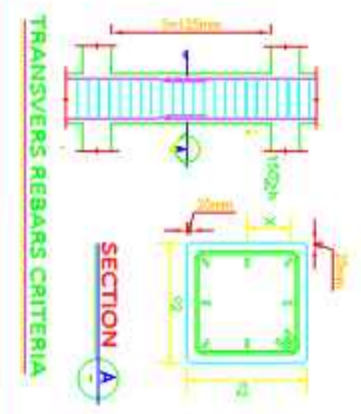


GENERAL NOTES

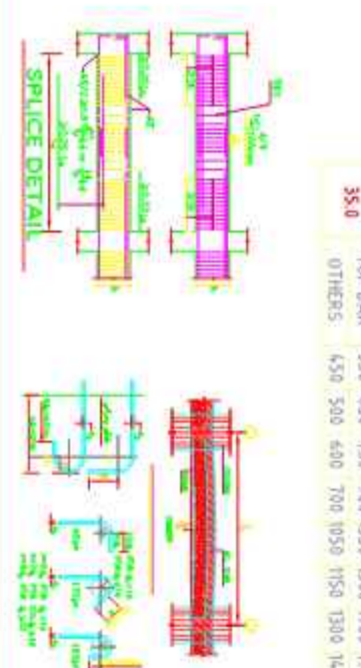
- IN CASE OF CONFLICTING INFORMATION IN TECHNICAL DOCUMENTS THE ORDER OF PRIORITY SHALL BE:
 - PRIORITY 1: DESIGN DRAWINGS
 - PRIORITY 2: THESE GENERAL NOTES
 - PRIORITY 3: TECHNICAL SPECIFICATIONS
 - PRIORITY 4: STANDARD DRAWINGS
- ALL DIMENSIONS & STAIRS SHALL BE IN MILLIMETERS & ALL COORDINATES & ELEVATIONS SHALL BE IN METERS.
- ALL REINFORCED CONCRETE WORK SHALL COMPLY WITH SBC PART-1000 CODE
- ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH THE DESIGN CODE AND HOLD DOWN BOLTS SHALL BE IN ACCORDANCE WITH THE DESIGN CODE.
- ALL GROUP UNDER BASH PLATES OR EQUIPMENT & STRUCTURAL MEMBERS SHALL BE NON-SHIMMING.
- FOR DETAILS OF CONNECTION, EXPANSION AND CONTRACTION JOINTS REFER TO SHEET 02.
- ALLOWABLE BRACING PRESSURE FOR FOUNDATION DESIGN ARE PER SOIL CONSULTANT'S RECOMMENDATION, NORMALLY BASED UPON SOIL CONDITIONS RECORDED IN BORINGS AS DESCRIBED IN SOIL REPORTS. SHOULD OTHER SOIL CONDITIONS BE ENCOUNTERED DURING CONSTRUCTION, CORRECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR WITH THE APPROVAL OF THE OWNER REPRESENTATIVE.
- ALL FOOTINGS SHALL BE PLACED ON NATURAL FILL. THE ALL BACKFILLS AND BATTERS SHALL BE EXCAVATED AND BLENDED WITH LEAN CONCRETE TO THE BOTTOM LEVEL OF FOOTINGS.
- SPACE SIZES OF REINFORCING MAY NOT BE TO SCALE, ONLY READ THE JOB SPECIFIED DIMENSIONS FROM THE DRAWINGS. MISSED DIMENSIONS SHOULD BE ASKED FROM THE CONTRACTOR.
- REINFORCING MAY BE ADJUSTED LOCALLY TO MEET REQUIREMENTS FOR ANCHOR BOLTS, BOLTS AND OTHER BARRIERED MATERIALS.
- LAP SPACES OF STEEL BARS SHALL BE STAGGERED OVER SPAN LENGTH.
- DEVELOPMENT LENGTH FOR UNCASTED DEVELOPED BARS SHALL CONFORM TO SBC 10.14.1.1.1 & SBC 10.14.1.2 FOR BARS IN SPECIAL MOMENT FRAMES.
- 12.1. DEVELOPMENT LENGTH IN TENSION (min)
 - (A) CLEAR SPACING OF BARS BEING DEVELOPED OR SPACED NOT LESS THAN BAR CLEAR COVER NOT LESS THAN 4d.



F _c (N/mm ²)	DIA (mm)	Ø10	Ø12	Ø14	Ø16	Ø20	Ø22	Ø25	Ø28	Ø32
35.0	TOP BAR	500	400	300	250	200	150	100	75	50
	OTHERS	400	300	250	200	150	100	75	50	30
30.0	TOP BAR	450	350	250	200	150	100	75	50	30
	OTHERS	350	250	200	150	100	75	50	30	20
35.0	TOP BAR	450	350	250	200	150	100	75	50	30
	OTHERS	350	250	200	150	100	75	50	30	20

RE-BAR	F _c (N/mm ²)	Ø10	Ø12	Ø14	Ø16	Ø20	Ø22	Ø25	Ø28	Ø32
25	150	200	250	250	300	350	400	450	500	
30	150	200	250	250	300	350	400	450	500	
35	150	200	250	250	300	350	400	450	500	

F _c (N/mm ²)	DIA (mm)	Ø10	Ø12	Ø14	Ø16	Ø20	Ø22	Ø25	Ø28	Ø32
35.0	TOP BAR	650	500	400	350	300	250	200	150	100
	OTHERS	500	400	350	300	250	200	150	100	75
30.0	TOP BAR	600	450	350	300	250	200	150	100	75
	OTHERS	450	350	300	250	200	150	100	75	50
35.0	TOP BAR	550	450	350	300	250	200	150	100	75
	OTHERS	450	350	300	250	200	150	100	75	50



- EXCEPT ABOVE DIA SHALL BE UNCLASSED TO 1.5 TIMES.
- TOP BAR DEVELOPMENT LENGTH SHALL BE USED WHERE HORIZONTAL REINFORCEMENT IS PLACED SUCH THAT MORE THAN 300 mm OF FRESH CONCRETE IS CAST BELOW THE DEVELOPMENT LENGTH.
- DEVELOPMENT LENGTH OF STANDARD HOOKS IN TENSION (min) FOR 90 DEGREE HOOKS WITH COVER ON BAR EXTENSION BEYOND HOOK NOT LESS THAN 30mm AND ENCLOSED WITHIN TIES OR STEERING PARALLEL TO BARS BEING DEVELOPED, SPACED NOT GREATER THAN 3dP ALONG THE LENGTH OF THE TAIL EXTENSION OF THE HOOK. PLAYS BEND FOR JOINTS OF SPECIAL MOMENT FRAMES.

CLASS A	CLASS B
ALL OTHER CONDITIONS AS PROVIDED IN AS REQUIRED	ALL OTHER CONDITIONS AS PROVIDED IN AS REQUIRED

- 21.3. SPLICES OF DEVELOPED BARS IN TENSION FOR CLEAR SPACING OF BARS BEING DEVELOPED OR SPACED NOT LESS THAN 4d, CLEAR COVER NOT LESS THAN 4d AND CLASS B SPLICES:
 - *APPLICABLE SHALL BE STAGGERED AT LEAST 600mm.
24. MAXIMUM CONCRETE WATER PER CENTAGE RATIO (W/C) BE LIMITED TO 0.4



No.	Date	Revised by	Revised for



HEB PLAN

PROJECT: Tower T01, Pile and Foundation Drawings

DATE: 2024-10-11

SCALE: 1:10

PROJECT TITLE: COLD BRIDGE TTR SPONGE IRON PROJECT

CONSULTANT: S.M.C.

DRAWING NO: 4102/2024/TTR/02-11

DESIGNED BY: 18

CHECKED BY: 19

APPROVED BY: 20

DATE: 2024-10-11

GENERAL NOTES

1. ALL DIMENSIONS AND ELEVATIONS UNLESS STATED OTHERWISE SHALL BE IN METERS.
2. ALL DIMENSIONS AND STAIRS SHALL BE IN MILLIMETERS & ALL COORDINATES & ELEVATIONS SHALL BE IN METERS.
3. ALL STRUCTURAL CONCRETE SHALL BE IN ACCORDANCE WITH THE DESIGN CODE AND HOLD DOWN BOLTS SHALL BE IN ACCORDANCE WITH THE DESIGN CODE.
4. ALL GROUP UNDER BASH PLATES OR EQUIPMENT & STRUCTURAL MEMBERS SHALL BE NON-SHIMMING.
5. FOR DETAILS OF CONNECTION, EXPANSION AND CONTRACTION JOINTS REFER TO SHEET 02.
6. ALLOWABLE BRACING PRESSURE FOR FOUNDATION DESIGN ARE PER SOIL CONSULTANT'S RECOMMENDATION, NORMALLY BASED UPON SOIL CONDITIONS RECORDED IN BORINGS AS DESCRIBED IN SOIL REPORTS. SHOULD OTHER SOIL CONDITIONS BE ENCOUNTERED DURING CONSTRUCTION, CORRECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR WITH THE APPROVAL OF THE OWNER REPRESENTATIVE.
7. ALL FOOTINGS SHALL BE PLACED ON NATURAL FILL. THE ALL BACKFILLS AND BATTERS SHALL BE EXCAVATED AND BLENDED WITH LEAN CONCRETE TO THE BOTTOM LEVEL OF FOOTINGS.
8. SPACE SIZES OF REINFORCING MAY NOT BE TO SCALE, ONLY READ THE JOB SPECIFIED DIMENSIONS FROM THE DRAWINGS. MISSED DIMENSIONS SHOULD BE ASKED FROM THE CONTRACTOR.
9. REINFORCING MAY BE ADJUSTED LOCALLY TO MEET REQUIREMENTS FOR ANCHOR BOLTS, BOLTS AND OTHER BARRIERED MATERIALS.
10. LAP SPACES OF STEEL BARS SHALL BE STAGGERED OVER SPAN LENGTH.
11. DEVELOPMENT LENGTH FOR UNCASTED DEVELOPED BARS SHALL CONFORM TO SBC 10.14.1.1.1 & SBC 10.14.1.2 FOR BARS IN SPECIAL MOMENT FRAMES.
- 12.1. DEVELOPMENT LENGTH IN TENSION (min)
 - (A) CLEAR SPACING OF BARS BEING DEVELOPED OR SPACED NOT LESS THAN BAR CLEAR COVER NOT LESS THAN 4d.

SYMBOL	MEANING
(Hatched)	CAST IN PLACE CONCRETE
(Diagonal)	FORMWORK
(Dotted)	EXCAVATION
(Cross-hatched)	FOUNDATION
(Horizontal)	REINFORCING
(Vertical)	REINFORCING
(Wavy)	GRAVEL
(Stippled)	GRAVEL



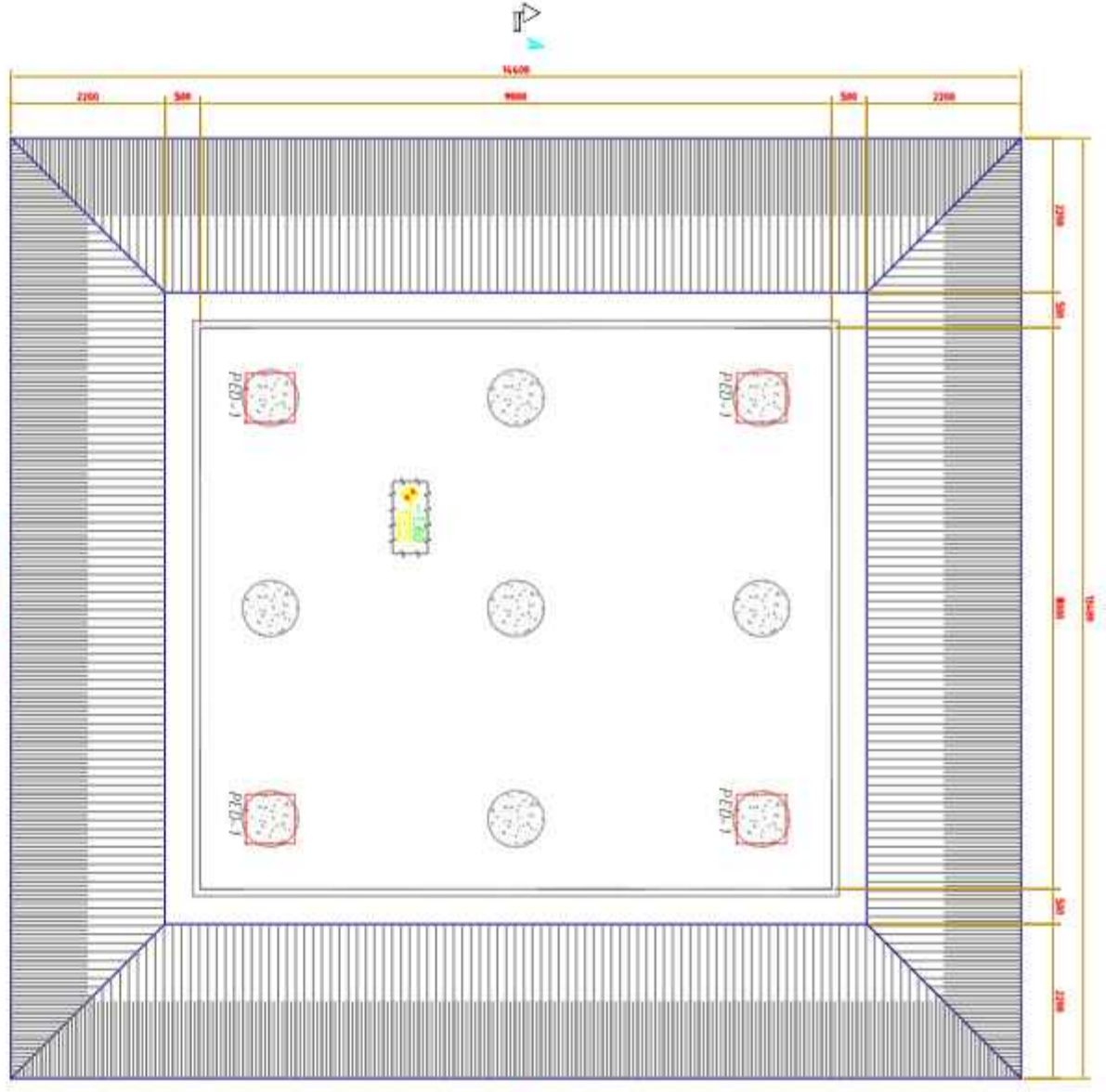
1. ALL DIMENSIONS ARE IN METERS UNLESS SPECIFIED OTHERWISE.
2. EXCAVATION SHALL BE TO THE FINISHED FLOOR LEVEL UNLESS OTHERWISE SPECIFIED.
3. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS C25/30 WITH 1.5% MINIMUM SLAB AND COLUMN AND 2.0% FOR WALLS.
4. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.
5. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.
6. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.
7. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.
8. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.
9. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.
10. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.

SPECIFIC NOTES

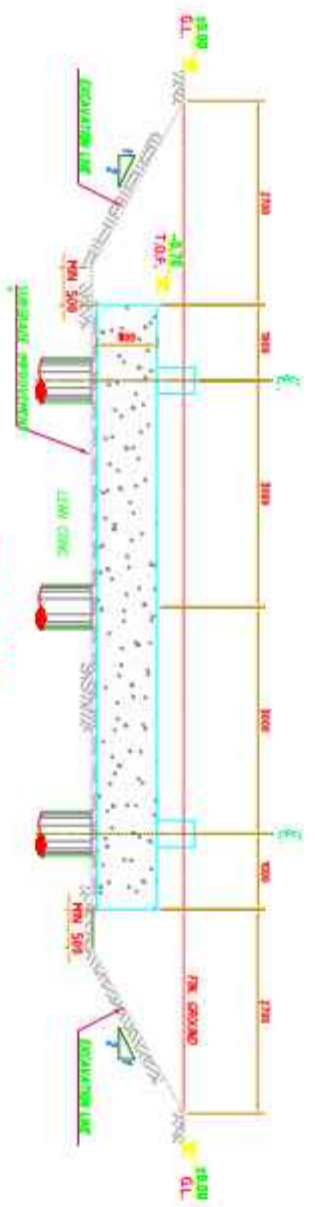
1. ALL DIMENSIONS ARE IN METERS UNLESS SPECIFIED OTHERWISE.
2. EXCAVATION SHALL BE TO THE FINISHED FLOOR LEVEL UNLESS OTHERWISE SPECIFIED.
3. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS C25/30 WITH 1.5% MINIMUM SLAB AND COLUMN AND 2.0% FOR WALLS.
4. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.
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10. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.

ABBREVIATIONS & LEGEND

1. ALL DIMENSIONS ARE IN METERS UNLESS SPECIFIED OTHERWISE.	2. EXCAVATION SHALL BE TO THE FINISHED FLOOR LEVEL UNLESS OTHERWISE SPECIFIED.	3. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS C25/30 WITH 1.5% MINIMUM SLAB AND COLUMN AND 2.0% FOR WALLS.	4. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.	5. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.	6. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.	7. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.	8. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.	9. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.	10. ALL CONCRETE SHALL BE CASTED WITH 10mm MAXIMUM SIZE AGGREGATE.
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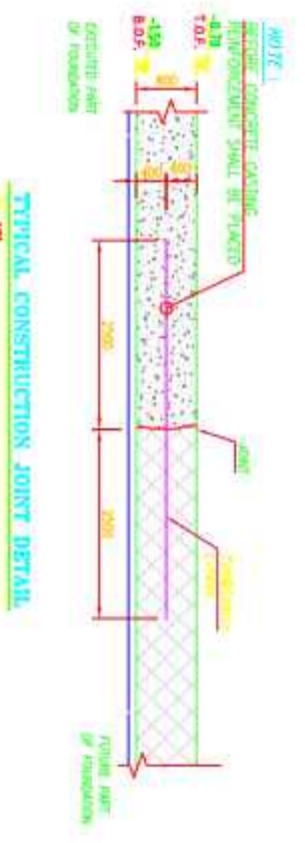


EXCAVATION PLAN



SECTION A-A

* CHECKED THAT LAYER SHALL BE CONTIGUOUS WITH ADJACENT STRUCTURE AND ASSURE PROPER CONNECTIONS TO THE LAYER SHALL BE PROVIDED BY STRUCTURAL CONTRACTOR.



TYPICAL CONSTRUCTION JOINT DETAIL

KEY PLAN



This Location

REFERENCE DIMENSIONS



COMMENT TABLE

NO.	DESCRIPTION	DATE
1	As per 'Approved' and 'Issued' drawings to be used for construction.	
2	All 'Approved' drawings shall be used for construction.	
3	All 'Approved' drawings shall be used for construction.	
4	All 'Approved' drawings shall be used for construction.	
5	All 'Approved' drawings shall be used for construction.	
6	All 'Approved' drawings shall be used for construction.	
7	All 'Approved' drawings shall be used for construction.	
8	All 'Approved' drawings shall be used for construction.	
9	All 'Approved' drawings shall be used for construction.	
10	All 'Approved' drawings shall be used for construction.	

REVISION TABLE

NO.	DATE	DESCRIPTION	BY	CHECKED	APPROVED
01	2023-08-01	Issue for Tender	KSJ	KSJ	KSJ
02	2023-08-05	Issue for Construction	KSJ	KSJ	KSJ
03	2023-08-10	Issue for Construction	KSJ	KSJ	KSJ
04	2023-08-15	Issue for Construction	KSJ	KSJ	KSJ
05	2023-08-20	Issue for Construction	KSJ	KSJ	KSJ
06	2023-08-25	Issue for Construction	KSJ	KSJ	KSJ
07	2023-09-01	Issue for Construction	KSJ	KSJ	KSJ
08	2023-09-05	Issue for Construction	KSJ	KSJ	KSJ
09	2023-09-10	Issue for Construction	KSJ	KSJ	KSJ
10	2023-09-15	Issue for Construction	KSJ	KSJ	KSJ

PROJECT TITLE: **C OLD BRIDGE TTE SPONGE IRON PROJECT**

CLIENT: **KSJ**

DESIGNER: **KSJ**

DATE: **2023-08-01**

SCALE: **1:100**

PROJECT NO: **KSJ/2023/08/01**

REVISION NO: **01**

DESIGNER: **KSJ**

CHECKED: **KSJ**

APPROVED: **KSJ**

DATE: **2023-08-01**

HOLD-PILE LOCATION

1. ALL DIMENSIONS ARE IN METERS UNLESS SPECIFIED OTHERWISE.
2. ALL DIMENSIONS ARE TO FACE UNLESS SPECIFIED OTHERWISE.
3. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS 30 MPa UNLESS SPECIFIED OTHERWISE.
4. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS 30 MPa UNLESS SPECIFIED OTHERWISE.
5. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS 30 MPa UNLESS SPECIFIED OTHERWISE.
6. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS 30 MPa UNLESS SPECIFIED OTHERWISE.
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SPECIFIC NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS SPECIFIED OTHERWISE.
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10. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS 30 MPa UNLESS SPECIFIED OTHERWISE.

ABBREVIATED MATERIAL LEGEND

- 1. ALL DIMENSIONS ARE IN METERS UNLESS SPECIFIED OTHERWISE.
- 2. ALL DIMENSIONS ARE TO FACE UNLESS SPECIFIED OTHERWISE.
- 3. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS 30 MPa UNLESS SPECIFIED OTHERWISE.
- 4. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS 30 MPa UNLESS SPECIFIED OTHERWISE.
- 5. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS 30 MPa UNLESS SPECIFIED OTHERWISE.
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- 9. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS 30 MPa UNLESS SPECIFIED OTHERWISE.
- 10. ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH CLASS 30 MPa UNLESS SPECIFIED OTHERWISE.

KEY PLAN



Site Location

REFERENCE DIMENSIONS



COMMENT TABLE

NO.	DESCRIPTION	DATE	BY	CHECKED
1	APPROVED			
2	REVISION			
3	REVISION			
4	REVISION			
5	REVISION			

REVISION TABLE

NO.	DATE	DESCRIPTION
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2		
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4		
5		

REVISION TABLE

NO.	DATE	DESCRIPTION
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REVISION TABLE

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REVISION TABLE

NO.	DATE	DESCRIPTION
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REVISION TABLE

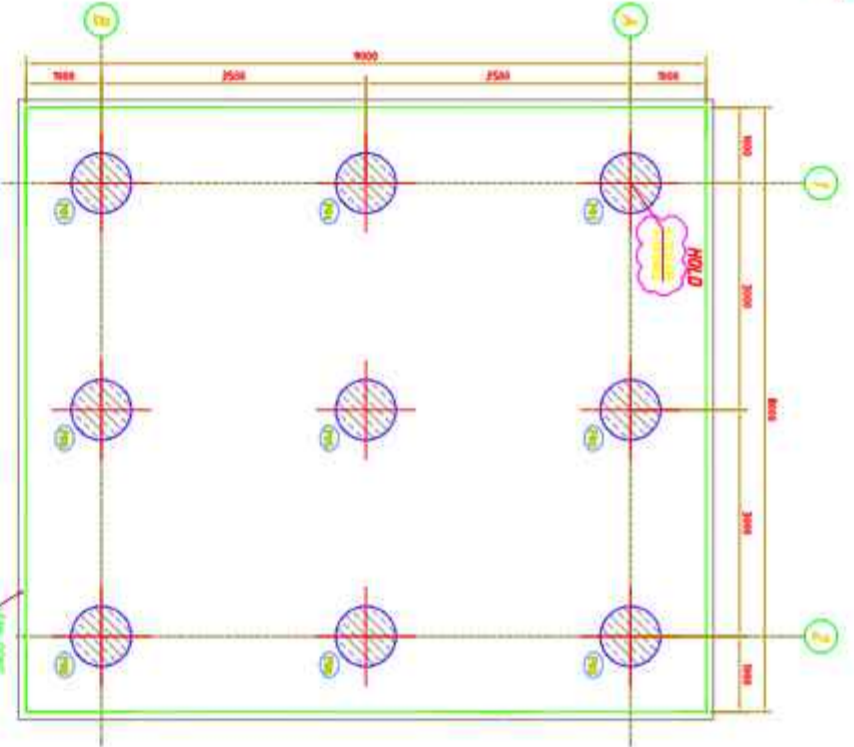
NO.	DATE	DESCRIPTION
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REVISION TABLE

NO.	DATE	DESCRIPTION
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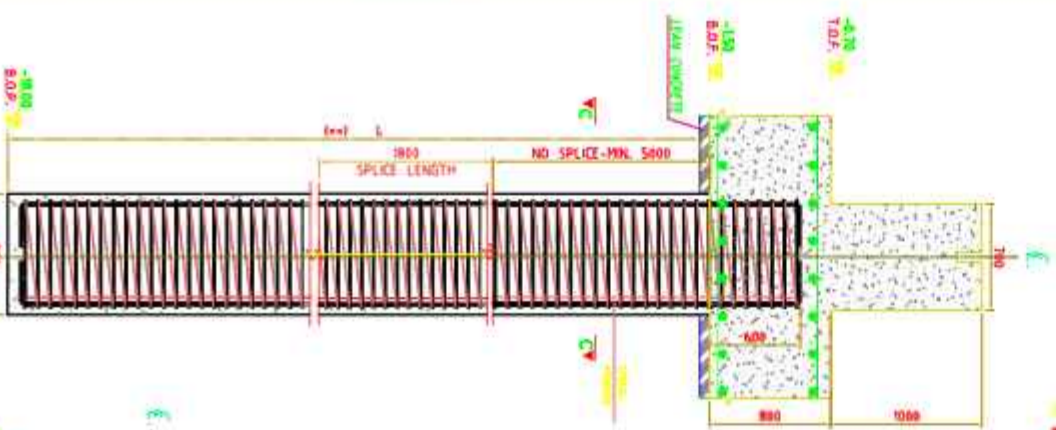
REVISION TABLE

NO.	DATE	DESCRIPTION
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2		
3		
4		
5		

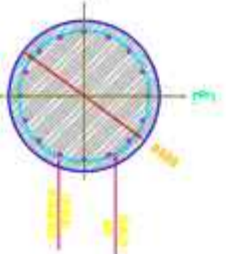


PILING PLAN

PILE LEGEND				
NO.	PILE MARKING	DIM (mm)	LENGTH (m)	QTY
1	P-01~09	800	18	09



PILE DETAIL

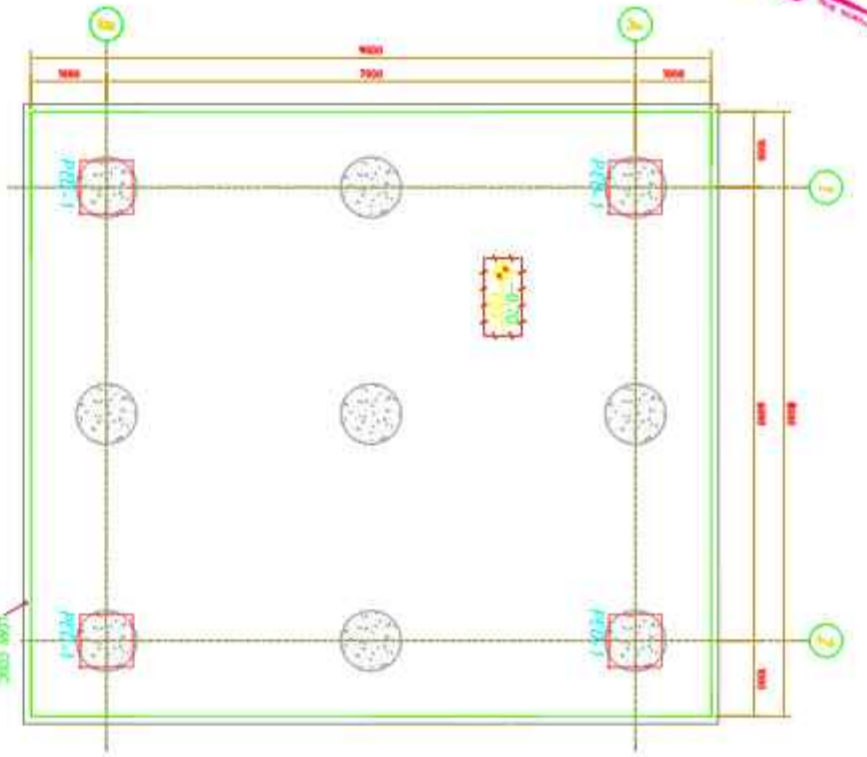


SECTION C-C

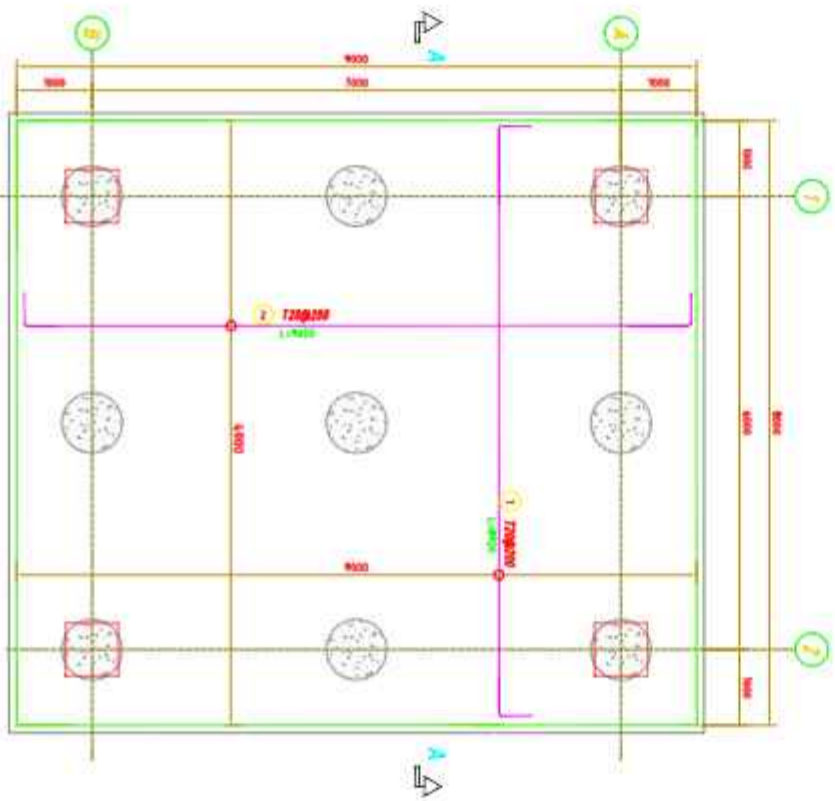
THE FINAL LENGTH SHALL BE DETERMINED BY PCA RESULTS WITH GEOTECHNICAL CONTRACTOR RECOMMENDATION.

d	Beam & Foundation		Column & Wall	
	Bot rebar	Top rebar	Bot rebar	Top rebar
Ø8	30.0cm	4.0cm	30.0cm	30.0cm
Ø10	35.0cm	5.0cm	35.0cm	35.0cm
Ø12	45.0cm	55.0cm	45.0cm	45.0cm
Ø14	50.0cm	65.0cm	50.0cm	50.0cm
Ø16	60.0cm	75.0cm	60.0cm	60.0cm
Ø18	65.0cm	85.0cm	65.0cm	65.0cm
Ø20	90.0cm	115.0cm	90.0cm	90.0cm
Ø22	95.0cm	125.0cm	95.0cm	95.0cm
Ø25	110.0cm	140.0cm	110.0cm	110.0cm
Ø28	125.0cm	160.0cm	125.0cm	125.0cm
Ø32	140.0cm	180.0cm	140.0cm	140.0cm

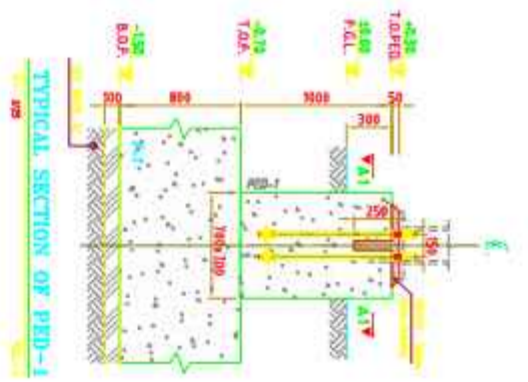
ACCORDING TO ACI 318-08 19 WITH C30 & S400



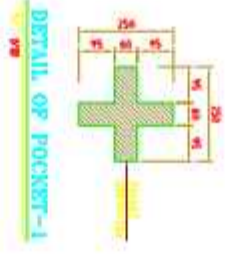
FOUNDATION PLAN



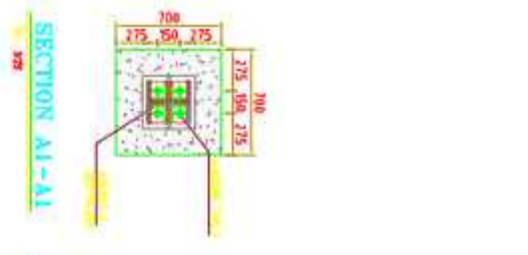
BOTTOM & TOP REINFORCEMENT PLAN OF FOUNDATION TYPE 'A-A'



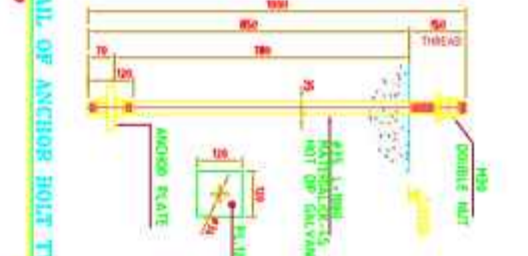
TYPICAL SECTION OF PED-1



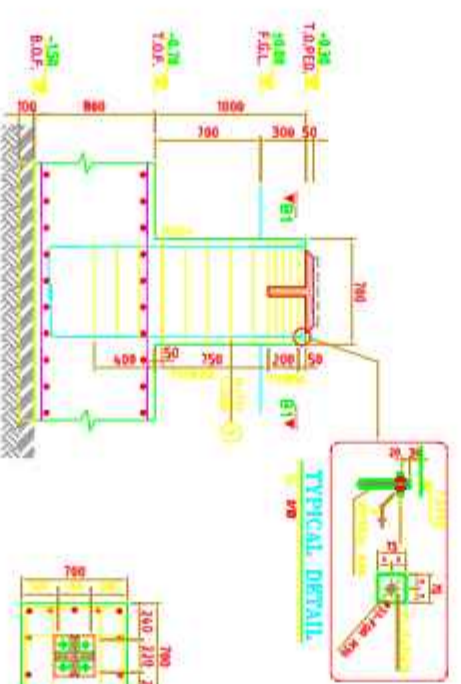
DETAIL OF POCKET-1



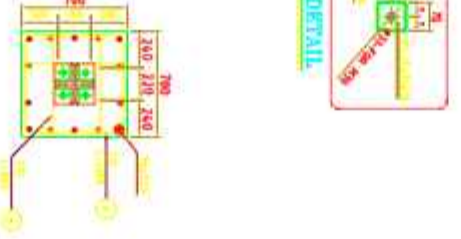
SECTION A1-A1



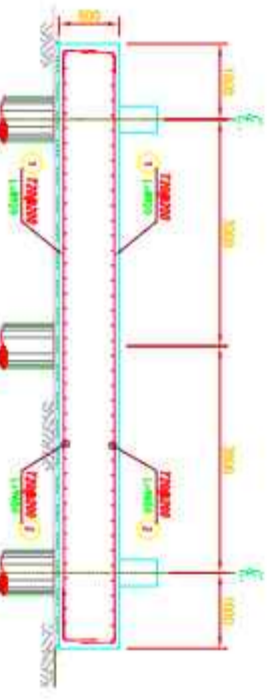
DETAIL OF ANCHOR HOLE TYPE-1



TYPICAL REINFORCEMENT SECTION OF PED-1



SECTION B1-B1



REINFORCEMENT - SECTION A-A

Table with columns: No. of Bars, Diameter, Area, Length, Volume, Weight, etc. for various reinforcement bars.

PROBESAL SIGNATURE

GENERAL NOTES

- 1. ALL DIMENSIONS ARE IN METERS UNLESS SPECIFIED OTHERWISE.
2. ALL DIMENSIONS ARE TO FACE UNLESS SPECIFIED OTHERWISE.
3. ALL DIMENSIONS ARE TO FACE UNLESS SPECIFIED OTHERWISE.
4. ALL DIMENSIONS ARE TO FACE UNLESS SPECIFIED OTHERWISE.

ABBREVIATIONS AND LEGEND table with symbols and descriptions for different materials and finishes.

