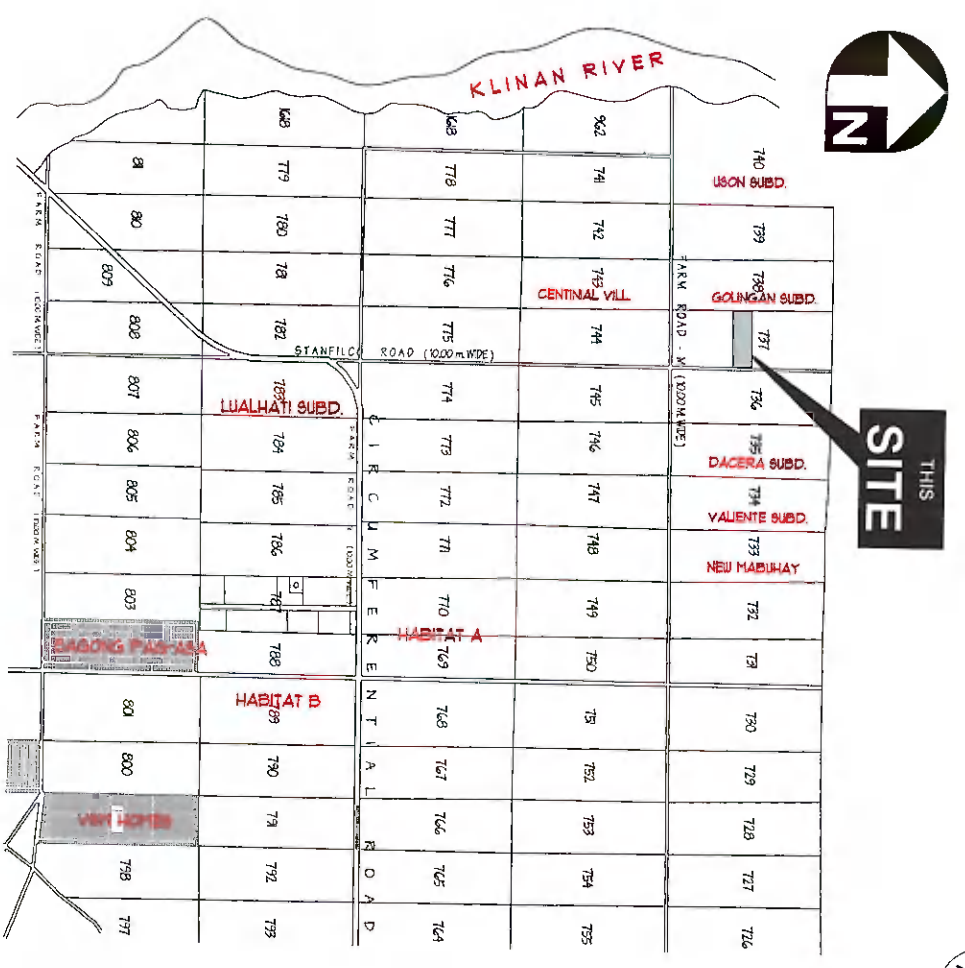


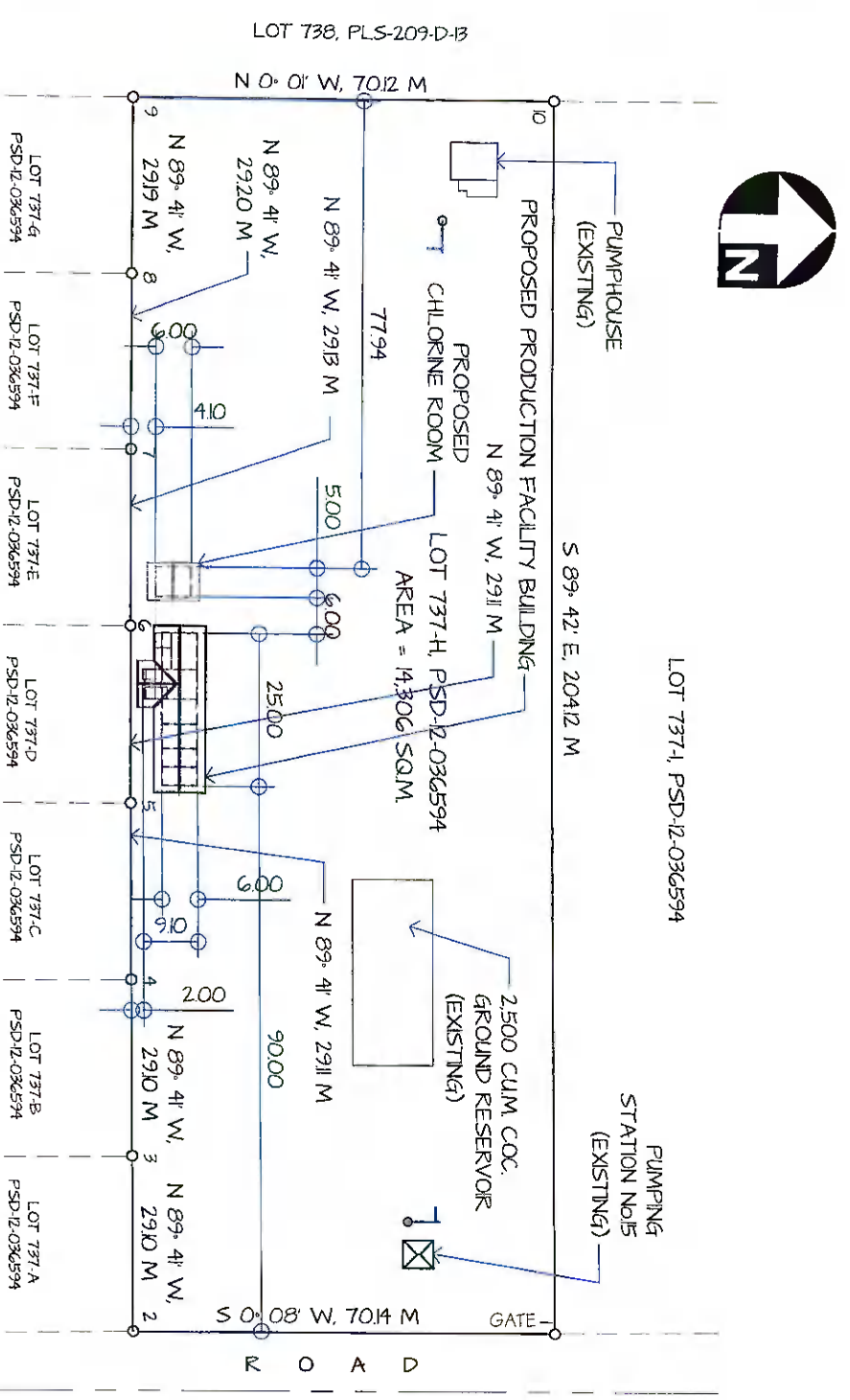
OFFICE OF THE BUILDING OFFICIAL



01 PERSPECTIVE VIEW  
A-01



02 VICINITY MAP  
A-01 NOT TO SCALE



03 SITE DEVELOPMENT PLAN  
A-01 SCALE 1:1200 M

**GENERAL SANTOS CITY WATER DISTRICT**  
E. FERNANDEZ STREET, BRGY. LAGAO, GEN. SANTOS CITY  
ENGINEERING & CONSTRUCTION DEPARTMENT  
PLANNING AND DESIGN DIVISION  
TEL. NO. : (083) 522-3824

**DANILO M. HORLADOR, JR.**  
CIVIL ENGINEER  
REG. NO. 010795-65  
TIN. NO. 291-941-697  
PR. NO. 61973A  
DATE: 01/12/2022

**ENGR. DANILLO M. HORLADOR, JR.**  
PROJECT PLANNING & DEVELOPMENT OFFICER A

**ENGR. MARIA CELIA N. DANDAN**  
O.C. - PDD

**ENGR. ROGELIO A. BESANA, JR.**  
A.C. - DIVISION & TECHNICAL SERVICES

MECHANICAL	SHEET NO.	A-01
ELECTRICAL	REV. NO.	01
ELECTRONICS	DATE	Nov. 2022
ARCHITECTURAL	CHECKED BY:	01
STRUCTURAL	DATE	24
LINE AND GRADE		
LAND USE & ZONING		

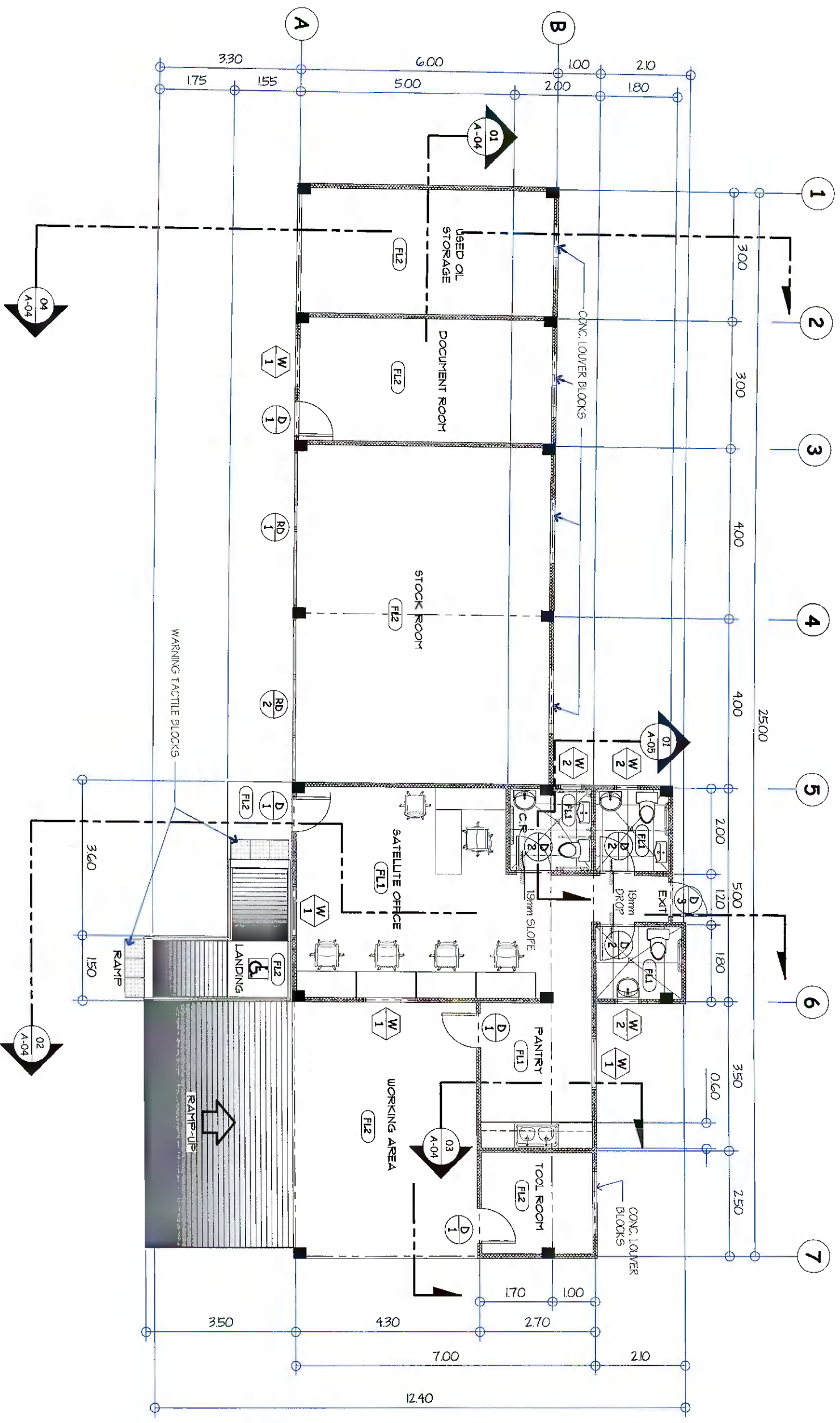
**SCHEDULE OF FINISH**

FLOORS :


- (FL1) 600mm x 600mm CERAMIC TILES (UNGLAZED)
- (FL2) NON SKID PLAIN CEMENT FLOOR FINISH

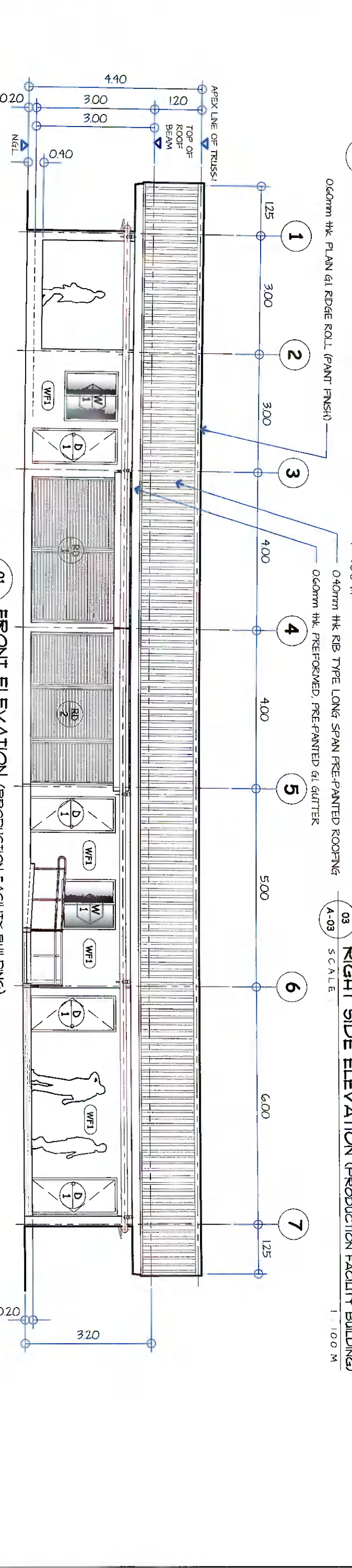
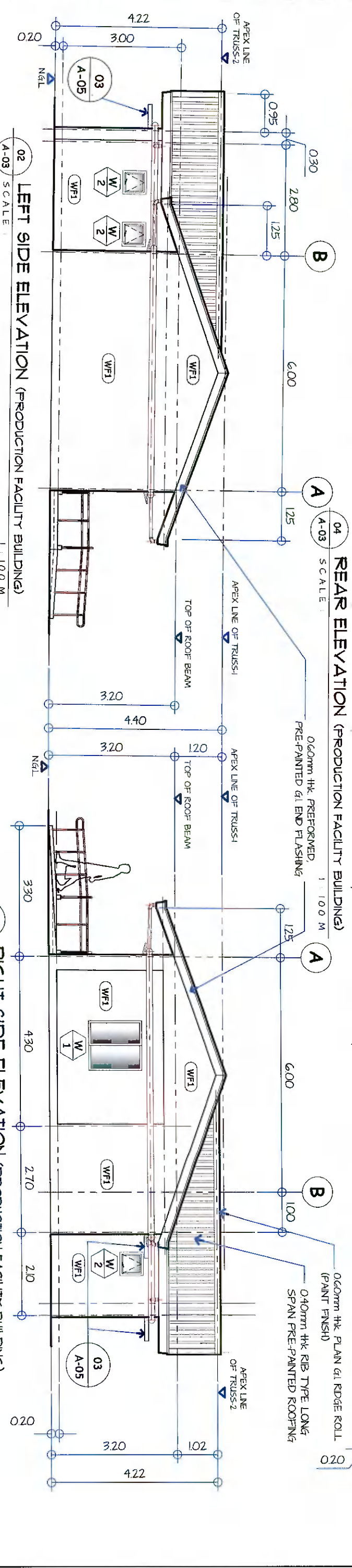
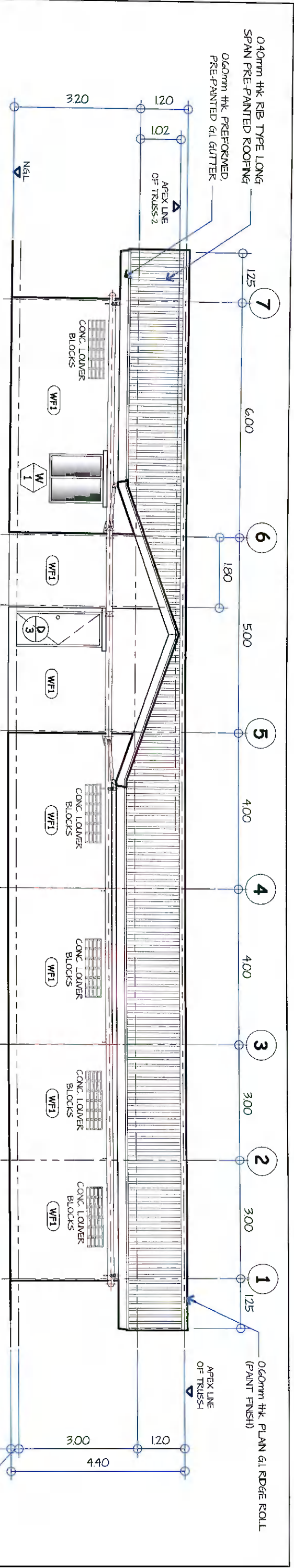
WALLS :

- (WF1) 100mm thick GHB WITH PLAIN CEMENT PLASTER (PAINT FINISH)
- (WF2) 600mm x 600mm CERAMIC WALL TILES (GLAZED)
- (WF3) KITCHEN BACKSPASH STICKER



**01 FLOOR PLAN (PRODUCTION FACILITY BUILDING)**  
 A-02 SCALE : 1 : 100 M

 <p><b>GENERAL SANTOS CITY WATER DISTRICT</b>                  E. FERNANDEZ STREET, BRGY. LAGAO, GEN. SANTOS CITY                  ENGINEERING &amp; CONSTRUCTION DEPARTMENT                  PLANNING AND DESIGN DIVISION                  TEL. NO. : (083) 532-3824</p>		<p><b>DANILO M. HORLADOR, JR.</b>                  CIVIL ENGINEER</p>		<p><b>PROJECT AND LOCATION</b>                  CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP &amp; CHLORINE STORAGE AREA</p>		<p><b>CHECKED:</b>                  ENGR. DANILLO M. HORLADOR, JR.</p>		<p><b>REVIEWED:</b>                  ENGR. MARIA CELIA N. DANDAN</p>		<p><b>APPROVED:</b>                  ENGR. ROGELIO A. BEBANA, JR.</p>		<p><b>SHEET CONTENTS</b>                  AS SHOWN</p>		<p><b>SHEET NO.</b>                  A-02</p>	
<p>REG. NO. 0127345                  PIR. NO. 819734</p>		<p>TIN. NO. 231-941-997                  DATE: 07/12/2022</p>		<p>LOCATION: LOT 73-74, PUEOK, GOLIQUAN, BRGY. MABUHAY, GSCC</p>		<p>PROJECT PLANNING &amp; DEVELOPMENT OFFICE A</p>		<p>OC - FPD</p>		<p>ACQ. OPERATION &amp; TECHNICAL SERVICES</p>		<p>DRAWN BY: DONGKAE                  REV. NO.</p>		<p>CHECKED BY:                  DATE: Oct. 2022</p>	
<p>02 24</p>															



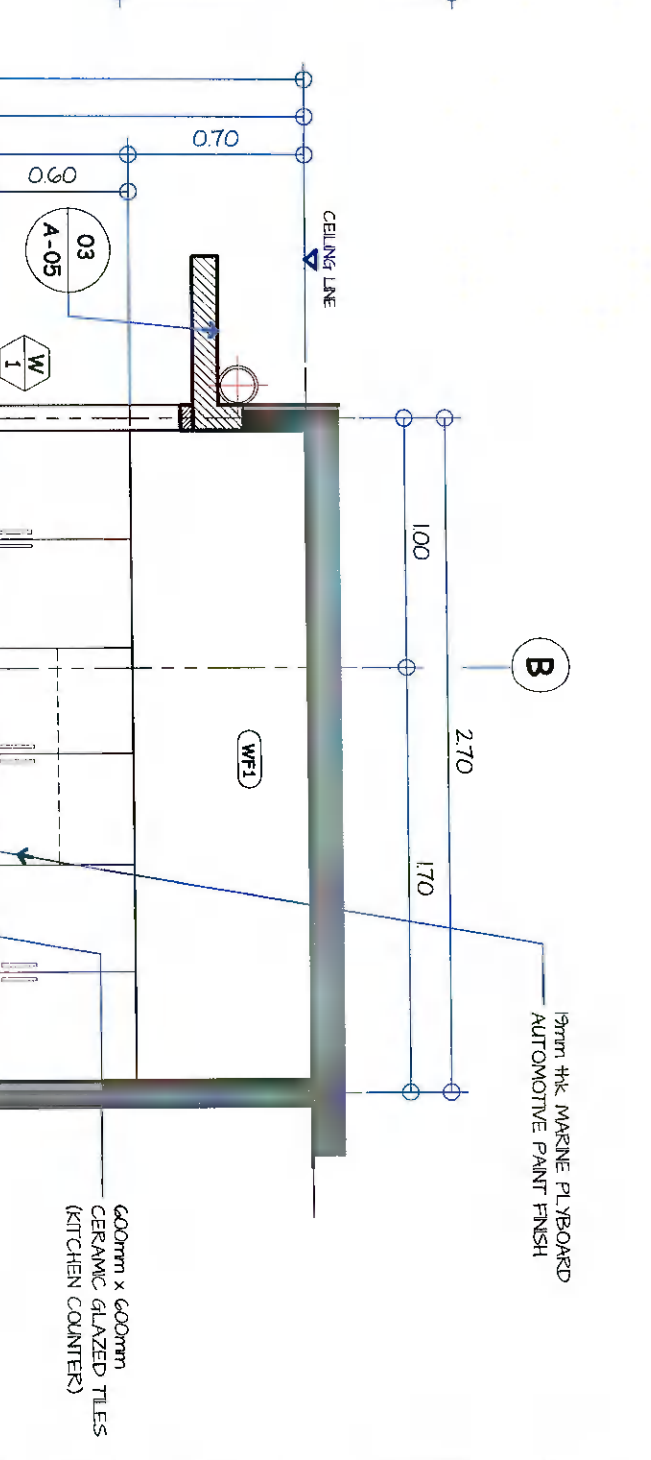
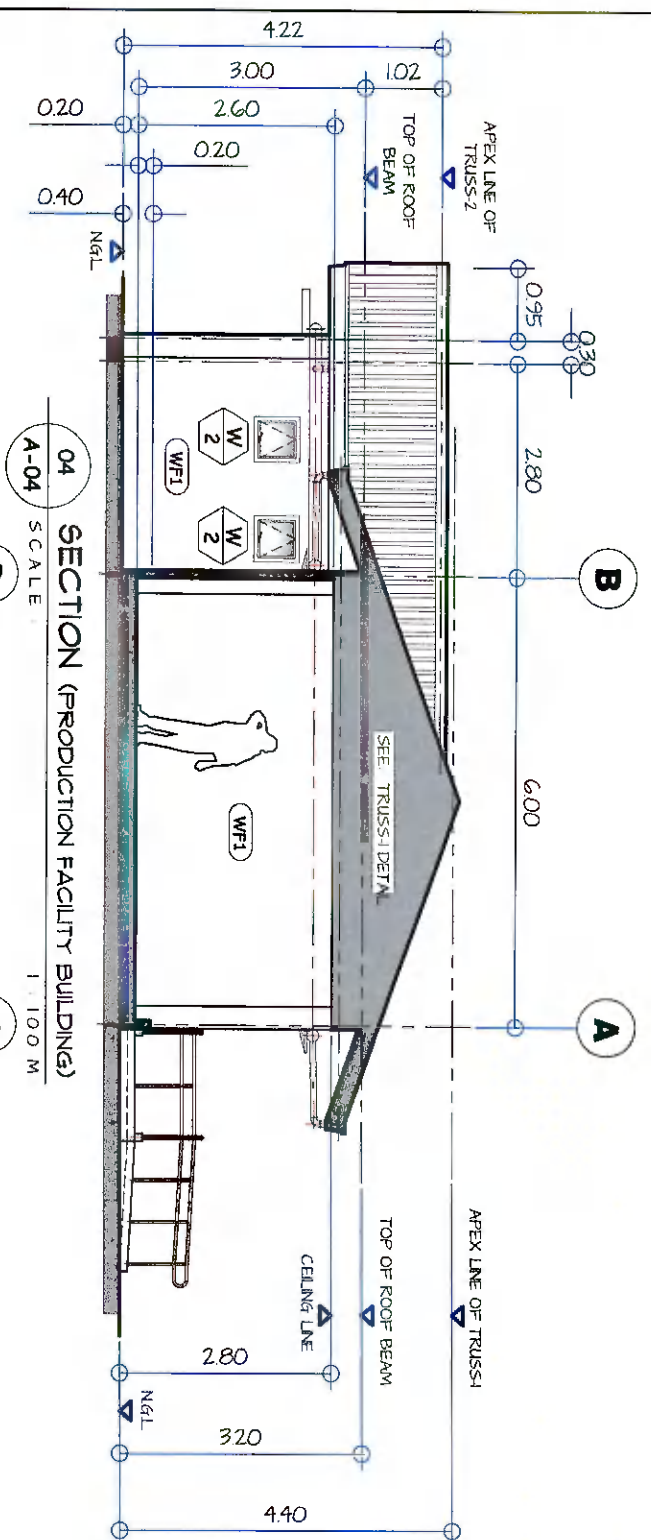
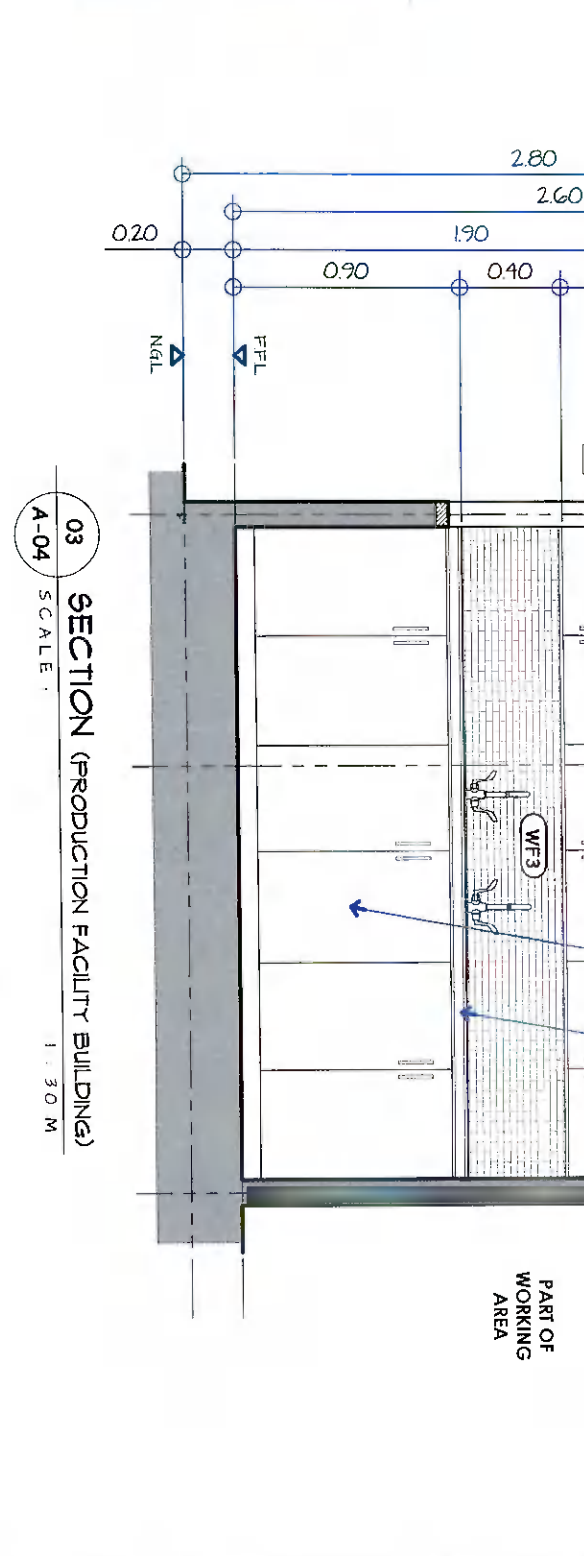
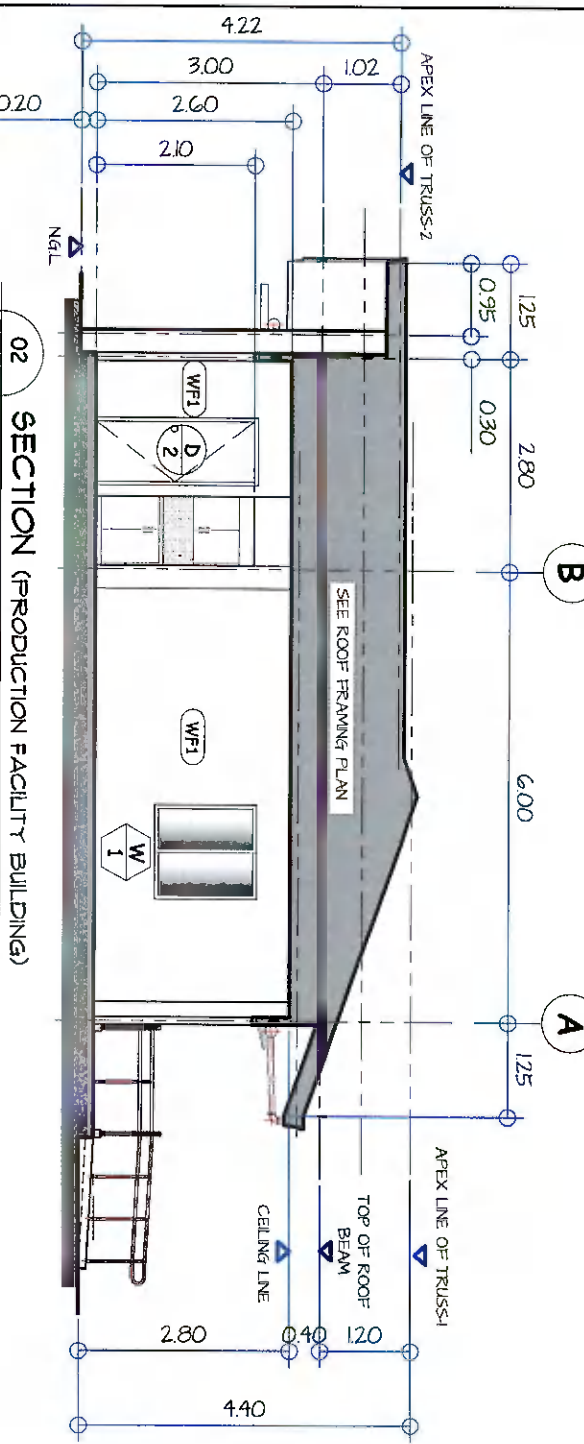
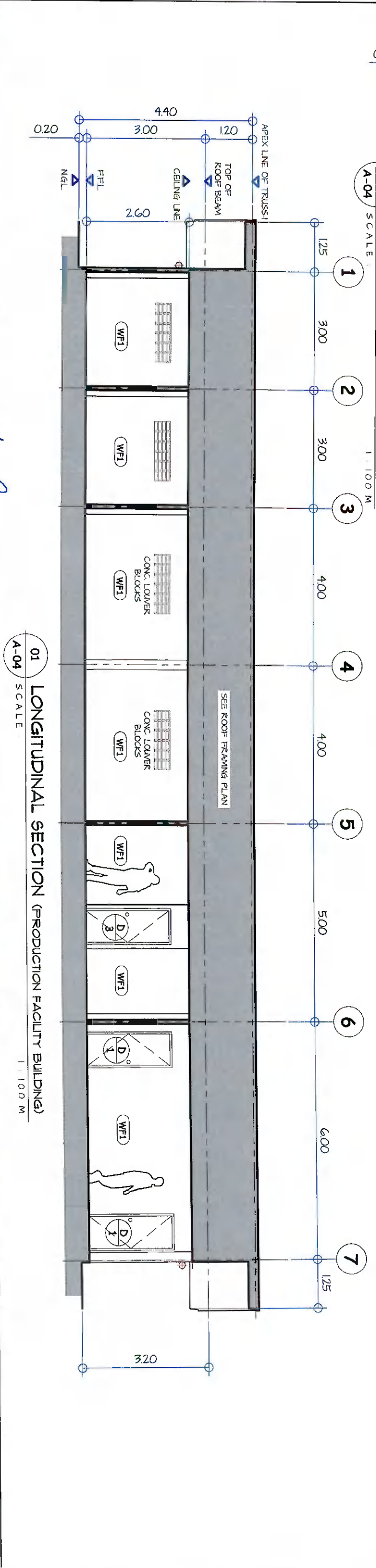
**01 FRONT ELEVATION (PRODUCTION FACILITY BUILDING)**  
SCALE: 1:100 M

