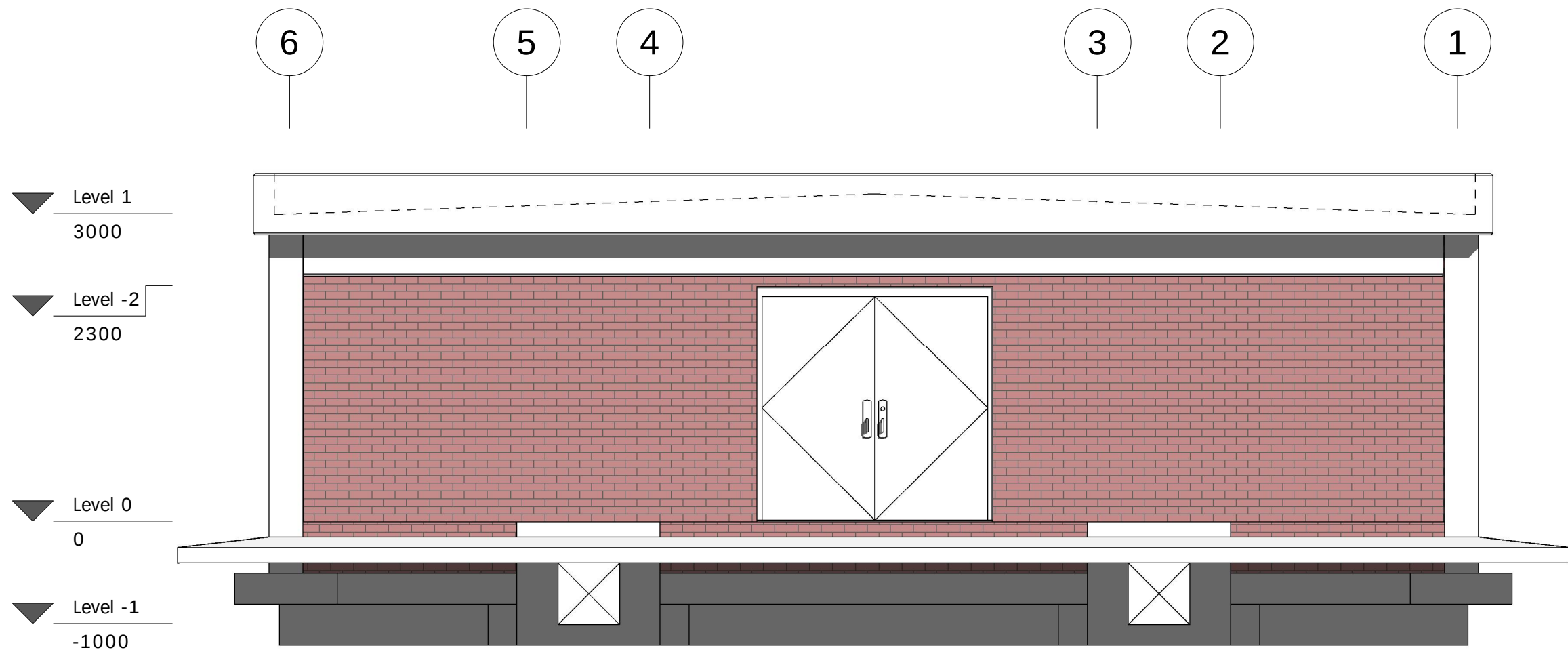
SECTION 3-3
SCALE 1:50



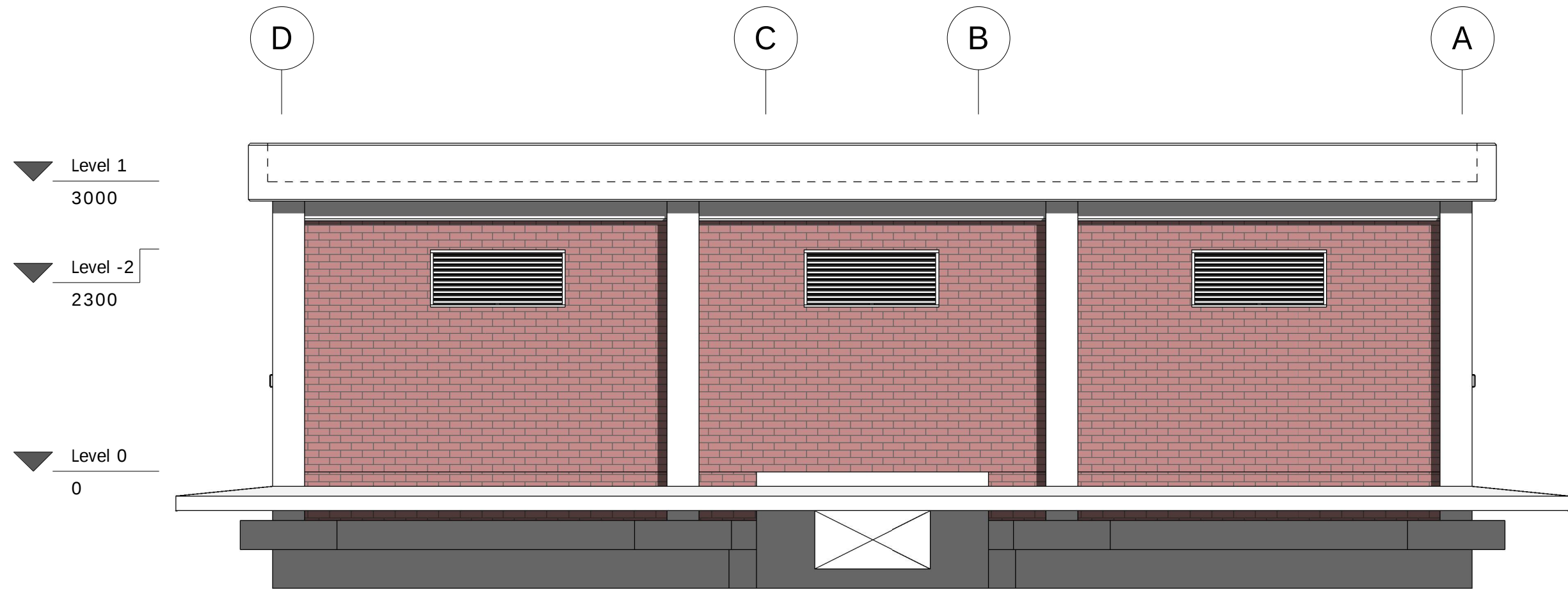
FOUNDATION PERSPECTIVE VIEW
SCALE: NTS



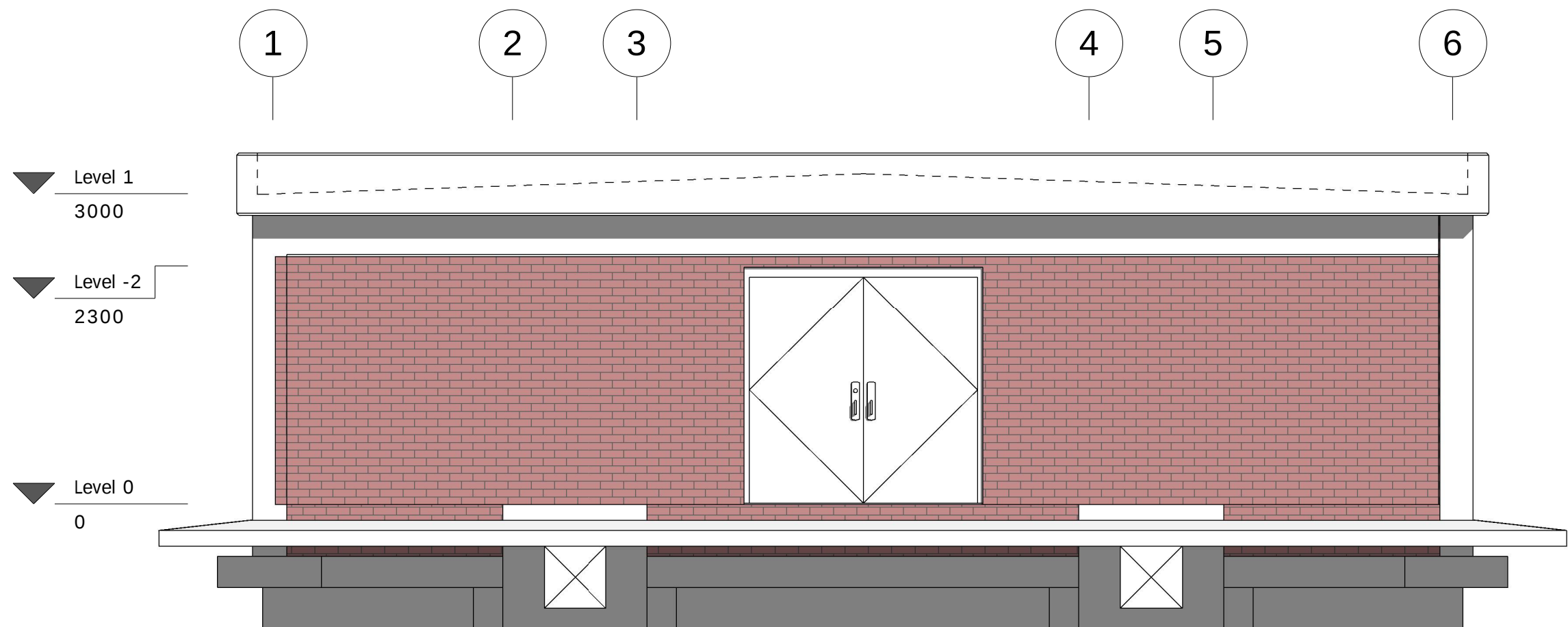
ROOF PERSPECTIVE VIEW
SCALE: NTS



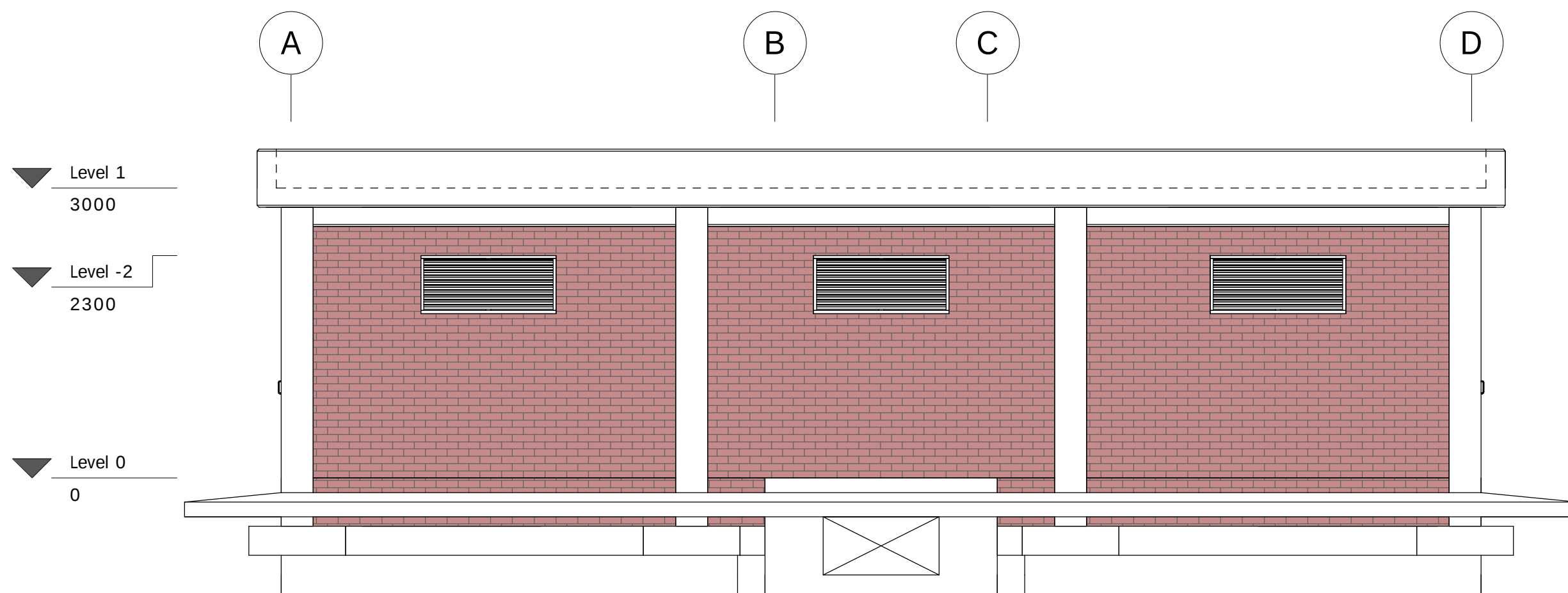
NORTH ELEVATION
SCALE 1:50



EAST ELEVATION
SCALE 1:50

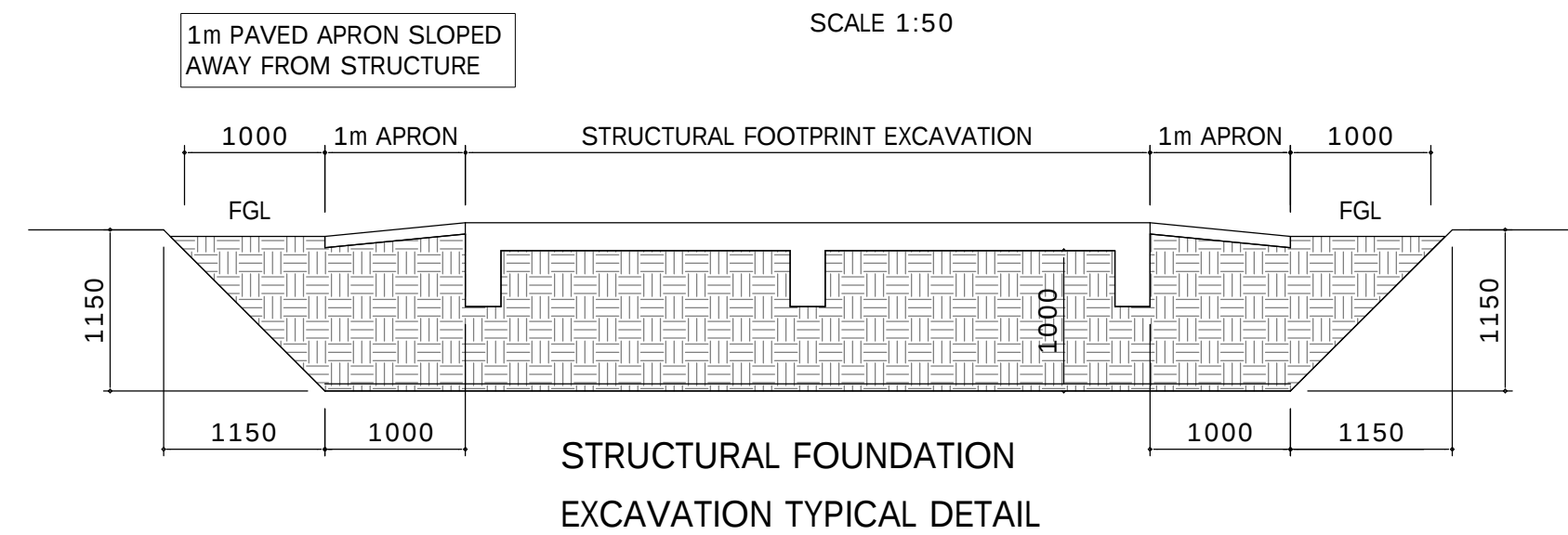
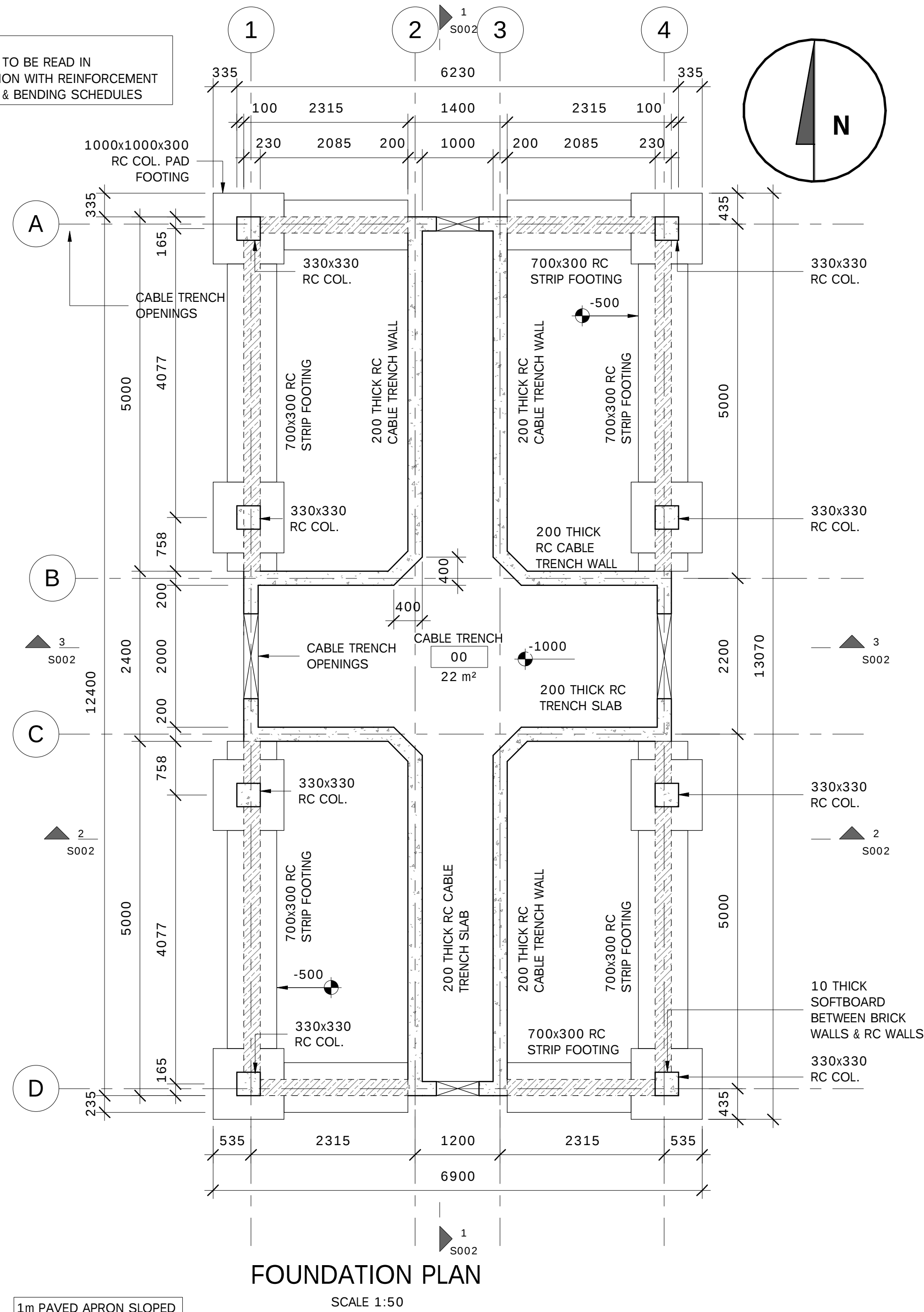


