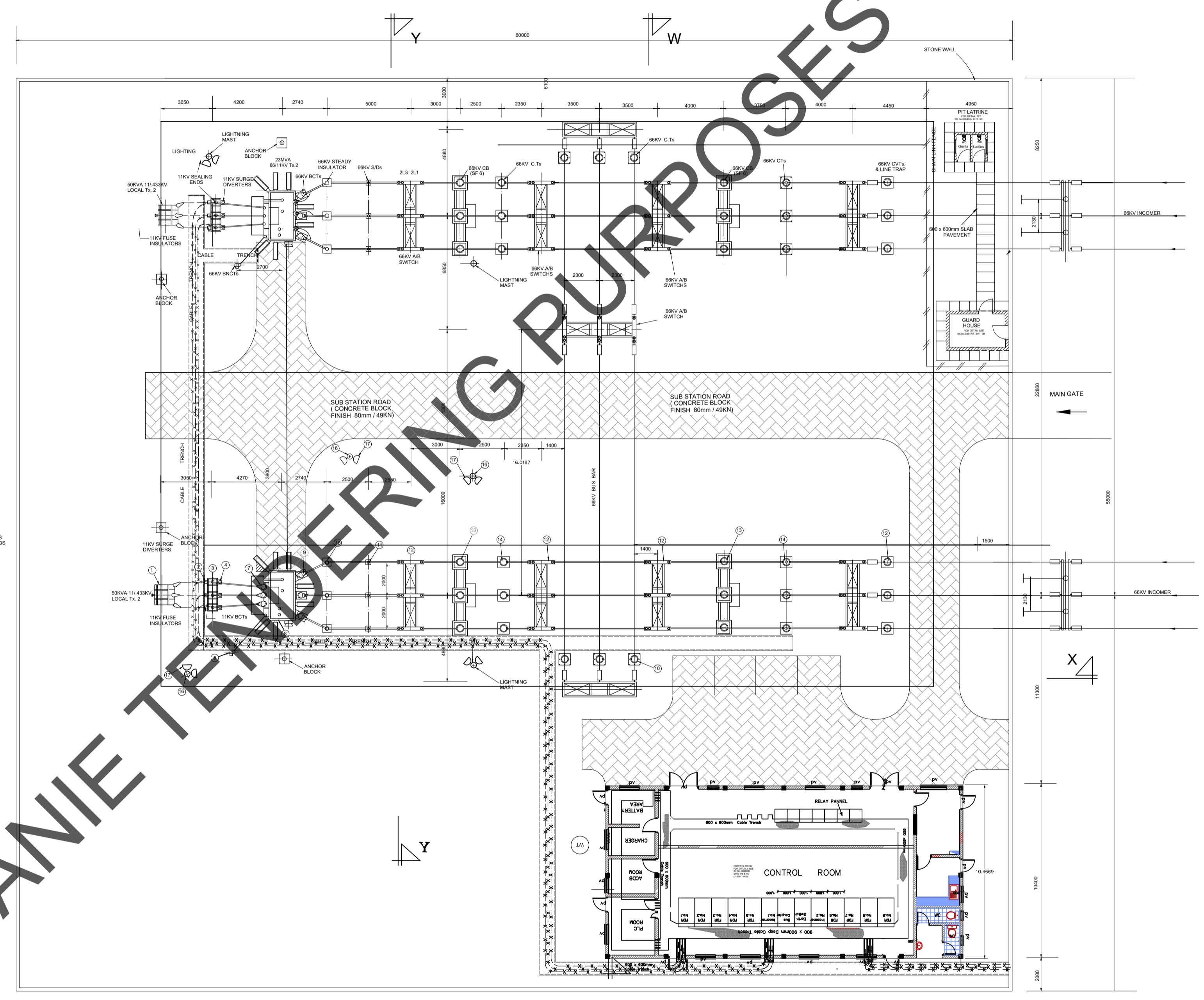


SCALE = 1:20  
FOR DETAILS SEE SK No. 05950 sheet 8

ITEM No.	DISCRPTION	No off	ITEM No.	DISCRPTION	No off
1	① — 50KVA 11/433KV LOCAL Tx	1	10	⑩ — 66KV VTs	3x1
2	② — 11KV TAPLIN ISOLATOR	3x1	11	⑪ — 66 KV SDs	3x1
3	③ — 11KV SEALING ENDS	3x1	12	⑫ — 66KV A/B SWITCH	3x4
4	④ — 11KV SURGE DIVERTERS	3x1	13	⑬ — 66KV CB (SF6)	2
5	⑤ — 11KV STEADY INSULATORS	3x1	14	⑭ — 66KV Cts	3x1
6	⑥ — 11KV BNCTs	3x1	15	⑮ — 66KV CVTs & LINE TRAP	3x1
7	⑦ — 11KV BCTs	3x1	16	⑯ — LIGHTNING MAST	4
8	⑧ — 23MVA 66/11KV Tx	1	17	⑰ — LIGHTING	
9	⑨ — 66KV BCTs	3x1	18	⑱ — STEADY INSULATOR	



PROPOSED WORKS  
FUTURE WORKS

*KINANIE*  
*W V W W*  
*Sig. D.M. Wambugu*  
*12/03/2023*  
*For Bidding only.*

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REVISIONS

Date	Suffix	Descriptions	Issue

**CLIENT**  
**KENYA POWER & LIGHTING COMPANY**

**PROJECT**  
**PROPOSED CIVIL WORKS & STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX**

CONSTRUCTION DRAWINGS

GENERAL ARRANGEMENT

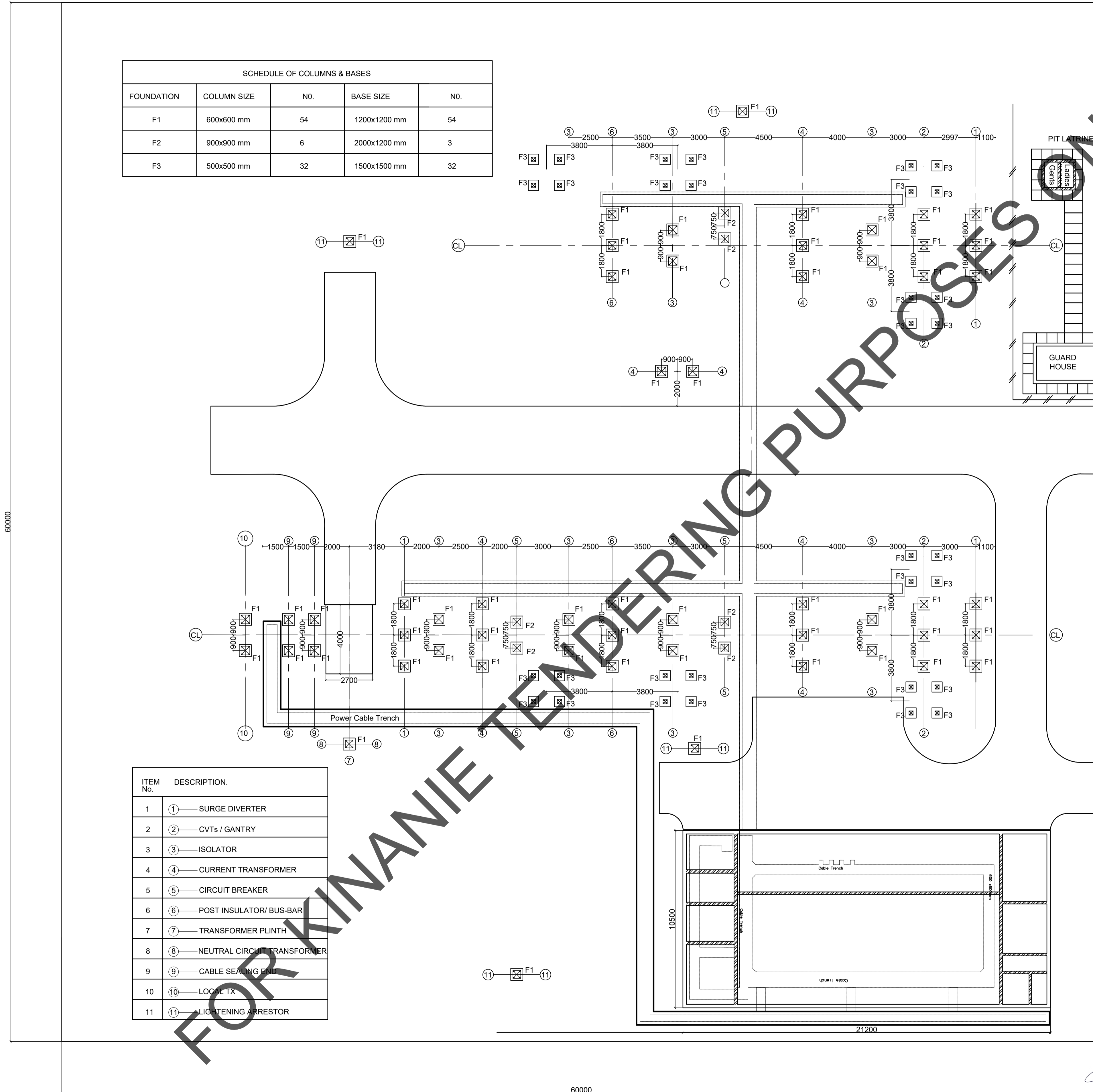
ELECTRICAL

KIN- SHEET 001/025

Drawn	D.WAITHERA	Scale(s)	AS INDICATED
Designed	D.WAITHERA	Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU	Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU	Date	MARCH, 2024

ISSUE DATE	MARCH, 2024
JOB No.	

SCHEDULE OF COLUMNS & BASES				
FOUNDATION	COLUMN SIZE	N.O.	BASE SIZE	N.O.
F1	600x600 mm	54	1200x1200 mm	54
F2	900x900 mm	6	2000x1200 mm	3
F3	500x500 mm	32	1500x1500 mm	32



ITEM No.	DESCRIPTION.
1	① — SURGE DIVERTER
2	② — CVTs / GANTRY
3	③ — ISOLATOR
4	④ — CURRENT TRANSFORMER
5	⑤ — CIRCUIT BREAKER
6	⑥ — POST INSULATOR/ BUS-BAR
7	⑦ — TRANSFORMER PLINTH
8	⑧ — NEUTRAL CIRCUIT TRANSFORMER
9	⑨ — CABLE SEALING END
10	⑩ — LOCAL TX
11	⑪ — LIGHTENING ARRESTOR

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REVISIONS			
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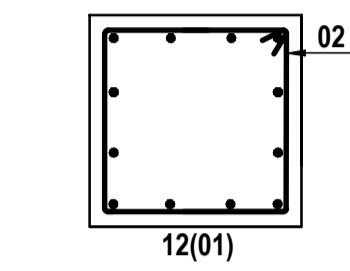
**CLIENT**  
KENYA POWER & LIGHTING COMPANY

**PROJECT**  
PROPOSED CIVIL WORKS & STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX

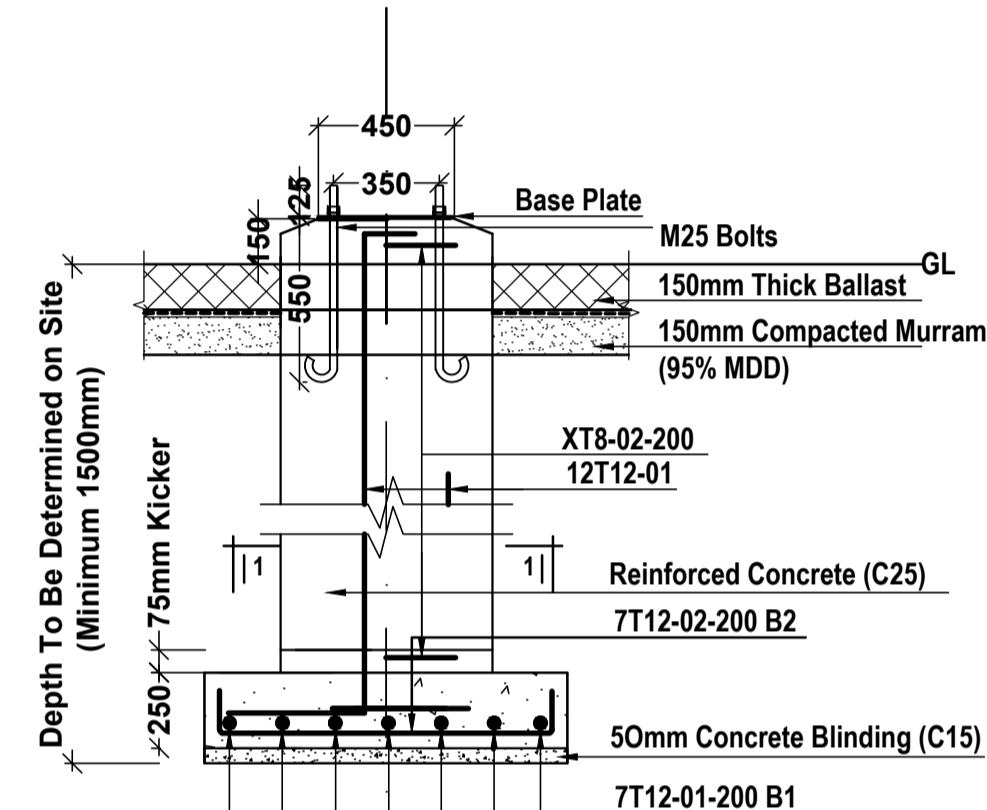
**CONSTRUCTION DRAWINGS**  
**GENERAL ARRANGEMENT**  
**STRUCTURAL**  
**KIN- SHEET 002/025 (a)**

Drawn	D.WAITHERA	Scale(s)	AS INDICATED
Designed	D.WAITHERA	Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU	Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU	Date	MARCH, 2024
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JOB No.			

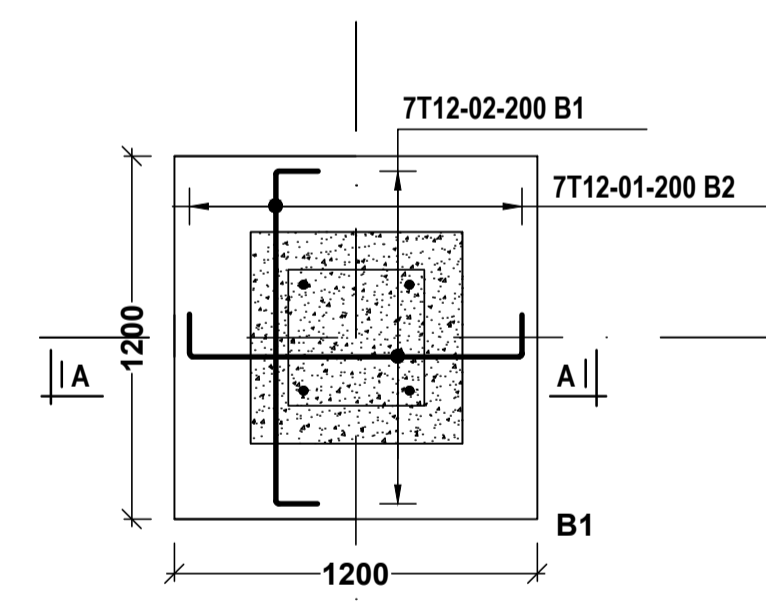
*Handwritten notes:*  
KINANIE  
W V W W  
Eng. D.M. WAMBUGU  
12/03/2024  
For Bid only.



