

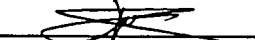
REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE XII
SOUTH COTABATO 2nd ENGINEERING DISTRICT
ALUNAN AVE., KORONADAL CITY, SOUTH COTABATO

DETAILED ENGINEERING DESIGN PLAN FOR

**CONSTRUCTION OF THE DBM 12
MULTI-PURPOSE COVERED AREA,
DBM COMPOUND BRGY. MORALES,
KORONADAL CITY, SOUTH COTABATO**


APPROPRIATION: Php2,000,000.00

SUBMITTED:


ANGEL A. BURGOS, JR.
ENGINEER III
CHIEF - PLANNING AND DESIGN SECTION

DATE: OCTOBER 06, 2021

RECOMMENDED:


BENEDICTOS S. AMIDO, MPA
ASSY. DISTRICT ENGINEER

DATE: OCTOBER 06, 2021

APPROVED:


HADJI KHALIL A. SULTAN, MPA
DISTRICT ENGINEER

DATE: OCTOBER 06, 2021

CONCURRED:



HON. AKMAD J. USMAN
REGIONAL DIRECTOR
DEPARTMENT OF BUDGET AND MANAGEMENT
REGION XII

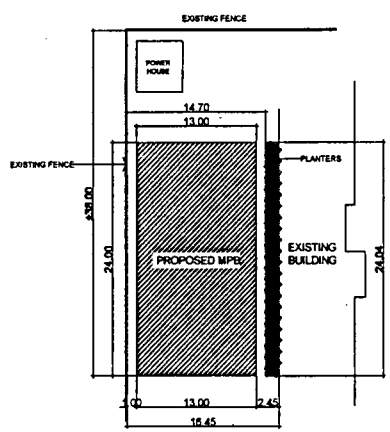
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		ELECTRICAL
		MECHANICAL

SCOPE OF WORKS:

- Construction of 4-spans, 6.0m x 13.0m Mini Gym Type-1
- Construction of 10 units Concrete Pedestal
- Structural Concrete Class "A": incl. pedestals, footings and restoration of affected existing flooring
- Fabrication / installation of 5 units three-hinged Arc and 4-spans of roof and roof framing
- Three-hinged Arch and Roof framing shall be painted with metal primer & silver aluminum paint
- Roof eaves shall be 1.00m.
- Roofing:
 - 0.40mm thk Blue Twin Hi-Rib Long Span Roofing (Pre-painted)
 - 0.40mm thk Blue Bended Panel Ridge Roll (Pre-painted)
 - 0.40mm thk Blue Bended Panel End Flashing (Pre-painted)
 - 0.40mm thk Blue Bended Panel Gutter (Pre-painted)
- With Painting Works on 10 units concrete pedestal (ORANGE)
- With Downspout and Catch Basin (10 SETS)

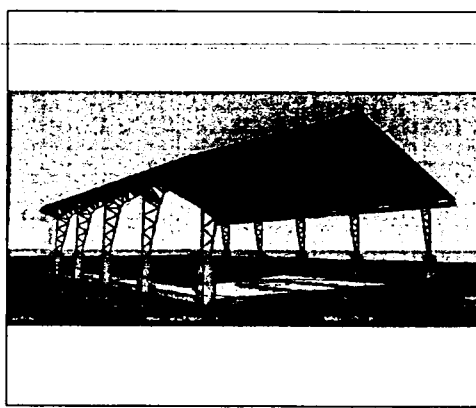
SUMMARY OF QUANTITIES:

ITEM NO.	DESCRIPTION	UNIT	QTY.	REMARKS
PART B OTHER GENERAL REQUIREMENTS				
B-3	Permits and Clearances	1s	1.00	
B-4	Project Billboard / Signboard	each	1.00	
B-7(2)	Occupational Safety and Health Program	1s	1.00	
B-9	Mobilization/Demobilization (Project Component ID - Description)	1s	1.00	
PART III CIVIL, MECHANICAL, ELECTRICAL AND SANITARY PLUMBING WORKS				
PART A EARTHWORKS				
803(1)a	Structure Excavation (Common Soil)	m ³	50.14	
804(1)a	Embankment from Structure Excavation	m ³	37.77	
804(4)	Gravel Fill	m ³	3.70	
PART B PLAIN AND REINFORCED CONCRETE WORKS				
900(1)c1	Structural Concrete (Class A)	m ³	20.00	
902(1)a	Reinforcing Steel (Deformed, Grade 40)	kg	1365.00	
903(1)	Formworks and Falseworks	1s	1.00	
PART C PAINTING AND OTHER CIVIL WORKS				
1013(2)a	Fabricated Metal Roofing Accessory (Ridge Roll)	m	26.40	
1013(2)b	Fabricated Metal Roofing Accessory (Flashing)	m	94.20	
1013(2)c	Fabricated Metal Roofing Accessory (Gutters)	m	52.80	
1014(1)a	Pre-painted Metal Sheets (Rib Type)	m ²	452.00	
1027(1)	Cement Plaster Finish	m ²	49.00	
1032(1)a	Painting Works (Masonry/Concrete)	m ²	42.60	
1045(2)a	Non Load Bearing (including Reinforcing Steel)-100mm	m ²	16.00	
1047(1)	Structural Steel	1s	1.00	
1048(1)	Structural Steel	1s	1.00	
1602(4)	PVC Polyvinyl Chloride Pipe	1s	1.00	

