

Section VII. Drawings

Nr	Description	ABC (PhP)	Page
1	Construction of One (1) Unit Supply Building (Oils and Lubs) for 155mm SP Howitzer Facilities at HAAR, PA	4,051,032.00	1-13
2	Construction of One (1) Unit Supply Building (Vehicle Parts) for 155mm SP Howitzer Facilities at HAAR, PA	4,051,032.00	14-26
3	Construction of One (1) Unit Supply Building (QMS) for 155mm SP Howitzer Facilities at HAAR, PA	4,051,032.00	27-39
4	Construction of One (1) Unit POL Dump for 155mm SP Howitzer Facilities at HAAR, PA	19,603,312.00	40-55
5	Construction of One (1) Unit Parking (Ammunition Vehicles) for 155mm SP Howitzer Facilities at HAAR, PA	2,114,172.00	56-61
6	Construction of One (1) Unit Parking (Fire Direction Center) for 155mm SP Howitzer Facilities at HAAR, PA	2,114,172.00	62-67
7	Construction of One (1) Unit Simulation Building for 155mm SP Howitzer Facilities at HAAR, PA	11,080,867.00	68-87
Total ABC (PhP)		47,065,619.00	

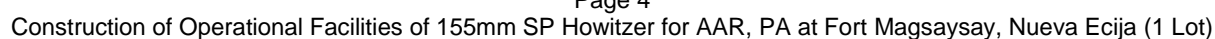
**Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at
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Bid Ref. No. ENG'G PABAC3 018-23**

Page 2

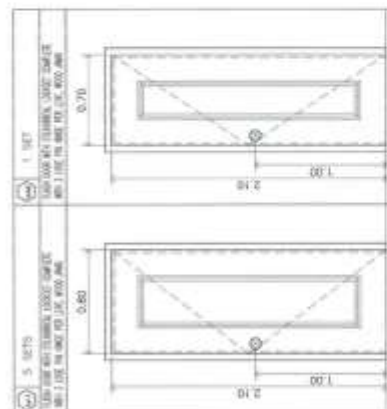
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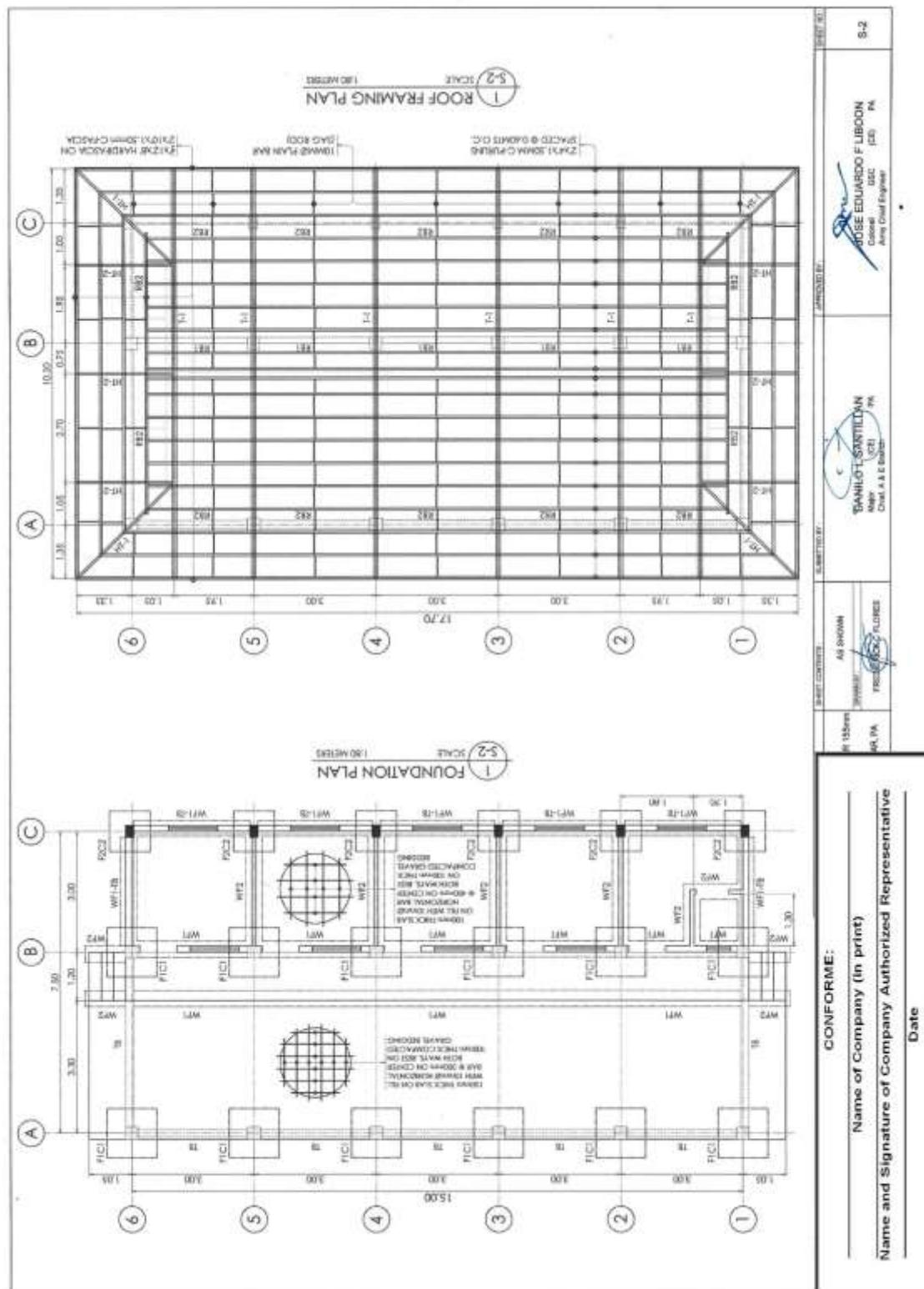
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**Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at
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<p>GENERAL NOTES</p> <ol style="list-style-type: none"> IN THE INTERPRETATION OF THE DRAWING, INDICATED DIMENSIONS SHALL DOWN AND DISTANCES AND SIZES SHALL NOT BE SOLELY FOR CONSTRUCTION PURPOSES. IN REFERENCE TO OTHER DRAWINGS, SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS IN FLOOR SLABS, OPENINGS IN THE WALLS AND SLABS, INTERIOR PARTITIONS, LOCATION OF DOORS ETC. IN CASE OF DISCREPANCIES AS TO THE LAYOUT, DIMENSIONS, AND ELEVATIONS BETWEEN THE STRUCTURAL PLANS, AND ARCHITECTURAL DRAWINGS, THE CONTRACTOR SHALL NOTIFY BOTH THE STRUCTURAL ENGINEER AND THE ARCHITECT. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE ACI 318-05 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND ALL STRUCTURAL STEEL WORK, ACCORDING WITH AISC SPECIFICATION (8TH EDITION) IN SO FAR AS THEY DO NOT CONFLICT WITH THE LOCAL BUILDING CODE REQUIREMENT. ACI REFERS TO AMERICAN CONCRETE INSTITUTE, INC. TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION AND ASTM TO AMERICAN SOCIETY FOR TESTING MATERIALS. CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED. WORKY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS. SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMS OF ALL STRUCTURAL STEELS, MISCELLANEOUS IRON, PRE-CAST CONCRETE, ETC. SHALL BE SUBMITTED FOR ENGINEER'S APPROVAL BEFORE FABRICATION. CONTRACTOR SHALL NOTE AND PROVIDE ALL MISCELLANEOUS CURB, BILLS, STEELS, EQUIPMENTS AND MECHANICAL DEVICES THAT ARE REQUIRED BY THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS. ALL RESULTS OF MATERIAL TESTING FOR CONCRETE, REINFORCING BARS, & STRUCTURAL STEEL MUST BE NOTED & APPROVED BY THE STRUCTURAL DESIGNER. 	<p>NOTES ON CONCRETE MIXES & PLACING</p> <ol style="list-style-type: none"> ALL CONCRETE SHALL DEVELOP A MIN. COMPRESSIVE STRENGTH AT THE END OF TWENTY EIGHT (28) DAYS W/ CORRESPONDING MAXIMUM SIZE AGGREGATE & SLUMPS AS FOLLOWS. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>LOCATION</th> <th>28 DAYS STRENGTH</th> <th>MAX. SIZE OF AGGREGATE</th> </tr> </thead> <tbody> <tr> <td>ALL OTHERS, INCLUDING SUSPENDED SLABS, COLUMNS</td> <td>3000 PSI (20.70 MPa)</td> <td>20mm</td> </tr> <tr> <td>BEAMS, SLABS</td> <td>3000 PSI (20.70 MPa)</td> <td>20mm</td> </tr> <tr> <td>SLAB ON FILL</td> <td>3000 PSI (20.70 MPa)</td> <td>20mm</td> </tr> </tbody> </table> <ol style="list-style-type: none"> MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL, AS FOLLOWS. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SLAB ON GRADE</th> <th>WALLS ABOVE GRADE</th> <th>BEAM STIRRUPS AND COLUMN TIES</th> <th>WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS</th> <th>WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH</th> </tr> </thead> <tbody> <tr> <td>20mm</td> <td>40mm</td> <td>25mm</td> <td>40mm</td> <td>50mm</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>75mm</td> </tr> </tbody> </table> <ol style="list-style-type: none"> CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION. RE-HAND LING OR PLACING SHALL BE DONE PREFERABLY WITH BUCKETS, BUCKETS OR WHEELBARROWS, NO CHUTES WILL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUCKETS, WHEELBARROWS OR BUCKETS IN WHICH CASE THEY SHALL NOT EXCEED SIX (6) METERS IN APPROXIMATE LENGTH. NO DEPOURING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE DESIGNERS AND ONLY FOR UNUSUAL CONDITIONS WHERE VIBRATIONS ARE EXTREMELY DIFFICULT TO ACCOMPLISH. 	LOCATION	28 DAYS STRENGTH	MAX. SIZE OF AGGREGATE	ALL OTHERS, INCLUDING SUSPENDED SLABS, COLUMNS	3000 PSI (20.70 MPa)	20mm	BEAMS, SLABS	3000 PSI (20.70 MPa)	20mm	SLAB ON FILL	3000 PSI (20.70 MPa)	20mm	SLAB ON GRADE	WALLS ABOVE GRADE	BEAM STIRRUPS AND COLUMN TIES	WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS	WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH	20mm	40mm	25mm	40mm	50mm					75mm	<p>TYP. DET. OF LINTEL BEAM AT CHB WALL OPENING</p>	<p>NOTES ON FOOTINGS</p> <ol style="list-style-type: none"> FOOTING SHALL REST AT LEAST 1500mm BELOW NATURAL GRADE LINE UNLESS OTHERWISE INDICATED IN PLANS. NO FOOTING SHALL REST ON FILL. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENTS SHALL BE 75mm CLEAR FOR CONCRETE DEPOSITED THE GROUND AND 50mm FOR CONCRETE DEPOSITED AGAINST A FORMWORK.
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<p>CONFORME:</p> <p>Name of Company (in print) _____</p> <p>Name and Signature of Company Authorized Representative _____</p> <p>Date _____</p>		<p>APPROVED BY: _____</p> <p>DATE: _____</p> <p>PROJECT NO. S-1</p> <p>JOSE EDUARDO F. LIRIO Colonel (CE) PA Army Chief Engineer</p> <p>DANIEL SANMILAN Major (OT) PA Chief A & T Branch</p>																												

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**Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at
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Bid Ref. No. ENG'G PABAC3 018-23**