**SECTION 1-1  
SCALE 1:30**

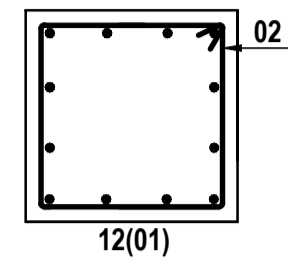


**600X600 COLUMN C1 [52 NO. OFF]  
SECTION A-A: BASE B1 ELEVATION DETAILS  
SCALE 1:20**

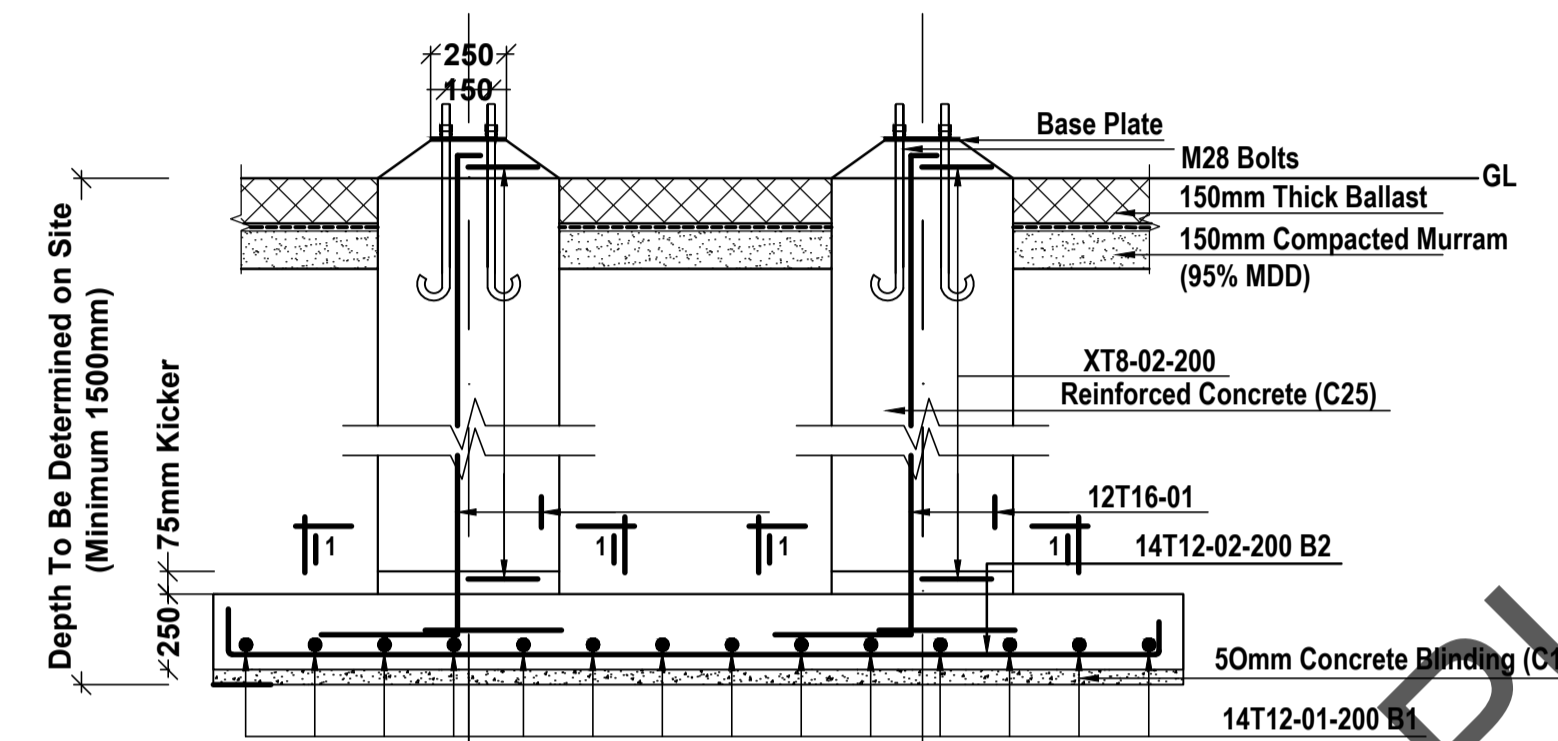


**1200x1200x250 mm BASE B1  
52 NO.OFF  
SCALE 1:20**

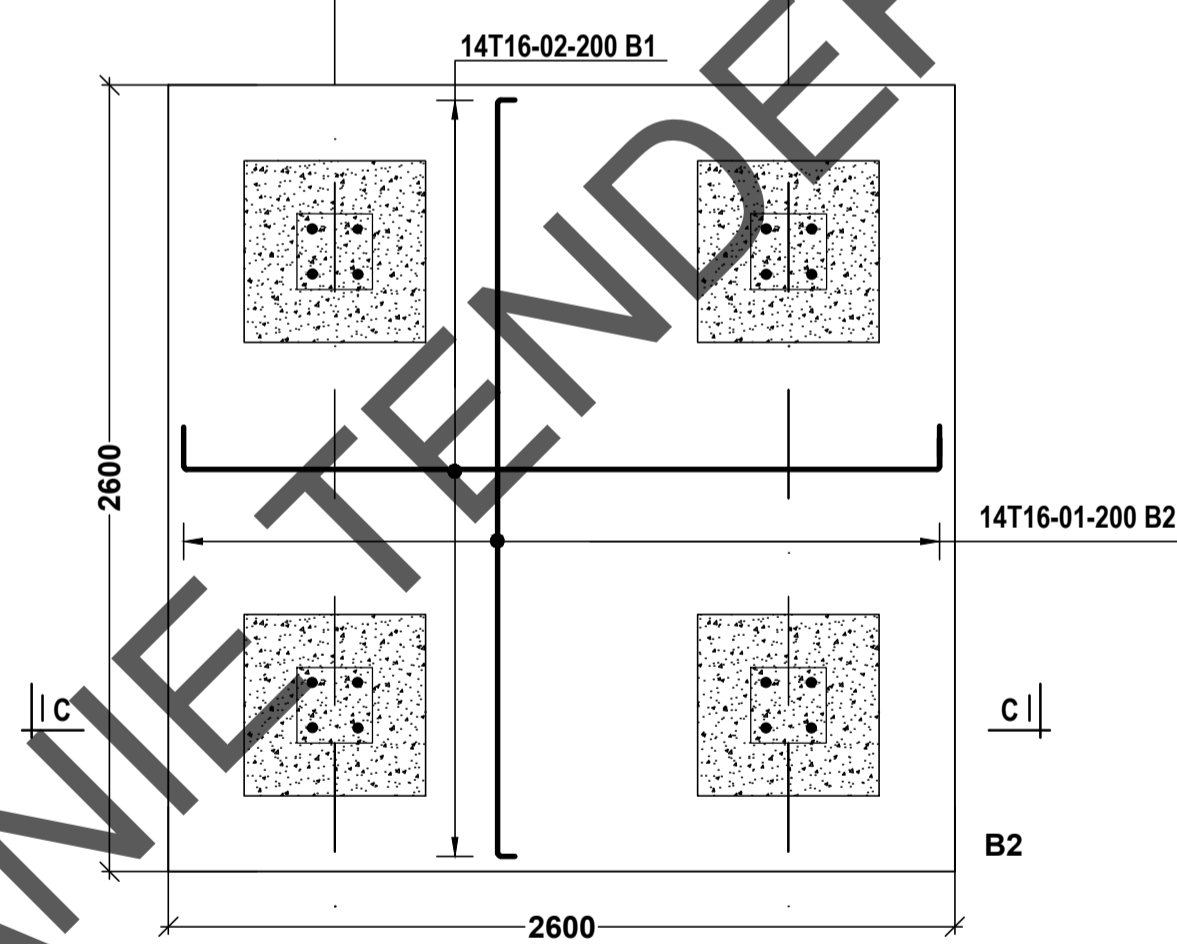
**TYPICAL FOUNDATION DETAIL F1**



**SECTION 1-1  
SCALE 1:30**

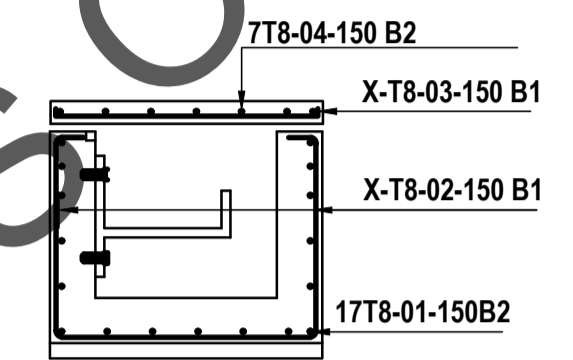


**500X500 COLUMN C3 [32 NO. OFF]  
SECTION C-C: BASE B3 ELEVATION DETAILS  
SCALE 1:25**

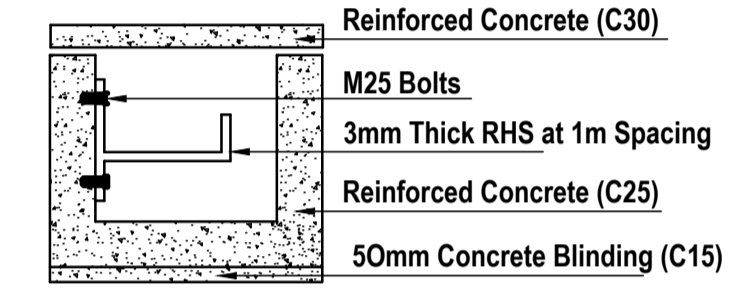


**2600x2600x250 mm BASE B3  
8NO.OFF  
SCALE 1:25**

**TYPICAL FOUNDATION DETAIL F3**



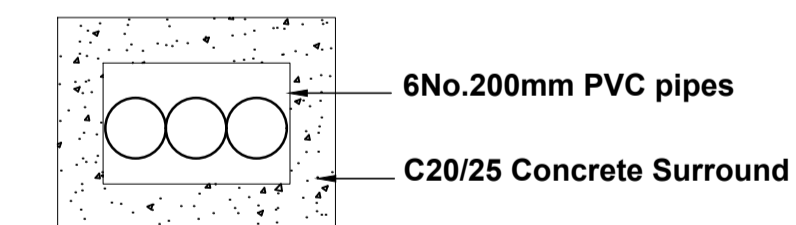
**600-1200 mm CABLE TRENCH  
ELEVATION DETAILS  
SCALE 1:25**



**600-1200 mm CABLE TRENCH  
SCALE 1:25**

**TYPICAL FOUNDATION DETAIL  
CABLE TRENCH**

**ROAD CROSSING**



**TYPICAL FOUNDATION DETAIL  
ROAD CROSSING**

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**REVISIONS**

Date	Suffix	Descriptions	Issue

**CLIENT**

**KENYA POWER & LIGHTING COMPANY**

**PROJECT**

**PROPOSED CIVIL WORKS & STRUCTURES FOR KINANIE  
66/11KV, 1X23MVA TX**

**CONSTRUCTION DRAWINGS**

**GENERAL ARRANGEMENT**

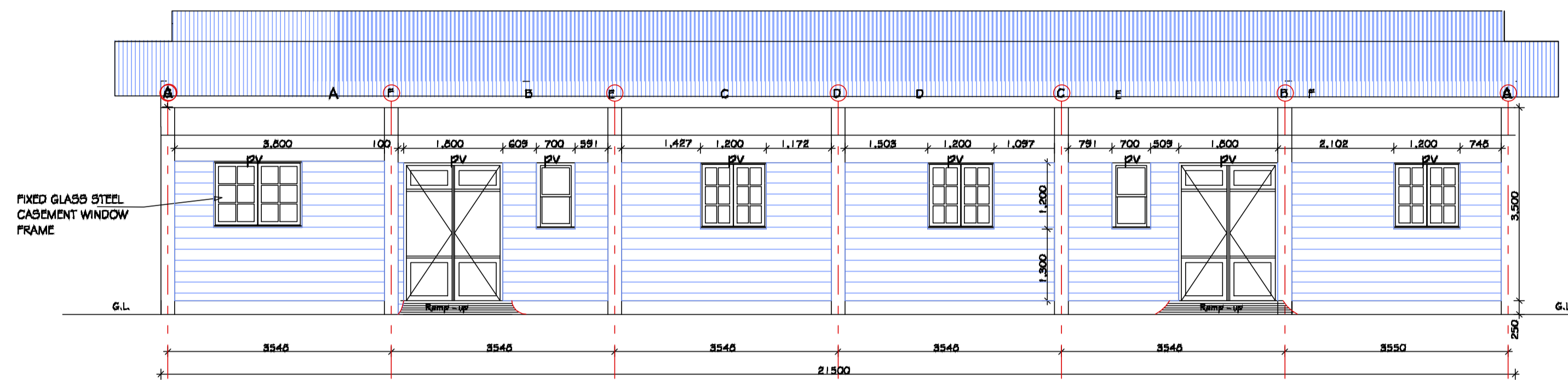
**STRUCTURAL : SECTIONS**

**KIN- SHEET 002/025 (b)**

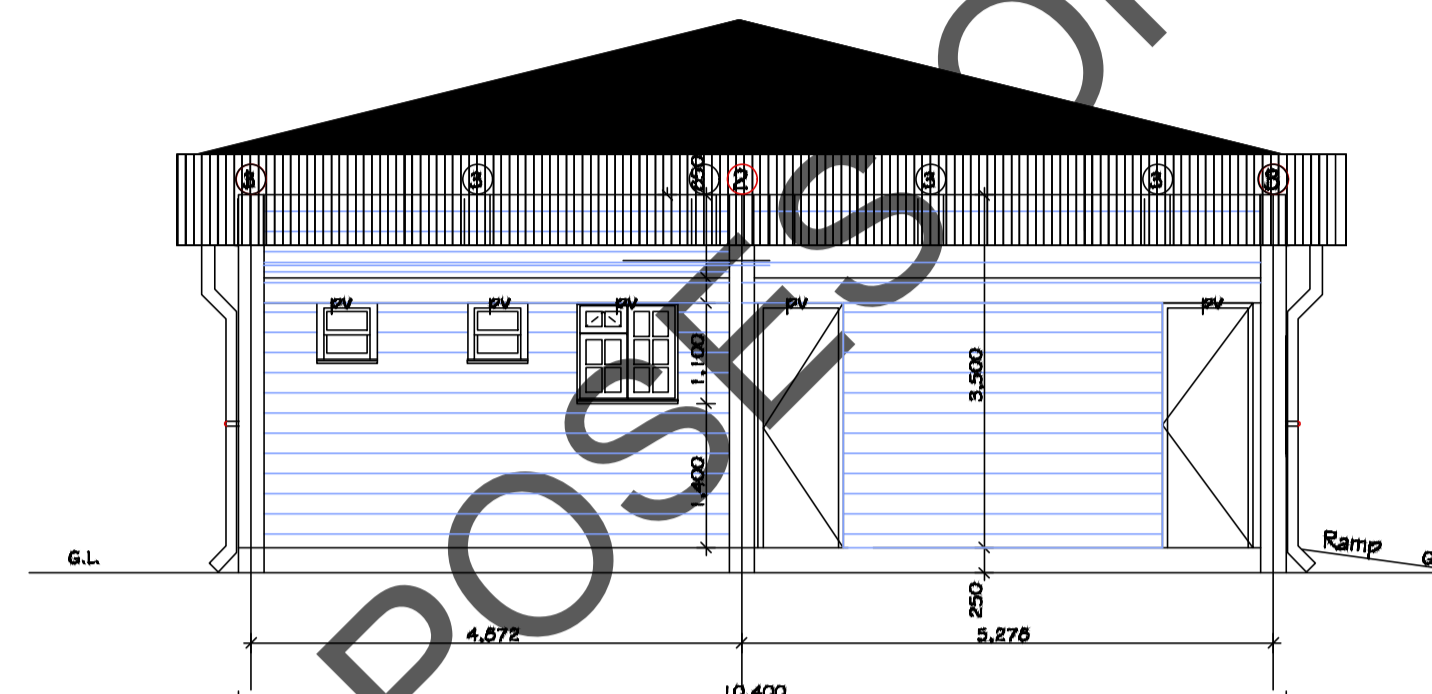
Drawn	D.WAITHERA	Scale(s)	AS INDICATED
Designed	D.WAITHERA	Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU	Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU	Date	MARCH, 2024
ISSUE DATE	MARCH, 2024		
JOB No.			

*KINANIE  
W V W W  
Sig. D.M. Wambugu  
12/03/2023  
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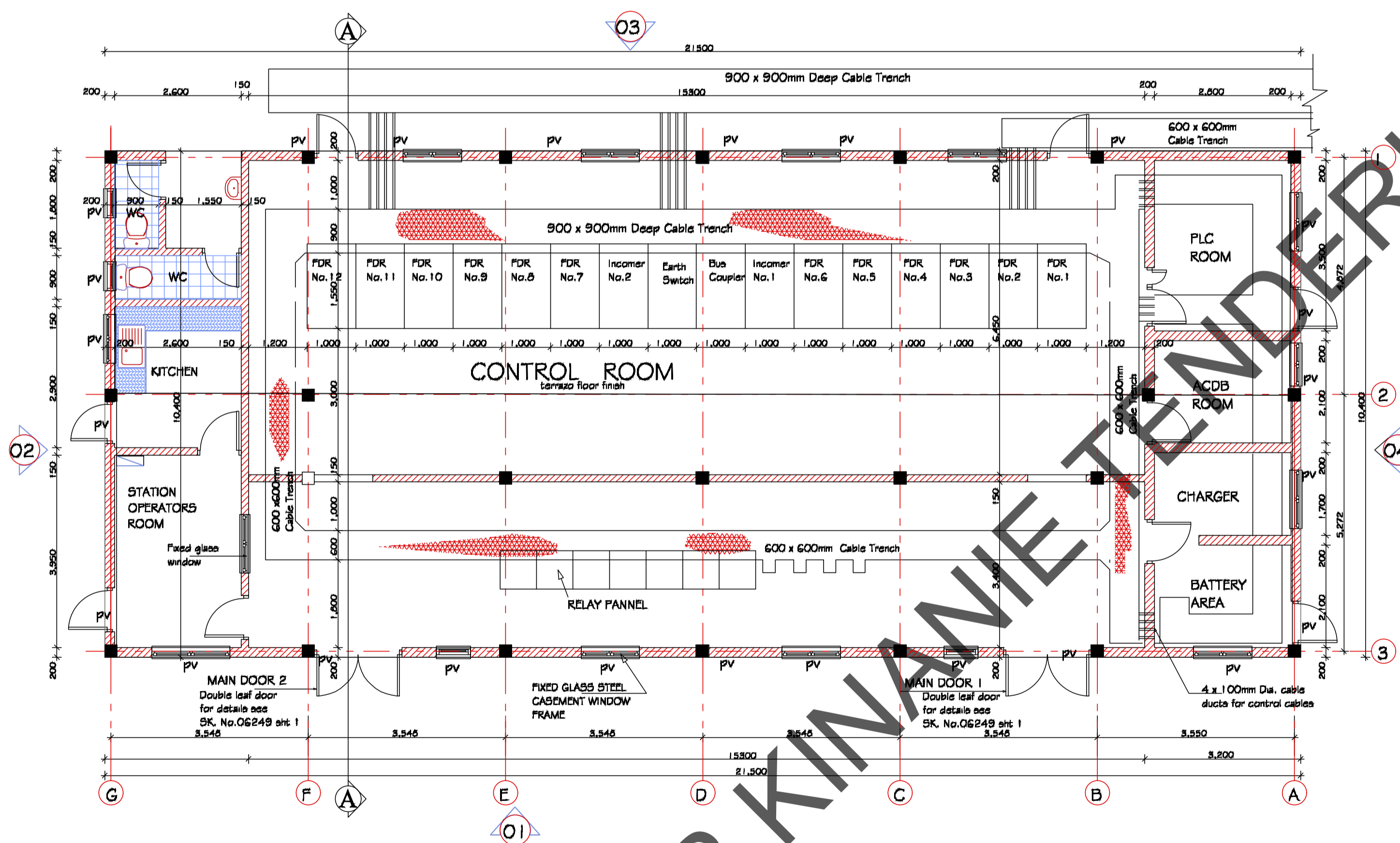
FOR KINANIE TENDERING PURPOSES ONLY



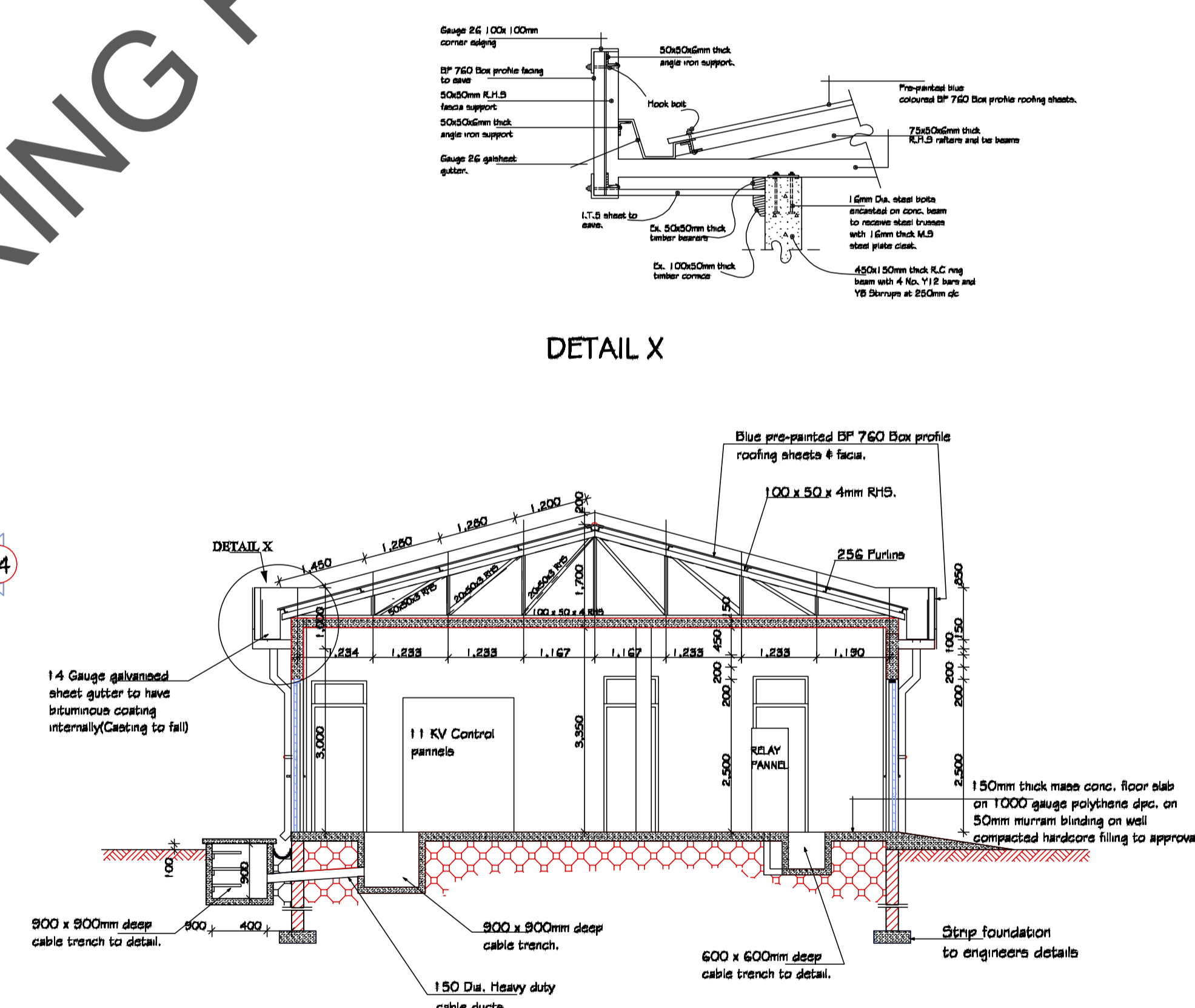
ELEVATION 01



ELEVATION 02



GROUND FLOOR PLAN



SECTION A - A

Notes: 1. All dimensions are in MM.  
2. For transition details see SK. No. 02220 sht 2B  
3. For roof details see SK. No. 02220 sht 3B