REFERENCE DIMENSIONS: REF. 1, REF. 2, REF. 3, REF. 4, REF. 5, REF. 6, REF. 7, REF. 8, REF. 9, REF. 10, REF. 11, REF. 12, REF. 13, REF. 14, REF. 15, REF. 16, REF. 17, REF. 18, REF. 19, REF. 20, REF. 21, REF. 22, REF. 23, REF. 24, REF. 25, REF. 26, REF. 27, REF. 28, REF. 29, REF. 30, REF. 31, REF. 32, REF. 33, REF. 34, REF. 35, REF. 36, REF. 37, REF. 38, REF. 39, REF. 40, REF. 41, REF. 42, REF. 43, REF. 44, REF. 45, REF. 46, REF. 47, REF. 48, REF. 49, REF. 50, REF. 51, REF. 52, REF. 53, REF. 54, REF. 55, REF. 56, REF. 57, REF. 58, REF. 59, REF. 60, REF. 61, REF. 62, REF. 63, REF. 64, REF. 65, REF. 66, REF. 67, REF. 68, REF. 69, REF. 70, REF. 71, REF. 72, REF. 73, REF. 74, REF. 75, REF. 76, REF. 77, REF. 78, REF. 79, REF. 80, REF. 81, REF. 82, REF. 83, REF. 84, REF. 85, REF. 86, REF. 87, REF. 88, REF. 89, REF. 90, REF. 91, REF. 92, REF. 93, REF. 94, REF. 95, REF. 96, REF. 97, REF. 98, REF. 99, REF. 100.



GENERAL NOTES

- ALL DIMENSIONS ARE IN mm
- ALL EXCAVATION AND BACKFILLING ARE TO BE DONE
- REVISIONS AND CORRECTIONS TO BE MADE
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE STANDARDS, INCLUDING THE CITY DEPARTMENT OF CONSTRUCTION MANAGEMENT AND MANAGEMENT OF THE DISTRICT OF COLUMBIA AND ANY APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS, INCLUDING ALL APPLICABLE REGULATIONS AND STANDARDS.
- ALL SOIL CONDITIONS ENCOUNTERED DURING CONSTRUCTION SHALL BE REPORTED TO THE OWNER REPRESENTATIVE AND THE GEOTECHNICAL CONSULTANT.
- CONSTRUCTION SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
- CONSTRUCTION SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
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- CONSTRUCTION SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
- CONSTRUCTION SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

SPECIFIC NOTES

ABBREVIATIONS & LEGEND

REBAR	Reinforced Concrete	Concrete
SB	Structural Board	Lean Concrete
CL	Cast in Place	Grout
FC	Formwork	Excavated Area
WH	Welded Mesh Fabric	Existing Foundation
CH	Chairs	Existing Foundation
CH	Chairs	Existing Foundation

KEY PLAN



REFERENCE DRAWINGS

DESCRIPTION	REF. NO.

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REVISION TABLE

REV	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED BY CONTRACTOR	APPROVED BY CLIENT
00	10.10.2024	IFR	N/A	N/A	ESH	

PROJECT TITLE: COLD BRIQUETTE SPONGE IRON PROJECT

DOCUMENT DESCRIPTION: TRANSFER TOWER TT02-PILE AND FOUNDATION DRAWINGS

DOCUMENT NO: 41S2CBSI-1H-ST-DW-450-15

- IN CASE OF CONFLICTING INFORMATION IN TECHNICAL DOCUMENTS THE ORDER OF PRIORITY SHALL BE:
 - PRIORITY 1: DESIGN DRAWINGS
 - PRIORITY 2: THESE GENERAL NOTES
 - PRIORITY 3: TECHNICAL SPECIFICATIONS
 - PRIORITY 4: STANDARD DRAWINGS
- ALL DIMENSIONS & SIZES SHALL BE IN MILLIMETERS & ALL COORDINATES & ELEVATIONS SHALL **BE IN METERS**.
- ALL REINFORCED CONCRETE WORK SHALL COMPLY WITH
- ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH
- ALL GROUT UNDER BASE PLATES OF EQUIPMENT & STRUCTURAL MEMBERS SHALL CONFORM TO
- FOR DETAILS OF CONTRACTION, EXPANSION AND CONSTRUCTION JOINTS REFER TO:
- ALLOWABLE BEARING PRESSURES FOR FOUNDATION DESIGN ARE PER SOIL CONSULTANT'S RECOMMENDATION, NORMALLY BASED UPON SOIL CONDITIONS ENCOUNTERED IN BORINGS AS DESCRIBED IN SOIL REPORTS. SHOULD OTHER SOIL CONDITIONS BE ENCOUNTERED DURING CONSTRUCTION, CORRECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR WITH THE APPROVAL OF THE OWNER REPRESENTATIVE.
- ALL FOUNDATIONS SHALL BE PLACED ON NATURAL SOIL THUS ALL BACKFILLS AND EARTHFILLS SHALL BE EXCAVATED AND REFILLED WITH LEAN CONCRETE TO THE BOTTOM LEVEL OF FOUNDATIONS.
- SINCE SOME OF DRAWINGS MAY NOT BE TO SCALE, ONLY READ THE JOB SPECIFIED DIMENSIONS FROM THE DRAWINGS. MISSED DIMENSIONS SHOULD BE ASKED FROM THE CONTRACTOR.
- REINFORCEMENT MAY BE ADJUSTED LOCALLY TO SUIT RECESS FOR ANCHOR BOLTS, HOLES AND OTHER EMBEDDED MATERIALS.
- LAP SPLICES OF SLAB BARS SHALL BE STAGGERED OVER SPAN LENGTH.
- DEVELOPMENT LENGTH(Ld) FOR UNCOATED DEFORMED BARS SHALL CONFORM TO ACI 318, SEC.12.2 & SEC.21.5.4 FOR JOINTS IN SPECIAL MOMENT FRAMES.

(FY=400 N/mm²)

f'c (N/MM ²)	DIA (db) LOCATION	Ø10	Ø12	Ø14	Ø16	Ø20	Ø22	Ø25	Ø28	Ø32
25.0	TOP BAR	500	600	700	800	1250	1350	1550	1700	1950
	OTHERS	400	450	550	600	950	1050	1200	1350	1500
30.0	TOP BAR	450	550	650	750	1150	1250	1400	1550	1800
	OTHERS	350	450	500	550	850	950	1100	1200	1400
35.0	TOP BAR	450	500	600	700	1050	1150	1300	1450	1650
	OTHERS	350	400	450	550	800	900	1000	1100	1300

- EXCEPT ABOVE 1) Ld SHALL BE INCREASED TO 1.5 TIMES.
- TOP BAR DEVELOPMENT LENGTH SHALL BE USED WHERE HORIZONTAL REINFORCEMENT IS PLACED SUCH THAT MORE THAN 300 mm OF FRESH CONCRETE IS CAST BELOW THE DEVELOPMENT LENGTH.

12.2. DEVELOPMENT LENGTH OF STANDARD HOOKS IN TENSION (mm)
 FOR 90 DEGREE HOOKS WITH COVER ON BAR EXTENSION BEYOND HOOK NOT LESS THAN 50mm AND ENCLOSED WITHIN TIES OR STIRRUPS PARALLEL TO BARS BEING DEVELOPED, SPACED NOT GREATER THAN 3db ALONG THE LENGTH OF THE TALL EXTENSION OF THE HOOK PLUS BEND FOR JOINTS OF SPECIAL MOMENT FRAMES.

(FY=400 N/mm²)

RE-BAR f'c (N/MM ²)	Ø10	Ø12	Ø14	Ø16	Ø20	Ø22	Ø25	Ø28	Ø32
25	150	200	250	250	300	350	400	450	500
30	150	200	200	250	300	300	350	400	450
35	150	150	200	200	250	300	300	350	400

- SPLICES OF DEFORMED BARS AND DEFORMED WIRE IN TENSION**
 - 13.1. MINIMUM LENGTH OF LAP FOR TENSION LAP SPLICES SHALL BE AS REQUIRED FOR CLASS A OR B SPLICE, BUT NOT LESS THAN 300mm WHERE:**
 CLASS A SPLICE ---- 1.0Ld.
 CLASS B SPLICE ---- 1.3Ld.
 WHERE Ld IS THE TENSILE DEVELOPMENT LENGTH. LAP SPLICE CLASS A AND B ARE DEFINED AS FOLLOW:

CLASS A (AS PROVIDED) ≥ 2(AS REQUIRED) AND PERCENT AS SPLICE ≤ 50%	CLASS B ALL OTHER CONDITIONS

*SPLICES SHALL BE STAGGERED AT LEAST 600mm.

- 13.2. SPLICES OF DEFORMED BARS IN TENSION FOR CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2db, CLEAR COVER NOT LESS THAN db AND CLASS B SPLICES:**

(FY=400 N/mm²)

f'c (N/MM ²)	DIA (db) LOCATION	Ø10	Ø12	Ø14	Ø16	Ø20	Ø22	Ø25	Ø28	Ø32
25.0	TOP BAR	650	800	900	1050	1600	1750	2000	2250	2550
	OTHERS	500	600	700	800	1250	1350	1550	1700	1950
30.0	TOP BAR	600	700	850	950	1450	1600	1850	2050	2350
	OTHERS	450	550	650	750	1150	1250	1400	1550	1800
35.0	TOP BAR	550	650	750	900	1350	1500	1700	1900	2150
	OTHERS	450	500	600	700	1050	1150	1300	1450	1650

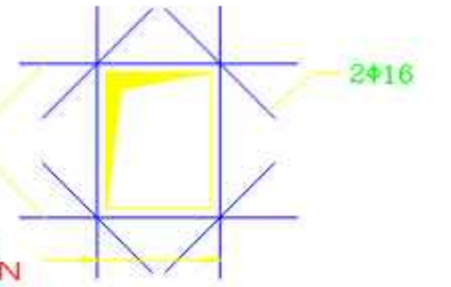
- MINIMUM DISTANCE FROM THE CENTRE LINE OF BOLT TO EDGE OF CONCRETE PLINTH SHALL BE AS FOLLOWS, UP TO AND INCLUDING.
 - 20 mm dia. = 125 mm
 - 24 mm dia. = 150 mm
 - 30 mm dia. = 160 mm
 - 36 mm dia. = 180 mm
 - 42 mm dia. = 210 mm
 - 48 mm dia. = 240 mm
 - 56 mm dia. = 280 mm
 - 64 mm dia. = 320 mm
- REINFORCEMENT BARS SHALL BE HIGH TENSILE STRENGTH GRADE A WITH Fy=4000 Kg/cm

- REBAR SPLICE OF TWO ADJACENT REINFORCEMENT SHOULD NOT BE AT THE SAME LOCATION. THEREFORE TWO ADJACENT REBARS SHOULD BE LOCATED ALTERNATE EACH OTHER.
- THE LONGITUDINAL REINFORCEMENT OF TIE BEAMS SHALL BE CONTINUOUSLY EXTENDED THROUGH THE FOUNDATIONS.
- THE CONTRACTOR SHALL PROVIDE SUFFICIENT SUPPORT, BY MEANS OF APPROVED CHAIRS, SPACERS ETC, TO ENSURE THAT ALL REINFORCEMENT IS HELD IN THE CORRECT POSITION WHILST CONCRETING IS TAKING PLACE. CONCRETE SPACERS SHALL BE MADE FROM MATERIALS IN NO WAY INFERIOR TO THOSE SPECIFIED FOR THE CONCRETE IN WHICH THE SPACER TO BE USED. ALL CONCRETE SPACERS SHALL BE WET CURED FOR 10 DAYS AND KEPT CLEAN PRIOR TO INSTALLATION IN CONCRETE STRUCTURE. PLASTIC AND METAL SPACERS ARE NOT PERMITTED.
- THE CLEAR COVER TO OUTER MOST REINFORCEMENT SHALL BE ACCORDING TO ENVIRONMENTAL CONDITIONS FOR REINFORCED CONCRETE:

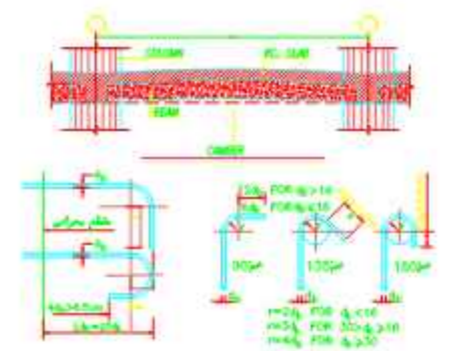
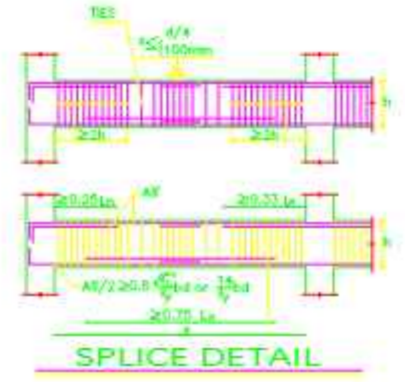
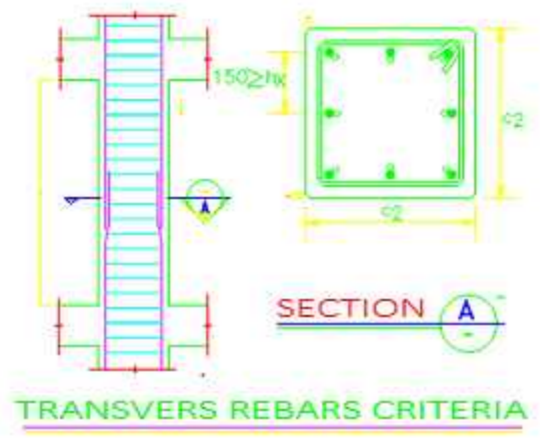
Element Type	Environmental Conditions				
	Mild	Normal	Severe	Very Severe	High Intense
Beams & Columns	35	45	50	65	75
Slabs, Walls & Joists	25	30	35	50	60
Shells & Plates	20	25	30	45	55
Foundations	40	50	60	75	90

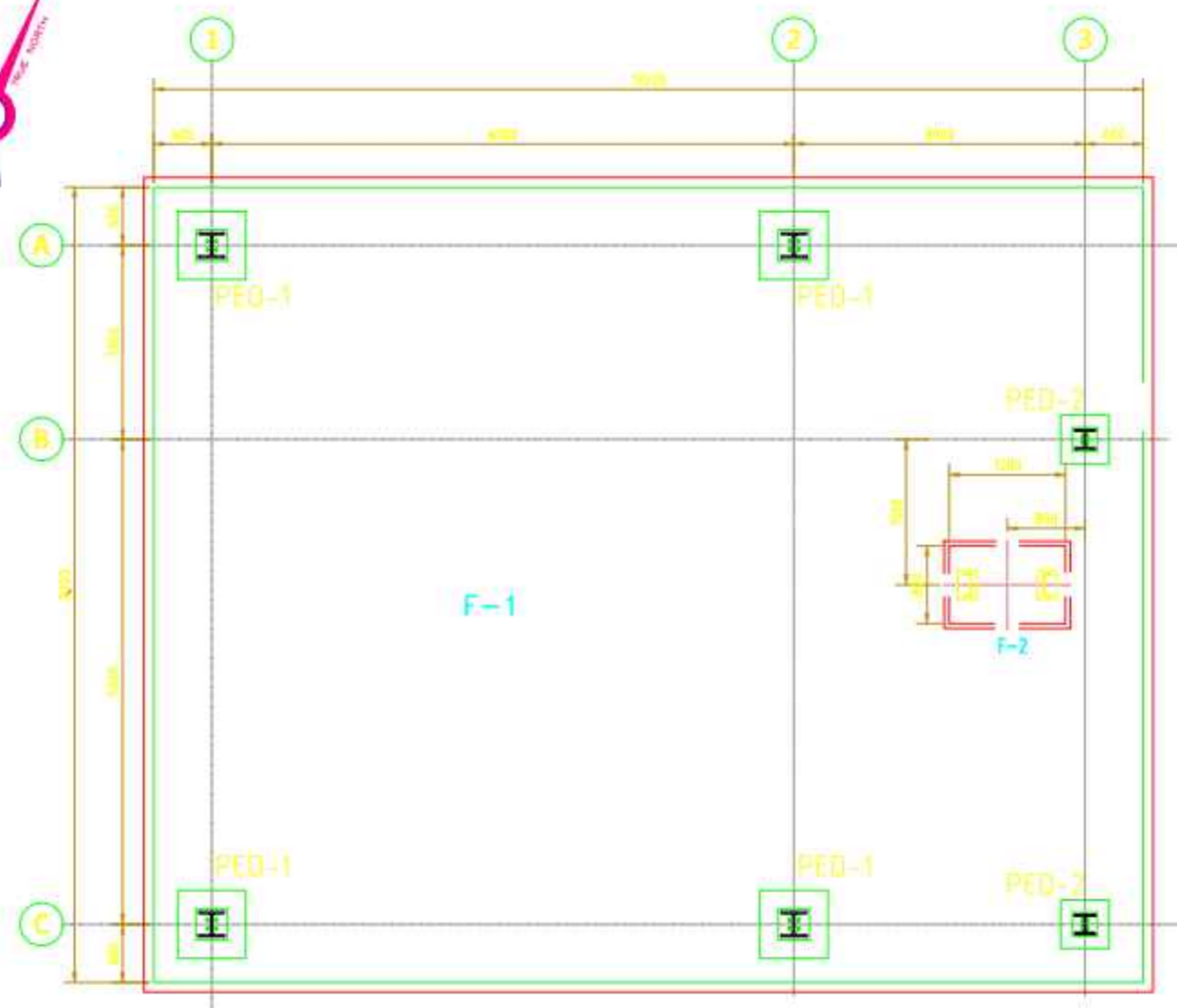
- Project environmental condition: SEVERE
- TYPE OF CEMENT TO BE USED SHALL BE : ACCORDANCE WITH SOIL INVESTIGATION REPORT.
- GRADES OF CONCRETE SHALL BE :
 - a. GRADE "C35" FOR ALL STRUCTURAL CONCRETE.
 - b. BLINDING AND LEAN CONCRETE SHALL HAVE MIN 150kg CEMENT CONTENT. FOR MORE DETAILS OF CONCRETE GRADE PLEASE SEE SPECIFICATION FOR REINFORCED CONCRETE:
- EXCAVATION SHALL NOT BE STARTED UNLESS THE FOUNDATION CONSTRUCTION & BACKFILLING CAN BE CARRIED OUT IN A SHORT TIME AFTER EXCAVATION. EXCAVATED BASE SHALL BE CAREFULLY PROTECTED AGAINST ENTERING WATER.
- UNDERGROUND CONCRETE SHALL BE COATED WITH BITUMINOUS PROTECTION ACCORDING TO CONSTRUCTION SPECIFICATION FOR REINFORCED CONCRETE:
- MAXIMUM CONCRETE WATER PER CEMENT RATIO MUST (W/C) BE LIMITED TO 0.4

TOTAL CROSS AREA OF REBAR SECTIONS SHOULD BE EQUAL TO DISCONNECTED REBARS IN THIS DIRECTION

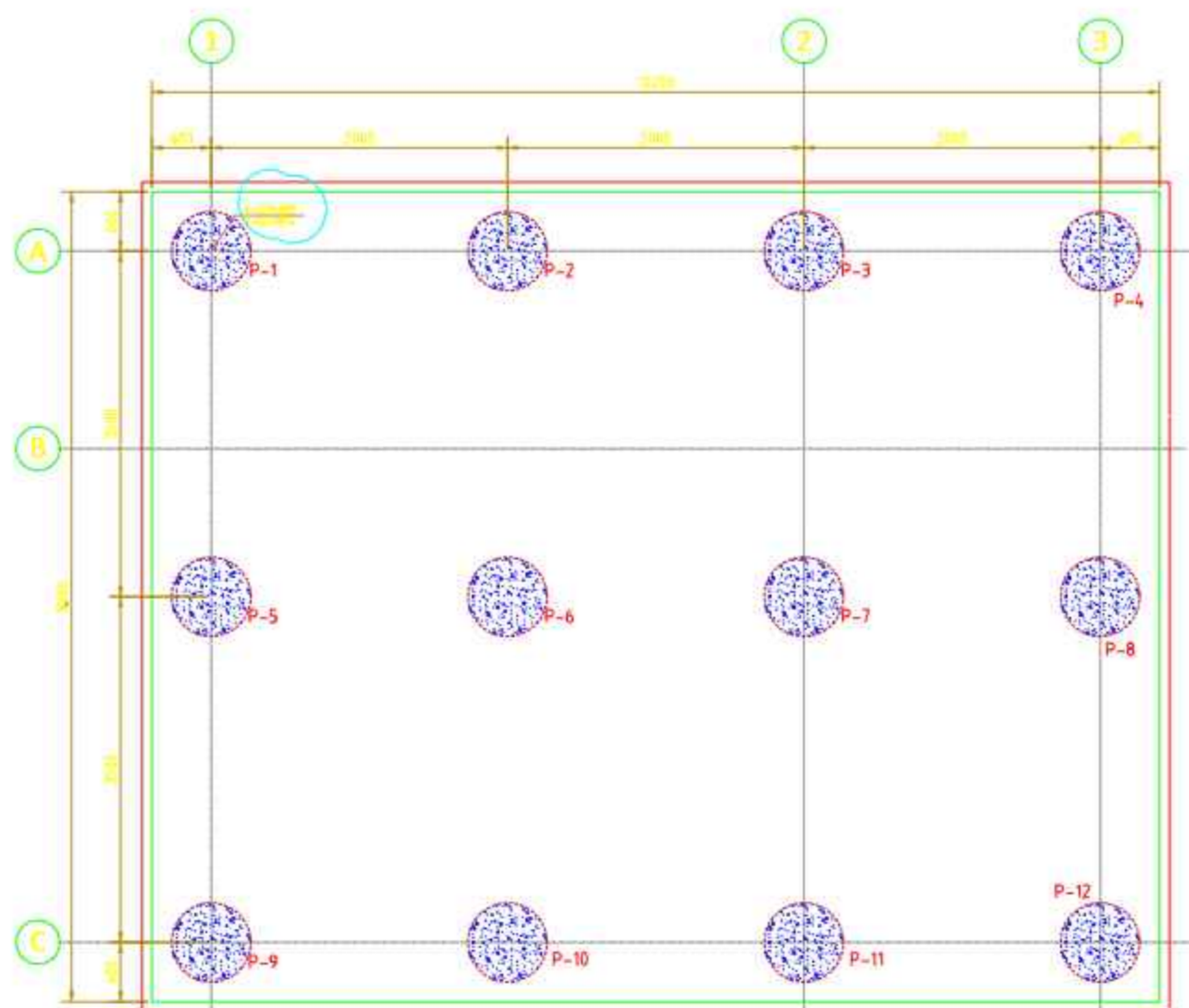


TOTAL CROSS AREA OF REBAR SECTIONS SHOULD BE EQUAL TO DISCONNECTED REBARS IN THIS DIRECTION

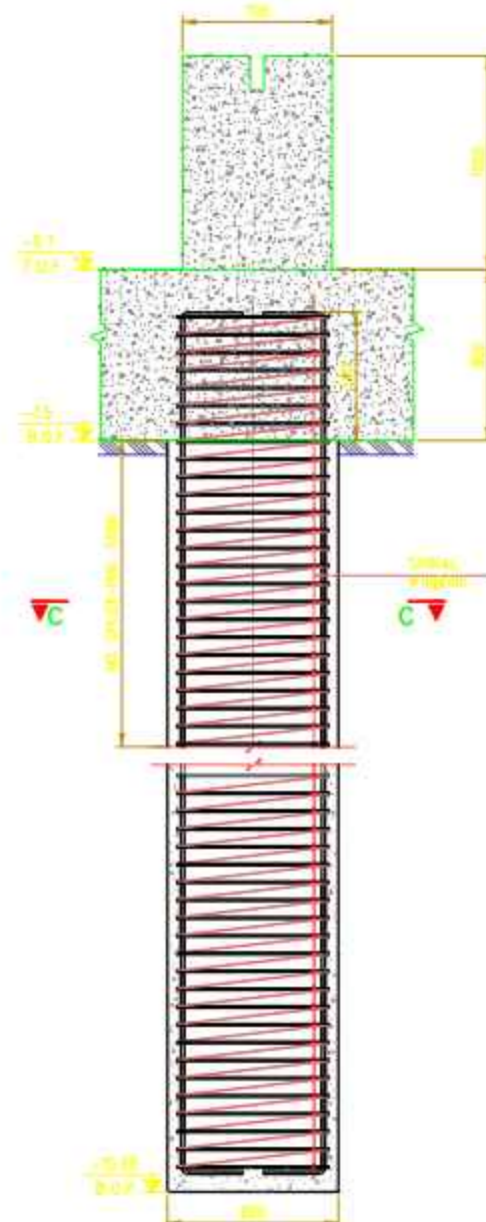
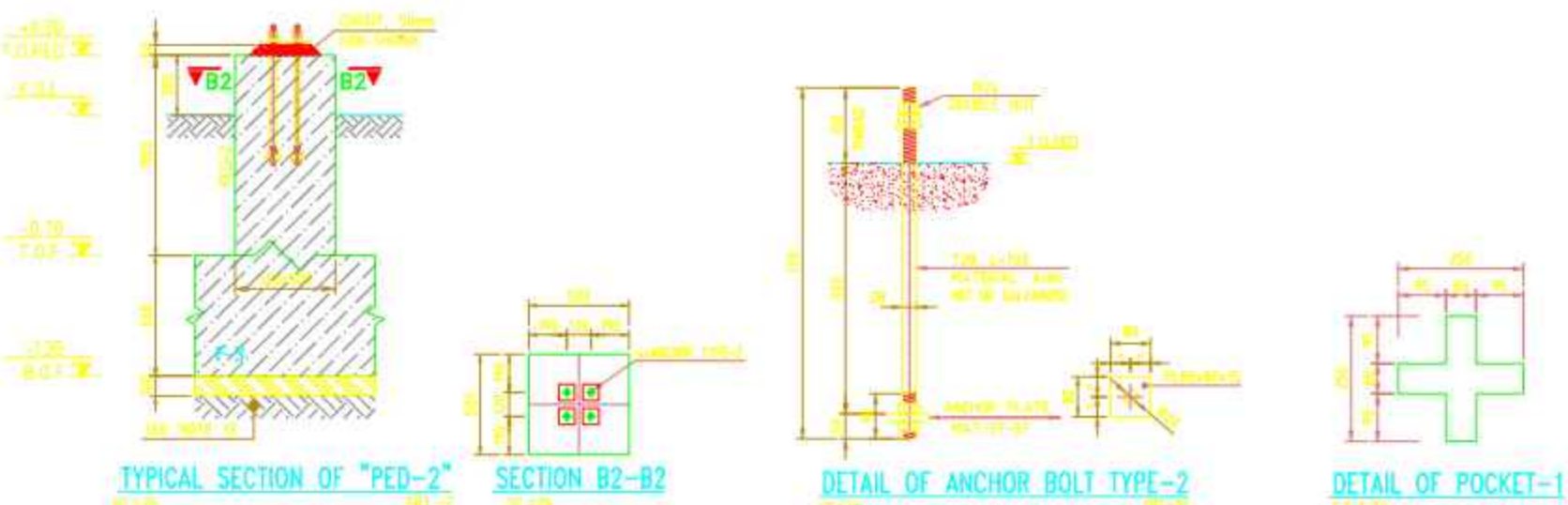
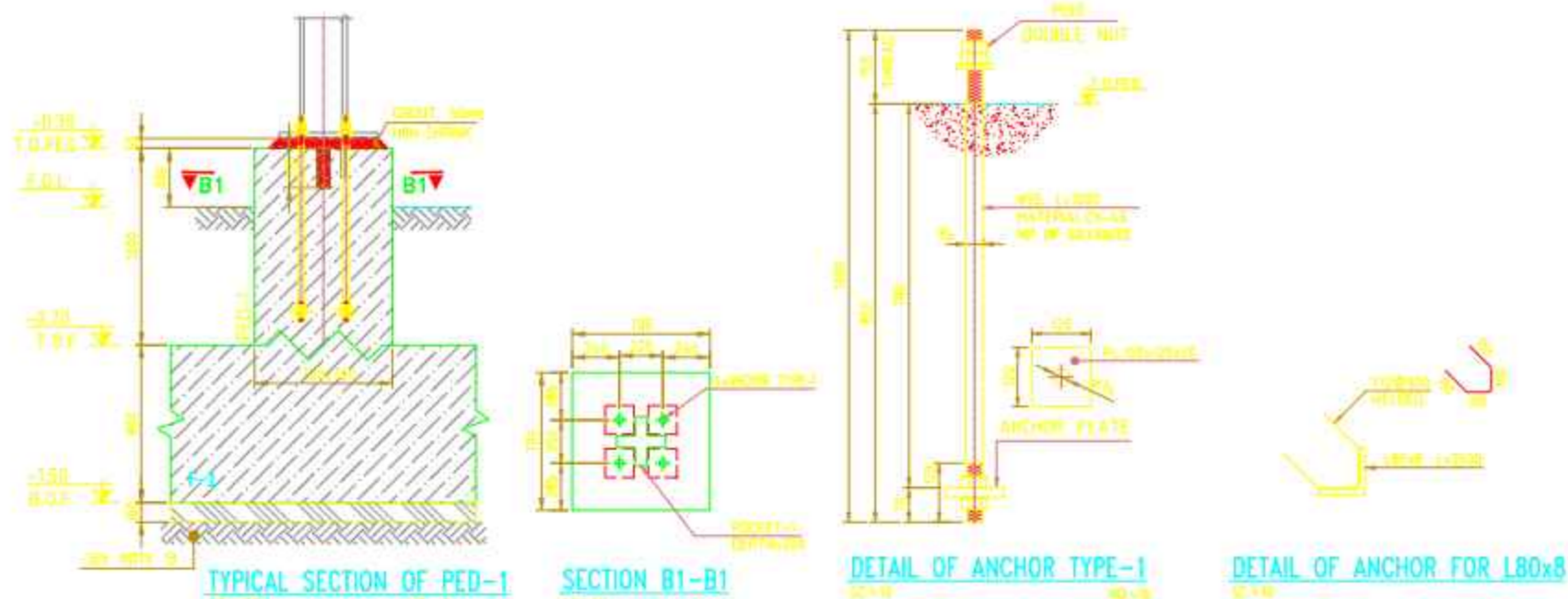




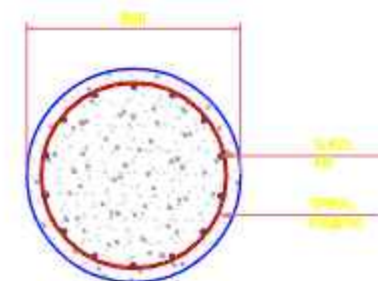
FOUNDATION PLAN



PILING PLAN



PILE DETAIL



SECTION C-C

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MM.
2. ALL ELEVATIONS ARE UNLESS NOTED.
3. EXISTING TO BE REMOVED ARE IN RED.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INCLUDING BUT NOT LIMITED TO, CONSTRUCTION PERMITS AND NECESSARY APPROVALS FROM THE LOCAL AUTHORITIES.
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND NOTIFICATIONS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY.
6. ALL SOIL CHARACTERISTICS, INCLUDING STRENGTH OF SOILS, SHALL BE OBTAINED FROM SOIL TESTS AND REPORTED TO THE ARCHITECT IMMEDIATELY.
7. ALL CONCRETE SHALL HAVE MINIMUM STRENGTH OF 30 MPa.
8. REINFORCEMENT SHALL BE AS PER IS 1786 PART 1 & 2 WITH YIELD STRENGTH OF 500 MPa AND ELONGATION OF 14% AT BREAK.
9. MATERIAL OF ANCHOR BOLTS SHALL BE AS PER IS 1786 PART 1 & 2 WITH YIELD STRENGTH OF 500 MPa AND ELONGATION OF 14% AT BREAK.
10. CONCRETE SHALL BE PLACED ACCORDING TO THE ARCHITECT'S INSTRUCTIONS.
11. CONCRETE SHALL BE CURED FOR 14 DAYS.
12. ALL EXISTING AND NEW FOUNDATION IS TO BE AS SHOWN IN THE DRAWINGS. THE EXISTING FOUNDATION SHALL BE EXPOSED UP TO THE LEVEL OF THE NEW FOUNDATION. THE EXISTING FOUNDATION SHALL BE REINFORCED WITH NEW CONCRETE UP TO THE LEVEL OF THE NEW FOUNDATION.
13. UNLESS SPECIFIED OTHERWISE IN THE DRAWINGS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE FIELD DATA.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.

SPECIFIC NOTES

ABBREVIATIONS & LEGEND

- B.C.C. : BOTTOM OF CONCRETE
 F.F.L. : FINISH FLOOR LEVEL
 G.L. : GRADE LEVEL
 P.C.L. : PROPOSED CONCRETE LEVEL
 S.F.L. : FINISH SURFACE LEVEL
 T.O.F. : TOP OF FOUNDATION
 T.O.P. : TOP OF POCKET

KEY PLAN



REFERENCE DRAWINGS

DESCRIPTION	REF. NO.

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Date: _____
Signature: _____

REVISION TABLE

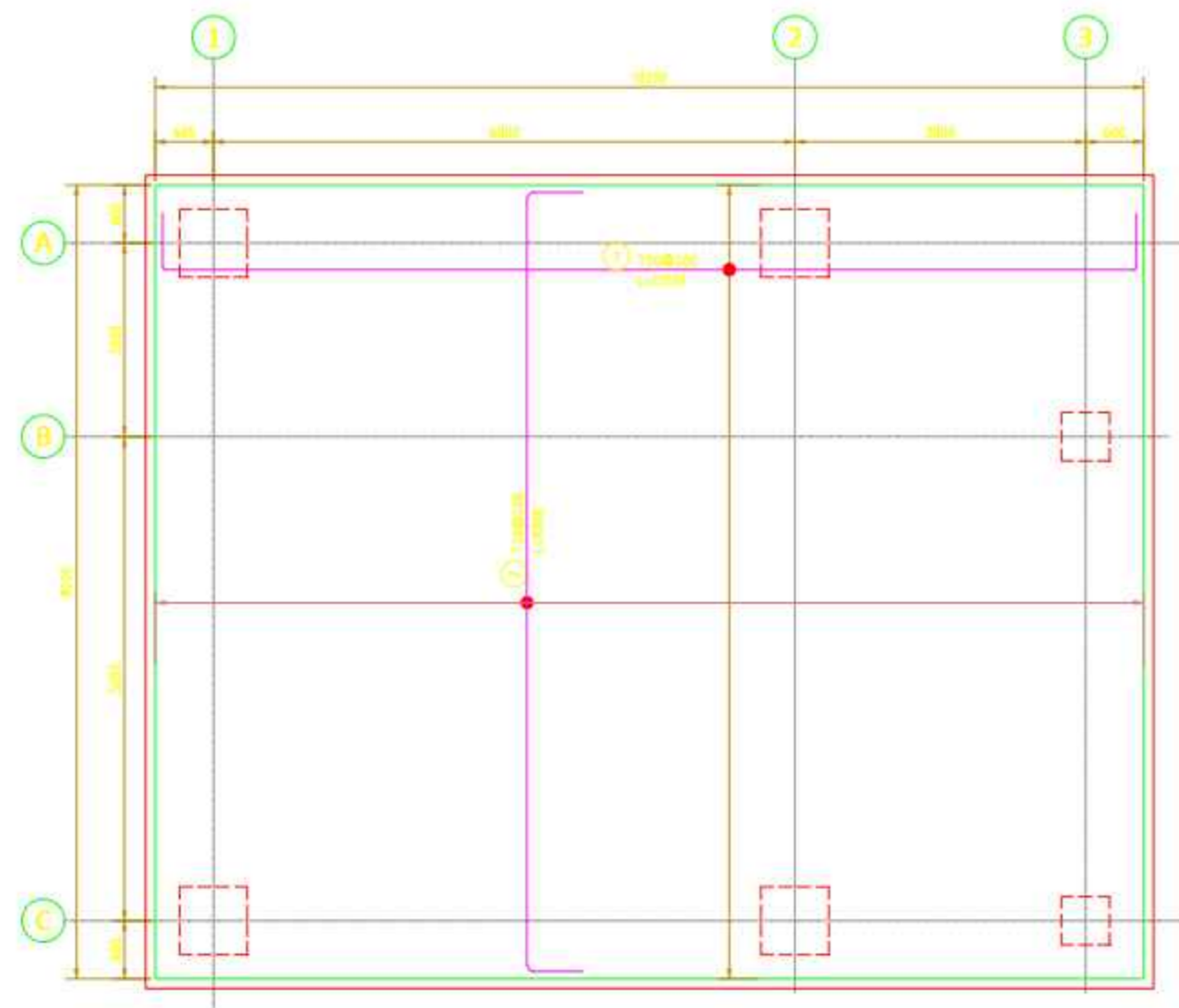
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00	10.10.2024	IFR	N.A.	N.A.	E.SH.