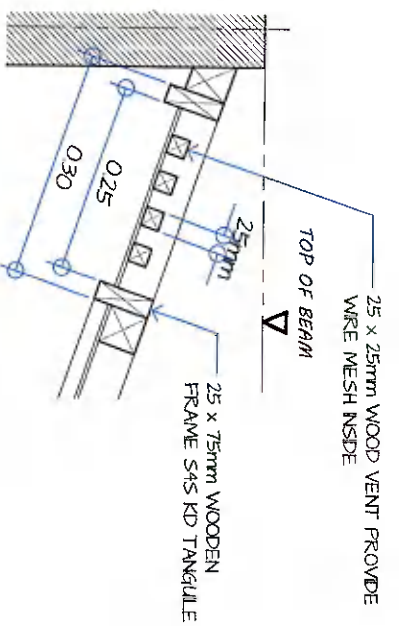
**02 LEFT SIDE ELEVATION (PRODUCTION FACILITY BUILDING)**  
SCALE: 1:100 M

**03 RIGHT SIDE ELEVATION (PRODUCTION FACILITY BUILDING)**  
SCALE: 1:100 M

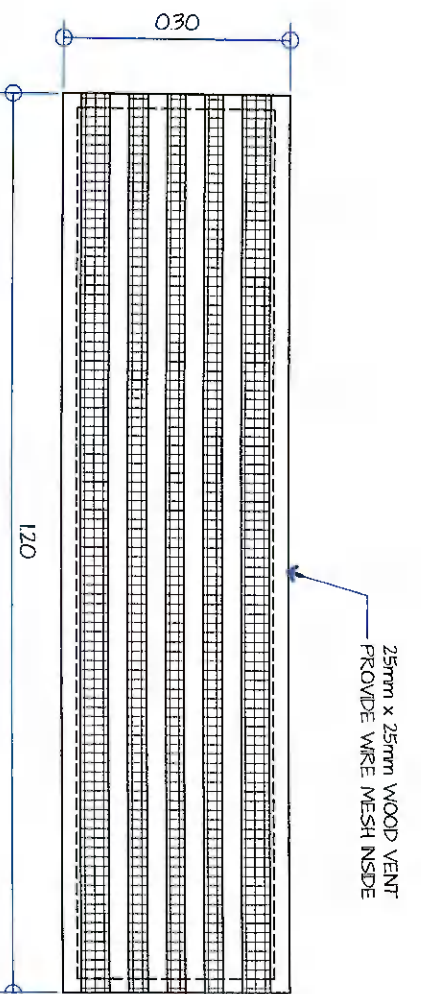
**04 REAR ELEVATION (PRODUCTION FACILITY BUILDING)**  
SCALE: 1:100 M

<p><b>GENERAL SANTOS CITY WATER DISTRICT</b> E. FERNANDEZ STREET, BRGY. LAGAO, GEN. SANTOS CITY ENGINEERING &amp; CONSTRUCTION DEPARTMENT PLANNING AND DESIGN DIVISION TEL. NO.: (083) 552-2824</p>		<p><b>DANILO M. HORLADOR, JR.</b> CIVIL ENGINEER</p>		<p>PROJECT AND LOCATION: <b>CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP &amp; CHLORINE STORAGE AREA</b></p>		<p>CHECKED: <i>[Signature]</i></p>		<p>REVIEWED: <i>[Signature]</i></p>		<p>APPROVED: <i>[Signature]</i></p>		<p>SHEET CONTENTS: AS SHOWN</p>		<p>SHEET NO.: <b>A-03</b></p>	
<p>REG. NO. 017345 PR. NO. 01873A</p>		<p>TN. NO. 291,941,997 DATE: 01/12/2022</p>		<p>LOCATION: LOT 7-14, PARRAQ, NGAN, BRGY. MANUPAY, GSC</p>		<p>ENGR. DANILLO M. HORLADOR, JR. PLANNING &amp; DEVELOPMENT OFFICER A</p>		<p>ENGR. MARIA CELIA N. DANDAN DEC. - PDG</p>		<p>ENGR. ROGELIO A. BEBANA, JR. ADM. OPERATIONS &amp; TECHNICAL SERVICES</p>		<p>DRAWN BY: PONG RAE REV. NO.:</p>		<p>CHECKED BY: DATE: Oct. 2022</p>	
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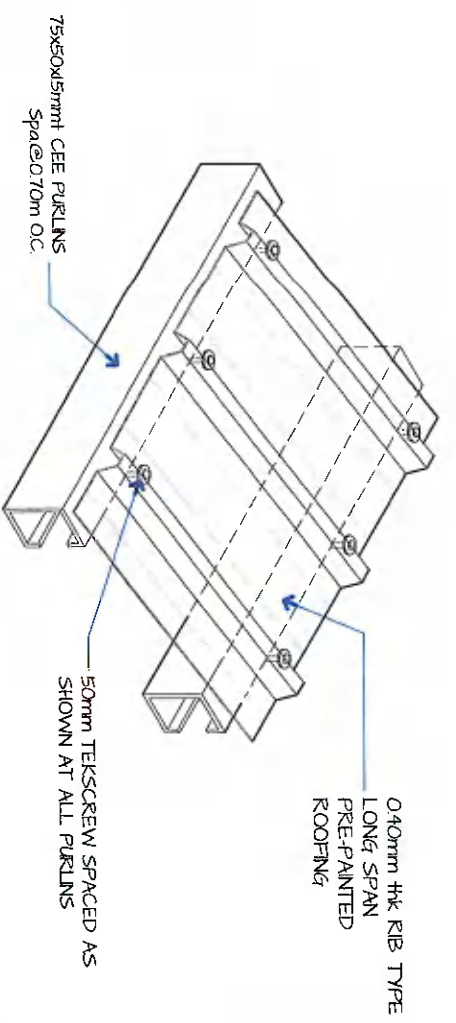




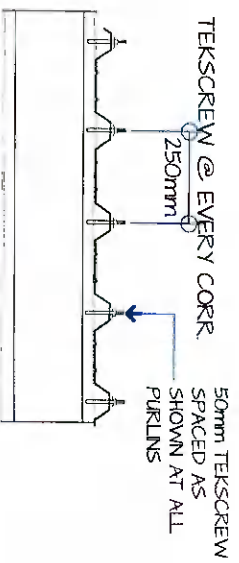
07 TYPICAL CEILING SECTION DETAIL  
A-05 SCALE 1:10 M



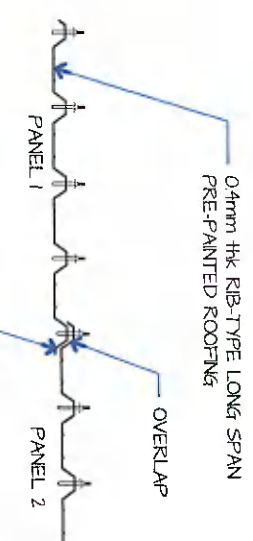
08 TYPICAL CEILING VENT PLAN DETAIL  
A-05 SCALE 1:10 M



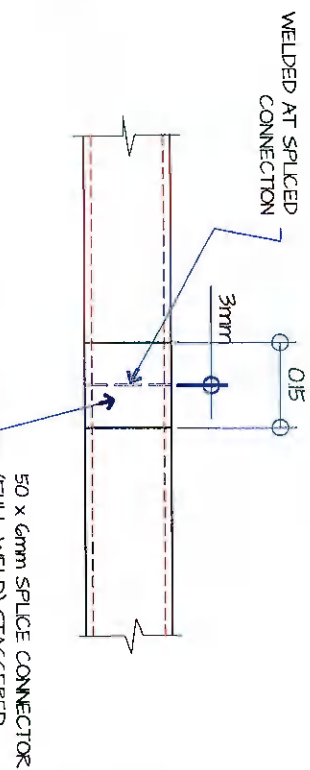
09 ISOMETRIC VIEW OF ROOFING TO PURLINS CONNECTION  
A-05 SCALE NTS



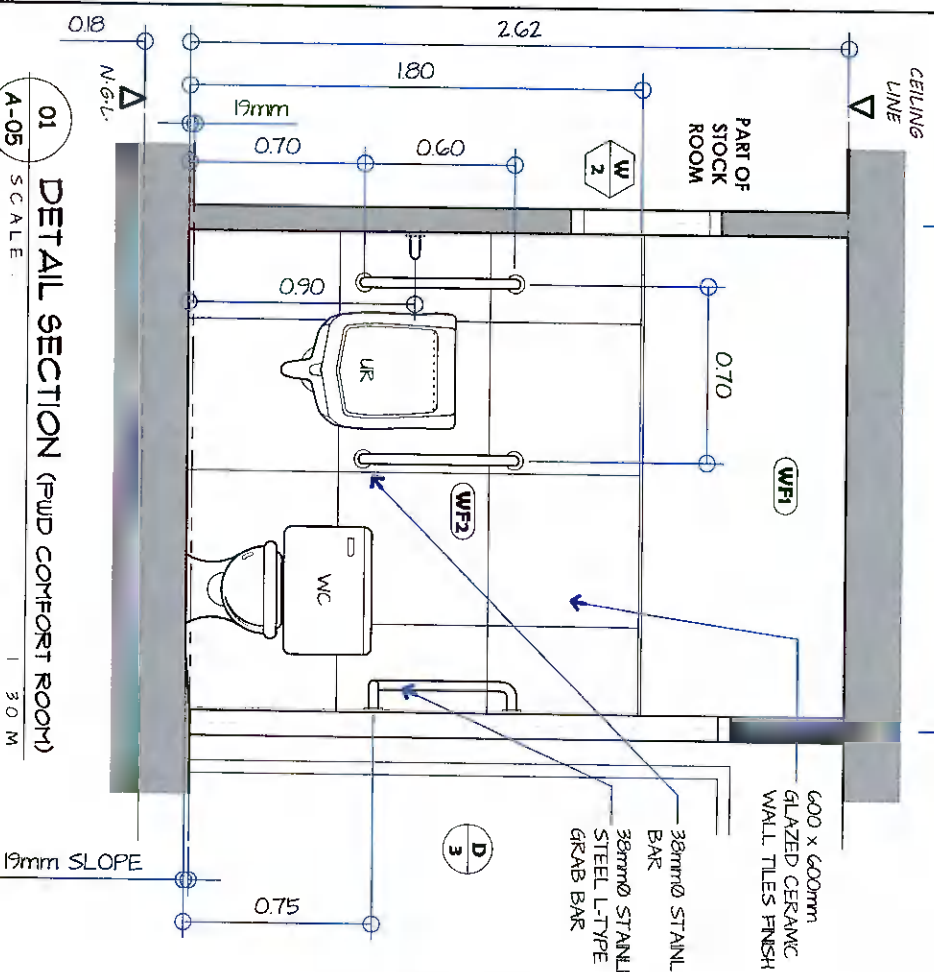
04 TEK SCREW SPACING  
A-05 SCALE NTS



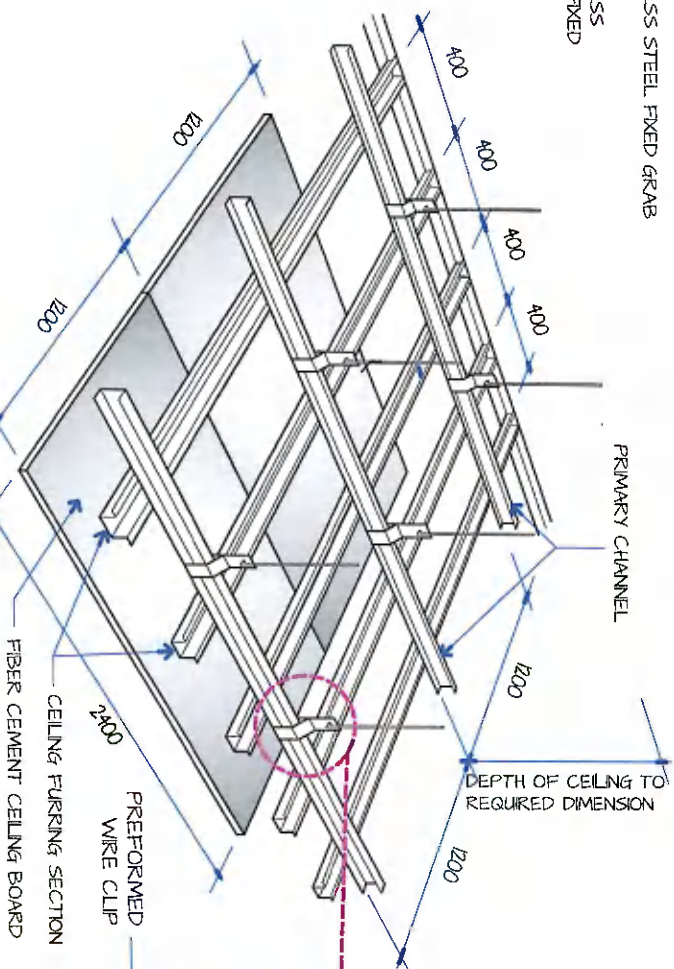
05 ROOF PANEL SIDE LAP DETAIL  
A-05 SCALE NTS



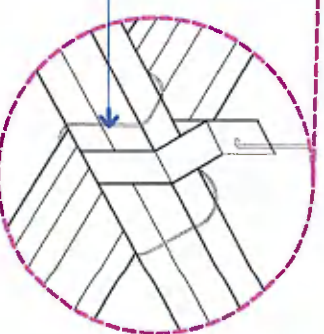
06 PURLIN SPLICE  
A-05 SCALE NTS



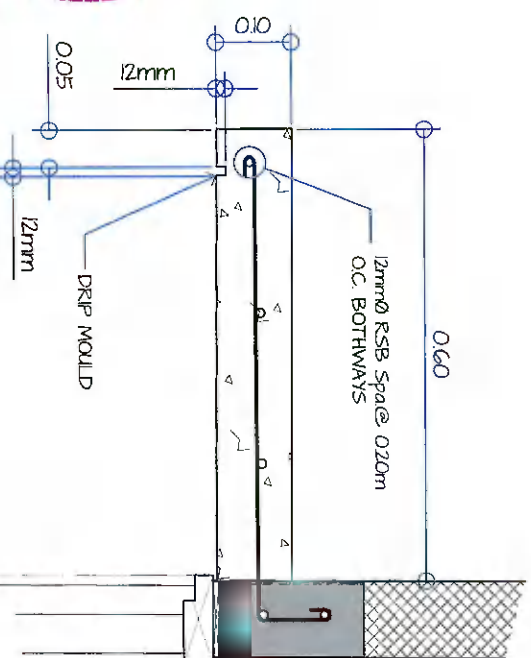
01 DETAIL SECTION (RUD COMFORT ROOM)  
A-05 SCALE 1:30 M



02 PERSPECTIVE (CEILING)  
A-05 SCALE NTS



SPOT DETAIL  
NOT TO SCALE



03 CONC. SUNBREAKER DETAIL  
A-05 SCALE 1:30 M

<p><b>GENERAL SANTOS CITY WATER DISTRICT</b> E. FERNANDEZ STREET, BRGY. LAGA, GEN. SANTOS CITY ENGINEERING &amp; CONSTRUCTION DEPARTMENT PLANNING AND DESIGN DIVISION TEL. NO.: (083) 552-3824</p>		<p><b>DANILO H. HORLADOR, JR.</b> CIVIL ENGINEER</p>		<p>PROJECT AND LOCATION <b>CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP &amp; CHLORINE STORAGE AREA</b></p>		<p>CHECKED: <i>[Signature]</i> ENGR. DANILLO H. HORLADOR, JR.</p>		<p>REVIEWED: <i>[Signature]</i> ENGR. YARIA CELIA N. DANDAN</p>		<p>APPROVED: <i>[Signature]</i> ENGR. ROGELIO A. BEBANA, JR.</p>		<p>SHEET CONTENTS AS SHOWN</p>		<p>SHEET NO. A-05</p>		
<p>REG. NO. 0107545 PR. NO. 61075A DATE: 07/22/2022</p>		<p>TIN. NO. 281-941-987</p>		<p>LOCATION: LOT 7374, TURKOK 901, NGAN, BGC, VANUJAY, D5C</p>		<p>PROJECT PLANNING &amp; DEVELOPMENT OFFICER A</p>		<p>OC - FDD</p>		<p>ASV. OPERATIONS &amp; TECHNICAL SERVICES</p>		<p>DRAWN BY: DONG RAE REV. NO. DATE: Oct 2022</p>		<p>CHECKED BY: DATE: Oct 2022</p>		
													<p>05</p>		<p>24</p>	



**GENERAL SANTOS CITY WATER DISTRICT**  
 E. FERNANDEZ STREET BRGY. LAGA, GEN. SANTOS CITY  
 ENGINEERING & CONSTRUCTION DEPARTMENT  
 PLANNING AND DESIGN DIVISION  
 TEL. NO. : (083) 592-3824