SOUTH ELEVATION
SCALE 1:50



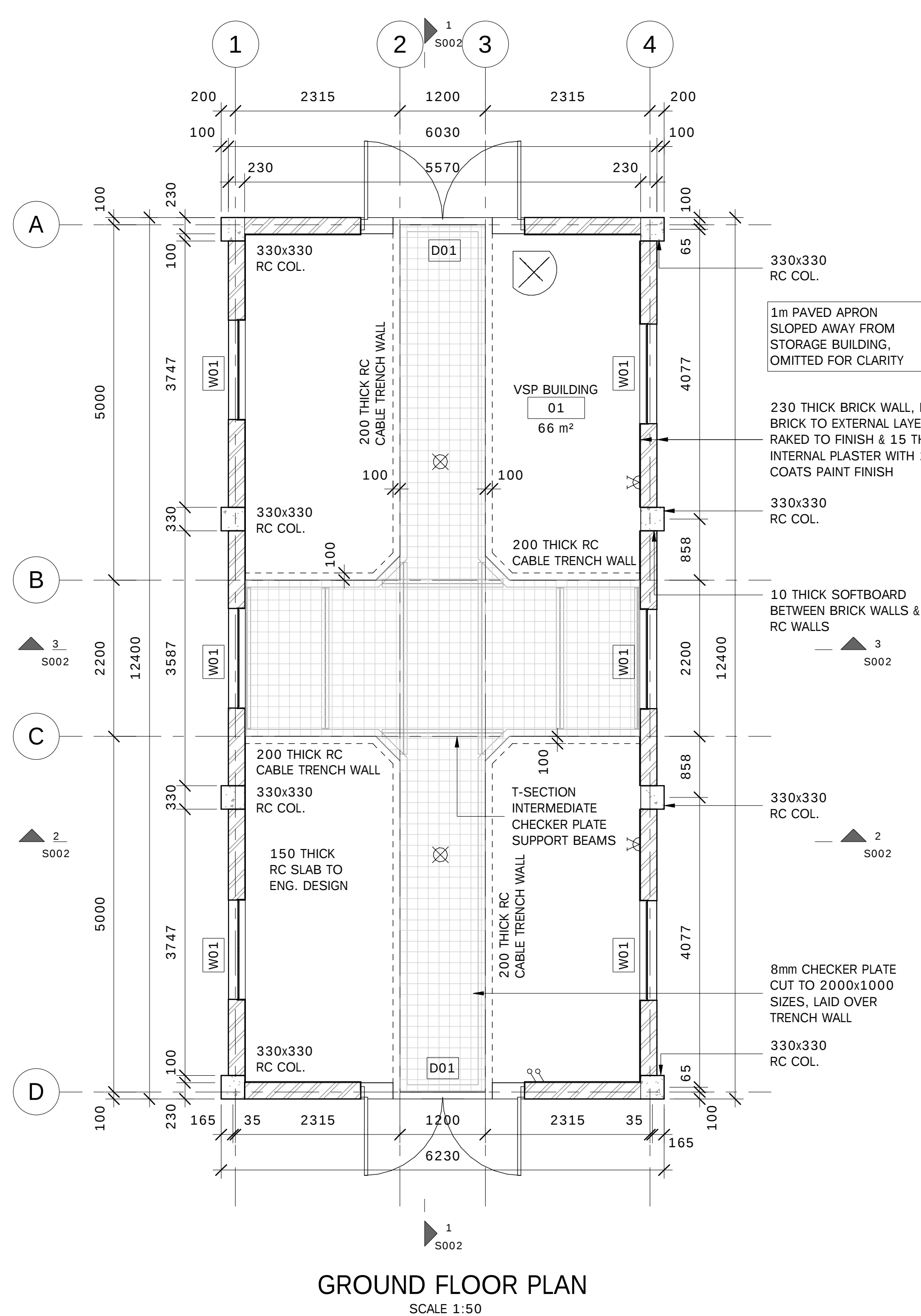
WEST ELEVATION
SCALE 1:50

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DRAWINGS & BENDING SCHEDULES



EARTH MATTRESS CONSTRUCTION (STRUCTURES)

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| (S2) | RIP AND RE-COMPACT BOTTOM IN SITU LAYER WHEN ESTABLISHED AT 1m BELOW RAFT SLAB. |
| (S3) | CONSTRUCT EARTH MATTRESS IN 150mm LAYERS TO BE COMPACTED AND TESTED AT EACH LAYER USING IMPORTED MATERIAL. COMPACTION TO BE ACHIEVED AT SPECIFIED MOD AASHTO DENSITY AS PER DETAIL PROVIDED. LAYERS SHALL BE CONSTRUCTED TO BENEATH FOUNDATIONS AND AROUND FOOTPRINT TO FGL. |
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REINFORCING

1 COVER TO LINKS IN BEAMS AND SLABS = 40mm.

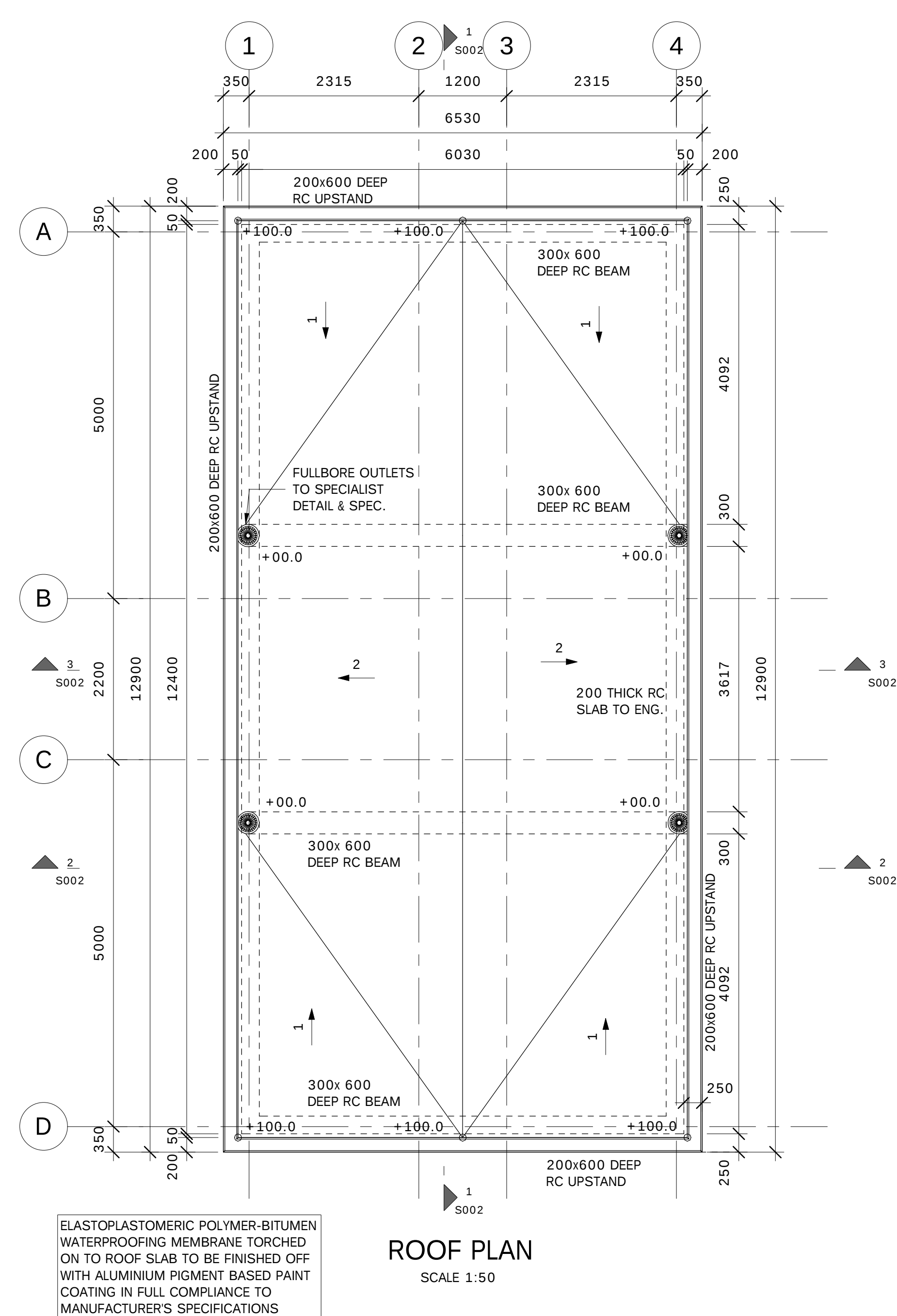
3	REFER TO BENDING SCHEDULES FOR RAFT SLAB DOWN STAND/EDGE BEAMS AND UPSTAND BEAMS TOLERANCES
1	RAFT SLAB: Horizontal sides and corner to corner across +- 20mm Vertical +50 -5 Surface +20 -5
2	UPSTAND BUND WALL BEAMS: Horizontal +-10 Vertical +-10

PROGRAM

- 1 UPSTAND BEAMS MAY BE STRIPPED AFTER 3 DAYS.
2 STRUCTURAL STEEL TANK CONSTRUCTION MAY COMMENCE
14 DAYS AFTER LAST CAST AFTER PROVIDING CUBE TEST RESULTS
1 TANK ERECTED TO +/-5MM TOLERANCES.
2 USE 120 x 120 x 1.2, 10mm HOT DIPPED GALVANISED SHIMS TO LEVEL TANK FLOOR
BELOW AND ON TOP OF 150x5 CONTINUOUS STEEL BEARING PLATE
WITH
SHIMS AT EACH TANK FLOOR NODE 1222# C/C BOTH WAYS.

PROVIDE 250mm MICRON DPM UNDERNEATH ENTIRE STRUCTURAL FOOTPRINT

PROVIDE 250mm MICRON DPM UNDERNEATH ENTIRE STRUCTURAL FOOTPRINT



METHODOLOGY

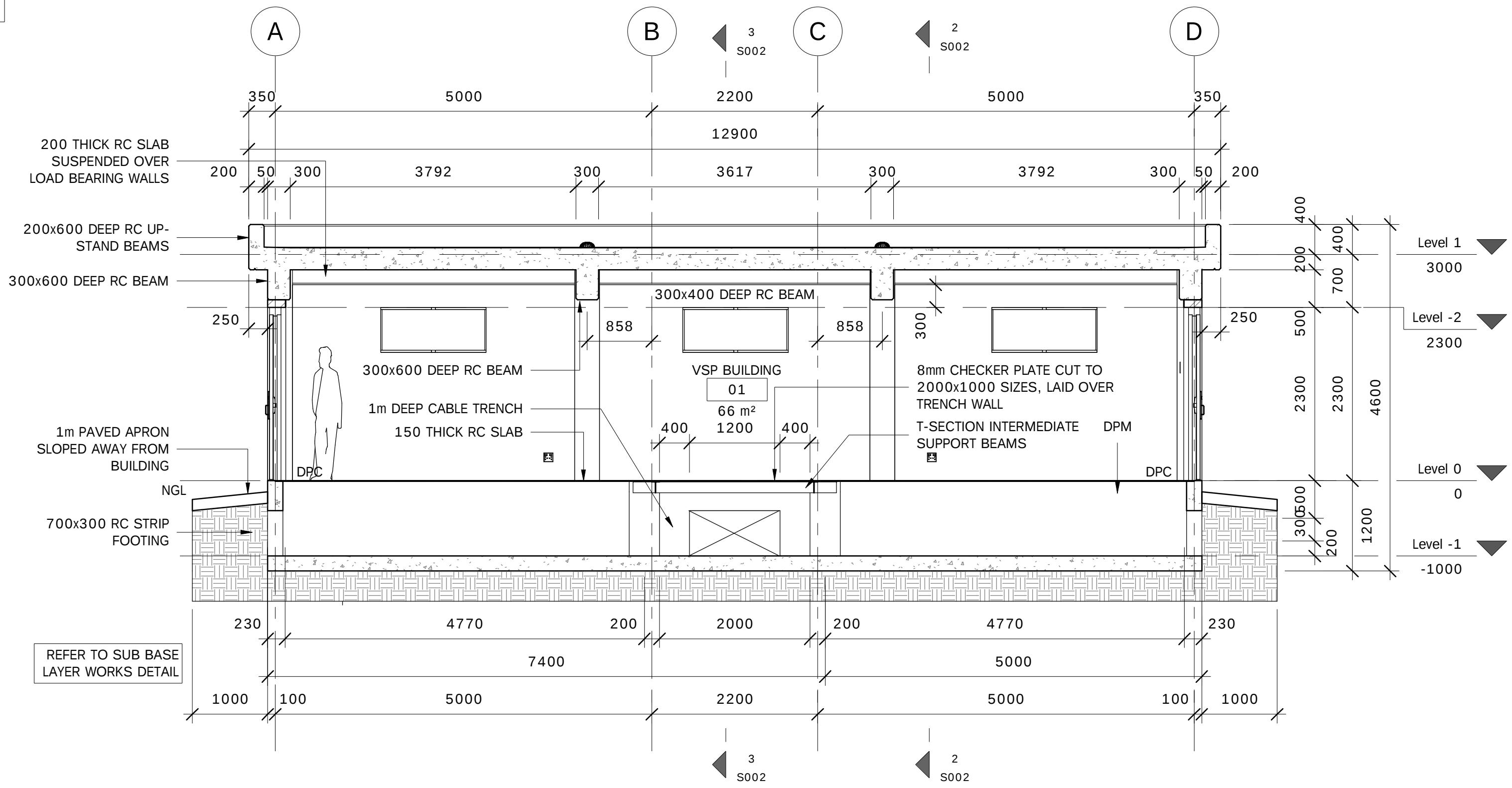
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CONCRETE NOTES:

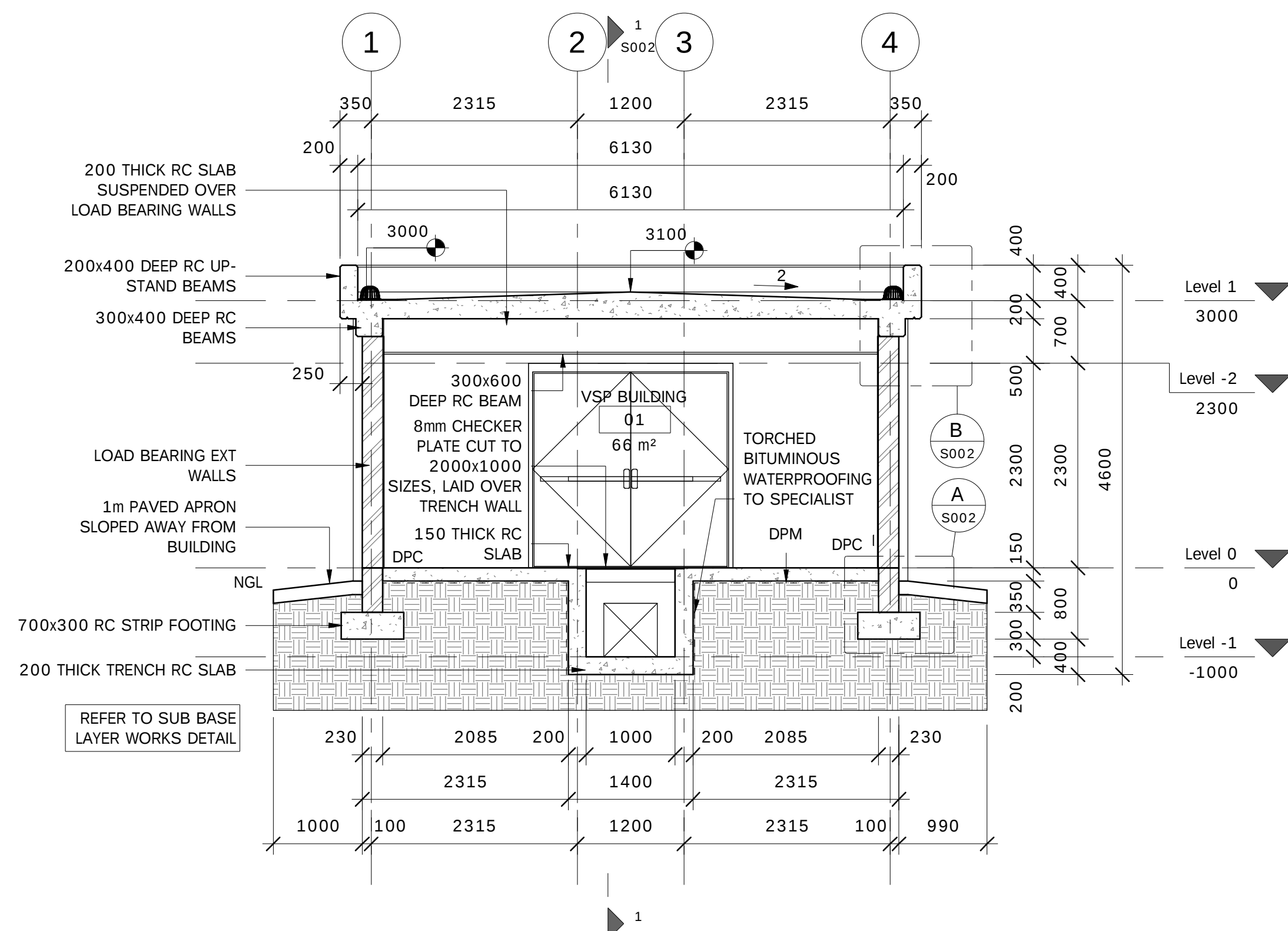
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CLIENT:  1 Landros Mare Street Polokwane Central Tel: (015) 295 1800 Email: info@lepelle.co.za Website: www.lepellewater.com LEPELLE NORTHERN WATER Water is our passion	CONSULTANT:  16 Blue Jay Rooiboskraai Centurion, 0157 P.O Box 31523 Braamfontein, 2017 Johannesburg Tel: (012) 661 0283 Fax: (035) 789 0222 Email: larsanam@sigodimarah.co.za Website: www.sigodimarah.com Sigodi Marah Martin Management Support Development & Engineering Consultants	PROFESSIONAL ENGINEER: R. OSTROWSKI PROF. Reg.No: 930381 DATE: SIGNATURE:	DESIGN BY: B. MBOYANA DRAWN BY: G. MAREDI CHECKED BY: B. MBOYANA APPROVED BY: R. OSTROWSKI	REVISIONS <table><thead><tr><th>REV</th><th>DATE</th><th>DESCRIPTION</th><th>BY</th></tr></thead><tbody><tr><td>0</td><td>23/09/2022</td><td>ISSUED FOR TENDER</td><td>J.B</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>				REV	DATE	DESCRIPTION	BY	0	23/09/2022	ISSUED FOR TENDER	J.B																									PROJECT NAME UPGRADE OF OLIFANTSPOORT AND EBENEZER WATER SUPPLY SCHEME TITLE PS2 VSD BUILDING FOUNDATION, GROUND PLAN & DETAILS				PROJECT STATUS: TENDER DRAWING <table><thead><tr><th>DATE</th><th>SCALE</th><th>SHEET</th><th>REV</th><th colspan="2"> </th></tr></thead><tbody><tr><td>23/09/2022</td><td>1:50</td><td>1 OF 1</td><td>0</td><td>A1</td><td> </td></tr></tbody></table> DWG NO P1001-OL1D-CIV-3200					DATE	SCALE	SHEET	REV			23/09/2022	1:50	1 OF 1	0	A1	
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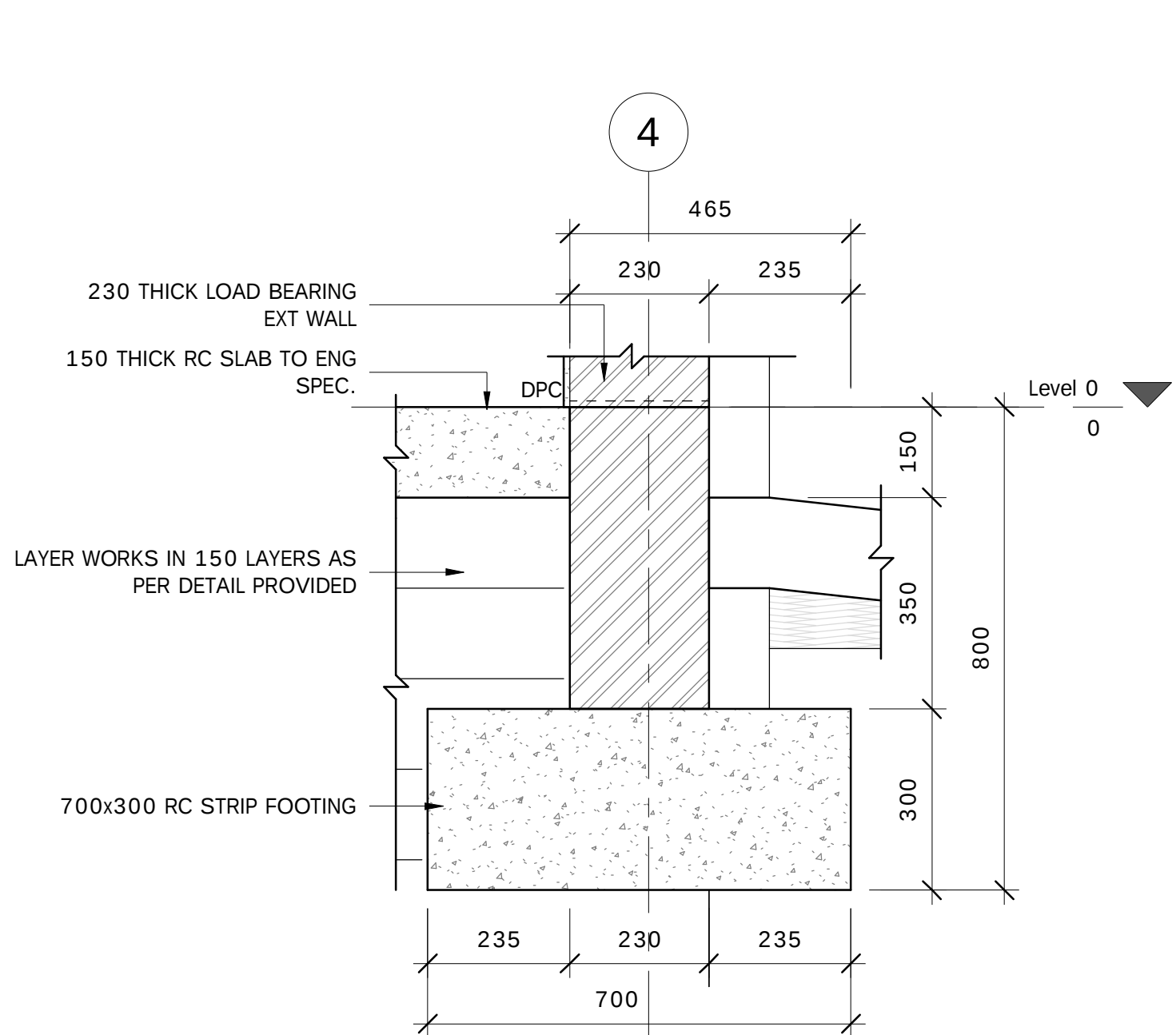
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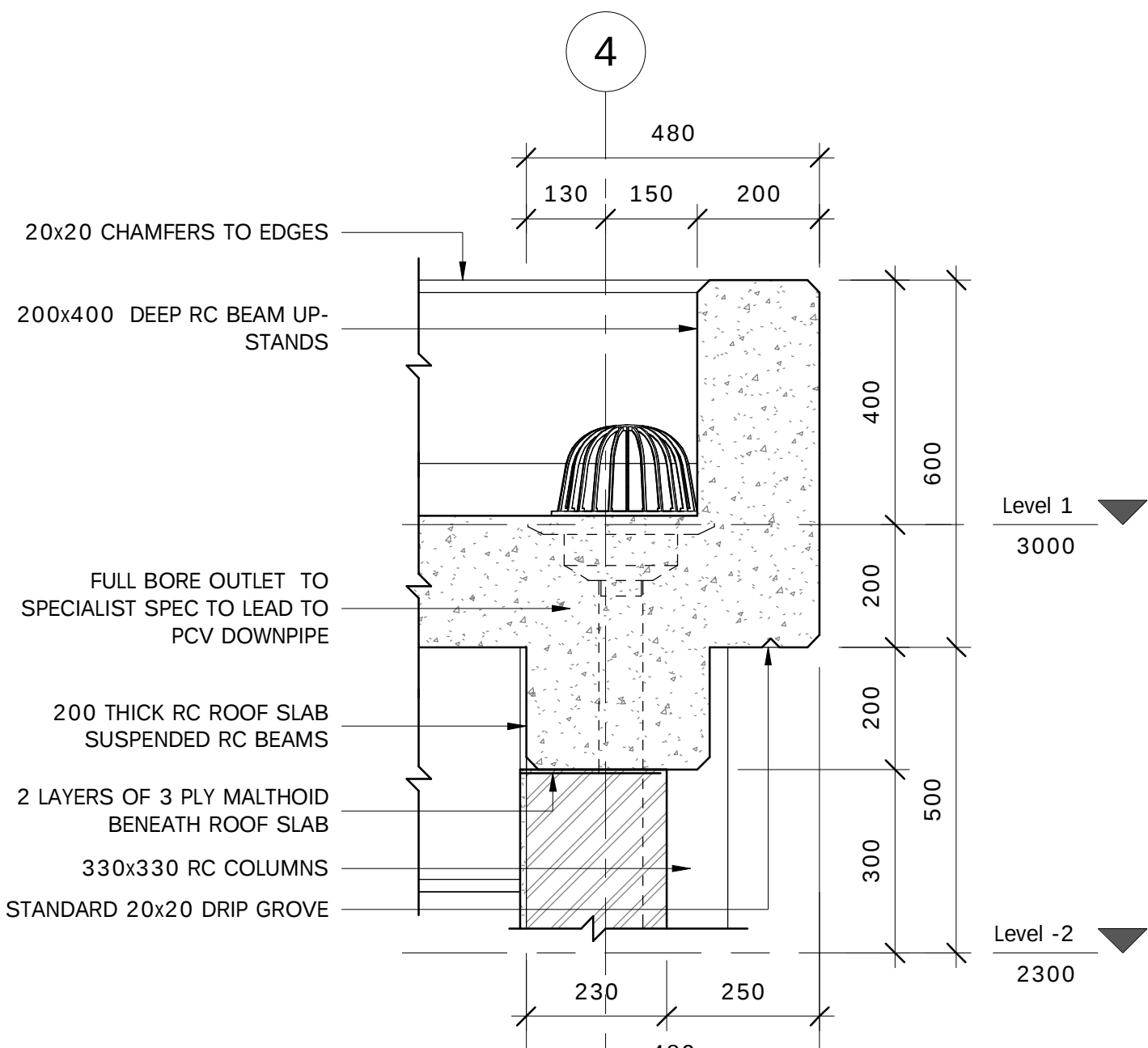
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SCALE 1:50



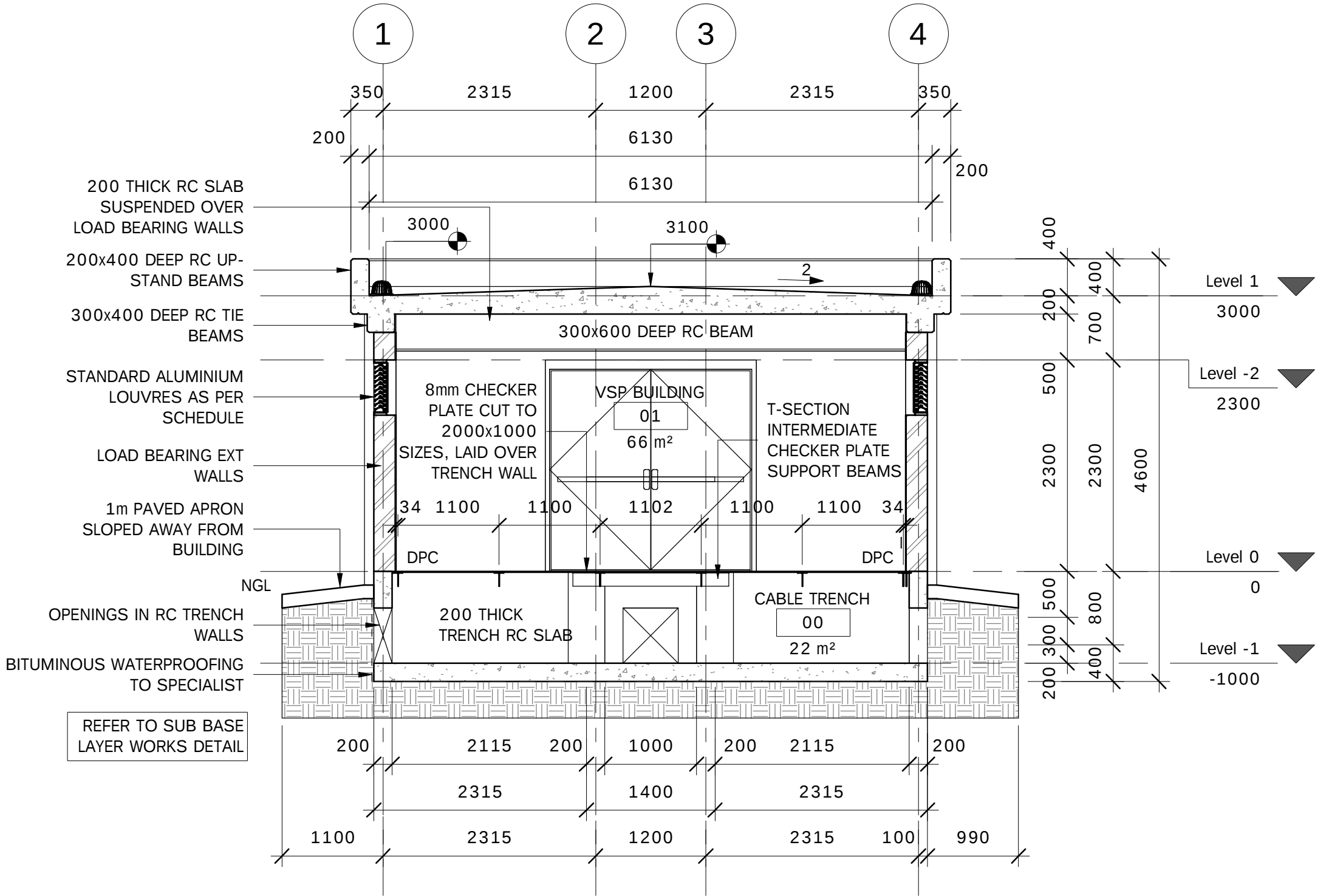
SECTION 2-2
SCALE 1:50



RAFT BEAM DETAIL A
SCALE 1:10



ROOF DETAIL B
SCALE 1:10



SECTION 3-3
SCALE 1:50

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UPGRADE OF OLIFANTSPOORT AND EBENEZER WATER
SUPPLY SCHEME

TITLE

PS2 VSD BUILDING SECTIONS & DETAILS

PROJECT STATUS:

TENDER DRAWING

DATE
23/09/2022

SCALE
1:50

SHEET
1 OF 2

REV
0

A1

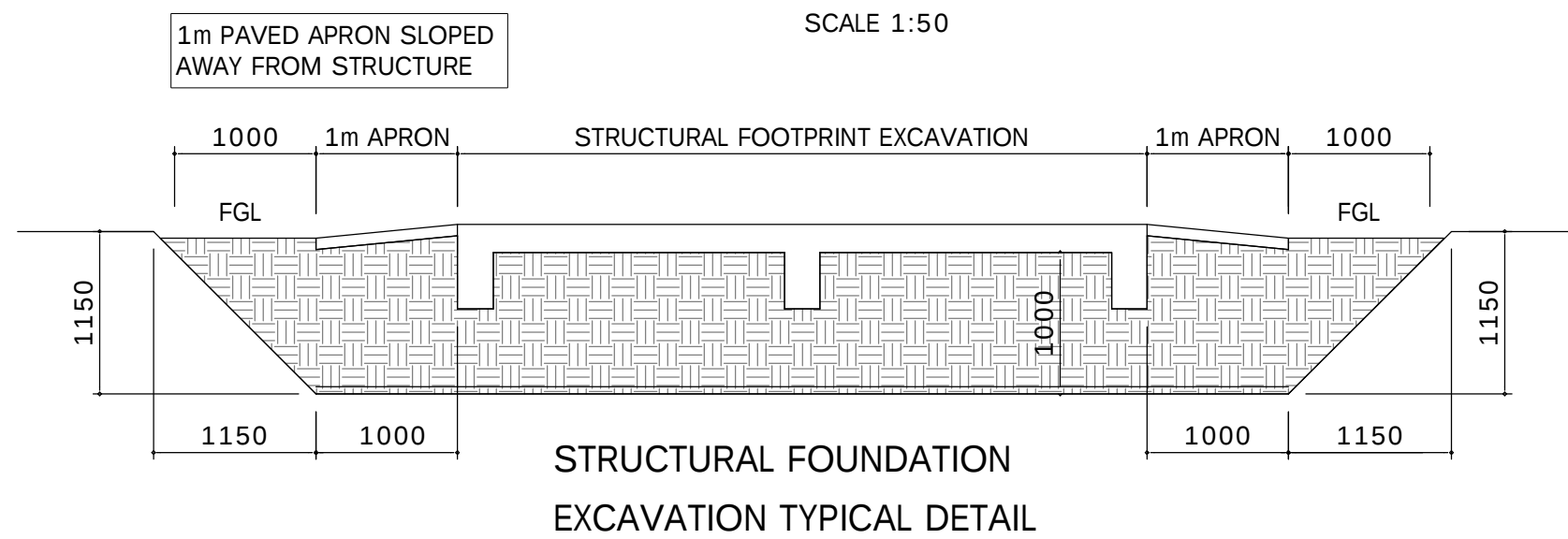
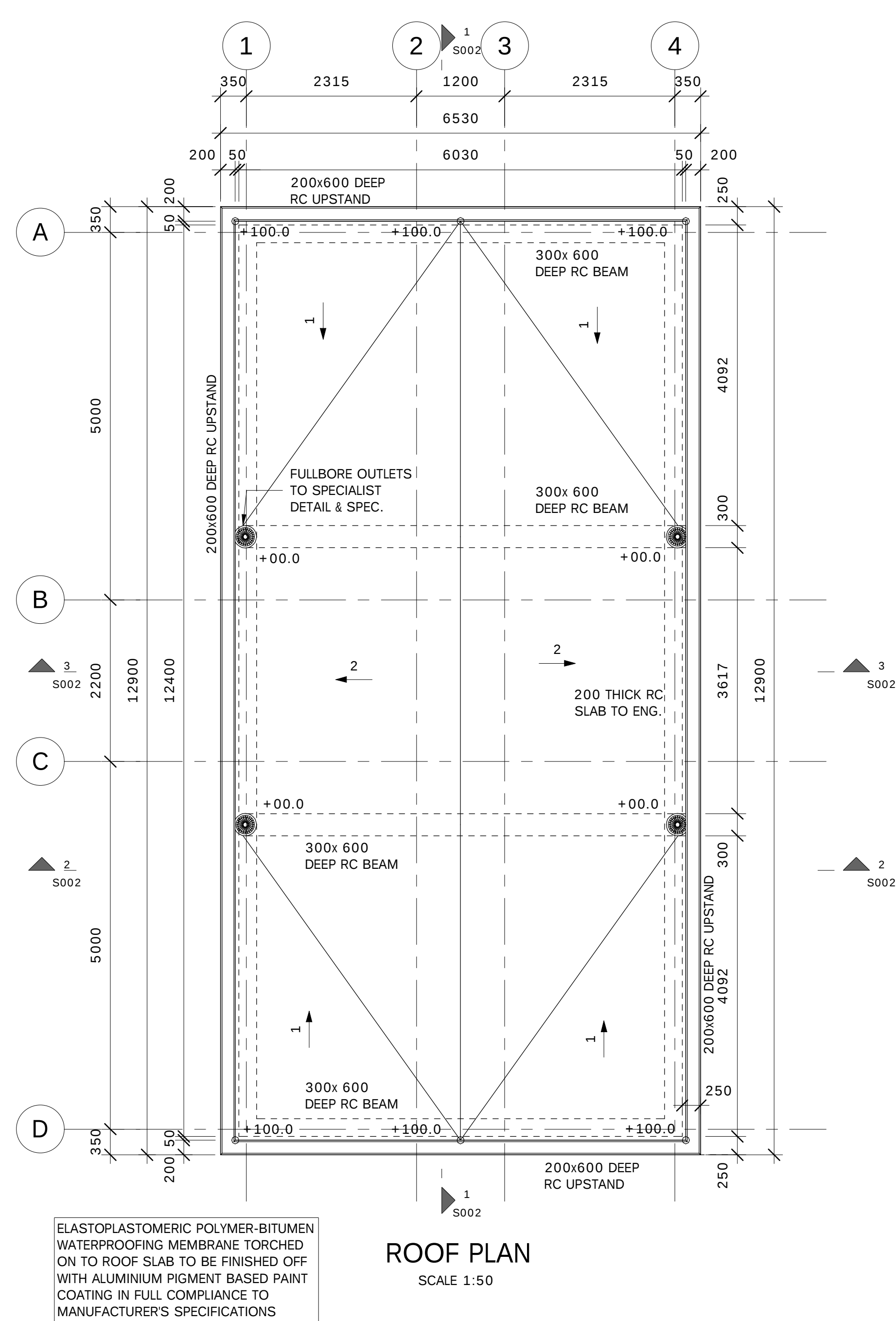
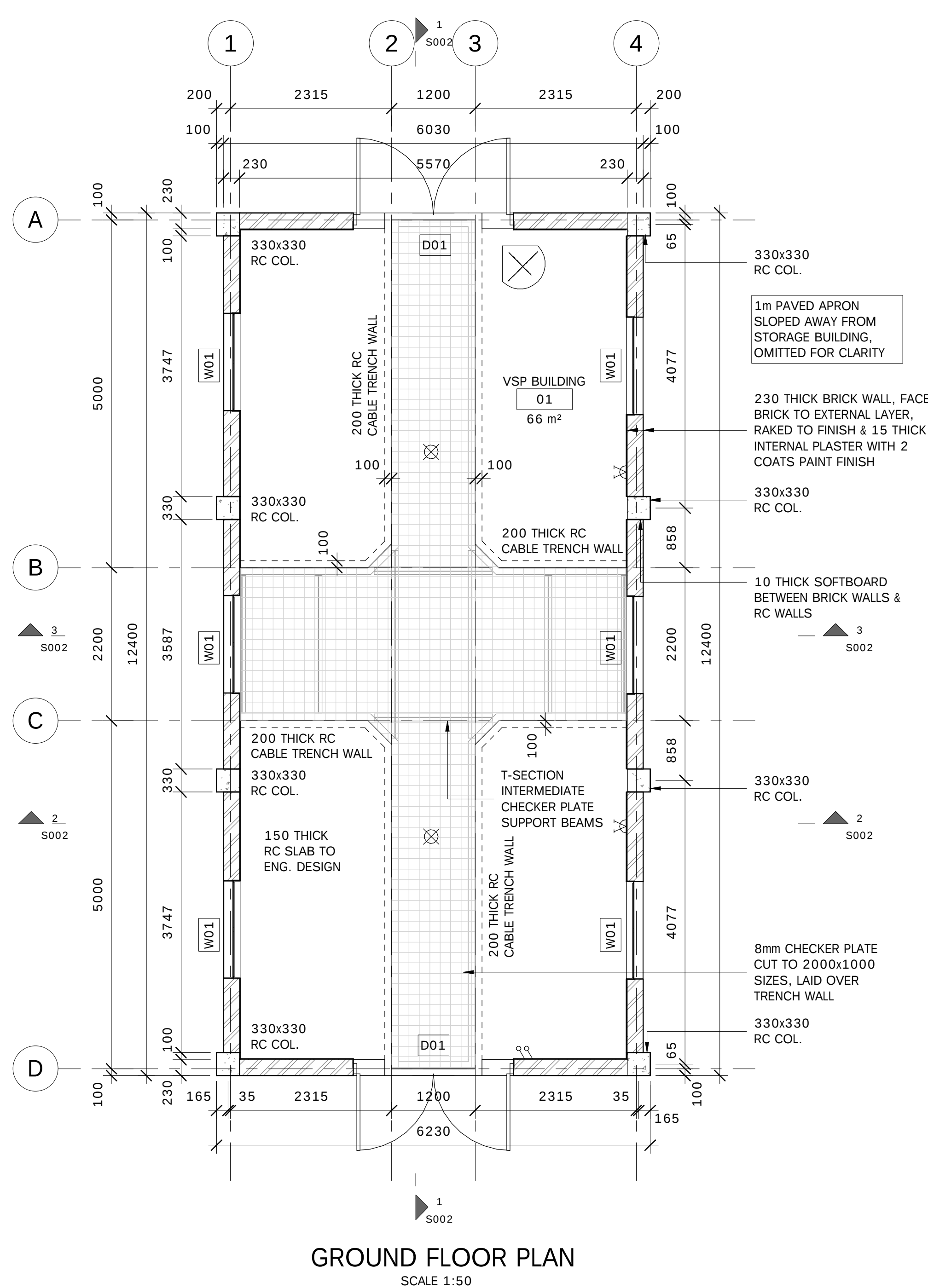
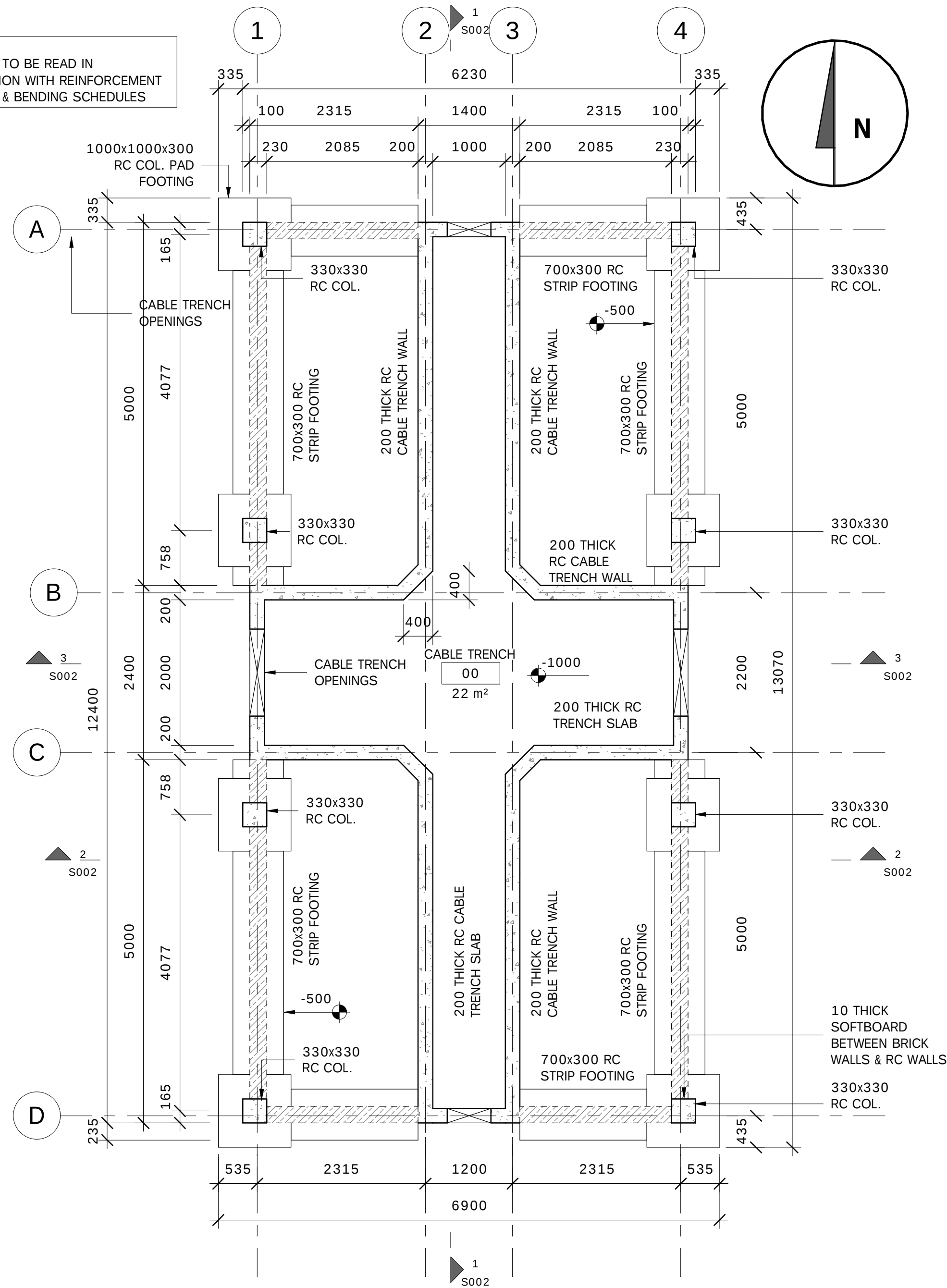
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|------|--|
| (S1) | EXCAVATE 1m BEYOND ENTIRE FOUNDATION FOOTPRINT USING 1:1 (V:H) SIDE SLOPES. |
| (S2) | RIP AND RE-COMPACT BOTTOM IN SITU LAYER WHEN ESTABLISHED AT 1m BELOW RAFT SLAB. |
| (S3) | CONSTRUCT EARTH MATTRESS IN 150mm LAYERS TO BE COMPACTED AND TESTED AT EACH LAYER USING IMPORTED MATERIAL. COMPACTION TO BE ACHIEVED AT SPECIFIED MOD AASHTO DENSITY AS PER DETAIL PROVIDED. LAYERS SHALL BE CONSTRUCTED TO BENEATH FOUNDATIONS AND AROUND FOOTPRINT TO FGL. |
| (S4) | AN APPROPRIATE WATER MANAGEMENT SYSTEM SHALL BE EMPLOYED WHILE EXCAVATIONS ARE EXPOSED |
| (S5) | ENSURE ALL REQUIRED STEPS DESCRIBED ARE APPROVED BY ENGINEER AT NECESSARY INTERVALS |

SPECIFICATIONS - REINFORCED CONCRETE

REINFORCED CONCRETE

- 1 VIBRATED CONCRETE 30 MPA.
- 2 PROVIDE MIX DESIGN.
- 3 MAKE 6 TEST CUBES FOR SLAB & 6 CUBES FOR UPSTAND BEAMS
- 4 3 CUBES EACH FOR 7 & 28 DAY TEST RESULTS RESPECTIVELY.
- 5 TOP SLAB FINISH TO BE WOODFLOATED.
- 6 FORMWORK VERTICAL

1 ALL FORMS TO BE NC

- 2 UPSTAND BEAMS SHOULD ALSO BE POKER VIBRATED.
3 SIDE FORMS TO BE TREATED WITH FORM RELEASE OIL FOR QUALITY STRIPPING
REINFORCING
1 COVER TO LINKS IN BEAMS AND SLABS = 40mm.

- 3 REFER TO BENDING SCHEDULES FOR
RAFT SLAB DOWN STAND/EDGE BEAMS AND UPSTAND BEAMS
TOLERANCES

- | | | |
|---|--|----------|
| 1 | RAFT SLAB: | |
| | Horizontal sides and corner to corner across | + - 20mm |
| | Vertical | + 50 -5 |
| | Surface | + 20 -5 |
| 2 | UPSTAND BUND WALL BEAMS: | |
| | Horizontal | + -10 |
| | Vertical | + -10 |

PROGRAM

- 1 UPSTAND BEAMS MAY BE STRIPPED AFTER 3 DAYS.
- 2 STRUCTURAL STEEL TANK CONSTRUCTION MAY COMMENCE
- 1 14 DAYS AFTER LAST CAST AFTER PROVIDING CUBE TEST RESULTS
- 1 TANK ERECTED TO +-5MM TOLERANCES.
- 2 USE 120 x 120 x 1,2,10mm HOT DIPPED GALVANISED SHIMS TO LEVEL TANK FLOOR
- 1 BELOW AND ON TOP OF 150x5 CONTINUOUS STEEL BEARING PLATE
- 1 WITH
- 1 SHIMS AT EACH TANK FLOOR NODE 1222# C/C BOTH WAYS.

PROVIDE 250mm MICRON DPM UNDERNEATH ENTIRE STRUCTURAL FOOTPRINT

METHODOLOGY

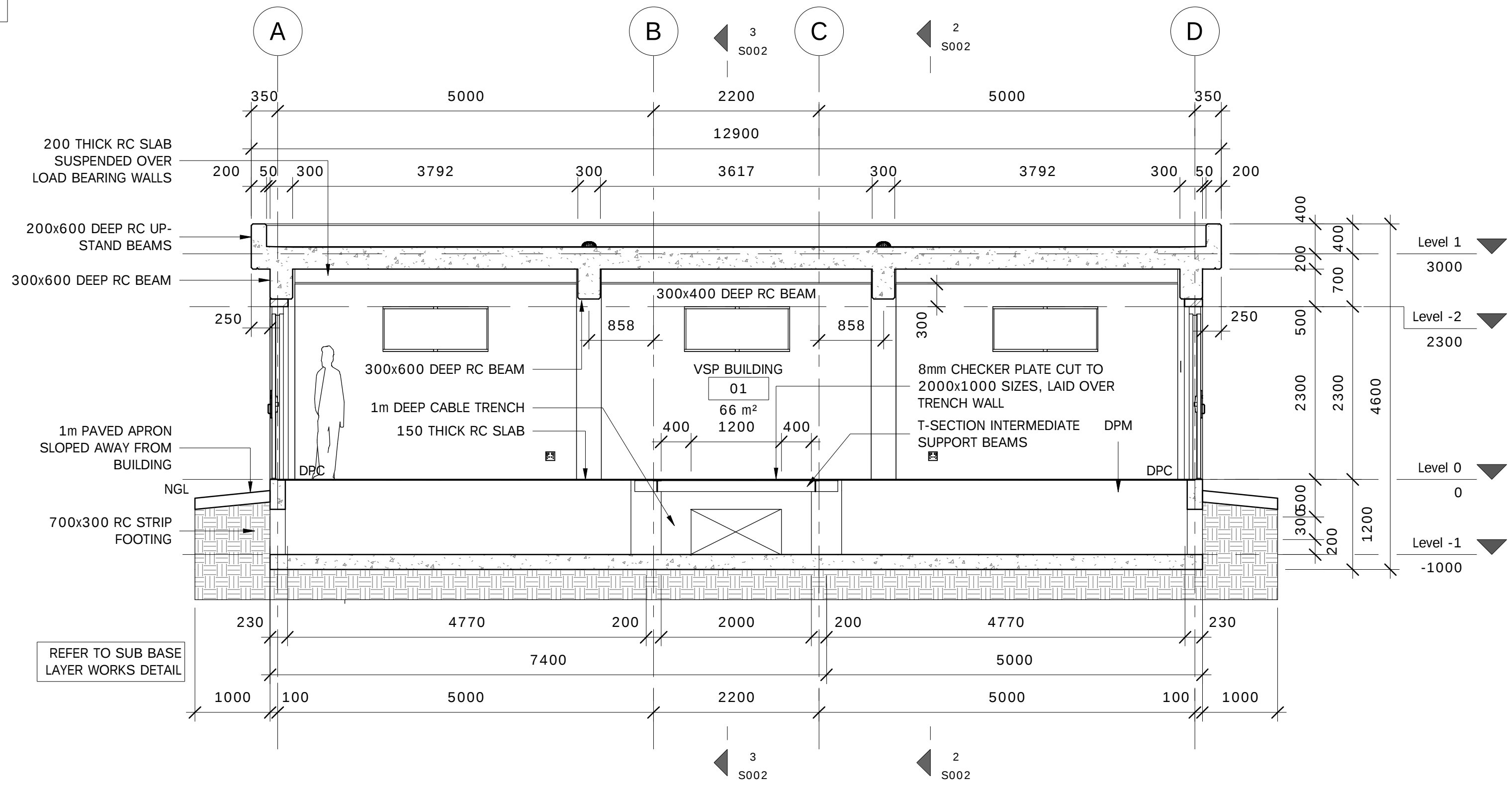
- 1) S1
- 2) S2
- 3) OBTAIN MODS FROM THE LABORATORY OF THE IN-SITU MATERIAL IN ORDER TO BE ABLE TO CONDUCT NUCLEAR DENSITY TESTING.
- 4) WHERE THERE IS GLARING EVIDENCE OF UNSATISFACTORY MATERIAL FOR FOUNDING, IMPORT GS MATERIAL AT 200 LAYERS FROM AN APPROVED COMMERCIAL QUARRY. WHERE THERE IS UNCERTAINTY, OBTAIN THE ADVICE OF THE ENGINEER BY FURNISHING PICTORIAL ILLUSTRATIONS OF THE SITE CONDITIONS.
- 5) LAYER TESTING SHOULD BE DONE EVERY 2ND LAYER WHETHER IN-SITU OR IMPORTED MATERIAL ARE BEING USED.
- 6) REINFORCEMENT & SHUTTERING CAN COMMENCE ONCE MATERIAL COMPACTION TESTS ARE PROVEN TO BE IN ORDER.

CONCRETE NOTES:

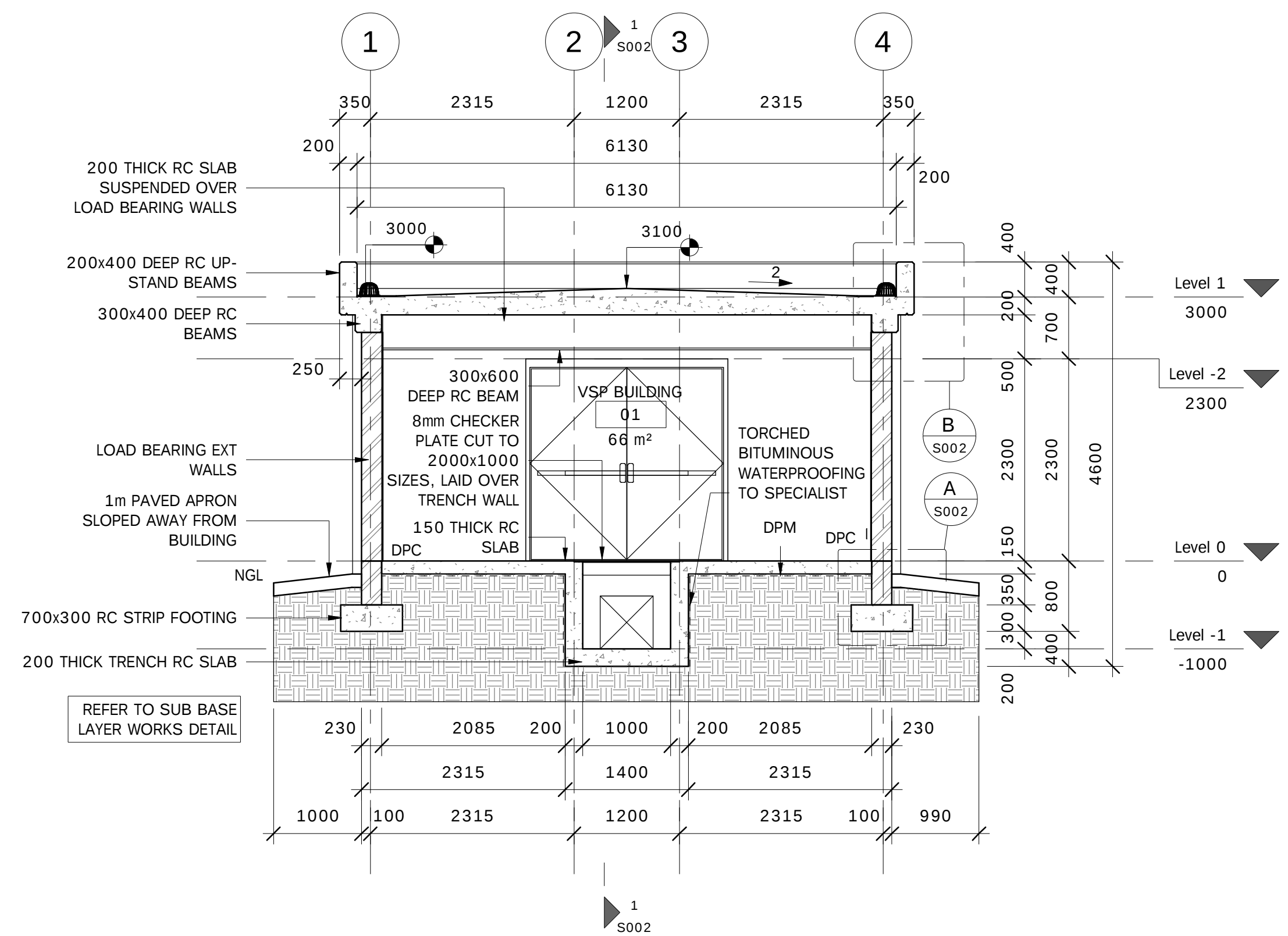
- 1) REQUEST THE READY MIX PLANT WHEN CASTING THE RAFT BEAMS AND SLAB TO SAMPLE AS FOLLOWS:
 - 3 CUBE MOULDS FOR 7 DAYS CRUSHING
 - 3 CUBE MOULDS FOR 14 DAYS CRUSHING
 - 3 CUBE MOULDS FOR 28 DAYS CRUSHING
- 2) APPLY CHRYSOCORE WB CURING COMPOUND TO TOP OF SURFACES AS SOON AS CONCRETE IS STURDY ENOUGH TO WALK ON. OBTAIN THE MANUFACTURERS DATA SHEETS TO ACHIEVE THE RECOMMENDED APPLICATION CONDITIONS.