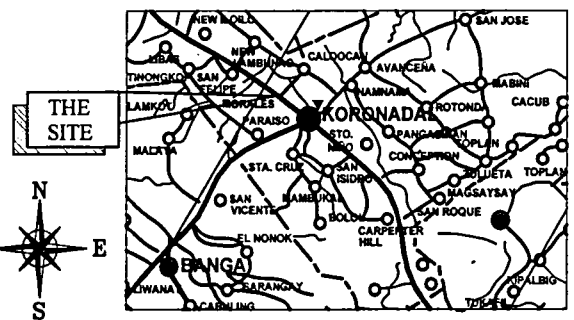


NOTE: VERIFY ACTUAL CONDITION

SITUATIONAL PLAN
SCALE: 1:100



PERSPECTIVE
SCALE: AS SHOWN



LOCATION MAP
SCALE: 1:50,000

<p>DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS SOUTH COTABATO 2nd DISTRICT ENGINEERING OFFICE ALABANG, KOROONADAL, CITY, SOUTH COTABATO</p>	<p>PROJECT NAME AND LOCATION: CONSTRUCTION OF THE MINI GYM IN THE THUNDER COVERED AREA, DISE COMPOUND BRGY. BOKALAS, KOROONADAL, CITY, SOUTH COTABATO APPROPRIATION: Pnp 2,848,848.00</p>	<p>SHEET CONTAINS: SITUATIONAL PLAN LOCATION MAP SUMMARY OF QUANTITIES SCOPE OF WORKS PERSPECTIVE VIEW</p>	<p>DRAWN BY: COLLEEN Y. SORIANO CHECKED BY: [Signature]</p>	<p>DESIGNED BY: [Signature] DATE: OCTOBER 8, 2021</p>	<p>RECOMMENDED BY: [Signature] DATE: OCTOBER 8, 2021</p>	<p>APPROVED BY: [Signature] DATE: OCTOBER 8, 2021</p>	<p>CONCURRED BY: [Signature] DATE: OCTOBER 8, 2021</p>	<p>REVISIONS: G 1/2 2 10</p>
	<p>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS SOUTH COTABATO 2nd DISTRICT ENGINEERING OFFICE ALABANG, KOROONADAL, CITY, SOUTH COTABATO</p>							

CONSTRUCTION OF (Name of Project and Location)






CONTRACTOR
 DATE STARTED
 CONTRACT COMPLETION DATE
 CONTRACT COST
 IMPLEMENTING OFFICE / CONTACT No.
 SOURCES OF FUND

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 TEXT 2520 or call (02)165-02 for any concern on this project
www.dpw.gov.ph




TRAIN
 THE ROAD TO PROGRESS



1220mm
 2440mm

PROJECT BILLBOARD

Building Construction Safety Signage	Dimension (Width X Height, feet)	Materials
Hard Hat Area 	3 x 2	a) Tarpean b) 1/2" Plywood (Back Frame) c) Miscellaneous (Nails, Tie Wires as hangers, etc.)
Danger Deep Excavation 	3 x 2	
Beware Falling Debris 	3 x 2	
Construction Entrance 	3 x 2	
Construction Exit 	3 x 2	

SAFETY SIGNAGES

Building Construction Safety Signage	Dimension (Width X Height, feet)	Materials
Project PPE Storage 	4 x 2	a) Tarpean b) 1/2" Plywood (Back Frame) c) Miscellaneous (Nails, Tie Wires as hangers, etc.)
Safety PPE (PPE) 	4 x 4	
Safety PPE (PPE) 	3 x 2	

Building Construction Safety Signage	Dimension (Width x Height, feet)	Materials
Authorized Personnel Only 	3 x 2	a) Tarpean b) 1/2" Plywood (Back Frame) c) Miscellaneous (Nails, Tie Wires as hangers, etc.)
Temporary Materials Stacking Area 	3 x 2	

SAFETY SIGNAGES



REPUBLIC OF THE PHILIPPINES
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 REGIONAL OFFICE 10
 SOUTH COTABATO 3RD DISTRICT
 ENGINEERING OFFICE
 ALABANG, KOTABATO CITY, SOUTH COTABATO

PROJECT NAME AND LOCATION
 CONSTRUCTION OF THE DM 12
 MULTIPURPOSE COVERED AREA
 WITH COMPASS SHED SIGNALS
 KOTABATO CITY, SOUTH COTABATO
 APPROPRIATORS: Piy L. LARIBAN

SHEET CONTENTS
 PROJECT BILLBOARD
 SAFETY SIGNAGES

DRAFTED
 COLLEEN VARGAS - MANGAT
 CHECKED
 DATE: OCTOBER 19, 2021

DESIGNED
 APPROVED
 DATE: OCTOBER 19, 2021

RECORDED
 APPROVED
 DATE: OCTOBER 19, 2021

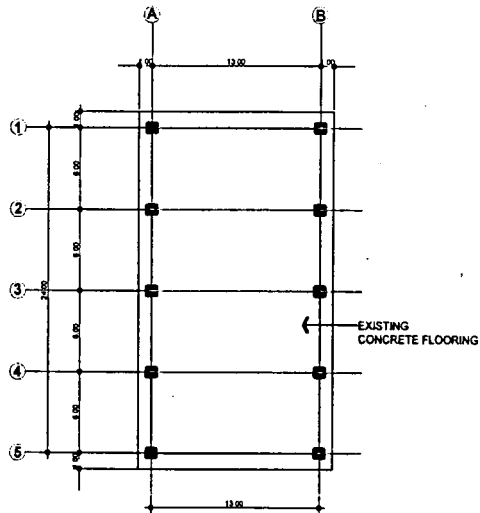
APPROVED
 DATE: OCTOBER 19, 2021

APPROVED
 DATE: OCTOBER 19, 2021

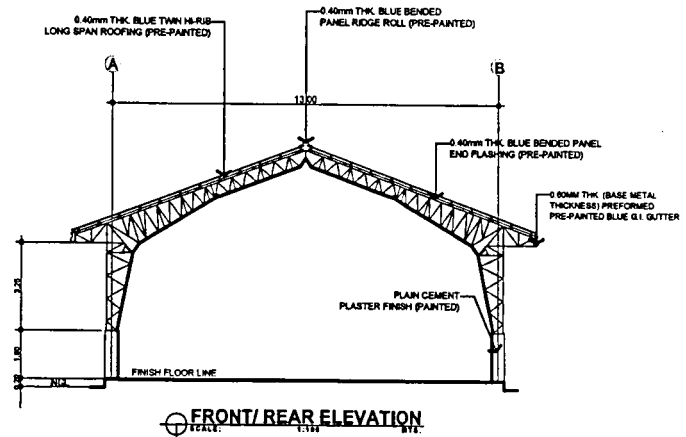
REV. NO.
 SHEET NO.

