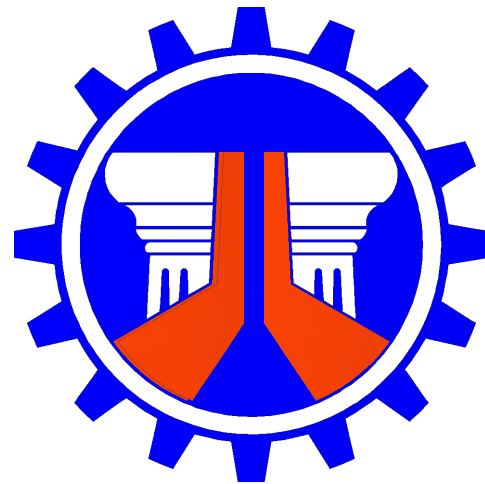




REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE No. IV-A
BATANGAS 2ND DISTRICT ENGINEERING OFFICE
KUMINTANG ILAYA, BATANGAS CITY

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN PLAN FOR
**REHABILITATION AND RECONSTRUCTION OF DAMAGED STRUCTURES ALONG TINGLOY
CIRCUMFERENTIAL ROAD, SAN JUAN SECTION, BRGY. SAN JUAN, TINGLOY, BATANGAS**
TINGLOY, BATANGAS
NET LENGTH = 640.00 L.M.

SUBMITTED:

GEMMA L. OLAN
CHIEF - PLANNING AND DESIGN SECTION

DATE:

RECOMMENDED:

ARIEL V. ARMEDILLA
ASSISTANT DISTRICT ENGINEER

DATE:

APPROVED:

SONIA D. PAGLICAUAN
DISTRICT ENGINEER

DATE:

A. GENERAL



COVER PAGE



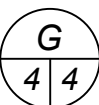
SUMMARY OF QUANTITIES



INDEX OF DRAWINGS
MAP OF BATANGAS
MAP OF TINGLOY MUNICIPALITY



DPWH STANDARD PROJECT
BILLBOARD



TRAFFIC MANAGEMENT PLAN

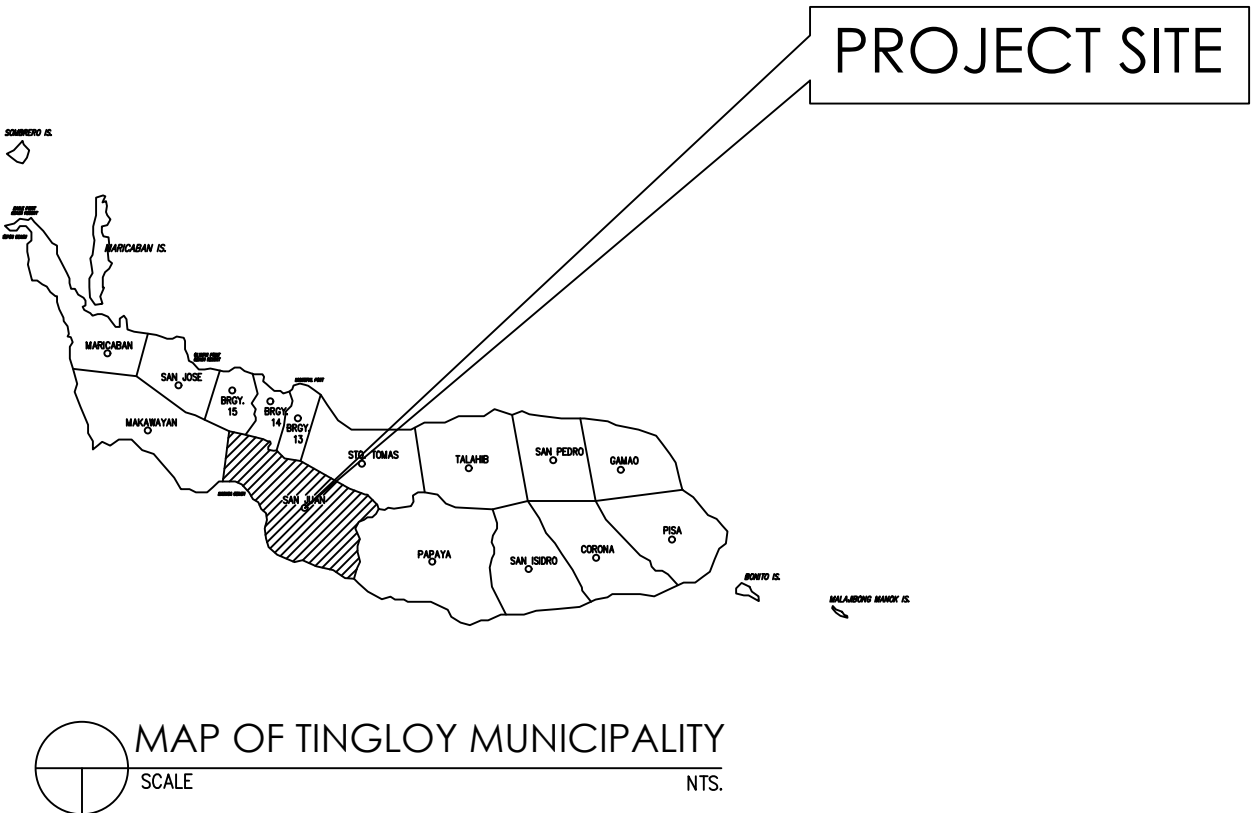
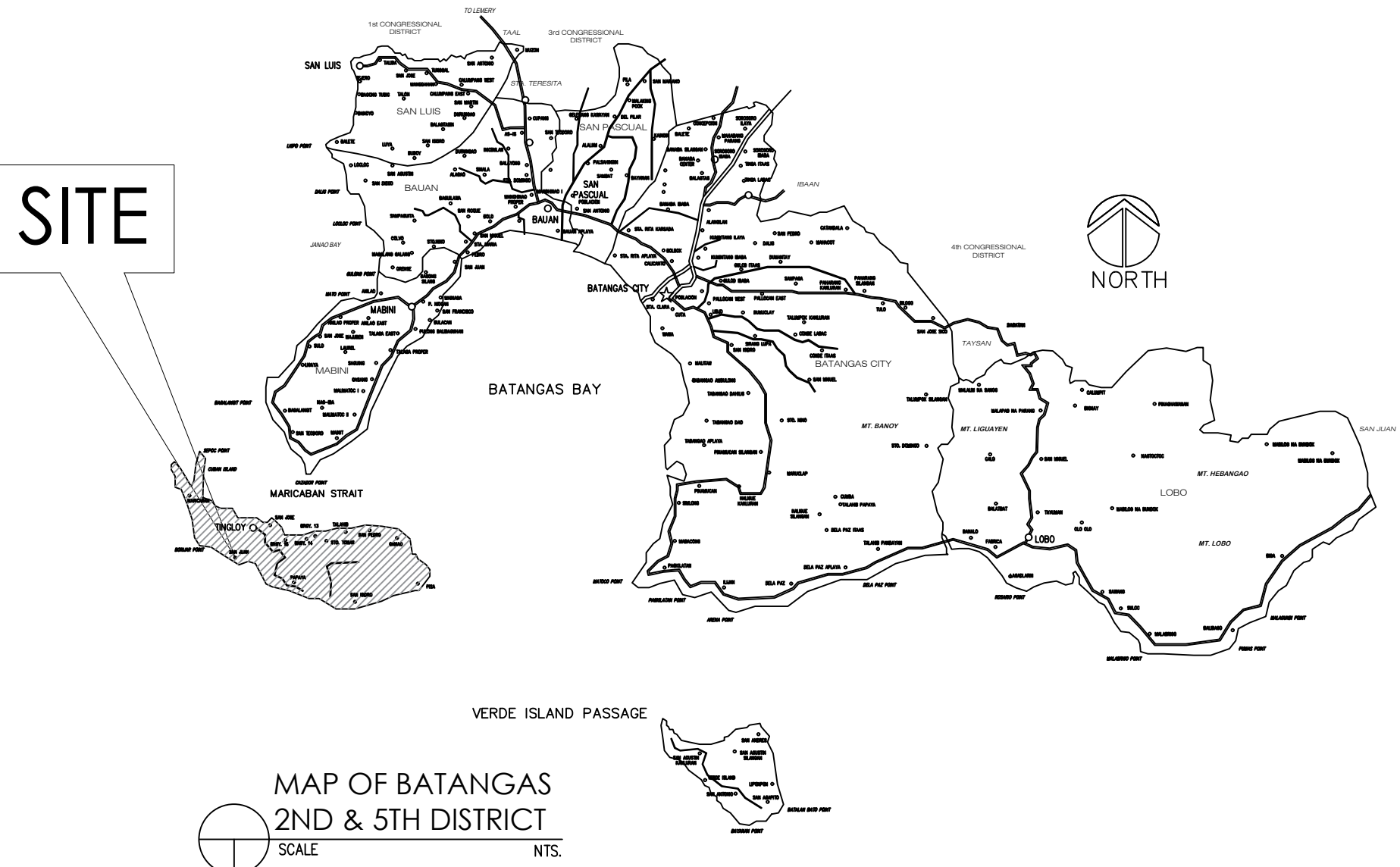
B. FLOOD CONTROL