PROJECT TITLE: **COLD BRIQUETTE SPONGE IRON PROJECT**

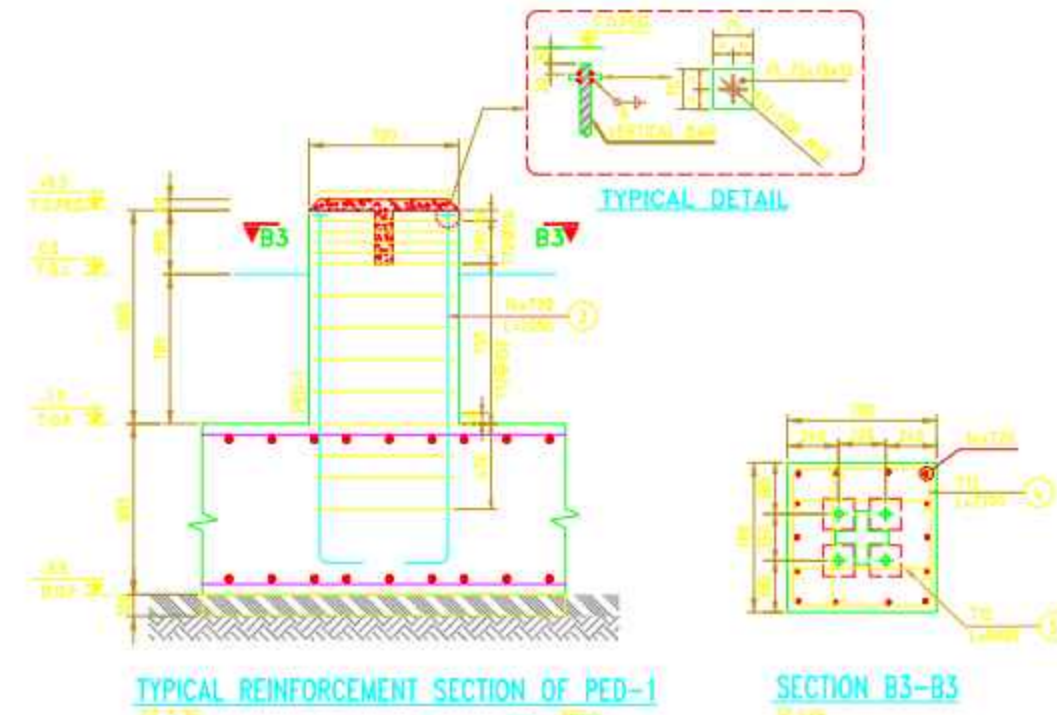
DOCUMENT DESCRIPTION: **TRANSFER TOWER TT02-PILE AND FOUNDATION DRAWINGS**

DOCUMENT NO. 41S2CBSI-1H-ST-DW-450-15

REV. 00, SIZE CC, SCALE 1:50, SHEET NO. 3 OF 3

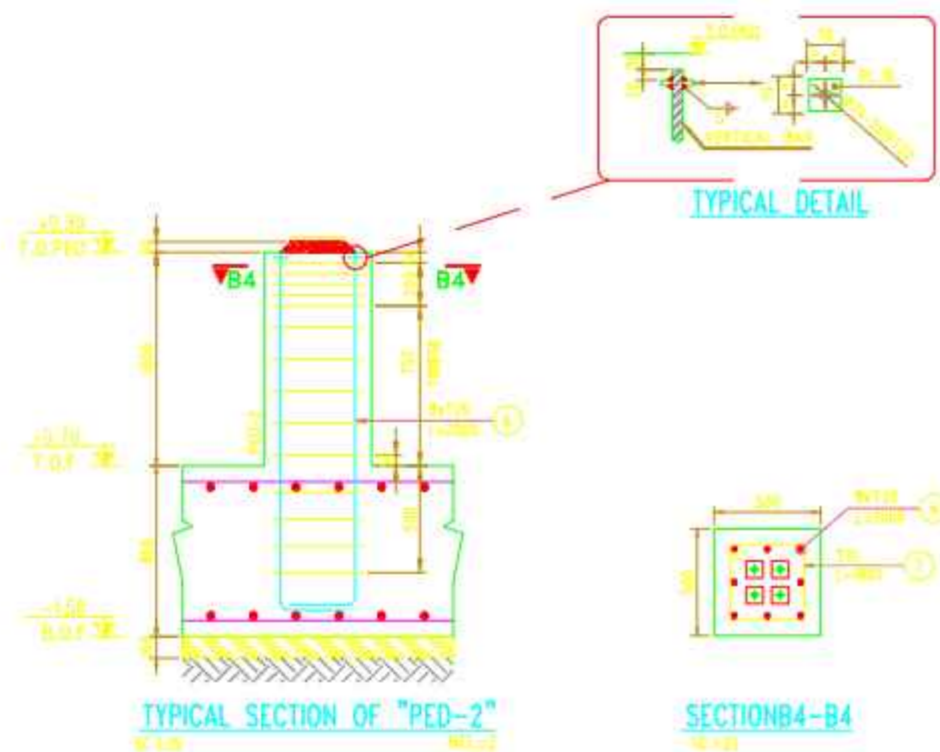


BOTTOM & TOP REINFORCEMENT PLAN OF FOUNDATION TYPE "F-1"
SC. 5.10



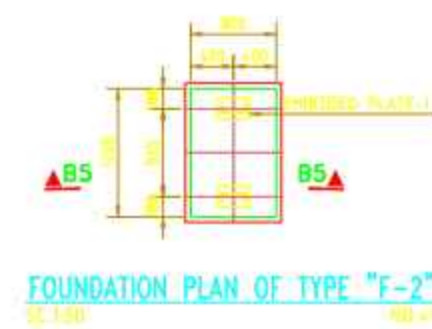
TYPICAL REINFORCEMENT SECTION OF PED-1
SC. 5.11

SECTION B3-B3
SC. 5.12

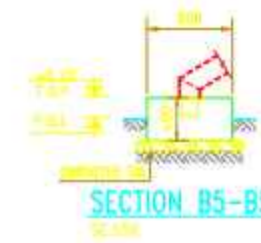


TYPICAL SECTION OF "PED-2"
SC. 5.13

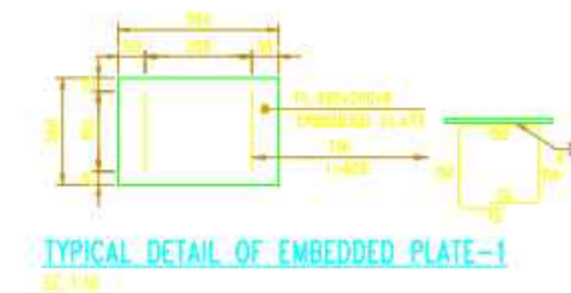
SECTION B4-B4
SC. 5.14



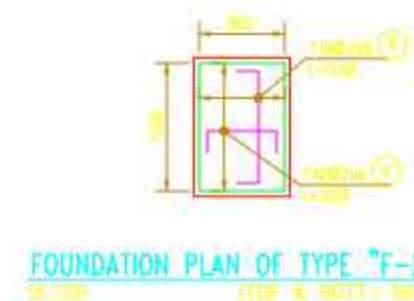
FOUNDATION PLAN OF TYPE "F-2"
SC. 5.15



SECTION B5-B5
SC. 5.16



TYPICAL DETAIL OF EMBEDDED PLATE-1
SC. 5.17



FOUNDATION PLAN OF TYPE "F-2"
SC. 5.18

BAR BENDING SCHEDULE

Sl. No.	Bar No.	Bar Description	Length (mm)	No.	Total Length (mm)	Weight (kg)
1	100	100	100	100	10000	0.10
2	100	100	100	100	10000	0.10
3	100	100	100	100	10000	0.10
4	100	100	100	100	10000	0.10
5	100	100	100	100	10000	0.10
6	100	100	100	100	10000	0.10
7	100	100	100	100	10000	0.10
8	100	100	100	100	10000	0.10
9	100	100	100	100	10000	0.10
10	100	100	100	100	10000	0.10
TOTAL LENGTH (mm)			10000	100	10000	1.00
WEIGHT (kg)			10000	100	10000	1.00
GRAND TOTAL (kg)						4071

GENERAL NOTES

SPECIFIC NOTES

ABBREVIATIONS & LEGEND

KEY PLAN



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DOCUMENT DESCRIPTION: **TRANSFER TOWER TT02-PILE AND FOUNDATION DRAWINGS**

DOCUMENT NO. 41S2CBSI-1H-ST-DW-450-15

REV. 00 SIZE 00 SCALE 00 SHEET NO. 03

GENERAL NOTES

GENERAL NOTES - STEEL CONNECTION

1. ALL CONNECTIONS SHOULD BE DESIGNED TO TRANSFER ALL LOADS AND MOMENTS TO BE TRANSFERRED TO THE FOUNDATION.

- REFER TO ALL RELEVANT DRAWINGS AND SPECIFICATIONS FOR DIMENSIONS AND DETAILS.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.

1. GENERAL

- 1 - CONNECTION / CONNECTION TYPE SHALL BE AS PER THE REQUIREMENTS OF THE DESIGNING ENGINEER AND APPROVED BY THE ARCHITECT.
- 2 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 3 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 4 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.

2. MATERIALS

- 1 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 2 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 3 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 4 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.

- 1 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 2 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 3 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 4 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.

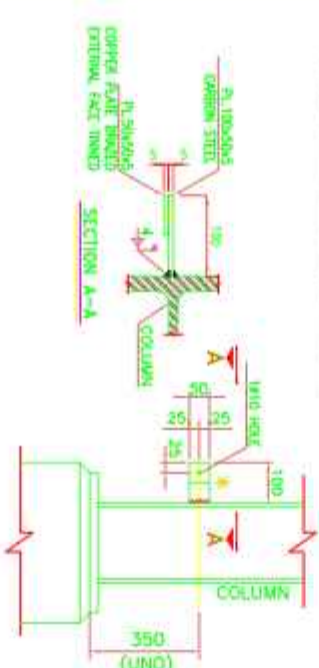


FIG 1 - STEEL STRUCTURE FABRICATING DETAILS

* FOR LOCATION OF PILE AND SPOUGE CONNECTION REFER TO ARCHITECTURAL DRAWING

- 1 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 2 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 3 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 4 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.

3. CONNECTION

- 1 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 2 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 3 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 4 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.

GENERAL REVISIONS

- 1 - ALL REVISIONS SHOULD BE MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ARCHITECT AND APPROVED BY THE ENGINEER.
- 2 - ALL REVISIONS SHOULD BE MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ARCHITECT AND APPROVED BY THE ENGINEER.
- 3 - ALL REVISIONS SHOULD BE MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ARCHITECT AND APPROVED BY THE ENGINEER.

FILLET WELD SIZE DETERMINATION GUIDE IN STANDARD CONNECTION DRAWINGS

CONNECTOR DRAWINGS

- 1 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 2 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.

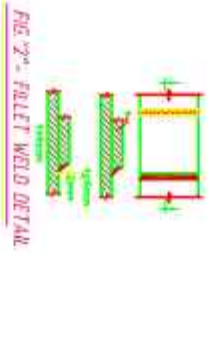
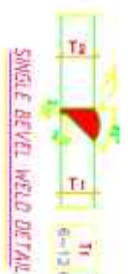


FIG 2 - FILLET WELD DETAIL

- 1 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 2 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.

THICKNESS OF PLATE (mm)	MIN WELD SIZE (mm)
4-6	3
8, 10, 12	5
15	7
15	8

1 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.



SINGLE V WELD DETAIL



FIG 3 - GROOVE WELD DETAILS

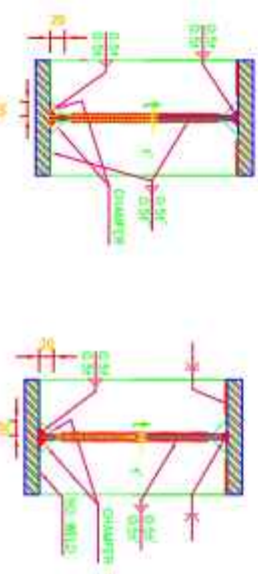


FIG 4 - TYPICAL CHAMFER DETAIL GENERAL GUIDE

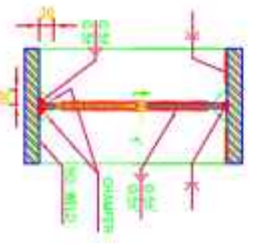


FIG 5 - CRANE TERMINATION DETAIL GENERAL GUIDE

FIG 3 - PLUG WELD DETAIL



FIG 3 - SLOT WELD DETAIL



- 1 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 2 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 3 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.

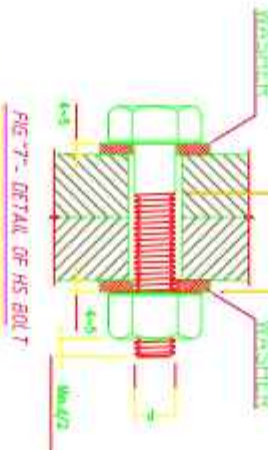
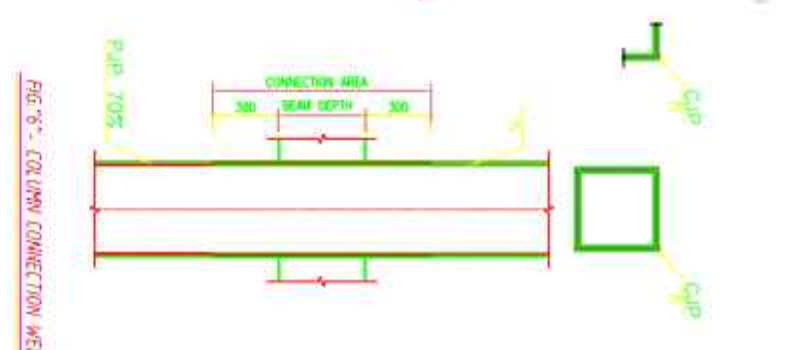


FIG 7 - DETAIL OF HS BOLT

Grade	Specification	Grade	Specification
M16	A573 A505	M20	A573 A505
M22	A573 A505	M27	A573 A505
M30	A573 A505	M36	A573 A505

** Equal to above

FIG 8 - COLUMN CONNECTION WELD



GENERAL NOTES

SPECIFIC NOTES

- 1 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 2 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.
- 3 - ALL CONNECTIONS SHALL BE DESIGNED TO RESIST ALL APPLIED LOADS AND MOMENTS.

SYMBOL	DESCRIPTION
[Symbol]	[Description]
[Symbol]	[Description]
[Symbol]	[Description]

ABBREVIATIONS & LEGEND



DESCRIPTION	REF. NO.
[Description]	[Ref. No.]
[Description]	[Ref. No.]
[Description]	[Ref. No.]

NO.	DATE	BY	CHECKED	APPROVED
1				
2				

GENERAL NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
2. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE SPECIFIED.
3. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE SPECIFIED.
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ABBREVIATIONS & LEGEND

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KEY PLAN



REFERENCE DRAWINGS

DESCRIPTION	REF. NO.

COMMENT TABLE

REVISION TABLE

NO.	DATE	BY	CHKD.	DESCRIPTION

PROJECT TITLE

COLD BRIQUETTE SPONGE IRON PROJECT

TRANSFER TOWER T103-PILE AND FOUNDATION DRAWINGS

GENERAL NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
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SPECIFIC NOTES

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ABBREVIATIONS & LEGEND

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KEY PLAN



REFERENCE DRAWINGS

DESCRIPTION	REF. NO.

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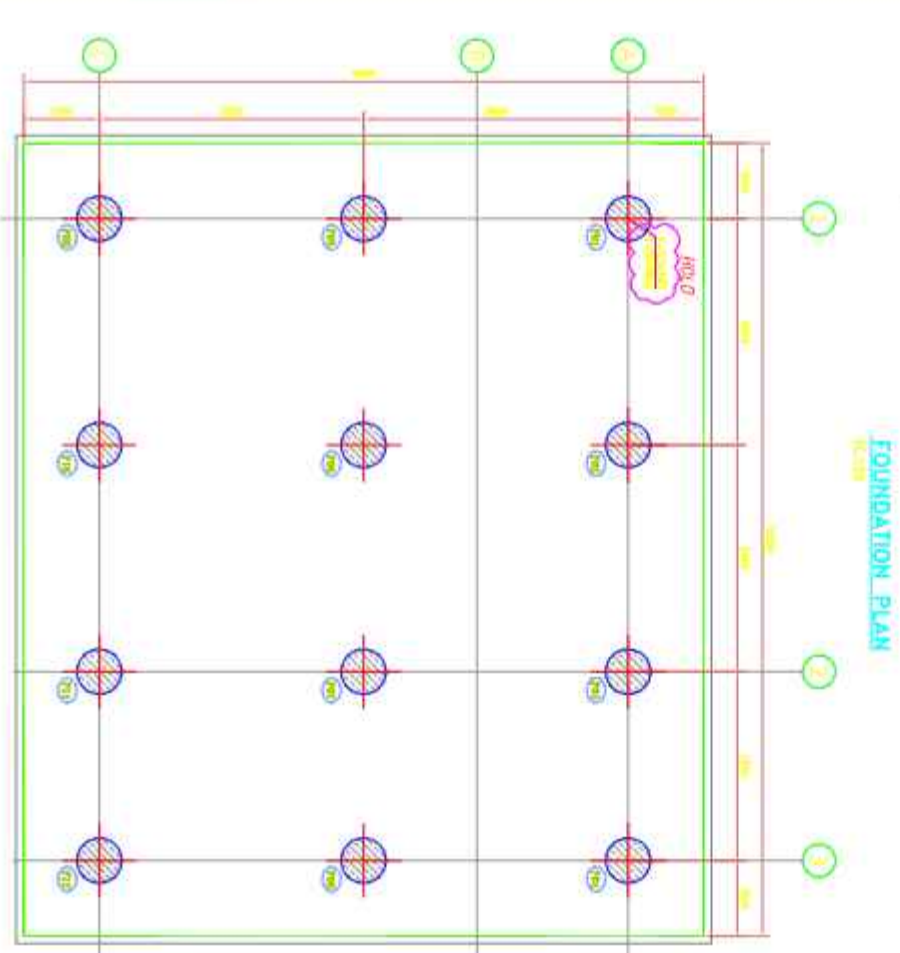
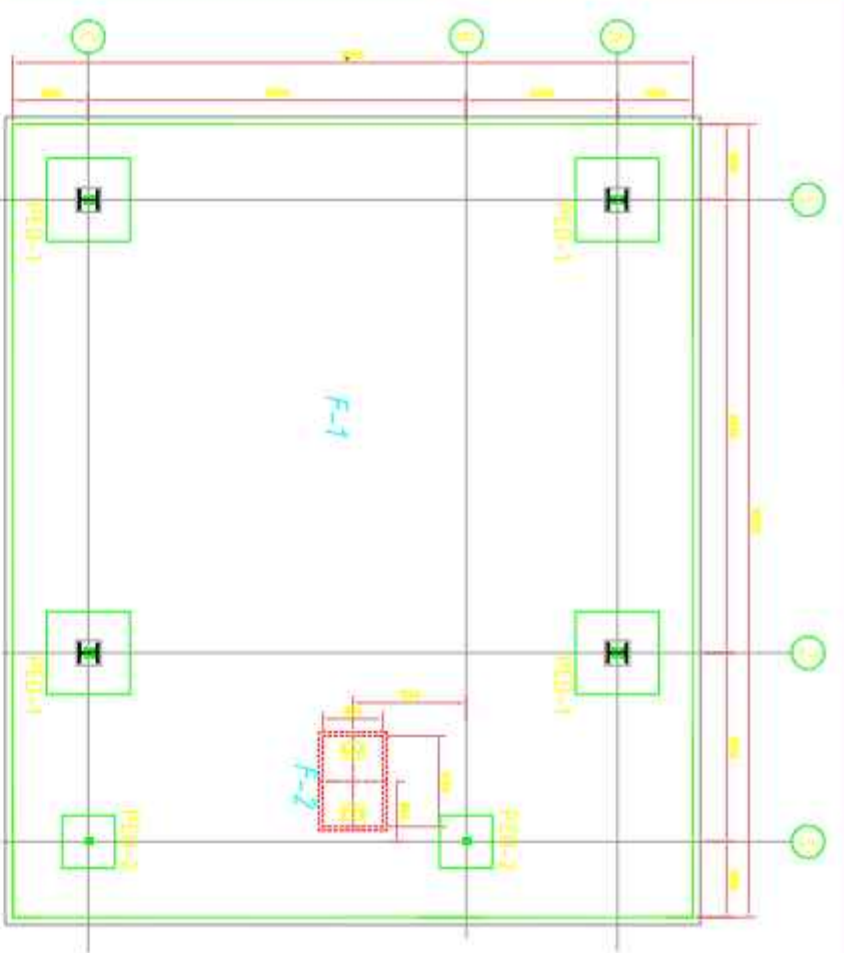
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NO.	DATE	BY	CHKD.	DESCRIPTION

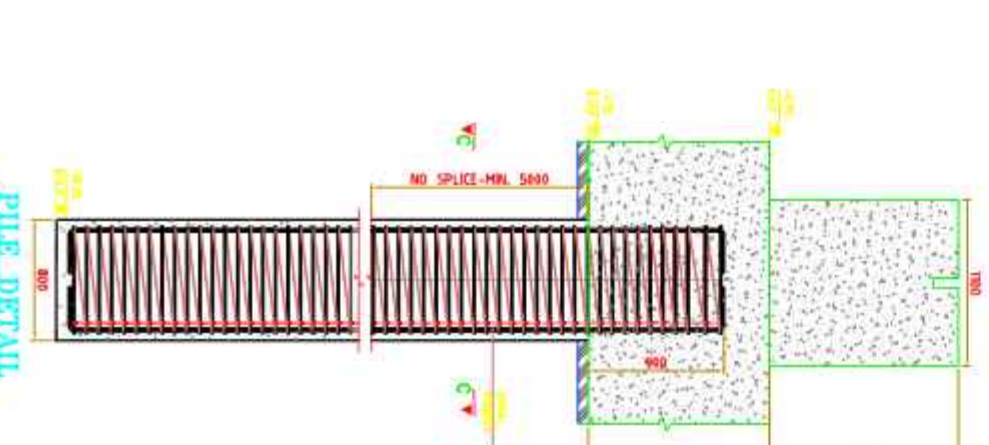
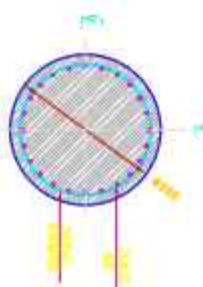
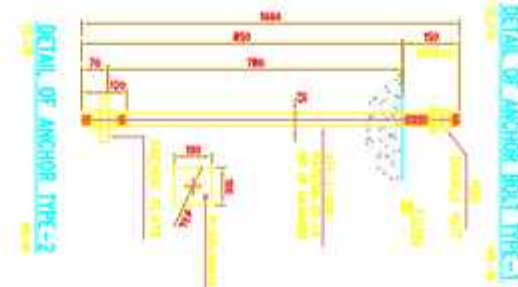
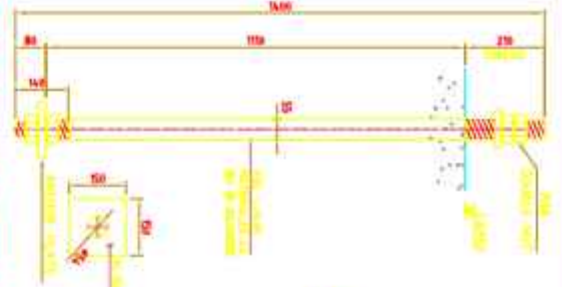
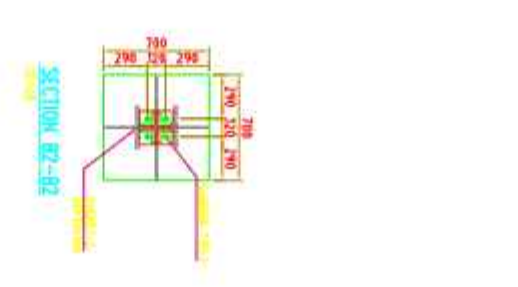
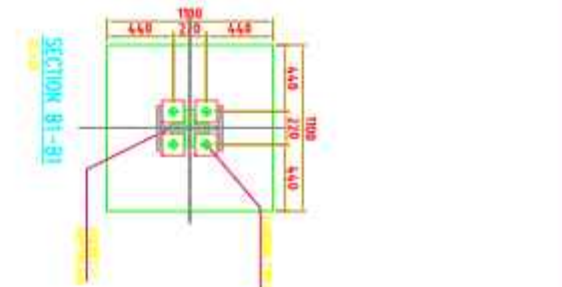
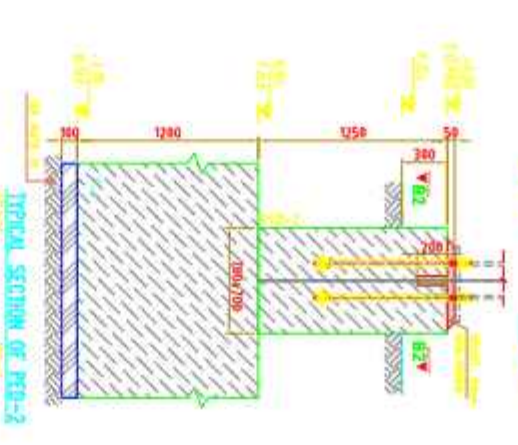
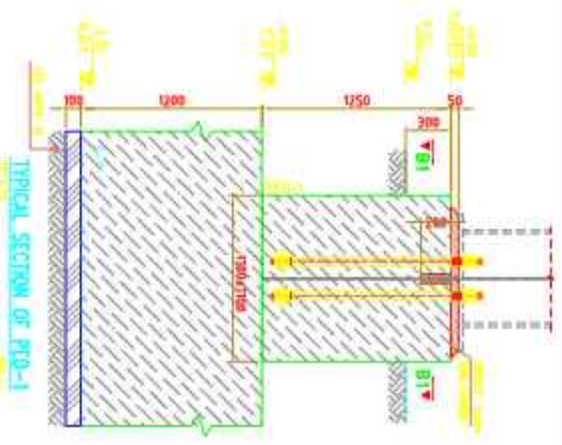
PROJECT TITLE

COLD BRIQUETTE SPONGE IRON PROJECT

TRANSFER TOWER T103-PILE AND FOUNDATION DRAWINGS



PILE LEGEND						
NO.	PILE MARKING	DIM (mm)	LENGTH (m)	COMPRESSION DEMAND (Tonn)	TENSION DEMAND (Tonn)	QTY
1	P-01~12	800	18	103	60	12



PILE DETAIL

SECTION C-C

GENERAL NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
2. DIVISION OF WORK TO BE DONE BY TRADE IS TO BE DONE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED.
3. ALL DIMENSIONS INDICATED SHALL BE TO THE CENTER UNLESS OTHERWISE SPECIFIED.
4. ALL DIMENSIONS SHALL BE TO THE CENTER UNLESS OTHERWISE SPECIFIED.
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SPECIFIC NOTES

- 1. All dimensions are to center unless otherwise specified.
- 2. All dimensions are to center unless otherwise specified.
- 3. All dimensions are to center unless otherwise specified.
- 4. All dimensions are to center unless otherwise specified.
- 5. All dimensions are to center unless otherwise specified.
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- 8. All dimensions are to center unless otherwise specified.
- 9. All dimensions are to center unless otherwise specified.
- 10. All dimensions are to center unless otherwise specified.

ABBREVIATIONS & LEGEND

0301	ASBESTOS	0401	WOOD
0302	CEMENT	0402	CONCRETE
0303	STEEL	0403	BRICK
0304	GLASS	0404	PAINT
0305	ROOFING	0405	LANDSCAPE
0306	ELECTRICAL	0406	MECHANICAL
0307	PLUMBING	0407	FINISH
0308	MECHANICAL	0408	PAINT
0309	ELECTRICAL	0409	MECHANICAL
0310	PLUMBING	0410	FINISH

KEY PLAN



REFERENCE DRAWINGS

DESCRIPTION	REF. NO.

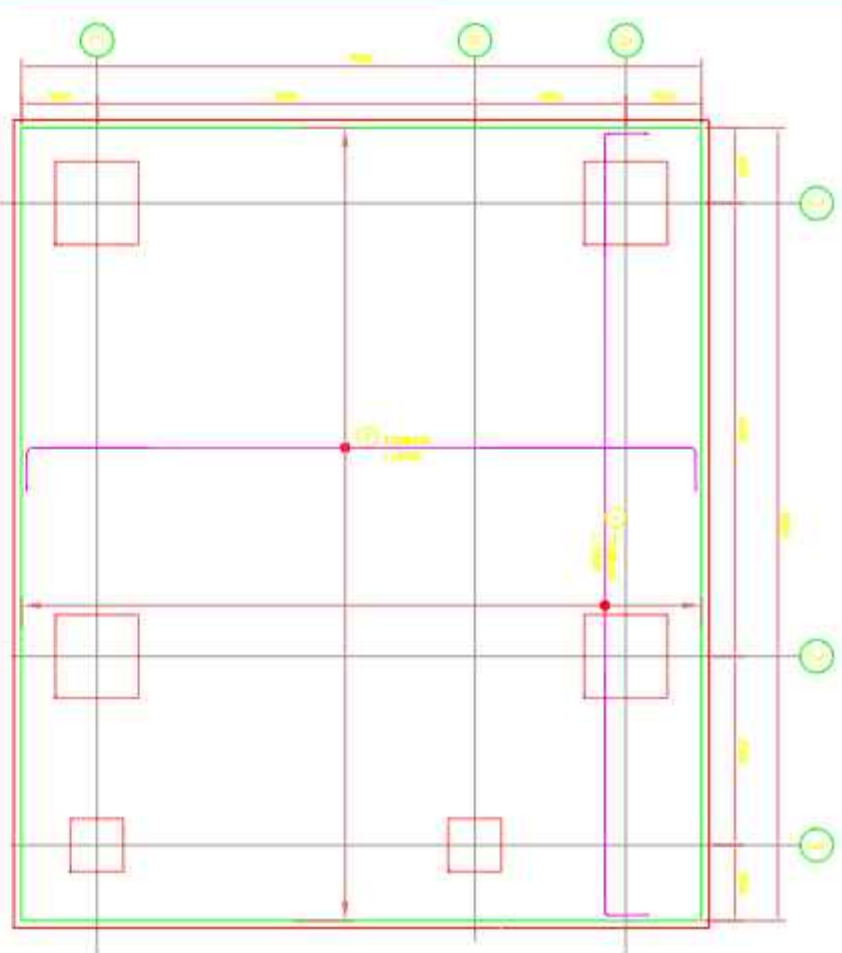
COMMENTS TABLE

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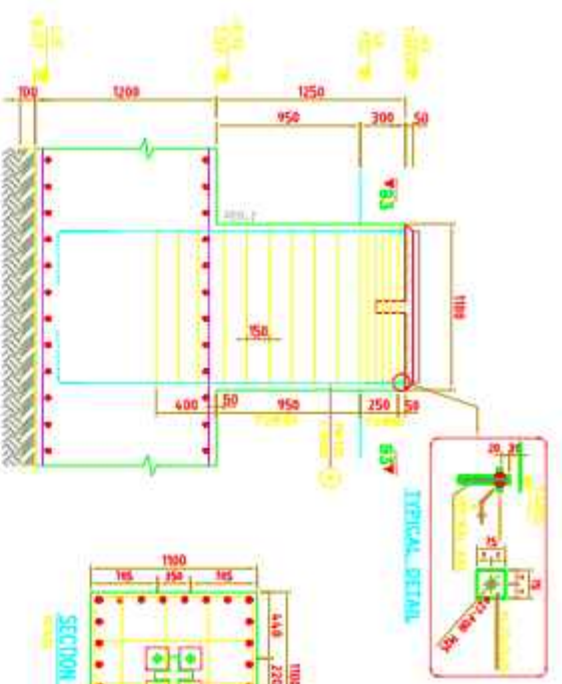
REVISION TABLE

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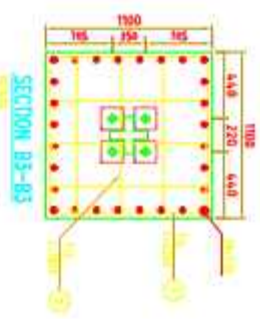
PROJECT TITLE	COLD BRIQUETTE SPONGE IRON PROJECT
PROJECT LOCATION	TRANSFER TOWER T103-PILE AND FOUNDATION DRAWINGS
PROJECT NO.	
DRAWING NO.	



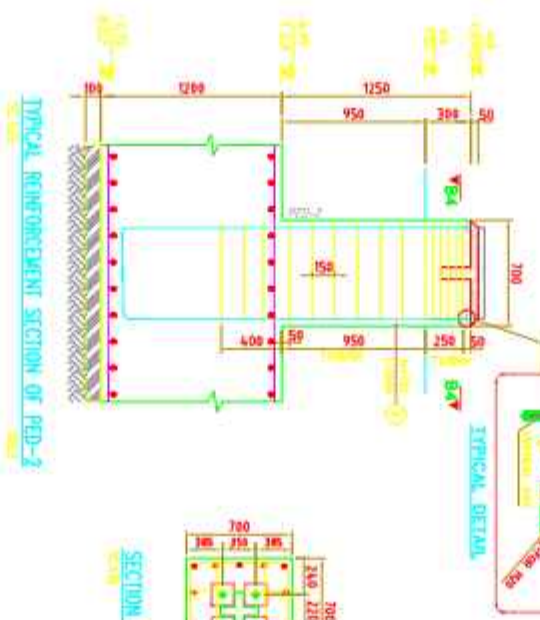
BOTTOM & TOP REINFORCEMENT PLAN OF FOUNDATION TYPE T-1



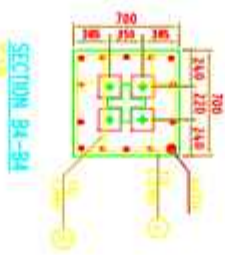
TYPICAL REINFORCEMENT SECTION OF FED-1



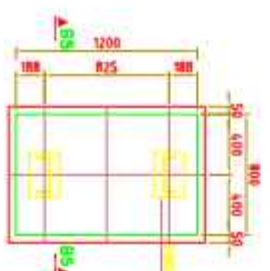
TYPICAL DETAIL



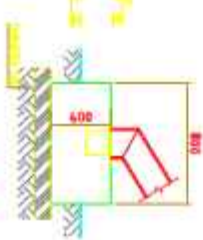
TYPICAL REINFORCEMENT SECTION OF FED-2



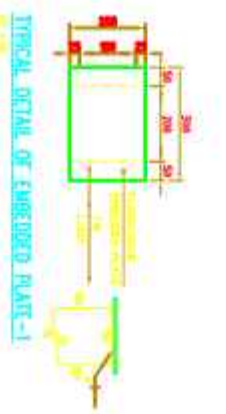
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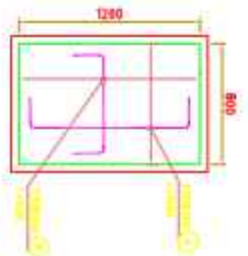
FOUNDATION PLAN OF TYPE T-2



SECTION B-B



TYPICAL DETAIL OF EMBEDDED PLATE-1



FOUNDATION PLAN OF TYPE T-2

BAR BENDING SCHEDULE

NO.	DESCRIPTION	QTY	UNIT
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GENERAL NOTES

- IN CASE OF CONFLICTING INFORMATION IN TECHNICAL DOCUMENTS THE ORDER OF PRIORITY SHALL BE:
-PRIORITY 1: DESIGN DRAWINGS
-PRIORITY 2: THESE GENERAL NOTES
-PRIORITY 3: TECHNICAL SPECIFICATIONS
-PRIORITY 4: STANDARD DRAWINGS
- ALL DIMENSIONS & SIZES SHALL BE IN MILLIMETERS & ALL COORDINATES & ELEVATIONS SHALL BE IN METERS.
- ALL REINFORCED CONCRETE WORK SHALL COMPLY WITH INBC PART9-1399 CODE.
- ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH AISC DESIGN GUIDE AISC NO.01, AC318.
- ALL GROUT UNDER BASE PLATES OF EQUIPMENT & STRUCTURAL MEMBERS SHALL BE NON-SHRINKAGE.
- FOR DETAILS OF CONTRACTION , EXPANSION AND CONSTRUCTION JOINTS REFER TO: SHEET 02.
- ALLOWABLE BEARING PRESSURES FOR FOUNDATION DESIGN ARE PER SOIL CONSULTANT'S RECOMMENDATION , NORMALLY BASED UPON SOIL CONDITIONS ENCOUNTERED IN BORINGS AS DESCRIBED IN SOIL REPORTS. SHOULD OTHER SOIL CONDITIONS BE ENCOUNTERED DURING CONSTRUCTION , CORRECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR WITH THE APPROVAL OF THE OWNER REPRESENTATIVE .
- ALL FOUNDATIONS SHALL BE PLACED ON NATURAL SOIL THUS ALL BACKFILLS AND EARTHFILLS SHALL BE EXCAVATED AND REFILLED WITH LEAN CONCRETE TO THE BOTTOM LEVEL OF FOUNDATIONS.
- SINCE SOME OF DRAWINGS MAY NOT BE TO SCALE , ONLY READ THE JOB SPECIFIED DIMENSIONS FROM THE DRAWINGS. MISSED DIMENSIONS SHOULD BE ASKED FROM THE CONTRACTOR.
- REINFORCEMENT MAY BE ADJUSTED LOCALLY TO SUIT RECESS FOR ANCHOR BOLTS , HOLES AND OTHER EMBEDDED MATERIALS.
- LAP SPLICES OF SLAB BARS SHALL BE STAGGERED OVER SPAN LENGTH.
- DEVELOPMENT LENGTH(Ld) FOR UNCOATED DEFORMED BARS SHALL CONFORM TO ACI 318, SEC.12.2 & SEC.21.5.4 FOR JOINTS IN SPECIAL MOMENT FRAMES.
- DEVELOPMENT LENGTH IN TENSION (mm)
1) CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2db, CLEAR COVER NOT LESS THAN db

(FY=400 N/mm ²)										
f'c (N/MM ²)	DIA (db) LOCATION	φ10	φ12	φ14	φ16	φ20	φ22	φ25	φ28	φ32
		25.0	TOP BAR	500	600	700	800	1250	1350	1550
	OTHERS	400	450	550	600	950	1050	1200	1350	1500
30.0	TOP BAR	450	550	650	750	1150	1250	1400	1550	1800
	OTHERS	350	450	500	550	850	950	1100	1200	1400
35.0	TOP BAR	450	500	600	700	1050	1150	1300	1450	1650
	OTHERS	350	400	450	550	800	900	1000	1100	1300

- EXCEPT ABOVE 1)LD SHALL BE INCREASED TO 1.5 TIMES.
- TOP BAR DEVELOPMENT LENGTH SHALL BE USED WHERE HORIZONTAL REINFORCEMENT IS PLACED SUCH THAT MORE THAN 300 mm OF FRESH CONCRETE IS CAST BELOW THE DEVELOPMENT LENGTH.

