



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE IX
ZAMBOANGA CITY 2ND DISTRICT ENGINEERING OFFICE
MCLL HIGH WAY, DIVISORIA, ZAMBOANGA CITY

C.Y. 2025 PROJECT

DETAILED ENGINEERING DESIGN PLAN FOR
REPAIR/MAINTENANCE OF TAMION RIVER REVETMENT 2
BRGY. VITALI, ZAMBOANGA CITY

STA.0+000 TO STA.0+065 (LEFT SIDE)

65.00 LM

SUBMITTED:


ABRAHAM M. AQUINO
CHIEF MAINTENANCE SECTION

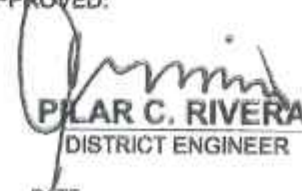
DATE

RECOMMENDED:


ROBERTO DONDI F. STA. ELENA
ASSISTANT DISTRICT ENGINEER

DATE

APPROVED:


PILAR C. RIVERA
DISTRICT ENGINEER

DATE



C.Y. 2025 PROJECT

DETAILED ENGINEERING DESIGN PLAN FOR
REPAIR/MAINTENANCE OF TAMION RIVER REVETMENT 2
BRGY. VITALI, ZAMBOANGA CITY

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- (10) - TYPICAL FRONT AND FRAME
ELEVATION OF STANDARD DPWH
BILLBOARD



INDEX MAP



VICINITY MAP



FACING DOWN STREAM
RIGHT SIDE

BEG. OF PROJECT ----- STA 0 + 000
END OF PROJECT ----- STA 0 + 065
LENGTH = 65.00 L.M.

TOTAL LENGTH ----- 65.00 L.M.

LOCATION PLAN
SCALE: NTS

LEGEND:

PROPOSED RIPRAP & GROUTED RIPRAP



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE IX
ZAMBOANGA CITY 2ND DISTRICT
ENGINEERING OFFICE
WILL HIGHWAY, ORASORA, ZAMBOANGA CITY

PROJECT NAME AND LOCATION:
C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN PLAN FOR
REPAIR/MAINTENANCE OF TAMION RIVER REVETMENT 2
BRGY. VITALI ZAMBOANGA CITY

SHEET CONTENTS:
LOCATION PLAN
INDEX MAP
VICINITY MAP

DRAFTED:
VICTOR G. BUNBLE
ENGINEERING OFFICE
DATE: 5/24/25
PREPARED:
BART JANE TUBIL
ENGINEER
DATE: 5/24/25

REVIEWED AS TO DESIGNED CONCEPT:
RICHARD L. ARANETA
ENGINEER
DATE: 5/24/25

REVIEWED:
ABRAHAM M. AQUINO
CHIEF MAINTENANCE SECTION
DATE: 5/26/25

REVIEWED:
ROBERTO DONDIF. STA. ELENA
ASSISTANT DISTRICT ENGINEER
DATE: 5/26/25

APPROVED:
PILAR C. RIVERA
DISTRICT ENGINEER
DATE: 5/26/25

SHEET NO.
2
10

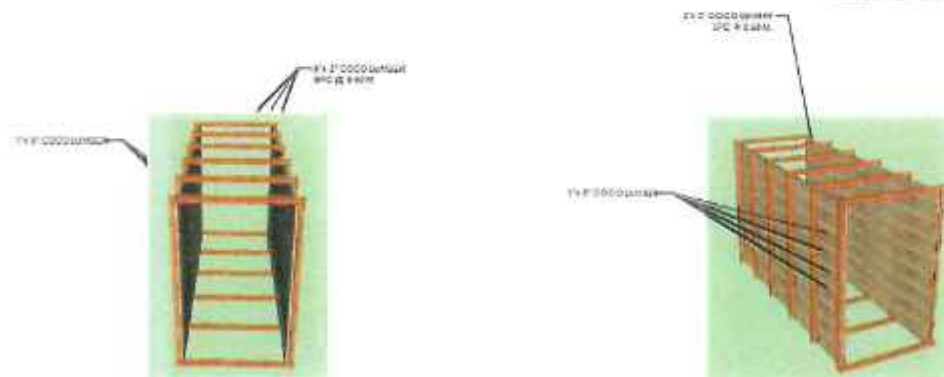
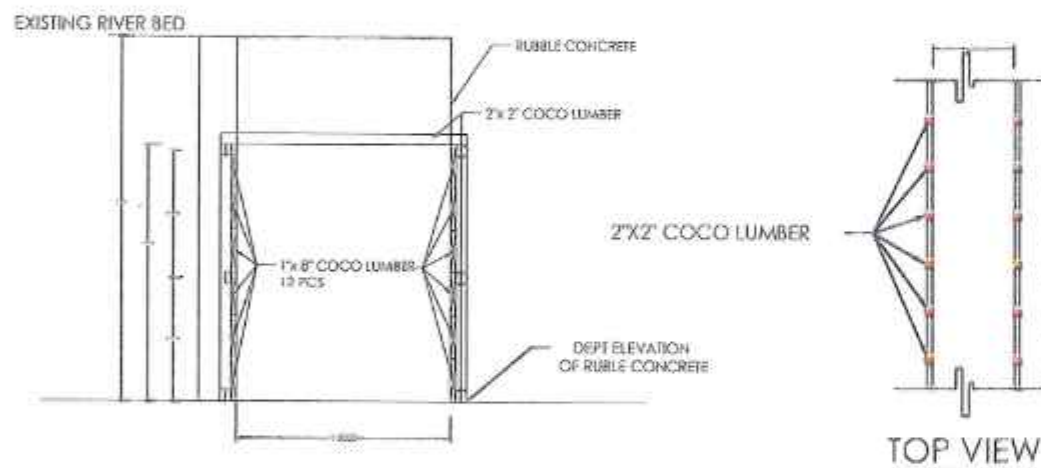
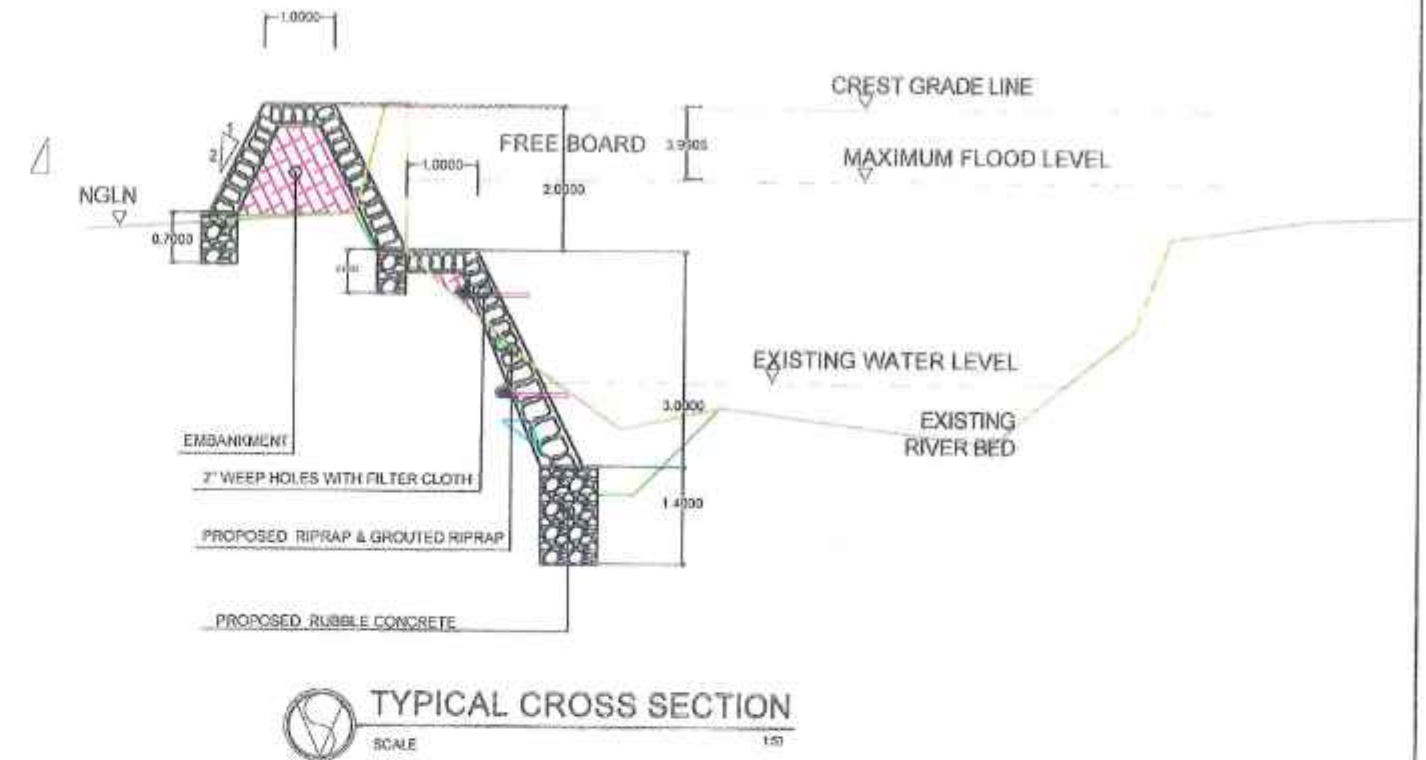
GENERAL NOTES FOR FLOOD CONTROL