**DANLO HORLADOR, JR.**  
 CIVIL ENGINEER  
 REG. NO. 21079-5  
 TIN. NO. 291941-98  
 DATE: 01/22/22

**PROJECT AND LOCATION**  
 CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP & CHLORINE STORAGE AREA

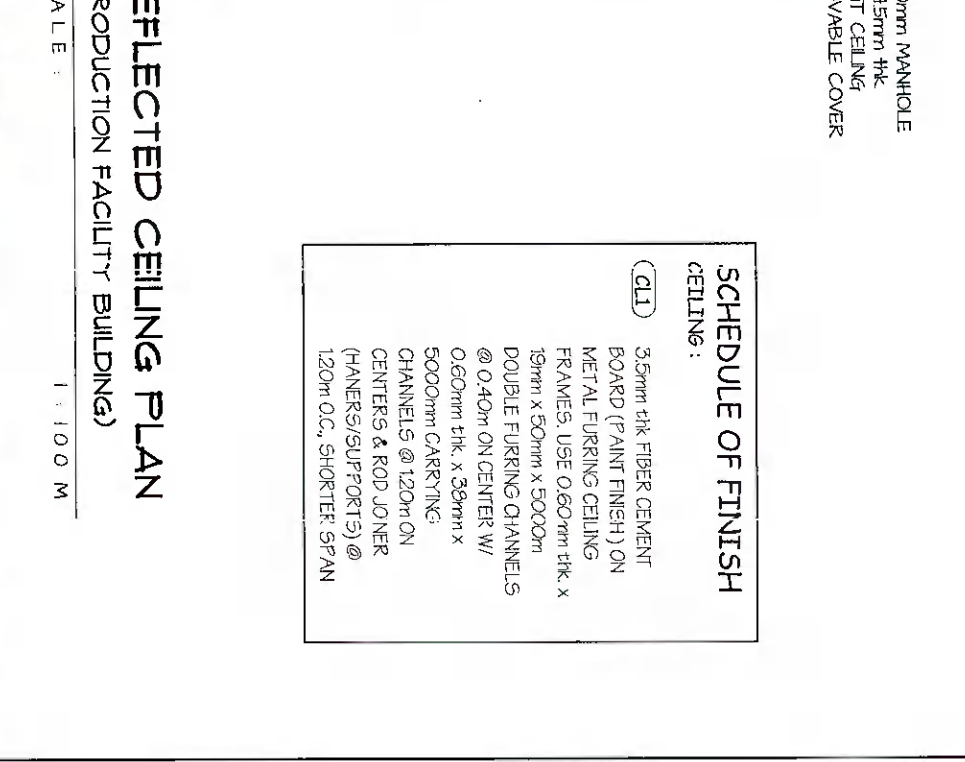
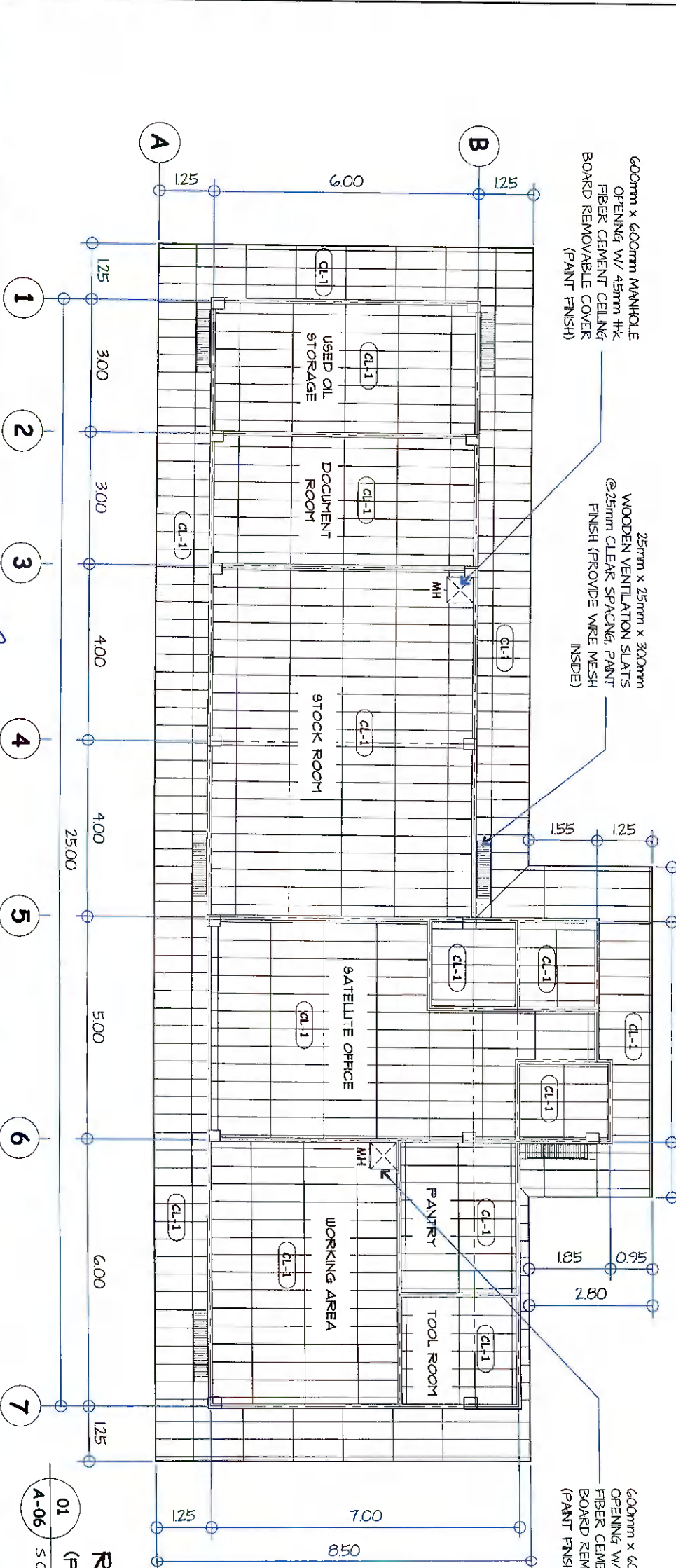
**CHECKED:**  
 ENGR. DANLO HORLADOR, JR.  
 REG. NO. 21079-5  
 DATE: 01/22/22

**REVIEWED:**  
 ENGR. MARIA CELIA N. DANDAN  
 REG. NO. 21079-5  
 DATE: 01/22/22

**APPROVED:**  
 ENGR. ROGELIO A. BEBANA, JR.  
 REG. NO. 21079-5  
 DATE: 01/22/22

**SHEET CONTENTS**  
 AS SHOWN  
 DRAWN BY: DONG-EAE  
 REV. NO.:  
 DATE: 01/22/22

**SHEET NO.**  
 A-06  
 06  
 24



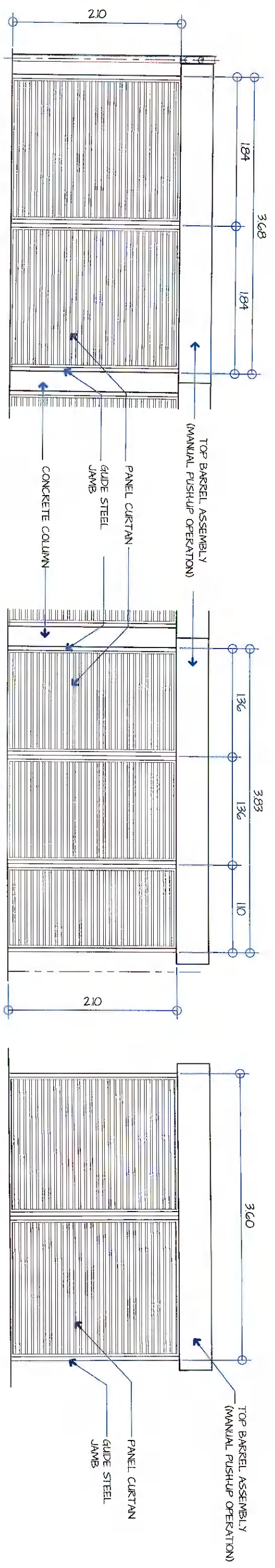
**SCHEDULE OF FINISH**

**CEILING:**

(CL1) 3.5mm thick FIBER CEMENT BOARD (PAINT FINISH) ON METAL FURRING CEILING FRAMES. USE 0.60mm thick x 19mm x 50mm x 5000mm DOUBLE FURRING CHANNELS @ 0.40m ON CENTER W/ 0.60mm thick x 39mm x 5000mm CARRYING CHANNELS @ 120mm ON CENTERS & ROD JOINER (HAINERS/SUPPORTS) @ 120mm O.C. SHORTER SPAN

**REFLECTED CEILING PLAN**  
 (PRODUCTION FACILITY BUILDING)  
 SCALE: 1 : 100 M

**ROOF PLAN (PRODUCTION FACILITY BUILDING)**  
 SCALE: 1 : 100 M



STEEL ROLL-UP DOOR WITH 0.50mm tik. G.I. PANEL CURTAIN (PAINT FINISH), REFER TO MANUFACTURERS SPECIFICATIONS FOR MATERIALS AND INSTALLATION PROCEDURES  
ONE (1) SET

STEEL ROLL-UP DOOR WITH 0.50mm tik. G.I. PANEL CURTAIN (PAINT FINISH), REFER TO MANUFACTURERS SPECIFICATIONS FOR MATERIALS AND INSTALLATION PROCEDURES  
ONE (1) SET

STEEL ROLL-UP DOOR WITH 0.50mm tik. G.I. PANEL CURTAIN (PAINT FINISH), REFER TO MANUFACTURERS SPECIFICATIONS FOR MATERIALS AND INSTALLATION PROCEDURES  
ONE (1) SET

40mm tik HOLLOW CORE FLUSH DOOR TYPE IN 150 x 150 KD DOOR JAMB WITH 6mm tik MARINE PLYWOOD DOUBLE FACING PAINT FINISH WITH COMPLETE ACCESSORIES  
FOUR (4) SETS

PVC TOILET DOOR W/ LOUVER SET PLAIN AND COMPLETE HARDWARE ACCESSORIES  
THREE (3) SETS

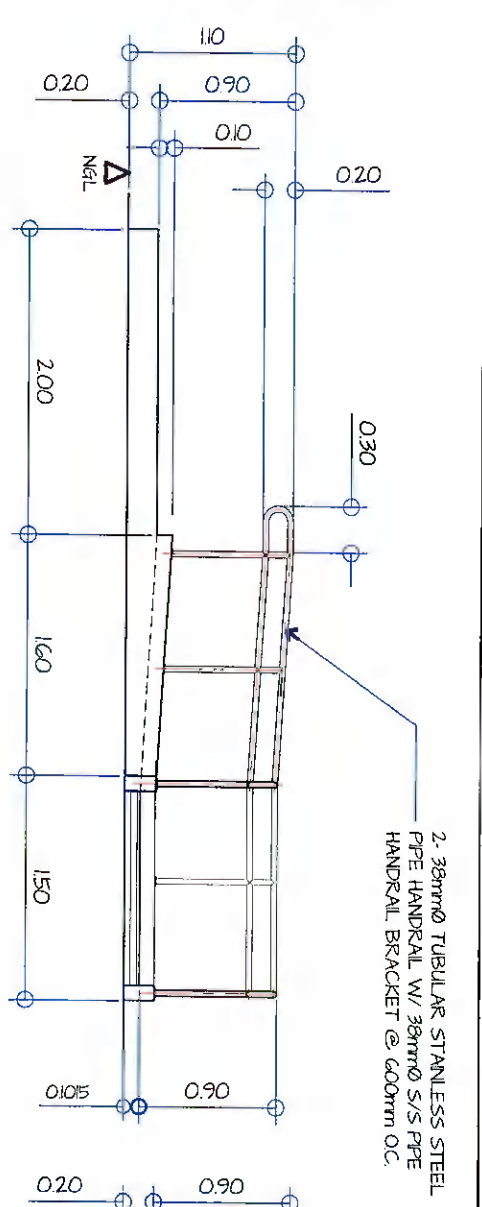
STEEL DOOR FIRE EXIT DOOR FULL FLUSH COMPLETE ACCESSORIES  
ONE (1) SET

SLIDING WINDOW IN POWDER COATED FINISH ALUMINUM FRAME WITH 6mm tik TINTED GLASS PANEL WITH COMPLETE ACCESSORIES  
FOUR (4) SETS

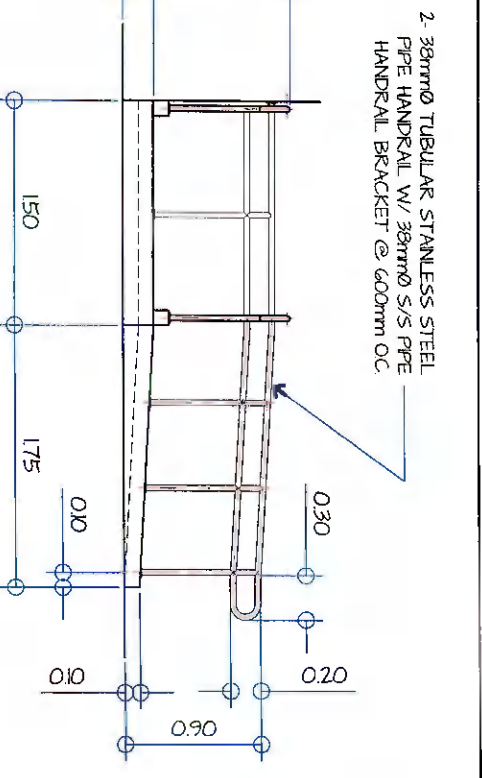
ANNING WINDOW IN POWDER COATED FINISH ALUMINUM FRAME WITH 6mm tik TINTED GLASS PANEL ON STEEL JAMB/FRAMING WITH COMPLETE ACCESSORIES  
THREE (3) SETS

**01 SCHEDULE OF DOORS & WINDOWS**  
SCALE: 1 : 50 M

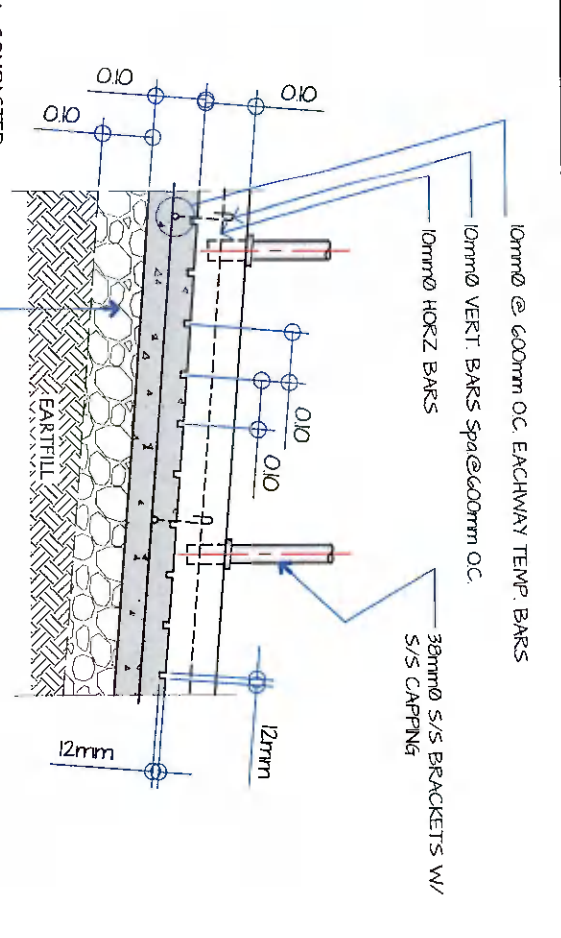
<p><b>GENERAL SANTOS CITY WATER DISTRICT</b> E. FERNANDEZ STREET BRGY. LAGA, GEN. SANTOS CITY ENGINEERING &amp; CONSTRUCTION DIVISION TEL. NO. : (083) 552-3824</p>		<p><b>DANILO T. HORLADOR, JR.</b> CIVIL ENGINEER</p>		<p>PROJECT AND LOCATION <b>CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP &amp; CHLORINE STORAGE AREA</b></p>		<p>CHECKED: <b>ENGR. DANILO T. HORLADOR, JR.</b> PROJECT PLANNING &amp; DESIGN DIVISION</p>		<p>REVIEWED: <b>ENGR. MARIA CELIA N. DANDAN</b> CC - FDO</p>		<p>APPROVED: <b>ENGR. ROGELIO A. BEBANA, JR.</b> AGV. OPERATION &amp; TECHNICAL SERVICES</p>		<p>SHEET CONTENTS AS SHOWN</p>		<p>SHEET NO. <b>A-07</b></p>	
REG. NO.	007545	TIN. NO.	29-941-997	DATE:	01/2/2022	LOCATION:	LOT 13 <sup>th</sup> , FLORIDA COL. GRAN. BRGY. MALIBAY, GSC	PTR. NO.	01873A	DATE:	01/2/2022	DRAWN BY:	DKG-FAE	REV. NO.	07



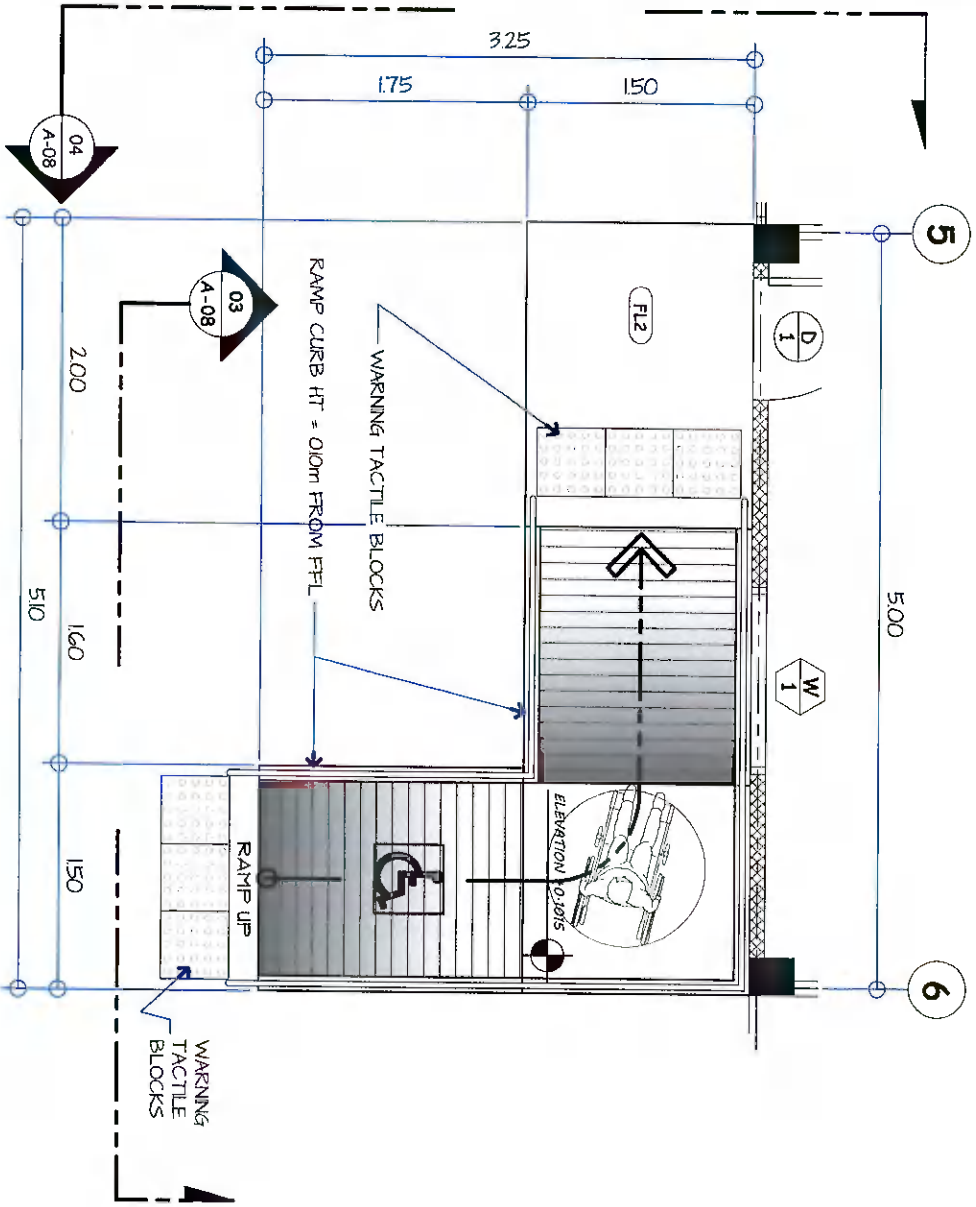
03 RAMP ELEVATION (PRODUCTION FACILITY BUILDING)  
SCALE: 1 : 50 M



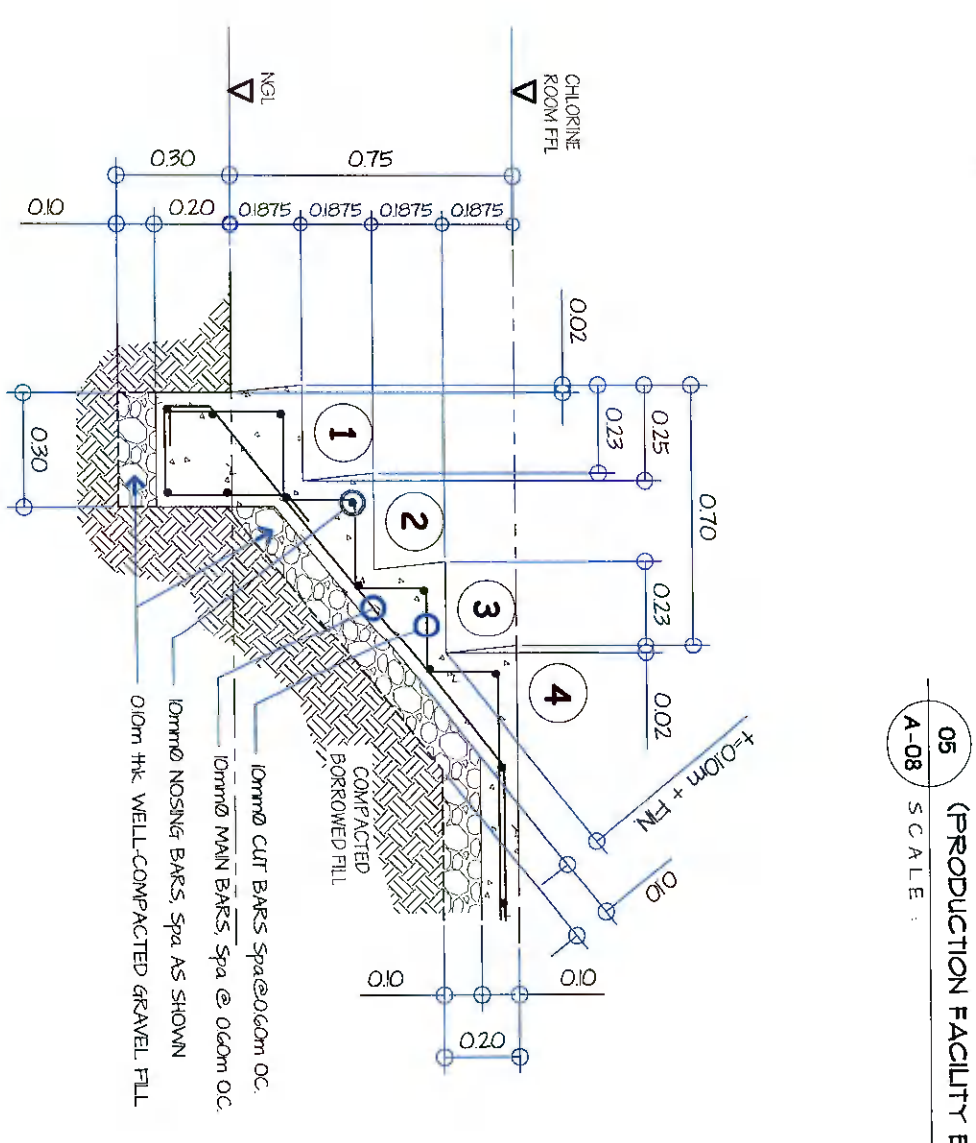
04 RAMP ELEVATION (PRODUCTION FACILITY BUILDING)  
SCALE: 1 : 50 M



05 RAMP DETAIL SECTION (PRODUCTION FACILITY BUILDING)  
SCALE: 1 : 15 M



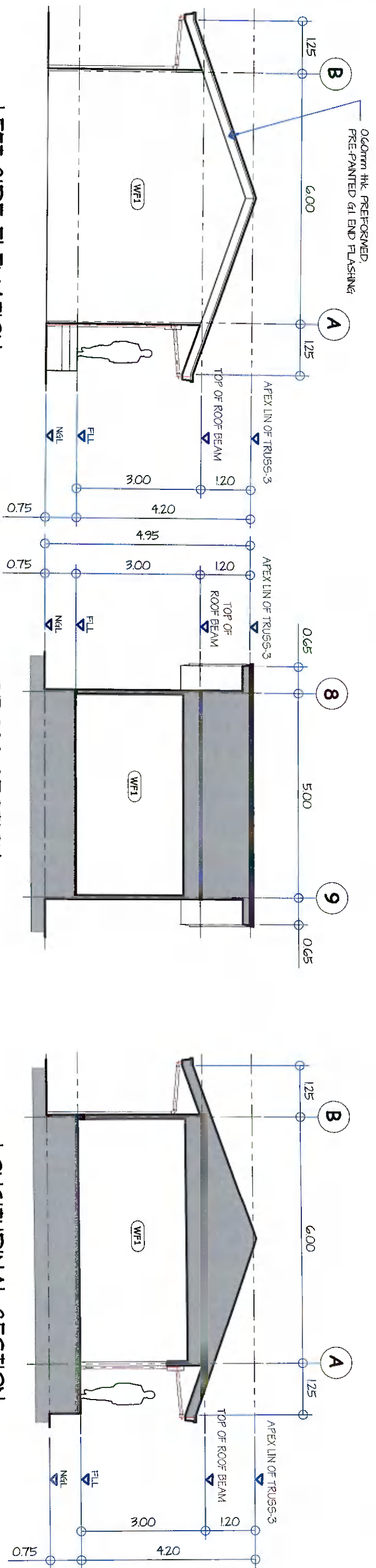
01 RAMP LAYOUT (PRODUCTION FACILITY BUILDING)  
SCALE: 1 : 50 M



02 DETAIL OF STAIR ON GRADE (CHLORINE ROOM)  
SCALE: 1 : 20 M

<p><b>GENERAL SANTOS CITY WATER DISTRICT</b> E. FERNANDEZ STREET, BRGY. LAGAO, GEN. SANTOS CITY ENGINEERING &amp; CONSTRUCTION DEPARTMENT PLANNING AND DESIGN DIVISION TEL. NO. : (083) 552-3824</p>		<p><b>DANILO M. HORLADOR, JR.</b> CIVIL ENGINEER</p>		<p><b>PROJECT AND LOCATION</b> CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP &amp; CHLORINE STORAGE AREA</p>		<p><b>CHECKED:</b> ENGR. DANILO M. HORLADOR, JR. PROJECT PLANNING &amp; DEVELOPMENT OFFICER A</p>		<p><b>REVIEWED:</b> ENGR. MARIA CELIA N. DANDAN OC - FDD</p>		<p><b>APPROVED:</b> ENGR. ROGELIO A. BEGANA, JR. CON. OPERATION &amp; TECHNICAL SERVICES</p>		<p><b>SHEET CONTENTS</b> AS SHOWN</p>		<p><b>SHEET NO.</b> A-08</p>	
<p>REG. NO. C107345 PR. NO. 618-73A</p>		<p>TIN. NO. 28-941-997 DATE: 07/12/2022</p>		<p>LOCATION: LOT 737-4, PULOK GALINGAN BRGY. MARIWAY, GSC</p>		<p>PROJECT PLANNING &amp; DEVELOPMENT OFFICER A</p>		<p>OC - FDD</p>		<p>ENGR. ROGELIO A. BEGANA, JR. CON. OPERATION &amp; TECHNICAL SERVICES</p>		<p>DRAWN BY: ZONE-PAE REV. NO.</p>		<p>CHECKED BY: DATE: 04/20/2022</p>	
												08		24	