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CLIENT

KENYA POWER & LIGHTING COMPANY

PROJECT

PROPOSED CIVIL WORKS & STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX

CONSTRUCTION DRAWINGS

CONTROL ROOM BUILDING

ARCHITECTURAL

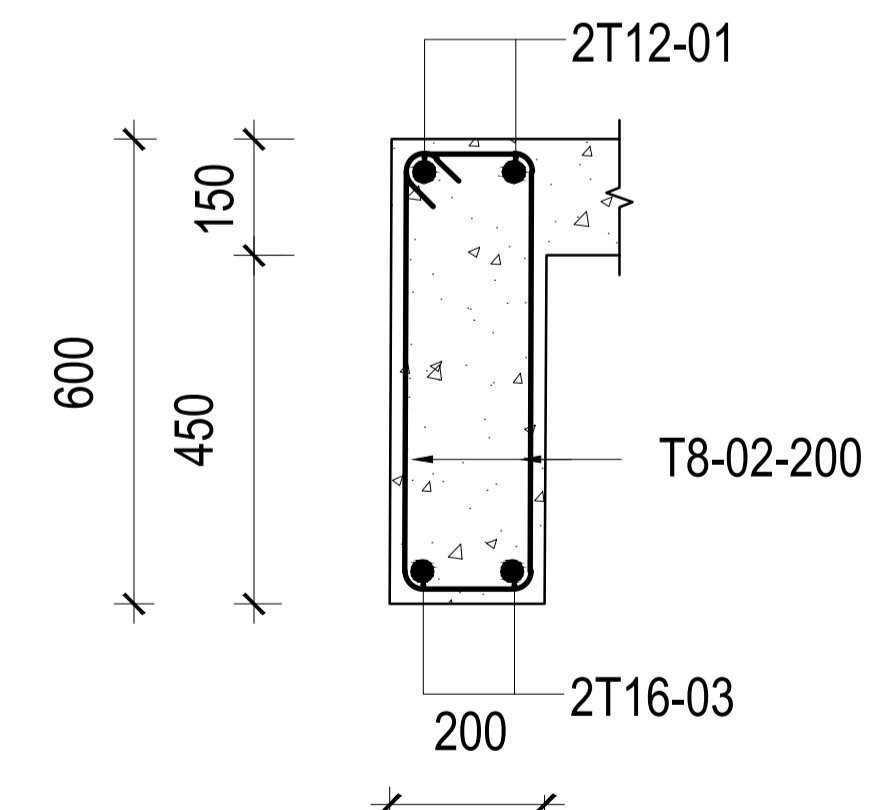
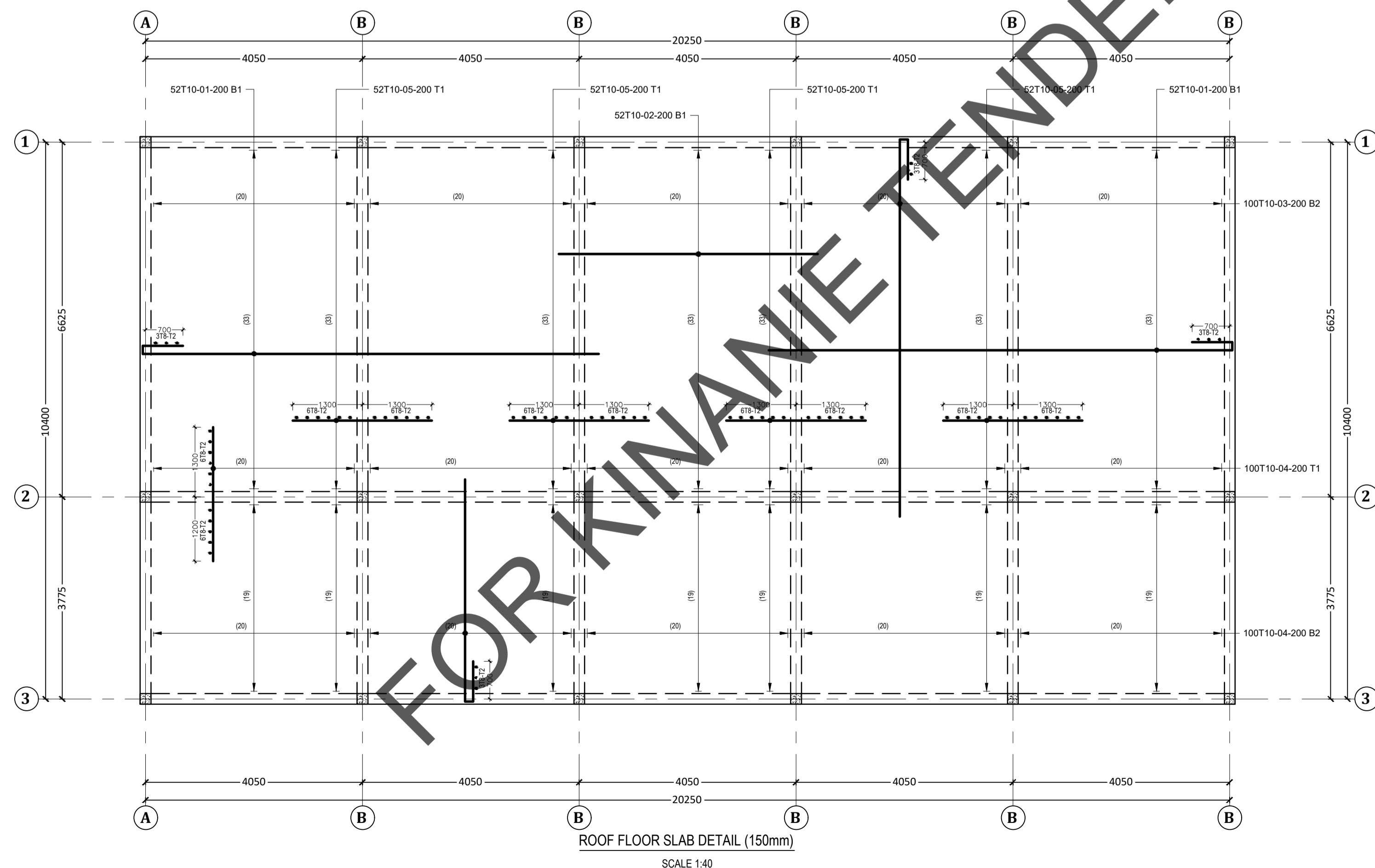
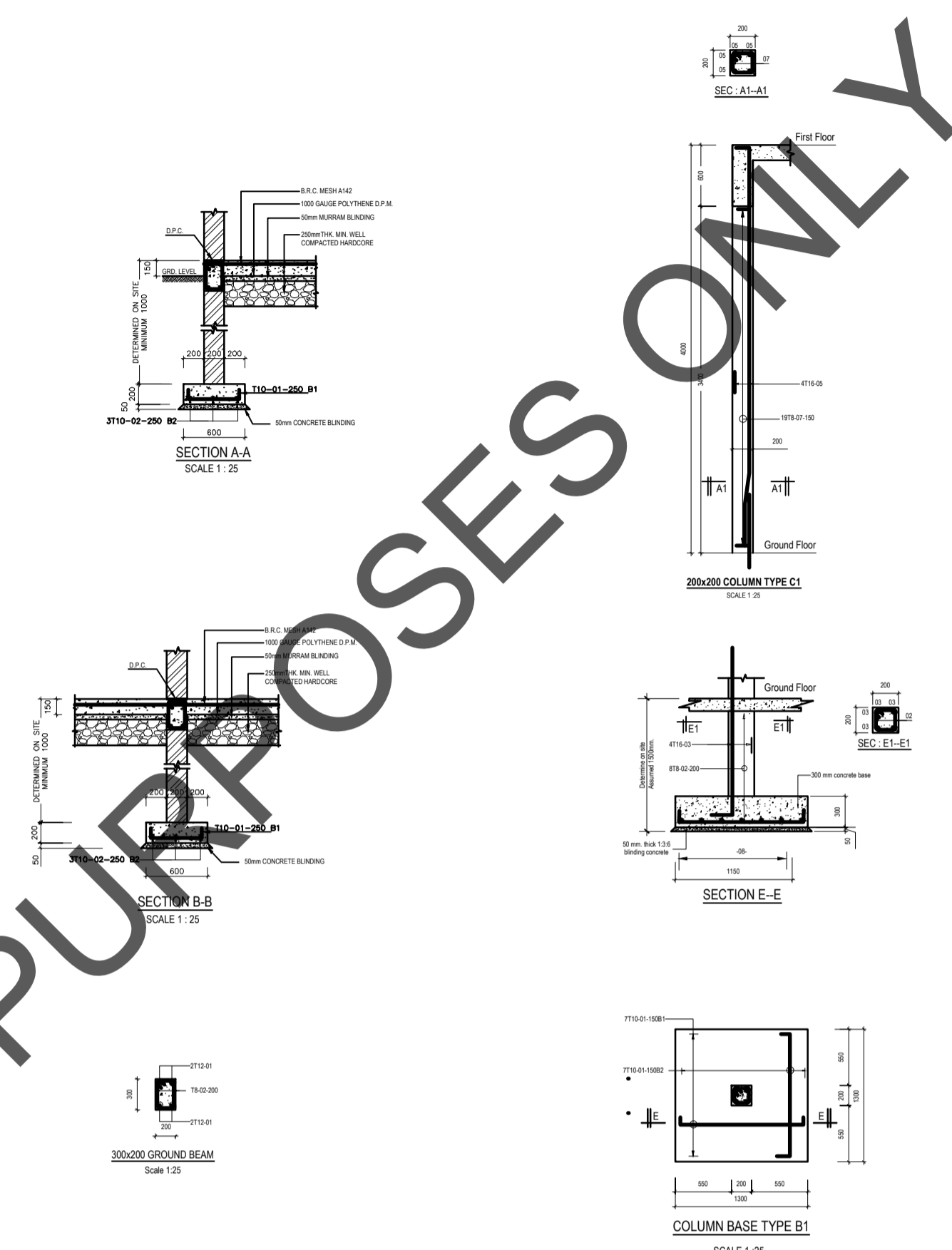
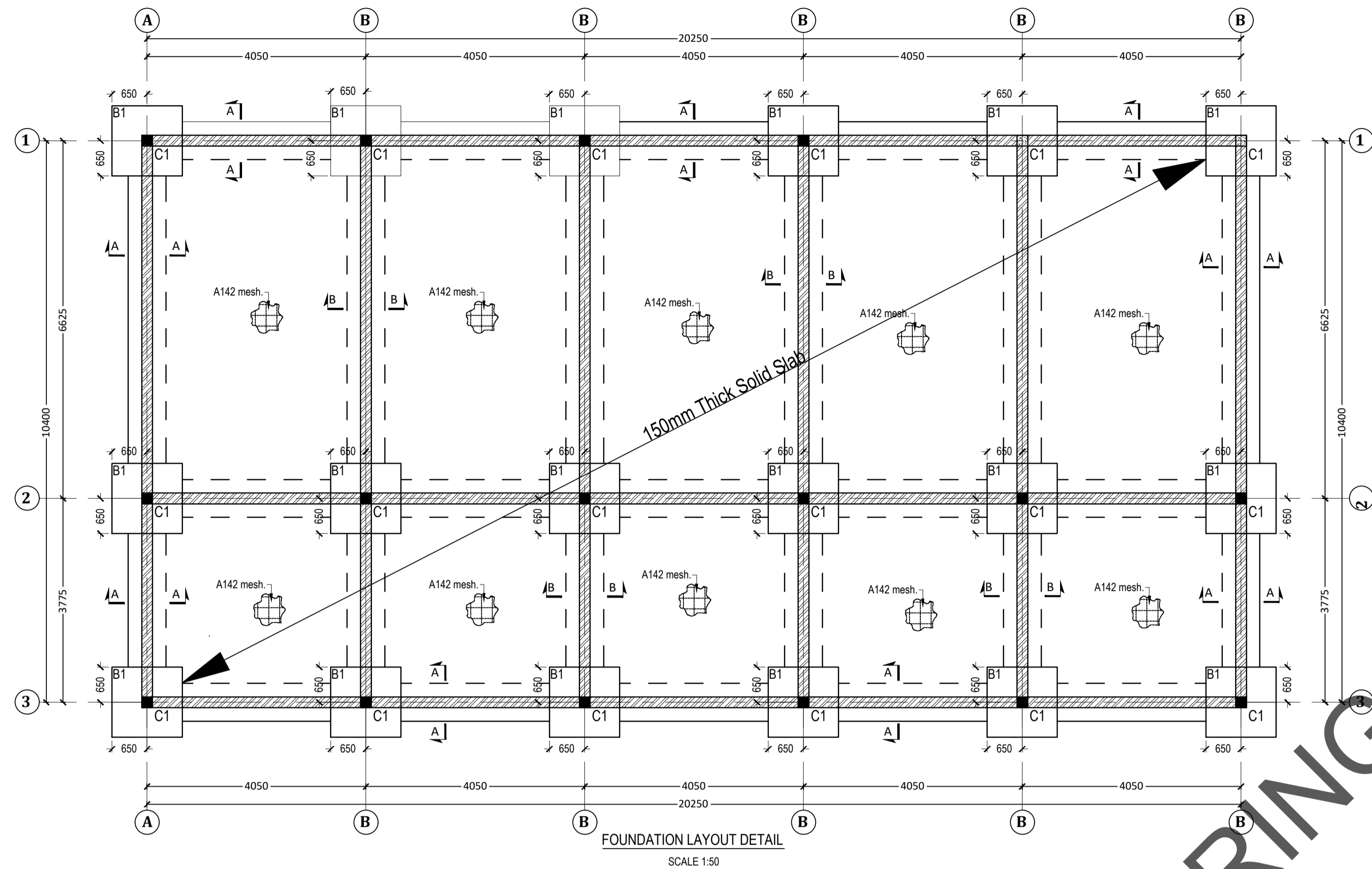
KIN- SHEET 003/025 (a)

Drawn	D.WAITHERA	Scale(s)	AS INDICATED
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Approved	ENG. D.M.WAMBUGU	Date	MARCH, 2024

ISSUE DATE	MARCH, 2024
JOB No.	

FOR KINANIE TENDERING PURPOSES ONLY

KINANIE  
 W. V. W. W.  
 Eng. D. M. Wambugu  
 12/03/2023  
 For Bldg only.



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 sig. D.M. Wambugu  
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Date	Suffix	Descriptions	Issue

**CLIENT**  
 KENYA POWER & LIGHTING COMPANY

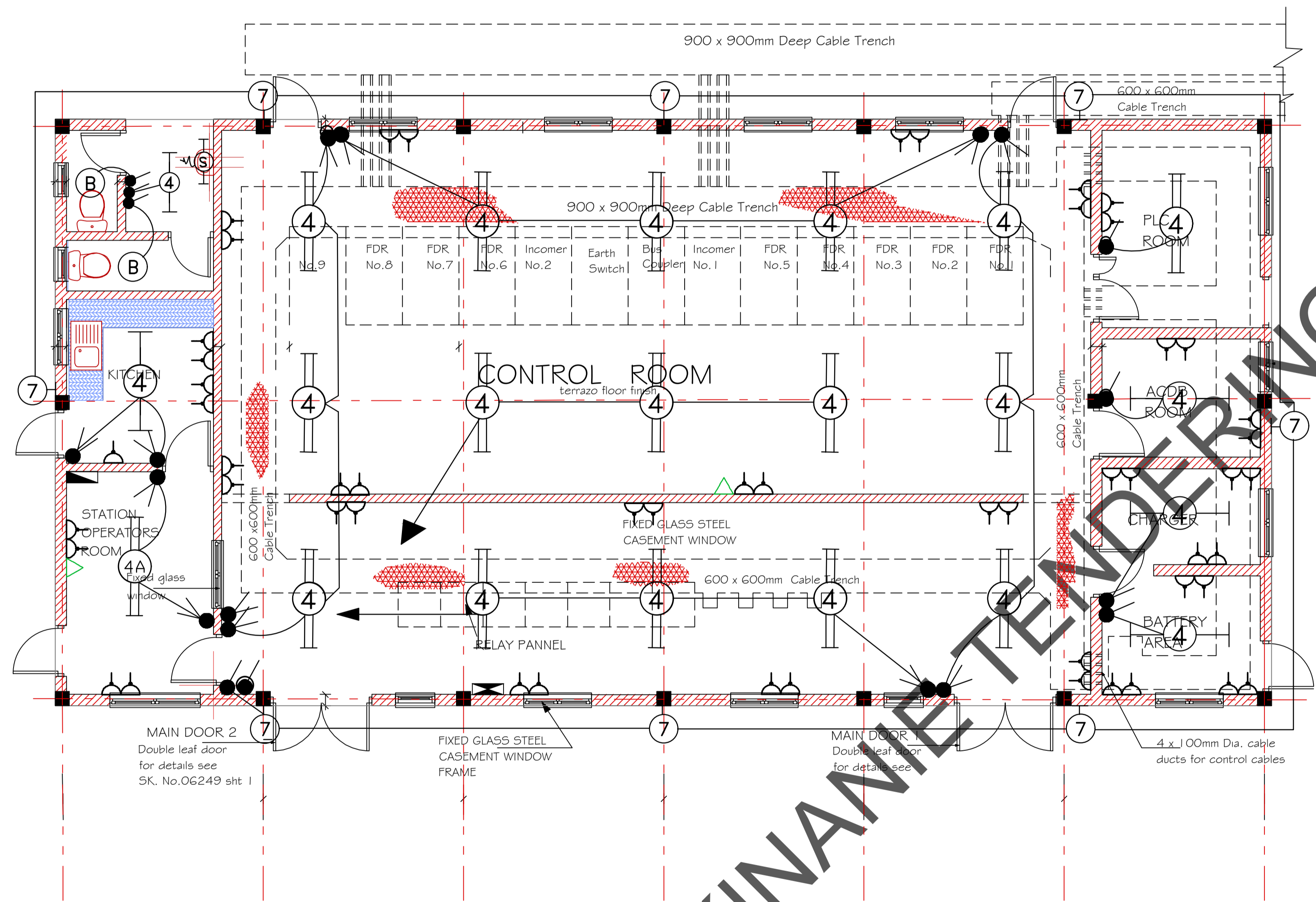
**PROJECT**  
 PROPOSED CIVIL WORKS & STRUCTURES FOR KINANIE  
 66/11KV, 1X23MVA TX

**CONSTRUCTION DRAWINGS**  
 CONTROL ROOM BUILDING

**STRUCTURAL**  
 KIN- SHEET 003/025 (b)

Drawn	D.WAITHERA	Scale(s)	AS INDICATED
Designed	D.WAITHERA	Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU	Date	MARCH, 2024
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ISSUE DATE	MARCH, 2024		
JOB No.			