2/2

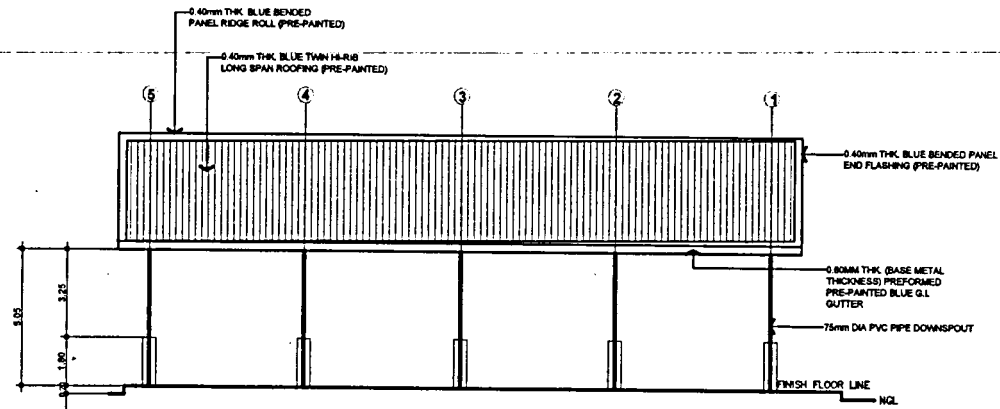
3/10



FLOOR PLAN
SCALE: 1:500



FRONT/REAR ELEVATION
SCALE: 1:100



TYPICAL SIDE ELEVATION
SCALE: 1:100

NOTE:
ALL STEEL STRUCTURES SHALL BE PAINTED WITH METAL PRIMER & SILVER ALUMINUM PAINT.



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE 10
SOUTH COTABATO DISTRICT
ENGINEERING OFFICE
ALAMIGON, BANGALAN, SOUTH COTABATO

PROJECT NAME AND LOCATION

CONSTRUCTION OF THE 12
MILL VULNERABLE COVERED AREA,
ONE COMPOUND BRIDGE, BANGALAN,
BANGALAN, SOUTH COTABATO
APPROPRIATION: P10,000,000.00

DRAWING CONTENTS

FLOOR PLAN
FRONT/REAR ELEVATION
TYPICAL SIDE ELEVATION

DRAWN BY

COLLEEN VITO S. BACIGALUA
ENR 1011
ENR 1011

CHECKED BY

ANGEL A. MADRUGA JR.
ENR 1011
ENR 1011

DESIGNED BY

RENEZITO S. BACIGALUA
ENR 1011
ENR 1011

APPROVED BY

MARCELO M. BACIGALUA
ENR 1011
ENR 1011

CONTRACT NO.

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGION 10

PROJECT NO.

A
111

DRAWING NO.

4
10

A
111

4
10

GENERAL NOTES:

1.0 STANDARDS AND REFERENCES

THE FOLLOWING SHALL COVER THE DESIGN, FABRICATION AND CONSTRUCTION OF THE PROJECT.

2.0 DESIGN STRESSES

- A. CONCRETE
COMPRESSIVE STRENGTH f_c IS 2400
- B. REINFORCING BARS
a. FOR ALL BARS
- C. STRUCTURAL STEEL, ASTM-A36 FOR TUBES, BEAMS, & SHIMS
- D. PURLINS
30-LB PER LINE CHS BARS
- E. MASONRY UNIT (CMU)
- F. WELD-ABLE E-80W ELECTRODE
WELD-ABLE CHS WALLS
- G. STRUCTURAL BOLTS, ASTM-A307
a. $F_t = 68,800$ MPa (10,000 psi) b. $F_y = 68$ MPa (10,000 psi)

3.0 FOUNDATION

- 3.1 ALL COLUMN FOOTINGS & THE BEAMS SHALL REST ON 100mm THK. WELL COMPACTED GRAVEL BASE COURSE.
- 3.2 BACK FILL SHALL BE PLACED IN LAYER AND EACH LAYER SHALL BE 200mm THK. AND SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY.
- 3.3 WHERE LOOSE/SOFT MATERIAL IS ENCOUNTERED AT DEPTH OF EMBEDMENT INDICATED, EXCAVATE TO FIRM LAYER AND REPLACE LOOSE/MATERIALS UNDERNEATH THE FOOTING WITHIN THE FOOTING AREA PLUS 1/2 DEPTH OF SOFT MATERIAL ON ALL SIDES WITH SELECT GRANULAR BACKFILL. COMPACT SELECT GRANULAR BACKFILL TO 95% OF MAXIMUM DRY DENSITY.

4.0 MATERIALS

- 4.1 CONCRETE
- 4.1.1 CONCRETE COVER OVER REINFORCING BARS SHALL BE AS FOLLOWS:
 - A. FOOTINGS, FOOTING-TIE BEAMS (CHST AGAINST EXTERIOR) 75mm
 - B. BEAMS AND COLUMNS (TO STRUPLAS AND TIES) 40mm
 - C. WALLS, SIDE OF FOOTING-TIE BEAMS (CHST AGAINST FORMS) 40mm
 - D. SUSPENDED SLAB 20mm
- 4.1.2 BEFORE CONCRETE IS POURED, CHECK WITH ALL TRADES TO ENSURE PROPER PLACEMENT OF ALL OPENINGS, SLEEVES, CURBS, CONDUITS, ETC. RELATING TO THE WORK.
- 4.2 REINFORCING BARS
- 4.2.1 ALL REINFORCING BARS SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIALS THAT WILL IMPAIR BOND.
- 4.2.2 ALL REINFORCING BARS SHALL BE ACCURATELY AND SECURELY PLACED BEFORE POURING CONCRETE OR APPLYING MORTAR OR GROUT.
- 4.2.3 LAPPED SPLICES SHALL BE STAGGERED WHERE POSSIBLE.
- 4.2.4 UNLESS OTHERWISE INDICATED, SPLICING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH ACI-318M, EXCEPT THAT THE MINIMUM LAP SPLICE SHALL BE 40 BAR DIAMETER BUT NOT LESS THAN 300mm.
- 4.2.5 UNLESS SHOWN OTHERWISE ON PLANS, SPLICES SHALL BE AS FOLLOWS:

- A. INTERMEDIATE BEAMS: TOP BARS SHALL BE SPLICED AT MID-SPAN, AND BOTTOM BARS AT THE SUPPORT.
 - B. BEAMS FRAMING TO COLUMNS: TOP BARS SHALL BE SPLICED AT MID-SPAN AND BOTTOM BARS SHALL NOT BE SPLICED W/IN THE COLUMN OR W/IN A DISTANCE OF TWICE THE MEMBER DEPTH FROM THE FACE OF THE COLUMN. THE SPLICE LENGTH SHALL NOT BE LESS THAN 1.6 TIMES THE DEVELOPMENT LENGTH (L_d) IN 4.2.8 BELOW BUT NOT LESS THAN 700mm.
 - C. COLUMNS: LAP SPLICES SHALL BE MADE WITHIN THE CENTER HALF OF HEIGHT AND THE SPLICE SHALL NOT BE LESS THAN 3X BAR DIAMETER. WELDING OR THE USE OF APPROVED MECHANICAL DEVICES MAY BE PERMITTED PROVIDED NOT MORE THAN ALTERNATE BARS ARE WELDED OR SPLICED AT ANY LEVEL AND THE MINIMUM VERTICAL DISTANCE BETWEEN TWO ADJACENT BAR SPLICES SHALL BE 600mm.
 - D. CHS WALLS: VERTICAL BARS SHALL BE SPLICED AT THE TOP OF WALL FOOTINGS OR FOOTING-TIE BEAMS AND AT THE BOTTOM OF REINFORCED CONCRETE LATERAL BEAMS OR BEAMS.
- 4.2.6 UNLESS OTHERWISE INDICATED: ALL BEAMS TERMINATING AT A COLUMN SHALL HAVE TOP AND BOTTOM BARS EXTENDING TO THE FAR FACE OF THE COLUMN, TERMINATING IN A STANDARD 90 HOOK LENGTH OF ANCHORAGE SHALL NOT BE LESS THAN 300mm.
- 4.2.7 SHOP DRAWING FOR REINFORCEMENT SHALL BE SUBMITTED FOR APPROVAL OF THE ENGINEER PRIOR TO FABRICATION & INSTALLATION.

4.2.8 DEVELOPMENT LENGTH (L_d) OF REINFORCING BARS SHALL BE AS FOLLOWS:

SIZE OF REBARS	DEVELOPMENT LENGTH
10 mm	170 mm
12 mm	220 mm
16 mm	270 mm
20 mm	300 mm
25 mm	350 mm

4.3 STRUCTURAL STEEL

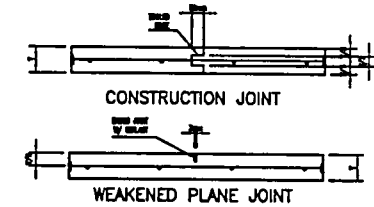
- 4.3.1 ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 AND SHALL HAVE A MINIMUM YIELD STRESS, $F_y = 248$ MPa (35,000 psi).
- 4.3.2 ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERRECTED IN ACCORDANCE WITH THE AISC SPECIFICATIONS AND CODE OF STANDARD PRACTICE AS AMENDED TO DATE.
- 4.3.3 ALL BOLTS SHALL CONFORM TO ASTM A-307 UNLESS OTHERWISE INDICATED. SHOP AND FIELD WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 AND PERFORMED BY QUALIFIED WELDERS.
- 4.3.4 UNLESS OTHERWISE INDICATED, WELDING ELECTRODES SHALL BE E80. NO STEEL SHALL BE FABRICATED OR ERRECTED UNITS SHOP DRAWINGS HAVE BEEN APPROVED BY THE STRUCTURAL ENGINEER.
- 4.3.7 WELDS (CONFORM WITH AMERICAN WELDING STANDARDS) USING E 80W ELECTRODES. $F_y = 48,777$ MPa.
- 4.3.8 ANCHOR BOLTS (CONFORM WITH ASTM A-307) R = 68,800 MPa. $F_y = 68$ MPa.

4.4 CONCRETE HOLLOW BLOCKS (CHB)

- 4.4.1 UNLESS OTHERWISE INDICATED, CHB USED IN THIS WORK SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH $F_{c'} = 2,480$ MPa (350 psi).
- 4.4.2 ALL CHB CELLS SHALL BE FILLED SOLIDLY WITH GROUT.

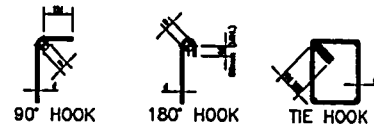
5.0 CONSTRUCTION JOINT

- 5.1 CONSTRUCTION JOINT NOT INDICATED ON THE PLANS SHALL BE MADE SO AS TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE AND SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER EXCEPT SLAB OR GRADE.
- 5.2 UNLESS SHOWN OTHERWISE, SLAB ON GRADE SHALL HAVE CONTROL JOINTS SPACED AT 6000mm MAXIMUM CENTER TO CENTER.
- 5.3 BEAMS CONSTRUCTION JOINT SHALL BE LOCATED W/ IN THE MIDDLE THIRD OF THE SPAN. IT SHALL BE PROVIDED WITH 3 EXTRA STRUPLAS @ 75mm O.C. ON EACH SIDE OF THE JOINT.



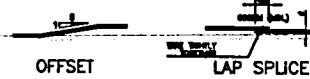
NOTE: CONTROL JOINT CAN BE EITHER CONSTRUCTION JOINT OR WEAKENED PLANE JOINT.