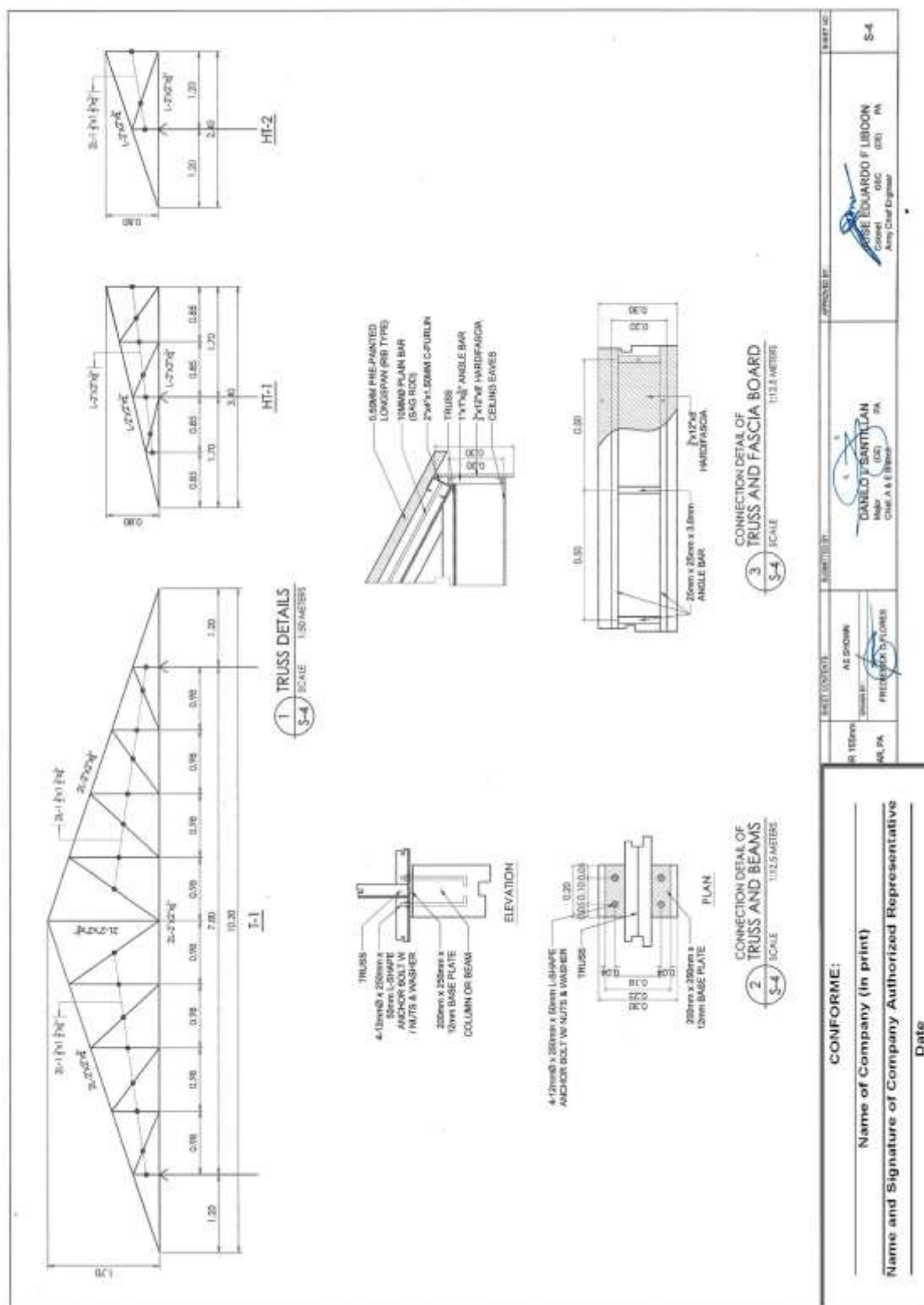


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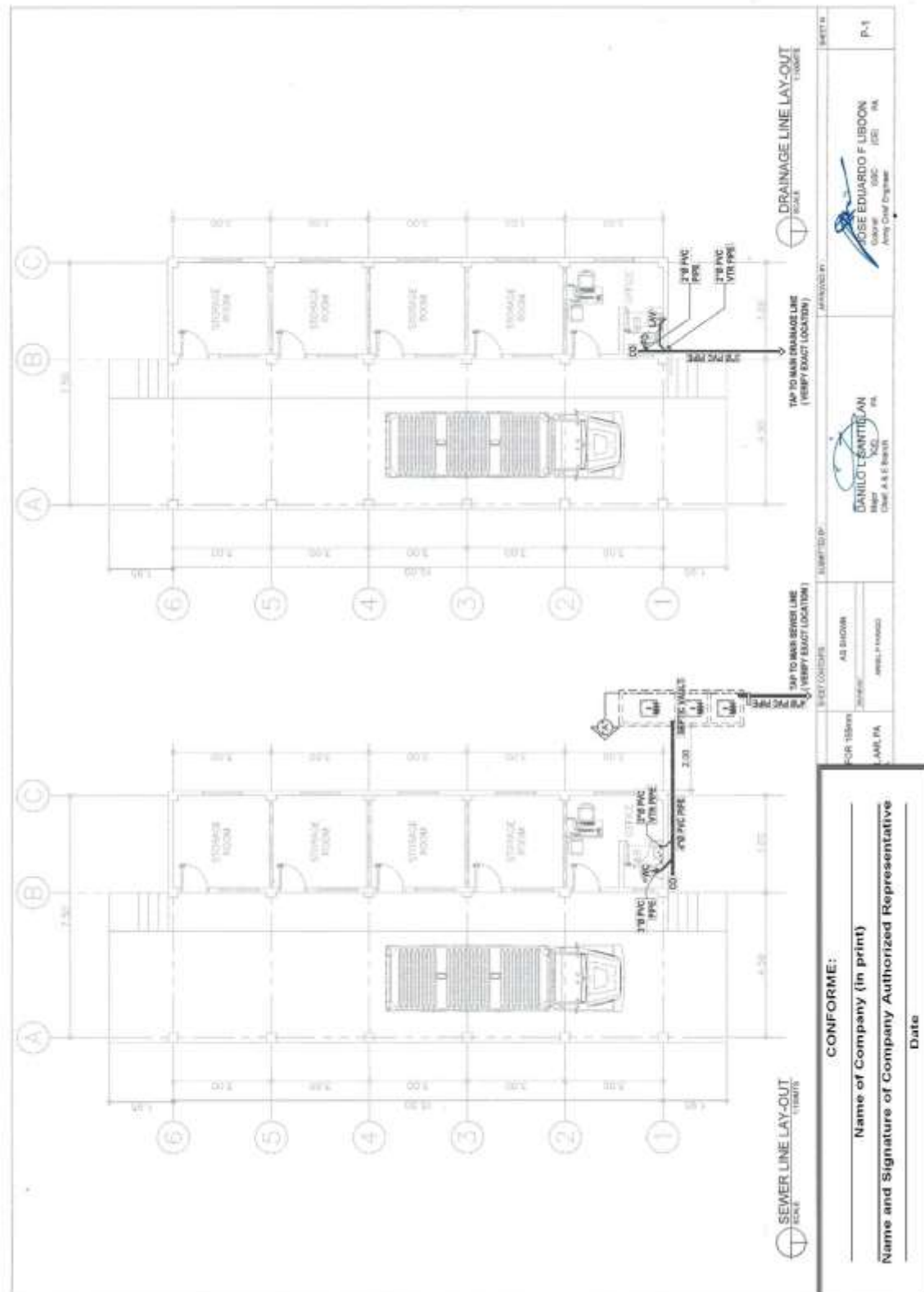
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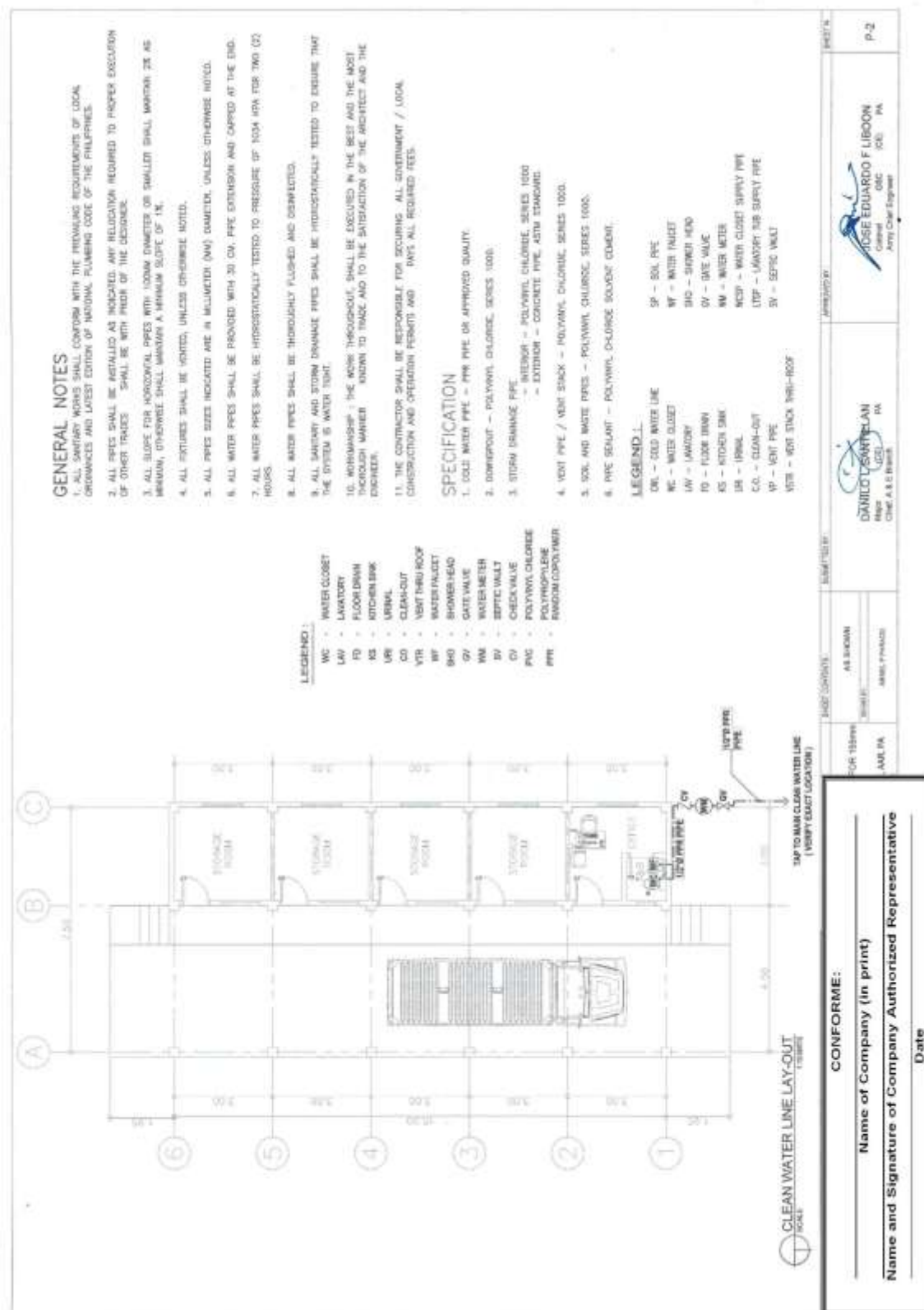
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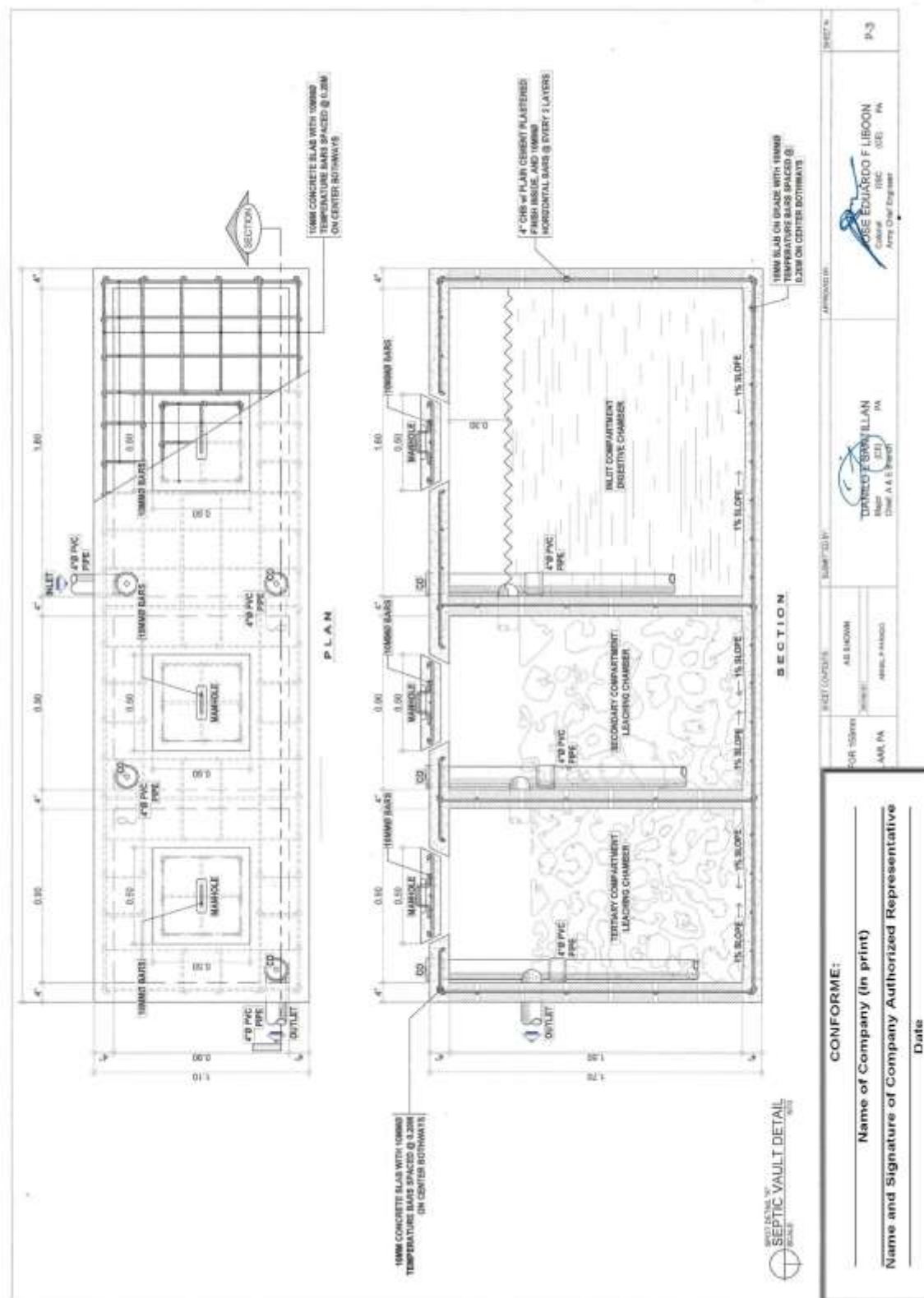
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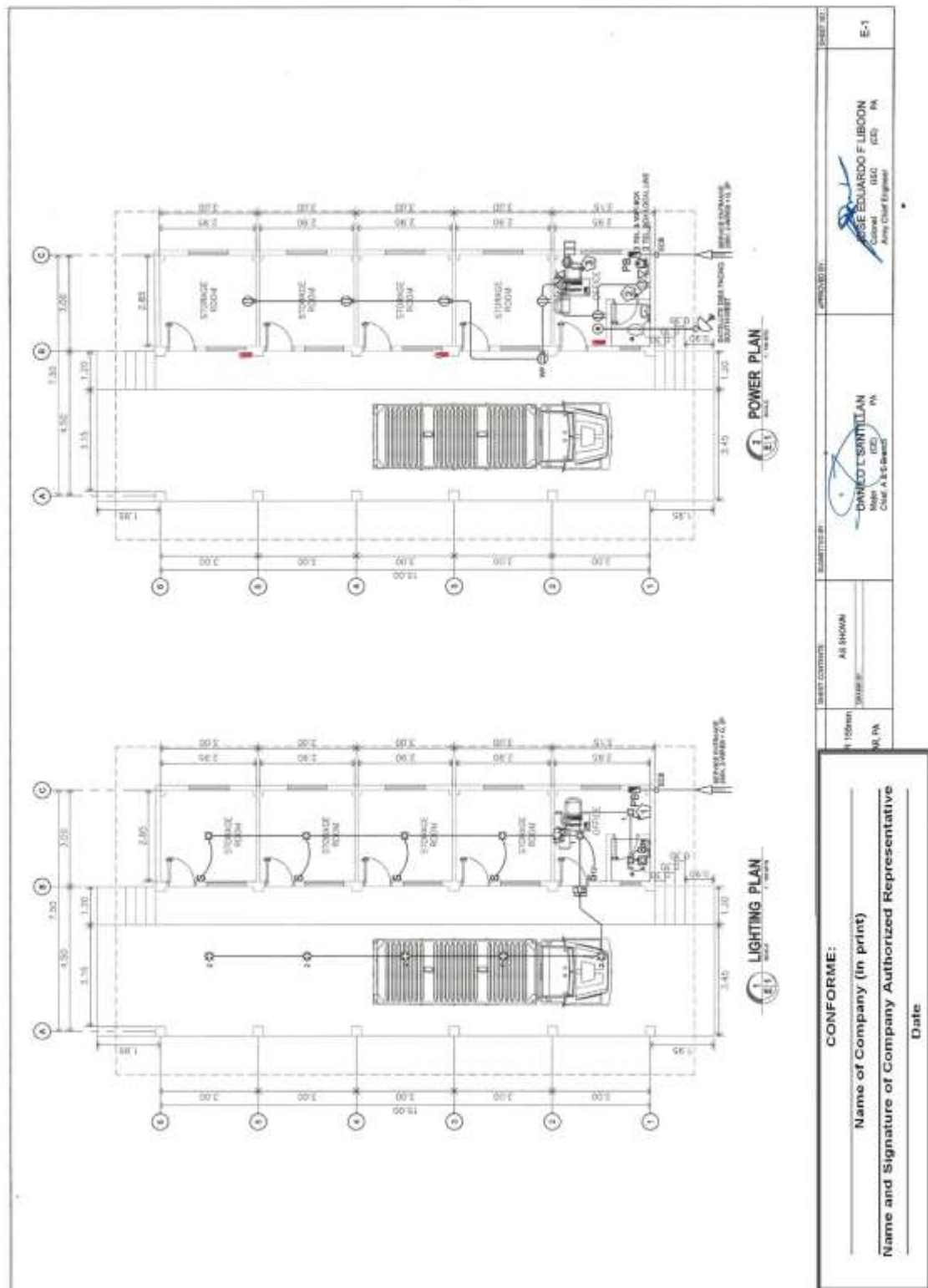
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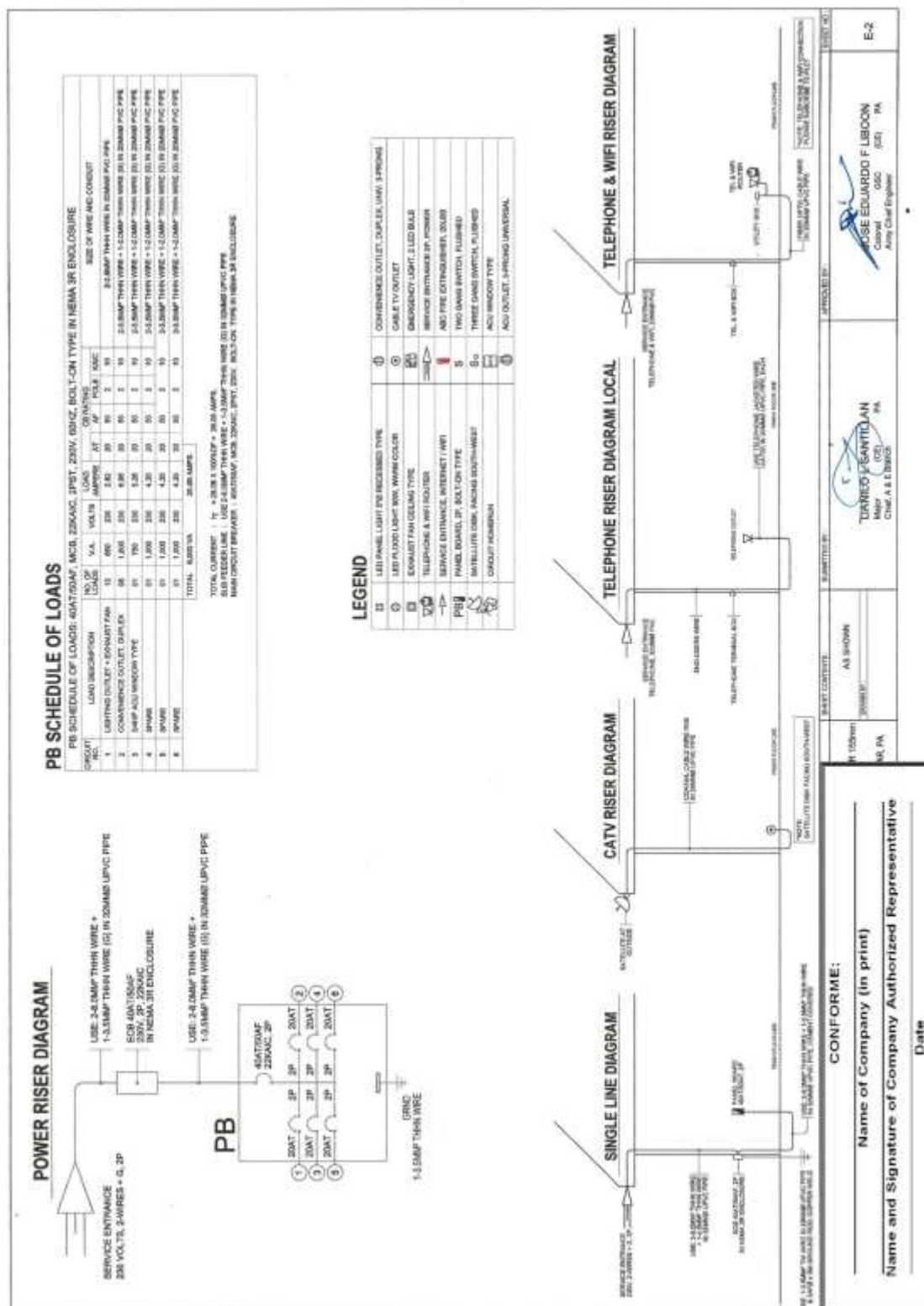
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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)