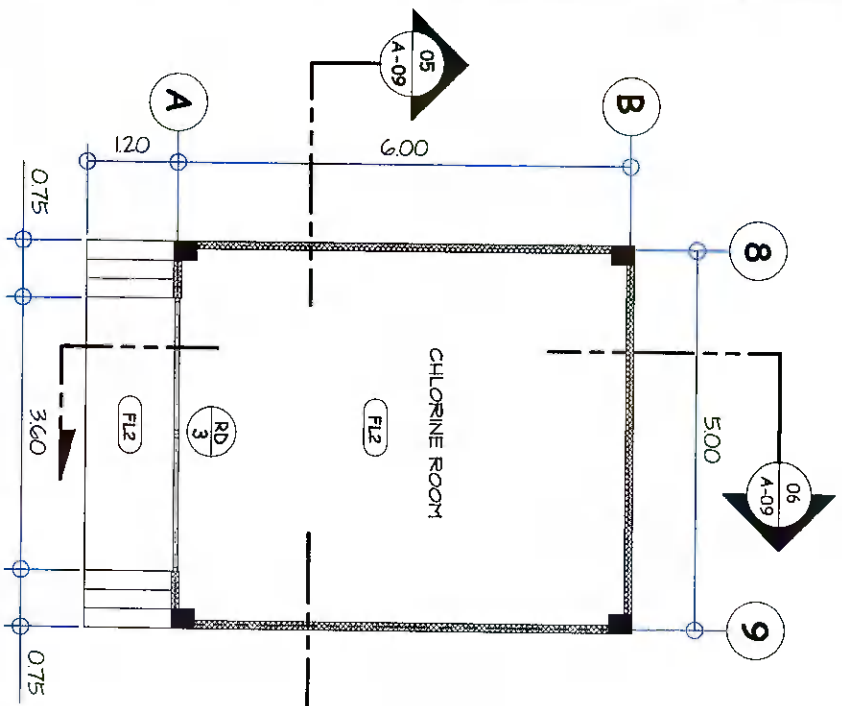




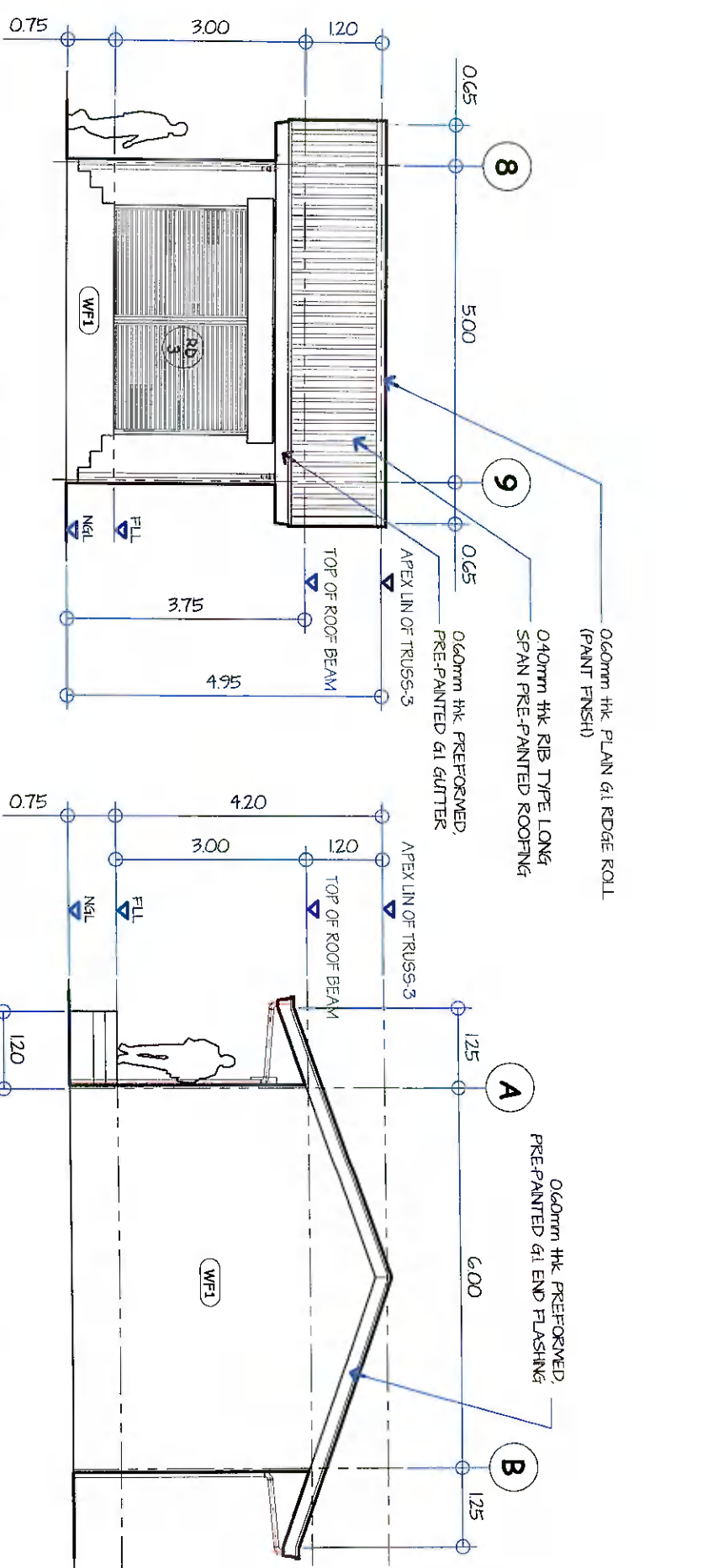
04 (CHLORINE ROOM)  
SCALE : 1 : 100 M

05 (CHLORINE ROOM)  
SCALE : 1 : 100 M

06 (CHLORINE ROOM)  
SCALE : 1 : 100 M




01 (CHLORINE ROOM)  
SCALE : 1 : 100 M



02 (CHLORINE ROOM)  
SCALE : 1 : 100 M

03 (CHLORINE ROOM)  
SCALE : 1 : 100 M

 <p><b>GENERAL SANTOS CITY WATER DISTRICT</b> E. FERNANDEZ STREET, BRGY. LAGAO, GEN. SANTOS CITY ENGINEERING &amp; CONSTRUCTION DEPARTMENT PLANNING AND DESIGN DIVISION TEL. NO. : (083) 552-3824</p>		<p><b>DANILO M. HORLADOR, JR.</b> CIVIL ENGINEER</p>		<p>PROJECT AND LOCATION <b>CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP &amp; CHLORINE STORAGE AREA</b></p>		<p>CHECKED: <i>[Signature]</i></p>		<p>REVIEWED: <i>[Signature]</i></p>		<p>APPROVED: <i>[Signature]</i></p>		<p>SHEET CONTENTS AS SHOWN</p>		<p>SHEET NO. A-09</p>	
<p>REG. NO. 070345 P.R. NO. 61873A</p>		<p>TIN. NO. 231-94-997</p>		<p>LOCATION: LOT 7-14, P. 20, COL. NGA, BRGY. MARIYAN, G.S.C.</p>		<p>PROJECT PLANNING &amp; DEVELOPMENT OFFICER A ENGR. DANILO M. HORLADOR, JR.</p>		<p>07-1730</p>		<p>AGRI. ENGINEERING &amp; TECHNICAL SERVICES</p>		<p>DRAWN BY: DOUGLAS REV. NO.</p>		<p>DATE: Oct. 2022</p>	
												<p>09</p>		<p>24</p>	

**DANILO M. HORLADOR, JR.**  
 CIVIL ENGINEER

REG. NO. 0707845  
 TIN. NO. 29194-997  
 DATE: 07/22/2022

**PROJECT AND LOCATION**  
 CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP & CHLORINE STORAGE AREA

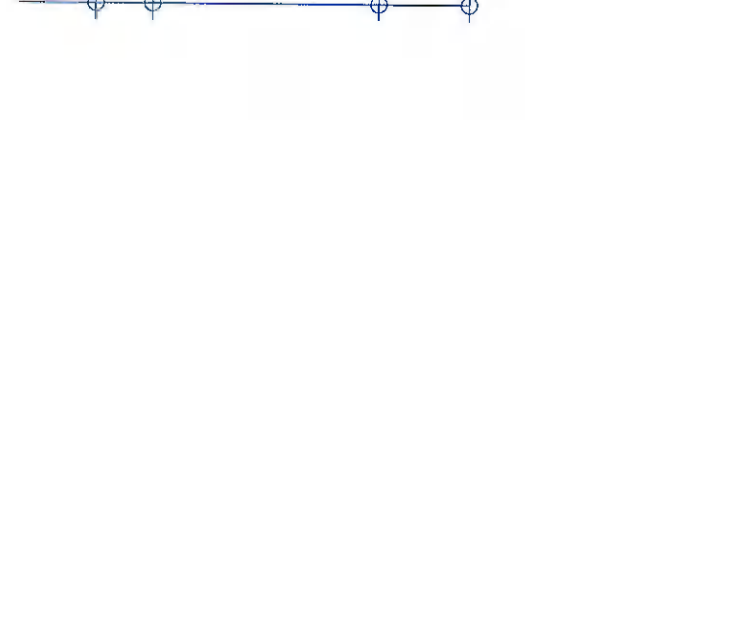
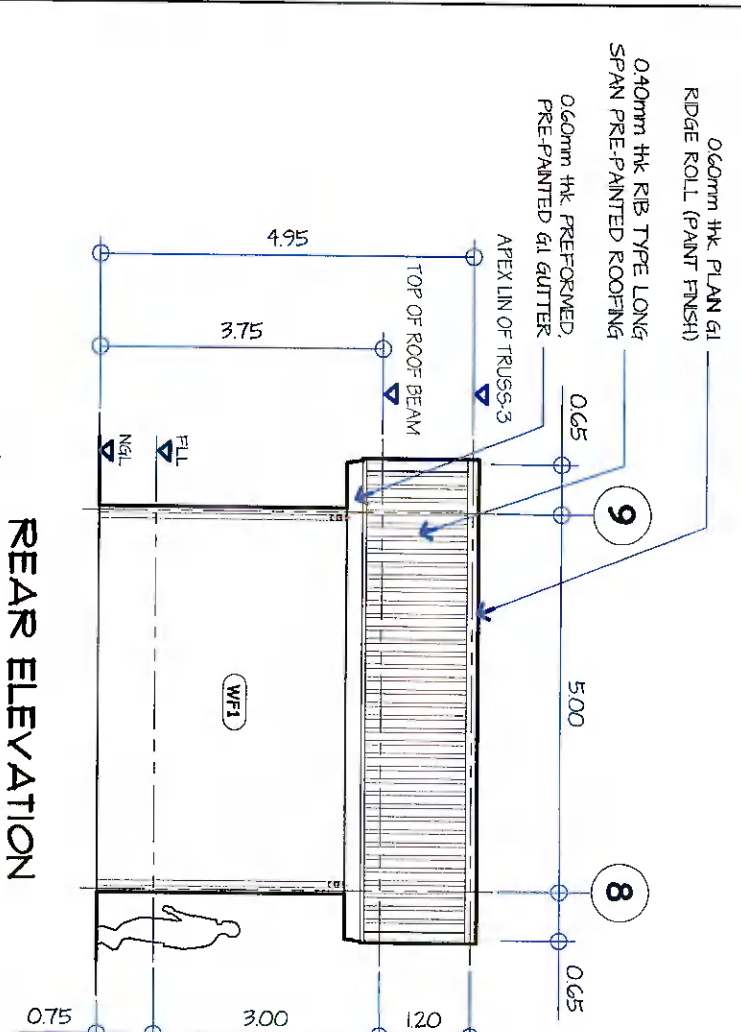
**CHECKED:**  
 ENGR. DANILO M. HORLADOR, JR.  
 PROJECT PLANNING & DEVELOPMENT OFFICE A

**REVIEWED:**  
 ENGR. MARYA CELIA N. DANDAN  
 05 - 020

**APPROVED:**  
 ENGR. ROGELIO A. BESANA, JR.  
 05 - 020

**SHEET CONTENTS**  
 AS SHOWN

**SHEET NO.**  
 A-10



**SCHEDULE OF FINISH CEILING:**

(CI1)	3.5mm thk FIBER CEMENT BOARD (PAINT FINISH) ON METAL FURRING CEILING FRAMES. USE 0.60mm thk x 19mm x 50mm x 500mm DOUBLE FURRING CHANNELS @ 0.40m ON CENTER W/ 0.60mm thk. x 39mm x 500mm CARRYING CHANNELS @ 120mm ON CENTERS & ROD JOINER (HANERS/SUPPORTS) @ 120mm O.C. SHORTER SPAN
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# CONSTRUCTION NOTES:

## A. GENERAL

1. CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL UNLESS OTHERWISE SHOWN OR NOTED. MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS.
2. SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMS OF ALL STRUCTURAL STEEL, MISCELLANEOUS IRON, PRE-CAST CONCRETE, ETC. SHALL BE SUBMITTED FOR ENGINEER'S APPROVAL BEFORE FABRICATION.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ALL WORK IS TO BEGIN. CHECK WITH MECHANICAL AND ELECTRICAL CONTRACTORS FOR CONDUITS, PIPE SLEEVES, ETC. TO BE EMBEDDED IN CONCRETE.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SPRINGS AND BRACING OF THE STRUCTURE FOR ALL LOADS THAT MAY BE IMPOSED DURING CONSTRUCTION.

## B. CONCRETE AND REINFORCEMENT

1. ALL MATERIALS WORKMANSHIP SHALL CONFORM WITH THE LATEST BUILDING CODE OF AMERICAN CONCRETE INSTITUTE (ACI-318).
  2. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH AT THE END OF TWENTY EIGHT (28) DAYS WITH CORRESPONDING MAXIMUM SIZE AGGREGATE AND SLUMPS AS FOLLOWS
- | LOCATION  | 28 DAYS STRENGTH         | MAX. SIZE AGGREGATE | MAX. SLUMP     |
|---|--------------------------|---------------------|----------------|
| CUBES AND SLAB  | 2500 PSI / 175 KG / CM 2 | 1 in. (25 mm)       | 4 in. (100 mm) |
| FOUNDATION  | 3000 PSI                 | 3/4 in. (19 mm)     | 4 in. (100 mm) |
| FOUNDATION & RETAINING WALL                             | 3000 PSI                 | 3/4 in. (19 mm)     | 5 in. (125 mm) |
| ALL OTHERS INCLUDING BEAMS, SUSPENDED SLABS AND COLUMNS | 3000 PSI                 | 3/4 in. (19 mm)     | 5 in. (125 mm) |
3. REINFORCING BARS SHALL CONFORM TO ASTM A618 & SMALLER
  4. IN GENERAL, THE LATEST EDITION OF ACI-318, MANUAL OF STANDARD PRACTICE OF CONCRETE STRUCTURES SHALL BE APPLIED UNLESS OTHERWISE SHOWN OR NOTED.
  5. MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:
 

SUSPENDED SLABS	3/4 in. (19mm)
SLAB ON GRADE	1 1/2 in. (38mm)
BEAM STIRRUPS AND COLUMN TIES	1 in. (25mm)
WHERE CONCRETE IS EXPOSED TO EARTH BUT FLOORED AGAINST FORMS	2 in. (50mm)
WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH	3 in. (75mm)
  6. SPLICES SHALL BE SECURELY WELDED AND SHALL LAP OR EXTEND IN ACCORDANCE WITH TABLE 1 (TABLE OF LAP SPLICE AND ANCHORAGE LENGTH) UNLESS OTHERWISE SHOWN ON DRAWINGS. SPLICES SHALL BE STAGGERED WHENEVER POSSIBLE.
  7. ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED AND SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
  8. CONTRACTOR SHALL NOTE AND PROVIDE ALL MISCELLANEOUS CURBS, SILLS, ARCHITECTURAL, ELECTRICAL, AND MECHANICAL BASES THAT ARE REQUIRED BY THE TOOLS, EQUIPMENT AND MECHANICAL BASES THAT ARE REQUIRED BY THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS.
  9. ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN (7) DAYS. FORMS SHALL BE REMOVED AFTER POLING BY THE USE OF NET BURLAP, FOR SPRAYING, CURING COMPOUNDS OR OTHER APPROVED METHODS.
  10. STRIPPING OF FORMS AND SHORES REFER TO TECHNICAL SPECIFICATIONS

## C. MASONRY AND CONCRETE BLOCKS

1. ALL LOAD BEARING TYPE CONCRETE BLOCKS SHALL HAVE A UNIT WEIGHT NOT TO EXCEED 80 P.C.F. FOR LOAD BEARING TYPE CONCRETE BLOCKS A MINIMUM COMPRESSIVE STRENGTH OF 850 P.S.I. SHALL BE DEVELOPED.
2. PROVIDE 1-#16 VERTICAL BARS AT CORNERS, INTERSECTIONS, END OF WALLS EACH SIDE OF OPENINGS.
3. UNTEL BEAMS SHALL BEAR AT LEAST 8 INCHES (200 MM.) ON EACH SIDE OF MASONRY WALL OPENING.
4. WALL REINFORCEMENTS SHALL BE AS FOLLOWS:
 

WALL THICKNESS	VERTICAL REINFORCEMENT	HORIZONTAL REINFORCEMENT
8 in. (200 mm)	#12 @ 400 mm	#10 @ 600 mm
6 in. (150 mm)	#10 @ 600 mm	#10 @ 600 mm
4 in. (100 mm)	#10 @ 600 mm	#10 @ 600 mm
5. SPLINED BARS SHALL BE LAPPED A MINIMUM OF 40 BARS DIAMETERS WHERE SPLINED BARS FROM CONCRETE FOOTINGS OR SLABS EXTEND INTO THE BLOCK WALL A MINIMUM OF 40 BAR DIAMETERS, AND DOWELS TO MATCH VERTICAL REINFORCEMENTS OF WALL.
6. ALL CELLS CONTAINING REINFORCING BARS OR INSERTS SHALL BE SOLIDLY FILLED WITH CONCRETE GROUT (REFER TO SPECIFICATIONS).

## D. STEEL NOTES:

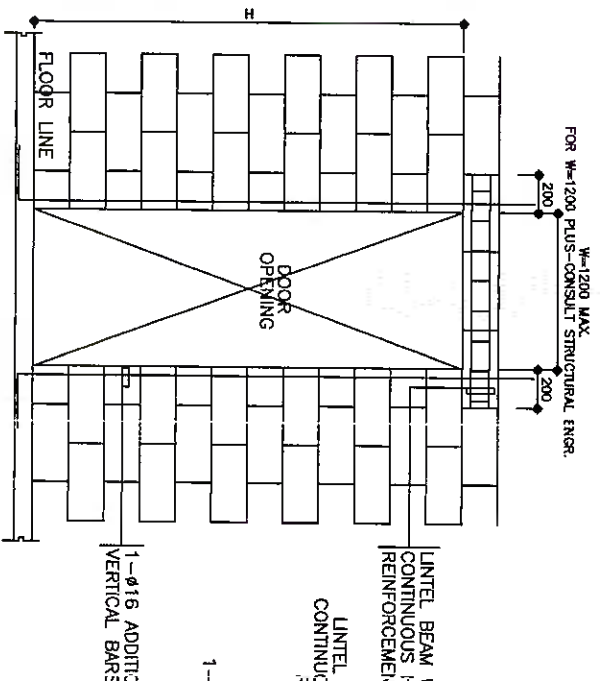
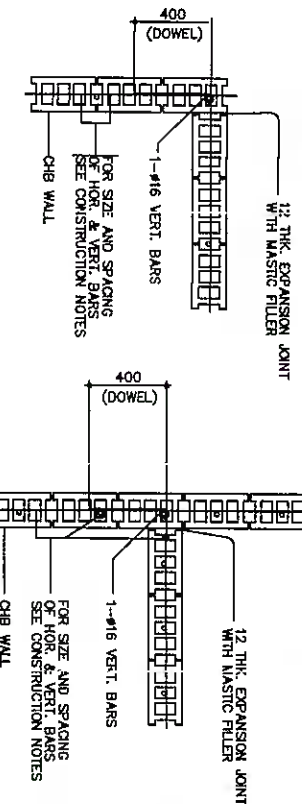
1. ALL STRUCTURAL STEEL SHAPES SHALL CONFORM TO STD. REQUIREMENTS OF AISC FOR ASTM A36 STEEL
2. ALL OLD FORGED STEEL SHAPES SHALL CONFORM TO STD. REQUIREMENTS OF AISC FOR AS 36 STEEL
3. ALL WELDS SHALL CONFORM WITH AWS STD.
4. CONNECTORS BOLTS ASTM A307 OR ASTM A325 AS SPECIFIED WELDS E60XX ELECTRODE

## E. FOUNDATION

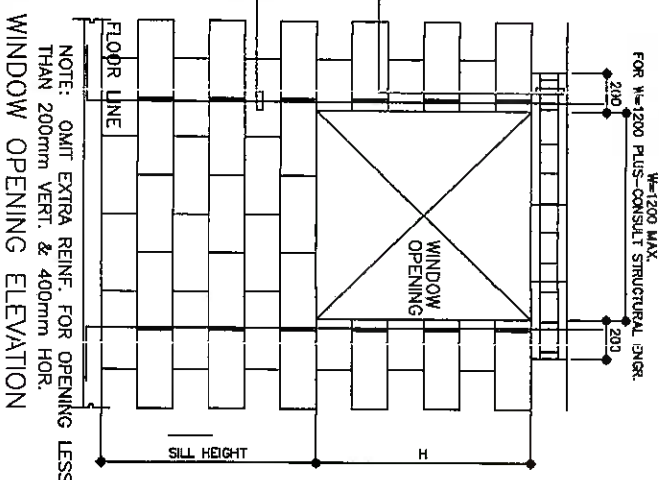
1. FOUNDATION IS DESIGNED BASED ON THE ASSUMPTION OF 2000 PSF SOIL BEARING CAPACITY FOR FOOTING NOT LESS THAN 1.5M.
2. FOUNDATION SHALL REST ON NATURAL SOIL, UNLESS OTHERWISE NOTED BY THE ENGINEER. NO PART OF THE FOUNDATION SHALL REST ON FILL.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER EXCAVATION HAVE BEEN COMPLETED, AND PRIOR TO CONCRETING TO CONFIRM THE DESIGN SOIL BEARING CAPACITY.
4. THE CONTRACTOR SHALL HAVE THE SOLE RESPONSIBILITY TO DEVISE & IMPLEMENT EXCAVATION PROCEDURES THAT WILL ENSURE SAFETY OF LIFE & PROPERTY.

6. SPLICES SHALL BE SECURELY WELDED AND SHALL LAP OR EXTEND IN ACCORDANCE WITH TABLE 1 (TABLE OF LAP SPLICE AND ANCHORAGE LENGTH) UNLESS OTHERWISE SHOWN ON DRAWINGS. SPLICES SHALL BE STAGGERED WHENEVER POSSIBLE.
7. ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED AND SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
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10. STRIPPING OF FORMS AND SHORES REFER TO TECHNICAL SPECIFICATIONS