FOR KINAMIE TENDERING PURPOSES ONLY



**GROUND FLOOR PLAN**

**LIST OF SYMBOLS**

SYMBOL	ELECTRICAL LEGEND	LIST NO.
⑦	VANDAL RESISTANT FLORESCENT BULKHEAD AS TERMLITE PATROL BHPW 2008 COMPLETE WITH 2X8W/75 300MM LAMPS	
⑧	100W BELLING SPHERE COMPLETE WITH LAMP AS THORN CAT NO. MTC 1100. (OR 1060) 60 WATTS OR NOVA	
④	1200mm 2 X 36W FLUOR FLG COMP WITH TUBE AS "THORN" CAT NO. PP 236	
④	1200mm 1 X 36W FLUOR FLG COMP WITH TUBE AS "THORN" CAT NO. PP 136	
④	600mm 1x18W FLUORESCENT FTG COMPLETE WITH TUBE AS THORN CAT NO. PP118	
④	13W WALL MOUNTED SHUTTERED SHOWER SOCKET (115/230) AND ON / OFF PULL SWITCH SIMILAR TO THORN VIEWPOINT FLUORESCENT	
④	13 AMP SWITCH SOCKET OUTLET SINGLE AS CRABTREE	
④	13 AMP SWITCH SOCKET OUTLET TWIN AS CRABTREE	
④	TELEPHONE OUTLET AS CRABTREE	
④	TELEVISION OUTLET AS CRABTREE	
④	6A ONE GANG ONE WAY PLATE SWITCH AS CRABTREE	
④	6A TWO GANG ONE WAY PLATE SWITCH AS CRABTREE	
④	6A ONE GANG TWO WAY PLATE SWITCH AS CRABTREE	
④	6A TWO GANG TWO WAY PLATE SWITCH AS CRABTREE	
④	CONSUMER CONTROL UNIT	
④	COOKER CONTROL UNIT	
④	DISTRIBUTION BOARD	

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**REVISIONS**

Date	Suffix	Descriptions	Issue

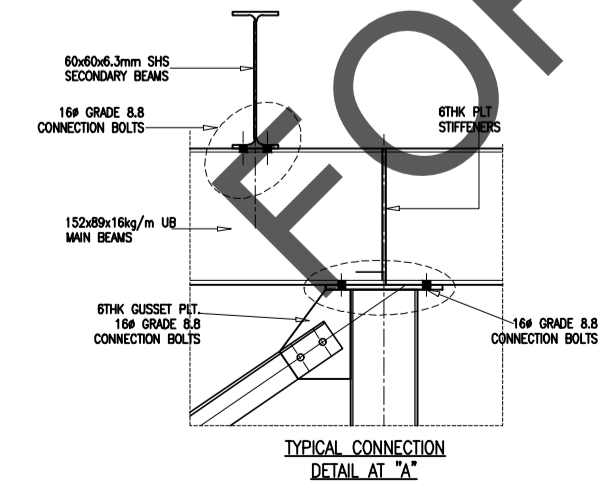
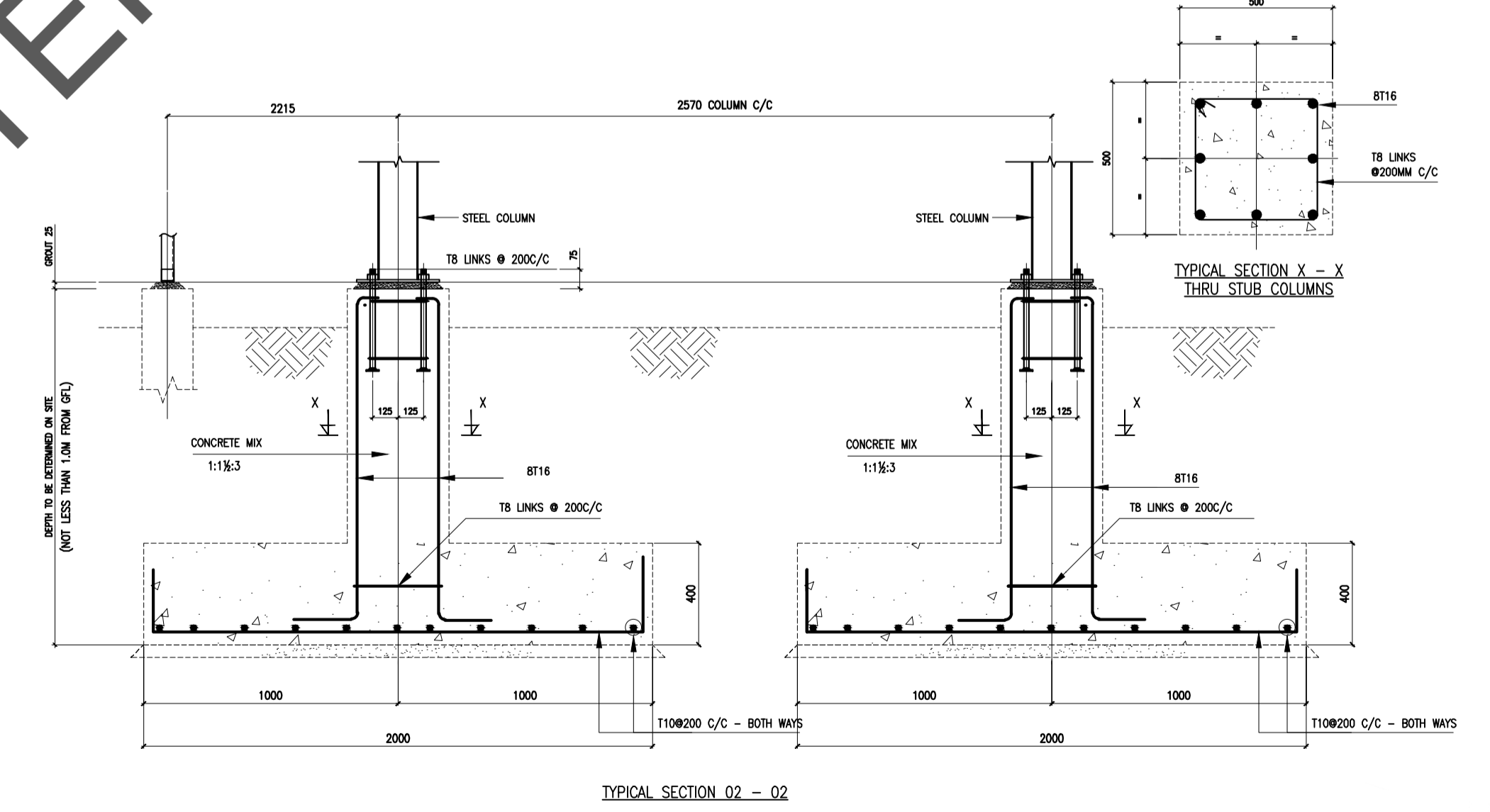
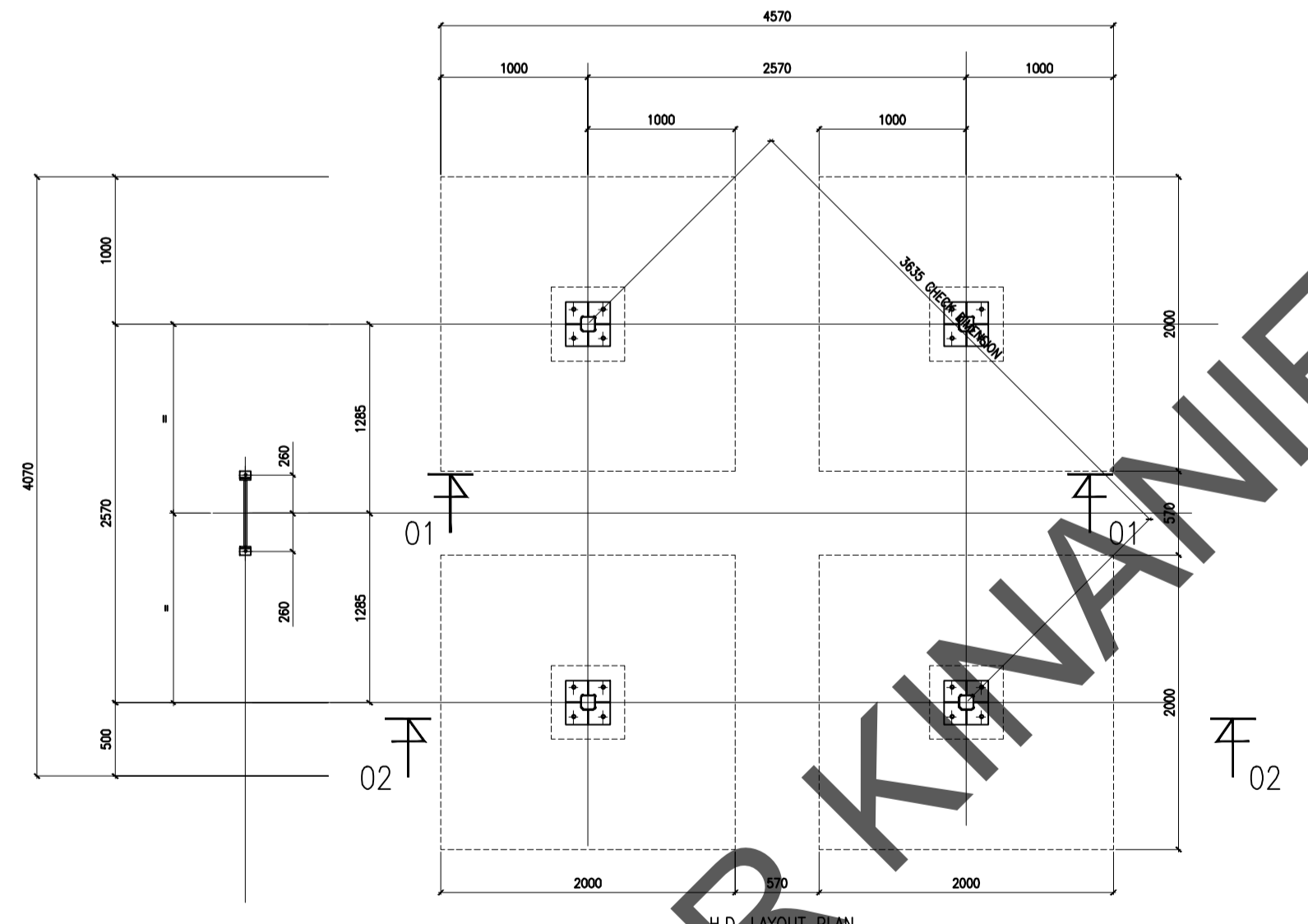
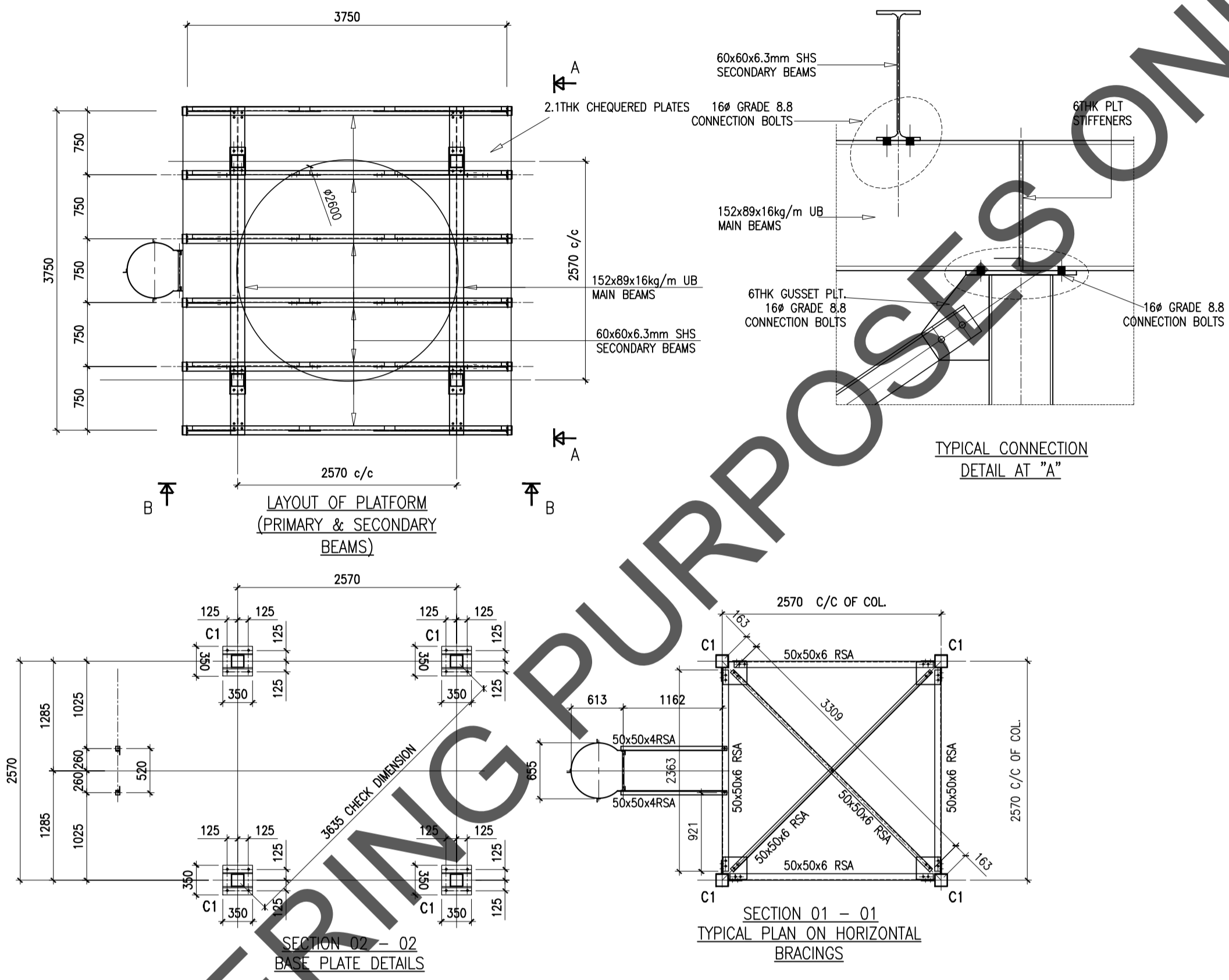
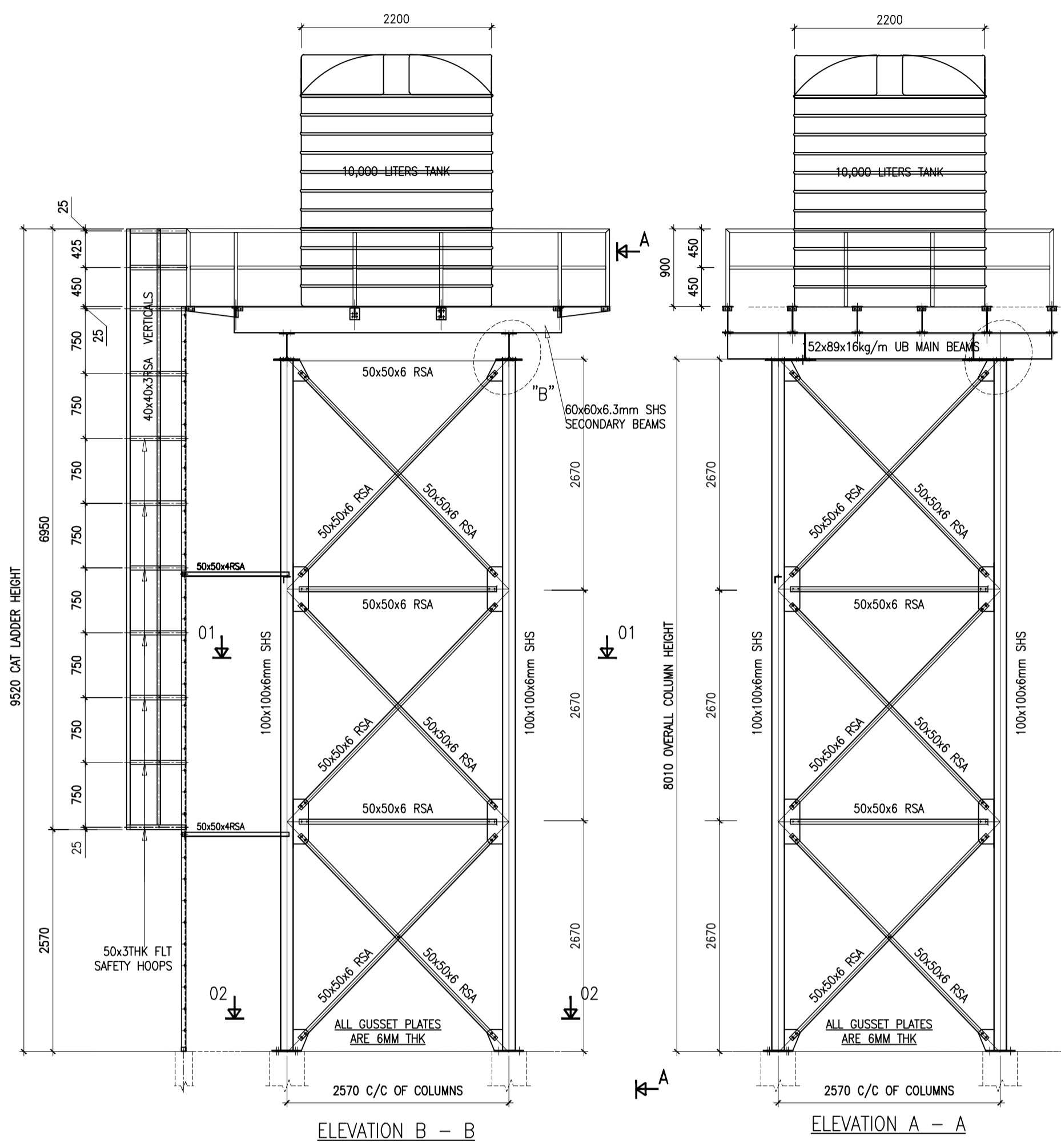
**CLIENT**  
KENYA POWER & LIGHTING COMPANY

**PROJECT**  
PROPOSED CIVIL WORKS & STRUCTURES FOR KINAMIE 66/11KV, 1X23MVA TX

**CONSTRUCTION DRAWINGS**  
**CONTROL ROOM BUILDING**  
**ELECTRICAL**  
**KIN- SHEET 003/025 (c)**

Drawn	D. WAITHERA	Scale(s)	AS INDICATED
Designed	D. WAITHERA	Date	MARCH, 2024
Checked	ENG. D.M. WAMBUGU	Date	MARCH, 2024
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*KINAMIE*  
*W V W U*  
*Sig. D.M. Wambugu*  
*12/03/2023*  
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**REVISIONS**