1. Alignments and grades are subject to adjustment to suit actual field conditions.
2. Distances and elevations are in meters unless otherwise indicated.
3. Grade shown are top of finished Structures
4. All work shall comply with the Standard Specifications for Highways and Bridges, Revised 2013
5. All structures or encumbrance of any character upon or within the limits of Project site affected by works shall be removed by the contractor and placed carefully on the abutting property or otherwise disposed of as indicate in the plans, materials so removed, including any existing drain or culvert pipes which the engineer may order salvaged shall be carefully removed and shall remain the property of the government.
6. The necessary drawings contained are the DPWH Standard Drawings for Roads and Bridges shall be utilized for the project unless otherwise a more detailed drawing is specified and/or provided and approved.
7. Design was based on survey data submitted by the Survey Team, Maintenance Section, Zamboanga City 2nd District Engineering Office, DPWH.
8. Bunkhouse shall be located on government owned / donated lot
9. Date Surveyed : APRIL 17,2025

	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE IX ZAMBOANGA CITY 2ND DISTRICT ENGINEERING OFFICE VOLL HIGHWAY, ORIENTAL ZAMBOANGA CITY	PROJECT NAME AND LOCATION: C.V. 2025 PROJECT DETAILED ENGINEERING DESIGN PLAN FOR REPAIR/MAINTENANCE OF TAMBON RIVER REVENEMENT 2 BRGY. VITALI, ZAMBOANGA CITY	SHEET CONTENTS: GENERAL NOTES	DRAFTED: VICTORIO SUMIL ENGINEER PREPARED: BABY JANE TORIL ENGINEER	5/24/25 5/24/25	REVIEWED AS TO DESIGNED CONCEPT: RHIZELLE P. ARANETA ENGINEER DATE: 5/24/25	SUBMITTED: ABRAHAM M. AQUINO CHIEF MAINTENANCE SECTION DATE: 5/24/25	RECOMMENDED: ROBERTO BONDY P. STA. ELENA ASSISTANT DISTRICT ENGINEER DATE:	APPROVED: PILAR C. RIVERA DISTRICT ENGINEER DATE:	SET NO. 3 1	SHEET NO. 3 10

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	ORIGINAL		REMARKS
		QTY.	UNIT	
A.1.1 (3)	Construction of Field Office for the Engineer	1.00	L.S.	INCLUDES STANDARD BUNKHOUSE TYPE 1
A.1.1 (11)	Provision of Furniture's/Fixtures, Equipment & Appliances for the Field Office for the Engineer	1.00	L.S.	
8.4 (1)	Construction Survey & Staking	1.00	L.S.	
8.5	Project Billboard/Sign Board	2.00	each	SIZE 8'X8' - 1PC 2PCS 4'X8'
8.7 (1)	Occupational Safety & Health Program	2.80	mo.	
8.9	Mobilization & Demobilization	1.00	L.S.	PER D.O. 725 2015
101 (1)	Removal of Structures and Obstruction (Existing Revetment)	1.00	L.S.	
103 (1)a	Structure Excavation, Common Soil	291.74	CU.M.	
104 (1)a	Embankment (from Borrow)	234.81	CU.M.	COMPACTED VOLUME
505 (2)a	Grouted Riprap (Class A)	123.28	CU.M.	
507	Rubble Concrete	193.84	CU.M.	