### CORNER WALL TYPICAL CONNECTION DETAIL OF MASONRY WALL



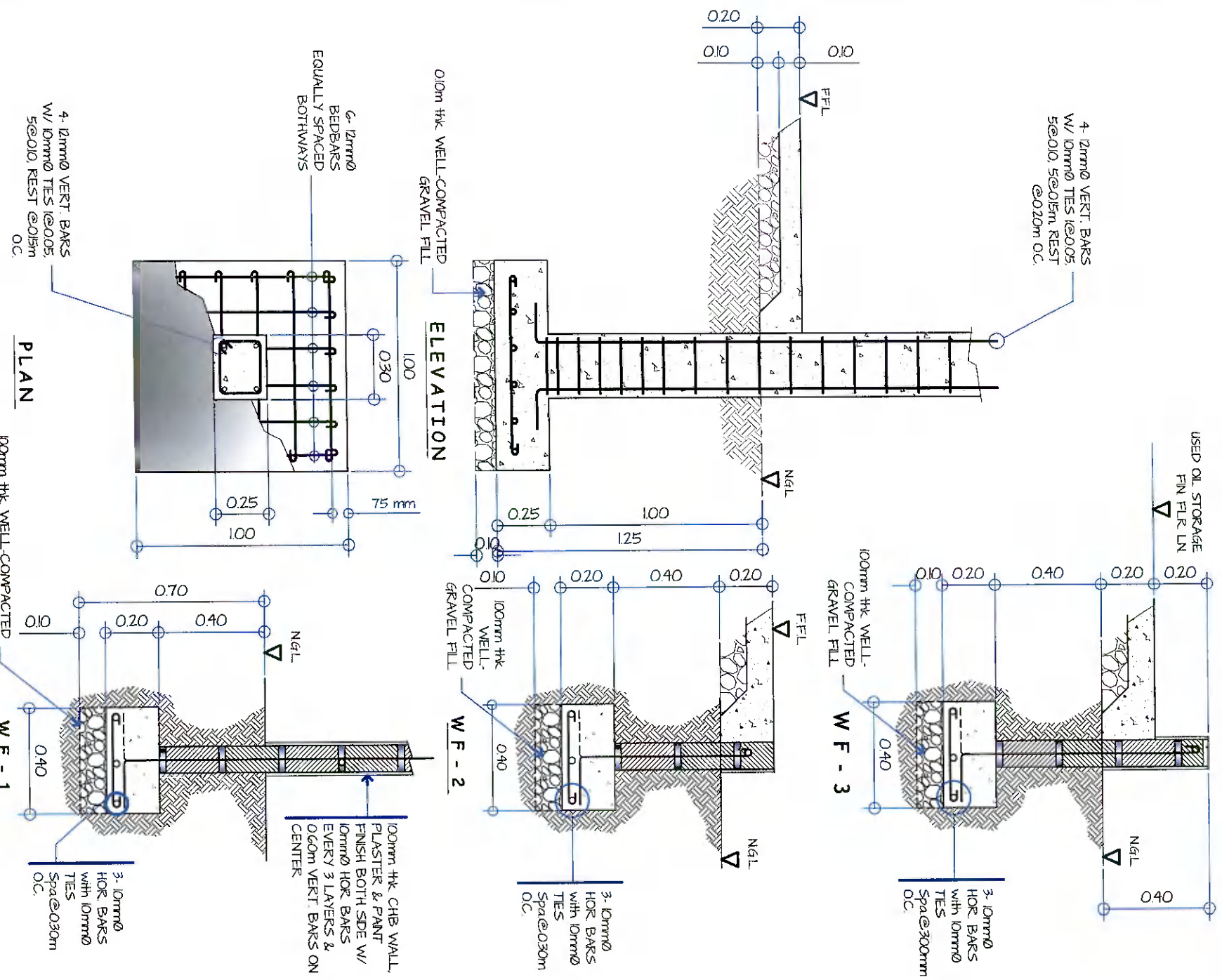
DOOR OPENING ELEVATION  
TYPICAL DETAIL OF UNTEL BEAM  
AT CHB WALL OPENING



WINDOW OPENING ELEVATION

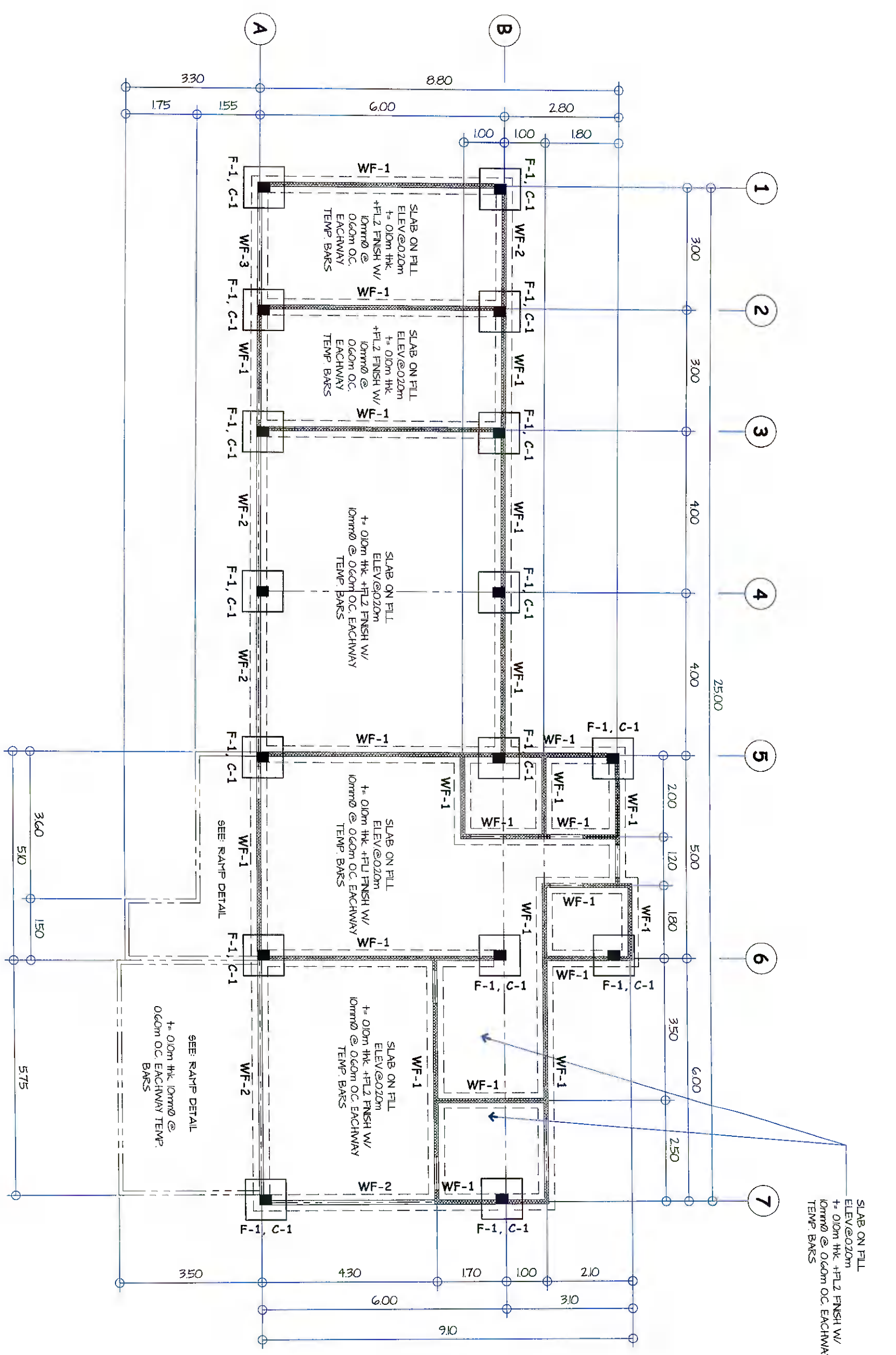
01  
SCALE 1 : 2.5 M  
DETAIL OF COLUMN & FOOTING (F1,C1)

02  
SCALE 1 : 2.0 M  
DETAIL OF WALL FOOTINGS



<p>GENERAL SANTOS CITY WATER DISTRICT E. FERNANDEZ STREET, BRGY. LAGAO, GEN. SANTOS CITY ENGINEERING &amp; CONSTRUCTION DEPARTMENT PLANNING AND DESIGN DIVISION TEL. NO.: (083) 552-3824</p>		<p>DANLO M. HORLADOR, JR. CIVIL ENGINEER</p>		<p>PROJECT AND LOCATION CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP &amp; CHLORINE STORAGE AREA</p>		<p>CHECKED: ENGR. DANLO M. HORLADOR, JR.</p>		<p>REVIEWED: ENGR. MARLA CELIA N. DANDAN</p>		<p>APPROVED: ENGR. ROGELIO A. BEBANA, JR.</p>		<p>SHEET CONTENTS AS SHOWN</p>		<p>SHEET NO. S-01</p>	
<p>REG. NO. 07075-45 PR. NO. 61873A</p>		<p>TIN. NO. 281-941-897 DATE: 01/22/2022</p>		<p>LOCATION: LOT 7374, P. ROK GOINGAN BRGY. MARILVA, CGC</p>		<p>PROJECT PLANNING &amp; DEVELOPMENT OFFICE A</p>		<p>02 - F10</p>		<p>AGM OFFERATION &amp; TECHNICAL SERVICES</p>		<p>DRAWN BY: DONG-SAE REV. NO.</p>		<p>CHECKED BY: DATE: 04/22/2022</p>	
												<p>11</p>		<p>24</p>	

**FOUNDATION PLAN**  
 01 (PRODUCTION FACILITIES BUILDING)  
 S-02 SCALE: 1:100 M



SLAB ON FILL  
 ELEV @ 0.20m  
 +/- 0.10m THK +/- FL2 FINISH W/  
 10mm @ 0.60m OC EACHWAY  
 TEMP. BARS

**DANILO M. HORLADOR, JR.**  
 CIVIL ENGINEER  
 REG. NO. 0107145  
 TIN NO. 29-341497  
 DATE: 07/22/2022

**PROJECT AND LOCATION**  
 CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP & CHLORINE STORAGE AREA  
 LOCATION: LOT 73-74, PUSK, GOJINAN BRGY, MADHAY, GSC

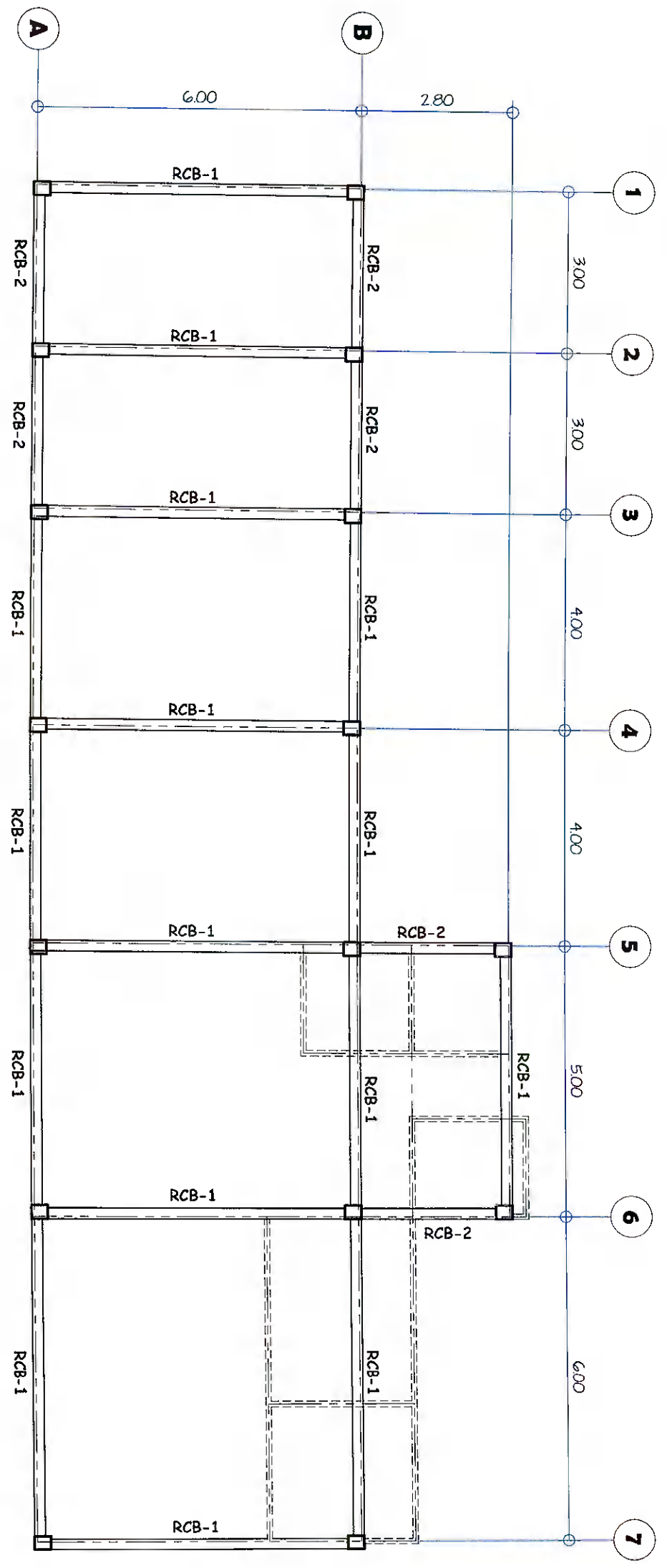
**CHECKED:**  
 ENGR. DANILLO M. HORLADOR, JR.  
 PROJECT PLANNING & DEVELOPMENT OFFICER A

**REVIEWED:**  
 ENGR. MARIA CELIA N. DANDAN  
 CC - F30

**APPROVED:**  
 ENGR. ROGELLO A. BEGANA, JR.  
 ASST. OPERATIONS & TECHNICAL SERVICES

**SHEET CONTENTS**  
 AS SHOWN  
 DRAWN BY: DCE-RJE  
 REV. NO.  
 CHECKED BY:  
 DATE: Oct 2022  
**SHEET NO. S-03**  
 13 24

**01**  
**ROOF BEAM PLAN**  
 (PRODUCTION FACILITIES BUILDING)  
 SCALE: 1 : 100 M

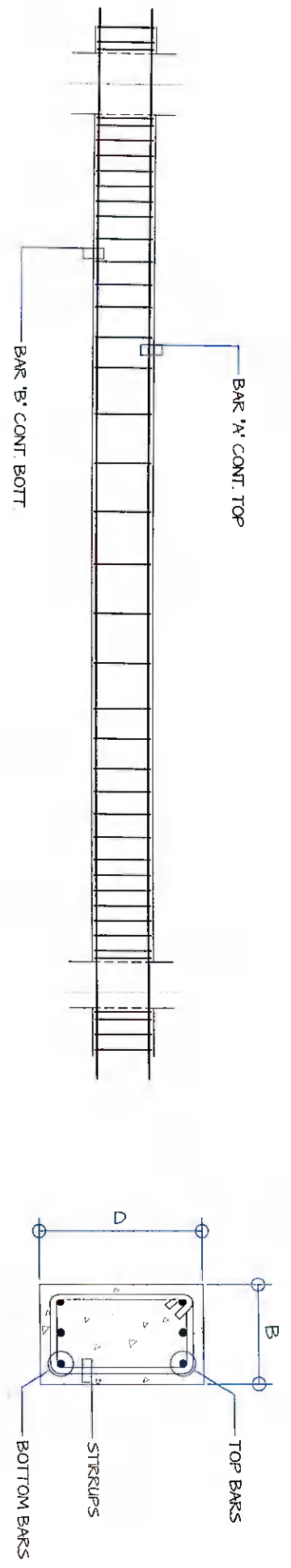


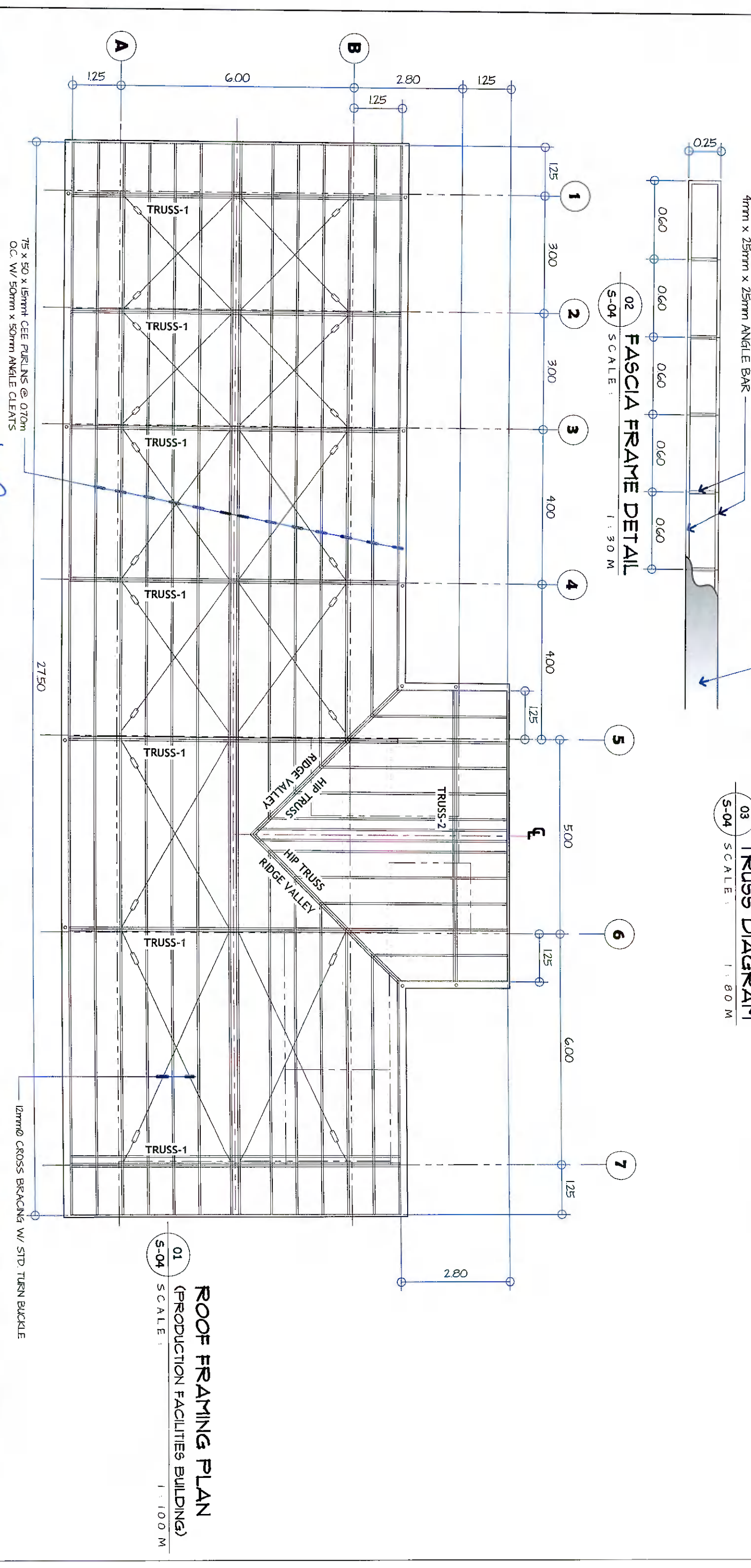
**02**  
**TYP. R.C. BEAM ELEVATION**  
 SCALE: N T S

BEAM MARK	SIZES		REINFORCEMENT		SPACING OF STIRRUPS
	WIDTH	DEPTH	BAR 'A'	BAR 'B'	
RCB-1	0.20	0.30	3 - Ø12mm	3 - Ø12mm	A
RCB-2	0.20	0.30	3 - Ø12mm	3 - Ø12mm	B

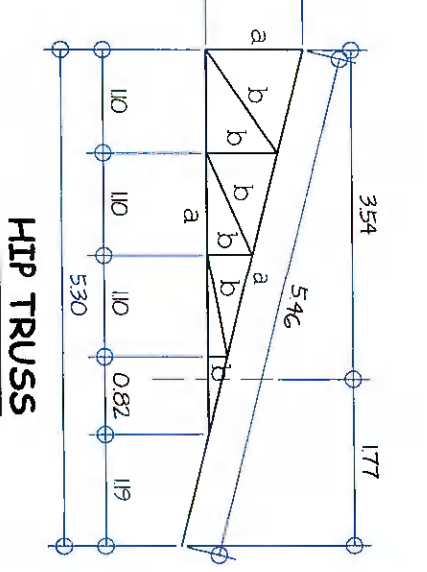
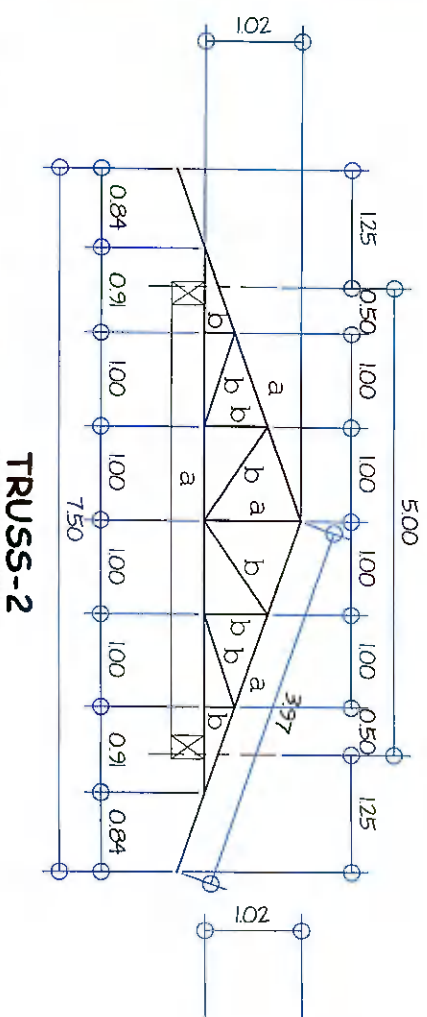
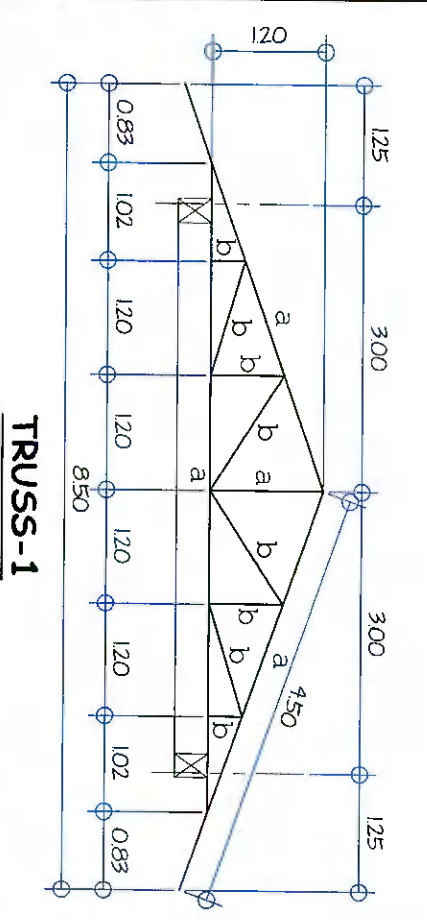
**SPACING OF STIRRUPS**  
 A - Ø10mm - 100mm, 600mm, 400mm, 200mm, REST @ 0.30m O.C.  
 B - Ø10mm - 100mm, 400mm, 400mm, 200mm, REST @ 0.30m O.C.

**TYP. R.C. BEAM SECTION**



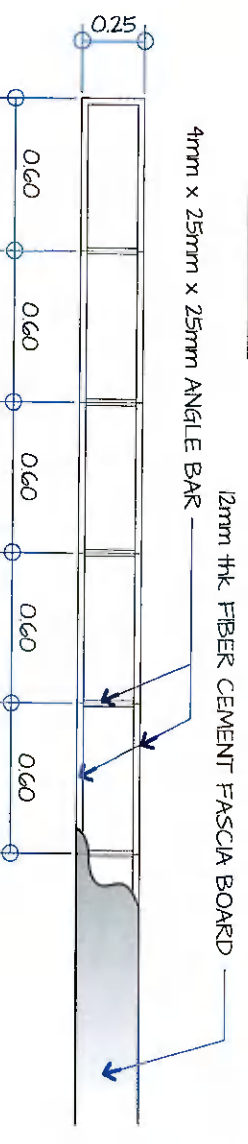


**01**  
**ROOF FRAMING PLAN**  
 (PRODUCTION FACILITIES BUILDING)  
 SCALE: 1 : 100 M

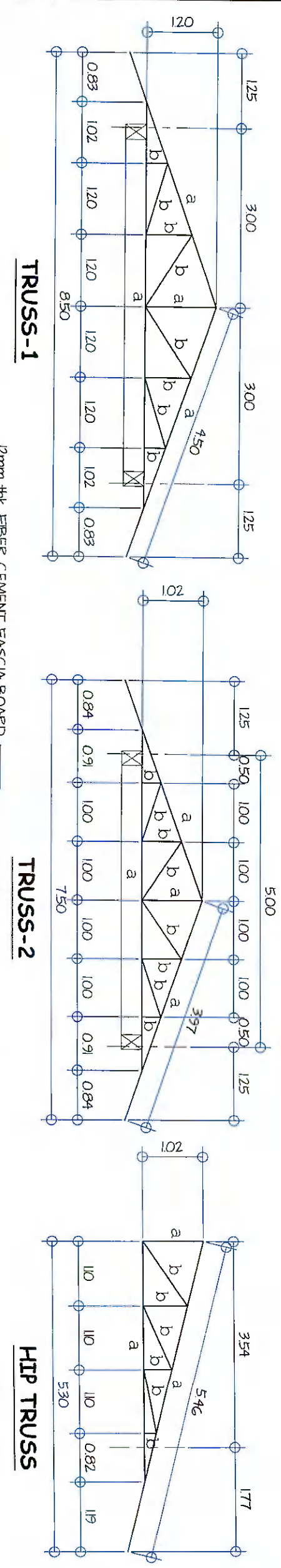


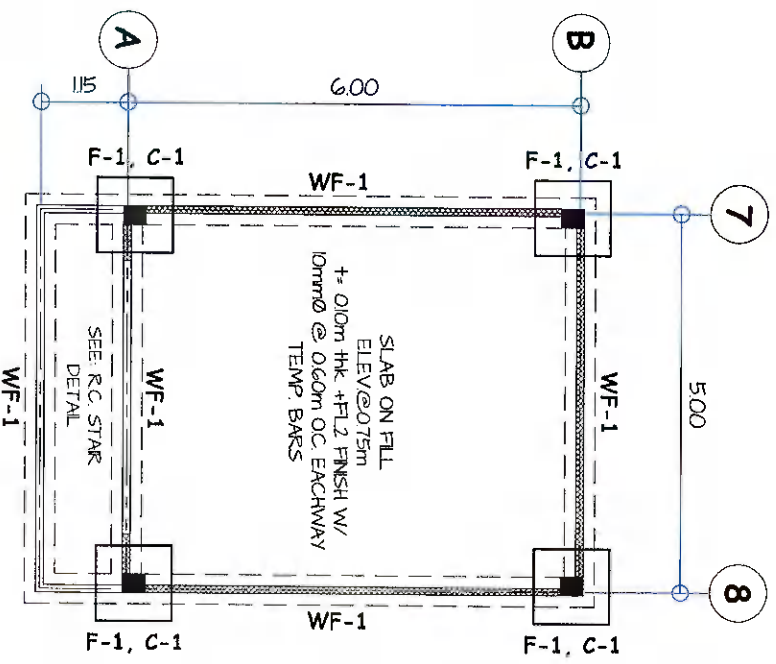
- LEGEND:**
- TRUSS-1  
 a = 24 - 38mm x 38 mm x 5mm  
 b = 24 - 25mm x 25mm x 4mm
  - TRUSS-2  
 a = 24 - 38mm x 38 mm x 5mm  
 b = 24 - 25mm x 25mm x 4mm
  - TRUSS-3  
 a = 24 - 38mm x 38 mm x 5mm  
 b = 24 - 25mm x 25mm x 4mm