CROSS SECTION OF STEEL SHEET PILE
PARAPET DETAIL
PILECAP DETAIL



TYPICAL ROAD SECTION
W/ STONE MASONRY



 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE No. IV-A BATANGAS 2ND DISTRICT ENGINEERING OFFICE KUMINTANG ILAYA, BATANGAS CITY	PROJECT NAME AND LOCATION: REHABILITATION AND RECONSTRUCTION OF DAMAGED STRUCTURES ALONG TINGLOY CIRCUMFERENTIAL ROAD, SAN JUAN SECTION, BRGY. SAN JUAN, TINGLOY, BATANGAS TINGLOY, BATANGAS	SHEET CONTENT: INDEX OF DRAWINGS MAP OF BATANGAS MAP OF TINGLOY MUNICIPALITY	DRAFTED: CHARLIE M. PEREZ ENGINEER II PREPARED: CHRISTIAN S. BAGSIT ENGINEER II	REVIEWED: MARICRIS P. VILLANUEVA ENGINEER II DATE:	SUBMITTED: GEMMA L. OLAN CHIEF - PLANNING AND DESIGN SECTION DATE:	RECOMMENDED: ARIEL V. ARMEDILLA ASSISTANT DISTRICT ENGINEER DATE:	APPROVED: SONIA D. PAGLICAUAN DISTRICT ENGINEER DATE:	SET NO. G 2 5	SHEET NO. 2 7