SHORING PLAN AND DETAILS
SCALE: 1:100 mls.

COMPUTATION OF QUANTITIES

ITEM 103(1)a - Structure Excavation, Common Soil

Start: STA. 0 + 000.00 to STA. 0 + 065.00
Length - 65.00 L.m.
Volume = 291.74 cu.m.

TOTAL VOLUME = 291.74 cu.m.

ITEM 505(2)a - Grouted Rip rap

Start: STA. 0 + 000.00 to STA. 0 + 065.00
Length - 65.00 L.m.
Area - 2.0517 Sq.m.
Volume = 65.00 L.m. X 2.0517 Sq.m.
= 123.28 cu.m.
VOLUME = 123.28 cu.m.

ITEM 104(1)a - Embankment (from Borrow)

Start: STA. 0 + 000.00 to STA. 0 + 065.00
Length - 65.00 L.m.
Volume = 234.81 cu.m.

VOLUME = 234.81 cu.m.

ITEM 507 - Rubble Concrete

Start: STA. 0 + 000.00 to STA. 0 + 065.00
Length - 65.00 L.m.
Area - 3.1153 Sq.m.
Volume = 65.00 L.m. X 3.1153 Sq.m.
= 193.84 cu.m.
VOLUME = 193.84 cu.m.



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE IX
ZAMBOANGA CITY 2ND DISTRICT
ENGINEERING OFFICE
BELL HIGHWAY, DAVOSORA, ZAMBOANGA CITY

PROJECT NAME AND LOCATION:
C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN PLAN FOR
REPAIR/MAINTENANCE OF TAMBON RIVER REVETMENT 2
BIDY. VITALI, ZAMBOANGA CITY