1 PERSPECTIVE

A-1 NOT TO SCALE

2 VICINITY MAP

A-1 NOT TO SCALE

3 LOCATION MAP

A-1 SCALE 1:500 METERS

4 SITE LOCATION PLAN

A-1 SCALE 1:500 METERS







CONFORME:

Name of Company (in print) _____

Name and Signature of Company Authorized Representative _____

Date _____

RTS FOR TES LAAR PA	AS SHOWN	DRAWN BY DENILO L. BAYUTAN	CHECKED BY FRANCIS M. CORDON	APPROVED BY JOSE EDUARDO F. LUBON	SCALE 1:500 METERS	SHEET NO. A-1
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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

5



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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

1
LEFT SIDE ELEVATION
SCALE 1:100 METERS

2
FRONT ELEVATION
SCALE 1:100 METERS

3
RIGHT SIDE ELEVATION
SCALE 1:100 METERS

4
REAR ELEVATION
SCALE 1:100 METERS

AS SHOWN
DATE: 10/10/2018
BY: [Signature]
FOR: [Signature]
PROJECT: [Signature]
DRAWN BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

CONFORME:

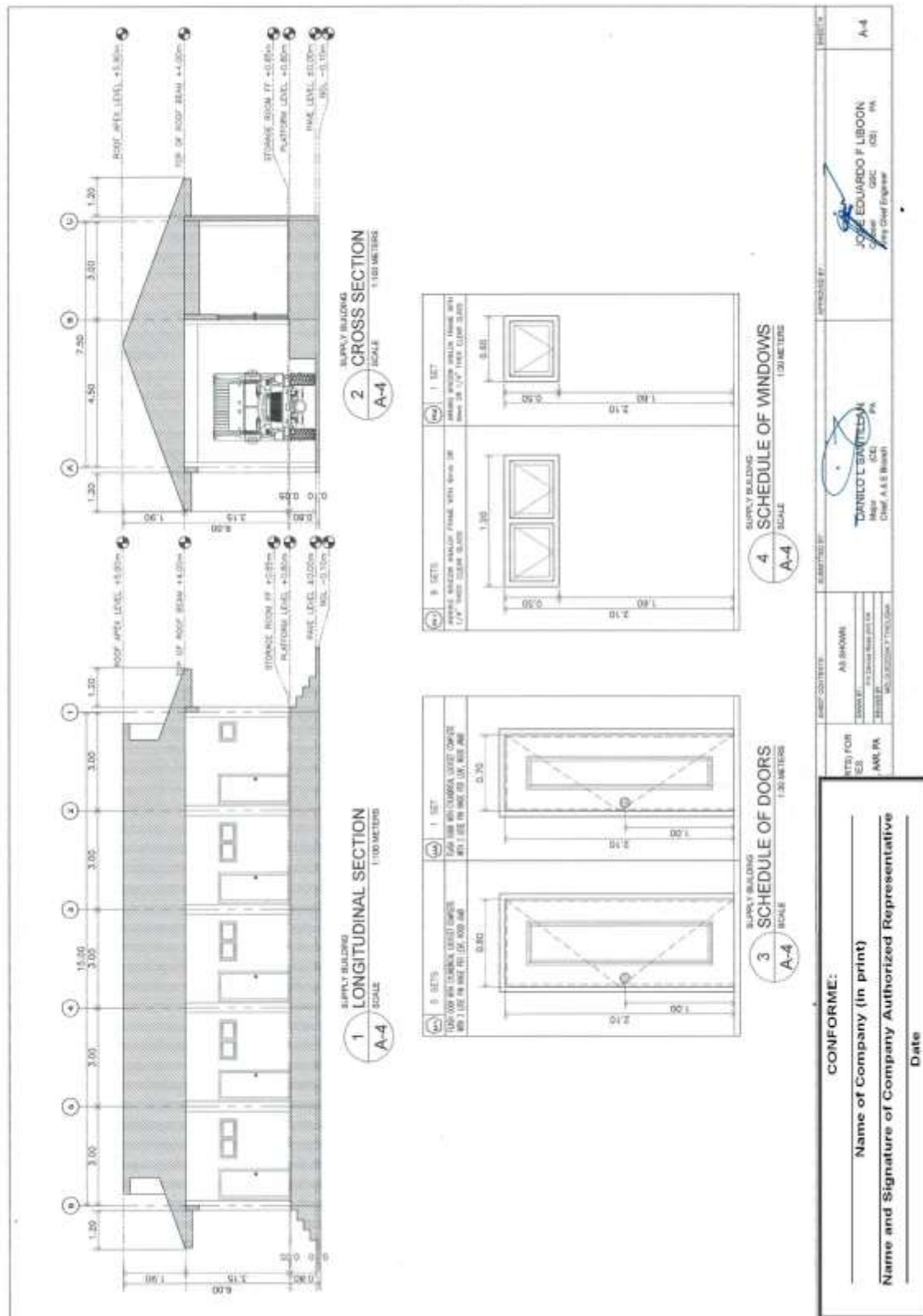
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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

GENERAL NOTES

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- AS REFERS TO AMERICAN CONCRETE INSTITUTE, AISC TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION AND ASTM TO AMERICAN SOCIETY FOR TESTING MATERIALS.
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NOTES ON CONCRETE MIXES & PLACING

- ALL CONCRETE SHALL DEVELOP A MIN. COMPRESSIVE STRENGTH AT THE END OF TWENTY EIGHT (28) DAYS W/ CORRESPONDING MAXIMUM SIZE AGGREGATE & SLUMPS AS FOLLOWS.

LOCATION	28 DAYS STRENGTH	MAX. SIZE OF AGGREGATE	SLUMP
ALL OTHERS, INCLUDING SUPPLEMENTED SLABS,	3000 PSI (20.70 MPa)	30mm	100mm
COLUMNS	3000 PSI (20.70 MPa)	20mm	100mm
BEAMS, SLABS	3000 PSI (20.70 MPa)	20mm	100mm
SLAB IN FILL	3000 PSI (20.70 MPa)	30mm	100mm

- MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS.

LOCATION	COVER
SUPPLEMENTED SLABS	20mm
WALLS ABOVE GRADE	40mm
BEAM STIRRUPS AND COLUMN TIES	20mm
BEAM STIRRUPS AND COLUMN TIES	40mm
EXPOSED CONCRETE IN EXPOSED TO WEATHER	50mm
WASTE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH	75mm

- CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION, RE-HAND UNDO OR PLACING SHALL BE DONE PREFERABLY WITH SHOVELS, BUCKETS OR WHEELBARROWS. NO CHARGES WILL BE ALLOWED EXCEPT TO TRANSPORT CONCRETE FROM HOPPERS TO SITES, WHENEVER CHARGES OR BUCKETS IN WHICH CASE THEY SHALL NOT EXCEED 30 (6) METERS IN AGGREGATE LENGTH.
- NO REPOURING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE DESIGNERS AND ONLY FOR UNUSUAL CONDITIONS WHERE VIBRATING ARE EXTREMELY DIFFICULT TO ACCOMPLISH.

TYPICAL CONNECTION DETAIL OF MASONRY WALL

12 THK. EXPANSION JOINT WITH MASTIC FILLER

1-#12 VERT. BARS

400 (MIN) DOWEL

CORNER WALL

1-#12 VERT. BARS

12 THK. EXPANSION JOINT WITH MASTIC FILLER

400 (MIN) DOWEL

FOR SIZE AND SPACING OF HOR. & VERT. BARS SEE CONSTRUCTION NOTES.

INTERSECTION WALL

FOR SIZE AND SPACING OF HOR. & VERT. BARS SEE CONSTRUCTION NOTES.

1-#16 VERT. BARS

CHB WALL

FOR SIZE AND SPACING OF HOR. & VERT. BARS SEE CONSTRUCTION NOTES.

OPENING OR END WALL

R.C. COLUMN OR WALL

DOWEL BARS TO MATCH CHB HOR. BARS

12 THK. EXPANSION JOINT WITH MASTIC FILLER

400 (MIN) DOWEL

INTERSECTING R.C. COLUMN OR WALL

TYP. DET. OF LINTEL BEAM AT CHB WALL OPENING

#10 STIRRUPS @ 150 O.C.

400 (MIN) DOWEL

2-#12 TOP BARS

2-#12 BOT. BARS

SECTION

FIN. FLR. LVL.

NOTES ON FOOTINGS

- FOOTING SHALL REST AT LEAST 1500mm BELOW NATURAL GRADE LINE UNLESS OTHERWISE INDICATED IN PLANS. NO FOOTING SHALL REST ON FILL.
- MINIMUM CONCRETE PROTECTION FOR REINFORCEMENTS SHALL BE 75mm CLEAR FOR CONCRETE DEPOSITED THE GROUND AND 50mm FOR CONCRETE DEPOSITED AGAINST A TOWERWORK.

CONFORME:

Name of Company (in print)

Name and Signature of Company Authorized Representative

Date

GENERAL NOTES

- ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED & SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
- ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP, FOG SPRINKLING, CURING COMPOUNDS OR OTHER APPROVED METHODS.
- STRIPPING OF FORMS AND SHORES

TYPICAL CONNECTION DETAIL OF MASONRY WALL

12 THK. EXPANSION JOINT WITH MASTIC FILLER

1-#12 VERT. BARS

400 (MIN) DOWEL

CORNER WALL

1-#12 VERT. BARS

12 THK. EXPANSION JOINT WITH MASTIC FILLER

400 (MIN) DOWEL

FOR SIZE AND SPACING OF HOR. & VERT. BARS SEE CONSTRUCTION NOTES.

INTERSECTION WALL

FOR SIZE AND SPACING OF HOR. & VERT. BARS SEE CONSTRUCTION NOTES.

1-#16 VERT. BARS

CHB WALL

FOR SIZE AND SPACING OF HOR. & VERT. BARS SEE CONSTRUCTION NOTES.

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R.C. COLUMN OR WALL

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TYPICAL CONNECTION DETAIL OF MASONRY WALL

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1-#12 VERT. BARS

400 (MIN) DOWEL

CORNER WALL

1-#12 VERT. BARS

12 THK. EXPANSION JOINT WITH MASTIC FILLER

400 (MIN) DOWEL

FOR SIZE AND SPACING OF HOR. & VERT. BARS SEE CONSTRUCTION NOTES.

INTERSECTION WALL

FOR SIZE AND SPACING OF HOR. & VERT. BARS SEE CONSTRUCTION NOTES.

1-#16 VERT. BARS

CHB WALL

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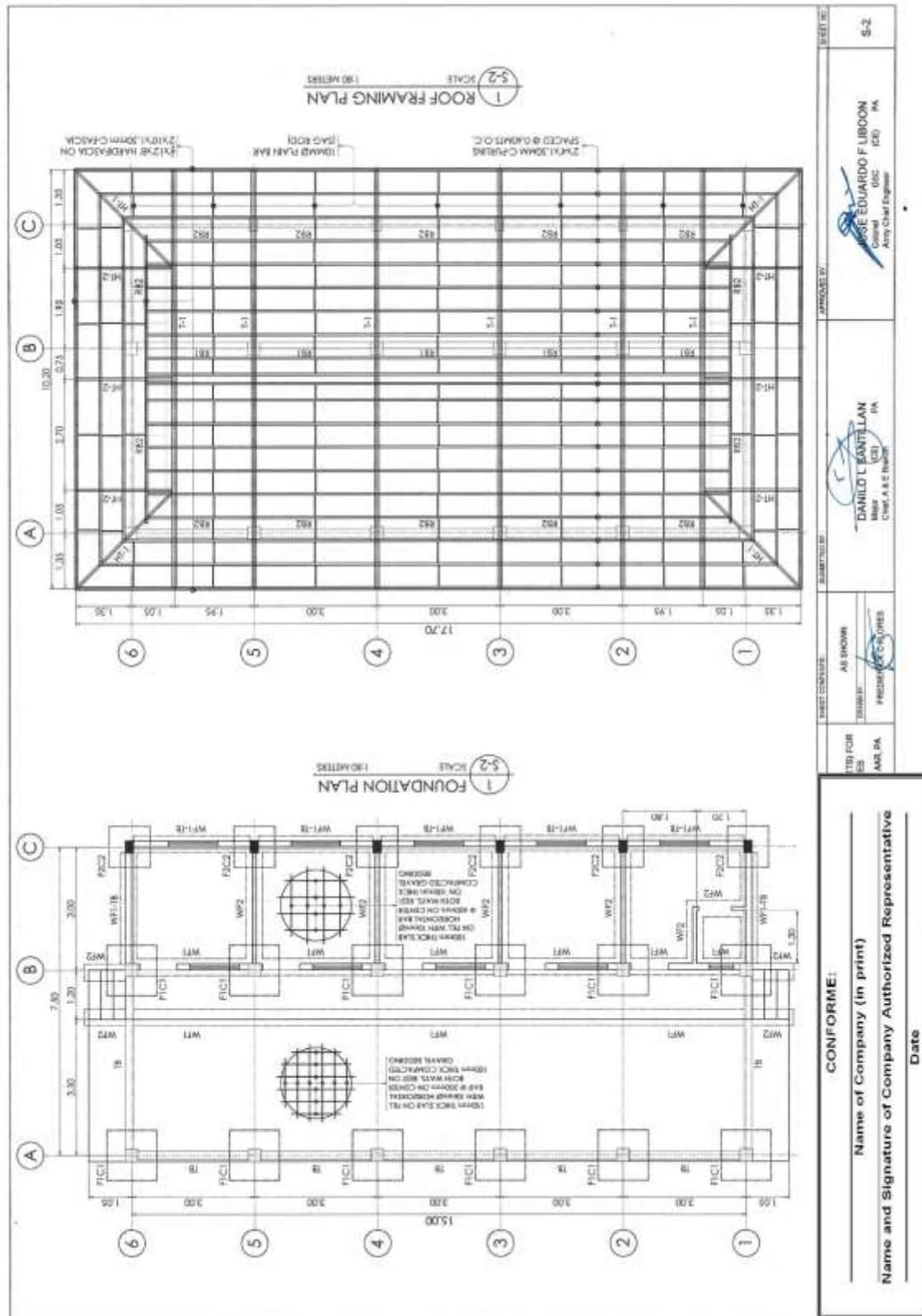
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GENERAL NOTES

Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

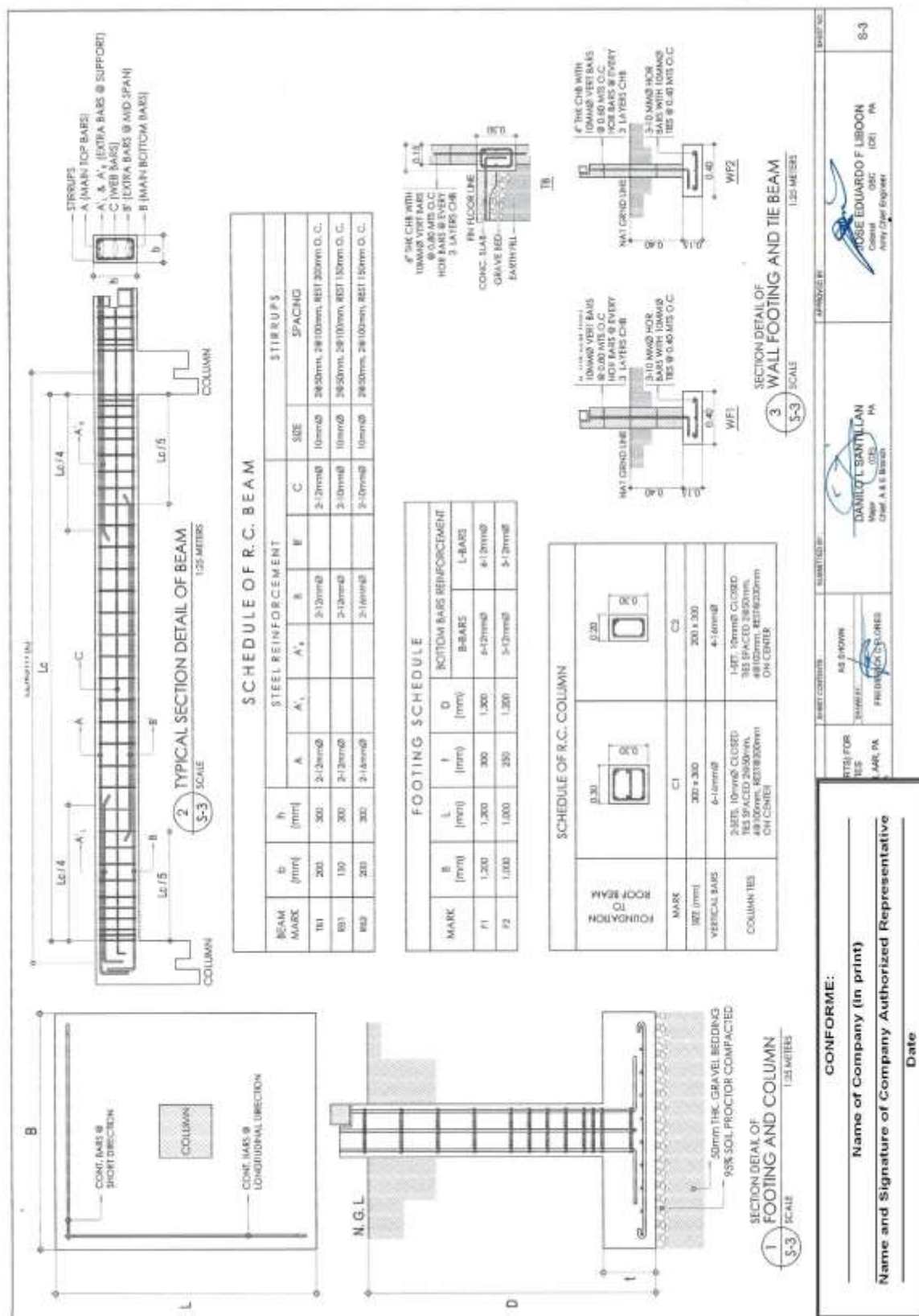
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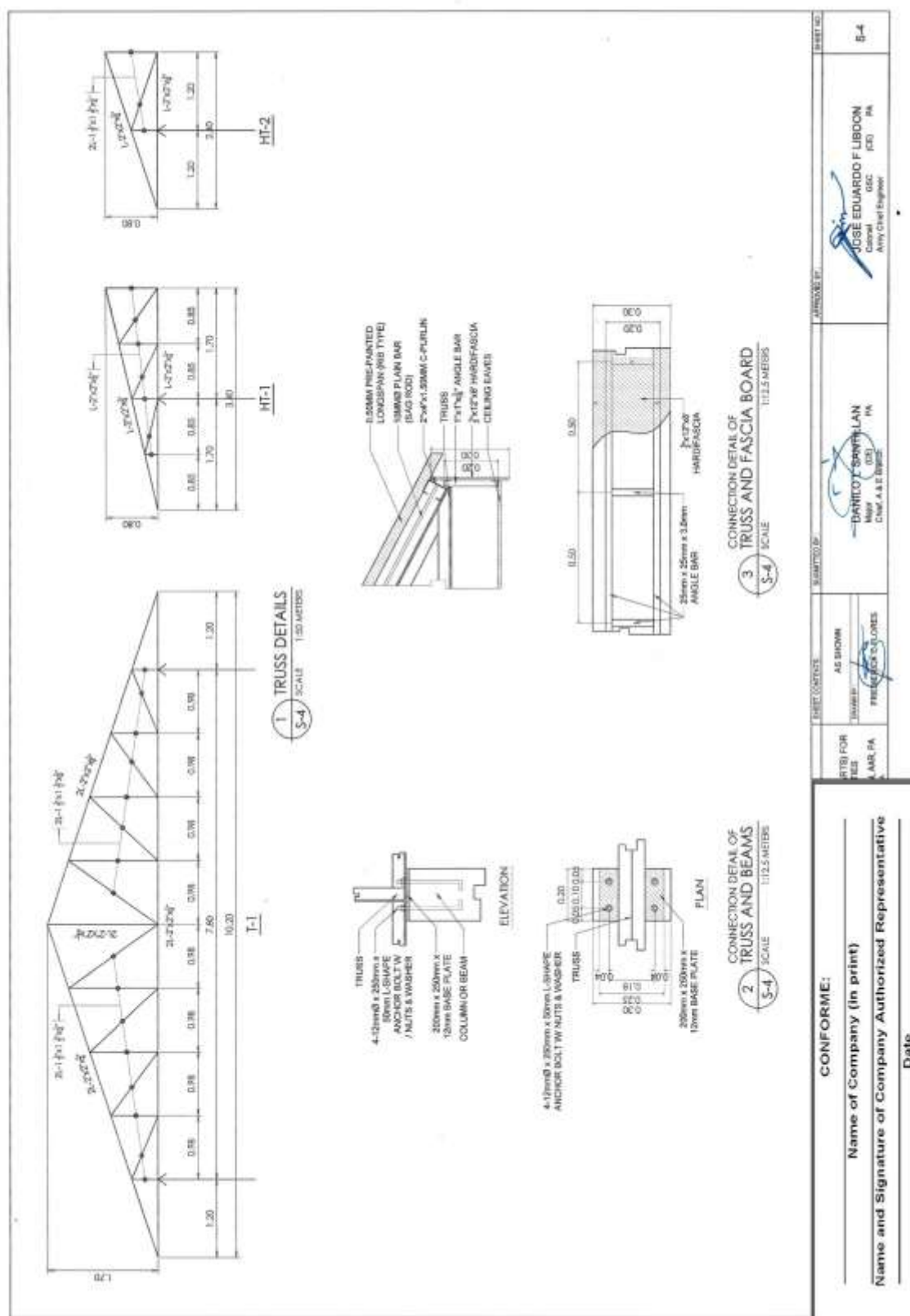
Bid Ref. No. ENG'G PABAC3 018-23



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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

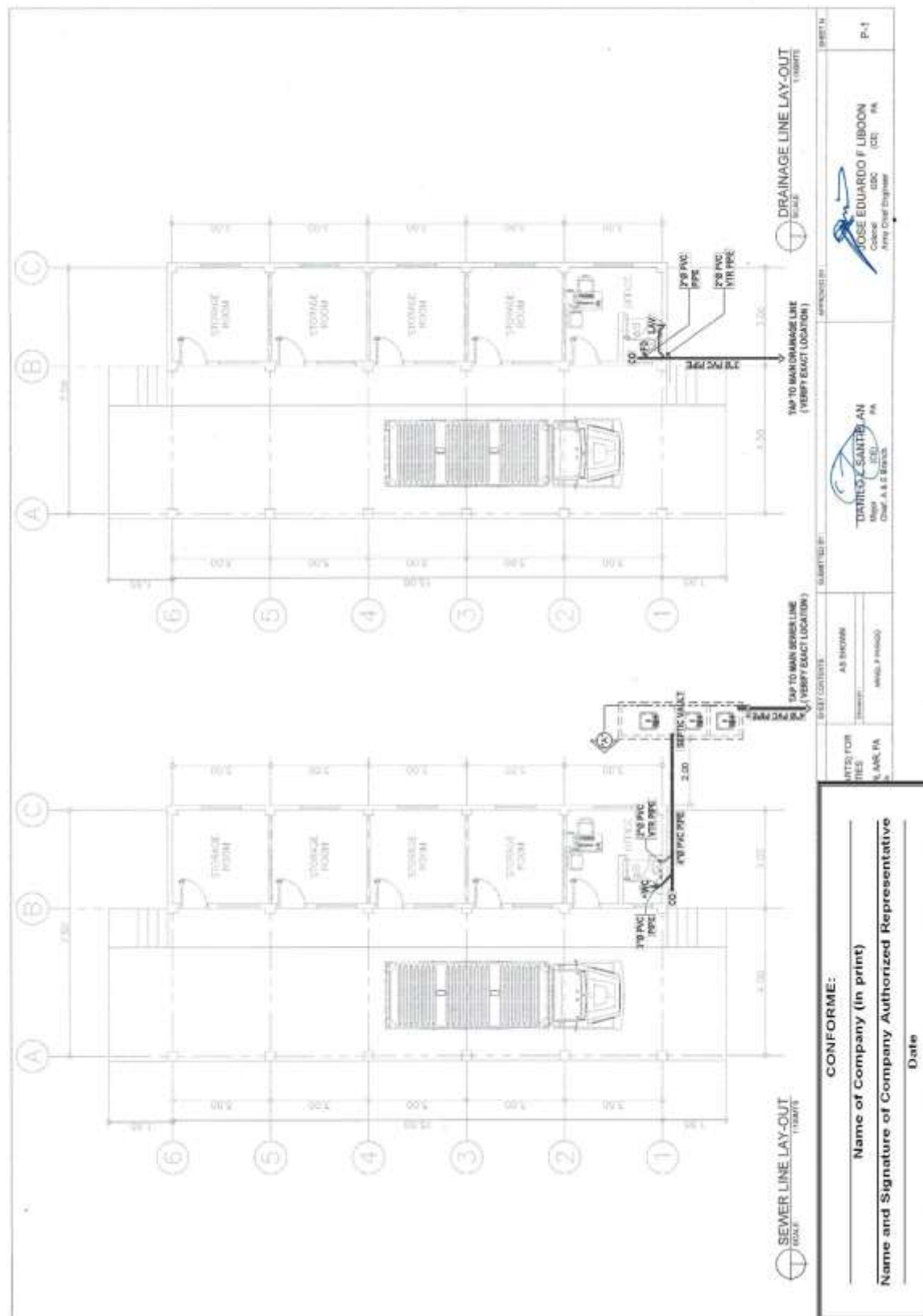
Bid Ref. No. ENG'G PABAC3 018-23



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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

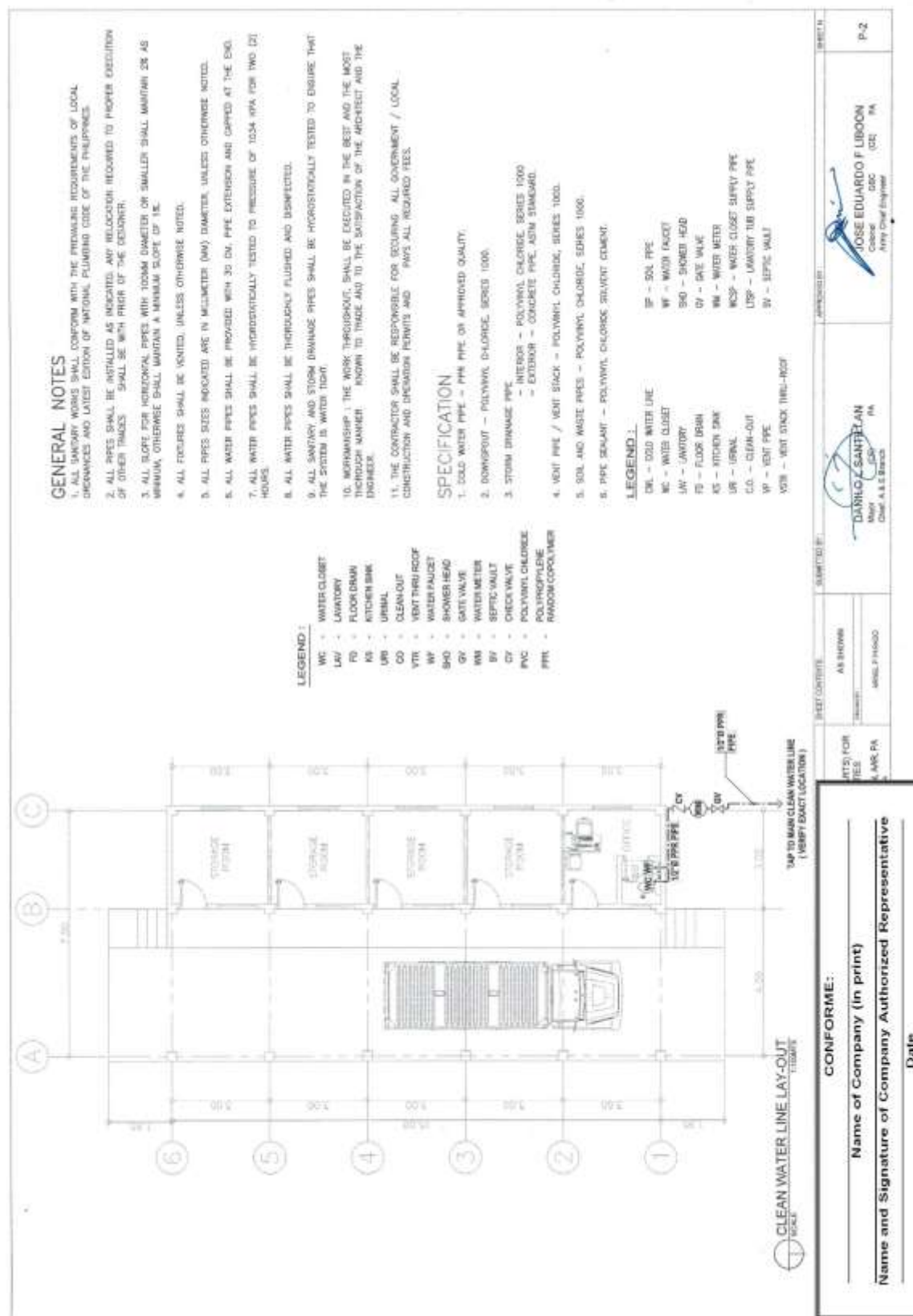
Bid Ref. No. ENG'G PABAC3 018-23



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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

