Civil Engineer | Structural Designer | Construction Manager

PROFESSIONAL PORTFOLIO

RATHRUN KAKADA

Areas of Expertise

Structural Engineering · Construction Management· Research

Selected Works & Experience

PROFESSIONAL PROFILE

I am a civil engineer with strong professional experience in **structural design, construction management, and quality control**, supported by both **site-based engineering practice** and **academic research activities**. My background includes residential and commercial building projects, where I have been actively involved in structural analysis, construction planning, method statement preparation, and daily site coordination.

I have practical experience in preparing **structural drawings**, **cost estimation**, **construction schedules**, and **safety protection systems**, ensuring compliance with engineering standards and site safety requirements. Alongside my professional work, I have also contributed to **teaching and mentoring engineering students**, emphasizing practical knowledge, problem-solving skills, and real construction-site applications.

Academically, I am highly motivated to pursue **PhD-level research in structural engineering**, with a research interest focused on **resilient and sustainable structural systems** and the integration of **artificial intelligence and data-driven approaches** in civil engineering. My long-term goal is to bridge professional engineering practice with advanced academic research to contribute to innovative and sustainable infrastructure development.

AREAS OF EXPERTISE

Structural Engineering

- Structural analysis and design of reinforced concrete structures
- Preparation of structural calculations and design reports
- Structural detailing and construction drawings
- Review of drawings and identification of design conflicts

Construction Management

- Construction planning and sequencing
- Daily, weekly, and monthly work scheduling
- Coordination between site teams, consultants, and contractors
- Monitoring construction progress and contract deadlines

Quality Control & Safety

- QA/QC inspections and compliance monitoring
- Preparation of method statements for structural works
- External and internal safety protection systems
- Risk assessment and site safety control

Research & Digital Skills

- Python programming for engineering applications
- Artificial intelligence and machine learning fundamentals
- Data analysis for engineering decision-making
- Technical reporting and academic writing

EDUCATION

Master of Civil Engineering (2022 – 2024)

International University

- Advanced structural engineering courses
- Research-oriented academic training
- Preparation for doctoral-level research

Bachelor of Civil Engineering (2017 – 2022)

National Technical Training Institute (NTTI)

- Structural design and construction technology
- Engineering mechanics and materials
- Graduation project and professional practice

PROFESSIONAL EXPERIENCE

Teacher in Civil engineering, Short Course (2022 – Present)

- Taught Structural Design, BIM, and CAD drawing
- Guided students toward practical engineering problem-solving
- Encouraged academic excellence and professional discipline

(Private School Location)

(Activity in Class : teaching structural design)

(Activity in Class : teaching CAD drawing)

(Activity in Class : teaching BIM drawing)

- Guided student interns on construction site.

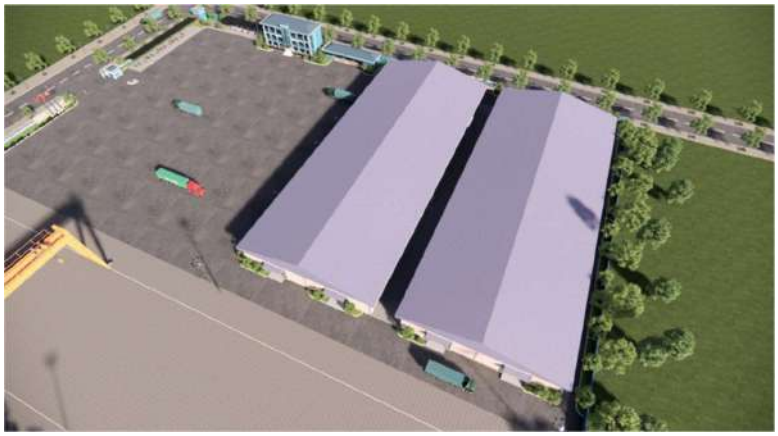
- Introduced to student about Finishing works:
    - Tile Installation
    - Ceiling Installation
    - Masonry works
    - Painting works

- Introduced to student about structure works:
    - Soil Compaction
    - Formworks Installation
    - Rebar Installation
    - Site preparation

Project Factory Pochentong (2025 – Currently)

Construction Manager

- Construction Supervision
- Quality Assurance & Quality Control (QA/QC)
- Safety & Risk Management
- Project Planning & Coordination
- Documentation & Reporting
- Leadership & Team Management



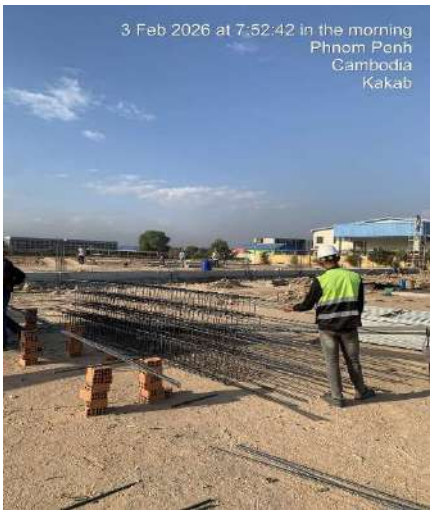
Project Name: Factory Pochentong

Location: No. A3 Plov betong, Prey pringtboung Village, Sangkat Choam Chao, Khan porsenchey, Phnom Penh.

Google Map: https://maps.app.goo.gl/KfFTLK27u6nN2HAd7

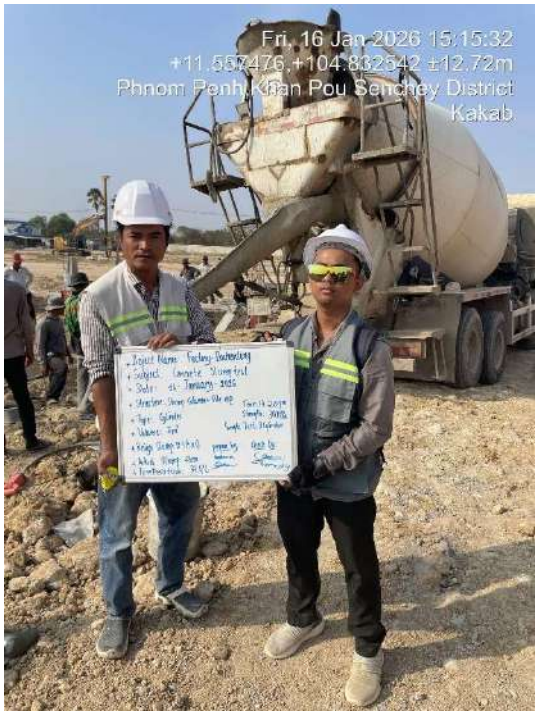
Leading Construction Activities

(Fabricating steel beam and column)



(Rebar Installation)

Slump Test Activities



Concrete Compressive Test Activities

Steel (J-bolts) Tensile Test Activities

Project Lumi Toys&Café (2025-2026)

Construction Manager

- Design & Technical Management
- Construction Supervision
- Quality Assurance & Quality Control (QA/QC)
- Safety & Risk Management
- Project Planning & Coordination
- Documentation & Reporting
- Leadership & Team Management

Project Name: LUMI Toys & Cafe

Location: Koh Norea, Phnom Penh, Cambodia , Phnom Penh, Cambodia

Google Map: https://maps.app.goo.gl/99VYHJ2eyyj3uyJx5

Leading Construction Activities

- Guided Junior engineer on construction site.

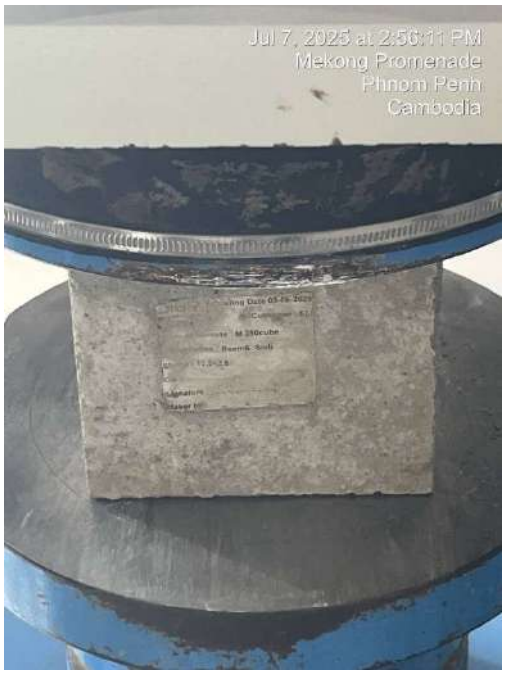
- Installing Precast slab.

- Beam's Rebar installation

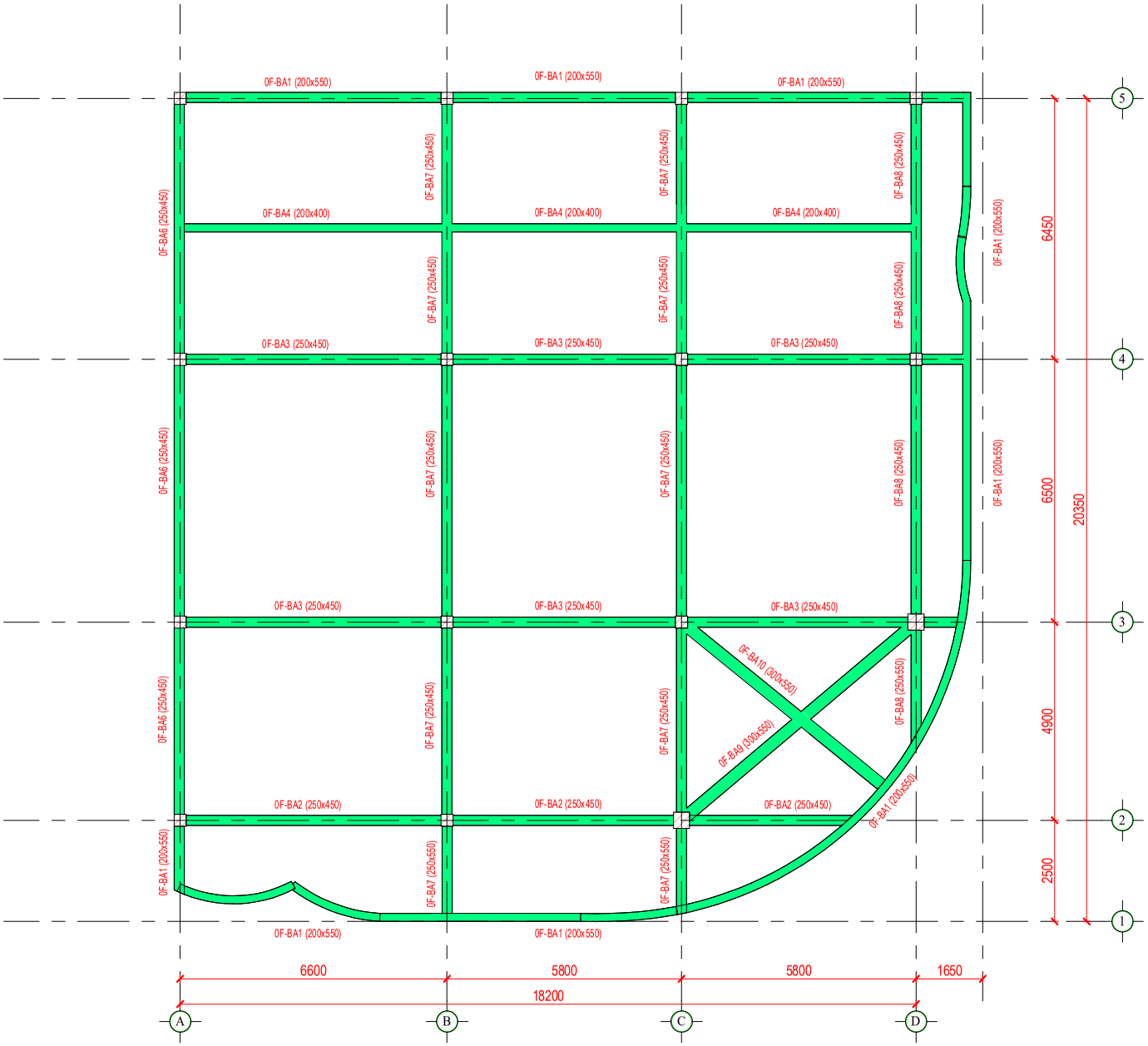
(Beam's Rebar installation)

Slump Test Activities

Compressive Test Activities



Technical Drawing
Using BIM
(Project: LUMI Toys & Cafe)



Ground Floor

SCALE (1:100)

PROJECT

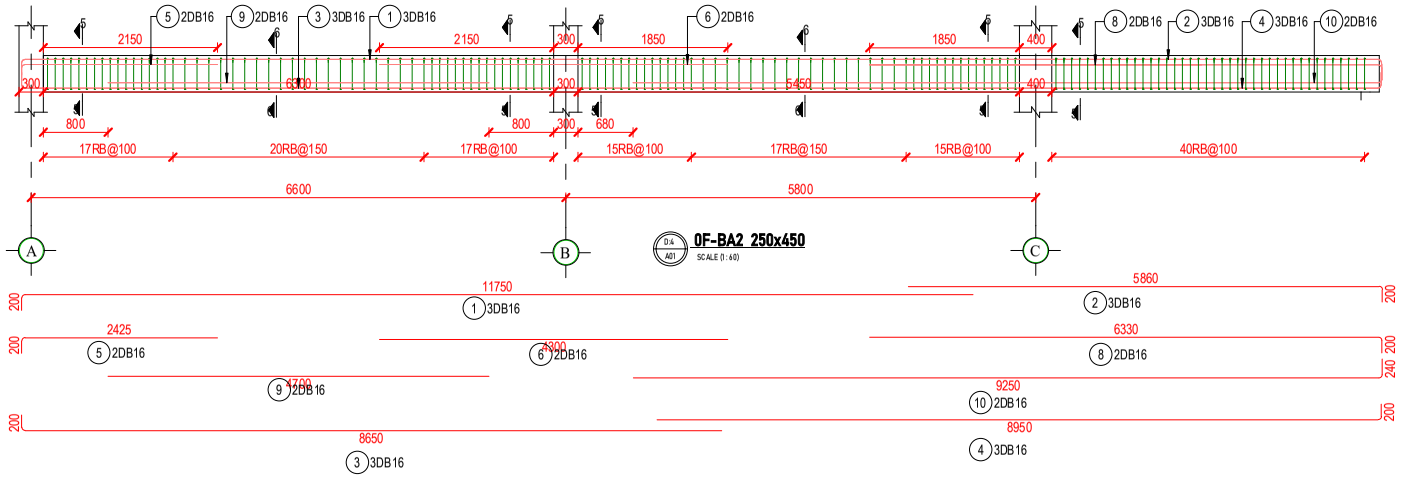
OWNER

WAGON Engineering Center

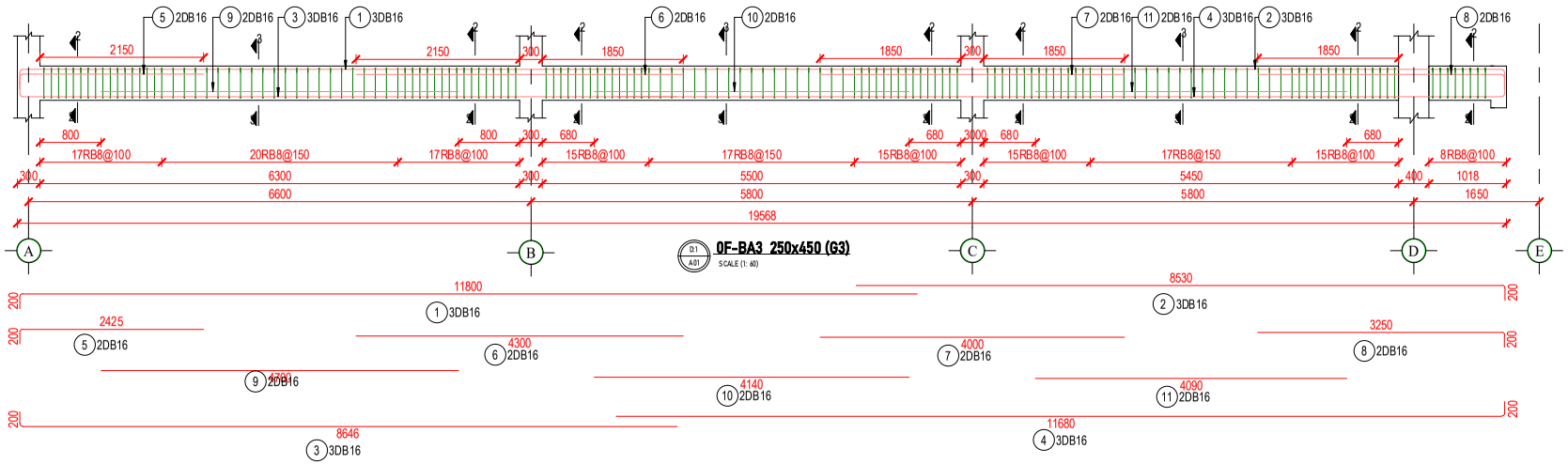
PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

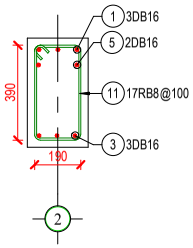
DRAWING TITLE 0F-Beam Layout Plan	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A00
DATE	11/11/2023



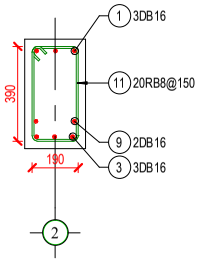
D.4 / A01 **0F-BA2 250x450**
SCALE (1:60)



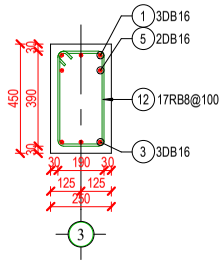
D.1 / A01 **0F-BA3 250x450 (G3)**
SCALE (1:60)



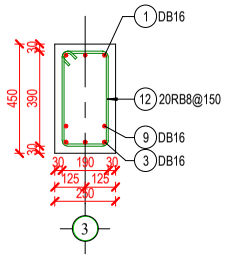
D.5 / A01 **0F-BA2 250x450 Section at Support**
SCALE (1:20)



D.6 / A01 **0F-BA2 250x450 Section at Mid Span**
SCALE (1:20)



D.2 / A01 **0F-BA3 250x450 (G3) Section at Support**
SCALE (1:20)



D.3 / A01 **0F-BA3 250x450 (G3) Section at Mid Span**
SCALE (1:20)

PROJECT

OWNER

WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE 0F-BA2 & BA3 Detailing	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A01
DATE	11/11/2023

0F-BA2 250x450 Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	16	3	11.92 m	35.75 m	18.80 kg	56.40 kg	11750 / 200
2	16	3	6.03 m	18.08 m	9.51 kg	28.52 kg	5860 / 200
3	16	3	8.82 m	26.45 m	13.91 kg	41.73 kg	8650 / 200
4	16	3	9.12 m	27.35 m	14.38 kg	43.15 kg	8950 / 200
5	16	2	2.59 m	5.18 m	4.09 kg	8.18 kg	2430 / 200
6	16	2	4.30 m	8.60 m	6.78 kg	13.57 kg	4300
7	16	2	4.10 m	8.20 m	6.47 kg	12.94 kg	4100
8	16	2	6.50 m	12.99 m	10.25 kg	20.50 kg	6330 / 200
9	16	2	4.70 m	9.40 m	7.41 kg	14.83 kg	4700
10	16	2	9.46 m	18.91 m	14.92 kg	29.84 kg	9250 / 240
11	8	141	1.21 m	170.64 m	3.34 kg	67.30 kg	390 / 50 / 50 / 190 / 190 / 390
Total: 17		165		341.57 m	109.86 kg	336.94 kg	

0F-BA3 250x450 (G3) Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	16	3	11.97 m	35.90 m	18.88 kg	56.63 kg	11800 / 200
2	16	3	8.70 m	26.09 m	13.72 kg	41.16 kg	8530 / 200
3	16	3	8.81 m	26.44 m	13.90 kg	41.71 kg	8650 / 200
4	16	3	11.85 m	35.54 m	18.69 kg	56.07 kg	11680 / 200
5	16	2	2.59 m	5.18 m	4.09 kg	8.18 kg	2430 / 200
6	16	2	4.30 m	8.60 m	6.78 kg	13.57 kg	4300
7	16	2	4.00 m	8.00 m	6.31 kg	12.62 kg	4000
8	16	2	3.42 m	6.83 m	5.39 kg	10.78 kg	3250 / 200
9	16	2	4.70 m	9.40 m	7.41 kg	14.83 kg	4700
10	16	2	4.14 m	8.28 m	6.53 kg	13.06 kg	4140
11	16	2	4.09 m	8.18 m	6.45 kg	12.90 kg	4090
12	8	156	1.21 m	188.80 m	4.77 kg	74.46 kg	390 / 50 / 50 / 190 / 190 / 390
Total: 21		182		367.25 m	112.93 kg	355.97 kg	

PROJECT

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

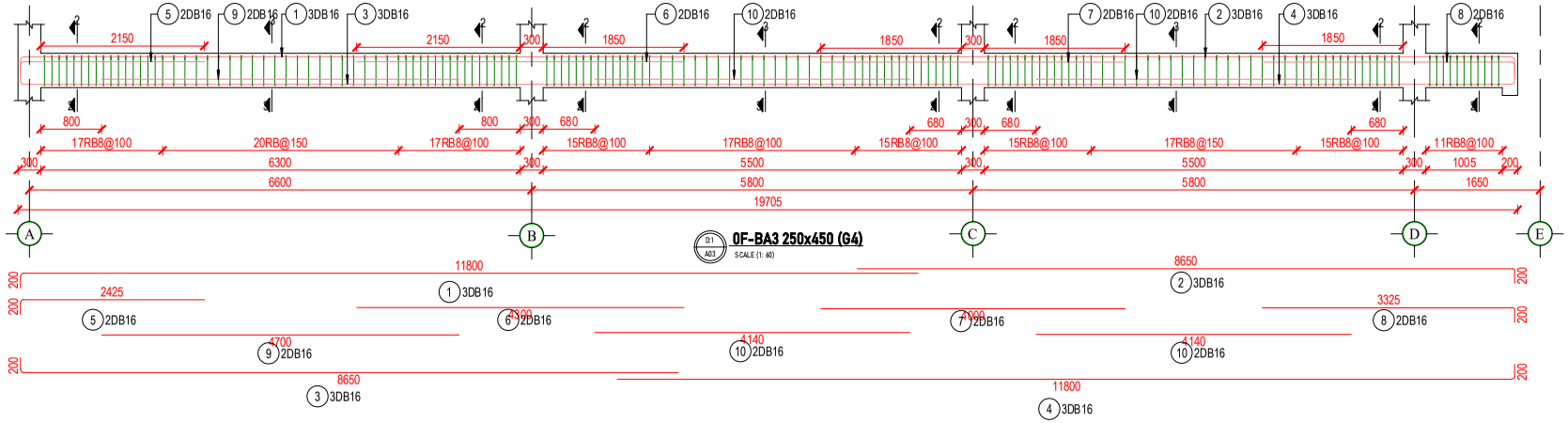
ELECTRICAL ENGINEERS

SANITARY ENGINEERS

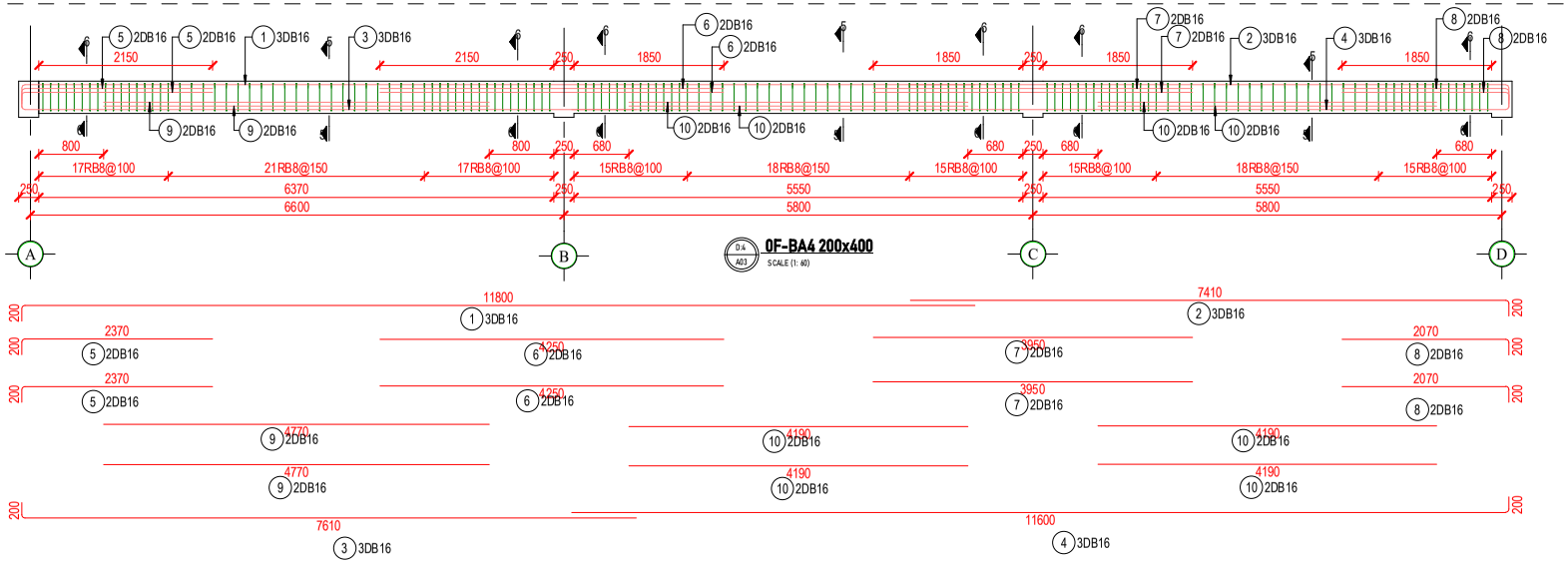
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

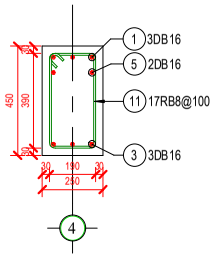
DRAWING TITLE	SCALE
0F-BA2 & BA3 Rebar Schedule	1/150
PAPER SIZE	A3
DRAWING NO.	A02
DATE	11/11/2023



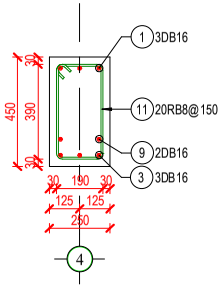
0F-BA3 250x450 (G4)
SCALE (1: 60)



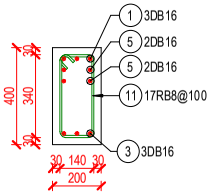
0F-BA4 200x400
SCALE (1: 60)



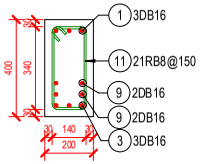
0F-BA3 250x450 (G4) Section at Support
SCALE (1: 20)



0F-BA3 250x450 (G4) Section at Mid Span
SCALE (1: 20)



0F-BA4 200x400 Section at Support
SCALE (1: 20)



0F-BA4 200x400 Section at Mid Span
SCALE (1: 20)

PROJECT	
OWNER	
PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE 0F-BA3 & BA4 Detailing	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A03
DATE	11/11/2023

0F-BA3 250x450 (G4) Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	16	3	11.97 m	35.90 m	18.88 kg	56.63 kg	11800 / 200
2	16	3	8.82 m	26.45 m	13.91 kg	41.73 kg	8650 / 200
3	16	3	8.82 m	26.45 m	13.91 kg	41.73 kg	8650 / 200
4	16	3	11.97 m	35.90 m	18.88 kg	56.63 kg	11800 / 200
5	16	2	2.59 m	5.18 m	4.09 kg	8.18 kg	2430 / 200
6	16	2	4.30 m	8.60 m	6.78 kg	13.57 kg	4300
7	16	2	4.00 m	8.00 m	6.31 kg	12.62 kg	4000
8	16	2	3.49 m	6.98 m	5.51 kg	11.02 kg	3330 / 200
9	16	2	4.70 m	9.40 m	7.41 kg	14.83 kg	4700
10	16	4	4.14 m	16.56 m	13.06 kg	26.12 kg	4140
11	8	159	1.21 m	192.43 m	4.77 kg	75.89 kg	390 / 190 / 50 / 50 / 190 / 390
Total: 21		185		371.86 m	113.51 kg	358.95 kg	

0F-BA4 200x400 Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	16	3	11.97 m	35.90 m	18.88 kg	56.63 kg	11800 / 200
2	16	3	7.58 m	22.73 m	11.95 kg	35.86 kg	7410 / 200
3	16	3	7.78 m	23.33 m	12.27 kg	36.80 kg	7610 / 200
4	16	3	11.77 m	35.30 m	18.56 kg	55.69 kg	11600 / 200
5	16	4	2.54 m	10.15 m	8.00 kg	16.01 kg	2370 / 200
6	16	4	4.25 m	17.00 m	13.41 kg	26.82 kg	4250
7	16	4	3.95 m	15.80 m	12.46 kg	24.93 kg	3950
8	16	4	2.24 m	8.95 m	7.06 kg	14.11 kg	2070 / 200
9	16	4	4.77 m	19.08 m	15.05 kg	30.10 kg	4770
10	16	8	4.19 m	33.52 m	26.44 kg	52.88 kg	4190
11	8	151	1.01 m	152.55 m	3.59 kg	60.16 kg	340 / 140 / 50 / 50 / 140 / 340
Total: 27		191		374.30 m	147.67 kg	409.99 kg	

PROJECT

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

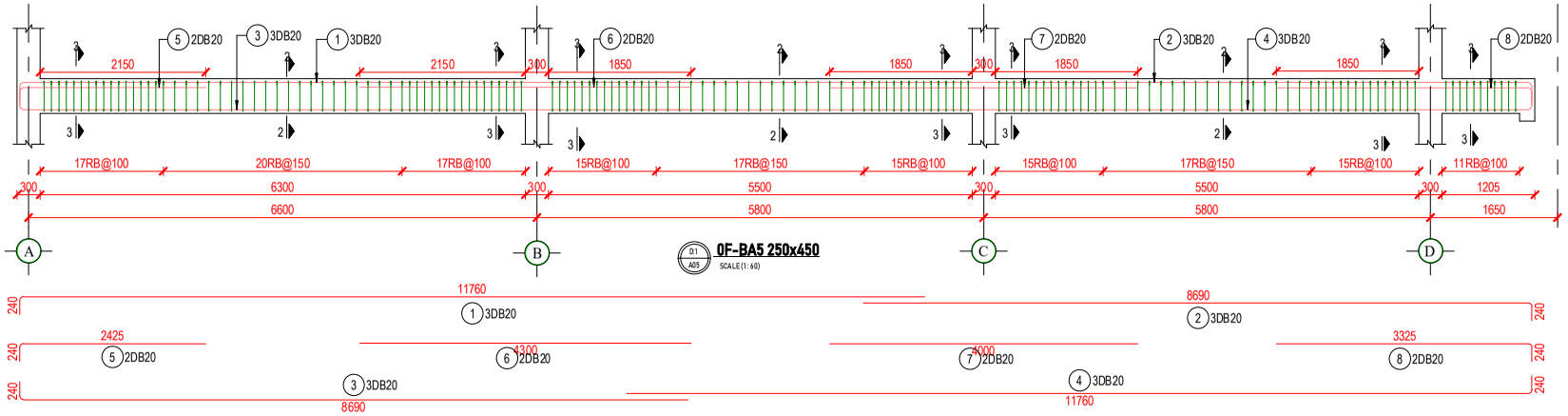
ELECTRICAL ENGINEERS

SANITARY ENGINEERS

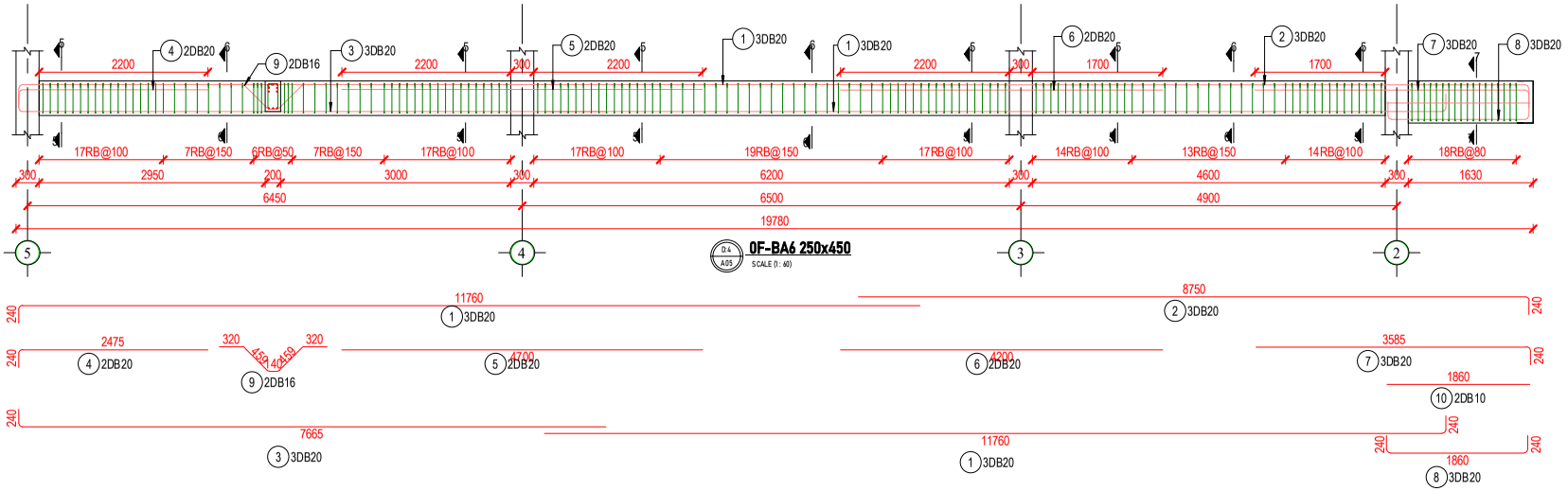
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

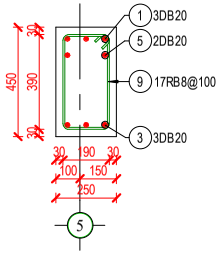
DRAWING TITLE	SCALE
0F-BA3 & BA4 Rebar Schedule	1/150
PAPER SIZE	A3
DRAWING NO.	A04
DATE	11/11/2023



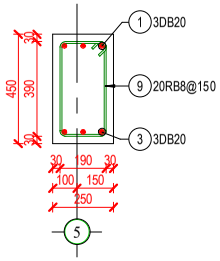
D.1 A05 **0F-BA5 250x450**
SCALE (1: 60)



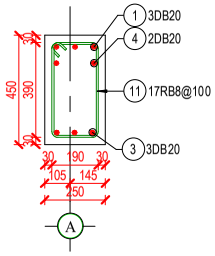
D.4 A05 **0F-BA6 250x450**
SCALE (1: 60)



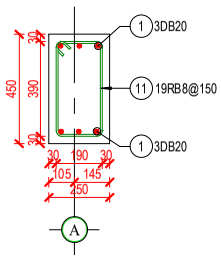
D.3 A05 **0F-BA5 250x450 Section at Support**
SCALE (1: 20)



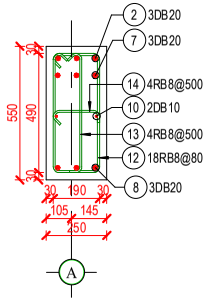
D.2 A05 **0F-BA5 250x450 Section at Mid Span**
SCALE (1: 20)



D.5 A05 **0F-BA6 250x450 Section Support**
SCALE (1: 20)



D.6 A05 **0F-BA6 250x450 Section Mid Span**
SCALE (1: 20)



D.7 A05 **0F-BA6 250x450 Cantiliver Section**
SCALE (1: 20)

PROJECT

OWNER

WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE 0F-BA5 & BA6 Detailing	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A05
DATE	11/11/2023

0F-BA5 250x450 Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	20	3	11.96 m	35.88 m	29.48 kg	88.43 kg	240 / 11760
2	20	3	8.89 m	26.67 m	21.91 kg	65.73 kg	240 / 8690
3	20	3	8.89 m	26.67 m	21.91 kg	65.73 kg	240 / 8690
4	20	3	11.96 m	35.88 m	29.48 kg	88.43 kg	240 / 11760
5	20	2	2.62 m	5.25 m	6.47 kg	12.93 kg	240 / 2430
6	20	2	4.30 m	8.60 m	10.60 kg	21.20 kg	4300
7	20	2	4.00 m	8.00 m	9.86 kg	19.72 kg	4000
8	20	2	3.52 m	7.05 m	8.69 kg	17.37 kg	240 / 3330
9	8	159	1.21 m	192.43 m	4.77 kg	75.89 kg	390 50 190 50 190 390
Total: 18		179		346.41 m	143.16 kg	455.43 kg	

0F-BA6 250x450 Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	20	6	11.96 m	71.75 m	58.95 kg	176.86 kg	240 / 11760
2	20	3	8.95 m	26.85 m	22.06 kg	66.17 kg	240 / 8750
3	20	3	7.86 m	23.59 m	19.38 kg	58.15 kg	240 / 7670
4	20	2	2.67 m	5.35 m	6.59 kg	13.18 kg	240 / 2480
5	20	2	4.70 m	9.40 m	11.59 kg	23.17 kg	4700
6	20	2	4.20 m	8.40 m	10.35 kg	20.71 kg	4200
7	20	3	3.78 m	11.35 m	9.33 kg	27.98 kg	240 / 3580
8	20	3	2.26 m	6.77 m	5.56 kg	16.69 kg	240 / 1860 / 240
9	16	2	1.66 m	3.33 m	2.63 kg	5.25 kg	320 460 140 460 320
10	10	2	1.86 m	3.72 m	1.15 kg	2.29 kg	1860
11	8	148	1.21 m	179.12 m	5.73 kg	70.64 kg	390 50 190 50 190 390
12	8	18	1.41 m	25.38 m	0.56 kg	10.01 kg	490 50 190 50 190 490
13	8	4	0.57 m	2.29 m	0.23 kg	0.90 kg	50 / 490 / 50
14	8	4	0.27 m	1.09 m	0.11 kg	0.43 kg	50 / 190 / 50
Total: 26		202		378.39 m	154.20 kg	492.43 kg	

PROJECT

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

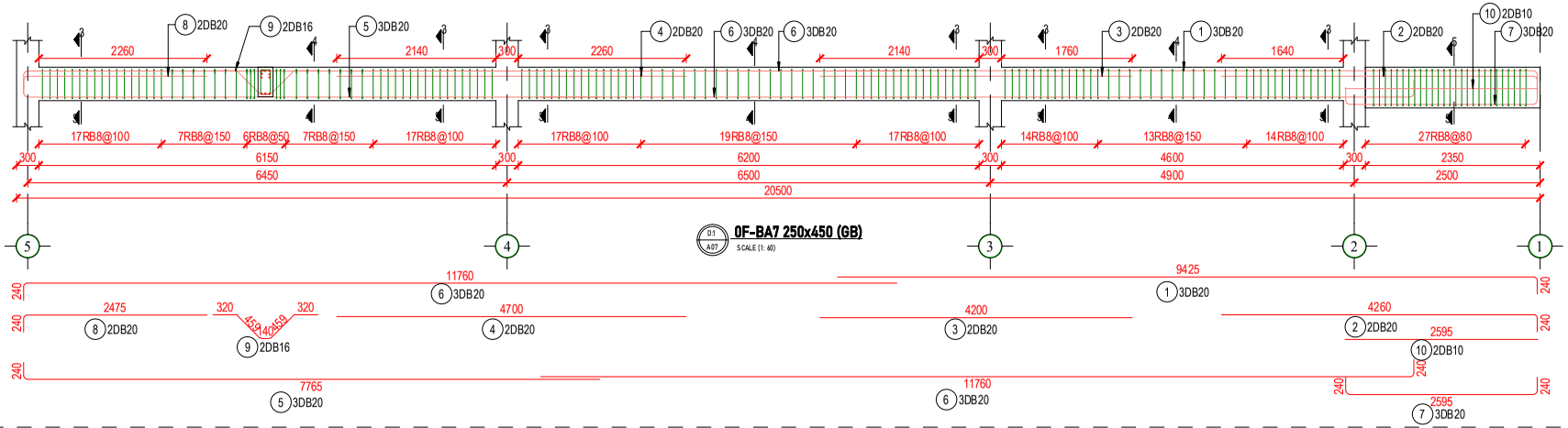
ELECTRICAL ENGINEERS

SANITARY ENGINEERS

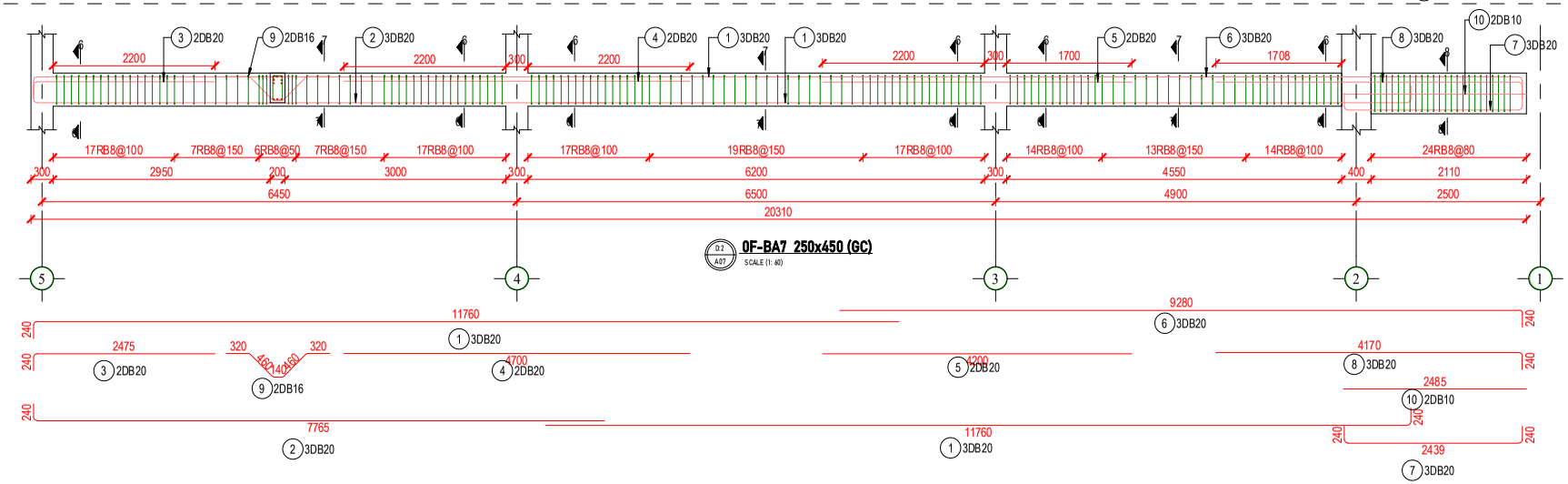
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

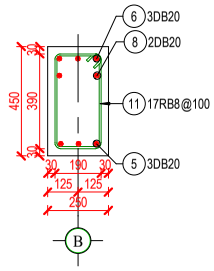
DRAWING TITLE	SCALE
0F-BA5 & BA6 Rebar Schedule	1/150
PAPER SIZE	A3
DRAWING NO.	A06
DATE	11/11/2023



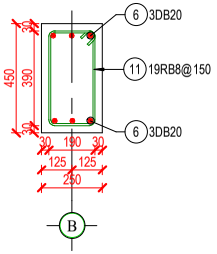
D.1 A07 **0F-BA7 250x450 (GB)**
SCALE (1: 60)



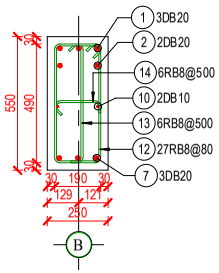
D.2 A07 **0F-BA7 250x450 (GC)**
SCALE (1: 60)



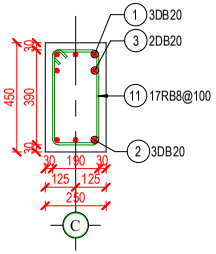
D.3 A07 **0F-BA7 250x450 Section at Support**
SCALE (1: 20)



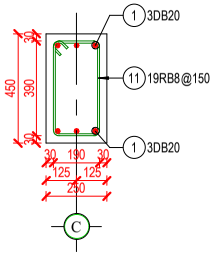
D.4 A07 **0F-BA7 250x450 Section at Mid Span**
SCALE (1: 20)



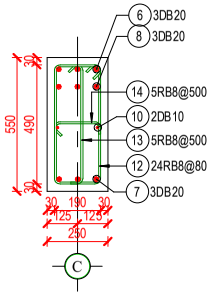
D.5 A07 **0F-BA7 250x450 Section at Cantiliver**
SCALE (1: 20)



D.6 A07 **0F-BA7 250x450 Section at Support**
SCALE (1: 20)



D.7 A07 **0F-BA7 250x450 Section at Mid Span**
SCALE (1: 20)



D.8 A07 **0F-BA7 250x450 Section at Cantiliver**
SCALE (1: 20)

PROJECT	
OWNER	
PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

WAGON Engineering Center

WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE 0F-BA7 Detailing	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A07
DATE	11/11/2023

0F-BA7 250x450 (GB) Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	20	3	9.62 m	28.87 m	23.72 kg	71.16 kg	240 9430
2	20	2	4.46 m	8.92 m	10.99 kg	21.98 kg	240 4260
3	20	2	4.20 m	8.40 m	10.35 kg	20.71 kg	4200
4	20	2	4.70 m	9.40 m	11.59 kg	23.17 kg	4700
5	20	3	7.96 m	23.89 m	19.63 kg	58.89 kg	240 7760
6	20	6	11.96 m	71.75 m	58.95 kg	176.86 kg	240 11760
7	20	3	2.99 m	8.98 m	7.38 kg	22.13 kg	240 2600 240
8	20	2	2.67 m	5.35 m	6.59 kg	13.18 kg	240 2480
9	16	2	1.66 m	3.33 m	2.63 kg	5.25 kg	320 460 140 60 320
10	10	2	2.60 m	5.19 m	1.60 kg	3.20 kg	2600
11	8	148	1.21 m	179.12 m	5.73 kg	70.64 kg	390 190 50 50 190 390
12	8	27	1.41 m	38.08 m	0.56 kg	15.02 kg	490 190 50 50 190 490
13	8	6	0.57 m	3.44 m	0.23 kg	1.36 kg	50 490 35
14	8	6	0.27 m	1.64 m	0.11 kg	0.65 kg	50 35 190
Total: 26		214		396.35 m	160.04 kg	504.18 kg	

0F-BA7 250x450 (GC) Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	20	6	11.96 m	71.75 m	58.95 kg	176.86 kg	240 11760
2	20	3	7.96 m	23.89 m	19.63 kg	58.89 kg	240 7770
3	20	2	2.67 m	5.35 m	6.59 kg	13.18 kg	240 2480
4	20	2	4.70 m	9.40 m	11.59 kg	23.17 kg	4700
5	20	2	4.20 m	8.40 m	10.35 kg	20.71 kg	4200
6	20	3	9.48 m	28.44 m	23.36 kg	70.09 kg	240 9280
7	20	3	2.84 m	8.51 m	6.99 kg	20.98 kg	240 2440 240
8	20	3	4.37 m	13.11 m	10.77 kg	32.30 kg	240 4170
9	16	2	1.67 m	3.33 m	2.63 kg	5.26 kg	320 460 140 60 320
10	10	2	2.48 m	4.97 m	1.53 kg	3.06 kg	2480
11	8	147	1.21 m	177.91 m	5.73 kg	70.16 kg	390 190 50 50 190 390
12	8	24	1.41 m	33.85 m	0.56 kg	13.35 kg	490 190 50 50 190 490
13	8	5	0.57 m	2.87 m	0.23 kg	1.13 kg	50 490 35
14	8	5	0.27 m	1.37 m	0.11 kg	0.54 kg	50 35 190
Total: 26		209		393.13 m	159.01 kg	509.67 kg	

PROJECT

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

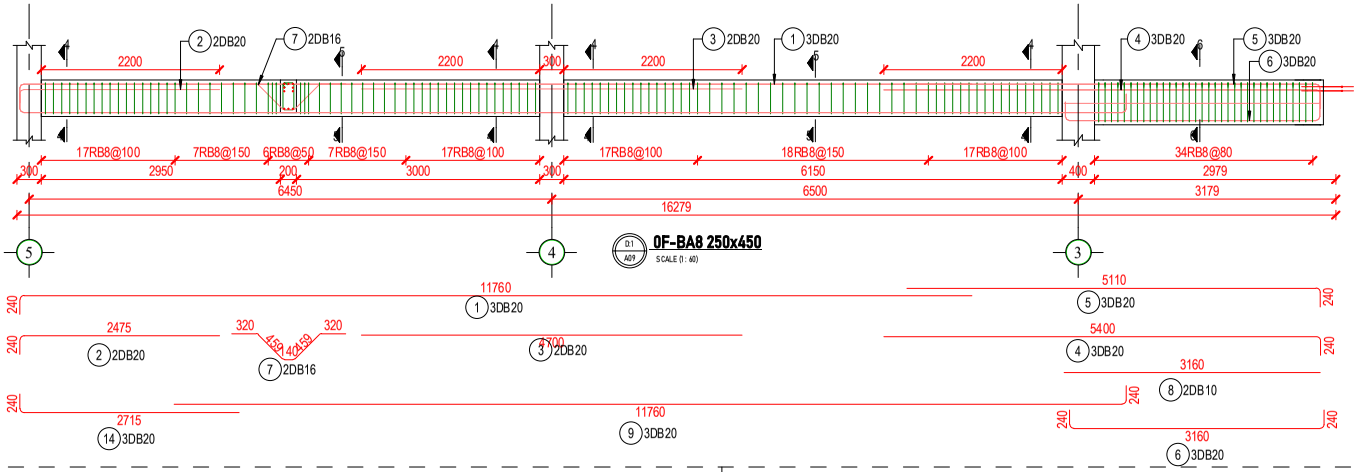
ELECTRICAL ENGINEERS

SANITARY ENGINEERS

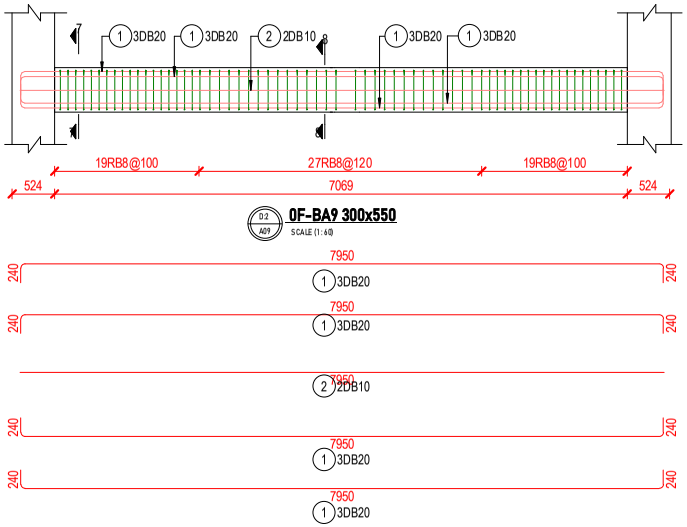
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

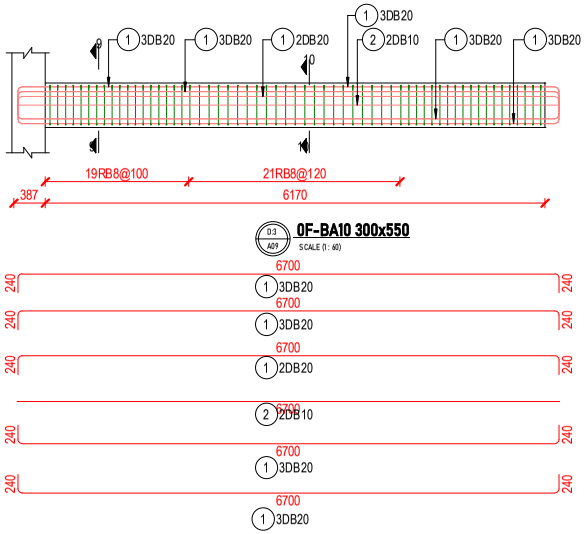
DRAWING TITLE	SCALE
0F-BA7 Rebar Schedule	1/150
PAPER SIZE	A3
DRAWING NO.	A08
DATE	11/11/2023



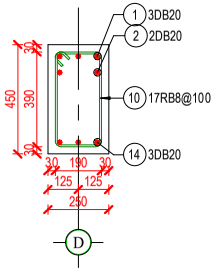
D.1 A09 **0F-BA8 250x450**
SCALE (1 : 60)



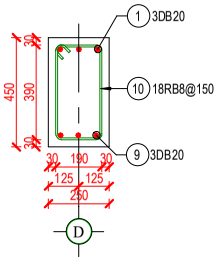
D.2 A09 **0F-BA9 300x550**
SCALE (1 : 60)



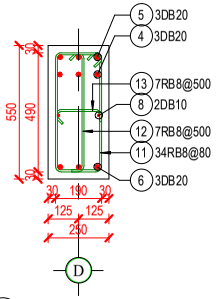
D.3 A09 **0F-BA10 300x550**
SCALE (1 : 60)



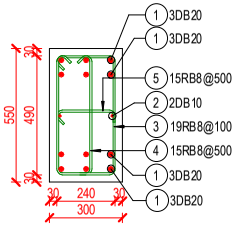
D.4 A09 **0F-BA8 Section at Support**
SCALE (1 : 20)



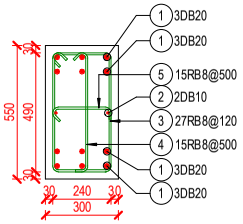
D.5 A09 **0F-BA8 Section at Mid Span**
SCALE (1 : 20)



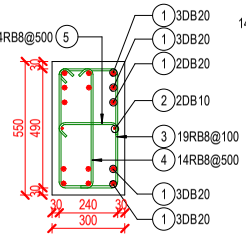
D.6 A09 **0F-BA8 Cantiliver Section**
SCALE (1 : 20)



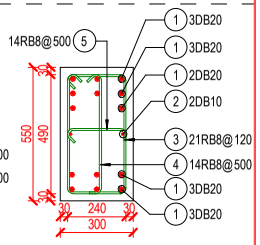
D.7 A09 **0F-BA9 Section at Support**
SCALE (1 : 20)



D.8 A09 **0F-BA9 Section at Mid Span**
SCALE (1 : 20)



D.9 A09 **0F-BA10 Section at Support**
SCALE (1 : 20)



D.10 A09 **0F-BA10 Section at Mid Span**
SCALE (1 : 20)

PROJECT

OWNER

WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE 0F-BA8,BA9,BA10 Detailing	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A09
DATE	11/11/2023

0F-BA8 250x450 Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	20	3	11.96 m	35.88 m	29.48 kg	88.43 kg	240 11760 240
2	20	2	2.67 m	5.35 m	6.59 kg	13.18 kg	240 2480 240
3	20	2	4.70 m	9.40 m	11.59 kg	23.17 kg	4700
4	20	3	5.60 m	16.80 m	13.80 kg	41.40 kg	240 5400 240
5	20	3	5.31 m	15.93 m	13.09 kg	39.26 kg	240 5110 240
6	20	3	3.56 m	10.67 m	8.77 kg	26.30 kg	240 3160 240
7	16	2	1.66 m	3.33 m	2.63 kg	5.25 kg	320 460 240 460 320
8	10	2	3.16 m	6.32 m	1.95 kg	3.89 kg	3160
9	20	3	11.96 m	35.88 m	29.48 kg	88.43 kg	240 11760 240
10	8	107	1.21 m	129.50 m	4.30 kg	51.07 kg	390 50 190 190 50 390
11	8	34	1.41 m	47.95 m	0.56 kg	18.91 kg	490 50 190 190 50 490
12	8	7	0.57 m	4.01 m	0.23 kg	1.58 kg	50 490 50
13	8	7	0.27 m	1.91 m	0.11 kg	0.75 kg	50 190 50
14	20	3	2.91 m	8.74 m	7.18 kg	21.54 kg	240 2720 240
Total: 22		181		331.65 m	129.72 kg	423.18 kg	

0F-BA9 300x550 Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	20	12	8.35 m	100.16 m	82.30 kg	246.90 kg	240 7950 240
2	10	2	7.95 m	15.90 m	4.90 kg	9.80 kg	7950
3	8	65	1.51 m	98.17 m	1.79 kg	38.72 kg	490 50 50 240 240 490
4	8	15	0.57 m	8.60 m	0.23 kg	3.39 kg	50 490 50
5	8	15	0.32 m	4.85 m	0.13 kg	1.91 kg	50 240 50
Total: 10		109		227.68 m	89.34 kg	300.72 kg	

0F-BA10 300x550 Rebar Schedule

Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1	20	14	7.10 m	99.36 m	87.47 kg	244.91 kg	240 6700 240
2	10	2	6.70 m	13.40 m	4.13 kg	8.26 kg	6700
3	8	59	1.51 m	89.10 m	1.79 kg	35.14 kg	490 50 50 240 240 490
4	8	14	0.57 m	8.03 m	0.23 kg	3.17 kg	50 490 50
5	8	14	0.32 m	4.53 m	0.13 kg	1.79 kg	50 240 50
Total: 11		103		214.42 m	93.74 kg	293.26 kg	

PROJECT

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

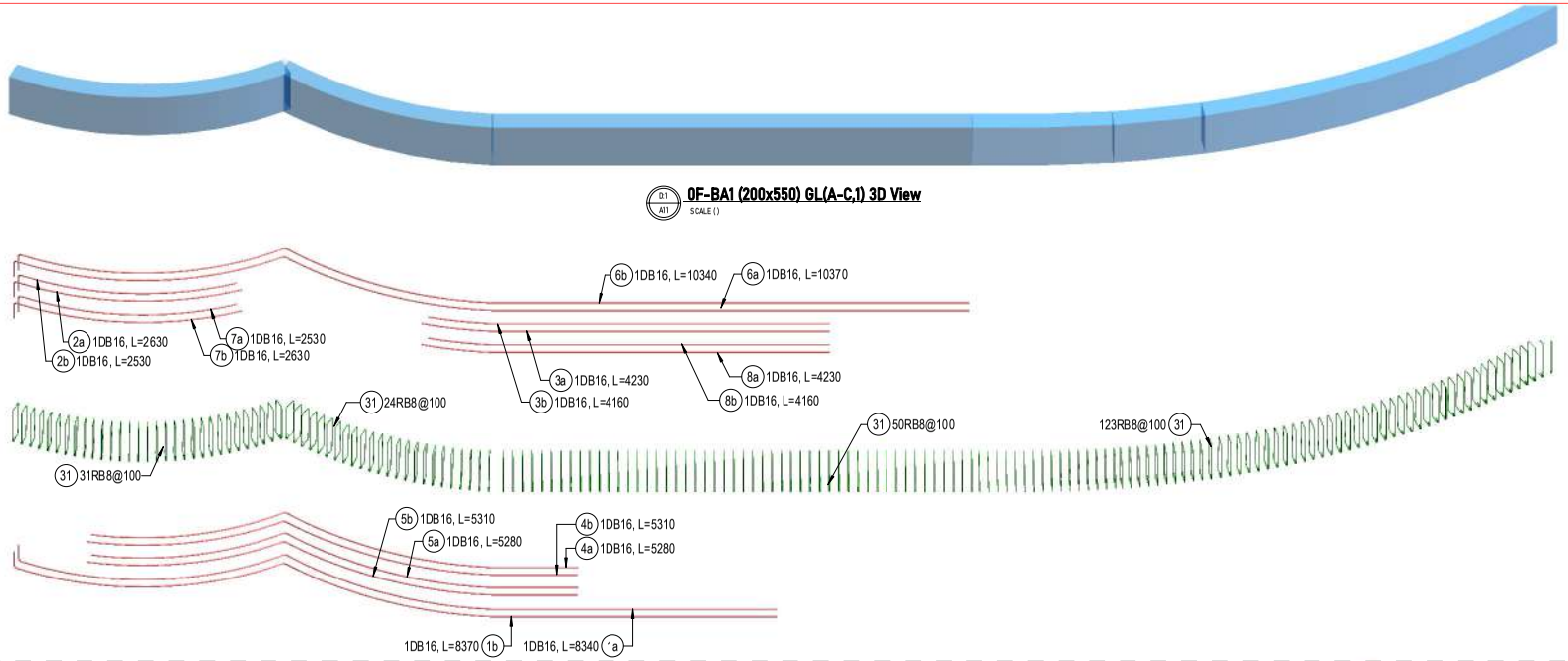
ELECTRICAL ENGINEERS

SANITARY ENGINEERS

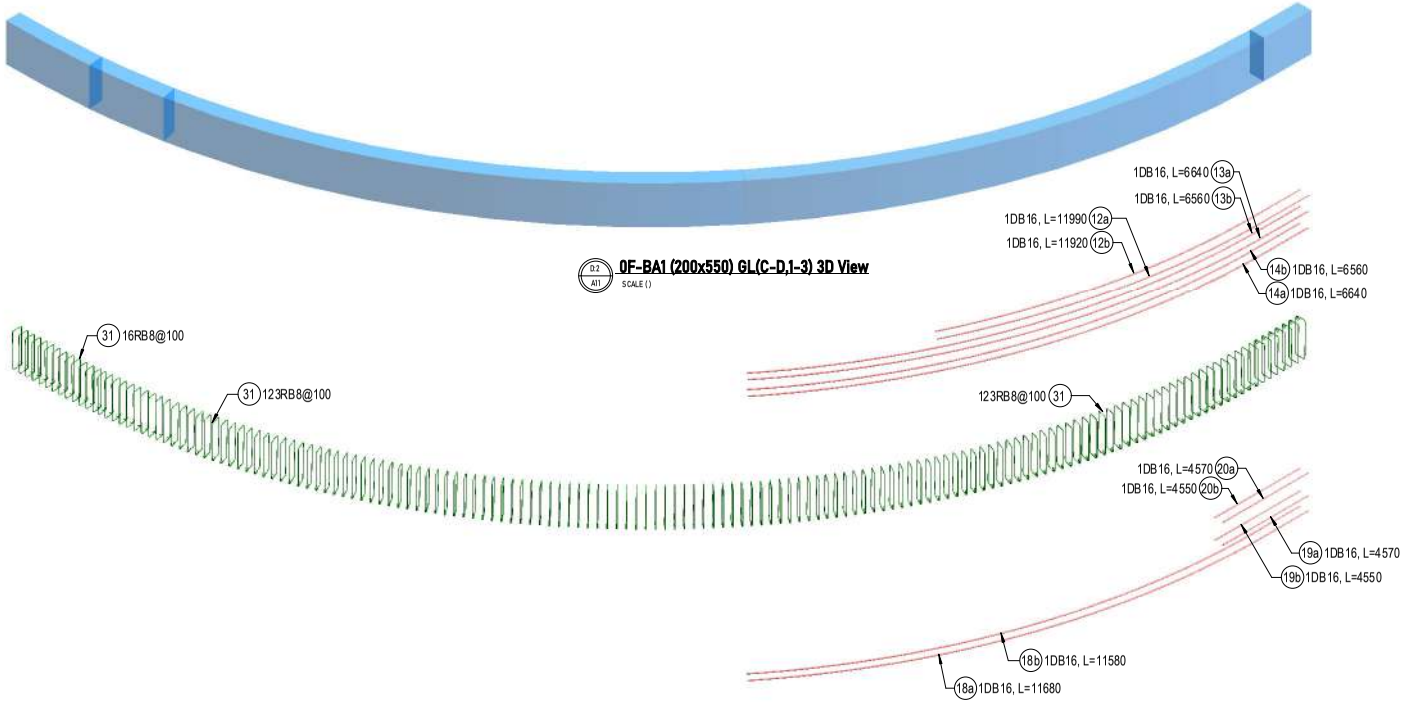
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
0F-BA8,BA9,BA10 Rebar Schedule	1/150
PAPER SIZE	A3
DRAWING NO.	A10
DATE	11/11/2023



D1 A11 **0F-BA1 (200x550) GL(A-C,1) 3D View**
SCALE ( )



D2 A11 **0F-BA1 (200x550) GL(C-D,1-3) 3D View**
SCALE ( )

PROJECT

OWNER

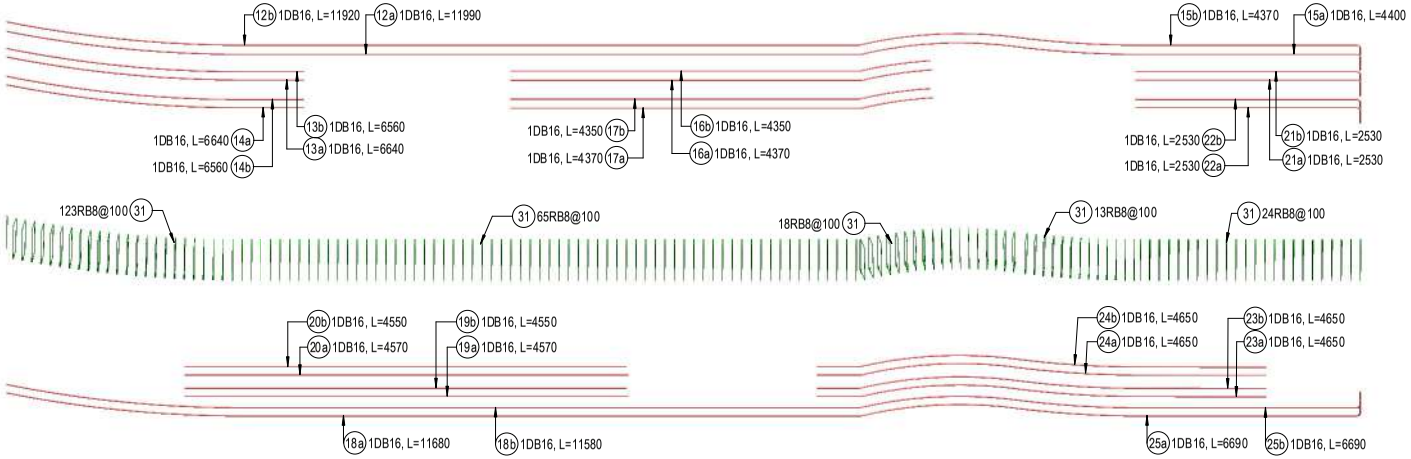
PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	

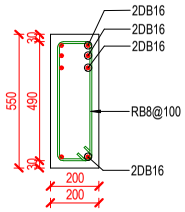
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

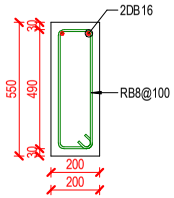
DRAWING TITLE	SCALE
0F-BA1 Detailing 01	1/150
PAPER SIZE	A3
DRAWING NO.	A11
DATE	11/11/2023

D1 / A12 **0F-BA1 (200x550) GL(D,3-5) 3D View**
SCALE ( )

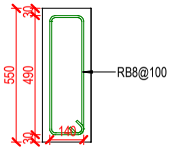




D2 / A12 **0F-BA1 200x550 Section at Support**
SCALE (1 : 20)



D3 / A12 **0F-BA1 200x550 Section at Mid Span**
SCALE (1 : 20)



D4 / A12 **0F-BA1 200x550 Curve Section**
SCALE (1 : 20)

PROJECT

OWNER

WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE 0F-BA1 Detailing 02	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A12
DATE	11/11/2023

0F-BA1 200x550 Rebar Schedule							
Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
1a	16	1	8.34 m	8.34 m	13.15 kg	13.15 kg	8340
1b	16	1	8.37 m	8.37 m	13.20 kg	13.20 kg	8370
2a	16	1	2.63 m	2.63 m	4.15 kg	4.15 kg	2630
2b	16	1	2.53 m	2.53 m	3.99 kg	3.99 kg	2530
3a	16	1	4.23 m	4.23 m	6.67 kg	6.67 kg	4230
3b	16	1	4.16 m	4.16 m	6.56 kg	6.56 kg	4160
4a	16	1	5.28 m	5.28 m	8.33 kg	8.33 kg	5280
4b	16	1	5.31 m	5.31 m	8.37 kg	8.37 kg	5310
5a	16	1	5.28 m	5.28 m	8.33 kg	8.33 kg	5280
5b	16	1	5.31 m	5.31 m	8.37 kg	8.37 kg	5310
6a	16	1	10.37 m	10.37 m	16.36 kg	16.36 kg	10370
6b	16	1	10.34 m	10.34 m	16.31 kg	16.31 kg	10340
7a	16	1	2.53 m	2.53 m	3.99 kg	3.99 kg	2530
7b	16	1	2.63 m	2.63 m	4.15 kg	4.15 kg	2630
8a	16	1	4.23 m	4.23 m	6.67 kg	6.67 kg	4230
8b	16	1	4.16 m	4.16 m	6.56 kg	6.56 kg	4160
12a	16	1	11.99 m	11.99 m	18.92 kg	18.92 kg	11990

0F-BA1 200x550 Rebar Schedule							
Bar Mark	Bar Dia	Quantity	Bar Length	Total Bar Length	Weight	Total Weight	Bending Detail
12b	16	1	11.92 m	11.92 m	18.81 kg	18.81 kg	11920
13a	16	1	6.64 m	6.64 m	10.47 kg	10.47 kg	6640
13b	16	1	6.56 m	6.56 m	10.35 kg	10.35 kg	6560
14a	16	1	6.64 m	6.64 m	10.47 kg	10.47 kg	6640
14b	16	1	6.56 m	6.56 m	10.35 kg	10.35 kg	6560
15a	16	1	4.40 m	4.40 m	6.94 kg	6.94 kg	4400
15b	16	1	4.37 m	4.37 m	6.90 kg	6.90 kg	4370
16a	16	1	4.37 m	4.37 m	6.89 kg	6.89 kg	4370
16b	16	1	4.35 m	4.35 m	6.86 kg	6.86 kg	4350
17a	16	1	4.37 m	4.37 m	6.89 kg	6.89 kg	4370
17b	16	1	4.35 m	4.35 m	6.86 kg	6.86 kg	4350
18a	16	1	11.68 m	11.68 m	18.42 kg	18.42 kg	11680
18b	16	1	11.58 m	11.58 m	18.26 kg	18.26 kg	11580
19a	16	1	4.57 m	4.57 m	7.21 kg	7.21 kg	4570
19b	16	1	4.55 m	4.55 m	7.17 kg	7.17 kg	4550
20a	16	1	4.57 m	4.57 m	7.21 kg	7.21 kg	4570
20b	16	1	4.55 m	4.55 m	7.17 kg	7.17 kg	4550

PROJECT

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

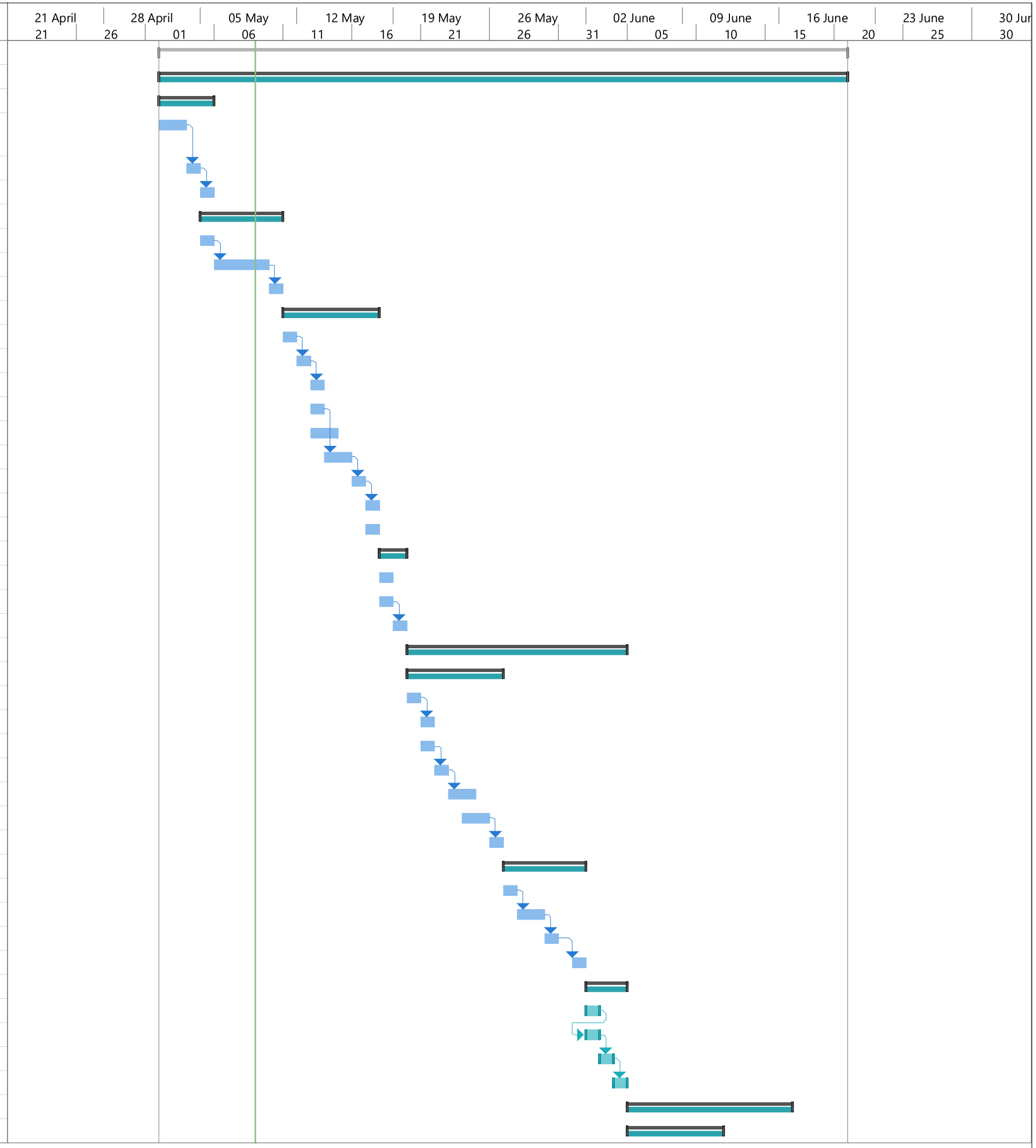
REVISIONS	DATE

WORKING DRAWING
FOR CONSTRUCTION

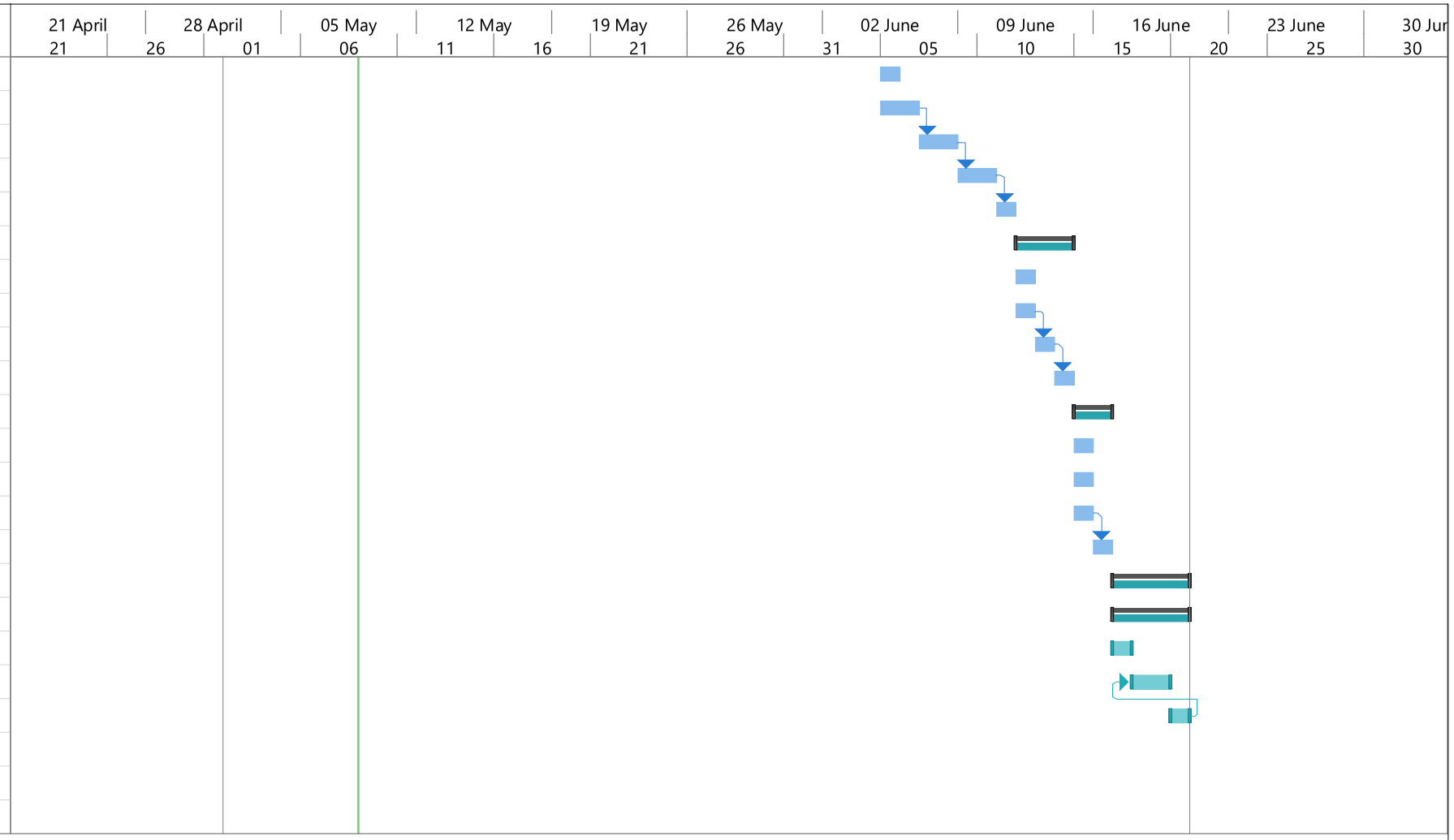
DRAWING TITLE	SCALE
0F-BA1 Rebar Schedule	1/150
PAPER SIZE	A3
DRAWING NO.	A13
DATE	11/11/2023

Project Planning
Schedule
(Project: LUMI Toys & Cafe)

ID	ID	Task Name	Duration	Start	Finish
0	**0**	**LUMI**	**49 days**	**Fri 02/05/25**	**Fri 20/06/25**
1	**1**	**STRUCTURE WORK**	**49 days**	**Fri 02/05/25**	**Fri 20/06/25**
2	**2**	**Site Preparation**	**4 days**	**Fri 02/05/25**	**Mon 05/05/25**
3	3	Temporary site fencing & Surveying work	2 days	Fri 02/05/25	Sat 03/05/25
4	4	Temporary worker camp, toil	1 day	Sun 04/05/25	Sun 04/05/25
5	5	Surveying works	1 day	Mon 05/05/25	Mon 05/05/25
6	**6**	**Pilling Works**	**6 days**	**Mon 05/05/25**	**Sat 10/05/25**
7	7	Mobilization and Equipment	1 day	Mon 05/05/25	Mon 05/05/25
8	8	Pile Installation	4 days	Tue 06/05/25	Fri 09/05/25
9	9	Remove head of Pile	1 day	Sat 10/05/25	Sat 10/05/25
10	**10**	**Pilecap Works**	**7 days**	**Sun 11/05/25**	**Sat 17/05/25**
11	11	Soil Excavation	1 day	Sun 11/05/25	Sun 11/05/25
12	12	Pile Cutting	1 day	Mon 12/05/25	Mon 12/05/25
13	13	Soil and Stone Compaction	1 day	Tue 13/05/25	Tue 13/05/25
14	14	Lean Concrete	1 day	Tue 13/05/25	Tue 13/05/25
15	15	Bar installation	2 days	Tue 13/05/25	Wed 14/05/25
16	16	Formwork Installation	2 days	Wed 14/05/25	Thu 15/05/25
17	17	Concrete Casting	1 day	Fri 16/05/25	Fri 16/05/25
18	18	Formwork Dismantle	1 day	Sat 17/05/25	Sat 17/05/25
19	19	Soil Backfill	1 day	Sat 17/05/25	Sat 17/05/25
20	**20**	**Stump Column Works**	**2 days**	**Sun 18/05/25**	**Mon 19/05/25**
21	21	Bar installation	1 day	Sun 18/05/25	Sun 18/05/25
22	22	Formwork installation	1 day	Sun 18/05/25	Sun 18/05/25
23	23	Curring concrete	1 day	Mon 19/05/25	Mon 19/05/25
24	**24**	**GF Structure Works**	**15 days**	**Tue 20/05/25**	**Wed 04/06/25**
25	**25**	**Ground Beam Works**	**7 days**	**Tue 20/05/25**	**Mon 26/05/25**
26	26	Soil excavation	1 day	Tue 20/05/25	Tue 20/05/25
27	27	Stone Backfill	1 day	Wed 21/05/25	Wed 21/05/25
28	28	Lean concrete	1 day	Wed 21/05/25	Wed 21/05/25
29	29	Formwork installation	1 day	Thu 22/05/25	Thu 22/05/25
30	30	Bar cutting	2 days	Fri 23/05/25	Sat 24/05/25
31	31	Bar installation	2 days	Sat 24/05/25	Sun 25/05/25
32	32	Curring concrete	1 day	Mon 26/05/25	Mon 26/05/25
33	**33**	**Ground Slab**	**5 days**	**Tue 27/05/25**	**Sun 01/06/25**
34	34	Sand and Stone backfill	1 day	Tue 27/05/25	Tue 27/05/25
35	35	Bar cutting	2 days	Wed 28/05/25	Thu 29/05/25
36	36	Bar installation	1 day	Fri 30/05/25	Fri 30/05/25
37	37	Curring concrete	1 day	Sun 01/06/25	Sun 01/06/25
38	**38**	**Column GF Works**	**3 days**	**Mon 02/06/25**	**Wed 04/06/25**
39	39	Bar cutting	1 day	Mon 02/06/25	Mon 02/06/25
40	40	Bar installation	1 day	Mon 02/06/25	Mon 02/06/25
41	41	Formwork instalation	1 day	Tue 03/06/25	Tue 03/06/25
42	42	Curring concrete	1 day	Wed 04/06/25	Wed 04/06/25
43	**43**	**1F Structure Works**	**12 days**	**Thu 05/06/25**	**Mon 16/06/25**
44	**44**	**Beam & Slab Works 1F**	**7 days**	**Thu 05/06/25**	**Wed 11/06/25**



ID	ID	Task Name	Duration	Start	Finish
45	45	Bar cutting	1 day	Thu 05/06/25	Thu 05/06/25
46	46	Bar installation	2 days	Thu 05/06/25	Fri 06/06/25
47	47	Formwork installation	2 days	Sat 07/06/25	Sun 08/06/25
48	48	Plank slab installation	2 days	Mon 09/06/25	Tue 10/06/25
49	49	Curring concrete	1 day	Wed 11/06/25	Wed 11/06/25
50	**50**	**Column 1F Works**	**3 days**	**Thu 12/06/25**	**Sat 14/06/25**
51	51	Bar cutting	1 day	Thu 12/06/25	Thu 12/06/25
52	52	Bar installation	1 day	Thu 12/06/25	Thu 12/06/25
53	53	Formwork installation	1 day	Fri 13/06/25	Fri 13/06/25
54	54	Curring concrete	1 day	Sat 14/06/25	Sat 14/06/25
55	**55**	**Staircase GF works**	**2 days**	**Sun 15/06/25**	**Mon 16/06/25**
56	56	Bar cutting	1 day	Sun 15/06/25	Sun 15/06/25
57	57	Bar installation	1 day	Sun 15/06/25	Sun 15/06/25
58	58	Formwork installation	1 day	Sun 15/06/25	Sun 15/06/25
59	59	Curring concrete	1 day	Mon 16/06/25	Mon 16/06/25
60	**60**	**RF Structure Works**	**4 days**	**Tue 17/06/25**	**Fri 20/06/25**
61	**61**	**Steel Frame works**	**4 days**	**Tue 17/06/25**	**Fri 20/06/25**
62	62	Bar cutting	1 day	Tue 17/06/25	Tue 17/06/25
63	63	Bar installation	2 days	Wed 18/06/25	Thu 19/06/25
64	64	Zinc installation	1 day	Fri 20/06/25	Fri 20/06/25
65	65				
66	66				
67	67				



Project Megabelle Clinic (2021 – 2023)

Construction Manager

- Prepared method statements for pile caps, beams, columns, and slabs
- Developed safety protection plans (internal and external systems)
- Issued construction drawings and coordinated revisions
- Solved on-site construction challenges to maintain progress
- Led daily site operations and supervised construction teams
- Prepared daily, weekly, and monthly work plans
- Trained and supervised engineering interns

Project Name: Megabelle Clinic

Location: St. 566, Sangkat Boeung Kok, Khan Toul Kork, Phnom Penh, Cambodia

Google Map: https://maps.app.goo.gl/9cHo4mCySea6snuM8

Trained and supervised engineering interns

- Guided student interns on construction site.

- Managing of casting Concrete activities.

- Teaching student about Surveying works.