SHEET CONTENTS:
SUMMARY OF QUANTITIES
TYPICAL CROSS SECTION
COMPUTATION OF QUANTITIES
SHORING PLAN AND DETAILS

DRAFTED:
VICTOR O. SUMIL
ENGINEERING OFFICE
PROPOSED:
BABY JANE TUGIL
ENGINEER

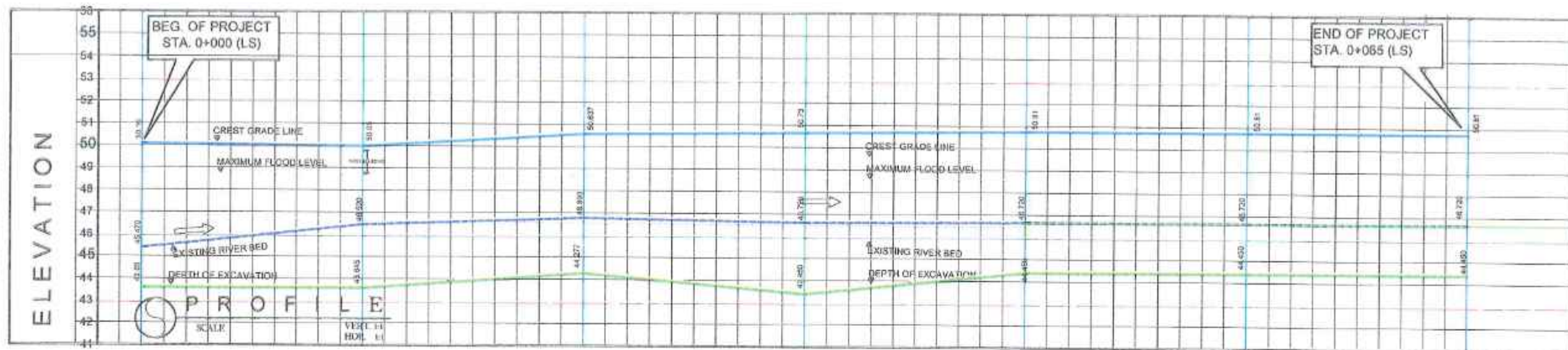
REVIEWED AS TO DESIGNED CONCEPT:
RHIZELLE P. ARANRYA
ENGINEER II
DATE: 5/24/25

SUBMITTED:
ABRAHAM M. AQUINO
CHIEF ENGINEERING SECTION
DATE: 5/24/25

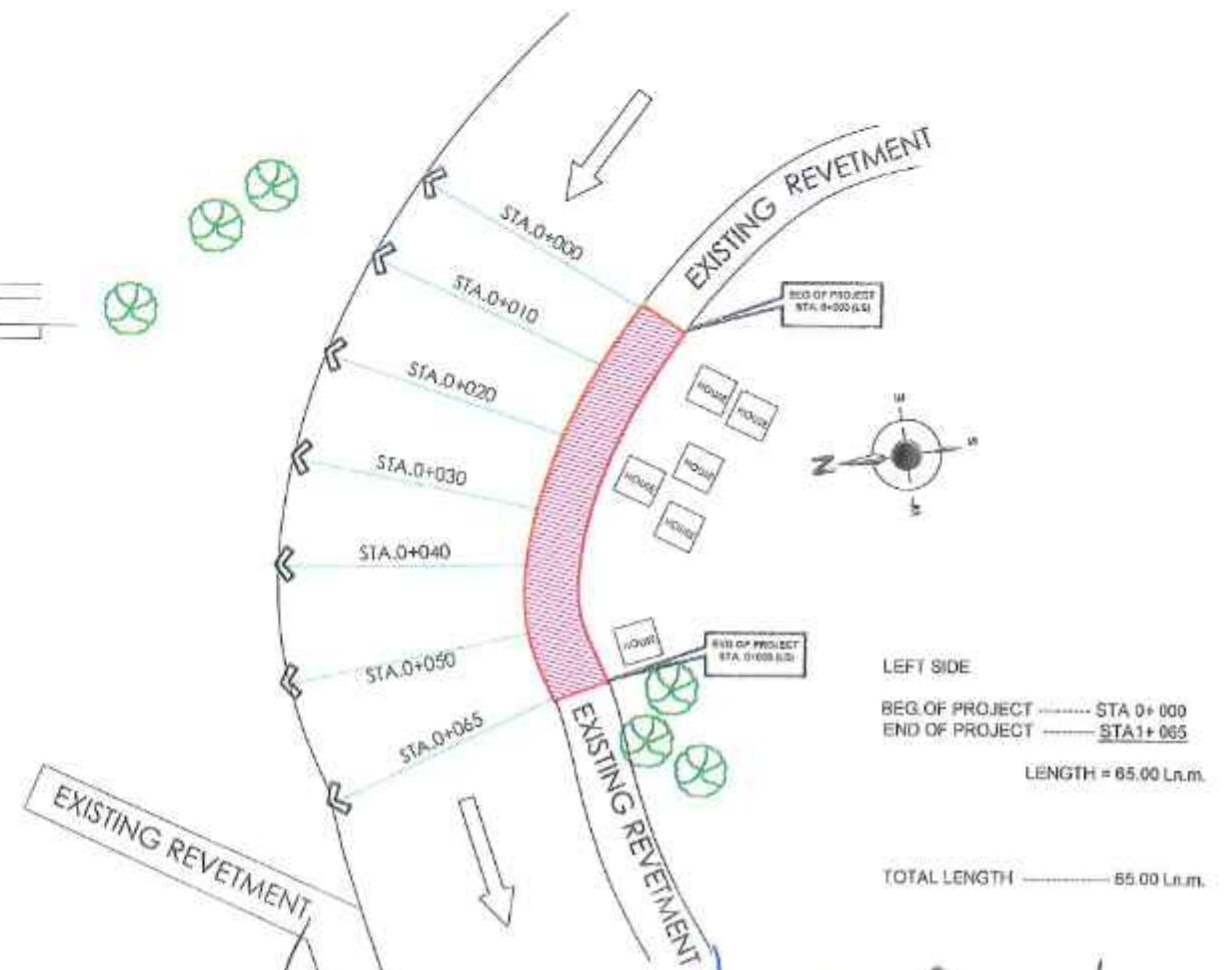
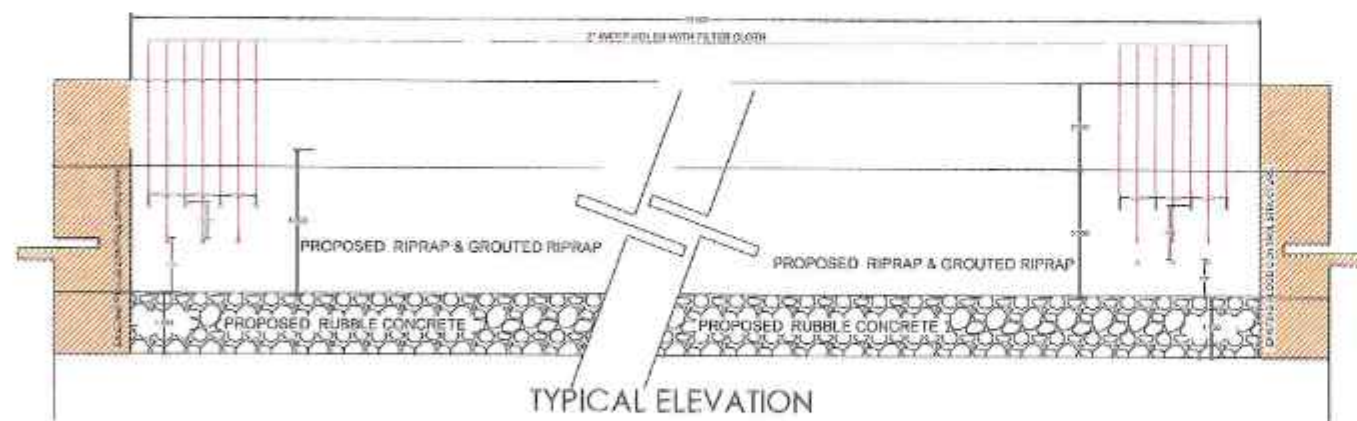
RECOMMENDED:
ROBERTO DOMINIC ALBA
ASSISTANT DISTRICT ENGINEER
DATE: 5/24/25