**02**  
**FASCIA FRAME DETAIL**  
 SCALE: 1 : 30 M

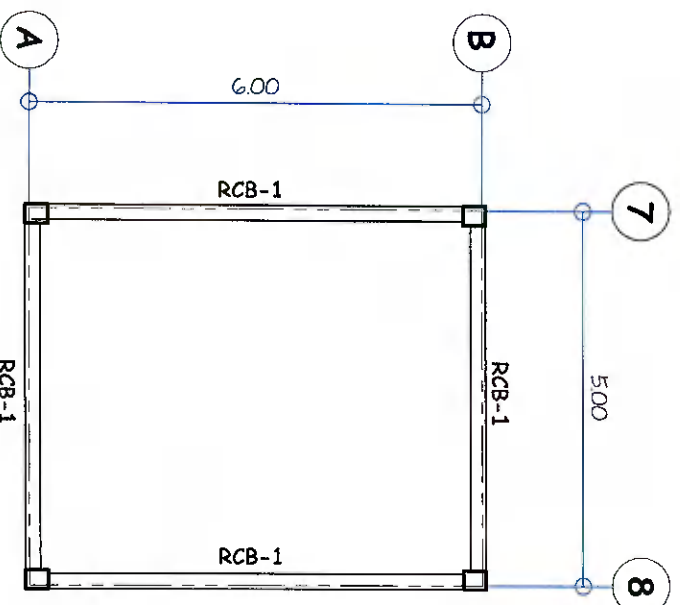


**03**  
**TRUSS DIAGRAM**  
 SCALE: 1 : 80 M

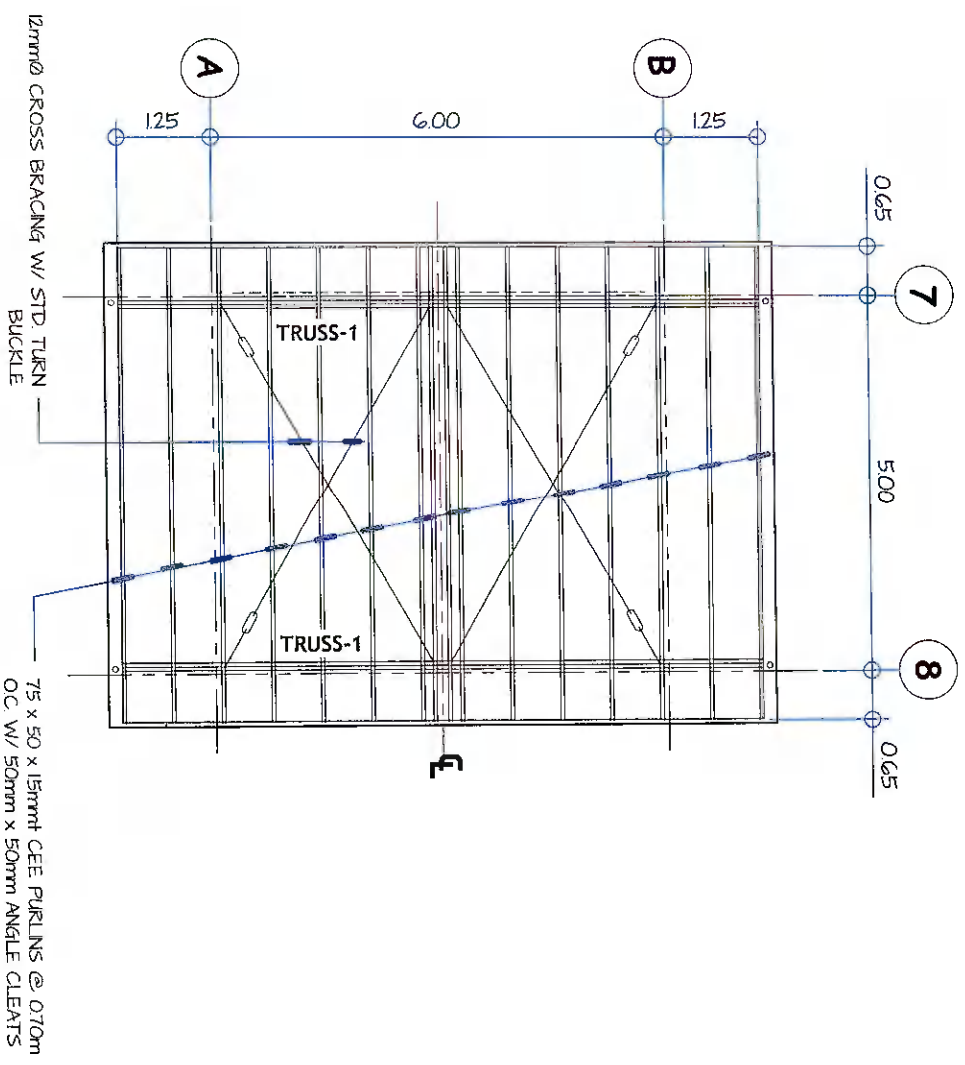




**01**  
**(CHLORINE ROOM)**  
**FOUNDATION PLAN**  
SCALE: 1:100 M



**02**  
**(CHLORINE ROOM)**  
**ROOF BEAM PLAN**  
SCALE: 1:100 M



**02**  
**(CHLORINE ROOM)**  
**ROOF FRAMING PLAN**  
SCALE: 1:100 M

<p><b>GENERAL SANTOS CITY WATER DISTRICT</b> E. FERNANDEZ STREET, BRGY. LAGAO, GEN. SANTOS CITY ENGINEERING &amp; CONSTRUCTION DEPARTMENT PLANNING AND DESIGN DIVISION TEL. NO.: (0831) 552-3824</p>		<p><b>DANILO M. HORLADOR, JR.</b> CIVIL ENGINEER</p>		<p><b>PROJECT AND LOCATION</b> CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP &amp; CHLORINE STORAGE AREA</p>		<p><b>CHECKED:</b></p>		<p><b>REVIEWED:</b></p>		<p><b>APPROVED:</b></p>		<p><b>SHEET CONTENTS</b></p>		<p><b>SHEET NO.</b></p>	
REG. NO. C-07345	TIN. NO. 291941937	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022	DATE: 01/21/2022
PR. NO. 61873A															
<p>LOCATION: LOT 7374 FLOROK GULANGAN BRGY. MABUHAY, G5C</p>															
<p>PROJECT PLANNING &amp; DEVELOPMENT OFFICE A</p>															
<p>ENGR. DANILLO M. HORLADOR, JR.</p>															
<p>ENGR. MARIA CELIA N. DANDAN</p>															
<p>CC - 100</p>															
<p>ENGR. ROGELIO A. BESANA, JR.</p>															
<p>REG. OFFER/ONLINE TECHNICAL SERVICES</p>															
<p>DRAWN BY: DONGSABE</p>															
<p>CHECKED BY:</p>															
<p>REV. NO.</p>															
<p>DATE: 01/21/2022</p>															
<p>AS SHOWN</p>															
<p>15</p>															
<p>24</p>															



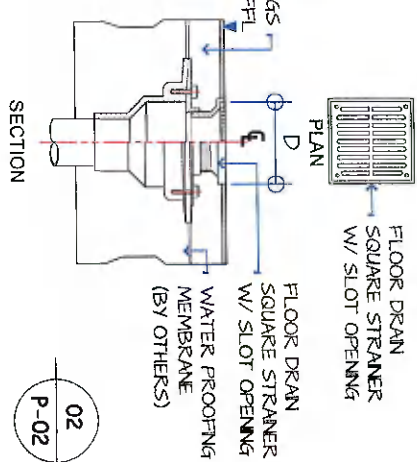


**PLUMBING LEGEND:**

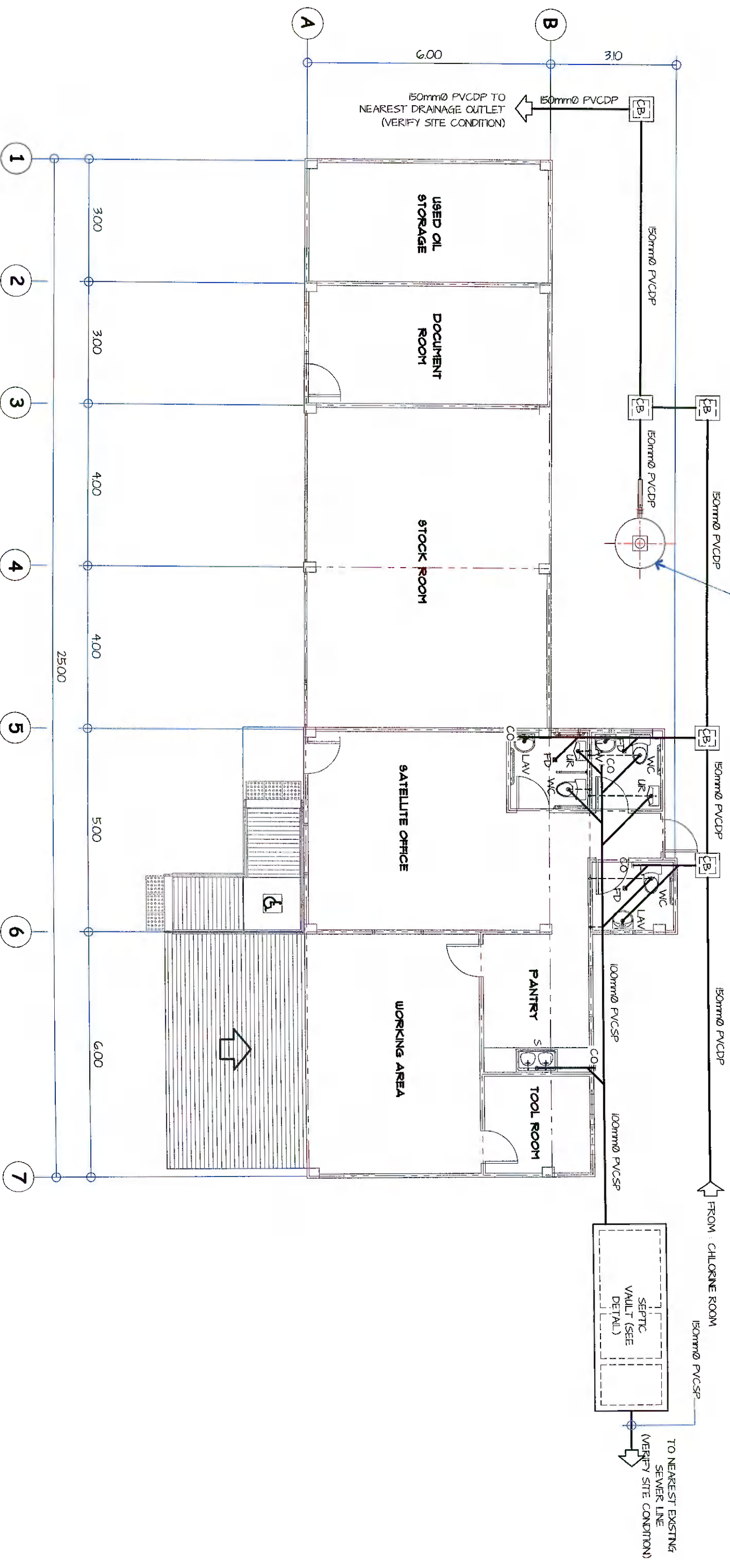
CB	CATCH BASIN	MH	MANHOLE	PVCVS	POLYVINYL CHLORIDE VENT STACK
CO	CLEAN OUT	PPRC CWL	POLYPROPYLENE RANDOM COPOLYMER COLD WATER LINE	PVCYTR	POLYVINYL CHLORIDE VENT THROUGH ROOF
CV	CHECK VALVE	PVCDP	POLYVINYL CHLORIDE DRAINAGE PPE	PVCWP	POLYVINYL CHLORIDE WASTE PPE
FD	FLOOR DRAIN	PVCDS	POLYVINYL CHLORIDE DOWNSPOUT	WC	WATER CLOSET
GV	GATE VALVE	PVCSP	POLYVINYL CHLORIDE SOL PIPE	WM	WATER METER
LAV	LAVATORY	PVCVP	POLYVINYL CHLORIDE VENT PIPE		

**SCHEDULE OF DIMENSIONS**

PIPE SIZE IN "A"	D	F
50	100x100	225.42
75	125x125	225.42
100	150x150	225.42
150	200x200	282.57



**02 FLOOR DRAIN DETAIL**  
SCALE: 1:100 N.T.S.



**01 SEWERAGE & DRAINAGE LAYOUT (PRODUCTION FACILITY BUILDING)**  
SCALE: 1:100 M

**GENERAL SANTOS CITY WATER DISTRICT**  
E. FERMANBER STREET, BRGY. LAGAO, GEN. SANTOS CITY  
ENGINEERING & CONSTRUCTION DEPARTMENT  
PLANNING AND DESIGN DIVISION  
TEL. NO.: (083) 552-3824

**ENGR. ROGELIO A. BESANA, JR.**  
REGISTERED MASTER PLUMBER

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**PROJECT AND LOCATION**  
CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP & CHLORINE STORAGE AREA

**CHECKED:** ENGR. DANILLO M. HORLADOR, JR.  
**REVIEWED:** ENGR. MARIA CELIA N. DANDAN

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**REG. NO. 2672**  
**TIN. NO. 30-455-622**  
**DATE: 07/02/2022**

**APPROVED:** ENGR. ROGELIO A. BESANA, JR.  
AS OPERATIONAL TECHNICAL SERVICES

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**PROJECT NO. 6792A**  
**DATE: 07/02/2022**  
**LOCATION: LOT 7341 TURKOK GOINGAN, BRGY. MARIWAW, GAG**

**DRAWN BY: 0066-RVE**  
**REV. NO.**  
**CHECKED BY:**

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**SHEET CONTENTS**  
As SHOWN

**SHEET NO.**  
P-02

**DATE: 04-2022**

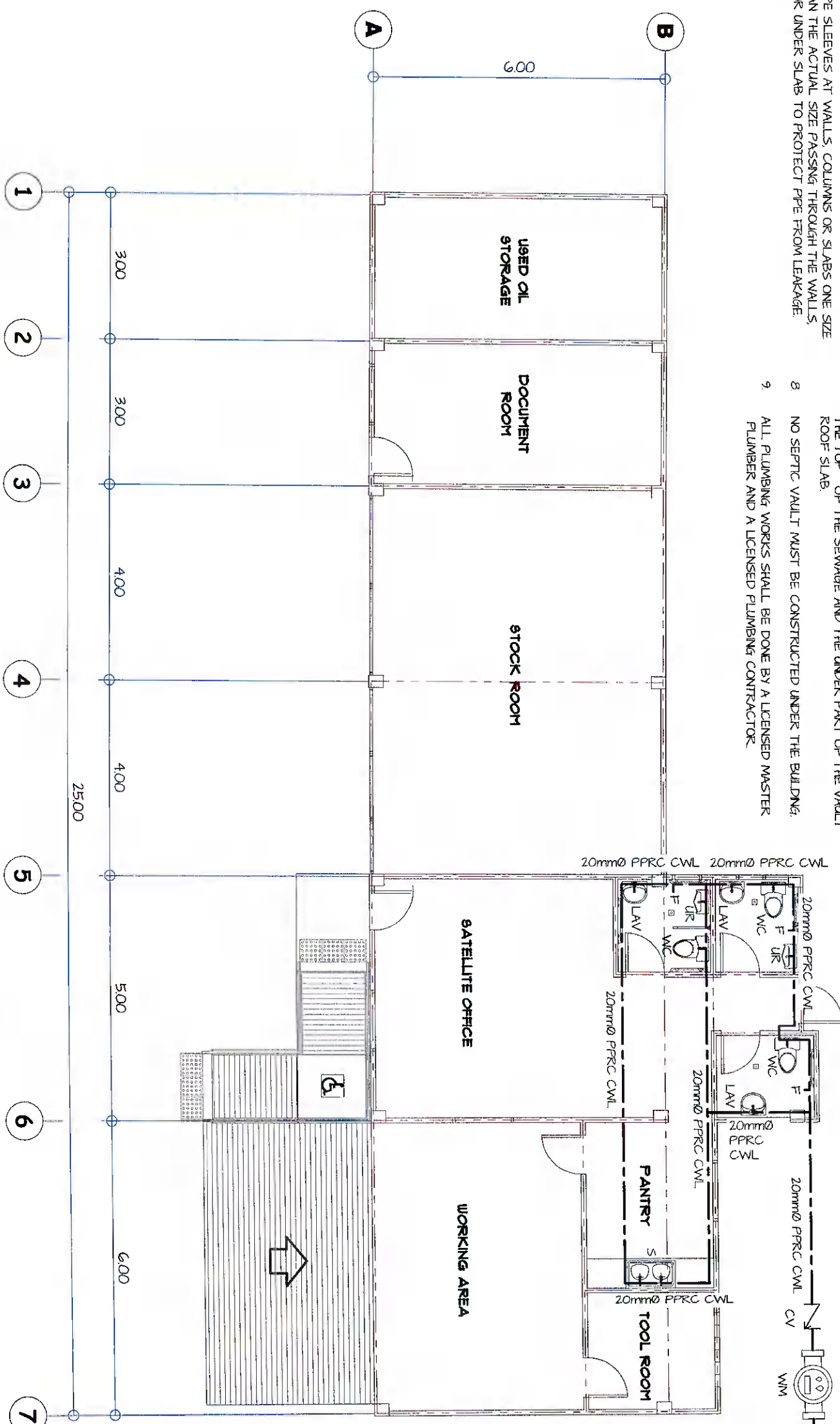
**17** **24**

**PLUMBING NOTES:**

1. GRADES OF HORIZONTAL PIPING RUN ALL HORIZONTAL PIPINGS IN PERFECT ALIGNMENT AND AT A FORM GRADE OF NOT LESS THAN TWO PERCENT (2%)
2. CHANGE IN DIRECTION  
ALL CHANGE IN DIRECTION SHALL BE MADE BY APPROPRIATE USE OF FORTY FIVE DEGREES (45°) WYES LONG SWEEP QUARTER BEND, SIX-EIGHT OR SIXTEENTH BENDS WHEN THE CHANGE OF FLOW IS FROM HORIZONTAL TO VERTICAL, 1/8 BEND COMBINATION MAYBE USED ON VERTICAL STACKS AND SHORT QUARTER BENDS MAYBE USED ON WASTE LINE TEE AND CROSSES MAYBE USED IN VENT PIPES.
3. PROHIBITED FITTINGS  
NO DOUBLE HUB OR TEE BRANCH SHALL BE USED ON HORIZONTAL WASTE LINES. THE DRILLINGS AND TAPPINGS OF HOUSE DRAIN WASTE OR VENT PIPES AND USE OF SADDLE HUB AND BEND ARE PROHIBITED.
4. SLEEVES  
PROVIDE PIPE SLEEVES AT WALLS, COLUMNS OR SLABS ONE SIZE BIGGER THAN THE ACTUAL SIZE PASSING THROUGH THE WALLS, COLUMNS OR UNDER SLAB TO PROTECT PIPE FROM LEAKAGE.
5. PIPE CLEAN-OUTS  
PIPE CLEAN-OUTS ARE REQUIRED UNDER THE FOLLOWING CONDITIONS:  
a. EVERY CHANGE IN HORIZONTAL DIRECTIONS EXCEEDING TWENTY-TWO AND ONE-HALF DEGREES (22 1/2°)
6. ONE AND ONE-HALF METERS (1.50 m) INSIDE THE PROPERTY LINE BEFORE THE HOUSE DRAINAGE CONNECTION
7. EVERY FIFTEEN METERS (15.00 m) IN HORIZONTAL RUN OF PIPES
8. AT THE END OF ANY HORIZONTAL PIPE LINES
9. THE DIGESTION CHAMBER OF SEPTIC VAULT MUST BE WATERPROOFED
10. NOT LESS THAN 300 mm OF AIR SPACE MUST BE LEFT BETWEEN THE TOP OF THE SEWAGE AND THE UNDER PART OF THE VAULT ROOF SLAB.
11. NO SEPTIC VAULT MUST BE CONSTRUCTED UNDER THE BUILDING.
12. ALL PLUMBING WORKS SHALL BE DONE BY A LICENSED MASTER PLUMBER AND A LICENSED PLUMBING CONTRACTOR

**SPECIFICATIONS:**

- ALL PLUMBING WORKS AND INSTALLATION SHALL CONFORM WITH THE LATEST EDITION OF NATIONAL PLUMBING CODE RULES AND REGULATION OF THE ENFORCING AUTHORITY CONCERNED AND CITY
- ALL HORIZONTAL PIPINGS SHALL RUN IN PRACTICAL ALIGNMENT AND SHALL BE PROVIDED WITH SLOPE OF NOT LESS THAN 1% SLOPE AND SUPPORTED OF ANCHORED EVERY 300m INTERVALS
- ALL MATERIALS SHALL BE NEW AND APPROVED TYPES
- a. FOR SANITARY LINES:  
2" PVC PIPES FOR VENTS AND FIXTURES  
4" PVC PIPES FOR WC, FD, CO
  - b. FOR WATER LINES:  
1 1/2" GI PIPE FOR FIXTURES  
2" GI PIPE FOR BRANCHES  
1 1/2" GI PIPE FOR MAINLINE SUPPLY
- ALL PLUMBING WORKS AND INSTALLATION SHALL BE STRICTLY SUPERVISED BY A DULY REGISTERED MASTER PLUMBER



**01 WATERLINE LAYOUT (PRODUCTION FACILITY BUILDING)**  
SCALE: 1:100 M

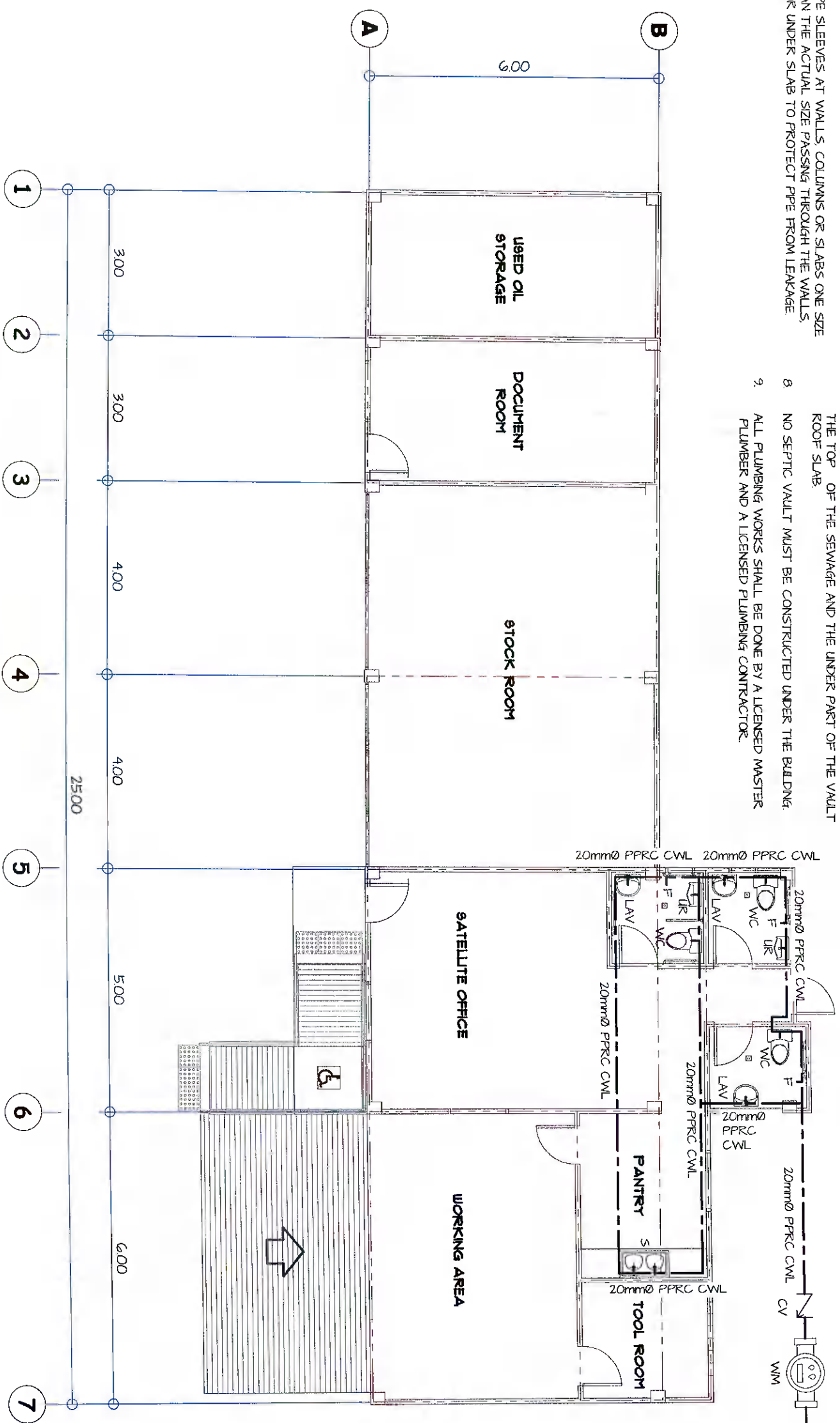
<p><b>GENERAL SANTOS CITY WATER DISTRICT</b> E. FERNANDEZ STREET, BRGY. LAGAO, GEN. SANTOS CITY ENGINEERING &amp; CONSTRUCTION DEPARTMENT PLANNING AND DESIGN DIVISION TEL. NO.: (083) 592-3824</p>		<p><b>ENGR. ROGELIO A. BESANA, JR.</b> REGISTERED MASTER PLUMBER</p>		<p><b>PROJECT AND LOCATION</b> CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP &amp; CHLORINE STORAGE AREA</p>		<p><b>CHECKED:</b> ENGR. DANILON HORLADOR, JR. PLANNING &amp; DEVELOPMENT OFFICE A</p>		<p><b>REVIEWED:</b> ENGR. MAYLA CELIA N. DANDAN DC - FPD</p>		<p><b>APPROVED:</b> ENGR. ROGELIO A. BESANA, JR. ASST. ENGINEER &amp; TECHNICAL SERVICES</p>		<p><b>SHEET CONTENTS</b> AS SHOWN</p>		<p><b>SHEET NO.</b> P-03</p>	
<p>REG. NO. 2672 PR. NO. 61872A</p>		<p>TIN. NO. 190-456-822 DATE: 07/12/2022</p>		<p>LOCATION: LOT 3-4, PURK. GOILINGAN BRGY. WAWU-PAY, GSC</p>		<p>ENGR. DANILON HORLADOR, JR. PLANNING &amp; DEVELOPMENT OFFICE A</p>		<p>ENGR. MAYLA CELIA N. DANDAN DC - FPD</p>		<p>ENGR. ROGELIO A. BESANA, JR. ASST. ENGINEER &amp; TECHNICAL SERVICES</p>		<p>DRAWN BY: DONG-AKE DATE: 09-2022</p>		<p>18 24</p>	

**PLUMBING NOTES:**

- 1 GRADES OF HORIZONTAL PIPING RUN ALL HORIZONTAL PIPINGS IN PERFECT ALIGNMENT AND AT A FORM GRADE OF NOT LESS THAN TWO PERCENT (2%)
- 2 CHANGE IN DIRECTION  
ALL CHANGE IN DIRECTION SHALL BE MADE BY APPROPRIATE USE OF FORTY FIVE DEGREES (45°) WYES LONG SWEEP QUARTER BEND, SIX-EIGHT OR SIXTEENTH BENDS WHEN THE CHANGE OF FLOW IS FROM HORIZONTAL TO VERTICAL, 1/8 BEND COMBINATION MAYBE USED ON VERTICAL STACKS AND SHORT QUARTER BENDS MAYBE USED ON WASTE LINE TEE AND CROSSES MAYBE USED IN VENT PIPES.
- 3 PROHIBITED FITTINGS  
NO DOUBLE HUB OR TEE BRANCH SHALL BE USED ON HORIZONTAL WASTE LINES. THE DRILLINGS AND TAPPINGS OF HOUSE DRAIN WASTE OR VENT PIPES AND USE OF SADDLE HUB AND BEND ARE PROHIBITED.
- 4 SLEEVES  
PROVIDE PIPE SLEEVES AT WALLS, COLUMNS OR SLABS ONE SIZE BIGGER THAN THE ACTUAL SIZE PASSING THROUGH THE WALLS, COLUMNS OR UNDER SLAB TO PROTECT PIPE FROM LEAKAGE.
- 5 PIPE CLEAN-OUTS  
PIPE CLEAN-OUTS ARE REQUIRED UNDER THE FOLLOWING CONDITIONS:  
a EVERY CHANGE IN HORIZONTAL DIRECTIONS EXCEEDING TWENTY-TWO AND ONE-HALF DEGREES (22 1/2°)
- 6 ONE AND ONE-HALF METERS (150 m) INSIDE THE PROPERTY LINE BEFORE THE HOUSE DRAINAGE CONNECTION
- 7 EVERY FIFTEEN METERS (1500 m) IN HORIZONTAL RUN OF PIPES
- 8 AT THE END OF ANY HORIZONTAL PIPE LINES
- 9 THE DIGESTION CHAMBER OF SEPTIC VAULT MUST BE WATERPROOFED.
- 10 NOT LESS THAN 300 mm OF AIR SPACE MUST BE LEFT BETWEEN THE TOP OF THE SEWAGE AND THE UNDER PART OF THE VAULT ROOF SLAB.
- 11 NO SEPTIC VAULT MUST BE CONSTRUCTED UNDER THE BUILDING.
- 12 ALL PLUMBING WORKS SHALL BE DONE BY A LICENSED MASTER PLUMBER AND A LICENSED PLUMBING CONTRACTOR.