5.1 CONTROL JOINTS ON SLAB ON-FILL



BAR SIZE	90° HOOK	180° HOOK
10mm @ 200mm @	4d	4d
16mm @ 200mm @	5d	4d

NOTE: 1. ALL BARS SHOWN IN DETAILS/SCHEDULES SHALL BE STANDARD HOOK OTHERWISE NOTED.
2. 180° HOOKS MAY BE SUBSTITUTED FOR 90° HOOKS.

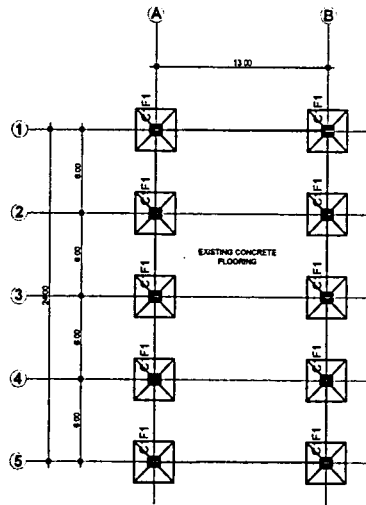


5.2 TYPICAL REINFORCEMENT DETAIL

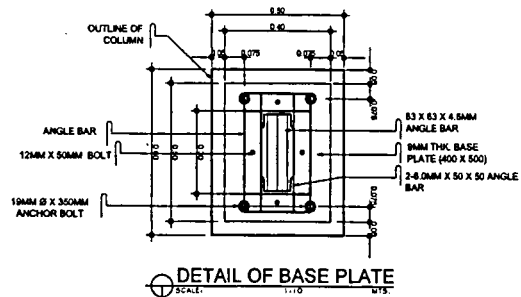
GENERAL NOTES AND STANDARD DETAILS

NOTE:
FOR THE DESIGNER TO BE RESPONSIBLE FOR THE DESIGN OF THE STRUCTURE AND THE CONTRACTOR TO BE RESPONSIBLE FOR THE CONSTRUCTION OF THE STRUCTURE.
THE ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE STRUCTURE AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION OF THE STRUCTURE.

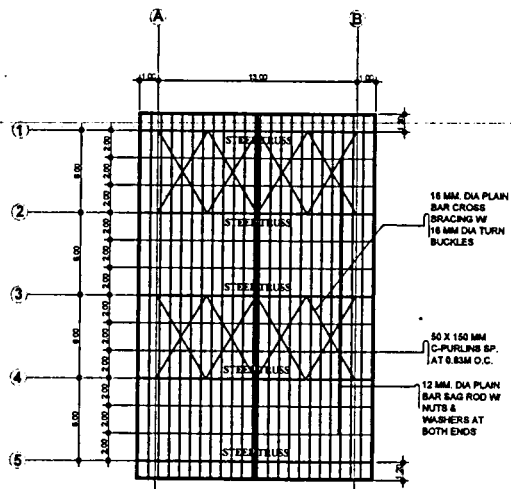
	PROJECT NAME AND LOCATION CONSTRUCTION OF THE 12 MULTI-PURPOSE COVERED AREA, ONE COMPASS BLDG. BANGAL, BANGAL, SOUTH COTABATO APPROXIMATELY PER PLAN/LAYOUT	SHEET CONTENTS GENERAL NOTES AND STANDARD DETAILS	DESIGNED BY COLLEEN V. BENDIC MAGRAT	SUBMITTED BY ANGEL M. BONDIA JR.	RECOMMENDED BY BENJAMIN S. BONDIA JR.	APPROVED BY JENNIFER S. BONDIA JR.	CONCLUDED BY ADAM J. BONDIA	SHEET NO. 5	SHEET NO. 5 OF 10
			DATE: OCTOBER 18, 2021	DATE: OCTOBER 18, 2021	DATE: OCTOBER 18, 2021	DATE: OCTOBER 18, 2021			



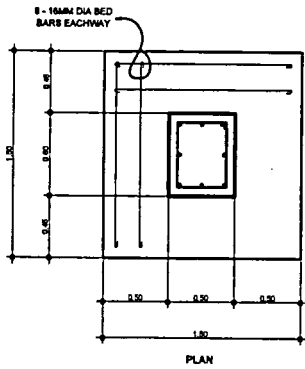
FOUNDATION PLAN
SCALE: 1:300
BY: [Signature]



DETAIL OF BASE PLATE
SCALE: 1:10
BY: [Signature]

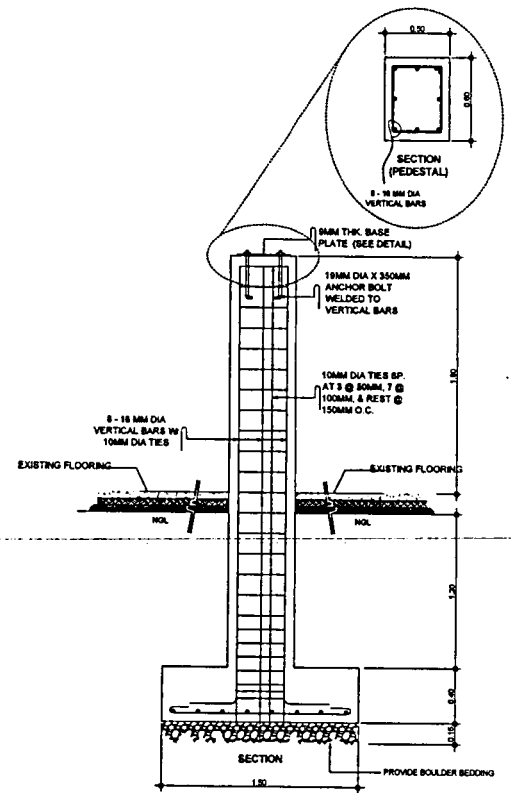


ROOF FRAMING PLAN
SCALE: 1:200
BY: [Signature]