12.2. DEVELOPMENT LENGTH OF STANDARD HOOKS IN TENSION(mm)
FOR 90 DEGREE HOOKS WITH COVER ON BAR EXTENSION BEYOND HOOK NOT LESS THAN 50mm AND ENCLOSED WITHIN TIES OR STIRRUPS PARALLEL TO BARS BEING DEVELOPED, SPACED NOT GREATER THAN 3db ALONG THE LENGTH OF THE TALL EXTENSION OF THE HOOK PLUS BEND FOR JOINTS OF SPECIAL MOMENT FRAMES.

(FY=400 N/mm ²)									
RE-BAR f'c (N/MM ²)	φ10	φ12	φ14	φ16	φ20	φ22	φ25	φ28	φ32
25	150	200	250	300	350	400	450	500	
30	150	200	200	250	300	300	350	400	450
35	150	150	200	200	250	300	300	350	400

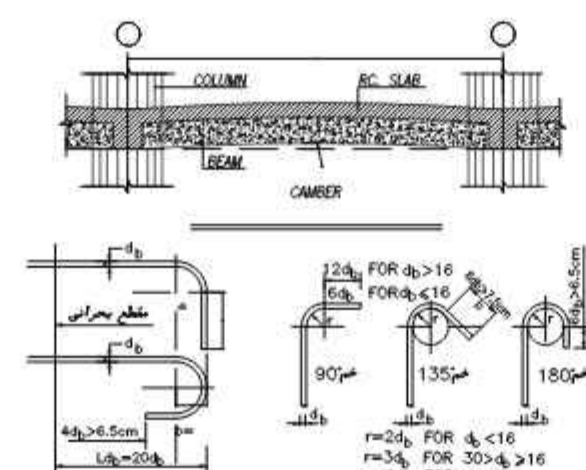
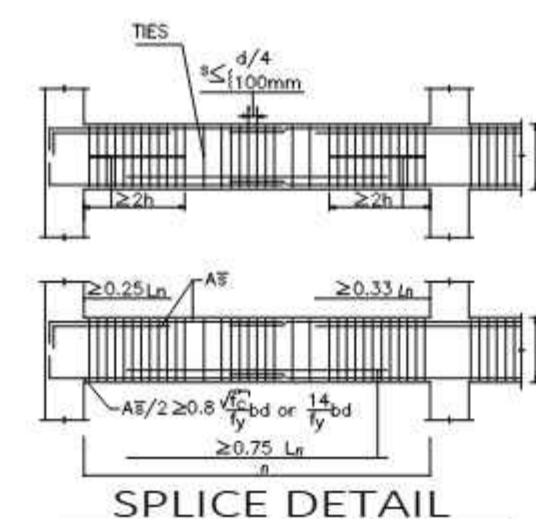
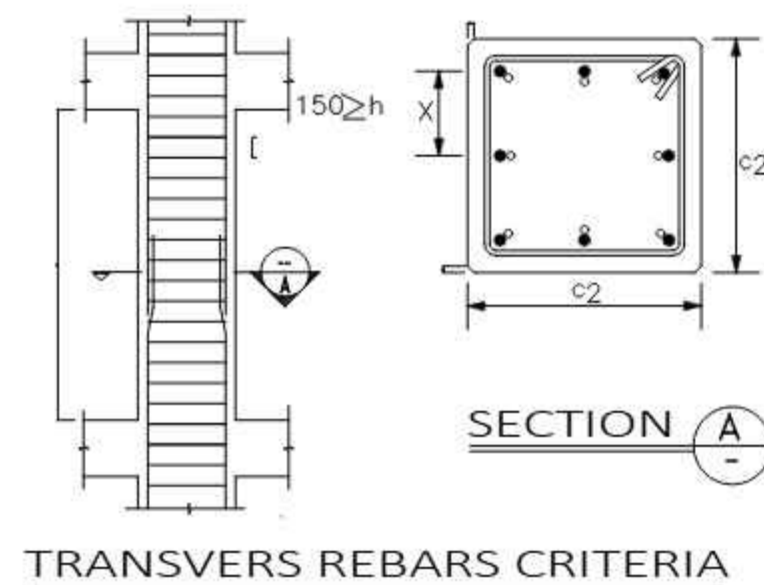
- SPLICES OF DEFORMED BARS AND DEFORMED WIRE IN TENSION
13.1. MINIMUM LENGTH OF LAP FOR TENSION LAP SPLICES SHALL BE AS REQUIRED FOR CLASS A OR B SPLICE, BUT NOT LESS THAN 300mm WHERE:
CLASS A SPLICE ---- 1.0Ld.
CLASS B SPLICE ---- 1.3Ld.
WHERE Ld IS THE TENSILE DEVELOPMENT LENGTH. LAP SPLICE CLASS A AND B ARE DEFINED AS FOLLOW:

CLASS A	CLASS B
(AS PROVIDED) ≥ 2(AS REQUIRED) AND PERCENT AS SPLICE ≤ 50%	ALL OTHER CONDITIONS

*SPLICES SHALL BE STAGGERED AT LEAST 600mm.

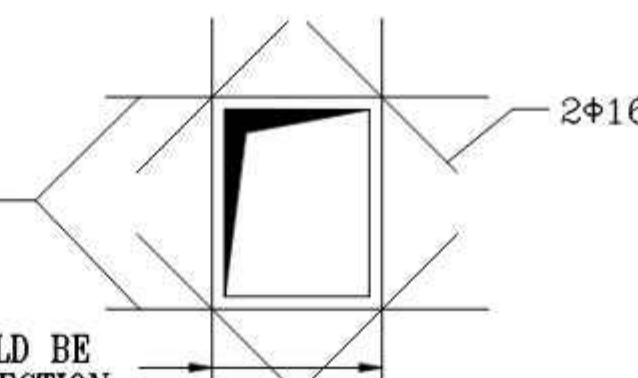
- SPLICES OF DEFORMED BARS IN TENSION FOR CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2db, CLEAR COVER NOT LESS THAN db AND CLASS B SPLICES:

(FY=400 N/mm ²)										
f'c (N/MM ²)	DIA (db) LOCATION	φ10	φ12	φ14	φ16	φ20	φ22	φ25	φ28	φ32
		25.0	TOP BAR	650	800	900	1050	1600	1750	2000
	OTHERS	500	600	700	800	1250	1350	1550	1700	1950
30.0	TOP BAR	600	700	850	950	1450	1600	1850	2050	2350
	OTHERS	450	550	650	750	1150	1250	1400	1550	1800
35.0	TOP BAR	550	650	750	900	1350	1500	1700	1900	2150
	OTHERS	450	500	600	700	1050	1150	1300	1450	1650



TOTAL CROSS AREA OF REBAR SECTIONS SHOULD BE EQUAL TO DISCONNECTED REBARS IN THIS DIRECTION

TOTAL CROSS AREA OF REBAR SECTIONS SHOULD BE EQUAL TO DISCONNECTED REBARS IN THIS DIRECTION



- MINIMUM DISTANCE FROM THE CENTRE LINE OF BOLT TO EDGE OF CONCRETE PLINTH SHALL BE AS FOLLOWS, UP TO AND INCLUDING.

- 20 mm dia. = 125 mm
- 24 mm dia. = 150 mm
- 30 mm dia. = 160 mm
- 36 mm dia. = 180 mm
- 42 mm dia. = 210 mm
- 48 mm dia. = 240 mm
- 56 mm dia. = 280 mm
- 64 mm dia. = 320 mm

- REINFORCEMENT BARS SHALL BE HIGH TENSILE STRENGTH GRADHIA WITH $F_y=4000 \text{ Kg/cm}$

- REBAR SPLICE OF TWO ADJACENT REINFORCEMENT SHOULD NOT BE AT THE SAME LOCATION. THEREFORE TWO ADJACENT REBARS SHOULD BE LOCATED ALTERNATE EACH OTHER.

- THE LONGITUDINAL REINFORCEMENT OF THE TIE BEAMS SHALL BE CONTINUOUSLY EXTENDED THROUGH THE FOUNDATIONS.

- THE CONTRACTOR SHALL PROVIDE SUFFICIENT SUPPORT,BY MEANS OF APPROVED CHAIRS,SPACERS ETC,TO ENSURE THAT ALL REINFORCEMENT IS HELD IN THE CORRECT POSITION WHILST CONCRETING IS TAKING PLACE.CONCRETE SPACERS SHALL BE MADE FROM MATERIALS IN NO WAY INFERIOR TO THOSE SPECIFIED FOR THE CONCRETE IN WITCH THE SPACER TO BE USED.ALL CONCRETE SPACERS SHALL BE WET CURED FOR 10 DAYS AND KEPT CLEAN PRIOR TO INSTALATION IN CONCRETE STRUCTURE.PLASTIC AND METAL SPACERS ARE NOT PERMITTED.

- THE CLEAR COVER TO OUTERMOST REINFORCEMENT SHALL BE ACCORDING TO ENVIRONMENTAL CONDITIONS FOR REINFORCED CONCRETE:

Element Type	Environmental Conditions				
	Mild	Normal	Severe	Very Severe	High Intense
Beams & Columns	35	45	50	65	75
Slabs, Walls & Joists	20	30	35	50	60
Shells & Plates	20	25	30	45	55
Foundations	40	50	60	75	90

Project environmental condition: SEVERE

- TYPE OF CEMENT TO BE USED SHALL BE : ACCORDANCE WITH SOIL INVESTIGATION REPORT.

- GRADES OF CONCRETE SHALL BE :
a. GRADE "C35" FOR ALL STRUCTURAL CONCRETE.
b. BLINDING AND LEAN CONCRETE SHALL HAVE MIN 150Kg CEMENT CONTENT. FOR MORE DETAILS OF CONCRETE GRADE PLEASE SEE SPECIFICATION FOR REINFORCED CONCRETE:

- EXCAVATION SHALL NOT BE STARTED UNLESS THE FOUNDATION CONSTRUCTION & BACKFILLING CAN BE CARREID OUT IN A SHORT TIME AFTER EXCAVATION. EXCAVATED BASE SHALL BE CAREFULLY PROTECTED AGAINST ENTERING WATER.

- UNDERGROUND CONCRETE SHALL BE COATED WITH BITUMINOUS PROTECTION ACCORDING TO CONSTRUCTION SPECIFICATION FOR REINFORCED CONCRETE:

- MAXIMUM CONCRETE WATER PER CEMENT RATIO MUST (W/C) BE LIMITED TO 0.4

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE.
- ALL THE ELEVATIONS ARE RELATED TO THE +0.00 OF THE SITE.
- ELEVATION OF +0.00 IS EQUAL TO +1270.00 OF THE SITE.
- ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH C35, USING TYPE II CEMENT.
- ALL CONCRETE SURFACES IN CONTACT WITH SOIL SHALL HAVE A MINIMUM COVER OF 75mm. THE MINIMUM COVER FOR WALL AND SLAB IS 30mm AND FOR COLUMNS AND BEAMS IS 50 mm

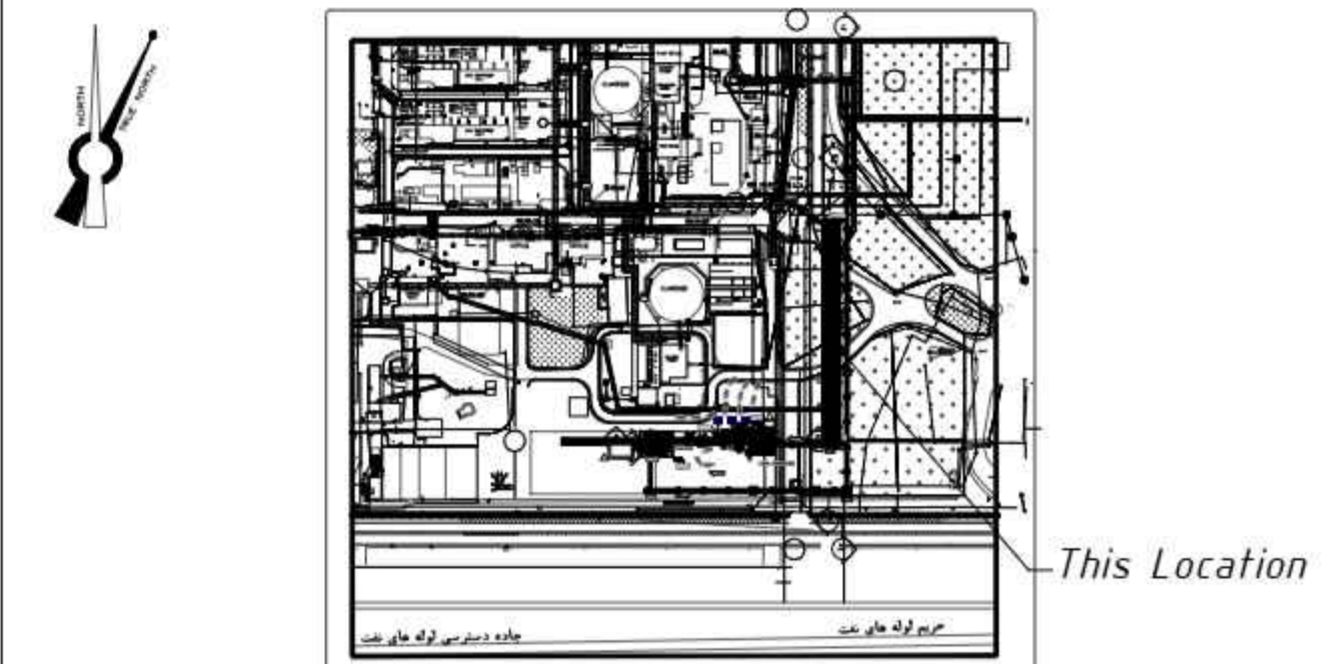
SPECIFIC NOTES

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- ALL ELEVATION AND CO-ORDINATES ARE IN METER.
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- CONTRACTOR SHALL CHECK AND VERIFY DIMENSIONS AND ANY DISCREPANCY SHALL BE REPORTED BEFORE CONSTRUCTION COMMENCEMENT.
- 28 DAY CHARACTERISTIC COMPRESSIVE STRENGTH OF CONCRETE IS 350 Kg/cm² IN CYLINDRICAL SPECIMEN UNLESS NOTED OTHERWISE.
- LEAN CONCRETE SHALL HAVE MINIMUM CEMENT CONTENT OF 150 kg/m³.
- DEFORMED REINFORCEMENT BAR TYPE IS AS A-III WITH YIELD STRESS OF $F_y=4000 \text{ kg/cm}$ AND ULTIMATE STRESS AT 6000 kg/cm².
- MATERIAL OF NUT IS AS HIGH STRENGTH GRADE (10.9) ACCORDING TO "EN 14399-4, HV", WITH $F_u=10000 \text{ kg/cm}$.
- MATERIAL OF ANCHOR PLATE IS ST-37 WITH YIELD STRESS OF $F_y=2400 \text{ kg/cm}$ UNLESS NOTED OTHERWISE.
- CEMENT TO BE PORTLAND ACCORDING TO SOIL INVESTIGATION.
- COVER FOR FOUNDATION AND PEDESTAL IS 60mm AND 75mm FOR THE PLACES THAT IS FACED WITH SOIL.
- IF EXISTING SOIL UNDER FOUNDATION IS SEEN AS UNSUITABLE (REFILLED SOIL, EXCAVATION UNDER FOUNDATIONS SHALL BE CONTINUED UP TO THE RELIABLE SOIL LAYER BASE ON EXPERT GEOTECHNICAL ENGINEER CONFIRMATION, THEN EXCAVATED REGION SHALL BE FILLED WITH MASS CONCRETE UP TO THE BOTTOM OF FOUNDATION.
- WHEREVER "HOLD" SIGN IS INDICATED IN THIS DRAWING, IT MEANS THAT CONSTRUCTION IS NOT PERMITTED UNTIL THE HOLD SIGN IS REMOVED.
- POCKETS SHALL BE FILLED WITH EXPANDABLE GROUT WHEN ERECTION OF STRUCTURE OR EQUIPMENT IS COMPLETED.

ABBREVIATIONS & LEGEND

B.O.B.C.L : BOTTOM OF BEAM AND CONCRETE	CONCRETE
F.F.F.L : FINISH OF FLOOR	CONCRETE
C.L.L : CENTER LINE	CONCRETE
F.O.B.L : FINISH OF BEAM LEVEL	CONCRETE
H.P.P.P : HIGH POINT OF PAVING	CONCRETE
T.O.F.F : TOP OF FOUNDATION	CONCRETE
B.O.F.F : BOTTOM OF FOUNDATION	CONCRETE
T.O.P.E.D : TOP OF PEDESTAL	CONCRETE
T.O.C.C : TOP OF CONCRETE	CONCRETE
T.O.M.W : TOP OF WALL	CONCRETE
T.O.S.L : TOP OF SLAB	CONCRETE
T.O.B.B : TOP OF BEAM	CONCRETE
T.A.B.B : TOP OF ANCHOR PLATE	CONCRETE
C.O.N.C : CONCRETE	CONCRETE
E.M.W : EMBANKMENT	CONCRETE
F.F.F.L : FINISH OF FLOOR	CONCRETE
F.B.F.B : FINISH OF BEAM	CONCRETE

KEY PLAN



REFERENCE DRAWINGS

DESCRIPTION	REF. NO.

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Date:
Signature:

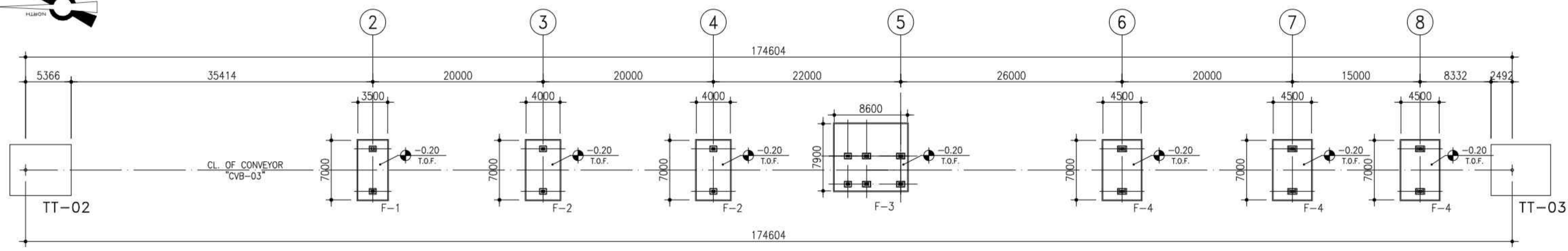
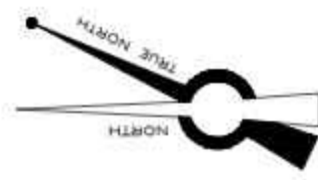
REVISION TABLE

REV.	Date	POI	Prepared	Checked	Approved by Contractor	Approved by Client
00	04.12.2024	IFR	N.A.	N.A.	E.SH.	---

PROJECT TITLE:
COLD BRIQUETTE SPONGE IRON PROJECT

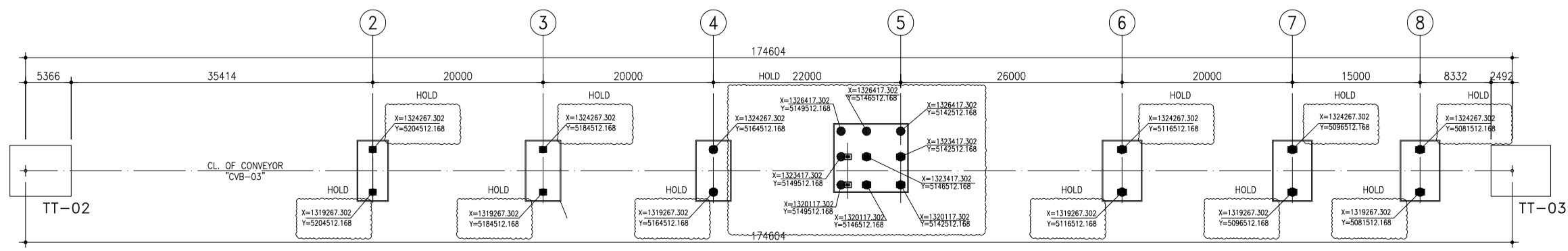
DOCUMENT DESCRIPTION:
Gallery of CVB03-Pile and Foundation Drawings

DOCUMENT NO.	4152CBSI-1H-ST-DW-433-01	REV.	SIZE	SCALE	SHEET NO.
		00	A1	-	1/7



FOUNDATIONS LAYOUT PLAN

Sc. 1/300



FOUNDATIONS LOCATION PLAN

Sc. 1/300

GENERAL NOTES

- 1- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE.
- 2- ALL ELEVATIONS ARE RELATED TO THE ±0.00 OF THE SITE.
- 3- ELEVATION OF ±0.00 IS EQUAL TO +1220.00 OF THE SITE.
- 4- ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH C35, USING TYPE II CEMENT.
- 5- ALL CONCRETE SURFACES IN CONTACT WITH SOIL SHALL HAVE A MINIMUM COVER OF 75mm. THE MINIMUM COVER FOR WALL AND SLAB IS 30mm AND FOR COLUMNS AND BEAMS IS 50 mm

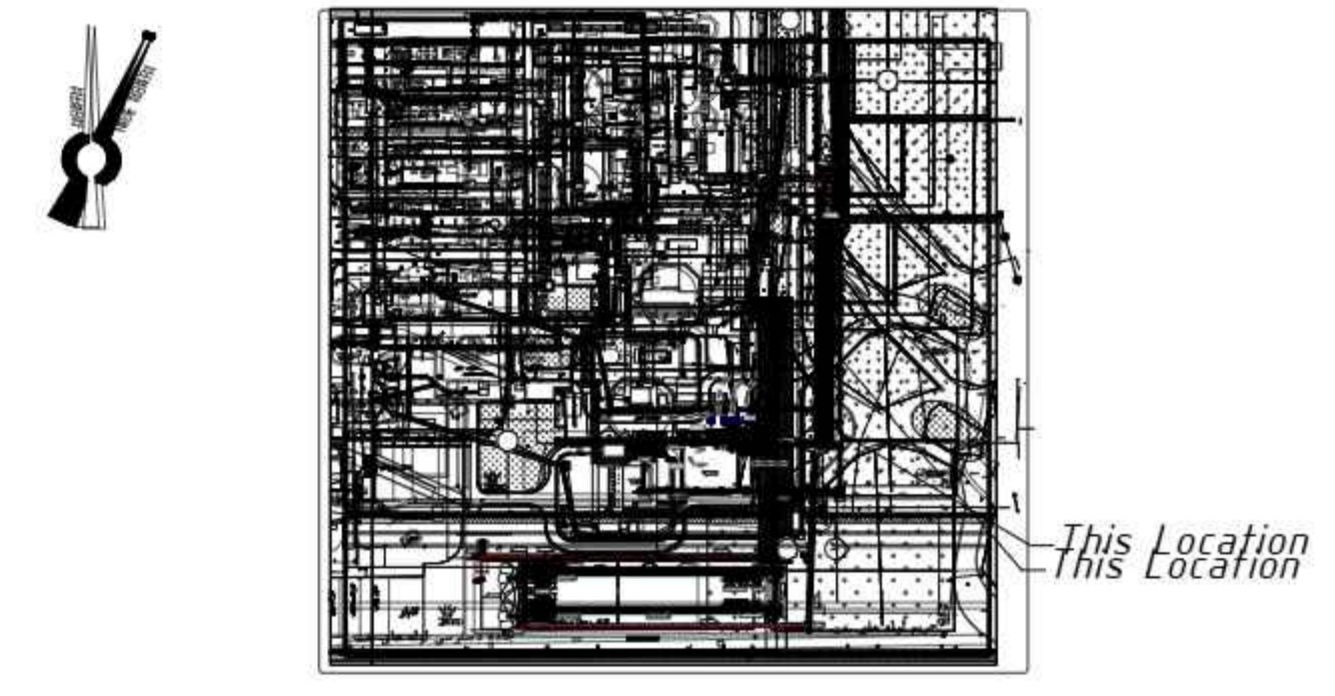
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KEY PLAN



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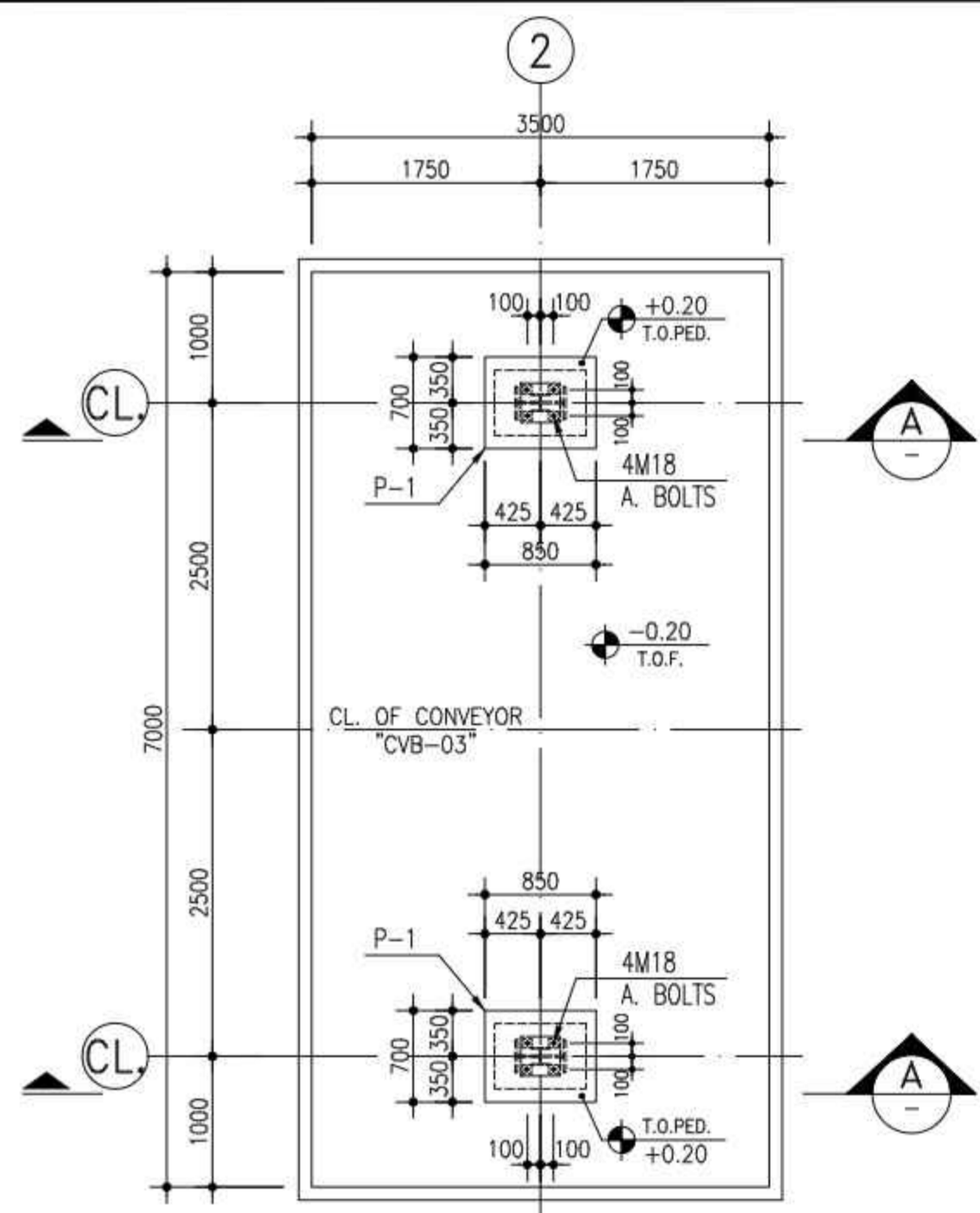
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Signature: _____

REVISION TABLE

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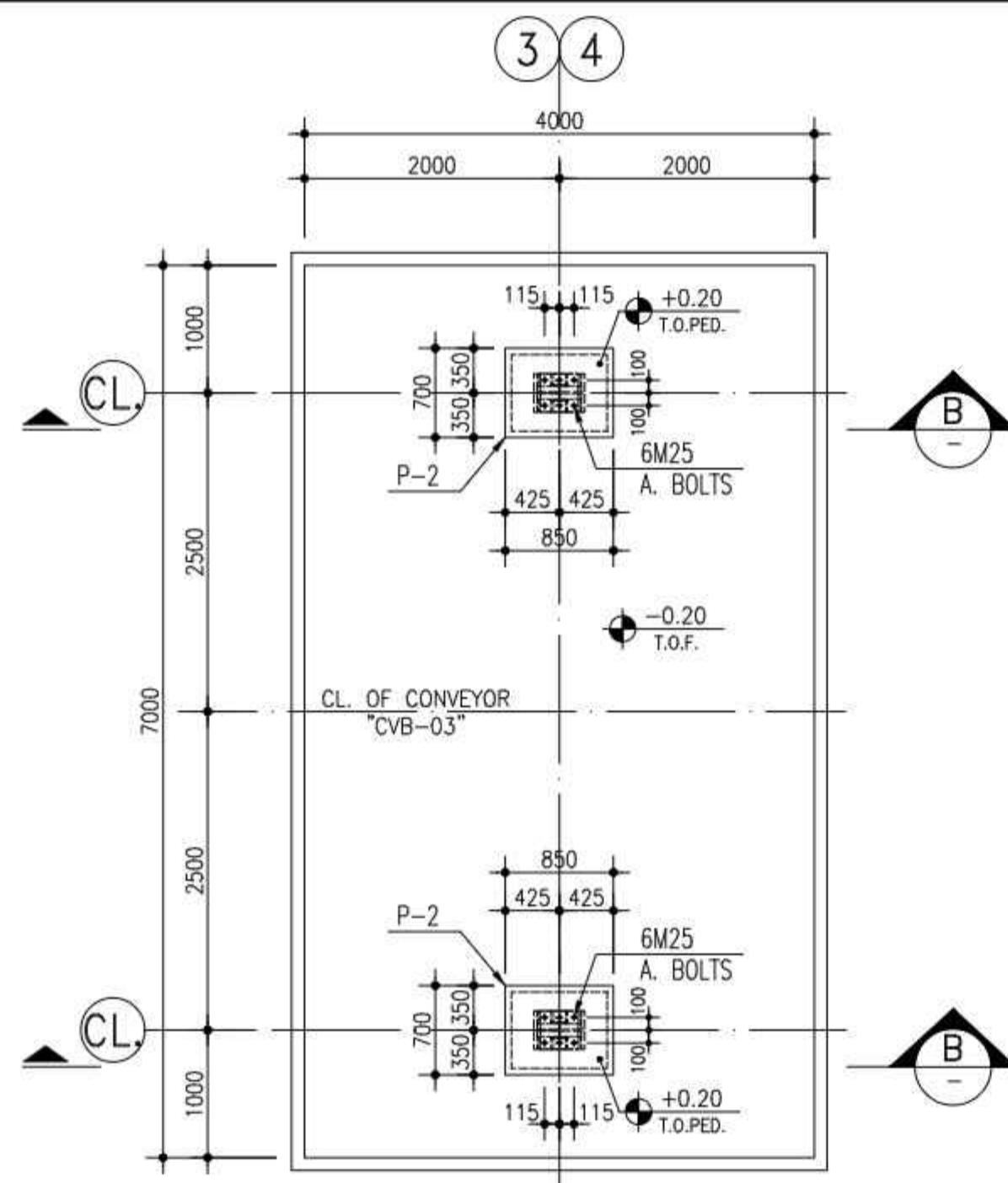
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DOCUMENT DESCRIPTION: **Gallery of CVB03-Pile and Foundation Drawings**