Date	Suffix	Descriptions	Issue

**CLIENT**  
KENYA POWER & LIGHTING COMPANY

**PROJECT**  
PROPOSED CIVIL WORKS & STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX

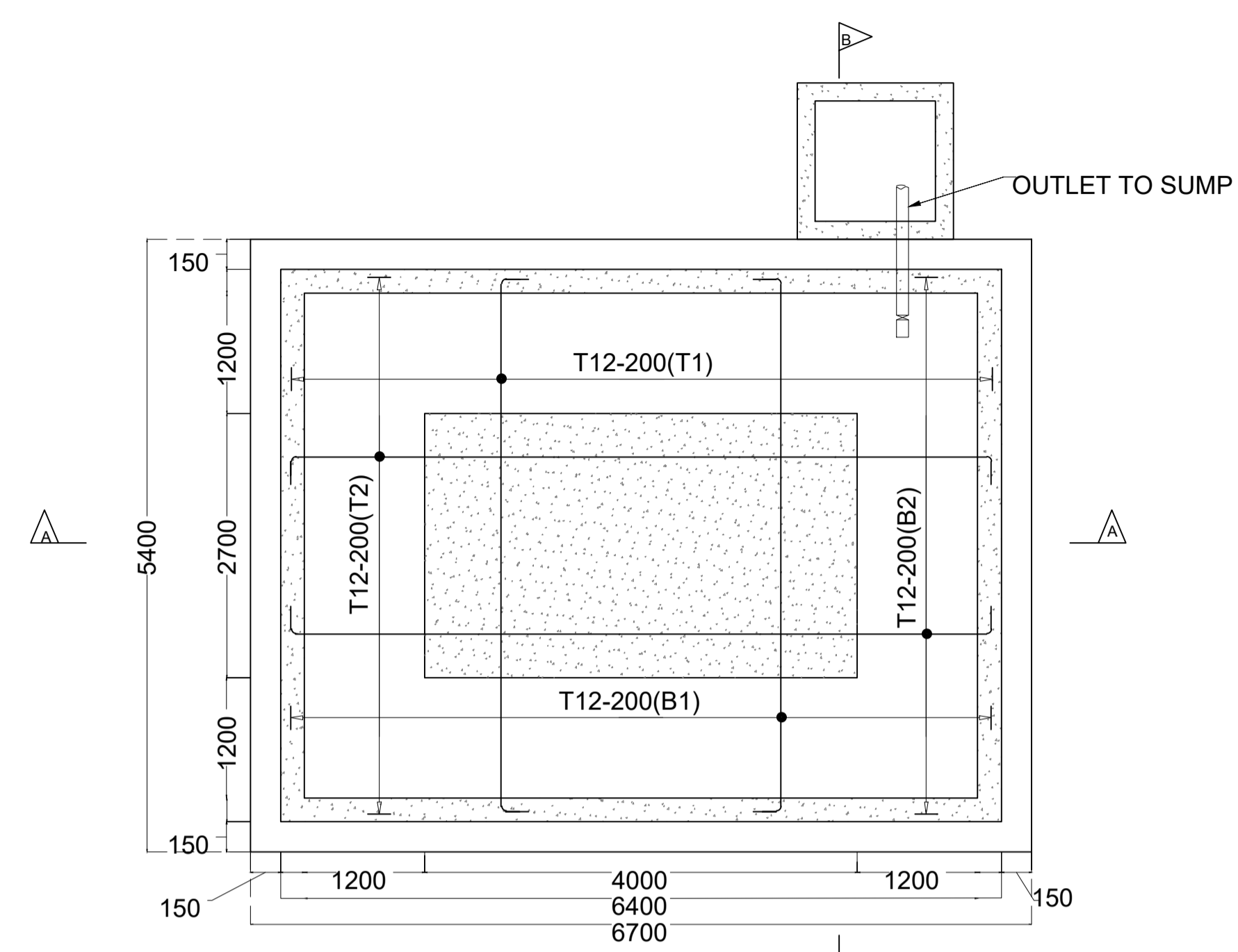
**CONSTRUCTION DRAWINGS**

**OVERHEAD WATER TANK**

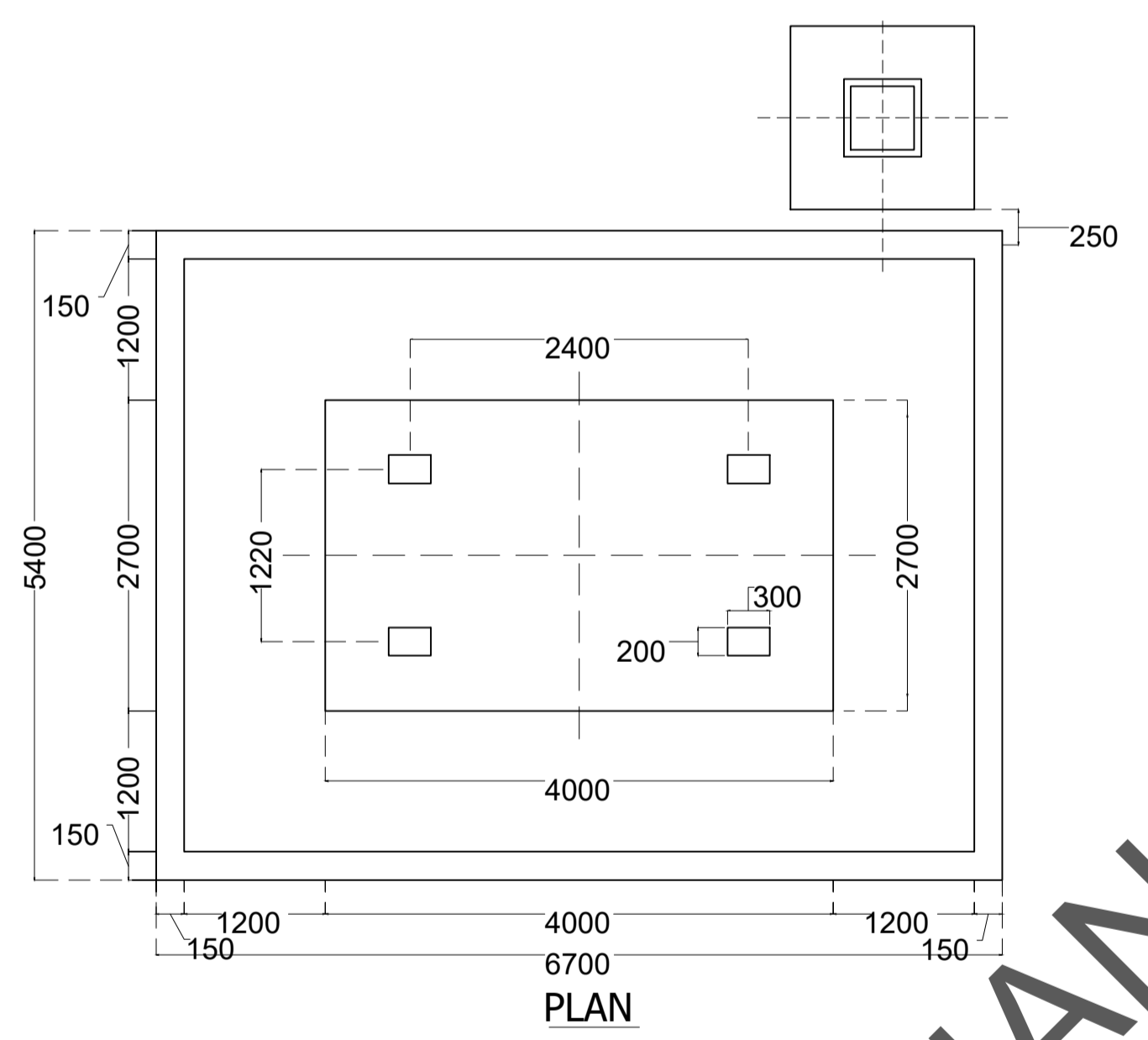
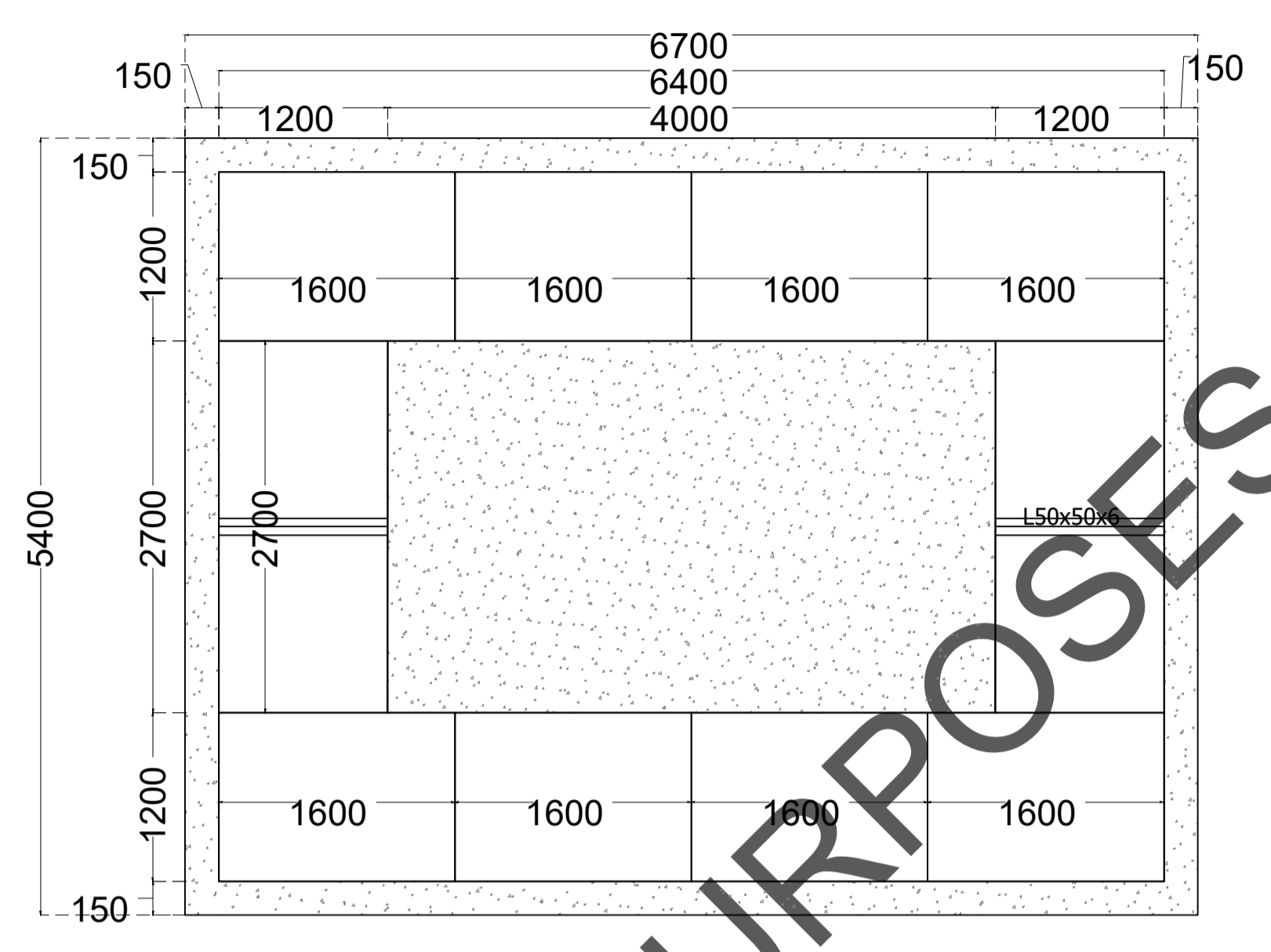
**KIN- SHEET 004/025**

Drawn	D.WAITHERA	Scale(s)	AS INDICATED
Designed	D.WAITHERA	Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU	Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU	Date	MARCH, 2024
ISSUE DATE	MARCH, 2024		
JOB No.			

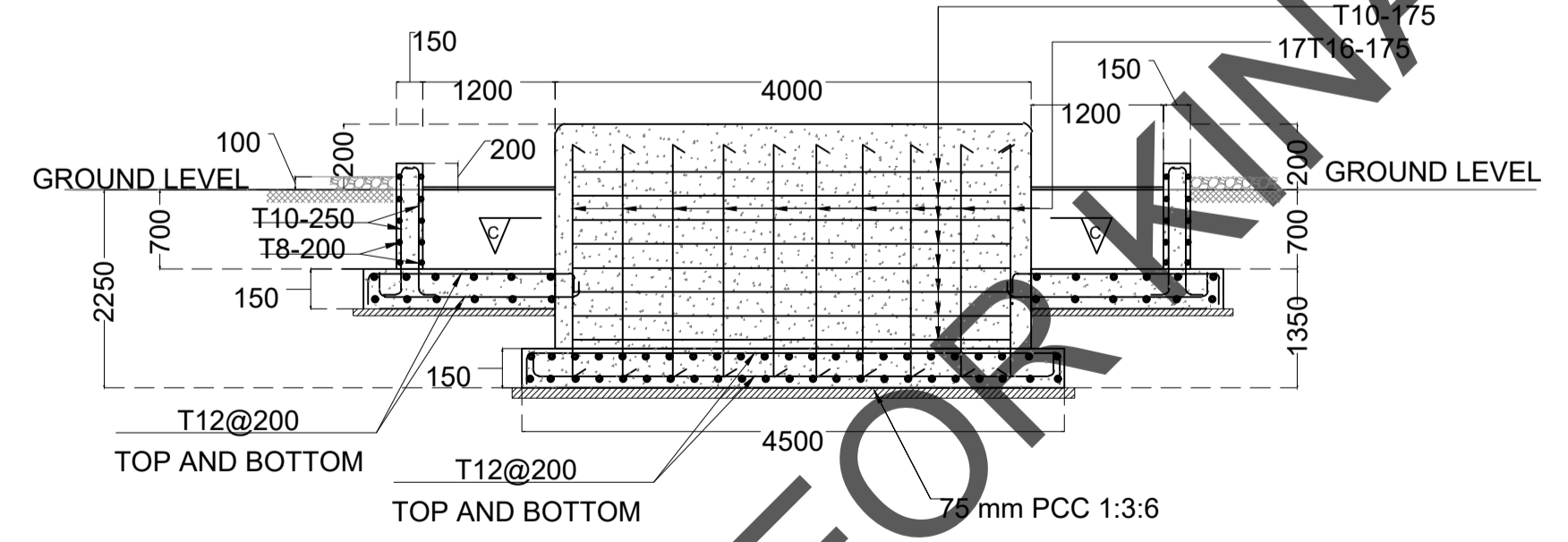
*KINANIE*  
*W V W W*  
*Sig. D.M. Wambugu*  
*12/03/2023*  
*For Bldg only.*