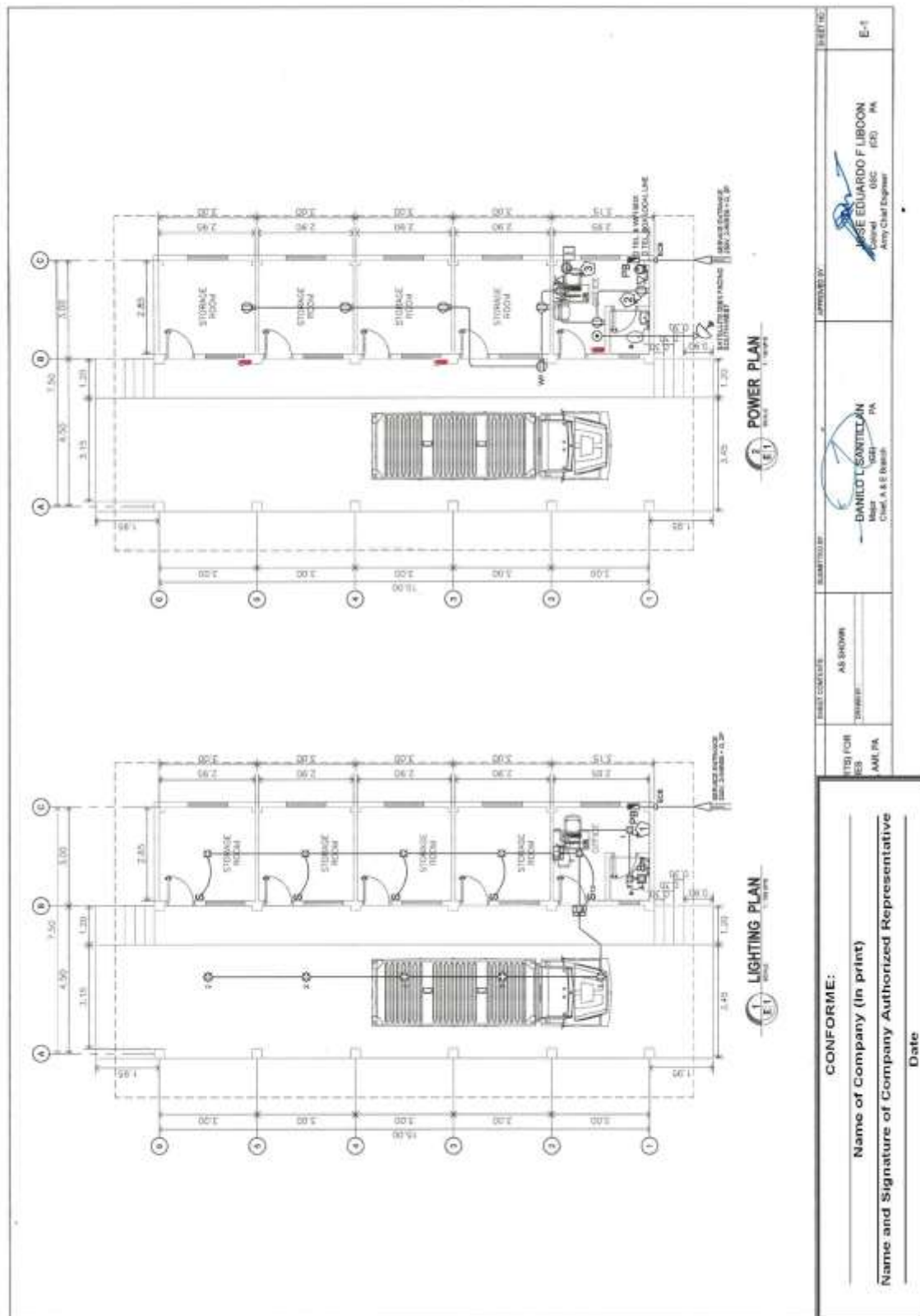
Bid Ref. No. ENG'G PABAC3 018-23



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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

Bid Ref. No. ENG'G PABAC3 018-23



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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

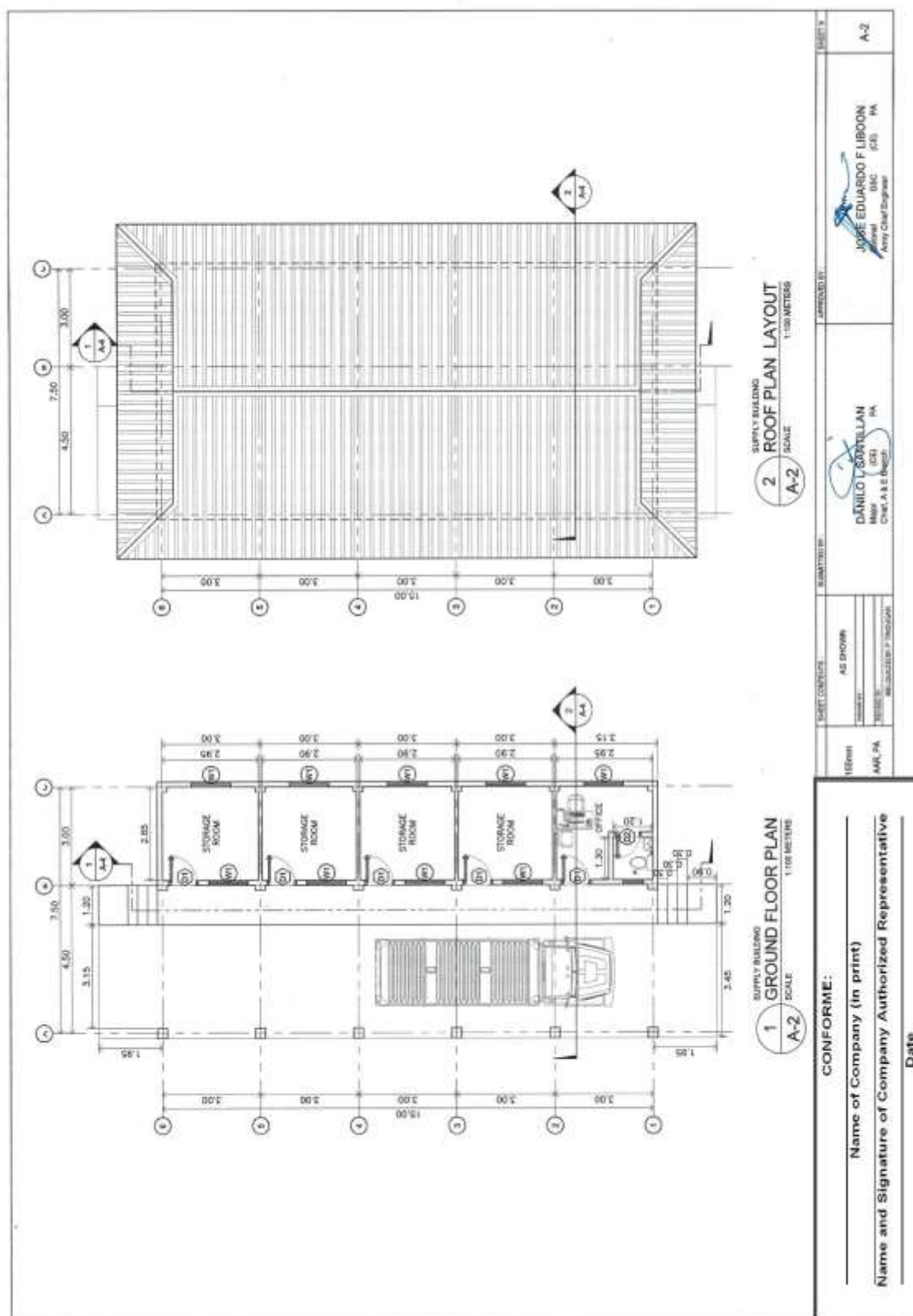
Bid Ref. No. ENG'G PABAC3 018-23

	<p>1 PERSPECTIVE A-1 NOT TO SCALE</p>		<p>2 VICINITY MAP A-1 NOT TO SCALE</p>		<p>3 LOCATION MAP A-1 SCALE 1:5000 METRES</p>		<p>4 SITE LOCATION PLAN A-1 SCALE 1:500 METRES</p>	
<p>CONFORME:</p> <p>Name of Company (in print) _____</p> <p>Name and Signature of Company Authorized Representative _____</p> <p>Date _____</p>								
<p>REMARKS:</p> <p>1. 155mm SP HOWITZER SUPPLY FACILITIES</p> <p>2. 155mm SP HOWITZER SUPPLY FACILITIES</p> <p>3. 155mm SP HOWITZER SUPPLY FACILITIES</p> <p>4. 155mm SP HOWITZER SUPPLY FACILITIES</p>								
<p>APPROVED BY:</p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p>								

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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

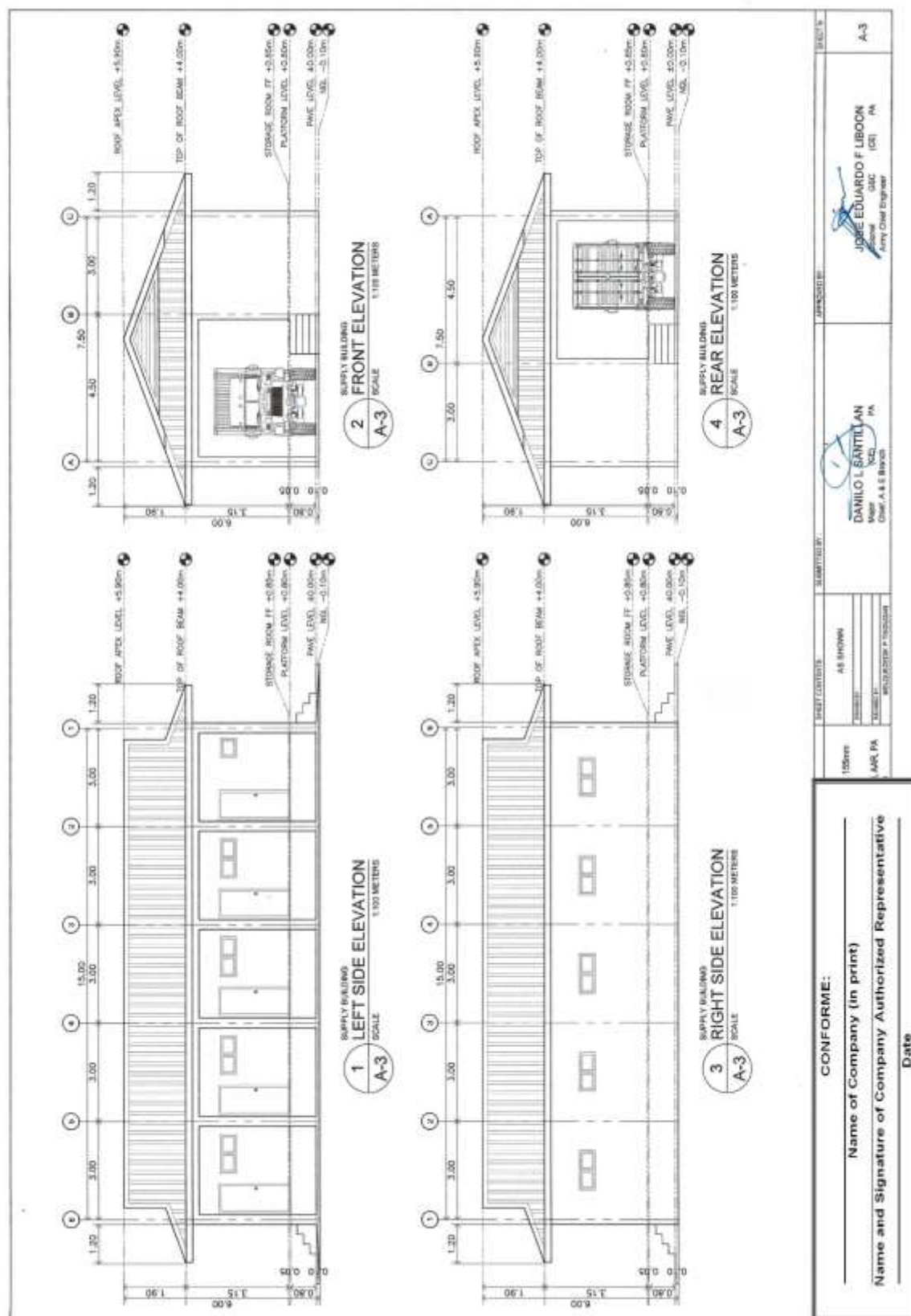
Bid Ref. No. ENG'G PABAC3 018-23



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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

Bid Ref. No. ENG'G PABAC3 018-23



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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