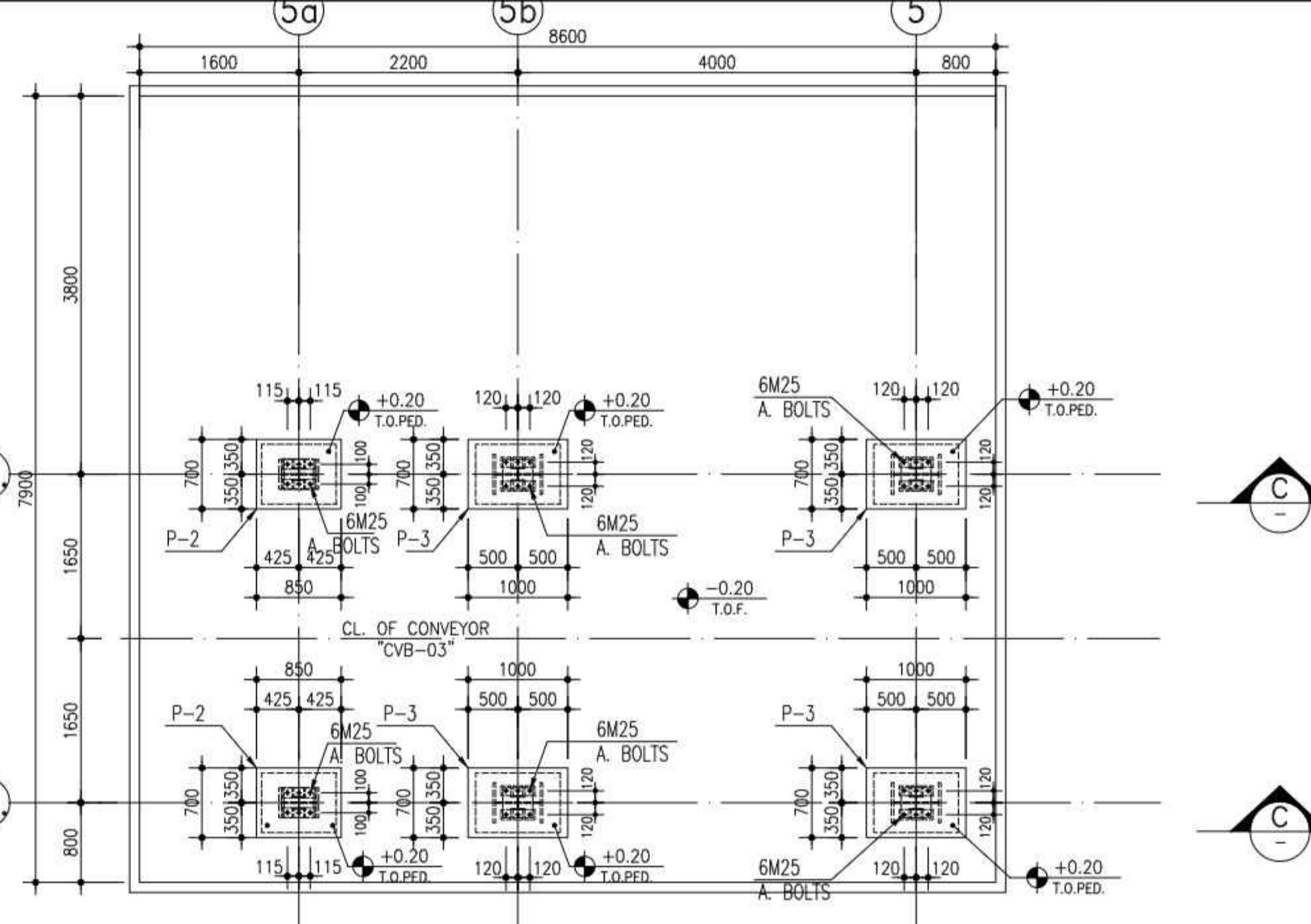
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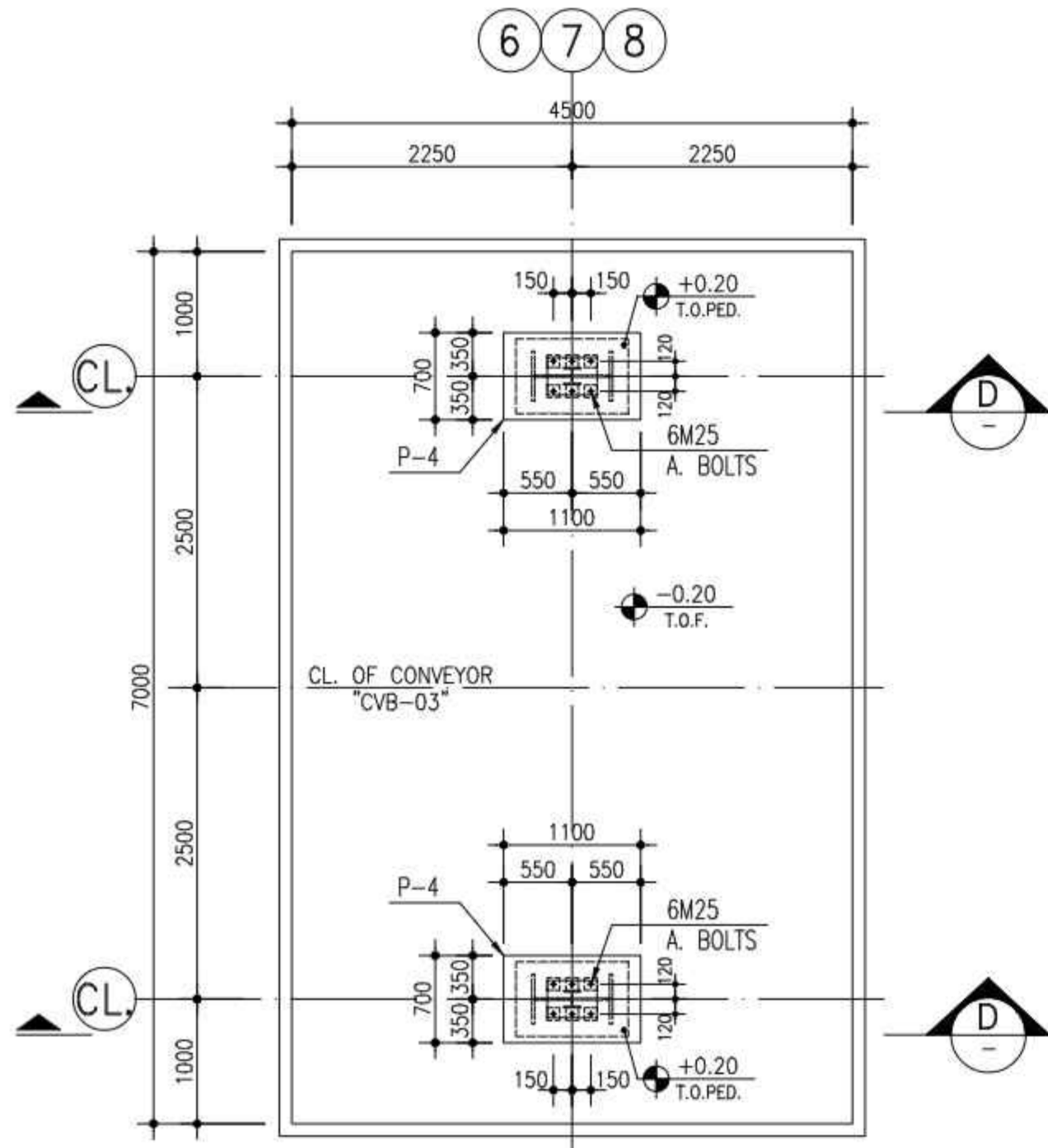
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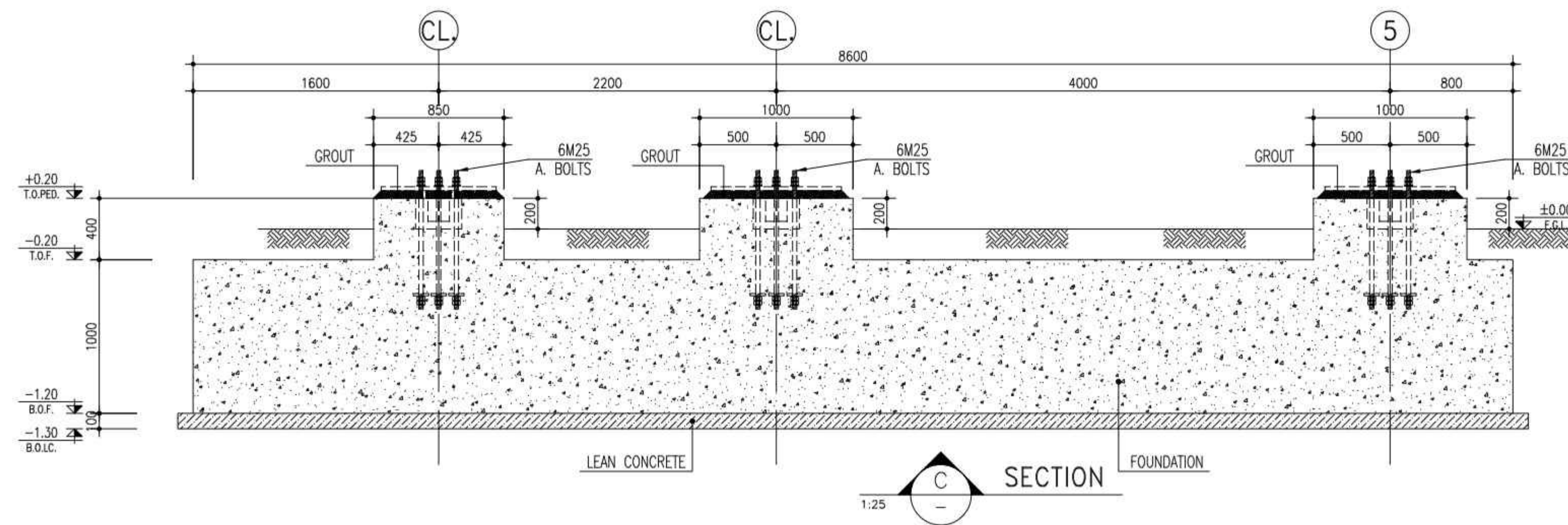
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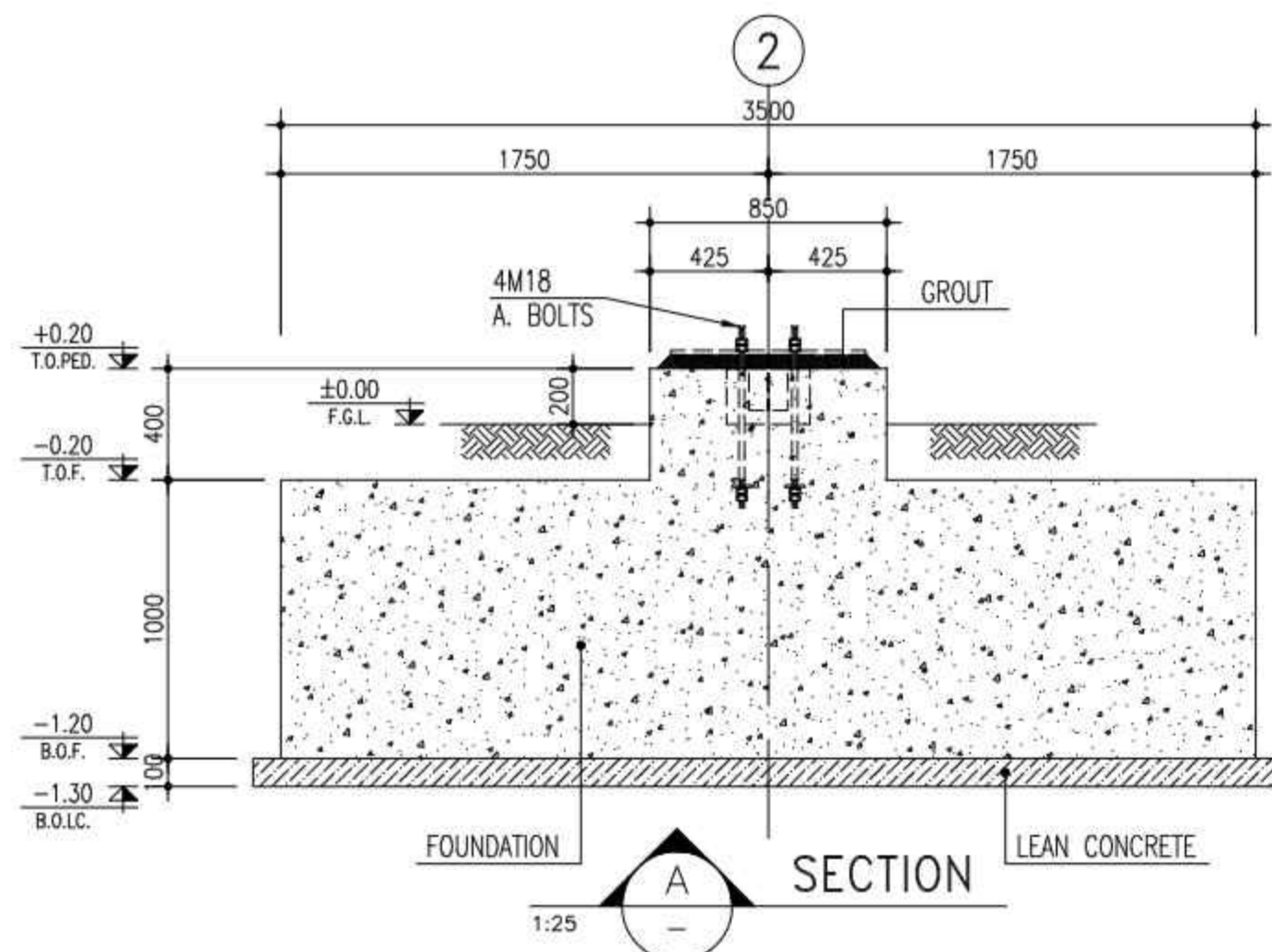


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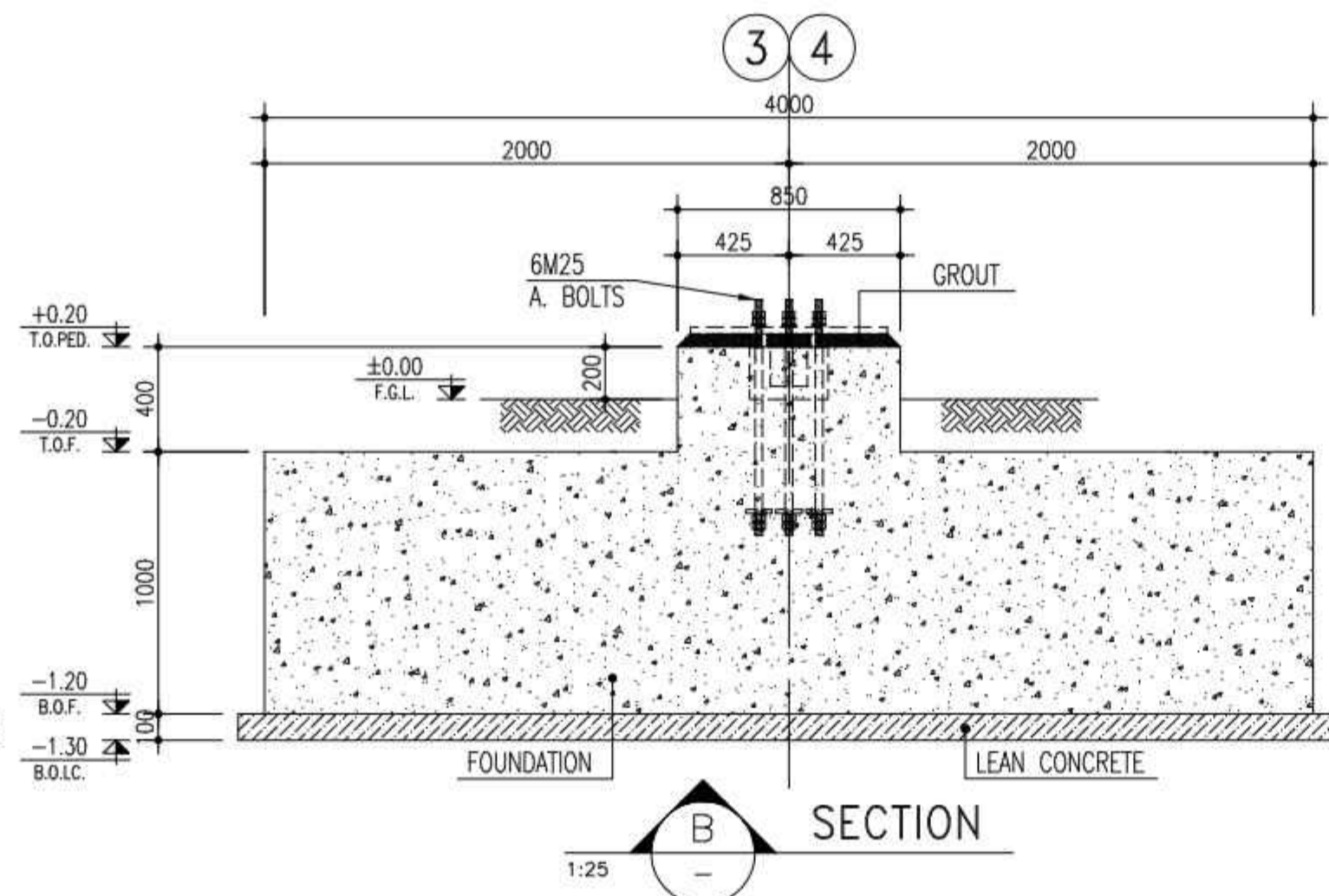
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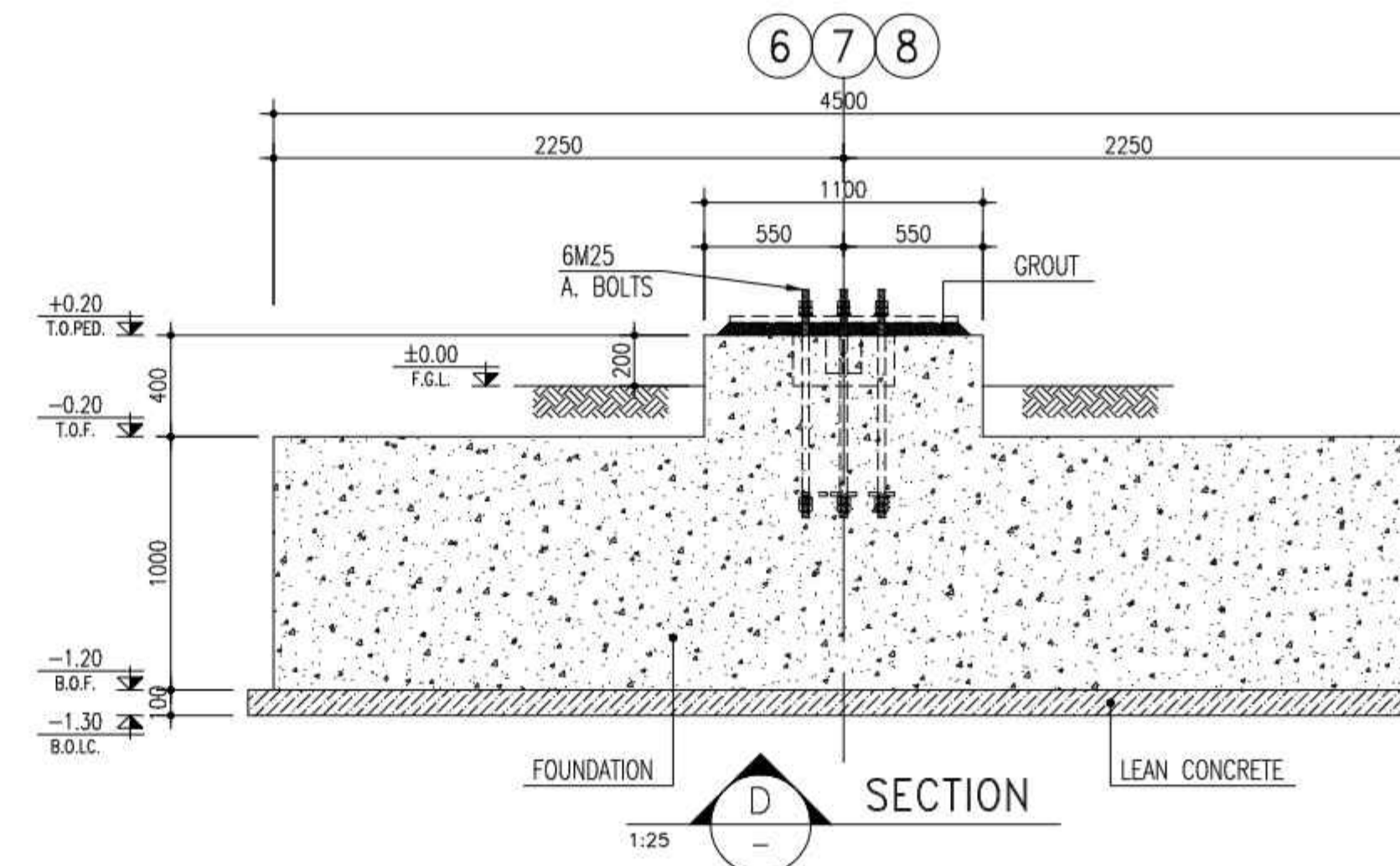
SECTION C



SECTION A



SECTION B



SECTION D

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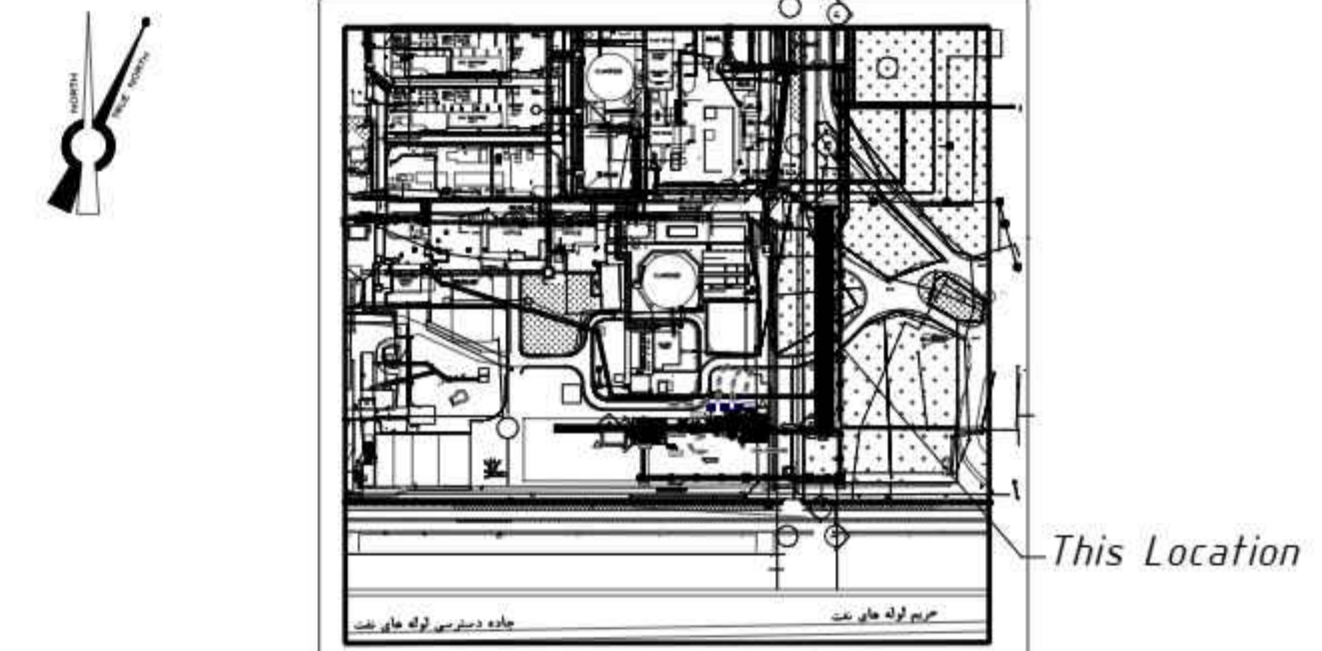
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H.P.P. : HIGH POINT OF PAVING		
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CONT. : CONTINUE BAR		
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KEY PLAN