SUMMARY OF QUANTITIES

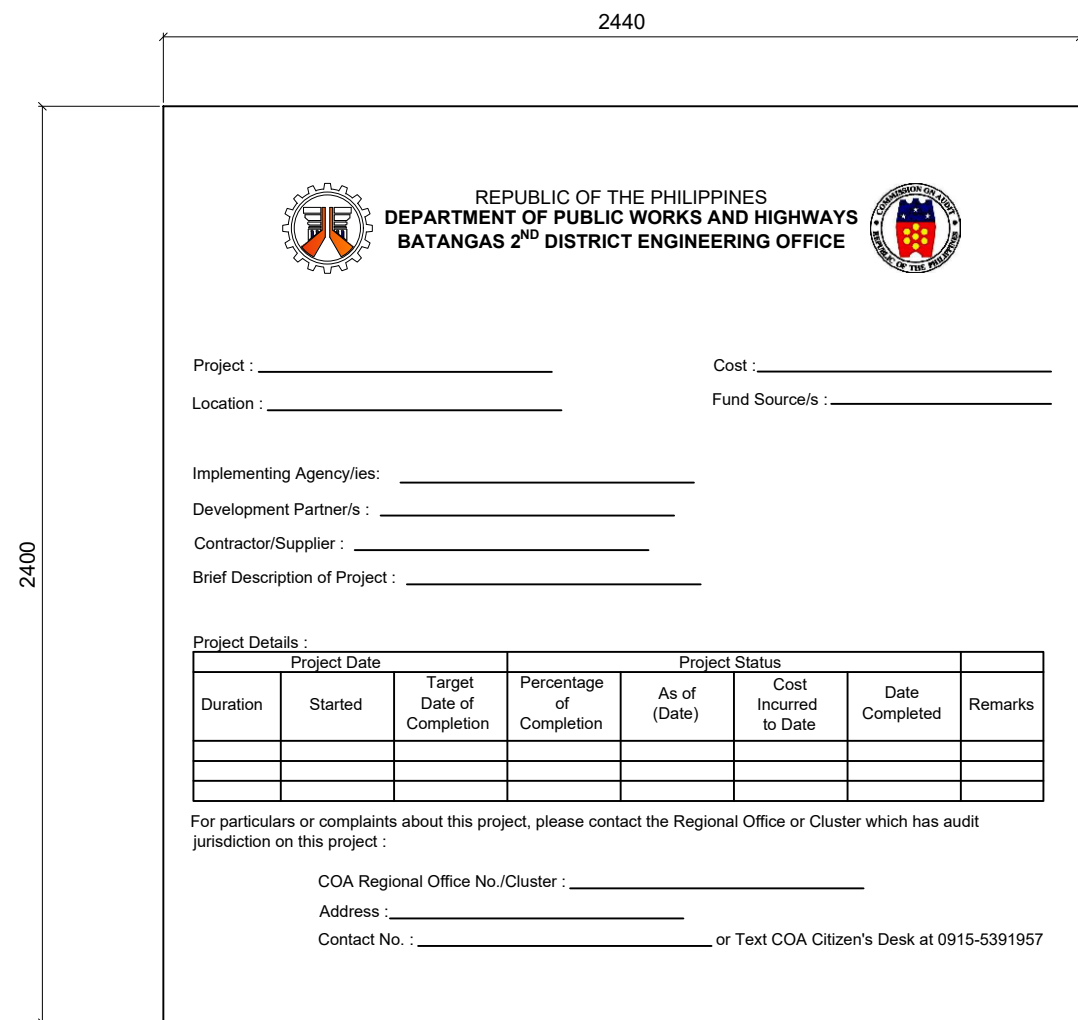
ITEM NO.	DESCRIPTION	QTY	UNIT	REMARKS
PART A	FACILITIES FOR THE ENGINEER			
A.1.1 (8)	Provision of Field Office for the Engineer (Rental Basis)	9.30	Month	
A.1.1 (11)	Provision of Furnitures/Fixtures, Equipment & Appliances for the Field Office for the Engineer	1.00	Lump Sum	
A.1.2 (11)	Provision of Motorized Banca for the Engineer (Rental Basis)	9.30	Month	
A.1.4 (1)	Provision of Progress Photographs	9.30	Month	
PART B	OTHER GENERAL REQUIREMENT			
B.5	Project Billboard / Signboard	2.00	Each	"1 Each" corresponds to a set of 1 DPWH and 1 COA Billboard
B.7 (2)	Occupational Safety and Health Program	1.00	Lump Sum	
B.8 (1)	Traffic Management	9.30	Month	
B.9	Mobilization / Demobilization	1.00	Lump Sum	
PART C	EARTHWORKS			
101 (1)	Removal of Structures and Obstruction	1.00	Lumpsum	
101 (6)	Removal of Structures and Obstruction, Concrete	4,168.64	cu.m	
102 (2)	Surplus common excavation	983.13	cu.m	
103(1)a	Structure Excavation, Common Soil	4,441.80	cu.m	
104 (1) a	Embankment from Roadway Excavation, Common Soil	380.00	cu.m	
104 (2) a	Embankment from Borrow, Common Soil	7,137.85	cu.m	
105 (1) a	Subgrade Preparation, Common Material	5,036.80	sq.m	
PART D	SUBBASE AND BASE COURSE			
200 (1)	Aggregate Subbase Course	1,263.74	cu.m.	
PART E	SURFACE COURSES			
311(1)b1	Portland Cement Concrete Pavement (Unreinforced), 0.20 m thick, 14 days	2,820.00	sq.m	
PART G	DRAINAGE AND SLOPE PROTECTION STRUCTURES			
404 (1) a	Reinforcing Steel, Grade 40	9,501.50	kg	
405 (1) a3	Structural Concrete, 20.68 Mpa, Class A, 28 days	180.20	cu.m	
506 (1)	Stone Masonry	4,561.78	cu.m	
509 (1) b1	Sheet Piles, Steel, Slope Protection	15,012.00	l.m.	



NOTES:

AS PER DEPARTMENT ORDER NO. 021 SERIES OF 2017

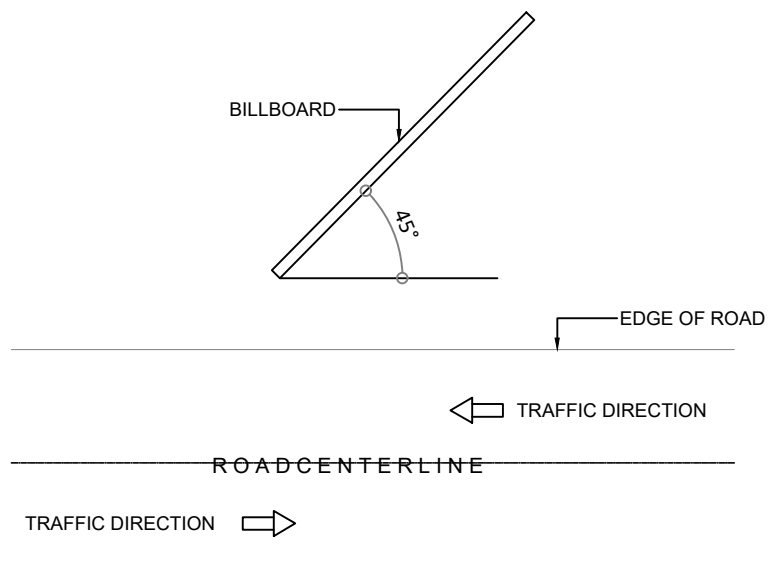
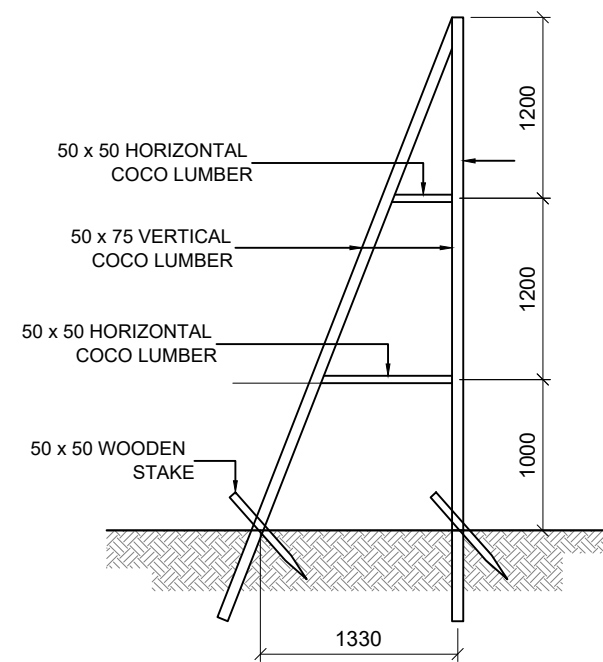
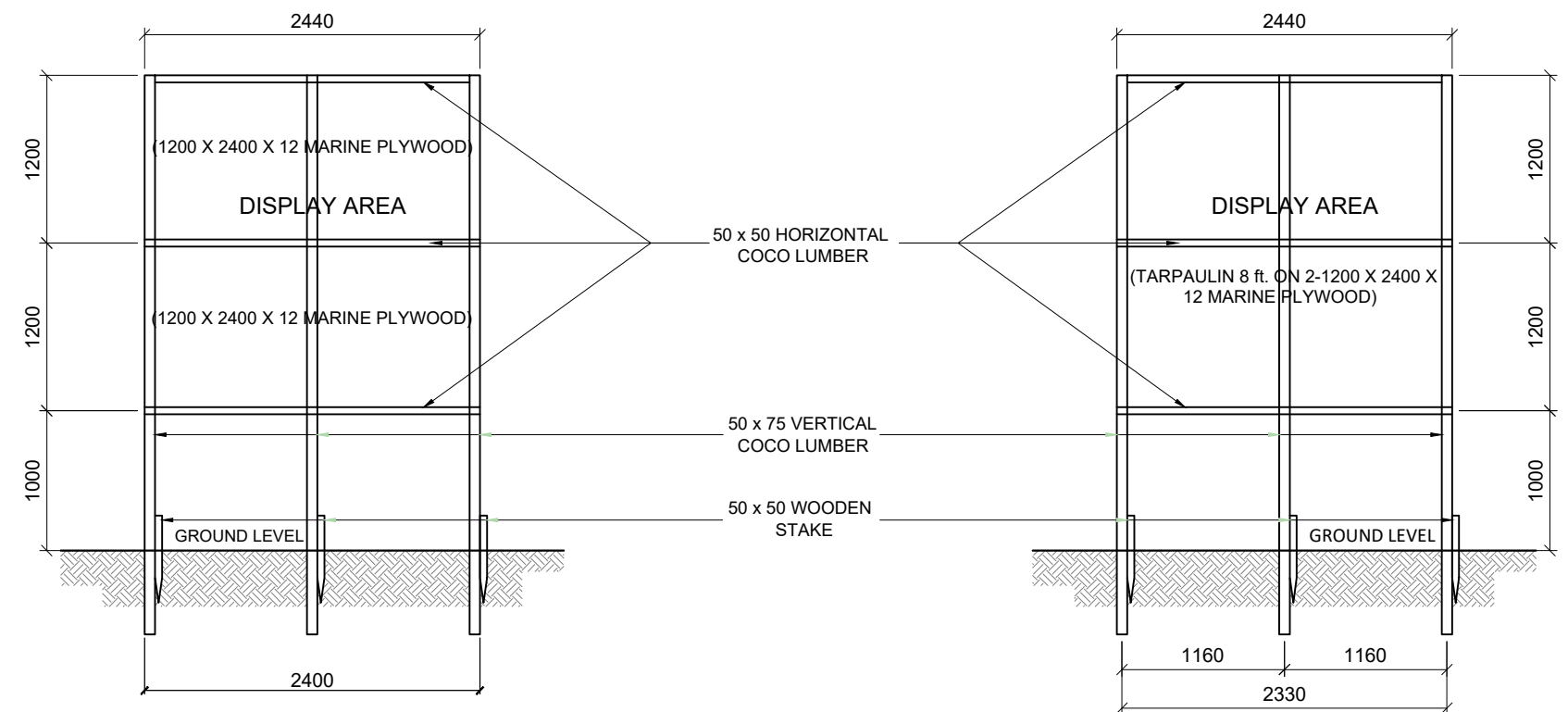
1. THE NEW BILLBOARD DESIGN LAYOUT AND DIMENSION (SEE DRAWING) SHALL BE INSTALLED ON A STANDARD BILLBOARD MEASURING 1220mm. x 2440mm. USING 12mm. (1/2 inch) THICK MARINE PLYWOOD OR TARPALIN POSTED ON 5mm. (3/16 inch) MARINE PLYWOOD.
2. FOR EACH BUILDING PROJECT, THE BILLBOARD SHALL BE INSTALLED IN FRONT OF THE PROJECT SITE.
3. FOR EACH ROAD/BRIDGE/FLOOD CONTROL PROJECT, TWO BILLBOARDS SHALL BE INSTALLED, I.E., ONE AT THE BEGINNING AND ONE AT THE END OF THE PROJECT.
4. FOR ROAD PROJECTS WITH LENGTH OF 10 KILOMETERS OR MORE, BILLBOARD(S) SHALL ALSO BE INSTALLED AT EVERY 5 KILOMETERS INTERVAL.
5. NAME(S) AND/OR PICTURE(S) OF ANY PERSONAGES SHOULD NOT APPEAR IN THE BILLBOARD.
6. NO POLITICAL BILLBOARDS SHALL BE ALLOWED TO BE INSTALLED 100 METERS BEFORE AND 100 METERS AFTER ALL DPWH PROJECTS AND IN BETWEEN THE PROJECT LIMITS OR WITHIN THE ROAD RIGHT-OF-WAY.
7. DPWH CONTRACTORS SHALL NOT BE ALLOWED TO PLACE NAMES OF POLITICIANS ON THEIR EQUIPMENT OR CARRY POLITICAL BILLBOARD ON THEIR EQUIPMENT.