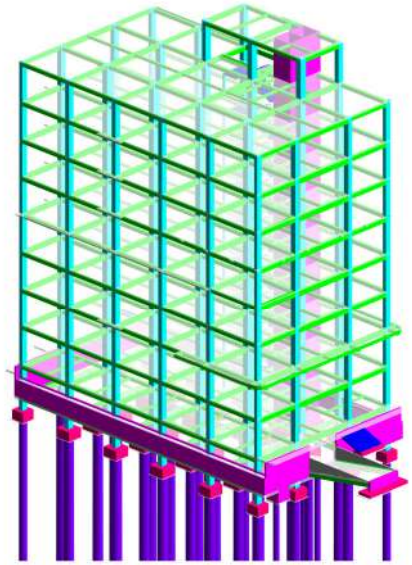
Managing works at site construction

Technical Drawing
Using BIM
(Project: Megabelle Clinic)

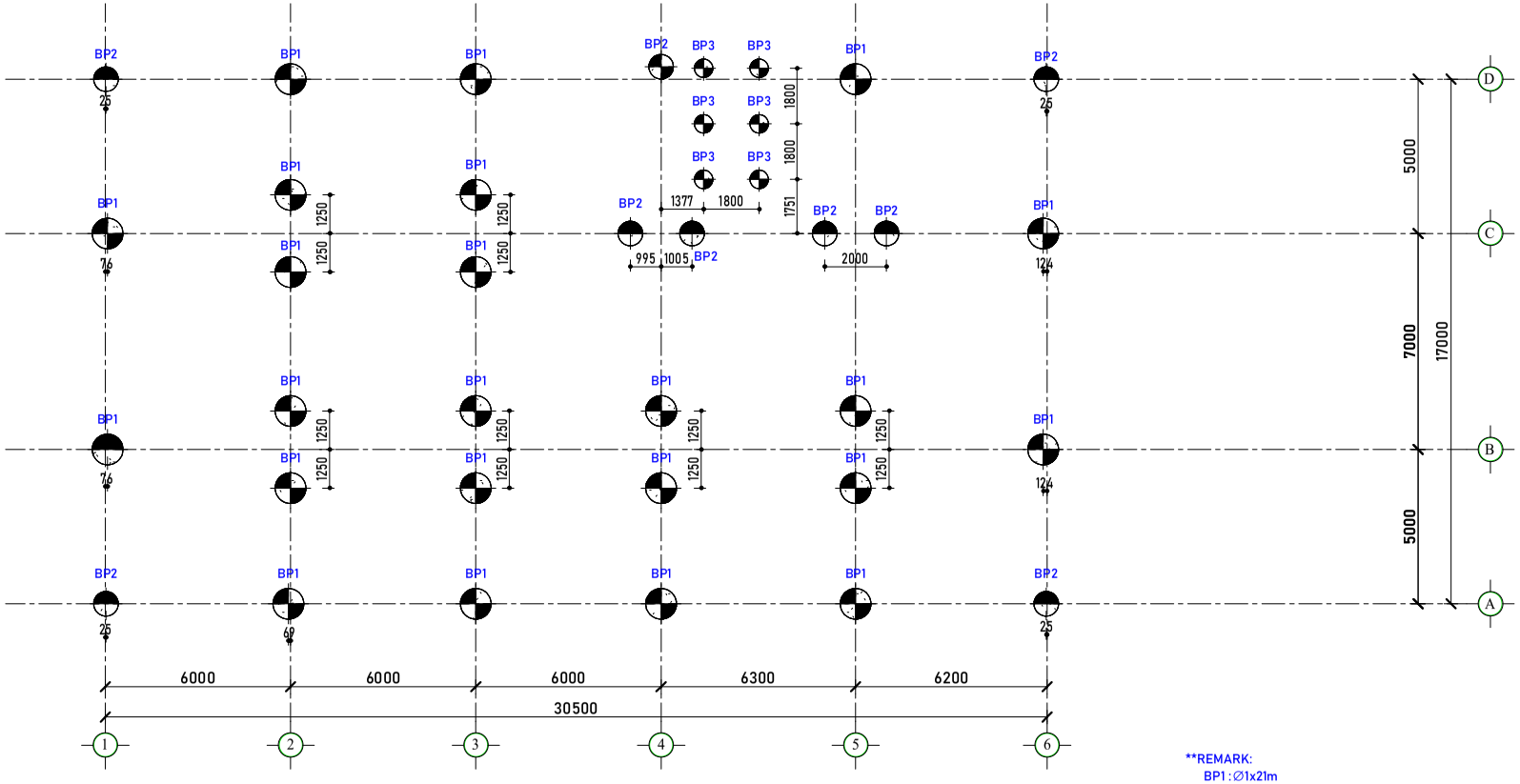
ព្រះរាជាណាចក្រកម្ពុជា

ជាតិ សាសនា ព្រះមហាក្សត្រ

គំនូរបង្ហាញគ្រឿងផ្ទុំសំណង់

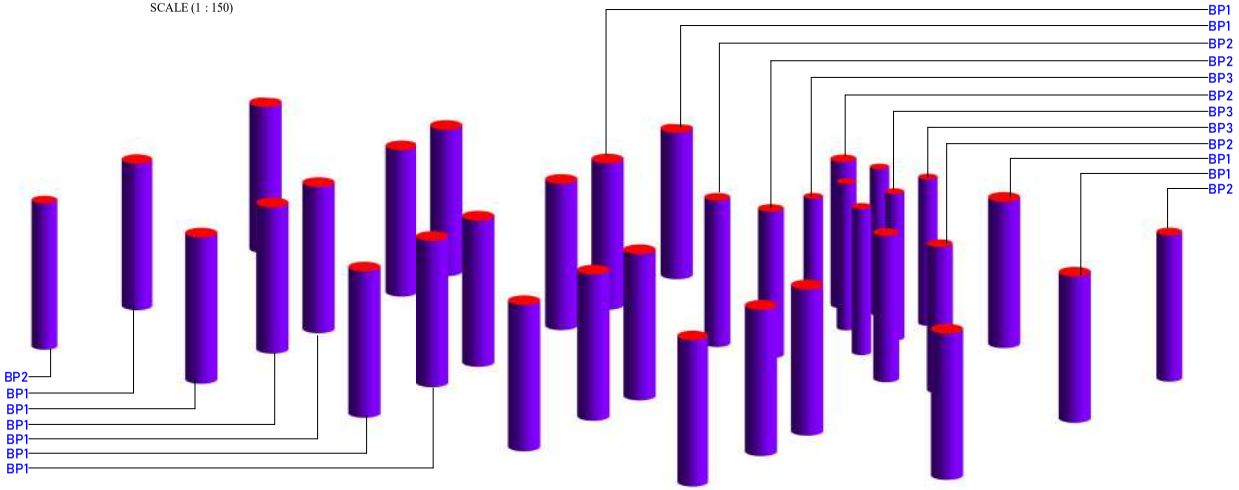


PHNOM PENH ,2025



BOREPILE LAYOUT PLAN

SCALE (1 : 150)



**REMARK:
BP1 : ∅1x21m
BP2 : ∅0.8x21m
BP3 : ∅0.6x15m

BORE PILE Schedule				
Type	Q'ty	Width	Length	Volume
BP1	23	1.0 m	21 m	379.34 m³
BP2	9	0.8 m	21 m	95.00 m³
BP3	6	0.6 m	15 m	25.45 m³
TOTAL: 38	38			499.79 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

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CHIEF SURVEY

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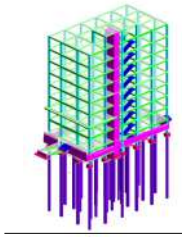
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

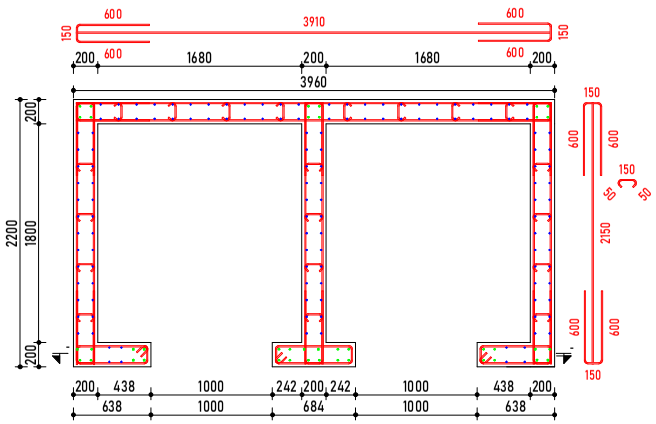
SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
Bored Pile	1/150
PAPER SIZE	A3
DRAWING NO.	A101
DATE	19/02/2025



Core Wall Reinforcement of Detailing

SCALE (1 : 40)

1 ST Stair Rebar Schedule Copy 1						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	10 mm	32	3.91 m	125.12 m	77.10 kg	3910
2	10 mm	129	1.31 m	168.80 m	104.02 kg	600 150 600
3	12 mm	100	3.15 m	315.00 m	279.52 kg	3150
4	16 mm	13	4.22 m	54.80 m	86.44 kg	4215
5	16 mm	17	3.58 m	60.78 m	95.87 kg	3575
6	10 mm	120	0.25 m	30.00 m	18.49 kg	50 150 50
7	10 mm	32	1.59 m	50.93 m	31.38 kg	588 150 89 89 150 588
8	10 mm	16	1.68 m	26.94 m	16.60 kg	634 150 89 89 150 634
9	10 mm	64	2.15 m	137.61 m	84.80 kg	2150
10	12 mm	26	2.95 m	76.70 m	68.06 kg	2950
11	12 mm	4	2.96 m	11.82 m	10.49 kg	2955
12	16 mm	4	4.18 m	16.70 m	26.34 kg	4175
13	12 mm	4	3.58 m	14.30 m	12.69 kg	3575
14	16 mm	3	3.63 m	10.90 m	17.20 kg	640 150 2838
16	16 mm	3	3.58 m	10.73 m	16.92 kg	640 150 2781
17	16 mm	2	9.29 m	18.57 m	29.30 kg	240 8872 240
18	10 mm	59	1.00 m	58.74 m	36.20 kg	120 340 89 89 120 320
19	16 mm	2	9.29 m	18.57 m	29.30 kg	240 8872 240
20	10 mm	32	2.16 m	68.96 m	42.50 kg	2155
TOTAl : 96		662		1275.96 m	1083.22 kg	

PROJECT: MEGABELLE

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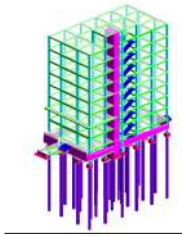
ELECTRICAL ENGINEERS

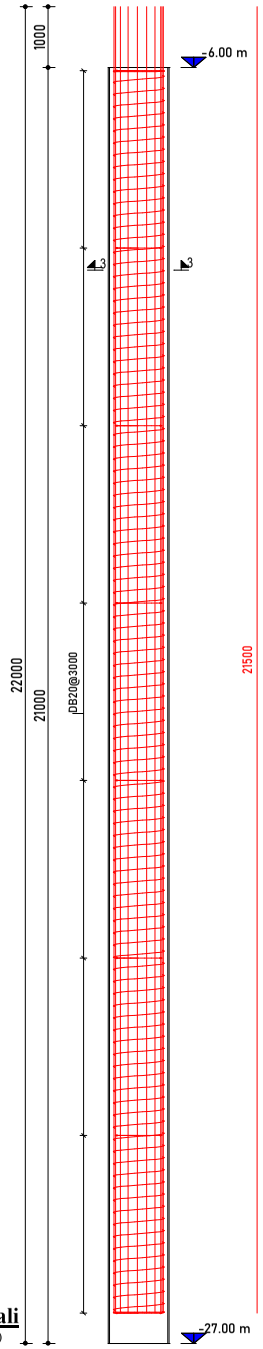
SANITARY ENGINEERS

REVISIONS	DATE

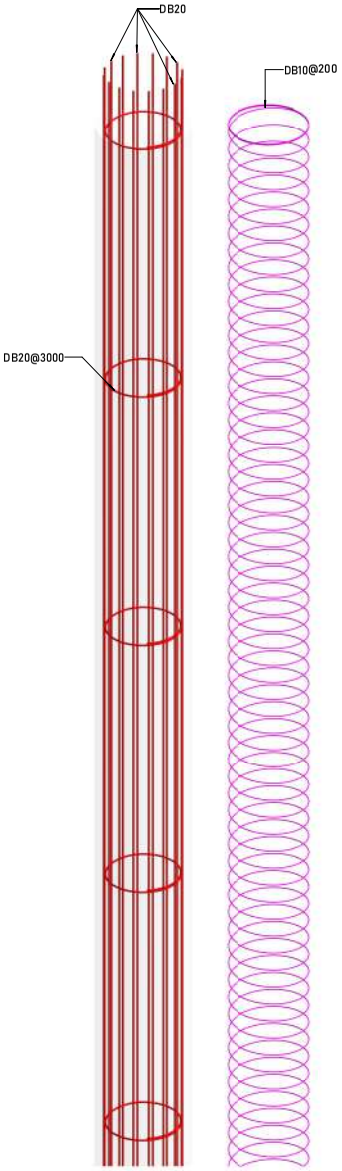


WORKING DRAWING
FOR CONSTRUCTION

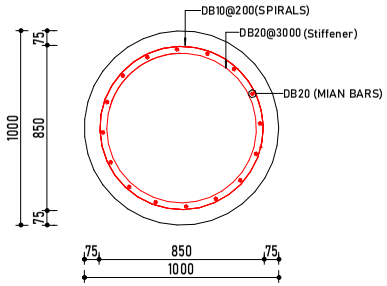
DRAWING TITLE	SCALE
Core Wall	1/150
PAPER SIZE	A3
DRAWING NO.	A101 (1)
DATE	19/02/2025



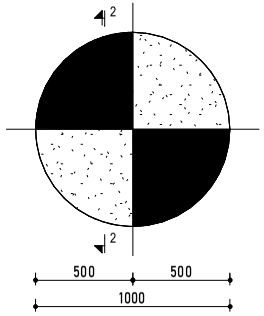
BP1 Detali
SCALE (1 : 80)



3D BP1
SCALE ( )



SECTION (3-3)
SCALE (1 : 25)



Detail Bore Pile 1.0mx21m
SCALE (1 : 25)

BP1 Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Wieght	Shape
1	10 mm	1	279.90 m	279.90 m	172.48 kg	850 200 20870
4	20 mm	8	2.92 m	23.35 m	57.56 kg	500
6	20 mm	16	21.50 m	344.00 m	847.93 kg	21500
TOTAL: 18		25		647.25 m	1077.97 kg	

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

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PROJECT DIRECTOR

CHIEF SURVEY

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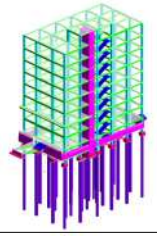
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

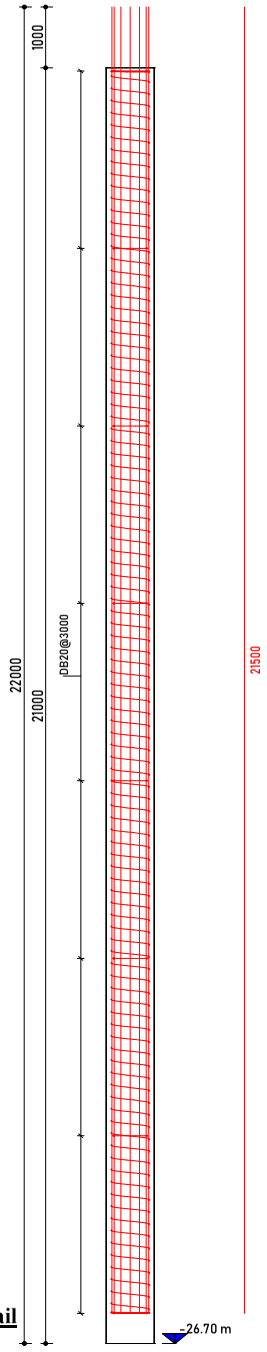
SANITARY ENGINEERS

REVISIONS	DATE

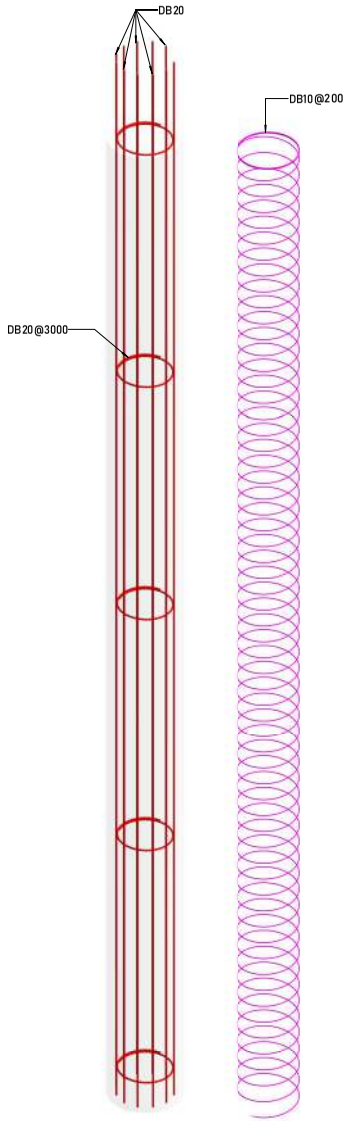


WORKING DRAWING
FOR CONSTRUCTION

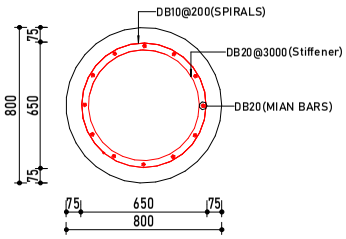
DRAWING TITLE	SCALE
BP1 Detail	1/150
PAPER SIZE	A3
DRAWING NO.	A101.1
DATE	19/02/2025



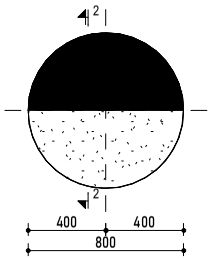
BP2 Detail
SCALE (1 : 80)



3D BP2
SCALE ( )



SECTION (3-3)
SCALE (1 : 25)



Detail Bore Pile 0.8mx21m
SCALE (1 : 25)

BP2 Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	10 mm	1	213.58 m	213.58 m	131.61 kg	650 200 20@70
3	20 mm	8	2.29 m	18.33 m	45.17 kg	500
4	20 mm	12	21.50 m	258.00 m	635.94 kg	21500
TOTAL: 14		21		489.91 m	812.73 kg	

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
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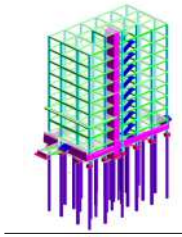
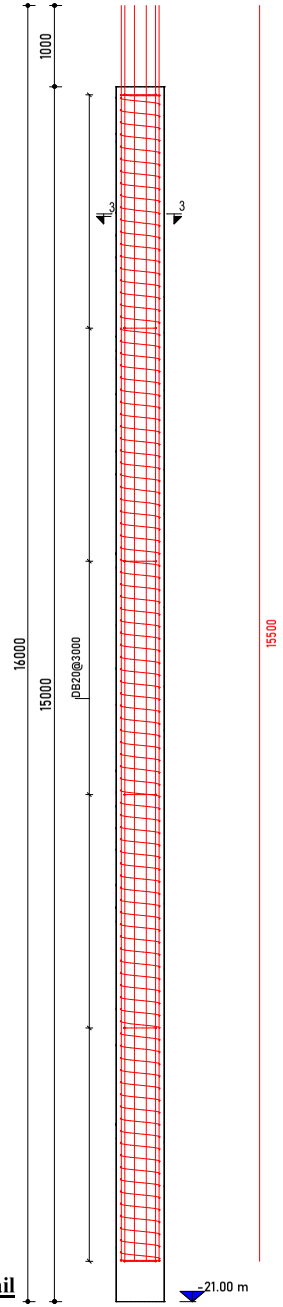
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

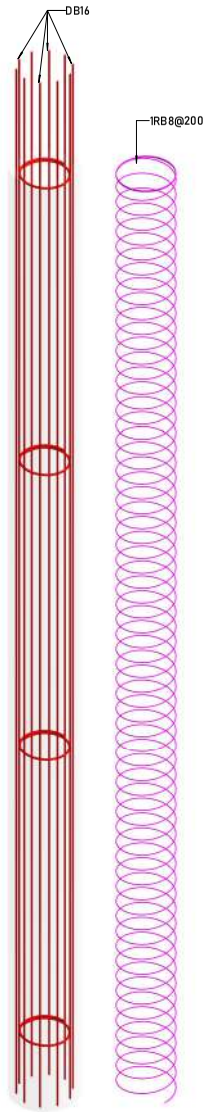


WORKING DRAWING
FOR CONSTRUCTION

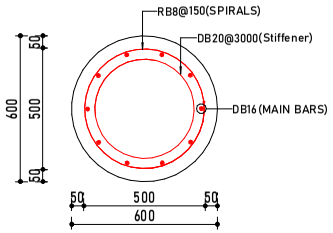
DRAWING TITLE BP2 Detail	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A101.2
DATE	19/02/2025



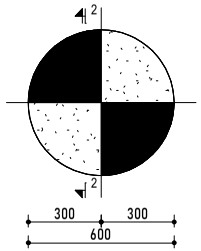
BP3 Detail
SCALE (1 : 60)



3D BP3
SCALE ( )



SECTION (3-3)
SCALE (1 : 20)



Detail Bore Pile 0.6mx15m
SCALE (1 : 20)

BP3 Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Bending Detail
1	8 mm	1	154.41 m	154.41 m	60.90 kg	500 150 14848
3	20 mm	6	1.68 m	10.09 m	24.87 kg	400
4	16 mm	10	15.50 m	155.00 m	244.52 kg	15500
TOTAL: 12		17		319.50 m	330.29 kg	

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

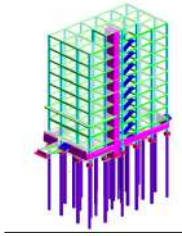
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

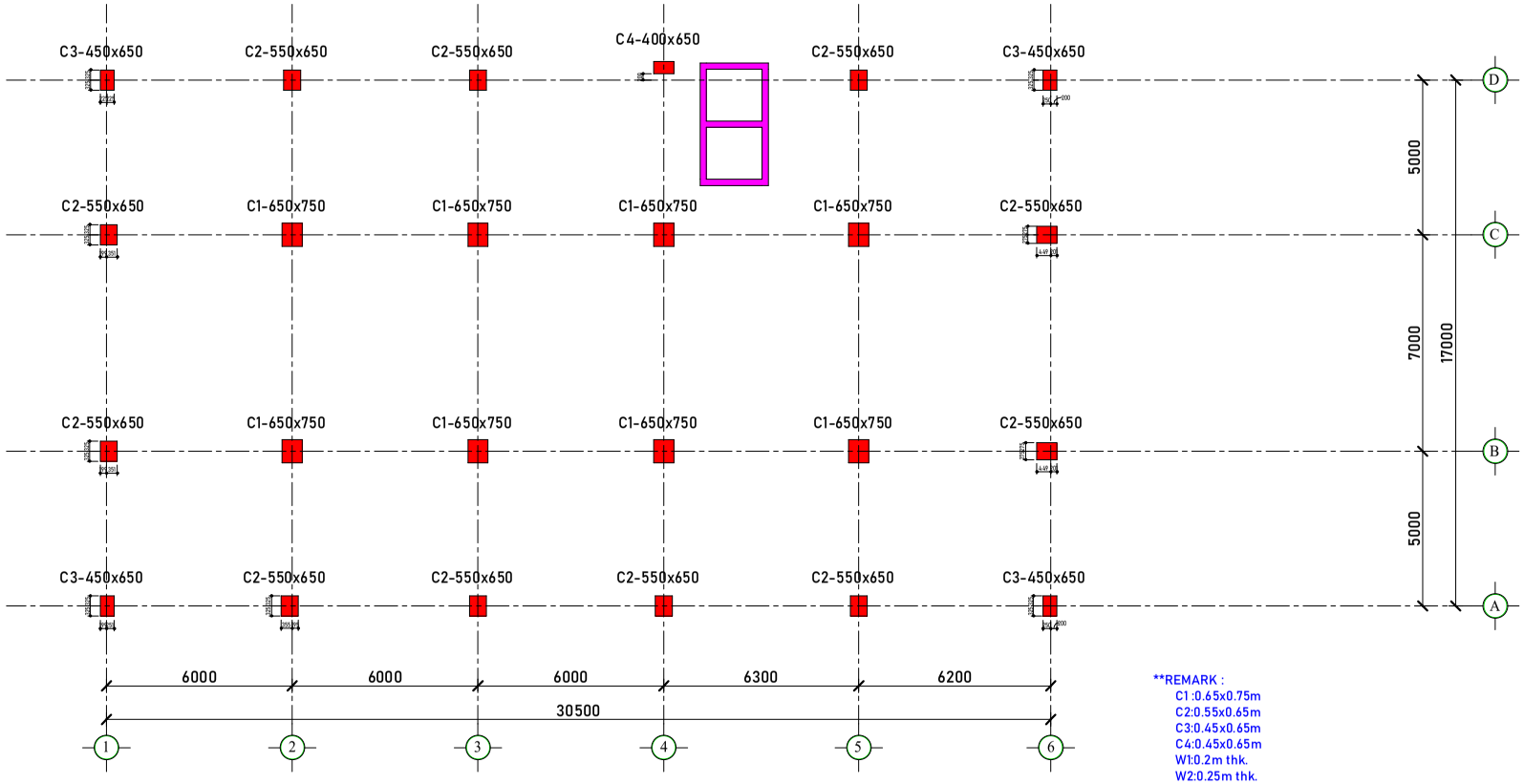
SANITARY ENGINEERS

REVISIONS	DATE



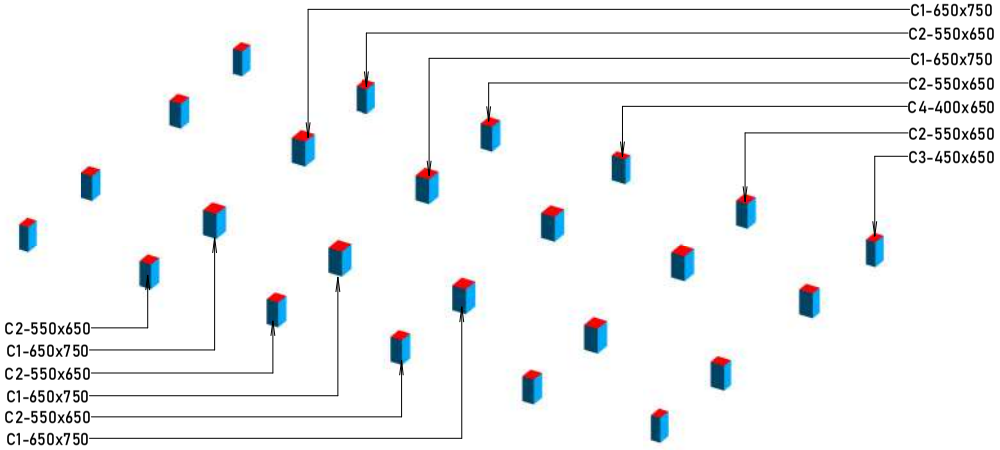
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
BP3 Detail	1/150
PAPER SIZE	A3
DRAWING NO.	A101.3
DATE	19/02/2025



STUMP COLUMN LAYOUT PLAN

SCALE (1 : 150)



**REMARK :
C1 :0.65x0.75m
C2:0.55x0.65m
C3:0.45x0.65m
C4:0.45x0.65m
W1:0.2m thk.
W2:0.25m thk.

Structural Stump Column Schedule		
Type	Q'ty	Volume
C1-650x750	8	5.85 m³
C2-550x650	11	5.83 m³
C3-450x650	4	1.76 m³
C4-400x650	1	0.39 m³
TOTAL: 24	24	13.82 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF **35MPa** (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

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PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
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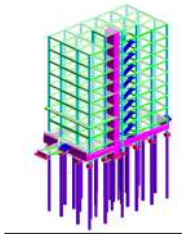
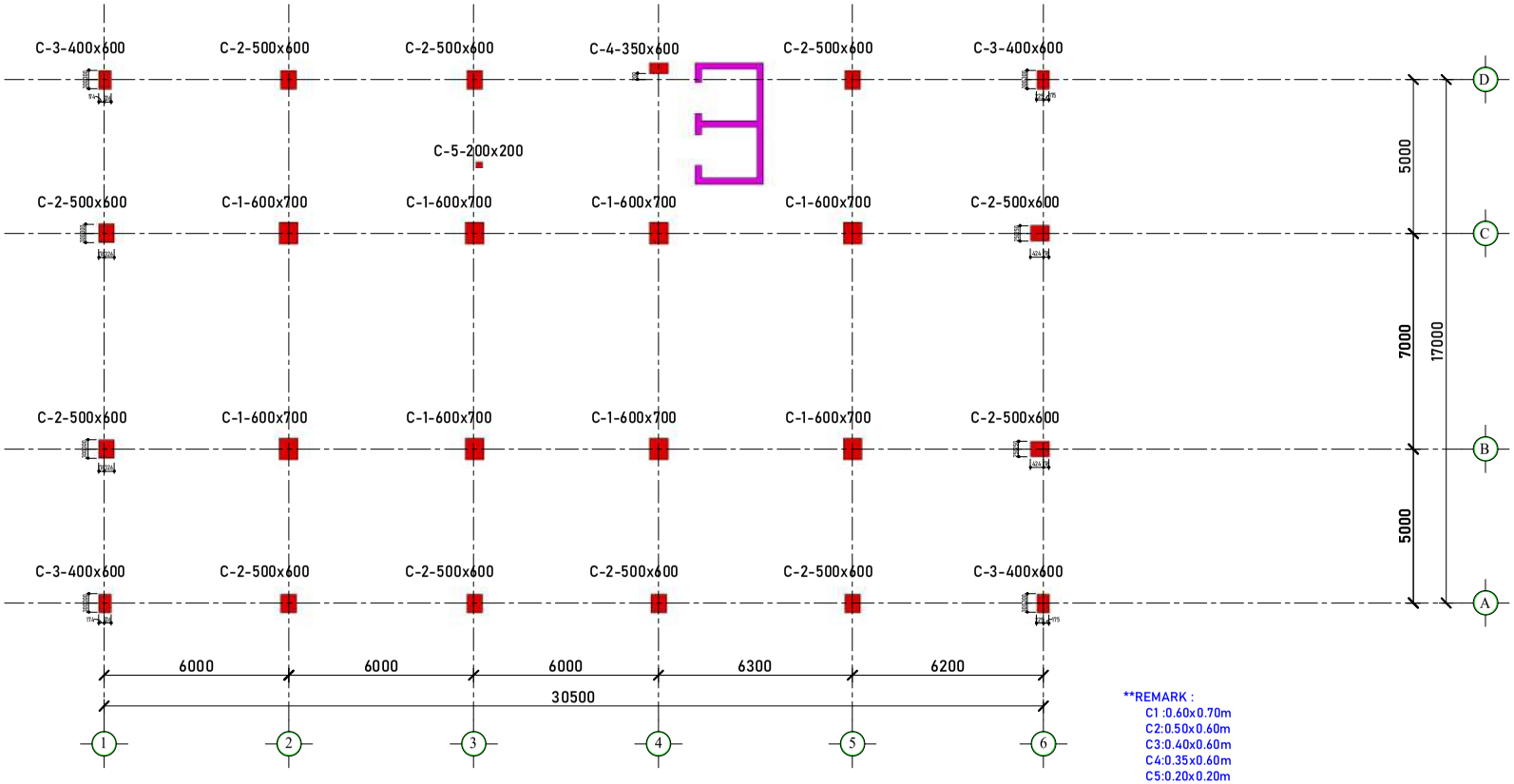
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

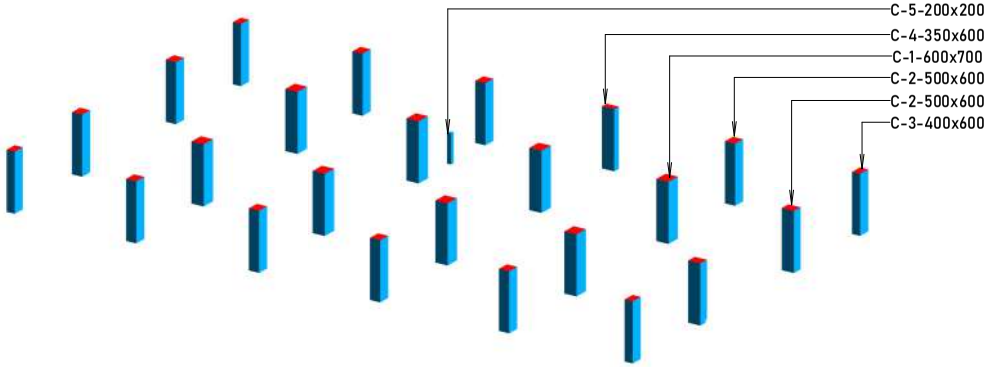
DRAWING TITLE Stump Column	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A102
DATE	19/02/2025



BASEMENT COLUMN LAYOUT

SCALE (1 : 150)

**REMARK :
C1 :0.60x0.70m
C2:0.50x0.60m
C3:0.40x0.60m
C4:0.35x0.60m
C5:0.20x0.20m
W1:0.2m thk.
W2:0.25m thk.



Structural BS Column Schedule		
Type	Q'ty	Volume
C-1-600x700	8	10.75 m³
C-2-500x600	11	10.55 m³
C-3-400x600	5	3.84 m³
C-4-350x600	1	0.67 m³
C-5-200x200	1	0.06 m³
TOTAL: 26	26	25.88 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
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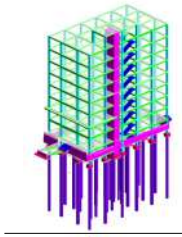
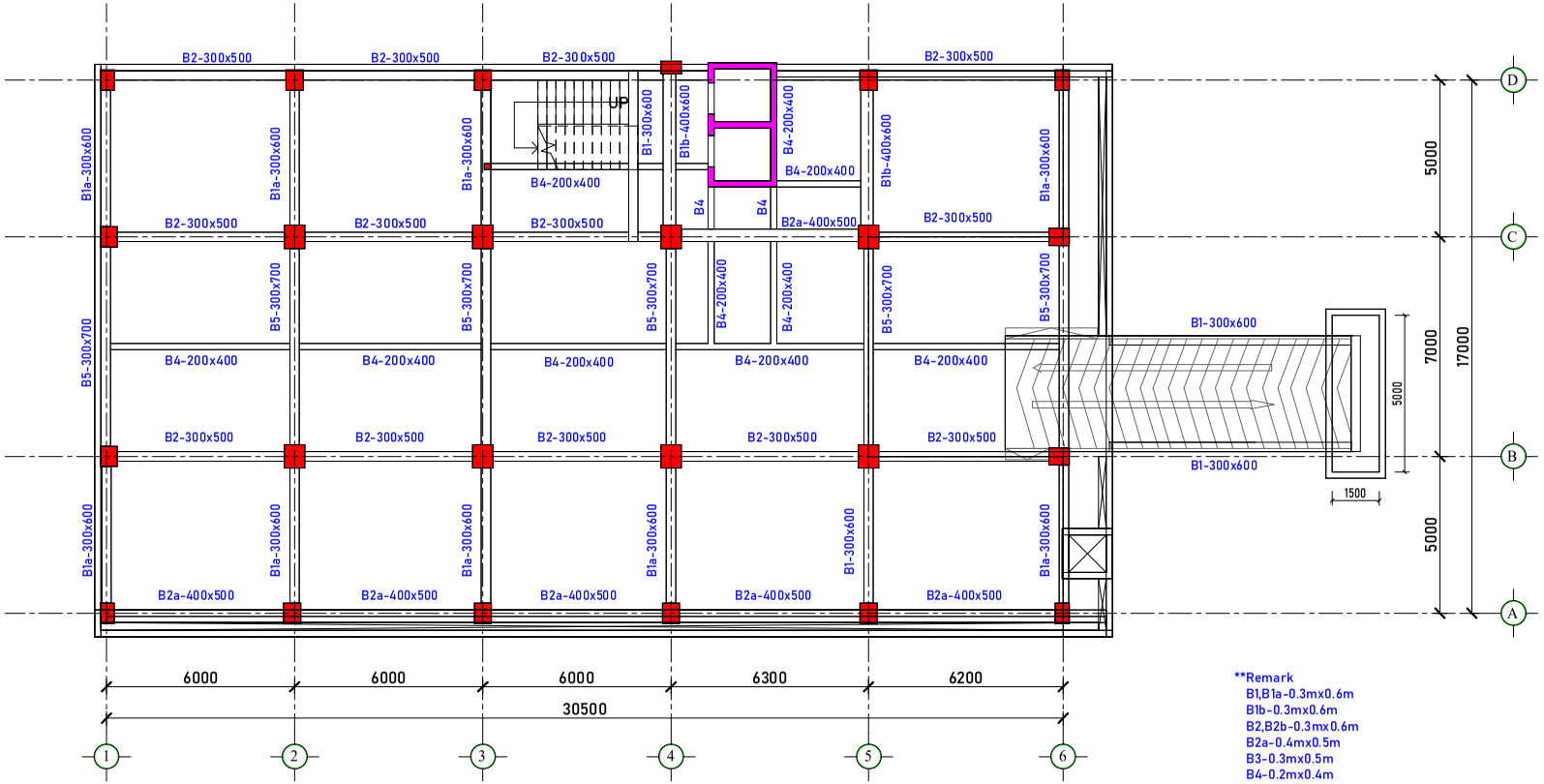
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Basement Column	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A102.1
DATE	19/02/2025

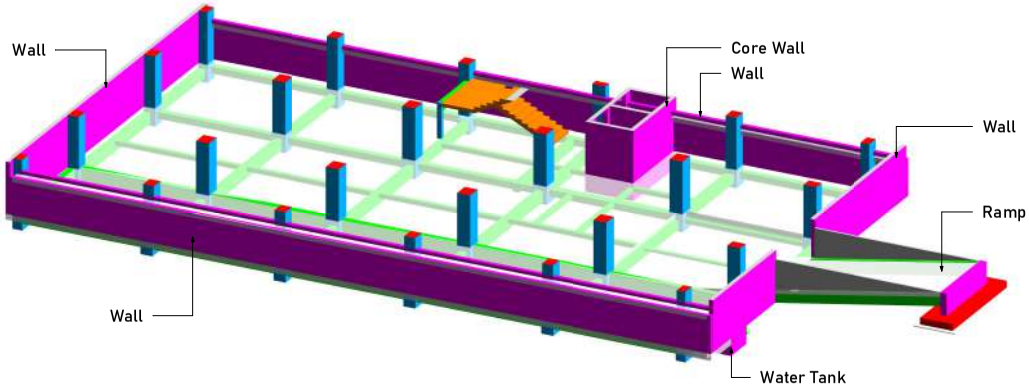


BASEMENT BEAM LAYOUT FLOOR

SCALE (1 : 150)

**Remark

B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m



Structural Framing BS Schedule		
Type	Q'ty	Volume
B1-300x600	5	7.83 m³
B1a-300x600	10	5.73 m³
B1b-400x600	2	1.46 m³
B2-300x500	5	4.16 m³
B2a-400x500	2	6.35 m³
B4-200x400	9	1.93 m³
B5-300x700	6	5.38 m³
TOTAl: 39	39	32.84 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

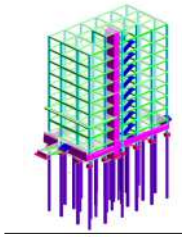
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

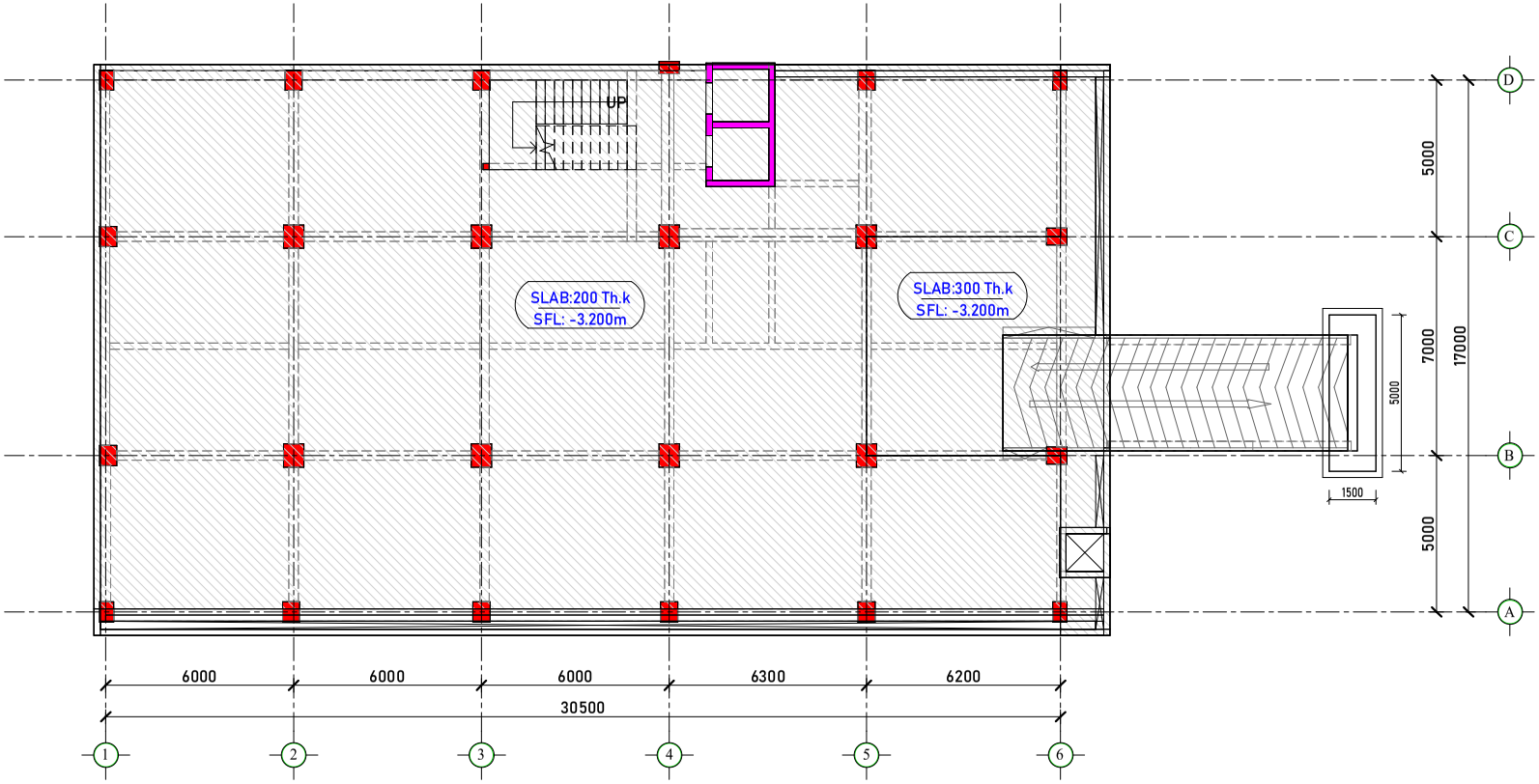
SANITARY ENGINEERS

REVISIONS	DATE



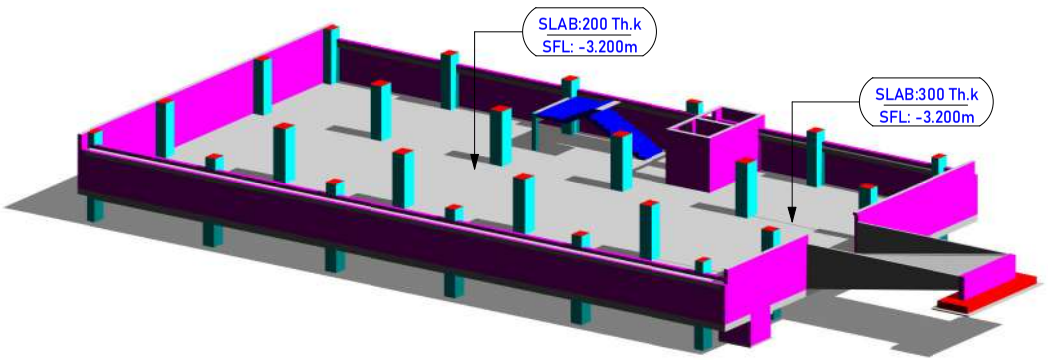
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
BS	1/150
PAPER SIZE	A3
DRAWING NO.	A103
DATE	19/02/2025



BASEMENT SLAB LAYOUT PLAN

SCALE (1 : 150)



BS Slab Schedule		
Type	Q'ty	Volume
Lean 50mm	1	0.51 m³
RC WALL 200mm	3	6.55 m³
Slab 200	4	115.84 m³
Slab 250	1	6.46 m³
Slab 300	1	21.11 m³
TOTAL: 10		150.47 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

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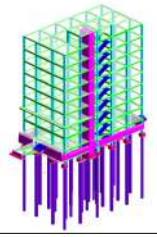
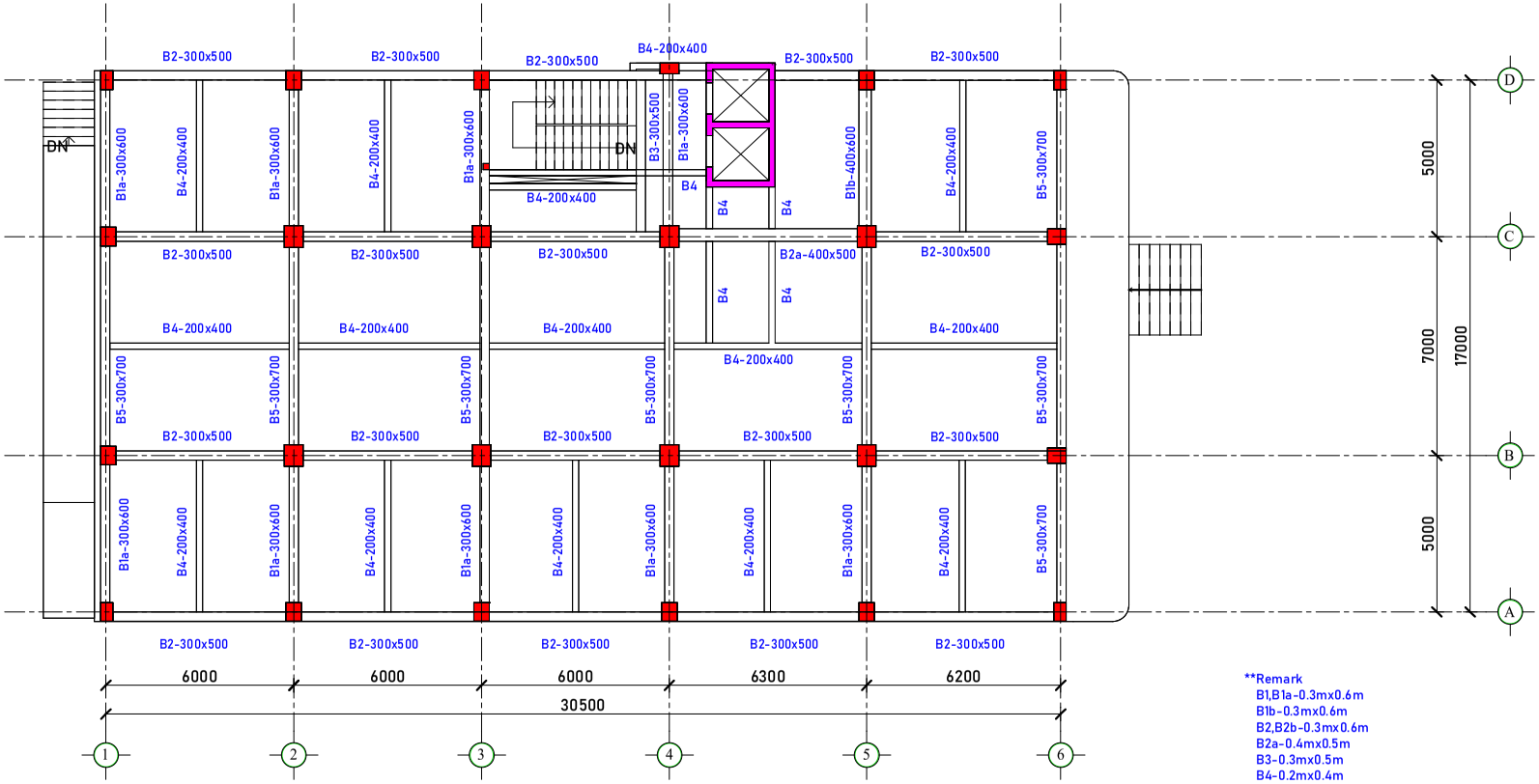
PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



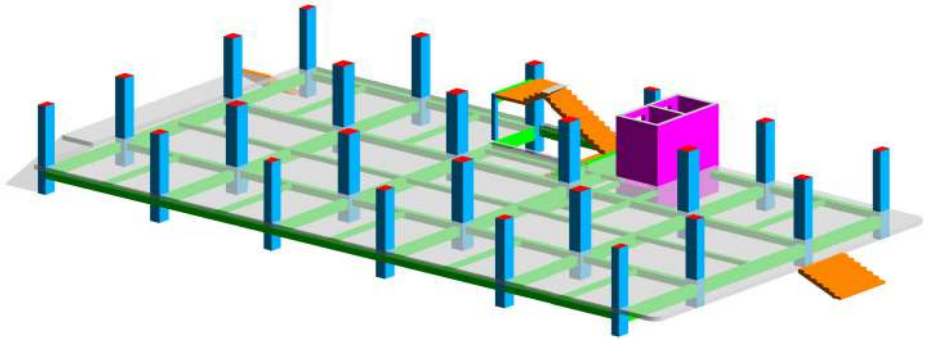
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE BS Slab Floor	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A103.1
DATE	19/02/2025



GROUND FLOOR BEAM LAYOUT PLAN

SCALE (1 : 150)



**Remark

B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m

Structural Framing GF Schedule		
Type	Q'ty	Volume
B1a-300x600	9	4.77 m³
B1b-400x600	1	0.70 m³
B2-300x500	6	9.51 m³
B2a-400x500	1	0.68 m³
B3-300x500	1	0.70 m³
B4-200x400	17	4.23 m³
B5-300x700	6	7.00 m³
TOTAL: 41	41	27.60 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

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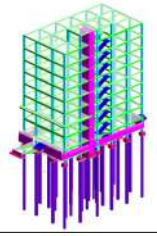
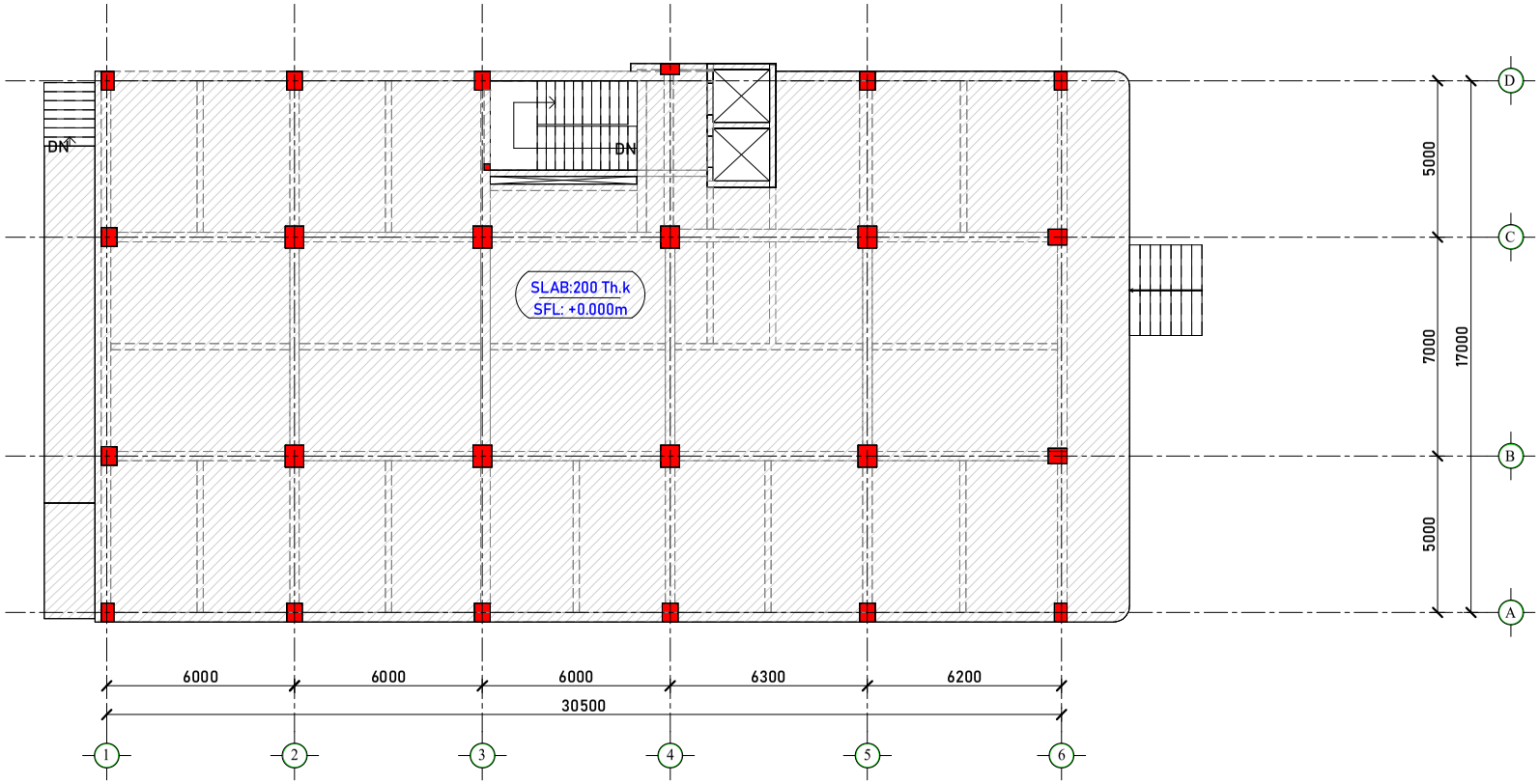


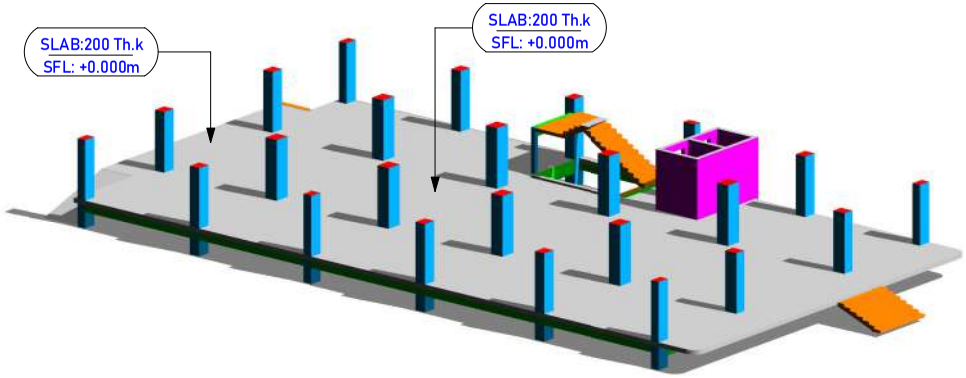
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
GF	1/150
PAPER SIZE	A3
DRAWING NO.	A104
DATE	19/02/2025



GROUND FLOOR SLAB LAYOUT PLAN

SCALE (1 : 150)



GF Slab Schedule		
Type	Q'ty	Volume
Slab 200	3	117.39 m³
TOTAL: 3		117.39 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

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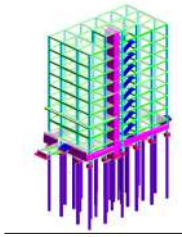
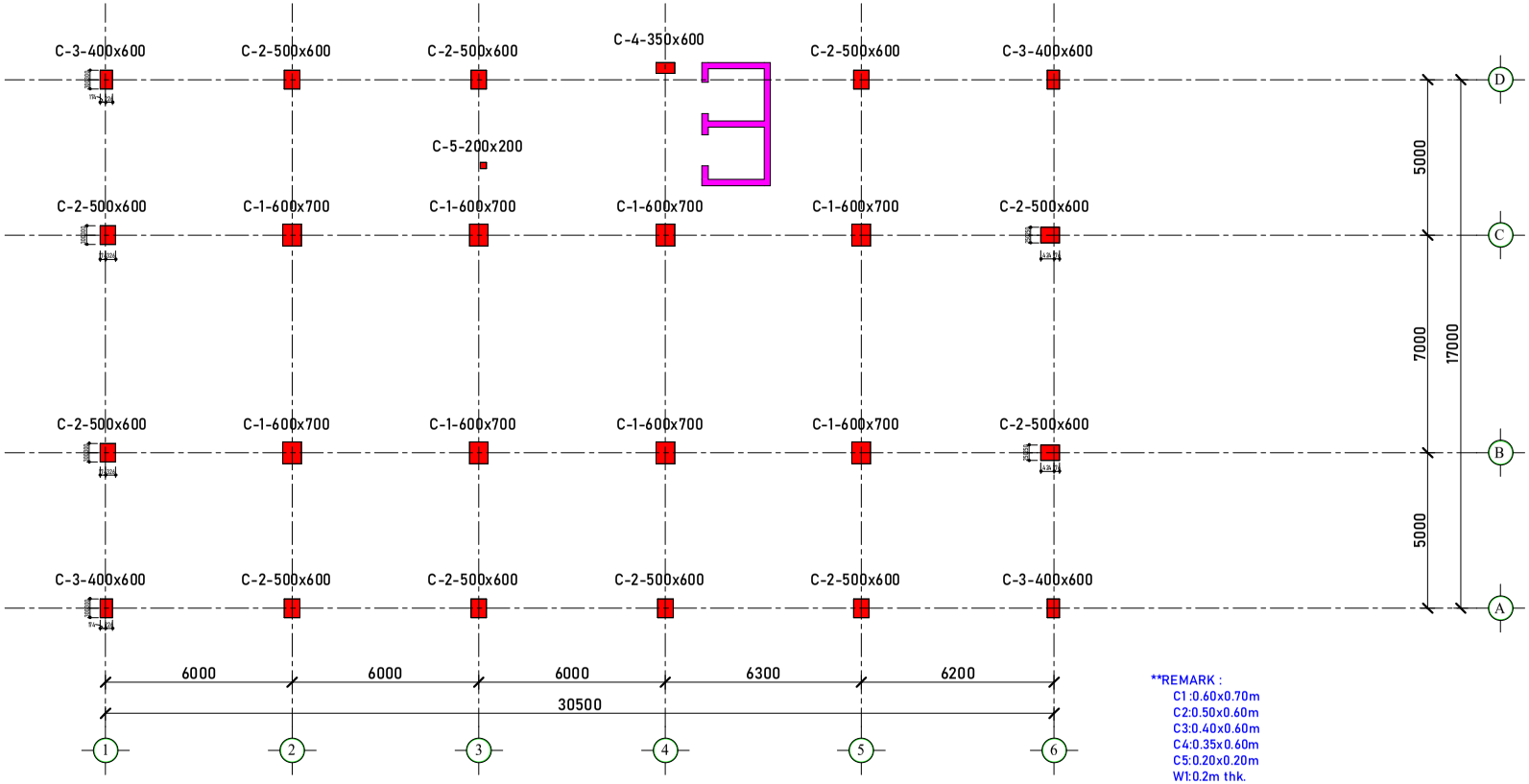


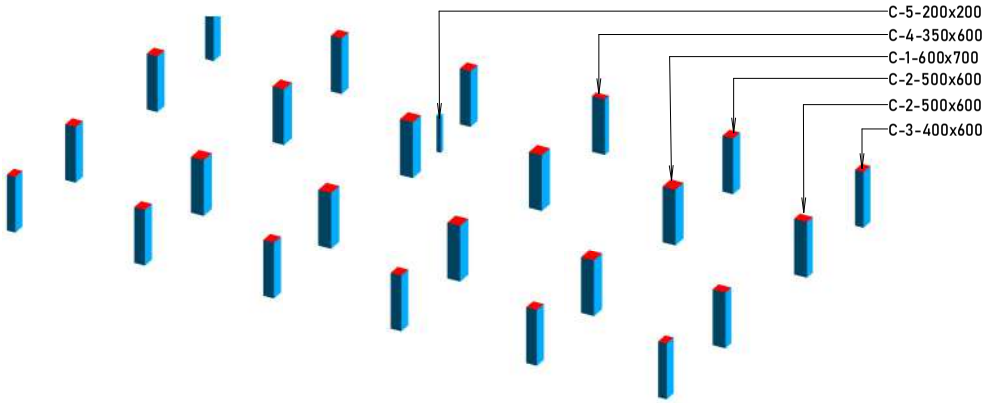
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
GF Slab Floor	1/150
PAPER SIZE	A3
DRAWING NO.	A104.1
DATE	19/02/2025



GROUND FLOOR COLUMN LAYOUT PLAN

SCALE (1 : 150)



**REMARK :
C1 :0.60x0.70m
C2:0.50x0.60m
C3:0.40x0.60m
C4:0.35x0.60m
C5:0.20x0.20m
W1:0.2m thk.
W2:0.25m thk.

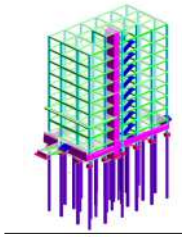
Structural GF Column Schedule		
Type	Q'ty	Volume
C-1-600x700	8	13.44 m³
C-2-500x600	11	13.20 m³
C-3-400x600	4	3.84 m³
C-4-350x600	1	0.84 m³
C-5-200x200	1	0.08 m³
TOTAL: 25	25	31.40 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

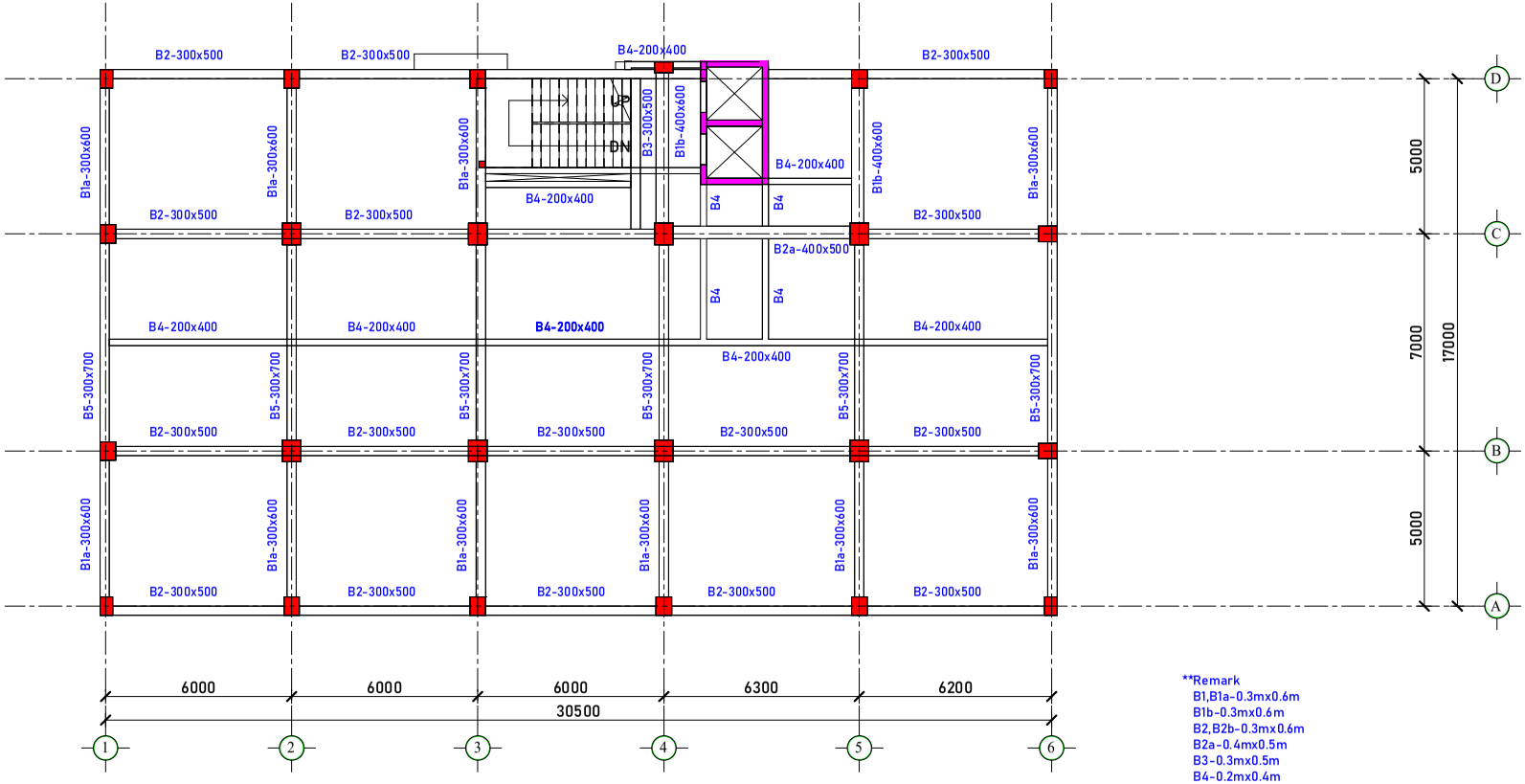
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



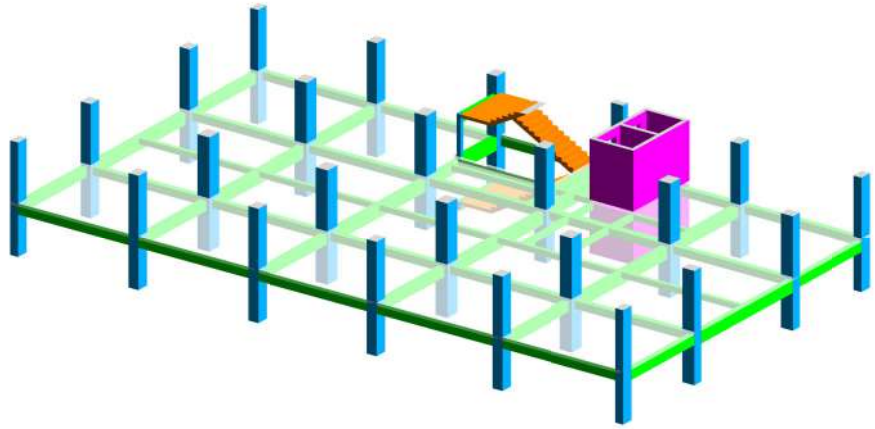
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE EO Column	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A105
DATE	19/02/2025



1st FLOOR BEAM LAYOUT PLAN

SCALE (1 : 150)



**Remark
B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m

Structural Framing 1F Schedule		
Type	Q'ty	Volume
B1a-300x600	10	6.15 m³
B1b-400x600	2	1.69 m³
B2-300x500	6	11.48 m³
B2a-400x500	1	0.82 m³
B3-300x500	1	0.52 m³
B4-200x400	10	3.54 m³
B5-300x700	6	6.40 m³
TOTAL: 36	36	30.61 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

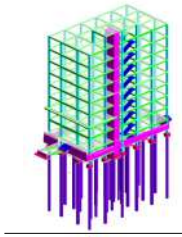
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

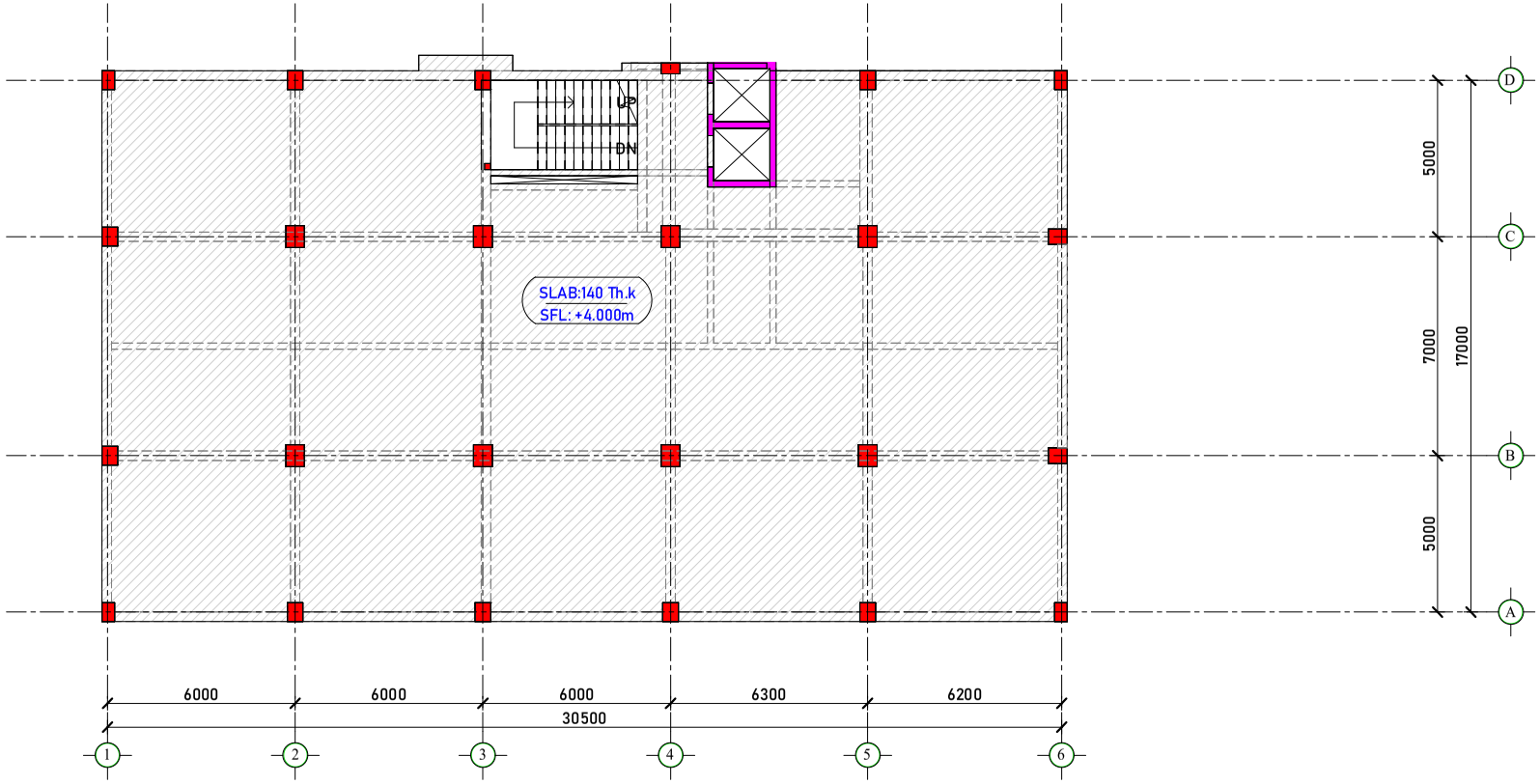
SANITARY ENGINEERS

REVISIONS	DATE



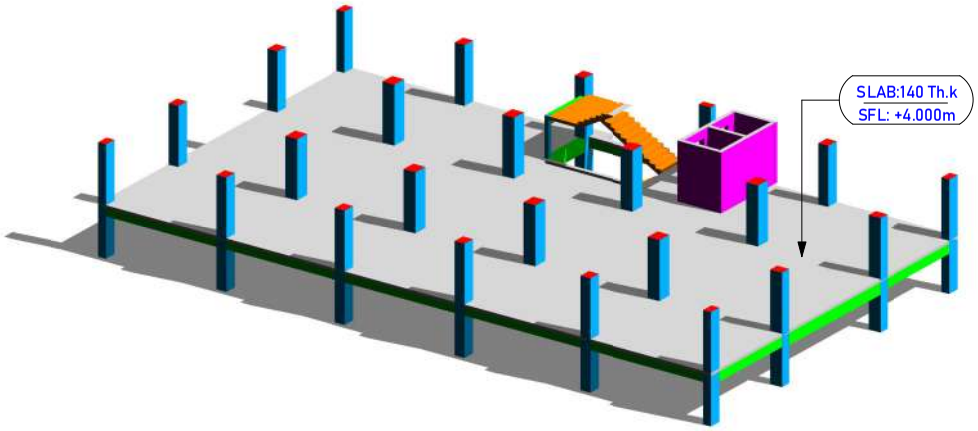
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
1F	1/150
PAPER SIZE	A3
DRAWING NO.	A106
DATE	19/02/2025



1st FLOOR SLAB LAYOUT PLAN

SCALE (1 : 150)



1F Slab Schedule		
Type	Q'ty	Volume
Slab 140	1	73.37 m³
TOTAL: 1		73.37 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

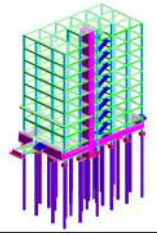
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

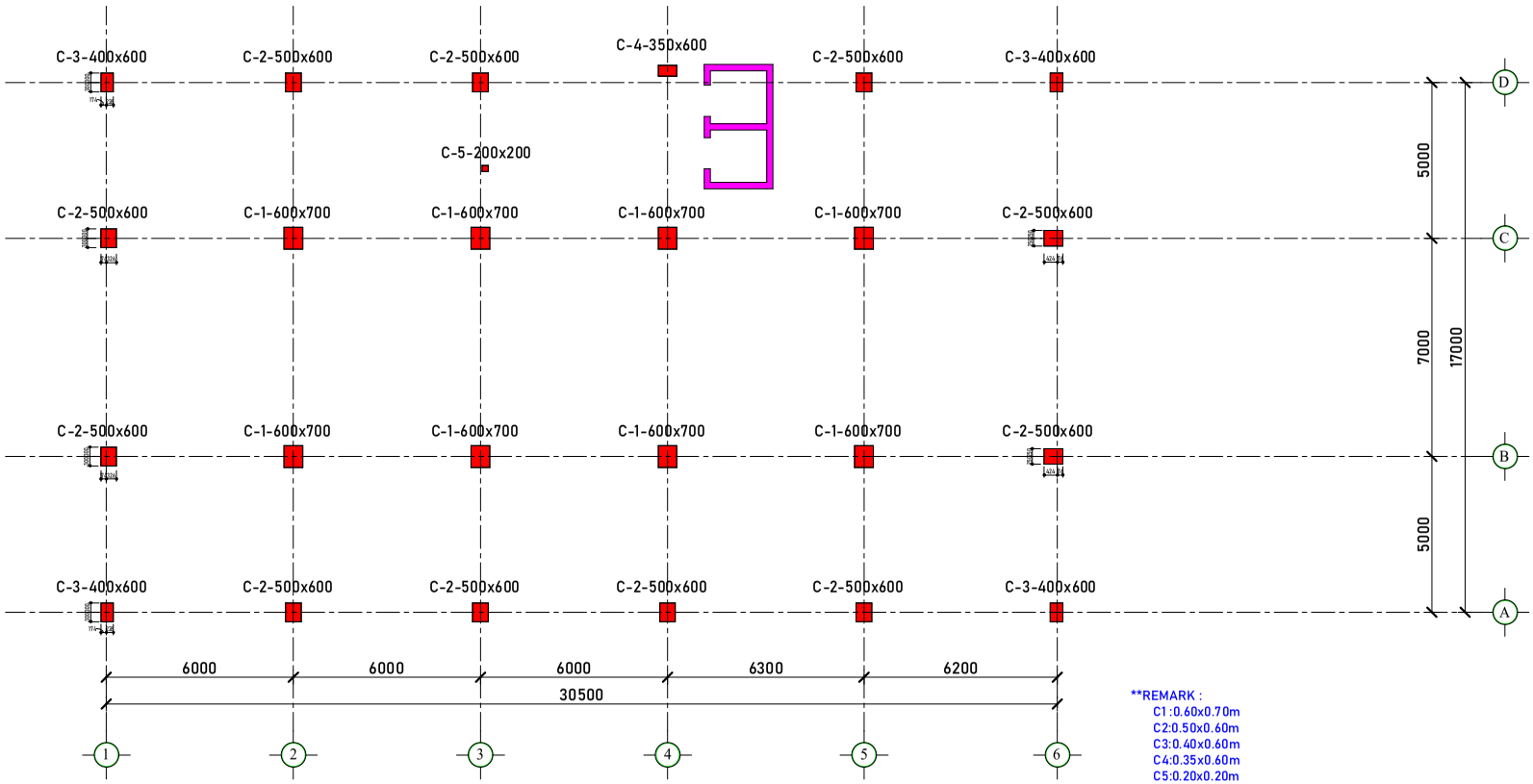
SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

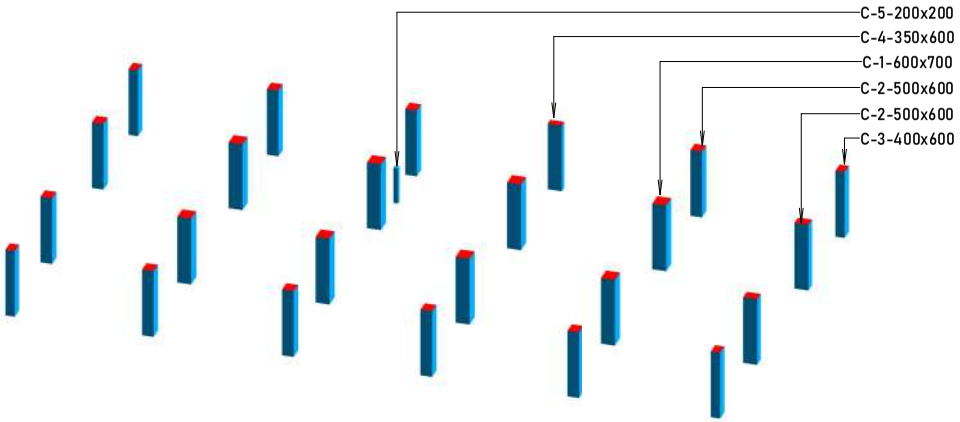
DRAWING TITLE	SCALE
1F Slab Floor	1/150
PAPER SIZE	A3
DRAWING NO.	A106.1
DATE	19/02/2025



1st FLOOR COLUMN LAYOUT PLAN

SCALE (1 : 150)

**REMARK :
C1 :0.60x0.70m
C2:0.50x0.60m
C3:0.40x0.60m
C4:0.35x0.60m
C5:0.20x0.20m
W1:0.2m thk.
W2:0.25m thk.



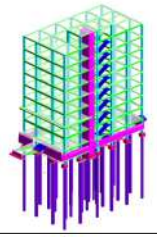
Structural 1st Column Schedule		
Type	Q'ty	Volume
C-1-600x700	8	12.77 m³
C-2-500x600	11	12.54 m³
C-3-400x600	4	3.65 m³
C-4-350x600	1	0.80 m³
C-5-200x200	1	0.08 m³
TOTAL: 25	25	29.83 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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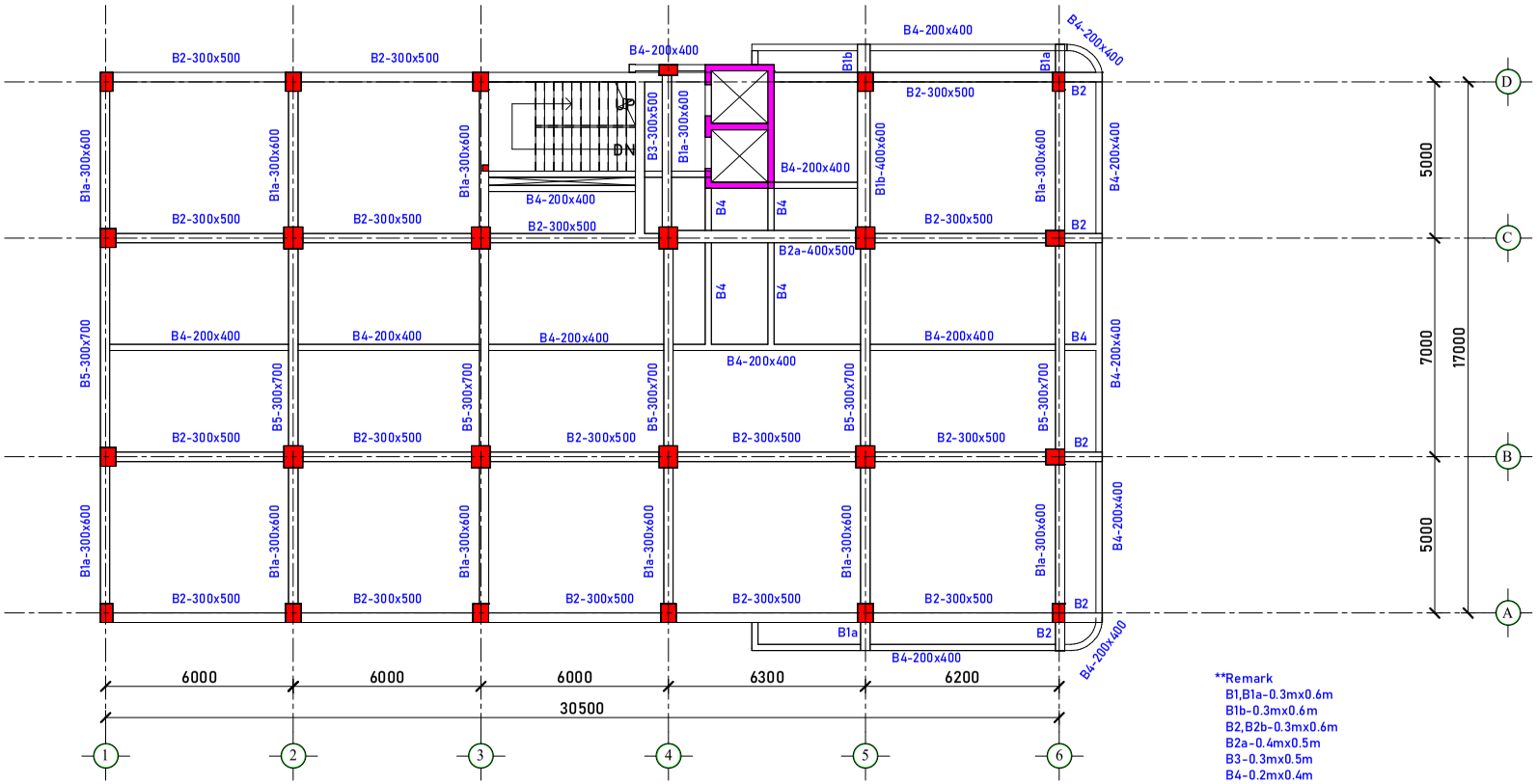
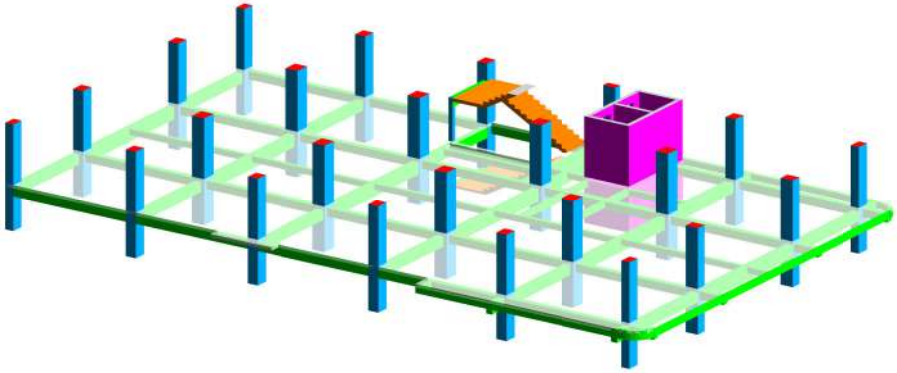
PAPER SIZE	A3
DRAWING NO.	A107
DATE	19/02/2025



2nd FLOOR BEAM LAYOUT PLAN

SCALE (1 : 150)



**Remark

B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m

Structural Framing 2F Schedule		
Type	Q'ty	Volume
B1a-300x600	14	7.05 m³
B1b-400x600	2	0.95 m³
B2-300x500	6	11.65 m³
B2a-400x500	1	0.82 m³
B3-300x500	1	0.51 m³
B4-200x400	20	5.60 m³
B5-300x700	6	6.32 m³
TOTAL: 50	50	32.90 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

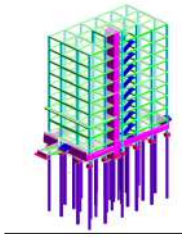
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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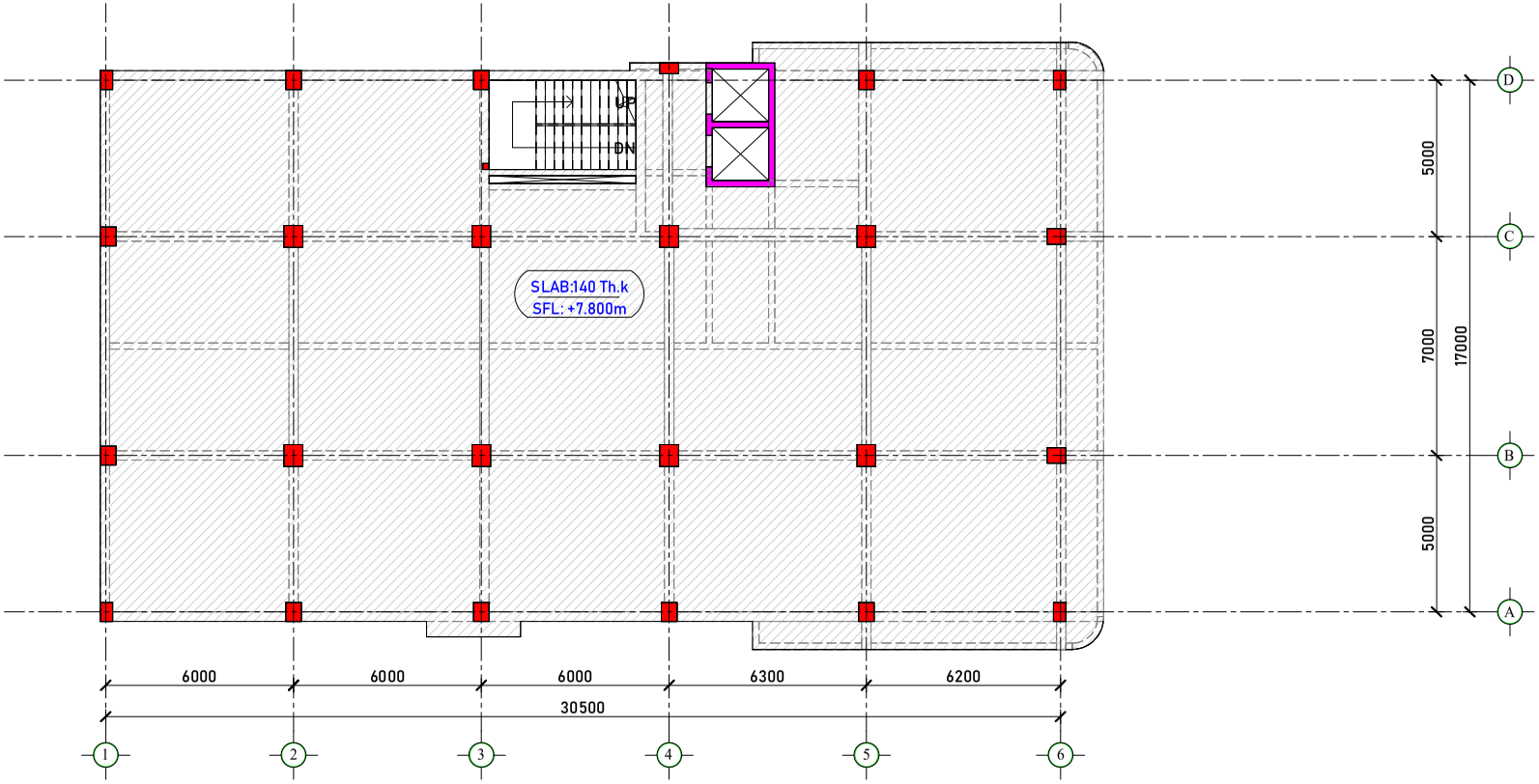
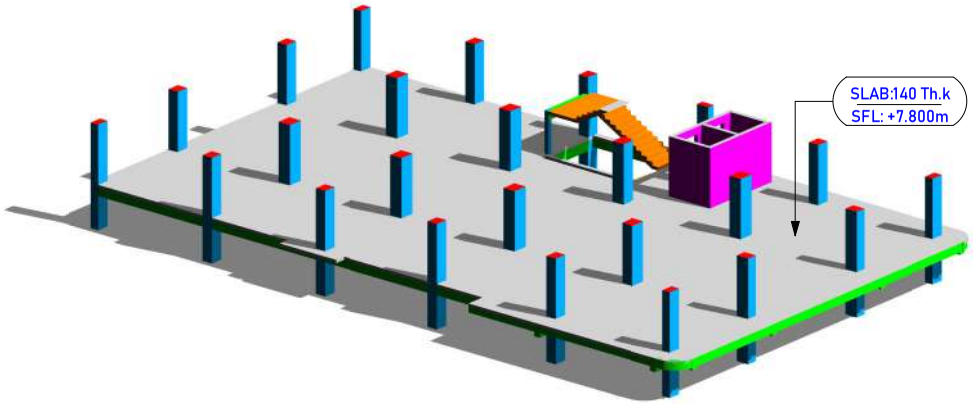
PAPER SIZE	A3
DRAWING NO.	A108
DATE	19/02/2025



2nd FLOOR SLAB LAYOUT PLAN

SCALE (1 : 150)



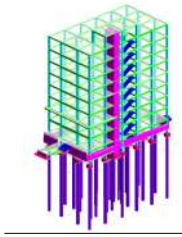
2F Slab Schedule		
Type	Q'ty	Volume
Slab 140	1	79.20 m³
TOTAL: 1		79.20 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

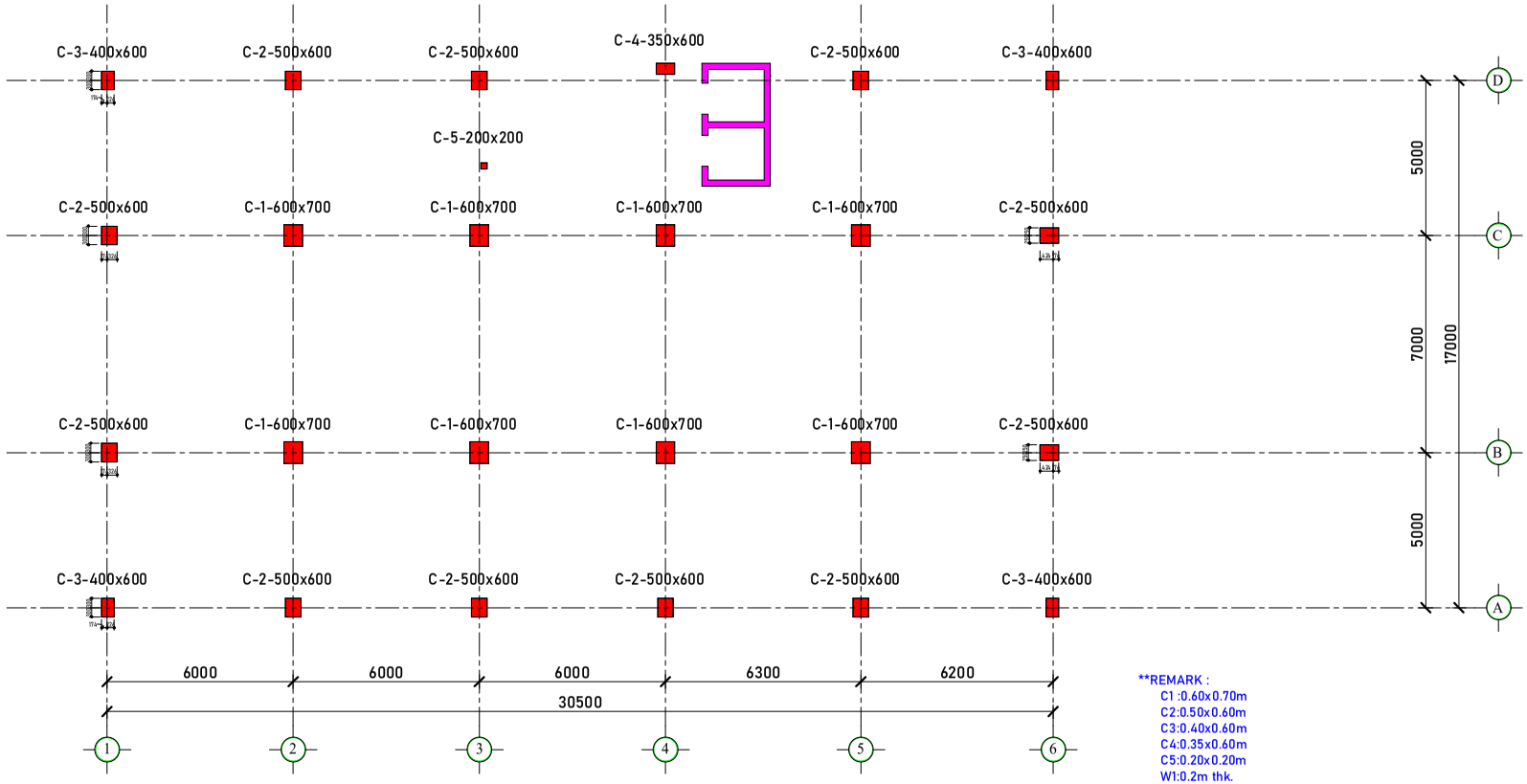
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

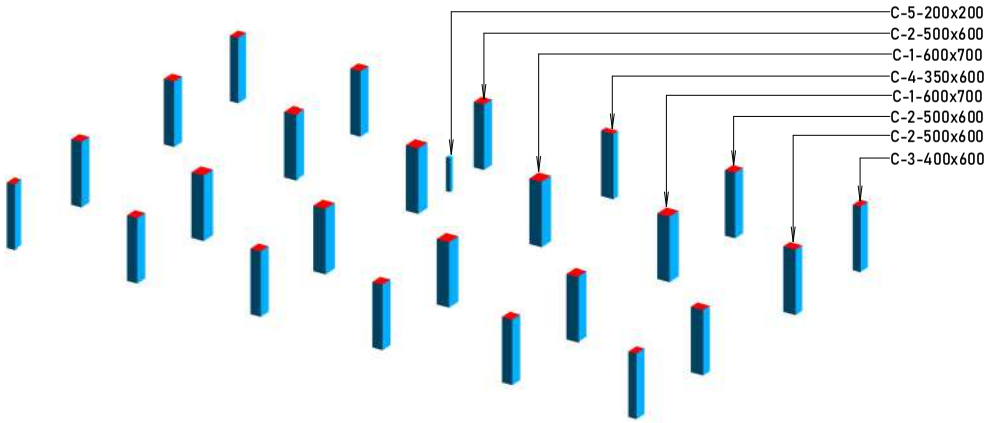
DRAWING TITLE 2F Slab Floor	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A108.1
DATE	19/02/2025



2nd FLOOR COLUMN LAYOUT PLAN

SCALE (1 : 150)

**REMARK :
C1 :0.60x0.70m
C2:0.50x0.60m
C3:0.40x0.60m
C4:0.35x0.60m
C5:0.20x0.20m
W1:0.2m thk.
W2:0.25m thk.



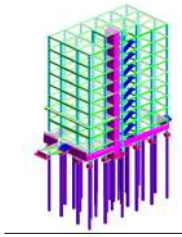
Structural 2nd Column Schedule		
Type	Q'ty	Volume
C-1-600x700	8	12.77 m³
C-2-500x600	11	12.54 m³
C-3-400x600	4	3.65 m³
C-4-350x600	1	0.80 m³
C-5-200x200	1	0.08 m³
TOTAL: 25	25	29.83 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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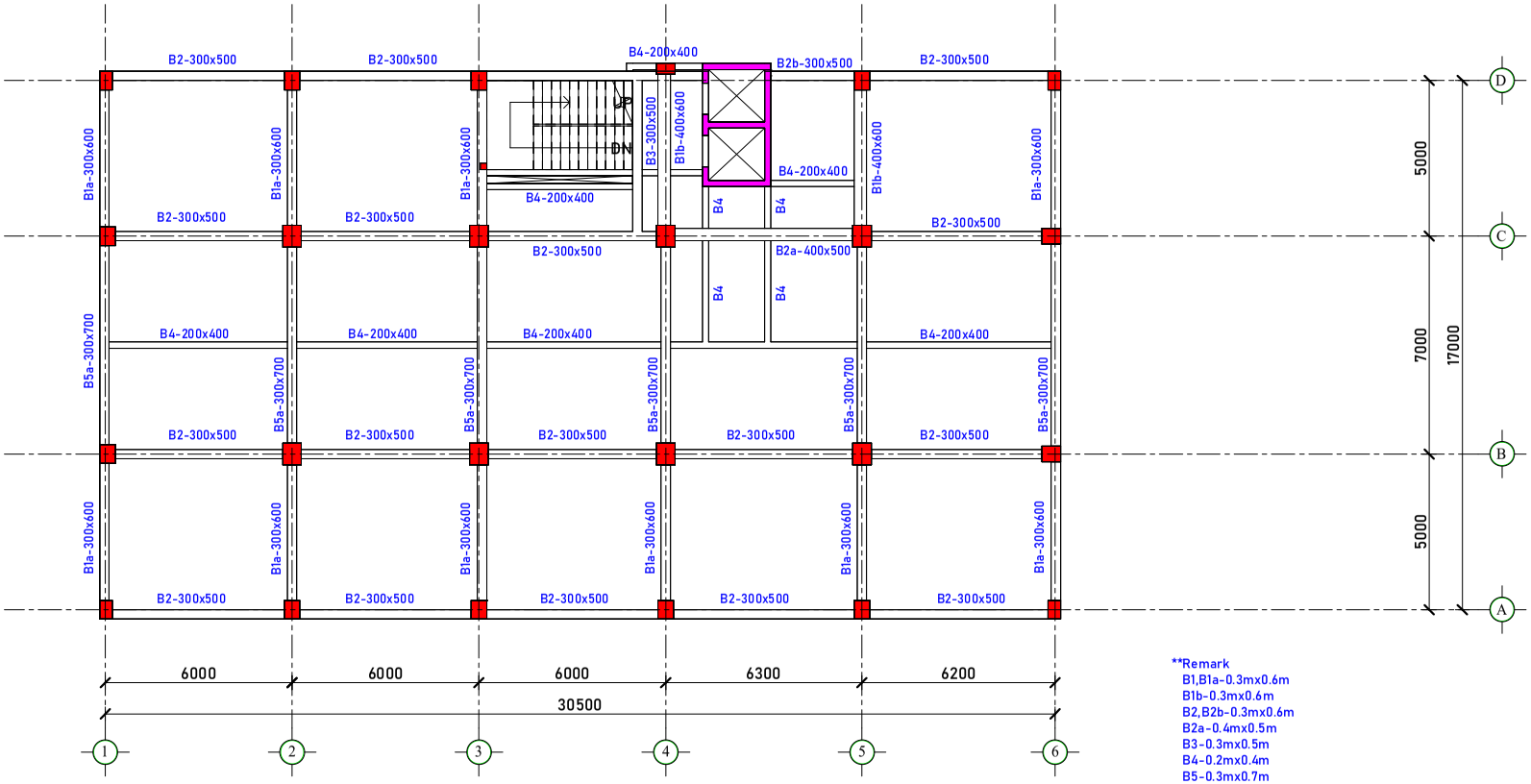
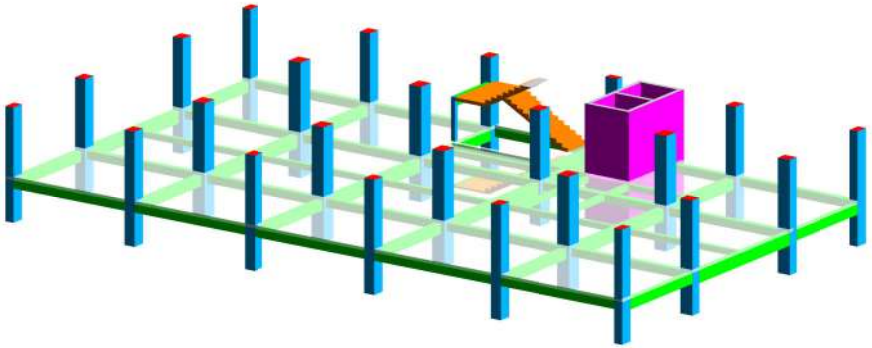
PAPER SIZE	A3
DRAWING NO.	A109
DATE	19/02/2025



**Remark
B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m

3rd FLOOR BEAM LAYOUT PLAN

SCALE (1 : 150)



Structural Framing 3F Schedule		
Type	Q'ty	Volume
B1a-300x600	10	6.04 m³
B1b-400x600	2	1.66 m³
B2-300x500	6	10.86 m³
B2a-400x500	1	0.82 m³
B2b-300x500	1	0.29 m³
B3-300x500	1	0.51 m³
B4-200x400	10	3.24 m³
B5a-300x700	6	6.40 m³
TOTAL: 37	37	29.82 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

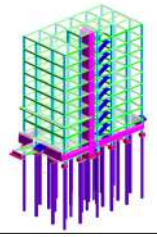
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS | DATE



WORKING DRAWING
FOR CONSTRUCTION

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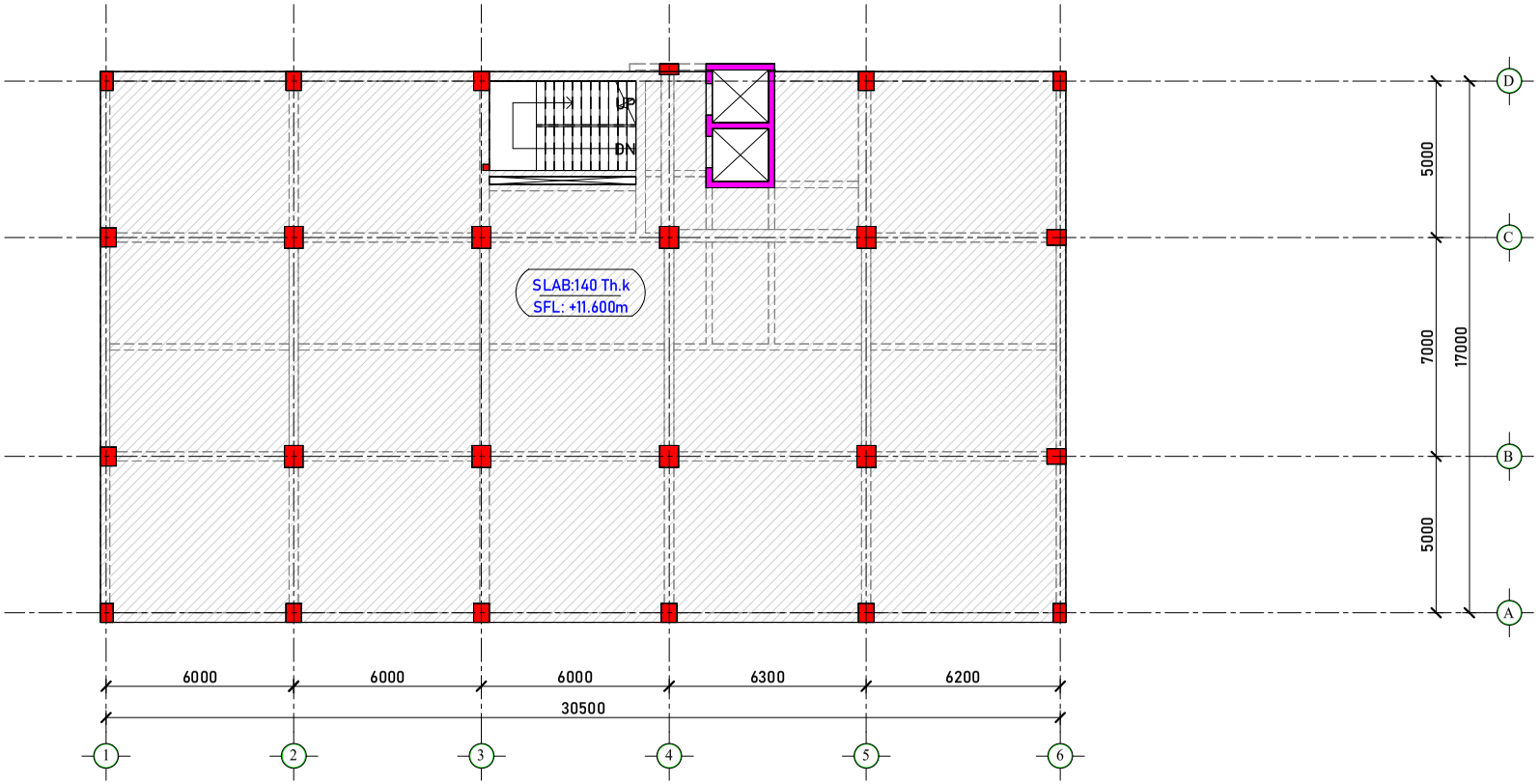
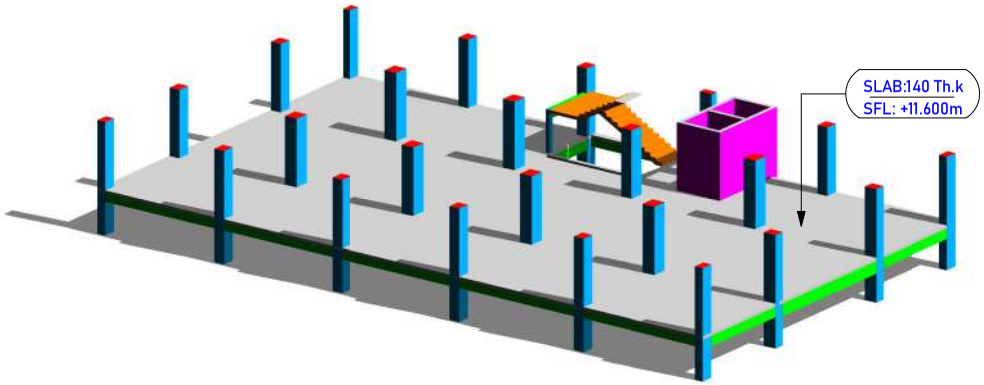
PAPER SIZE	A3
DRAWING NO.	A110
DATE	19/02/2025



3rd FLOOR SLAB LAYOUT PLAN

SCALE (1 : 150)



3F Slab Schedule		
Type	Q'ty	Volume
Slab 140	1	73.14 m³
TOTAL: 1		73.14 m³

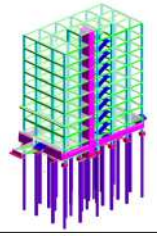
NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

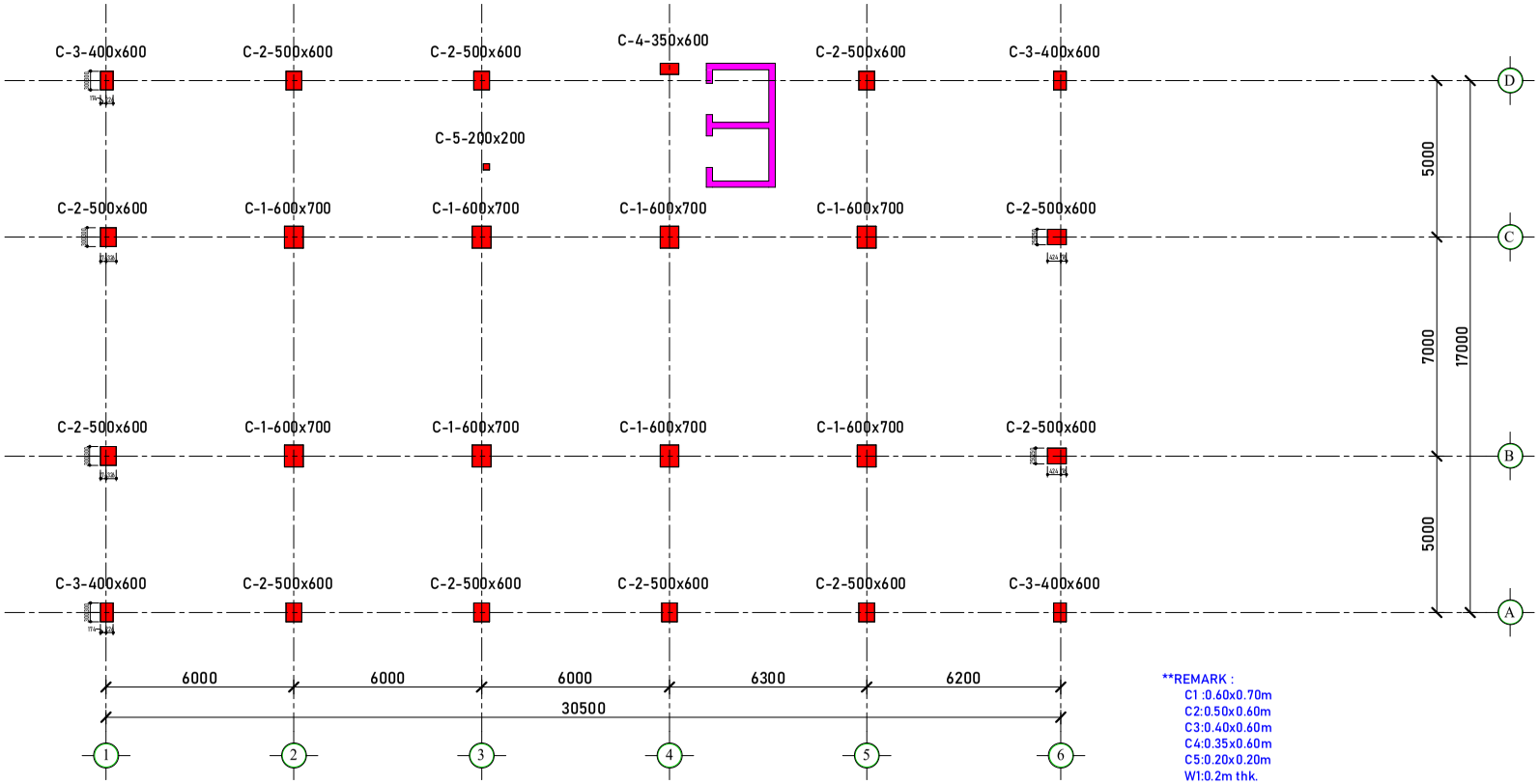
WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

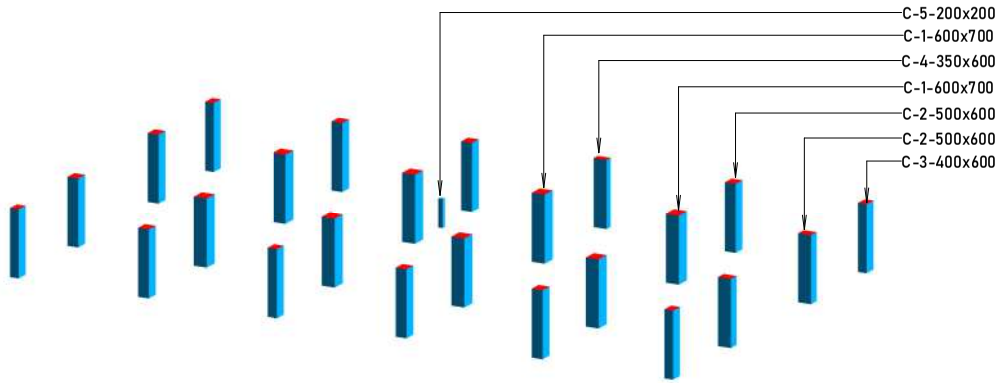
DRAWING TITLE 3F Slab Floor	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A110.1
DATE	19/02/2025