CLIENT:  1 Landros Mare Street Polokwane Central Tel: (015) 295 1800 Email: info@lepele.co.za Website: www.lepelwater.com LEPELE NORTHERN WATER Water is our passion	CONSULTANT:  16 Blue Jay Rooihuiskraal Centurion, 0157 P.O Box 31523 Braamfontein, 2017 Johannesburg Tel: (012) 661 0283 Fax: (035) 789 0222 Email: lansanam@sigodimarah.co.za Website: www.sigodimarah.com Sigodi Marah Martin Management Support Development & Engineering Consultants	PROFESSIONAL ENGINEER: R. OSTROWSKI PROF. Reg.No: 930381 DATE: SIGNATURE:	DESIGN BY: B. MBOYANA DRAWN BY: G. MAREDI CHECKED BY: B. MBOYANA APPROVED BY: R. OSTROWSKI	<table><tr><th>REV</th><th>DATE</th><th>REVISIONS</th><th>BY</th></tr><tr><td>0</td><td>23/09/2022</td><td>ISSUED FOR TENDER</td><td>J.B</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>	REV	DATE	REVISIONS	BY	0	23/09/2022	ISSUED FOR TENDER	J.B																																	PROJECT NAME UPGRADE OF OLIFANTSPOORT AND EBENEZER WATER SUPPLY SCHEME TITLE PS3 VSD BUILDING FOUNDATION, GROUND PLAN & DETAILS	PROJECT STATUS: TENDER DRAWING <table><tr><td>DATE</td><td>23/09/2022</td><td>SCALE</td><td>1:50</td><td>SHEET</td><td>1 OF 1</td><td>REV</td><td>0</td><td>A1</td></tr></table> DWG NO P1001-OL1D-CIV-3300	DATE	23/09/2022	SCALE	1:50	SHEET	1 OF 1	REV	0	A1
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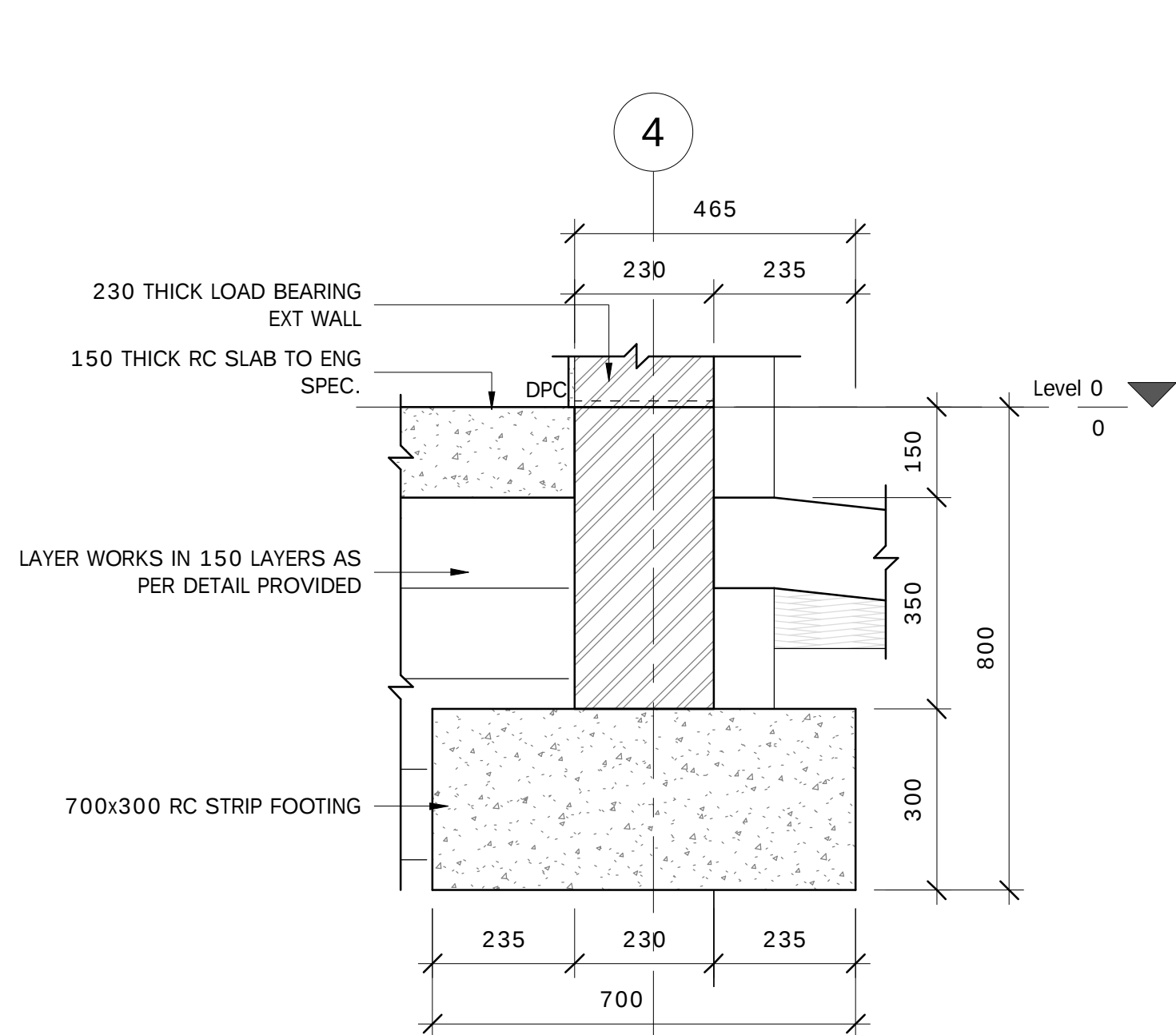
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DRAWINGS TO BE READ IN
CONJUNCTION WITH
REINFORCEMENT DRAWINGS &
BENDING SCHEDULES



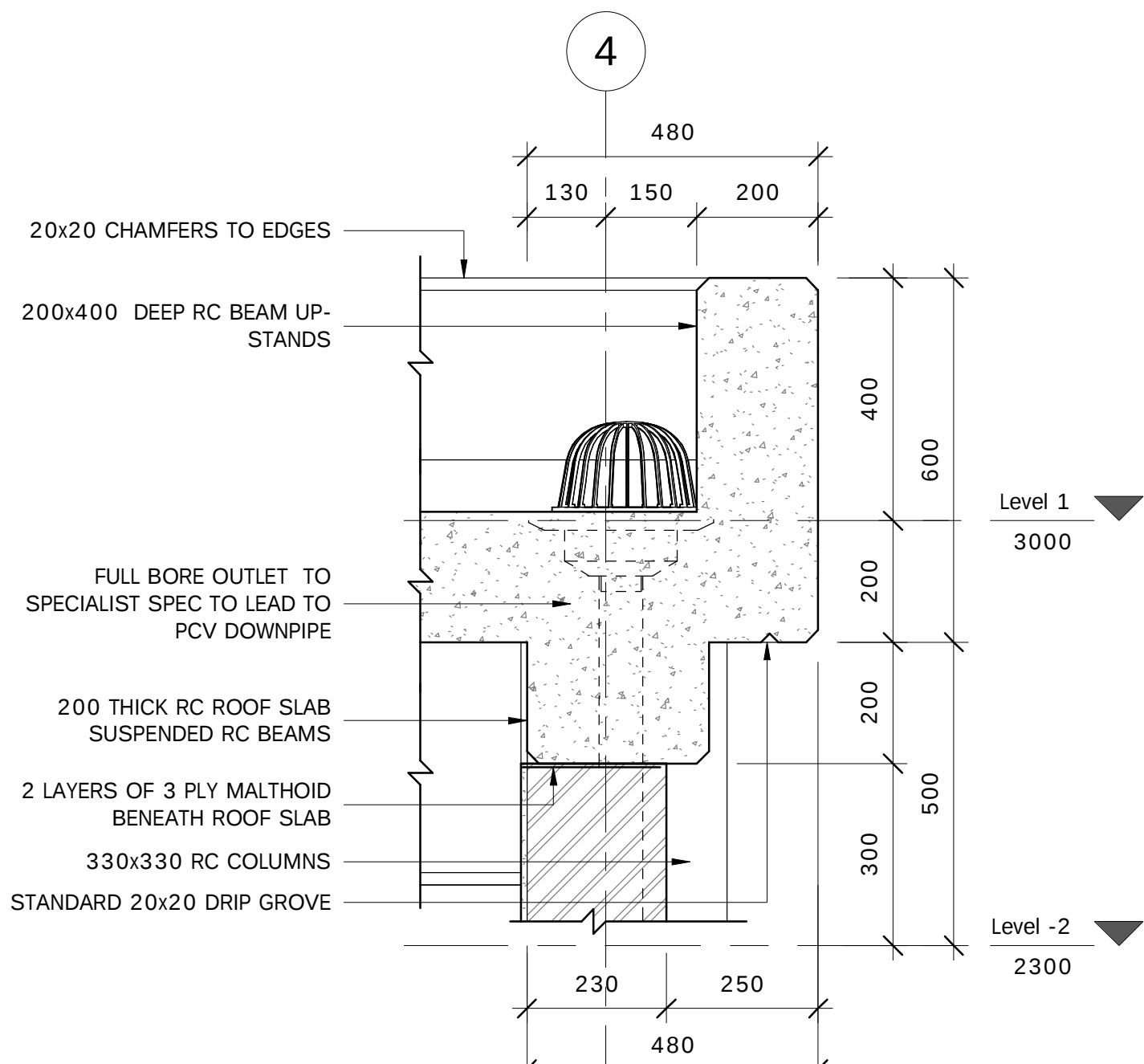
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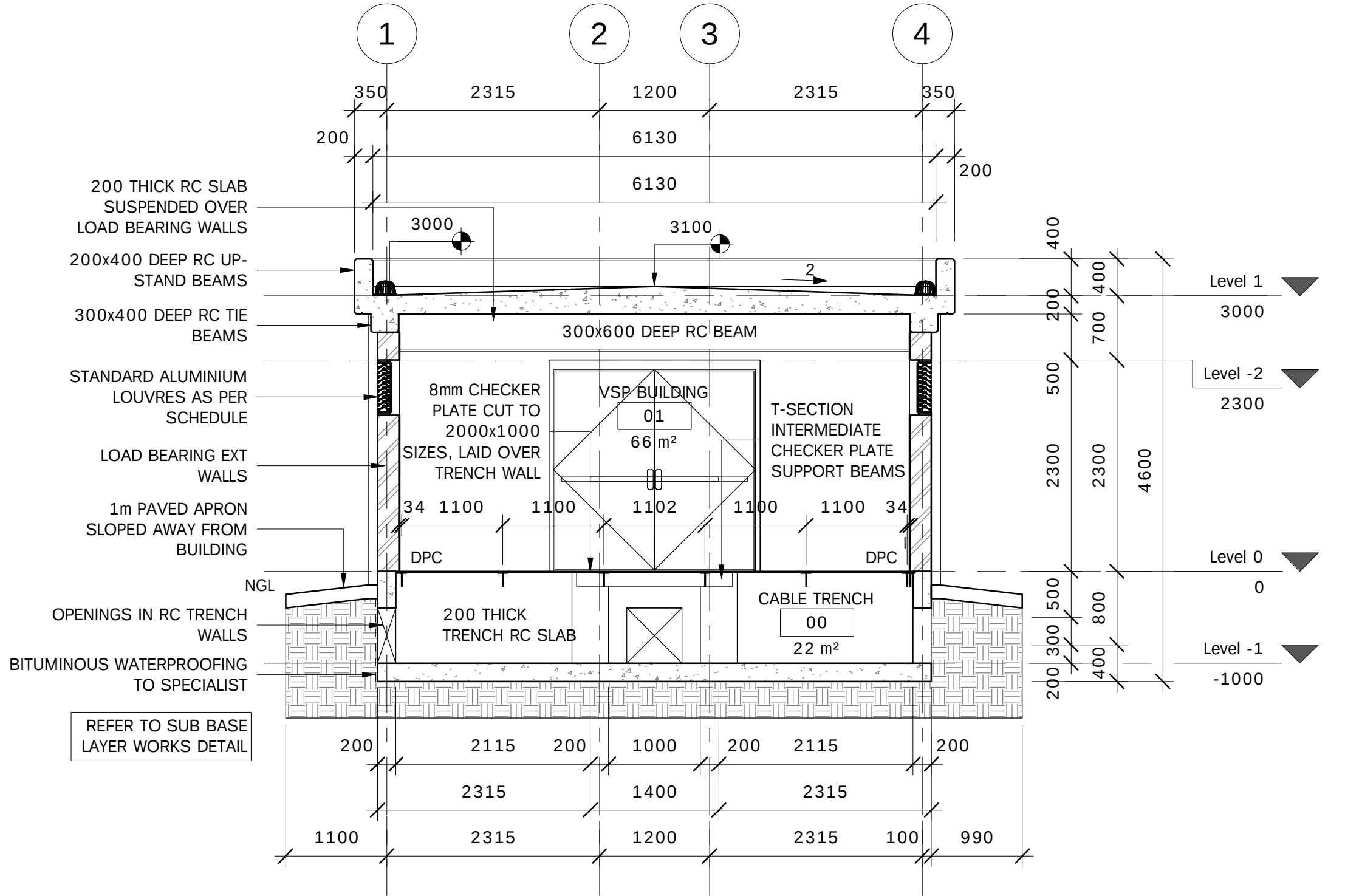
SECTION 2-2
SCALE 1:50



RAFT BEAM DETAIL A
SCALE 1:10



ROOF DETAIL B
SCALE 1:10



SECTION 3-3
SCALE 1:50

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R. OSTROWSKI

PROF. Reg.No:

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DRAWN BY:

G. MAREDI

CHECKED BY:

B. MBOYANA

APPROVED BY:

R. OSTROWSKI

REVISIONS

REV	DATE	DESCRIPTION	BY
0	23/09/2022	ISSUED FOR TENDER	J.B

PROJECT NAME

UPGRADE OF OLIFANTSPOORT AND EBENEZER WATER
SUPPLY SCHEME

TITLE

PS3 VSD BUILDING SECTIONS & DETAILS

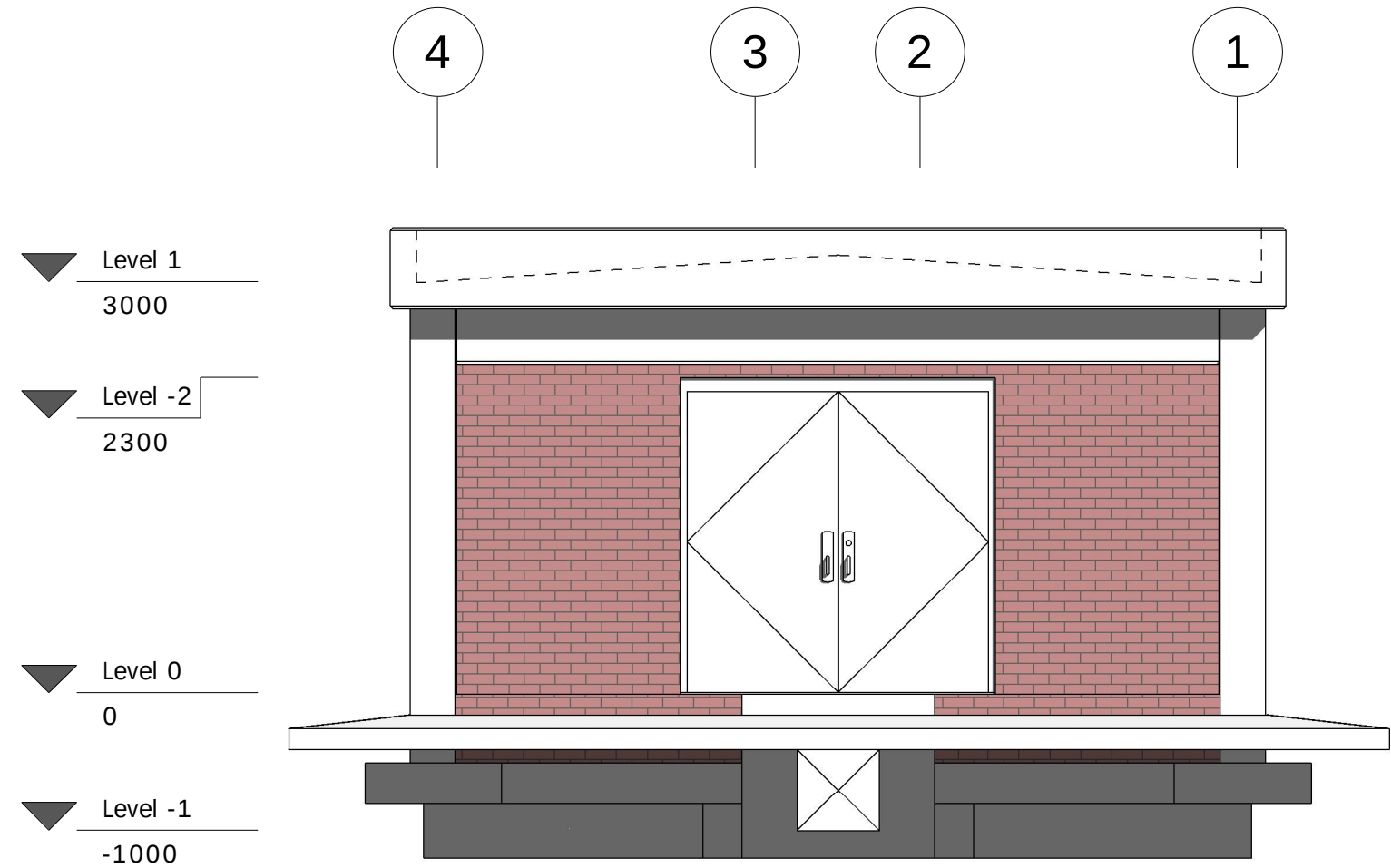
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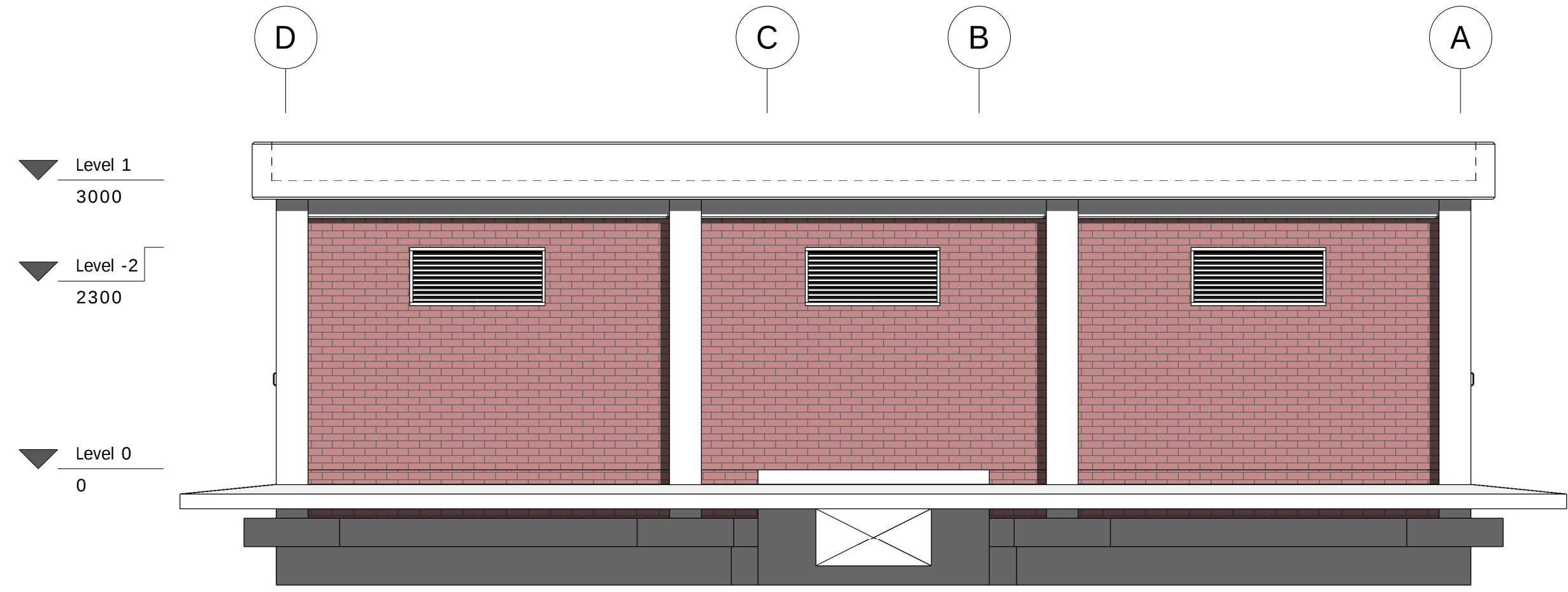
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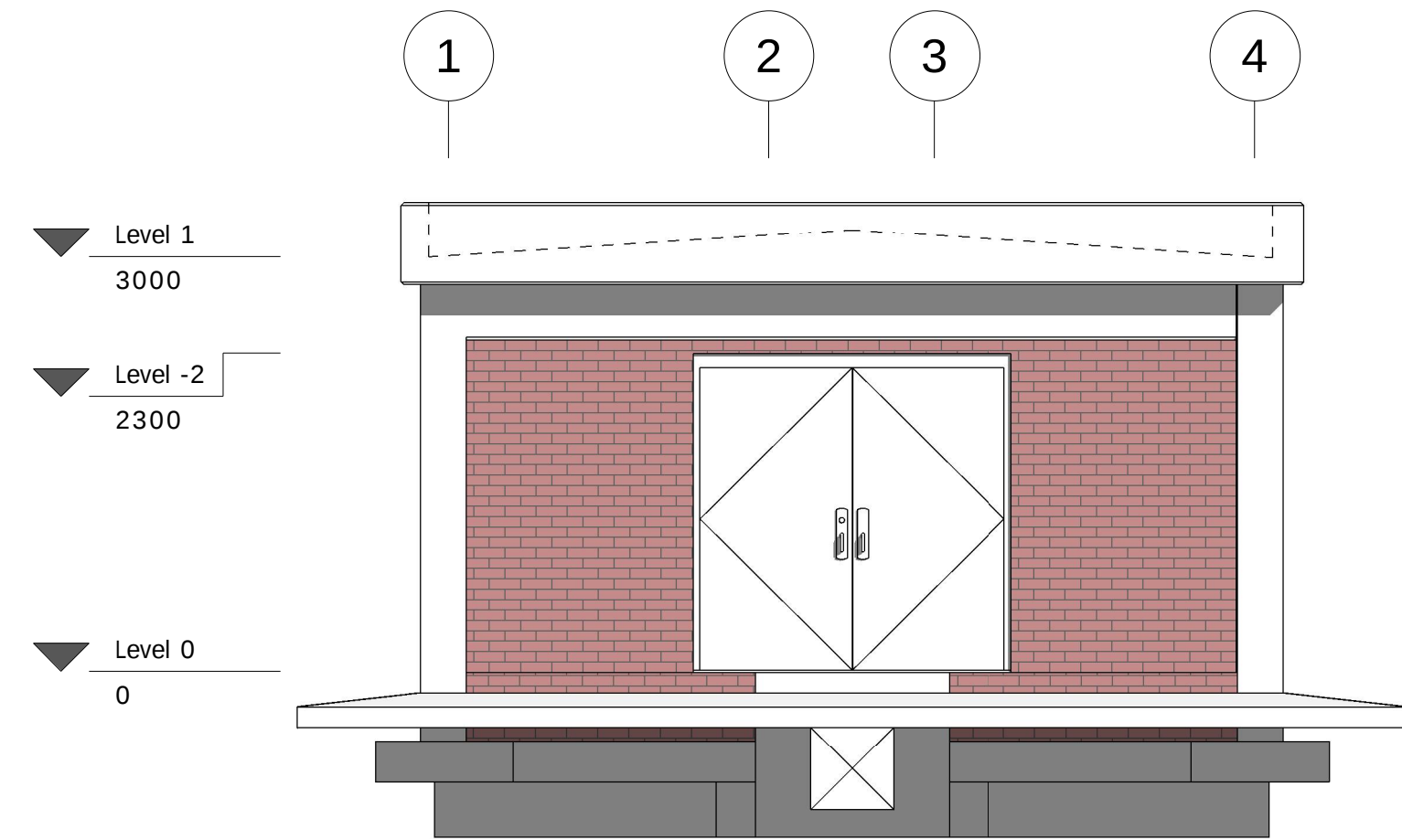
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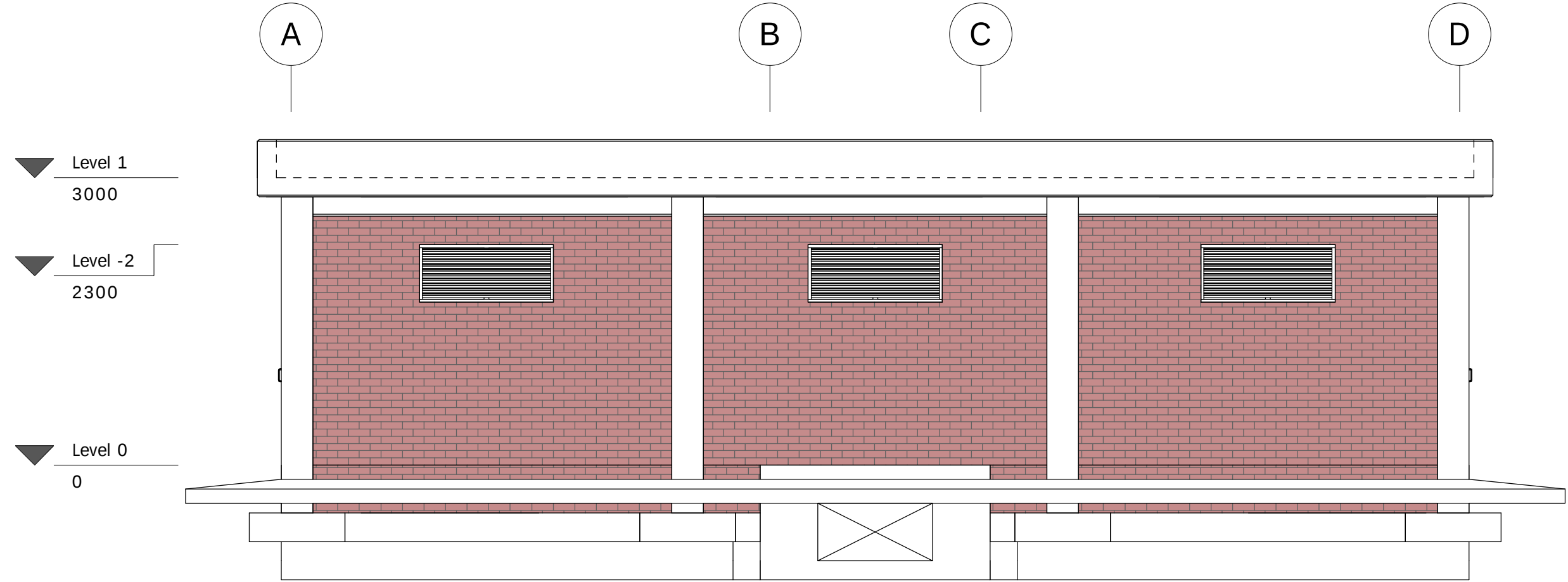
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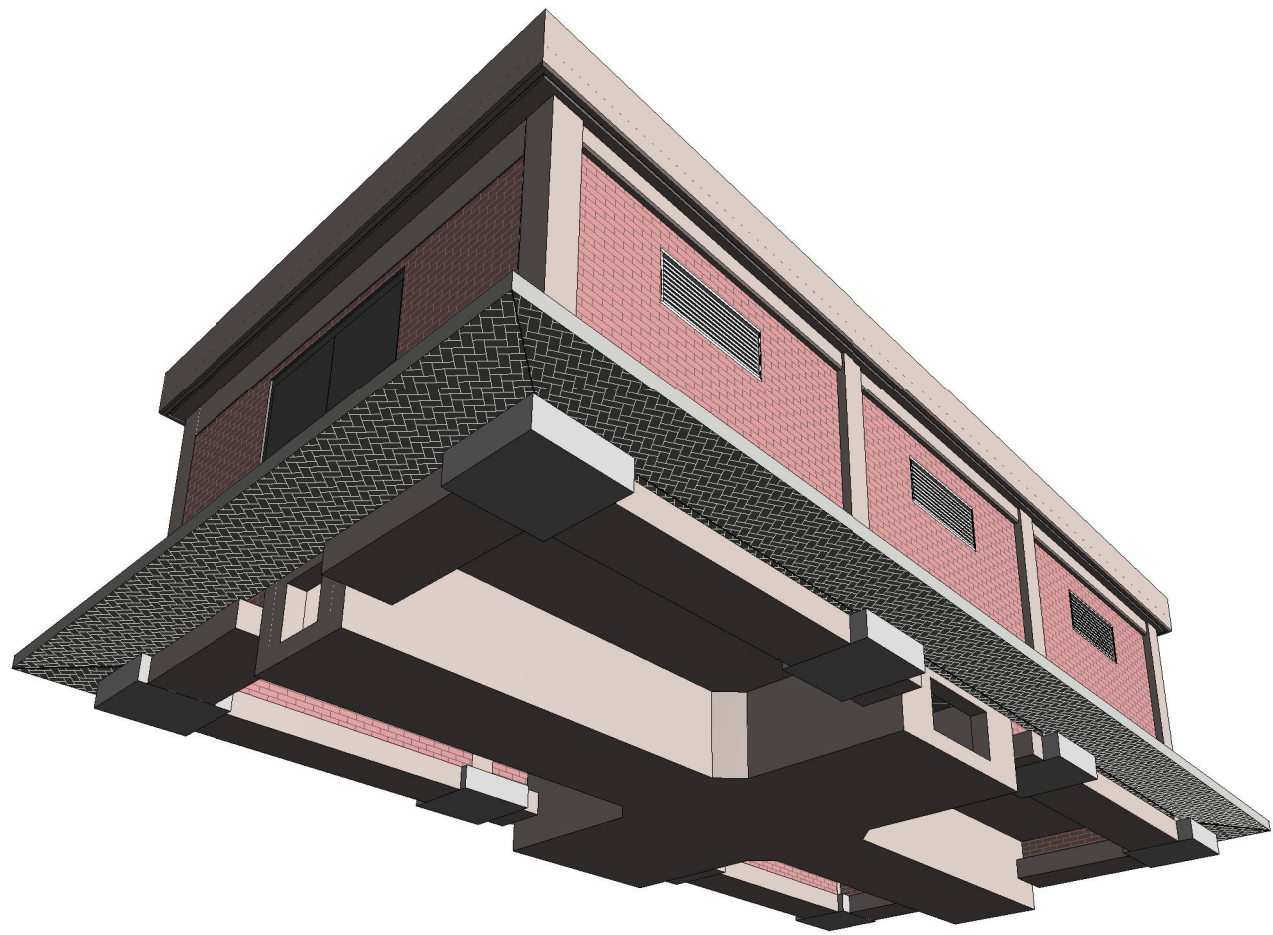
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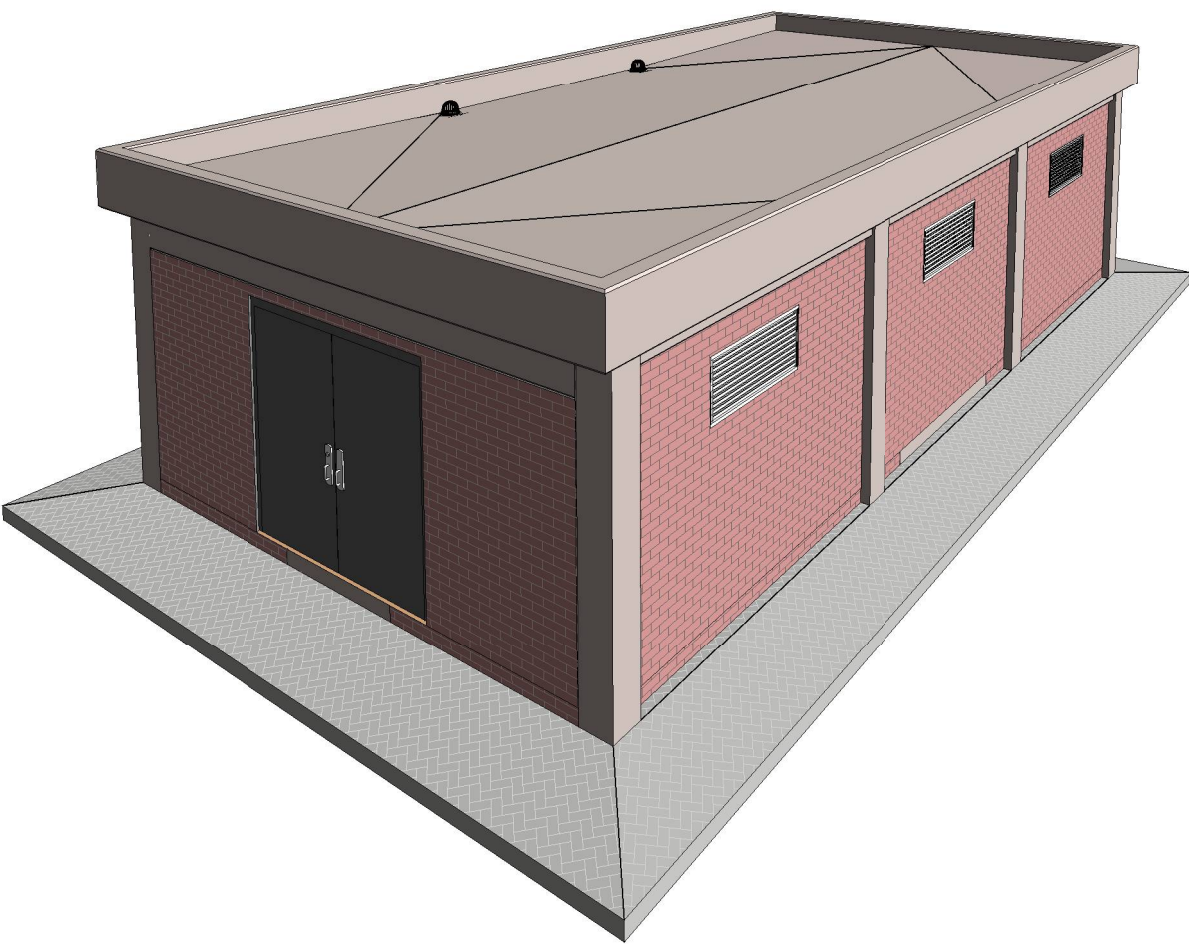
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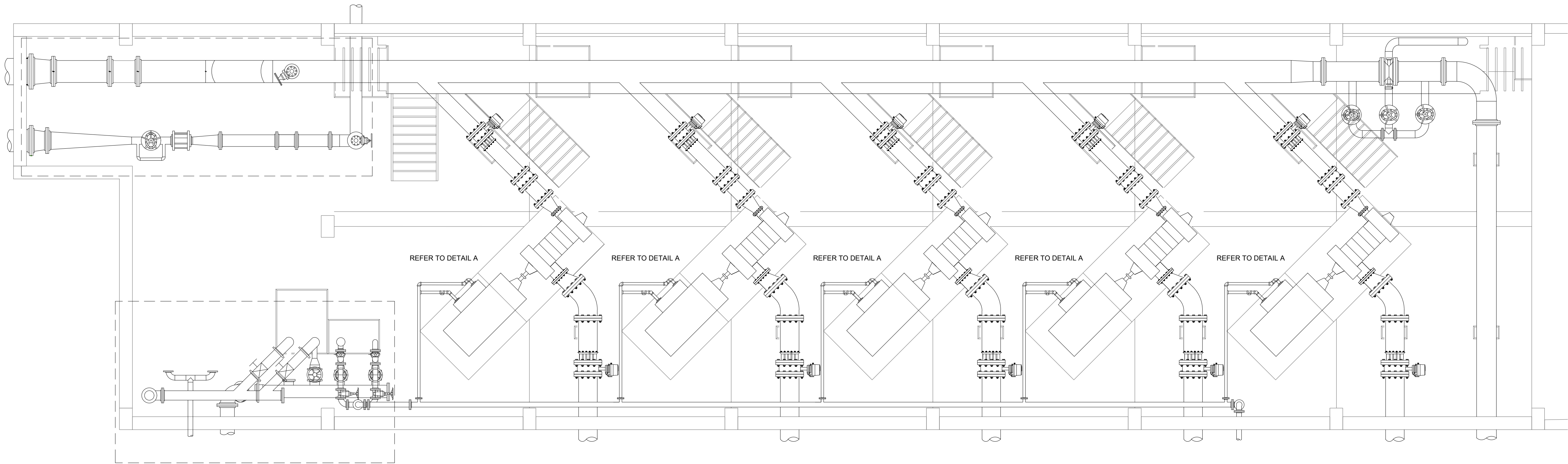
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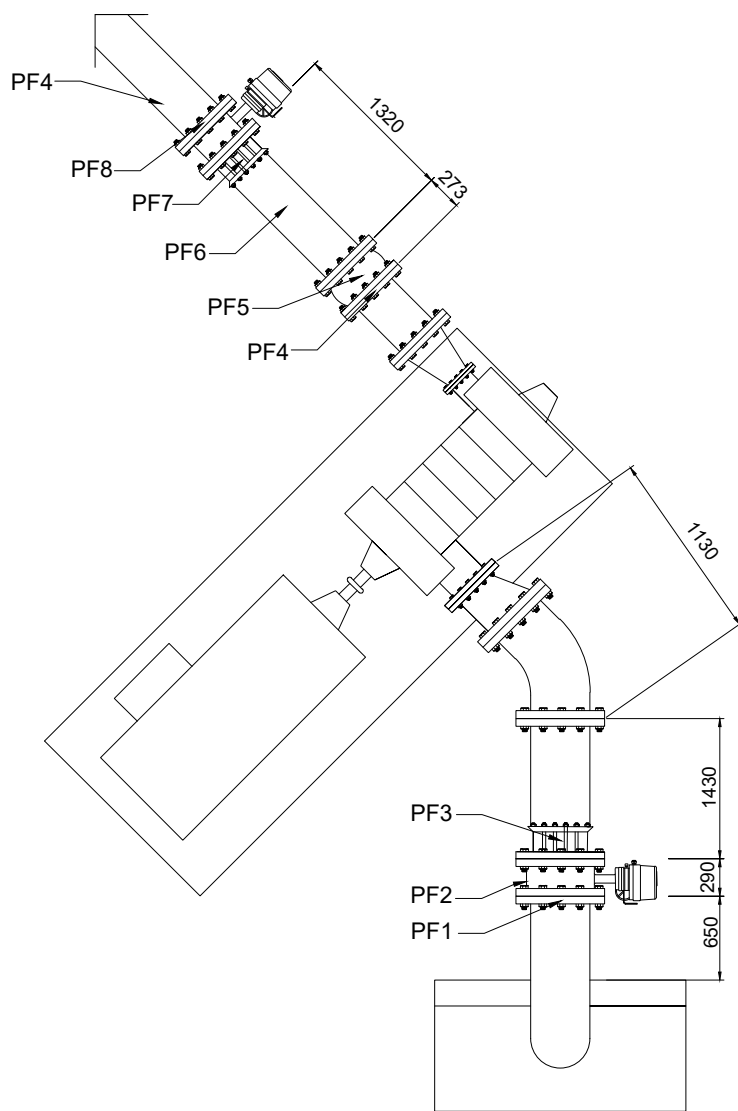
FOUNDATION PERSPECTIVE VIEW
SCALE: NTS