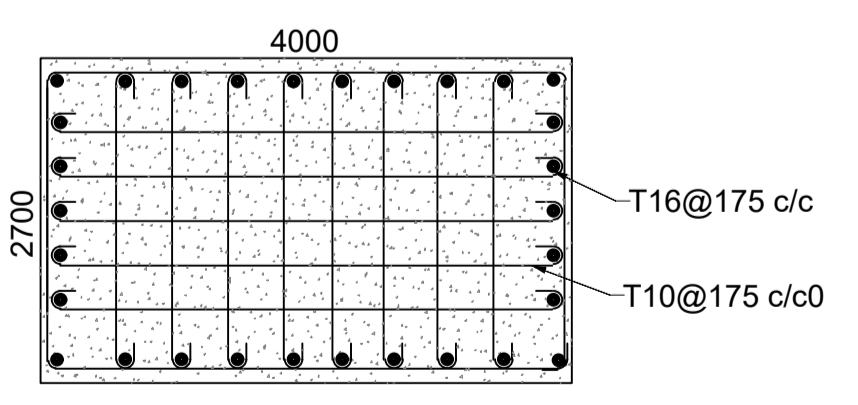
TRANSFORMER SUPPORT  
PAD BASE DETAILS



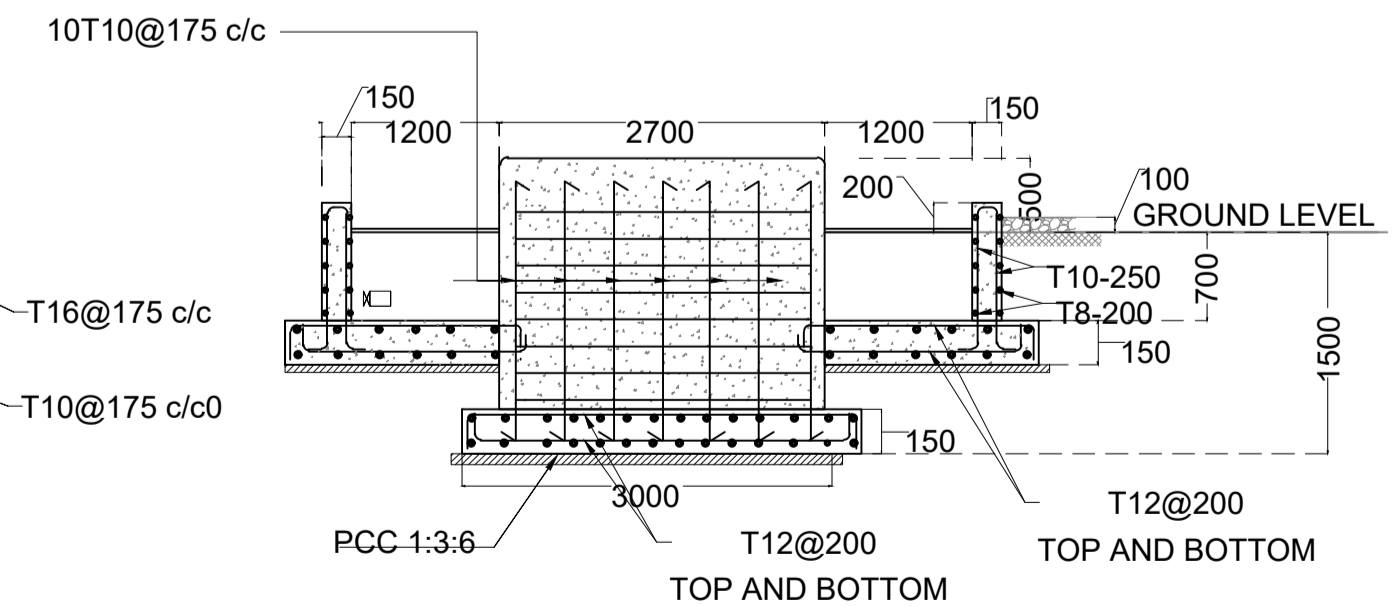
PLAN



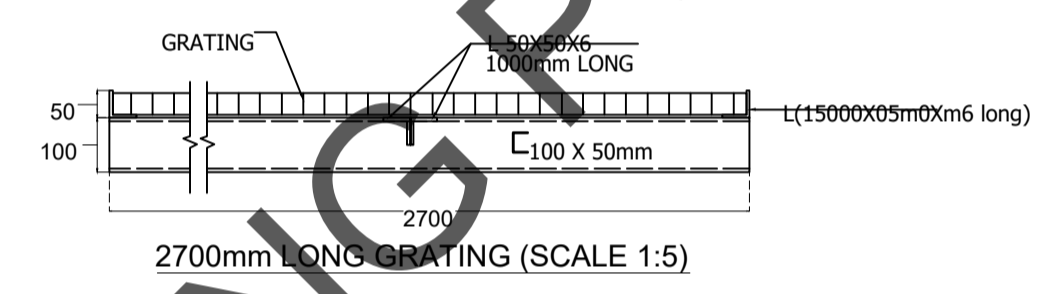
SECTION A-A



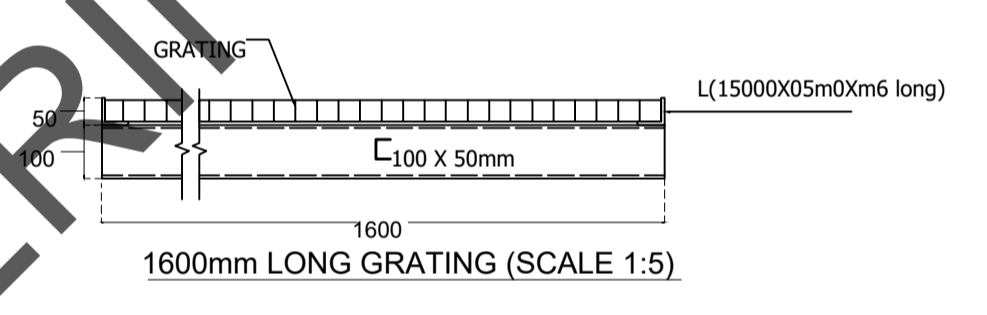
PEDESTAL DETAIL  
SECTION C-C



SECTION B-B



TYPICAL GRATING  
DETAIL - PLAN



TYPICAL GRATING  
DETAIL - PLAN

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REVISIONS

Date	Suffix	Descriptions	Issue

**CLIENT**  
KENYA POWER & LIGHTING  
COMPANY

**PROJECT**  
PROPOSED CIVIL WORKS &  
STRUCTURES FOR KINANIE  
66/11KV, 1X23MVA TX

**CONSTRUCTION DRAWINGS**

**TRANSFORMER**

**PLINTH**

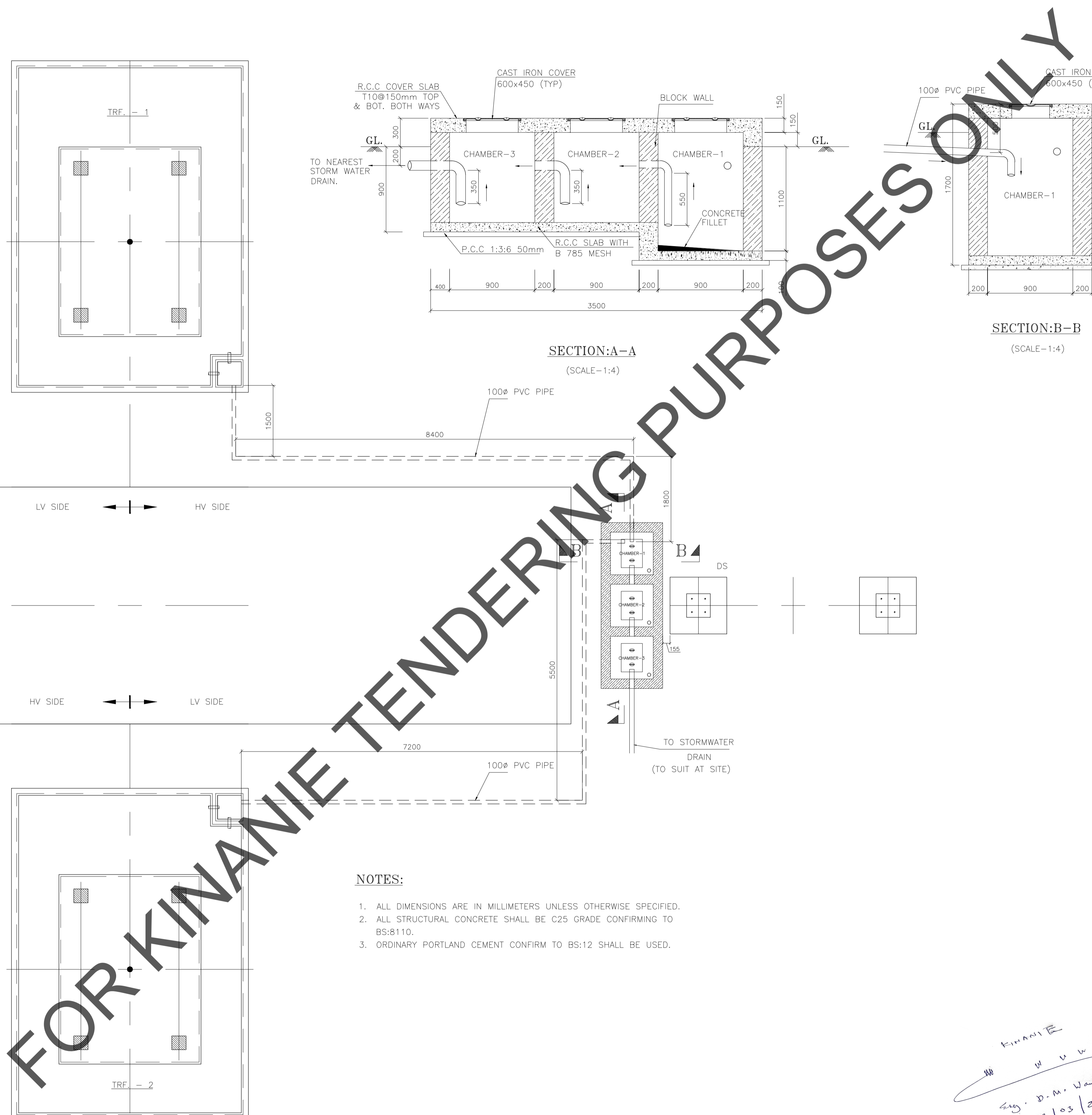
**KIN- SHEET 005/025 (a)**

Drawn	D.WAITHERA	Scale(s)	AS INDICATED
Designed	D.WAITHERA	Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU	Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU	Date	MARCH, 2024

ISSUE DATE	MARCH, 2024
JOB No.	

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- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
  2. ALL STRUCTURAL CONCRETE SHALL BE C25 GRADE CONFIRMING TO BS:8110.
  3. ORDINARY PORTLAND CEMENT CONFIRM TO BS:12 SHALL BE USED.

**NOTES**

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REVISIONS			
Date	Suffix	Descriptions	Issue

**CLIENT**  
**KENYA POWER & LIGHTING COMPANY**

**PROJECT**  
**PROPOSED CIVIL WORKS & STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX**

**CONSTRUCTION DRAWINGS**

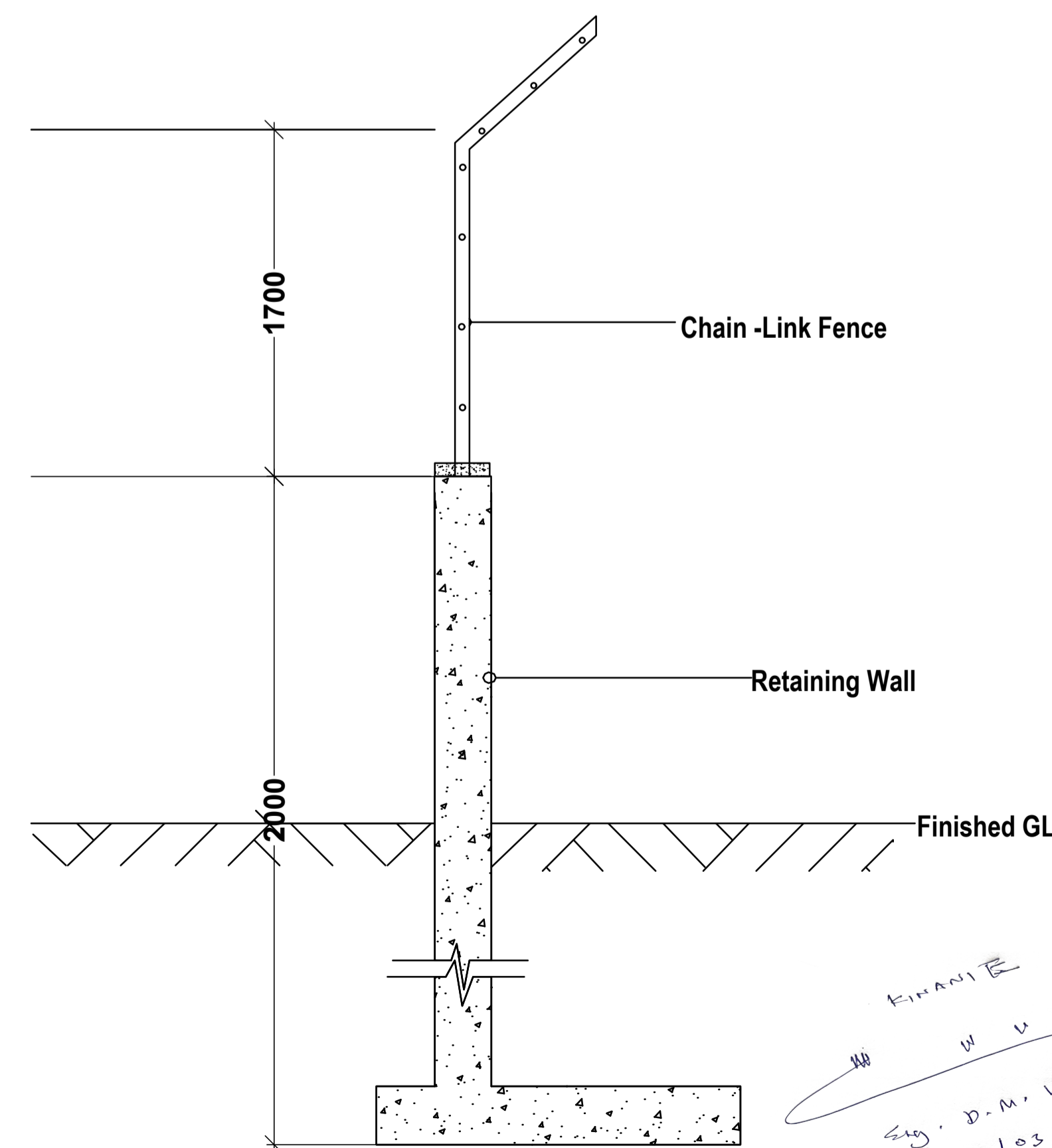
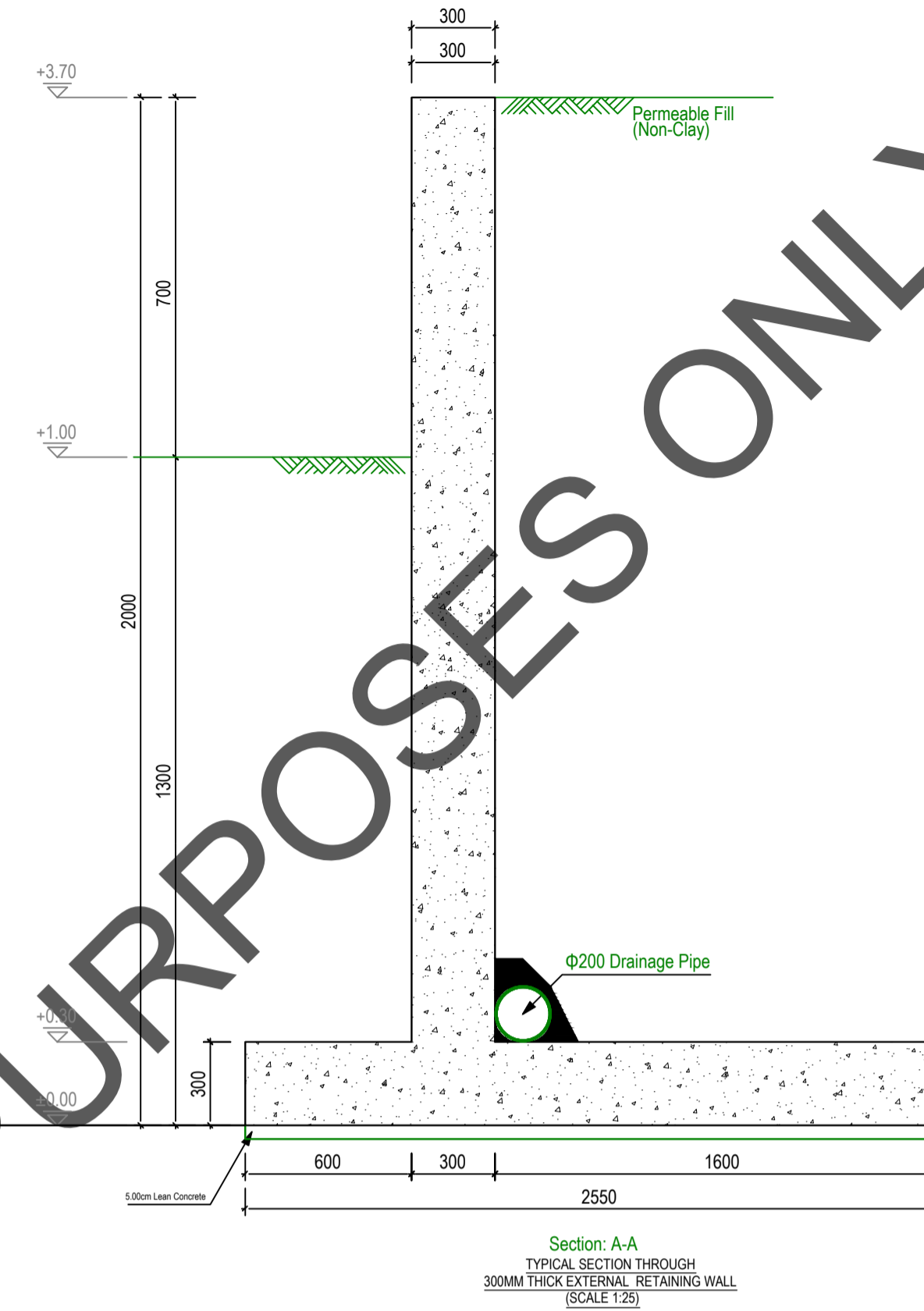
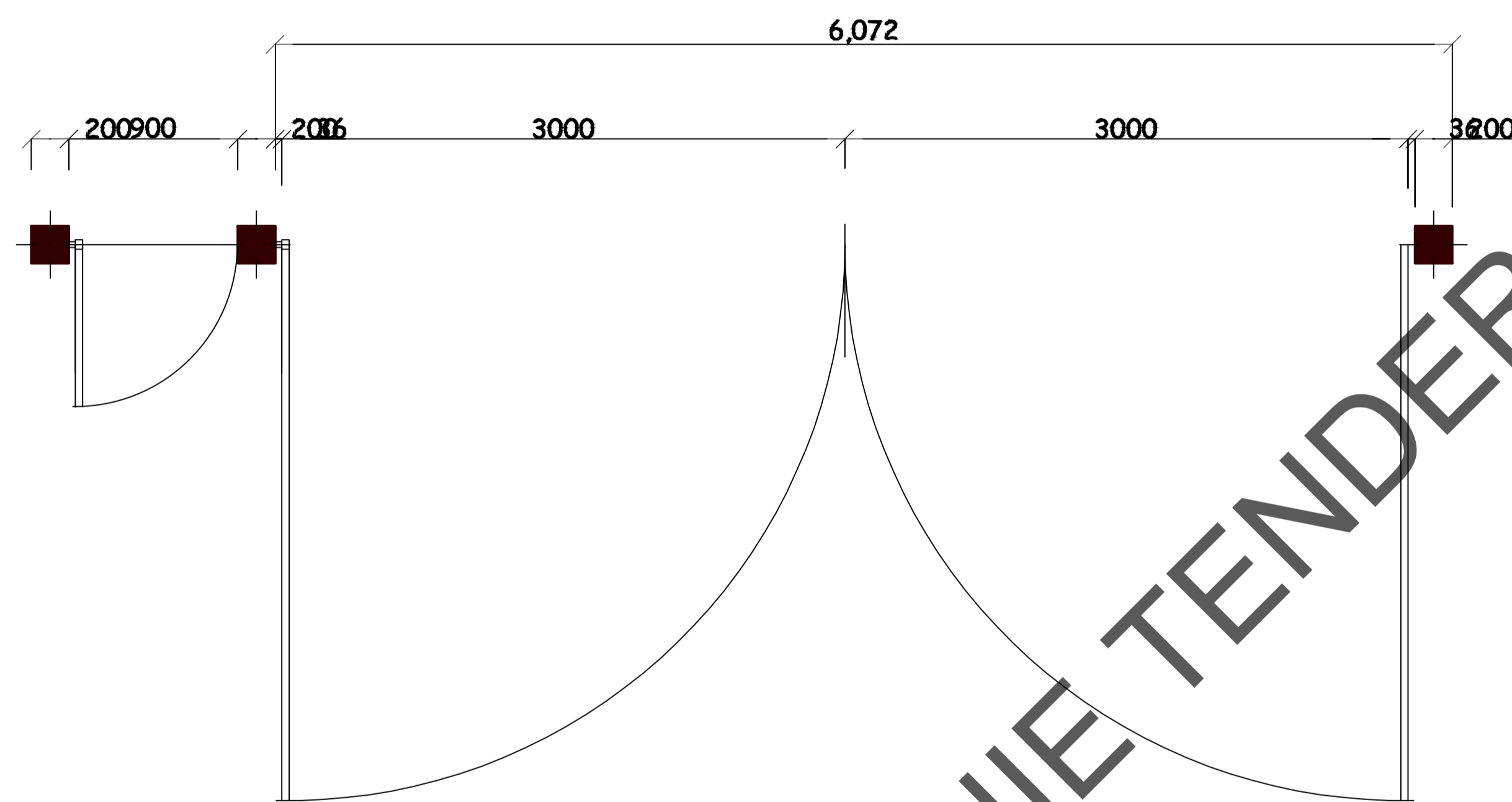
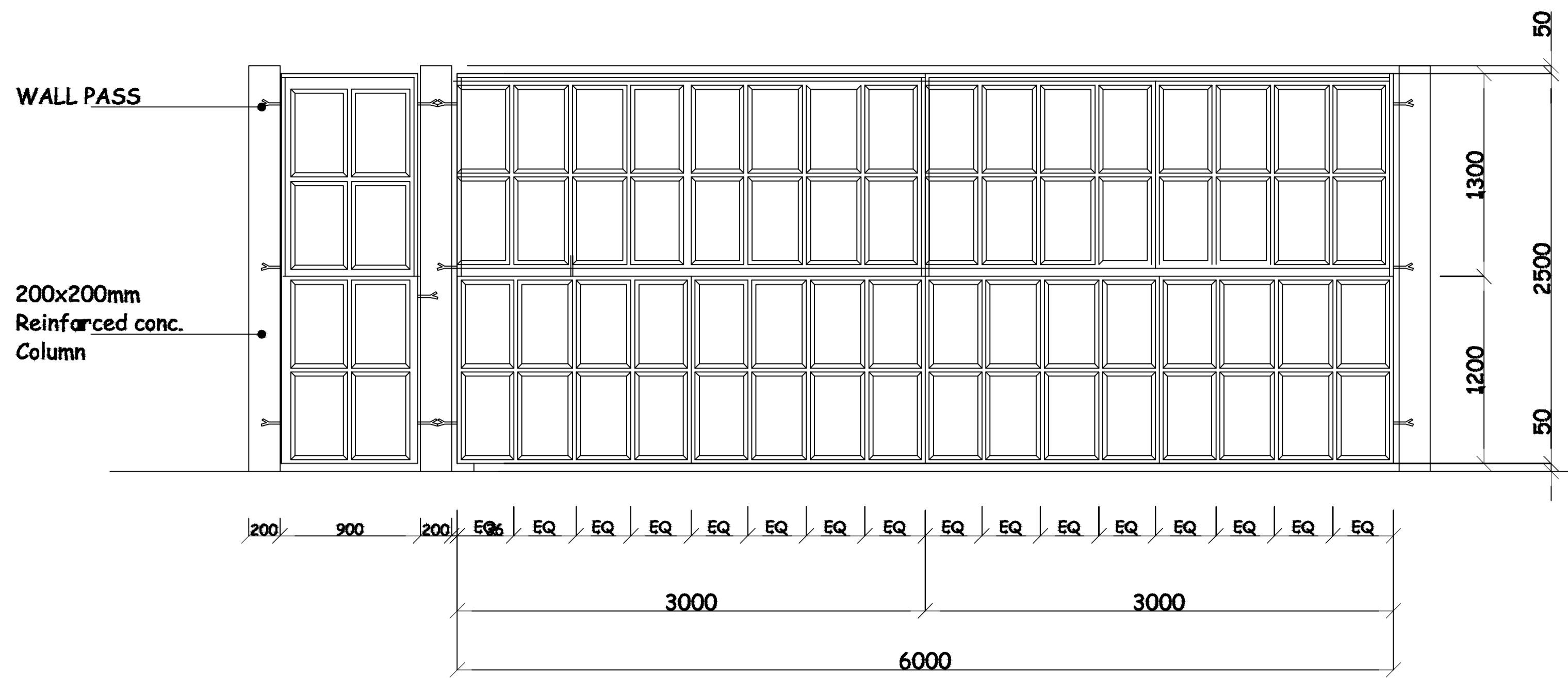
**TRANSFORMER**

**OIL INTERCEPTOR**

**KIN- SHEET 005/025 (b)**

Drawn	D.WAITHERA	Scale(s)	AS INDICATED
Designed	D.WAITHERA	Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU	Date	MARCH, 2024
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*Eng. D.M. Wambugu*  
*12/03/2023*  
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FOR KINANIE TENDERING PURPOSES ONLY