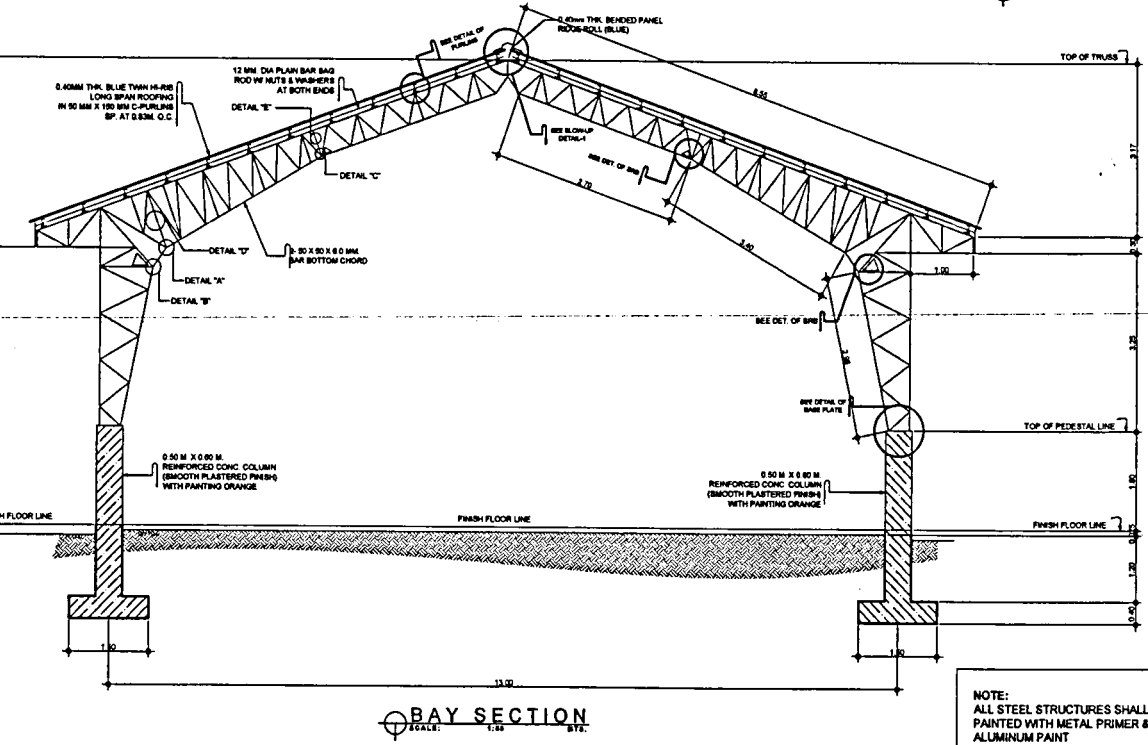
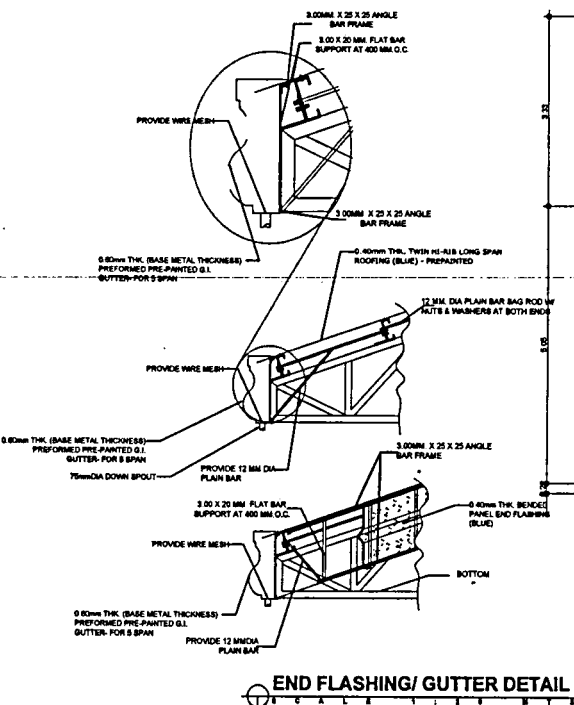
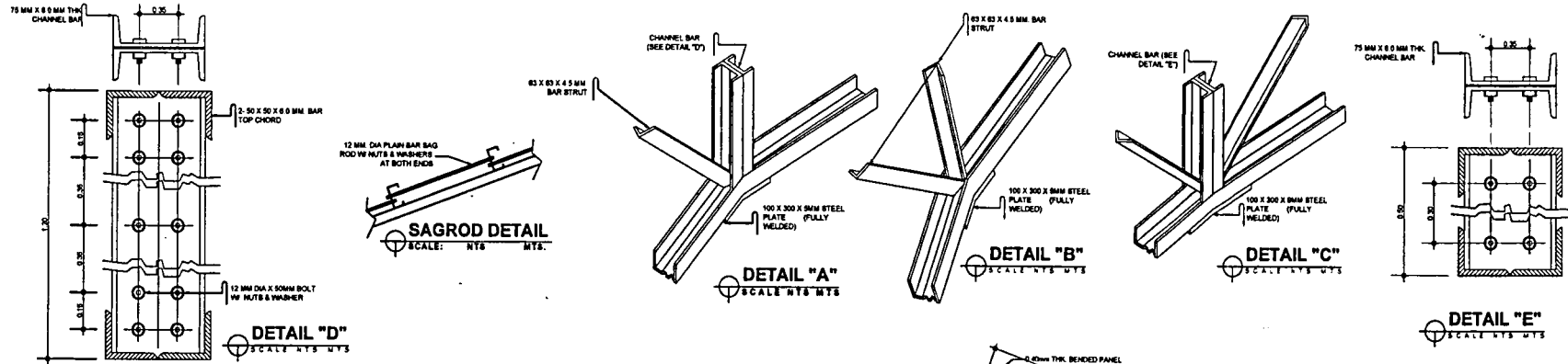
PLAN

TYPICAL C1F1 DETAIL
SCALE: 1:20
BY: [Signature]



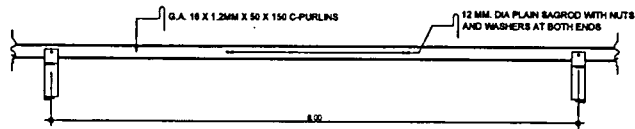
NOTE:
ALL STEEL STRUCTURES SHALL BE PAINTED WITH METAL PRIMER & SILVER ALUMINUM PAINT