ROOF PERSPECTIVE VIEW
SCALE: NTS



PLAN VIEW



DETAIL A

NOTES:
1. This drawing to be read in conjunction with all relevant drawings and contract specifications, which can be made available on request.
2. Any discrepancies should be brought to consultant's attention prior to implementation of any work.

- LEGEND:
- NOZZLE CHECK VALVE
 - FLANGE ADAPTER
 - AUTOMATED BUTTERFLY VALVE
 - SINGLE FLANGED SPOOL PIECE WITH PUDDLE FLANGE
 - SINGLE FLANGED SPOOL PIECE

SCHEDULE OF PIPE FITTINGS

Ref	Description	Material	Dimensions			QTY
			DN	PN	F - F	
PF1	SINGLE WELD ON FLANGE		450	40		5
PF2	AUTOMATED BUTTERFLY VALVE		450	40	290	5
PF3	FLANGE ADAPTER FOR A STEEL PIPES		450	40		5
PF4	SINGLE WELD ON FLANGE		350	64		10
PF5	NOZZLE CHECK NON-RETURN VALVE		350	64	290	5
PF6	SINGLE FLANGED SPOOL PIECE		350	64	1320	5
PF7	FLANGE ADAPTER FOR A STEEL PIPES		350	64		5
PF8	WEDGE GATE VALVE		350	64	572	5

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SIGNATURE:

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DRAWN BY:
B.MVUKUZO
CHECKED BY:
L.MIYA
APPROVED BY:
L.MIYA

REVISIONS

REV	DATE	DESCRIPTION	BY
a	2022-09-23	ISSUED FOR TENDER	L.M

PROJECT NAME

UPGRADE OF OLIFANTSPOORT AND EBENEZER
WATER SUPPLY SCHEME

TITLE

OLIFANTSPOORT PUMP STATION 1
GENERAL ARRANGEMENT

PROJECT STATUS:

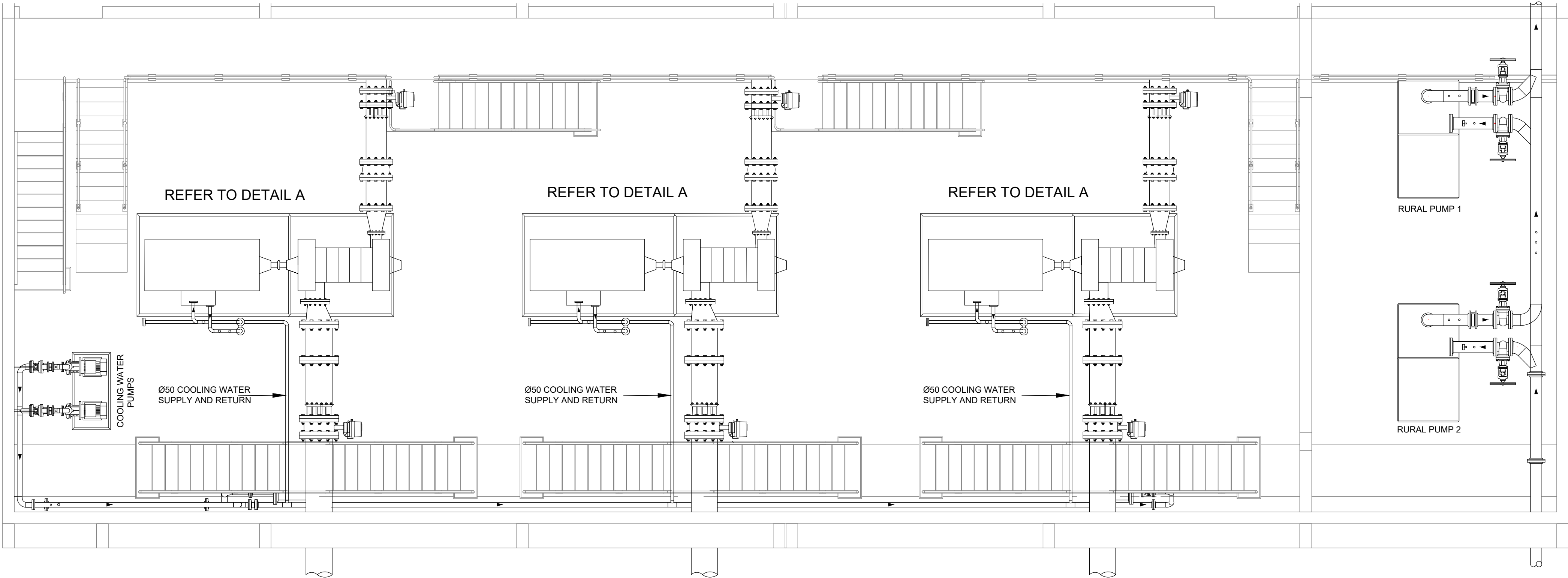
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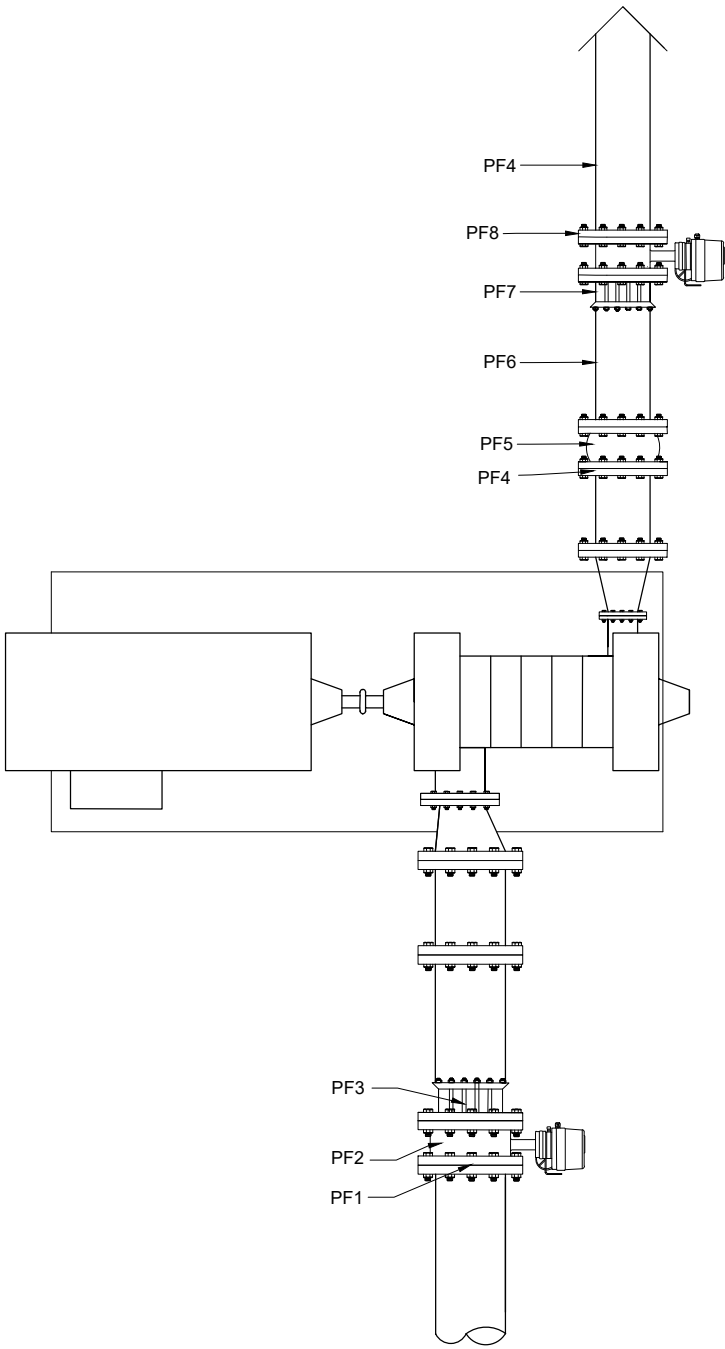
DWG NO

P1001-OL1D-MEC-6101

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GROUND FLOOR



DETAIL A

LEGEND:

- NOZZLE CHECK VALVE
- FLANGE ADAPTER
- AUTOMATED BUTTERFLY VALVE
- SINGLE FLANGED SPOOL PIECE WITH PUDDLE FLANGE
- SINGLE FLANGED SPOOL PIECE

SCHEDULE OF PIPE FITTINGS						
Ref	Description	Material	Dimensions			QTY
			DN	PN	F - F	
PF1	SINGLE WELD ON FLANGE		450	40		5
PF2	AUTOMATED BUTTERFLY VALVE		450	40		5
PF3	FLANGE ADAPTER FOR A STEEL PIPES		450	40		5
PF4	SINGLE WELD ON FLANGE		350	40		10
PF5	NOZZLE CHECK NON-RETURN VALVE		350	40		5
PF6	SINGLE FLANGED SPOOL PIECE		350	40		5
PF7	FLANGE ADAPTER FOR A STEEL PIPES		350	40		5
PF8	WEDGE GATE VALVE		350	40		5

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APPROVED BY:

L.MIYA

REVISIONS

REV	DATE	DESCRIPTION	BY
a	2022-09-23	ISSUED FOR TENDER	L.M

PROJECT NAME

UPGRADE OF OLIFANTSPOORT AND EBENEZER
WATER SUPPLY SCHEME

TITLE

OLIFANTSPOORT PUMP STATION 2
GENERAL ARRANGEMENT

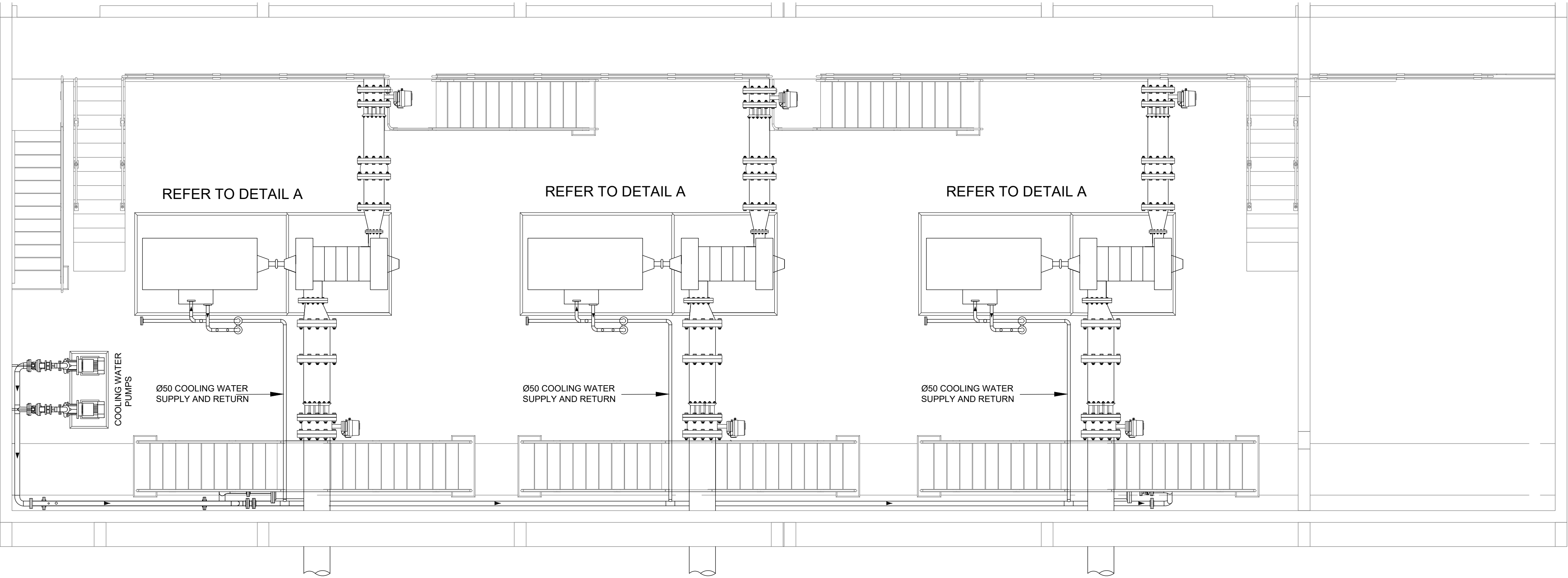
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TENDER DRAWING

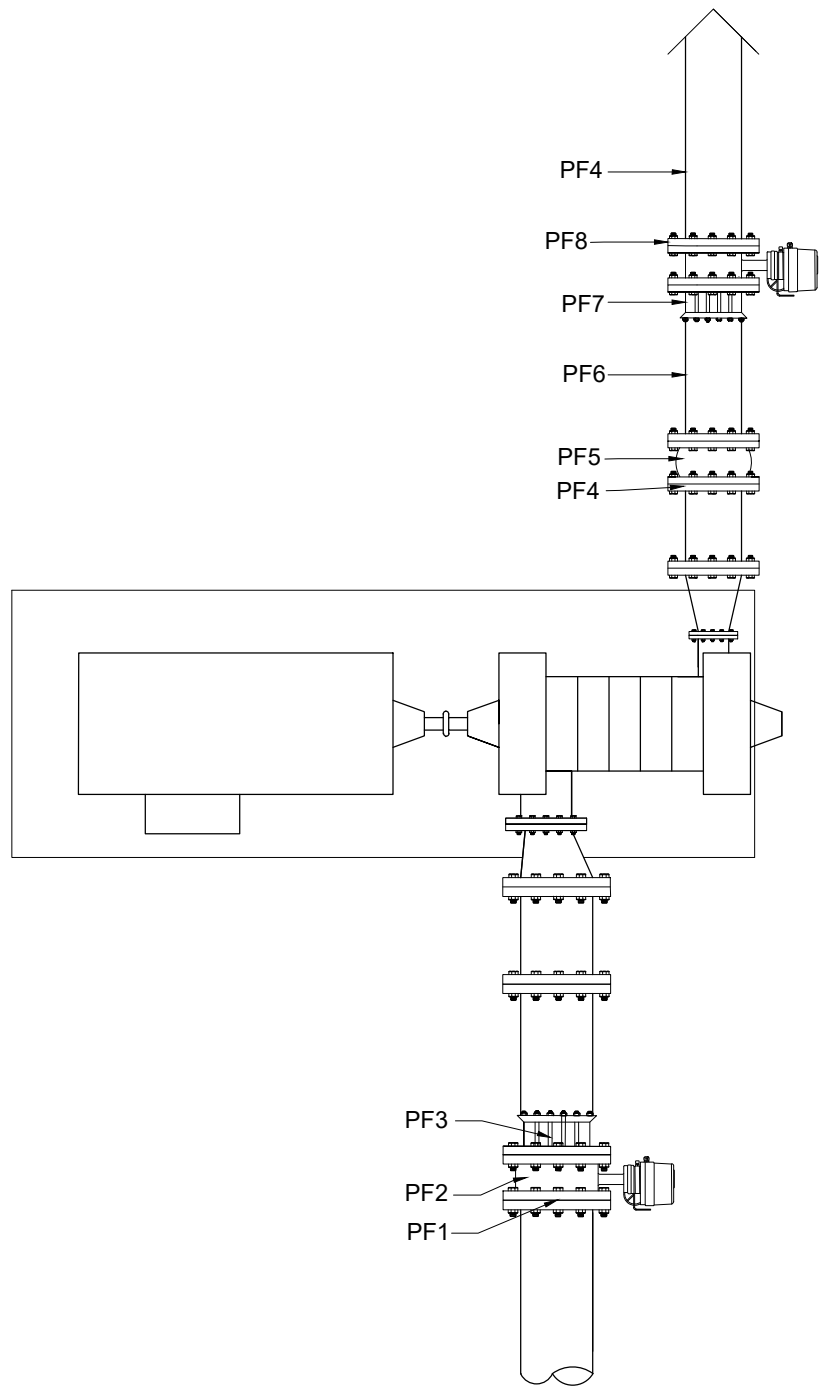
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DWG NO