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**REVISIONS**

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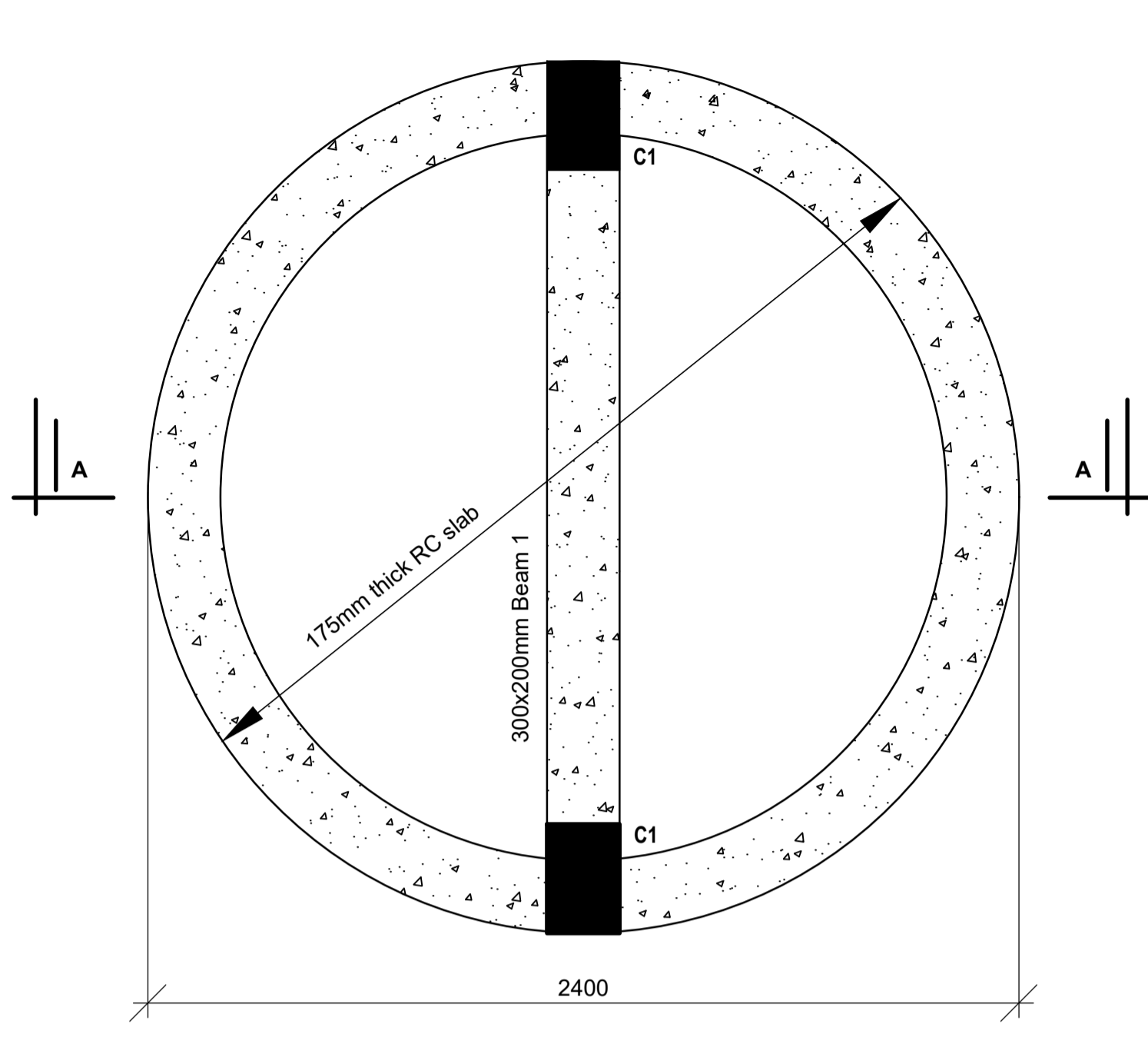
**CLIENT**  
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**PROJECT**  
PROPOSED CIVIL WORKS & STRUCTURES FOR KINANIE  
66/11KV, 1X23MVA TX

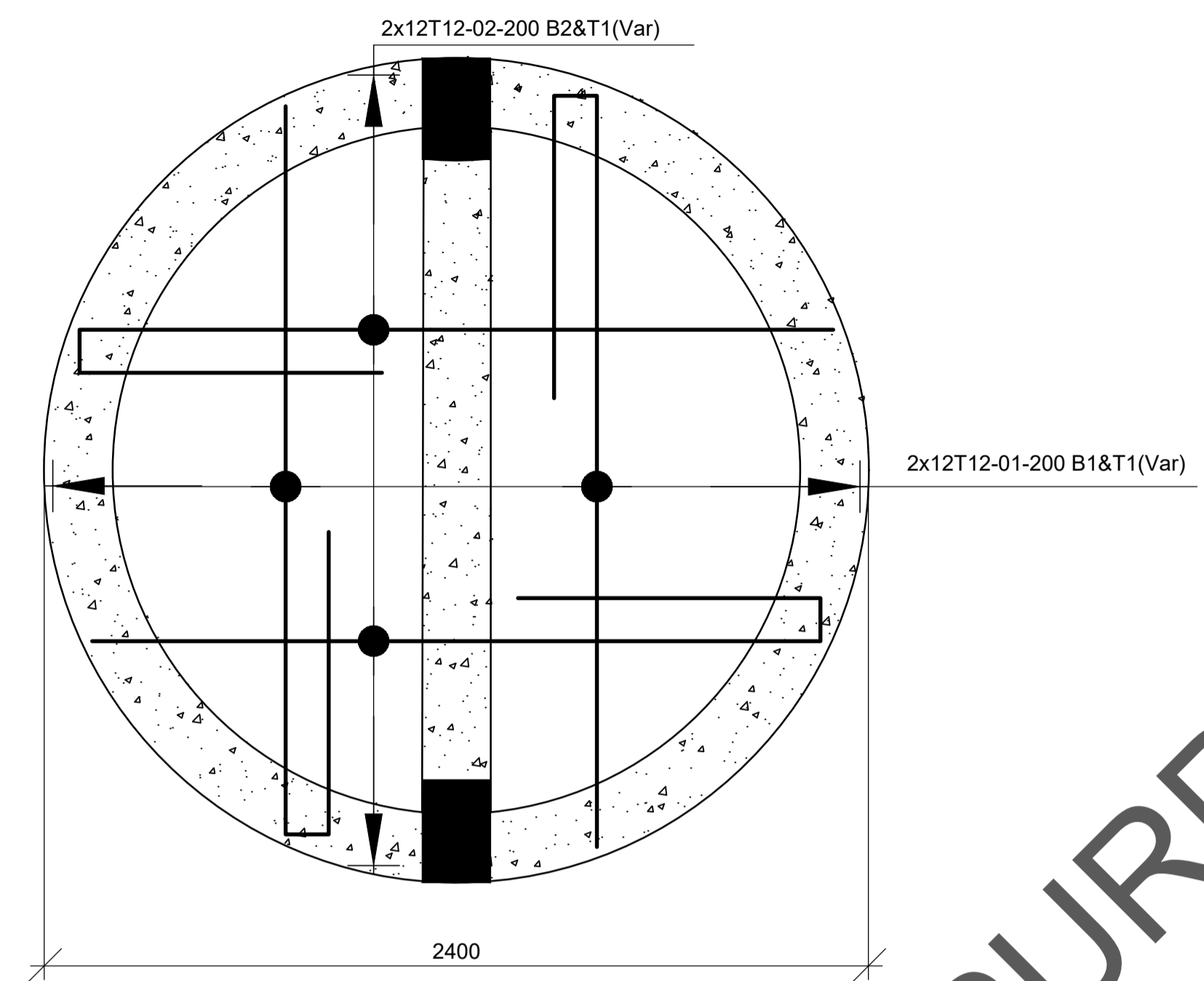
**CONSTRUCTION DRAWINGS**  
**FENCE AND GATE**  
**KIN- SHEET 006/025**

Drawn	D.WAITHERA	Scale(s)	AS INDICATED
Designed	D.WAITHERA	Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU	Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU	Date	MARCH, 2024
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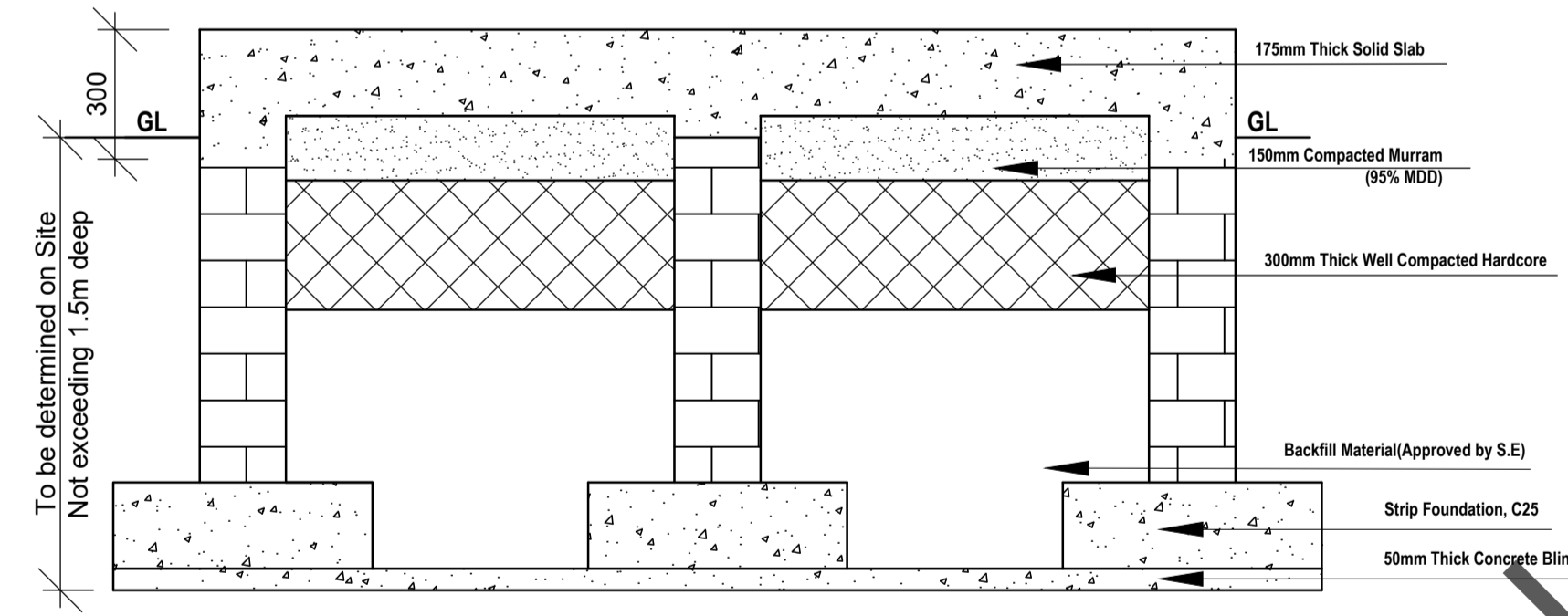
KINANIE  
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Eng. D.M. Wambugu  
12/03/2024  
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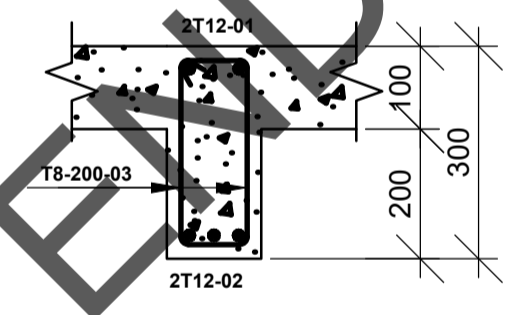
**GROUND MOUNTED TANK PLINTH  
COVER SLAB LAYOUT PLAN  
SCALE 1:15**



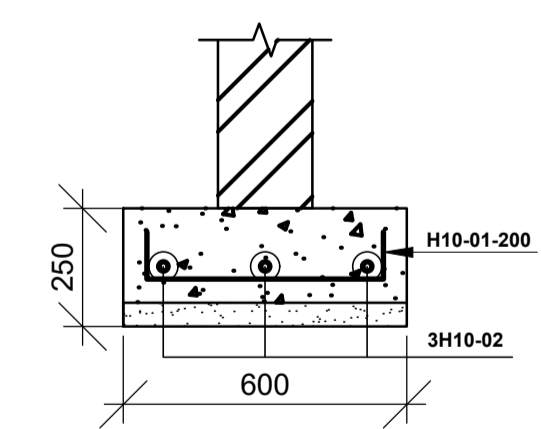
**GROUND MOUNTED TANK PLINTH  
COVER SLAB REINFORCEMENT DETAILS  
SCALE 1:15**



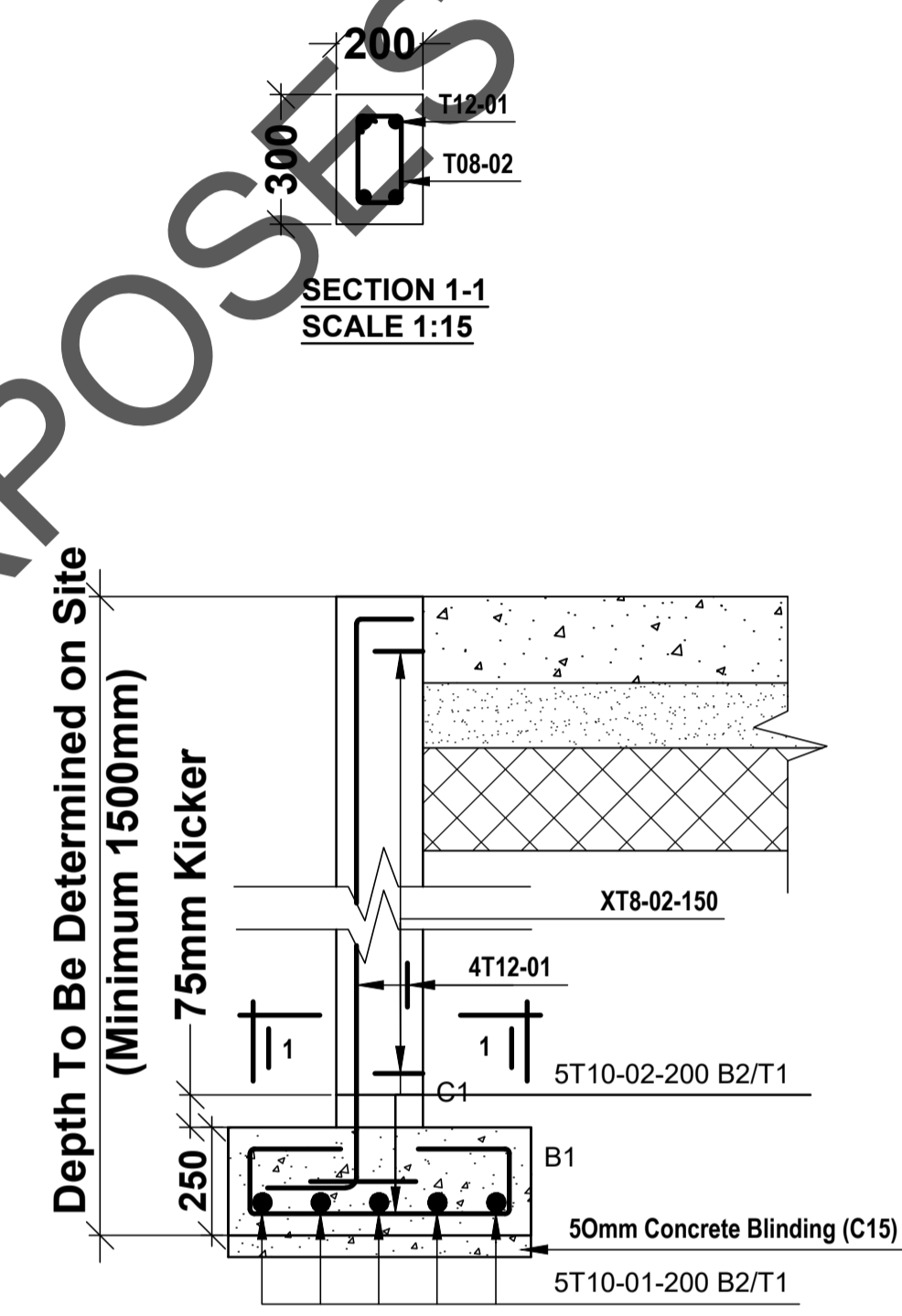
**SECTION A-A LAYOUT PLAN  
SCALE 1:15**



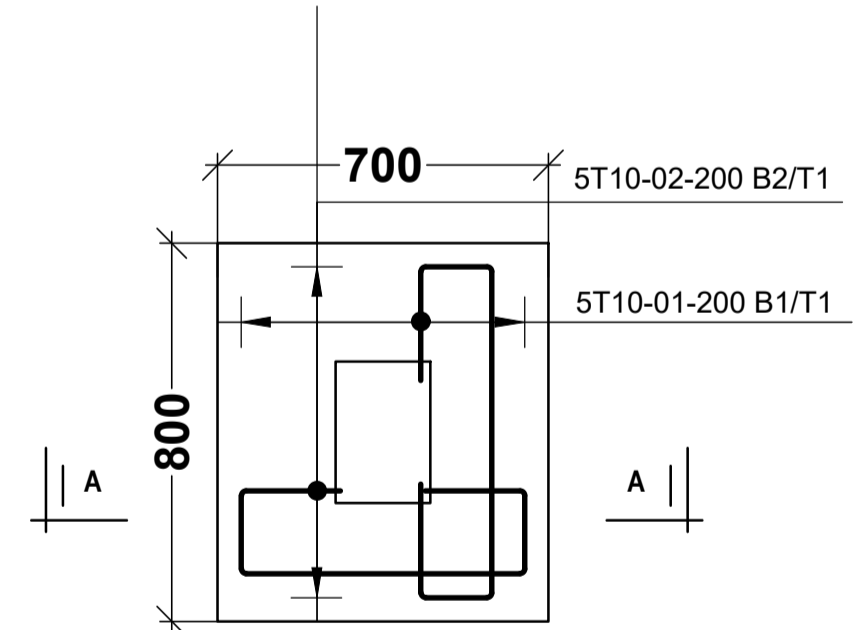
**SECTION THROUGH  
300x200mm BEAM 1  
SCALE 1:15**



**SECTION THROUGH  
STRIP FOUNDATION  
SCALE 1:15**



**300x200 COLUMN C1  
SECTION A-A BASE B1 ELEVATION DETAILS  
SCALE 1:15**



**800x700x250 mm BASE B1  
SCALE 1:15**

**TYPICAL FOUNDATION DETAIL  
COLUMN C1**

FOR KINANIE TENDERING PURPOSES ONLY

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**KENYA POWER & LIGHTING  
COMPANY**

**PROJECT**  
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STRUCTURES FOR KINANIE  
66/11KV, 1X23MVA TX**

**CONSTRUCTION DRAWINGS**

**GROUND WATER TANK PLINTH**

**KIN- SHEET 007/025**

Drawn	D.WAITHERA	Scale(s)	AS INDICATED
Designed	D.WAITHERA	Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU	Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU	Date	MARCH, 2024

ISSUE DATE	MARCH, 2024
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KINANIE  
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PROJECT