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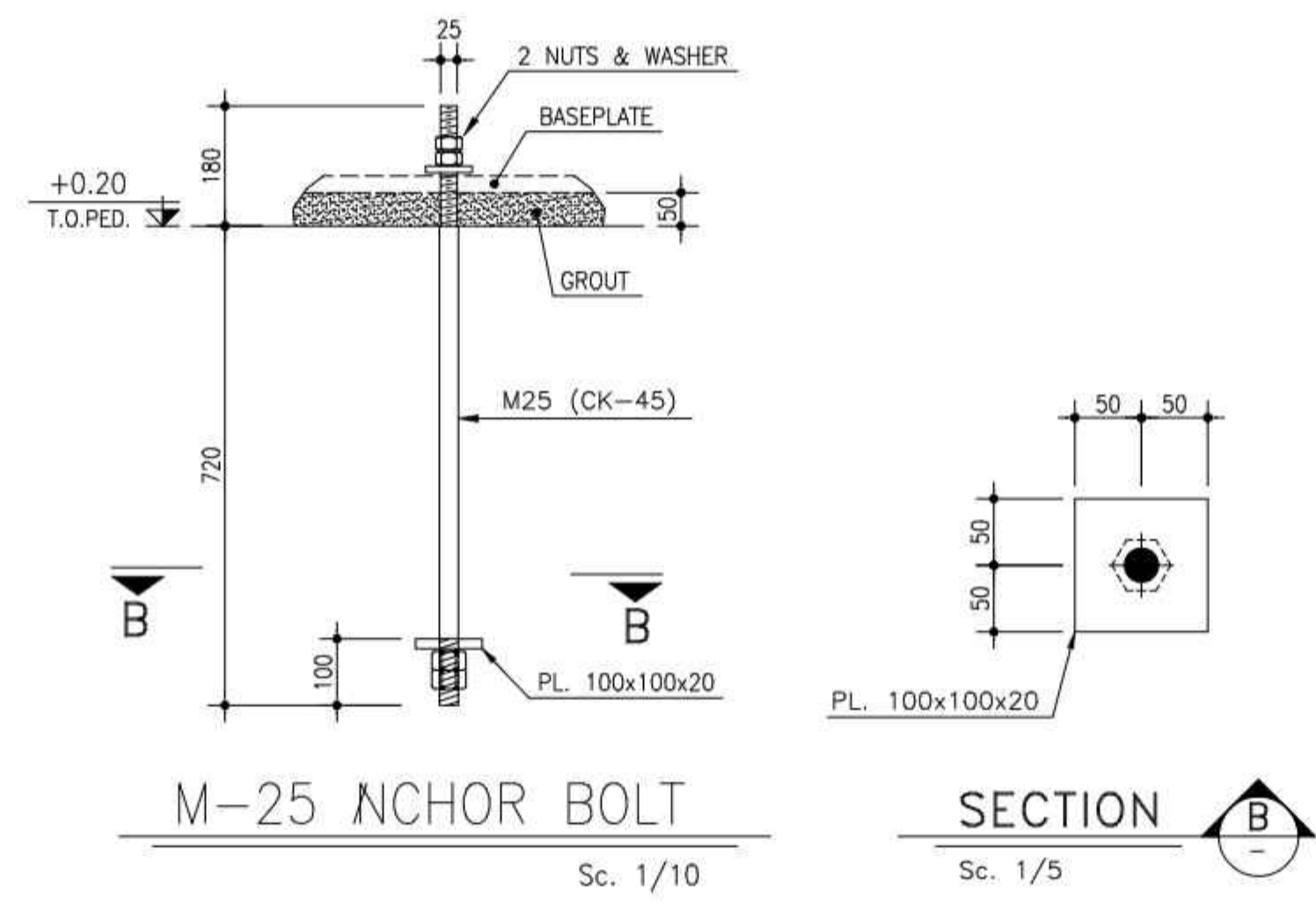
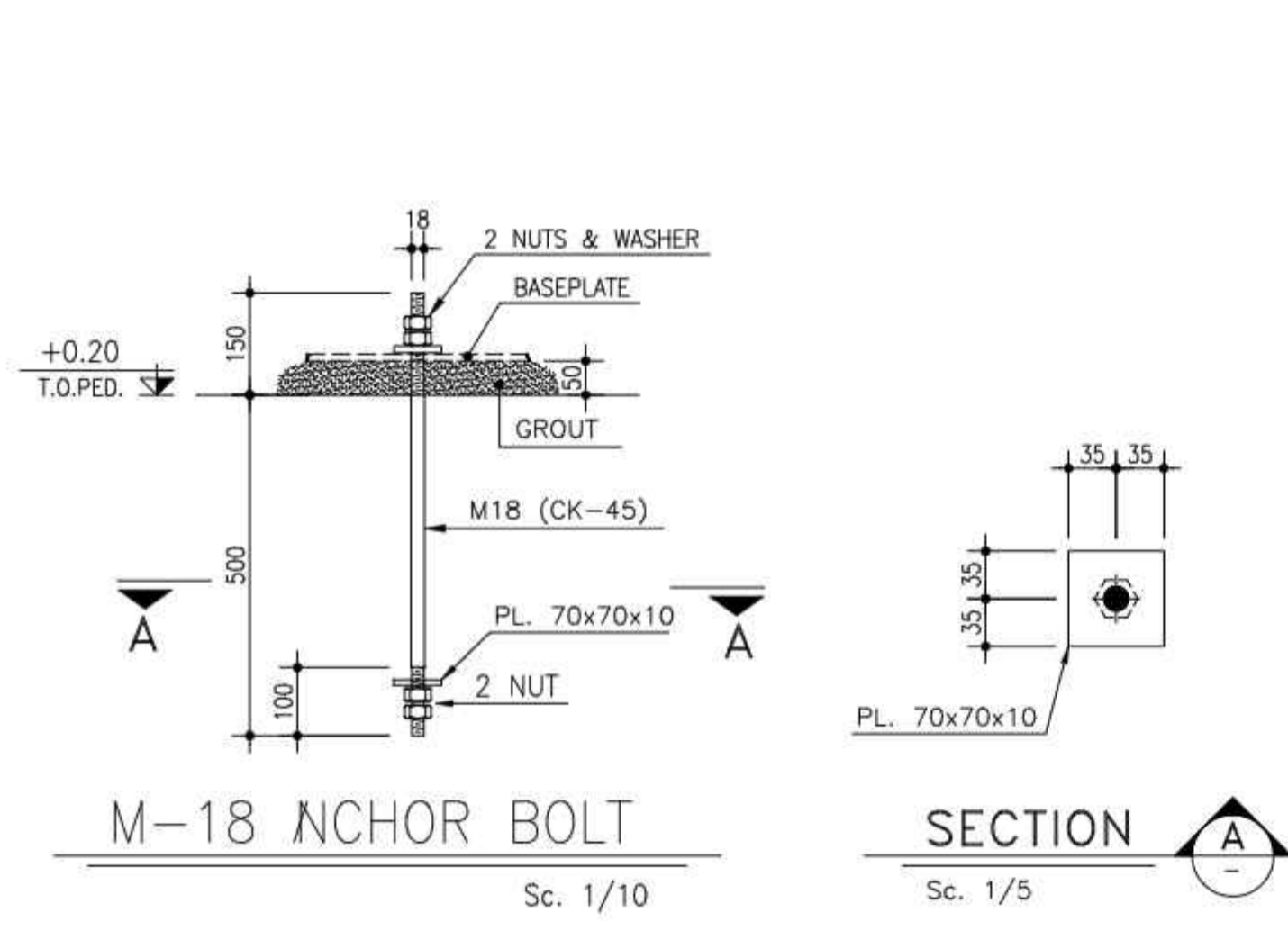
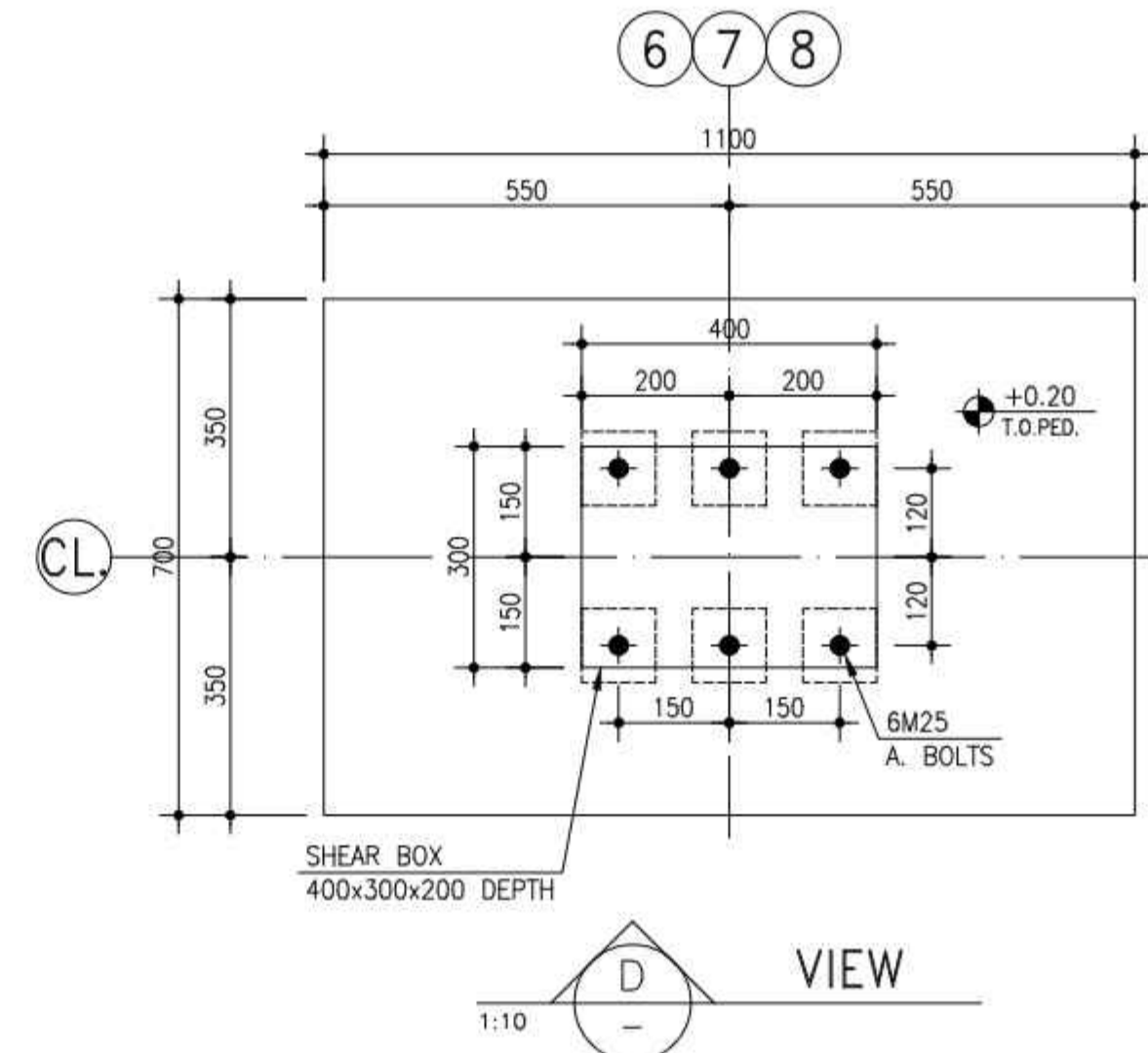
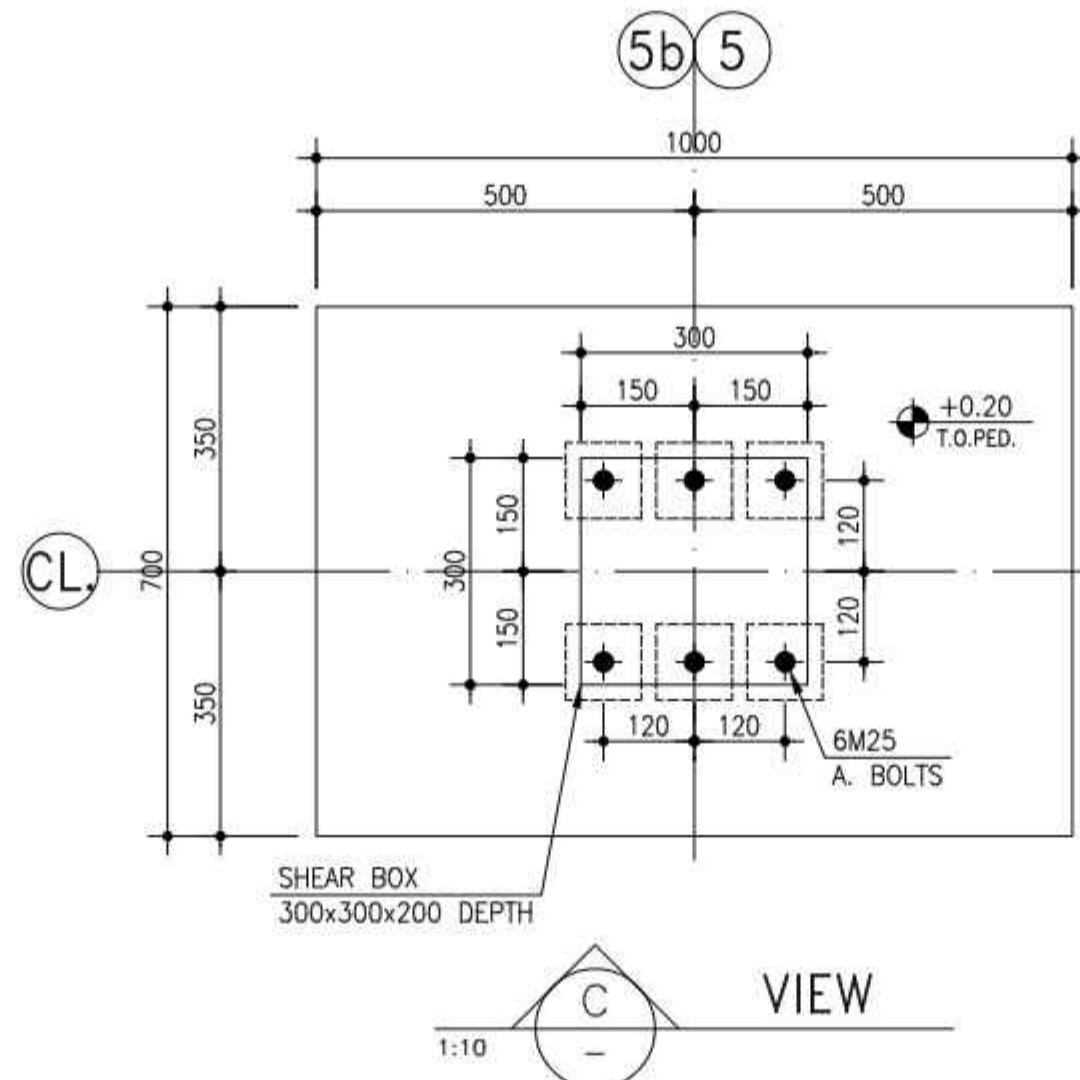
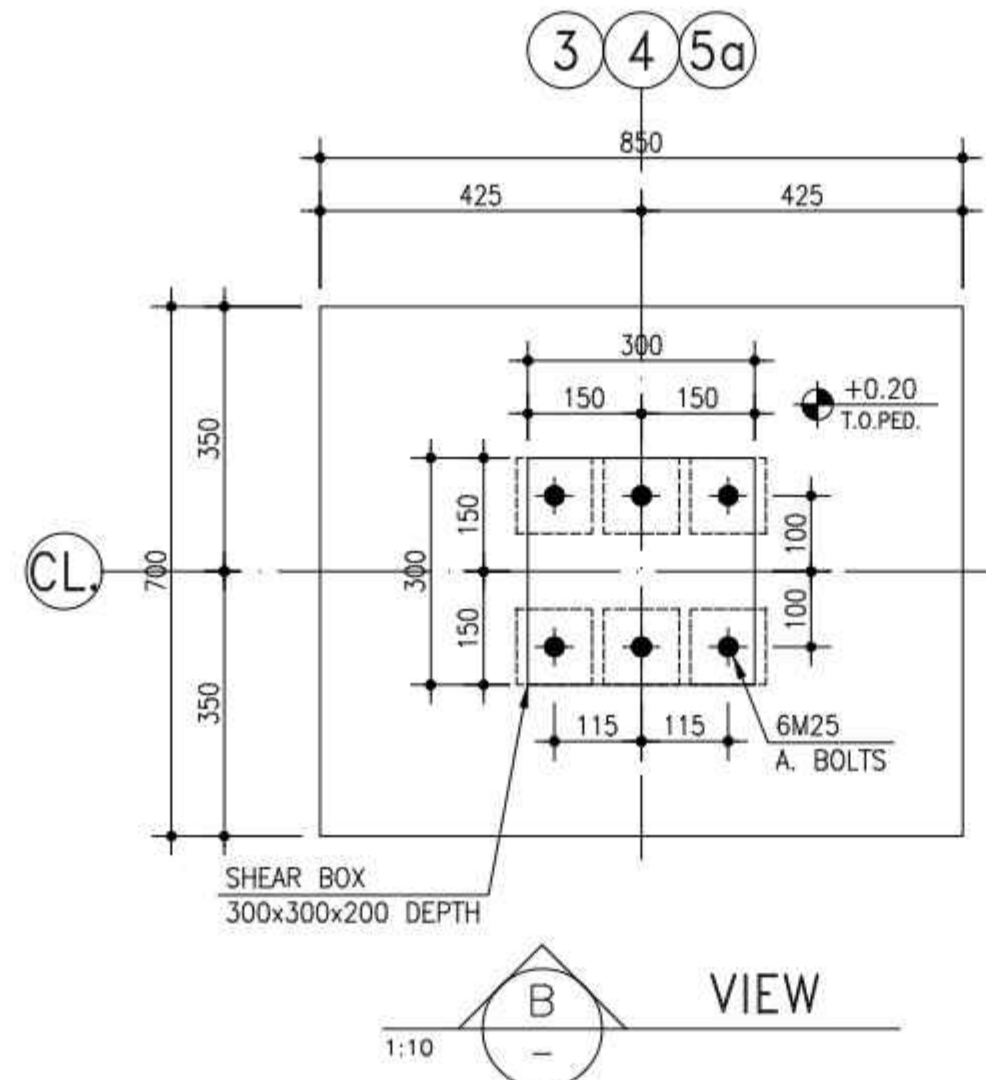
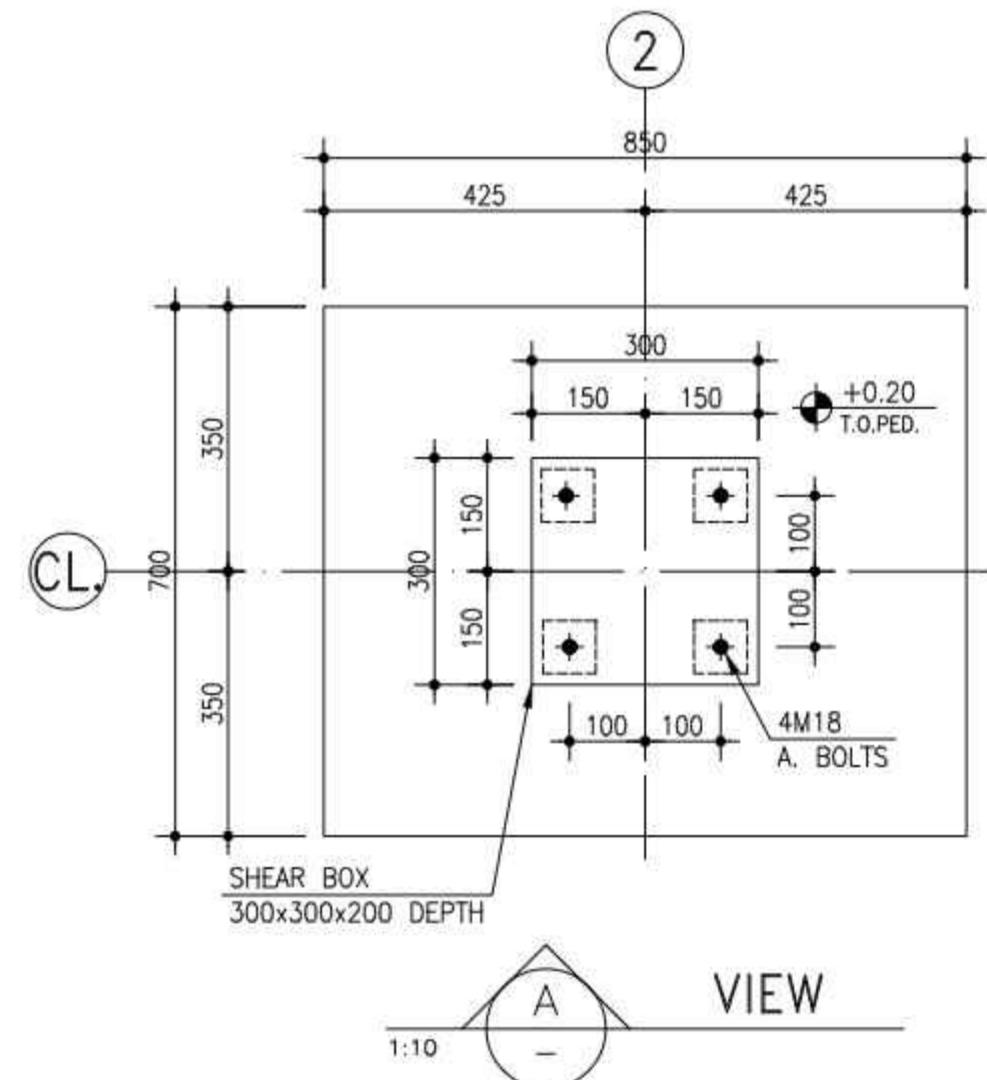
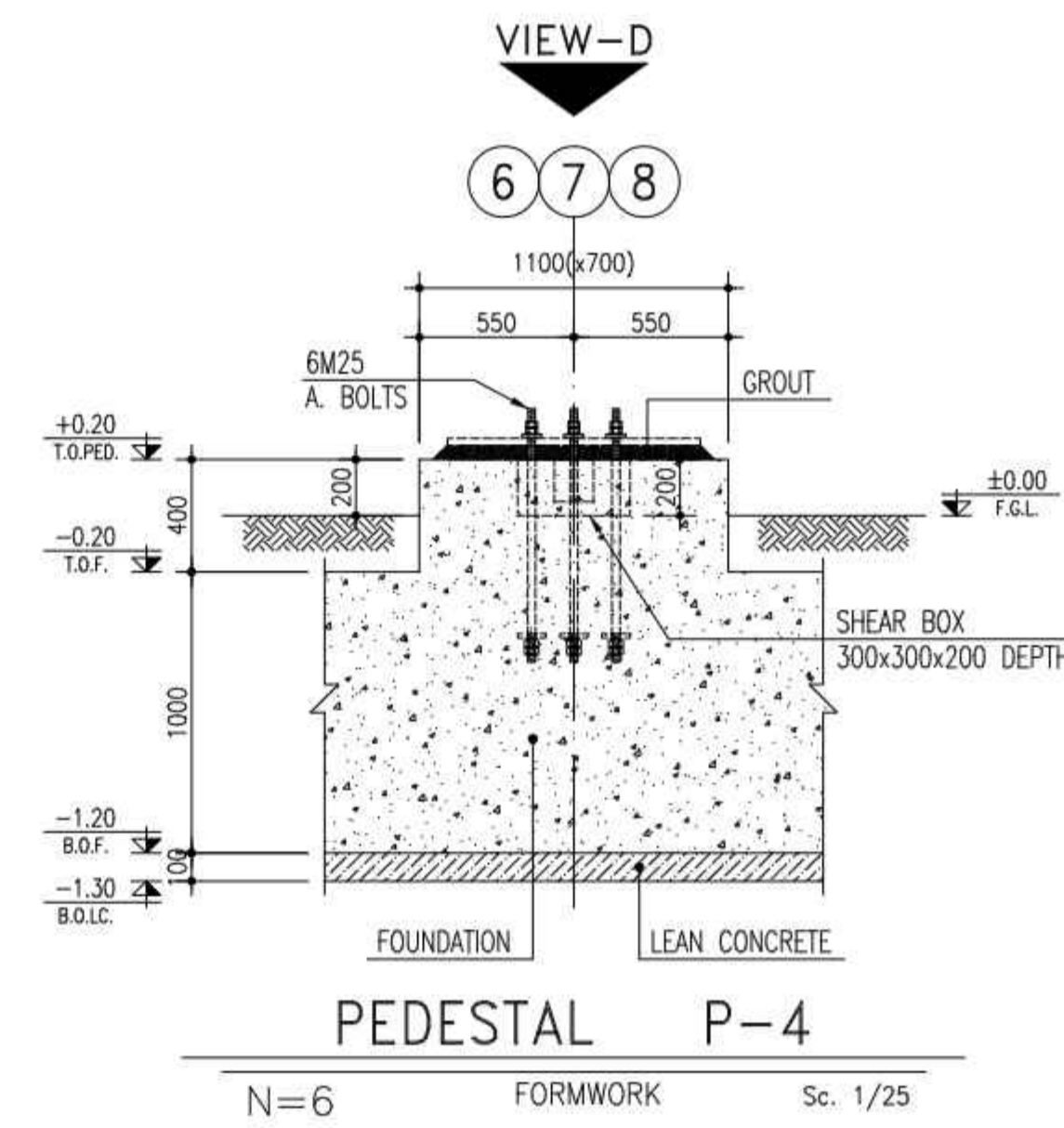
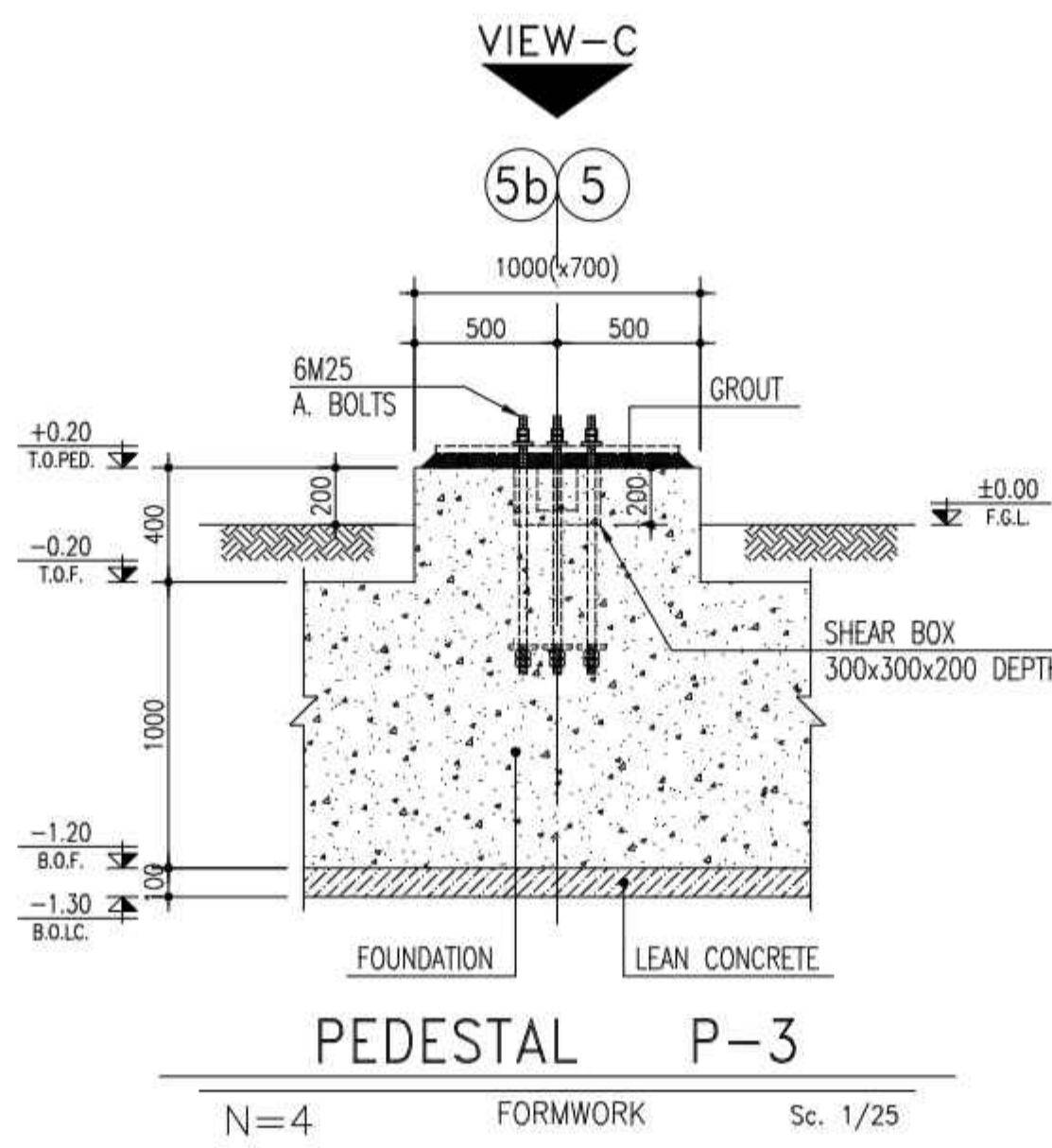
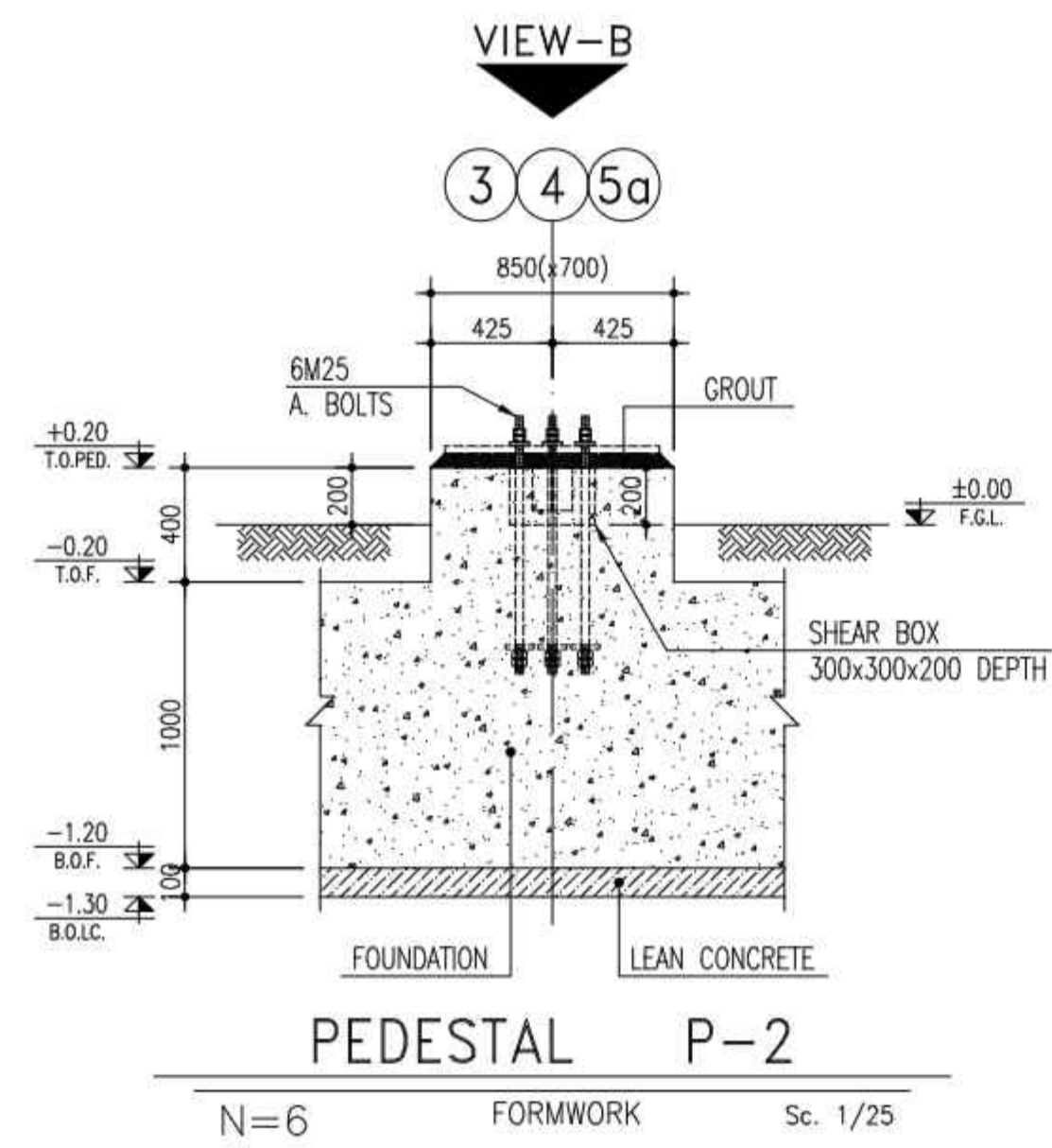
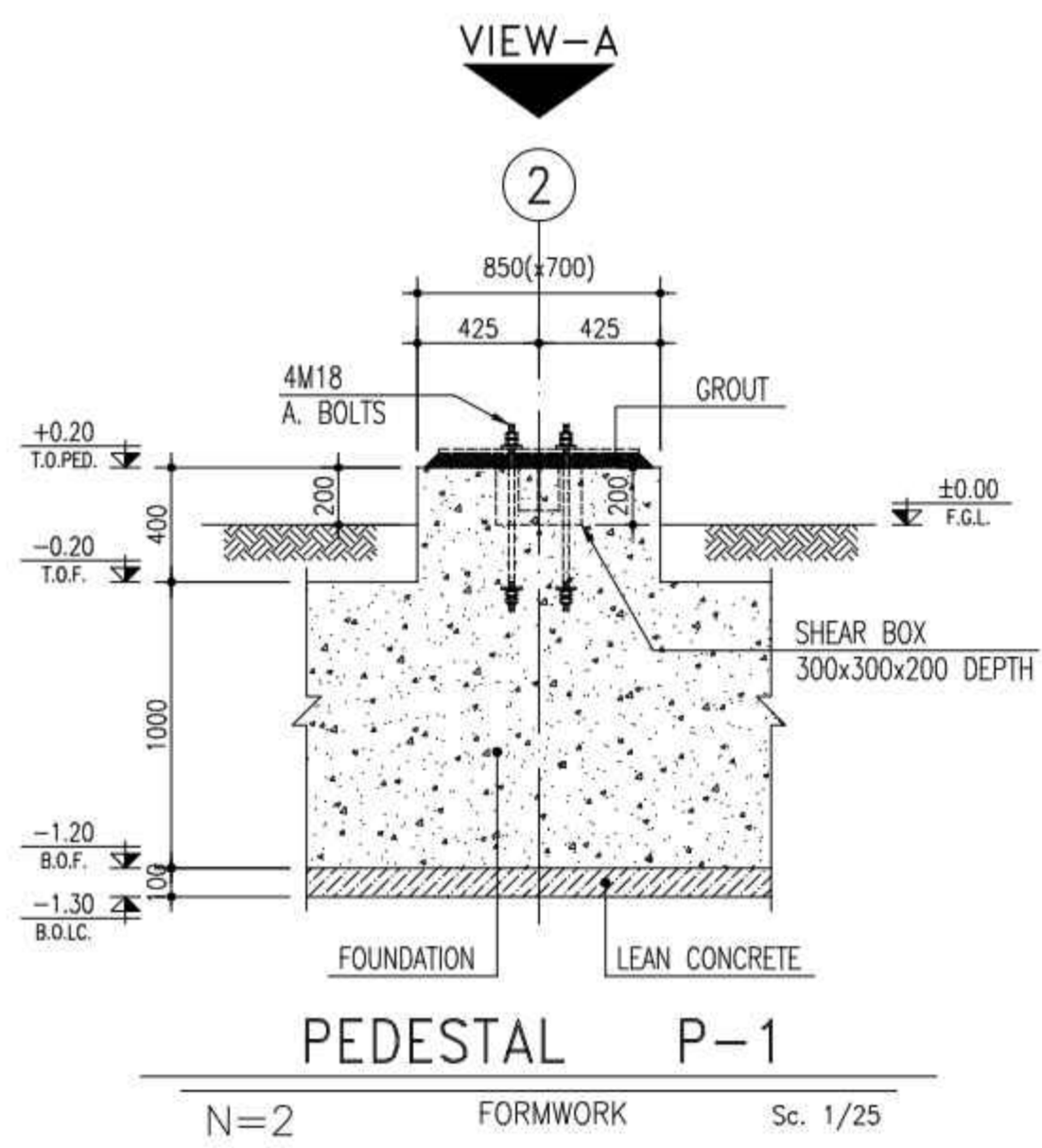
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REVISION TABLE

NO	Date	DESCRIPTION	PREPARED	CHECKED	APPROVED BY CONTRACTOR	APPROVED BY CLIENT
00	04.12.2024	IFR	N.A.	N.A.	E.S.H.	---
REV.	Date	POI	Prepared	Checked	Approved by Contractor	Approved by Client

PROJECT TITLE: **COLD BRIQUETTE SPONGE IRON PROJECT**
DOCUMENT DESCRIPTION: Gallery of CVB03-Pile and Foundation Drawings

DOCUMENT NO.	4152CBSI-IH-ST-DW-453-01	REV.	00	SIZE	A1	SCALE	1/100	SHEET NO.	3 / 7
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GENERAL NOTES

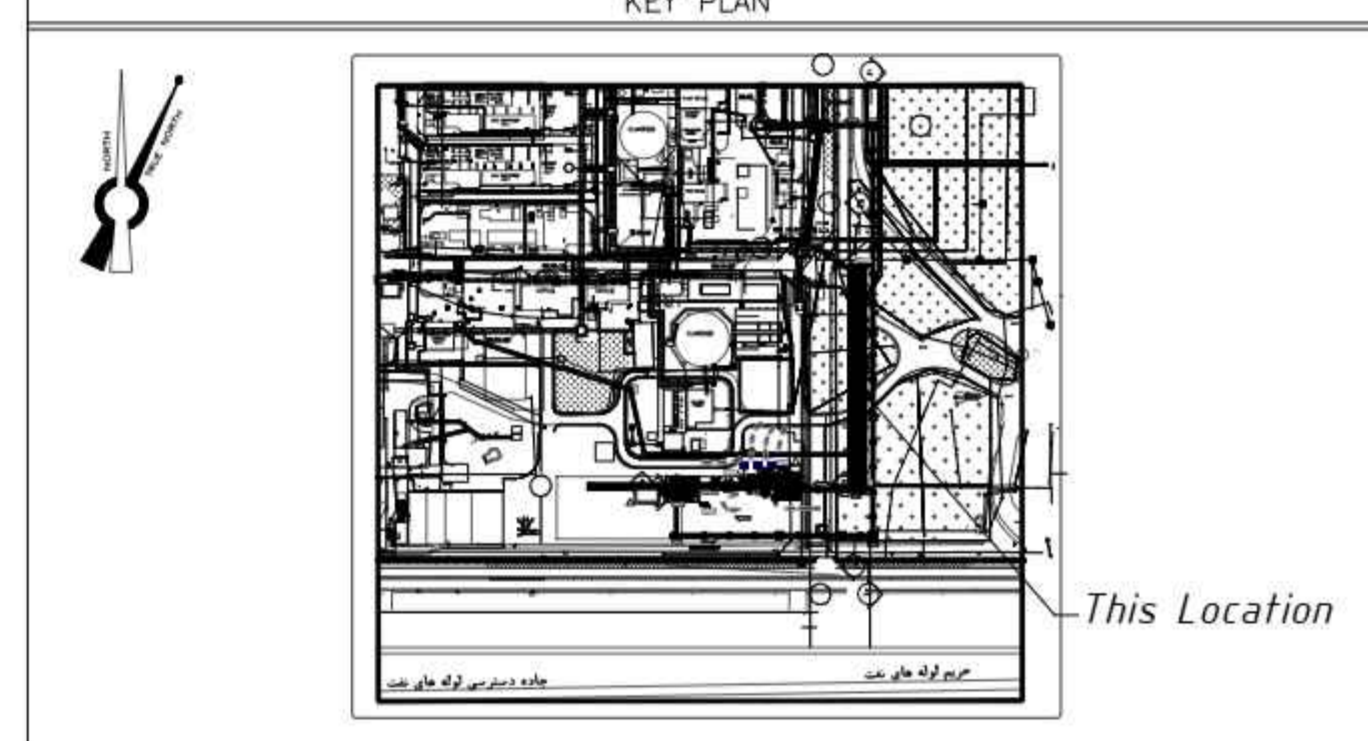
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DESCRIPTION	REF. NO.

COMMENT TABLE

NO.	DATE	DESCRIPTION

REVISION TABLE

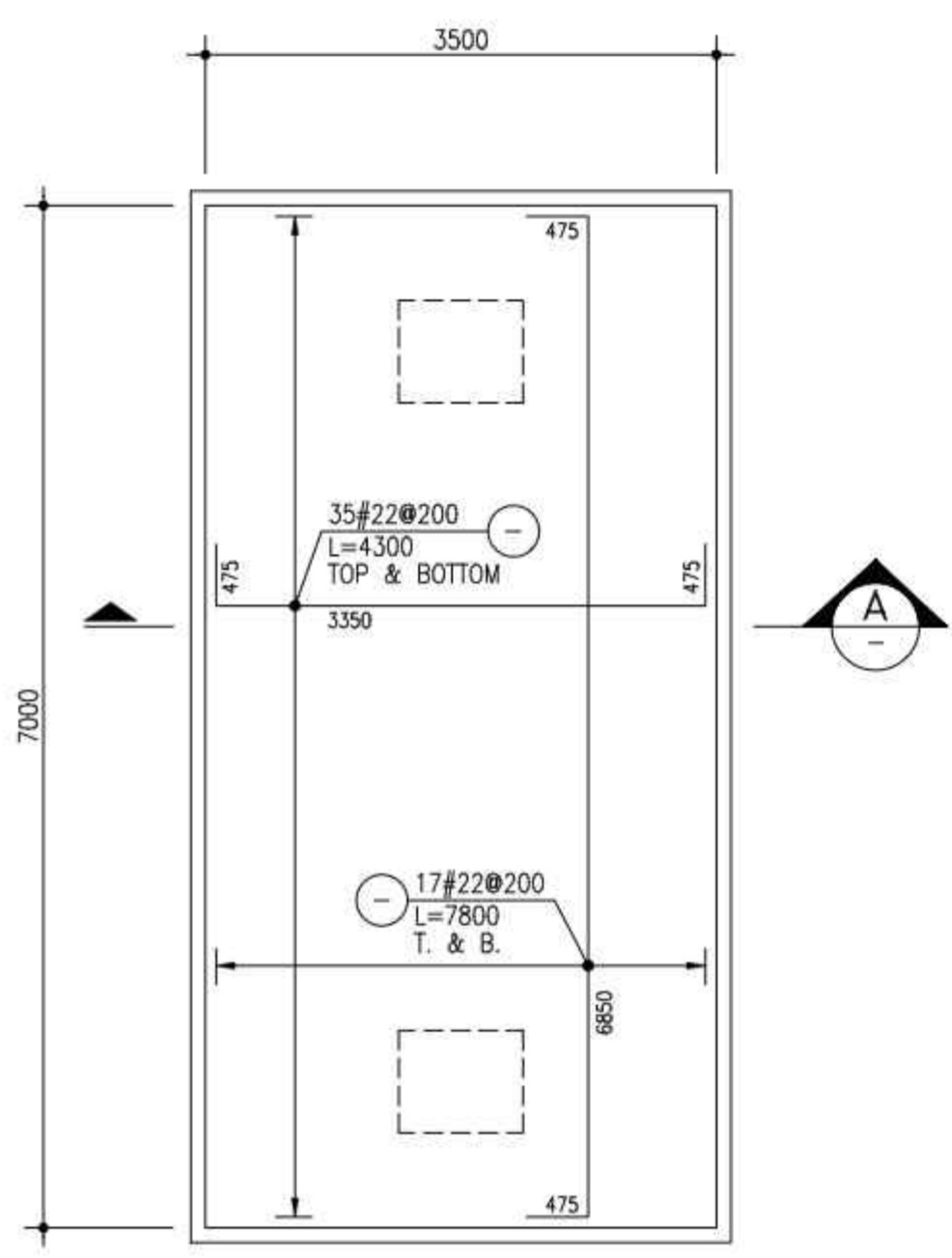
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PROJECT TITLE: COLD BRIQUETTE SPONGE IRON PROJECT