P1001-OL1D-MEC-6102



GROUND FLOOR

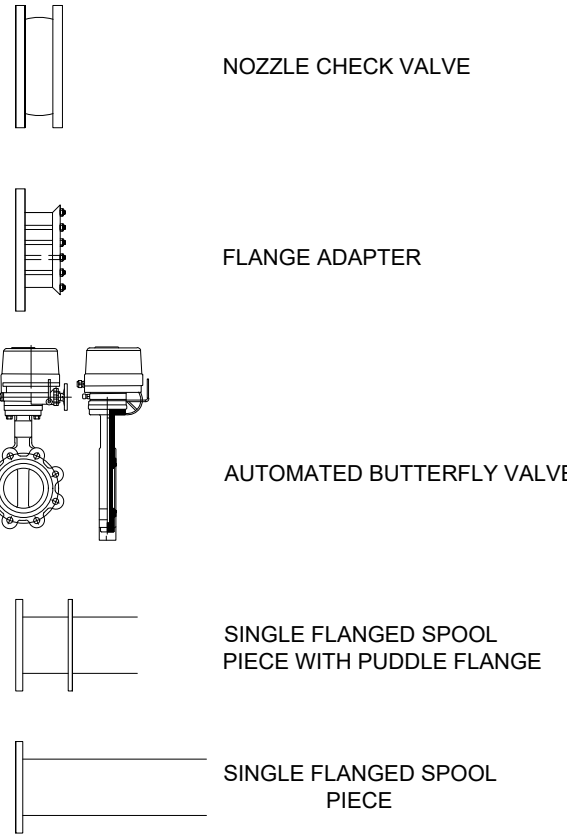


DETAIL A

SCHEDULE OF PIPE FITTINGS

Ref	Description	Material	Dimensions			QTY
			DN	PN	F - F	
PF1	SINGLE WELD ON FLANGE		450	40		5
PF2	AUTOMATED BUTTERFLY VALVE		450	40		5
PF3	FLANGE ADAPTER FOR A STEEL PIPES		450	40		5
PF4	SINGLE WELD ON FLANGE		350	40		10
PF5	NOZZLE CHECK NON-RETURN VALVE		350	40		5
PF6	SINGLE FLANGED SPOOL PIECE		350	40		5
PF7	FLANGE ADAPTER FOR A STEEL PIPES		350	40		5
PF8	WEDGE GATE VALVE		350	40		5

LEGEND:



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DATE:
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SIGNATURE:

DESIGN BY:

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B.MVUKUZO

CHECKED BY:

L.MIYA

APPROVED BY:

L.MIYA

REVISIONS

REV	DATE	DESCRIPTION	BY
a	2022-09-23	ISSUED FOR TENDER	L.M

PROJECT NAME

UPGRADE OF OLIFANTSPOOT AND EBENEZER
WATER SUPPLY SCHEME

TITLE

OLIFANTSPOOT PUMP STATION 3
GENERAL ARRANGEMENT

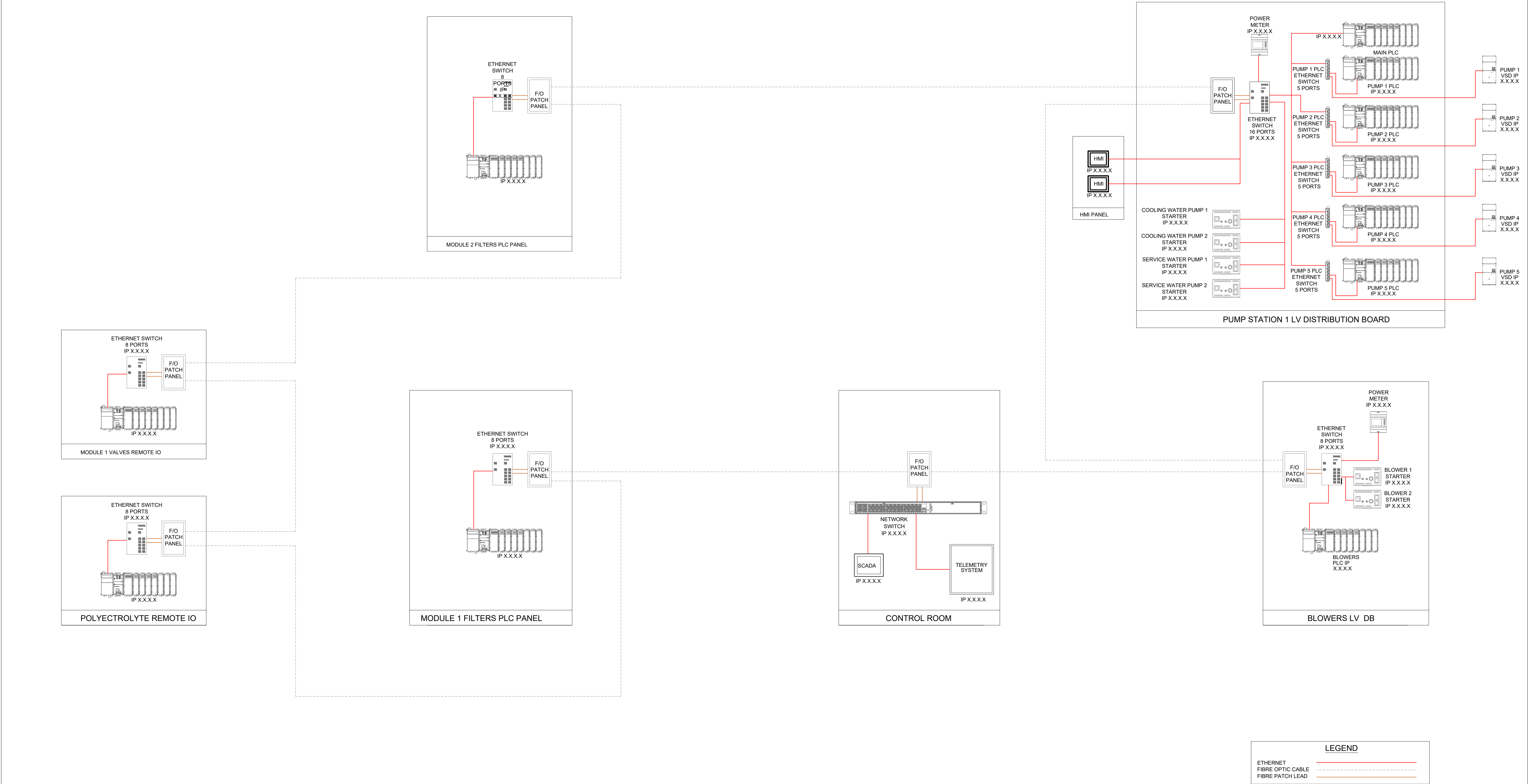
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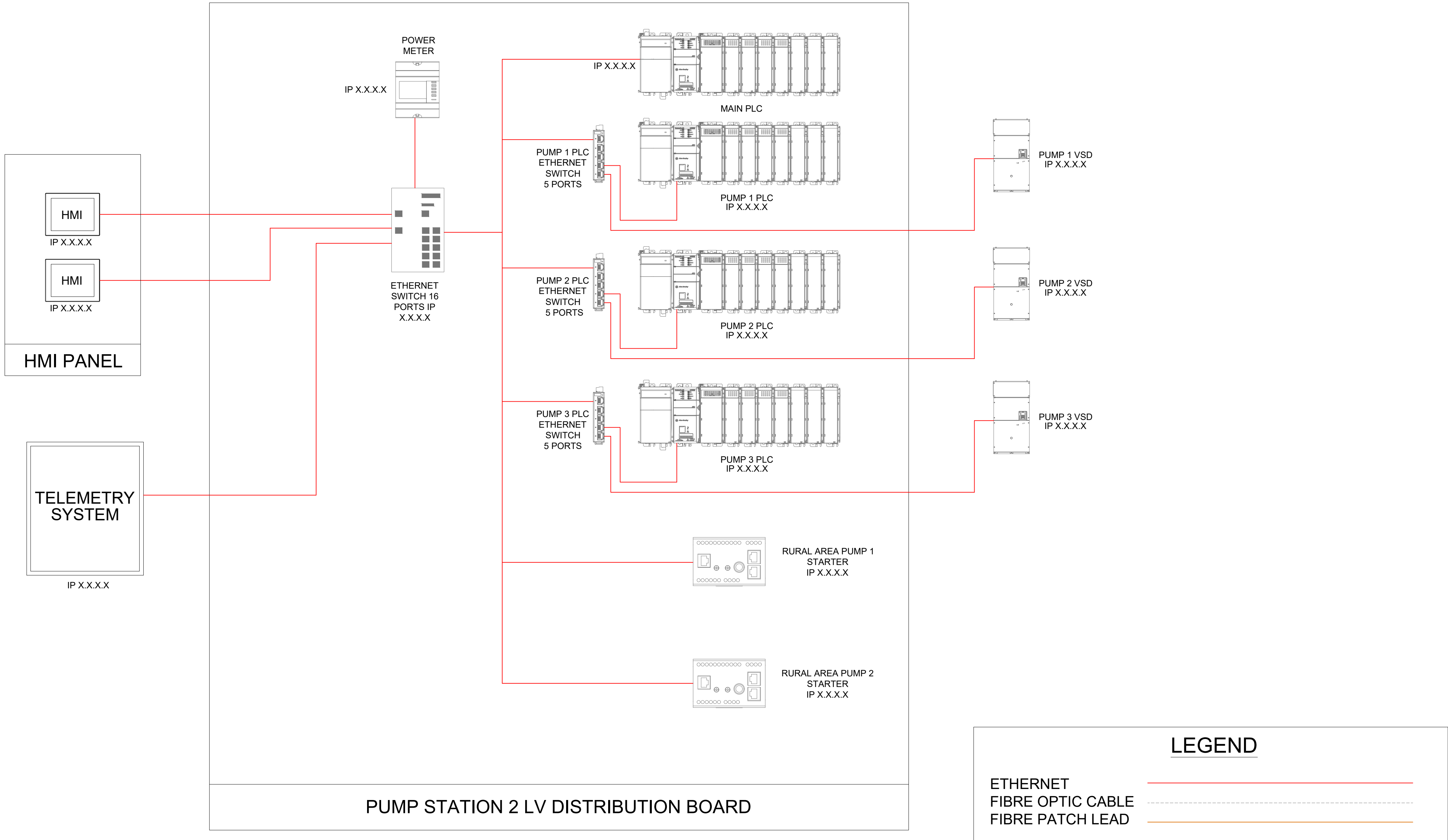
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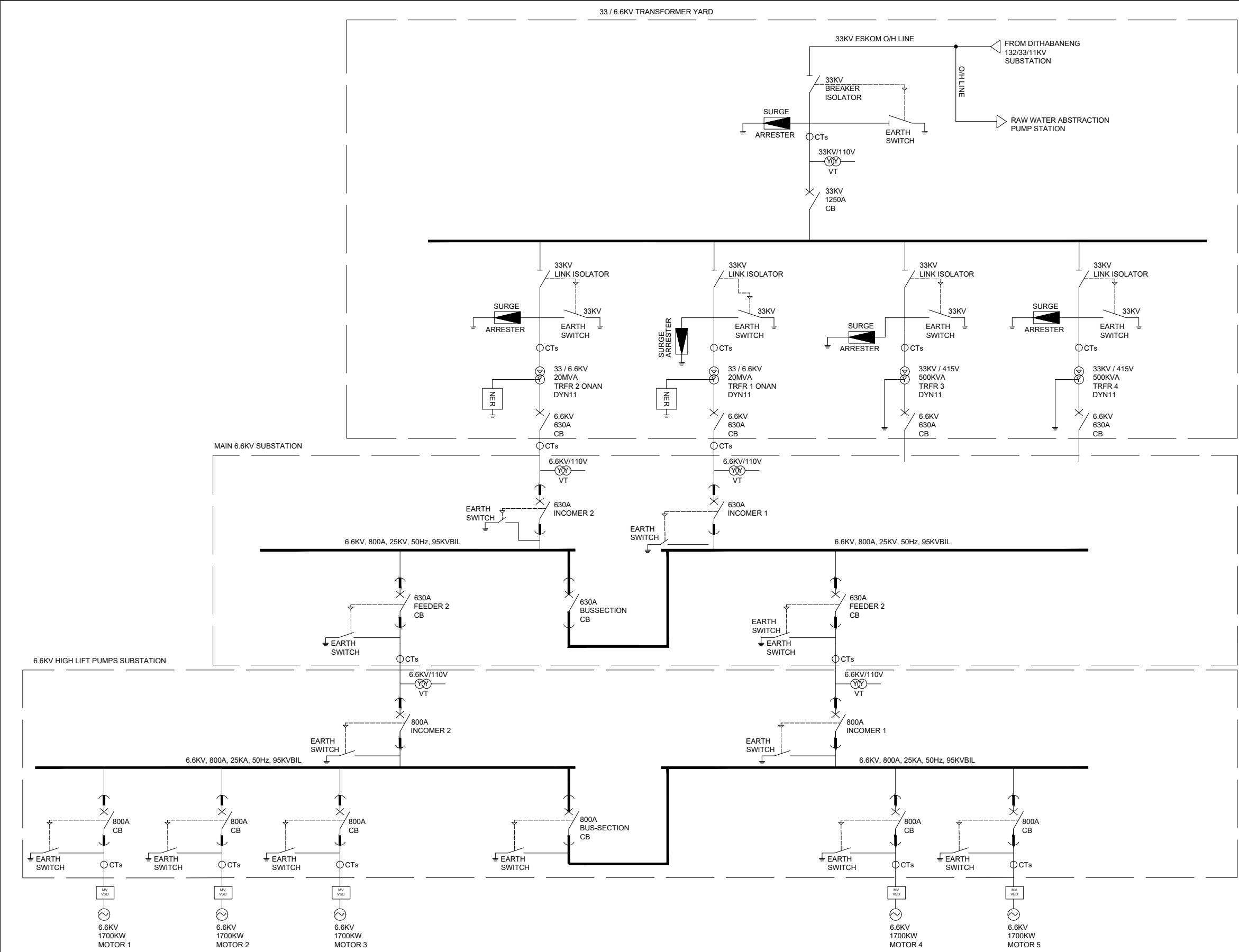
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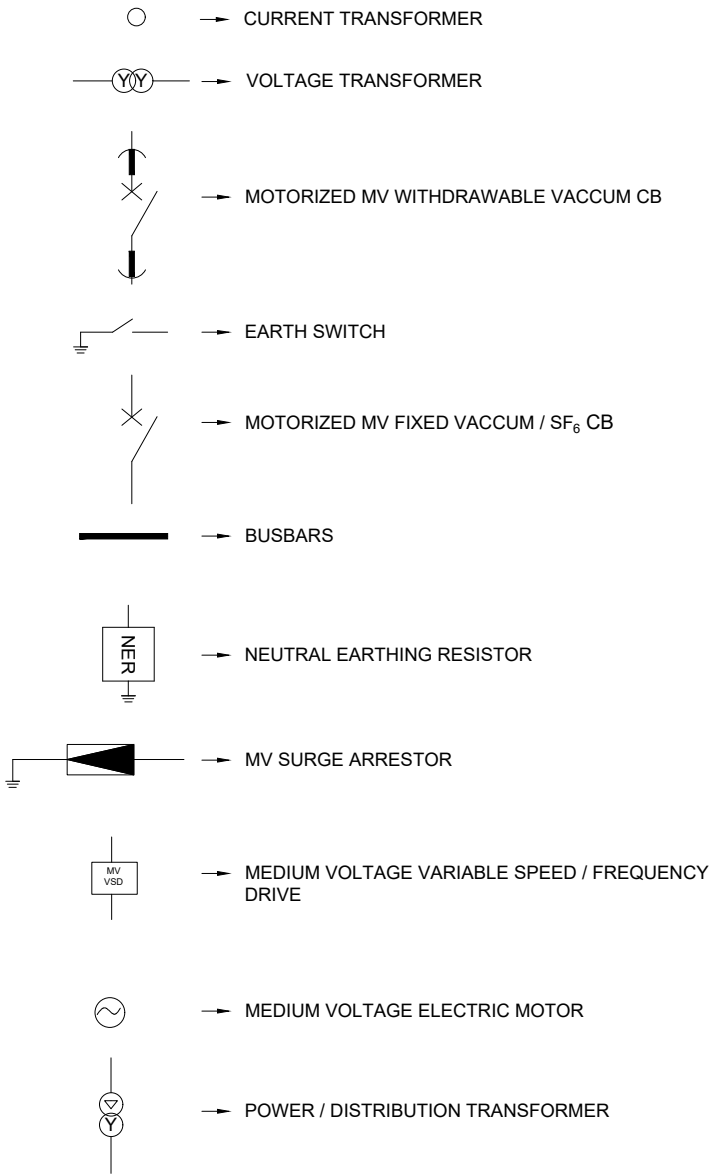
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LEGEND:



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CHECKED BY:
F.MAPULANE
APPROVED BY:
F.MAPULANE

REVISIONS				
REV	DATE	DESCRIPTION	BY	
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PROJECT NAME

UPGRADE OF OLIFANTSPOORT AND EBENEZER
WATER SUPPLY SCHEME

TITLE

OLIFANTSPOORT WATER SCHEME - PS1 MV
RETICULATION NETWORK SINGLE LINE
DIAGRAM

PROJECT STATUS:

TENDER DRAWING

DATE	SCALE	SHEET	REV	A1
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DWG NO

P1001-OL1D-ELE-7201