3rd FLOOR COLUMN LAYOUT PLAN

SCALE (1 : 150)

**REMARK :
C1 :0.60x0.70m
C2:0.50x0.60m
C3:0.40x0.60m
C4:0.35x0.60m
C5:0.20x0.20m
W1:0.2m thk.
W2:0.25m thk.



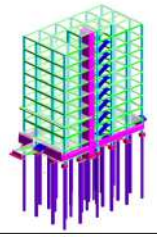
Structural 3rd Column Schedule		
Type	Q'ty	Volume
C-1-600x700	8	12.77 m³
C-2-500x600	11	12.54 m³
C-3-400x600	4	3.65 m³
C-4-350x600	1	0.80 m³
C-5-200x200	1	0.08 m³
TOTAL: 25	25	29.83 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

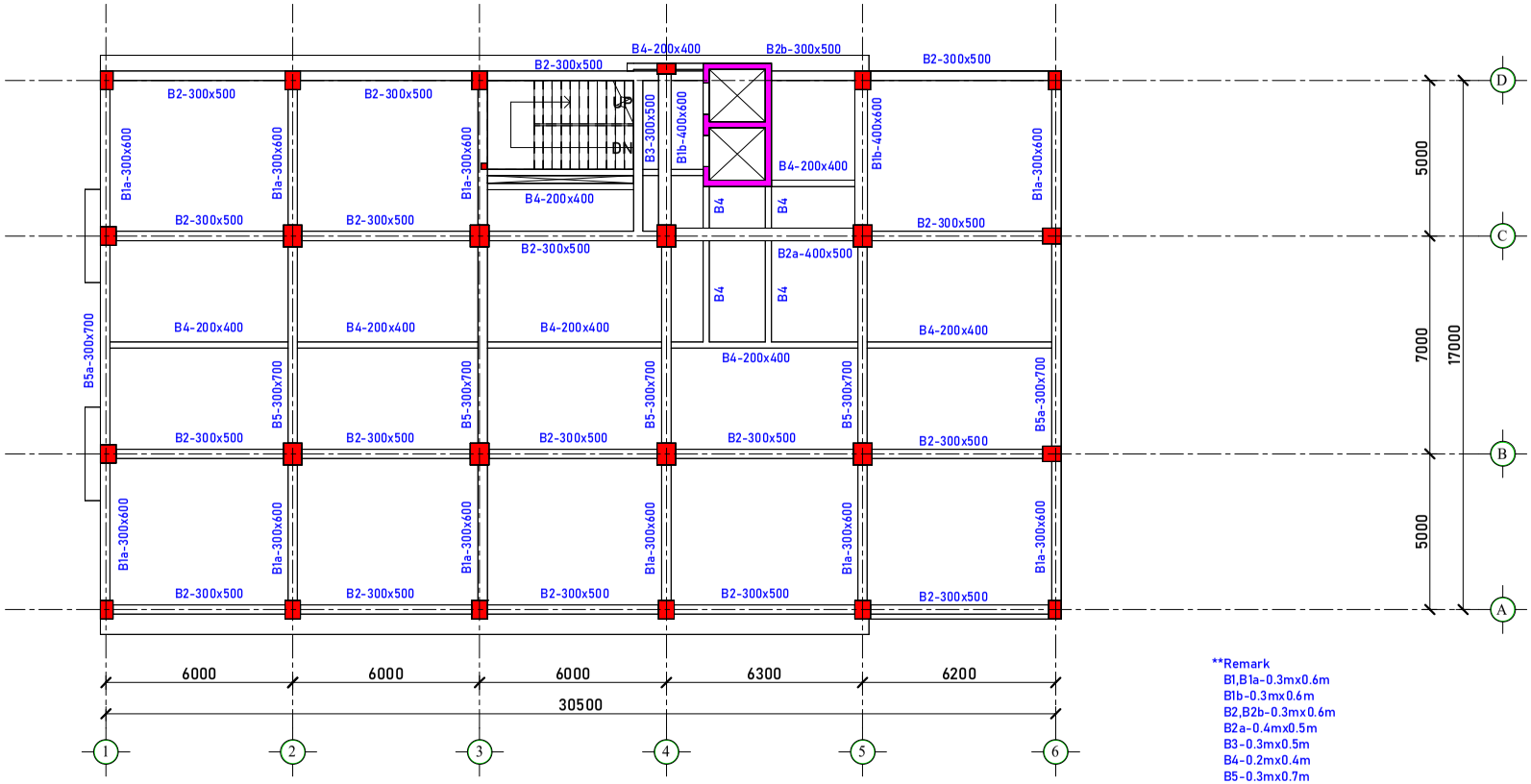
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



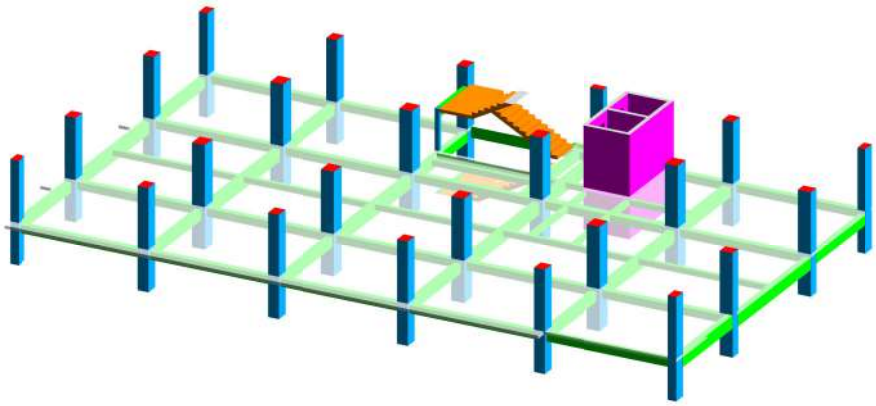
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE E3 Column	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A111
DATE	19/02/2025



4th FLOOR BEAM LAYOUT PLAN

SCALE (1 : 150)



**Remark

B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m

Structural Framing 4F Schedule		
Type	Q'ty	Volume
B1a-300x600	10	6.23 m³
B1b-400x600	2	1.66 m³
B2-300x500	6	10.86 m³
B2a-400x500	1	0.82 m³
B2b-300x500	1	0.29 m³
B3-300x500	1	0.51 m³
B4-200x400	12	3.24 m³
B5-300x700	4	4.23 m³
B5a-300x700	2	2.17 m³
TOTAL: 39	39	30.01 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

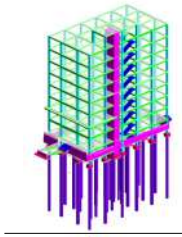
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



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FOR CONSTRUCTION

DRAWING TITLE	SCALE
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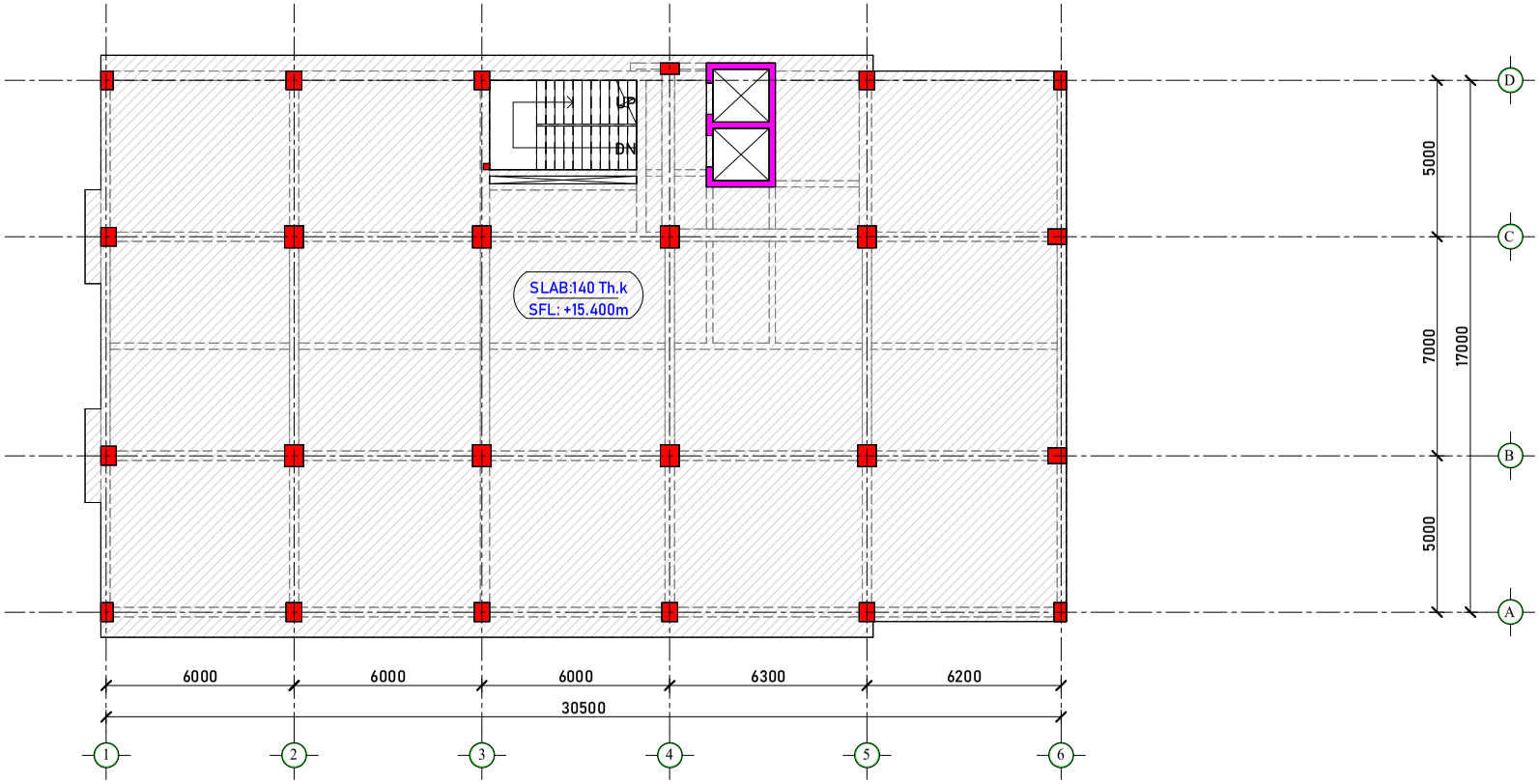
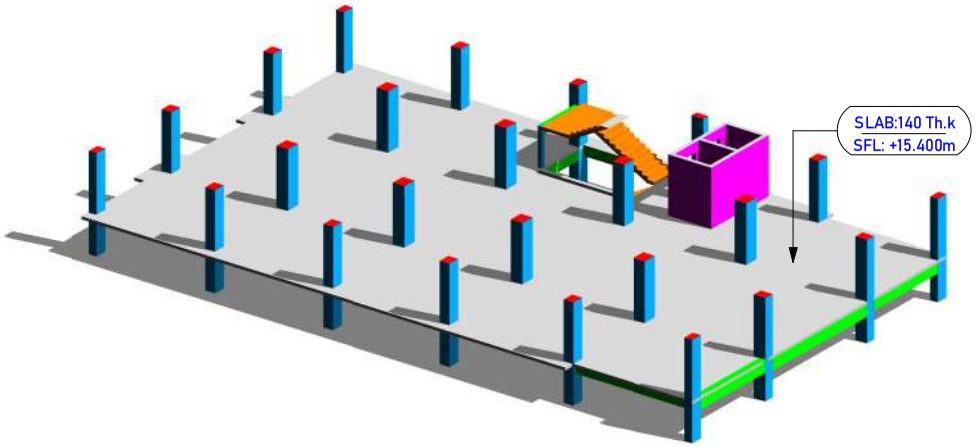
PAPER SIZE	A3
DRAWING NO.	A112
DATE	19/02/2025



4th FLOOR SLAB LAYOUT PLAN

SCALE (1 : 150)



4F Slab Schedule		
Type	Q'ty	Volume
Slab 140	1	77.00 m³
TOTAL: 1		77.00 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

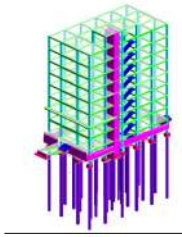
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

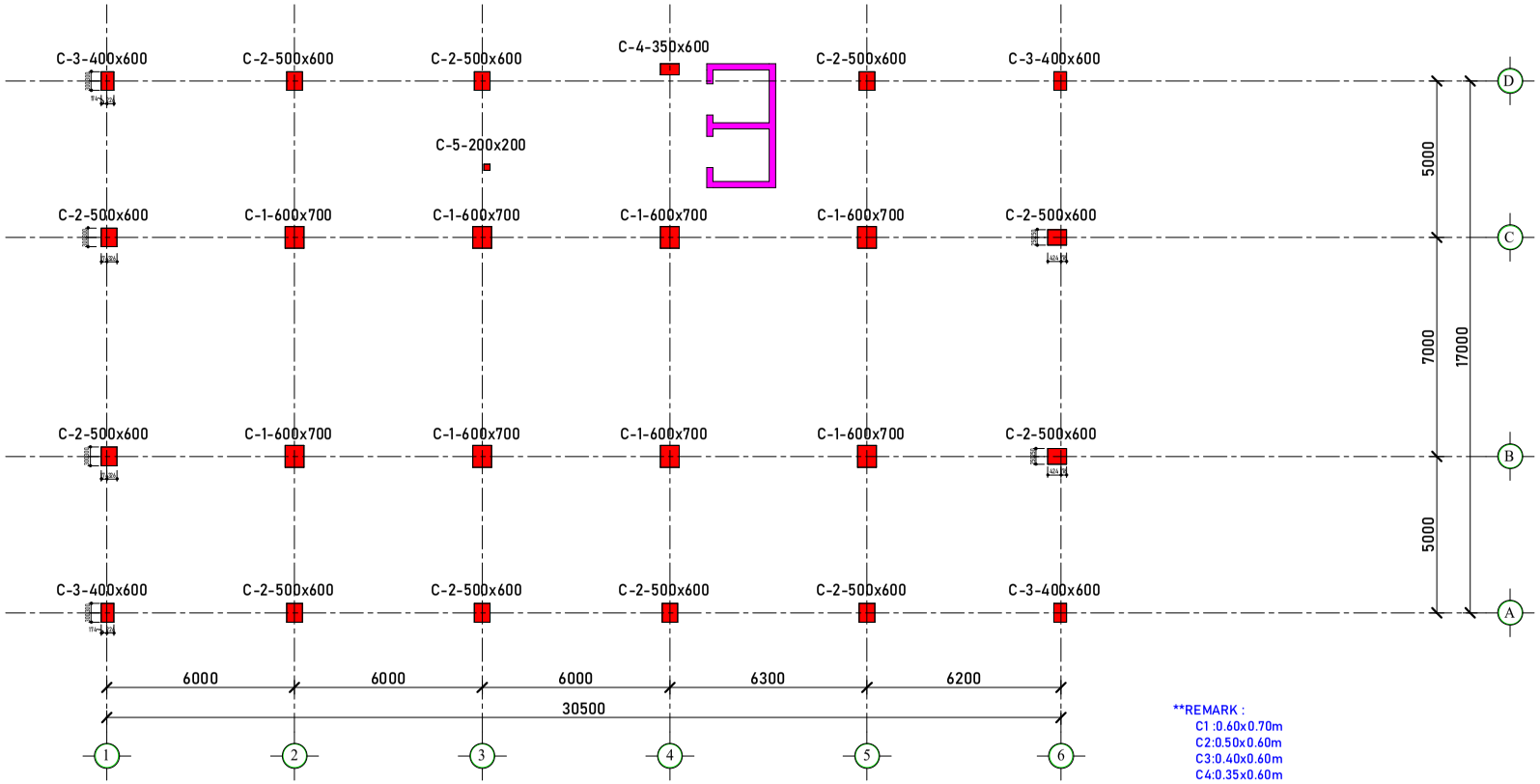
SANITARY ENGINEERS

REVISIONS	DATE



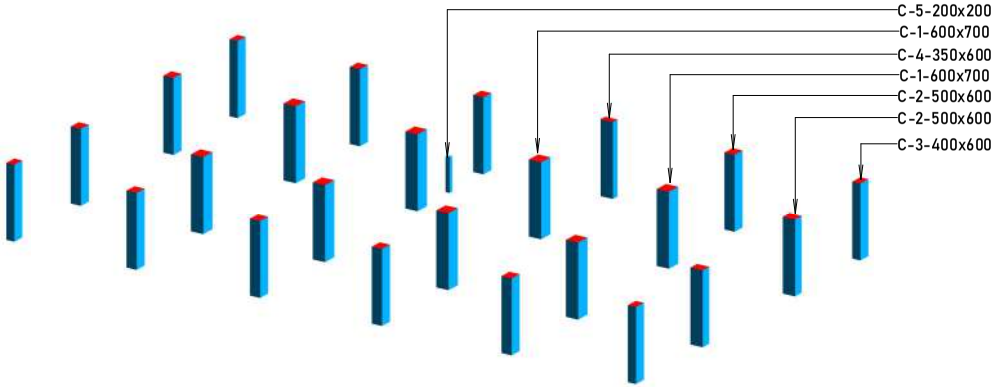
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
4F Slab Floor	1/150
PAPER SIZE	A3
DRAWING NO.	A112.1
DATE	19/02/2025



4th FLOOR COLULMN LAYOUT PLAN

SCALE (1 : 150)



**REMARK :
C1 :0.60x0.70m
C2:0.50x0.60m
C3:0.40x0.60m
C4:0.35x0.60m
C5:0.20x0.20m
W1:0.2m thk.
W2:0.25m thk.

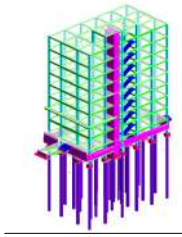
Structural 4th Column Schedule		
Type	Q'ty	Volume
C-1-600x700	8	12.77 m³
C-2-500x600	11	12.54 m³
C-3-400x600	4	3.65 m³
C-4-350x600	1	0.80 m³
C-5-200x200	1	0.08 m³
TOTAL: 25	25	29.83 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



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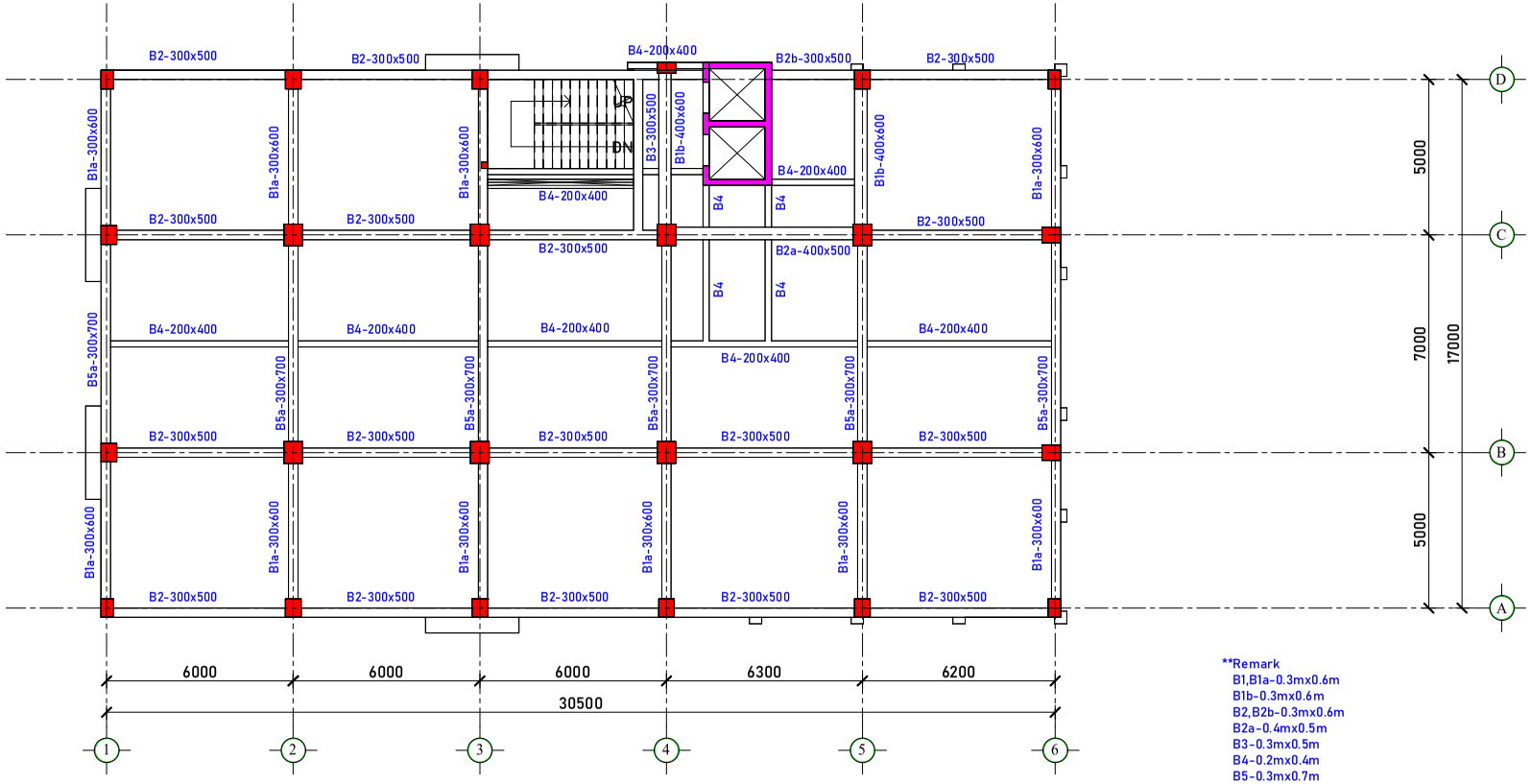
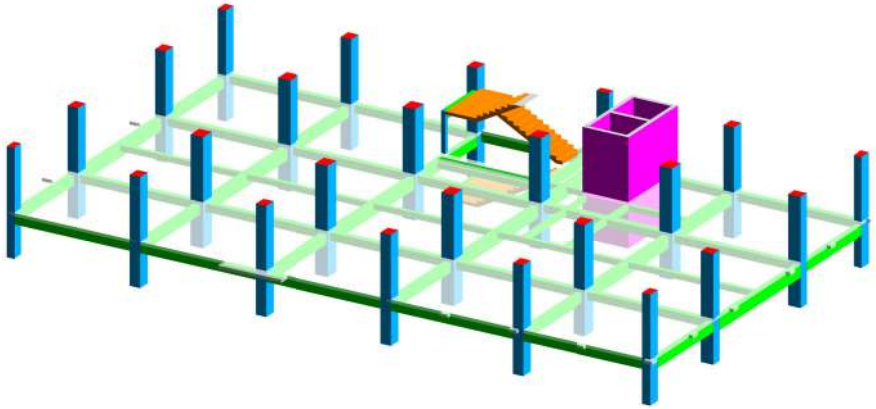
DRAWING NO.	A113
DATE	19/02/2025



5th FLOOR BEAM LAYOUT PLAN

SCALE (1 : 150)



**Remark

B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m

Structural Framing 5F Schedule		
Type	Q'ty	Volume
B1a-300x600	10	6.04 m³
B1b-400x600	2	1.64 m³
B2-300x500	6	10.88 m³
B2a-400x500	1	0.78 m³
B2b-300x500	1	0.29 m³
B3-300x500	1	0.51 m³
B4-200x400	10	3.45 m³
B5a-300x700	6	6.34 m³
TOTAl: 37	37	29.93 m³

NOTE :

1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS

Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

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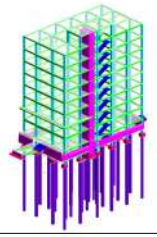

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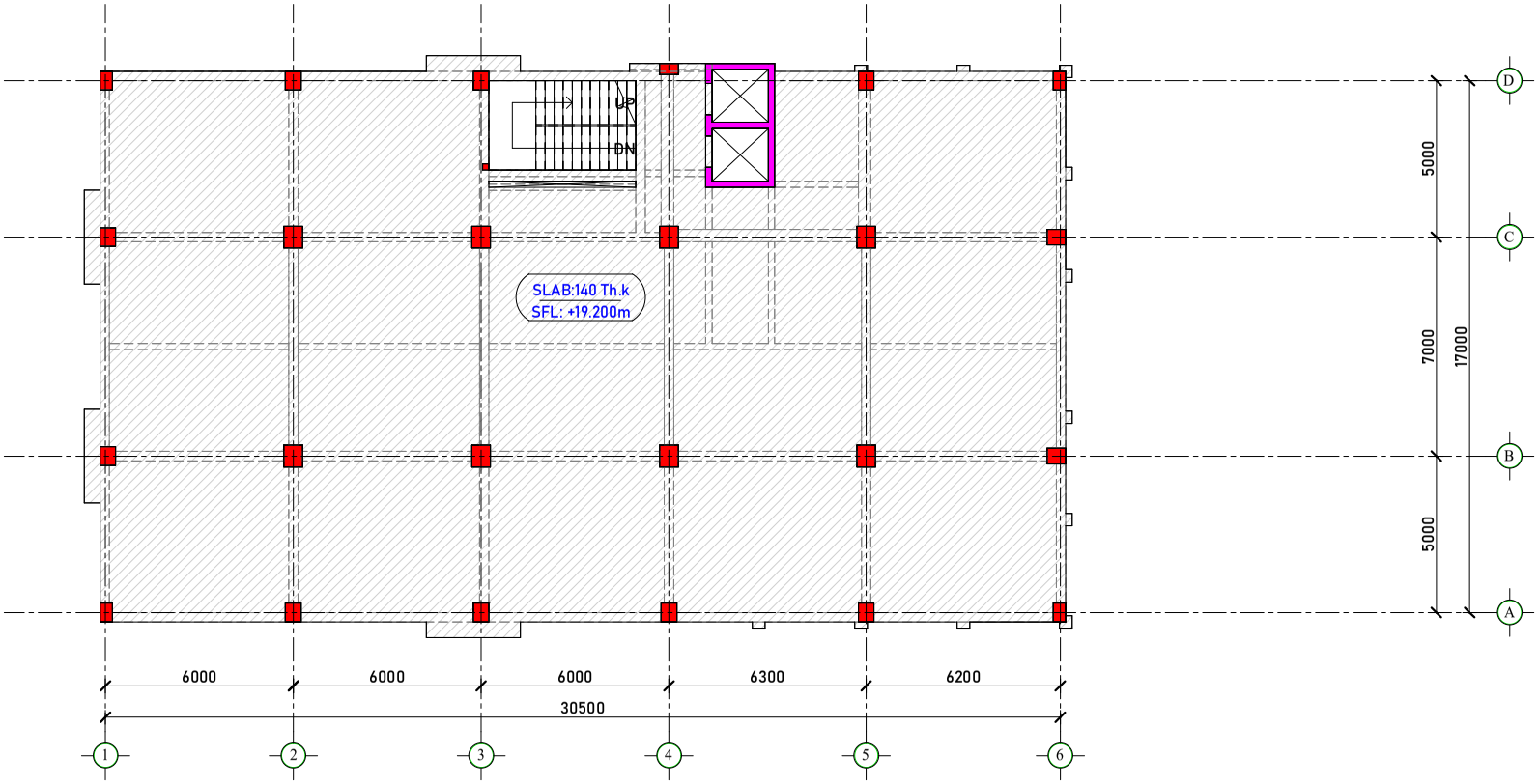
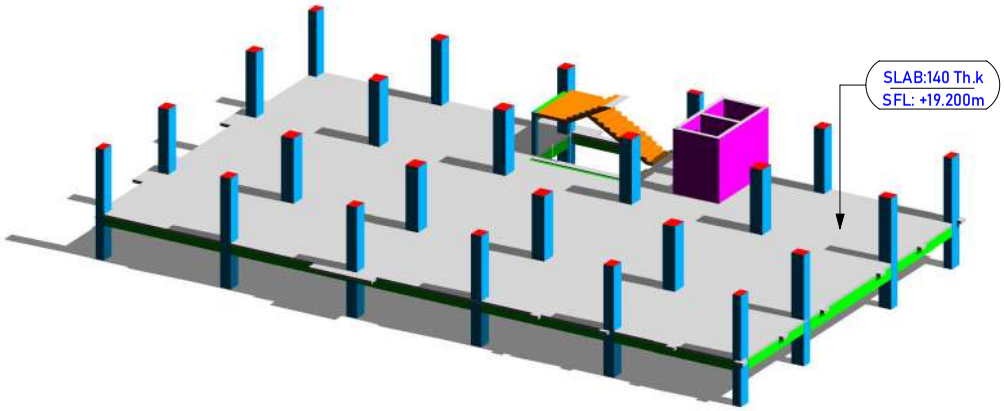
PAPER SIZE	A3
DRAWING NO.	A114
DATE	19/02/2025



5th FLOOR SLAB LAYOUT PLAN

SCALE (1 : 150)



5F Slab Schedule		
Type	Q'ty	Volume
Slab 140	1	74.30 m³
TOTAL: 1		74.30 m³

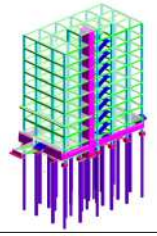
NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

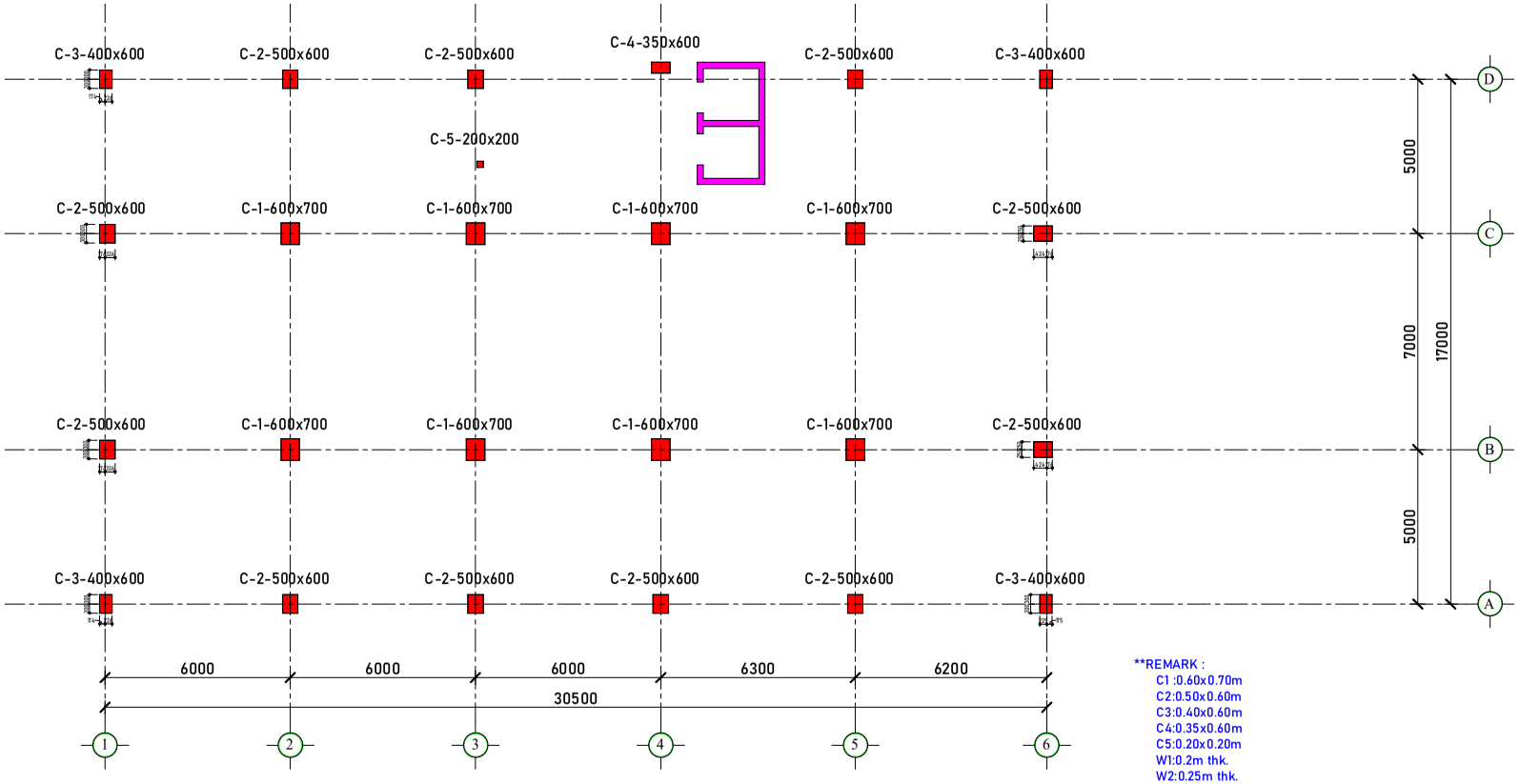
WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

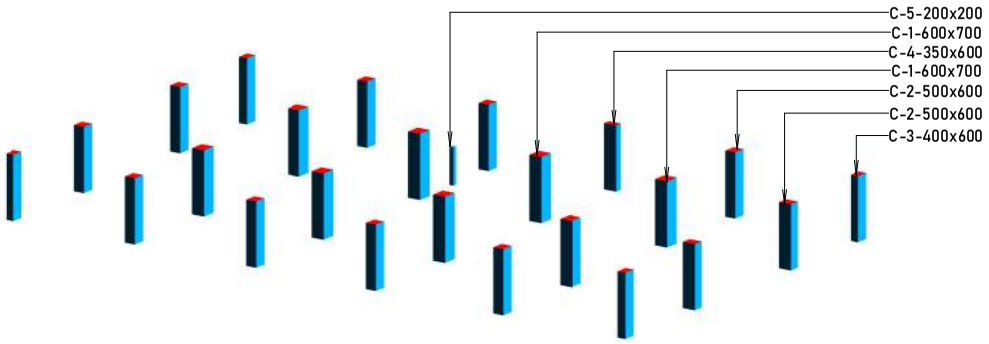
DRAWING TITLE 5F Slab Floor	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A114.1
DATE	19/02/2025



5th FLOOR COLUMN LAYOUT PLAN

SCALE (1 : 150)

**REMARK :
C1 :0.60x0.70m
C2:0.50x0.60m
C3:0.40x0.60m
C4:0.35x0.60m
C5:0.20x0.20m
W1:0.2m thk.
W2:0.25m thk.



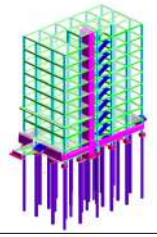
Structural 5th Column Schedule		
Type	Q'ty	Volume
C-1-600x700	8	12.77 m³
C-2-500x600	11	12.54 m³
C-3-400x600	4	3.65 m³
C-4-350x600	1	0.80 m³
C-5-200x200	1	0.08 m³
TOTAL: 25	25	29.83 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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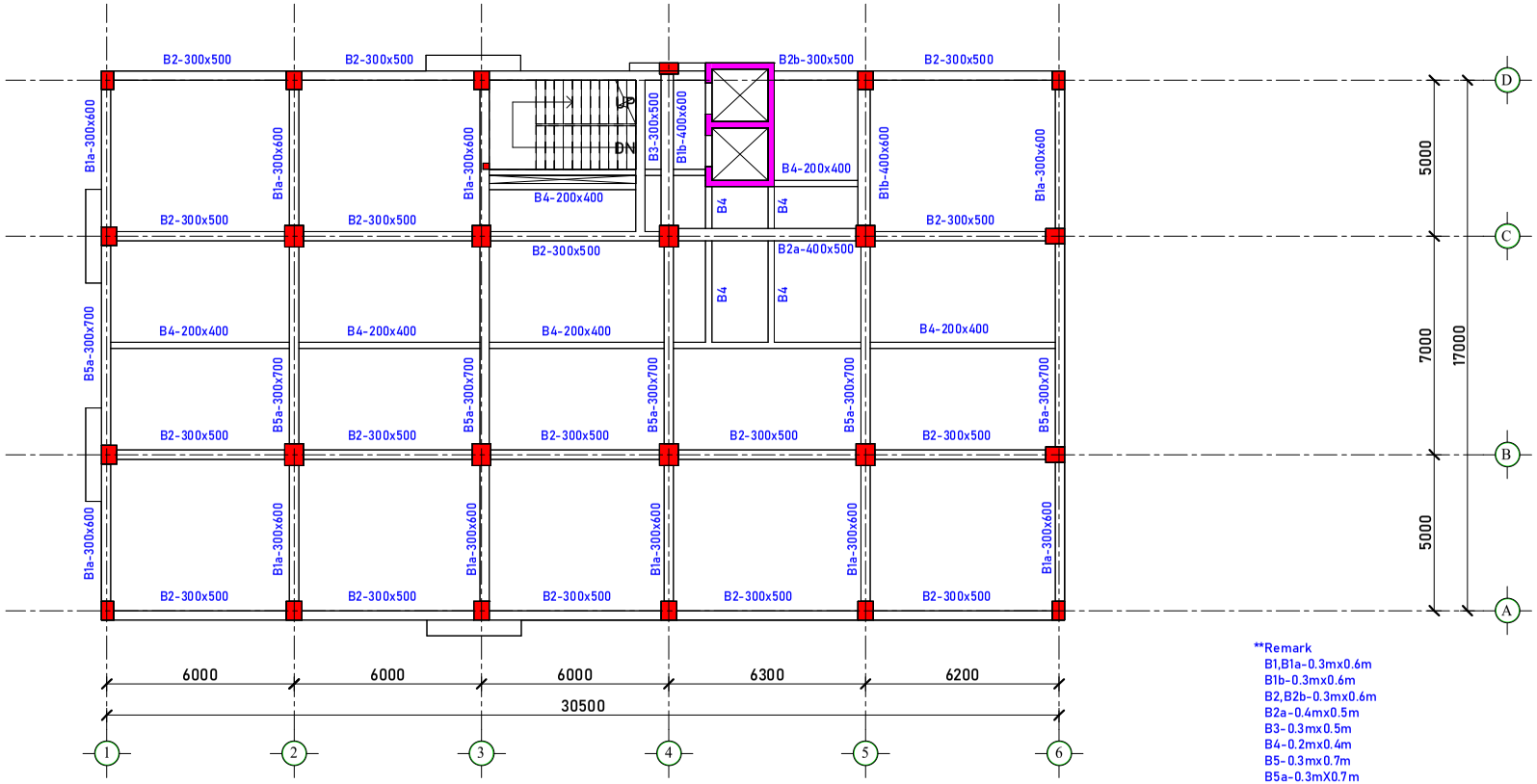
PAPER SIZE	A3
DRAWING NO.	A115
DATE	19/02/2025

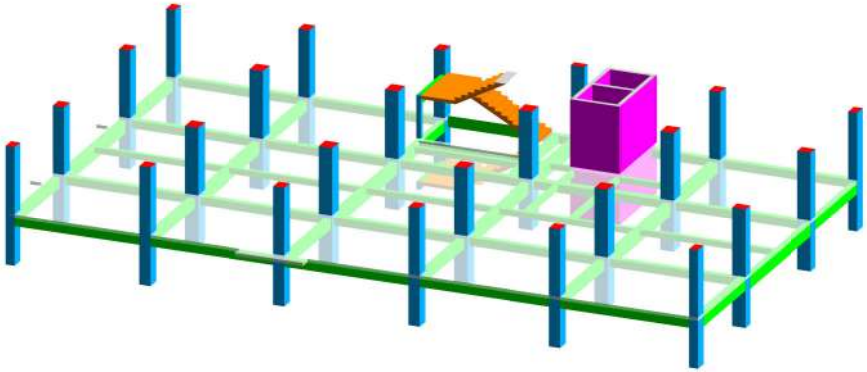


6th FLOOR BEAM LAYOUT PLAN

SCALE (1 : 150)

**Remark

B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m



Structural Framing 6F Schedule		
Type	Q'ty	Volume
B1a-300x600	10	6.23 m³
B1b-400x600	2	1.66 m³
B2-300x500	6	10.88 m³
B2a-400x500	1	0.82 m³
B2b-300x500	1	0.29 m³
B3-300x500	1	0.51 m³
B4-200x400	8	3.15 m³
B5a-300x700	6	6.34 m³
TOTAL: 35	35	29.88 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

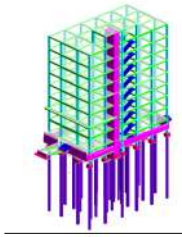
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



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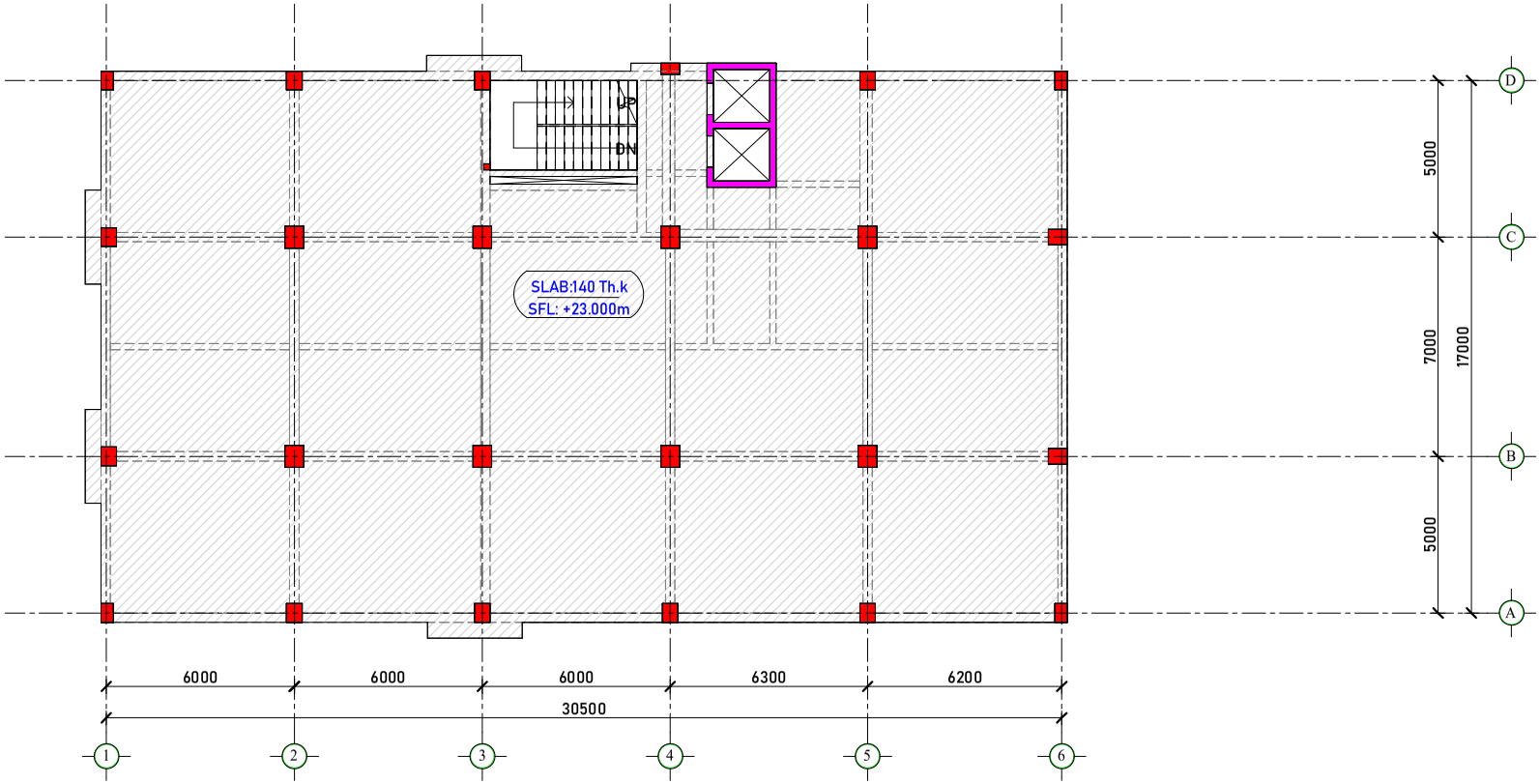
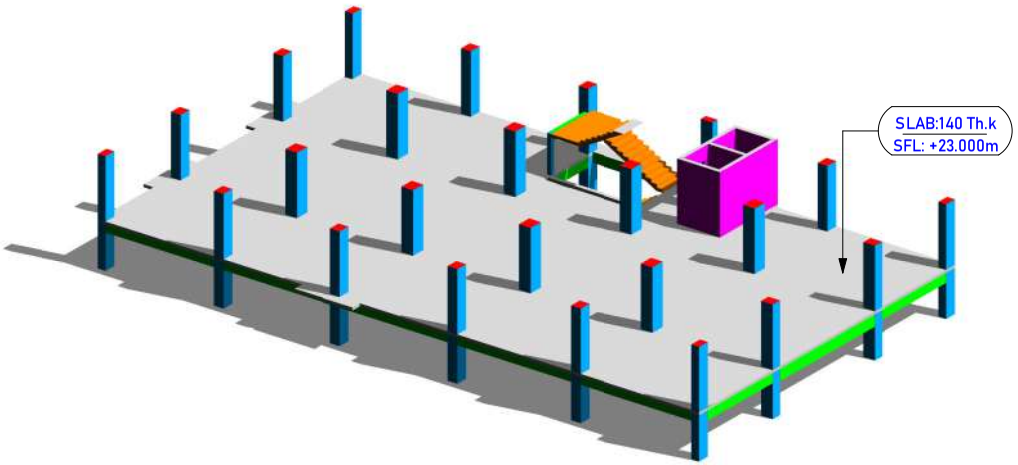
FOR CONSTRUCTION

DRAWING TITLE	SCALE
6F	1/150
PAPER SIZE	A3
DRAWING NO.	A117
DATE	19/02/2025



6th FLOOR SLAB LAYOUT PLAN

SCALE (1 : 150)



6F Slab Schedule		
Type	Q'ty	Volume
Slab 140	1	74.13 m³
TOTAL: 1		74.13 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

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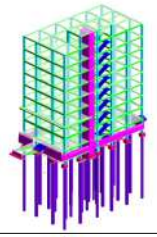
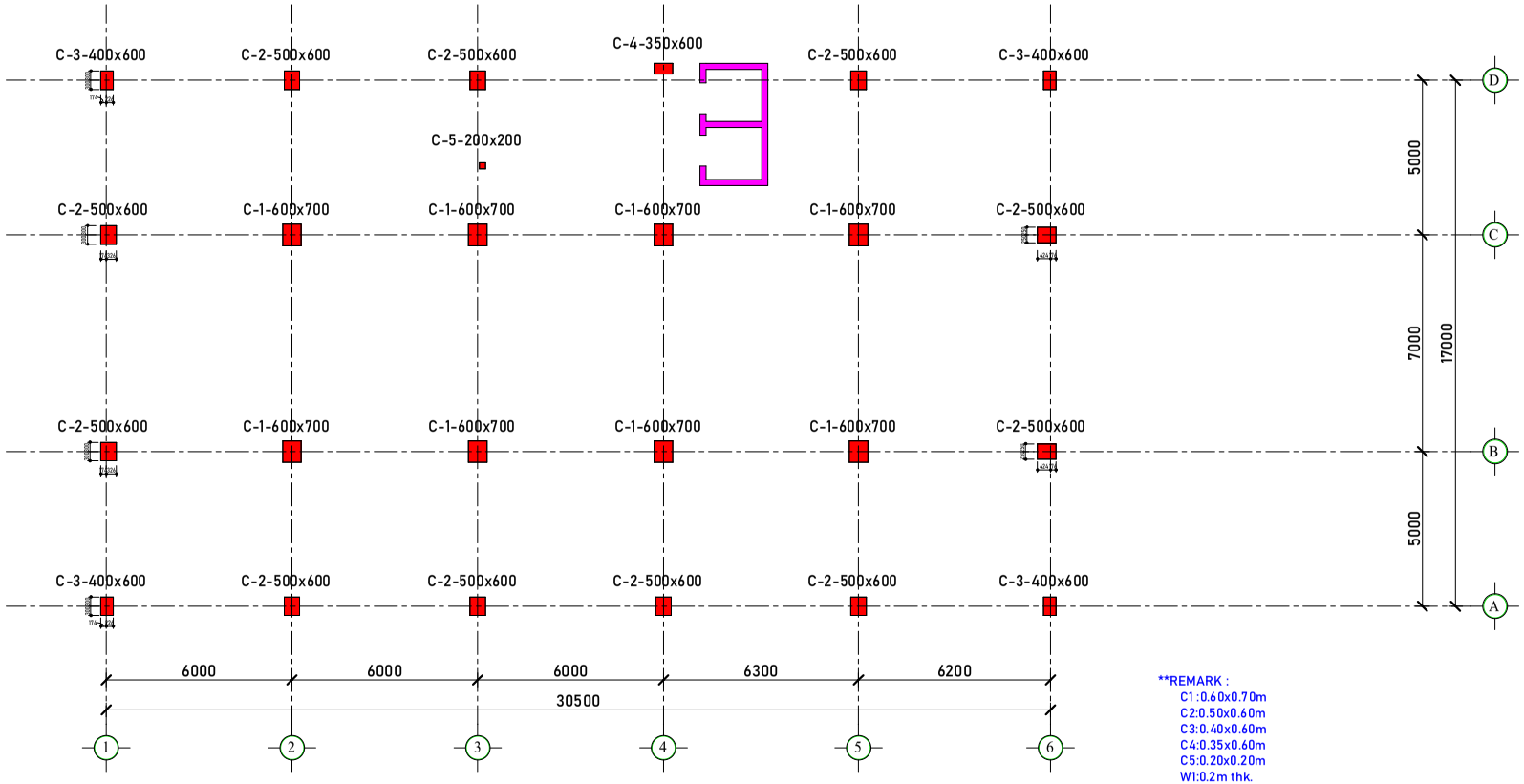
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

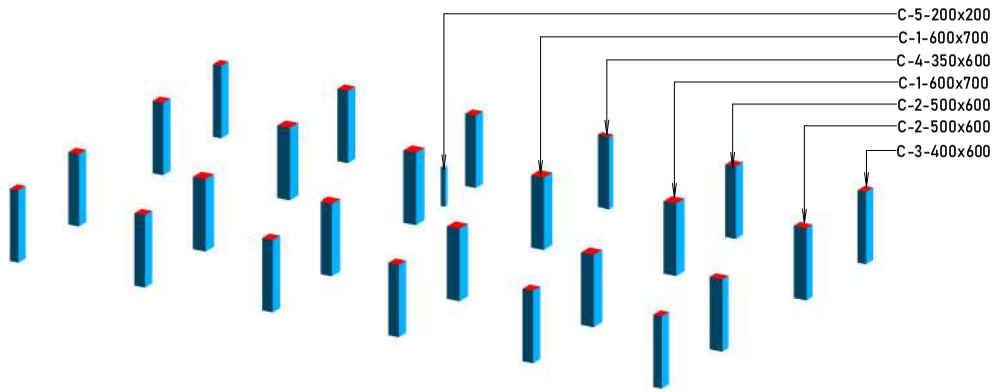
DRAWING TITLE 6F Slab Floor	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A117.1
DATE	19/02/2025



6th FLOOR COLUMN LAYOU PLAN

SCALE (1 : 150)

**REMARK :
C1 :0.60x0.70m
C2:0.50x0.60m
C3:0.40x0.60m
C4:0.35x0.60m
C5:0.20x0.20m
W1:0.2m thk.
W2:0.25m thk.



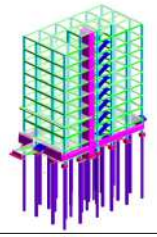
Structural 6th Column Schedule		
Type	Q'ty	Volume
C-1-600x700	8	12.77 m³
C-2-500x600	11	12.54 m³
C-3-400x600	4	3.65 m³
C-4-350x600	1	0.80 m³
C-5-200x200	1	0.08 m³
TOTAL: 25	25	29.83 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

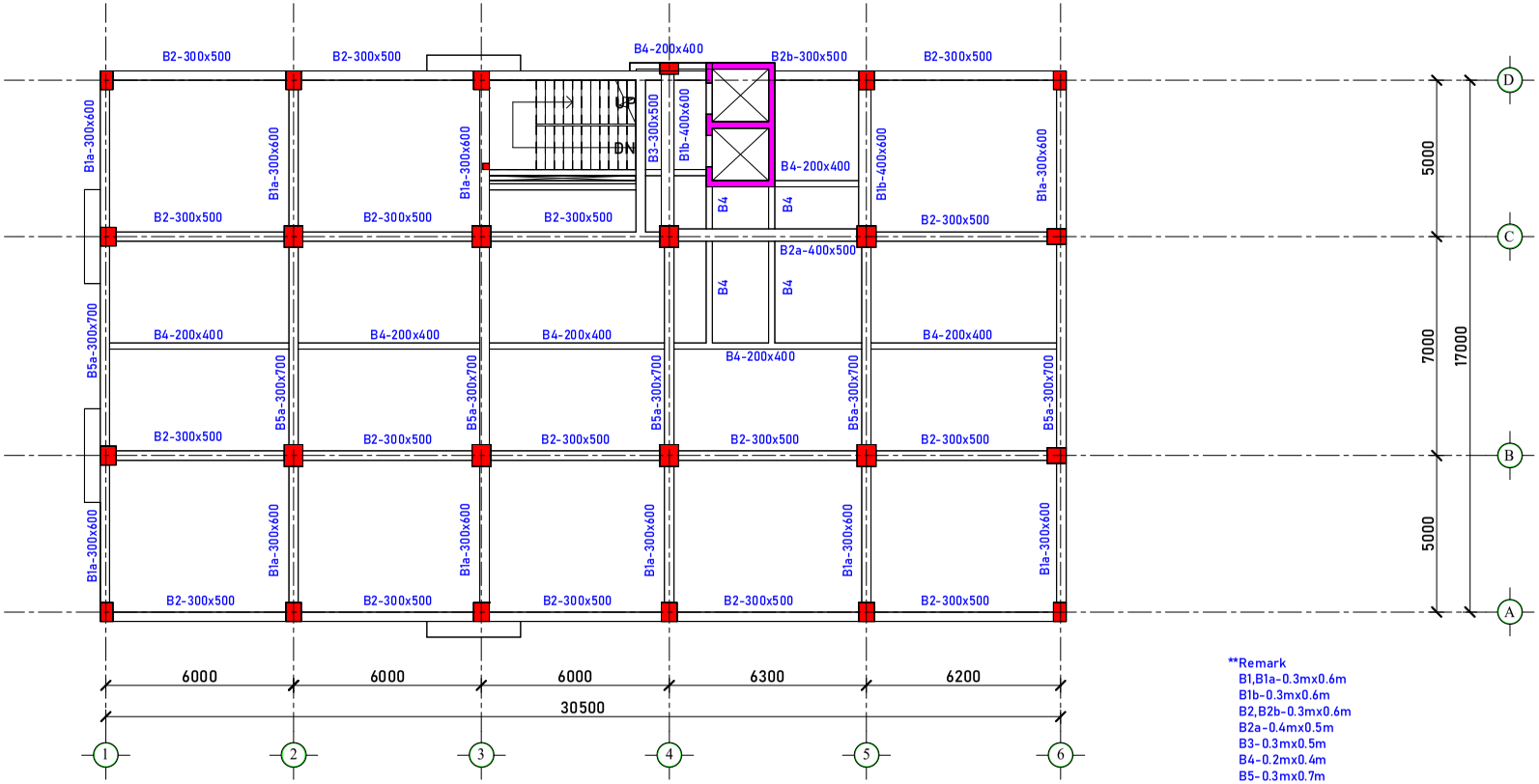
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



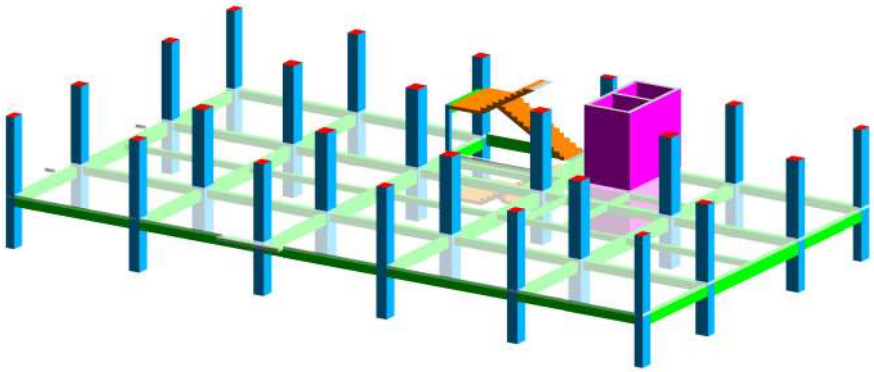
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE E6 Column	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A118
DATE	19/02/2025



7th FLOOR BEAM LAYOUT PLAN

SCALE (1 : 150)



**Remark

B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m

Structural Framing 7F Schedule		
Type	Q'ty	Volume
B1a-300x600	10	6.04 m³
B1b-400x600	2	1.66 m³
B2-300x500	7	10.88 m³
B2a-400x500	1	0.78 m³
B2b-300x500	1	0.29 m³
B3-300x500	1	0.52 m³
B4-200x400	10	3.34 m³
B5a-300x700	6	6.34 m³
TOTAL: 38	38	29.86 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

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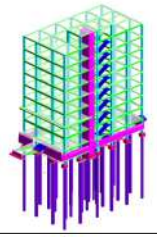

WORKING DRAWING
FOR CONSTRUCTION

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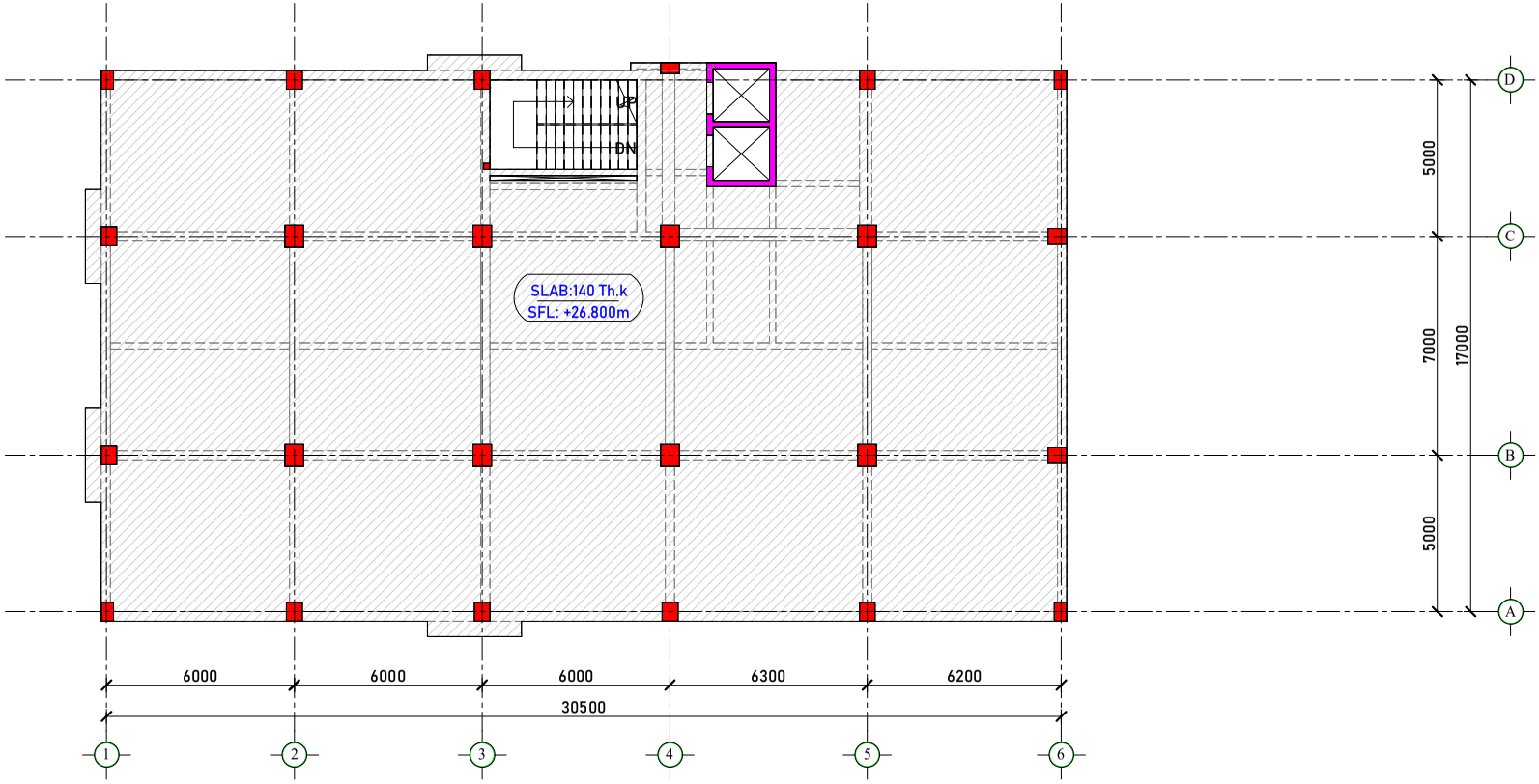
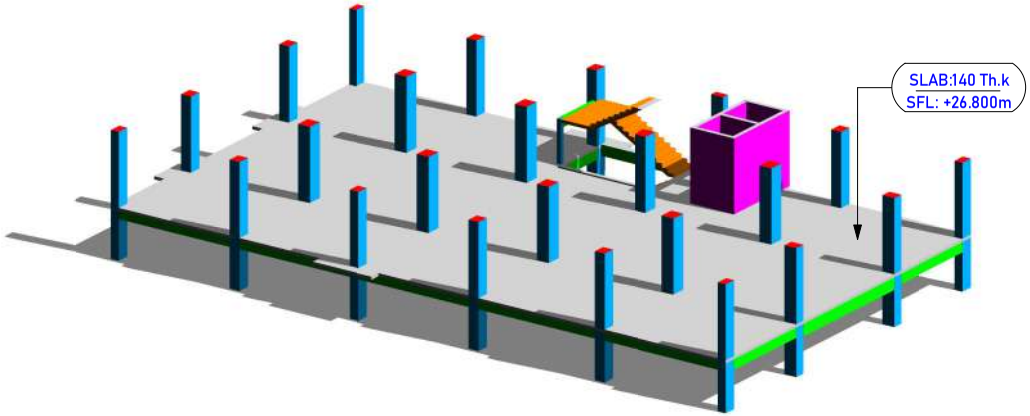
PAPER SIZE	A3
DRAWING NO.	A119
DATE	19/02/2025



7th FLOOR FLOOR LAYOUT PLAN

SCALE (1 : 150)



7F Slab Schedule		
Type	Q'ty	Volume
Slab 140	1	74.20 m³
TOTAL: 1		74.20 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

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CHIEF SURVEY

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STRUCTURAL ENGINEERS
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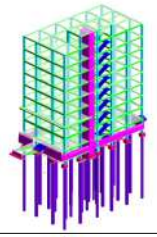
ELECTRICAL ENGINEERS

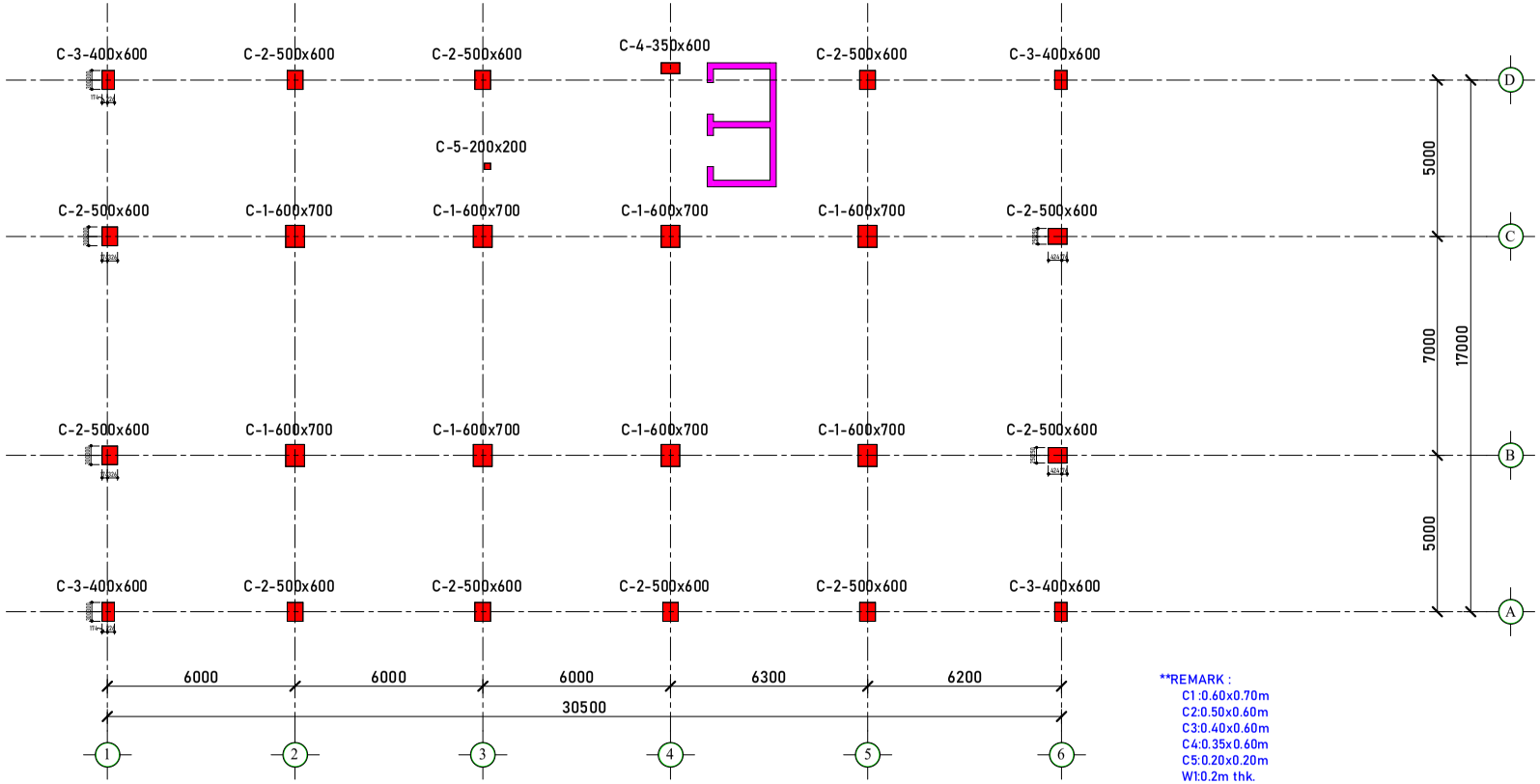
SANITARY ENGINEERS

REVISIONS	DATE



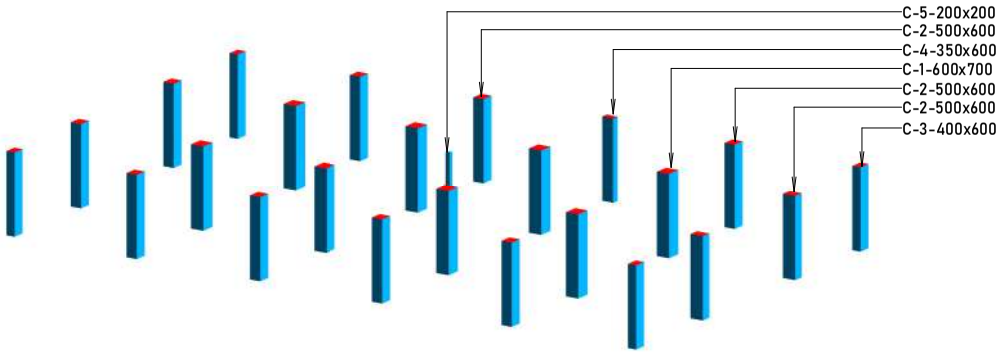
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
7F Slab Floor	1/150
PAPER SIZE	A3
DRAWING NO.	A119.1
DATE	19/02/2025



7th FLOOR COLUMN LAYOUT PLAN

SCALE (1 : 150)



**REMARK :
C1:0.60x0.70m
C2:0.50x0.60m
C3:0.40x0.60m
C4:0.35x0.60m
C5:0.20x0.20m
W1:0.2m thk.
W2:0.25m thk.

Structural 7th Column Schedule		
Type	Q'ty	Volume
C-1-600x700	8	13.15 m³
C-2-500x600	11	12.82 m³
C-3-400x600	4	3.71 m³
C-4-350x600	1	0.84 m³
C-5-200x200	1	0.08 m³
TOTAL: 25	25	30.59 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS
Mr. Rath RunKakada

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ELECTRICAL ENGINEERS

SANITARY ENGINEERS

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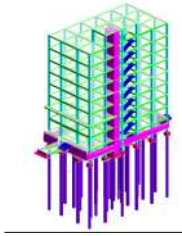

WORKING DRAWING
FOR CONSTRUCTION

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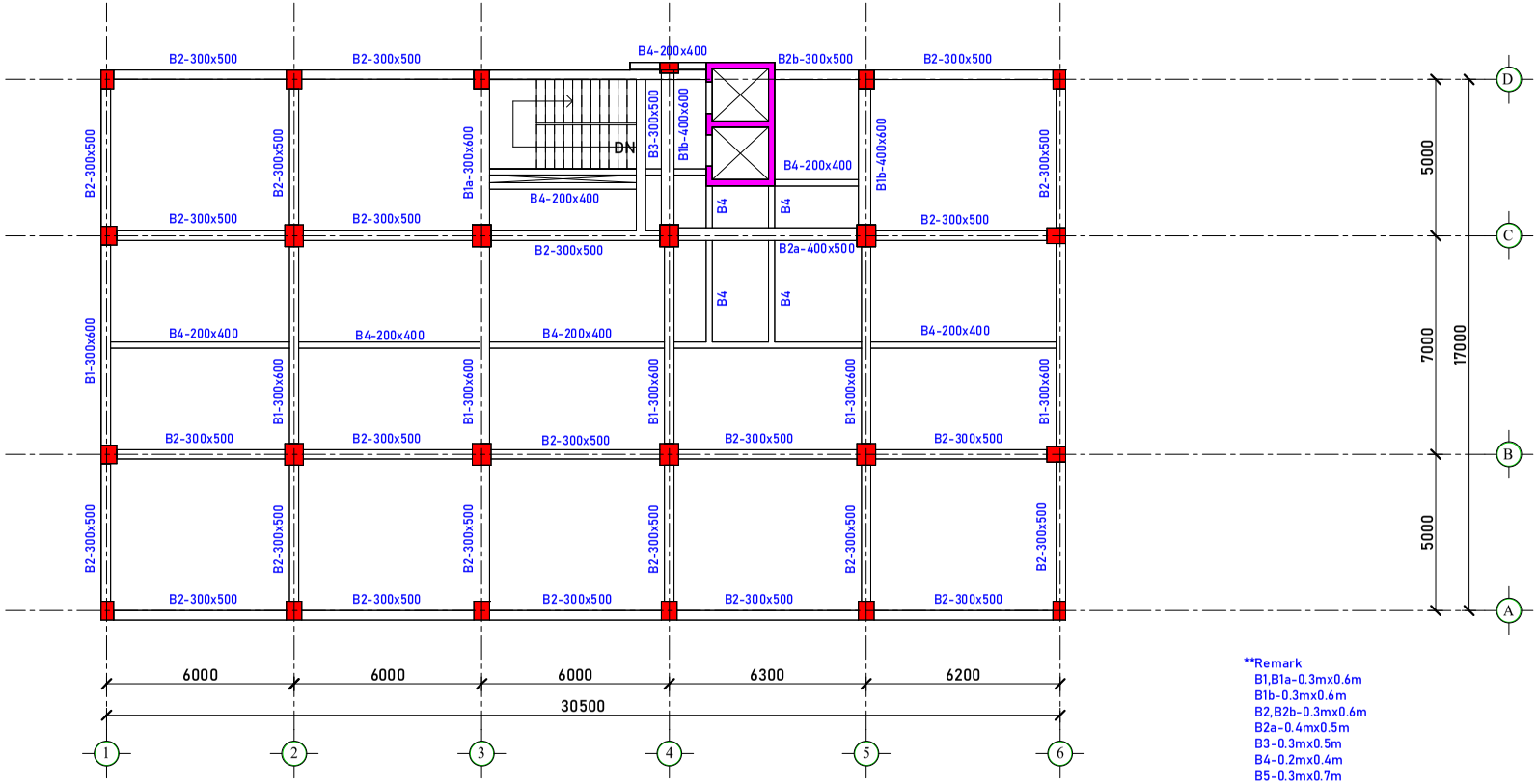
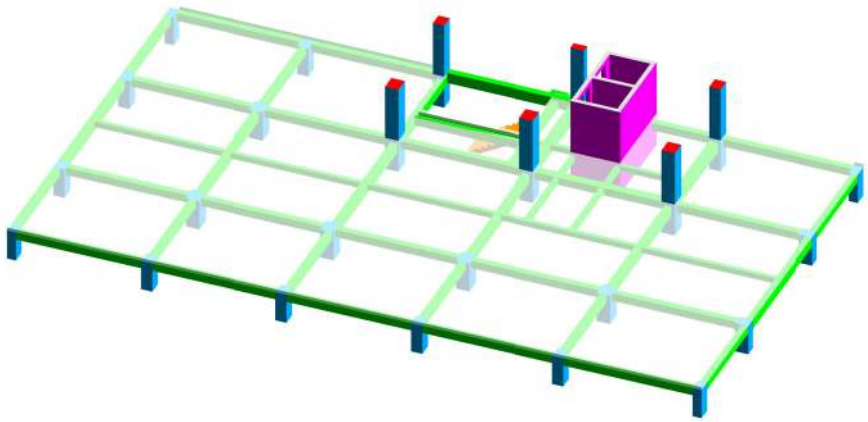
PAPER SIZE	A3
DRAWING NO.	A120
DATE	19/02/2025



8th FLOOR BEAM LAYOUT PLAN

SCALE (1 : 150)



**Remark
B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m

Structural Framing 8F Schedule		
Type	Q'ty	Volume
B1-300x600	6	5.20 m³
B1a-300x600	1	0.60 m³
B1b-400x600	2	1.65 m³
B2-300x500	17	15.43 m³
B2a-400x500	1	0.82 m³
B2b-300x500	1	0.29 m³
B3-300x500	1	0.51 m³
B4-200x400	10	3.09 m³
TOTAL: 39	39	27.58 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

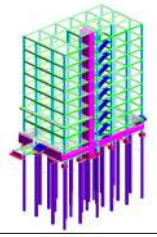
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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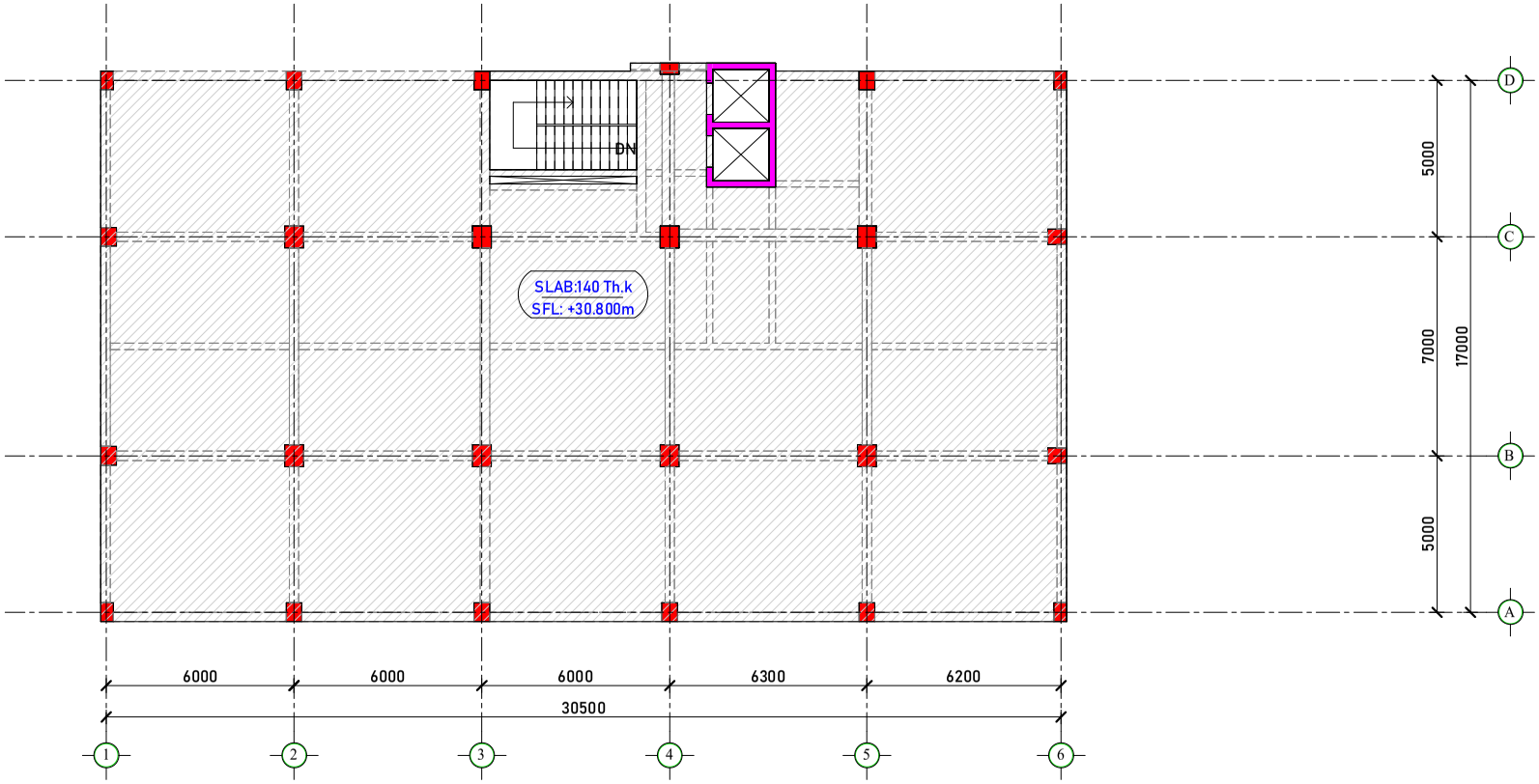
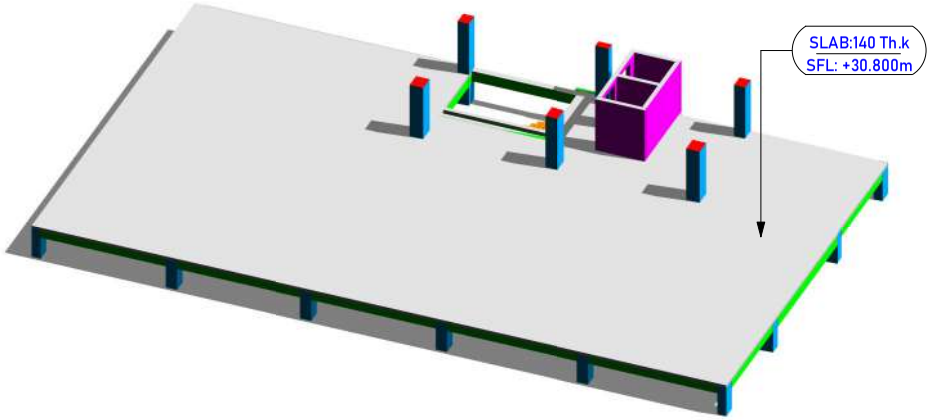
PAPER SIZE	A3
DRAWING NO.	A121
DATE	19/02/2025



8th FLOOR SLAB LAYOUT PLAN

SCALE (1 : 150)



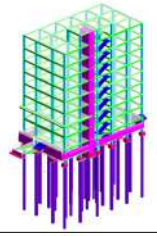
8F Slab Schedule		
Type	Q'ty	Volume
Slab 140	1	73.29 m³
TOTAL: 1		73.29 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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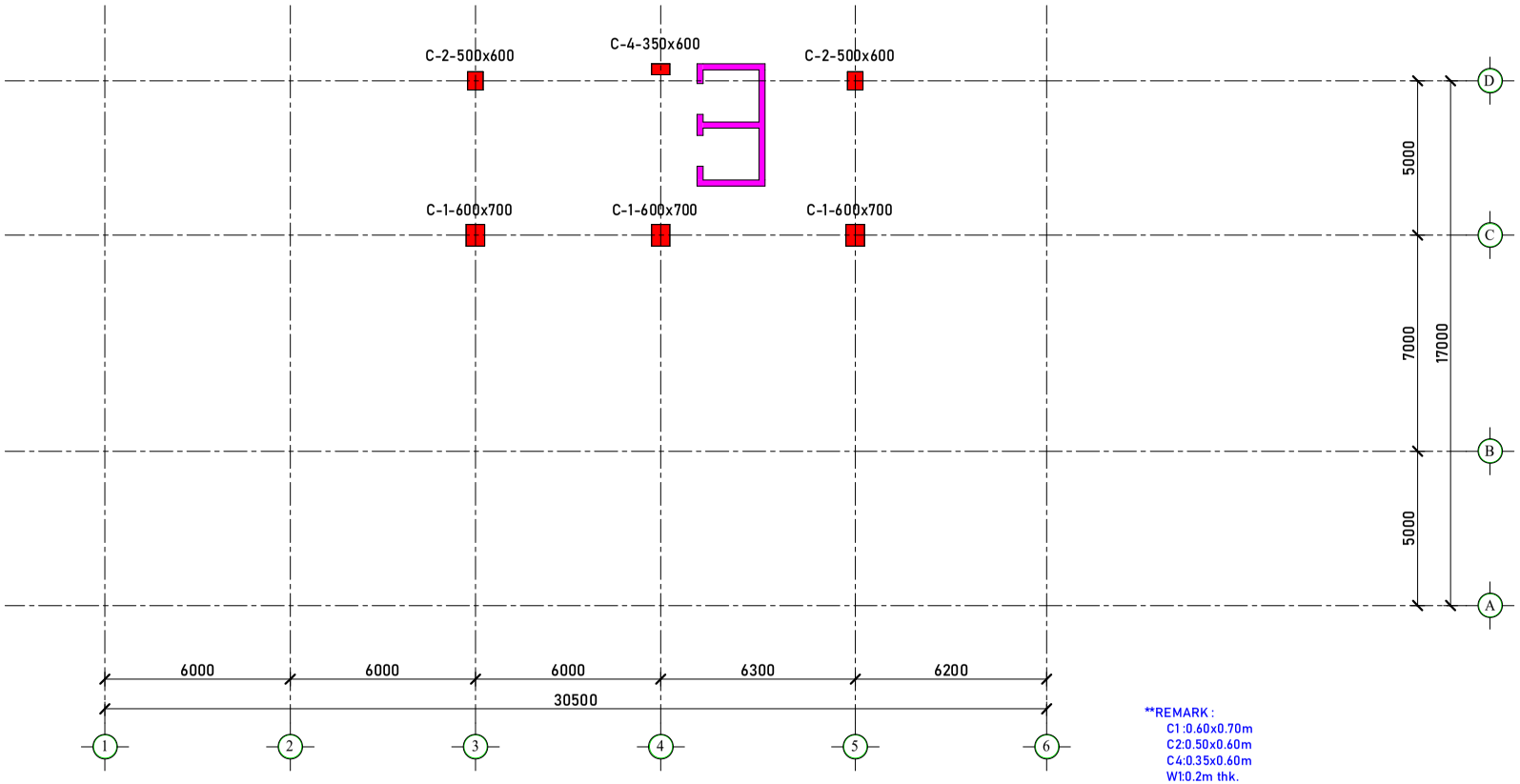
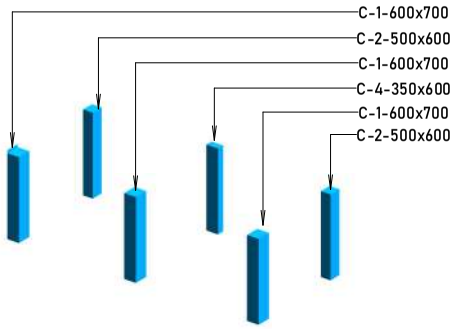
PAPER SIZE	A3
DRAWING NO.	A121.1
DATE	19/02/2025



ROOF COLUMN LAYOUT PLAN

SCALE (1 : 150)

**REMARK :
C1 :0.60x0.70m
C2:0.50x0.60m
C4:0.35x0.60m
W1:0.2m thk.
W2:0.25m thk.



Structural Roof Column Schedule		
Type	Q'ty	Volume
C-1-600x700	3	4.99 m³
C-2-500x600	2	2.38 m³
C-4-350x600	1	0.83 m³
TOTAL: 6	6	8.20 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

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CHIEF SURVEY

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Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

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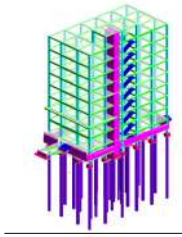

WORKING DRAWING
FOR CONSTRUCTION

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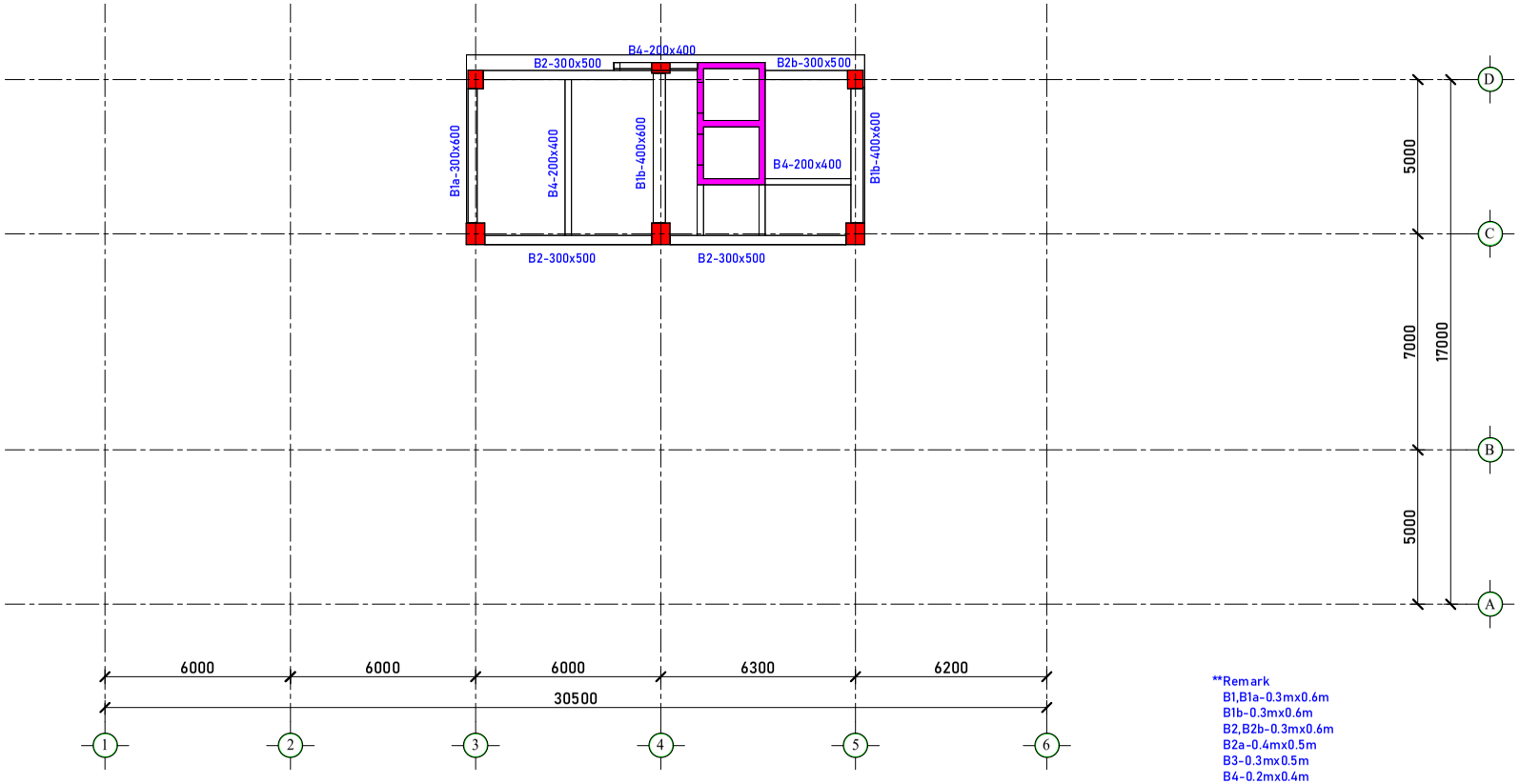
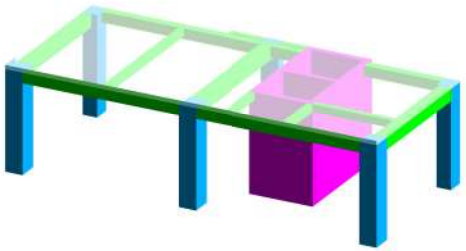
PAPER SIZE	A3
DRAWING NO.	A122
DATE	19/02/2025



TOP ROOF BEAM LAYOUT PLAN

SCALE (1 : 150)

**Remark
B1,B1a-0.3mx0.6m
B1b-0.3mx0.6m
B2,B2b-0.3mx0.6m
B2a-0.4mx0.5m
B3-0.3mx0.5m
B4-0.2mx0.4m
B5-0.3mx0.7m
B5a-0.3mX0.7m



Structural Framing ROOF Schedule		
Type	Q'ty	Volume
B1a-300x600	1	0.60 m³
B1b-400x600	2	1.66 m³
B2-300x500	3	1.95 m³
B2b-300x500	1	0.29 m³
B4-200x400	6	0.70 m³
TOTAL: 13	13	5.20 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

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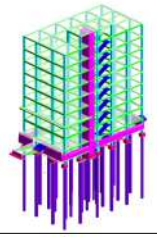
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
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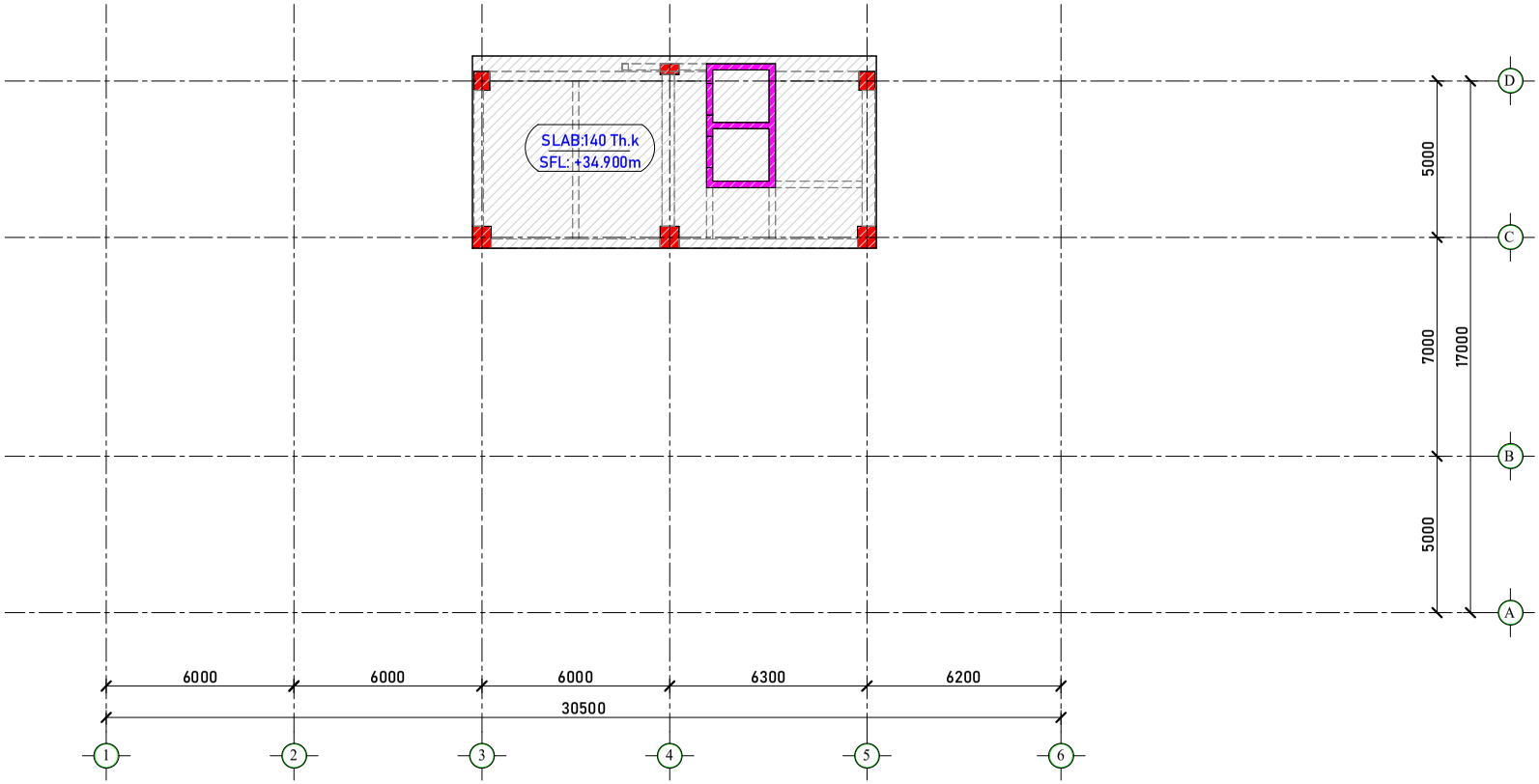
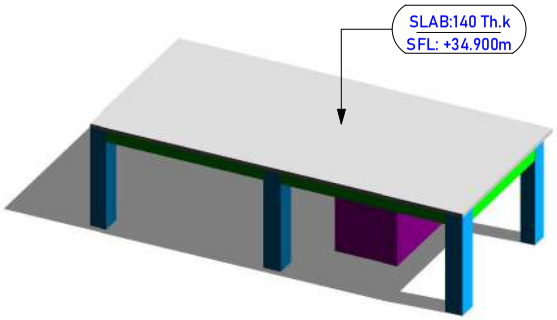
PAPER SIZE	A3
DRAWING NO.	A123
DATE	19/02/2025



TOP ROOF SLAB LAYOUT PLAN

SCALE (1 : 150)



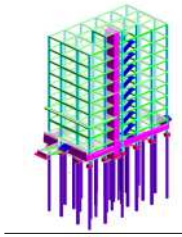
ROOF Slab Schedule		
Type	Q'ty	Volume
Slab 140	1	11.11 m³
TOTAL: 1		11.11 m³

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

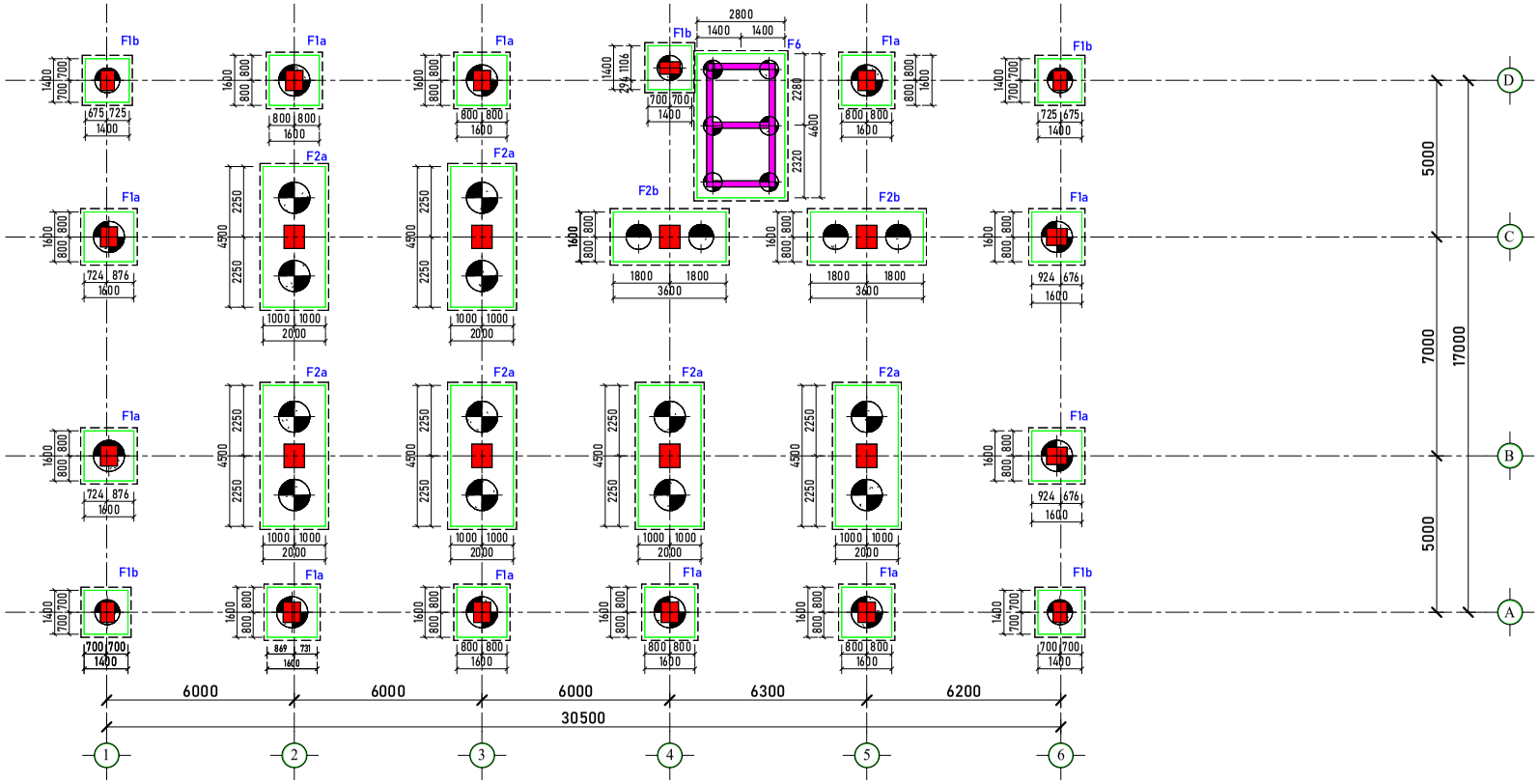
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