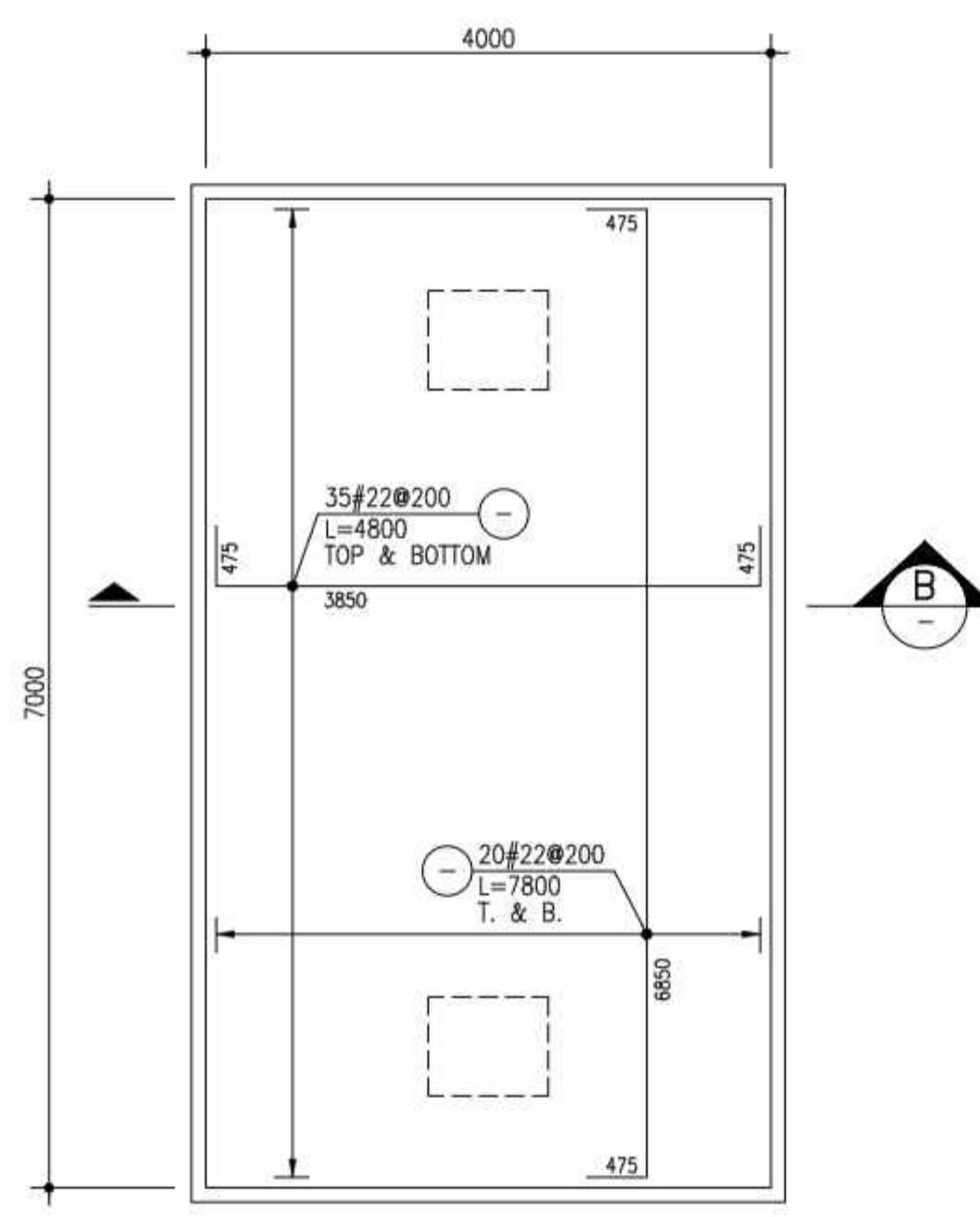
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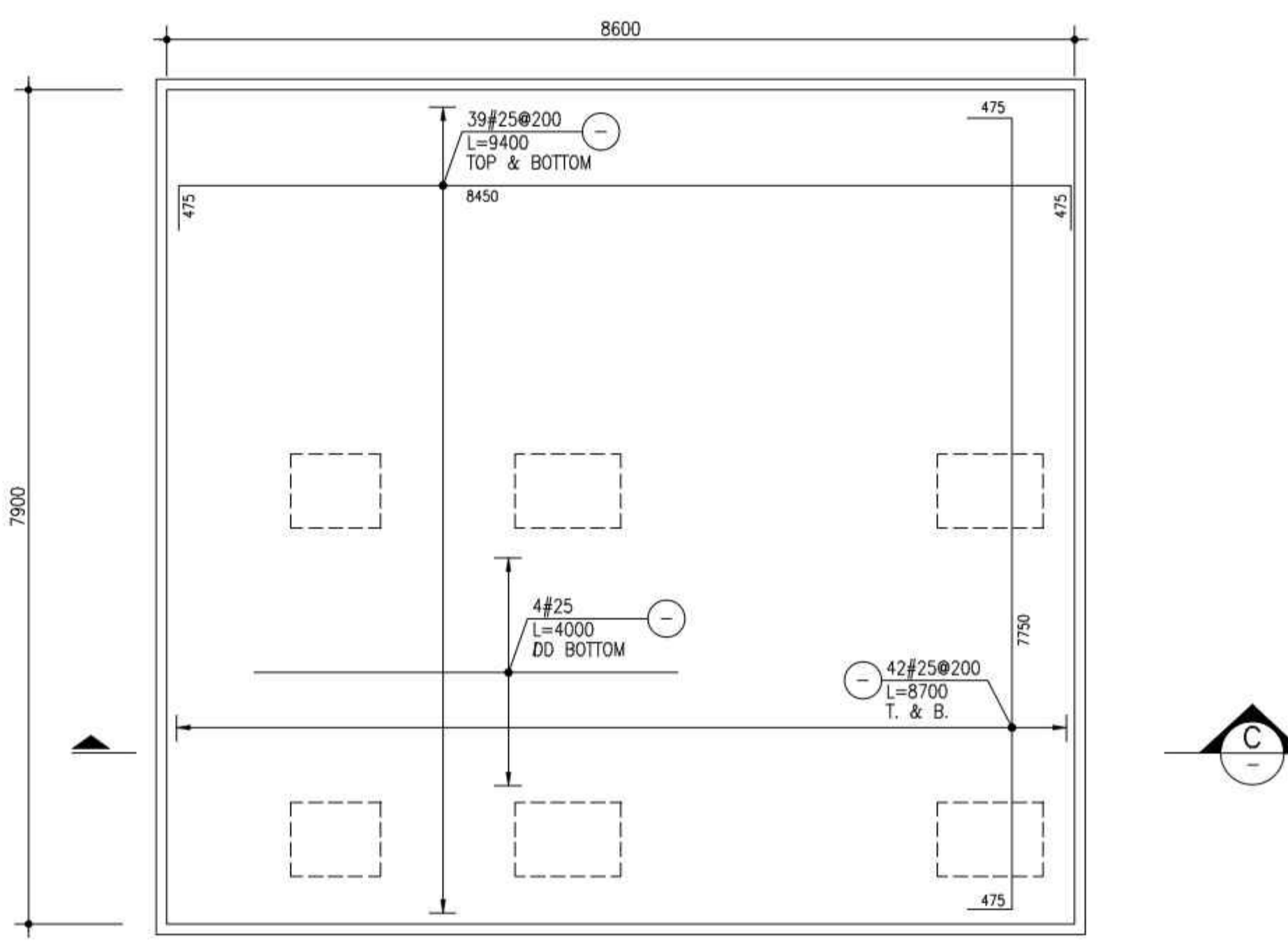
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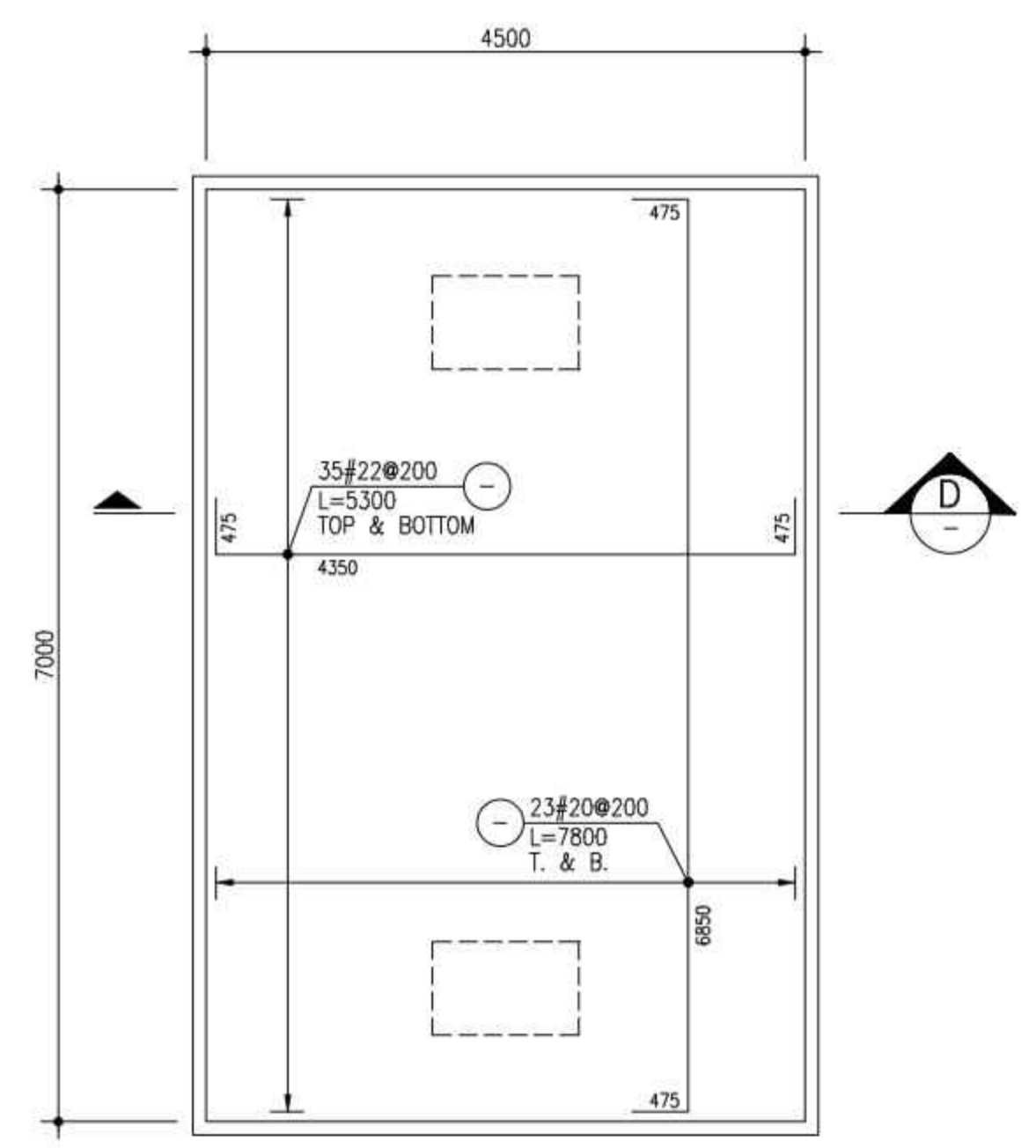
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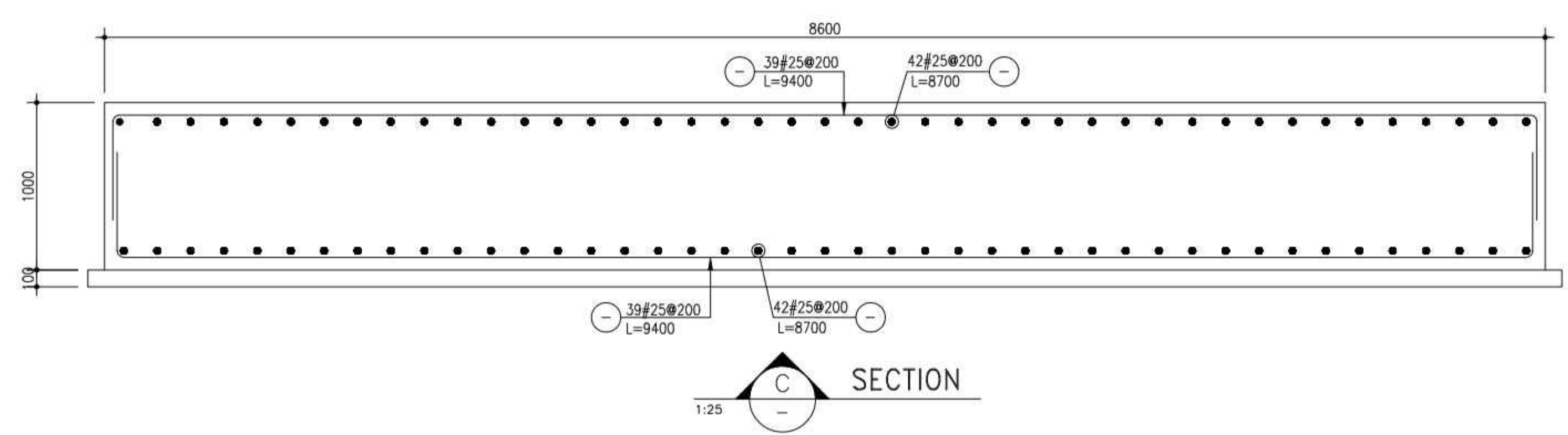
FOUND. TYPE F-2
N=2 REINFORCEMENT Sc. 1/50



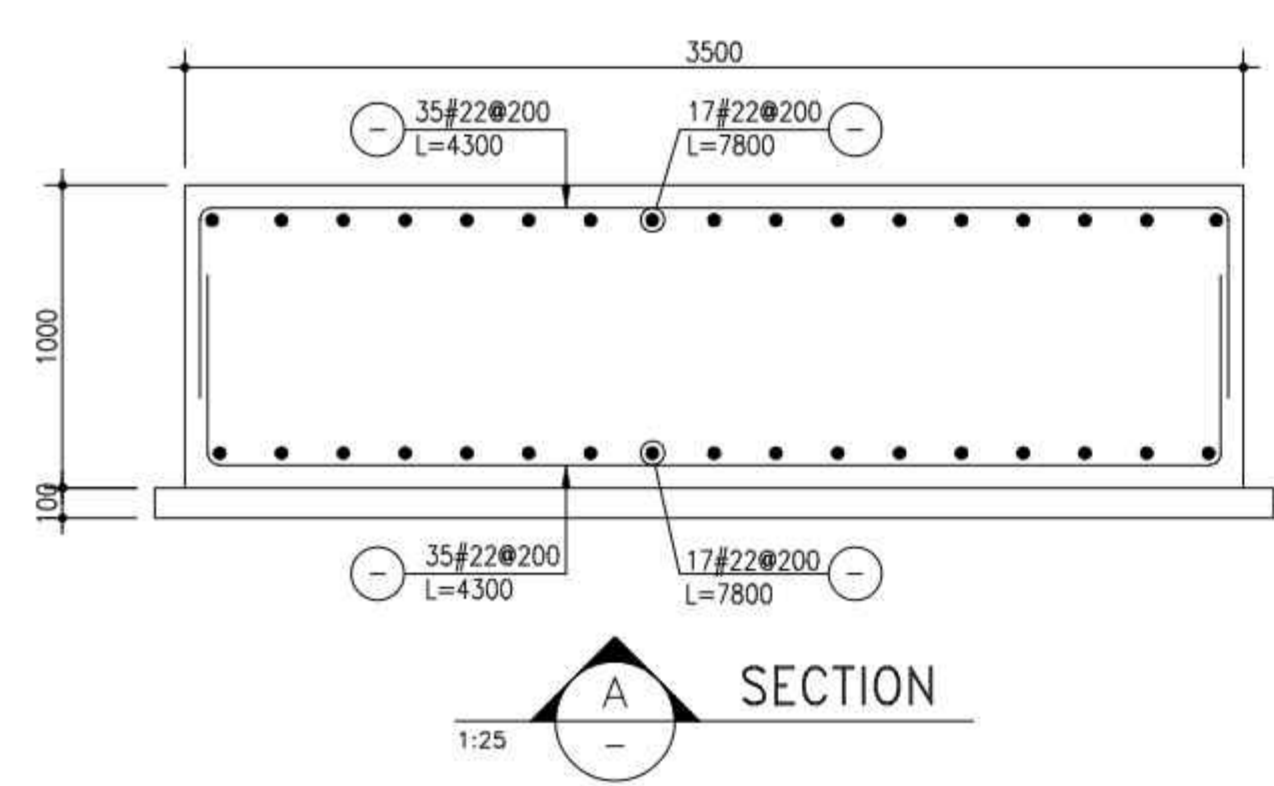
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N1-1 REINFORCEMENT Sc. 1/50



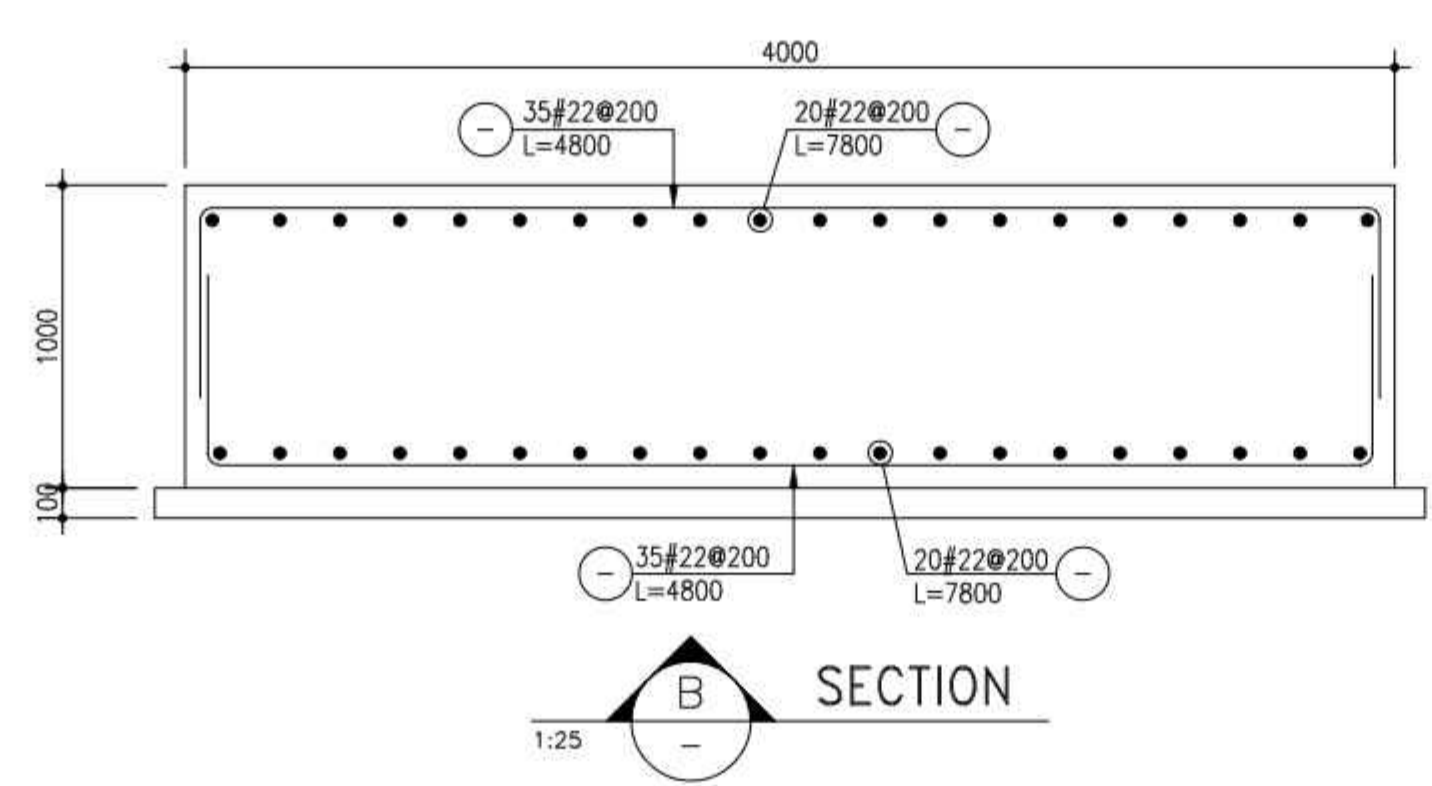
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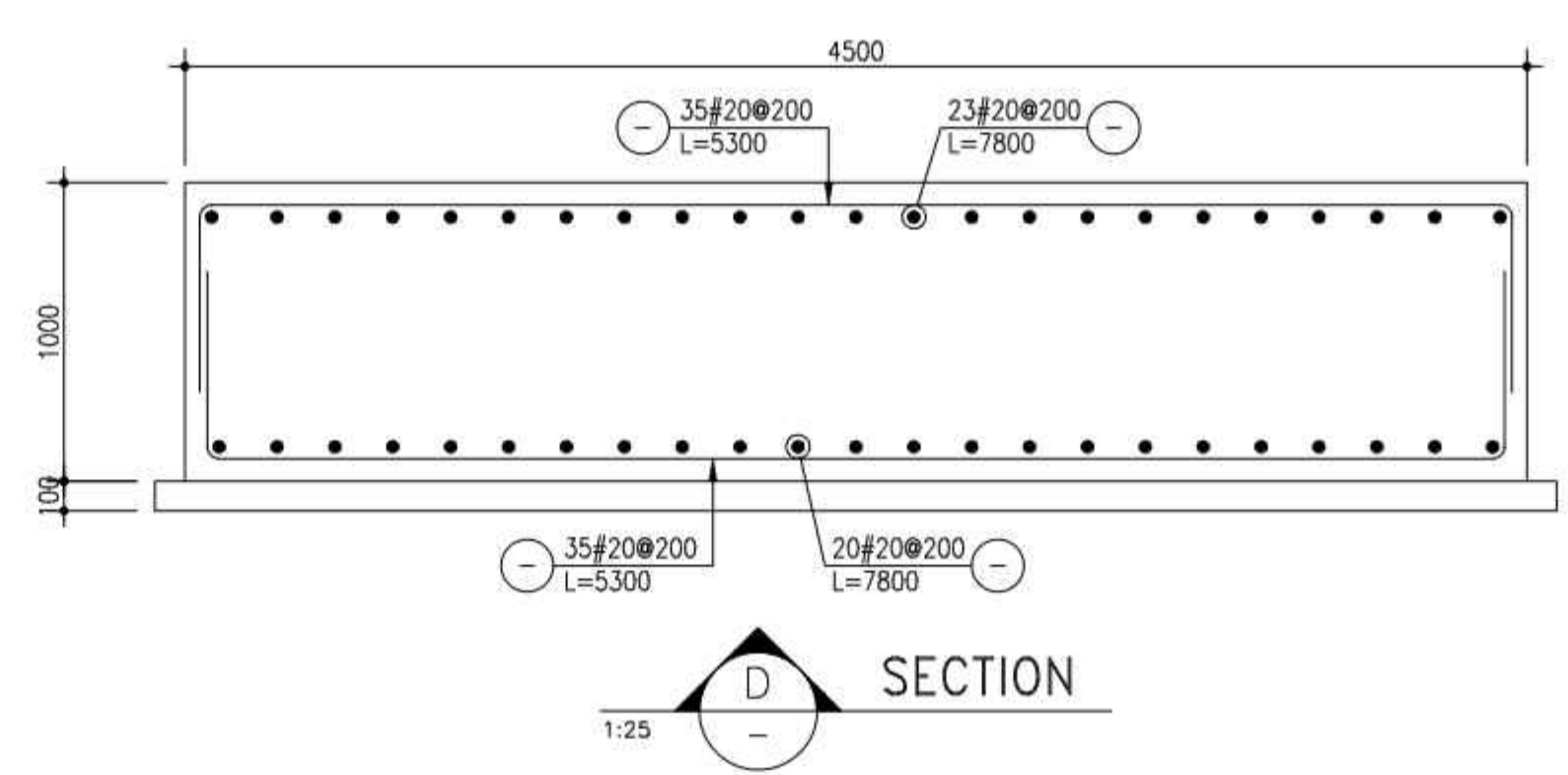
SECTION C
1:25



SECTION A
1:25



SECTION B
1:25



SECTION D
1:25

GENERAL NOTES

- 1- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE.
- 2- ALL THE ELEVATIONS ARE RELATED TO THE ±0.00 OF THE SITE.
- 3- ELEVATION OF ±0.00 IS EQUAL TO +1220.00 OF THE SITE.
- 4- ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH C35, USING TYPE II CEMENT.
- 5- ALL CONCRETE SURFACES IN CONTACT WITH SOIL SHALL HAVE A MINIMUM COVER OF 75mm. THE MINIMUM COVER FOR WALL AND SLAB IS 30mm AND FOR COLUMNS AND BEAMS IS 50 mm

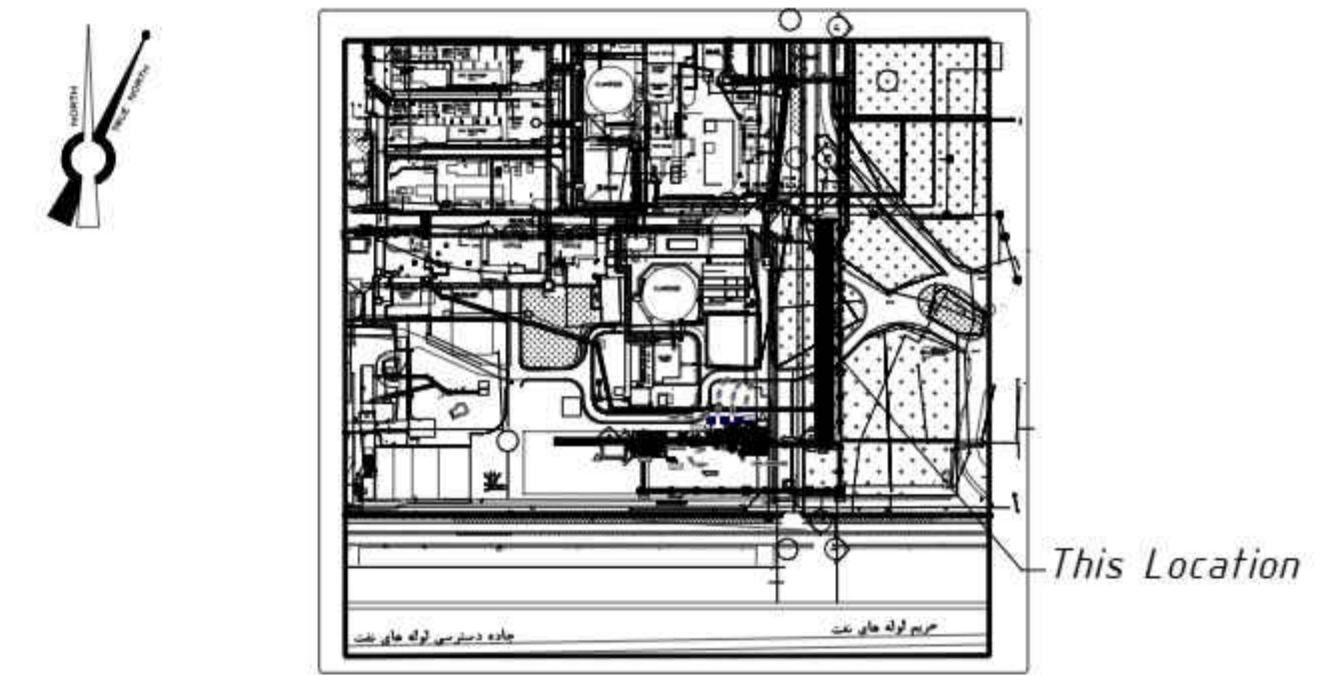
SPECIFIC NOTES

- 1- ALL DIMENSIONS ARE IN mm.
- 2- ALL ELEVATION AND CO-ORDINATES ARE IN METER.
- 3- CONTRACTOR SHALL USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND SITE DRAWINGS PRIOR TO CONSTRUCTION COMMENCEMENT. ANY INCOMPATIBILITY BETWEEN MENTIONED DRAWINGS SHALL BE REPORTED AND SOLVED PRIOR TO CONSTRUCTION.
- 4- CONTRACTOR SHALL CHECK AND VERIFY DIMENSIONS AND ANY DISCREPANCY SHALL BE REPORTED BEFORE CONSTRUCTION COMMENCEMENT.
- 5- 28 DAY CHARACTERISTIC COMPRESSIVE STRENGTH OF CONCRETE IS 350 kg/cm² ON CYLINDRICAL SPECIMEN UNLESS NOTED OTHERWISE
- 6- LEAN CONCRETE SHALL HAVE MINIMUM CEMENT CONTENT OF 150 kg/m³.
- 7- DEFORMED REINFORCEMENT BAR TYPE IS AS A-III WITH YIELD STRESS OF Fy=4000 kg/cm² AND ULTIMATE STRESS OF 6000 kg/cm²
- 8- MATERIAL OF NUT IS AS HIGH STRENGTH GRADE (10.9) ACCORDING TO "EN 14399-4, HV" WITH F_u=10000 kg/cm²
- 9- MATERIAL OF ANCHOR PLATE IS ST-37 WITH YIELD STRESS OF Fy=2400 kg/cm² UNLESS NOTED OTHERWISE.
- 10- CEMENT TO BE PORTLAND ACCORDING TO SOIL INVESTIGATION.
- 11- COVER FOR FOUNDATION AND PEDESTAL IS 60mm AND 75mm FOR THE PLACES THAT IS FACED WITH SOIL.
- 12- IF EXISTING SOIL UNDER FOUNDATION IS SEEN AS UNSUITABLE (REFILLED) SOIL, EXCAVATION UNDER FOUNDATIONS SHALL BE CONTINUED UP TO THE RELIABLE SOIL LAYER BASE ON EXPERT GEOTECHNICAL ENGINEER CONFIRMATION, THEN EXCAVATED REGION SHALL BE FILLED WITH MASS CONCRETE UP TO THE BOTTOM OF FOUNDATION.
- 13- WHEREVER "HOLD" SIGN IS INDICATED IN THIS DRAWING, IT MEANS THAT CONSTRUCTION IS NOT PERMITTED UNTIL THE HOLD SIGN IS REMOVED.
- 14- POCKETS SHALL BE FILLED WITH EXPANDABLE GROUT WHEN ERECTION OF STRUCTURE OR EQUIPMENT IS COMPLETED.

ABBREVIATIONS & LEGEND

B.O.L.C. : BOTTOM OF LEAN CONCRETE		NATURAL SOIL
F.F.L. : FINISH FLOOR		LEAN CONCRETE
CL : CENTER LINE		CONCRETE
F.G.L. : FINISH GROUND LEVEL		CENTER LINE
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CONT. : CONTINUE BAR		
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F.B. : FACE BAR		

KEY PLAN



REFERENCE DRAWINGS

DESCRIPTION	REF. NO.