**PROPOSED CIVIL WORKS & STRUCTURES FOR KINANIE  
66/11KV, 1X23MVA TX**

CONSTRUCTION DRAWINGS

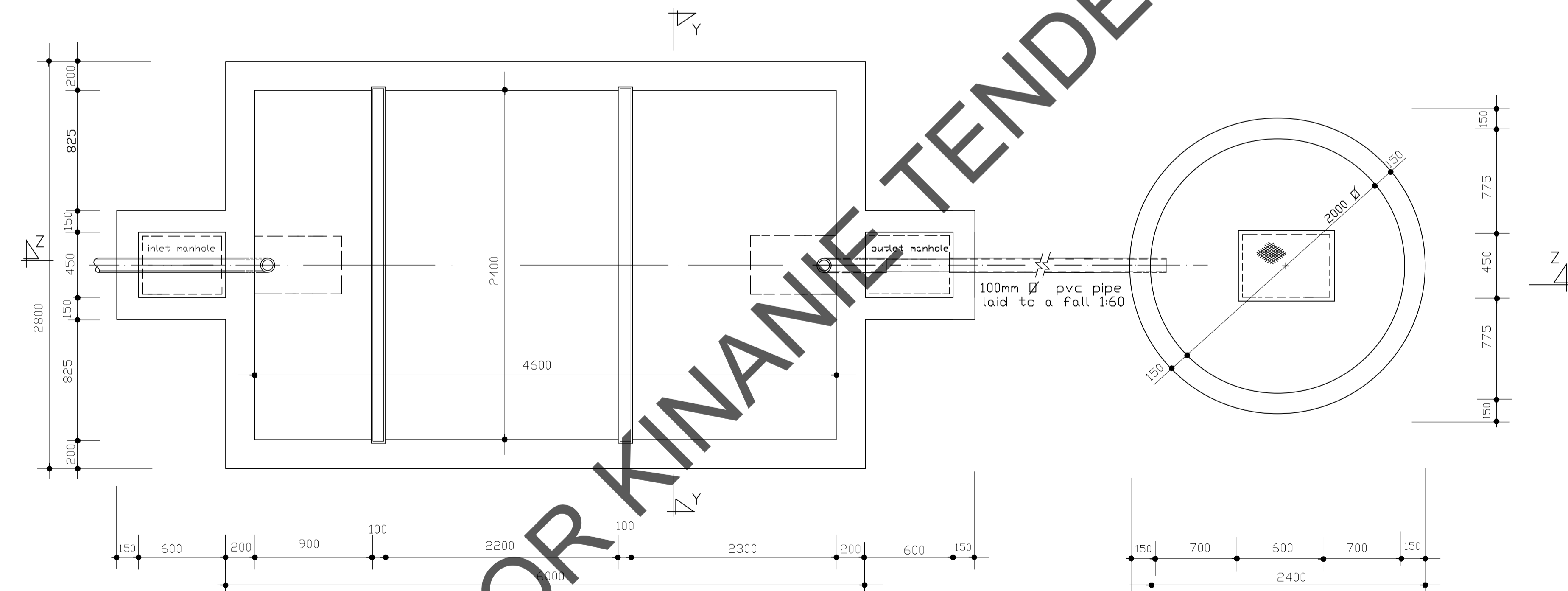
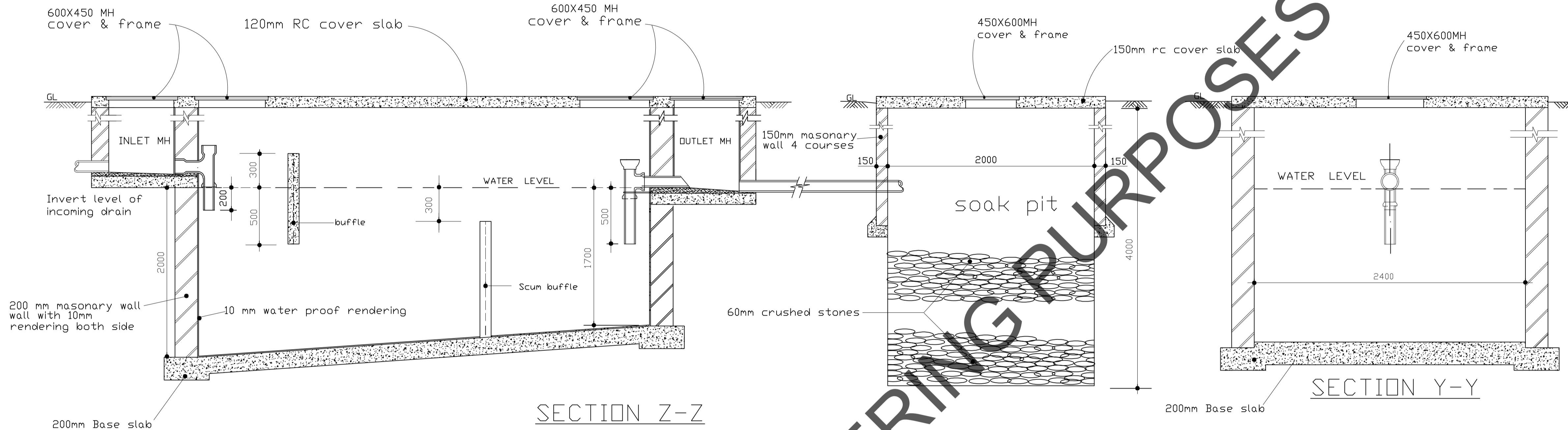
SEPTIC TANK AND SOAK PIT

KIN- SHEET 008/025

Drawn	D.WAITHERA	Scale(s)	AS INDICATED
Designed	D.WAITHERA	Date	MARCH, 2024
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Approved	ENG. D.M.WAMBUGU	Date	MARCH, 2024

ISSUE DATE MARCH, 2024

JOB No.

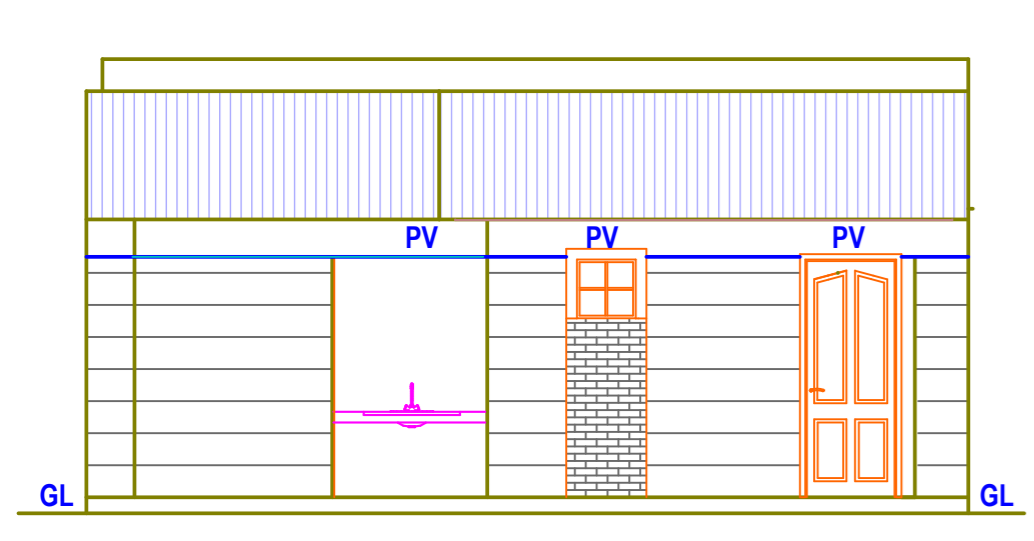


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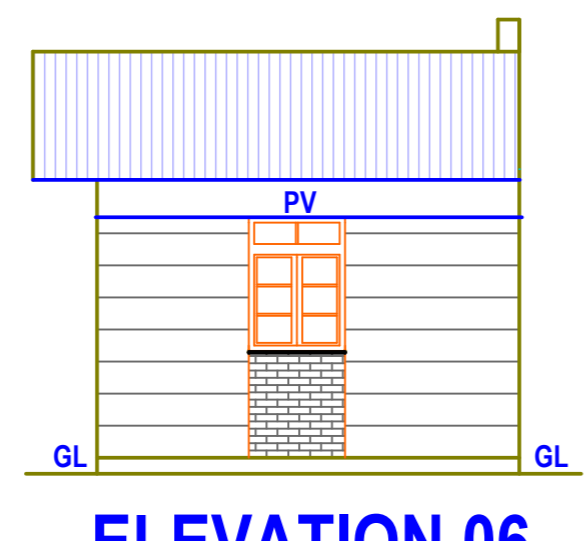
- Cover slab to be reinforced with Y10 bars both ways conc. class 20(20)
- Base slab to be conc. class mix 1:3:6
- Outlet & inlet pipes to be 100 mm  $\square$  cast iron
- Scum baffle to be 100mm thick reinforced with 2No.Y10 at both end conc. 20(20)
- dividing wall to be to be 100mm thick reinforced with weld-mesh.

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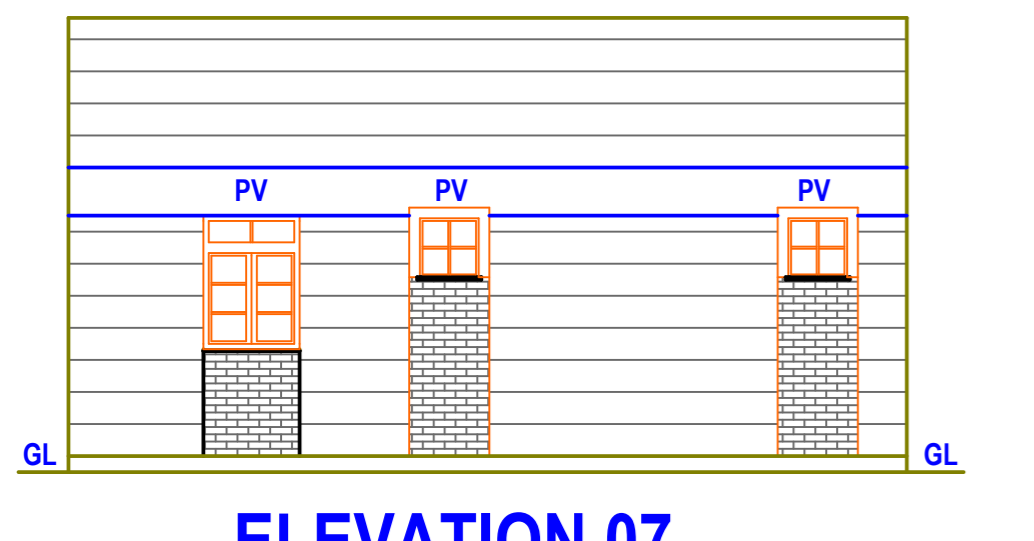
FOR KINANIE TENDERING PURPOSES ONLY



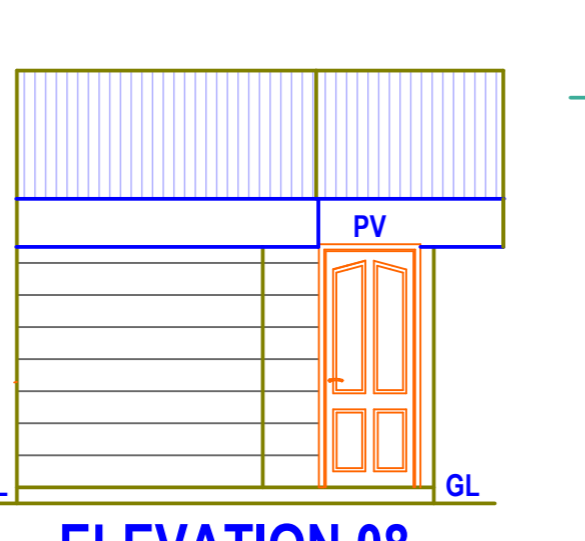
**ELEVATION 05**



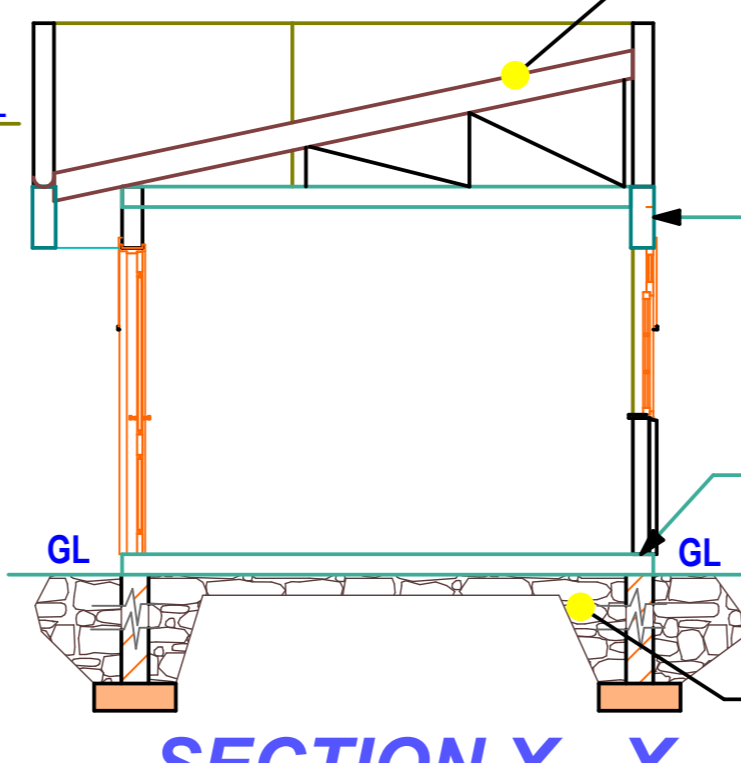
**ELEVATION 06**



**ELEVATION 07**



**ELEVATION 08**

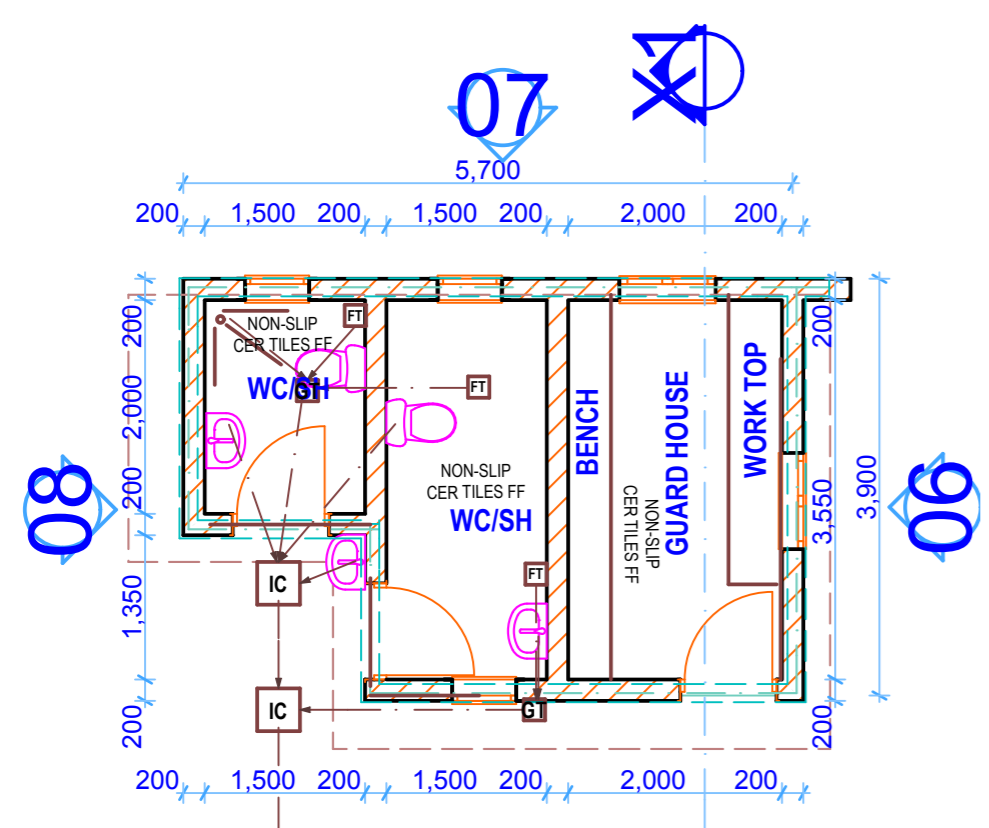


**SECTION X - X**

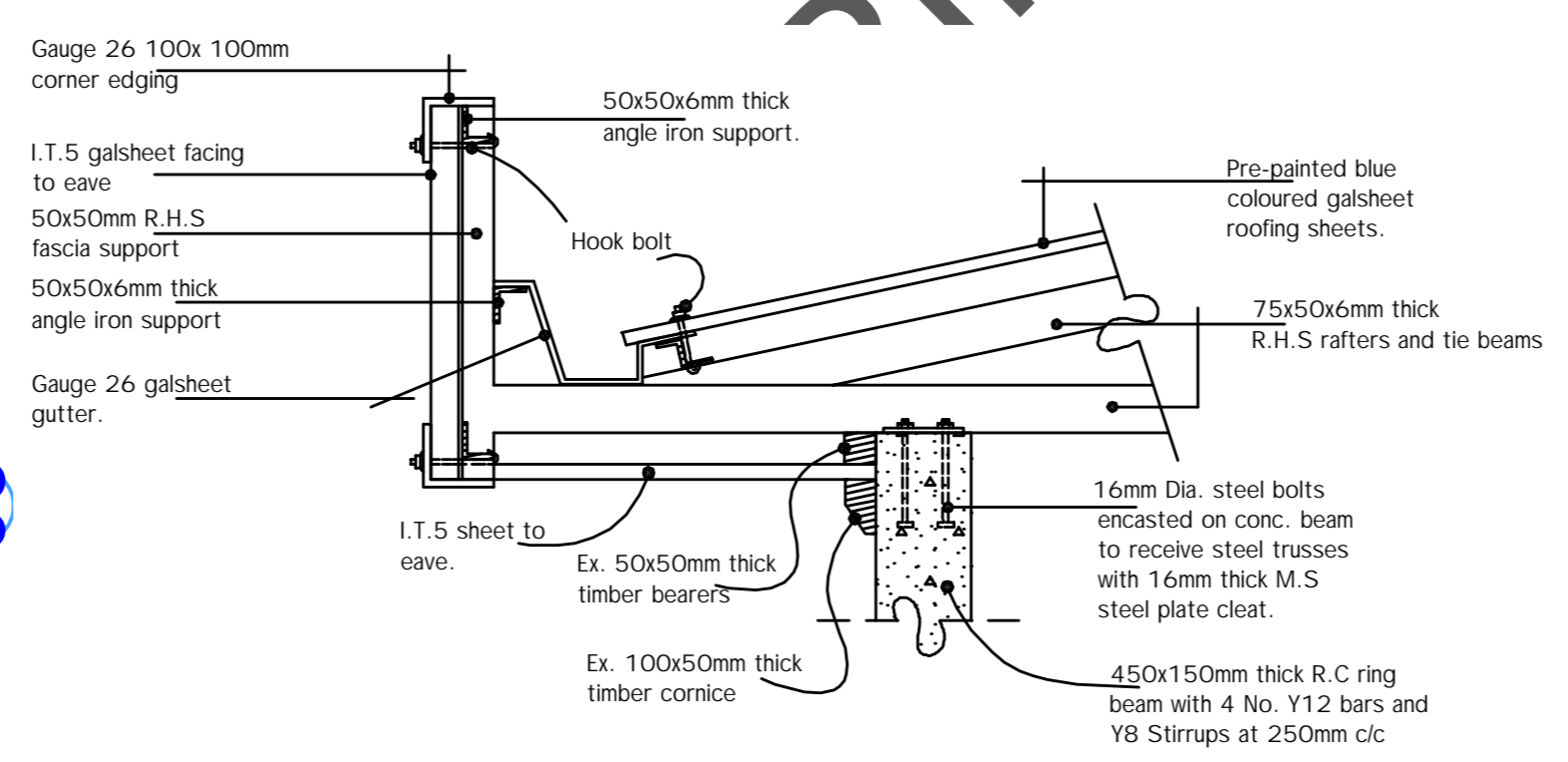
**ROOF DETAILS**  
 flat roof 15°  
 Blue coloured pre-painted IT5 roofing sheet on 50x50x6mm thick angle iron purlin on 75x503mm RHS truss and rafters  
 Gauge 26 galsheet rainwater gutter  
 Galsheet IT5 fascia on 50x50x3mm RHS framing  
 100mm Dia. p.v.c. rain water down pipe.

**BEAM SPECIFICATION**  
 300X200mm r.c beam finished with 12mm painted wood flat plaster, all r.c works to S.E details.

**3Ply bitumenous felt as dpc under all walls**  
 100x25mm skirting  
 25mm floor screed  
 100mm thick floor slab  
 50mm thick blinding layer  
 300mm min thick hardcore fill  
 200mm foundation wall  
 600x200mm strip foundation.



**GROUND FLOOR PLAN**



**EAVE DETAIL**

**DETAIL OF GUARD HOUSE AND TOILET IN PRIMARY SUBSTATION**

FOR KIN...

KIRAN E  
 W U W U  
 Sig. D.M. Vasanth  
 12/05/2025  
 For Bulding only.