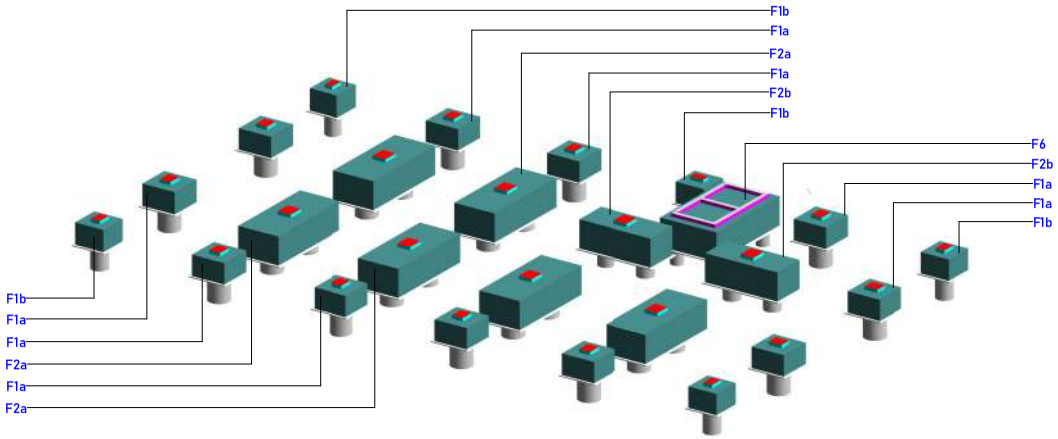
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE RF Slab Floor	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A123.0
DATE	19/02/2025



PILECAP LAYOUT PLAN

SCALE (1 : 150)



**REMARK:
F1a-1600x1600x1000
F1b-1400x1400x1000
F2a-2000x3600x1300
F2b-1600x3600x1300
F6-2800x4600x1300

Structural Foundation Schedule		
Type	Q'ty	Volume
F1a	11	28.16 m³
F1b	5	9.80 m³
F2a	6	70.20 m³
F2b	2	14.98 m³
F6	1	16.74 m³
TOTAL: 25	25	139.88 m³

NOTE :
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2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

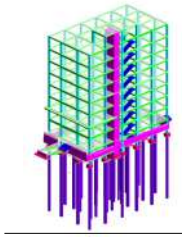
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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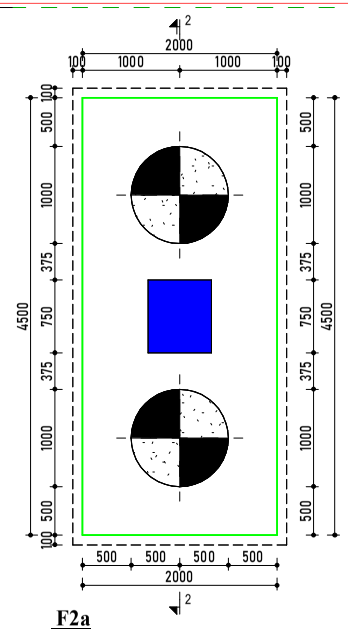
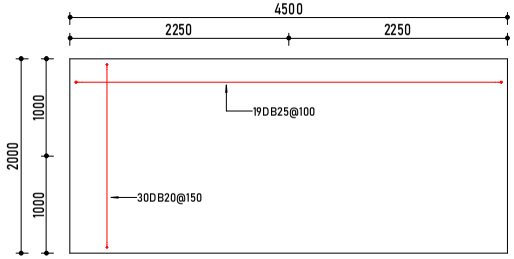
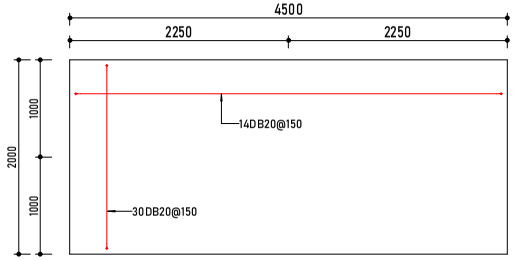
PAPER SIZE	A3
DRAWING NO.	A125
DATE	19/02/2025



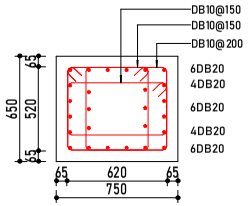
F2a
SCALE (1 : 50)



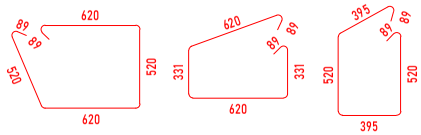
Bottom Rebar Pile Cap F2a
SCALE (1 : 50)

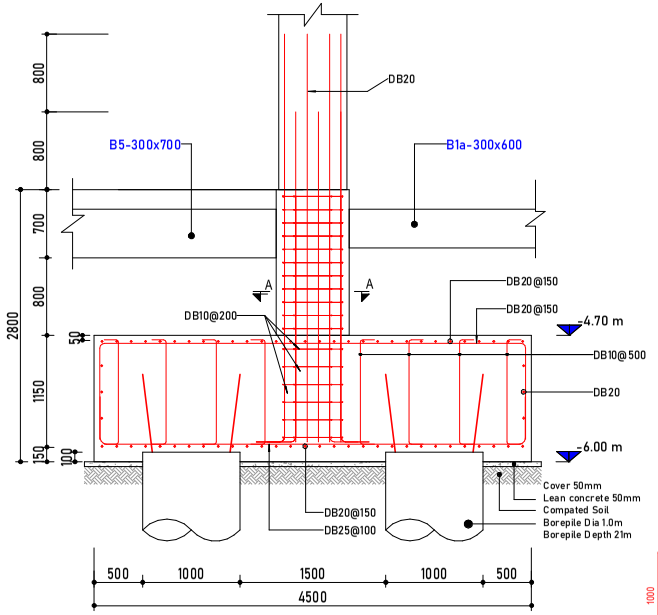


Top Rebar Pile Cap F2a
SCALE (1 : 50)

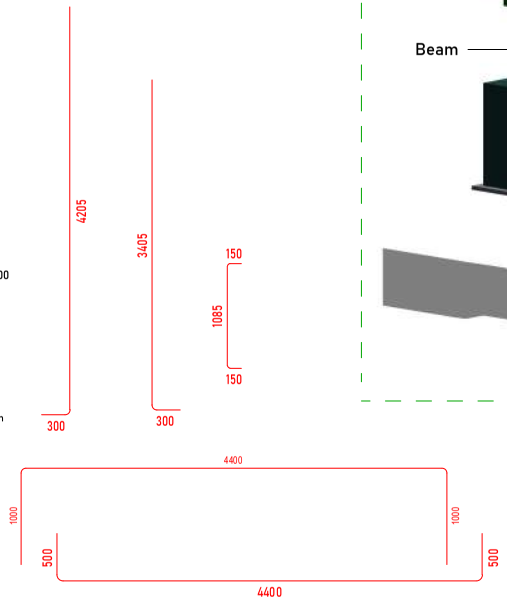


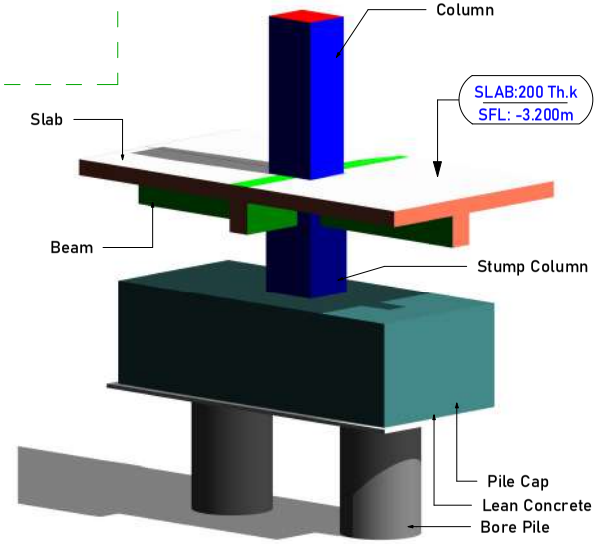
SECTION (A-A)
SCALE (1 : 30)





SECTION (2-2)
SCALE (1 : 50)





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PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

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STRUCTURAL ENGINEERS Mr. Rath RunKakada	
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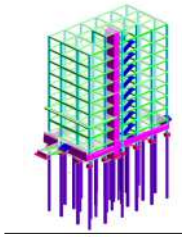
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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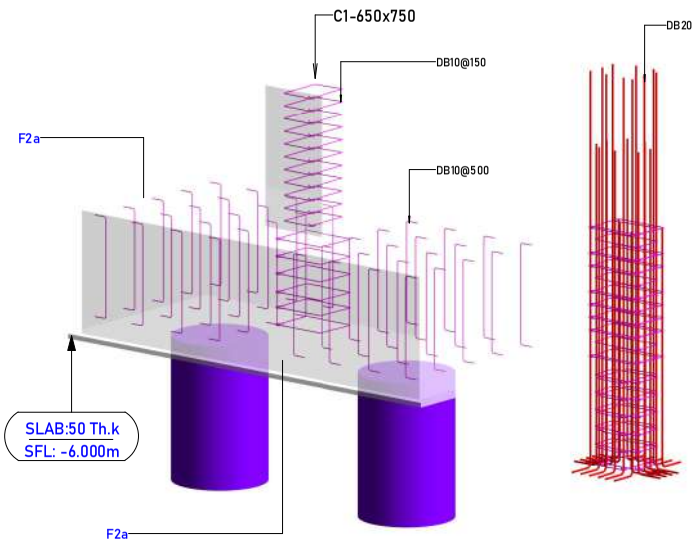
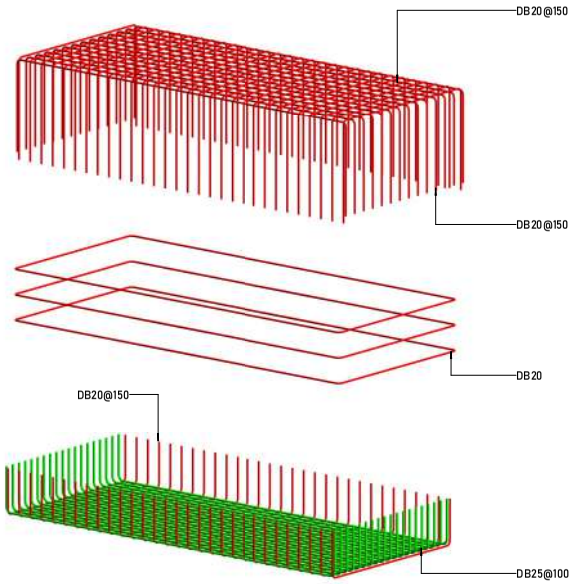
PAPER SIZE	A3
DRAWING NO.	A12 G
DATE	19/02/2025



3D F2a

SCALE ( )



F2a Rebar Schedule

Number	Diameter	Quantity	Length	Total Length	Total Weight	Shape
1	25 mm	19	5.30 m	100.63 m	387.57 kg	500 / 4400 / 500
2	20 mm	30	4.02 m	120.51 m	297.05 kg	1100 / 1900 / 1100
3	20 mm	14	6.32 m	88.44 m	217.99 kg	1000 / 4400 / 1000
4	10 mm	40	1.34 m	53.75 m	33.12 kg	150 / 1085 / 150
5	20 mm	6	7.02 m	42.10 m	103.78 kg	2600 / 2600 / 1900
6	20 mm	30	2.82 m	84.51 m	208.31 kg	500 / 1900 / 500
TOTAL: 18		139		489.95 m	1247.83 kg	

Strump Cl F2a Rebar Schedule

Number	Diameter	Quantity	Length	Total Length	Total Wieght	Shape
1	10 mm	14	2.40 m	33.54 m	20.67 kg	89 / 620 / 89 / 520 / 620
2	10 mm	17	2.02 m	34.32 m	21.15 kg	620 / 89 / 89 / 331 / 331 / 620
3	10 mm	17	1.94 m	33.06 m	20.37 kg	89 / 520 / 89 / 395 / 520
4	20 mm	10	4.46 m	44.63 m	110.02 kg	300 / 4205
5	20 mm	8	3.66 m	29.31 m	72.24 kg	300 / 3405
6	20 mm	5	2.80 m	13.99 m	34.49 kg	300 / 2540
7	20 mm	3	2.80 m	8.39 m	20.69 kg	300 / 2540
TOTAL: 32		74		197.25 m	299.63 kg	

PROJECT: MEGABELLE

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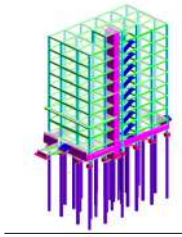
ELECTRICAL ENGINEERS

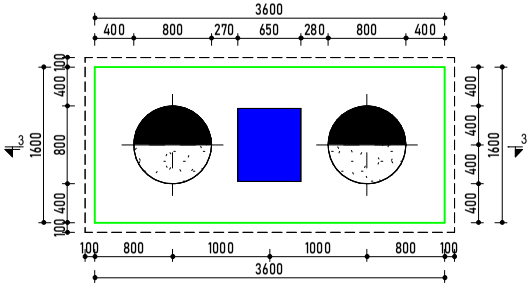
SANITARY ENGINEERS

REVISIONS	DATE



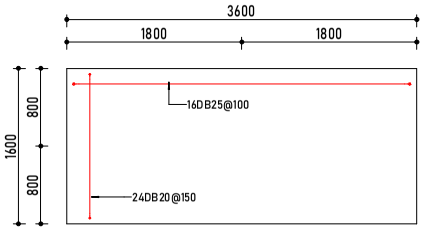
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
Pile Cap F2a (2)	1/150
PAPER SIZE	A3
DRAWING NO.	A126.1
DATE	19/02/2025



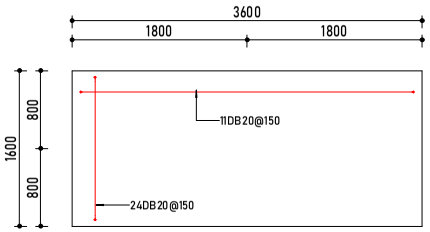
F2b

SCALE (1 : 50)



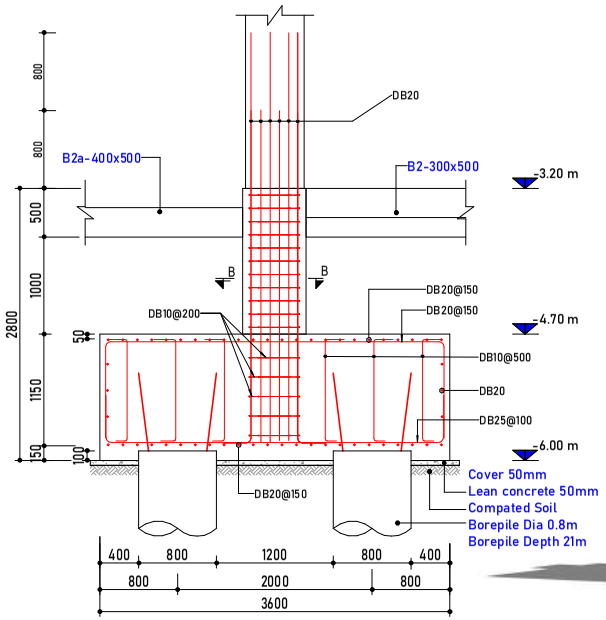
Bottom Rebar Pile Cap F2b

SCALE (1 : 50)



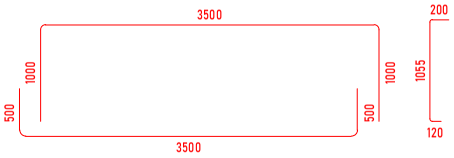
Top Rebar Pile Cap F2b

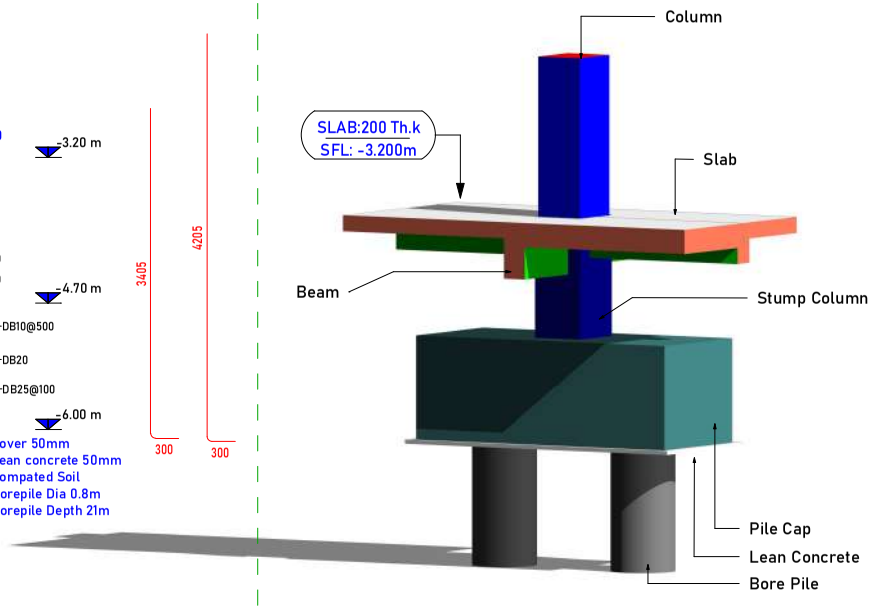
SCALE (1 : 50)

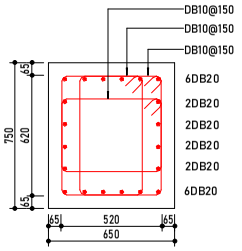


SECTION (3-3)

SCALE (1 : 50)

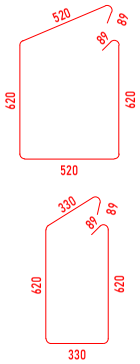






SECTION (B-B)

SCALE (1 : 25)



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PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

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STRUCTURAL ENGINEERS Mr. Rath RunKakada	
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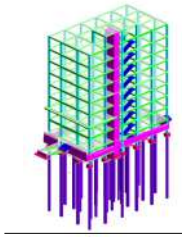
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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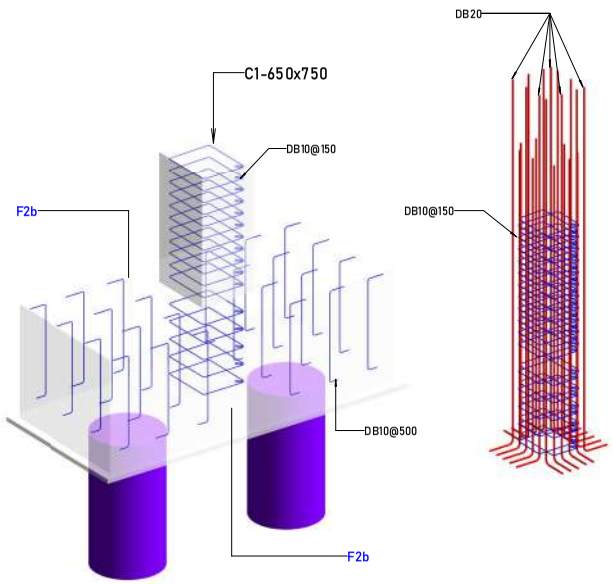
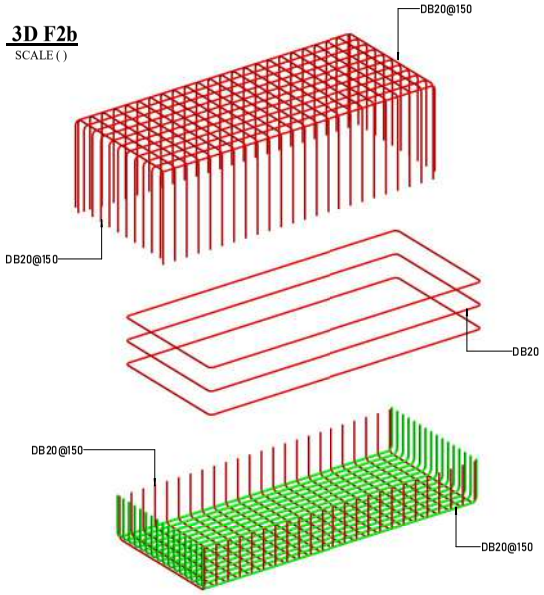
PAPER SIZE	A3
DRAWING NO.	A127
DATE	19/02/2025



3D F2b

SCALE ( )



F2b Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	25 mm	16	4.40 m	70.34 m	270.91 kg	500 / 3500 / 500
2	20 mm	24	3.62 m	86.81 m	213.98 kg	1100 / 1500 / 1100
3	20 mm	11	5.42 m	59.59 m	146.88 kg	1000 / 3500 / 1000
4	10 mm	4	1.33 m	5.34 m	3.29 kg	200 / 1055 / 120
5	10 mm	4	1.40 m	5.61 m	3.46 kg	229 / 1055 / 160
6	10 mm	4	1.34 m	5.37 m	3.31 kg	205 / 1055 / 125
7	10 mm	12	1.33 m	16.00 m	9.86 kg	200 / 1055 / 120
8	20 mm	3	5.71 m	17.12 m	42.20 kg	2145 / 2145 / 1500
9	20 mm	3	5.72 m	17.16 m	42.31 kg	2152 / 2152 / 1500
10	20 mm	24	2.42 m	58.01 m	142.99 kg	500 / 1500 / 500
Total: 16		105		341.35 m	879.18 kg	

Strump CL Pile Cap F2b Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	10 mm	16	2.40 m	38.33 m	23.62 kg	620 / 89 / 89 / 95 / 520 / 620
2	10 mm	16	1.93 m	30.81 m	18.99 kg	520 / 89 / 89 / 385 / 385 / 520
3	10 mm	16	2.02 m	32.26 m	19.88 kg	620 / 89 / 89 / 95 / 330 / 620
6	20 mm	2	3.66 m	7.33 m	18.06 kg	300 / 3405
7	20 mm	11	4.49 m	49.37 m	121.70 kg	300 / 4230
13	20 mm	3	3.66 m	10.99 m	27.09 kg	300 / 3405
15	20 mm	3	3.69 m	11.06 m	27.27 kg	300 / 3430
16	20 mm	1	4.46 m	4.46 m	11.00 kg	300 / 4205
TOTAL: 26		68		184.61 m	267.60 kg	

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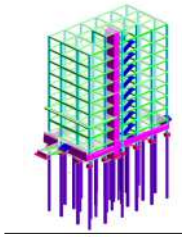

WORKING DRAWING
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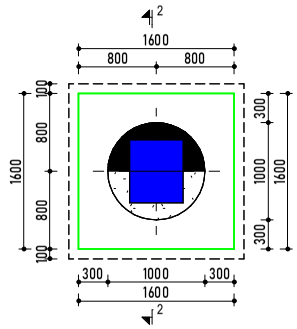
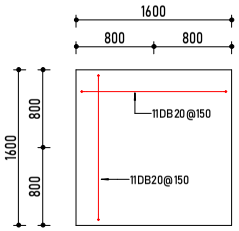
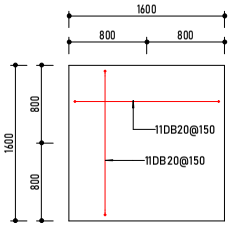
PAPER SIZE	A3
DRAWING NO.	A127.1
DATE	19/02/2025



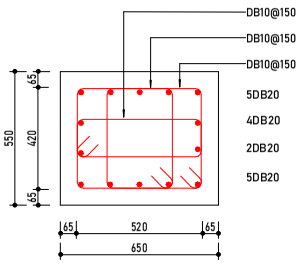
F1a
SCALE (1 : 50)



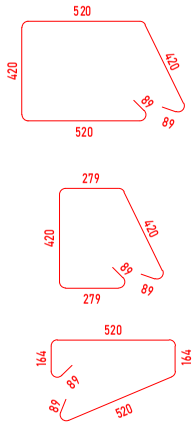
Bottom Rebar Pile Cap F1a
SCALE (1 : 50)

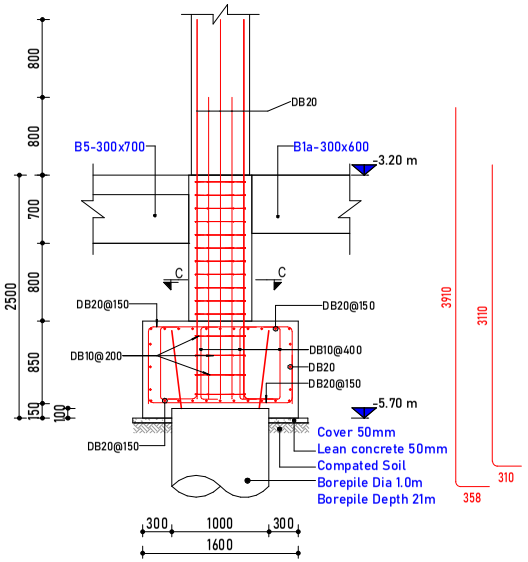


Top Rebar Pile Cap F1a
SCALE (1 : 50)

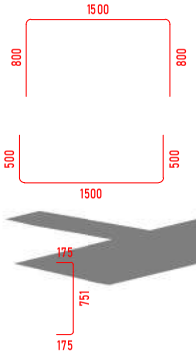


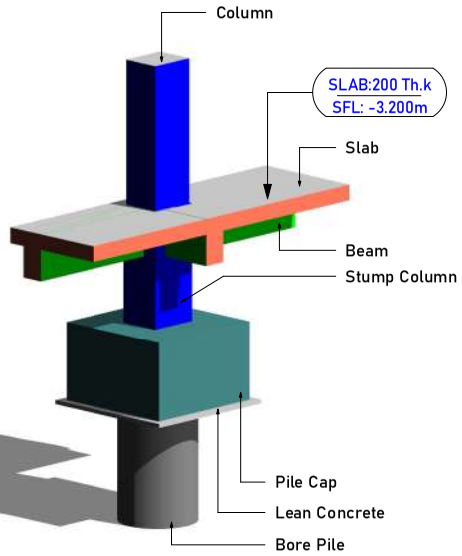
SECTION (C-C)
SCALE (1 : 20)





SECTION (2-2)
SCALE (1 : 50)





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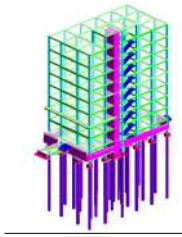
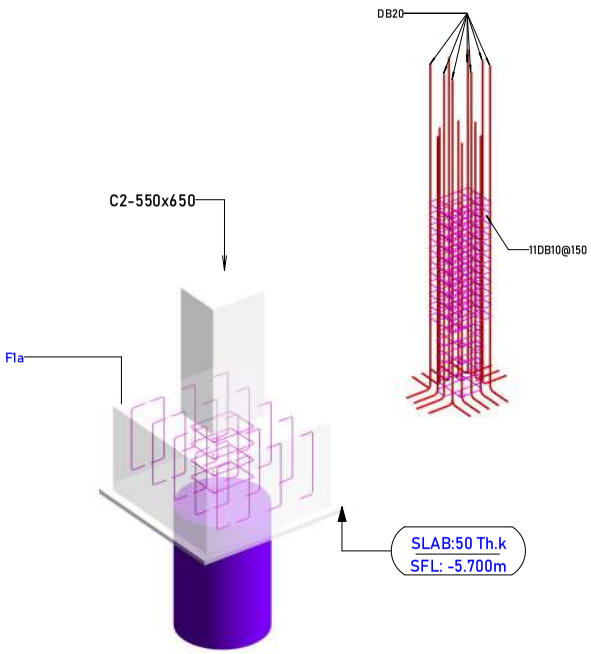
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

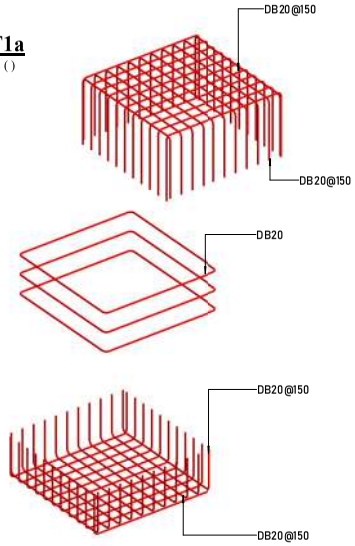


WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Pile Cap Fla	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A128
DATE	19/02/2025



3D F1a
SCALE ( )



F1a Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	20 mm	22	2.42 m	53.18 m	65.54 kg	500 / 1500 / 500
2	20 mm	11	2.92 m	32.09 m	79.09 kg	750 / 1500 / 750
3	20 mm	11	3.02 m	33.19 m	81.80 kg	800 / 1500 / 800
4	10 mm	20	1.06 m	21.19 m	3.26 kg	175 / 751 / 175
5	20 mm	6	3.72 m	22.30 m	27.49 kg	1150 / 1500 / 1150
Total: 10		70		161.94 m		

Strump CL F1a Rebar Schedule

Number	Diameter	Quantity	Length	Total Length	Total Weight	Shape
1	10 mm	14	2.40 m	33.54 m	20.67 kg	620 / 89 / 89 / 520 / 620
2	10 mm	17	2.02 m	34.32 m	21.15 kg	620 / 89 / 89 / 331 / 331 / 620
3	10 mm	17	1.94 m	33.06 m	20.37 kg	520 / 89 / 89 / 395 / 395 / 520
4	20 mm	10	4.46 m	44.63 m	110.02 kg	300 / 4205
5	20 mm	8	3.66 m	29.31 m	72.24 kg	300 / 3405
6	20 mm	5	2.80 m	13.99 m	34.49 kg	300 / 2540
7	20 mm	3	2.80 m	8.39 m	20.69 kg	300 / 2540
TOTAL: 32		74		197.25 m	299.63 kg	

PROJECT: MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

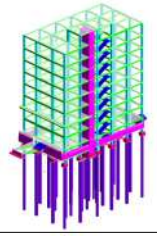
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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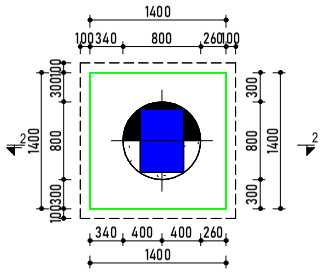
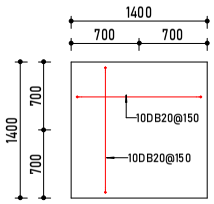
PAPER SIZE	A3
DRAWING NO.	A128.1
DATE	19/02/2025



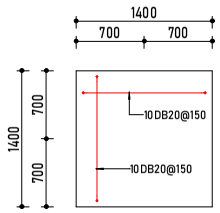
F1b

SCALE (1 : 50)



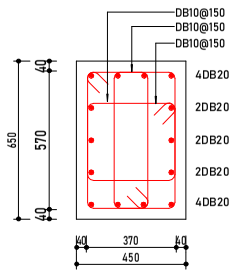
Bottom Rebar Pile Cap F1b

SCALE (1 : 50)



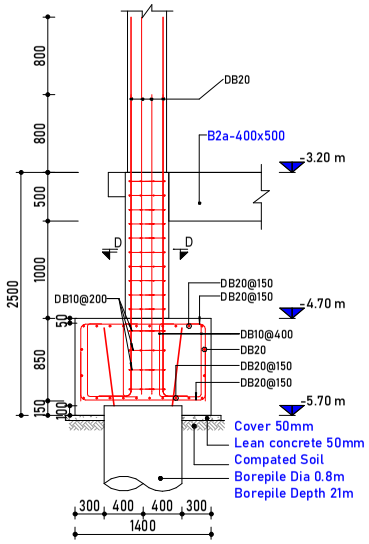
Top Rebar Pile Cap F1b

SCALE (1 : 50)



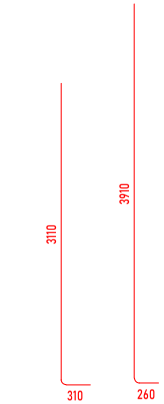
SECTION (D-D)

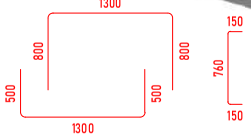
SCALE (1 : 20)

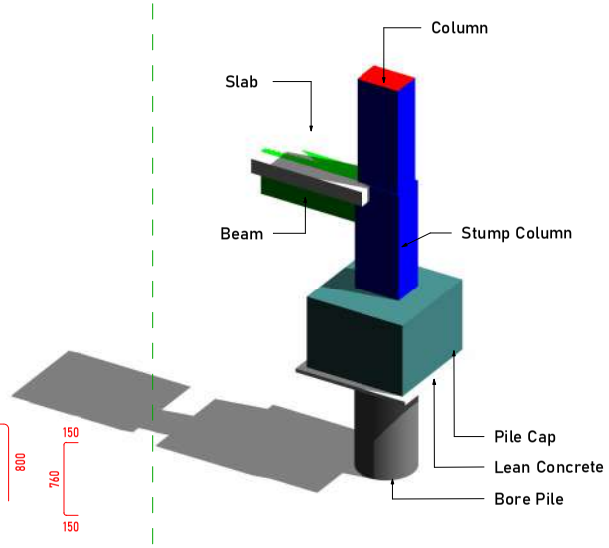


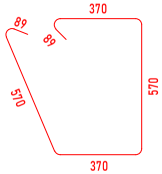
SECTION (2-2)

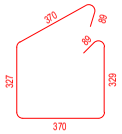
SCALE (1 : 50)

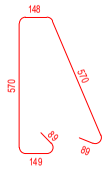










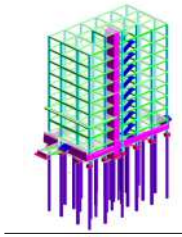


NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT: MEGABELLE

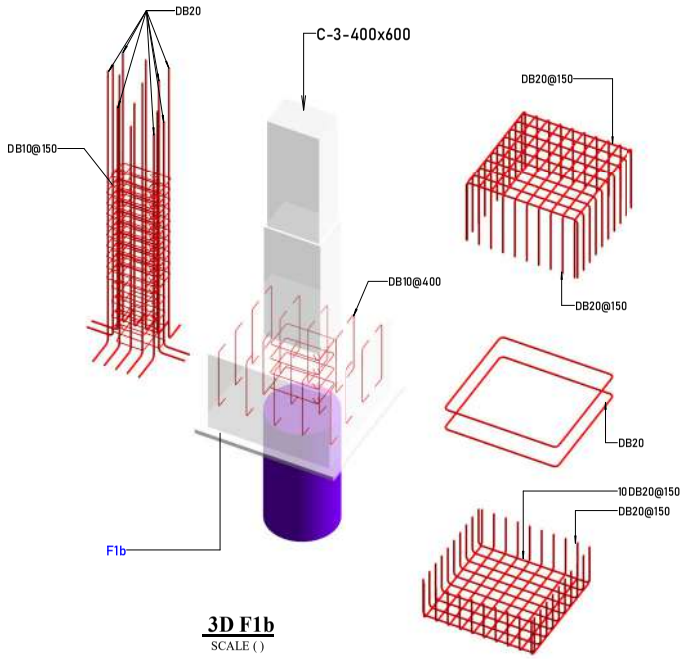
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Pile Cap F1b	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A129
DATE	19/02/2025



3D F1b
SCALE ( )

F1b Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	20 mm	20	2.22 m	44.34 m	109.30 kg	500 / 1300 / 500
2	20 mm	20	2.82 m	56.34 m	138.88 kg	800 / 1300 / 800
3	20 mm	2	3.32 m	6.63 m	16.35 kg	1060 / 1279 / 1060
4	20 mm	2	3.32 m	6.63 m	16.35 kg	1060 / 1280 / 1060
5	10 mm	5	1.02 m	5.09 m	3.14 kg	150 / 760 / 150
6	10 mm	10	1.02 m	10.19 m	6.28 kg	150 / 761 / 150
7	10 mm	5	1.02 m	5.09 m	3.14 kg	150 / 760 / 150
Total: 12		64		134.33 m	293.43 kg	

CL F1b-1 Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	20 mm	1	3.38 m	3.38 m	8.32 kg	308 / 3110
2	20 mm	1	4.18 m	4.18 m	10.30 kg	308 / 3910
5	20 mm	1	4.18 m	4.18 m	10.30 kg	310 / 3910
6	20 mm	1	3.38 m	3.38 m	8.33 kg	310 / 3110
7	10 mm	14	2.00 m	27.93 m	17.21 kg	570 / 89 / 370 / 370 / 570
8	10 mm	14	1.51 m	21.16 m	13.04 kg	370 / 89 / 327 / 329 / 370
9	10 mm	14	1.55 m	21.73 m	13.39 kg	570 / 89 / 148 / 148 / 570
10	20 mm	3	4.13 m	12.39 m	30.53 kg	260 / 3910
11	20 mm	3	4.21 m	12.63 m	31.12 kg	340 / 3910
12	20 mm	2	3.33 m	6.66 m	16.41 kg	260 / 3110
13	20 mm	2	3.41 m	6.82 m	16.80 kg	340 / 3110
TOTAL : 20		56		124.43 m	175.76 kg	

PROJECT: MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

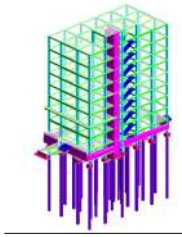
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

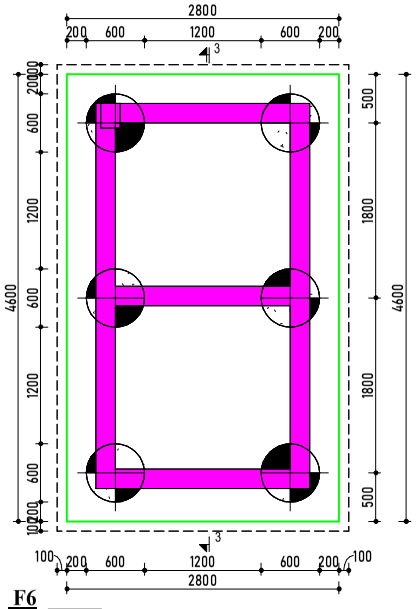
SANITARY ENGINEERS

REVISIONS	DATE

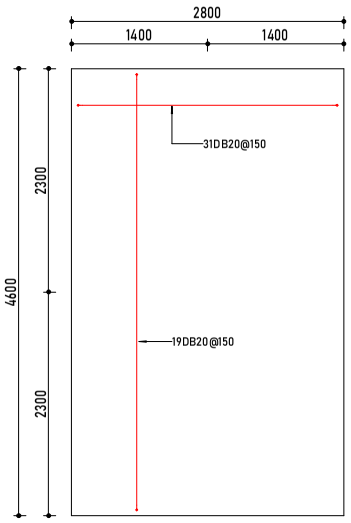


WORKING DRAWING
FOR CONSTRUCTION

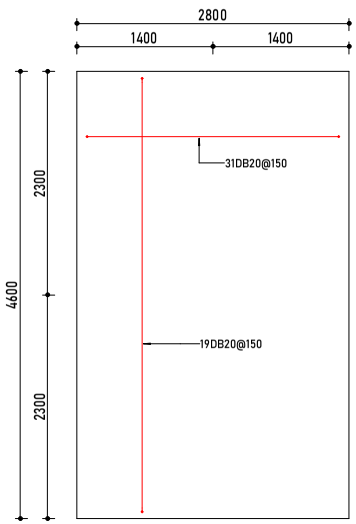
DRAWING TITLE	SCALE
Pile Cap F1b (2)	1/150
PAPER SIZE	A3
DRAWING NO.	A129.1
DATE	19/02/2025



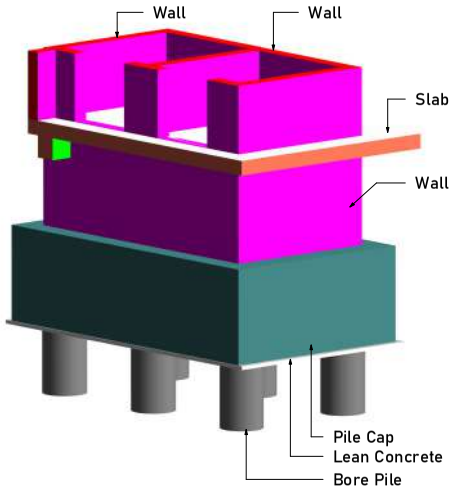
F6
SCALE (1 : 50)

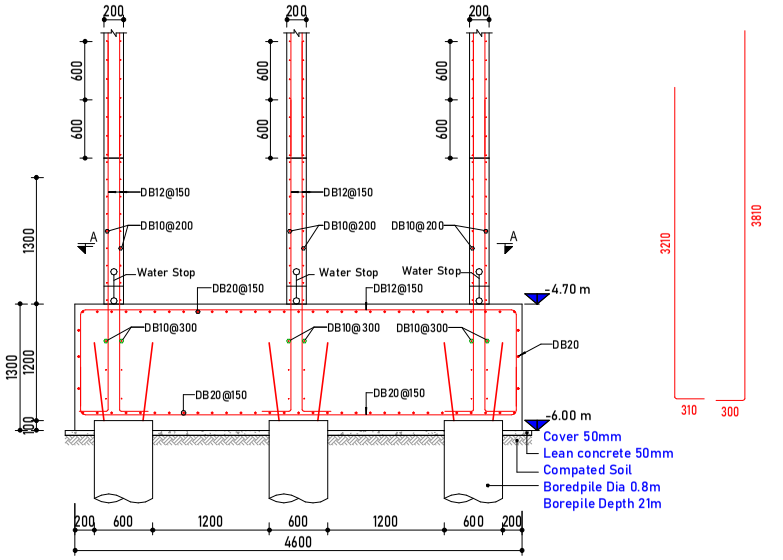


Bottom Rebar Pile Cap F6
SCALE (1 : 50)

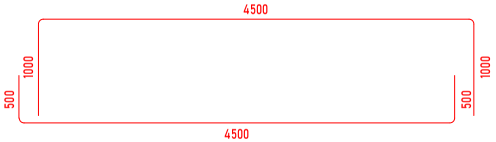


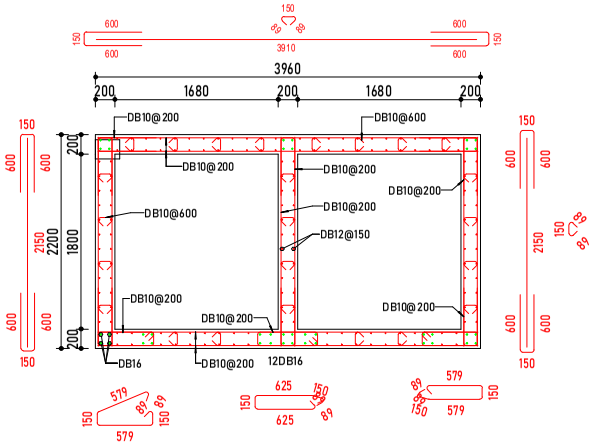
Top Rebar Pile Cap F6
SCALE (1 : 50)





SECTION (3-3)
SCALE (1 : 50)





SECTION (A-A)
SCALE (1 : 50)

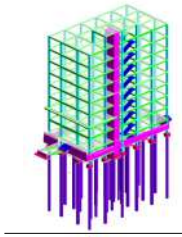
NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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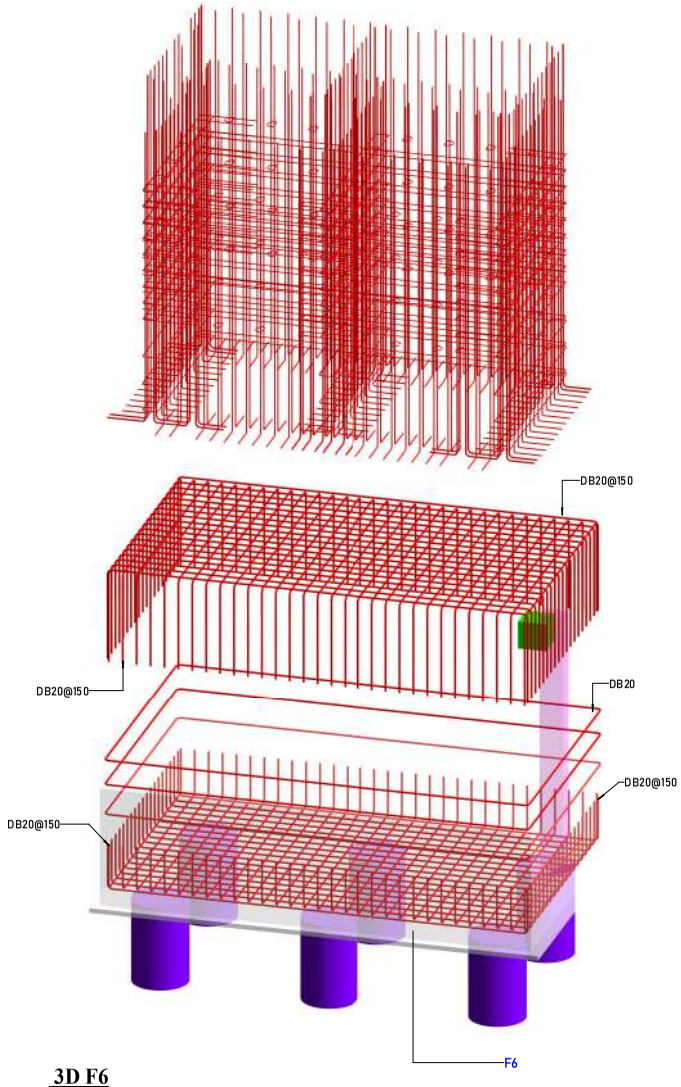
PAPER SIZE	A3
DRAWING NO.	A130
DATE	19/02/2025



3D F6

SCALE ( )

F6 Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	20 mm	19	5.42 m	102.92 m	253.70 kg	500 / 4500 / 500
2	20 mm	31	3.62 m	112.13 m	276.39 kg	500 / 2700 / 500
3	20 mm	19	6.42 m	121.92 m	300.53 kg	1000 / 4500 / 1000
4	20 mm	31	4.62 m	143.13 m	352.80 kg	1000 / 2700 / 1000
5	20 mm	1	8.02 m	8.02 m	19.77 kg	1761 / 4542 / 1760
6	10 mm	18	2.41 m	43.32 m	26.69 kg	149 / 2150 / 149
7	20 mm	1	8.02 m	8.02 m	19.77 kg	1761 / 4542 / 1760
8	20 mm	1	8.02 m	8.02 m	19.77 kg	1761 / 4542 / 1760
9	20 mm	1	8.02 m	8.02 m	19.76 kg	1760 / 4541 / 1760
10	20 mm	1	8.02 m	8.02 m	19.76 kg	1760 / 4541 / 1760
11	20 mm	1	8.02 m	8.02 m	19.76 kg	1760 / 4540 / 1760
TOTAL: 16		124		571.54 m	1328.70 kg	

PROJECT: MEGABELLE

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ARCHITECTS

STRUCTURAL ENGINEERS

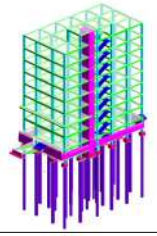
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

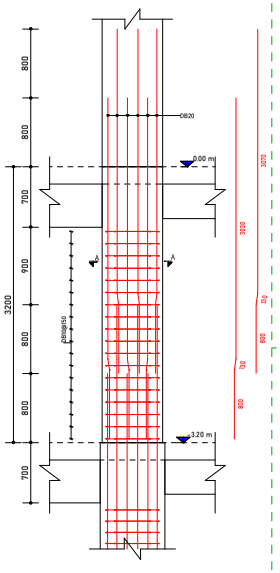
SANITARY ENGINEERS

REVISIONS	DATE



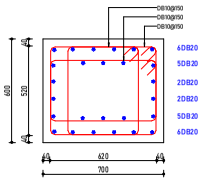
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
Pile Cap F6 (2)	1/150
PAPER SIZE	A3
DRAWING NO.	A130.1
DATE	19/02/2025



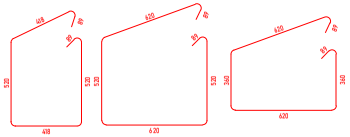
Detail Column C1 BS FLOOR

SCALE (1 : 30)

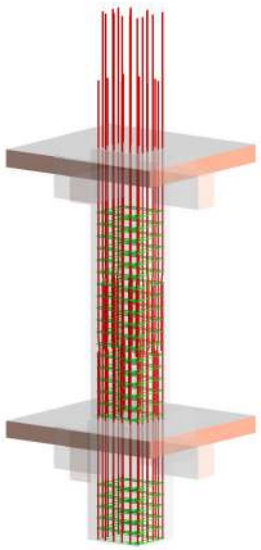


SECTION (A-A)

SCALE (1 : 15)



BS Column C1 Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	20 mm	15	4.00 m	59.94 m	147.74 kg	3070 140
2	20 mm	11	3.94 m	43.51 m	107.26 kg	3030 140
3	10 mm	18	2.40 m	43.12 m	26.57 kg	120 89 120 620
4	10 mm	18	2.08 m	37.36 m	23.02 kg	120 89 120 600
5	10 mm	18	1.99 m	35.86 m	22.10 kg	120 89 120 600
TOTAL : 29		80		219.79 m	326.69 kg	



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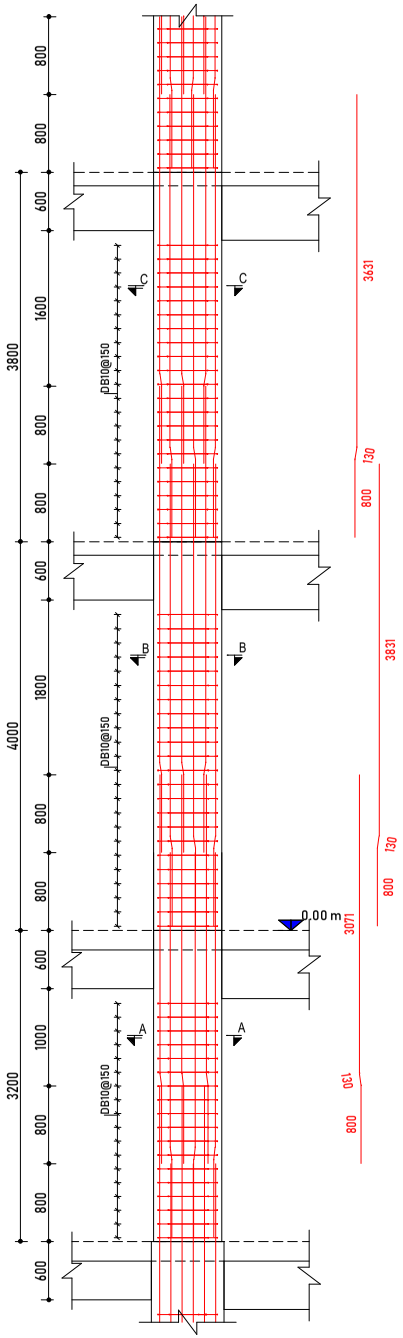
PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr Rob Rarkatate	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

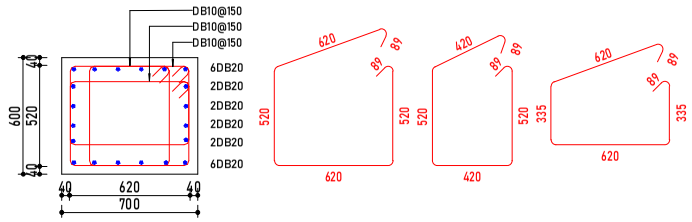
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C1 BS	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A131
DATE	19/02/2025



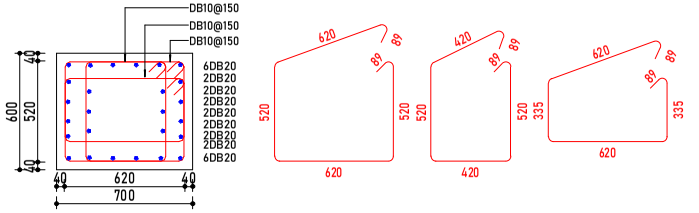
Detail Column C1 (BS to 2nd)

SCALE (1 : 50)



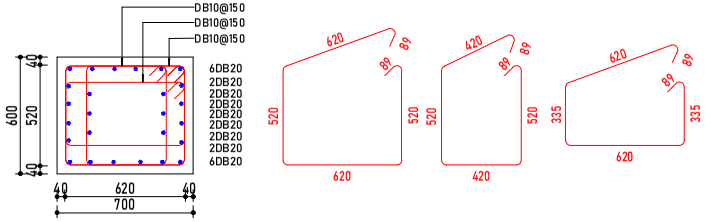
SECTION (C-C)

SCALE (1 : 25)



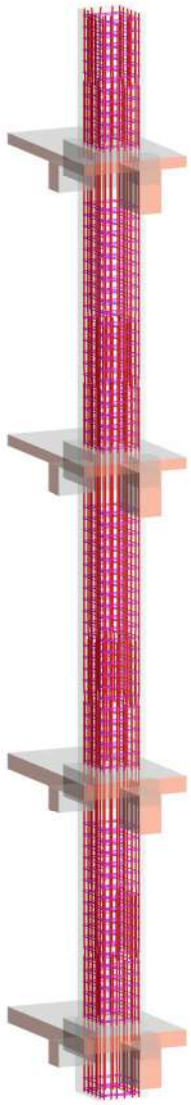
SECTION (B-B)

SCALE (1 : 25)



SECTION (A-A)

SCALE (1 : 25)



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PROJECT : MEGABELLE

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STRUCTURAL ENGINEERS Mr. Rath RunKakada	
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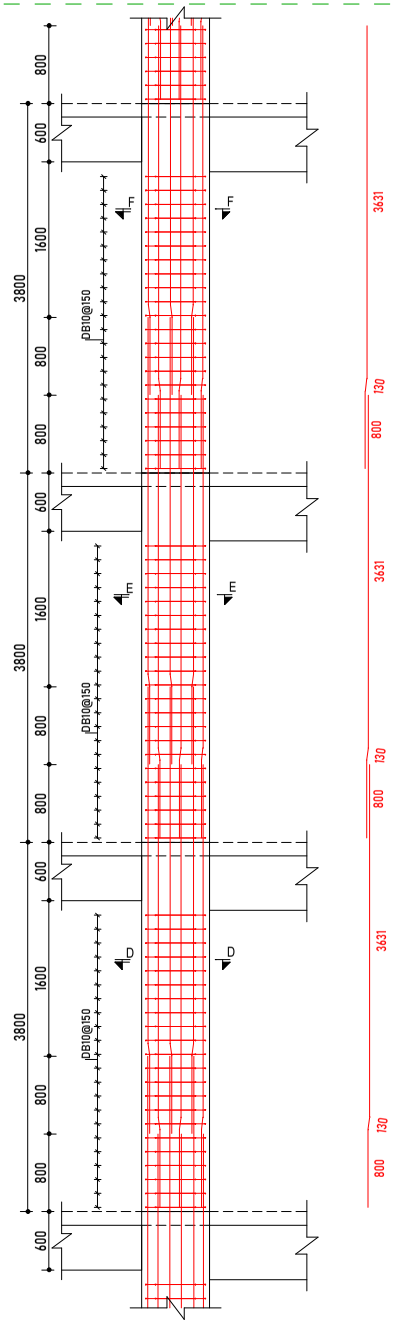
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

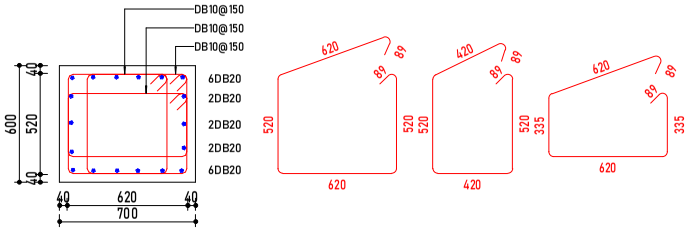
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C1 (BS TO ROOF)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A131(1)
DATE	19/02/2025



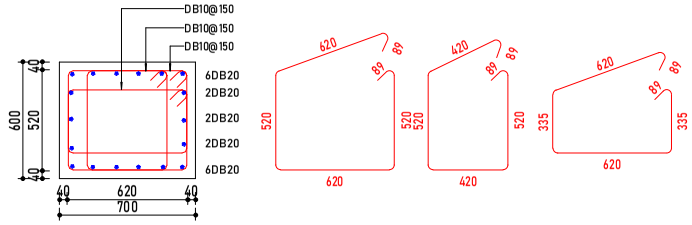
Detail Column C1 (2nd TO 5th)

SCALE (1 : 50)



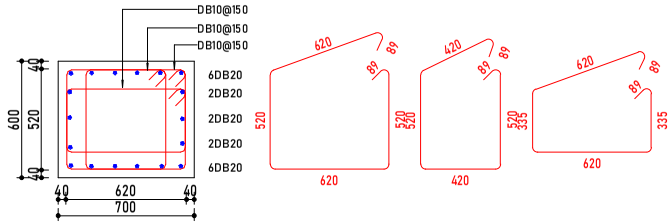
SECTION (F-F)

SCALE (1 : 25)



SECTION (E-E)

SCALE (1 : 25)



SECTION (D-D)

SCALE (1 : 25)

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STRUCTURAL ENGINEERS Mr. Rath RunKakada	
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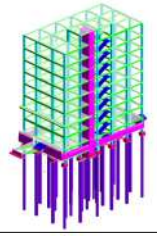
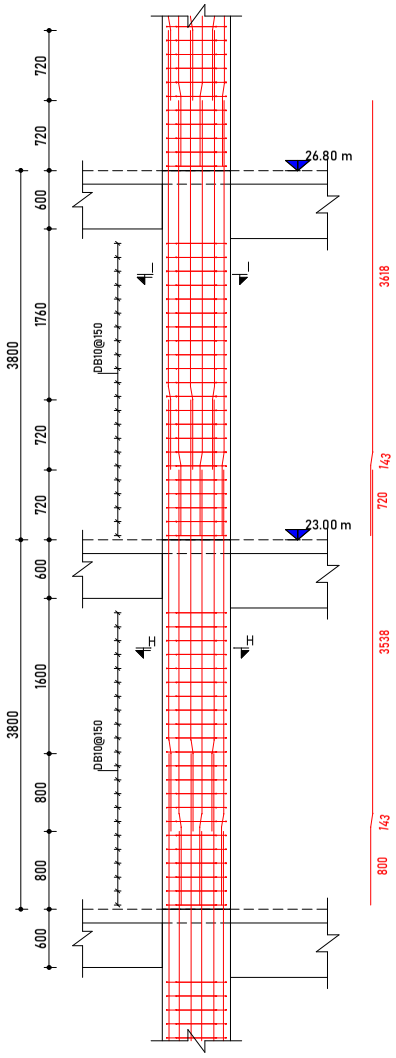
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



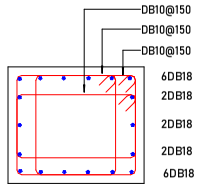
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C1 (BS TO ROOF)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A131(2)
DATE	19/02/2025



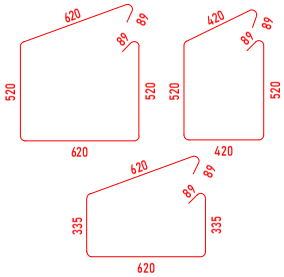
Detail Column C1 (5th TO 7th)

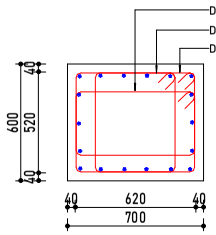
SCALE (1 : 50)



SECTION (I-I)

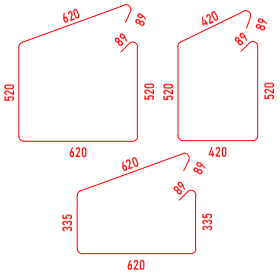
SCALE (1 : 25)

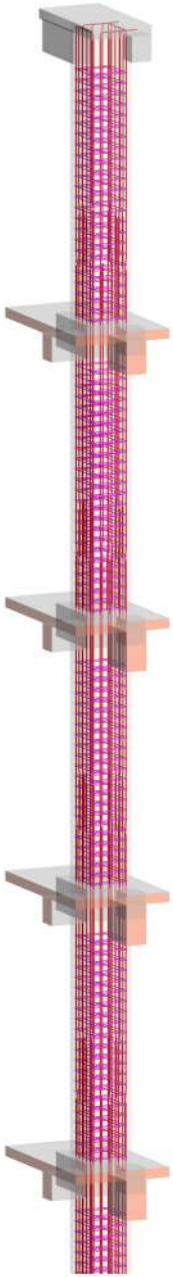


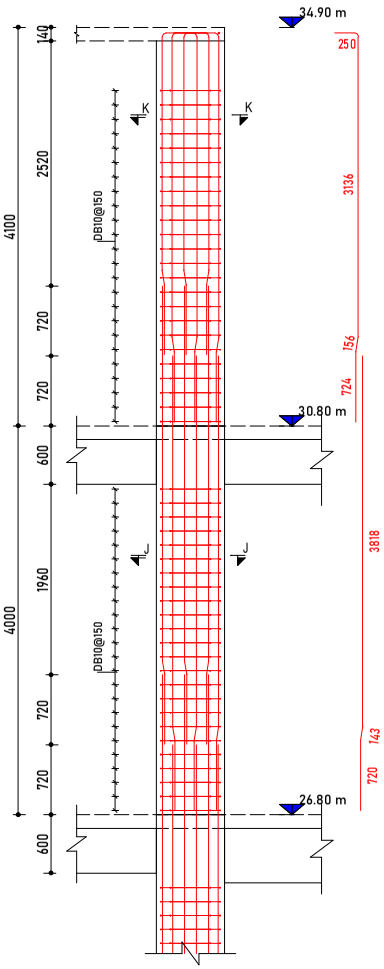


SECTION (H-H)

SCALE (1 : 25)

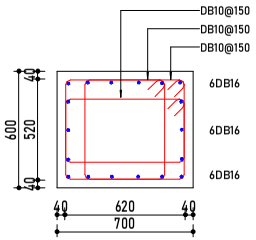






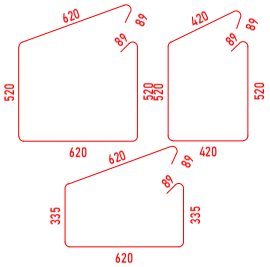
Detail Column C1 (7th TO Roof)

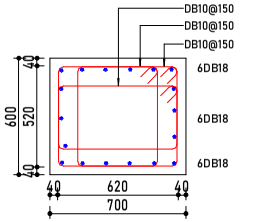
SCALE (1 : 50)



SECTION (K-K)

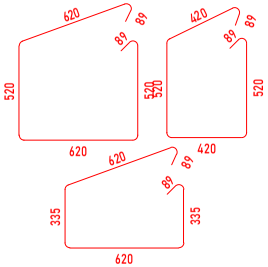
SCALE (1 : 25)





SECTION (J-J)

SCALE (1 : 25)



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PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

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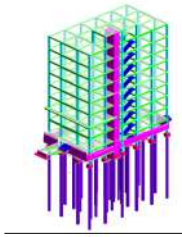
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C1 (BS TO ROOF)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A131(3)
DATE	19/02/2025

Column C1 BS TO 8TH Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	10 mm	245	2.40 m	586.93 m	361.68 kg	620 89 89 520 520 620
2	20 mm	10	2.24 m	22.35 m	55.09 kg	2235
3	20 mm	10	3.04 m	30.35 m	74.81 kg	3035
4	10 mm	6	1.94 m	11.64 m	7.17 kg	620 89 89 391 393 520
5	10 mm	5	2.11 m	10.54 m	6.50 kg	620 89 89 379 379 620
6	20 mm	27	4.60 m	124.10 m	305.90 kg	3671 130 800
7	20 mm	27	4.56 m	123.02 m	303.24 kg	3631 130 800
8	18 mm	6	4.44 m	26.62 m	53.16 kg	3498 143 800
9	18 mm	8	4.48 m	35.82 m	71.52 kg	3538 143 800
10	18 mm	1	4.43 m	4.43 m	8.85 kg	3493 143 800
11	18 mm	1	4.44 m	4.44 m	8.86 kg	4436
12	18 mm	1	4.48 m	4.48 m	8.94 kg	3552 130 800
13	18 mm	1	4.43 m	4.43 m	8.85 kg	3507 130 800
14	18 mm	8	4.52 m	36.14 m	72.16 kg	3658 143 720
15	18 mm	1	4.43 m	4.43 m	8.85 kg	3574 143 720
16	18 mm	9	4.48 m	40.30 m	80.46 kg	3618 143 720

Column C1 BS TO 8TH Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
17	18 mm	9	4.72 m	42.46 m	84.77 kg	3858 143 720
18	18 mm	9	4.68 m	42.10 m	84.05 kg	3818 143 720
19	16 mm	3	3.54 m	10.61 m	16.74 kg	720 156 2447 250
20	16 mm	5	3.54 m	17.72 m	27.96 kg	720 156 2456 250
21	16 mm	8	4.23 m	33.83 m	53.37 kg	724 156 3136 250
22	16 mm	1	4.23 m	4.23 m	6.67 kg	724 156 3136 250
23	16 mm	1	3.54 m	3.54 m	5.59 kg	720 156 2452 250
24	20 mm	12	4.00 m	47.96 m	118.21 kg	3071 130 800
25	20 mm	14	3.96 m	55.39 m	136.53 kg	3031 130 800
26	20 mm	11	4.60 m	50.55 m	124.61 kg	3671 130 800
27	20 mm	9	4.56 m	41.00 m	101.07 kg	3631 130 800
28	10 mm	219	2.03 m	443.61 m	273.36 kg	620 89 89 335 335 620
29	10 mm	221	2.00 m	441.03 m	271.77 kg	520 89 89 420 420 520
30	20 mm	12	4.76 m	57.07 m	140.67 kg	3831 130 800
31	20 mm	14	4.80 m	67.14 m	165.50 kg	3871 130 800
TOTAl : 252		914		2428.27 m	3046.88 kg	

PROJECT : MEGABELLE

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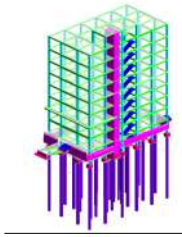
MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

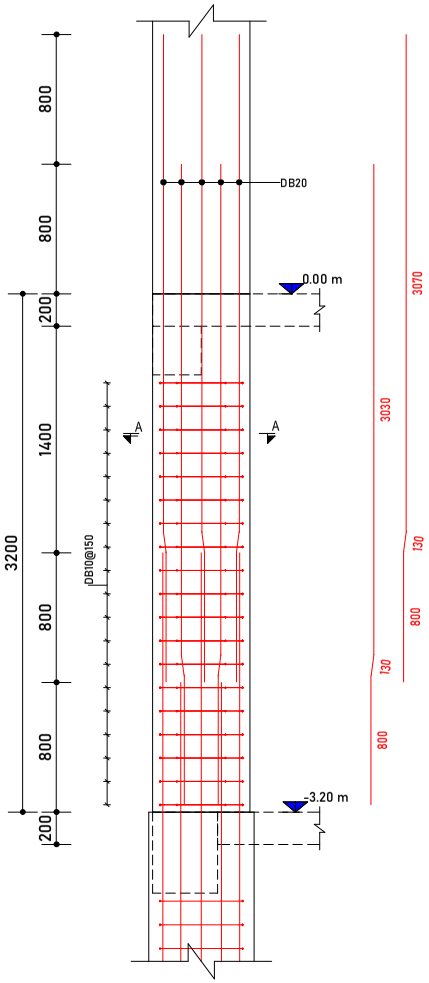
SANITARY ENGINEERS

REVISIONS	DATE



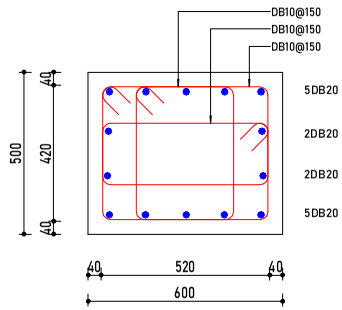
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
Column C1 (BS TO ROOF)	1/150
PAPER SIZE	A3
DRAWING NO.	A131(4)
DATE	19/02/2025



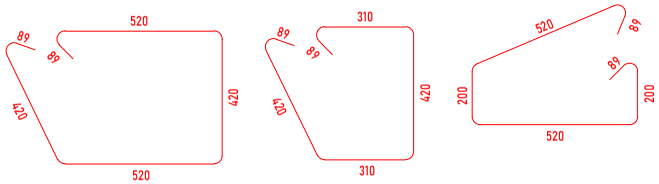
Detail Column C2 BS FLOOR

SCALE (1 : 30)

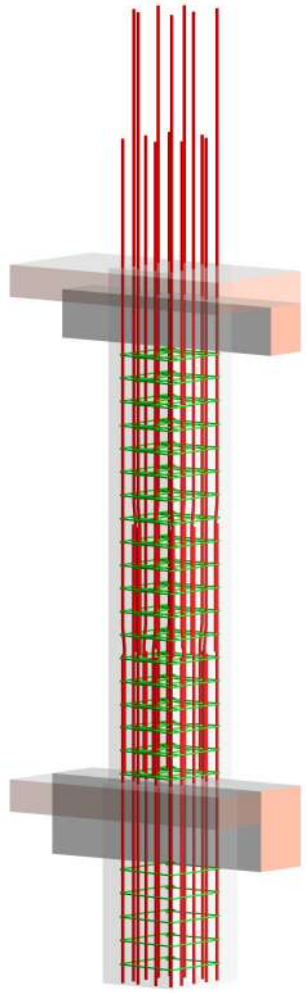


SECTION (A-A)

SCALE (1 : 15)



Column C2 BS Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	20 mm	7	4.00 m	27.97 m	68.94 kg	3070 130 800
2	20 mm	7	3.96 m	27.69 m	68.25 kg	3030 130 800
3	10 mm	19	2.00 m	37.92 m	23.37 kg	520 89 89 420 420 520
4	10 mm	19	1.58 m	29.94 m	18.45 kg	420 89 89 310 310 420
5	10 mm	19	1.56 m	29.56 m	18.21 kg	520 89 89 200 200 520
TOTAL : 17		71		153.07 m	197.23 kg	



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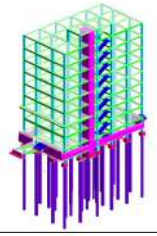
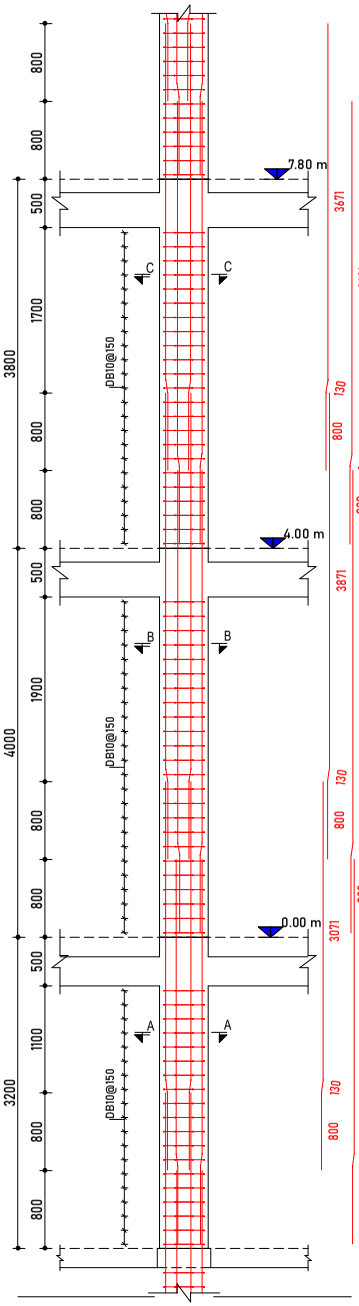


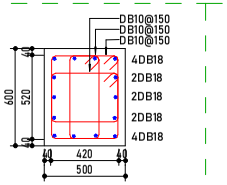
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C2 BS	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A132
DATE	19/02/2025



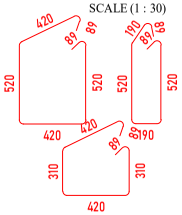
Detail Column C2 (BS to 2nd)

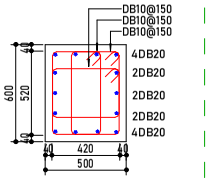
SCALE (1 : 50)



SECTION (C-C)

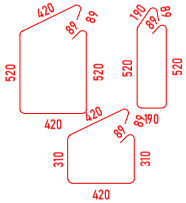
SCALE (1 : 30)

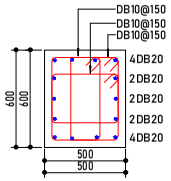




SECTION (B-B)

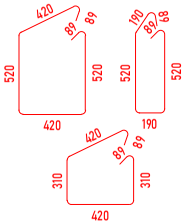
SCALE (1 : 30)

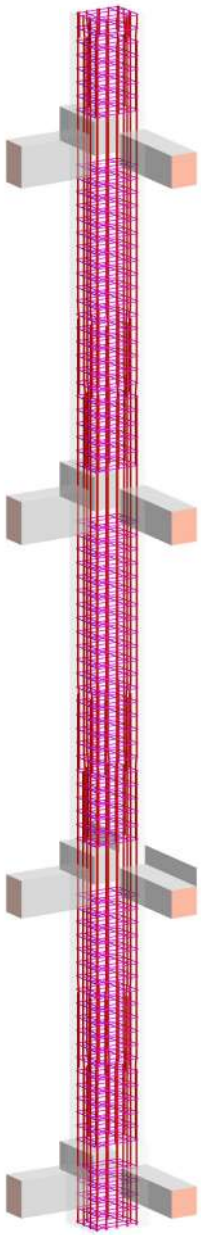


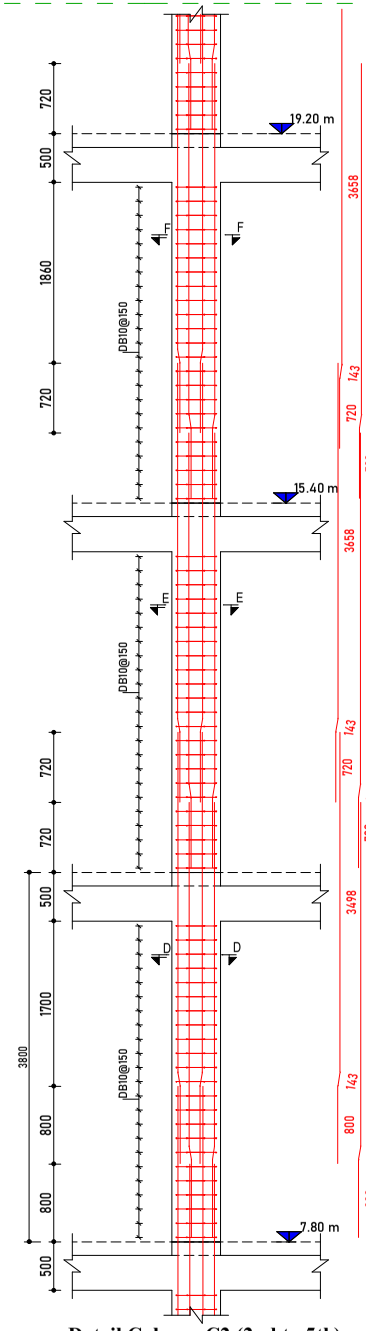


SECTION (A-A)

SCALE (1 : 30)

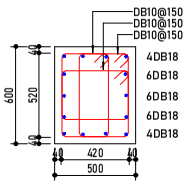






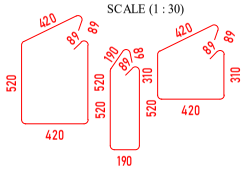
Detail Column C2 (2nd to 5th)

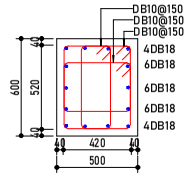
SCALE (1 : 50)



SECTION (F-F)

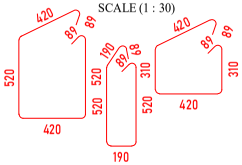
SCALE (1 : 30)

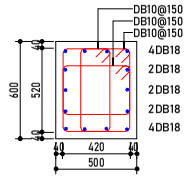




SECTION (E-E)

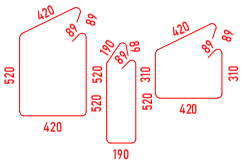
SCALE (1 : 30)





SECTION (D-D)

SCALE (1 : 30)



NOTE :

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2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
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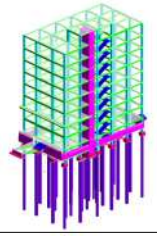
PROJECT: MEGABELLE

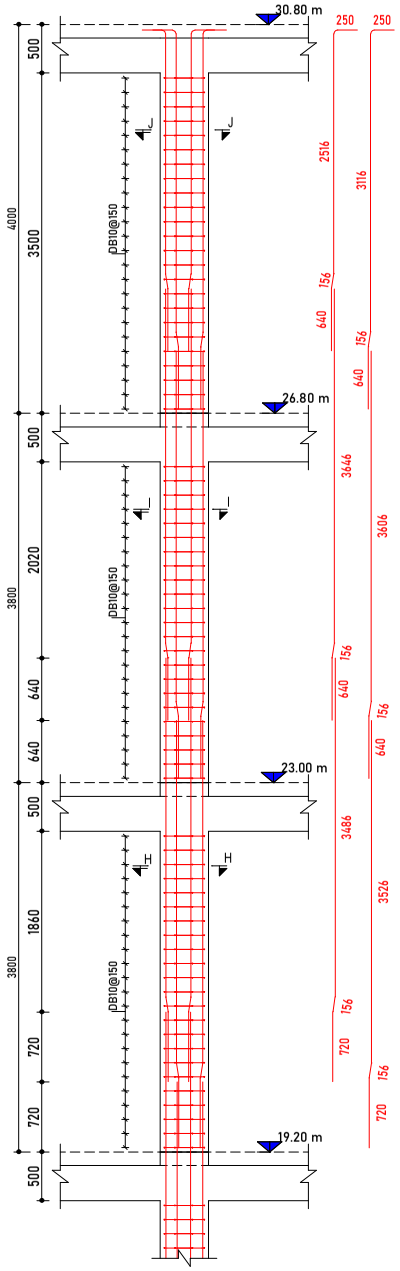
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



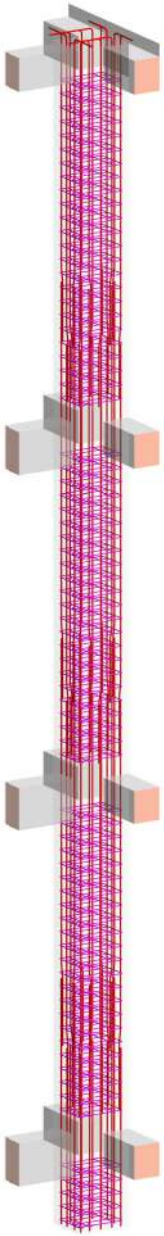
WORKING DRAWING
FOR CONSTRUCTION

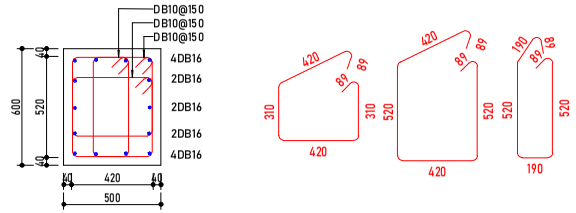
DRAWING TITLE Column C2 (BS TO 8th)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A132 (1)
DATE	19/02/2025



Detail Column C2 (5th to 8th)

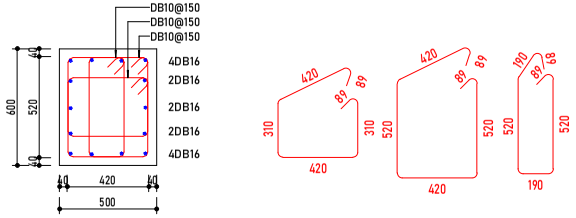
SCALE (1 : 50)





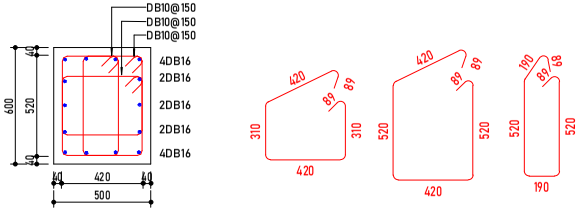
SECTION (J-J)

SCALE (1 : 25)



SECTION (I-I)

SCALE (1 : 25)



SECTION (H-H)

SCALE (1 : 25)

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PROJECT : MEGABELLE

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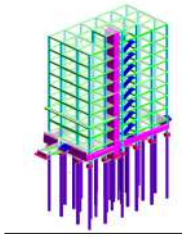
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C2 (B5 TO 8th)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A132 (2)
DATE	19/02/2025

Column C2 BS TO 8TH Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	18 mm	14	4.52 m	63.24 m	126.27 kg	3658 14@20
2	18 mm	4	4.48 m	17.91 m	35.76 kg	3614 14@24
3	10 mm	205	2.00 m	409.10 m	252.10 kg	520 89 89 420 420 520
4	10 mm	205	1.54 m	314.80 m	193.99 kg	520 89 89 190 190 520
5	10 mm	139	1.58 m	219.06 m	134.99 kg	420 89 89 310 310 420
6	18 mm	4	4.48 m	17.91 m	35.76 kg	3618 14@20
7	18 mm	6	4.47 m	26.84 m	53.59 kg	3614 14@20
9	16 mm	7	4.36 m	30.51 m	48.13 kg	3486 15@20
10	16 mm	7	4.40 m	30.79 m	48.57 kg	3526 15@20
12	16 mm	8	4.44 m	35.50 m	56.01 kg	3646 15@40
13	16 mm	4	4.40 m	17.59 m	27.75 kg	3606 15@40
14	16 mm	2	4.44 m	8.88 m	14.01 kg	3646 15@44
15	16 mm	2	3.52 m	7.05 m	11.12 kg	640 156 2516 250
16	16 mm	2	4.16 m	8.33 m	13.14 kg	640 156 3156 250

Column C2 BS TO 8TH Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
18	16 mm	5	3.52 m	17.62 m	27.80 kg	640 156 2516 250
19	16 mm	4	4.12 m	16.50 m	26.03 kg	640 156 3116 250
20	16 mm	1	4.16 m	4.16 m	6.57 kg	640 156 3156 250
21	18 mm	7	4.44 m	31.06 m	62.02 kg	3498 14@00
22	18 mm	7	4.48 m	31.34 m	62.58 kg	3538 14@00
25	20 mm	8	4.60 m	36.77 m	90.63 kg	3671 13@00
26	20 mm	6	4.56 m	27.34 m	67.38 kg	3631 13@00
27	10 mm	66	1.58 m	103.99 m	64.08 kg	420 89 89 310 310 420
28	20 mm	7	3.96 m	27.69 m	68.26 kg	3031 13@00
29	20 mm	7	4.00 m	27.97 m	68.95 kg	3071 13@00
33	20 mm	7	4.80 m	33.57 m	82.75 kg	3871 13@00
34	20 mm	7	4.76 m	33.29 m	82.06 kg	3831 13@00
TOTAL : 153		741		1598.84 m	1760.29 kg	

PROJECT : MEGABELLE

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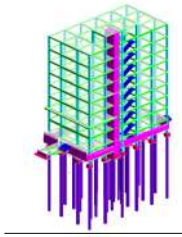
ELECTRICAL ENGINEERS

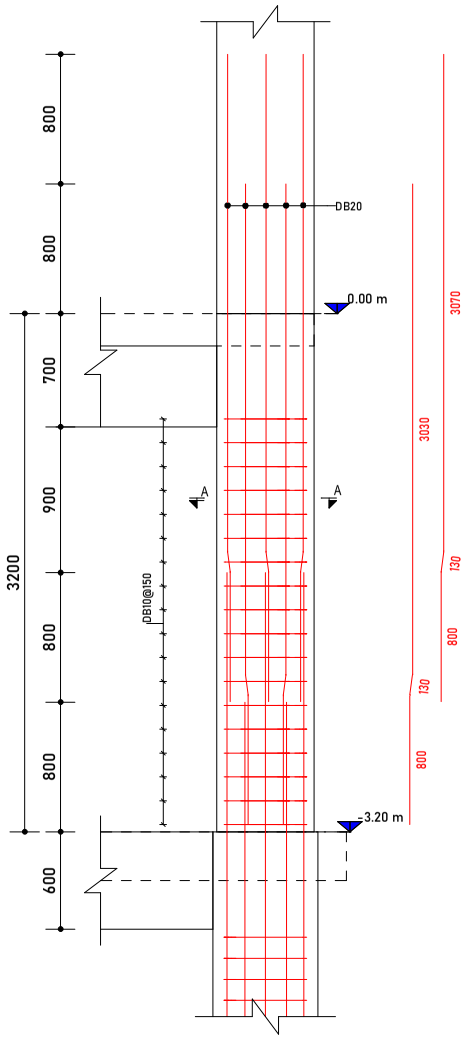
SANITARY ENGINEERS

REVISIONS	DATE



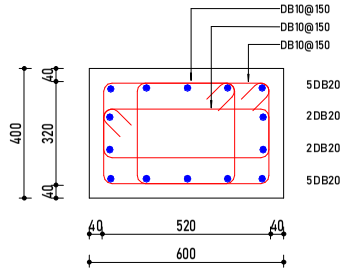
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
Column C2 (BS TO 8th)	1/150
PAPER SIZE	A3
DRAWING NO.	A132 (3)
DATE	19/02/2025



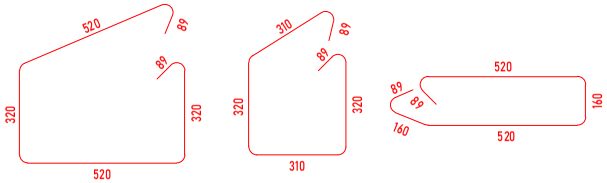
Detail Column C3 FLOOR

SCALE (1 : 30)

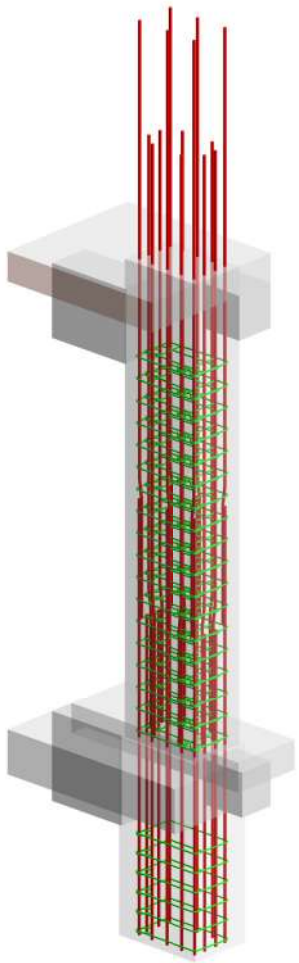


SECTION (A-A)

SCALE (1 : 15)



Column C3 BS Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	20 mm	6	4.00 m	23.97 m	59.10 kg	3070 130 800
2	10 mm	18	1.38 m	24.76 m	15.26 kg	320 89 89 310 310 320
3	20 mm	8	3.96 m	31.65 m	78.00 kg	3030 130 800
4	10 mm	18	1.48 m	26.56 m	16.37 kg	520 89 89 160 160 520
5	10 mm	18	1.80 m	32.32 m	19.92 kg	520 89 89 320 320 520
TOTAL : 17		68		139.26 m	188.64 kg	



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PROJECT : MEGABELLE

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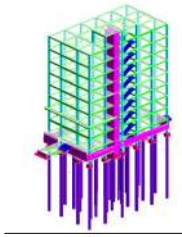
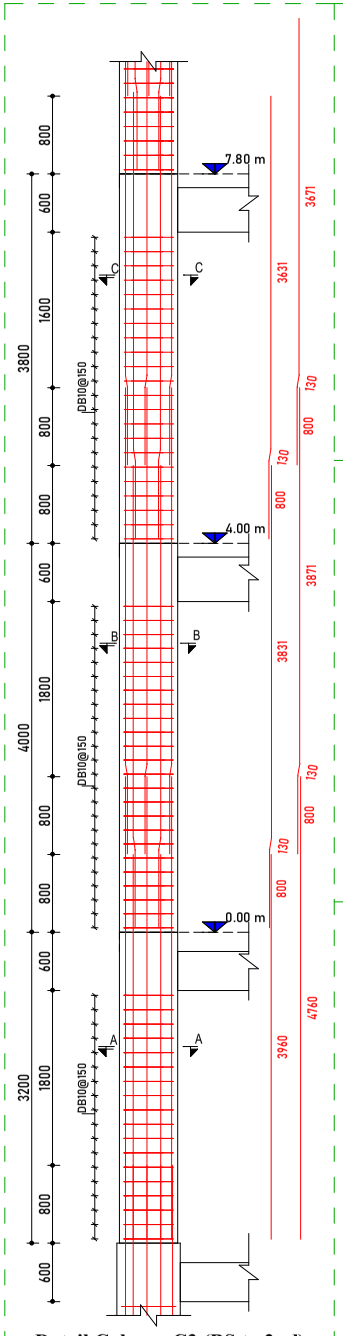


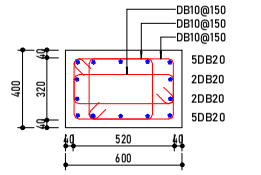
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C3 BS	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A133
DATE	19/02/2025



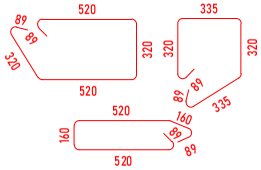
Detail Column C3 (BS to 2nd)

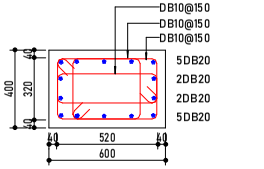
SCALE (1 : 50)



SECTION (C-C)

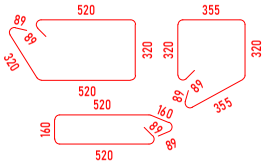
SCALE (1 : 25)

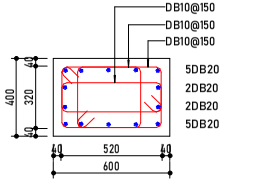




SECTION (B-B)

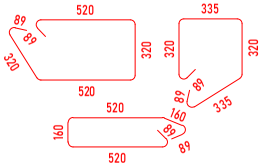
SCALE (1 : 25)

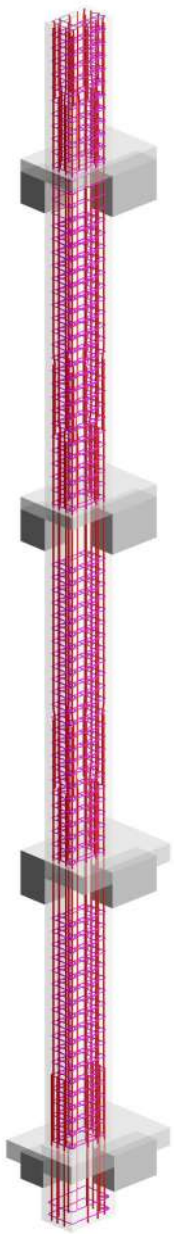


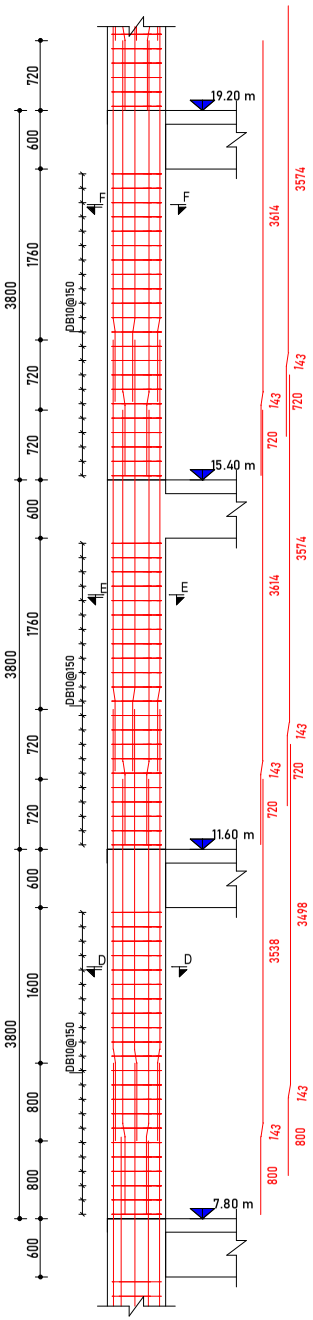


SECTION (A-A)

SCALE (1 : 25)

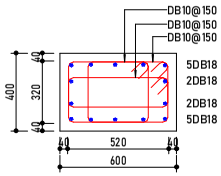






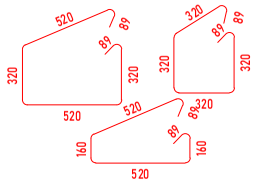
Detail Column C3 (2nd to 5th)

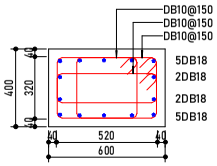
SCALE (1 : 50)



SECTION (F-F)

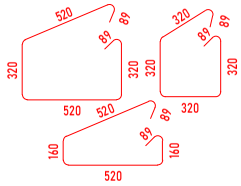
SCALE (1 : 25)

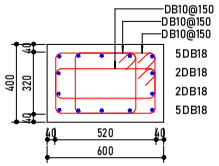




SECTION (E-E)

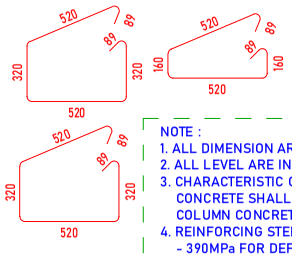
SCALE (1 : 25)





SECTION (D-D)

SCALE (1 : 25)



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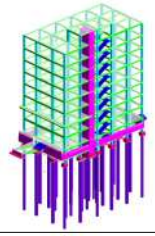
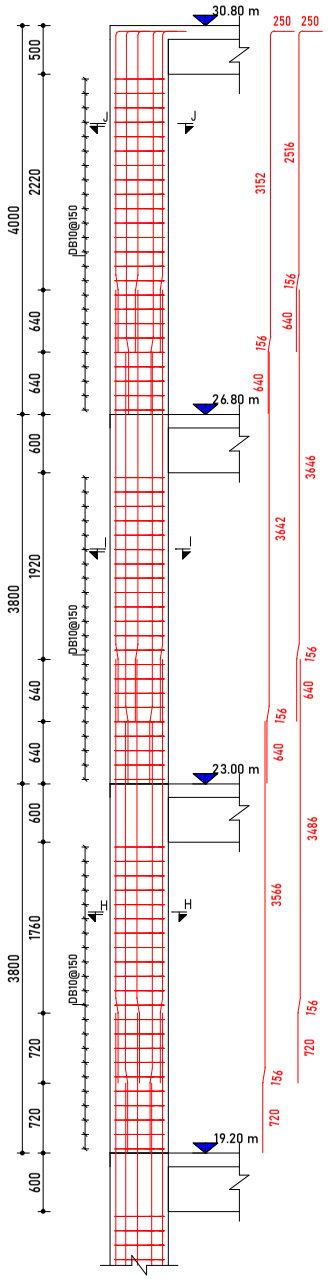
REVISIONS	DATE



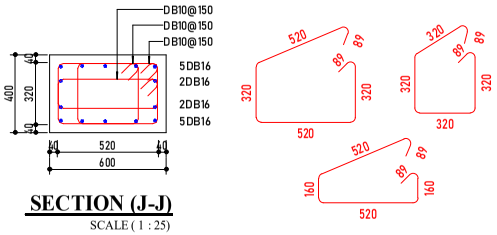
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C3 (BS TO ROOF)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A133 (1)
DATE	19/02/2025



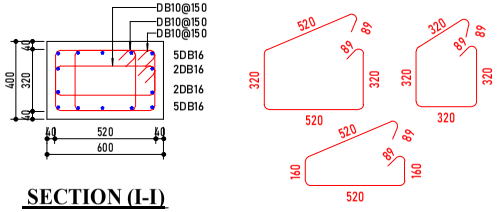
Detail Column C3 (5th to Roof)

SCALE (1 : 50)



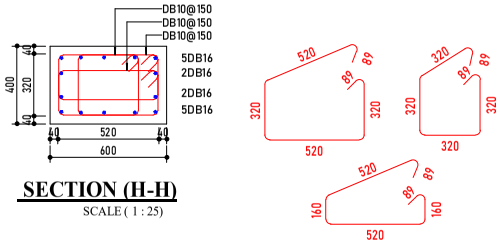
SECTION (J-J)

SCALE (1 : 25)



SECTION (I-I)

SCALE (1 : 25)



SECTION (H-H)

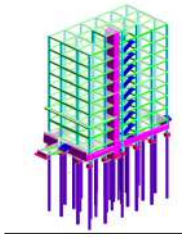
SCALE (1 : 25)

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C3 (BS TO ROOF)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A133 (2)
DATE	19/02/2025

Column C3 BS TO ROOF Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	18 mm	12	4.43 m	53.20 m	106.21 kg	3574 14720
2	10 mm	134	1.80 m	240.61 m	148.27 kg	520 89 89 320 320 520
3	10 mm	134	1.40 m	187.01 m	115.24 kg	320 89 89 320 320 320
4	10 mm	134	1.48 m	197.81 m	121.90 kg	520 89 89 160 160 520
5	18 mm	16	4.47 m	71.57 m	142.90 kg	3614 14720
6	16 mm	6	4.36 m	26.15 m	41.25 kg	3486 15720
7	16 mm	8	4.44 m	35.50 m	56.01 kg	3566 15720
9	16 mm	6	4.44 m	26.63 m	42.01 kg	3646 15840
10	16 mm	8	4.43 m	35.47 m	55.96 kg	3642 15840
13	16 mm	4	3.52 m	14.10 m	22.24 kg	640 156 2516 250
15	16 mm	2	3.52 m	7.05 m	11.12 kg	640 156 2516 250
16	16 mm	4	4.16 m	16.64 m	26.26 kg	640 156 3152 250
17	16 mm	4	4.16 m	16.64 m	26.26 kg	640 156 3152 250
19	18 mm	6	4.44 m	26.62 m	53.16 kg	3498 14800

Column C3 BS TO ROOF Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
20	18 mm	8	4.48 m	35.82 m	71.52 kg	3538 14800
21	20 mm	7	4.60 m	32.17 m	79.30 kg	3671 130800
22	20 mm	8	4.56 m	36.45 m	89.84 kg	3631 130800
23	10 mm	68	1.80 m	122.10 m	75.24 kg	520 80 89 320 520
24	10 mm	22	1.43 m	31.36 m	19.33 kg	335 89 89 320 320 335
25	10 mm	46	1.48 m	67.88 m	41.83 kg	520 89 89 160 160 520
26	20 mm	6	4.76 m	28.56 m	70.40 kg	4760
27	20 mm	8	3.96 m	31.68 m	78.09 kg	3960
28	10 mm	18	1.48 m	26.57 m	16.37 kg	520 89 89 160 160 520
29	10 mm	18	1.43 m	25.66 m	15.81 kg	335 89 89 320 320 335
30	20 mm	6	4.80 m	28.78 m	70.93 kg	3871 130800
31	20 mm	9	4.76 m	42.80 m	105.50 kg	3831 130800
32	10 mm	24	1.47 m	35.17 m	21.68 kg	355 89 89 320 320 355
TOTAL : 155		726		1500.03 m	1724.62 kg	