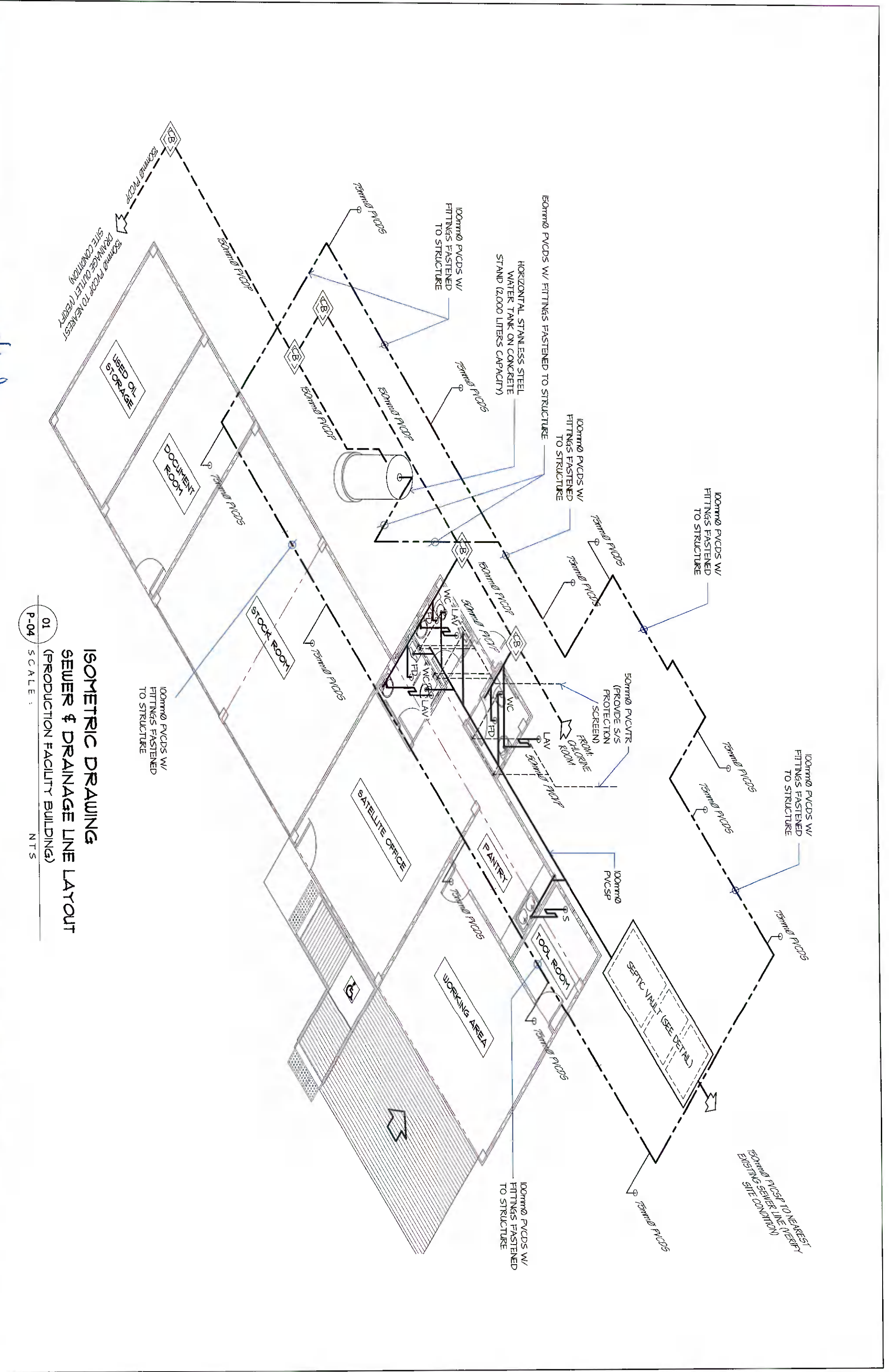
**SPECIFICATIONS:**

- ALL PLUMBING WORKS AND INSTALLATION SHALL CONFORM WITH THE LATEST EDITION OF NATIONAL PLUMBING CODE RULES AND REGULATION OF THE ENFORCING AUTHORITY CONCERNED AND CITY OF NOT LESS THAN 1% SLOPE AND SUPPORTED OF ANCHORED EVERY 300m INTERVALS
- ALL MATERIALS SHALL BE NEW AND APPROVED TYPES.
- a FOR SANITARY LINES  
2" PVC PIPES FOR VENTS AND FIXTURES  
4" PVC PIPES FOR WC, FD, CO
  - b FOR WATER LINES  
1/2" GAL PIPE FOR FIXTURES  
1" GAL PIPE FOR BRANCHES  
1 1/2" GAL PIPE FOR MAINLINE SUPPLY
- ALL PLUMBING WORKS AND INSTALLATION SHALL BE STRICTLY SUPERVISED BY A DULY REGISTERED MASTER PLUMBER



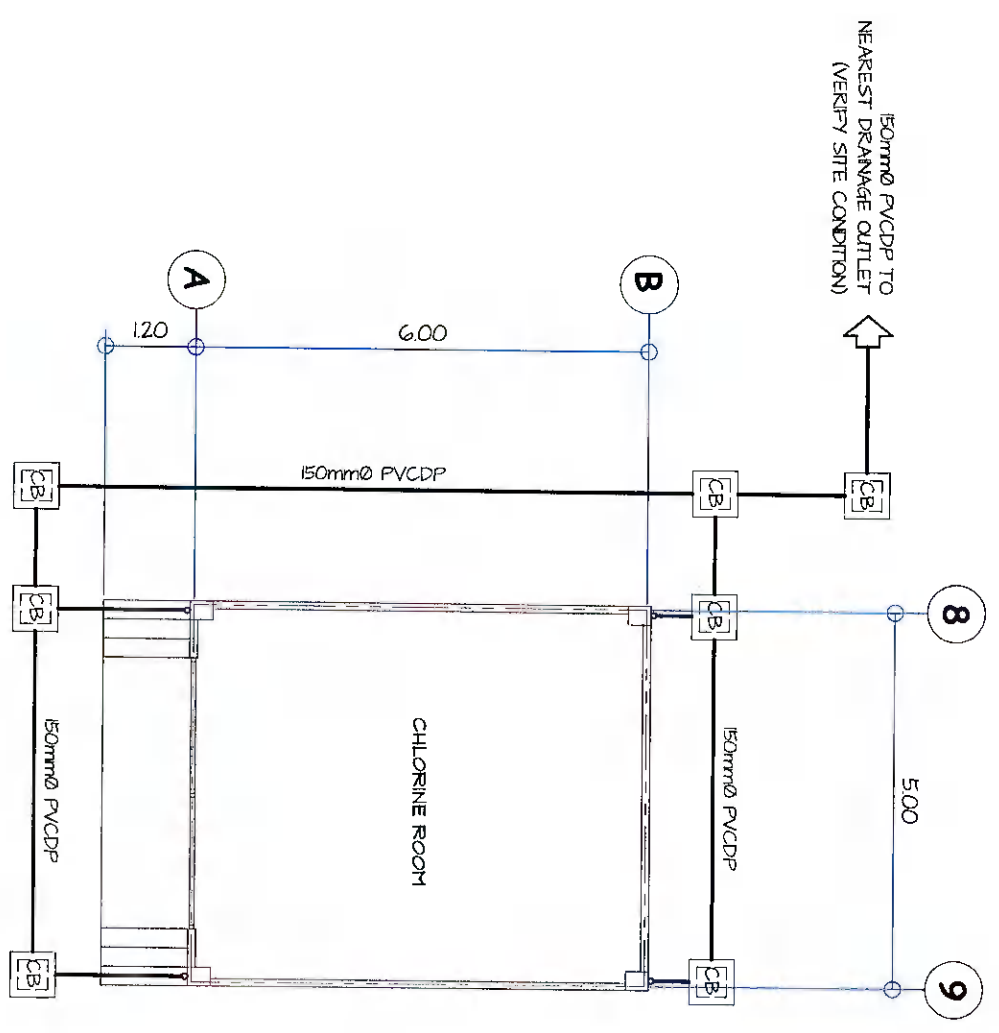
**01 WATERLINE LAYOUT (PRODUCTION FACILITY BUILDING)**  
SCALE: 1 : 100 M

<p><b>GENERAL SANTOS CITY WATER DISTRICT</b> E. FERNANDEZ STREET, BRGY. LAGAO, GEN. SANTOS CITY ENGINEERING &amp; CONSTRUCTION DEPARTMENT PLANNING AND DESIGN DIVISION TEL. NO.: (083) 582-3824</p>		<p><b>ENGR. ROGELIO A. BESANA, JR.</b> REGISTERED MASTER PLUMBER</p>		<p>PROJECT AND LOCATION CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP &amp; CHLORINE STORAGE AREA</p>		<p>CHECKED: <b>ENGR. DANILLO M. HORLADOR, JR.</b> PROJECT PLANNING &amp; DEVELOPMENT OFFICER A</p>		<p>REVIEWED: <b>ENGR. MAYA CELIA N. DANDAN</b> QC - FPD</p>		<p>APPROVED: <b>ENGR. ROGELIO A. BESANA, JR.</b> CONSTRUCTION &amp; TECHNICAL SERVICES</p>		<p>SHEET CONTENTS AS SHOWN</p>		<p>SHEET NO. P-03</p>	
REG. NO. 2072	TIN. NO. 180-455-822	PR. NO. 61872A	DATE: 07/12/2022	LOCATION: LOT 73-H, FURKOG COUNANG, BRGY. MABUHAY, GSG	ENGR. DANILLO M. HORLADOR, JR.	ENGR. MAYA CELIA N. DANDAN	ENGR. ROGELIO A. BESANA, JR.	DRAWN BY: DONG RAE	REV. NO.	DATE: 08-2022	18	24			

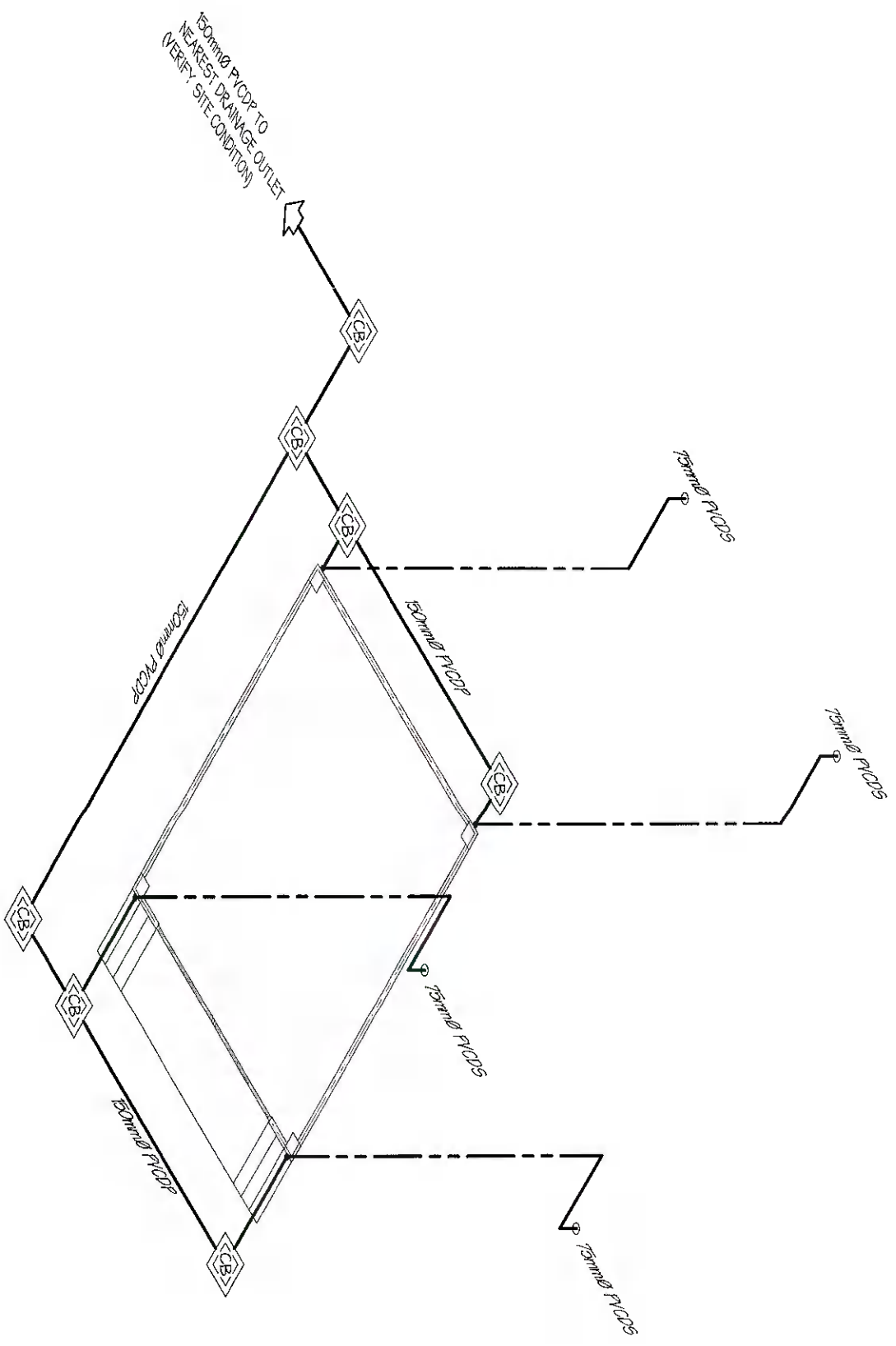


**ISOMETRIC DRAWING  
 SEWER & DRAINAGE LINE LAYOUT  
 (PRODUCTION FACILITY BUILDING)**  
 P-04 SCALE: N.T.S.

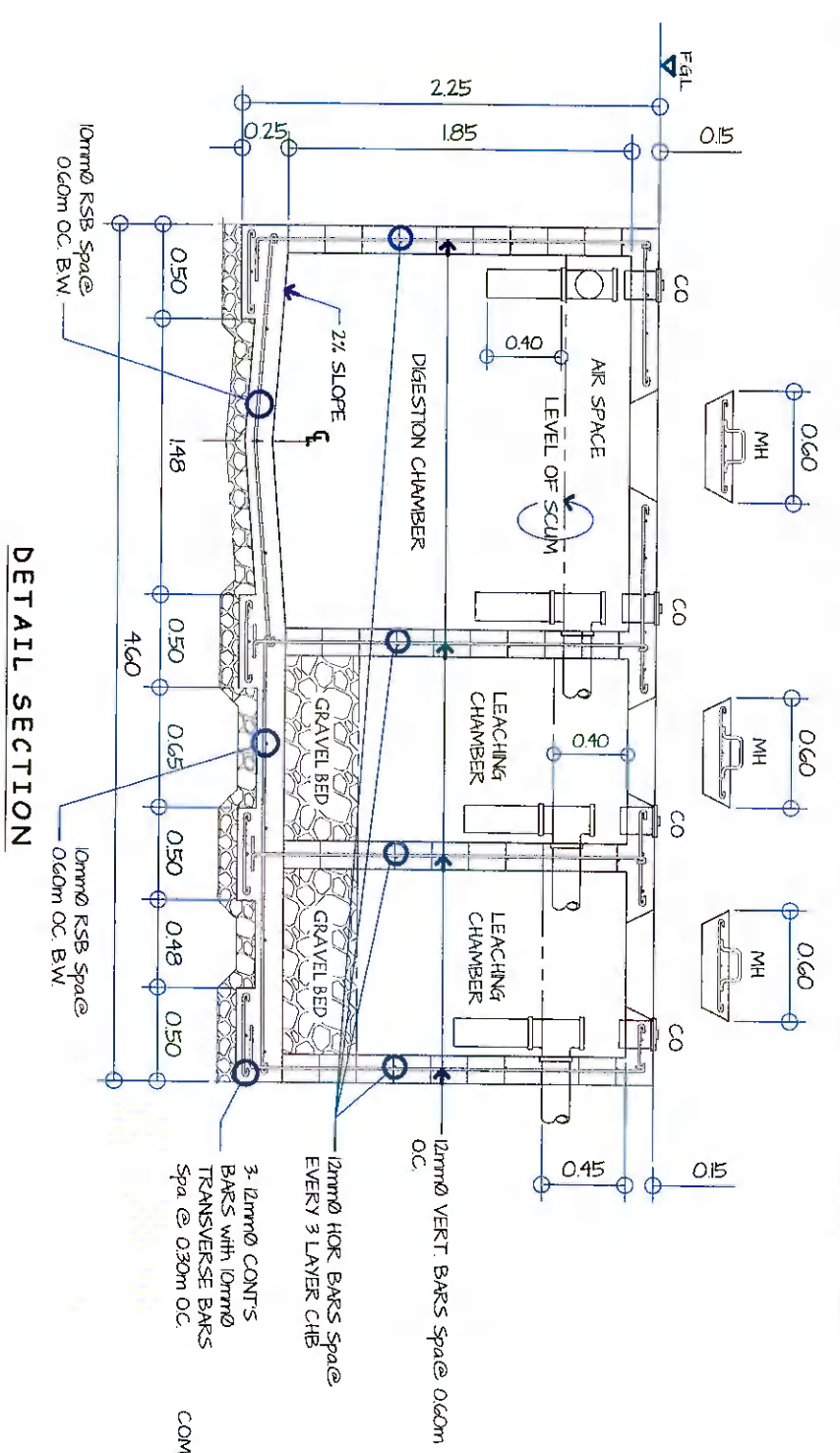
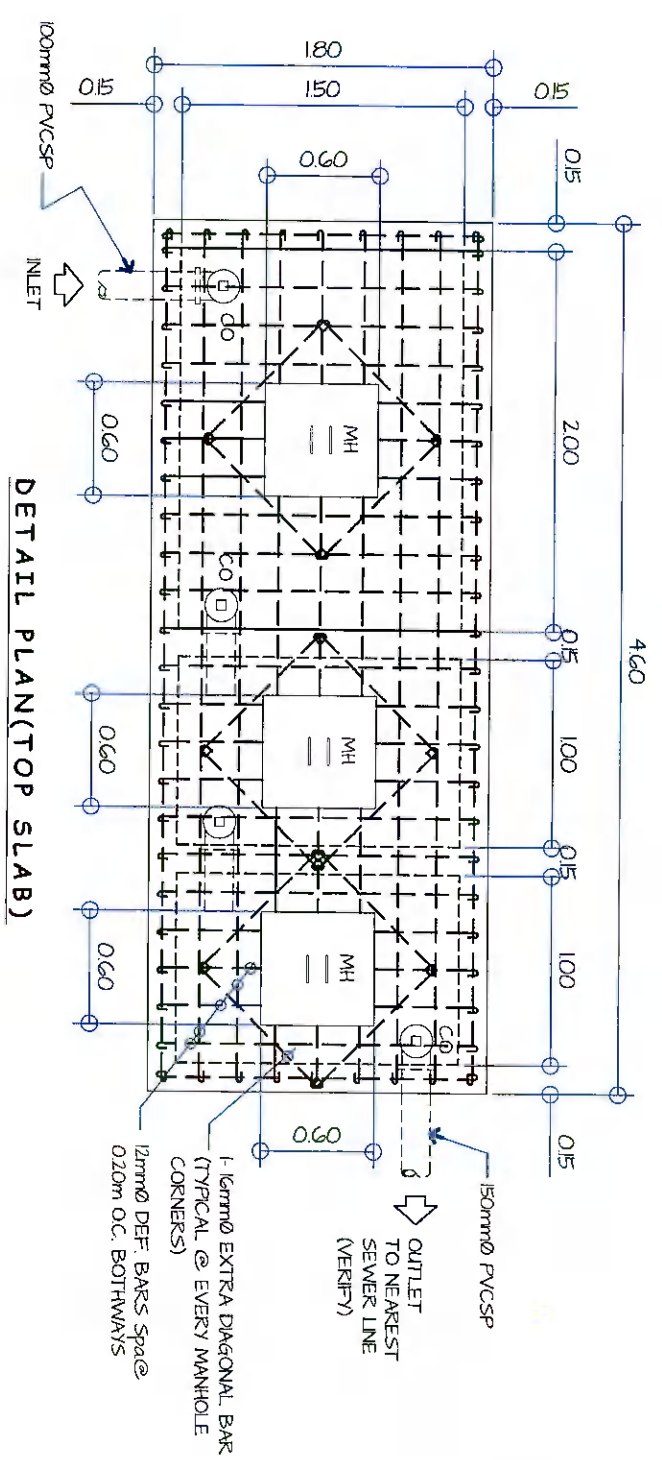
**01 SEWERAGE & DRAINAGE LAYOUT (CHLORINE ROOM)**  
 SCALE: 1 : 100 M



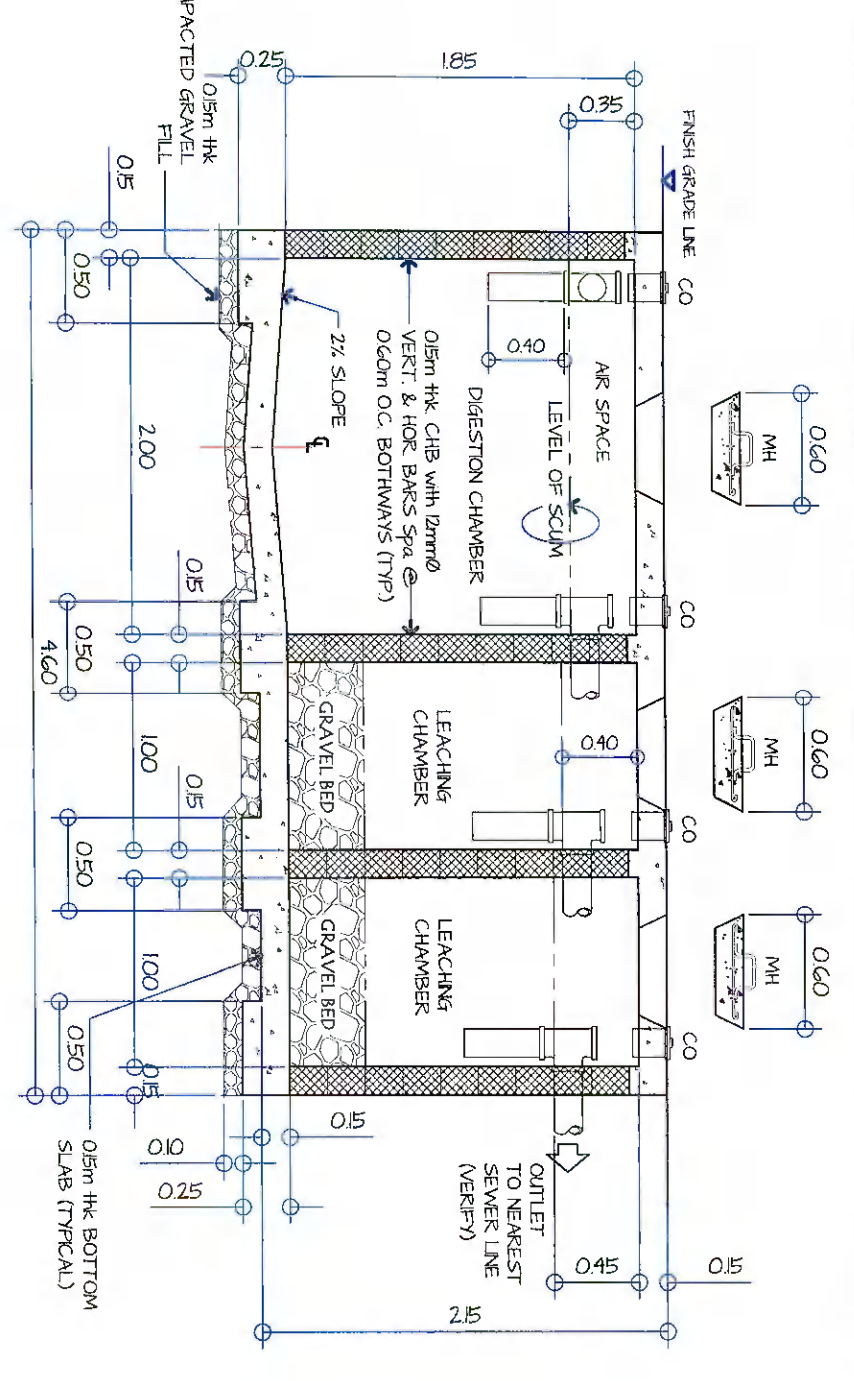
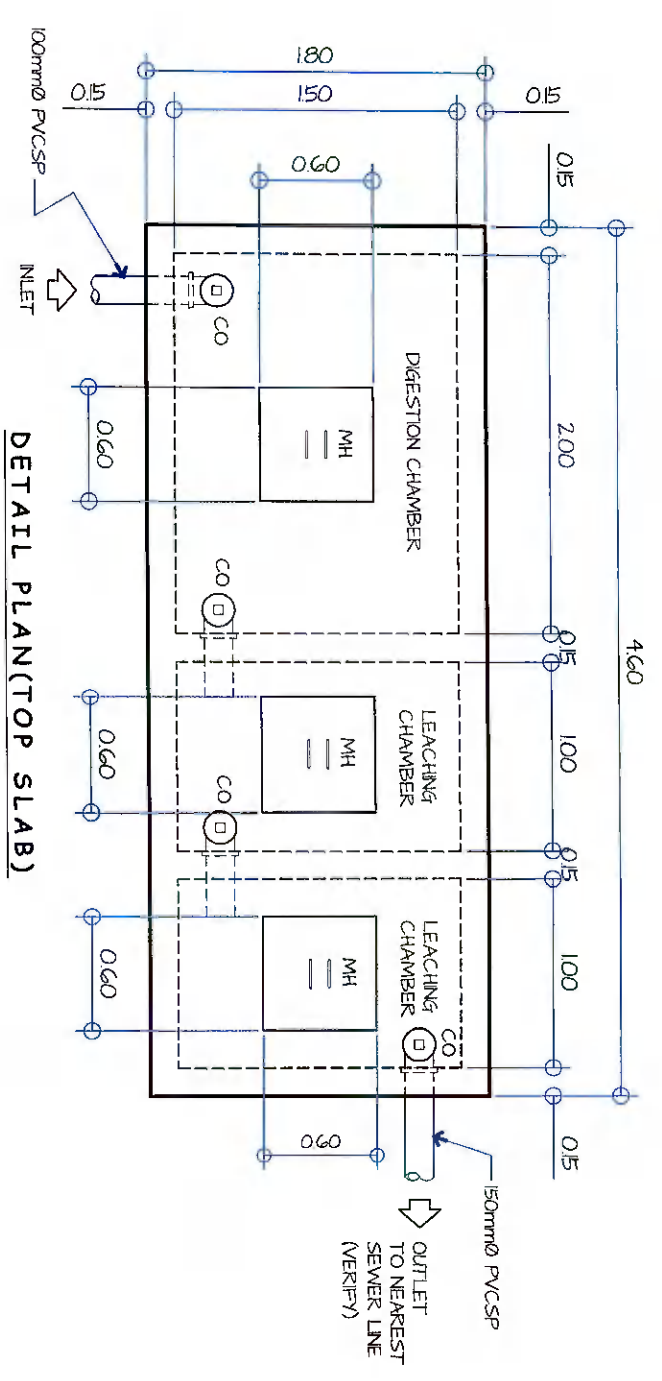
**02 ISOMETRIC DRAWING SEWER & DRAINAGE LINE LAYOUT (CHLORINE ROOM)**  
 SCALE: N.T.S.