	PROJECT NAME AND LOCATION CONSTRUCTION OF THE GRAB 12 BUS STOP/PURPOSE COVERED AREA, BUREAU COMPOUND BUNY, BODALIS, BODONALAN, CITY, SOUTH COTABATO TO APPROXIMATELY 100m LENGTH.	SHEET CONTENTS FOUNDATION PLAN ROOF FRAMING PLAN DETAIL OF BASE PLATE DETAIL OF C1F1	DESIGNED [Signature] COLLEGE OF CIVIL ENGINEERING UNIVERSITY OF THE PHILIPPINES DAVAO DEL SUR CAMPUS DIVISORIO, COTABATO CITY DATE: OCTOBER 18, 2017	SUBMITTED [Signature] ANGEL A. MADRIDA, JR. PROJECT ENGINEER DATE: OCTOBER 18, 2017	RECOMMENDED [Signature] BENIGNO A. BARRERA ASST. DIR. DISTRICT ENGINEERING DATE: OCTOBER 18, 2017	APPROVED [Signature] AGA SORAL, JR. DISTRICT ENGINEER DATE: OCTOBER 18, 2017	CHECKED [Signature] AKMAD J. URMAN REGIONAL DIRECTOR DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGION III	SHEET NO. 5 2/9	SHEET NO. 6 10
	DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE 03 SOUTH COTABATO 2ND DISTRICT ENGINEERING OFFICE ALAMANG, BODONALAN, CITY, SOUTH COTABATO								

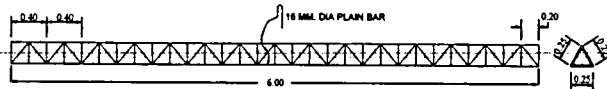


NOTE:
ALL STEEL STRUCTURES SHALL BE PAINTED WITH METAL PRIMER & SILVER ALUMINUM PAINT

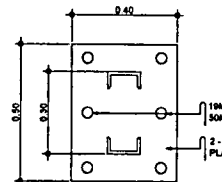
	PROJECT NAME AND LOCATION	SHEET CONTENTS	DESIGNED	SUBMITTED	RECOMMENDED	APPROVED	CONCLUDED	REV. NO.	SHEET NO.
	CONSTRUCTION OF THE ONE (1) 12 BLDG. PURPOSE COVERED AREA, ONE (1) COVERED BRIDGE, ONE (1) BARRIAGE WALL, ONE (1) BARRIAGE WALL, APPROXIMATELY 2.0 KM. IN LENGTH.	DETAILS A, B, C, D, & E BAY SECTION SAGROD DETAIL GUTTER DETAIL	DESIGNED BY SOLANGE V. DELA ROSA PROJECT ENGINEER	DATE OCTOBER 12, 2021	RECOMMENDED BY ALBERTO M. DELA ROSA PROJECT ENGINEER	DATE OCTOBER 12, 2021	APPROVED BY MARSHAL P. DELA ROSA DISTRICT ENGINEER	DATE OCTOBER 12, 2021	5 3/4



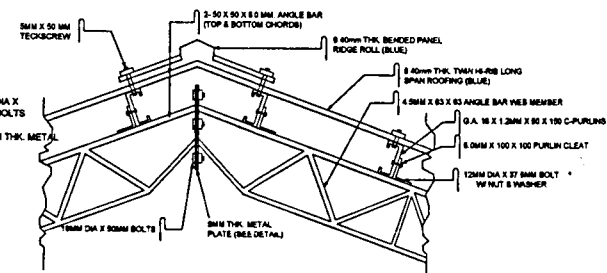
DETAIL OF PURLINS



DETAIL OF SRB



METAL PLATE DETAIL



BLOW UP DETAIL - 1

NOTE:
ALL STEEL STRUCTURES SHALL BE PAINTED WITH METAL PRIMER & SILVER ALUMINUM PAINT

<p>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE # 8 SOUTH COTABATO DISTRICT ENGINEERING OFFICE ALORAIN, KORNIGAL CITY, SOUTH COTABATO</p>	<p>PROJECT NAME AND LOCATION CONSTRUCTION OF THE DISE 11 MULTI-PURPOSE COVERED AREA, DISE COMPOUND STREET, KORNIGAL, KORNIGAL CITY, SOUTH COTABATO APPROPRIATOR: P16 18188.00</p>	<p>SHEET CONTENTS BLOW UP DETAIL - 1 DETAIL OF SRB DETAIL OF PURLINS</p>	<p>DRAWN <i>[Signature]</i> COLLEEN YON CHANTO - MAGDAY DATE: OCTOBER 18, 2021</p>	<p>SUBMITTED <i>[Signature]</i> DATE: OCTOBER 18, 2021</p>	<p>RECOMMENDED <i>[Signature]</i> DATE: OCTOBER 18, 2021</p>	<p>APPROVED <i>[Signature]</i> DATE: OCTOBER 18, 2021</p>	<p>CONCURRED <i>[Signature]</i> DATE: OCTOBER 18, 2021</p>	<p>REV NO. 5</p>	<p>SHEET NO. 8 10</p>
			<p>CHECKED <i>[Signature]</i> DATE: OCTOBER 18, 2021</p>	<p>APPROVED <i>[Signature]</i> DATE: OCTOBER 18, 2021</p>	<p>CONCURRED <i>[Signature]</i> DATE: OCTOBER 18, 2021</p>	<p>REV NO. 5</p>	<p>SHEET NO. 8 10</p>		

ELECTRICAL NOTES :

1. WIRING INSTALLATION MUST BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE PHILIPPINES ELECTRICAL CODE AND OF THE LOCAL POWER COMPANY CONCERNED
2. ALL ELECTRICAL INSTALLATION MUST BE DONE THROUGH PVC ELECTRICAL PIPE RUNS
3. ALL WORKS SHALL BE DONE UNDER THE SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER
4. ALL CONDUCTOR INSTALLED SHALL BE IN TUBE WORK (RSC).
5. PULL BOXES AND JUNCTION BOXES SHALL BE PROVIDED TO ACCESS SPLICING AND CONNECTIONS