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS

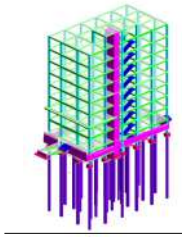
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

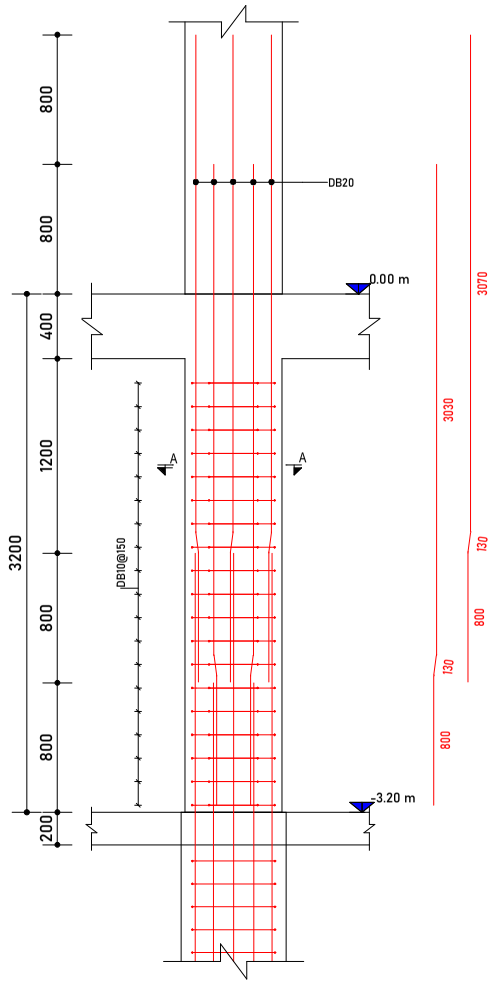
SANITARY ENGINEERS

REVISIONS	DATE



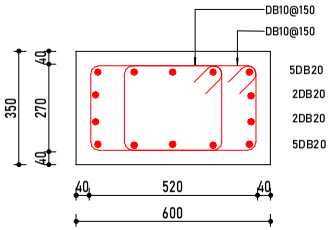
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
Column C3 (BS TO ROOF)	1/150
PAPER SIZE	A3
DRAWING NO.	A133 (3)
DATE	19/02/2025



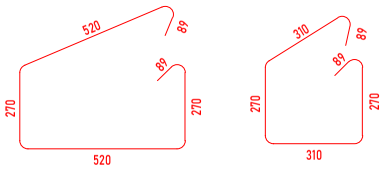
Detail Column C4 FLOOR

SCALE (1 : 30)

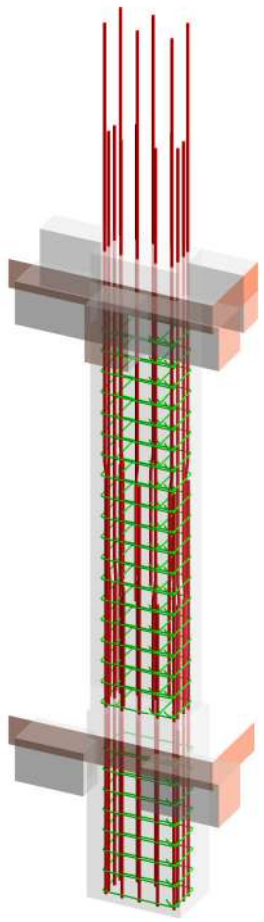


SECTION (A-A)

SCALE (1 : 15)



Column C4 BS Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	20 mm	4	3.96 m	15.82 m	39.00 kg	3030 130 800
2	20 mm	6	4.00 m	23.97 m	59.10 kg	3070 130 800
3	10 mm	19	1.70 m	32.22 m	19.85 kg	520 89 89 270 270 520
4	10 mm	19	1.28 m	24.24 m	14.94 kg	310 89 89 270 270 310
5	20 mm	4	3.96 m	15.82 m	39.00 kg	3040 121 800
TOTAL : 16		52		112.08 m	171.89 kg	



NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
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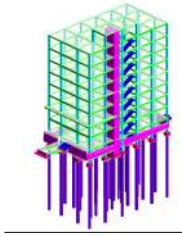
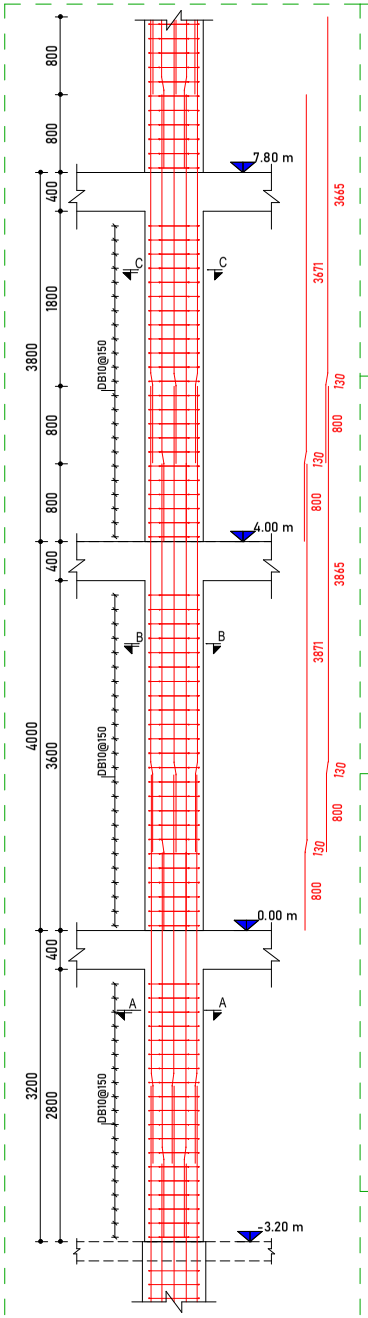
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

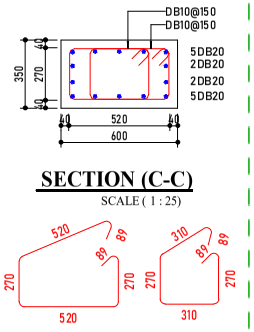


WORKING DRAWING
FOR CONSTRUCTION

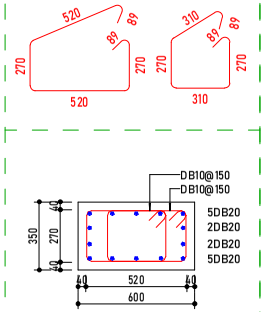
DRAWING TITLE Column C4 BS	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A134
DATE	19/02/2025



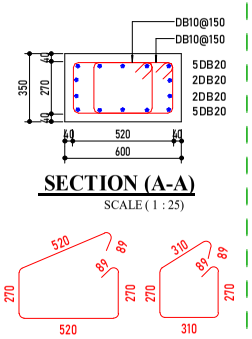
Detail Column C4 (BS to 2nd)
SCALE (1 : 50)



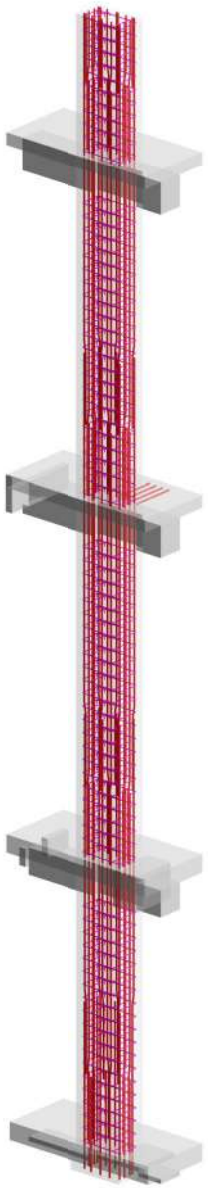
SECTION (C-C)
SCALE (1 : 25)

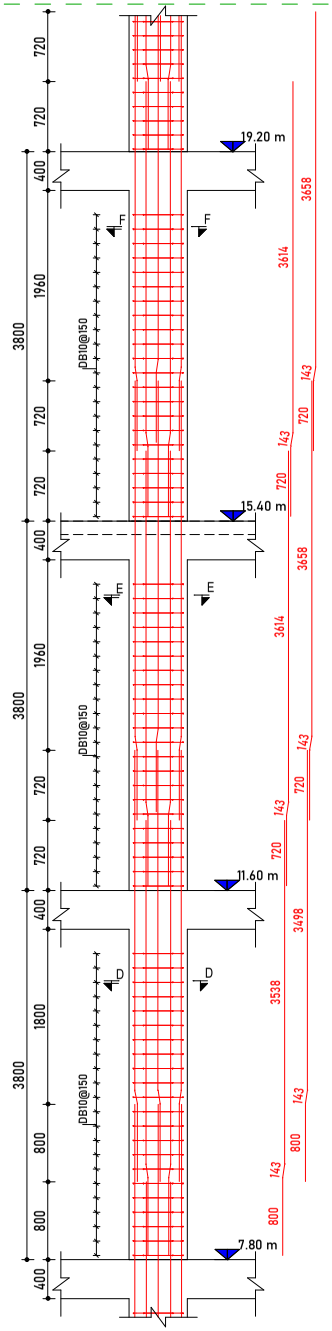


SECTION (B-B)
SCALE (1 : 25)

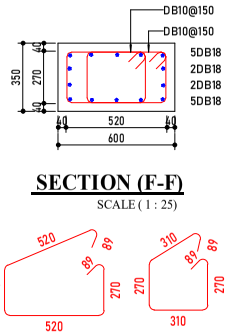


SECTION (A-A)
SCALE (1 : 25)

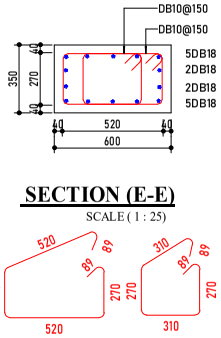




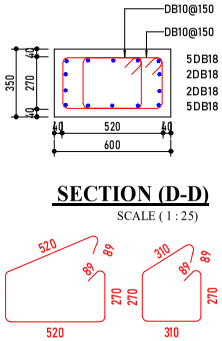
Detail Column C4 (2nd to 5th)
SCALE (1 : 50)



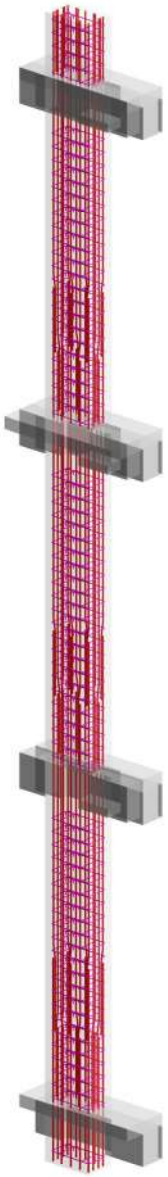
SECTION (F-F)
SCALE (1 : 25)



SECTION (E-E)
SCALE (1 : 25)



SECTION (D-D)
SCALE (1 : 25)

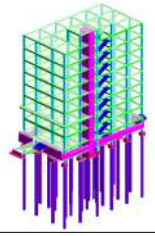


NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF **35MPa** (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

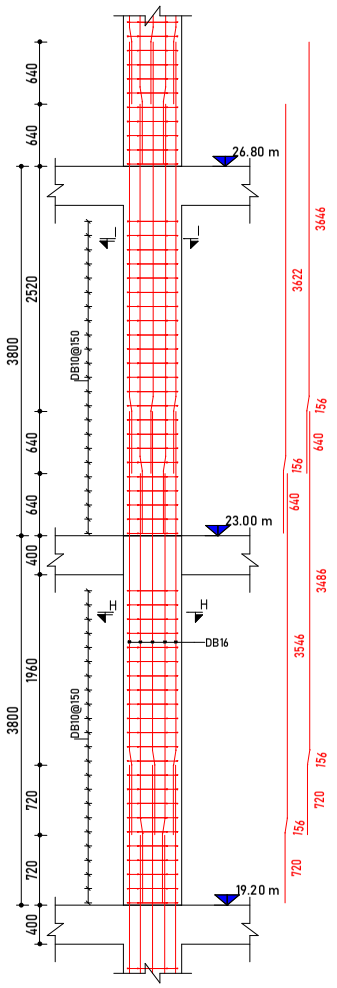
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



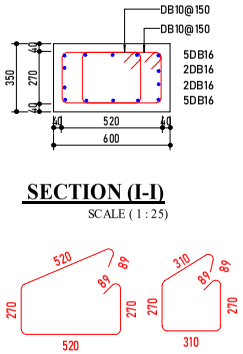
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C4 (BS TO ROOF)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A134 (1)
DATE	19/02/2025



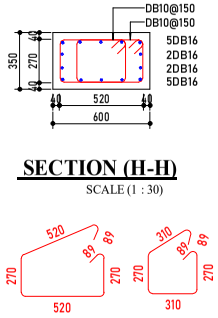
Detail Column C4 (5th TO 7th)

SCALE (1 : 50)



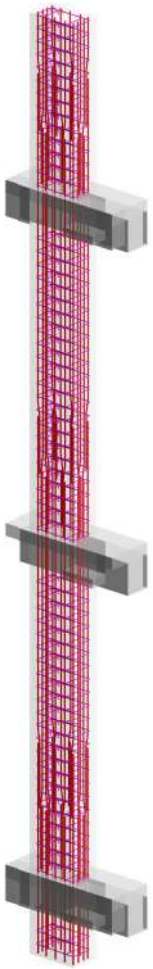
SECTION (I-I)

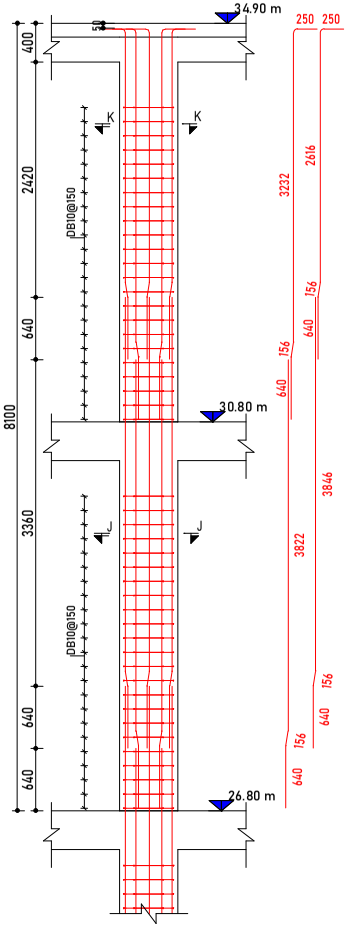
SCALE (1 : 25)



SECTION (H-H)

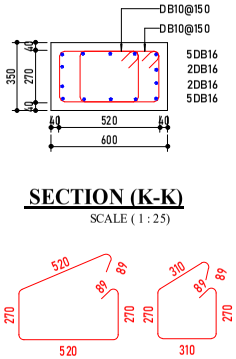
SCALE (1 : 30)





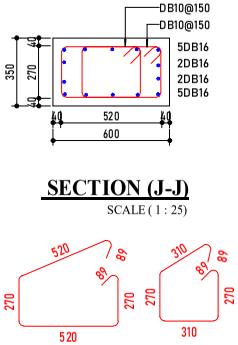
Detail Column C4 (7th TO Roof)

SCALE (1 : 50)



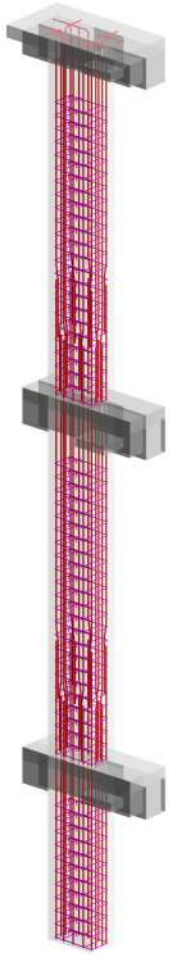
SECTION (K-K)

SCALE (1 : 25)



SECTION (J-J)

SCALE (1 : 25)



NOTE :
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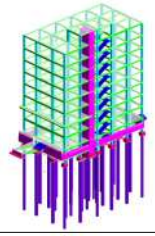
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF **35MPa** (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Column C4 (BS TO ROOF)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A134 (2)
DATE	19/02/2025

Column C4 BS TO ROOF Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	16 mm	3	4.44 m	13.31 m	21.00 kg	3646 156 640
2	16 mm	3	4.35 m	13.06 m	20.61 kg	3562 156 640
3	16 mm	8	4.41 m	35.31 m	55.71 kg	3622 156 640
4	10 mm	205	1.70 m	347.60 m	214.20 kg	420 89 89 270 270 520
5	10 mm	205	1.28 m	261.50 m	161.14 kg	310 89 89 270 270 310
6	16 mm	3	4.64 m	13.91 m	21.95 kg	3846 156 640
7	16 mm	3	4.55 m	13.66 m	21.55 kg	3762 156 640
8	16 mm	8	4.61 m	36.91 m	58.23 kg	3822 156 640
9	16 mm	1	3.62 m	3.62 m	5.72 kg	640 156 2616 250
10	16 mm	3	3.54 m	10.62 m	16.76 kg	640 156 2532 250
11	16 mm	6	4.24 m	25.45 m	40.14 kg	640 156 3232 250
12	16 mm	2	3.62 m	7.25 m	11.44 kg	640 156 2616 250
13	16 mm	2	4.24 m	8.48 m	13.38 kg	640 156 3232 250
14	18 mm	10	4.52 m	45.17 m	90.19 kg	720 143 3658

Column C4 BS TO ROOF Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
15	18 mm	16	4.47 m	71.57 m	142.90 kg	720 143 3614
16	18 mm	2	4.43 m	8.87 m	17.70 kg	720 143 3574
17	16 mm	6	4.36 m	26.15 m	41.25 kg	3486 156 720
18	16 mm	8	4.42 m	35.34 m	55.76 kg	3546 156 720
19	18 mm	4	4.44 m	17.75 m	35.44 kg	800 143 3498
20	18 mm	8	4.48 m	35.82 m	71.52 kg	800 143 3538
21	18 mm	1	4.44 m	4.44 m	8.87 kg	804 143 3498
22	18 mm	1	4.44 m	4.44 m	8.86 kg	800 143 3500
23	20 mm	8	4.60 m	36.77 m	90.63 kg	3671 130 800
24	20 mm	2	4.56 m	9.11 m	22.46 kg	3631 130 800
25	20 mm	4	4.59 m	18.36 m	45.26 kg	3665 130 800
28	20 mm	10	4.80 m	47.96 m	118.21 kg	3871 130 800
29	20 mm	4	4.79 m	19.16 m	47.23 kg	3865 130 800
TOTAL : 144		536		1171.63 m	1458.11 kg	

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS

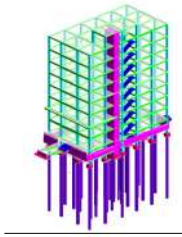
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

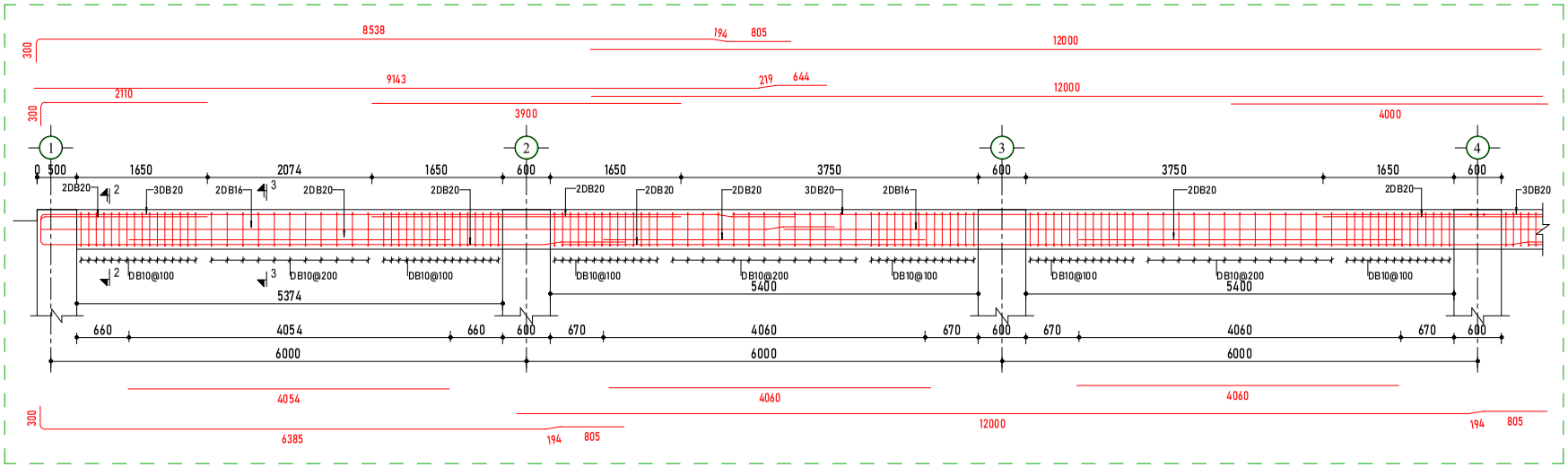
SANITARY ENGINEERS

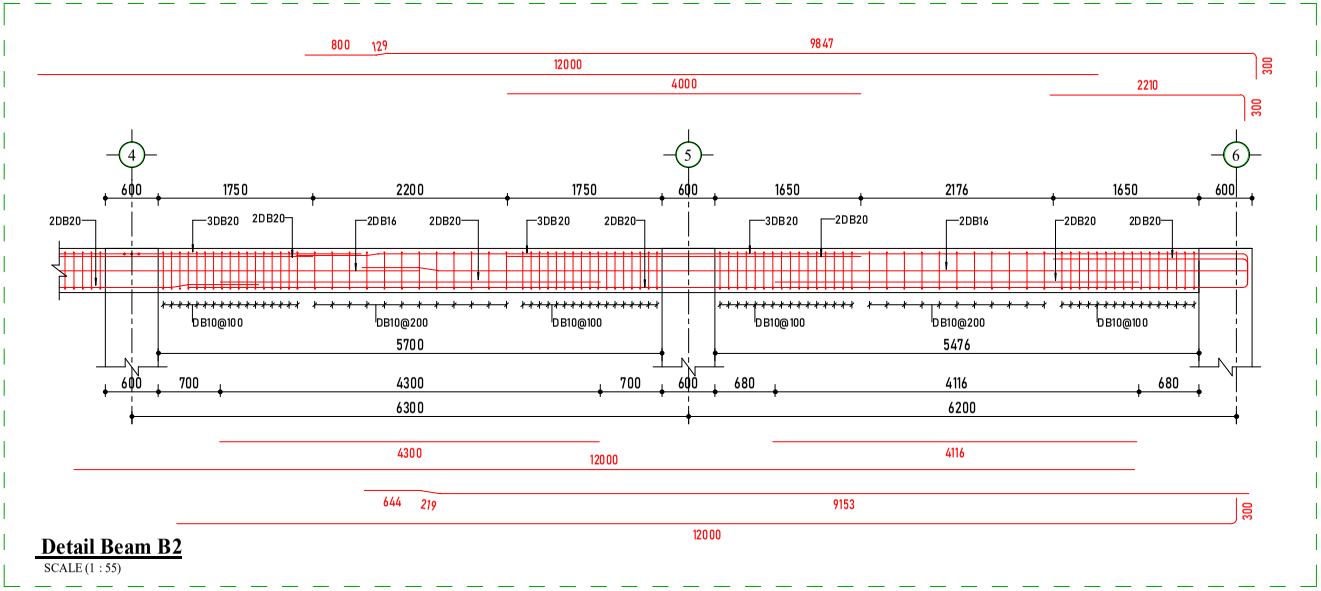
REVISIONS | DATE



WORKING DRAWING
FOR CONSTRUCTION

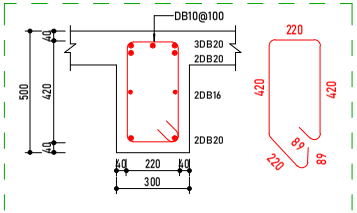
DRAWING TITLE	SCALE
Column C4 (BS TO ROOF)	1/150
PAPER SIZE	A3
DRAWING NO.	A134 (3)
DATE	19/02/2025





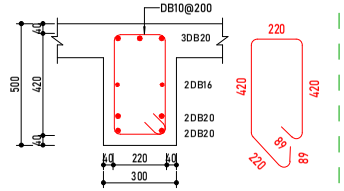
Detail Beam B2

SCALE (1 : 55)



SECTION (2-2)

SCALE (1 : 20)



SECTION (3-3)

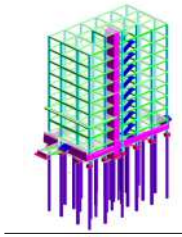
SCALE (1 : 20)

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

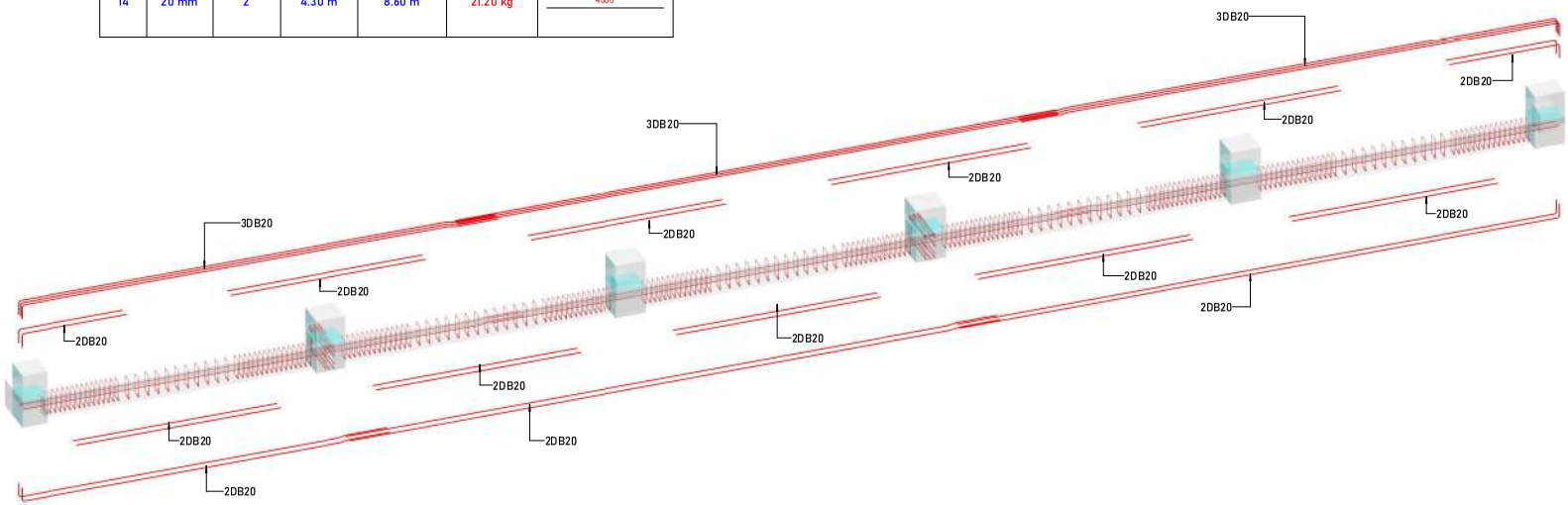
DRAWING TITLE E1 Beam B2 300x500	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A135
DATE	19/02/2025

Beam B2 Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	20 mm	2	12.26 m	24.52 m	60.43 kg	12000, 300
2	20 mm	3	12.00 m	36.00 m	88.74 kg	12000
3	20 mm	3	9.79 m	29.37 m	72.40 kg	300, 8538, 15905
4	20 mm	3	11.03 m	33.09 m	81.57 kg	300, 9847, 12000
5	20 mm	2	13.00 m	25.99 m	64.06 kg	12000, 15905
6	20 mm	2	7.64 m	15.28 m	37.65 kg	300, 6385, 15905
11	20 mm	2	2.47 m	4.94 m	12.17 kg	2210, 300
12	20 mm	2	4.05 m	8.11 m	19.99 kg	4054
13	20 mm	4	4.06 m	16.24 m	40.03 kg	4060
14	20 mm	2	4.30 m	8.60 m	21.20 kg	4300

Beam B2 Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
15	20 mm	2	4.12 m	8.23 m	20.29 kg	4116
16	16 mm	2	10.00 m	20.01 m	31.56 kg	644, 19, 9143
17	10 mm	214	1.40 m	298.66 m	184.04 kg	420, 89, 89, 220, 220, 420
18	16 mm	2	10.01 m	20.03 m	31.59 kg	9153, 21044
19	16 mm	2	12.00 m	24.00 m	37.86 kg	12000
20	20 mm	2	2.37 m	4.74 m	11.68 kg	2110, 300
21	20 mm	4	3.90 m	15.60 m	38.45 kg	3900
22	20 mm	4	4.00 m	16.00 m	39.44 kg	4000
TOTAL: 35		257		609.40 m	893.15 kg	



PROJECT: MEGABELLE

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WAGON Engineering Center

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STRUCTURAL ENGINEERS

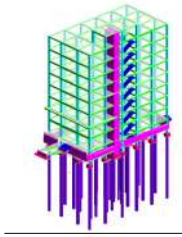
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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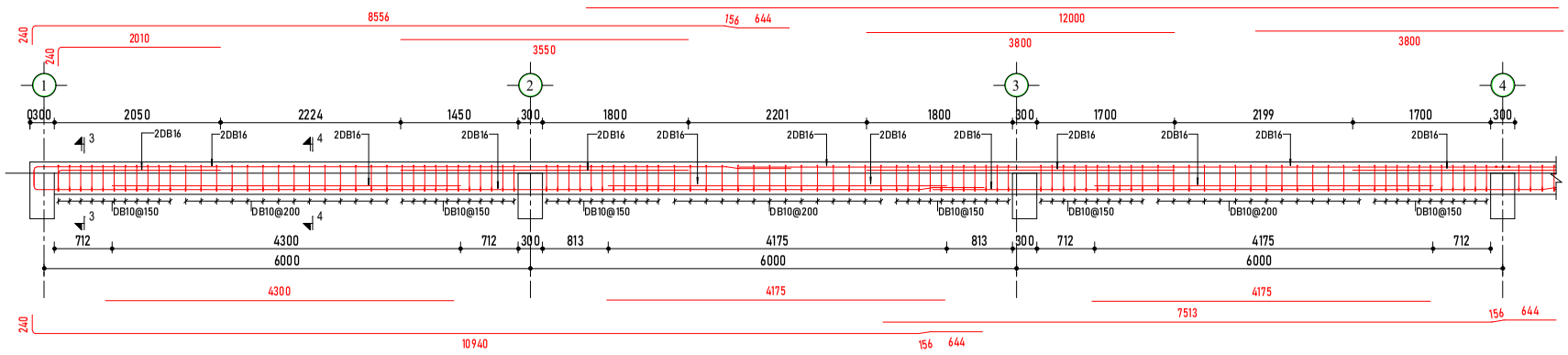
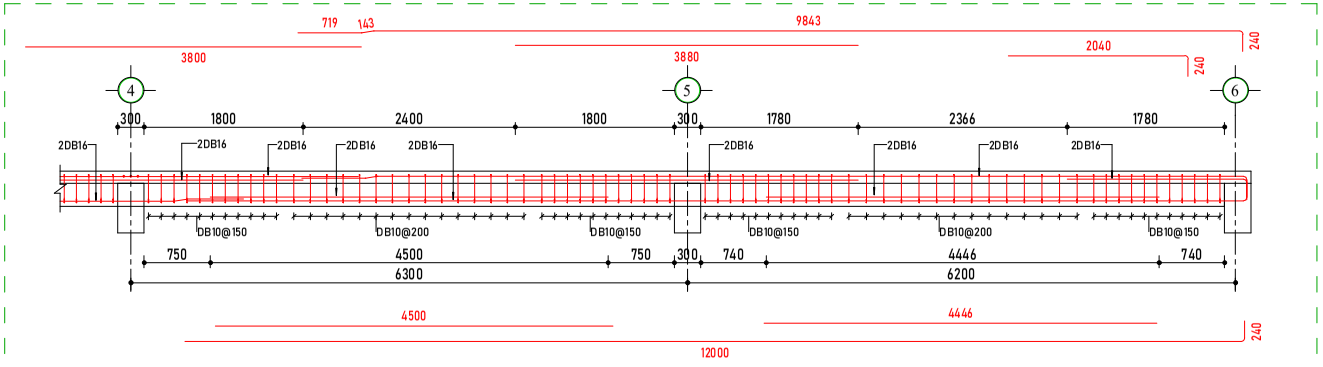
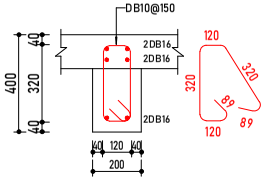
PAPER SIZE	A3
DRAWING NO.	A135.1
DATE	19/02/2025





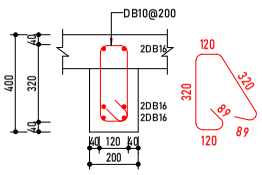
Detail Beam B4

SCALE (1 : 55)



SECTION (3-3)

SCALE (1 : 20)



SECTION (4-4)

SCALE (1 : 20)

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
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   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

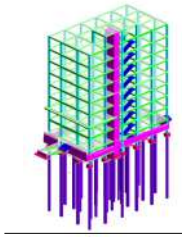
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

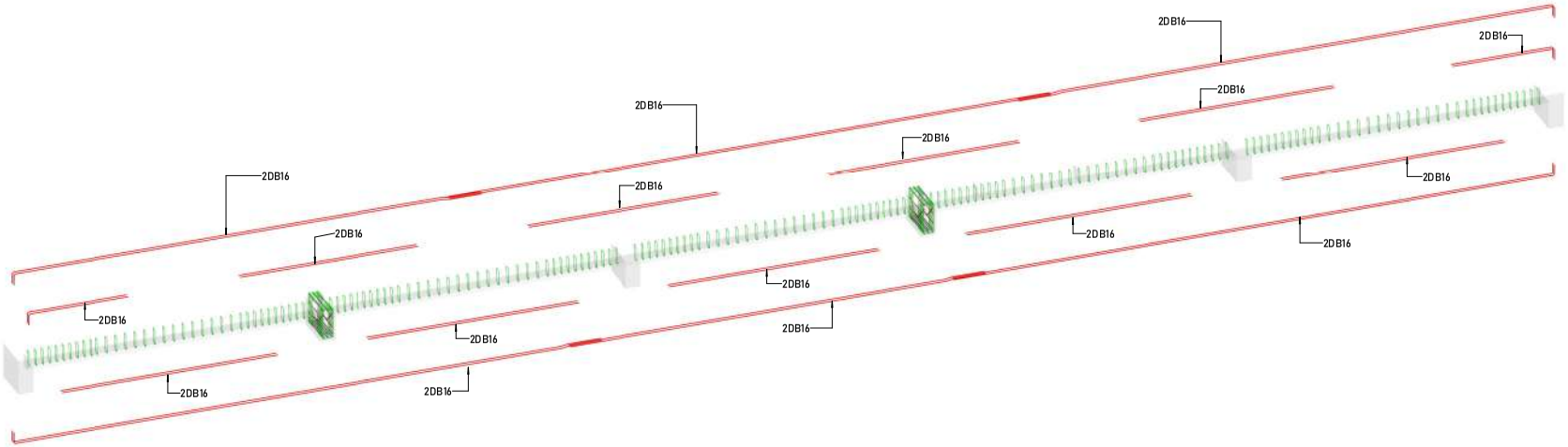
SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
E1 Beam B4 200x400	1/150
PAPER SIZE	A3
DRAWING NO.	A136
DATE	19/02/2025



Beam B4 Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	16 mm	2	11.94 m	23.89 m	37.68 kg	240 10940 156 644
2	16 mm	2	10.91 m	21.82 m	34.42 kg	240 9843 147 719
3	16 mm	2	9.56 m	19.12 m	30.16 kg	240 8556 156 644
4	16 mm	2	12.00 m	24.00 m	37.86 kg	12000
5	16 mm	2	12.21 m	24.41 m	38.51 kg	240 12000
6	16 mm	2	8.31 m	16.62 m	26.22 kg	644 156 7513
11	16 mm	2	2.25 m	4.49 m	7.09 kg	240 2040
12	16 mm	2	4.45 m	8.89 m	14.03 kg	4446
13	16 mm	2	4.50 m	9.00 m	14.20 kg	4500

Beam B4 Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
14	16 mm	2	4.30 m	8.60 m	13.57 kg	4300
15	10 mm	180	1.00 m	179.21 m	110.43 kg	320 120 89 89 120 320
26	16 mm	4	4.18 m	16.70 m	26.35 kg	4175
27	16 mm	2	2.22 m	4.43 m	6.99 kg	240 2010
28	16 mm	2	3.55 m	7.10 m	11.20 kg	3550
29	16 mm	4	3.80 m	15.20 m	23.98 kg	3800
30	16 mm	2	3.88 m	7.76 m	12.24 kg	3880
TOTAL: 32		214		391.24 m	444.92 kg	

PROJECT: MEGABELLE

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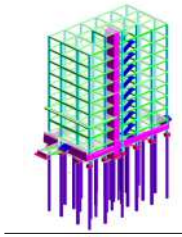
ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
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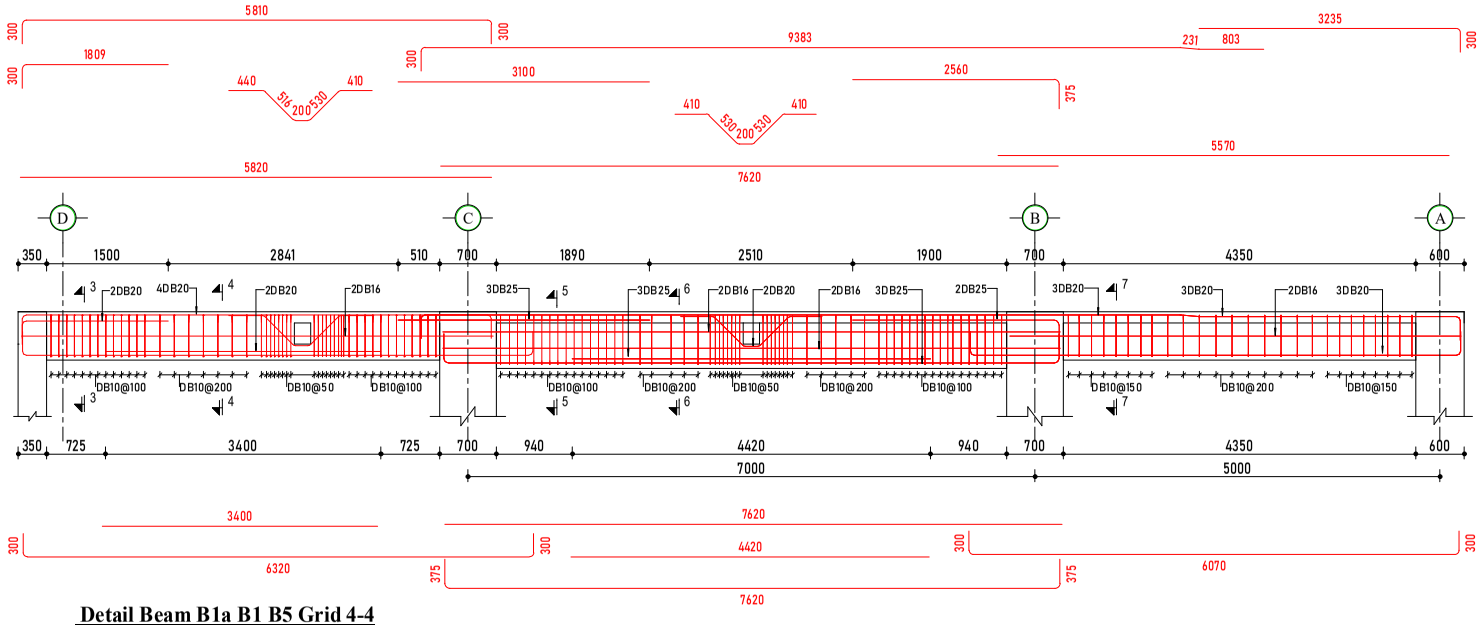
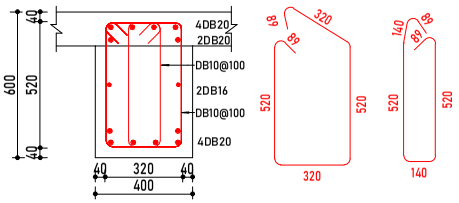
PAPER SIZE	A3
DRAWING NO.	A136.1
DATE	19/02/2025



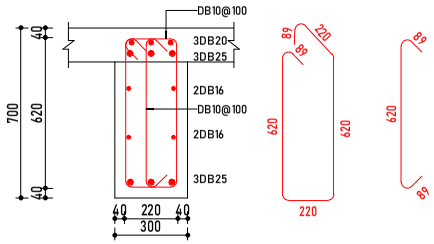
Detail Beam B1a B1 B5 Grid 4-4

SCALE (1 : 60)



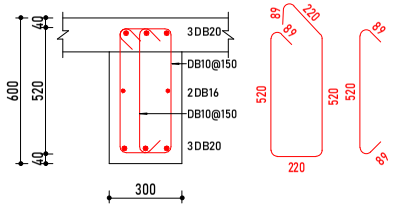
SECTION (3-3)

SCALE (1 : 20)



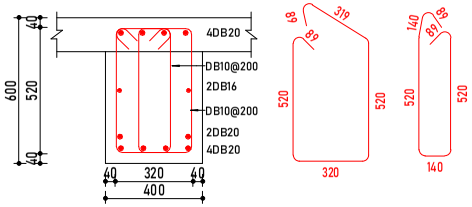
SECTION (5-5)

SCALE (1 : 20)



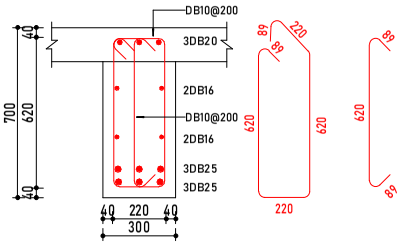
SECTION (7-7)

SCALE (1 : 20)



SECTION (4-4)

SCALE (1 : 20)



SECTION (6-6)

SCALE (1 : 20)

NOTE :
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2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
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   - 390MPa FOR DEFORMED BAR (DB)
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5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR	
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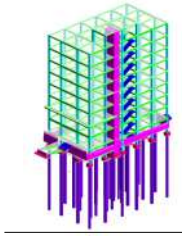
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE E1 Beam B1a B1b & B5	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A139
DATE	19/02/2025

Beam B1 B1a B5 Rebar Schedule

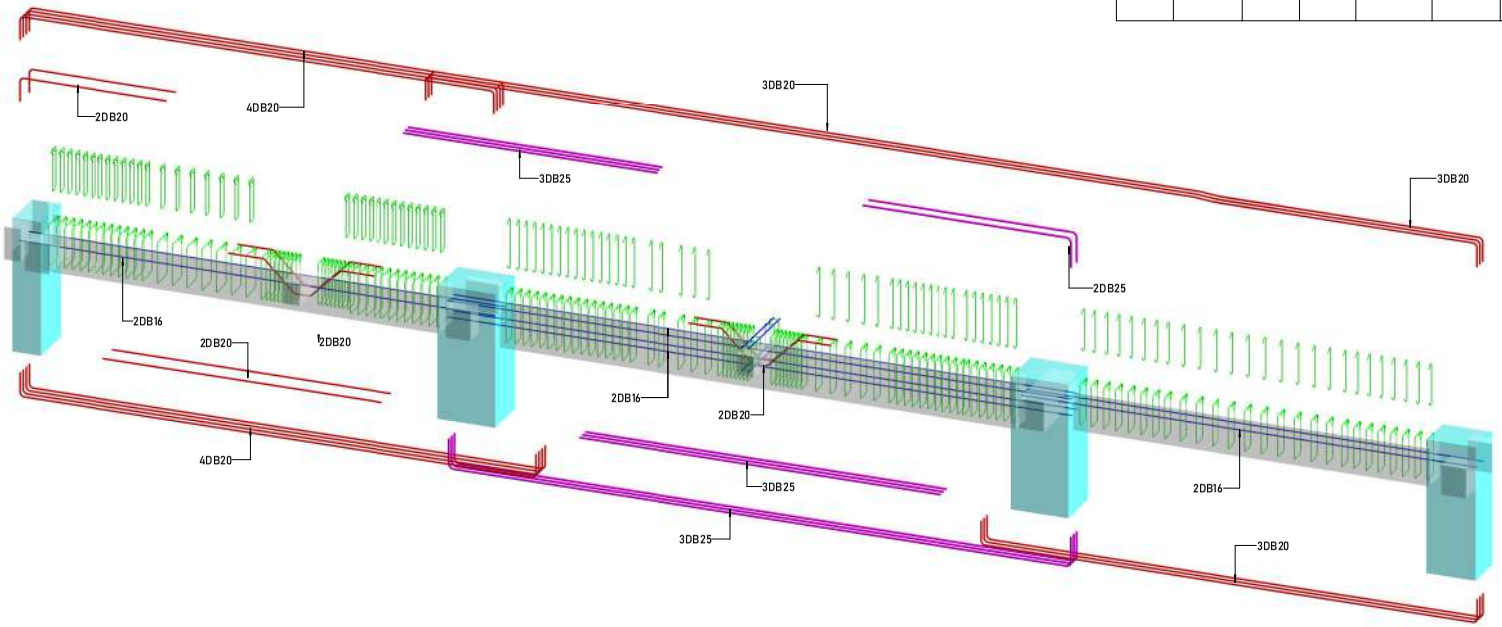
Number	Diameter	Quantity	Length	Total Length	Total Weight	Shape
1	20 mm	4	6.84 m	27.35 m	67.41 kg	300 6320 300
2	25 mm	3	8.27 m	24.80 m	95.51 kg	375 7620 375
5	20 mm	3	6.59 m	19.76 m	48.71 kg	300 6070 300
8	25 mm	3	4.42 m	13.26 m	51.07 kg	4420
12	20 mm	2	3.40 m	6.80 m	16.76 kg	3400
13	20 mm	2	2.04 m	4.08 m	10.05 kg	410 516 200 530 410
14	10 mm	42	1.60 m	67.02 m	41.30 kg	520 89 89 220 520

Beam B1 B1a B5 Rebar Schedule

Number	Diameter	Quantity	Length	Total Length	Total Weight	Shape
15	10 mm	25	1.80 m	44.89 m	27.66 kg	520 89 89 320 520
16	10 mm	59	1.80 m	105.94 m	65.28 kg	620 89 89 220 620
17	10 mm	8	1.79 m	14.34 m	8.84 kg	520 89 89 319 520
18	16 mm	2	5.82 m	11.64 m	18.36 kg	5820
19	16 mm	2	5.57 m	11.14 m	17.57 kg	5570
20	16 mm	4	7.62 m	30.48 m	48.08 kg	7620
21	10 mm	33	1.44 m	47.40 m	29.21 kg	520 89 89 140 520 140

Beam B1 B1a B5 Rebar Schedule

Number	Diameter	Quantity	Length	Total Length	Total Weight	Shape
22	10 mm	26	0.70 m	18.14 m	11.18 kg	89 89 520
23	10 mm	42	0.80 m	33.51 m	20.65 kg	89 89 620
27	10 mm	7	1.79 m	12.56 m	7.74 kg	520 89 89 319 320 520
28	20 mm	4	6.33 m	25.31 m	62.38 kg	300 5810 300
29	20 mm	3	10.67 m	32.02 m	78.92 kg	9383 2303 300
30	20 mm	2	2.07 m	4.13 m	10.19 kg	300 1809
31	25 mm	3	3.10 m	9.30 m	35.82 kg	3100
32	25 mm	2	2.88 m	5.77 m	22.21 kg	375 2560
33	20 mm	3	3.49 m	10.48 m	25.83 kg	300 3235
34	20 mm	2	2.07 m	4.14 m	10.20 kg	440 516 200 530 410
Total: 42		286		584.25 m	830.94 kg	



PROJECT: MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR	
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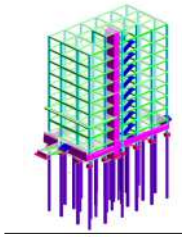
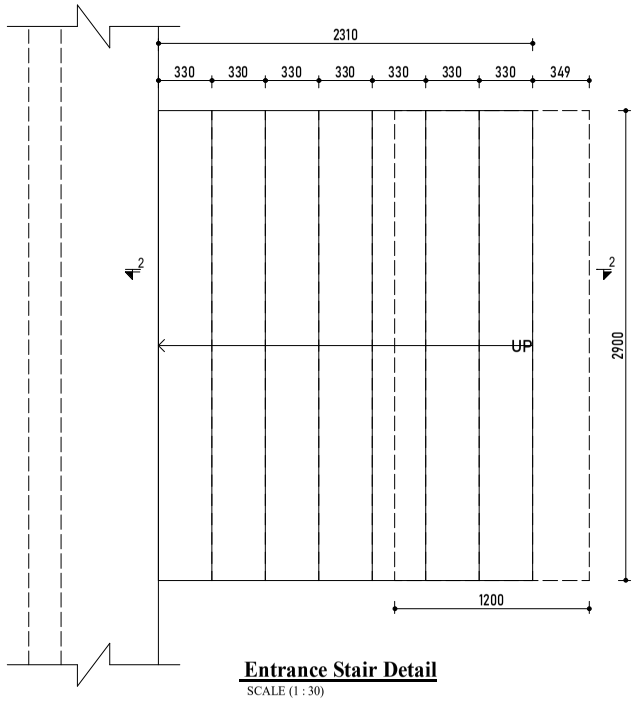
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



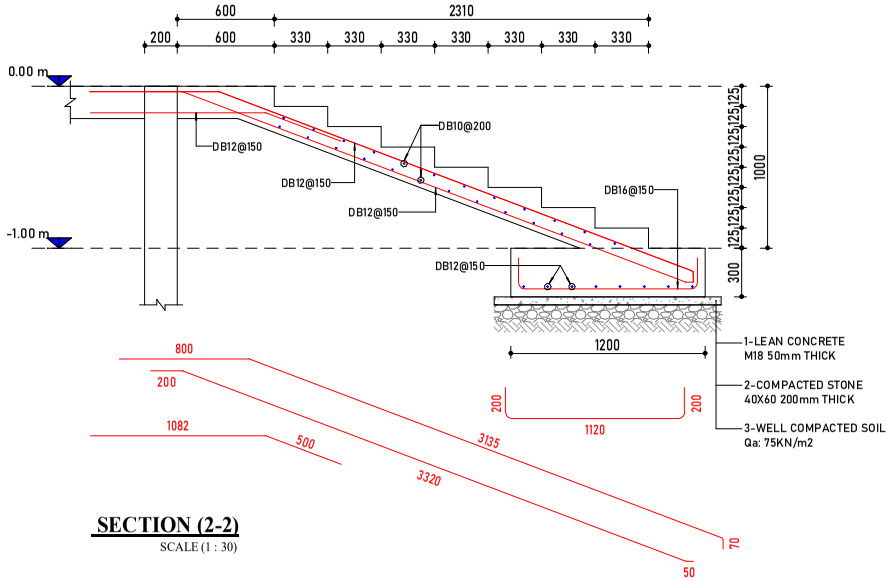
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE E1 Beam B1a B1b & B5(2)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A139.1
DATE	19/02/2025



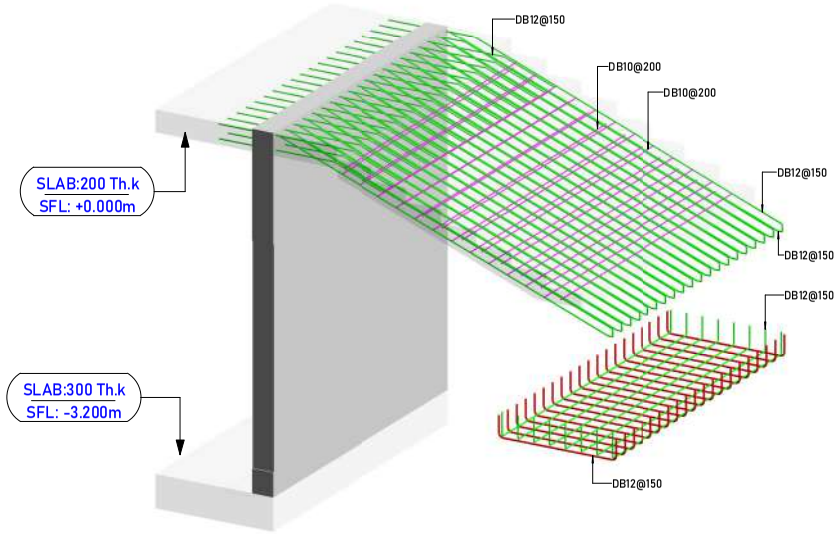
Entrance Stair Detail

SCALE (1 : 30)



SECTION (2-2)

SCALE (1 : 30)



Rebar Schedule of Entrance Stair						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	12 mm	20	3.57 m	71.30 m	63.27 kg	50 3320 200
2	12 mm	20	3.99 m	79.83 m	70.84 kg	800 3135 70
3	12 mm	20	1.58 m	31.59 m	28.03 kg	1082 500
4	10 mm	24	2.84 m	68.16 m	42.00 kg	2840
5	16 mm	20	1.45 m	29.07 m	45.86 kg	200 1120 200
6	12 mm	8	3.20 m	25.60 m	22.72 kg	220 2820 200
TOTAL : 7		112		305.55 m	272.72 kg	

NOTE :
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   - 235MPa FOR ROUNDED BAR (RB)
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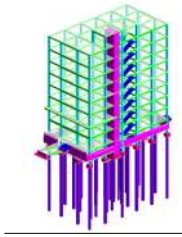
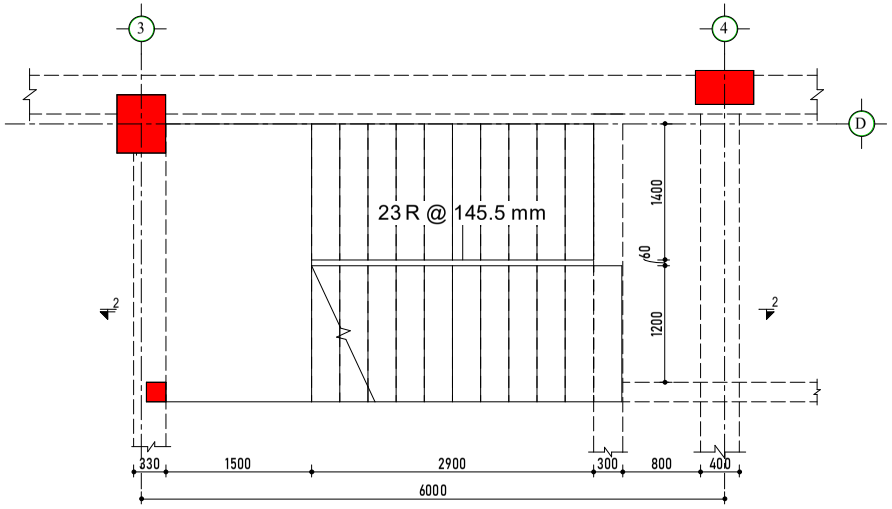
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



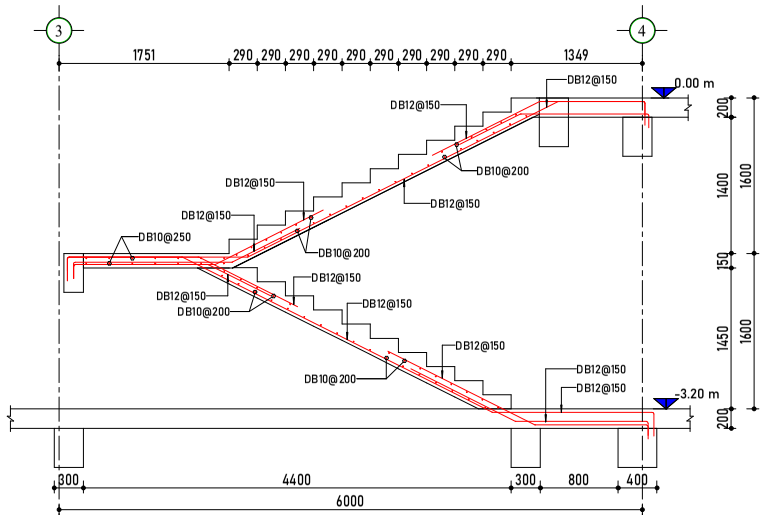
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Entrance Stair	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A140
DATE	19/02/2025



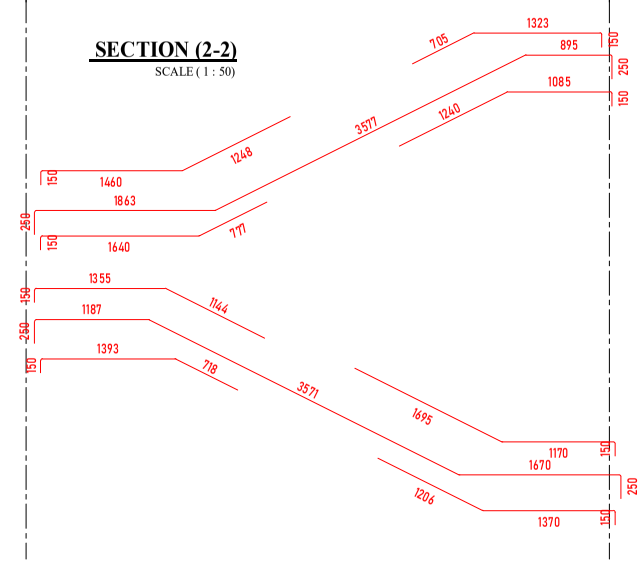
BS stair Reinforcement Detail

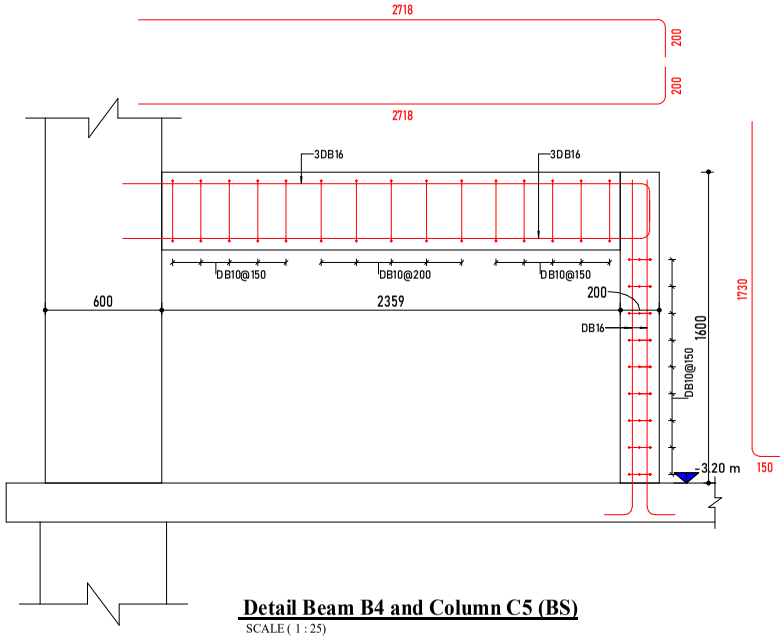
SCALE (1 : 50)



SECTION (2-2)

SCALE (1 : 50)





Detail Beam B4 and Column C5 (BS)

SCALE (1 : 25)

NOTE :

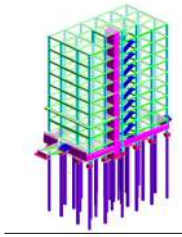
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

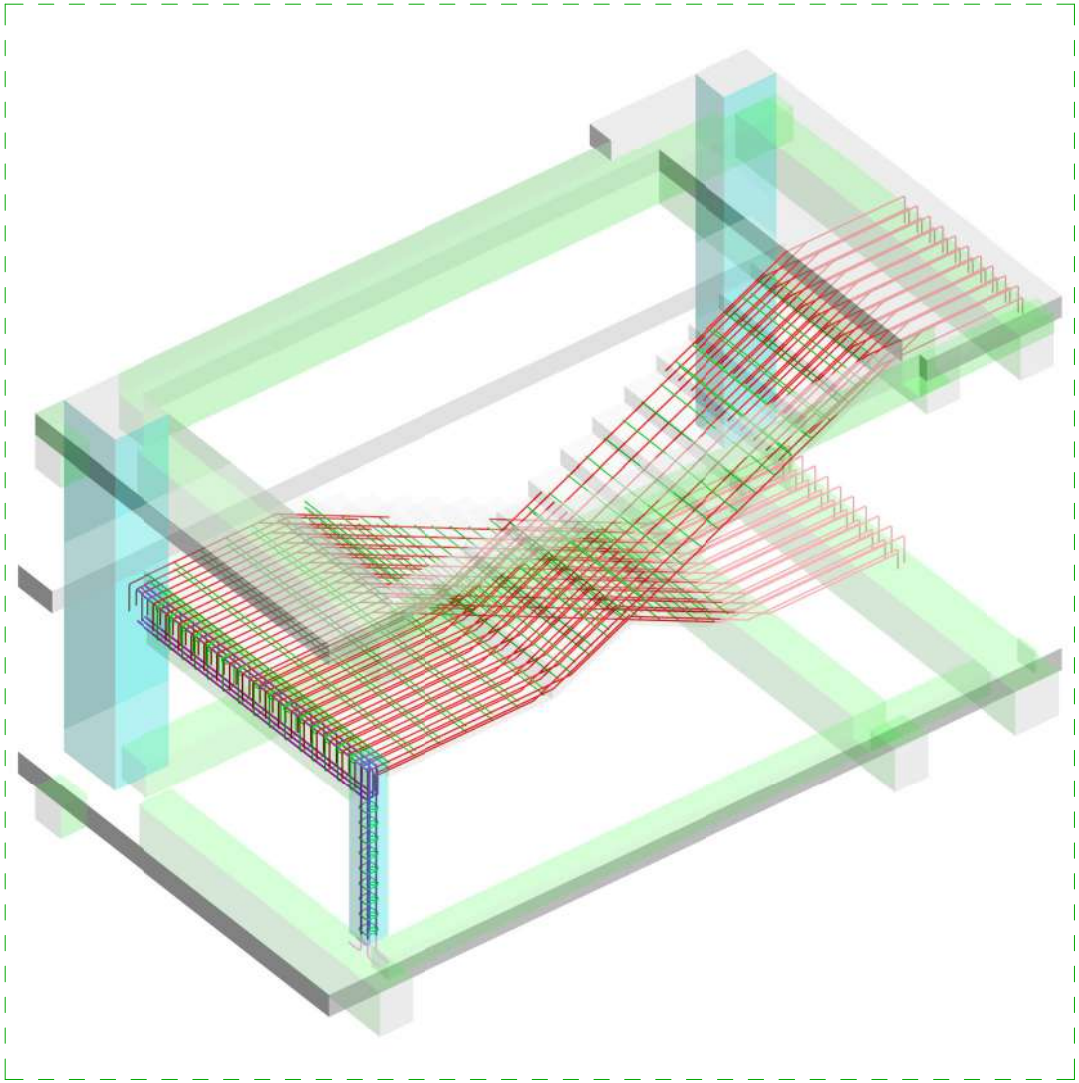
WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE BS Stair	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A141
DATE	19/02/2025



BS Stair Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	12 mm	10	6.79 m	67.90 m	60.25 kg	895 250 3577 1863 250
2	12 mm	10	2.45 m	24.53 m	21.76 kg	150 1085 1240
3	12 mm	10	2.84 m	28.36 m	25.16 kg	1248 1460 150
5	12 mm	10	2.16 m	21.56 m	19.13 kg	150 1323 705
6	12 mm	10	2.54 m	25.44 m	22.58 kg	777 1640 150
8	12 mm	10	6.88 m	68.82 m	61.07 kg	1187 250 3571 1670 250
9	12 mm	10	2.99 m	29.91 m	26.54 kg	1695 1170 150
10	12 mm	10	2.70 m	27.03 m	23.99 kg	1206 1370 150
11	12 mm	10	2.63 m	26.26 m	23.30 kg	150 1355 1144
12	12 mm	10	2.24 m	22.39 m	19.86 kg	150 1393 718
13	10 mm	60	1.35 m	81.00 m	49.91 kg	1350
14	10 mm	14	2.81 m	39.34 m	24.24 kg	2810
TOTAL : 18		174		462.52 m	377.80 kg	

Column C5 BS Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	16 mm	4	1.85 m	7.39 m	11.65 kg	150 1730
2	10 mm	9	0.60 m	5.36 m	3.30 kg	120 120 120 120
TOTAL : 3		13		12.75 m	14.96 kg	

BS Besm B4 Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
2	10 mm	15	1.00 m	14.93 m	9.20 kg	320 120 120 320
3	16 mm	6	2.88 m	17.31 m	27.31 kg	200 2718
TOTAL : 5		21		32.24 m	36.51 kg	

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

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ARCHITECTS

STRUCTURAL ENGINEERS

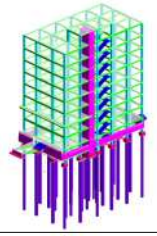
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
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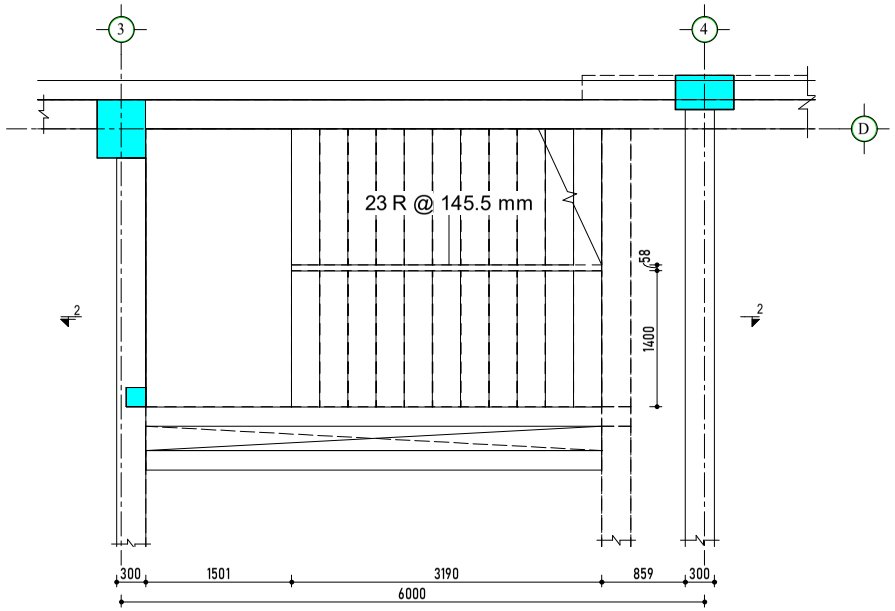
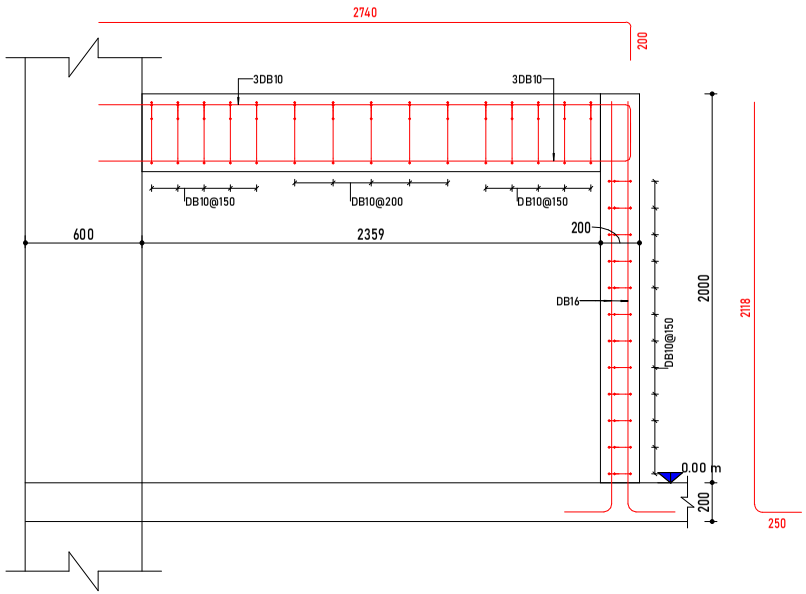
PAPER SIZE	A3
DRAWING NO.	A141.1
DATE	19/02/2025



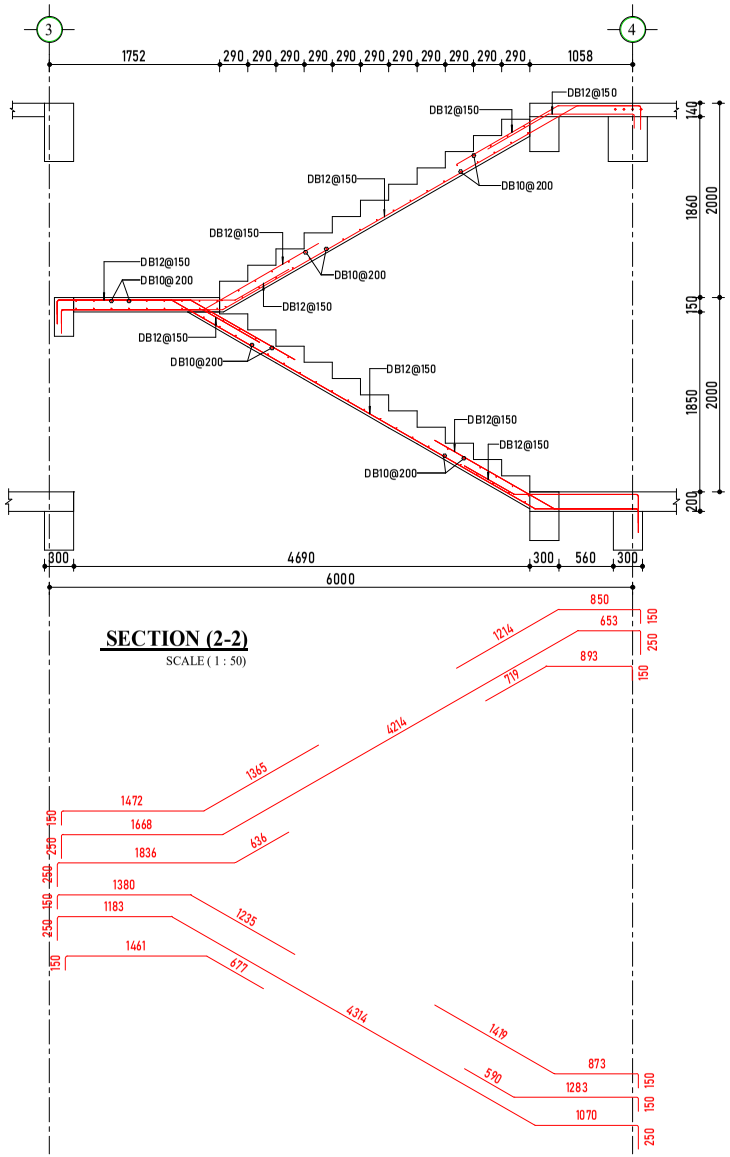
GF stair Reinforcement Detail

SCALE (1 : 50)



Detail Beam B4 and Column C5 (GF)

SCALE (1 : 25)



SECTION (2-2)

SCALE (1 : 50)

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
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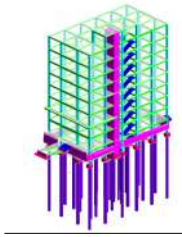
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

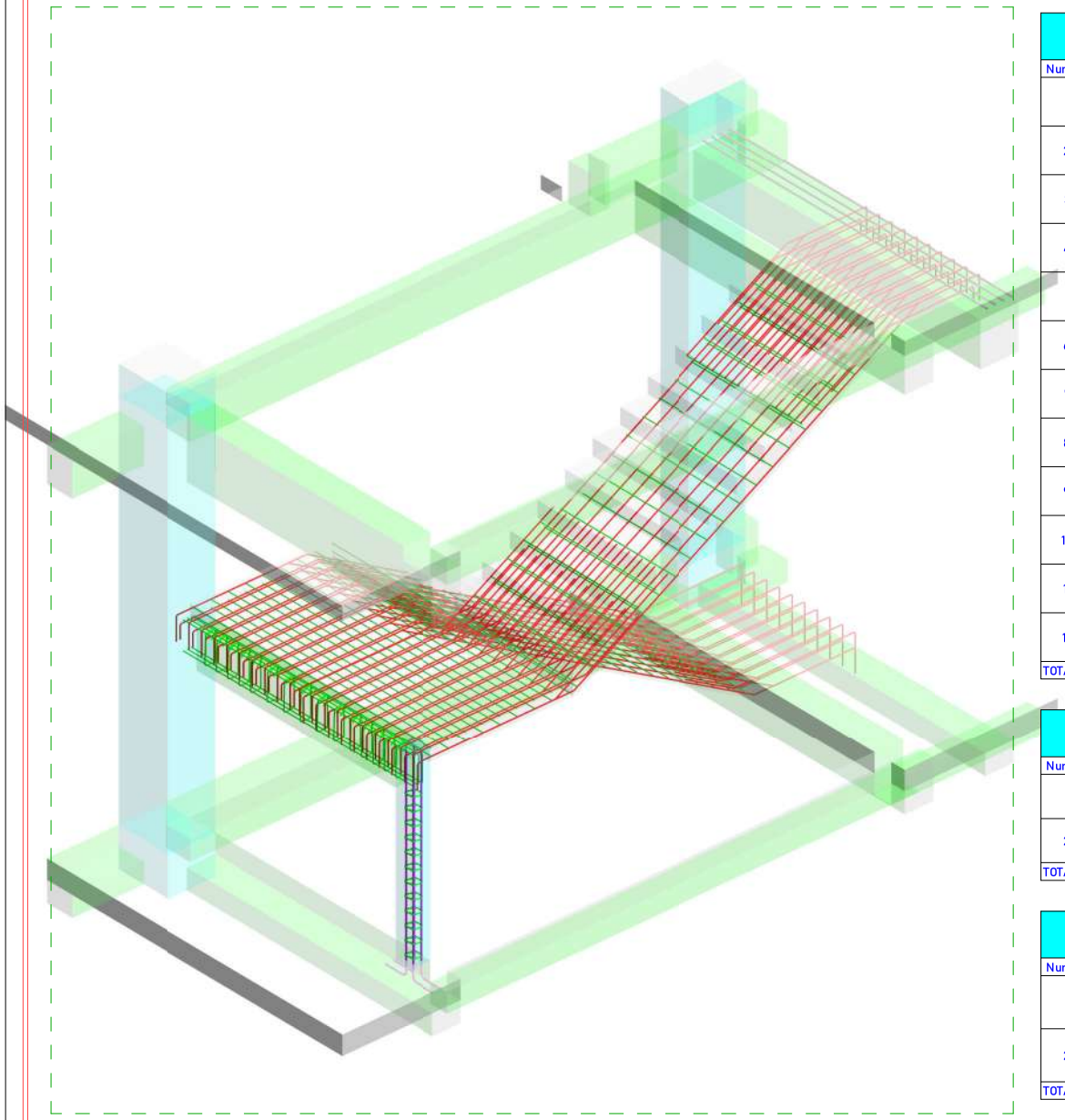
WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE GF Stair	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A142
DATE	19/02/2025



GF Stair Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	12 mm	10	6.99 m	69.88 m	62.01 kg	853 1214 1668 250 250
2	12 mm	10	2.96 m	29.64 m	26.30 kg	1472 1365 150
3	12 mm	10	2.19 m	21.91 m	19.44 kg	850 1214 150
4	10 mm	63	1.36 m	85.68 m	52.80 kg	1360
5	10 mm	18	2.82 m	50.73 m	31.26 kg	2818
6	12 mm	10	1.74 m	17.38 m	15.42 kg	893 719 150
7	12 mm	10	2.70 m	26.99 m	23.95 kg	1836 635 250
8	12 mm	10	7.02 m	70.20 m	62.30 kg	1183 431 1070 250 250
9	12 mm	10	2.42 m	24.19 m	21.47 kg	873 1419 150
10	12 mm	10	2.74 m	27.41 m	24.32 kg	1380 1235 150
11	12 mm	10	2.00 m	20.00 m	17.75 kg	1283 590 150
12	12 mm	10	2.26 m	22.65 m	20.10 kg	1461 677 150
TOTAl : 18		181		466.67 m	377.12 kg	

Column C5 GF Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	16 mm	4	2.33 m	9.34 m	14.73 kg	2118 250
2	10 mm	12	0.60 m	7.15 m	4.40 kg	120 120 120 120
TOTAl : 3		16		16.48 m	19.13 kg	

GF Besm B4 Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	10 mm	6	2.92 m	17.52 m	10.79 kg	2740 200
2	10 mm	15	1.00 m	14.93 m	9.20 kg	200 89 89 120 120 320
TOTAl : 5		21		32.45 m	20.00 kg	

PROJECT: MEGABELLE

OWNER

WAGON Engineering Center

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ARCHITECTS

STRUCTURAL ENGINEERS

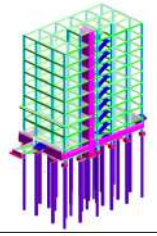
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
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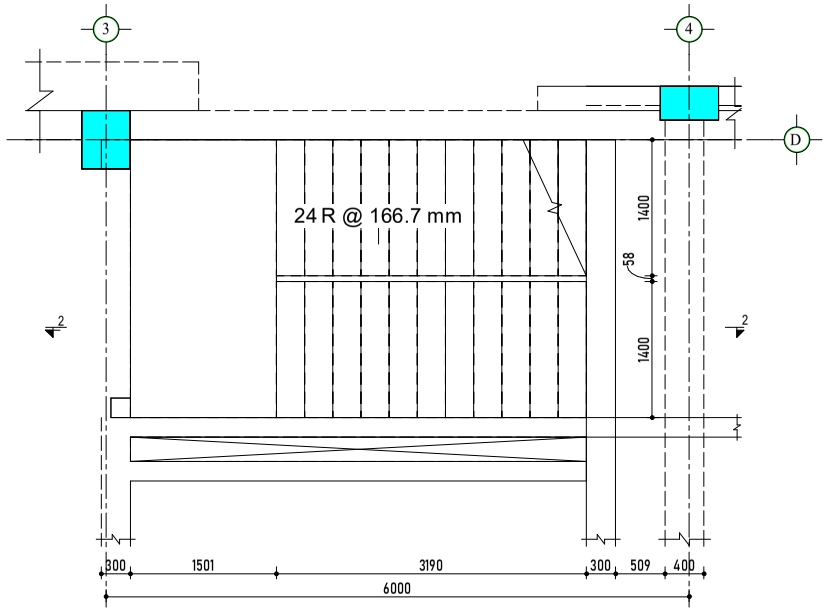
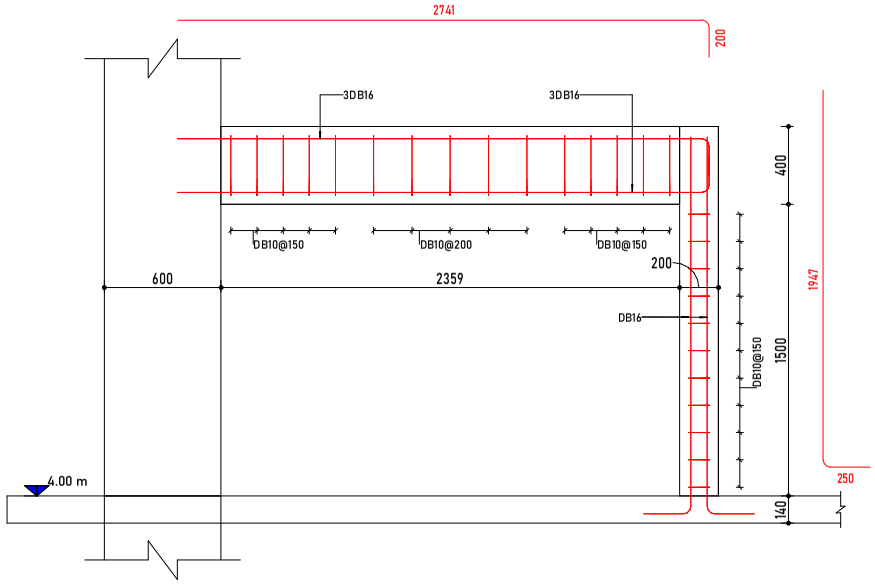
PAPER SIZE	A3
DRAWING NO.	A142.1
DATE	19/02/2025



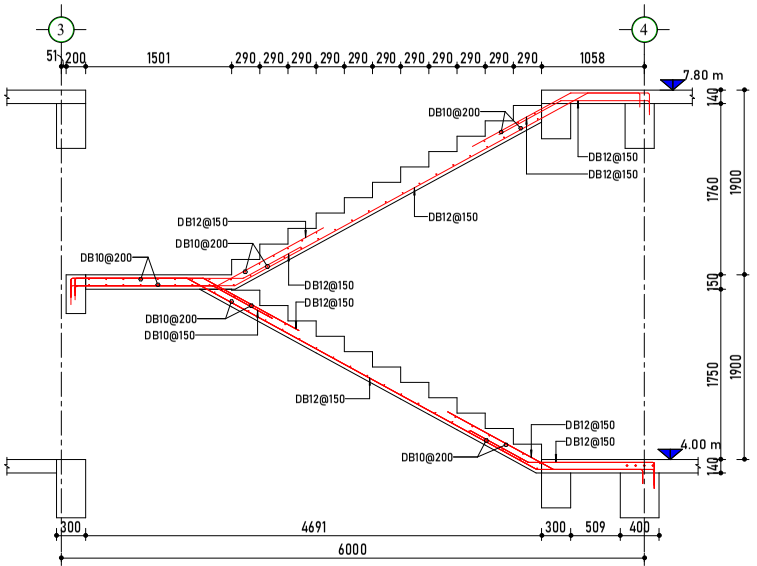
1ST stair Reinforcement Detail

SCALE (1 : 50)



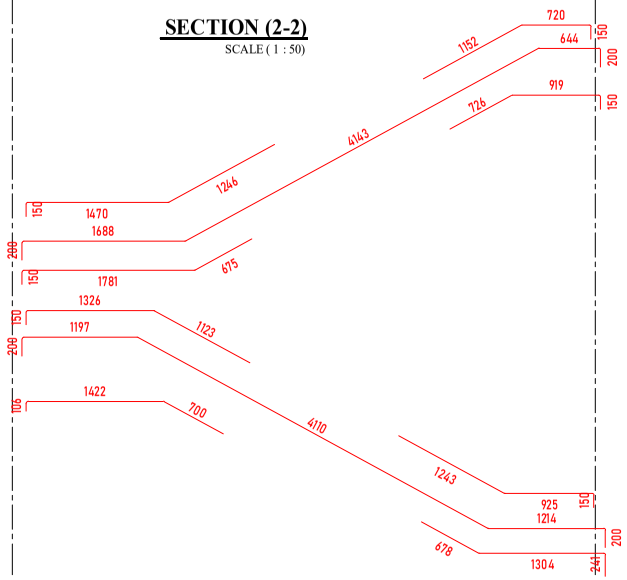
Detail Beam B4 and Column C5 (1st)

SCALE (1 : 25)



SECTION (2-2)

SCALE (1 : 50)



NOTE :
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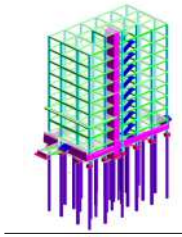
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT: MEGABELLE

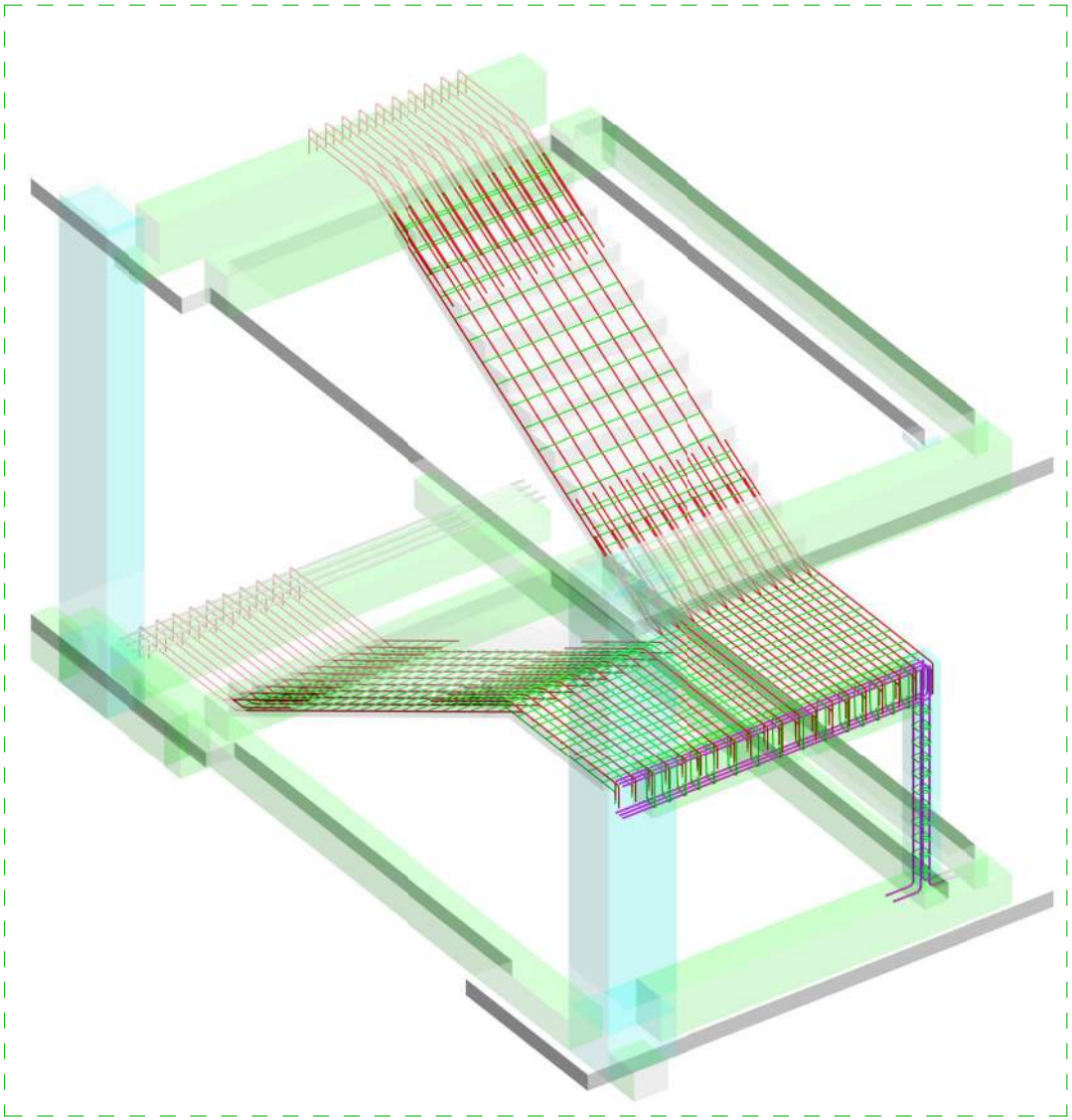
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE 1ST Stair	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A143
DATE	19/02/2025



1 ST Stair Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	12 mm	10	6.83 m	68.29 m	60.60 kg	200 644 1140 1088 200
2	12 mm	10	2.00 m	20.00 m	17.74 kg	150 720 1152
3	12 mm	10	2.84 m	28.44 m	25.23 kg	1246 1470 150
4	10 mm	61	1.34 m	81.74 m	50.37 kg	1340
5	12 mm	10	2.58 m	25.83 m	22.92 kg	675 1781 150
6	12 mm	10	1.77 m	17.72 m	15.73 kg	150 919 726
7	10 mm	16	2.80 m	44.78 m	27.59 kg	2798
8	12 mm	10	6.87 m	68.75 m	61.00 kg	200 1197 1140 1214 200
9	12 mm	10	2.58 m	25.76 m	22.86 kg	150 1326 1123
10	12 mm	10	2.29 m	22.95 m	20.36 kg	1743 925 150
11	12 mm	10	2.20 m	22.00 m	19.52 kg	678 1304 241
12	10 mm	10	2.20 m	22.04 m	13.58 kg	106 1422 700
TOTAL : 18		177		448.29 m	357.52 kg	

Column C5 1ST Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	16 mm	4	2.16 m	8.65 m	13.65 kg	250 1947
2	10 mm	11	0.60 m	6.55 m	4.04 kg	120 120 120 120
TOTAL : 3		15		15.21 m	17.69 kg	

1ST Besm B4 Rebar Schedule

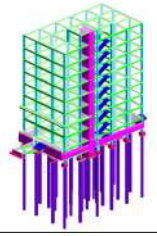
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	16 mm	6	2.91 m	17.44 m	27.52 kg	200
2	10 mm	15	1.00 m	14.93 m	9.20 kg	120 2741 89 120 120 320
TOTAL : 5		21		32.38 m	36.72 kg	

PROJECT : MEGABELLE

OWNER

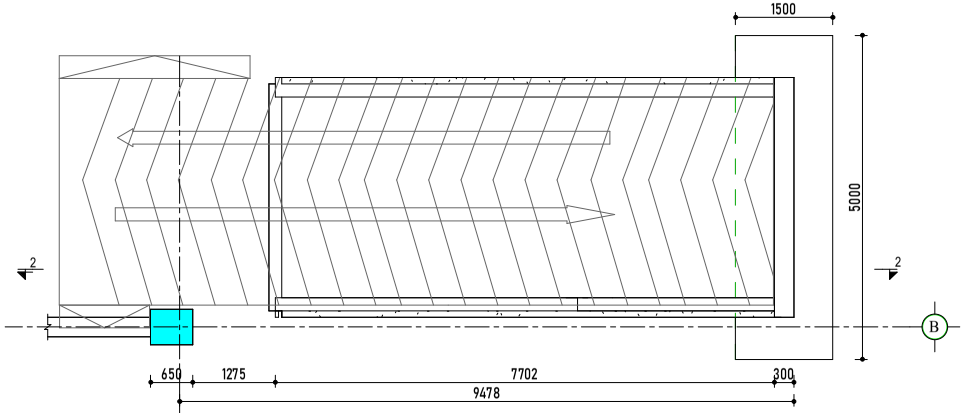
WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



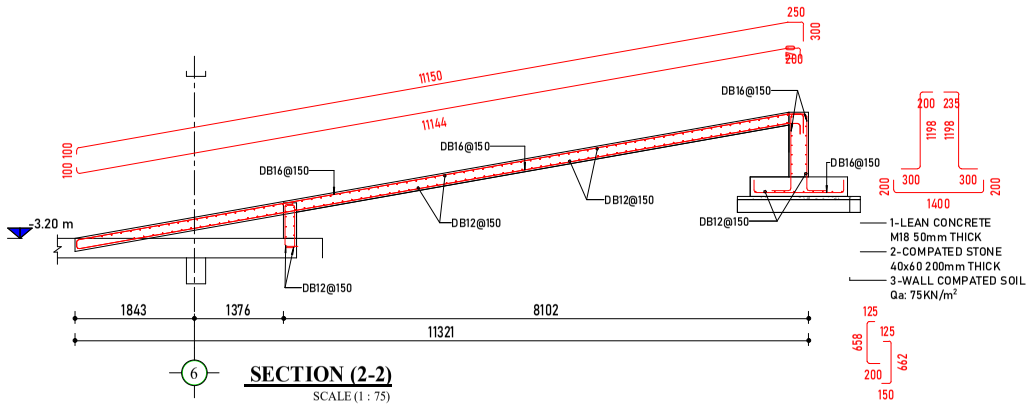
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE 1ST Stair (2)	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A143.1
DATE	19/02/2025



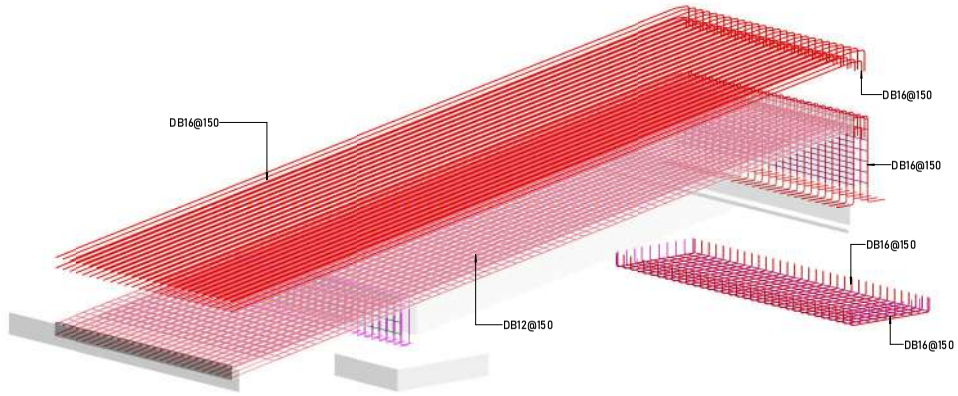
Ramp Detail

SCALE (1 : 75)



SECTION (2-2)

SCALE (1 : 75)



Rebar Schedule Ramp

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	16 mm	52	11.55 m	600.79 m	947.77 kg	100, 11144, 290
2	16 mm	52	11.74 m	610.52 m	963.11 kg	300, 290, 11150, 100
3	12 mm	288	3.66 m	1054.12 m	935.38 kg	3660
4	16 mm	26	1.63 m	42.42 m	66.92 kg	300, 1198, 200
5	16 mm	34	1.73 m	58.94 m	92.99 kg	200, 1400, 200
6	12 mm	10	5.26 m	52.61 m	46.68 kg	200, 4900, 200
7	12 mm	14	3.66 m	51.23 m	45.46 kg	3659
8	12 mm	24	0.93 m	22.41 m	19.88 kg	125, 658, 200
9	12 mm	24	0.89 m	21.28 m	18.89 kg	125, 662, 150
10	10 mm	8	3.46 m	27.68 m	17.06 kg	3460
11	16 mm	26	1.67 m	43.33 m	68.35 kg	300, 1198, 235
TOTAL : 18		558		2585.33 m	3222.50 kg	

NOTE :
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2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
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5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

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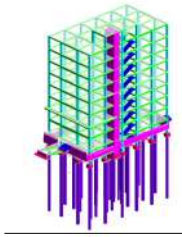
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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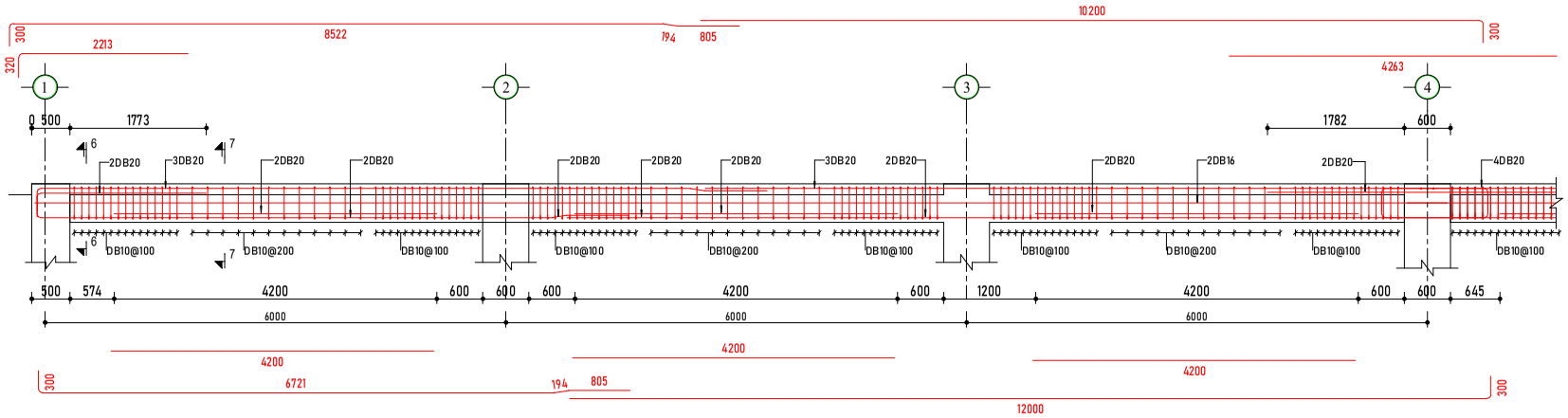
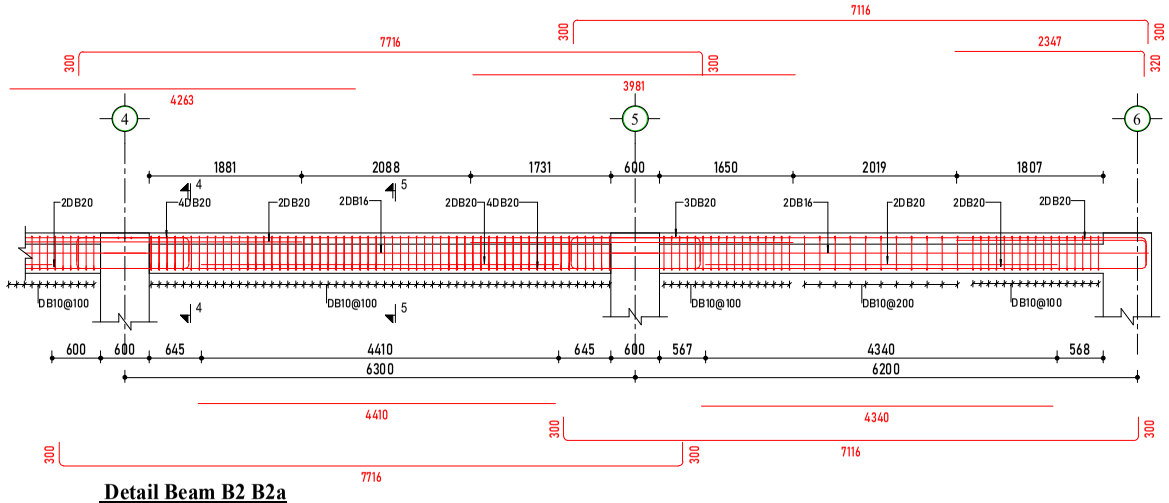
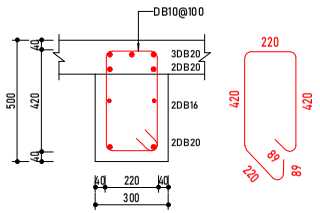
DRAWING NO.	A148
DATE	19/02/2025