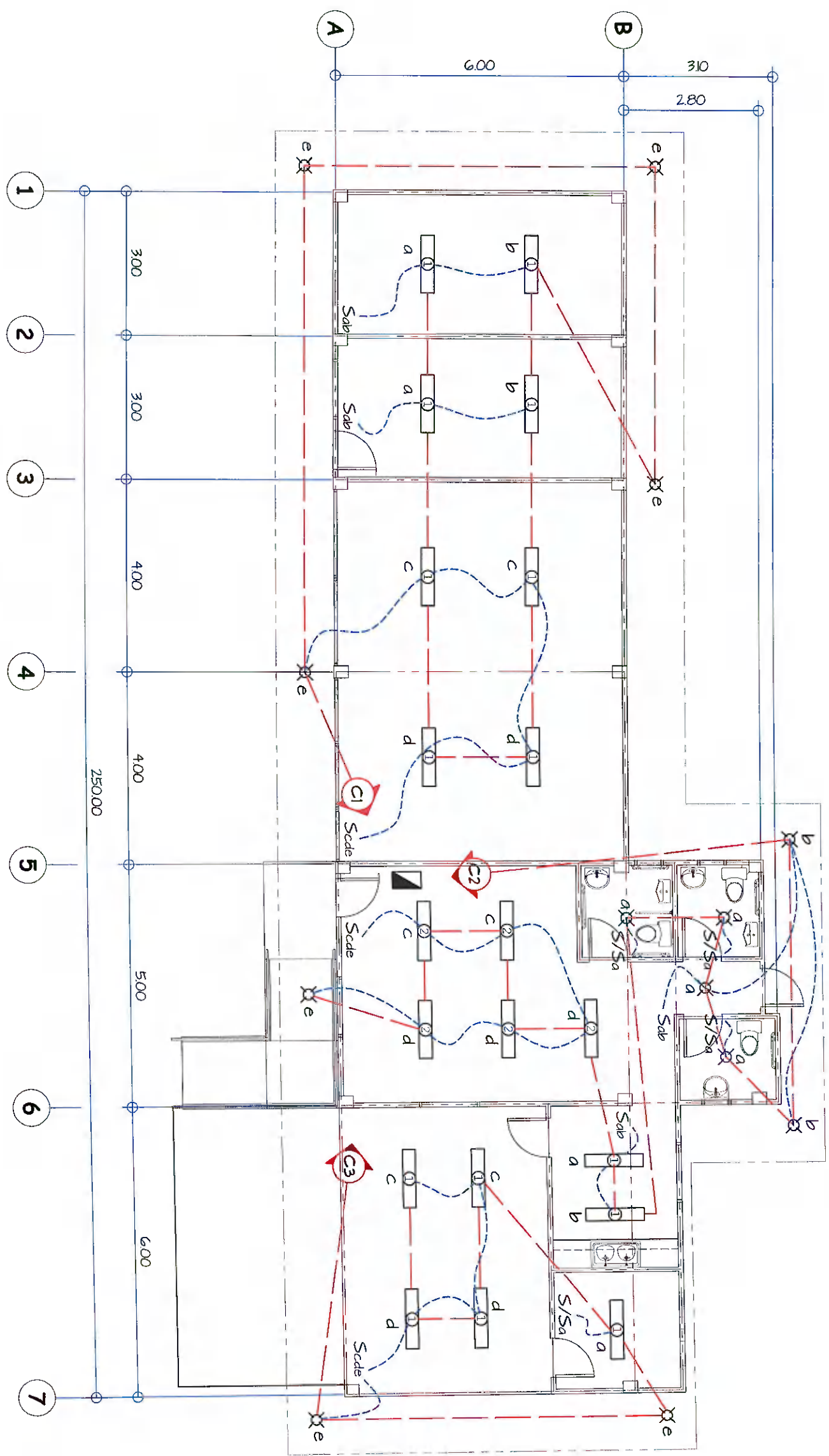
**01** **DETAIL OF SEPTIC VAULT (W/ REINFORCING BARS)**  
 SCALE: 1 : 40 M



**02** **DETAIL OF SEPTIC VAULT**  
 SCALE: 1 : 40 M



LEGEND	
	CEILING LIGHT OUTLET
	CEILING LIGHT OUTLET
	CEILING LIGHT OUTLET
	DUPLEX CONVENIENCE OUTLET, GROUNDING TYPE 10 AMPERS, 250 VOLT W/ MODERN PLATE COVER
	PANEL BOARD
	ELECTRIC SERVICE METER
	GROUNDING SYSTEM
	ELECTRIC SERVICE ENTRANCE
	RACEWAY CONDUIT CONCEALED UNDER FLOOR
	RACEWAY CONDUIT CONCEALED IN CEILING
	HOMERUN DIRECT TO PANEL BOARD
	ONE GANG DEVICE SWITCH
	TWO GANG DEVICE SWITCH
	THREE GANG DEVICE SWITCH
	RACEWAY CONDUIT CONCEALED IN CEILING
	HOMERUN DIRECT TO PANEL BOARD
	ONE GANG DEVICE SWITCH
	TWO GANG DEVICE SWITCH
	THREE GANG DEVICE SWITCH



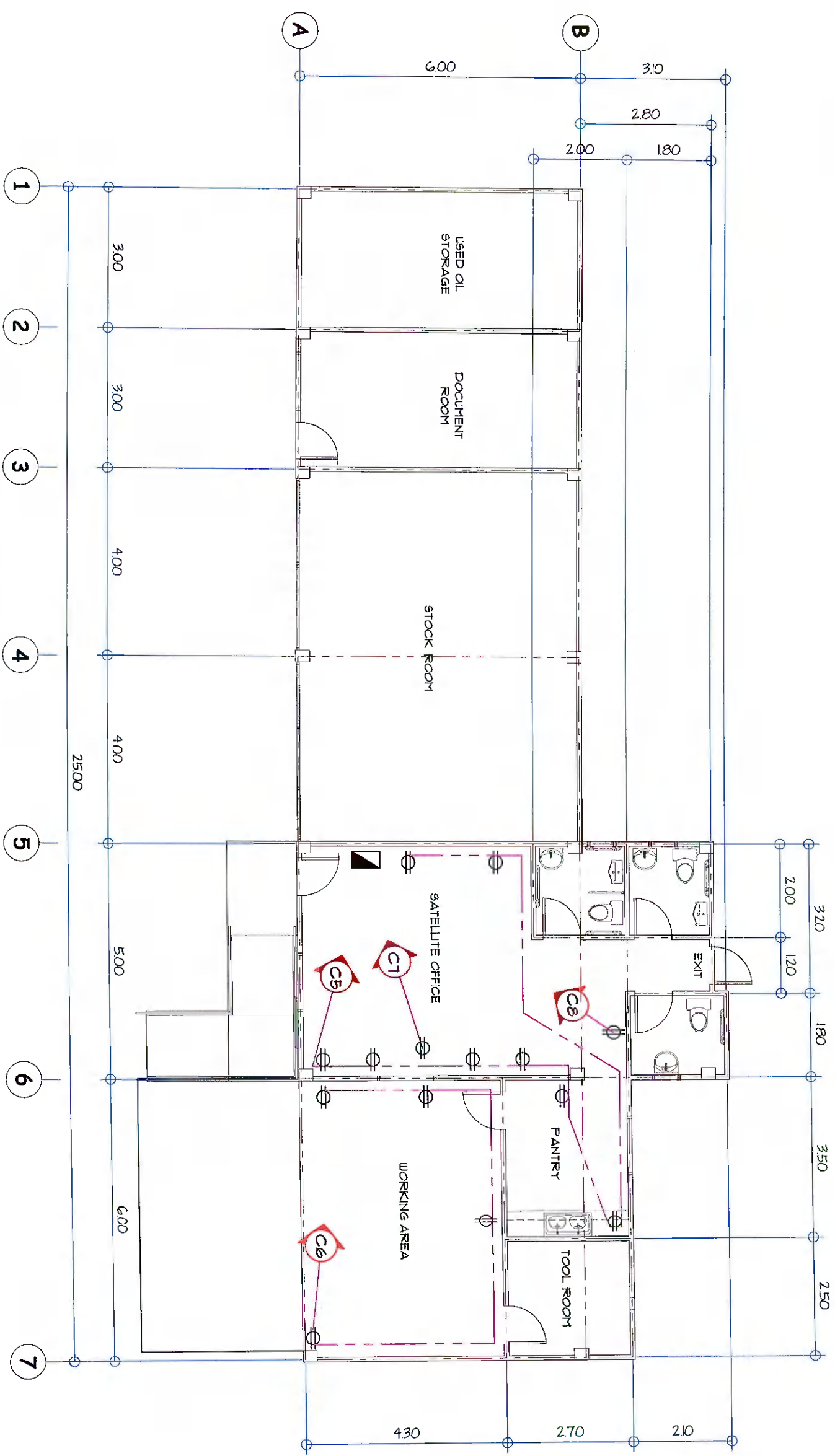
01 LIGHTING LAYOUT (PRODUCTION FACILITY BUILDING)  
 E-01 SCALE: 1 : 100 M

		<b>GENERAL SANTOS CITY WATER DISTRICT</b> E. FERNANDEZ STREET BRGY. LASAO, GEN. SANTOS CITY ENGINEERING & CONSTRUCTION DEPARTMENT PLANNING AND DESIGN DIVISION TEL. NO. : (083) 592-3824		PROFESSIONAL ELECTRICAL ENGINEER REG. NO. 2672 TIN. NO. (SO-45)-622 PTR. NO. 01872A DATE: 01/02/2022		PROJECT AND LOCATION CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP & CHLORINE STORAGE AREA LOCATION: LOT 73-H, FURUK GALINGAN BRGY. VALENTIN, GSCC		CHECKED: 		REVIEWED: 		APPROVED: 		SHEET CONTENTS AS SHOWN		SHEET NO. E-01	
						PROJECT PLANNING & DEVELOPMENT OFFICER A OC - FPD		ENGR. DANILLO N. HORLADOR, JR. ENGR. TRISHA CELIA N. DANDAN		ENGR. ROGELIO A. BESANA, JR. AGM. OF ENGINEERING & TECHNICAL SERVICES		DRAWN BY: DONGKAE DATE: NOV. 2022		22		24	

# SCHEDULE OF LIGHTING FIXTURES AND LAMPS

SYMBOLS	DESCRIPTION	INSTALLATION/MOUNTING
①	ONE (1) - 36W, 230V, 60HZ AC, FLUORESCENT LIGHTING FIXTURE, BOX TYPE	SURFACED CEILING MOUNTING
②	TWO (2) - 36W, 230V, 60HZ AC, FLUORESCENT LIGHTING FIXTURE, BOX TYPE	SURFACED CEILING MOUNTING
⊗	ONE (1) - 5W, 230V, 6' DIA. LED DOWNLIGHT, INDOOR CEILING PN LIGHT	RECESSED TYPE

**NOTE:** ALL FLUORESCENT LIGHTING FIXTURES SHALL BE EQUIPPED WITH A HIGH POWER FACTOR, PRE-HEAT WITH STARTER AND THERMALLY PROTECTED BALLAST, COMPLETE WITH ALL NECESSARY ACCESSORIES, WIRED AND READY FOR USE.



**01 POWER LAYOUT (PRODUCTION FACILITY BUILDING)**  
**E-02 SCALE: 1 : 100 M**

**GENERAL SANTOS CITY WATER DISTRICT**  
 E. FERNANDEZ STREET, BAGO, LAGA O, GEN. SANTOS CITY  
 ENGINEERING & CONSTRUCTION DEPARTMENT  
 PLANNING AND DESIGN DIVISION  
 TEL. NO.: (083) 582-3824

**PROJECT AND LOCATION:**  
 CONSTRUCTION OF PRODUCTION BUILDING, WORKING SHOP & CHLORINE STORAGE AREA  
 LOCATION: LOT 737-H, PUROK GONGGANGAN BEGY. MAB. JAWY, GSC

---

**CHECKED:**  
  
 ENGR. DANILLO M. HORLADOR, JR.  
 PROJECT PLANNING & DEVELOPMENT OFFICER A

**REVIEWED:**  
  
 ENGR. YVETA CELIA N. DANDAN  
 CO.-PRD

**APPROVED:**  
  
 ENGR. ROGELIO A. BESANA, JR.  
 ASM, OPERATIONS & TECHNICAL SERVICES

---

**PROFESSIONAL ELECTRICAL ENGINEER**  
 REG. NO. 2672 TIN. NO. 90-485-622  
 PIR. NO. 61872A DATE: 01/21/2022

**SHEET CONTENTS**

AS SHOWN	E-02
DRAWN BY: DONGSABE	23
REV. NO.	24
DATE: Dec. 2022	



# SCHEDULE OF LOADS:

CIRCUIT No.	PARTICULARS	NO. OF OUTLET	WATTS	PHASE	VOLTS	AMPERE	CB RATING	WIRE SIZE AND CONDUIT	TOTAL	
									WATTS	AMPERE
1	CEILING LIGHT OUTLETS (FLUORESCENT) - 8	12	1200	1	230	5.22	15 AT	2-35mm <sup>2</sup> THWN 1-20mm <sup>2</sup> TW(GND) IN 15mm <sup>2</sup> CONDUIT		
2	CEILING LIGHT OUTLETS (LED LAMP) - 4									
2	CEILING LIGHT OUTLETS (FLUORESCENT) - 7	14	1400	1	230	6.09	15 AT	2-35mm <sup>2</sup> THWN 1-20mm <sup>2</sup> TW(GND) IN 15mm <sup>2</sup> CONDUIT		
3	CEILING LIGHT OUTLETS (FLUORESCENT) - 5	7	700	1	230	3.04	15 AT	2-35mm <sup>2</sup> THWN 1-20mm <sup>2</sup> TW(GND) IN 15mm <sup>2</sup> CONDUIT		
3	CEILING LIGHT OUTLETS (LED LAMP) - 2									
4	CEILING LIGHT OUTLETS (FLUORESCENT) - 2	4	400	1	230	1.74	15 AT	2-35mm <sup>2</sup> THWN 1-20mm <sup>2</sup> TW(GND) IN 15mm <sup>2</sup> CONDUIT		
5	CONVENIENCE OUTLET	8	2880	1	230	12.52	20 AT	2-55mm <sup>2</sup> THWN 1-20mm <sup>2</sup> TW(GND) IN 15mm <sup>2</sup> CONDUIT		
6	CONVENIENCE OUTLET	4	1440	1	230	6.26	20 AT	2-55mm <sup>2</sup> THWN 1-20mm <sup>2</sup> TW(GND) IN 15mm <sup>2</sup> CONDUIT		
7	ACU 2 hp (Magnetic Switch w/ Built-in 3-Prong Outlet	1	3,680	1	230	16.00	20 AT	2-55mm <sup>2</sup> THWN 1-20mm <sup>2</sup> TW(GND) IN 15mm <sup>2</sup> CONDUIT		
8	ACU 1 hp (Magnetic Switch w/ Built-in 3-Prong Outlet	1	1,840	1	230	8.00	20 AT	2-55mm <sup>2</sup> THWN 1-20mm <sup>2</sup> TW(GND) IN 15mm <sup>2</sup> CONDUIT		
9	SPARE	1	2,000	1	230	8.70	30 AT	2-55mm <sup>2</sup> THWN 1-20mm <sup>2</sup> TW(GND) IN 15mm <sup>2</sup> CONDUIT		
									<b>15,540</b>	<b>67.57</b>

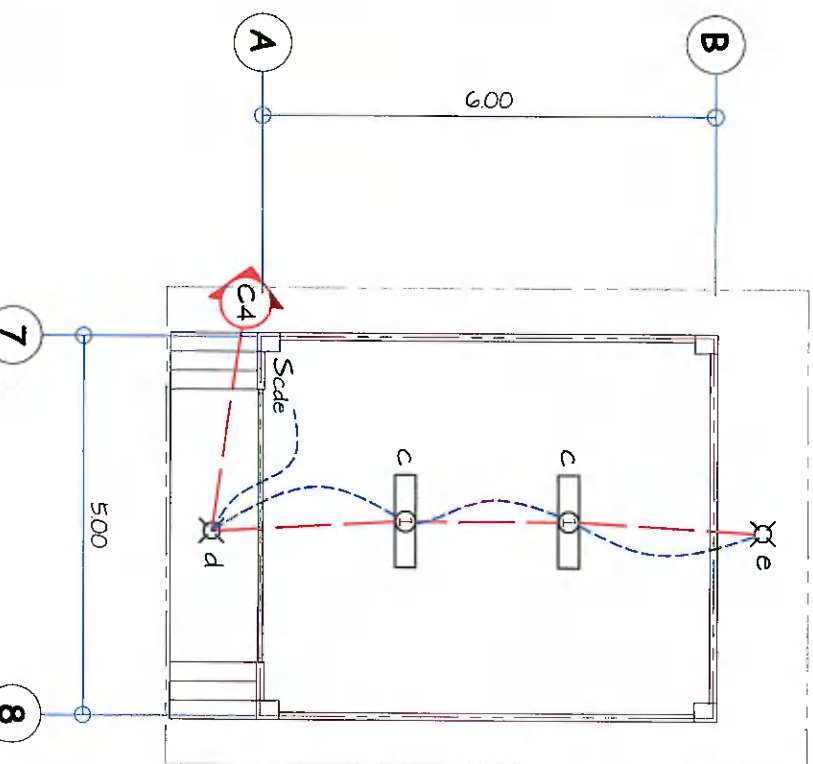
Total Current = 67.57 A  
Main = 125 Amps, 1φ, 230V

KVA = 67.57 x 230 / 1000  
KVA = 15.54

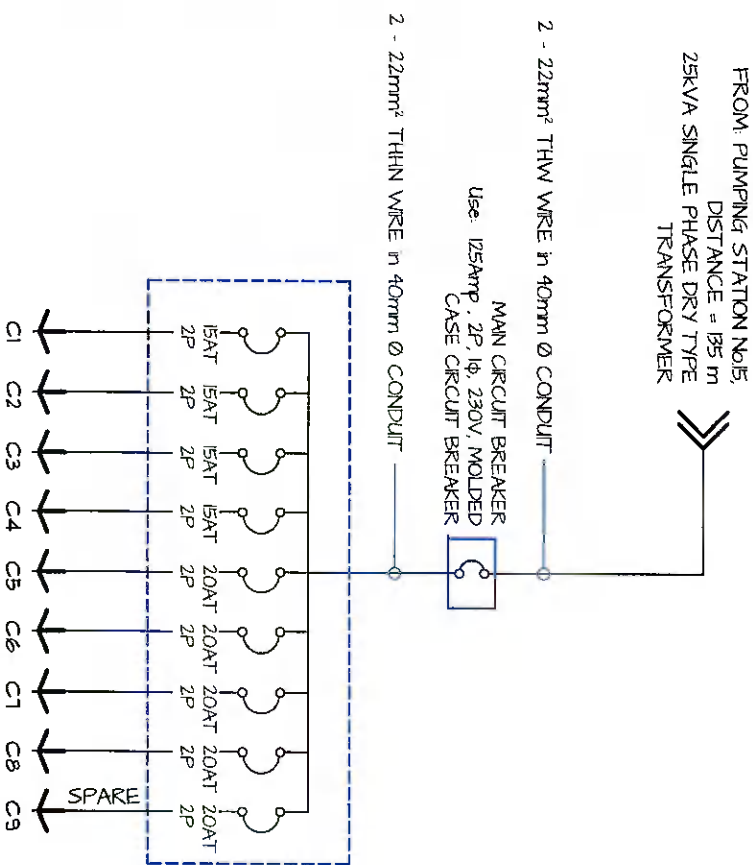
USE: 25 KVA SINGLE PHASE DRY TYPE TRANSFORMER,  
2 - 22mm<sup>2</sup> THWN wire 1 - 80mm<sup>2</sup> TW (GND) WIRE  
in 40mm<sup>2</sup> CONDUIT  
MAIN: 125 Amp, 1φ, 230V

## GENERAL NOTES:

1. ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, EXISTING APPLICABLE ORDINANCES, RULES AND REGULATIONS OF THE LOCAL GOVERNMENT AND WITH THE REQUIREMENTS OF THE LOCAL POWER COMPANY.
2. THE TYPE OF SERVICE POWER SUPPLY TO BE USED SHALL BE SINGLE-PHASE, 2 WIRE, 230V, 60-HERTZ, AC
3. THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOCATION OF SERVICE ENTRANCE FOR CONNECTION TO THE POWER COMPANY SERVICE POINT.
4. UNLESS OTHERWISE SPECIFIED, THE MINIMUM SIZES OF WIRE AND ELECTRICAL PVC PIPE TO BE USED SHALL BE 3.5mm<sup>2</sup> THIN AND 15mm NOMINAL DIAMETER, RESPECTIVELY. LIKEWISE ALL ELECTRICAL WIRES SHALL BE COLOR-CODED.
5. ALL LIGHTING CIRCUIT HOME RUNS AND CONVENIENCE OUTLETS SHALL BE WIRED WITH NOT LESS THAN 3.5 mm<sup>2</sup> IN SIZE.
6. WHEREVER REQUIRED AND NECESSARY, FULL OR JUNCTION BOXES SHALL BE INSTALLED AT CONVENIENT AND INCONSPICUOUS LOCATION, ALTHOUGH SUCH BOXES ARE NOT SHOWN ON THE PLANNING MENTIONED IN THE SPECIFICATIONS.
7. ALL NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE.
8. ALL MATERIALS TO BE USED SHALL BE BRAND NEW AND OF THE APPROVED TYPE FOR LOCATION AND PURPOSE.
9. STANDARD TYPE OF ACCESSORIES, SPlicing DEVICES, TERMINATIONS AND OTHER APPURTENANCES FOR THE ENTIRE ELECTRICAL INSTALLATION SHALL BE USED.
10. ALL WALL OUTLETS SHALL BE INSTALLED AT THE FOLLOWING HEIGHTS ABOVE THE FINISHED FLOOR LEVEL, UNLESS NOTED IN THE PLAN:
  - a) WALL SWITCHES @ 1300mm
  - b) WALL CONVENIENCE OUTLETS @ 300 mm
11. ALL ELECTRICAL WORKS SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY REGISTERED ELECTRICAL ENGINEER.



01 LIGHTING LAYOUT (CHLORINE ROOM)  
SCALE: 1:100 M



02 POWER SYSTEM SINGLE LINE DIAGRAM  
SCALE: 1:100 M

### MOUNTING HEIGHTS:

- CONVENIENCE OUTLETS: 300mm FROM BOTTOM OF OUTLET TO FINISH FLOOR LEVEL
- WALL SWITCHES: 1300mm FROM BOTTOM OF SWITCH TO FINISH FLOOR LEVEL
- PANEL BOARD: 1890mm FROM TOP OF PANEL TO FINISH FLOOR LEVEL
- KLOWATT HOUR METER: 1890mm FROM CENTER OF DEVICES TO FINISH GRADE LEVEL