APPROVED:
PILAR C. RIVERA
DISTRICT ENGINEER
DATE: 5/24/25

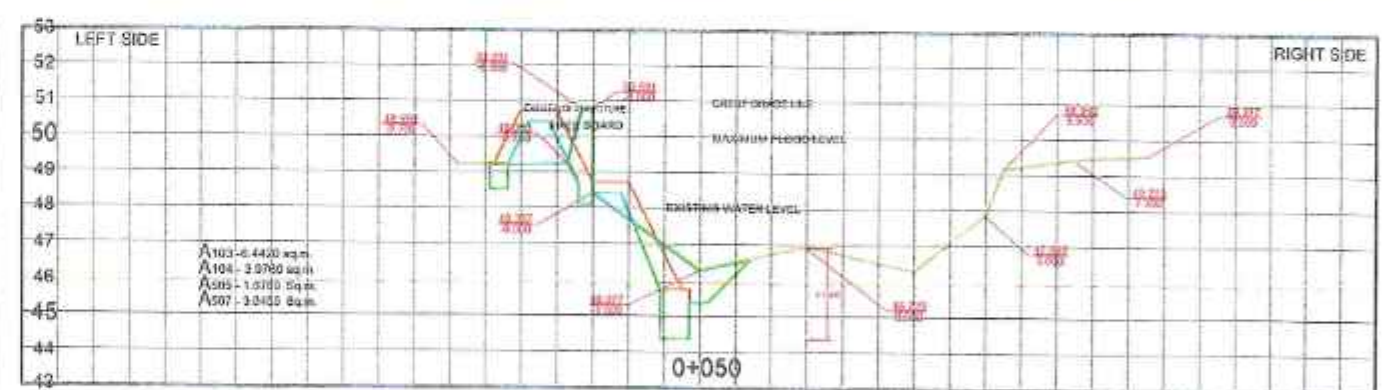
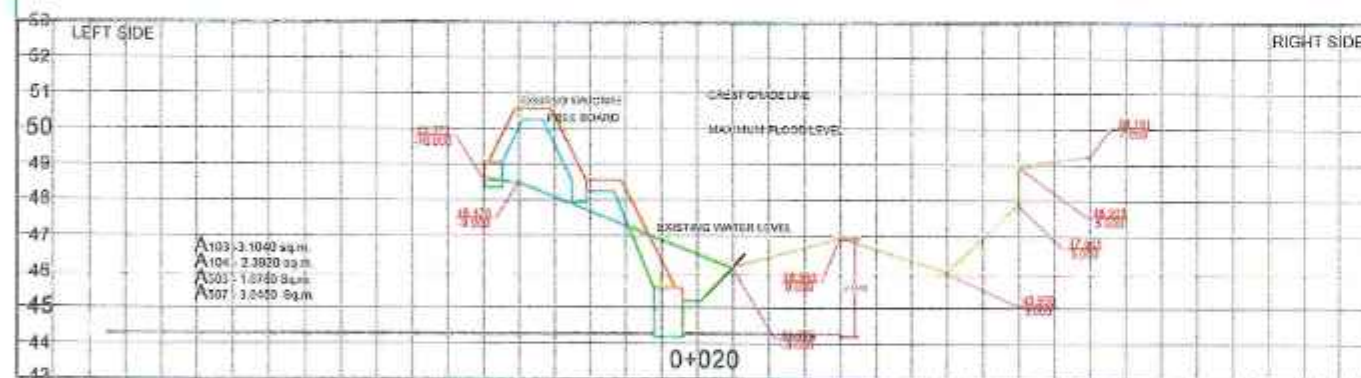
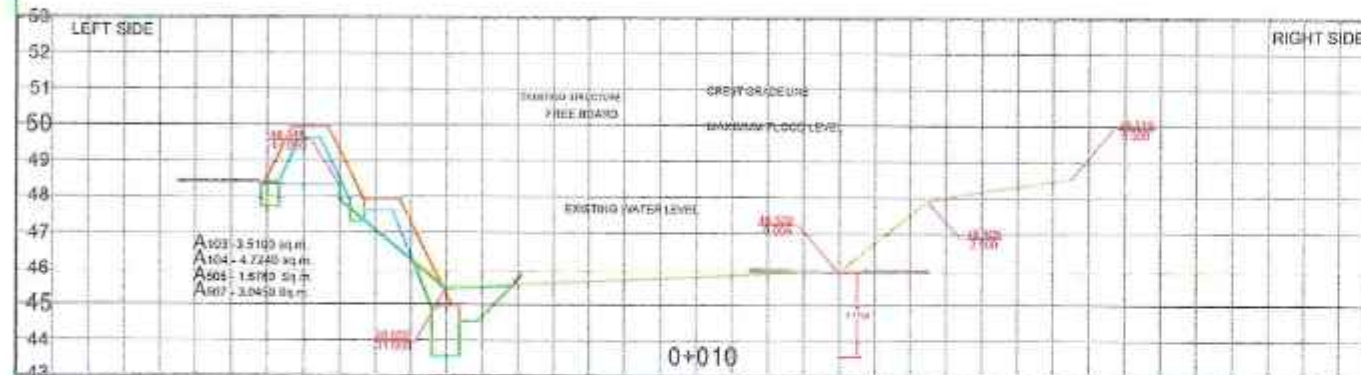
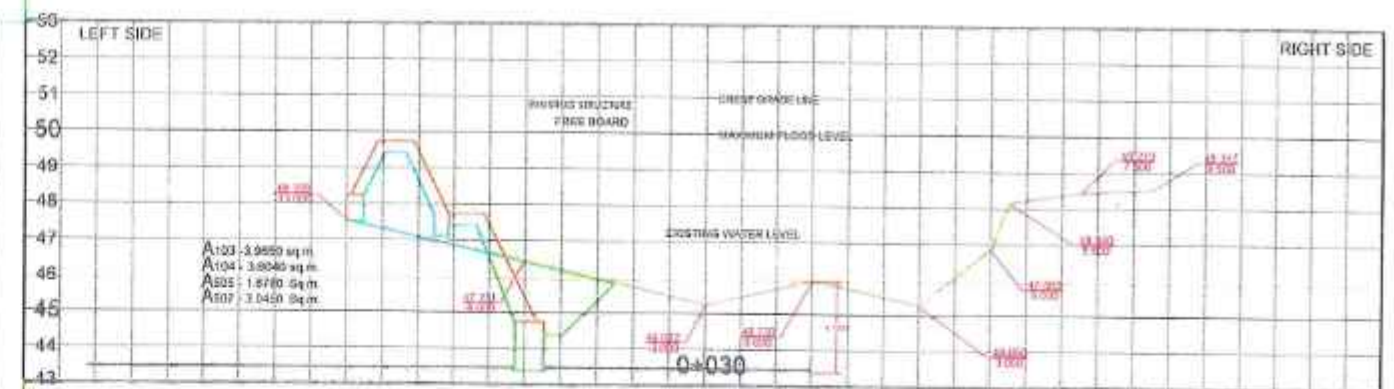
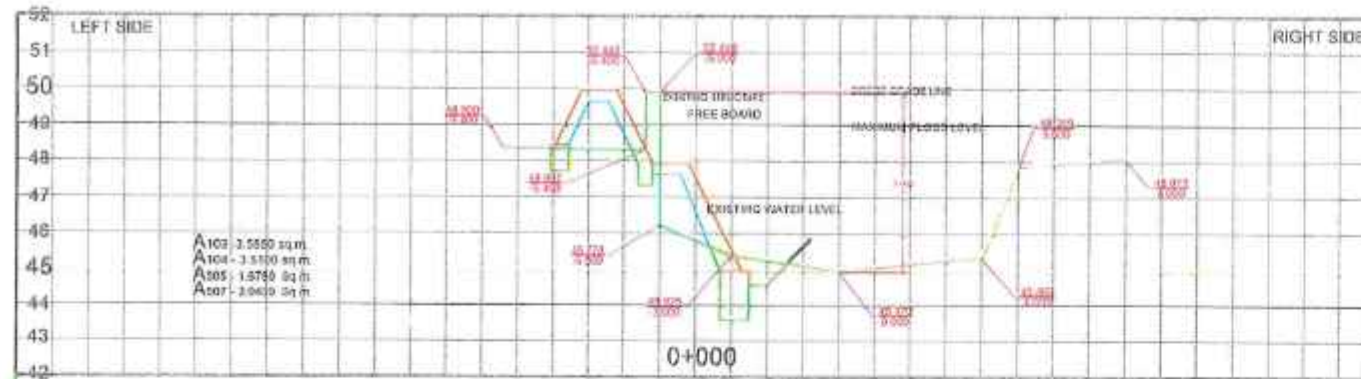
SHEET NO. 4
SHEET NO. 10