COMMENT TABLE

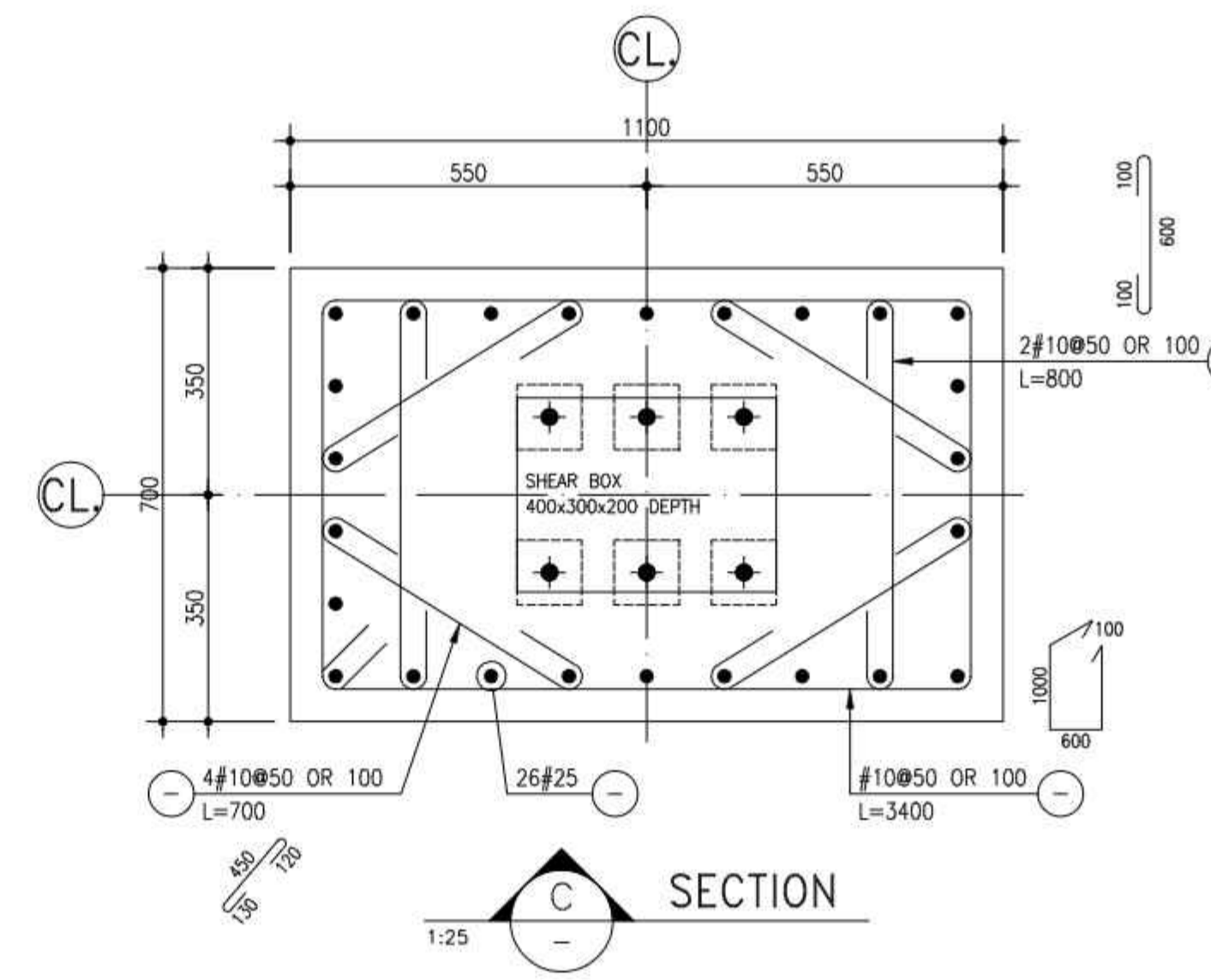
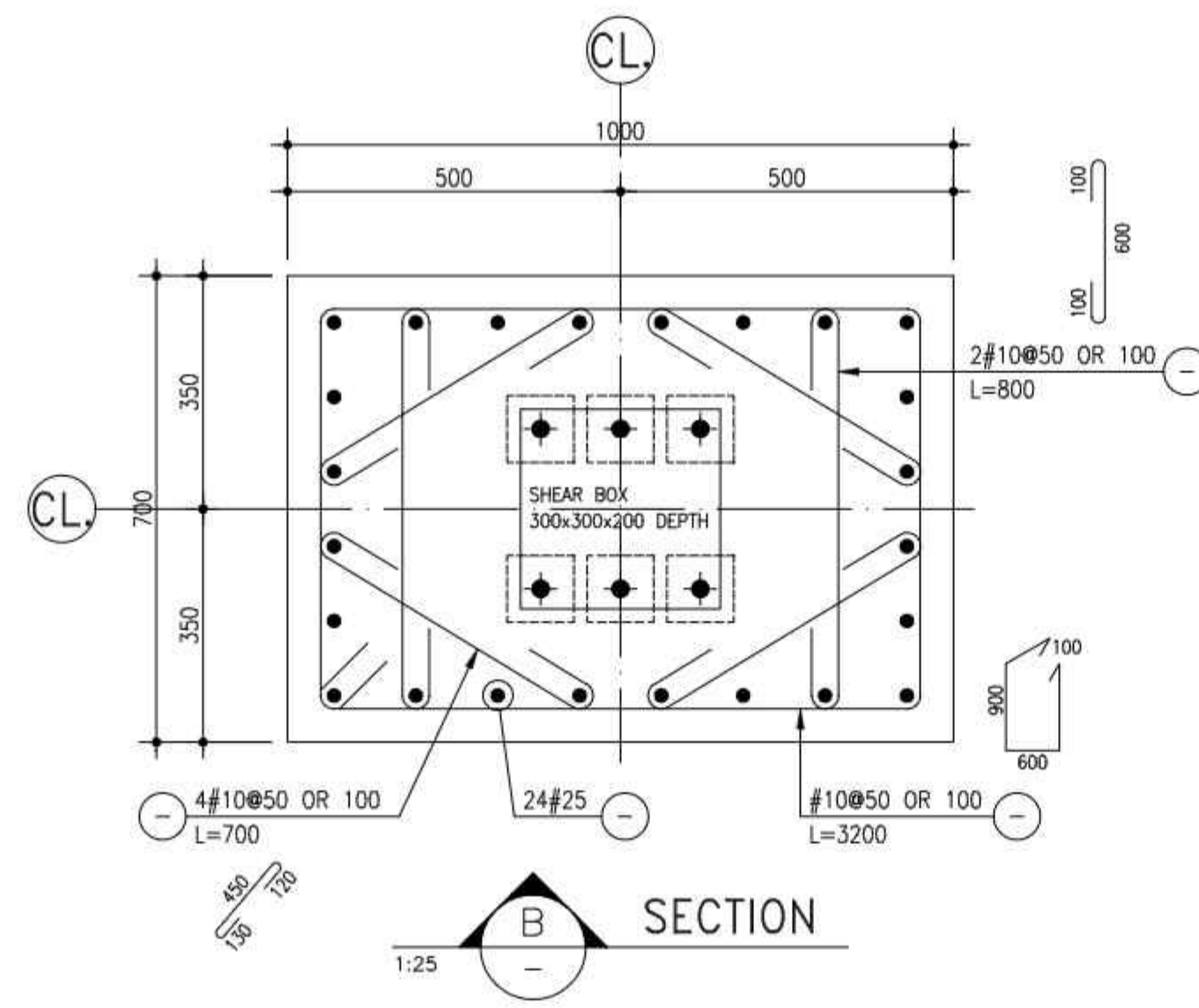
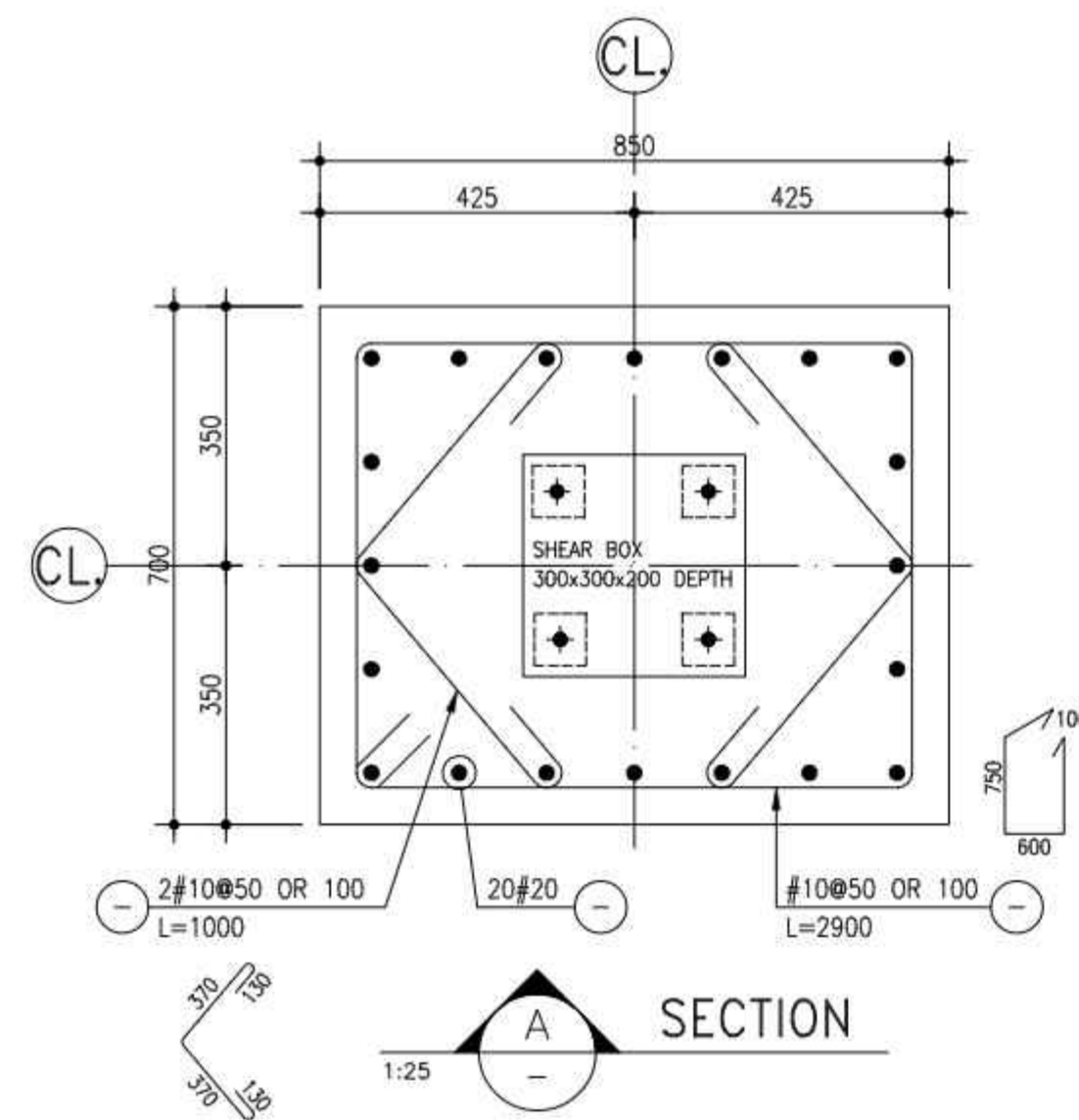
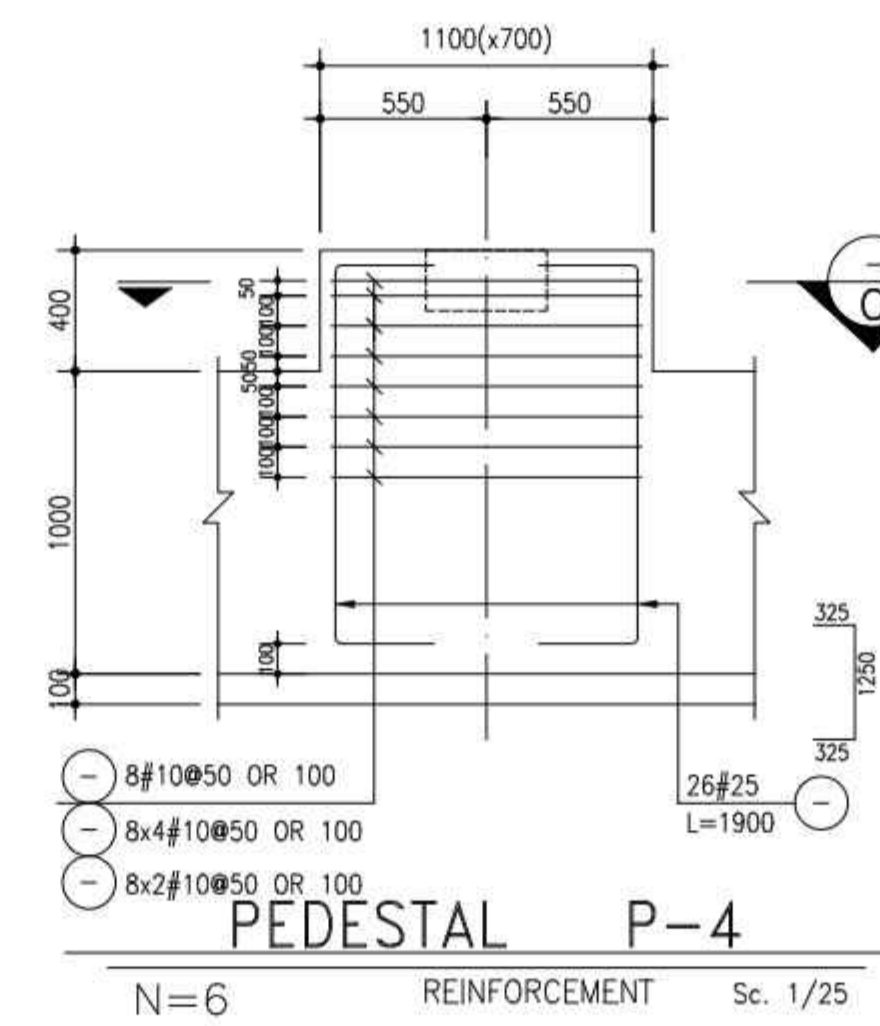
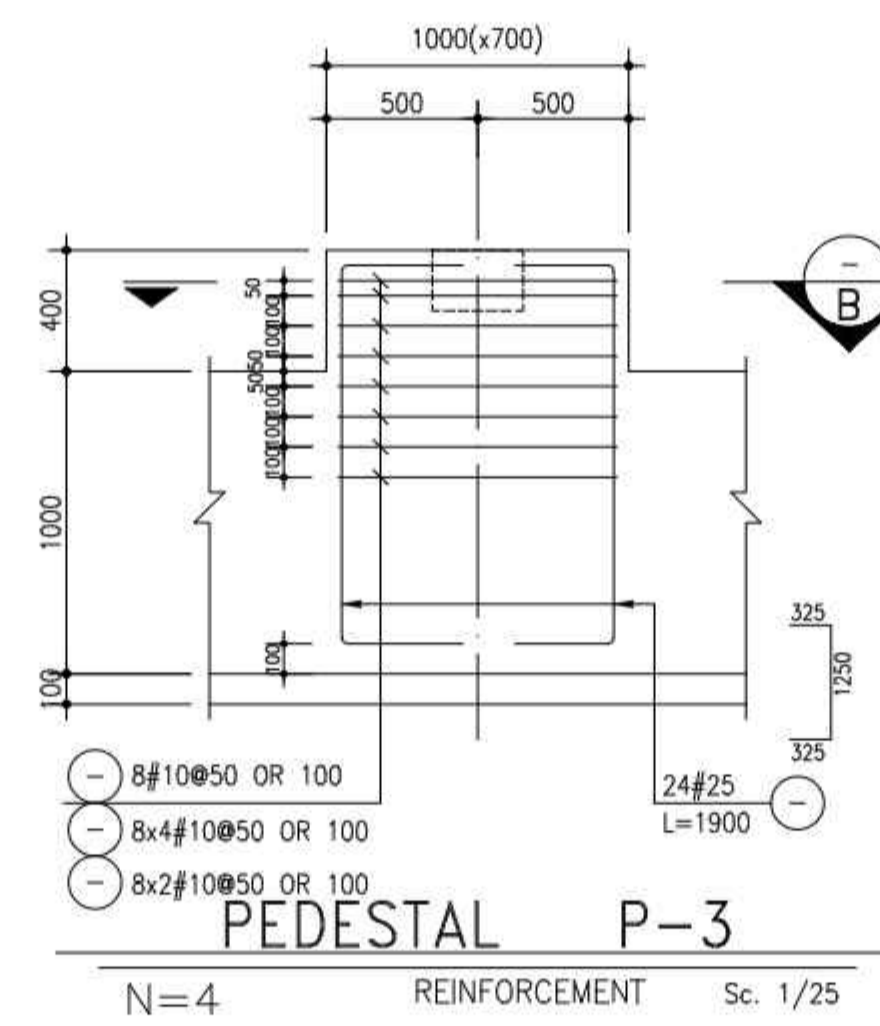
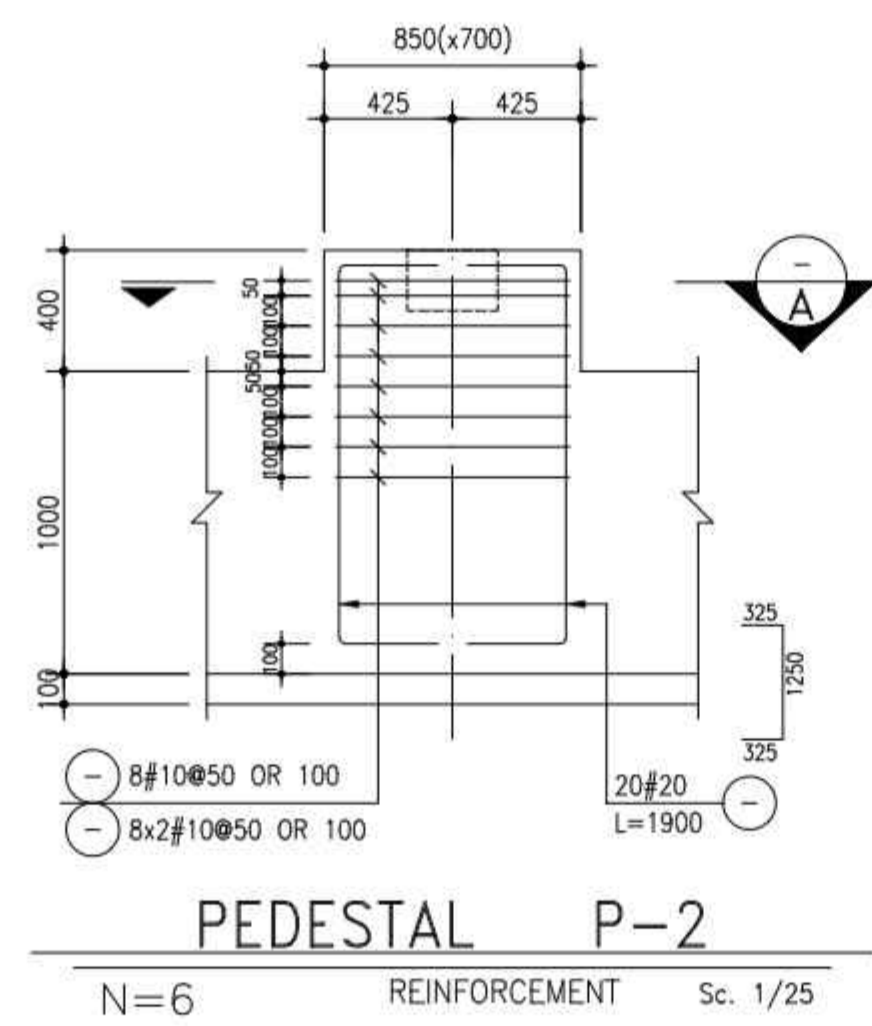
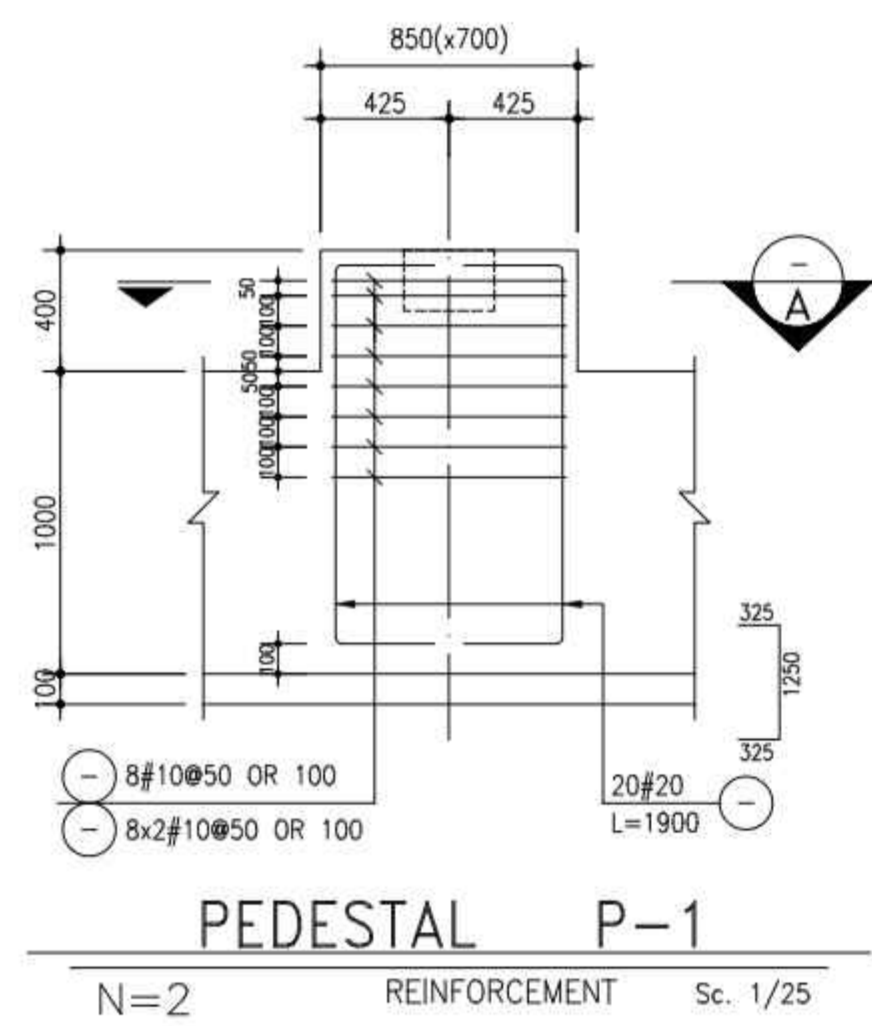
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Date: _____
Signature: _____

REVISION TABLE

REV.	Date	IFR	POI	Prepared	Checked	Approved by Contractor	Approved by Client
00	04.12.2024	IFR	POI	N.A.	N.A.	E.SH.	---

PROJECT TITLE: **COLD BRIQUETTE SPONGE IRON PROJECT**
DOCUMENT DESCRIPTION: **Gallery of CVB03-Pile and Foundation Drawings**



GENERAL NOTES

- 1- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE.
- 2- ALL THE ELEVATIONS ARE RELATED TO THE ±0.00 OF THE SITE.
- 3- ELEVATION OF ±0.00 IS EQUAL TO +120.00 OF THE SITE.
- 4- ALL STRUCTURAL CONCRETE SHALL BE OF STRENGTH C35, USING TYPE II CEMENT.
- 5- ALL CONCRETE SURFACES IN CONTACT WITH SOIL SHALL HAVE A MINIMUM COVER OF 75mm. THE MINIMUM COVER FOR WALL AND SLAB IS 30mm AND FOR COLUMNS AND BEAMS IS 50 mm

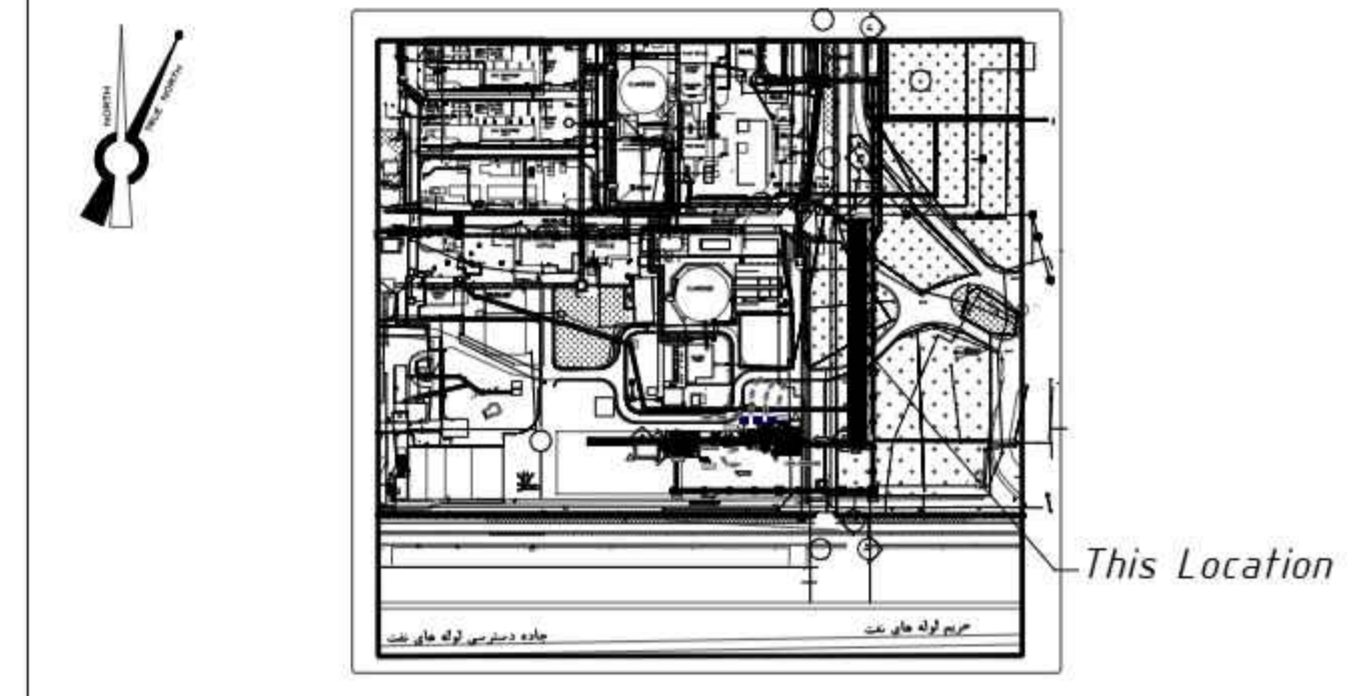
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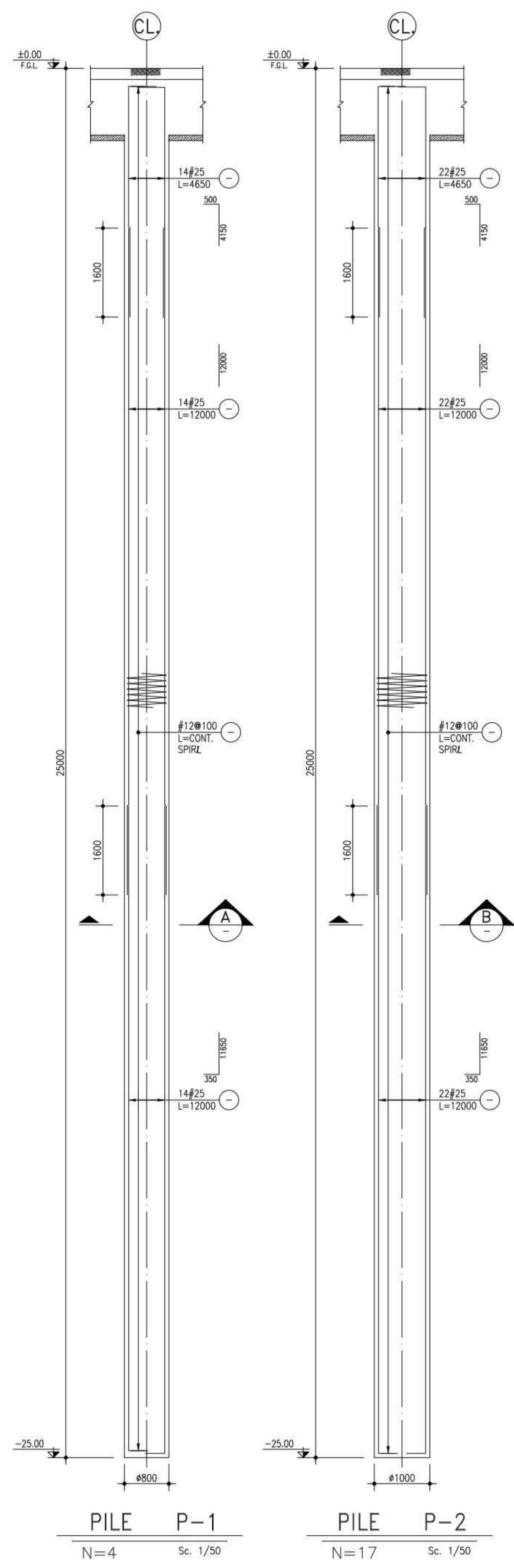
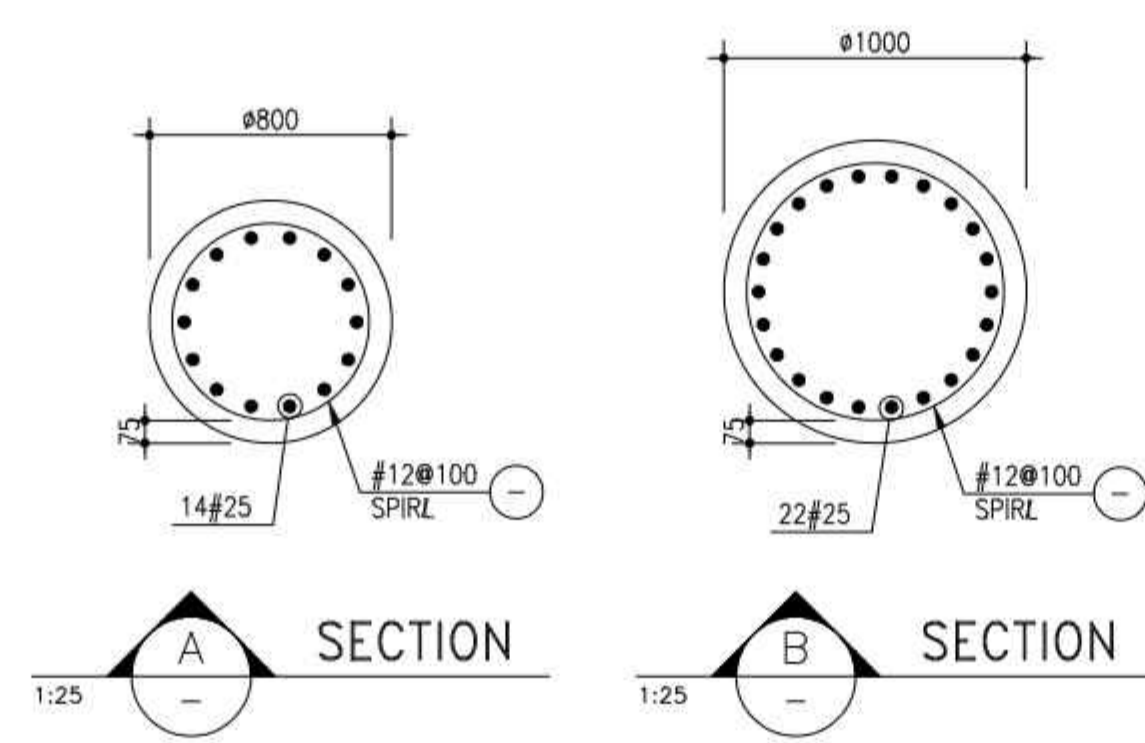
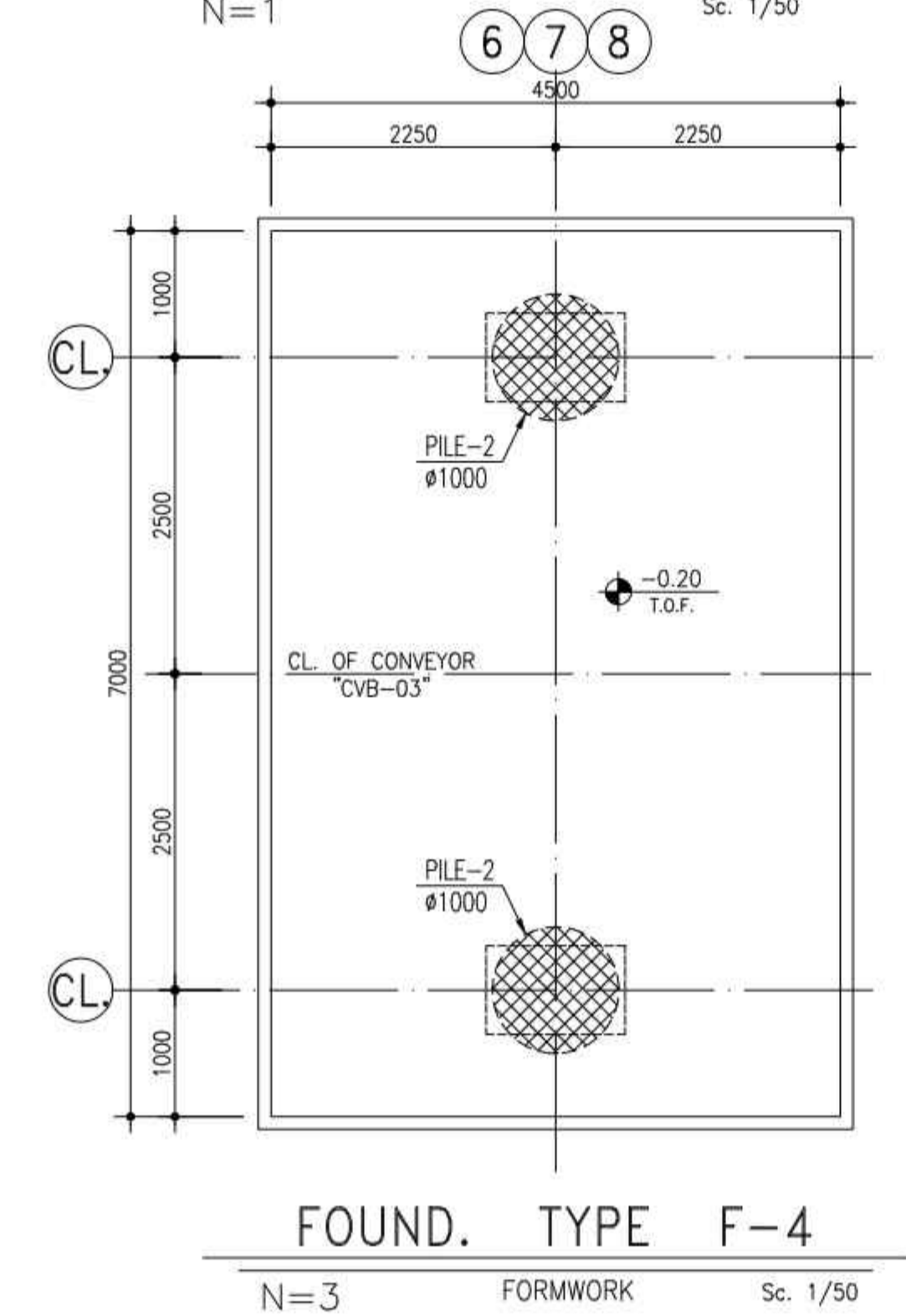
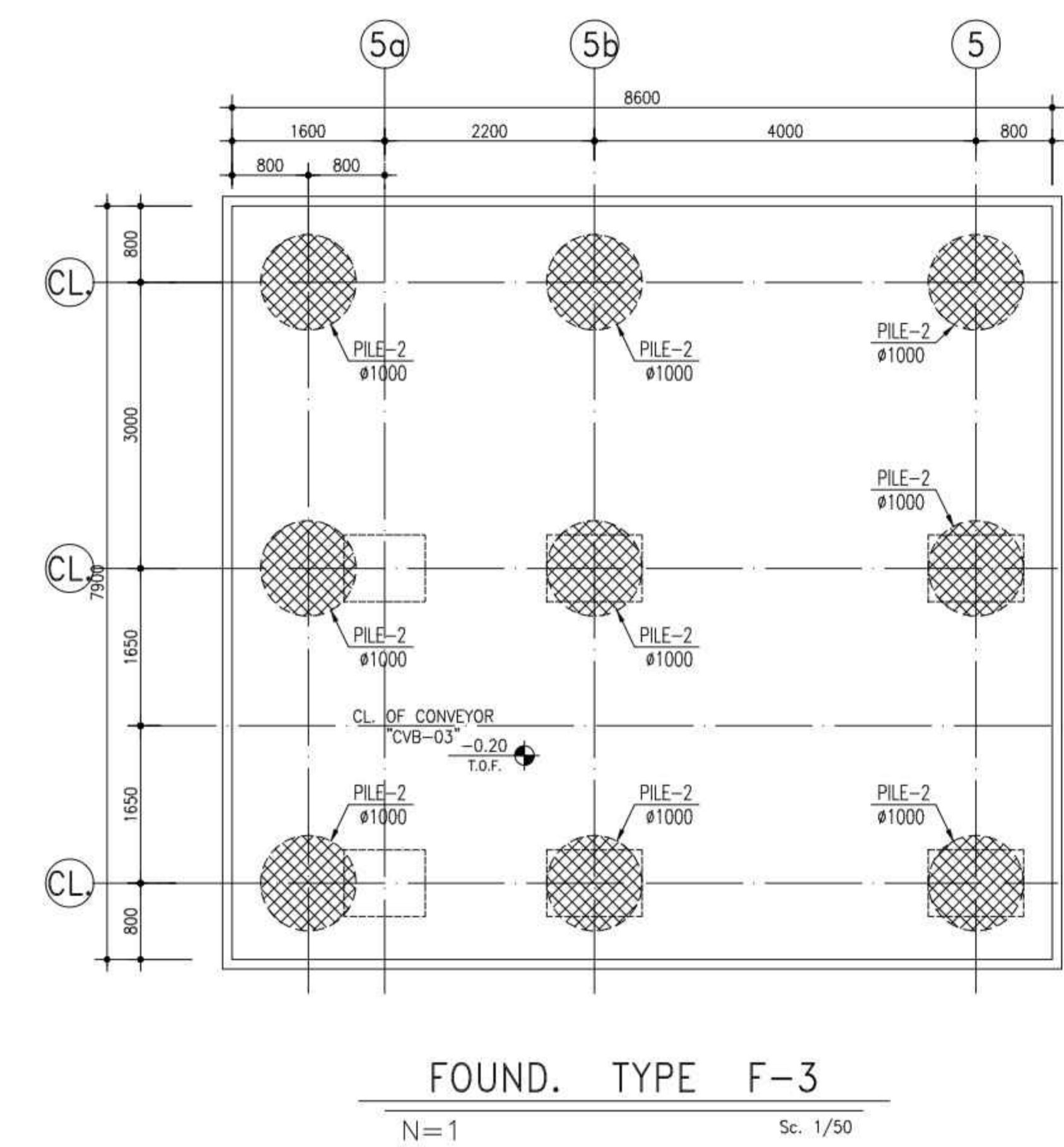
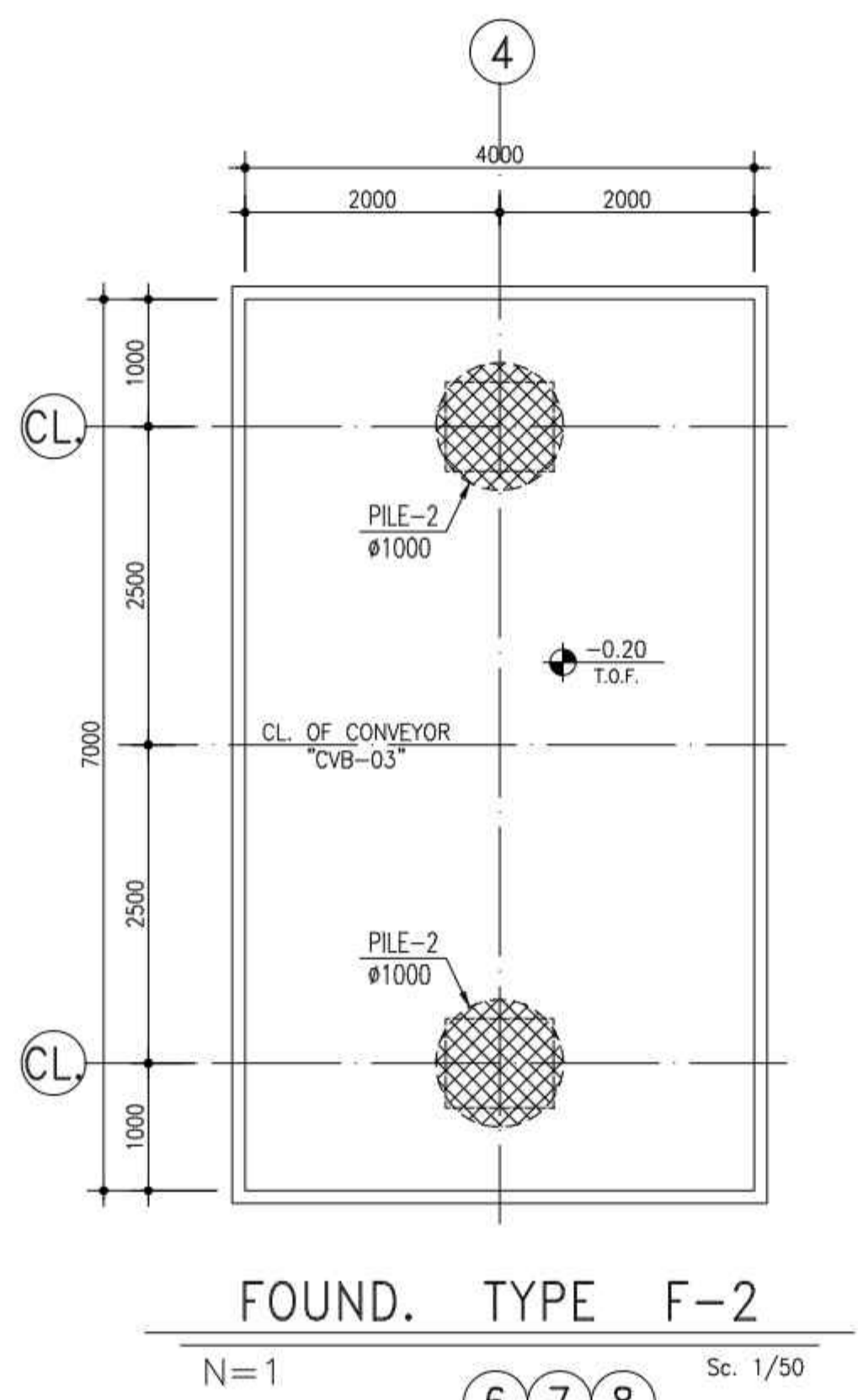
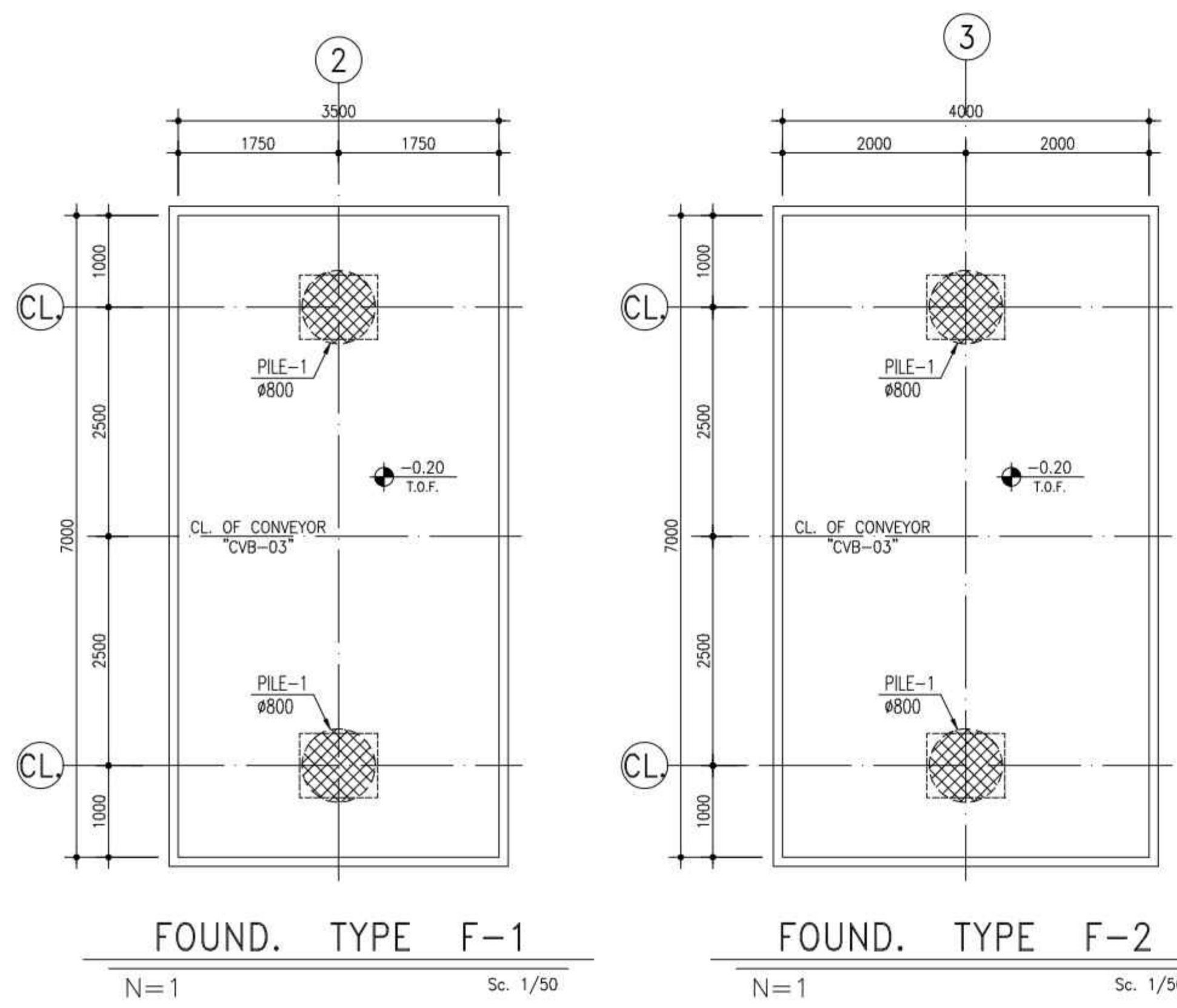
Date: _____ Signature: _____

REVISION TABLE

REV.	Date	Prepared	Checked	Approved by Contractor	Approved by Client
00	04.12.2024	IFR	N.A.	N.A.	E.S.H.

PROJECT TITLE: **COLD BRIQUETTE SPONGE IRON PROJECT**

DOCUMENT DESCRIPTION: **Gallery of CVB03-Pile and Foundation Drawings**



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KEY PLAN

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DESCRIPTION	REF. NO.

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PROJECT TITLE: COLD BRIQUETTE SPONGE IRON PROJECT

DOCUMENT DESCRIPTION: Gallery of CVB03-Pile and Foundation Drawings

DOCUMENT NO.: 4152CBSI-IH-ST-DW-453-01

REV.: 00 **SIZE:** A1 **SCALE:** 1/100 **SHEET NO.:** 7/7