SCHEDULE OF LOADS

CKT.	LOAD	SWITCH	POWER	CURRENT	ACB RATING	WIRE SIZE	PIPE SIZE						
NO.	LO	CO	M	S1	S2	S3	VA	AMP	V	A	P	MMSQ	MM
C1	4			2			2000	8.70	230	20	1	3.5 mm ²	20 mm
C2	10			2	2		120	0.52	230	20	1	3.5 mm ²	20 mm
C3	4						1200	5.22	230	20	1	3.5 mm ²	20 mm
C4	S P A R E								230	20	1		
MAIN							2420	10.52	230	60	1	14 mm ²	25 mm

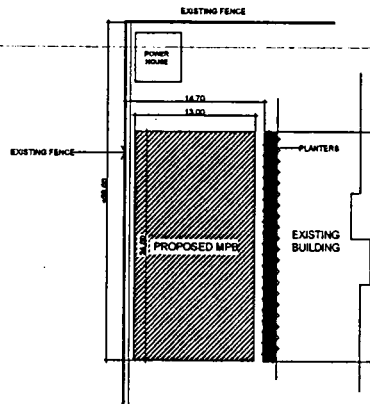
FOR SERVICE ENTRANCE WIRE = $\frac{(VA)}{230V} (1.25) (80\% DF) = \frac{(2420) (1.25) (0.80)}{230V} = 10.52 A$

USE: 14mm² THIN WIRE IN 25mm RSC

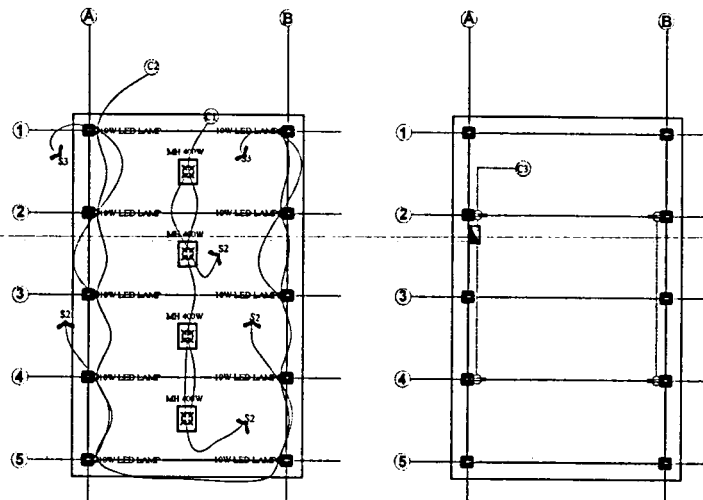
FOR MAIN CIRCUIT BREAKER = USE 60 AMPS. MAIN ACB SINGLE PHASE WITH 4 BRANCH BREAKER 4-20AMPS.

LEGEND :

- MH 400 W METAL HALLWAY
- 10W LED LAMP
- CONVENIENCE OUTLET
- CIRCUIT LINE
- SWITCH LINE
- CIRCUIT HOMERUN
- PANEL BOARD
- CIRCUIT BREAKER
- TWO GANG SWITCH
- THREE GANG SWITCH
- SERVICE ENTRANCE



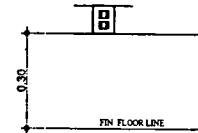
SITE DEVELOPMENT PLAN



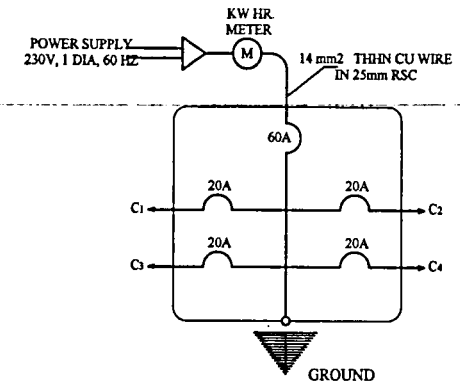
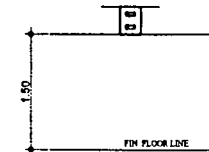
LIGHTING LAY-OUT
SCALE: 1:200

POWER LAY-OUT
SCALE: 1:200

CONVENIENCE OUTLET INST. DETAIL :



SWITCHES INST. DETAIL :



NOTE:
ELECTRICAL WORKS ARE NOT INCLUDED IN THE SCOPE OF WORKS.



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
SOUTH COTABATO 2ND DISTRICT
ENGINEERING OFFICE
ALAMIG AVE. HONOLUPON CITY, SOUTH COTABATO

PROJECT NAME AND LOCATION
CONSTRUCTION OF THE ONE (1) 1000 SQM COVERED AREA, ONE (1) COFFERED BRIDGE, BIPHONAL CITY, SOUTH COTABATO (APPROXIMATE PIG LAUNDRIES)

SHEET CONTENTS
ELECTRICAL LAYOUT
RISER DIAGRAM
SCHEDULE OF LOADS
LIGHTING AND ELECTRICAL NOTES
LIGHTING INSTALLATION DETAIL
CONVENIENCE OUTLET DETAIL
SITE DEVELOPMENT PLAN

DRAWN BY: [Signature]
CHECKED BY: [Signature]
DATE: OCTOBER 18, 2021

SUBMITTED BY: [Signature]
ANDRE COURAGE JR.
REGISTERED ELECTRICAL ENGINEER
DATE: OCTOBER 18, 2021

RECOMMENDED BY: [Signature]
DATE: OCTOBER 18, 2021

APPROVED BY: [Signature]
DATE: OCTOBER 18, 2021

CONCURRED BY: [Signature]
AKHAD A. USMAN
REGISTERED ELECTRICAL ENGINEER
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
DATE: OCTOBER 18, 2021

SHEET NO. 10
OF 10