STATION	0+000	0+010	0+020	0+030	0+040	0+050	0+065
EXISTING RIVER BED	43.65	44.52	44.88	44.72	44.81	44.72	44.81
CREST GRADE LINE	48.03	48.03	48.03	48.03	48.03	48.03	48.03
DEPTH OF EXCAVATION	4.38	3.50	3.14	3.31	3.22	3.31	3.22



	PROJECT NAME AND LOCATION:	SHEET CONTENTS:	DRAFTED:	REVIEWED AND APPROVED:	SUBMITTED:	DESIGNED:	APPROVED:	SET NO.	SHEET NO.
	C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN PLAN FOR REPAIR/MAINTENANCE OF TAMON RIVER REVELMENT 2 BRGY. VITAL, ZAMBOANGA CITY	PROFILE PLAN PLAN TYPICAL ELEVATION	VICTOR O. BUNILE ENGINEER/DRAWER DATE 5/24/25	RHUELLE P. ARANITA ENGINEER DATE 5/24/25	ABRHAM M. AQUINO CHIEF MAINTENANCE SECTION DATE 5/24/25	ROBERTO M. BAYAT, JR. ASSISTANT DISTRICT ENGINEER DATE	FILAR C. RIVERA DISTRICT ENGINEER DATE	5 1	5 10



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE IX
ZAMBOANGA CITY 2ND DISTRICT
ENGINEERING OFFICE
MOLLO HIGHWAY, DAVITOGA, ZAMBOANGA CITY

PROJECT NAME AND LOCATION:
C.V. 2025 PROJECT
DETAILED ENGINEERING DESIGN PLAN FOR
REPAIR/MAINTENANCE OF TAMON RIVER REVEALMENT 2
BRGY. VITALI, ZAMBOANGA CITY

SHEET CONTENTS:
TYPICAL CROSS SECTION
COMPUTATION OF QUANTITIES

DRAFTED:
VICTOR B. SUMIL
ENGINEER
5/24/25
PREPARED:
BART JANE RUBIN
ENGINEER
5/24/25

REVIEWED AS DESIGNED CONCEPT:
RHIZELLA P. ARANETA
ENGINEER
5/24/25

SUBMITTED:
ABRAHAM M. AQUINO
CHIEF MAINTENANCE SECTION
5/24/25

APPROVED:
ROBERTO DONOFRIO, JR.
DISTRICT ENGINEER
5/24/25

APPROVED:
PILAR C. RIVERA
DISTRICT ENGINEER
5/24/25

SHEET NO. 6
SHEET NO. 10

STATION LOCATION LEFT SIDE	NET LENGTH	ITEM 103 - Excavation		ITEM 104(1)a		ITEM 505- GROUTED RIPRAP		ITEM 507 RUBBLE CONCRETE		REMARK
		Area (sq.m.)	Vol. (cu.m.)	Area (sq.m.)	Vol. (cu.m.)	Area (sq.m.)	Vol. (cu.m.)	Area (sq.m.)	Vol. (cu.m.)	
STA. 0 + 231 to STA. 0 + 241	10.0	$[(3.5860 + 3.5100) / 2.0] \times 10.0$	35.480	$[(3.1540 + 4.7220) / 2.0] \times 10.0$	39.380	$[(2.0547 + 2.0547) / 2.0] \times 10.0$	20.547	$[(3.1153 + 3.1153) / 2.0] \times 10.0$	31.153	
STA. 0 + 241 to STA. 0 + 251	10.0	$[(3.5100 + 3.1040) / 2.0] \times 10.0$	33.070	$[(4.7220 + 3.9760) / 2.0] \times 10.0$	43.490	$[(2.0547 + 2.0547) / 2.0] \times 10.0$	20.547	$[(3.1153 + 3.1153) / 2.0] \times 10.0$	31.153	
STA. 0 + 251 to STA. 0 + 261	10.0	$[(3.1040 + 3.9650) / 2.0] \times 10.0$	15.520	$[(2.3950 + 3.9760) / 2.0] \times 10.0$	31.855	$[(2.0547 + 2.0547) / 2.0] \times 10.0$	20.547	$[(3.1153 + 2.9850) / 2.0] \times 10.0$	26.830	
STA. 0 + 251 to STA. 0 + 261	10.0	$[(3.9650 + 6.4420) / 2.0] \times 10.0$	52.035	$[(3.6040 + 3.9760) / 2.0] \times 10.0$	37.900	$[(2.0547 + 2.0547) / 2.0] \times 10.0$	10.274	$[(3.1153 + 3.1153) / 2.0] \times 10.0$	26.825	
STA. 0 + 251 to STA. 0 + 261	10.0	$[(5.3580 + 6.4420) / 2.0] \times 10.0$	59.000	$[(3.9760 + 3.9760) / 2.0] \times 10.0$	39.760	$[(2.0547 + 2.0547) / 2.0] \times 10.0$	20.547	$[(3.1153 + 3.1153) / 2.0] \times 10.0$	31.153	
STA. 0 + 251 to STA. 0 + 261	15.0	$[(6.4420 + 6.4420) / 2.0] \times 15.0$	96.630	$[(3.9760 + 1.6790) / 2.0] \times 15.0$	42.428	$[(2.0547 + 2.0547) / 2.0] \times 15.0$	30.821	$[(3.1153 + 3.1153) / 2.0] \times 15.0$	46.730	
TOTAL	65.000		291.74		234.81		123.28		193.84	

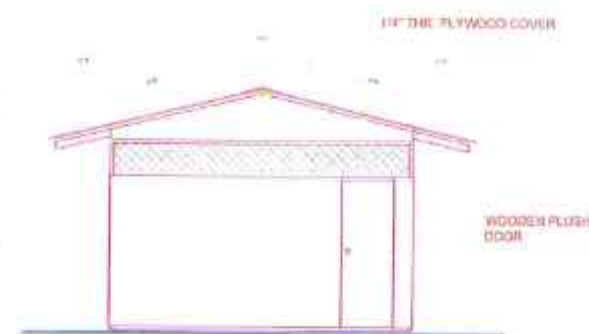
COMPUTATION OF QUANTITIES

 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE IX ZAMBOANGA CITY 2ND DISTRICT ENGINEERING OFFICE MALL HIGHWAY, DAVAO, ZAMBOANGA CITY	PROJECT NAME AND LOCATION:	SHEET CONTENTS:	DRAFTED:	REVIEWED AND DESIGNED CONCEPT:	DESIGNED:	RECOMMENDED:	APPROVED:	SET NO.	SHEET NO.
	C.Y. 2025 PROJECT	COMPUTATION OF QUANTITIES	VICTOR G. SUMIL ENGINEER 5/24/25	RHIZELLE V. ARANETA ENGINEER II 5/24/25	ABRAHAM M. AQUINO CHIEF ENGINEER SECTION 5/24/25	ROBERTO D. SANTOS ASSISTANT DISTRICT ENGINEER 5/24/25	FILAR C. RIVERA DISTRICT ENGINEER 5/24/25	7 11	7 10