Bid Ref. No. ENG'G PABAC3 018-23

GENERAL NOTES		NOTES ON CONCRETE MIXES & PLACING		NOTES ON FOOTINGS		TYP. DET. OF LINTEL BEAM AT CHB WALL OPENING		TYPICAL CONNECTION																																																	
<p>1. IN THE INTERPRETATION OF THE DRAWING, INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES AND SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.</p> <p>2. IN REFERENCE TO OTHER DRAWINGS, SEE ARCHITECTURAL DRAWINGS FOR DEPRESSIONS IN FLOOR SLABS, OPENINGS IN THE WALLS AND SLAB, INTERIOR PARTITIONS, LOCATION OF DOORS ETC.</p> <p>3. IN CASE OF DISCREPANCIES AS TO THE LAYOUT, DIMENSIONS, AND ELEVATIONS BETWEEN THE STRUCTURAL PLANS, AND ARCHITECTURAL DRAWINGS, THE CONTRACTOR SHALL NOTIFY BOTH THE STRUCTURAL ENGINEER AND THE ARCHITECT.</p> <p>4. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE ACI 318-05 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND ALL STRUCTURAL STEEL WORK ACCORDING WITH AISC SPECIFICATION (9th EDITION) IN SO FAR AS THEY DO NOT CONFLICT WITH THE LOCAL BUILDING CODE REQUIREMENT.</p> <p>5. ALL REFERENCES TO AMERICAN CONCRETE INSTITUTE, ALSO TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION AND ASTM TO AMERICAN SOCIETY FOR TESTING MATERIALS.</p> <p>6. CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED. MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS.</p> <p>7. SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMS OF ALL STRUCTURAL STEELS, MISCELLANEOUS IRON, PNEUMATIC CONCRETE, ETC. SHALL BE SUBMITTED FOR ENGINEER'S APPROVAL BEFORE FABRICATION.</p> <p>8. CONTRACTOR SHALL NOTE AND PROVIDE ALL MISCELLANEOUS CLIMBS, BILLS, STOLLS, EQUIPMENTS AND MECHANICAL BASES THAT ARE REQUIRED BY THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS.</p> <p>9. ALL RESULTS OF MATERIAL TESTING FOR CONCRETE, REINFORCING BARS, & STRUCTURAL STEEL, MUST BE NOTED & APPROVED BY THE STRUCTURAL DESIGNER.</p>		<p>1. ALL CONCRETE SHALL DEVELOP A MIN. COMPRESSIVE STRENGTH AT THE END OF TWENTY (20) DAYS W/ CORRESPONDING MAXIMUM SIZE AGGREGATE & SLUMPS AS FOLLOWS.</p> <table border="1"> <thead> <tr> <th>LOCATION</th> <th>28 DAYS STRENGTH</th> <th>MAX. SIZE OF MAX. SLUMP AGGREGATE</th> </tr> </thead> <tbody> <tr> <td>ALL OTHERS, INCLUDING SUSPENDED SLABS, COLUMNS</td> <td>3000 PSI (20.70 MPa)</td> <td>20mm</td> </tr> <tr> <td>BEAMS, SLABS</td> <td>3000 PSI (20.70 MPa)</td> <td>20mm</td> </tr> <tr> <td>SLAB ON FILL</td> <td>3000 PSI (20.70 MPa)</td> <td>20mm</td> </tr> </tbody> </table> <p>2. MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:</p> <table border="1"> <thead> <tr> <th>REINFORCING STEEL AS FOLLOWS:</th> <th>COVER</th> </tr> </thead> <tbody> <tr> <td>SUSPENDED SLABS</td> <td>20mm</td> </tr> <tr> <td>SLAB ON GRADE</td> <td>40mm</td> </tr> <tr> <td>WALLS ABOVE GRADE</td> <td>20mm</td> </tr> <tr> <td>BEAM STIRRUPS AND COLUMN TIES</td> <td>40mm</td> </tr> <tr> <td>WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS</td> <td>50mm</td> </tr> <tr> <td>WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH</td> <td>75mm</td> </tr> </tbody> </table> <p>3. CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION. RE-HAND LING OR PLACING SHALL BE DONE PREFERABLY WITH BUCKETS, SHOVELS OR WHEELBARROWS. NO CHUTES WILL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUCKETS, WHEELBARROWS OR BUCKETS IN WHICH CASE THEY SHALL NOT EXCEED SIX (6) METERS IN AGGREGATE LENGTH.</p> <p>4. NO DEPOSITING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE DESIGNER AND ONLY FOR UNUSUAL CONDITIONS WHERE VIBRATIONS ARE EXTREMELY DIFFICULT TO ACCOMPLISH.</p>		LOCATION	28 DAYS STRENGTH	MAX. SIZE OF MAX. SLUMP AGGREGATE	ALL OTHERS, INCLUDING SUSPENDED SLABS, COLUMNS	3000 PSI (20.70 MPa)	20mm	BEAMS, SLABS	3000 PSI (20.70 MPa)	20mm	SLAB ON FILL	3000 PSI (20.70 MPa)	20mm	REINFORCING STEEL AS FOLLOWS:	COVER	SUSPENDED SLABS	20mm	SLAB ON GRADE	40mm	WALLS ABOVE GRADE	20mm	BEAM STIRRUPS AND COLUMN TIES	40mm	WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS	50mm	WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH	75mm	<p>1. FOOTING SHALL REST AT LEAST 1500mm BELOW NATURAL GRADE LINE UNLESS OTHERWISE INDICATED IN PLANS. NO FOOTING SHALL REST ON FILL.</p> <p>2. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENTS SHALL BE 75mm CLEAR FOR CONCRETE DEPOSITED THE GROUND AND 50mm FOR CONCRETE DEPOSITED AGAINST A FORMWORK.</p>		<p>1. ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED & SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.</p> <p>2. ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP, FOG SPRAYING, CURING COMPOUNDS OR OTHER APPROVED METHODS.</p> <p>3. 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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

[illegible]

Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

1 **FOOTING AND COLUMN**
SCALE 1:25 METERS

2 **TYPICAL SECTION DETAIL OF BEAM**
SCALE 5-3

3 **WALL FOOTING AND TIE BEAM**
SCALE 1:25 METERS

SCHEDULE OF R.C. BEAM

BEAM MARK	b (mm)	h (mm)	STEEL REINFORCEMENT					STIRRUPS	
			A	A ₁	A ₂	B	C	SIZE	SPACING
R1	300	300	3-12mmØ			3-10mmØ	2-10mmØ	10mmØ	28/50mm, 28-100mm, REST 200mm O.C.
R2	150	300	2-12mmØ			2-10mmØ	2-10mmØ	10mmØ	28/50mm, 28-100mm, REST 150mm O.C.
R3	200	300	2-12mmØ			2-10mmØ	2-10mmØ	10mmØ	28/50mm, 28-100mm, REST 150mm O.C.

FOOTING SCHEDULE

MARK	B (mm)	L (mm)	F (mm)	D (mm)	BOTTOM BARS REINFORCEMENT	
					B-BARS	L-BARS
F1	1,200	1,200	300	1,300	4-12mmØ	4-12mmØ
F2	1,000	1,000	300	1,300	4-12mmØ	4-12mmØ

SCHEDULE OF R.C. COLUMN

FOUNDATION TO	COLUMN		C2
	C1	C2	
ROOF BEAM	300 x 300	300 x 300	200 x 300
VERTICAL BARS	4-12mmØ	4-12mmØ	4-12mmØ
COLUMN TIES	2-FTS, 10mmØ CLOSED TIES SPACED 280mm, 40mm Ø, 10mmØ Ø20mm ON CORNER	1-FT, 10mmØ CLOSED TIES SPACED 280mm, 40mm Ø, 10mmØ Ø20mm ON CORNER	

SECTION DETAIL OF FOOTING AND COLUMN
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SECTION DETAIL OF WALL FOOTING AND TIE BEAM
SCALE 1:25 METERS

SECTION DETAIL OF TYPICAL SECTION DETAIL OF BEAM
SCALE 5-3

Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

T-1
SCALE: 1:50 METERS

HT-1
SCALE: 1:50 METERS

HT-2
SCALE: 1:50 METERS

1 TRUSS DETAILS
SCALE: 1:50 METERS

2 CONNECTION DETAIL OF TRUSS AND BEAMS
SCALE: 1:12.5 METERS

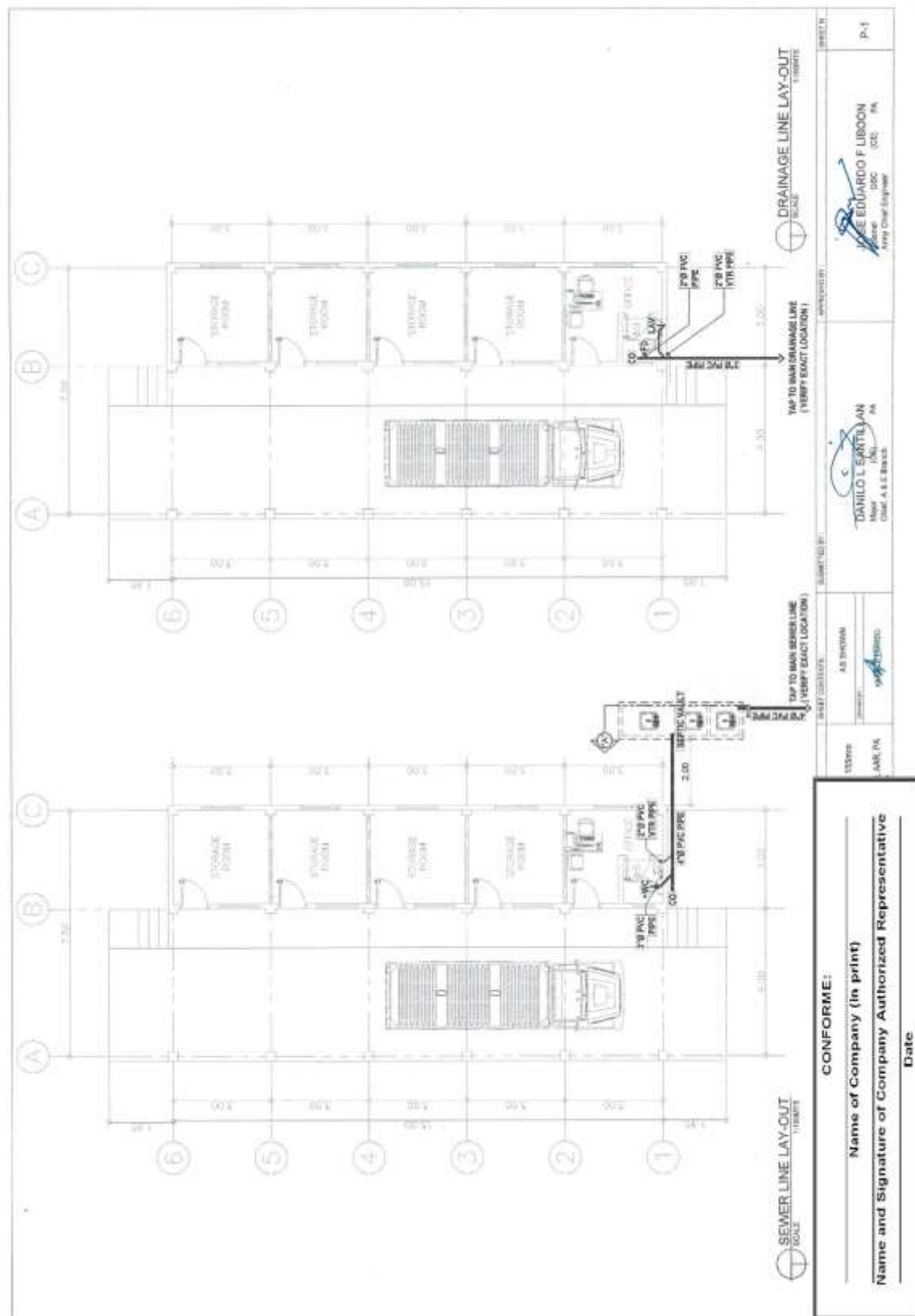
3 CONNECTION DETAIL OF TRUSS AND FASCIA BOARD
SCALE: 1:12.5 METERS

Details:

- Detail 1:** Truss connection to column or beam. Components include: 4-32mm x 250mm x 50mm L-SHAPE ANCHOR BOLT W/ NUTS & WASHER, 250mm x 250mm x 12mm BASE PLATE, TRUSS, and COLUMN OR BEAM.
- Detail 2:** Truss connection to beam. Components include: 4-32mm x 250mm x 10mm L-SHAPE ANCHOR BOLT W/ NUTS & WASHER, TRUSS, and 250mm x 250mm x 12mm BASE PLATE.
- Detail 3:** Truss connection to fascia board. Components include: 32mm x 250mm x 3.0mm ANGLE BAR, TRUSS, and 7x12x12 HARD FASCIA.

Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

Bid Ref. No. ENG'G PABAC3 018-23



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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

LEGEND 1:

WC	-	WATER CLOSET
LAU	-	LAUNDRY
FD	-	FLOOR DRAIN
KS	-	KITCHEN SINK
URI	-	URINAL
CD	-	CLEAN-OUT
VTR	-	VENT THRU ROOF
WF	-	WATER FAUCET
SHD	-	SHOWER HEAD
GV	-	GATE VALVE
WM	-	WATER METER
SV	-	SEPTIC VAULT
CV	-	CHECK VALVE
PVC	-	POLYVINYL CHLORIDE
PPR	-	POLYPROPYLENE
PPR	-	RANDOM COPOLYMER

LEGEND 2:

OK	-	COLD WATER LINE
WC	-	WATER CLOSET
LAU	-	LAUNDRY
FD	-	FLOOR DRAIN
KS	-	KITCHEN SINK
URI	-	URINAL
CD	-	CLEAN-OUT
VP	-	VENT PIPE
VTR	-	VENT THRU ROOF

GENERAL NOTES:

1. ALL SANITARY WORKS SHALL CONFORM WITH THE PREVAILING REQUIREMENTS OF LOCAL ORDINANCES AND LATEST EDITION OF NATIONAL PLUMBING CODE OF THE PHILIPPINES.
2. ALL PIPES SHALL BE INSTALLED AS INDICATED. ANY RELOCATION REQUIRED TO PROTECT EXISTING UTILITIES SHALL BE WITH PRIOR OF THE DESIGNER.
3. ALL SLOPE FOR HORIZONTAL PIPES WITH 100MM DIAMETER OR SMALLER SHALL MAINTAIN 2% AS MINIMUM, OTHERWISE SHALL MAINTAIN A MINIMUM SLOPE OF 1%.
4. ALL FITTINGS SHALL BE VENTED, UNLESS OTHERWISE NOTED.
5. ALL PIPES SIZES INDICATED ARE IN MILLIMETER (MM) DIAMETER, UNLESS OTHERWISE NOTED.
6. ALL WATER PIPES SHALL BE PROVIDED WITH 30 CM. PIPE EXTENSION AND CAPPED AT THE END.
7. ALL WATER PIPES SHALL BE HYDROSTATICALLY TESTED TO PRESSURE OF 10.34 MPa FOR TWO (2) HOURS.
8. ALL WATER PIPES SHALL BE THOROUGHLY FLUSHED AND DISINFECTED.
9. ALL SANITARY AND STORM DRAINAGE PIPES SHALL BE HYDROSTATICALLY TESTED TO ENSURE THAT THE SYSTEM IS WATER TIGHT.
10. WORKMANSHIP: THE WORK THROUGHOUT, SHALL BE EXECUTED IN THE BEST AND THE MOST THROUGH MANNER KNOWN TO TRADE AND TO THE SATISFACTION OF THE ARCHITECT AND THE ENGINEER.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL GOVERNMENT / LOCAL CONSTRUCTION AND UTILIZATION PERMITS AND PAYS ALL REQUIRED FEES.

SPECIFICATION

1. COLD WATER PIPE - PPR PIPE OF APPROVED QUALITY.
2. DOWNGROUT - POLYVINYL CHLORIDE, SERIES 1000.
3. STORM DRAINAGE PIPE - INTERIOR - POLYVINYL CHLORIDE, SERIES 1000.
- EXTERIOR - CONCRETE PIPE, ASTM STANDARD.
4. VENT PIPE / VENT STACK - POLYVINYL CHLORIDE, SERIES 1000.
5. SOIL AND WASTE PIPES - POLYVINYL CHLORIDE, SERIES 1000.
6. PIPE JOINTANT - POLYVINYL CHLORIDE SOLVENT CEMENT.