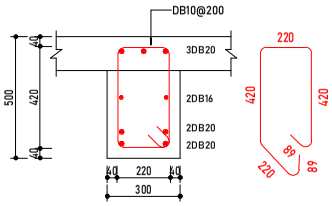
Detail Beam B2 B2a

SCALE (1 : 60)



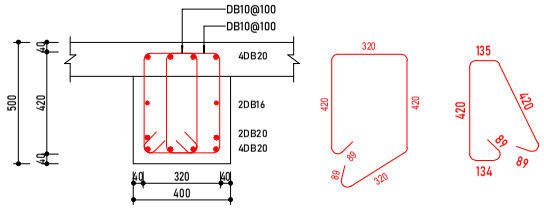
SECTION (6-6)

SCALE (1 : 20)



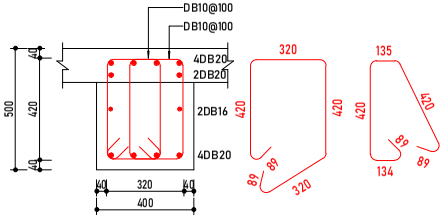
SECTION (7-7)

SCALE (1 : 20)



SECTION (5-5)

SCALE (1 : 20)



SECTION (4-4)

SCALE (1 : 20)

NOTE :

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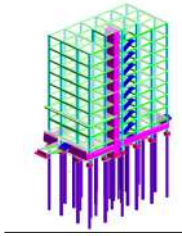
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

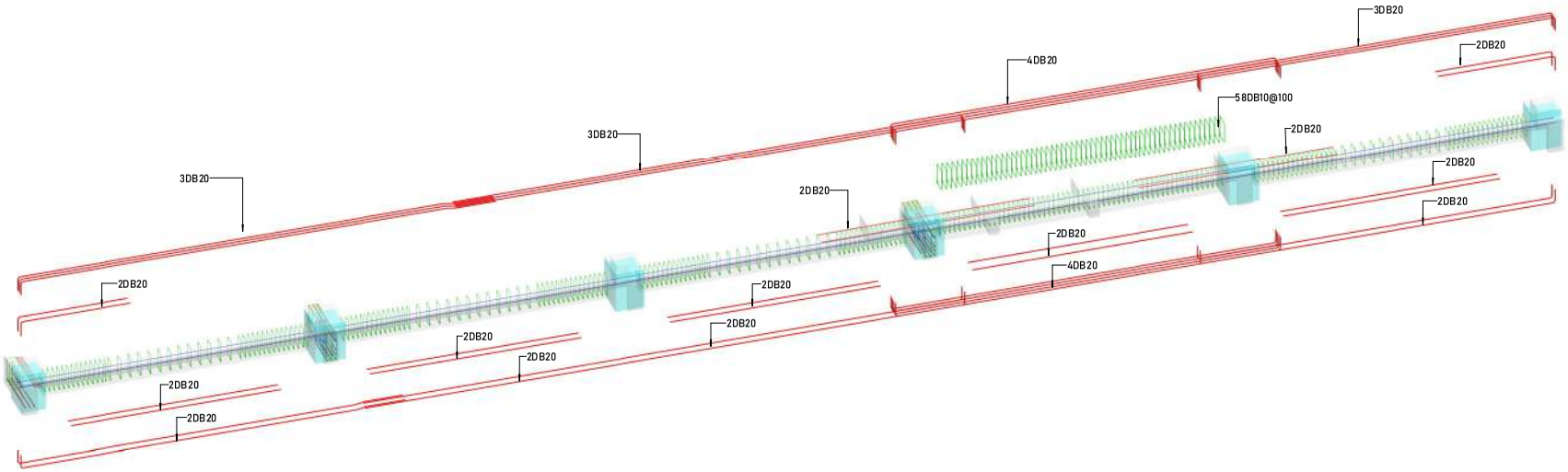
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE E1 Beam B2 B2a	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A149
DATE	19/02/2025



Beam B2 B2a Rebar Schedule

Number	Diameter	Quantity	Length	Total Length	Total Wieght	Shape
1	20 mm	2	7.97 m	15.95 m	39.31 kg	805 194 6721 800
3	20 mm	5	7.63 m	38.16 m	94.07 kg	300 7116 300
4	20 mm	2	2.49 m	4.98 m	12.29 kg	320 2213
6	20 mm	2	2.63 m	5.25 m	12.94 kg	2347 320
7	20 mm	2	4.26 m	8.53 m	21.02 kg	4263
8	20 mm	2	4.41 m	8.82 m	21.74 kg	4410
11	20 mm	2	4.34 m	8.68 m	21.40 kg	4340
12	10 mm	171	1.40 m	238.65 m	147.06 kg	420 89 89 220 220 420

Beam B2 B2a Rebar Schedule

Number	Diameter	Quantity	Length	Total Length	Total Wieght	Shape
13	10 mm	58	1.60 m	92.55 m	57.03 kg	420 89 89 320 320 420
14	20 mm	3	9.78 m	29.33 m	72.28 kg	805 194 8522 800
15	20 mm	3	10.46 m	31.38 m	77.34 kg	300 10200
16	20 mm	2	12.26 m	24.52 m	60.43 kg	300 12000
17	20 mm	6	4.20 m	25.20 m	62.12 kg	4200
18	20 mm	2	3.98 m	7.96 m	19.63 kg	3981
20	20 mm	8	8.23 m	65.87 m	162.35 kg	300 7716 300
Total : 30		270		605.82 m	881.00 kg	

PROJECT: MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS

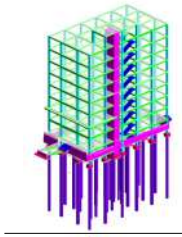
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

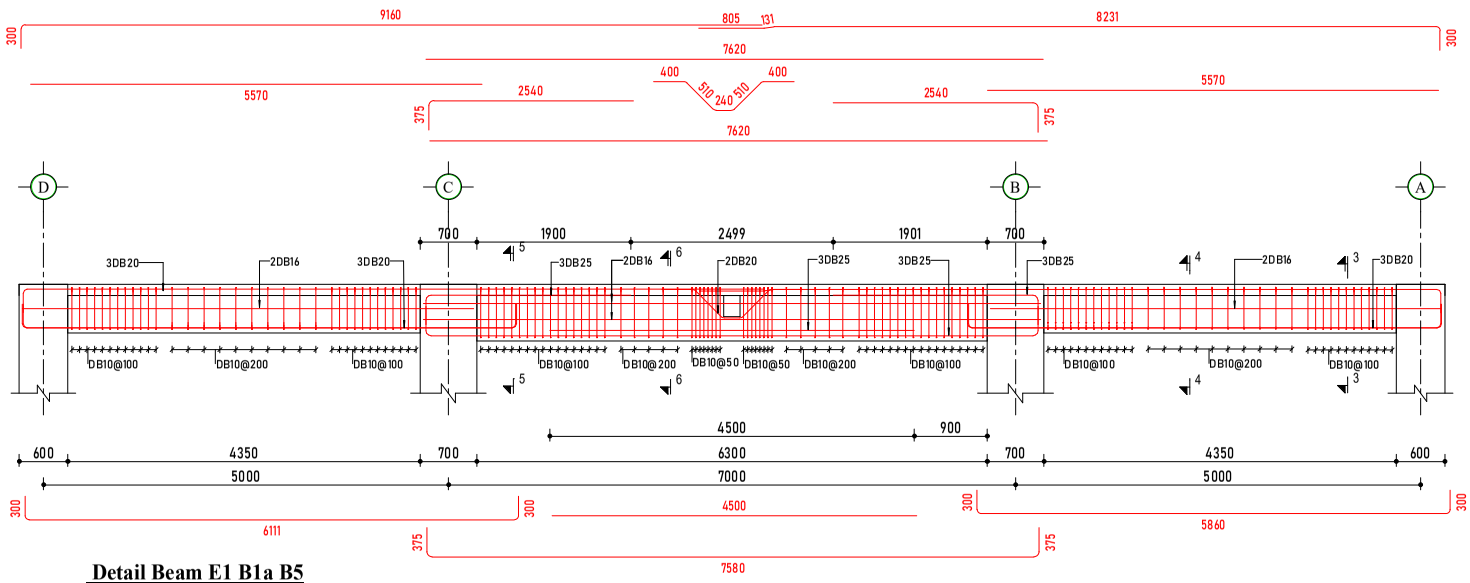
SANITARY ENGINEERS

REVISIONS	DATE



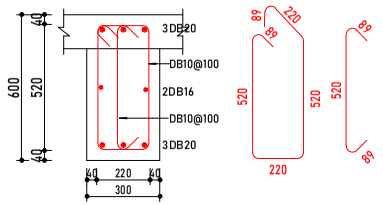
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
E1 Beam B2 B2a (2)	1/150
PAPER SIZE	A3
DRAWING NO.	A149.1
DATE	19/02/2025



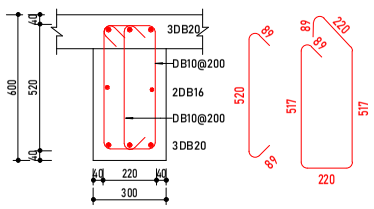
Detail Beam E1 B1a B5

SCALE (1 : 60)



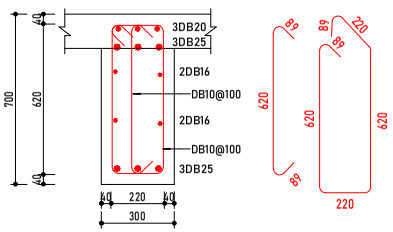
SECTION (3-3)

SCALE (1 : 20)



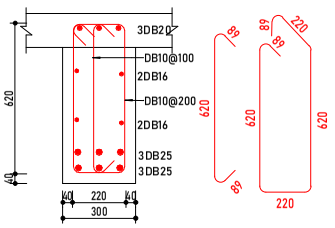
SECTION (4-4)

SCALE (1 : 20)



SECTION (5-5)

SCALE (1 : 20)



SECTION (6-6)

SCALE (1 : 20)

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
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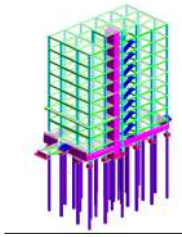
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

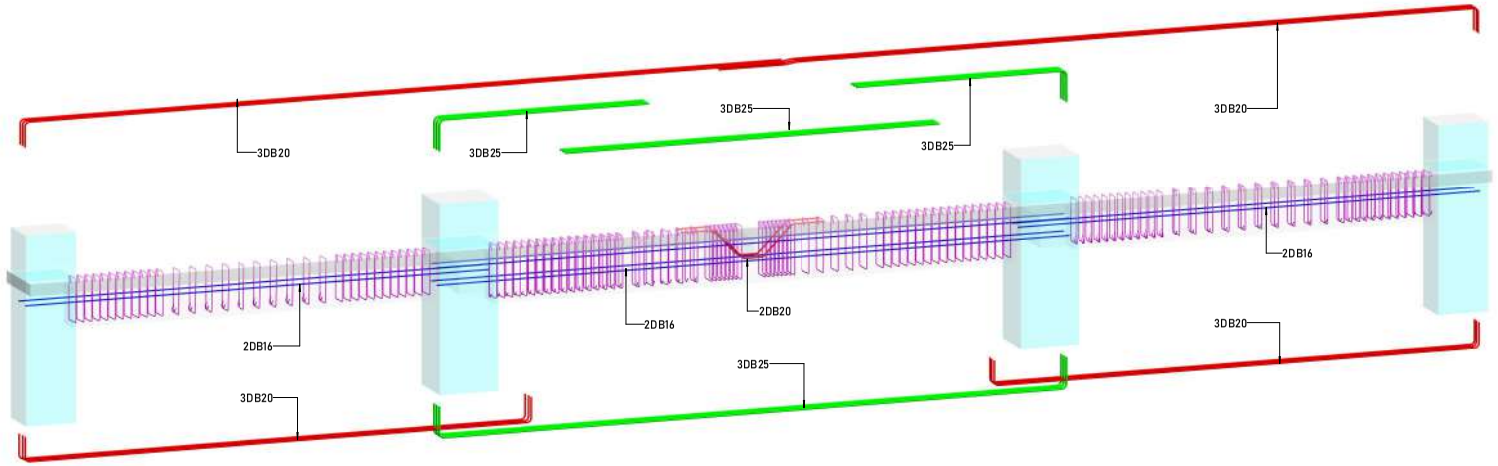
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE E1 Beam B1a B5	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A149.2
DATE	19/02/2025



Beam B1a B5 Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	20 mm	3	6.38 m	19.13 m	47.16 kg	300 5860 300
2	25 mm	3	8.23 m	24.68 m	95.05 kg	375 7580 375
3	25 mm	6	2.86 m	17.18 m	66.16 kg	2540 375
4	25 mm	3	4.50 m	13.50 m	51.99 kg	4500
5	16 mm	4	7.62 m	30.48 m	48.08 kg	7620
6	16 mm	4	5.57 m	22.28 m	35.15 kg	5570
9	10 mm	10	1.59 m	15.90 m	9.79 kg	517 89 89 220 220 517
10	10 mm	60	1.80 m	107.74 m	66.39 kg	620 89 89 220 420 620
11	20 mm	2	2.02 m	4.03 m	9.95 kg	400 510 240 510 400

Beam B1a B5 Rebar Schedule

Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
13	10 mm	22	0.70 m	15.35 m	9.46 kg	89 520 89
14	10 mm	25	0.80 m	19.95 m	12.29 kg	89 620 89
15	10 mm	36	1.60 m	57.44 m	35.40 kg	520 89 89 220 220 520
16	10 mm	12	1.60 m	19.14 m	11.80 kg	520 89 89 220 220 520
17	10 mm	10	1.60 m	15.96 m	9.83 kg	420 89 89 220 220 520
18	20 mm	3	6.63 m	19.88 m	49.01 kg	300 6111 300
20	20 mm	3	9.42 m	28.26 m	69.66 kg	8231 1305 300
TOTAL: 28		206		430.90 m	627.17 kg	

PROJECT: MEGABELLE

OWNER

WAGON Engineering Center

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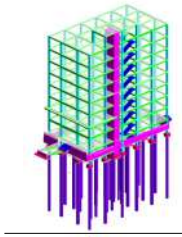
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

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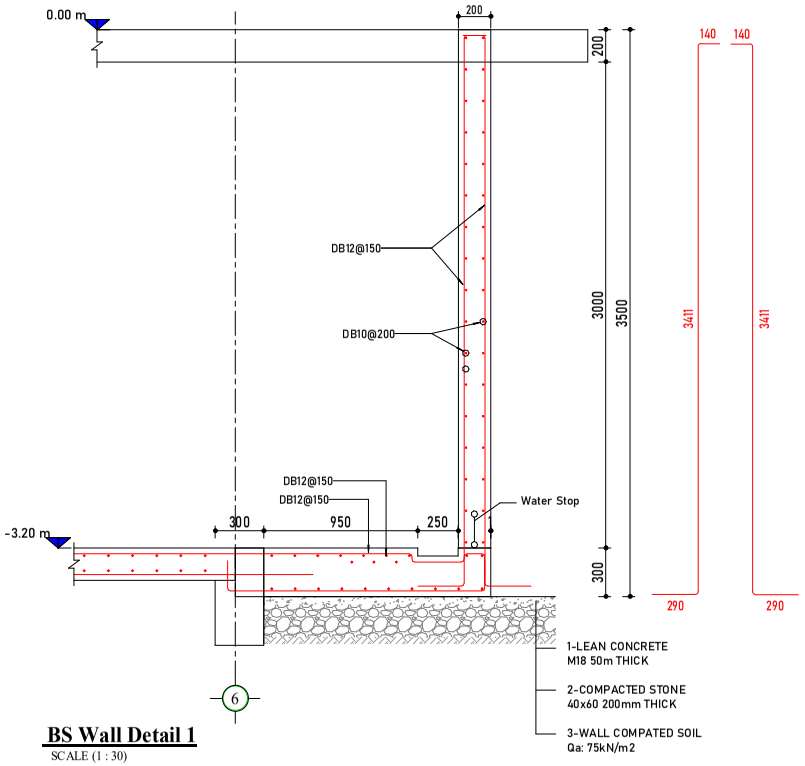
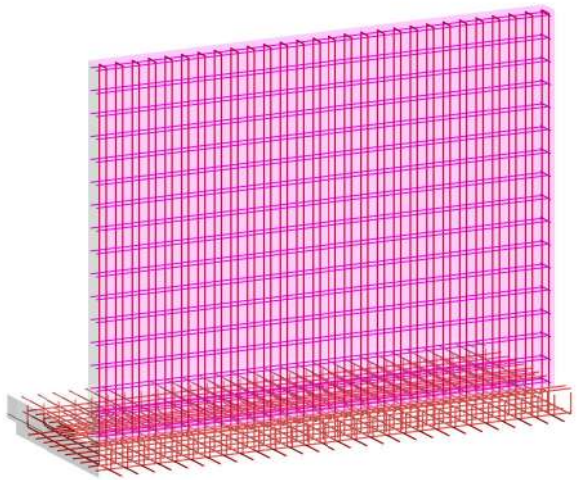
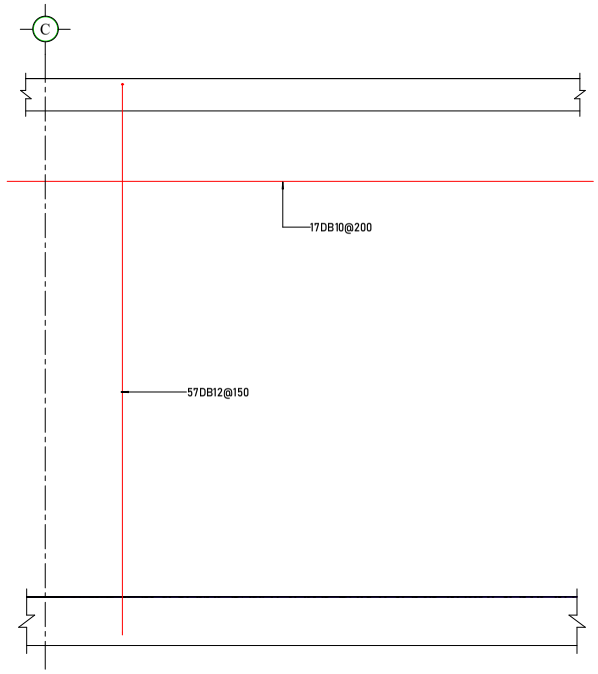
PAPER SIZE	A3
DRAWING NO.	A149.3
DATE	19/02/2025



BS Wall Detail 1

SCALE (1 : 30)





Detail Rebar Wall 1

SCALE (1 : 30)

BS Wall 1 Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	12 mm	57	4 m	217 m	192.30 kg	140 3411 290
2	12 mm	57	4 m	217 m	192.28 kg	140 3411 290
3	10 mm	34	9 m	297 m	183.30 kg	150 8490 150
TOTAL: 4		148		731 m	567.87 kg	

NOTE :
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   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

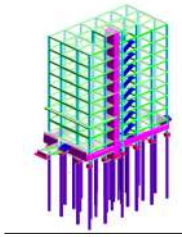
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

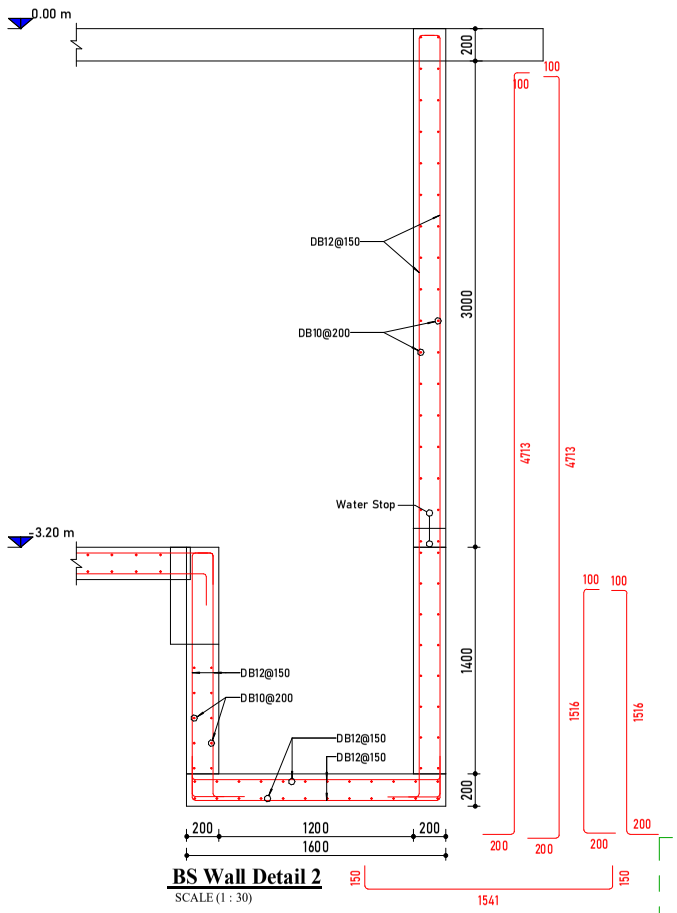
SANITARY ENGINEERS

REVISIONS | DATE



WORKING DRAWING
FOR CONSTRUCTION

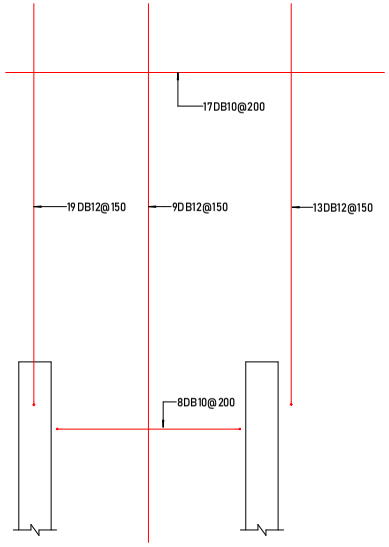
DRAWING TITLE	SCALE
Basement wall detail 1	1/150
PAPER SIZE	A3
DRAWING NO.	A160
DATE	19/02/2025



BS Wall Detail 2

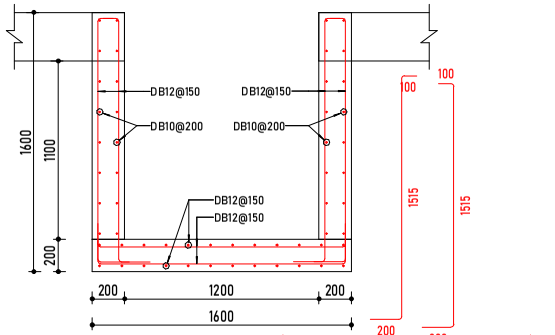
SCALE (1 : 30)

Water Tank Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	12 mm	24	1.80 m	43.21 m	38.35 kg	150 / 1540 / 150
2	12 mm	9	4.97 m	44.76 m	39.72 kg	200 / 4713 / 100
3	12 mm	9	1.78 m	15.99 m	14.19 kg	100 / 1516 / 200
4	12 mm	9	1.78 m	15.99 m	14.19 kg	100 / 1516 / 200
5	10 mm	10	1.40 m	13.99 m	8.62 kg	140 / 1160 / 140
6	12 mm	9	4.97 m	44.76 m	39.72 kg	200 / 4713 / 100
7	10 mm	8	1.38 m	11.01 m	6.78 kg	139 / 1139 / 139
8	10 mm	8	1.38 m	11.04 m	6.80 kg	141 / 1139 / 141
9	12 mm	19	3.70 m	70.37 m	62.44 kg	202 / 3441 / 100
10	12 mm	19	3.70 m	70.33 m	62.41 kg	200 / 3441 / 100
11	12 mm	13	3.70 m	48.10 m	42.69 kg	200 / 3440 / 100
12	12 mm	13	3.70 m	48.10 m	42.69 kg	200 / 3440 / 100
13	10 mm	34	5.99 m	203.61 m	125.47 kg	140 / 5750 / 140
14	12 mm	24	1.80 m	43.23 m	38.37 kg	150 / 1541 / 150
TOTAL: 18		208		684.49 m	542.42 kg	



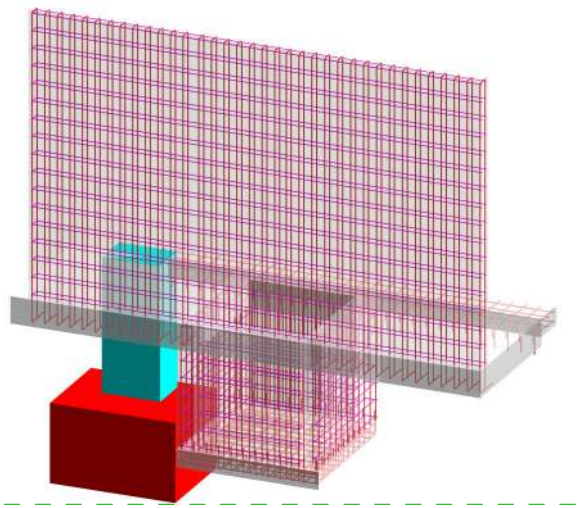
Detail Rebar Water Tank

SCALE (1 : 30)



SECTION (2-2)

SCALE (1 : 30)



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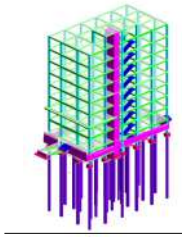
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

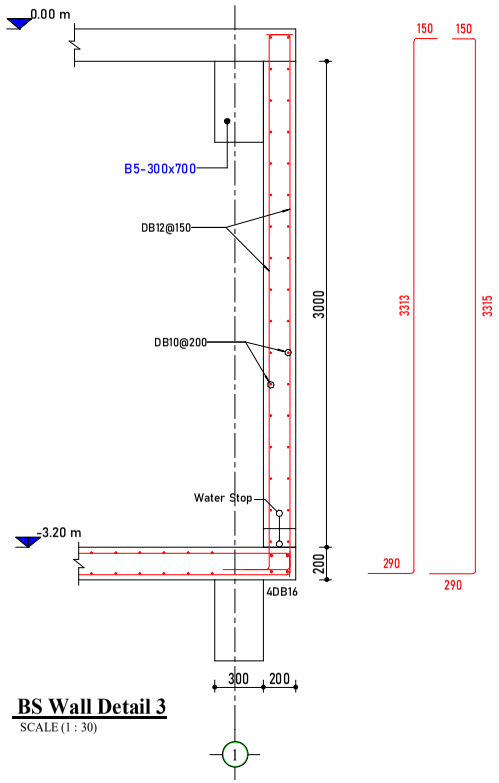
WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



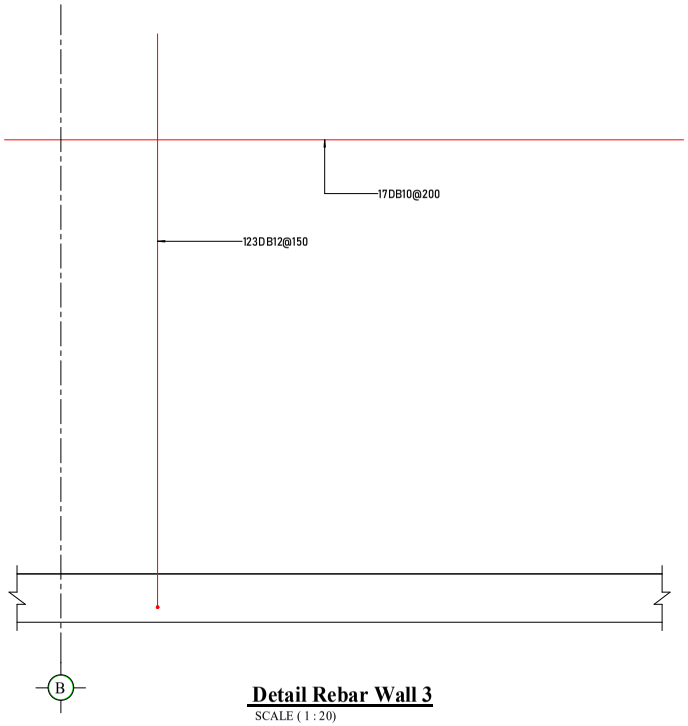
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Water Tank	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A160.1
DATE	19/02/2025



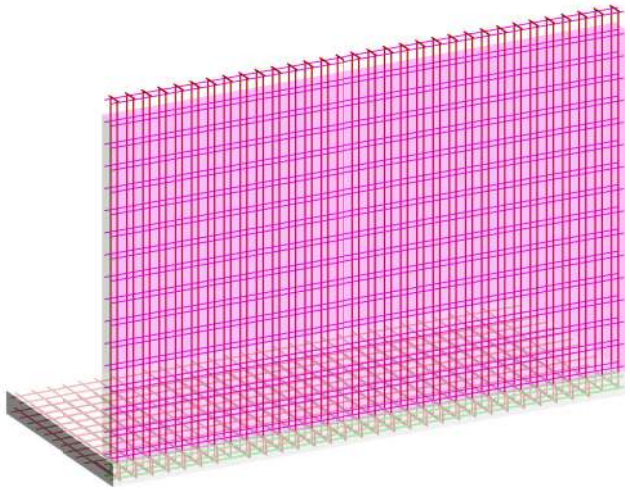
BS Wall Detail 3

SCALE (1 : 30)



Detail Rebar Wall 3

SCALE (1 : 20)



BS Wall 3 Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	12 mm	123	4 m	457 m	405.51 kg	150 3315 290
2	12 mm	123	4 m	457 m	405.35 kg	150 3313 290
3	10 mm	34	18 m	618 m	381.11 kg	18190
TOTAL: 4		280		1532 m	1191.97 kg	

NOTE :
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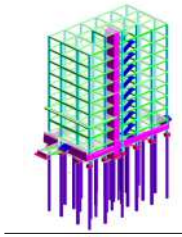
PROJECT : MEGABELLE

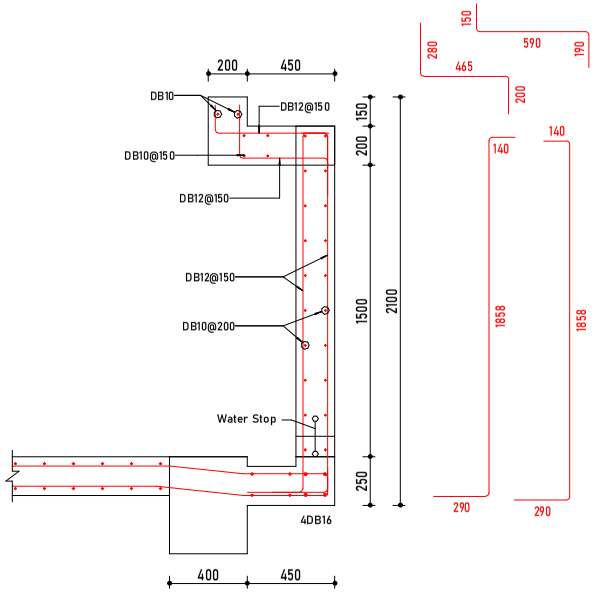
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



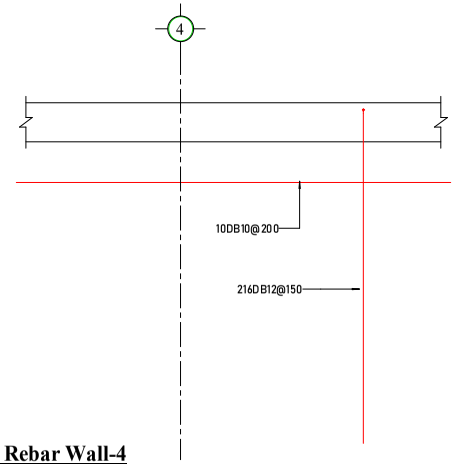
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Basement wall detail 3	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A160.2
DATE	19/02/2025



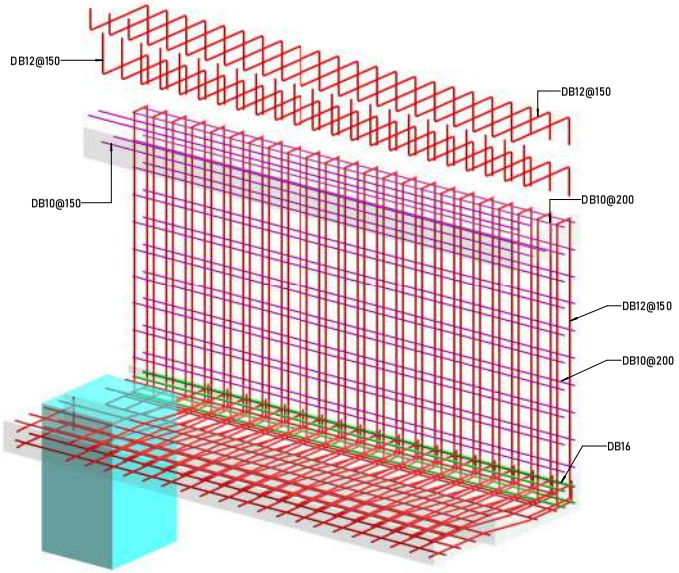
BS Wall Detail 4

SCALE (1 : 25)



Detail Rebar Wall-4

SCALE (1 : 25)



BS Wall 4 Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	12 mm	216	2.25 m	485.72 m	431.01 kg	280, 1858, 140
2	12 mm	216	2.25 m	485.74 m	431.03 kg	290, 1858, 140
3	10 mm	20	32.39 m	647.80 m	399.19 kg	32390
4	12 mm	214	0.89 m	190.58 m	169.11 kg	150, 590, 190
5	12 mm	214	0.91 m	193.79 m	171.96 kg	280, 465, 200
7	10 mm	6	31.82 m	190.90 m	117.63 kg	31816
TOTAL: 10		886		2194.53 m	1719.94 kg	

NOTE :
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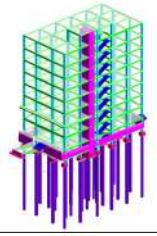
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
4. REINFORCING STEEL YEILD STRENGTH TO BE MINIMUM OF :
   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

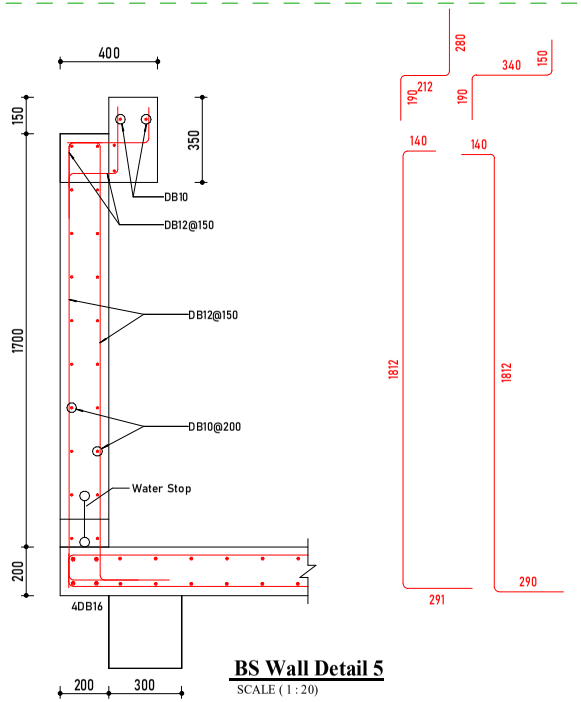
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



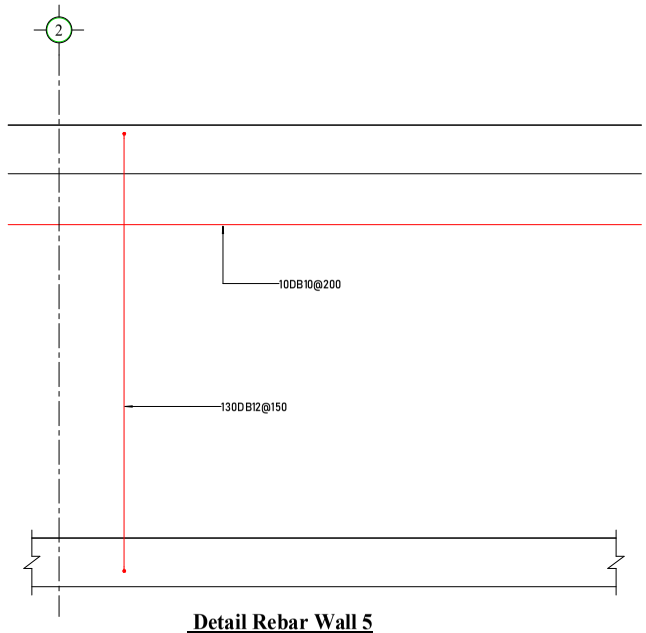
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE Basement wall detail 4	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A160.3
DATE	19/02/2025



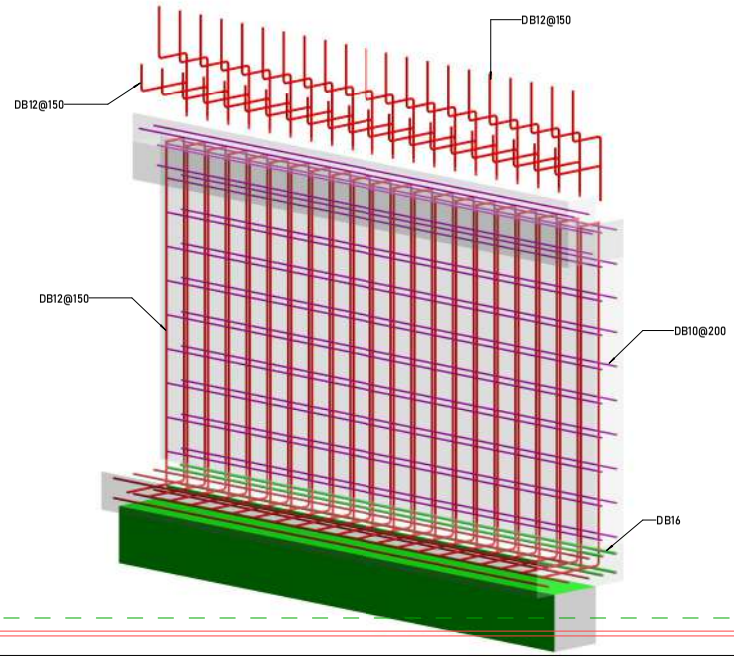
BS Wall Detail 5

SCALE (1 : 20)



Detail Rebar Wall 5

SCALE (1 : 20)



BS Wall 5 Rebar Schedule						
Number	Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
1	12 mm	130	2.20 m	286.41 m	254.15 kg	291 / 1812 / 140
2	12 mm	130	2.20 m	286.27 m	254.03 kg	140 / 1812 / 280
3	10 mm	20	19.49 m	389.82 m	240.22 kg	19491
TOTAL: 4		280		962.51 m	748.40 kg	

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   - 390MPa FOR DEFORMED BAR (DB)
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

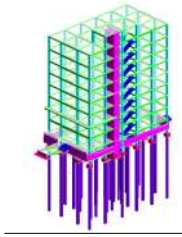
STRUCTURAL ENGINEERS
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

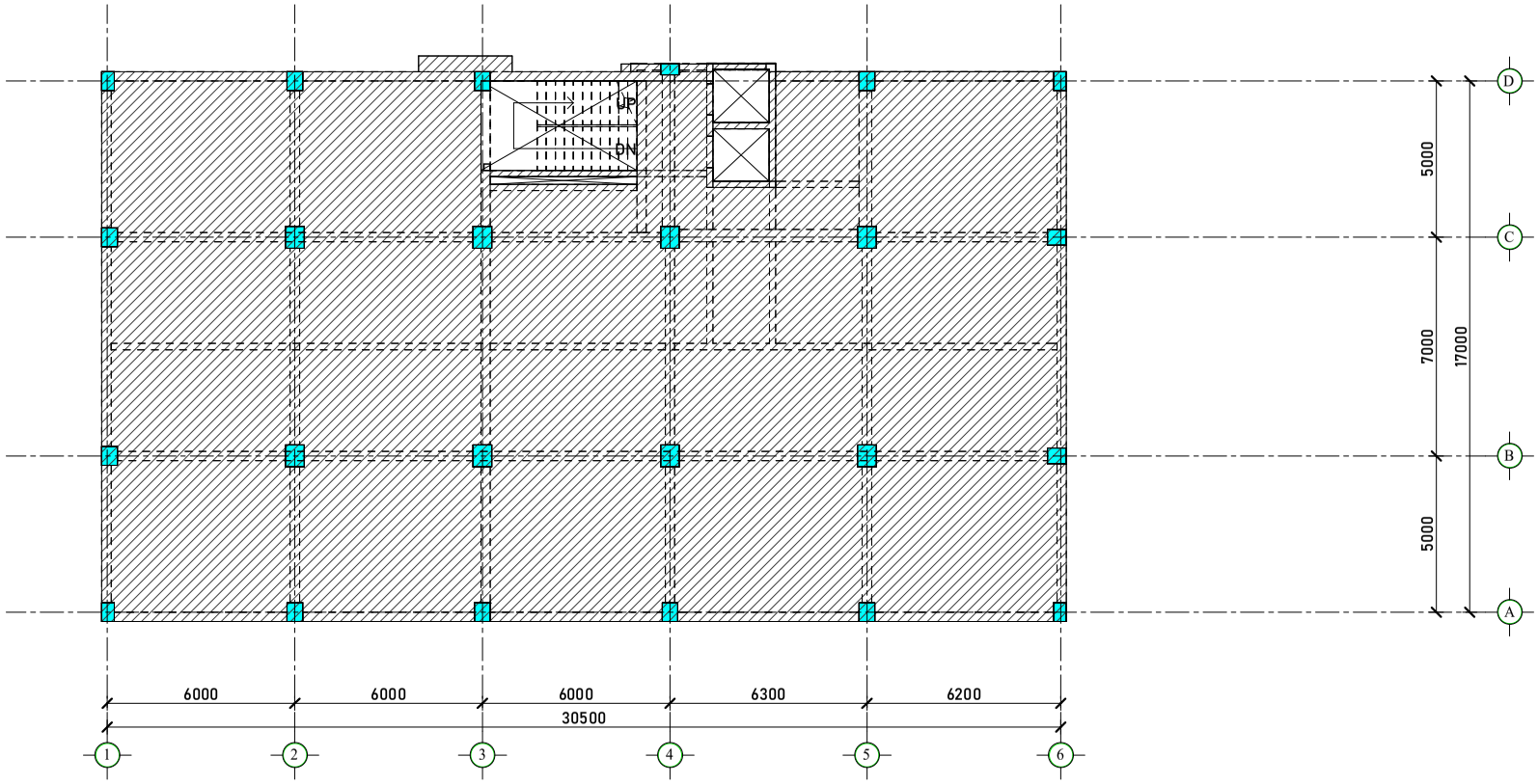
SANITARY ENGINEERS

REVISIONS	DATE



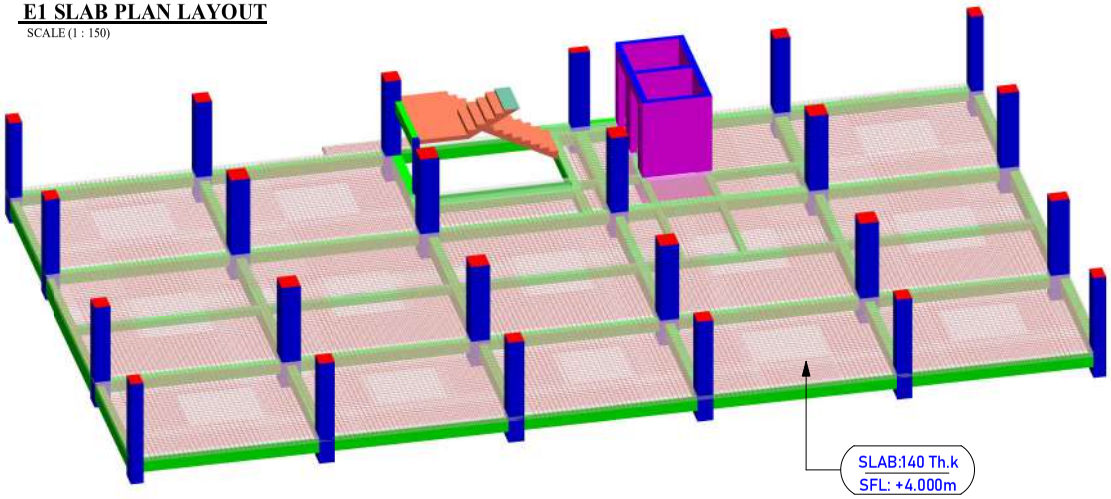
WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
Basement wall detail 5	1/150
PAPER SIZE	A3
DRAWING NO.	A160.4
DATE	19/02/2025



E1 SLAB PLAN LAYOUT

SCALE (1 : 150)



NOTE :
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2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
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   - 235MPa FOR ROUNDED BAR (RB)
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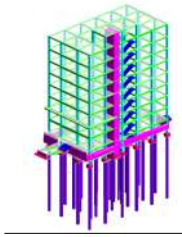
PROJECT : MEGABELLE

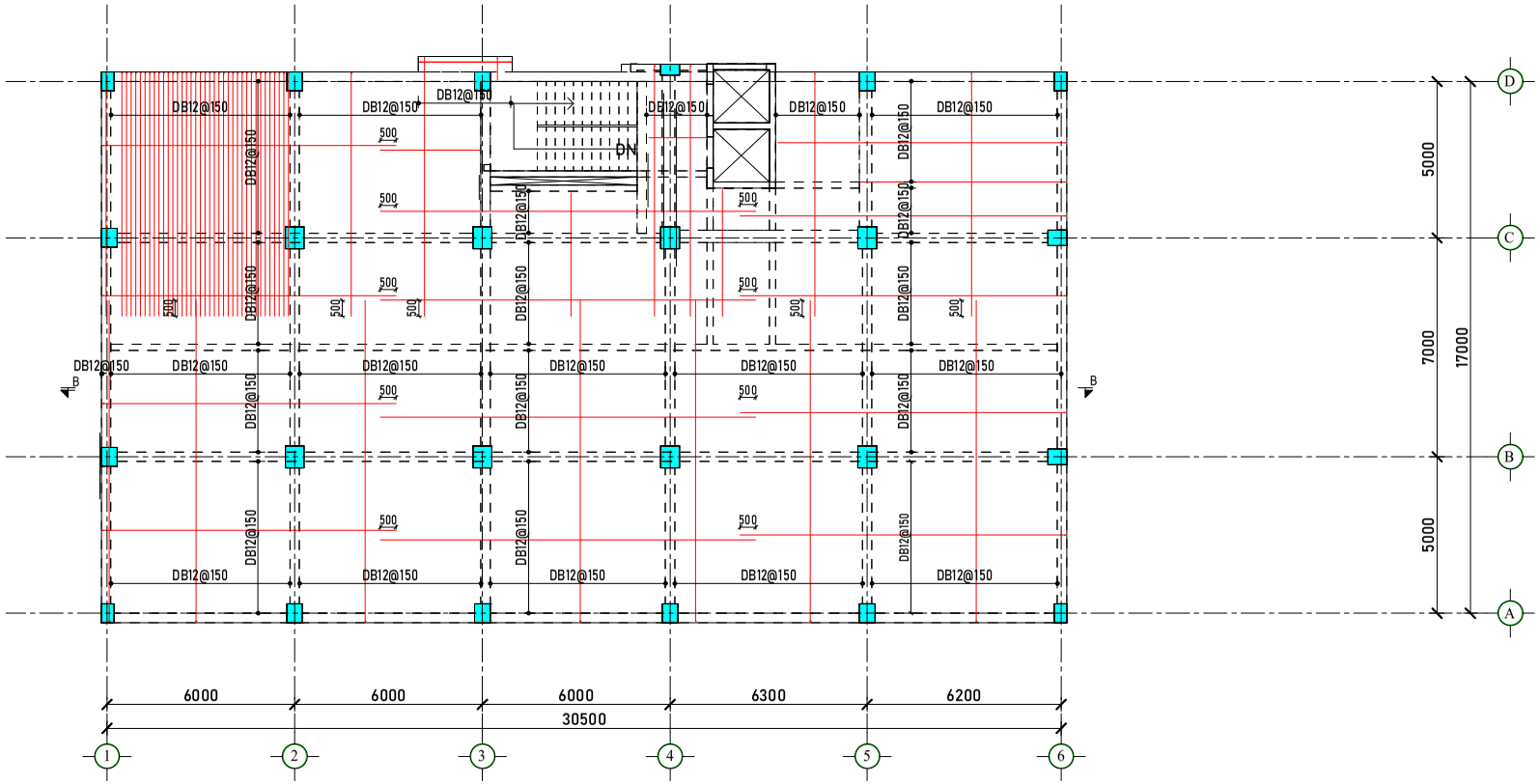
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



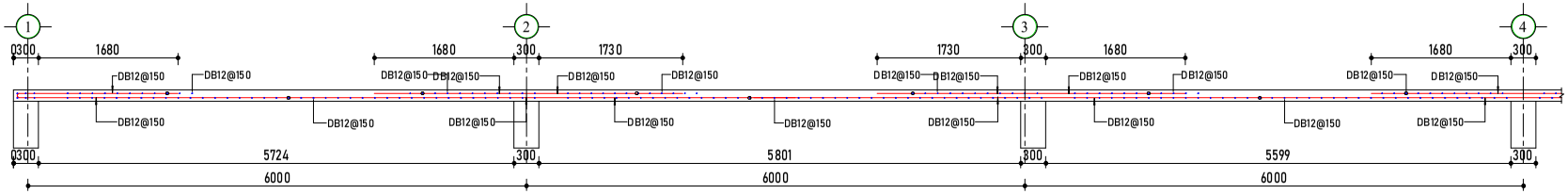
WORKING DRAWING
FOR CONSTRUCTION

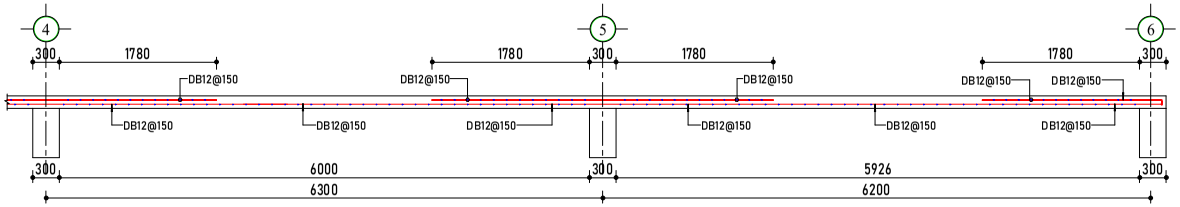
DRAWING TITLE E1 SLAB PLAN LAYOUT	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A170
DATE	19/02/2025



E1 BOTTOM SLAB PLAN LAYOUT

SCALE (1 : 150)





SECTION (B-B)

SCALE (1 : 55)

NOTE :
1. ALL DIMENSION ARE IN MILIMETERS EXCEPT INDICATED
2. ALL LEVEL ARE IN METERS EXCEPT INDICATED
3. CHARACTERISTIC CYLINDER COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM OF 35MPa (PILE CAP , COLUMN CONCRETE) AT 28DAYS.
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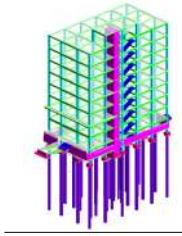
   - 235MPa FOR ROUNDED BAR (RB)
5. CLEAR COVER SHALL BE lateral=50mm, inside=50mm top=50mm, bottom=100mm, UNLESS INDICATED OTHERWISE.

PROJECT : MEGABELLE

OWNER

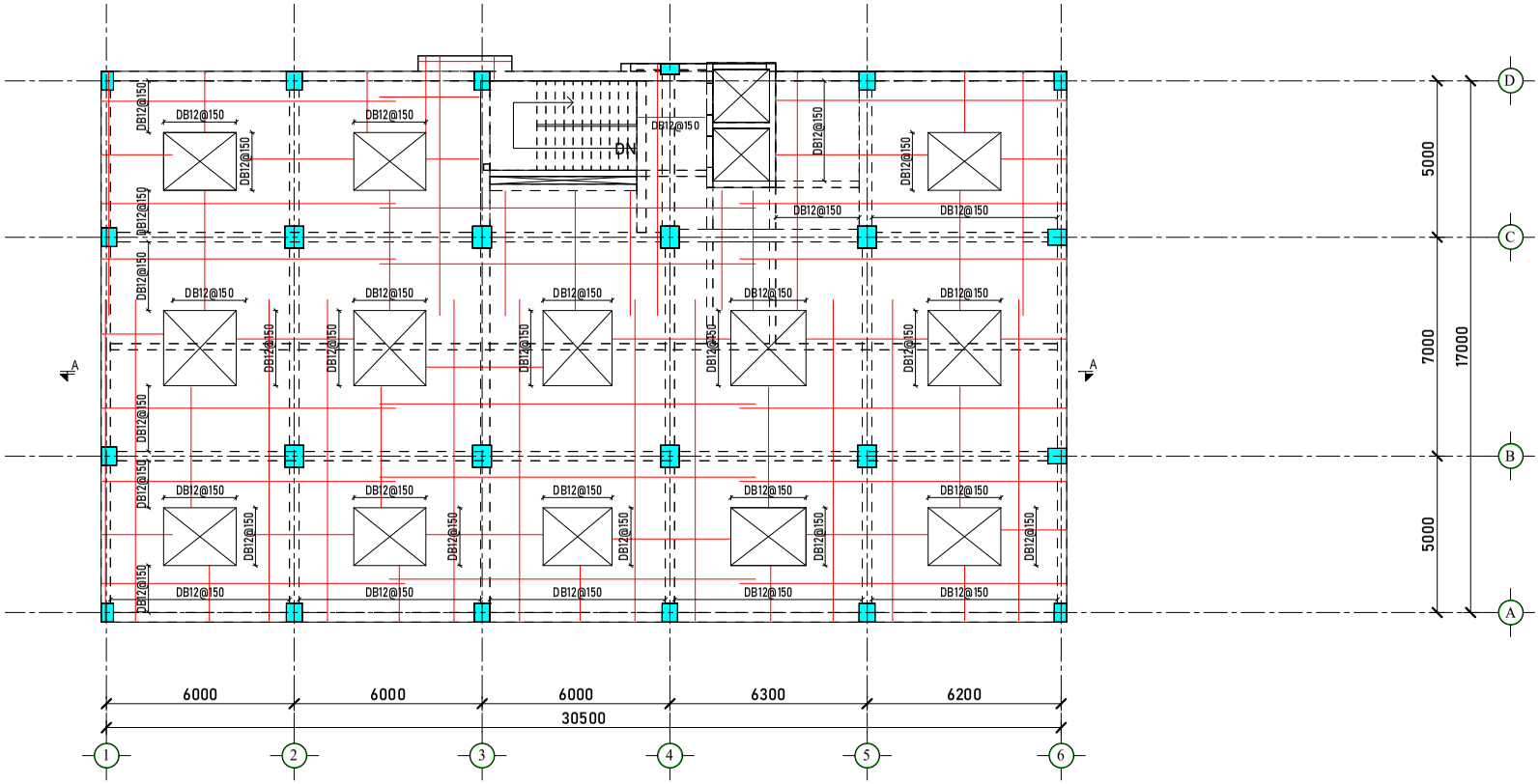
WAGON Engineering Center

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



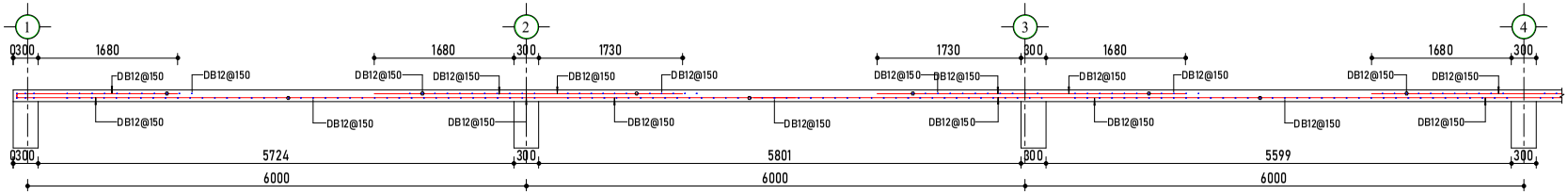
WORKING DRAWING
FOR CONSTRUCTION

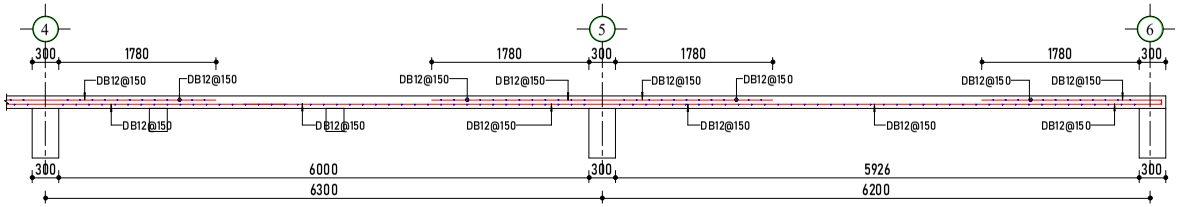
DRAWING TITLE BOTTOM REINFORCEMENT OF BS SLAB DETAILING	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A171
DATE	19/02/2025



E1 TOP SLAB PLAN LAYOUT

SCALE (1 : 150)





SECTION (A-A)

SCALE (1 : 55)

NOTE :
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   - 235MPa FOR ROUNDED BAR (RB)
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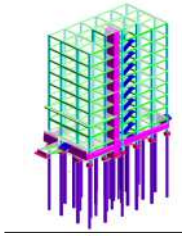
PROJECT : MEGABELLE

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS Mr. Rath RunKakada	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE TOP REINFORCEMENT OF BS SLAB DETAILING	SCALE 1/150
PAPER SIZE	A3
DRAWING NO.	A172
DATE	19/02/2025

Rebar Schedule of Bottom Bar Slab E1

Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
12 mm	7	0.79 m	5.53 m	4.91 kg	90 720
12 mm	24	1.80 m	43.29 m	38.42 kg	1804
12 mm	4	3.06 m	12.24 m	10.86 kg	90 2920 90
12 mm	24	3.17 m	76.20 m	67.62 kg	3175
12 mm	34	3.94 m	134.01 m	118.91 kg	3941
12 mm	15	4.04 m	60.65 m	53.82 kg	4043
12 mm	2	6.61 m	13.21 m	11.72 kg	60 6566
12 mm	59	7.83 m	461.98 m	409.94 kg	90 7760
12 mm	66	7.85 m	517.78 m	459.46 kg	90 7775
12 mm	12	8.08 m	96.96 m	86.04 kg	90 8010
12 mm	14	8.33 m	116.62 m	103.49 kg	90 8260
12 mm	22	9.23 m	203.09 m	180.21 kg	60 9191
12 mm	108	9.41 m	1016.31 m	901.84 kg	60 9370
12 mm	199	10.33 m	2055.72 m	1824.18 kg	90 10260
12 mm	86	10.44 m	897.87 m	796.74 kg	60 10400
12 mm	85	12.00 m	1020.00 m	905.11 kg	12000
TOTAL : 34	761		6731.48 m	5973.27 kg	

Rebar Schedule of Top Bar Slab E1

Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
12 mm	8	0.79 m	6.32 m	5.61 kg	90 720
12 mm	14	1.69 m	23.66 m	21.00 kg	1690
12 mm	80	1.81 m	144.82 m	128.51 kg	90 1740
12 mm	49	1.96 m	96.05 m	85.23 kg	90 1890
12 mm	17	1.98 m	33.66 m	29.87 kg	60 1940
12 mm	45	2.08 m	93.61 m	83.07 kg	60 2040
12 mm	25	2.13 m	53.31 m	47.31 kg	2133
12 mm	28	2.28 m	63.85 m	56.66 kg	60 2240
12 mm	2	2.46 m	4.92 m	4.37 kg	90 2390
12 mm	4	3.06 m	12.24 m	10.86 kg	90 2920 90
12 mm	11	3.17 m	34.92 m	30.99 kg	3175
12 mm	28	3.41 m	95.48 m	84.73 kg	3410
12 mm	48	3.71 m	178.08 m	158.02 kg	3710
12 mm	31	3.76 m	116.56 m	103.43 kg	3760
12 mm	67	3.81 m	255.27 m	226.52 kg	3810

Rebar Schedule of Top Bar Slab E1

Diameter	Quantity	Bar Length	Total Length	Total Weight	Shape
12 mm	16	3.82 m	61.14 m	54.25 kg	3821
12 mm	82	3.83 m	314.06 m	278.69 kg	3830
12 mm	31	3.86 m	119.66 m	106.18 kg	3860
12 mm	18	3.98 m	71.64 m	63.57 kg	3980
12 mm	14	4.83 m	67.66 m	60.04 kg	4833
12 mm	7	7.66 m	53.62 m	47.58 kg	90 7590
12 mm	4	8.01 m	32.04 m	28.43 kg	8010
12 mm	11	8.33 m	91.63 m	81.31 kg	90 8260
12 mm	10	9.28 m	92.79 m	82.34 kg	60 9239
12 mm	58	9.41 m	545.80 m	484.32 kg	60 9370
12 mm	10	9.71 m	97.10 m	86.17 kg	60 9670
12 mm	118	10.33 m	1218.97 m	1081.67 kg	90 10260
12 mm	57	10.44 m	595.10 m	528.07 kg	60 10400
12 mm	10	11.70 m	117.00 m	103.82 kg	11700
12 mm	47	12.00 m	564.00 m	500.47 kg	12000
TOTAL : 74	950		5254.99 m	4663.09 kg	

PROJECT : MEGABELLE

OWNER

WAGON Engineering Center

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

STRUCTURAL ENGINEERS

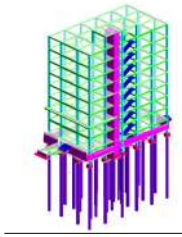
Mr. Rath RunKakada

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	SCALE
Rebar Schedule slab E1	1/150
PAPER SIZE	A3
DRAWING NO.	A173
DATE	19/02/2025

Project: Viel Sbov Modern Villa (Dec 2021-Dec 2022)

Structural Engineer

- Structural design and detailing
- Cost estimation and quantity take-off
- Quality control and site supervision
- Resolution of structural and construction issues

Project Name: Viel Sbov Modern Villa

Location: Sangkat Viel Sbov, Khan Meanchey, Phnom Penh, Cambodia

Google Map: https://maps.app.goo.gl/B9PQwuauCR3TxHoW8

Managing works at site construction

(Rebar Installation)

(Curing Concrete After Casted)

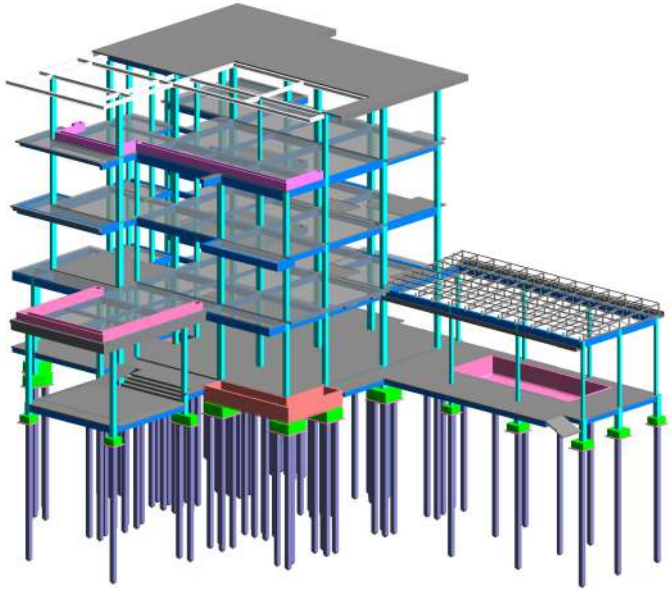
(Site Meeting while COVID19)

Technical Drawing
Using BIM
(Project: Viel Sbov Modern Villa)

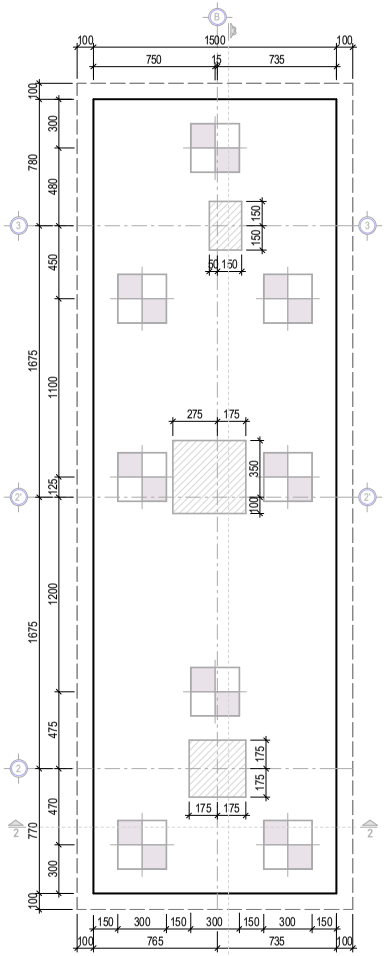
ព្រះរាជាណាចក្រកម្ពុជា

ជាតិ សាសនា ព្រះមហាក្សត្រ

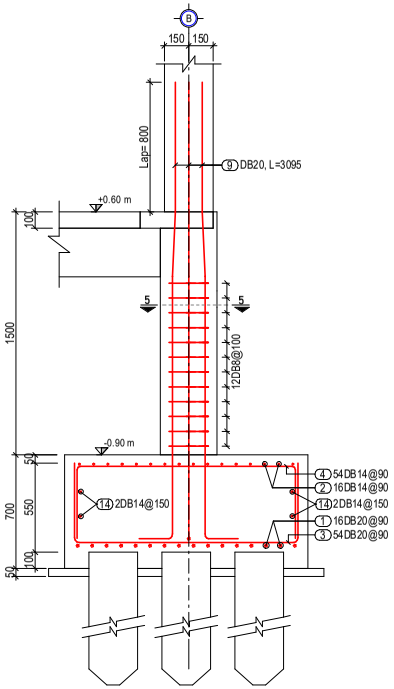
គំនូរប្លង់គ្រឿងផ្ទុំសំណង់



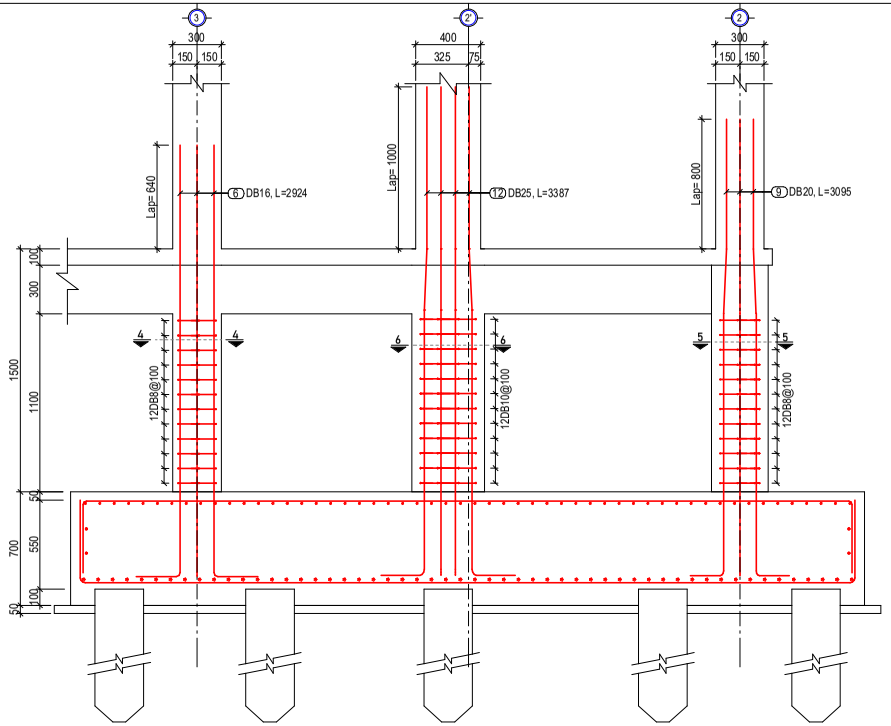
PHNOM PENH ,2021



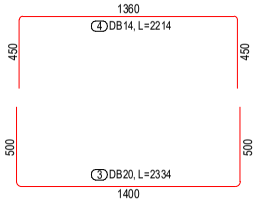
D.1 A-100 **PC-8 LAYOUT PLAN**
SCALE (1: 30)

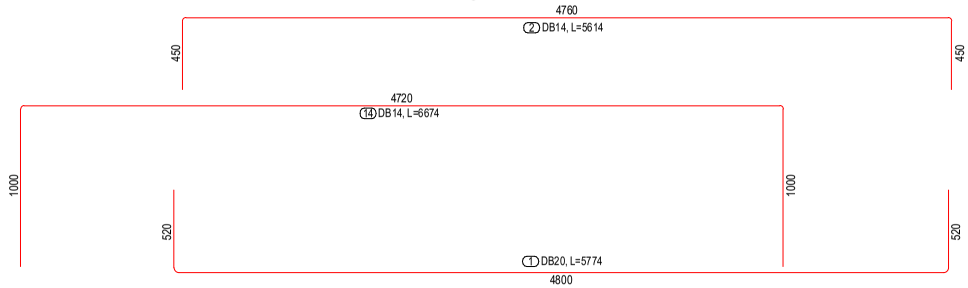


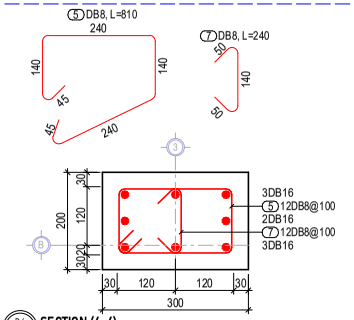
D.2 A-100 **SECTION (2-2)**
SCALE (1: 30)



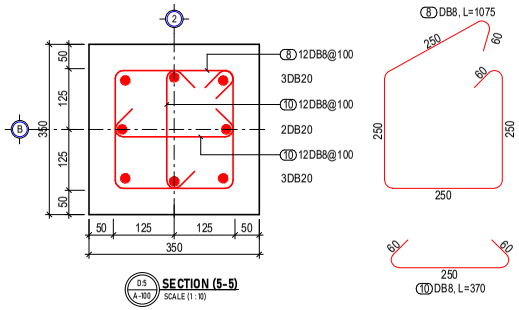
D.3 A-100 **SECTION (3-3)**
SCALE (1: 30)



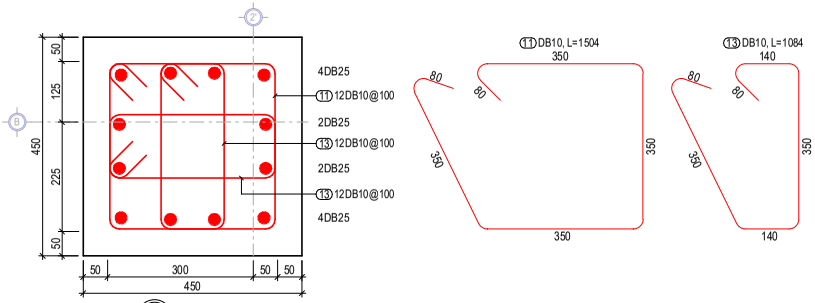




D.4 A-100 **SECTION (4-4)**
SCALE (1: 10)



D.5 A-100 **SECTION (5-5)**
SCALE (1: 10)

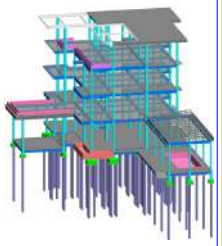


D.6 A-100 **SECTION (6-6)**
SCALE (1: 10)

PROJECT : **VEAL SBOV VILLA**

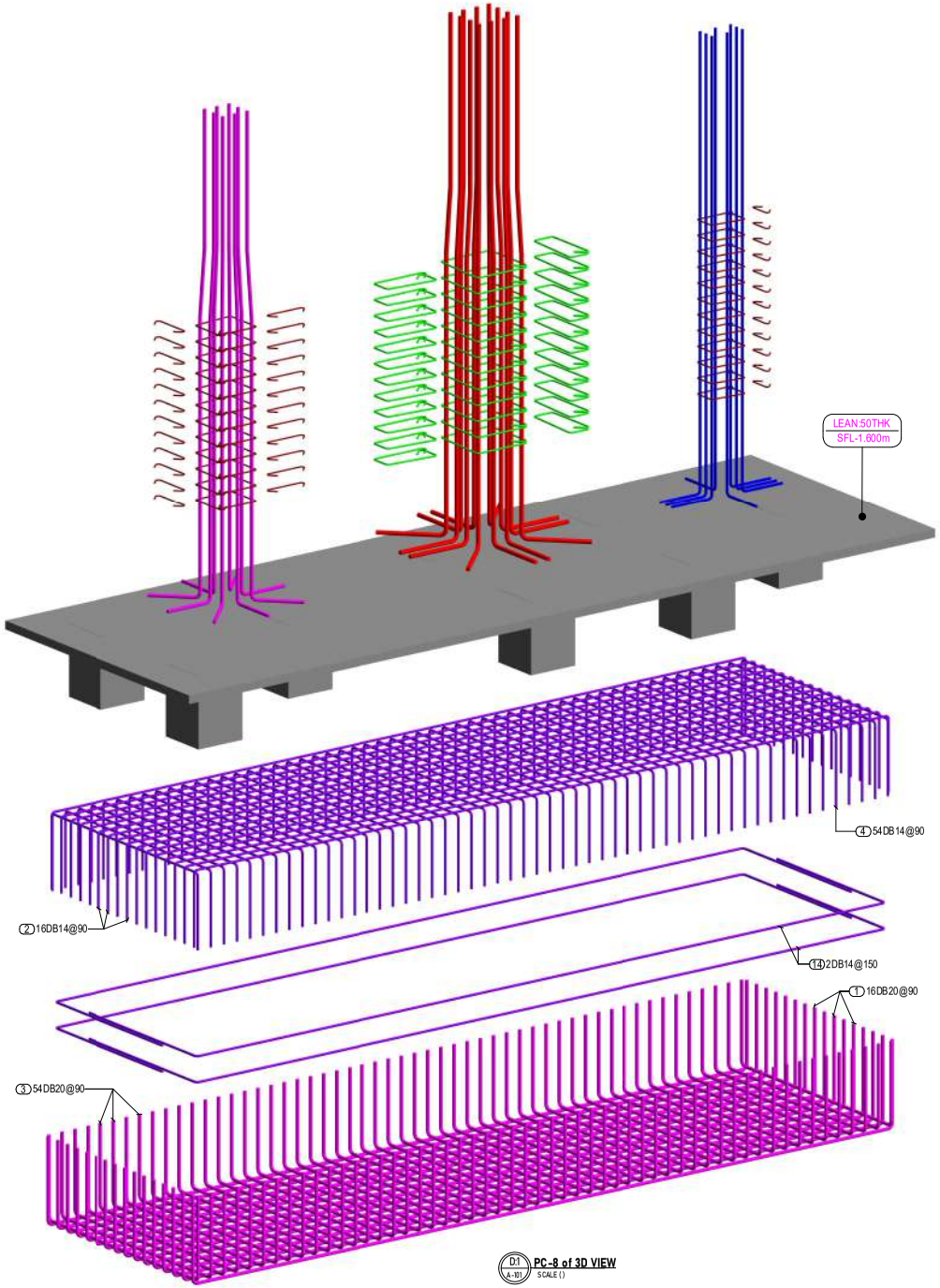
OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE	PC-8 DETAILING
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-100
DATE:	19/10/2021
DRAWING SIZE	A3



D1 A-101 **PC-8 of 3D VIEW**
SCALE ( )

PC-8 Rebar Schedule

Rebar.Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB20	16	5.77 m	227.84 kg	520, 4800, 520
2	DB14	16	5.61 m	108.54 kg	450, 4760, 450
3	DB20	54	2.33 m	310.86 kg	500, 1400, 500
4	DB14	54	2.21 m	144.47 kg	450, 1360, 450
5	RB8 R(2DB)	12	0.81 m	3.83 kg	240, 140, 45, 45, 140, 240
6	DB16	8	11.69 m	36.92 kg	2670, 280
7	RB8 R(2DB)	12	0.24 m	1.14 kg	50, 140, 50
8	RB8	12	1.08 m	5.09 kg	250, 250, 80, 80, 250, 250
9	DB20	8	24.76 m	61.07 kg	800, 400, 1630, 300
10	RB8	24	0.74 m	3.50 kg	60, 250, 60
11	DB10	12	1.50 m	11.13 kg	350, 350, 80, 80, 350, 350
12	DB25	12	27.09 m	156.59 kg	1000, 380, 1650, 400
13	DB10	24	2.17 m	16.04 kg	350, 140, 80, 80, 140, 350
14	DB14	4	13.35 m	32.26 kg	1000, 4720, 1000
Total		268	99.37 m	1119.29 kg	

PROJECT : **VEAL SBOV VILLA**

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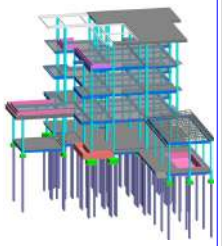

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PC-8 SCHEDULE AND 3D VIEW

Drawn by	Mr. Rath RunKakada
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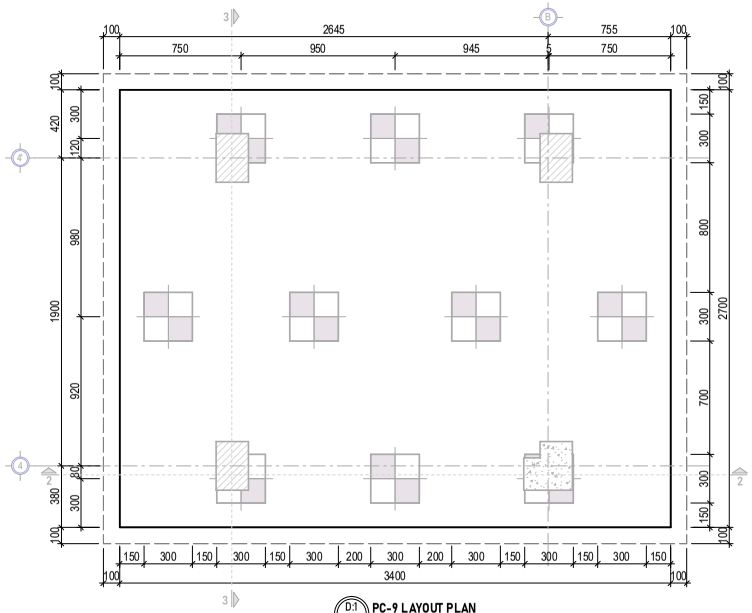
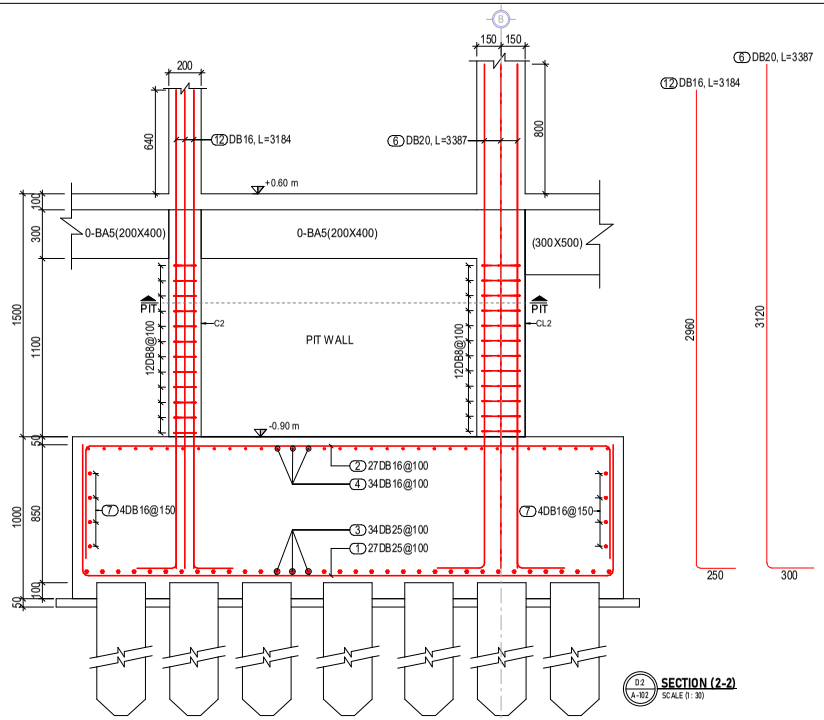
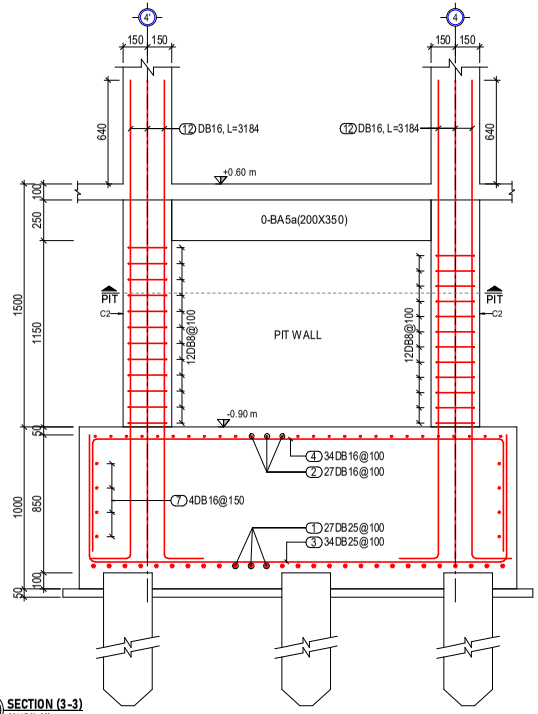
DRAWING NO.	A-101
DATE:	19/10/2021
DRAWING SIZE	A3



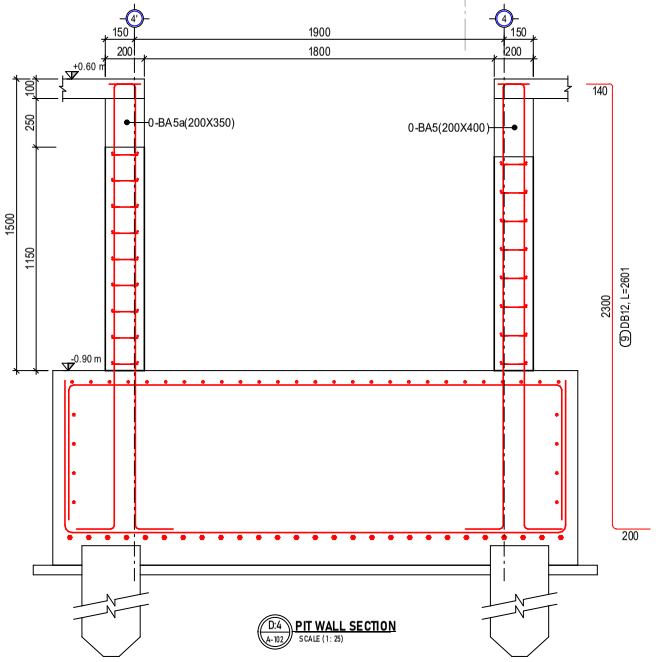
D.1 A-102 **PC-9 LAYOUT PLAN**
SCALE (1:30)



D.2 A-102 **SECTION (2-2)**
SCALE (1:30)



D.3 A-102 **SECTION (3-3)**
SCALE (1:30)



D.4 A-102 **PIT WALL SECTION**
SCALE (1:25)

PROJECT : **VEAL SBOV VILLA**

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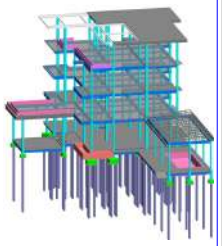

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PC-9 DETAILING

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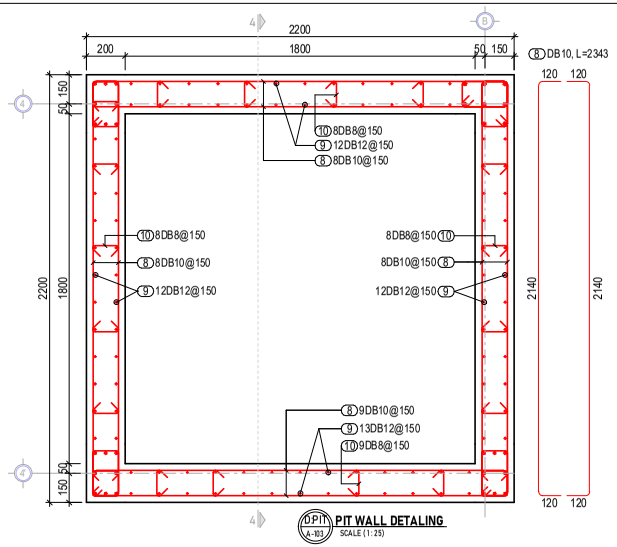
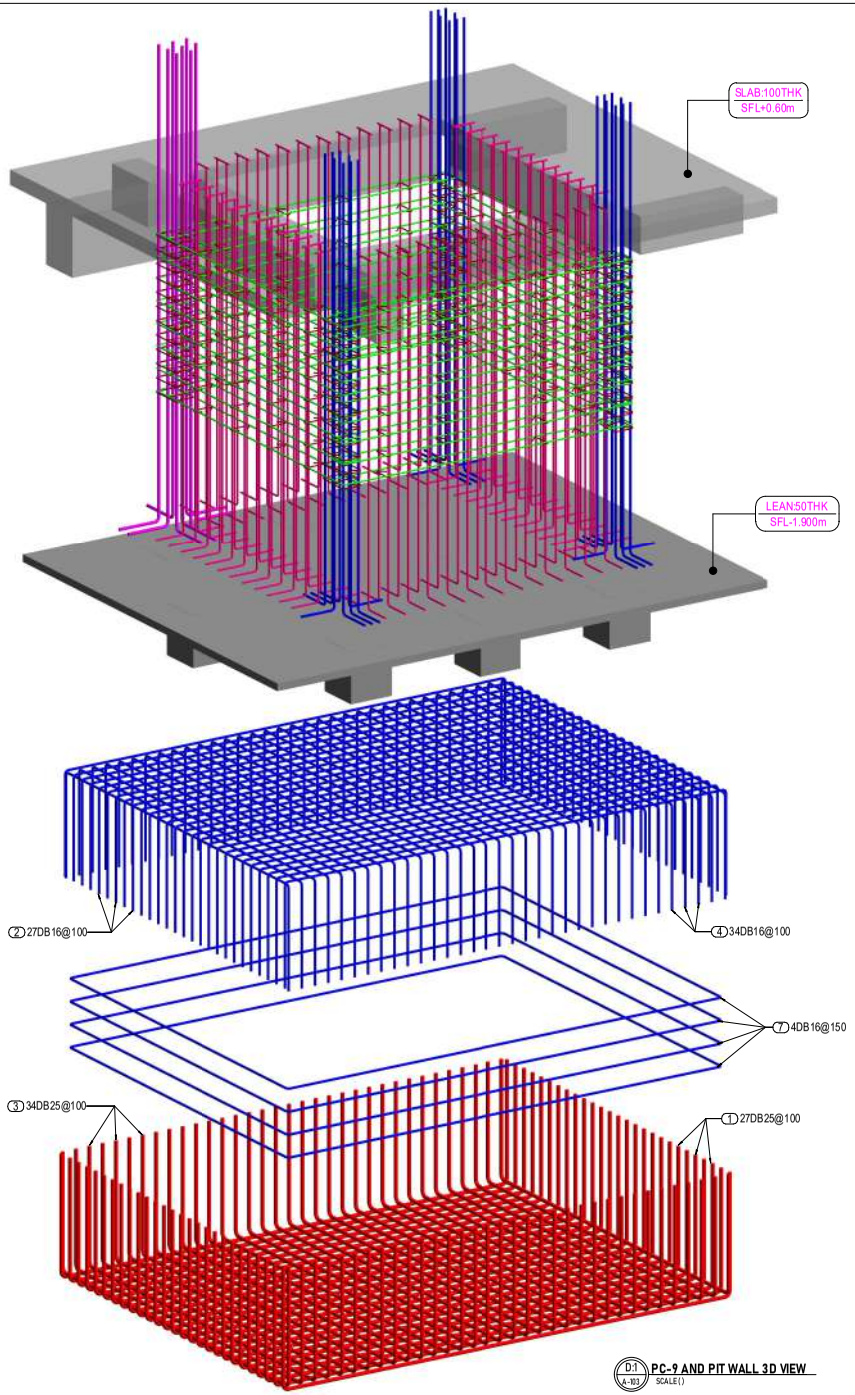
DRAWING NO.	A-102
DATE:	19/10/2021
DRAWING SIZE	A3



PC-9 AND PIT WALL REBAR SCHEDULE					
Rebar.Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB25	27	4.86 m	505.41 kg	820 / 3300 / 820
2	DB16	27	4.60 m	195.92 kg	700 / 3250 / 700
3	DB25	34	4.11 m	538.18 kg	795 / 2600 / 795
4	DB16	34	3.90 m	209.15 kg	700 / 2550 / 700
5	RB8	24	1.67 m	7.91 kg	240 / 140 / 60 / 60 / 140 / 240
6	DB20	8	27.10 m	66.83 kg	300 / 3120
7	DB16	8	12.29 m	77.62 kg	1500 / 3200 / 1500
8	DB10	66	18.74 m	95.33 kg	120 / 2140 / 120
9	DB12	98	20.80 m	226.26 kg	200 / 2300 / 140
10	RB8 R(2DB)	132	4.16 m	13.54 kg	60 / 140 / 60
11	RB8 R(2DB)	36	2.43 m	11.50 kg	240 / 140 / 45 / 45 / 140 / 240
12	DB16	24	38.20 m	120.60 kg	250 / 2960
13	RB8 R(2DB)	36	0.72 m	3.41 kg	50 / 140 / 50
Total		554	143.58 m	2071.66 kg	



D.1 A-103 PC-9 AND PIT WALL 3D VIEW
SCALE (1)

PROJECT : VEAL SBOV VILLA

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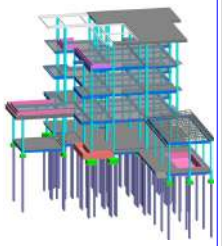

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PIT WALL SCHEDULE AND 3D VIEW

Drawn by	Mr. Rath RunKakada
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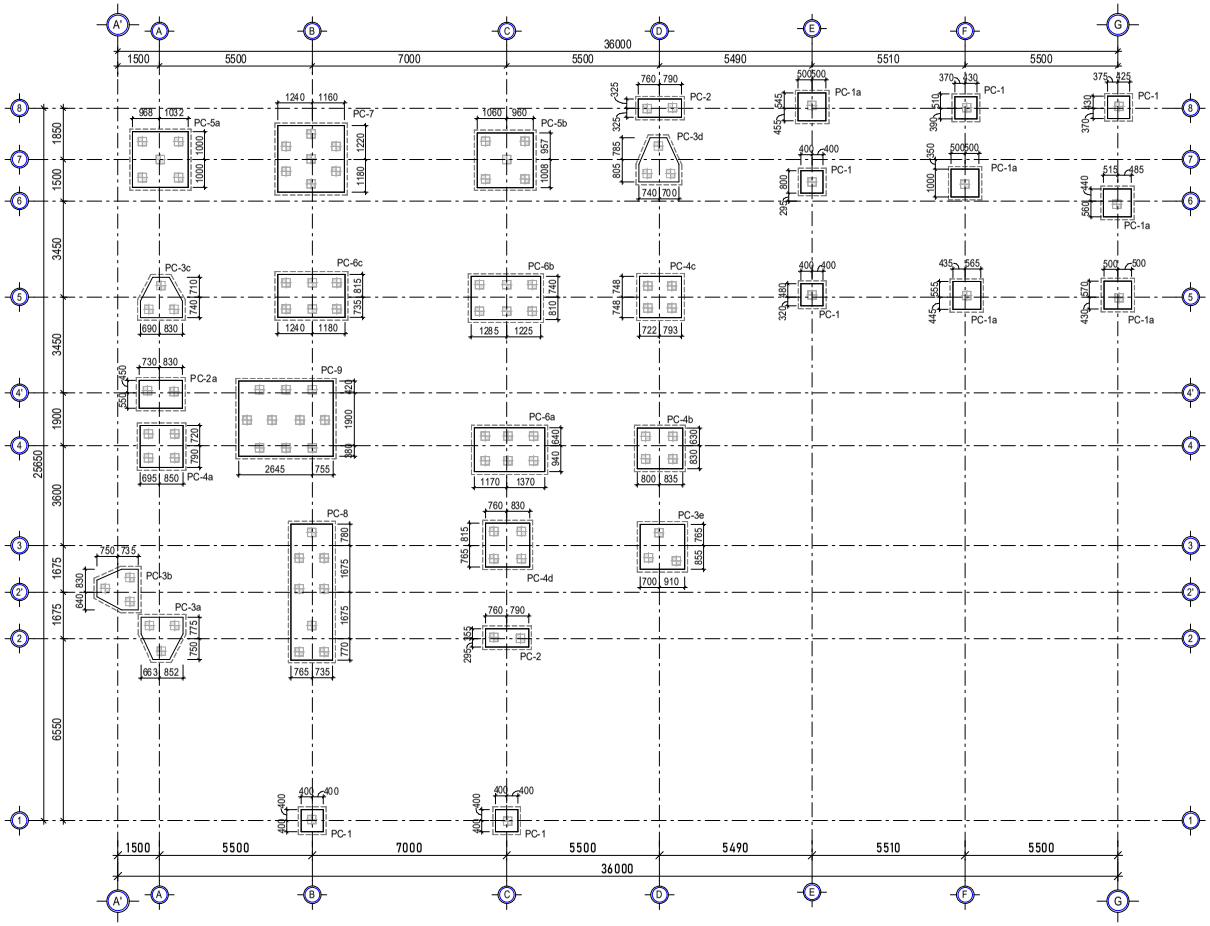
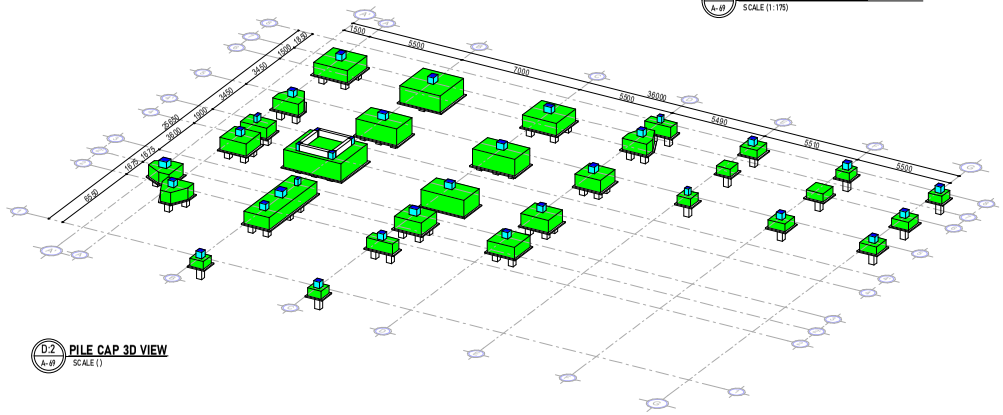
DRAWING NO.	A-103
DATE:	19/10/2021
DRAWING SIZE	A3



D.1 A-69 **PILE CAP LAYOUT PLAN**
SCALE (1:175)



D.2 A-69 **PILE CAP 3D VIEW**
SCALE ( )

Structural Foundation Schedule					
Remark	Quantity	Elevation at Bottom	Elevation at Top	Formwork	Volume
PC-1	6	-1350	-900	9 m²	1.73 m³
PC-1a	5	-1350	-900	9 m²	2.25 m³
PC-2	2	-1500	-900	5 m²	1.21 m³
PC-2a	1	-1500	-900	3 m²	0.94 m³
PC-3a	1	-1550	-900	3 m²	1.23 m³
PC-3b	1	-1550	-900	3 m²	1.17 m³
PC-3c	1	-1550	-900	3 m²	1.18 m³
PC-3d	1	-1550	-900	4 m²	1.23 m³
PC-3e	1	-1550	-900	4 m²	1.70 m³
PC-4a	1	-1600	-900	4 m²	1.63 m³
PC-4b	1	-1600	-900	4 m²	1.67 m³
PC-4c	1	-1600	-900	4 m²	1.59 m³
PC-4d	1	-1600	-900	4 m²	1.76 m³
PC-5a	1	-1600	-900	6 m²	2.80 m³
PC-5b	1	-1600	-900	6 m²	2.78 m³
PC-6a	1	-1850	-900	8 m²	3.81 m³
PC-6b	1	-1850	-900	8 m²	3.70 m³
PC-6c	1	-1850	-900	8 m²	3.56 m³
PC-7	1	-1850	-900	9 m²	5.47 m³
PC-8	1	-1600	-900	9 m²	5.15 m³
PC-9	1	-1900	-900	12 m²	9.18 m³
Grand total	31			126 m²	55.71 m³

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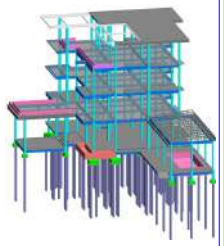