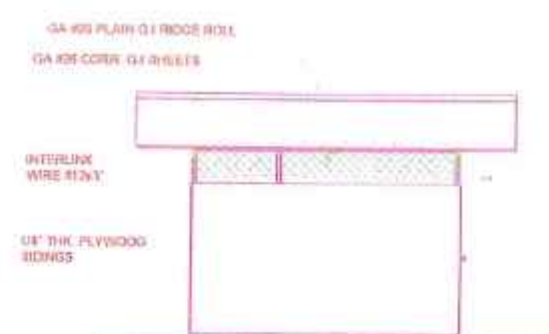
PERSPECTIVE VIEW

TYPICAL LOWCOST BUNKHOUSE PROJECT FIELD OFFICE



FRONT ELEVATION

SCALE 1:100 MTS.



LEFT SIDE ELEVATION

SCALE 1:100 MTS.



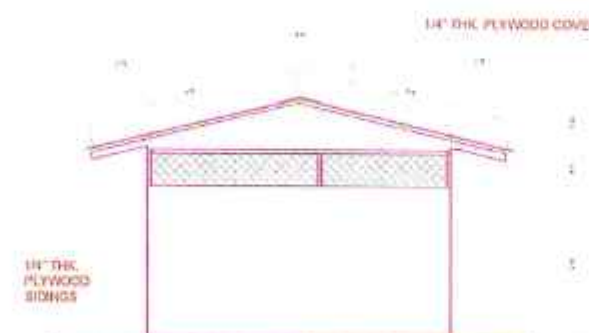
LONGITUDINAL SECTION

SCALE 1:100 MTS.



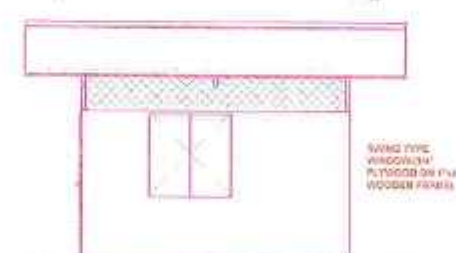
FLOOR PLAN

SCALE 1:100 MTS.



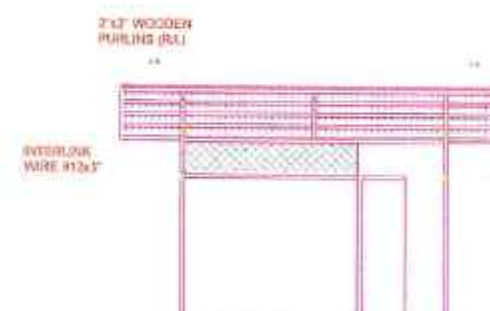
REAR ELEVATION

SCALE 1:100 MTS.



RIGHT SIDE ELEVATION

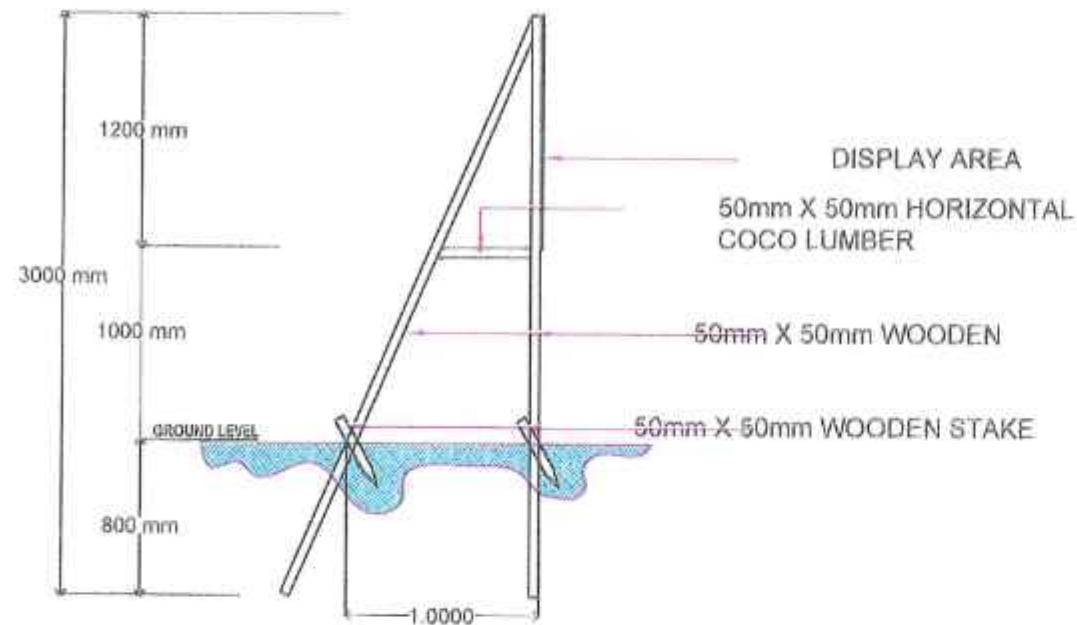
SCALE 1:100 MTS.



CROSS SECTION

SCALE 1:100 MTS.