LEGEND 3:

SP	-	SOIL PIPE
WF	-	WATER FAUCET
SHD	-	SHOWER HEAD
GV	-	GATE VALVE
WM	-	WATER METER
KS	-	KITCHEN SINK
URI	-	URINAL
CD	-	CLEAN-OUT
VP	-	VENT PIPE
VTR	-	VENT THRU ROOF

APPROVED BY: _____

DATE: _____

PROJECT: _____

CLIENT: _____

DESIGNER: _____

CONFORME: _____

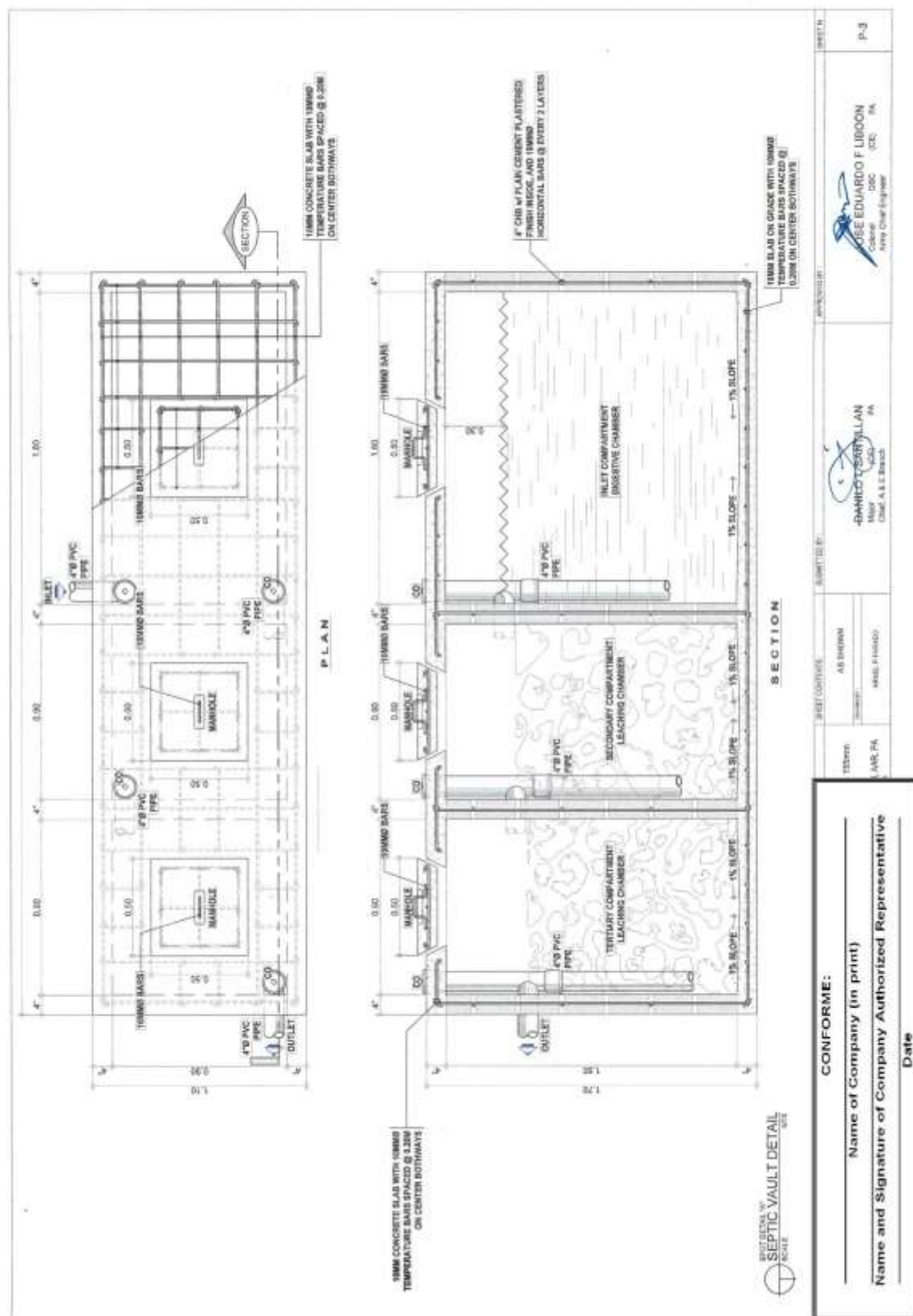
Name of Company (in print) _____

Name and Signature of Company Authorized Representative _____

Date _____

Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

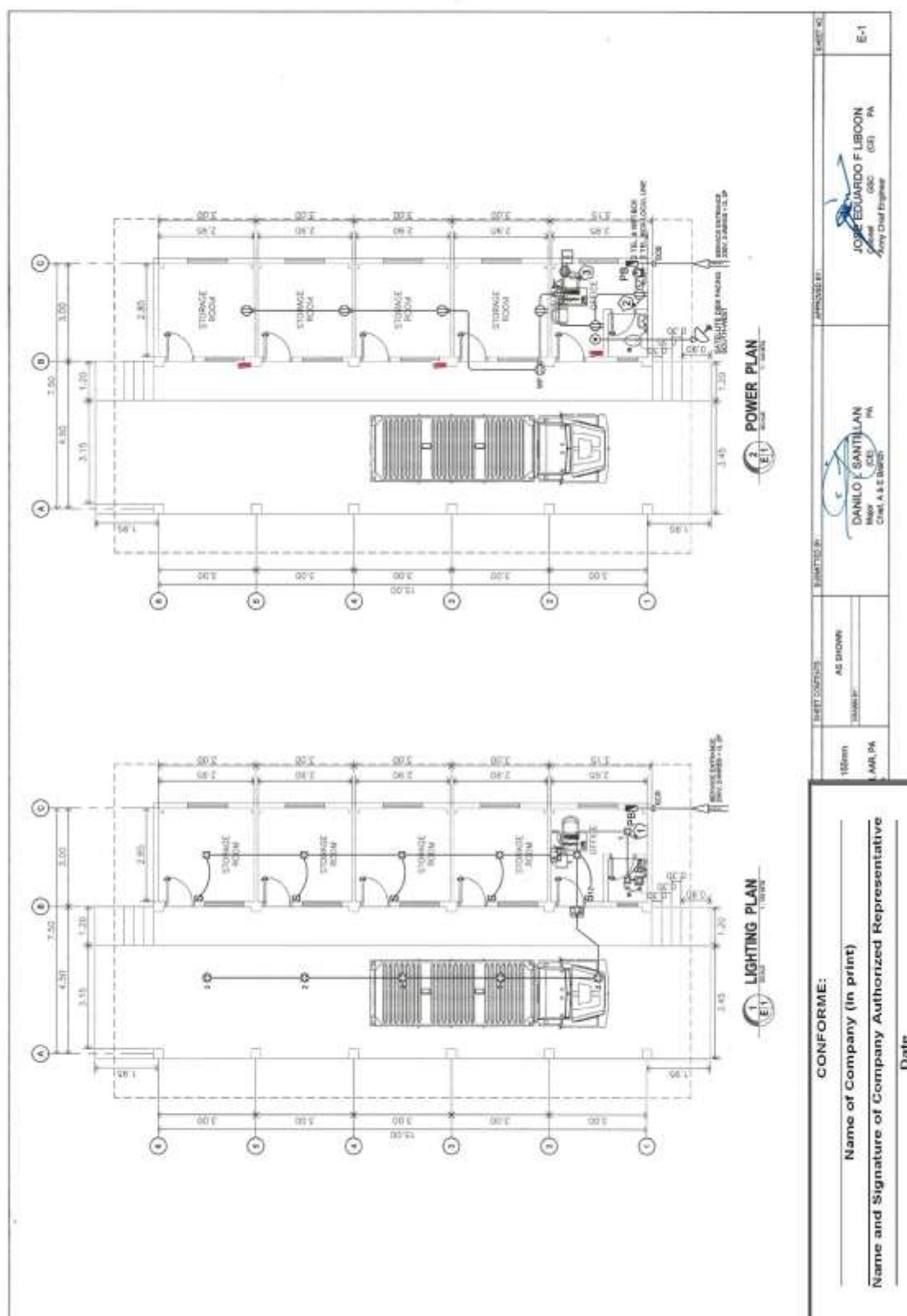
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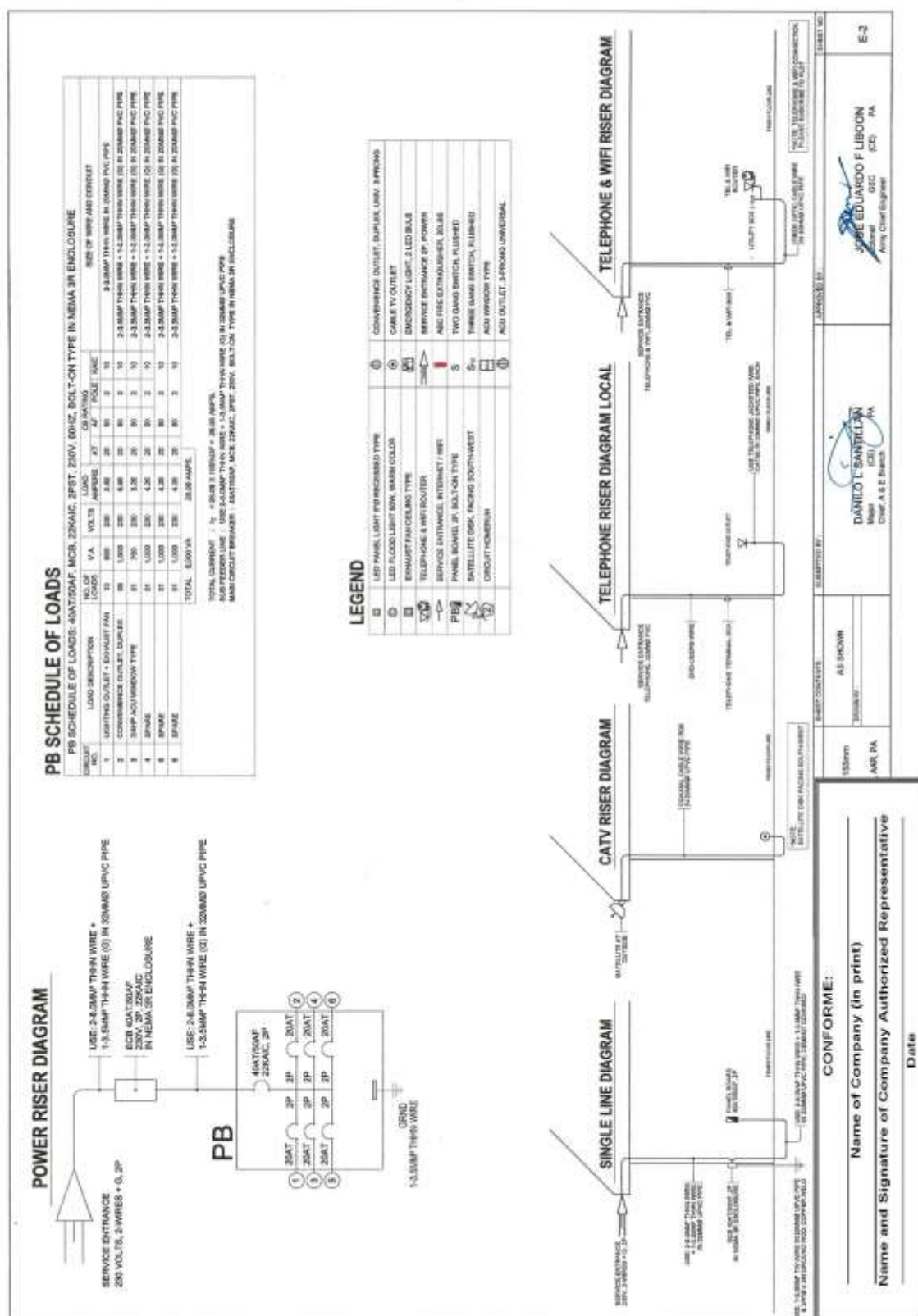
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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)



1 PERSPECTIVE
A-1 NOT TO SCALE



2 VICINITY MAP
A-1 NOT TO SCALE



3 LOCATION MAP
A-1 SCALE 1:5000 METERS



4 SITE LOCATION PLAN
A-1 SCALE 1:500 METERS

CONFORME:

Name of Company (in print) _____

Name and Signature of Company Authorized Representative _____

Date _____

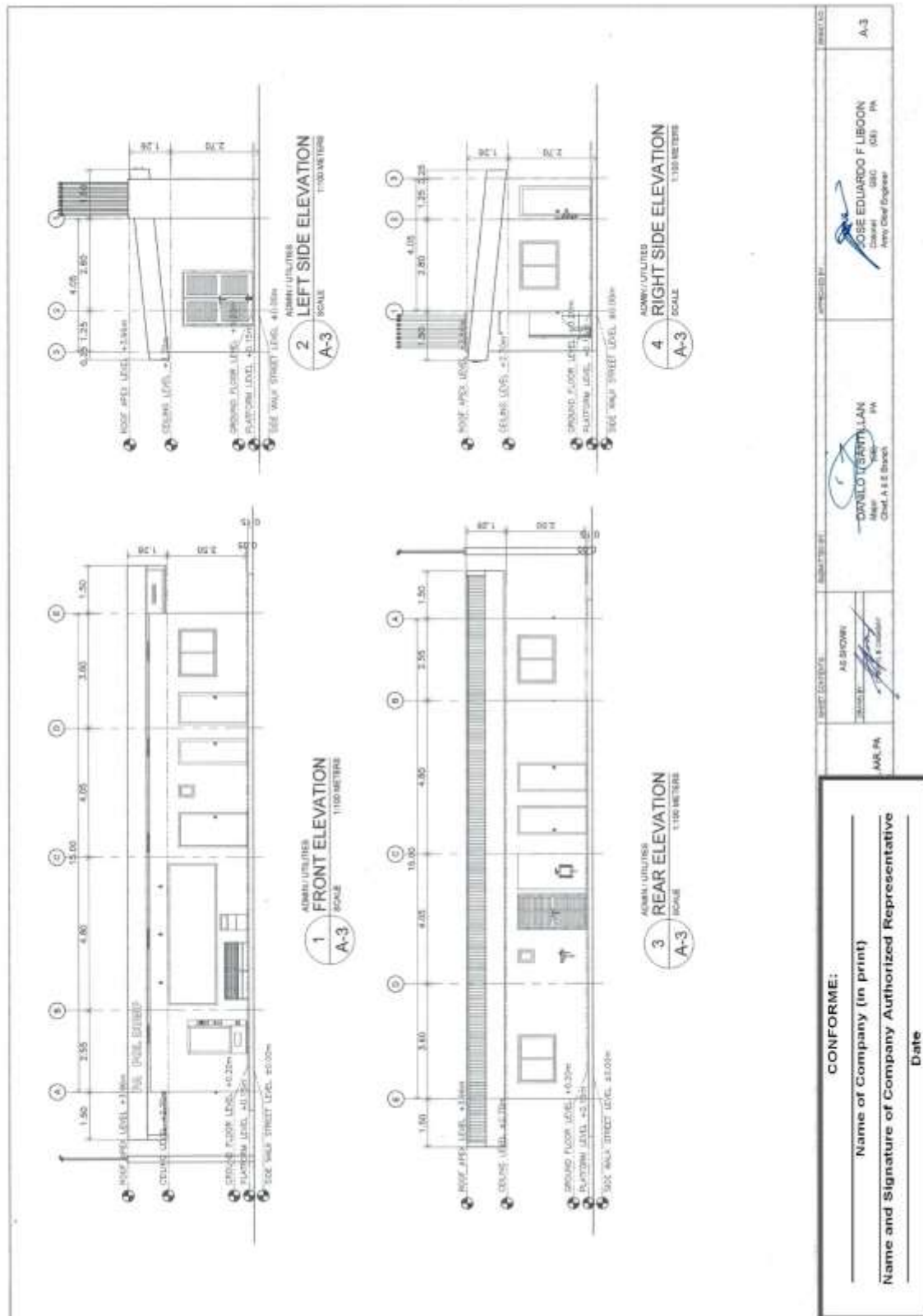
NAME	AS SHOWN	SCALE	DATE	APPROVED BY	DATE
NAME BY: EDUARDO F. LIBON	AS SHOWN	SCALE	DATE	APPROVED BY: FRANCISCO M. CORONEL	DATE
NAME BY: EDUARDO F. LIBON	AS SHOWN	SCALE	DATE	APPROVED BY: FRANCISCO M. CORONEL	DATE

Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

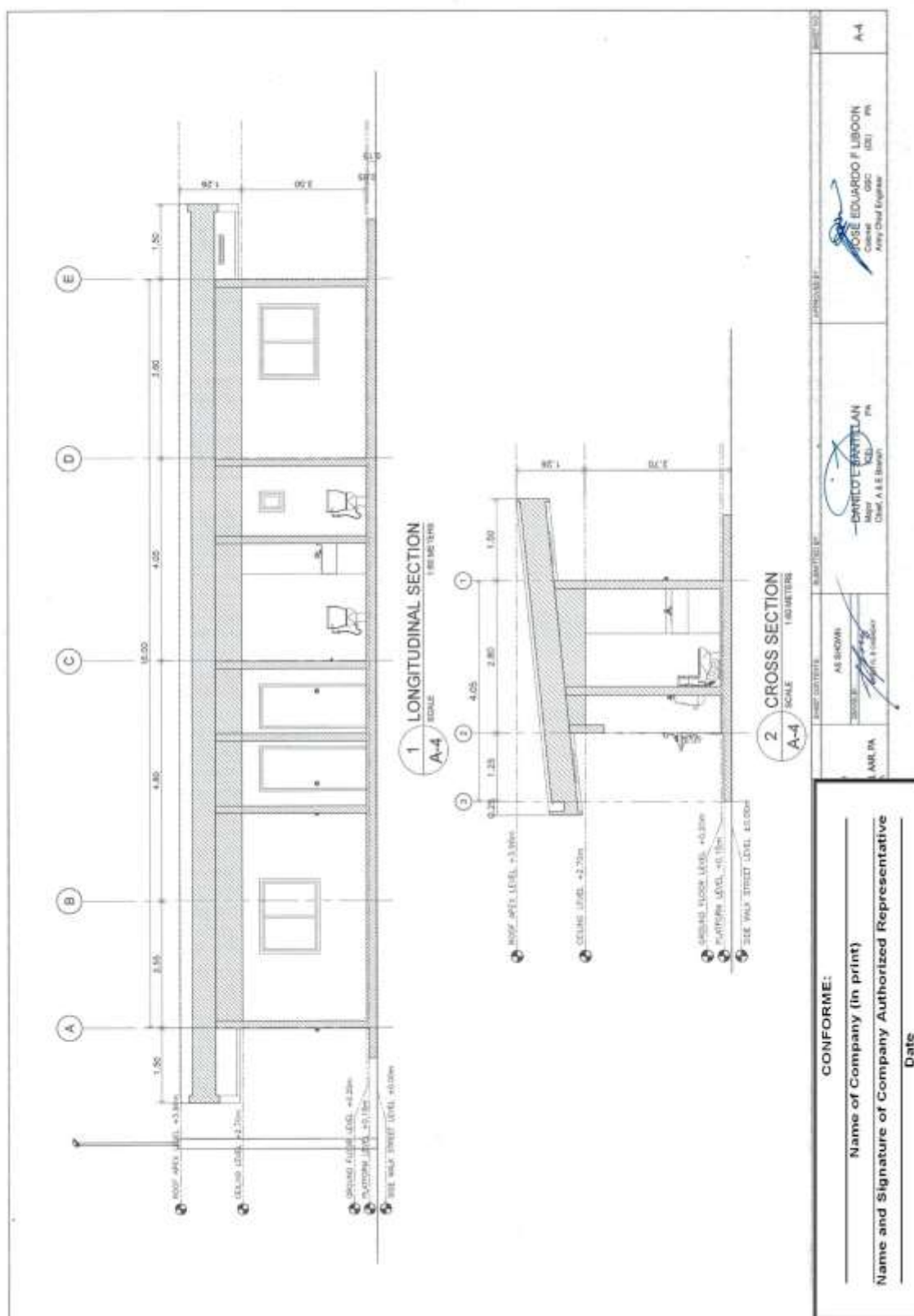
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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

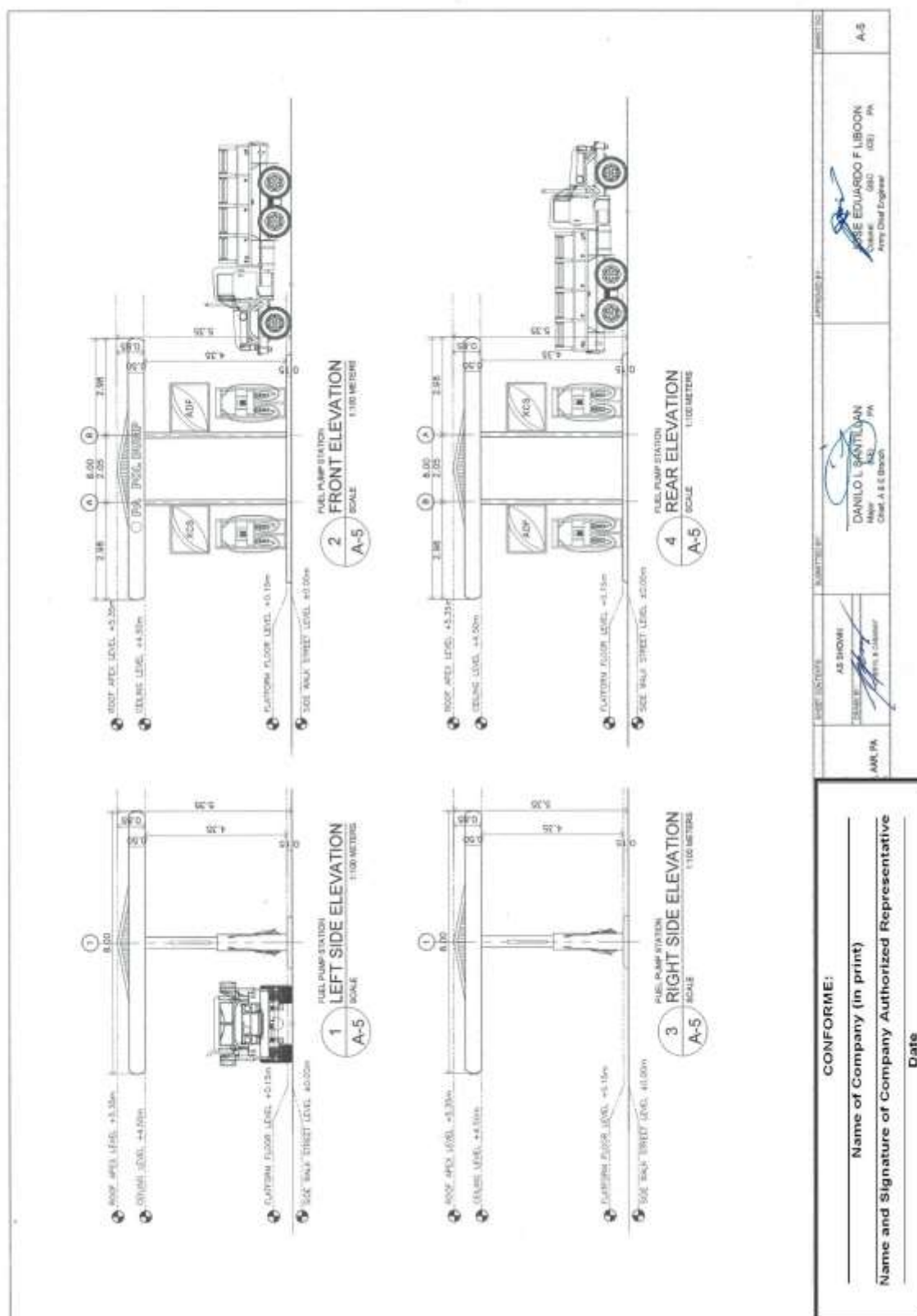
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Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at
Fort Magsaysay, Nueva Ecija (1 Lot)

25.00 33.00

5.00 11.75 4.00 5.40

1.80 4.45 2.90 1.00 3.60 1.90

1.30 1.10 2.50 1.25

18.00

5.00 11.75 4.00 5.40

25.00 33.00

1:100 METERS

1 ROOF PLAN LAYOUT

A-6

CONFORME:

Name of Company (in print) _____

Name and Signature of Company Authorized Representative _____

Date _____

AS SHOWN

DATE BY _____

APR 14

DAVIDO V. SANTILLAN

Major Civil Engineer

Chief, A.E. Branch

JOSE EDUARDO F. LIBON

Chief, A.E. Branch

APR 14

APR 14

Construction of Operational Facilities of 155mm SP Howitzer for AAR, PA at Fort Magsaysay, Nueva Ecija (1 Lot)

Bid Ref. No. ENG'G PABAC3 018-23

1 SCHEDULE OF DOORS
SCALE 1:30 METERS

1 SET	3 SETS	1 SET	1 SET	1 SET	1 SET
DOOR FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM	DOOR FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM	DOOR FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM	DOOR FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM	DOOR FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM	DOOR FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM

2 SCHEDULE OF WINDOWS
SCALE 1:30 METERS

2 SETS	4 SETS
WINDOW FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM	WINDOW FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM

3 SCHEDULE OF ROOF
SCALE 1:30 METERS

1 SET
ROOF FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM

4 SCHEDULE OF FLOORS
SCALE 1:30 METERS

1 SET
FLOOR FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM

5 SCHEDULE OF WALLS
SCALE 1:30 METERS

1 SET
WALL FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM

6 SCHEDULE OF CEILING
SCALE 1:30 METERS

1 SET
CEILING FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM

7 SCHEDULE OF STAIRS
SCALE 1:30 METERS

1 SET
STAIRS FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM

8 SCHEDULE OF ELEVATIONS
SCALE 1:30 METERS

1 SET
ELEVATIONS FOR MAIN ENTRANCE TO THE BUILDING WITH 1/2" GLASS AND 1/4" ALUMINUM

CONFORME:

Name of Company (in print)

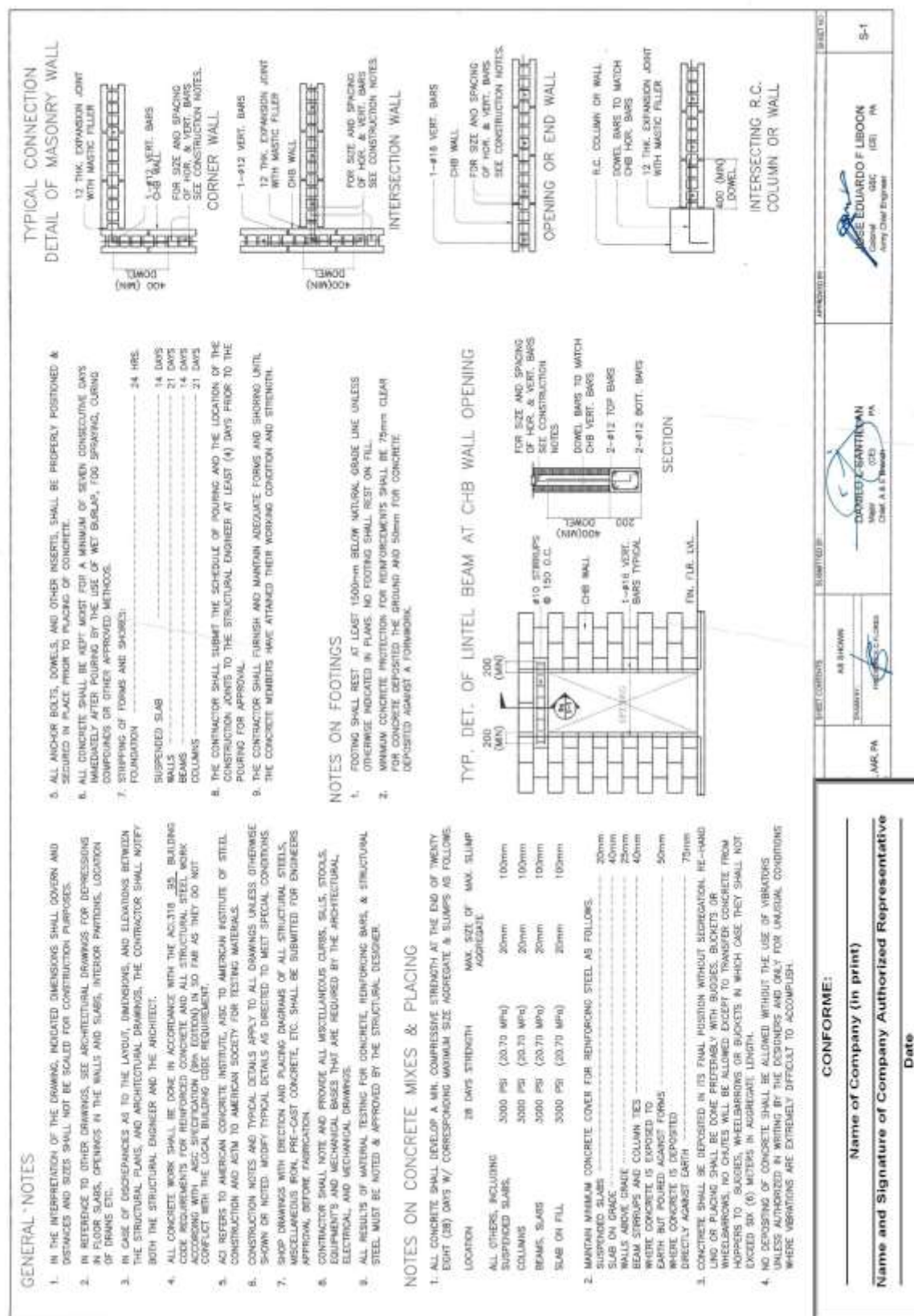
Name and Signature of Company Authorized Representative

Date

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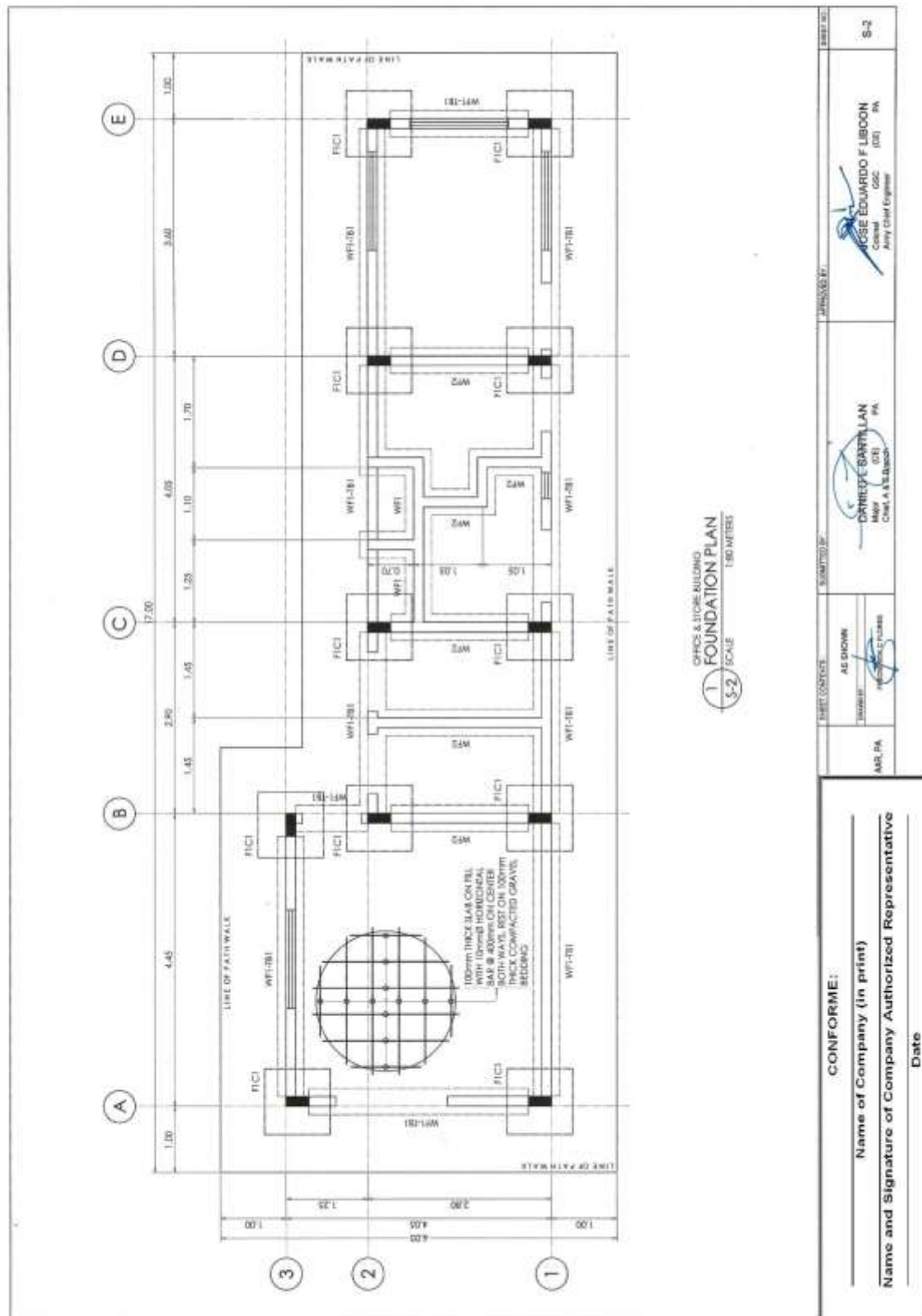
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