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PILE CAP LAYOUT PLAN

Drawn by	Mr. Rath RunKakada
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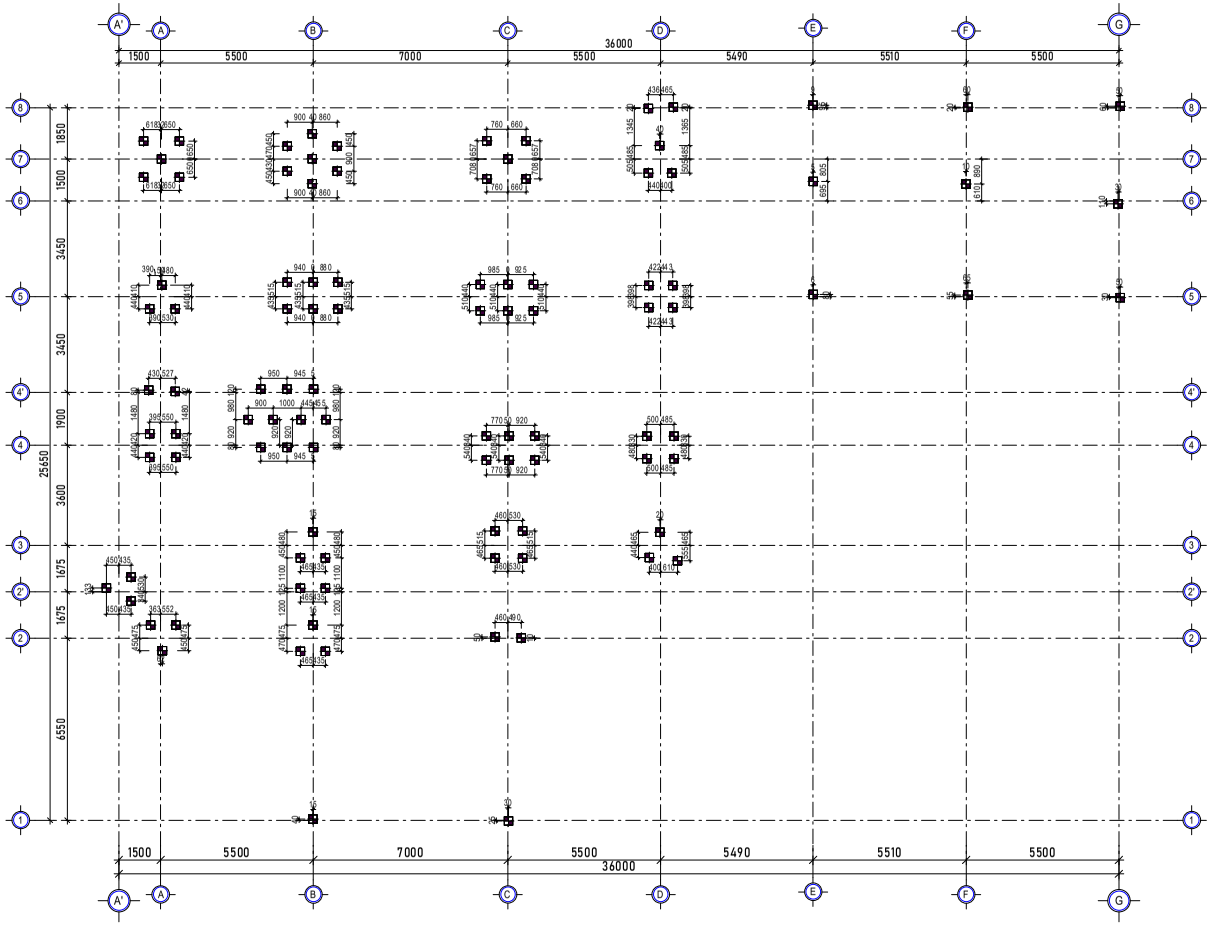
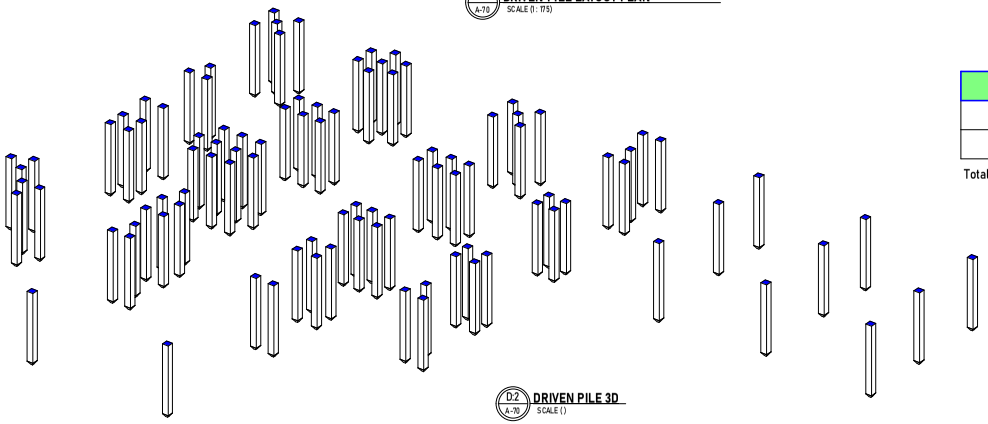
DATE:	19/10/2021
DRAWING SIZE	A3



D:1 A-70 **DRIVEN PILE LAYOUT PLAN**
SCALE (1: 175)



D:2 A-70 **DRIVEN PILE 3D**
SCALE ()

Driven PIle Schedule			
Remark	Dimension	Quantity	Driven Pile Depth
D(300x300)	300 mm	101	9.30 m
Total		101	

PROJECT : **VEAL SBOV VILLA**

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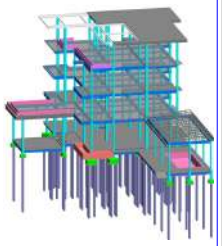

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DRIVEN PILE LAYOUT PLAN

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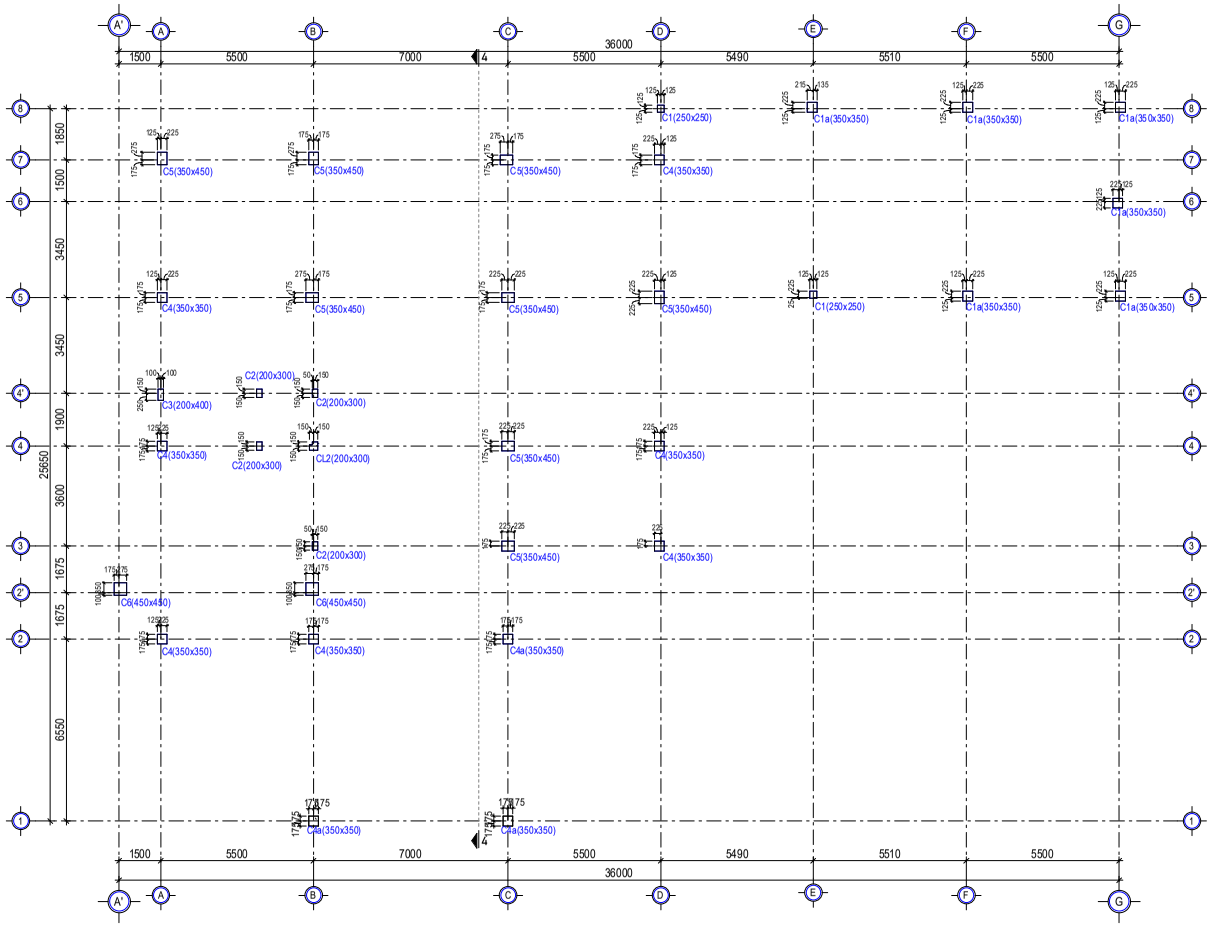
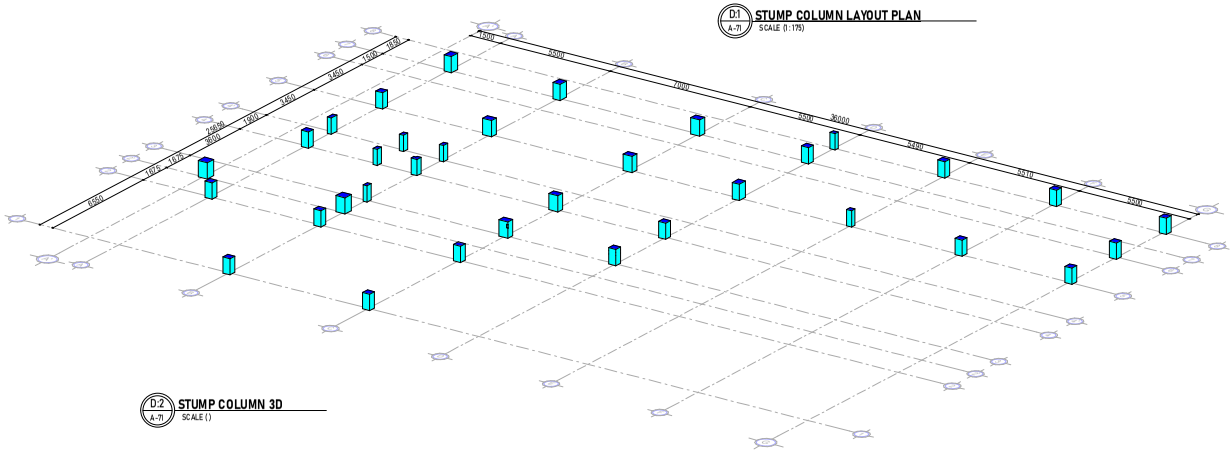


D:1 A-71 **STUMP COLUMN LAYOUT PLAN**
SCALE (1:175)



D:2 A-71 **STUMP COLUMN 3D**
SCALE ()

Structural Column Schedule				
Remark	Quantity	Base Level	FormworkArea	Volume
C1(250x250)	2	TOP PILE CAP	0 m²	0.17 m³
C1a(350x350)	6	TOP PILE CAP	4 m²	0.97 m³
C2(200x300)	4	TOP PILE CAP	0 m²	0.34 m³
C3(200x400)	1	TOP PILE CAP	0 m²	0.11 m³
C4(350x350)	7	TOP PILE CAP	0 m²	1.20 m³
C4a(350x350)	3	TOP PILE CAP	0 m²	0.36 m³
C5(350x450)	8	TOP PILE CAP	0 m²	1.77 m³
C6(450x450)	2	TOP PILE CAP	0 m²	0.57 m³
CL2(200x300)	1	TOP PILE CAP	0 m²	0.11 m³
Total	34		4 m²	5.59 m³

PROJECT : **VEAL SBOV VILLA**

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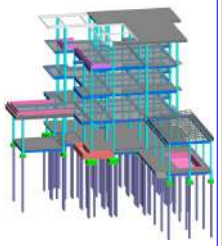
REVISIONS	DATE



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STUMP COLUMN LAYOUT PLAN

Drawn by	Mr. Rath RunKakada
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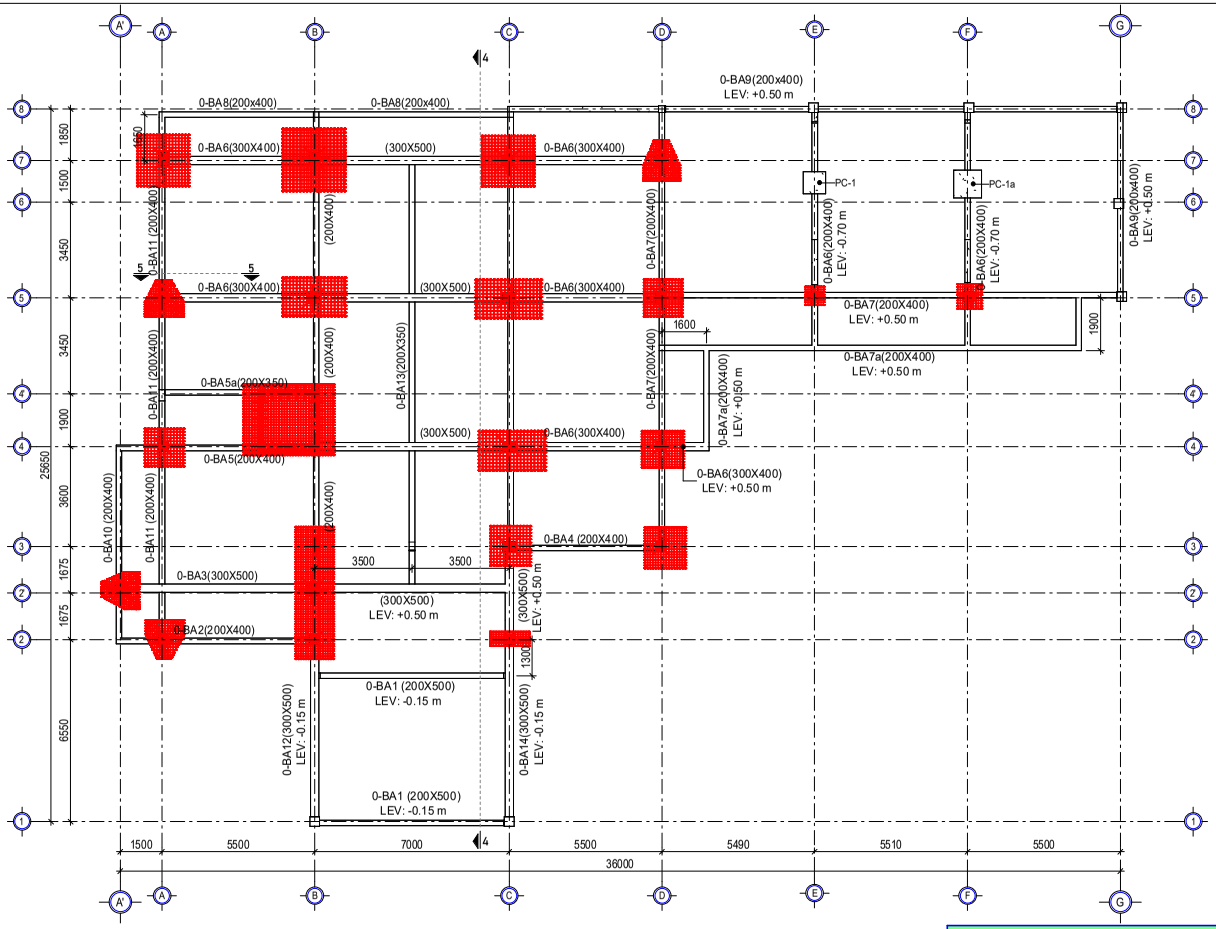
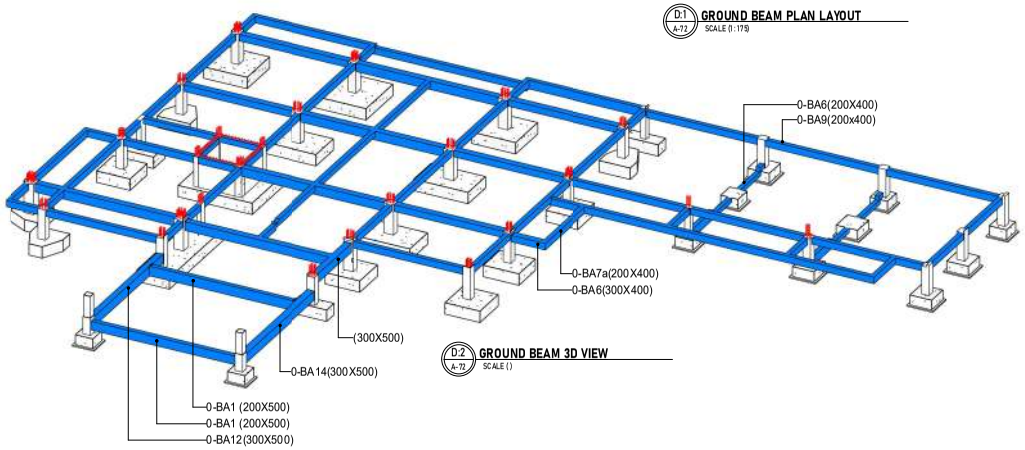
DRAWING NO.	A-71
DATE:	19/10/2021
DRAWING SIZE	A3



D:1 A-72 **GROUND BEAM PLAN LAYOUT**
SCALE (1:175)



D:2 A-72 **GROUND BEAM 3D VIEW**
SCALE ( )

Structural Framing Schedule				
Remark	Quantity	Elevation at Top	Formwork	Volume
(200X400)	3	+0.60 m	24.88 m²	1.85 m³
(300X500)	2	+0.50 m	7.29 m²	1.16 m³
(300X500)	3	+0.60 m	14.83 m²	2.37 m³
0-BA1 (200X500)	2	-0.15 m	14.28 m²	1.14 m³
0-BA2(200X400)	1	+0.60 m	5.36 m²	0.40 m³
0-BA3(300X500)	1	+0.60 m	7.22 m²	0.77 m³
0-BA4 (200X400)	1	+0.60 m	0.00 m²	0.30 m³
0-BA5(200X400)	1	+0.60 m	5.22 m²	0.39 m³
0-BA5a(200X350)	2	+0.60 m	4.87 m²	0.34 m³
0-BA6(200X400)	2	-0.70 m	3.89 m²	0.58 m³
0-BA6(300X400)	1	+0.50 m	1.54 m²	0.14 m³
0-BA6(300X400)	5	+0.60 m	18.63 m²	2.28 m³
0-BA7(200X400)	1	+0.50 m	0.00 m²	0.94 m³
0-BA7(200X400)	1	+0.60 m	0.00 m²	0.86 m³
0-BA7a(200X400)	5	+0.50 m	5.32 m²	1.40 m³
0-BA8(200x400)	1	+0.50 m	5.76 m²	0.43 m³
0-BA8(200x400)	1	+0.60 m	4.50 m²	0.33 m³
0-BA9(200x400)	2	+0.50 m	22.68 m²	1.73 m³
0-BA10 (200X400)	1	+0.60 m	5.04 m²	0.38 m³
0-BA11 (200X400)	1	+0.60 m	0.00 m²	1.01 m³
0-BA12(300X500)	1	-0.15 m	7.36 m²	0.80 m³
0-BA13(200X350)	1	+0.50 m	0.00 m²	0.06 m³
0-BA13(200X350)	1	+0.60 m	0.00 m²	0.66 m³
0-BA14(300X500)	1	-0.15 m	7.36 m²	0.80 m³
Total	41		166.04 m²	21.12 m³

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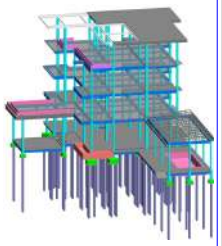

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GROUND BEAM LAYOUT PLAN

Drawn by	Mr. Rath RunKakada
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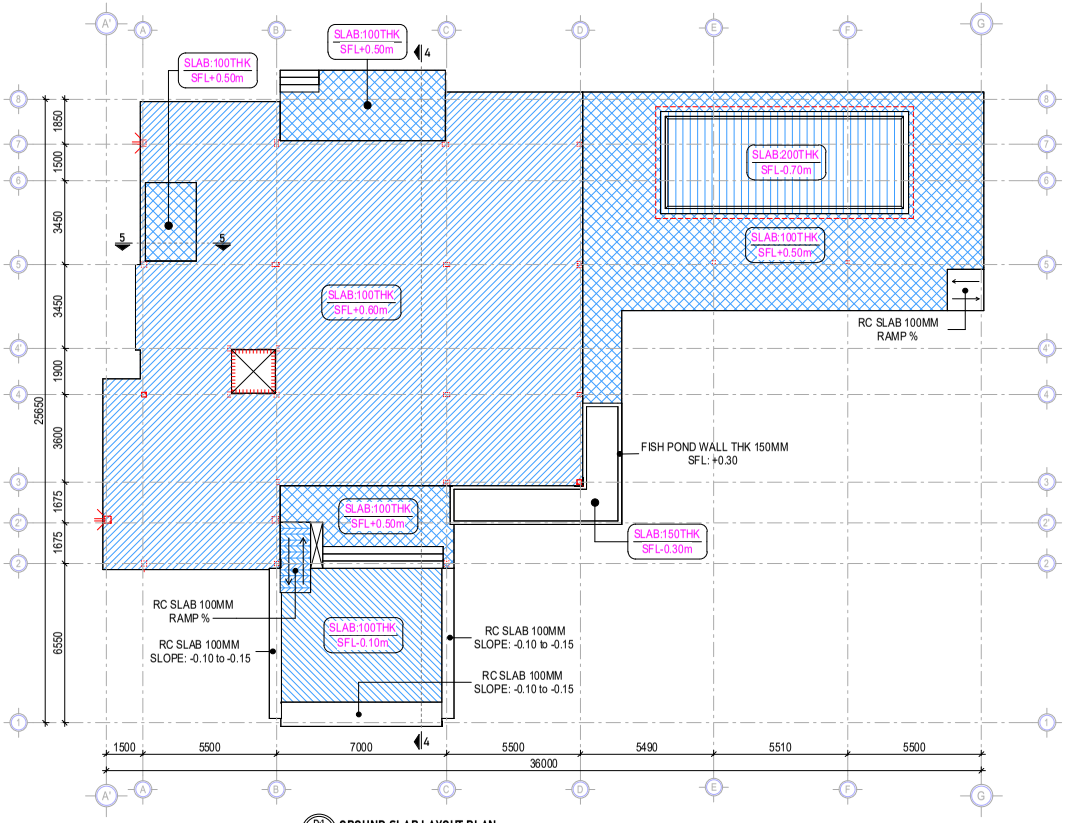
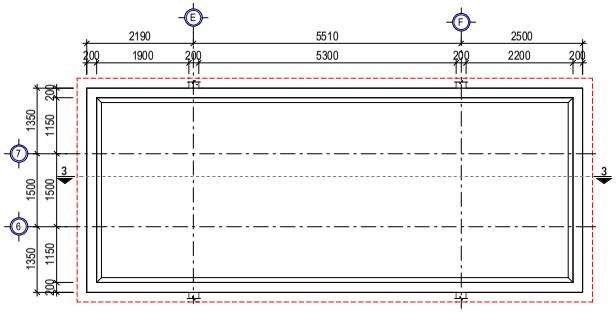
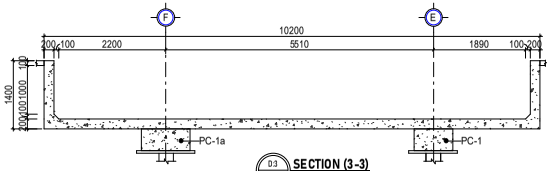
DRAWING NO.	A-72
DATE:	19/10/2021
DRAWING SIZE	A3



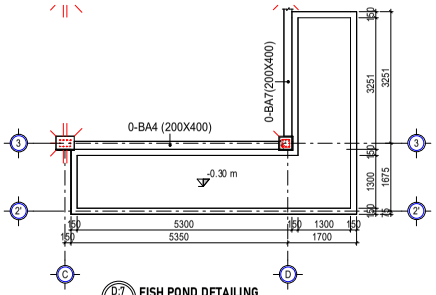
D:1 A-73 **GROUND SLAB LAYOUT PLAN**
SCALE (1: 200)



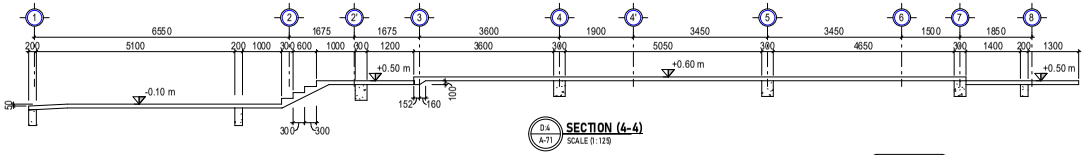
D:2 A-73 **SWIMMING POOL DETAILING**
SCALE (1: 100)



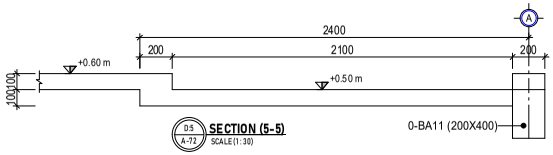
D:3 A-73 **SECTION (3-3)**
SCALE (1: 100)



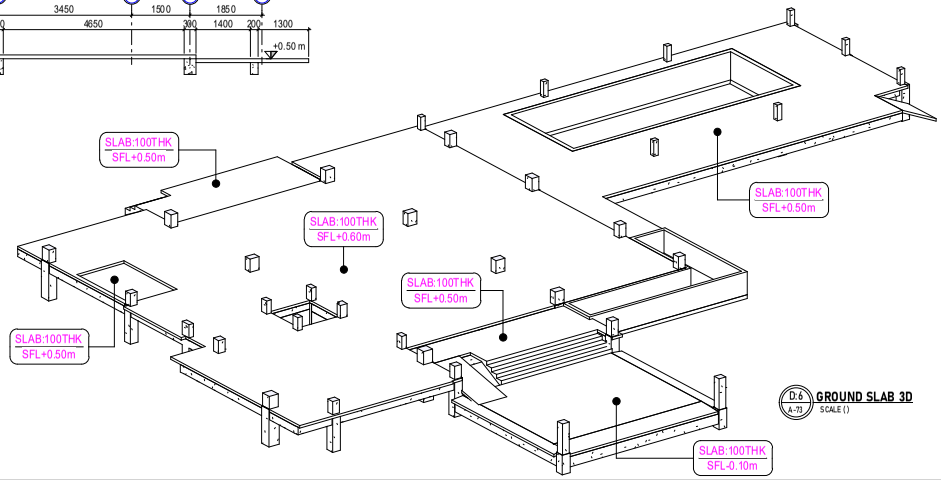
D:7 A-72 **FISH POND DETAILING**
SCALE (1 : 120)



D:4 A-71 **SECTION (4-4)**
SCALE (1: 125)



D:5 A-72 **SECTION (5-5)**
SCALE (1: 30)



D:6 A-73 **GROUND SLAB 3D**
SCALE ()

PROJECT : **VEAL SBOV VILLA**

OWNER

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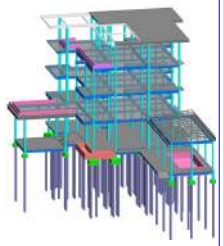
ARCHITECTS	
STRUCTURAL ENGINEERS	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

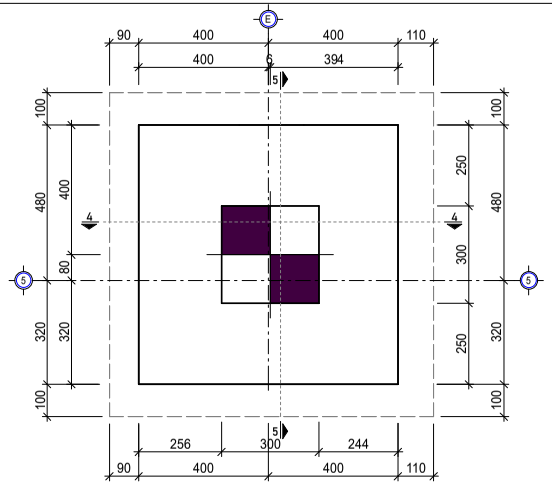


WORKING DRAWING
FOR CONSTRUCTION

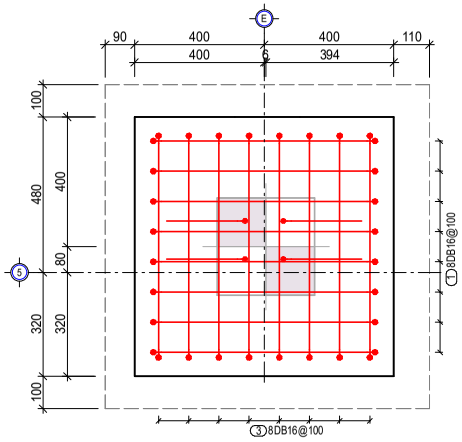
DRAWING TITLE

GROUND SLAB LAYOUT PLAN

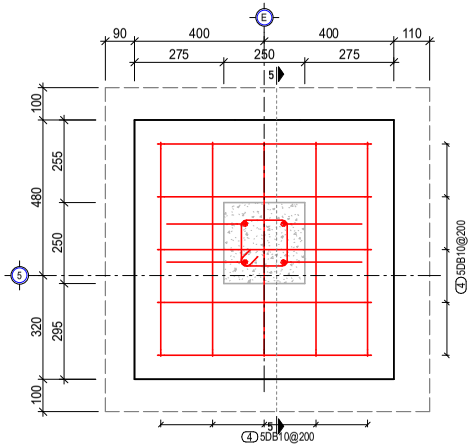
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-73
DATE:	19/10/2021
DRAWING SIZE	A3



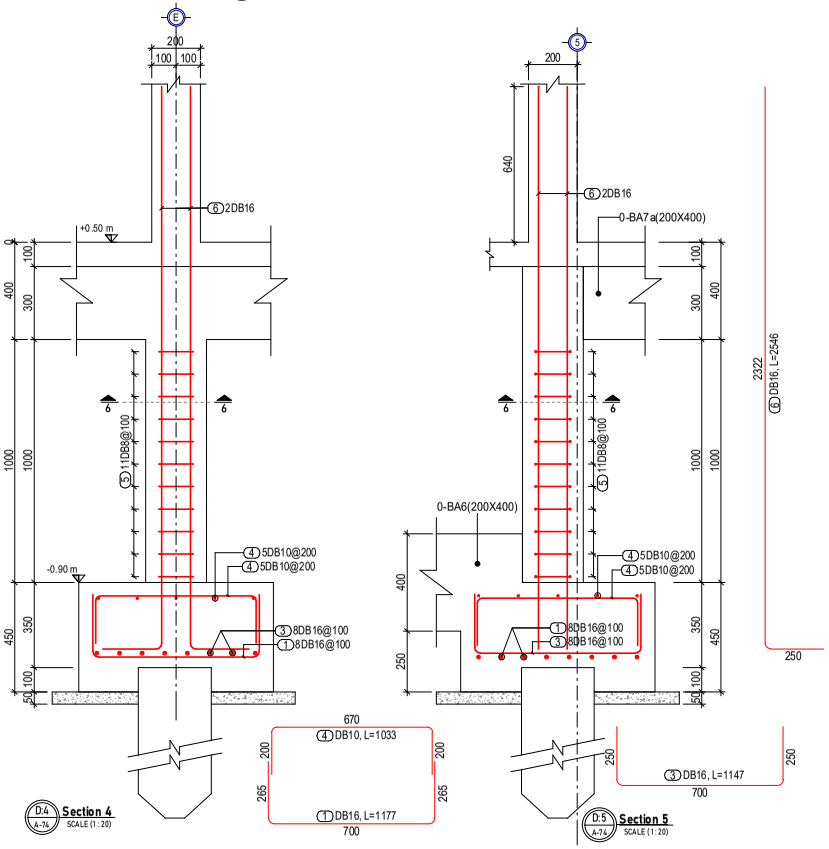
D:1 A-74 **PC-1 LAYOUT PLAN**
SCALE (1 : 15)



D:2 A-74 **BOTTOM BAR OF PC-1 DETAILING**
SCALE (1 : 15)

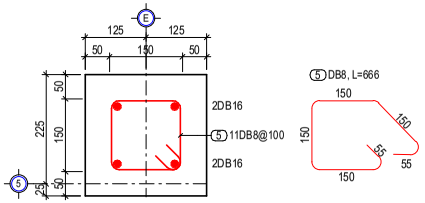


D:3 A-74 **TOP BAR OF PC-1 DETAILING**
SCALE (1 : 15)



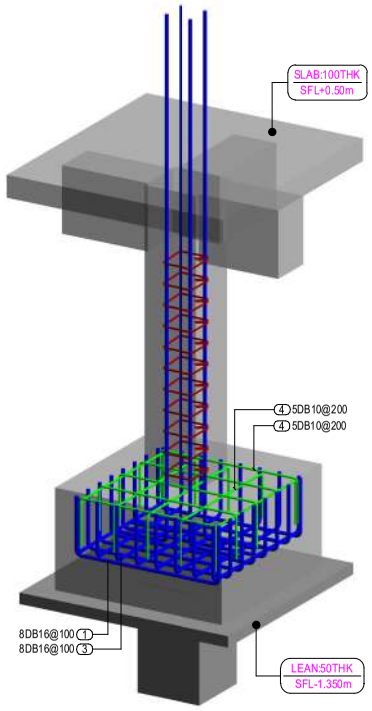
D:4 A-74 **Section 4**
SCALE (1 : 20)

D:5 A-74 **Section 5**
SCALE (1 : 20)



D:6 A-74 **SECTION (6-6)**
SCALE (1 : 10)

PC-1 Rebar Schedule					
Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB16	8	1.18 m	14.87 kg	265, 700, 265
3	DB16	8	1.15 m	14.49 kg	250, 700, 250
4	DB10	10	2.07 m	6.37 kg	200, 670, 200
5	RB8	11	0.67 m	2.89 kg	150, 55, 55, 150, 150
6	DB16	4	5.09 m	16.07 kg	250, 2322
Total		41	10.15 m	54.69 kg	



D:7 A-74 **PC-1 3D VIEW**
SCALE ( )

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

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STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

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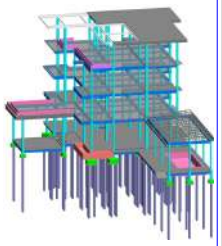
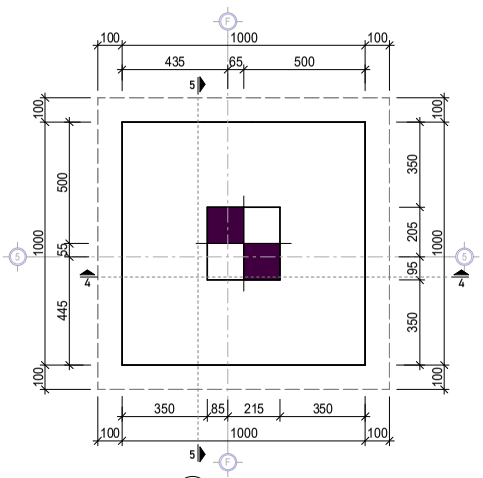


WORKING DRAWING
FOR CONSTRUCTION

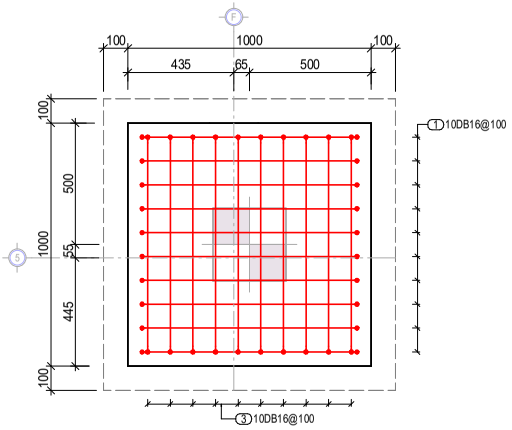
DRAWING TITLE

PC-1 DETAILING

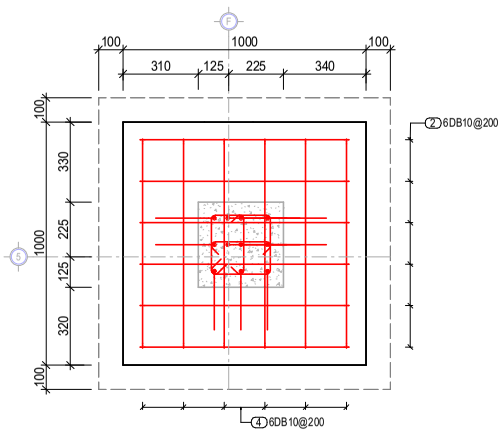
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-74
DATE:	19/10/2021
DRAWING SIZE	A3



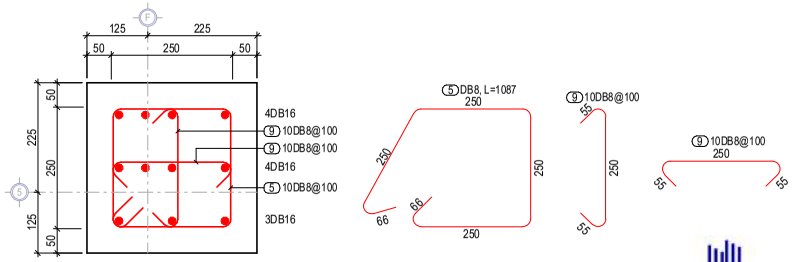
D:1 A-75 **PC-1a LAYOUT PLAN**
SCALE (1 : 20)



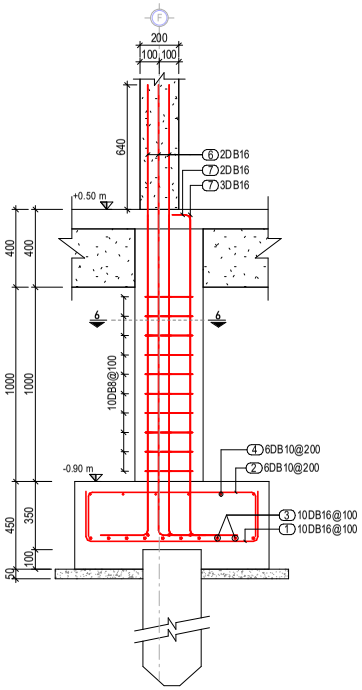
D:2 A-75 **BOTTOM BAR OF PC-1a DETAILING**
SCALE (1 : 20)



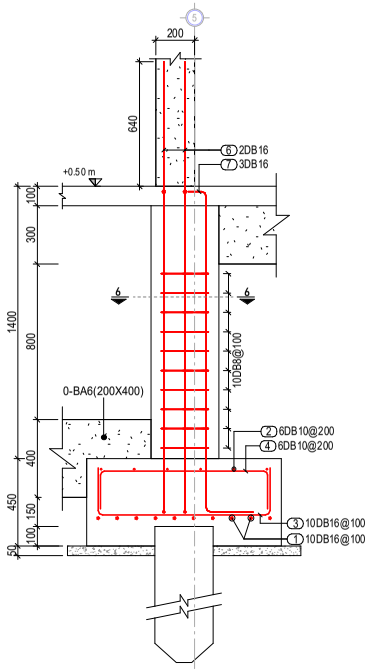
D:3 A-75 **TOPBAR OF PC-1a DETAILING**
SCALE (1 : 20)



D:4 A-75 **SECTION (6-6)**
SCALE (1 : 10)

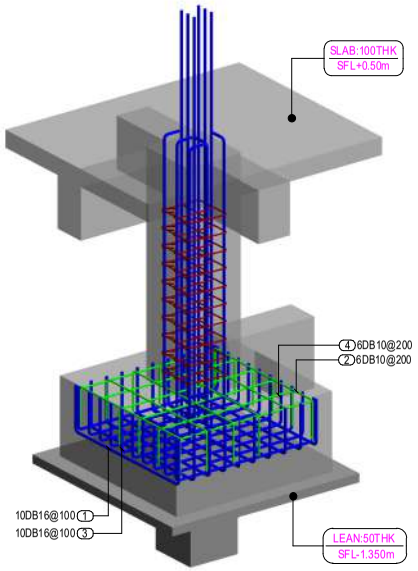


D:4 A-75 **SECTION (4-4)**
SCALE (1 : 25)



D:5 A-75 **SECTION (5-5)**
SCALE (1 : 25)

PC-1a Rebar Schedule					
Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB16	10	1.38 m	21.74 kg	265 900 265
2	DB10	6	1.29 m	4.78 kg	230 870 230
3	DB16	10	1.35 m	21.27 kg	250 900 250
4	DB10	6	1.23 m	4.56 kg	200 870 200
5	RB8	10	1.09 m	4.29 kg	250 250 55 55 250 250
6	DB16	6	7.64 m	24.12 kg	250 2323
7	DB16	5	3.92 m	15.47 kg	250 1663 100
9	RB8	20	0.72 m	2.85 kg	55 250 55
Total		73	18.62 m	99.07 kg	



D:7 A-75 **PC-1a 3D VIEW**
SCALE ()

PROJECT : **VEAL SBOV VILLA**

OWNER

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STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

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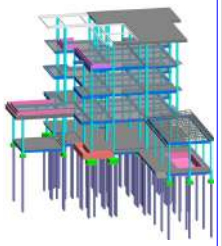

WORKING DRAWING
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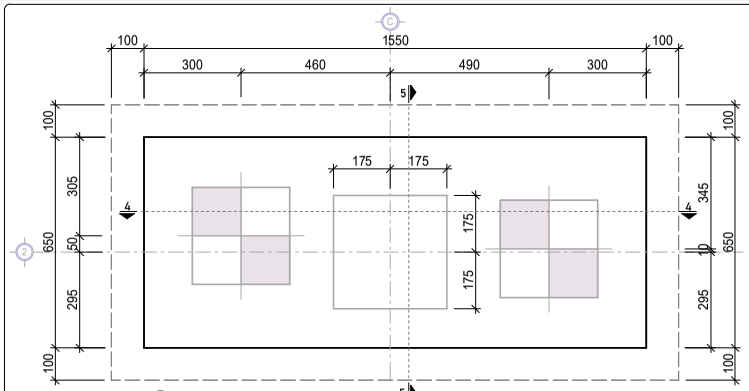
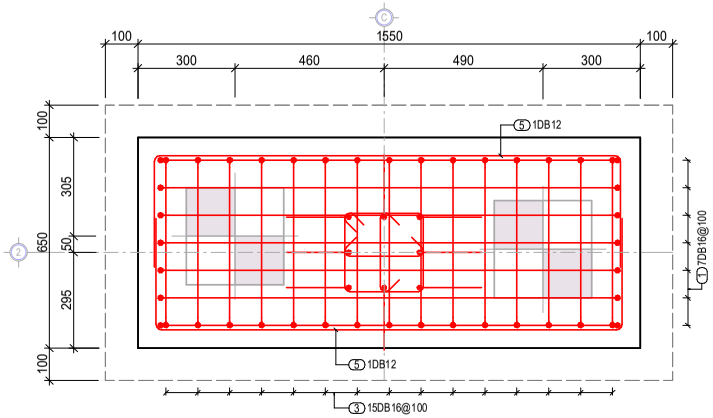
DRAWING TITLE

PC-1a DETAILING

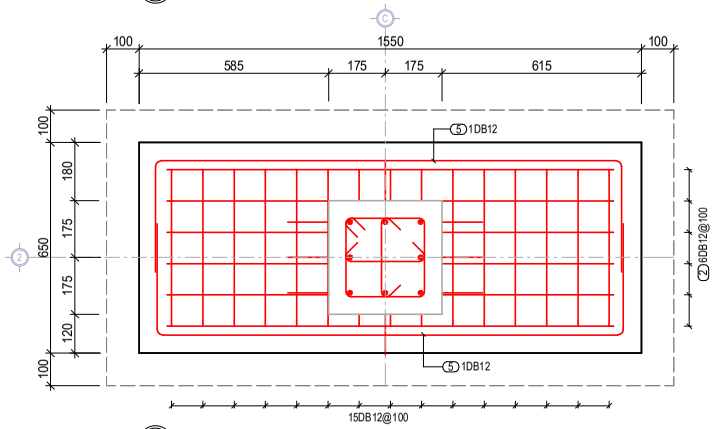
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-75
DATE:	19/10/2021
DRAWING SIZE	A3



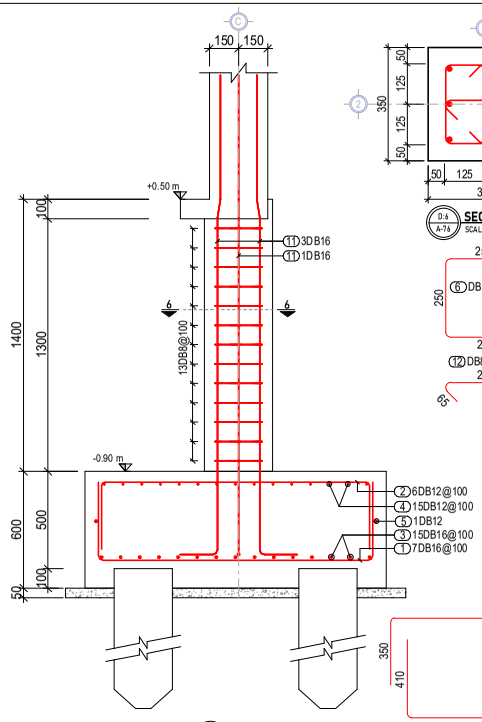
D:1 A-76 PC-2 LAYOUT PLAN
SCALE (1:15)



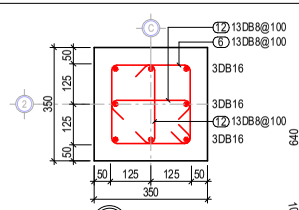
D:2 A-76 BOTTOM BAR OF PC-2 DETAILING
SCALE (1:15)



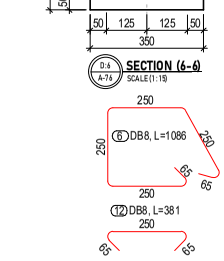
D:3 A-76 TOP BAR OF PC-2 DETAILING
SCALE (1:15)

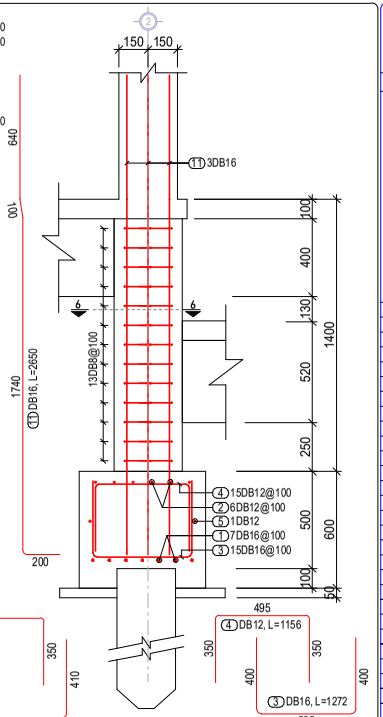


D:4 A-76 SECTION (4-4)
SCALE (1:25)

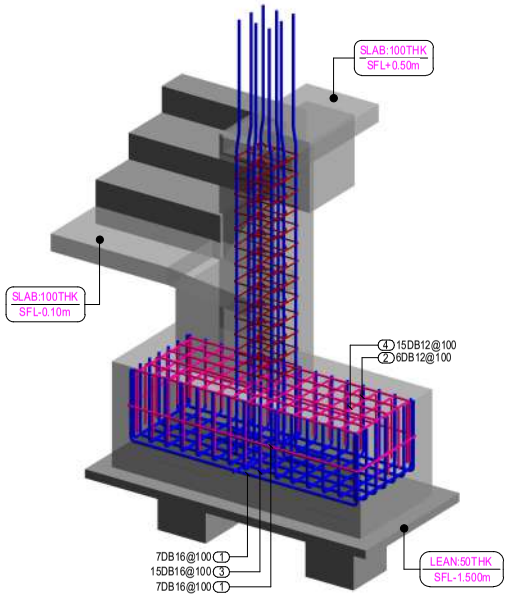


D:6 A-76 SECTION (6-6)
SCALE (1:15)





D:5 A-76 SECTION (5-5)
SCALE (1:25)



D:7 A-76 PC-2 3D VIEW
SCALE ( )

PC-2 Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB16	7	2.19 m	24.23 kg	410 / 1426 / 410
2	DB12	6	2.05 m	10.92 kg	350 / 1390 / 350
3	DB16	15	1.27 m	30.12 kg	400 / 525 / 400
4	DB12	15	1.16 m	15.39 kg	350 / 495 / 350
5	DB12	2	4.22 m	3.75 kg	350 / 1450 / 350
6	RB8	13	1.09 m	5.57 kg	250 / 65 / 250 / 250
11	DB16	8	10.60 m	33.46 kg	640 / 100 / 1740 / 200
12	RB8	26	0.76 m	3.91 kg	65 / 250 / 65
Total		92	23.34 m	127.36 kg	

PROJECT : VEAL SBOV VILLA

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SANITARY ENGINEERS

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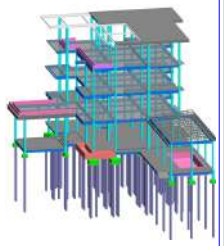

WORKING DRAWING
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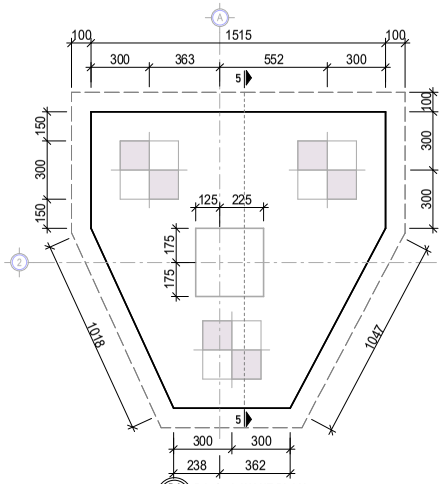
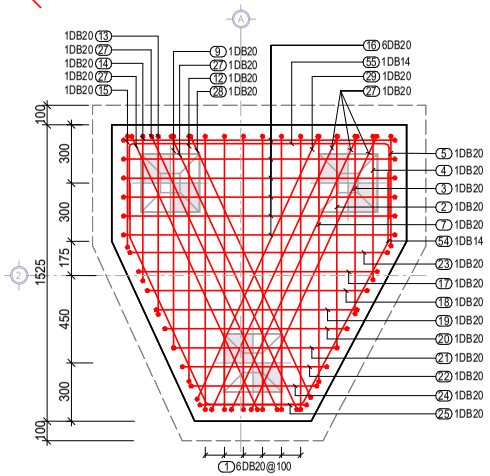
PC-2 DETAILING

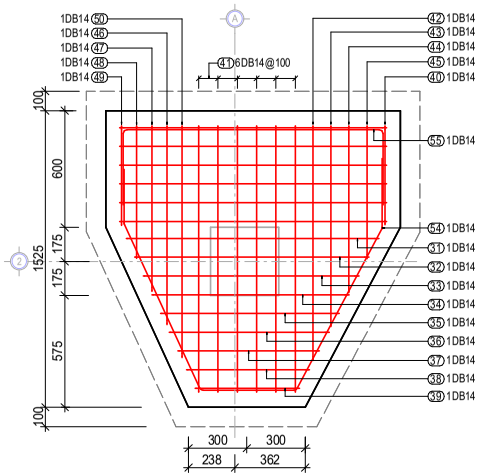
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-76
DATE:	19/10/2021
DRAWING SIZE	A3



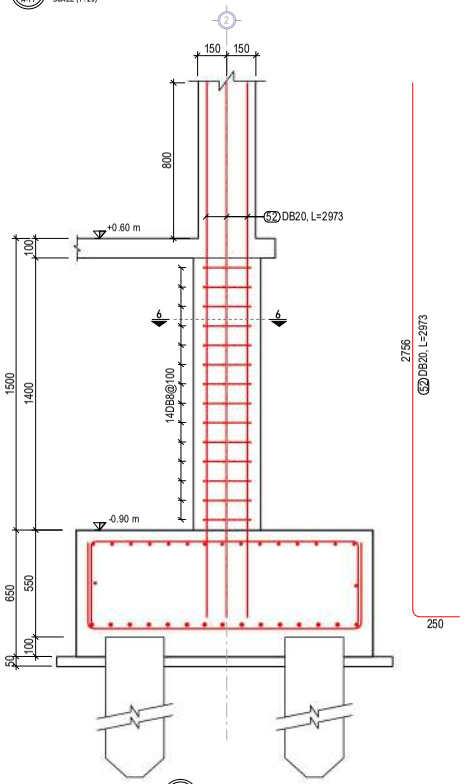
D:1 A-77 **PC-3a LAYOUT PLAN**
SCALE (1 : 25)



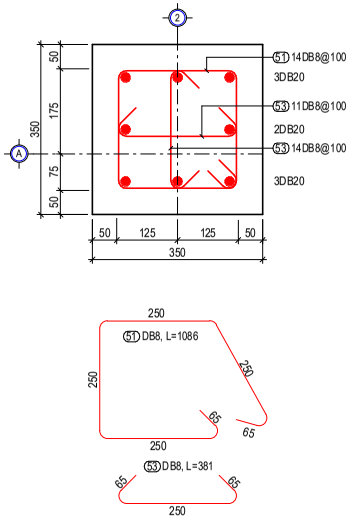
D:2 A-77 **BOTTOM BAR OF PC-3a DETAILING**
SCALE (1 : 25)



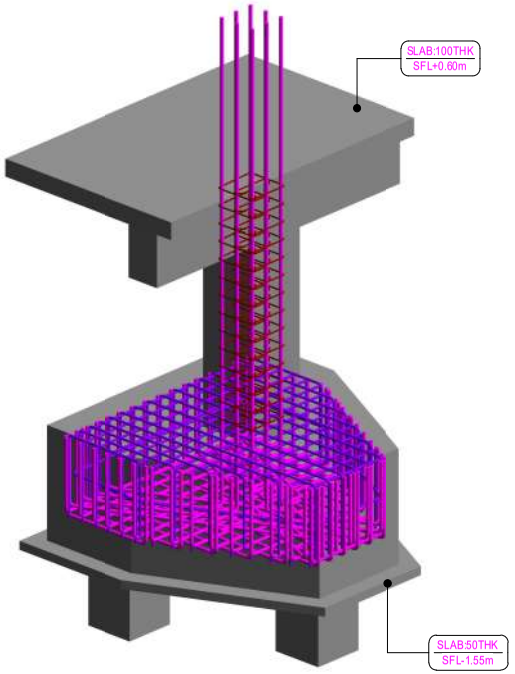
D:3 A-77 **TOP BAR OF PC-3a DETAILING**
SCALE (1 : 25)



D:5 A-77 **SECTION (5-5)**
SCALE (1 : 25)



D:6 A-77 **SECTION (6-6)**
SCALE (1:10)



D:4 A-77 **PC-3a 3D VIEW**
SCALE ()

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR

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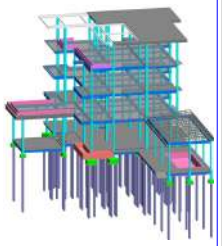
STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE



WORKING DRAWING
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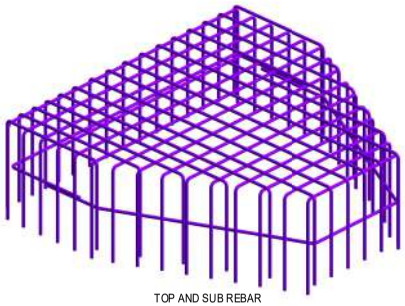
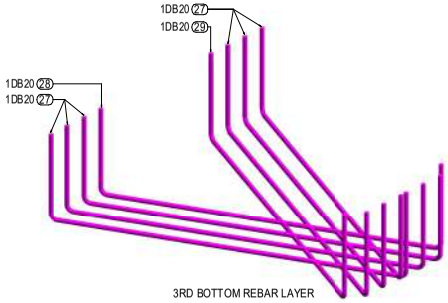
DRAWING TITLE

PC-3a DETAILING

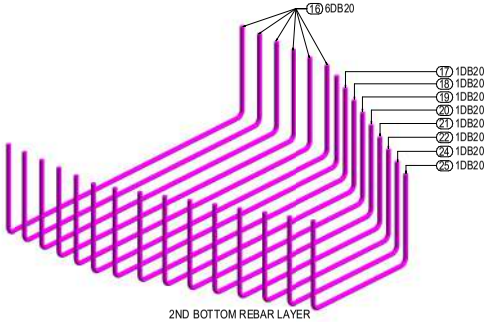
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-77
DATE:	19/10/2021
DRAWING SIZE	A3



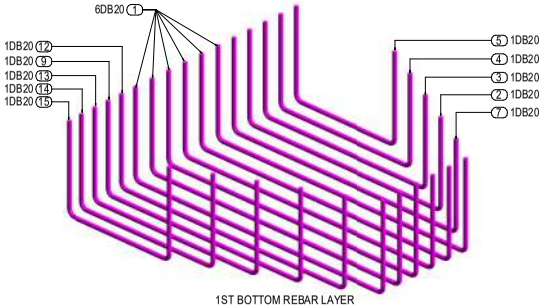
TOP AND SUB REBAR



3RD BOTTOM REBAR LAYER



2ND BOTTOM REBAR LAYER



1ST BOTTOM REBAR LAYER

PC-3a Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB20	6	2.26 m	33.43 kg	450 1425 450
2	DB20	5	1.94 m	4.79 kg	450 1107 450
3	DB20	5	1.77 m	4.36 kg	450 932 450
4	DB20	5	1.59 m	3.93 kg	450 757 450
5	DB20	5	1.42 m	3.49 kg	450 583 450
7	DB20	5	2.12 m	5.22 kg	450 1281 450
9	DB20	5	1.94 m	4.79 kg	450 1108 450
12	DB20	5	2.11 m	5.21 kg	450 1280 450
13	DB20	5	1.77 m	4.36 kg	450 935 450
14	DB20	5	1.60 m	3.94 kg	450 763 450
15	DB20	5	1.42 m	3.51 kg	450 590 450
16	DB20	6	2.21 m	32.69 kg	430 1415 430
17	DB20	9	2.04 m	5.04 kg	430 1247 430
18	DB20	9	1.94 m	4.80 kg	430 1150 430
19	DB20	9	1.85 m	4.56 kg	430 1053 430
20	DB20	9	1.75 m	4.32 kg	430 956 430
21	DB20	9	1.65 m	4.08 kg	430 859 430
22	DB20	9	1.56 m	3.84 kg	430 762 430
23	DB20	9	2.14 m	5.27 kg	430 1344 430
24	DB20	9	1.46 m	3.60 kg	430 666 430
25	DB20	9	1.36 m	3.36 kg	430 569 430
27	DB20	6	4.64 m	34.34 kg	410 1566 410
28	DB20	1	2.25 m	5.55 kg	410 1497 410
29	DB20	1	2.26 m	5.58 kg	410 1507 410
30	DB14	6	2.24 m	16.25 kg	450 1387 450

PC-3a Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
31	DB14	9	2.17 m	2.62 kg	450 1314 450
32	DB14	9	2.07 m	2.50 kg	450 1218 450
33	DB14	9	1.98 m	2.39 kg	450 1123 450
34	DB14	9	1.88 m	2.27 kg	450 1028 450
35	DB14	9	1.79 m	2.16 kg	450 932 450
36	DB14	9	1.69 m	2.04 kg	450 837 450
37	DB14	9	1.60 m	1.93 kg	450 742 450
38	DB14	9	1.50 m	1.81 kg	450 646 450
39	DB14	9	1.40 m	1.70 kg	450 551 450
40	DB14	5	1.32 m	1.59 kg	420 524 420
41	DB14	6	2.18 m	15.80 kg	420 1385 420
42	DB14	5	2.02 m	2.44 kg	420 1222 420
43	DB14	5	1.84 m	2.23 kg	420 1047 420
44	DB14	5	1.67 m	2.01 kg	420 873 420
45	DB14	5	1.49 m	1.80 kg	420 698 420
46	DB14	5	1.83 m	2.21 kg	420 1037 420
47	DB14	5	1.66 m	2.01 kg	420 867 420
48	DB14	5	1.49 m	1.80 kg	420 697 420
49	DB14	5	1.32 m	1.60 kg	420 527 420
50	DB14	5	2.00 m	2.42 kg	420 1207 420
51	RB8	14	1.09 m	6.00 kg	250 250 250 250 250
52	DB20	8	11.89 m	58.65 kg	250 2756
53	RB8	25	0.76 m	3.76 kg	65 250 65
54	DB14	1	3.01 m	3.64 kg	500 398 50 288
55	DB14	1	2.09 m	2.53 kg	394 1350 394
Total		343	103.03 m	340.19 kg	

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

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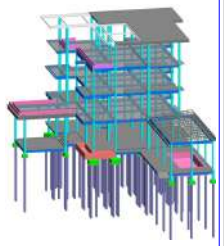
MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS | DATE

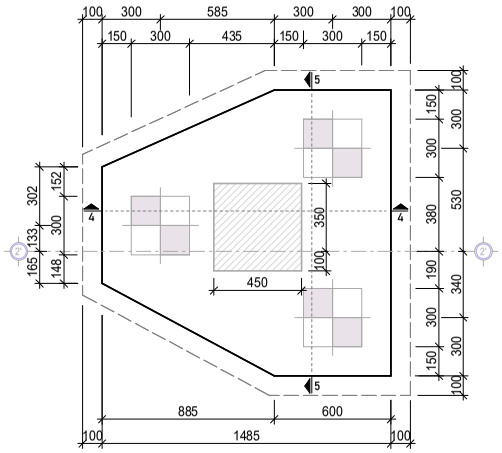


WORKING DRAWING
FOR CONSTRUCTION

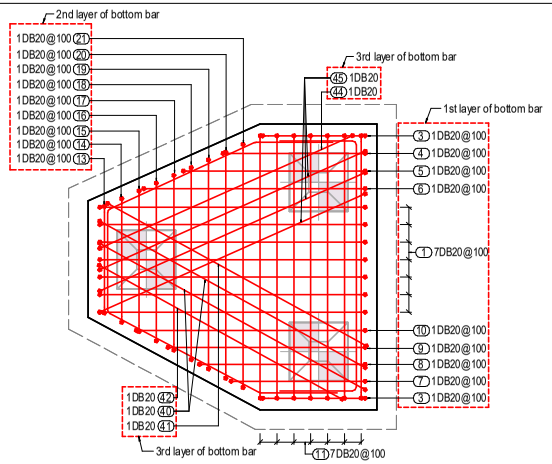
DRAWING TITLE

PC-3a Schedule

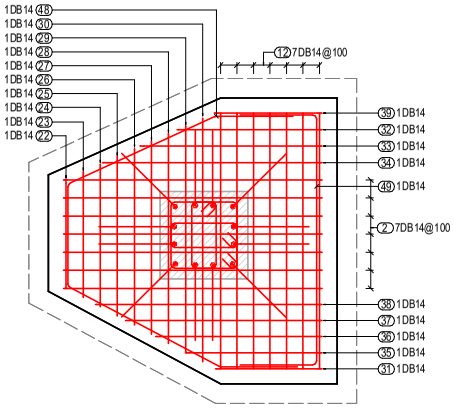
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-78
DATE:	19/10/2021
DRAWING SIZE	A3



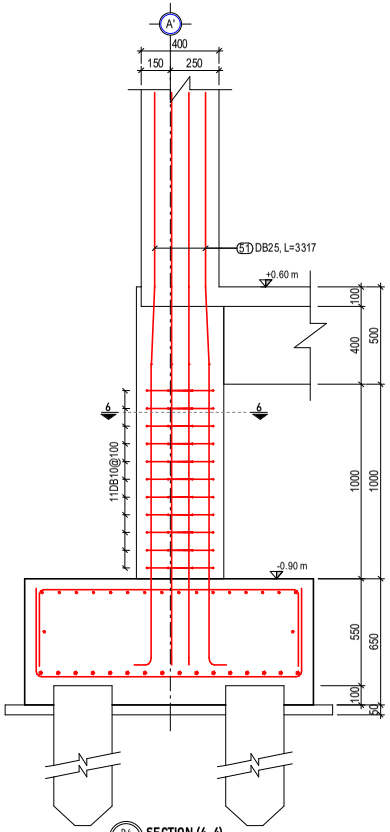
D:1 A-79 **PC-3b LAYOUT PLAN**
SCALE (1: 25)



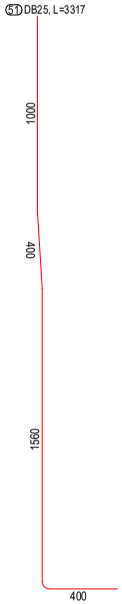
D:2 A-79 **BOTTOM BAR OF PC-3b DETAILING**
SCALE (1: 25)

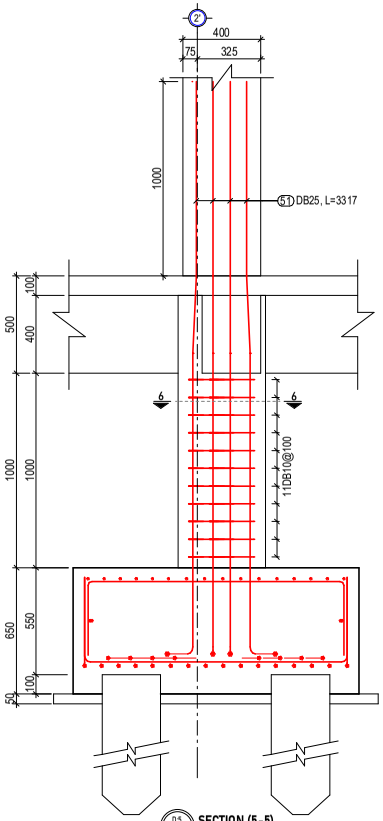


D:3 A-79 **TOP BAR OF PC-3b DETAILING**
SCALE (1: 25)

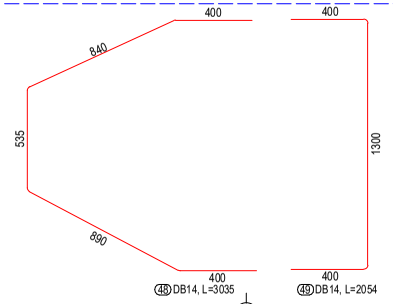


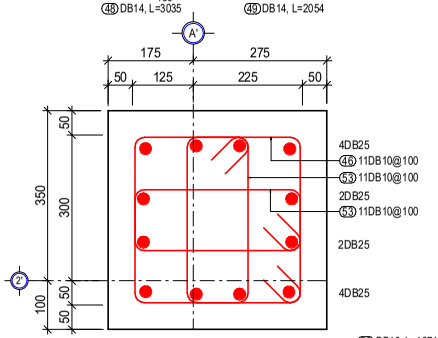
D:4 A-79 **SECTION (4-4)**
SCALE (1: 25)



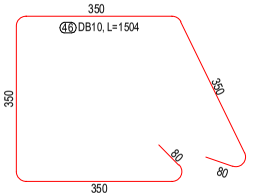


D:5 A-79 **SECTION (5-5)**
SCALE (1: 25)





D:6 A-79 **SECTION (6-6)**
SCALE (1:10)



PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

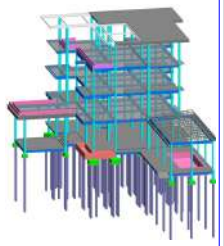
STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE

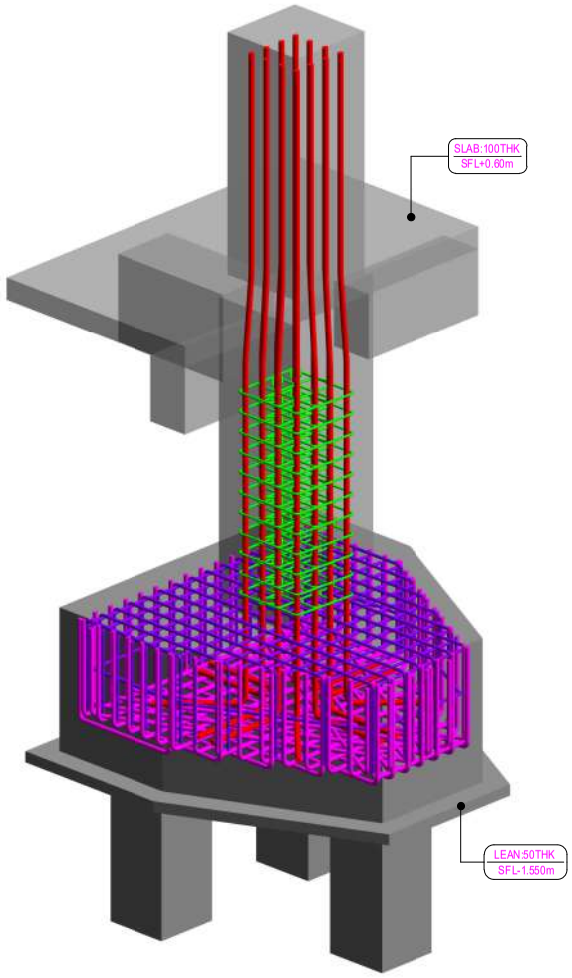


WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE

PC-3b DETAILLING

Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-79
DATE:	19/10/2021
DRAWING SIZE	A3



D:1 A-80 **PC-3b 3D VIEW**
SCALE ( )

PC-3b Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB20	7	2.25 m	38.83 kg	465 / 1385 / 465
2	DB14	7	2.10 m	17.75 kg	400 / 1345 / 400
3	DB20	9	2.82 m	6.96 kg	465 / 547 / 465
4	DB20	4	1.62 m	3.98 kg	465 / 751 / 465
5	DB20	4	1.82 m	4.49 kg	465 / 955 / 465
6	DB20	4	2.02 m	4.99 kg	465 / 1159 / 465
7	DB20	5	1.57 m	3.88 kg	465 / 710 / 465
8	DB20	5	1.74 m	4.28 kg	465 / 872 / 465
9	DB20	5	1.90 m	4.68 kg	465 / 1034 / 465
10	DB20	5	2.06 m	5.08 kg	465 / 1197 / 465
11	DB20	7	2.19 m	37.88 kg	445 / 1370 / 445
12	DB14	7	2.06 m	17.39 kg	386 / 1330 / 386
13	DB20	9	1.39 m	3.43 kg	445 / 568 / 445
14	DB20	9	1.48 m	3.65 kg	445 / 656 / 445
15	DB20	9	1.57 m	3.87 kg	445 / 744 / 445
16	DB20	9	1.66 m	4.08 kg	445 / 832 / 445
17	DB20	9	1.74 m	4.30 kg	445 / 919 / 445
18	DB20	9	1.83 m	4.52 kg	445 / 1007 / 445
19	DB20	9	1.92 m	4.73 kg	445 / 1095 / 445
20	DB20	9	2.01 m	4.95 kg	445 / 1182 / 445
21	DB20	9	2.09 m	5.17 kg	445 / 1270 / 445
22	DB14	9	1.30 m	1.57 kg	385 / 576 / 385
23	DB14	9	1.39 m	1.68 kg	385 / 663 / 385
24	DB14	9	1.47 m	1.78 kg	385 / 749 / 385
25	DB14	9	1.56 m	1.88 kg	385 / 836 / 385

PC-3b Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
26	DB14	9	1.65 m	1.99 kg	385 / 922 / 385
27	DB14	9	1.73 m	2.09 kg	385 / 1008 / 385
28	DB14	9	1.82 m	2.20 kg	385 / 1095 / 385
29	DB14	9	1.91 m	2.30 kg	385 / 1181 / 385
30	DB14	9	1.99 m	2.41 kg	385 / 1267 / 385
31	DB14	5	1.32 m	1.59 kg	400 / 562 / 400
32	DB14	4	1.51 m	1.83 kg	400 / 761 / 400
33	DB14	4	1.71 m	2.06 kg	400 / 952 / 400
34	DB14	4	1.90 m	2.29 kg	400 / 1143 / 400
35	DB14	5	1.47 m	1.78 kg	400 / 717 / 400
36	DB14	5	1.63 m	1.96 kg	400 / 871 / 400
37	DB14	5	1.78 m	2.15 kg	400 / 1025 / 400
38	DB14	5	1.93 m	2.34 kg	400 / 1180 / 400
39	DB14	4	1.32 m	1.60 kg	400 / 570 / 400
40	DB20	2	2.31 m	11.41 kg	400 / 1579 / 400
41	DB20	1	2.27 m	5.60 kg	400 / 1538 / 400
42	DB20	1	2.18 m	5.38 kg	400 / 1446 / 400
44	DB20	1	2.18 m	5.37 kg	400 / 1442 / 400
45	DB20	3	4.50 m	16.64 kg	400 / 1515 / 400
46	DB10	11	1.50 m	10.20 kg	350 / 350 / 350 / 350 / 350
48	DB14	1	3.04 m	3.67 kg	400 / 535 / 400
49	DB14	1	2.05 m	2.48 kg	400 / 1300 / 400
51	DB25	12	39.80 m	153.36 kg	1000 / 400 / 1560 / 400
53	DB10	22	2.15 m	14.57 kg	350 / 135 / 80 / 80 / 135 / 350
Total		327	131.20 m	453.08 kg	

PROJECT : **VEALSBOV VILLA**

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

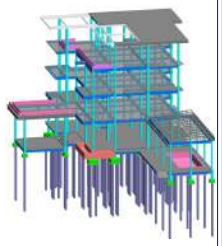
STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS	DATE

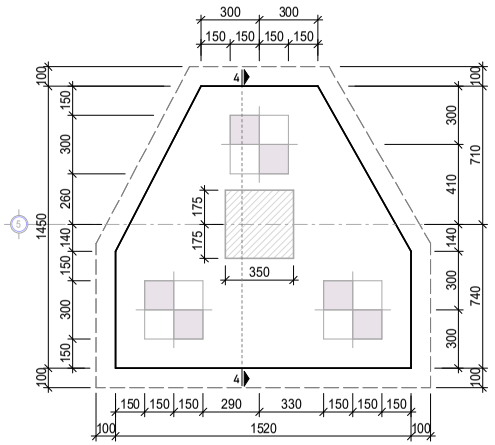


WORKING DRAWING
FOR CONSTRUCTION

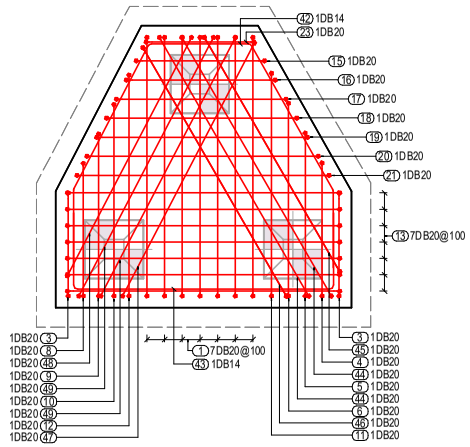
DRAWING TITLE

PC-3b of 3D and Schedule

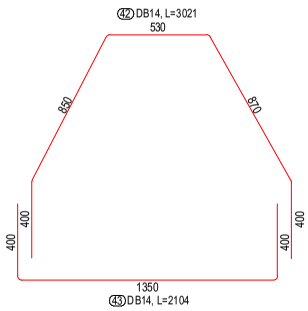
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-80
DATE:	19/10/2021
DRAWING SIZE	A3

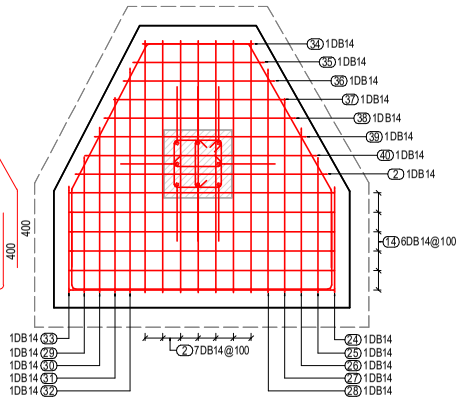


D:1 A-81 **PC-3c LAYOUT PLAN**
SCALE (1: 25)

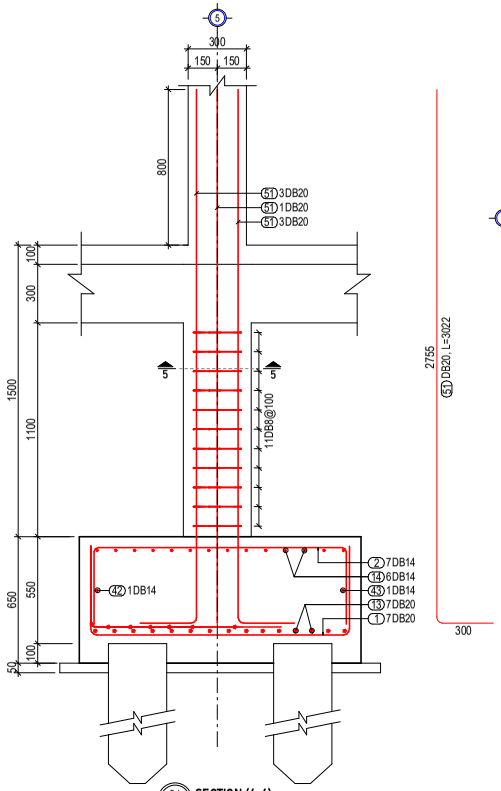


D:2 A-81 **BOTTOM BAR OF PC-3c DETAILING**
SCALE (1: 25)

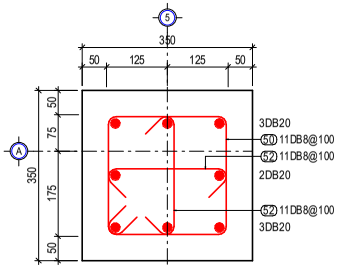




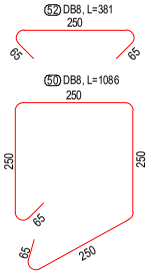
D:3 A-81 **TOP BAR OF PC-3c DETAILING**
SCALE (1: 25)

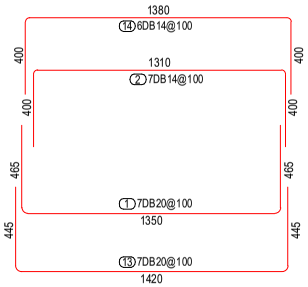


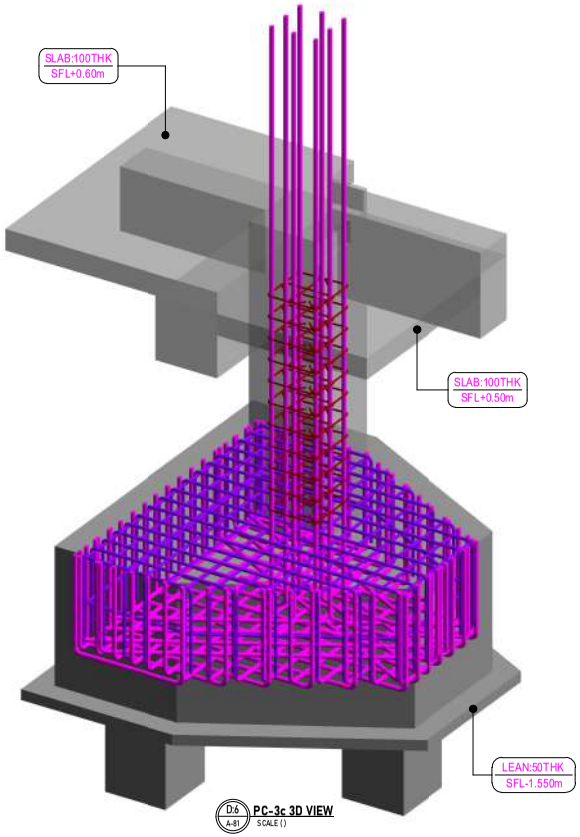
D:4 A-81 **SECTION (4-4)**
SCALE (1: 25)



D:5 A-81 **SECTION (5-5)**
SCALE (1:10)







D:6 A-81 **PC-3c 3D VIEW**
SCALE ( )

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

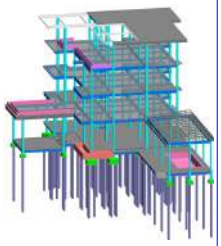
STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS | DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE

PC-3c DETAILING

Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-81
DATE:	19/10/2021
DRAWING SIZE	A3

PC-3c Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB20	7	2.21 m	38.22 kg	465 / 1350 / 465
2	DB14	15	4.13 m	19.95 kg	400 / 1310 / 400
3	DB20	10	2.83 m	6.98 kg	465 / 550 / 465
4	DB20	5	1.57 m	3.87 kg	465 / 704 / 465
5	DB20	5	1.72 m	4.25 kg	465 / 858 / 465
6	DB20	5	1.88 m	4.63 kg	465 / 1011 / 465
8	DB20	5	1.57 m	3.86 kg	465 / 702 / 465
9	DB20	5	1.72 m	4.24 kg	465 / 853 / 465
10	DB20	5	1.87 m	4.61 kg	465 / 1005 / 465
11	DB20	5	2.03 m	5.00 kg	465 / 1165 / 465
12	DB20	5	2.02 m	4.98 kg	465 / 1156 / 465
13	DB20	7	2.24 m	38.74 kg	445 / 1420 / 445
14	DB14	6	2.13 m	15.47 kg	400 / 1380 / 400
15	DB20	8	1.50 m	3.71 kg	445 / 679 / 445
16	DB20	8	1.61 m	3.97 kg	445 / 786 / 445
17	DB20	8	1.72 m	4.23 kg	445 / 892 / 445
18	DB20	8	1.82 m	4.49 kg	445 / 998 / 445

PC-3c Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
19	DB20	8	1.93 m	4.76 kg	445 / 1104 / 445
20	DB20	8	2.03 m	5.02 kg	445 / 1210 / 445
21	DB20	8	2.14 m	5.28 kg	445 / 1316 / 445
23	DB20	8	1.40 m	3.45 kg	445 / 573 / 445
24	DB14	5	1.31 m	1.58 kg	400 / 557 / 400
25	DB14	5	1.46 m	1.77 kg	400 / 709 / 400
26	DB14	5	1.61 m	1.95 kg	400 / 860 / 400
27	DB14	5	1.77 m	2.13 kg	400 / 1011 / 400
28	DB14	5	1.92 m	2.32 kg	400 / 1163 / 400
29	DB14	5	1.47 m	1.77 kg	400 / 713 / 400
30	DB14	5	1.62 m	1.96 kg	400 / 865 / 400
31	DB14	5	1.77 m	2.14 kg	400 / 1017 / 400
32	DB14	5	1.92 m	2.32 kg	400 / 1169 / 400
33	DB14	5	1.31 m	1.59 kg	400 / 561 / 400
34	DB14	8	1.34 m	1.62 kg	400 / 585 / 400
35	DB14	8	1.44 m	1.74 kg	400 / 688 / 400
36	DB14	8	1.55 m	1.87 kg	400 / 792 / 400

PC-3c Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
37	DB14	8	1.65 m	1.99 kg	400 / 896 / 400
38	DB14	8	1.75 m	2.12 kg	400 / 999 / 400
39	DB14	8	1.86 m	2.24 kg	400 / 1103 / 400
40	DB14	8	1.96 m	2.37 kg	400 / 1206 / 400
42	DB14	1	3.02 m	3.65 kg	400, 850, 530, 870, 400
43	DB14	1	2.10 m	2.54 kg	400 / 1350 / 400
44	DB20	2	2.34 m	11.54 kg	425 / 1556 / 425
45	DB20	2	4.39 m	10.83 kg	425 / 1412 / 425
46	DB20	2	4.56 m	11.24 kg	425 / 1494 / 425
47	DB20	1	2.27 m	5.60 kg	425 / 1487 / 425
48	DB20	1	2.19 m	5.39 kg	425 / 1402 / 425
49	DB20	2	2.30 m	11.36 kg	425 / 1519 / 425
50	RB8	11	1.09 m	4.71 kg	250, 250, 65, 65, 250, 250
51	DB20	8	12.09 m	59.62 kg	300 / 2755
52	RB8	22	0.76 m	3.31 kg	65, 250, 65
Total		308	106.89 m	352.99 kg	

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

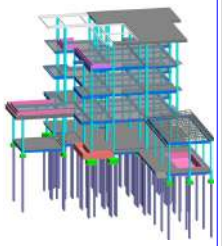
STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS | DATE



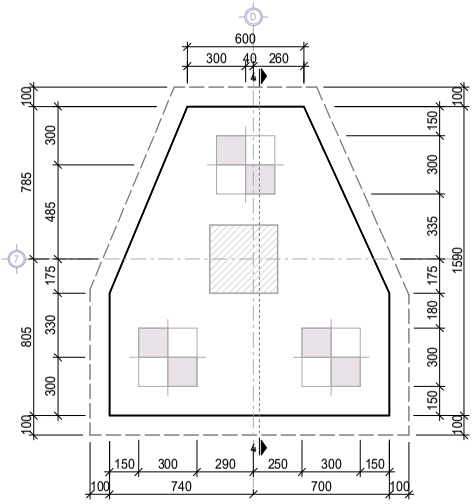
WORKING DRAWING

FOR CONSTRUCTION

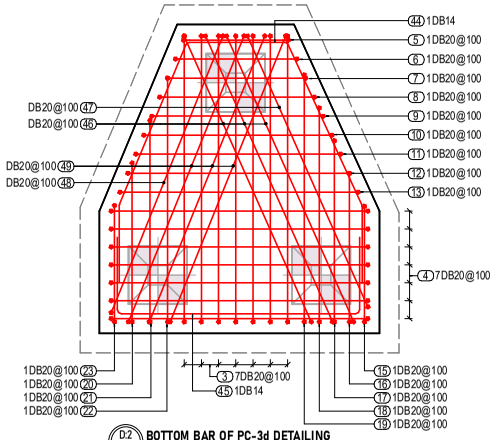
DRAWING TITLE

PC-3c SCHEDULE

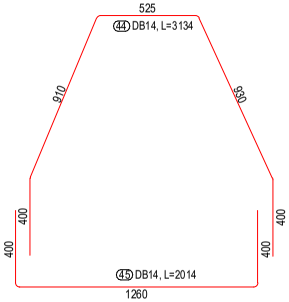
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-82
DATE:	19/10/2021
DRAWING SIZE	A3

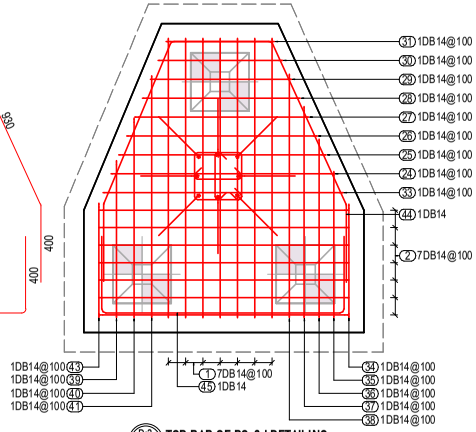


D:1 A-83 **PC-3d LAYOUT PLAN**
SCALE (1 : 25)

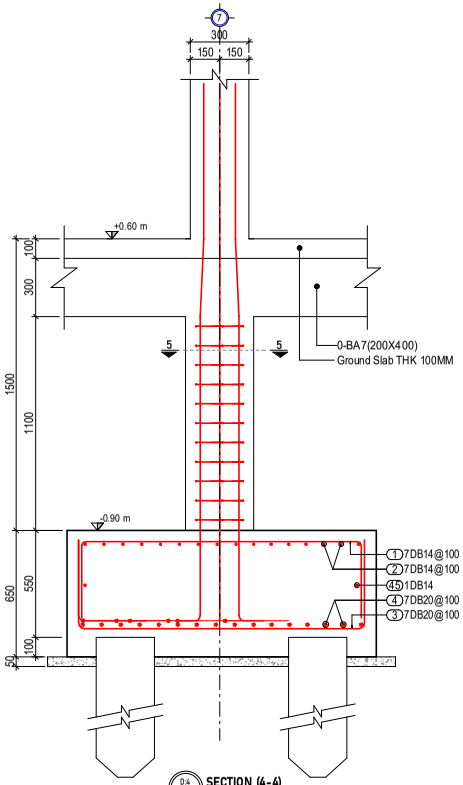


D:2 A-83 **BOTTOM BAR OF PC-3d DETAILING**
SCALE (1 : 25)

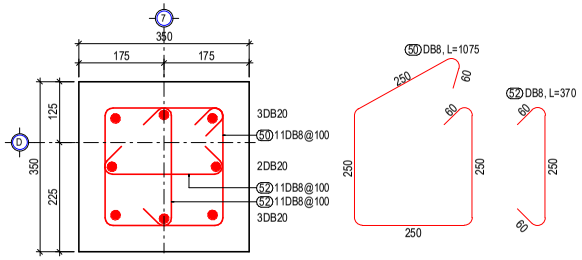




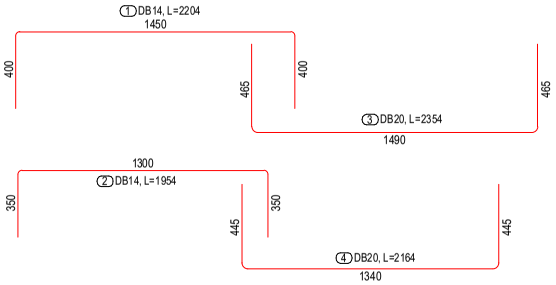
D:3 A-83 **TOP BAR OF PC-3d DETAILING**
SCALE (1 : 25)

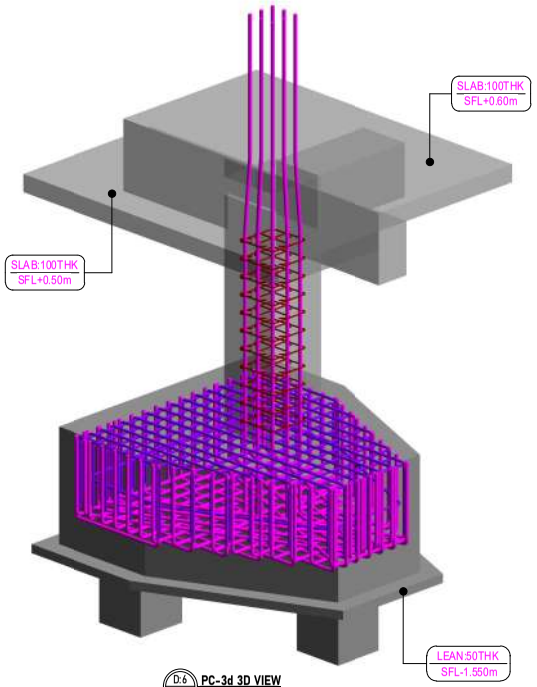


D:4 A-83 **SECTION (4-4)**
SCALE (1: 25)



D:5 A-83 **SECTION (5-5)**
SCALE (1:10)



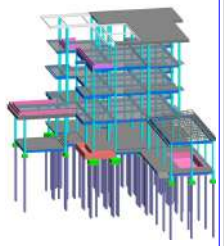


D:6 A-83 **PC-3d 3D VIEW**
SCALE ( )

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE

PC-3d DETAILLNG

Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-83
DATE:	19/10/2021
DRAWING SIZE	A3

PC-3d Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB14	7	2.20 m	18.64 kg	400 / 1450 / 400
2	DB14	7	1.95 m	16.53 kg	350 / 1300 / 350
3	DB20	7	2.35 m	40.64 kg	465 / 1490 / 465
4	DB20	7	2.16 m	37.36 kg	445 / 1340 / 445
5	DB20	9	1.38 m	3.41 kg	445 / 560 / 445
6	DB20	9	1.47 m	3.62 kg	445 / 645 / 445
7	DB20	9	1.56 m	3.84 kg	445 / 731 / 445
8	DB20	9	1.64 m	4.05 kg	445 / 817 / 445
9	DB20	9	1.73 m	4.26 kg	445 / 902 / 445
10	DB20	9	1.81 m	4.47 kg	445 / 988 / 445
11	DB20	9	1.90 m	4.68 kg	445 / 1073 / 445
12	DB20	9	1.98 m	4.89 kg	445 / 1159 / 445
13	DB20	9	2.07 m	5.10 kg	445 / 1245 / 445
15	DB20	5	1.48 m	3.65 kg	465 / 614 / 465
16	DB20	5	1.65 m	4.06 kg	465 / 783 / 465
17	DB20	5	1.82 m	4.48 kg	465 / 952 / 465
18	DB20	5	1.98 m	4.89 kg	465 / 1120 / 465

PC-3d Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
19	DB20	5	2.15 m	5.31 kg	465 / 1289 / 465
20	DB20	4	1.70 m	4.20 kg	465 / 837 / 465
21	DB20	4	1.92 m	4.73 kg	465 / 1056 / 465
22	DB20	4	2.14 m	5.27 kg	465 / 1274 / 465
23	DB20	4	1.48 m	3.66 kg	465 / 619 / 465
24	DB14	9	1.82 m	2.20 kg	350 / 1165 / 350
25	DB14	9	1.73 m	2.10 kg	350 / 1081 / 350
26	DB14	9	1.65 m	1.99 kg	350 / 996 / 350
27	DB14	9	1.56 m	1.89 kg	350 / 911 / 350
28	DB14	9	1.48 m	1.79 kg	350 / 826 / 350
29	DB14	9	1.39 m	1.69 kg	350 / 741 / 350
30	DB14	9	1.31 m	1.58 kg	350 / 656 / 350
31	DB14	9	1.22 m	1.48 kg	350 / 571 / 350
33	DB14	9	1.90 m	2.30 kg	350 / 1250 / 350
34	DB14	5	1.35 m	1.63 kg	400 / 598 / 400
35	DB14	5	1.52 m	1.84 kg	400 / 765 / 400

PC-3d Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
36	DB14	5	1.69 m	2.04 kg	400 / 932 / 400
37	DB14	5	1.85 m	2.24 kg	400 / 1099 / 400
38	DB14	5	2.02 m	2.44 kg	400 / 1266 / 400
39	DB14	4	1.58 m	1.90 kg	400 / 822 / 400
40	DB14	4	1.79 m	2.17 kg	400 / 1040 / 400
41	DB14	4	2.01 m	2.43 kg	400 / 1259 / 400
43	DB14	4	1.36 m	1.64 kg	400 / 604 / 400
44	DB14	1	3.13 m	3.79 kg	525 / 910 / 930 / 400 / 400
45	DB14	1	2.01 m	2.43 kg	400 / 1260 / 400
46	DB20	3	2.41 m	17.85 kg	425 / 1629 / 425
47	DB20	1	2.33 m	5.74 kg	425 / 1545 / 425
48	DB20	1	2.34 m	5.77 kg	425 / 1555 / 425
49	DB20	3	2.39 m	17.68 kg	425 / 1605 / 425
50	RB8	11	1.07 m	4.67 kg	250 / 60 / 60 / 250 / 250
51	DB20	8	24.32 m	59.98 kg	800 / 400 / 1575 / 300
52	RB8	22	0.74 m	3.21 kg	60 / 250 / 60
Total		323	110.55 m	348.22 kg	

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

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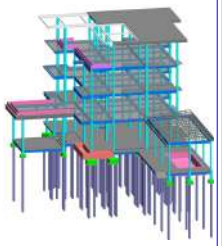
MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS | DATE



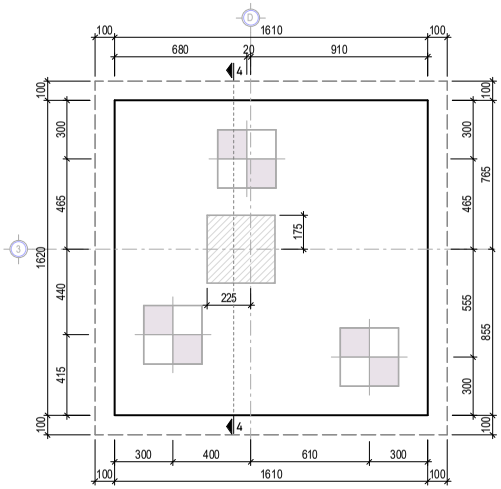
WORKING DRAWING

FOR CONSTRUCTION

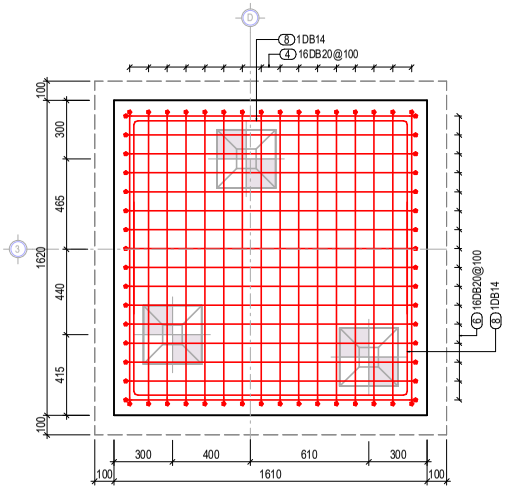
DRAWING TITLE

PC-3d SCHEDULE

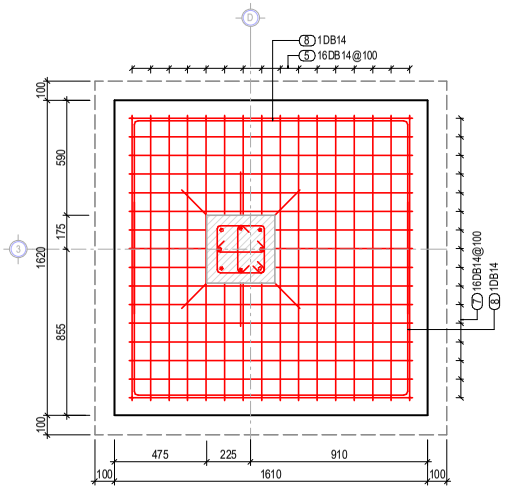
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-84
DATE:	19/10/2021
DRAWING SIZE	A3



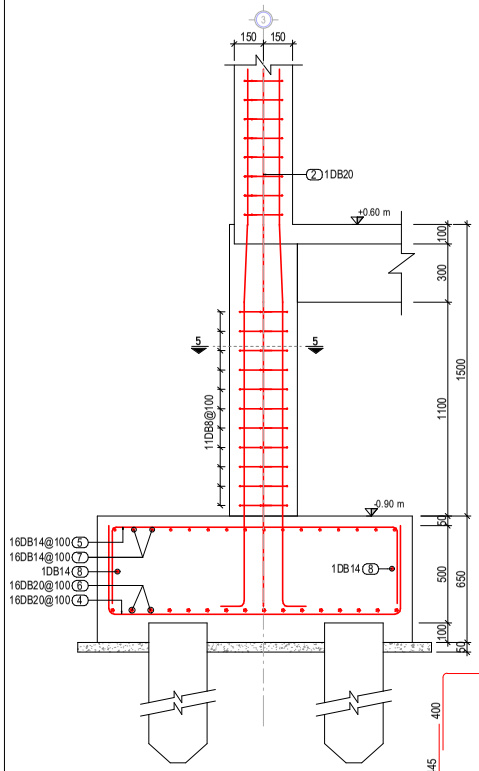
D.1 A-85 **PC-3e LAYOUT PLAN**
SCALE (1: 25)