 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE IX ZAMBOANGA CITY 2ND DISTRICT ENGINEERING OFFICE MCLL HIGHWAY, DAVAO CITY, ZAMBOANGA CITY	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN PLAN FOR REPAIR/MAINTENANCE OF TAMON RIVER REVETMENT 2 BROV. VITALL, ZAMBOANGA CITY	SHEET CONTENTS: BUNK HOUSE	DRAFTED: VICTOR G. SUMER ENGINEERING AIDE DATE 5/24/25 PREPARED: BABY JANE TORIL ENGINEER II DATE 5/25/24	REVIEWED AND DESIGNED CONCEPT: RHIZELLE P. ARANETA ENGINEER III DATE 5/24/25	SUBMITTED: ABRAHAM M. AQUINO CHIEF MAINTENANCE SECTION DATE 5/24/25	APPROVED: ROBERTO LOPEZ, EYA, ELEM ASSISTANT DISTRICT ENGINEER DATE	APPROVED: PILAR C. RIVERA DISTRICT ENGINEER DATE	SHEET NO. 8 11 SHEET NO. 8 10
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TYPICAL FRAME ELEVATION



THIS IS WHERE YOUR TAXES GO

NAME OF PROJECT:

LOCATION:

NAME OF CONTRACTOR:

DATE STARTED:

CONTRACT COMPLETION DATE:

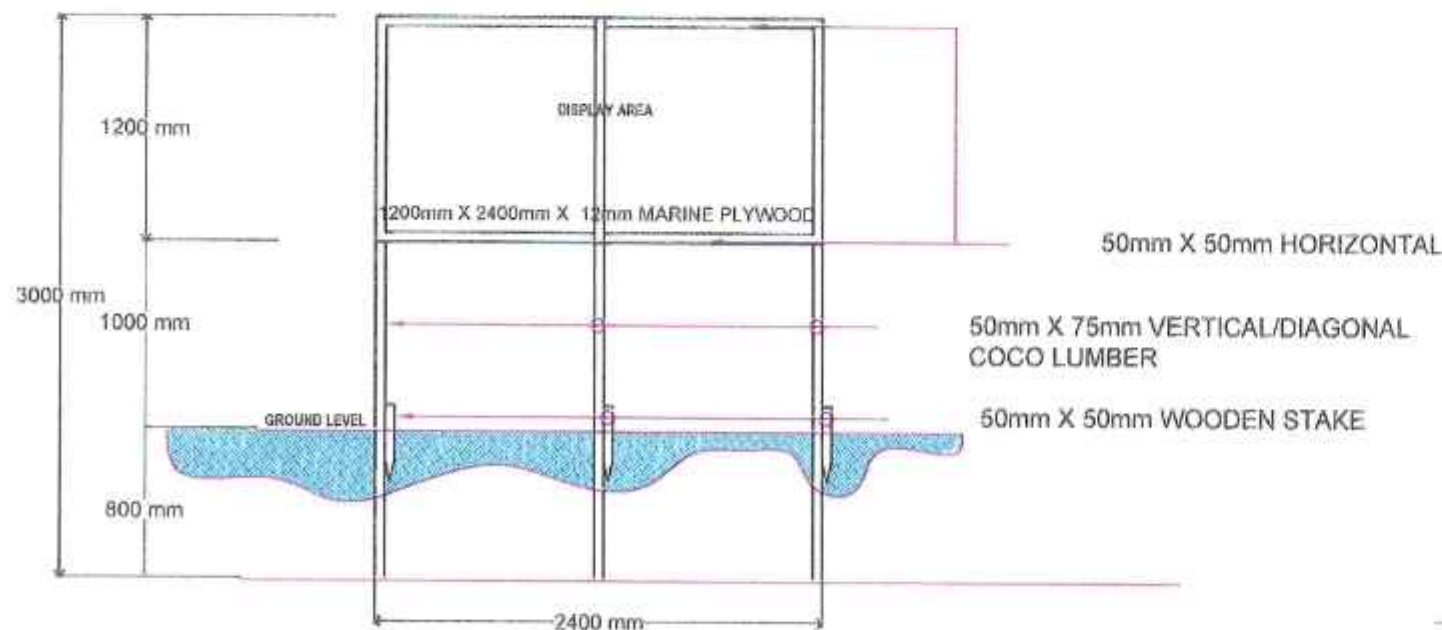
CONTRACT COST:

IMPLEMENTING OFFICE:

SOURCE OF FUND:

Department of Public Works and Highways
 Text 09118867044 or call (02) 115-02 for any concern on this project
www.dpwh.gov.ph

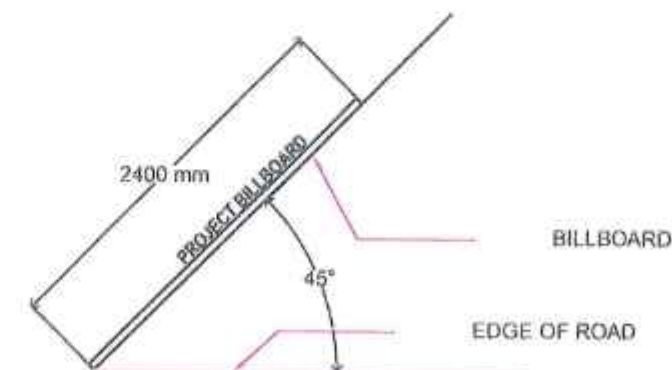
DPWH STANDARD PROJECT BILLBOARD



FRONT ELEVATION

GENERAL NOTES:

1. FRONT STYLE SHALL BE ARIAL, WHILE THE DIMENSION AND LETTER SIZES AS INDICATED ON THE DESIGN LAYOUT SHALL BE ON WHITE BACKGROUND.
2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.



ROAD TRAFFIC DIRECTION

ORIENTATION

 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE IX ZAMBOANGA CITY 2ND DISTRICT ENGINEERING OFFICE JACEL HIGHWAY, DIVISORIA, ZAMBOANGA CITY	PROJECT NAME AND LOCATION:	SHEET CONTENTS:	QUANTITY:	REVIEWED AS TO DESIGNED CONCEPT:	SUBMITTED:	RECOMMENDED:	SET NO.	SHEET NO.
	C.V. 3035 PROJECT DETAILED ENGINEERING DESIGN PLAN FOR REPAIR/RECONSTRUCTION OF ZAMBOANGA RIVER REVEGETATION 2 BRIDGE, YITALL, ZAMBOANGA CITY	SAMPLE OF PROJECT BILLBOARD AND DETAILS	5/24/25	RHIZEL P. ARANETA ENGINEER II 5/24/25	ABRAHAM M. AQUINO CHIEF MAINTENANCE SECTION 5/26/25	ROBERTO D. SANTIAGO ASSISTANT DISTRICT ENGINEER 5/26/25	PILAR C. RIVERA DISTRICT ENGINEER	10 11