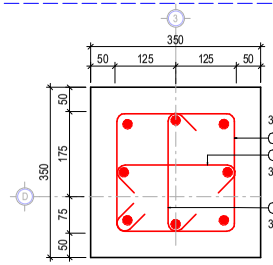
D.2 A-85 **BOTTOM BAR OF PC-3e DETAILING**
SCALE (1: 25)



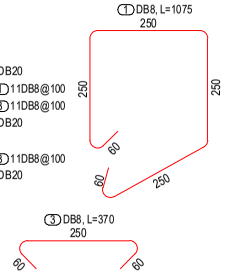
D.3 A-85 **TOP BAR OF PC-3e DETAILING**
SCALE (1: 25)

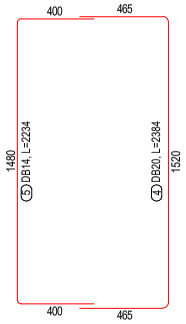


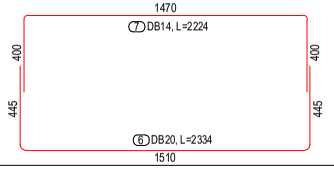
D.4 A-85 **SECTION (4-4)**
SCALE (1: 25)

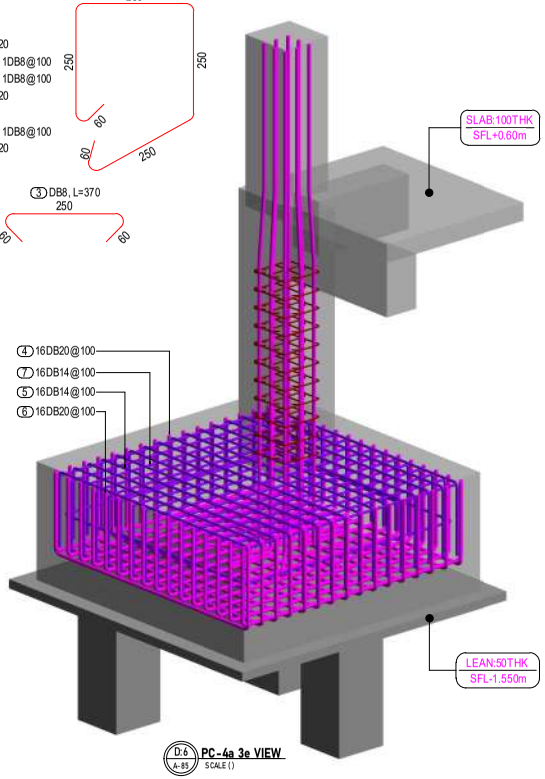


D.5 A-85 **SECTION (5-5)**
SCALE (1: 10)









D.6 A-85 **PC-4a 3e VIEW**
SCALE ()

PC-3e Rebar Schedule

Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	RB8	11	1.07 m	4.67 kg	250, 250, 60, 60, 250, 250
2	DB20	8	24.32 m	59.98 kg	800, 400, 1575, 300
3	RB8	22	0.74 m	3.21 kg	60, 250, 60
4	DB20	16	2.38 m	94.08 kg	465, 1520, 465
5	DB14	16	2.23 m	43.19 kg	400, 1480, 400
6	DB20	16	2.33 m	92.11 kg	445, 1510, 445
7	DB14	16	2.22 m	43.00 kg	400, 1470, 400
8	DB14	2	6.75 m	8.15 kg	1000, 1420, 1000
Total		107	42.06 m	348.39 kg	

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

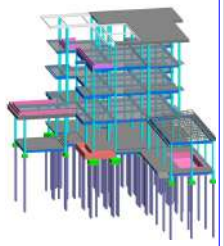
STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS | DATE

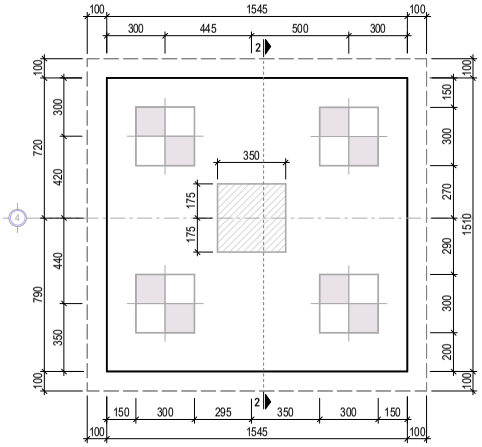


WORKING DRAWING
FOR CONSTRUCTION

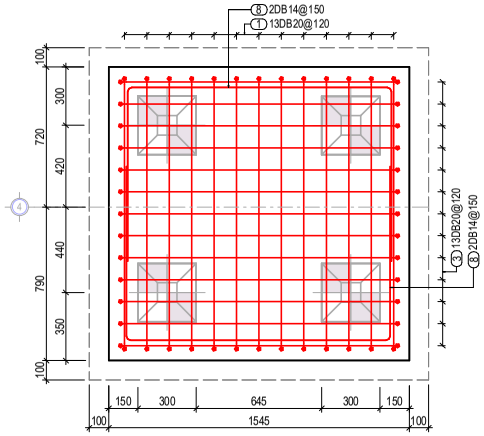
DRAWING TITLE

PC-3e DETAILING

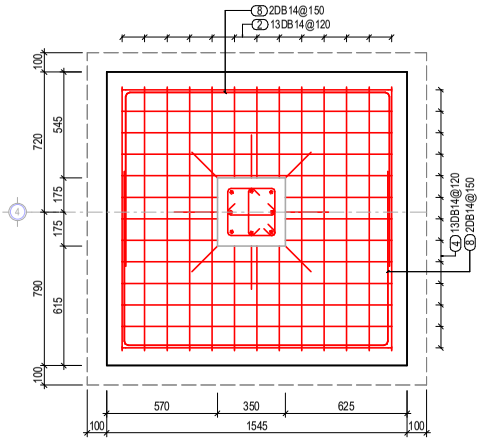
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-85
DATE:	19/10/2021
DRAWING SIZE	A3



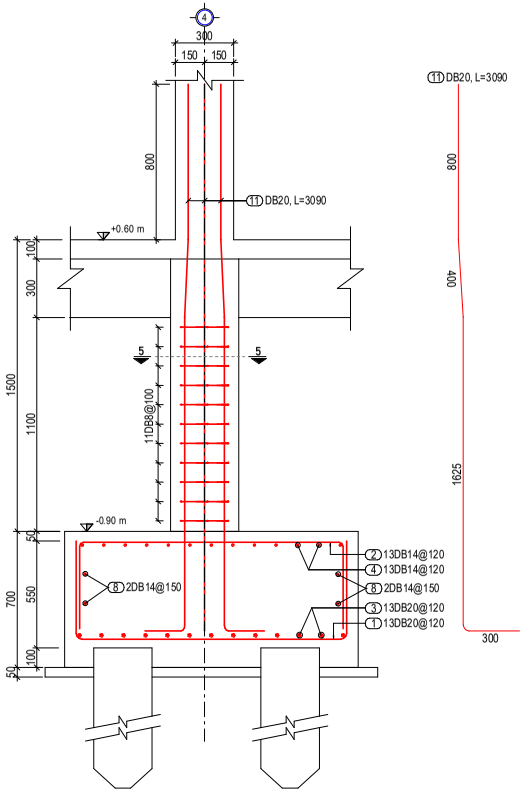
D:1 A-86 **PC-4a LAYOUT PLAN**
SCALE (1 : 25)



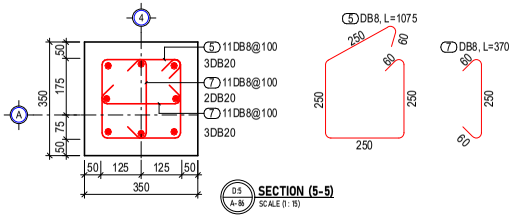
D:3 A-86 **BOTTOM BAR OF PC-4a DETAILING**
SCALE (1 : 25)



D:4 A-86 **TOP BAR OF PC-4a DETAILING**
SCALE (1 : 25)

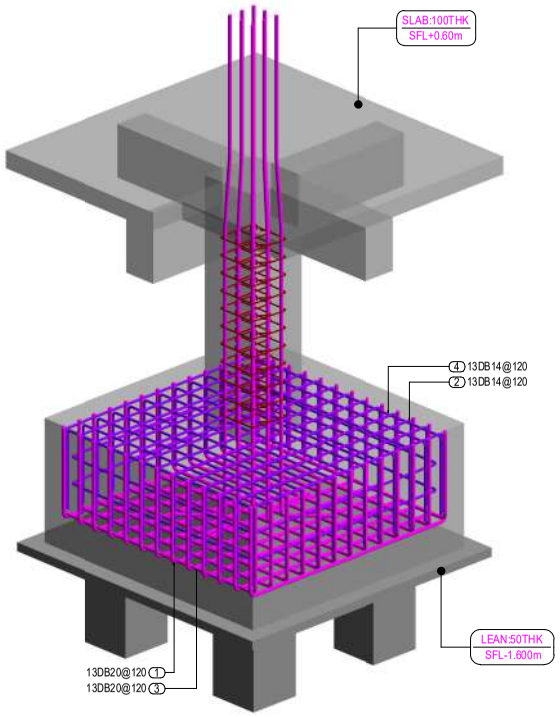


D:2 A-86 **SECTION (2-2)**
SCALE (1 : 25)



D:5 A-86 **SECTION (5-5)**
SCALE (1 : 15)

PC-4a Rebar Schedule					
Rebar. Num.	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB20	13	2.37 m	76.12 kg	515 / 1410 / 515
2	DB14	13	2.22 m	34.94 kg	450 / 1370 / 450
3	DB20	13	2.37 m	75.96 kg	495 / 1445 / 495
4	DB14	13	2.26 m	35.49 kg	450 / 1405 / 450
5	RB8	11	1.08 m	4.67 kg	250 / 60 / 250 / 250
7	RB8	22	0.74 m	3.21 kg	60 / 250 / 60
8	DB14	4	6.25 m	15.10 kg	900 / 1370 / 900
11	DB20	8	24.72 m	60.97 kg	800 / 400 / 1625 / 300
Total		97	42.01 m	306.45 kg	

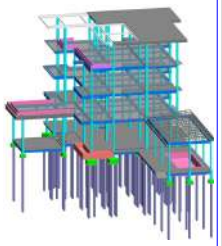


D:6 A-86 **PC-4a 3D VIEW**
SCALE ( )

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

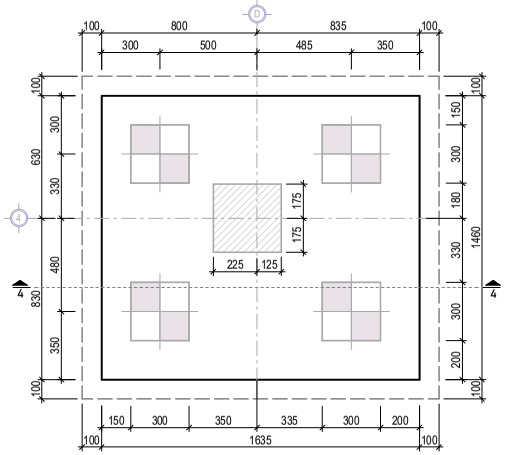


WORKING DRAWING
FOR CONSTRUCTION

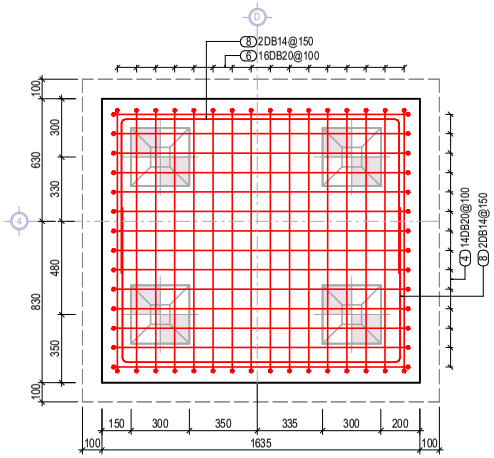
DRAWING TITLE

PC-4a DETAILING

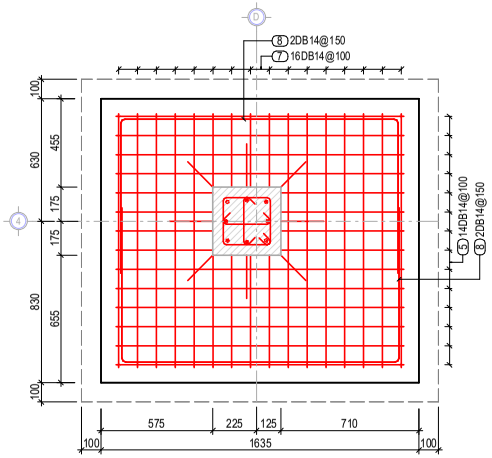
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-86
DATE:	19/10/2021
DRAWING SIZE	A3



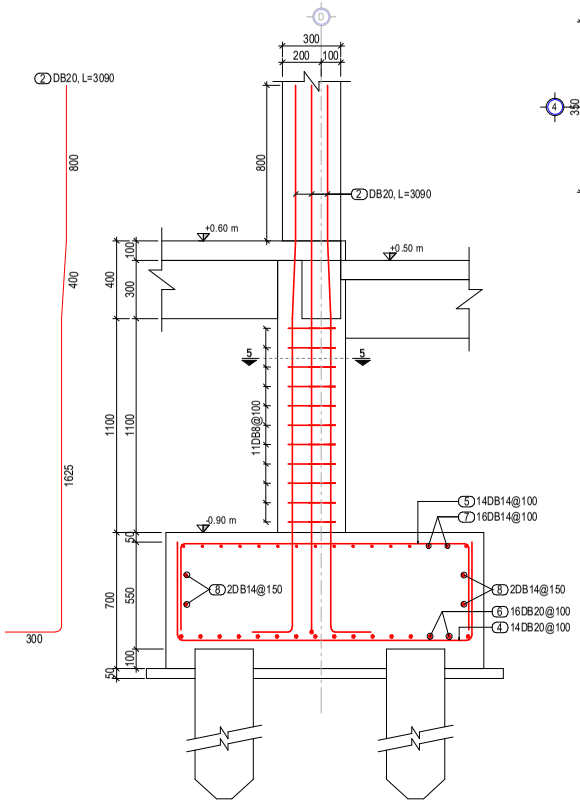
D:1 A-87 **PC-4b LAYOUT PLAN**
SCALE (1: 25)



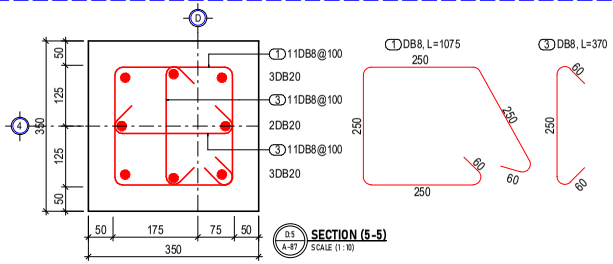
D:2 A-87 **BOTTOM BAR OF PC-4b DETAILING**
SCALE (1: 25)



D:3 A-87 **TOP BAR OF PC-4b DETAILING**
SCALE (1: 25)

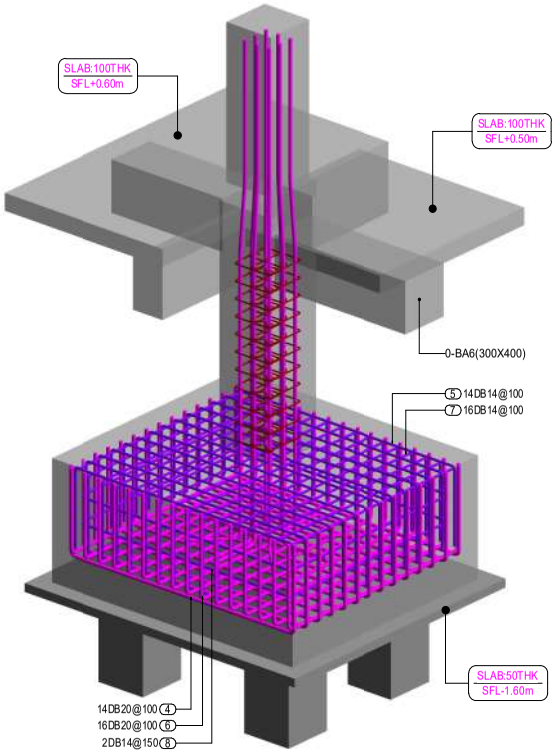


D:4 A-87 **SECTION (4-4)**
SCALE (1: 25)



D:5 A-87 **SECTION (5-5)**
SCALE (1: 10)

PC-4b Rebar Schedule					
Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	RB8	11	1.07 m	4.67 kg	250, 250, 250, 250, 60, 60
2	DB20	8	24.72 m	60.97 kg	800, 400, 1625, 300
3	RB8	22	0.74 m	3.21 kg	60, 250, 60
4	DB20	14	2.50 m	86.29 kg	515, 1535, 515
5	DB14	14	2.35 m	39.74 kg	450, 1495, 450
6	DB20	16	2.28 m	90.13 kg	495, 1360, 495
7	DB14	16	2.17 m	42.03 kg	450, 1320, 450
8	DB14	4	5.99 m	14.47 kg	800, 1440, 800
Total		105	41.83 m	341.51 kg	



D:6 A-87 **PC- 4b 3D VIEW**
SCALE ()

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

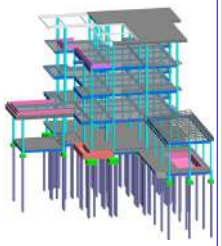
STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS | DATE

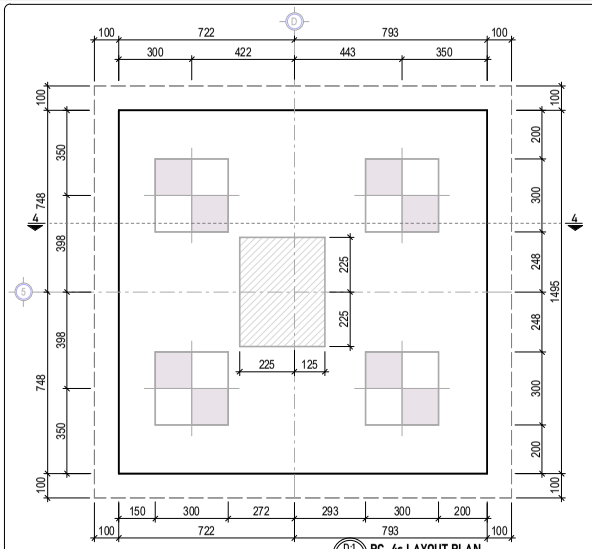


WORKING DRAWING
FOR CONSTRUCTION

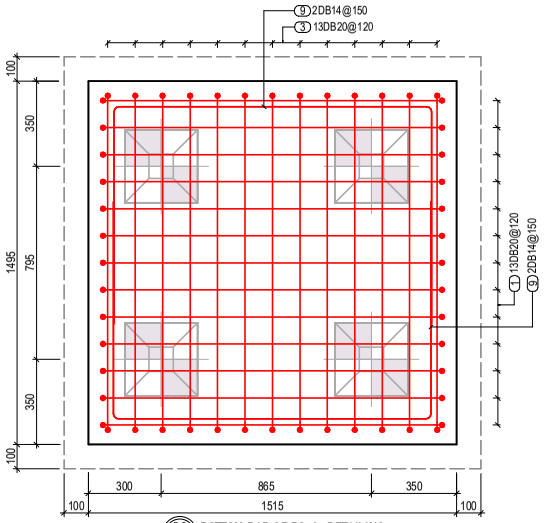
DRAWING TITLE

PC-4b DETAILING

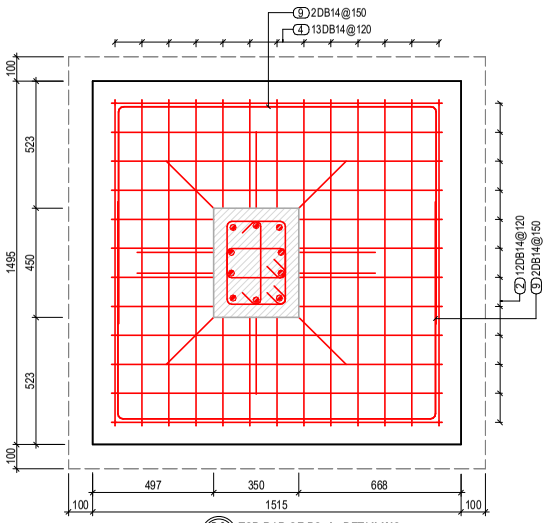
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-87
DATE:	19/10/2021
DRAWING SIZE	A3



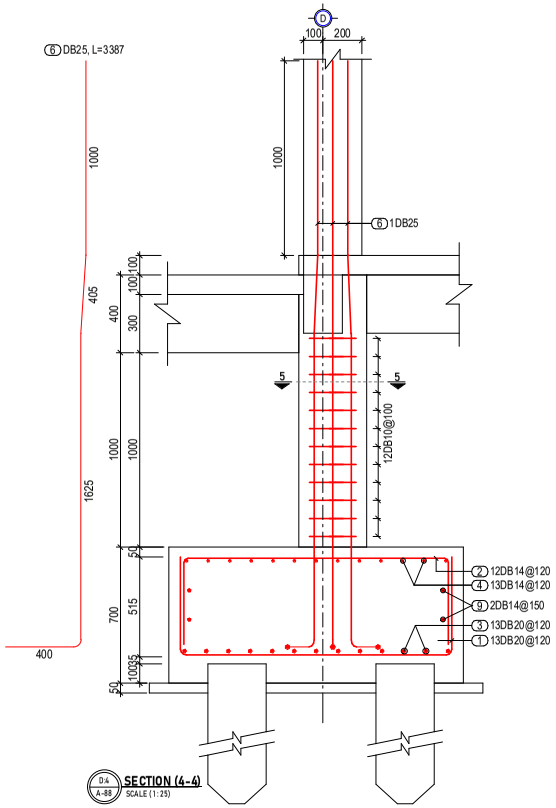
D:1 A-88 PC-4c LAYOUT PLAN
SCALE (1: 20)



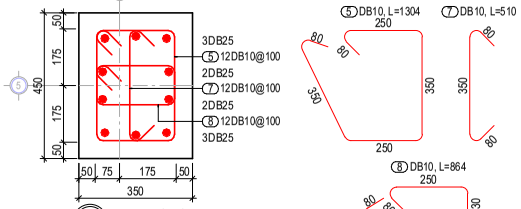
D:2 A-88 BOTTOM BAR OF PC-4c DETAILING
SCALE (1: 20)



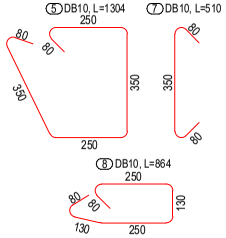
D:3 A-88 TOP BAR OF PC-4c DETAILING
SCALE (1: 20)



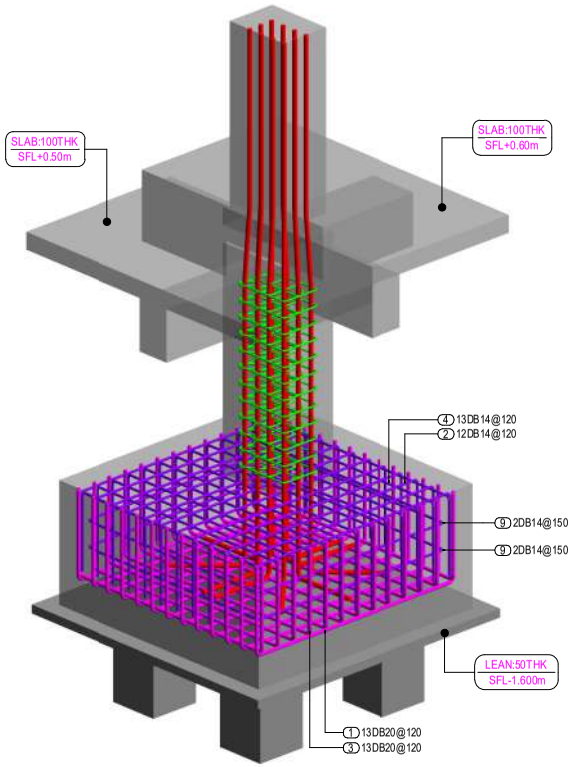
D:4 A-88 SECTION (4-4)
SCALE (1: 25)



D:5 A-88 SECTION (5-5)
SCALE (1: 15)



PC-4c Rebar Schedule					
Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB20	13	2.38 m	76.28 kg	515 / 1415 / 515
2	DB14	12	2.23 m	32.32 kg	450 / 1375 / 450
3	DB20	13	2.32 m	74.35 kg	495 / 1395 / 495
4	DB14	13	2.21 m	34.70 kg	450 / 1355 / 450
5	DB10	12	1.30 m	9.65 kg	350 / 250 / 80 / 80 / 250 / 350
6	DB25	10	27.09 m	130.50 kg	400 / 1000 / 405 / 1625
7	DB10	12	0.51 m	3.77 kg	80 / 350 / 80
8	DB10	12	0.86 m	6.39 kg	250 / 130 / 80 / 80 / 130 / 250
9	DB14	4	6.15 m	14.86 kg	900 / 1320 / 900
Total		101	45.06 m	382.83 kg	



D:6 A-88 PC-4c 3D VIEW
SCALE ()

PROJECT : VEAL SBOV VILLA

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

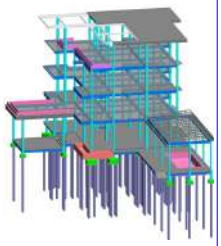
STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS | DATE

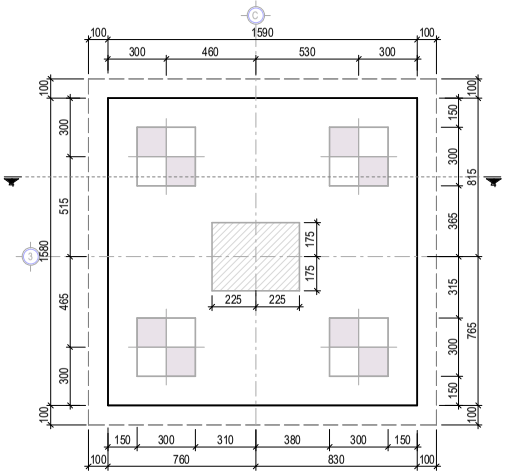


WORKING DRAWING
FOR CONSTRUCTION

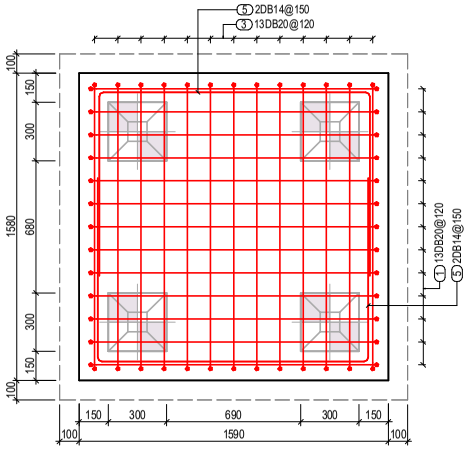
DRAWING TITLE

PC-4c DETAILING

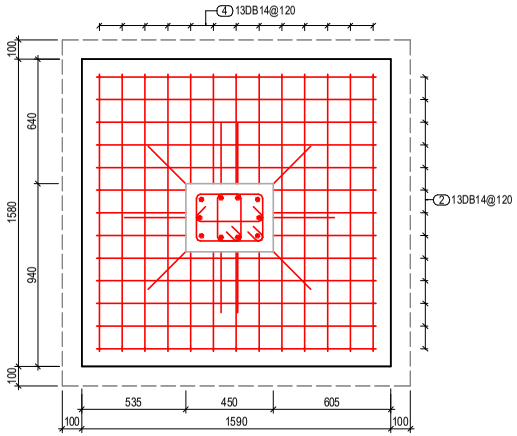
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-88
DATE:	19/10/2021
DRAWING SIZE	A3



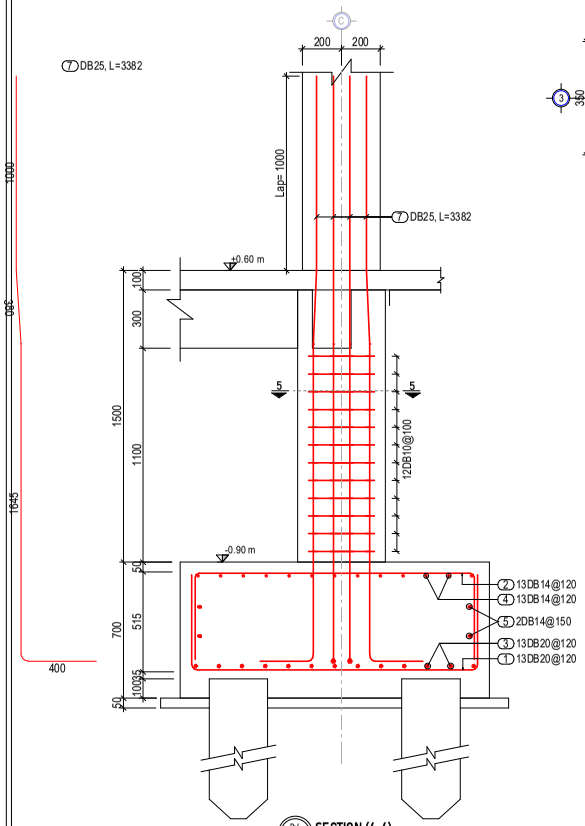
D.1 A-89 **PC-4d LAYOUT PLAN**
SCALE (1 : 25)



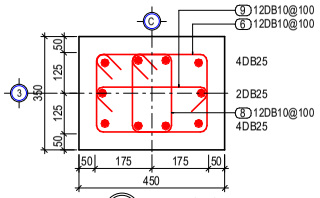
D.2 A-89 **BOTTOM BAR OF PC-4d DETAILING**
SCALE (1 : 25)



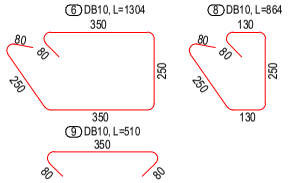
D.3 A-89 **TOP BAR OF PC-4d DETAILING**
SCALE (1 : 25)



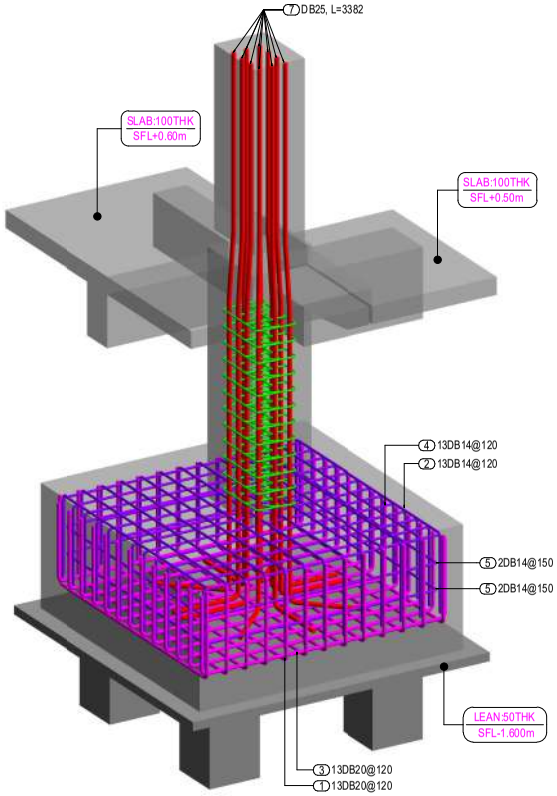
D.4 A-89 **SECTION (4-4)**
SCALE (1 : 25)



D.5 A-89 **SECTION (5-5)**
SCALE (1 : 15)



PC-4d Rebar Schedule					
Rebar. Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB20	13	2.42 m	77.72 kg	500 / 1490 / 500
2	DB14	13	2.30 m	36.19 kg	450 / 1450 / 450
3	DB20	13	2.31 m	74.19 kg	450 / 1480 / 450
4	DB14	13	2.29 m	36.04 kg	450 / 1440 / 450
5	DB14	4	6.52 m	15.75 kg	950 / 1405 / 950
6	DB10	12	1.30 m	9.65 kg	350 / 80 / 80 / 250 / 350 / 250
7	DB25	10	27.05 m	130.30 kg	1000 / 380 / 1645 / 400
8	DB10	12	0.86 m	6.39 kg	250 / 130 / 80 / 80 / 130 / 250
9	DB10	12	0.51 m	3.77 kg	80 / 350 / 80
Total		102	45.59 m	390.02 kg	

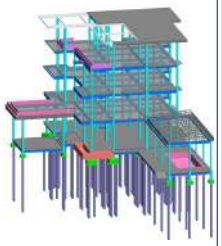


D.6 A-89 **PC-4d 3D VIEW**
SCALE ()

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

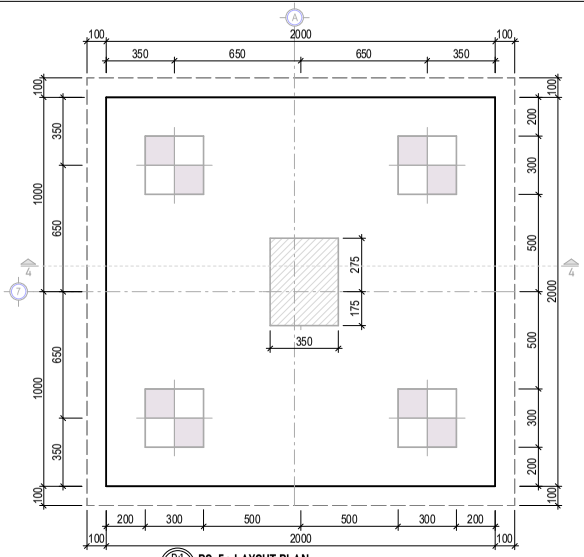


WORKING DRAWING
FOR CONSTRUCTION

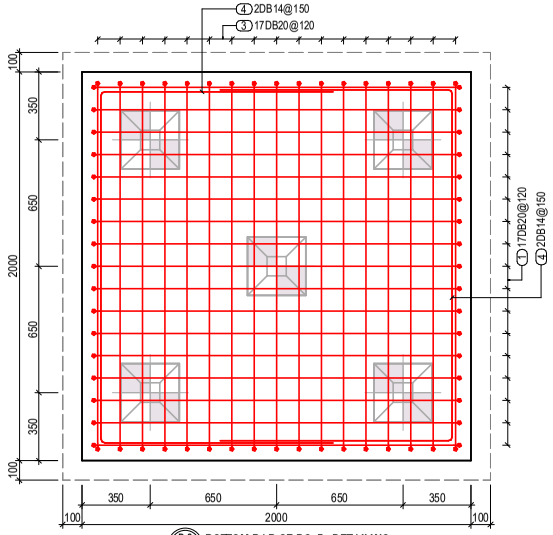
DRAWING TITLE

PC-4d DETAILING

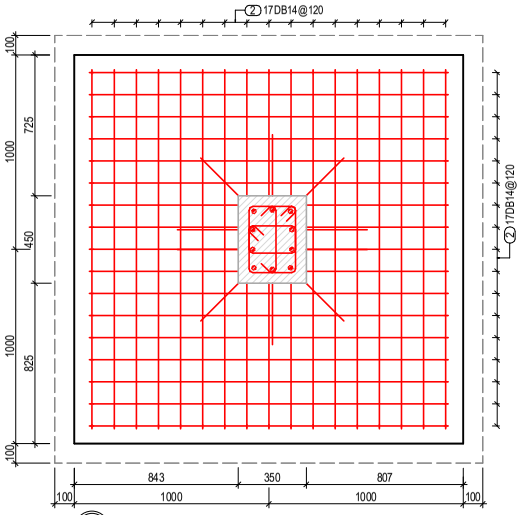
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-89
DATE:	19/10/2021
DRAWING SIZE	A3



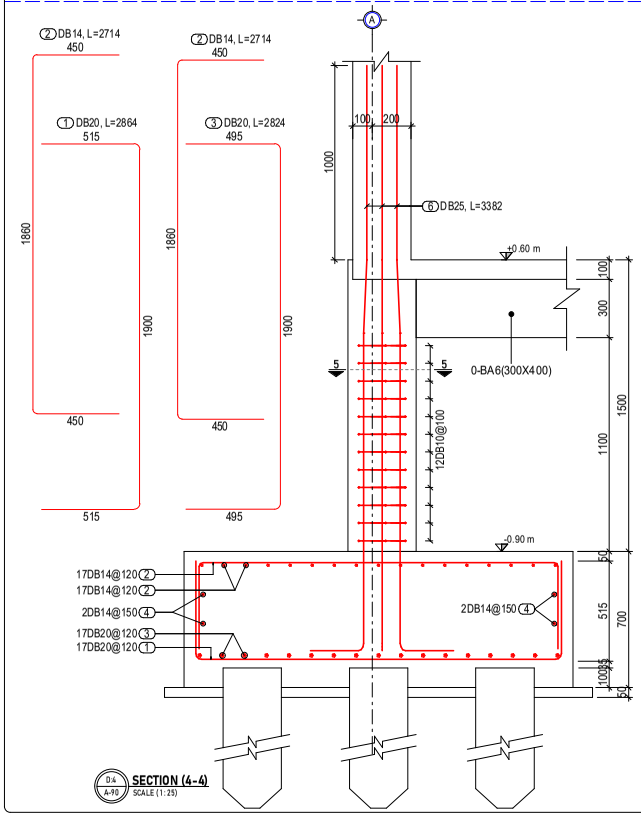
D:1 A-90 **PC-5a LAYOUT PLAN**
SCALE (1: 25)



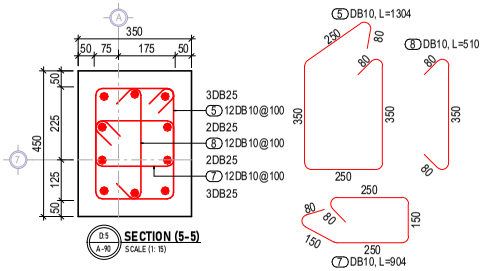
D:2 A-90 **BOTTOM BAR OF PC-5a DETAILING**
SCALE (1: 25)



D:3 A-90 **TOP BAR OF PC-5a DETAILING**
SCALE (1: 25)



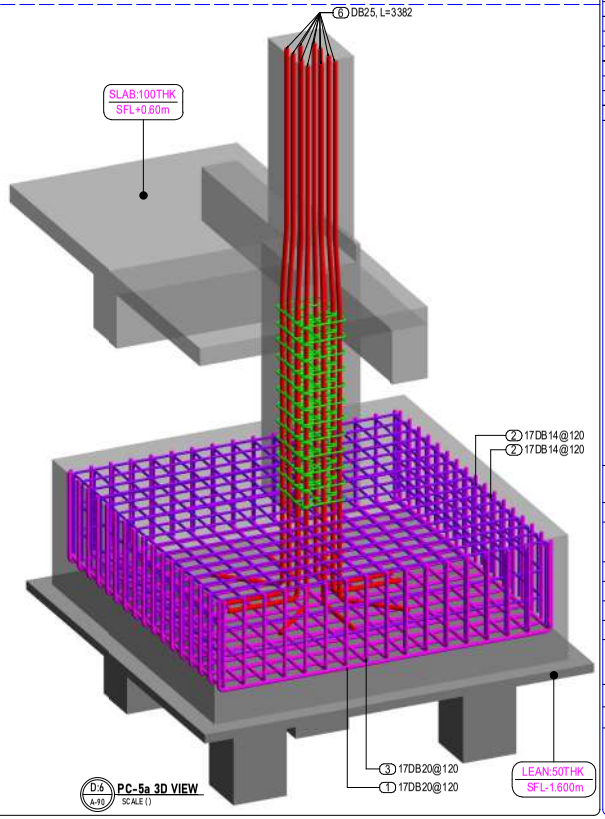
D:4 A-90 **SECTION (4-4)**
SCALE (1: 25)



D:5 A-90 **SECTION (5-5)**
SCALE (1: 15)

PC-5a Rebar Schedule

Rebar .Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB20	17	2.86 m	120.08 kg	515 / 1900 / 515
2	DB14	34	5.43 m	111.51 kg	450 / 1860 / 450
3	DB20	17	2.82 m	118.41 kg	495 / 1900 / 495
4	DB14	4	8.35 m	20.18 kg	1200 / 1820 / 1200
5	DB10	12	1.30 m	9.65 kg	350 / 80 / 80 / 250 / 350
6	DB25	10	27.05 m	130.30 kg	1000 / 380 / 1645 / 400
7	DB10	12	0.90 m	6.69 kg	250 / 80 / 80 / 150 / 150 / 250
8	DB10	12	0.51 m	3.77 kg	80 / 350 / 80
Total		118	49.24 m	520.59 kg	

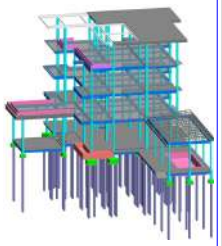


D:6 A-90 **PC-5a 3D VIEW**
SCALE ( )

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

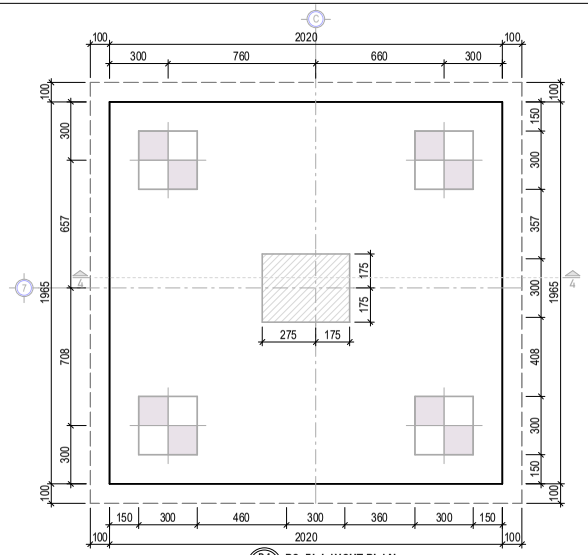


WORKING DRAWING
FOR CONSTRUCTION

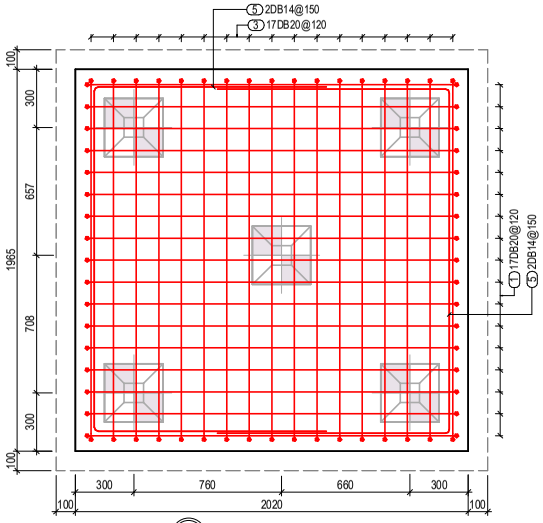
DRAWING TITLE

PC-5a DETAILING

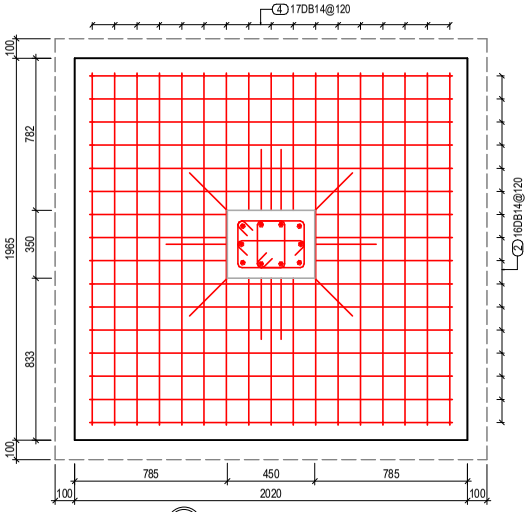
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-90
DATE:	19/10/2021
DRAWING SIZE	A3



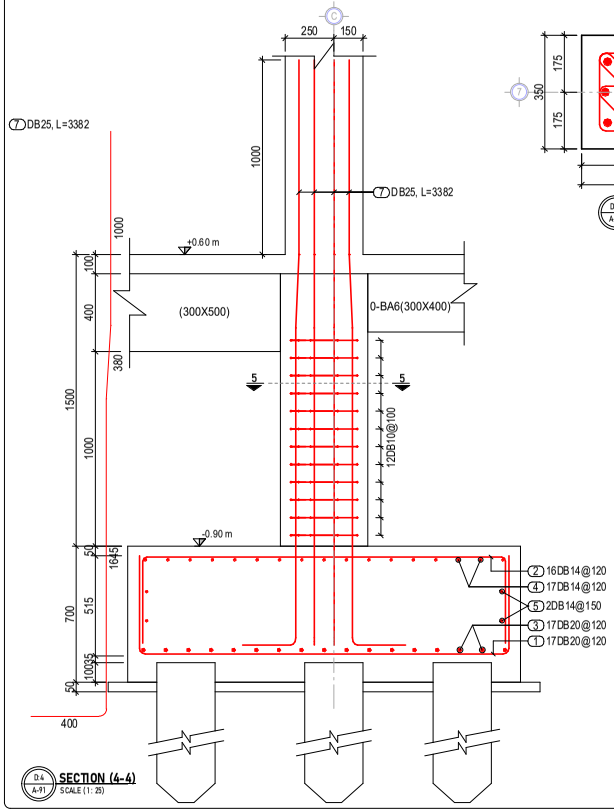
D:1 A-91 **PC-5b LAYOUT PLAN**
SCALE (1 : 25)



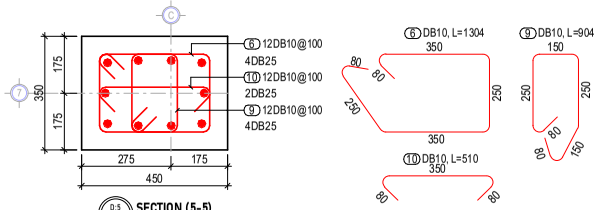
D:2 A-91 **BOTTOM BAR OF PC-5b DETAILING**
SCALE (1 : 25)



D:3 A-91 **TOP BAR OF PC-5b DETAILING**
SCALE (1 : 25)

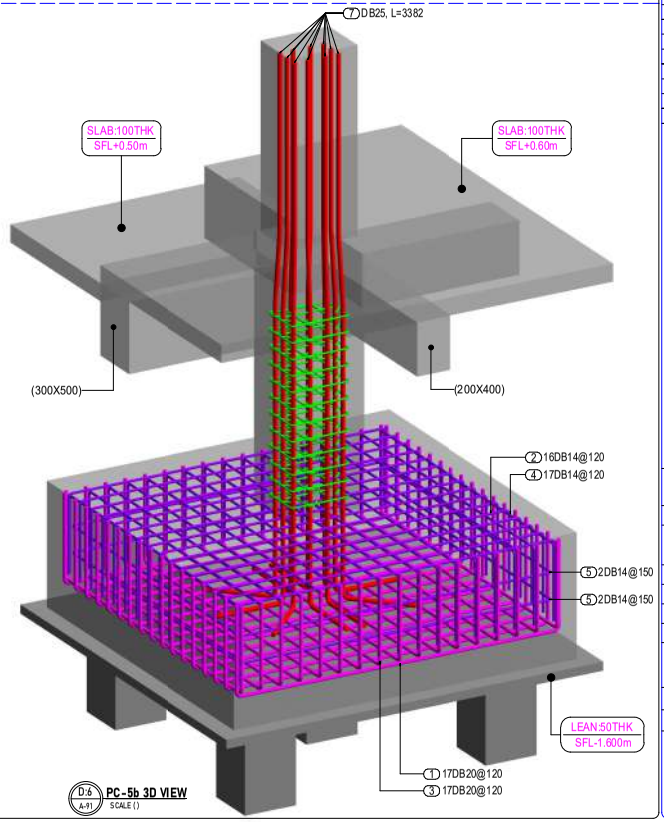


D:4 A-91 **SECTION (4-4)**
SCALE (1 : 25)



D:5 A-91 **SECTION (5-5)**
SCALE (1 : 15)

PC-5b Rebar Schedule					
Rebar Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB20	17	2.88 m	120.92 kg	515 1920 515
2	DB14	16	2.73 m	52.86 kg	450 1880 450
3	DB20	17	2.79 m	116.94 kg	495 1865 495
4	DB14	17	2.65 m	54.42 kg	435 1825 435
5	DB14	4	8.28 m	20.01 kg	1200 1785 1200
6	DB10	12	1.30 m	9.65 kg	350 80 80 250 250 350
7	DB25	10	27.05 m	130.30 kg	1000 380 1645 400
9	DB10	12	0.90 m	6.69 kg	250 80 80 150 150 250
10	DB10	12	0.51 m	3.77 kg	80 350 80
Total		117	49.11 m	515.56 kg	

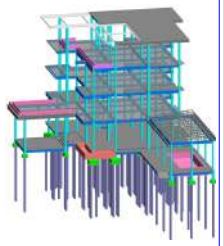


D:6 A-91 **PC-5b 3D VIEW**
SCALE ( )

PROJECT : **VEAL SBOV VILLA**

OWNER

PROJECT DIRECTOR	
CHIEF SURVEY	
ARCHITECTS	
STRUCTURAL ENGINEERS	
MECHANICAL ENGINEERS	
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE

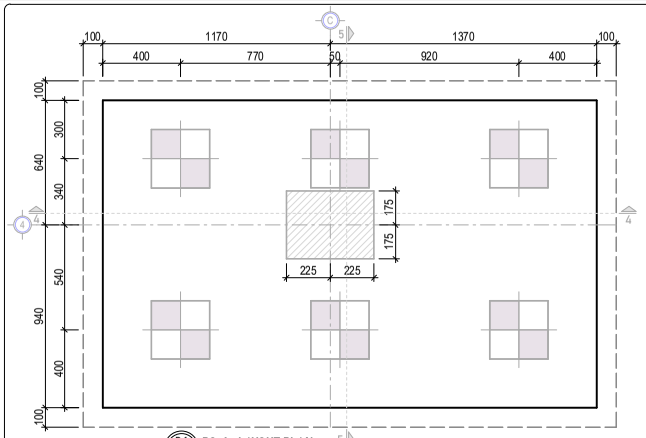


WORKING DRAWING
FOR CONSTRUCTION

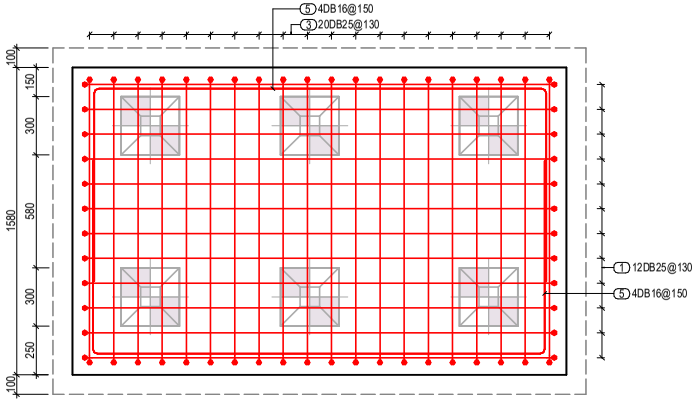
DRAWING TITLE

PC-5b DETAILING

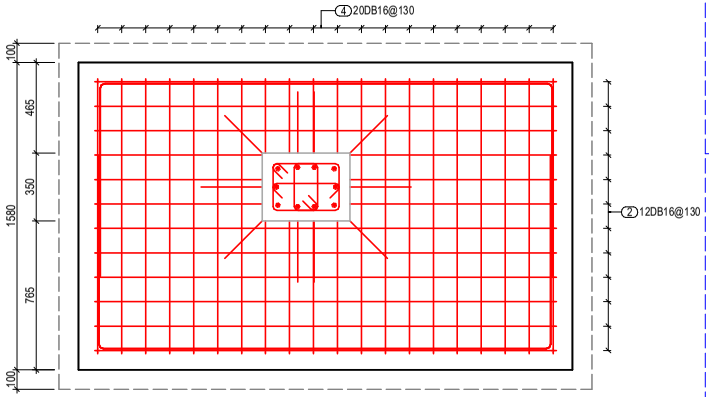
Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-91
DATE:	19/10/2021
DRAWING SIZE	A3



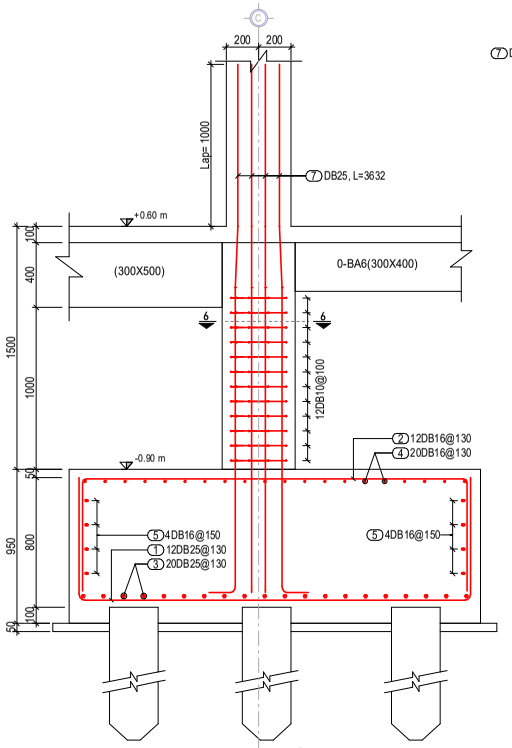
D:1 A-92 PC-6a LAYOUT PLAN
SCALE (1: 25)



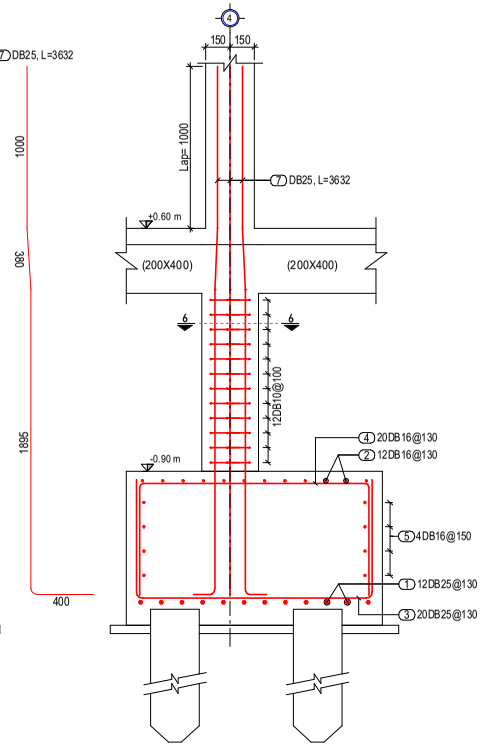
D:2 A-92 BOTTOM BAR OF PC-6a DETAILING
SCALE (1: 25)



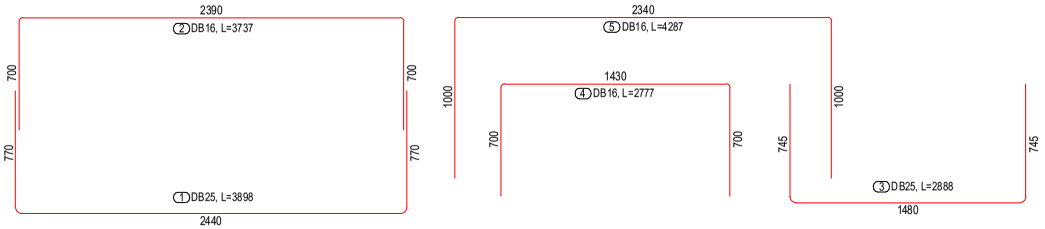
D:3 A-92 TOP BAR OF PC-6a DETAILING
SCALE (1: 25)

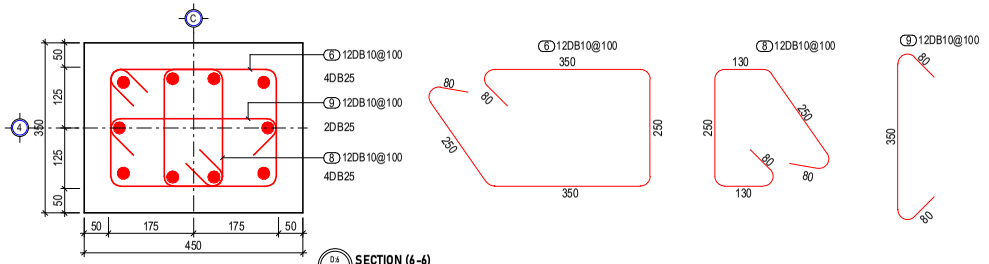


D:4 A-92 SECTION (4-4)
SCALE (1: 30)



D:5 A-92 SECTION (5-5)
SCALE (1: 30)





D:6 A-92 SECTION (6-6)
SCALE (1: 10)

PROJECT : VEAL SBOV VILLA

OWNER

PROJECT DIRECTOR

CHIEF SURVEY

ARCHITECTS

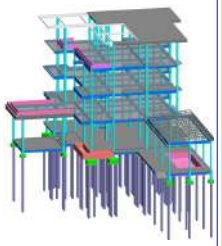
STRUCTURAL ENGINEERS

MECHANICAL ENGINEERS

ELECTRICAL ENGINEERS

SANITARY ENGINEERS

REVISIONS | DATE

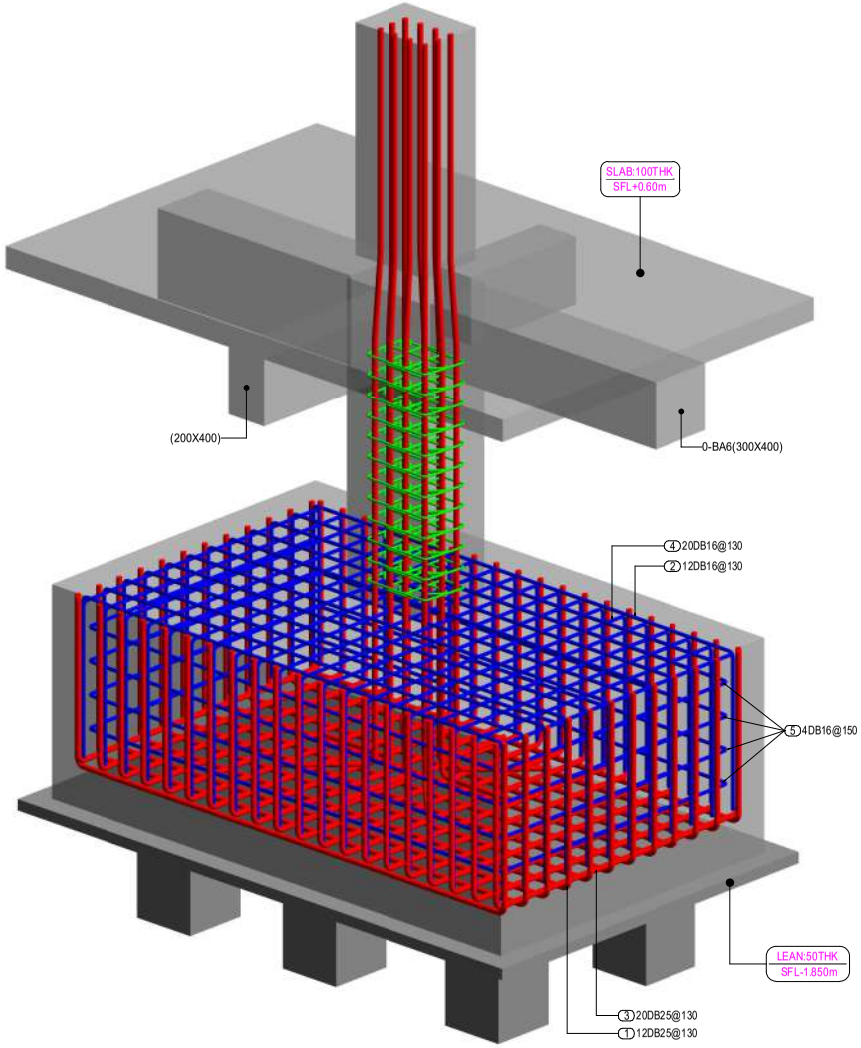


WORKING DRAWING
FOR CONSTRUCTION

DRAWING TITLE

PC-6a DETAILING

Drawn by	Mr. Rath RunKakada
Design by	
Checked by	
Approved by	
DRAWING NO.	A-92
DATE:	19/10/2021
DRAWING SIZE	A3



D.1 A-93 **PC-6a 3D VIEW**
SCALE 1:

PC-6a Rebar Schedule					
Rebar.Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB25	12	3.90 m	180.24 kg	770, 2440, 770
2	DB16	12	3.74 m	70.79 kg	700, 2390, 700
3	DB25	20	2.89 m	222.56 kg	745, 1480, 745
4	DB16	20	2.78 m	87.67 kg	700, 1430, 700
5	DB16	8	8.57 m	54.14 kg	1000, 2340, 1000
6	DB10	12	1.30 m	9.65 kg	350, 250, 80, 80, 250, 350
7	DB25	10	29.05 m	139.94 kg	1000, 380, 1895, 400
8	DB10	12	0.86 m	6.39 kg	250, 130, 80, 80, 130, 250
9	DB10	12	0.51 m	3.77 kg	80, 350, 80
Total		118	53.61 m	775.14 kg	

PROJECT : **VEAL SBOV VILLA**

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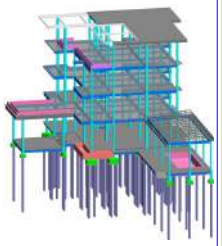

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PC-6a SCHEDULE AND 3D VIEW

Drawn by	Mr. Rath RunKakada
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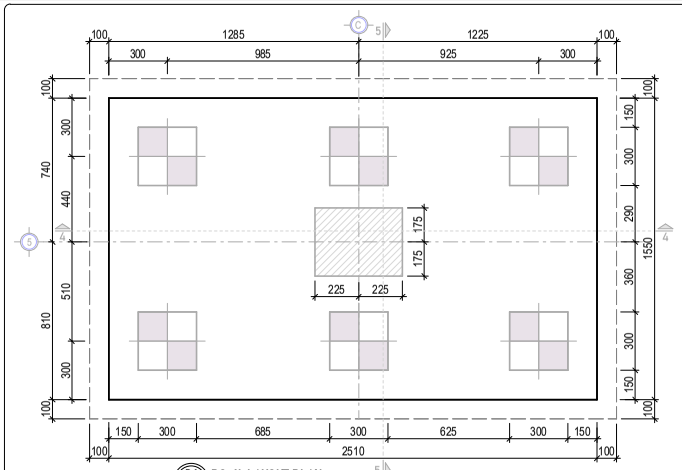
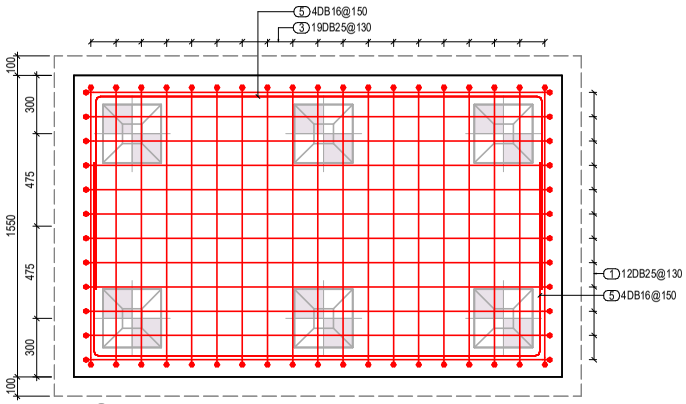
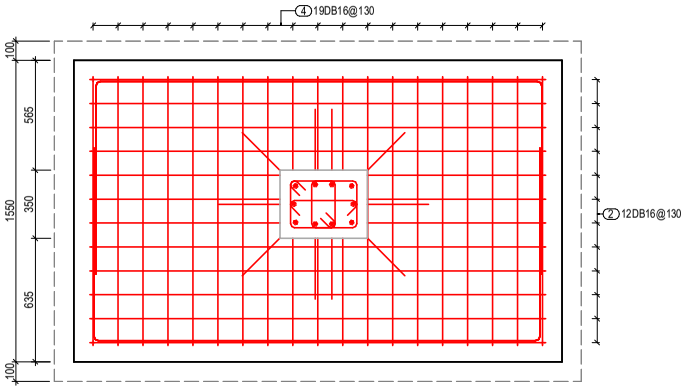
Approved by	
DRAWING NO.	A-93
DATE:	19/10/2021
DRAWING SIZE	A3



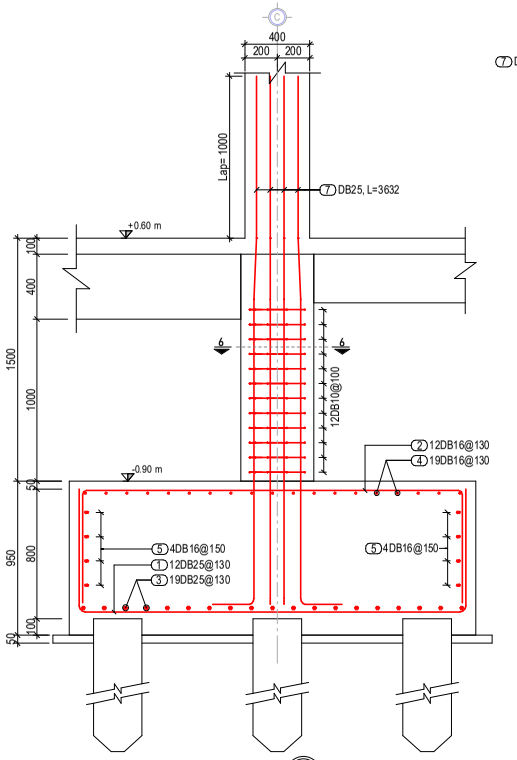
D:1 A-94 **PC-6b LAYOUT PLAN**
SCALE (1: 25)



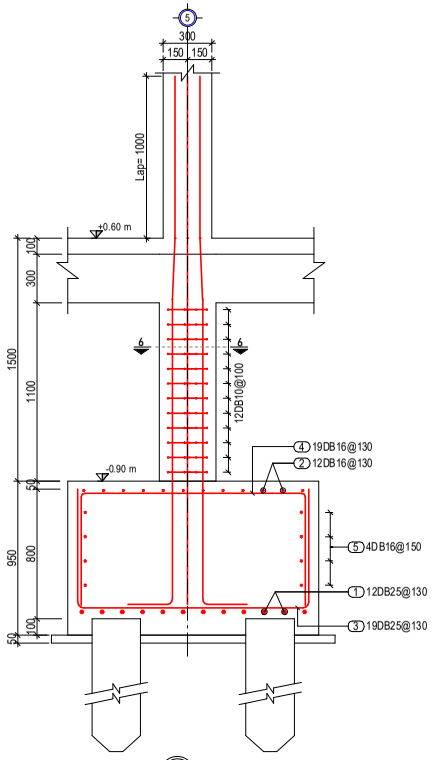
D:2 A-94 **BOTTOM BAR OF PC-6b DETAILING**
SCALE (1: 25)



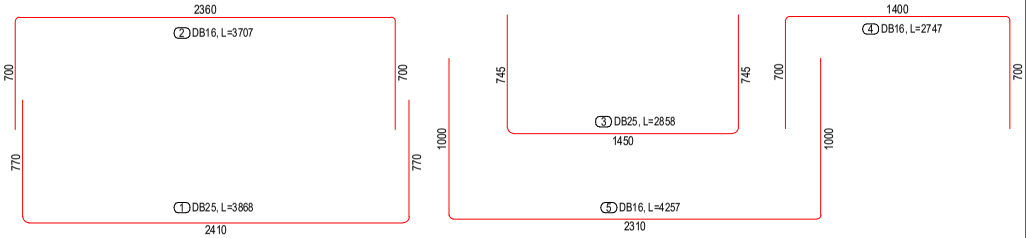
D:3 A-94 **TOP BAR OF PC-6b DETAILING**
SCALE (1: 25)

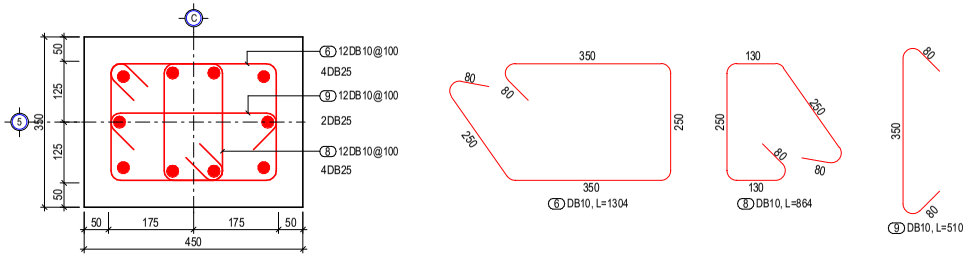


D:4 A-94 **SECTION (4-4)**
SCALE (1: 30)



D:5 A-94 **SECTION (5-5)**
SCALE (1: 30)





D:6 A-94 **SECTION (6-6)**
SCALE (1: 10)

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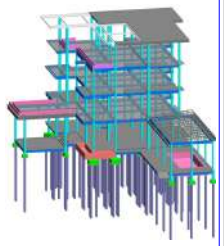
ELECTRICAL ENGINEERS	
SANITARY ENGINEERS	
REVISIONS	DATE



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PC-6b DETAILING

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DRAWING NO.	A-94
DATE:	19/10/2021
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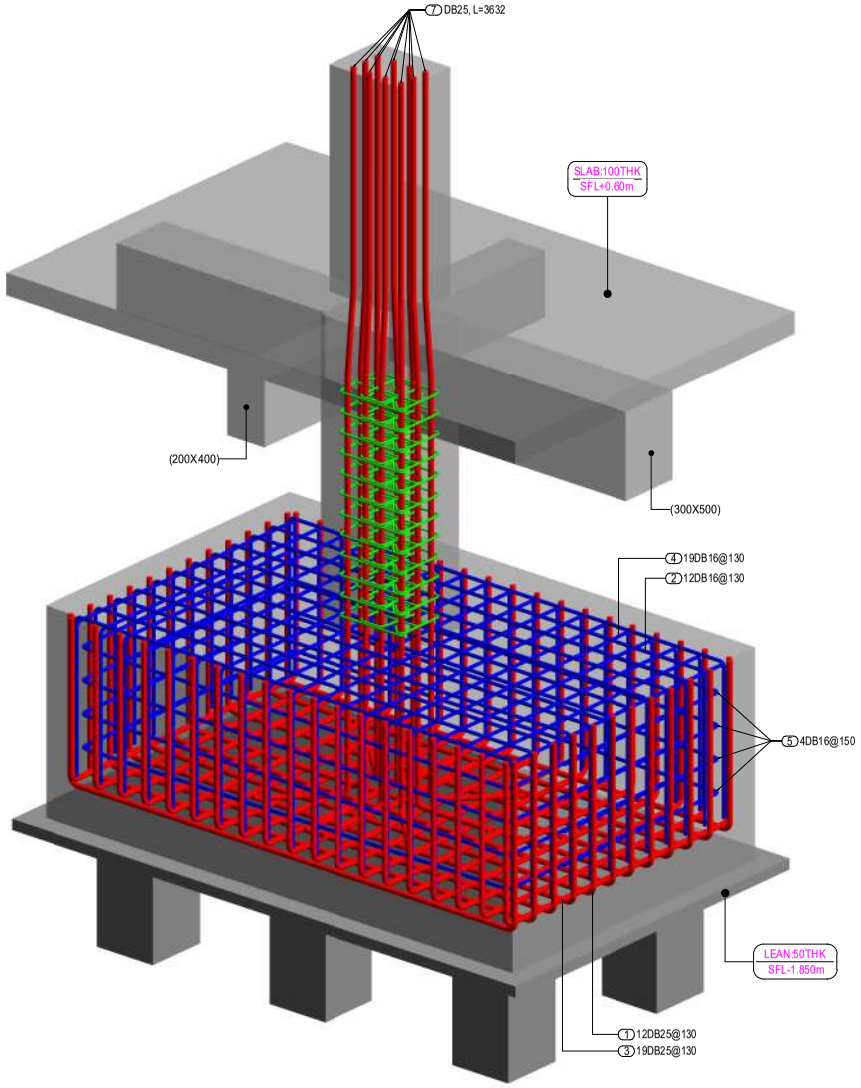

D1 A-95 **PC-6b 3D VIEW**
SCALE(1)

PC-6b Rebar Schedule

Rebar.Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB25	12	3.87 m	178.85 kg	770, 2410, 770
2	DB16	12	3.71 m	70.22 kg	700, 2360, 700
3	DB25	19	2.86 m	209.23 kg	745, 1450, 745
4	DB16	19	2.75 m	82.39 kg	700, 1400, 700
5	DB16	8	8.51 m	53.76 kg	1000, 2310, 1000
6	DB10	12	1.30 m	9.65 kg	350, 250, 80, 80, 250, 350
7	DB25	10	29.05 m	139.94 kg	1000, 380, 1895, 400
8	DB10	12	0.86 m	6.39 kg	250, 130, 80, 80, 130, 250
9	DB10	12	0.51 m	3.77 kg	80, 350, 80
Total		116	53.43 m	754.20 kg	

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SANITARY ENGINEERS

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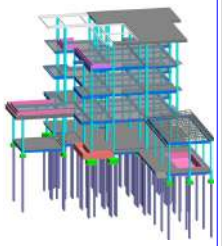

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PC-6b SCHEDULE AND 3D VIEW

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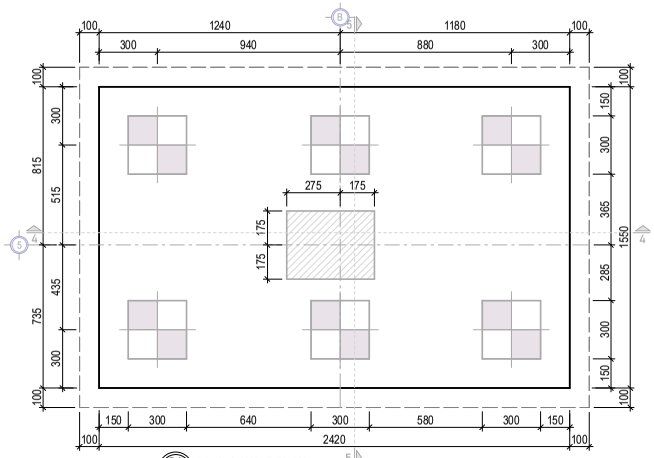
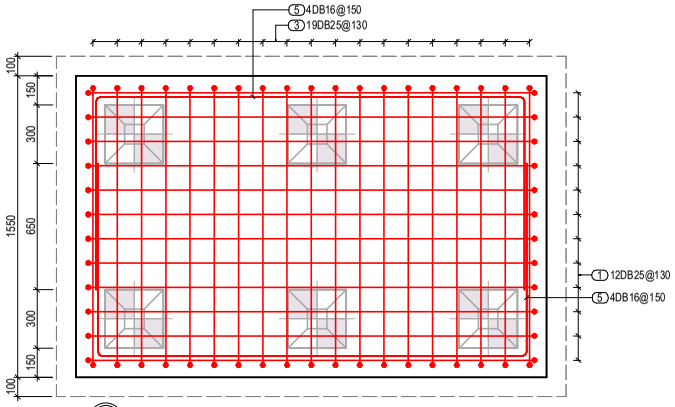
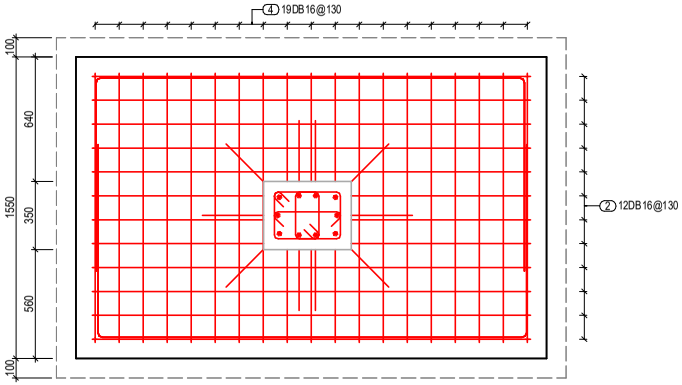
Approved by	
DRAWING NO.	A-95
DATE:	19/10/2021
DRAWING SIZE	A3



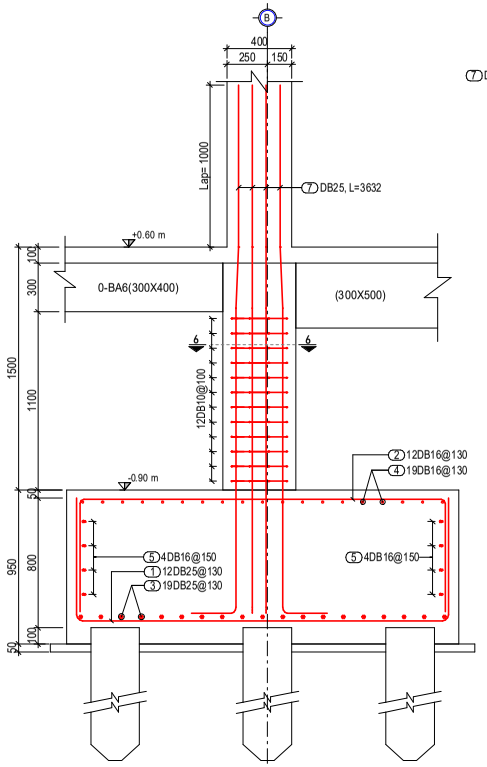
D.1 A-96 **PC-6c LAYOUT PLAN**
SCALE (1: 25)



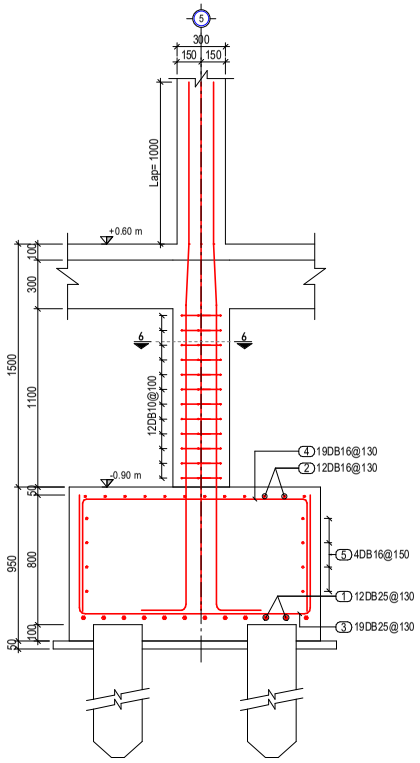
D.2 A-96 **BOTTOM BAR OF PC-6c DETAILING**
SCALE (1: 25)



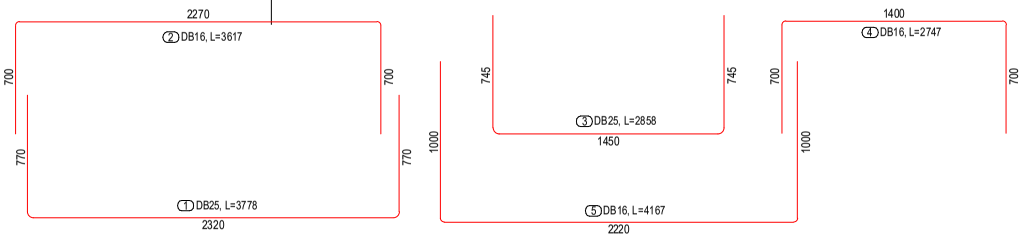
D.3 A-96 **TOP BAR OF PC-6c DETAILING**
SCALE (1: 25)

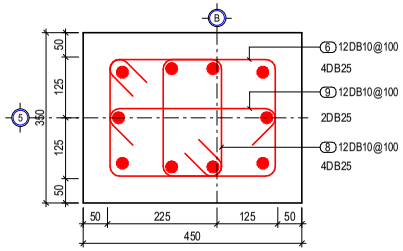


D.4 A-96 **SECTION (4-4)**
SCALE (1: 30)

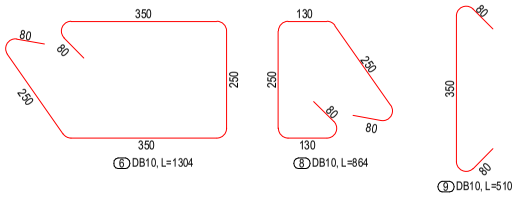


D.5 A-96 **SECTION (5-5)**
SCALE (1: 30)





D.6 A-96 **SECTION (6-6)**
SCALE (1:10)



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SANITARY ENGINEERS	
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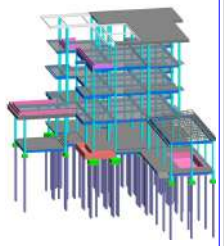

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PC-6c DETAILING

Drawn by	Mr. Rath RunKakada
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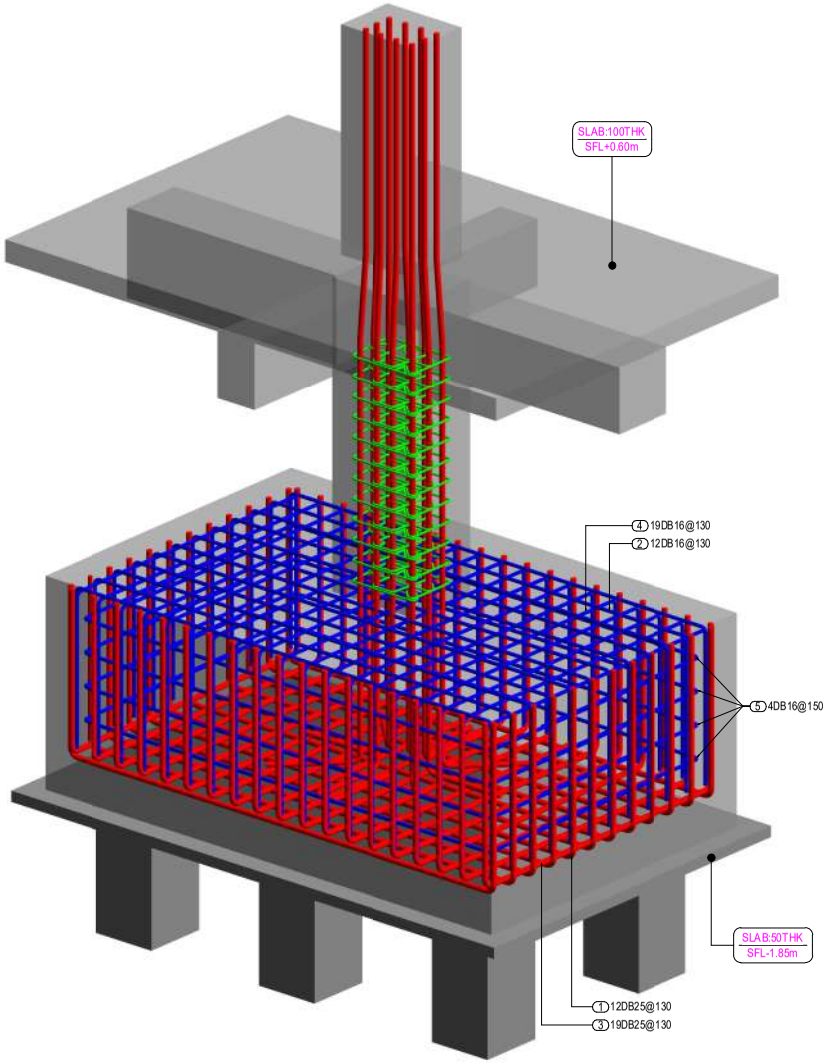
DRAWING NO.	A-96
DATE:	19/10/2021
DRAWING SIZE	A3



D:1 A-97 **PC-6c 3D VIEW**
SCALE (1)

PC-6c Rebar Schedule

Rebar.Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB25	12	3.78 m	174.69 kg	770, 2320, 770
2	DB16	12	3.62 m	68.51 kg	700, 2270, 700
3	DB25	19	2.86 m	209.23 kg	745, 1450, 745
4	DB16	19	2.75 m	82.39 kg	700, 1400, 700
5	DB16	8	8.33 m	52.62 kg	1000, 2220, 1000
6	DB10	12	1.30 m	9.65 kg	350, 250, 80, 80, 250, 350
7	DB25	10	29.05 m	139.94 kg	1000, 380, 1895, 400
8	DB10	12	0.86 m	6.39 kg	250, 130, 80, 80, 130, 250
9	DB10	12	0.51 m	3.77 kg	80, 350, 80
Total		116	53.07 m	747.19 kg	

PROJECT : **VEAL SBOV VILLA**

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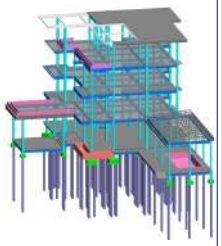

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PC-6c SCHEDULE AND 3D VIEW

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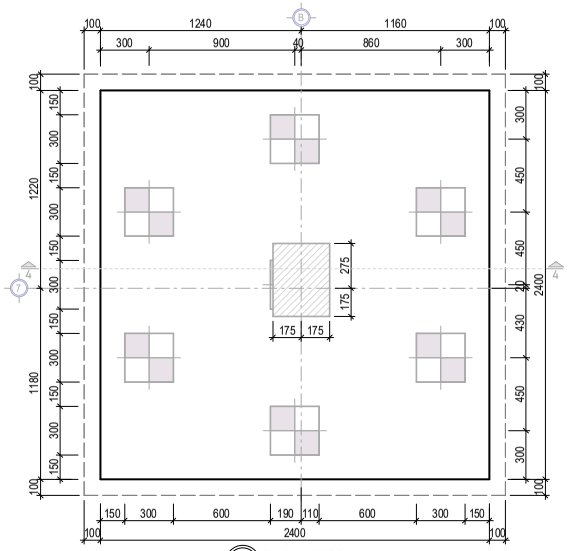
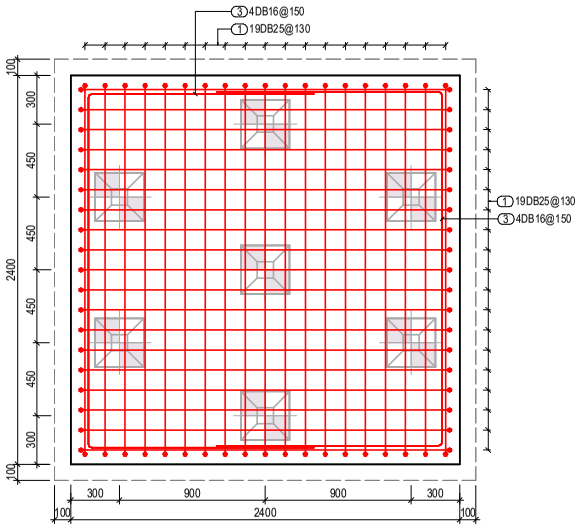
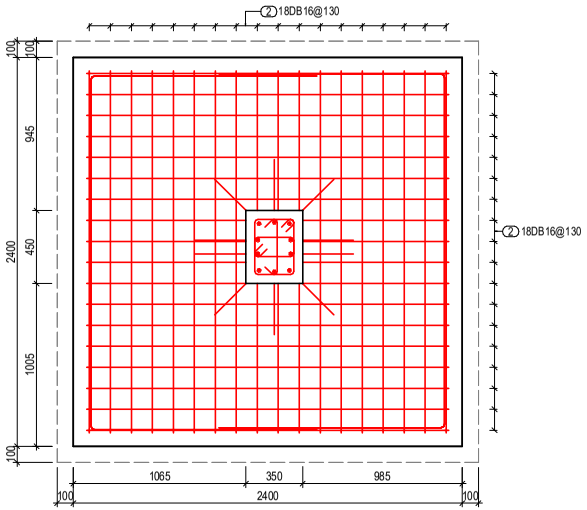
DRAWING NO.	A-97
DATE:	19/10/2021
DRAWING SIZE	A3



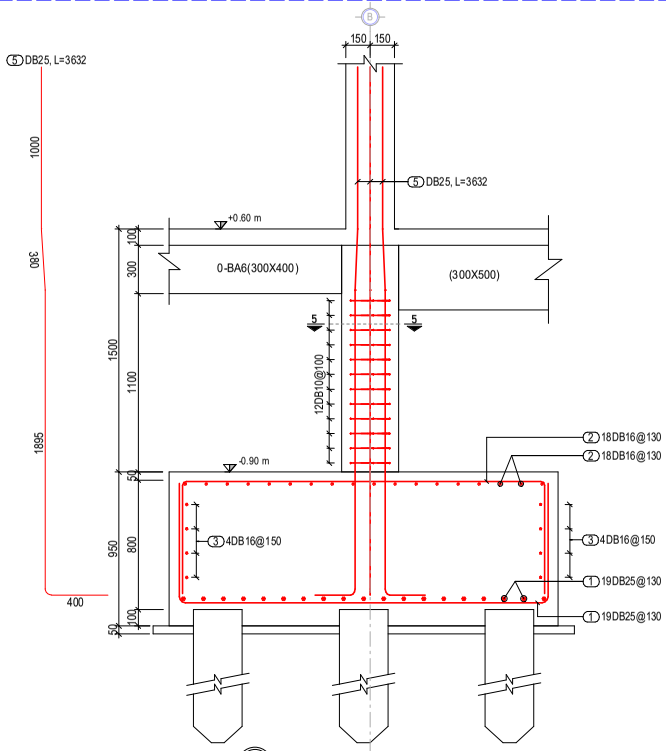
D:1 A-98 **PC-7 LAYOUT PLAN**
SCALE (1 : 30)



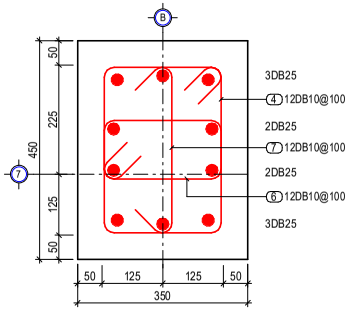
D:2 A-98 **BOTTOM BAR OF PC-7 DETAILING**
SCALE (1 : 30)



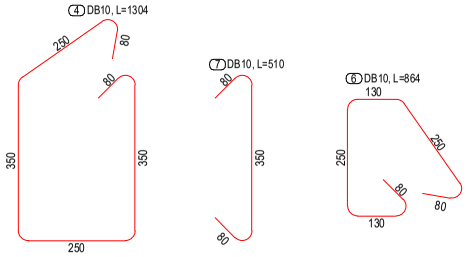
D:3 A-98 **TOP BAR OF PC-7 DETAILING**
SCALE (1 : 30)

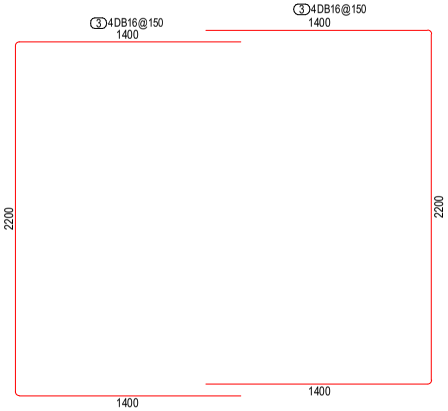


D:4 A-98 **SECTION (4-4)**
SCALE (1: 30)



D:5 A-98 **SECTION (5-5)**
SCALE (1: 10)





PROJECT : **VEAL SBOV VILLA**

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SANITARY ENGINEERS	
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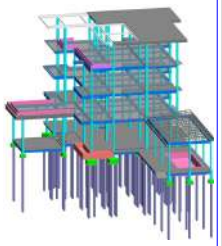

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PC-7 DETAILING

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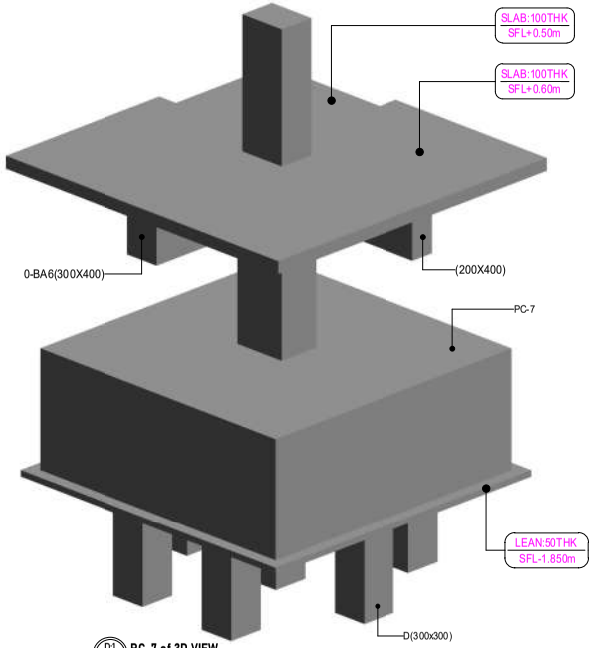
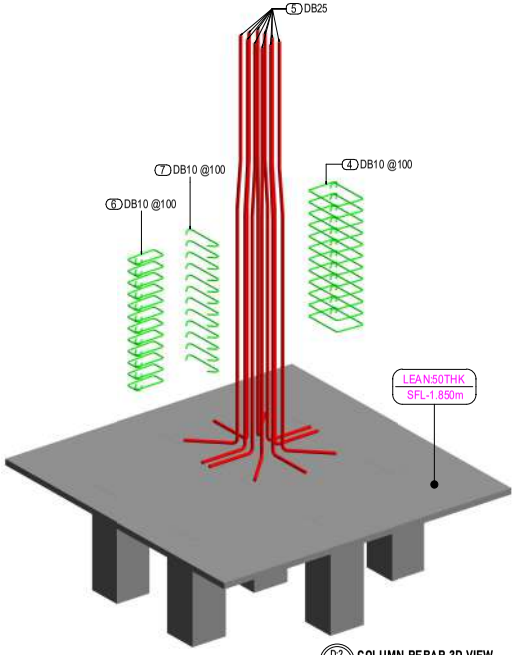
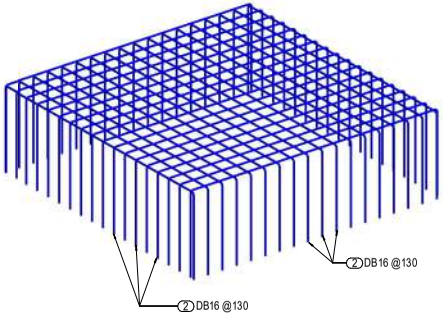
Approved by	
DRAWING NO.	A-98
DATE:	19/10/2021
DRAWING SIZE	A3

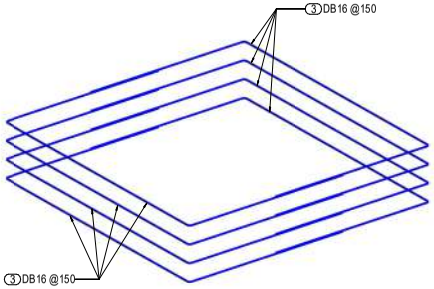


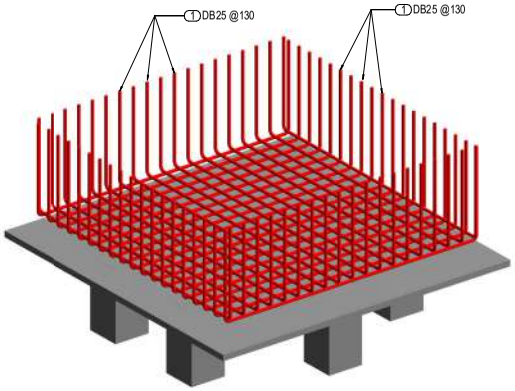
D:1 A-99 **PC-7 of 3D VIEW**
SCALE ( )



D:2 A-99 **COLUMN REBAR 3D VIEW**
SCALE ( )







D:3 A-99 **PILE CAP REBAR 3D VIEW**
SCALE ( )

PC-7 Rebar Schedule

Rebar.Num	Diameter	Quantity	Bar Length	Total Weight	Rebar Shape
1	DB25	12	3.78 m	174.69 kg	770, 770, 2320
2	DB16	12	3.62 m	68.51 kg	700, 700, 2270
3	DB25	19	2.86 m	209.23 kg	745, 745, 1450
4	DB16	19	2.75 m	82.39 kg	700, 700, 1400
5	DB16	8	8.33 m	52.62 kg	1000, 1000, 2220
6	DB10	12	1.30 m	9.65 kg	350, 80, 80, 250, 250, 350
7	DB25	10	29.05 m	139.94 kg	1000, 380, 1895, 400
8	DB10	12	0.86 m	6.39 kg	250, 80, 80, 130, 130, 250
9	DB10	12	0.51 m	3.77 kg	80, 80, 350
Total		116	53.07 m	747.19 kg	

PROJECT : **VEAL SBOV VILLA**

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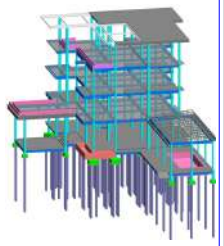

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PC-7 SCHEDULE AND 3D VIEW

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Approved by	
DRAWING NO.	A-99
DATE:	19/10/2021
DRAWING SIZE	A3

Project: Shop House (Oct 2021 – Dec 2022)

Structural Engineer

- Structural method statement preparation
- Site coordination and workforce supervision
- Quality and safety compliance monitoring

Project Name: Shop Houses

Location: Sangkat Kouk Roka, Khan Preaek Phnov, Phnom Penh, Cambodia

Google Map: https://maps.app.goo.gl/ZwXiwY5K6obSuVmj7

Works at site construction

(Rebar Installation)

(Casting Concrete)

(Meeting with workers at site)

Project: Booyong (Jan 2021 – March 2021)

QA/QC Engineer (finishing works)

- Monitored construction quality and compliance
- Conducted site inspections and reporting
- Coordinated with site engineers and supervisors

Project Name: Flats Houses

Location: Sangkat Phnom Penh Thmey, Khan Sen Sok, Phnom Penh, Cambodia

Google Map: https://maps.app.goo.gl/F6D7K8pebZpMK38N8

Works at site construction

TF Engineering Co., Ltd (Jan 2020 – June 2020)

Structural Designer

- Performed structural analysis and design calculations
- Prepared tender documents and cost estimates
- Conducted QA/QC inspections and reporting
- Prepared as-built drawings and documentation

Company Name: TF Engineering Co., Ltd.

Location: Borey Piphup Thmey, Khan Sen Sok, Phnom Penh, Cambodia

Google Map: https://maps.app.goo.gl/iZYQF7auzBsSHr616