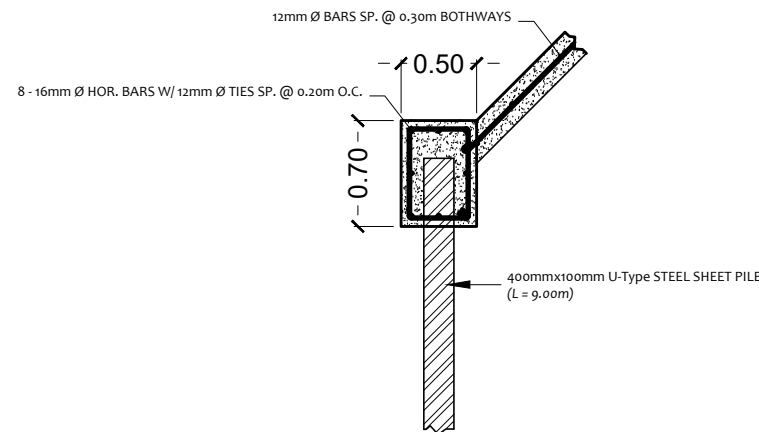
SPECIFICATIONS :

TARPAULIN, WHITE, 8 ft x 8 ft
RESOLUTION : 70 DPI
FONT : HELVETICA
FONT SIZE : MAIN INFORMATION - 3"
FONT COLOR : BLACK

COA STANDARD PROJECT BILLBOARD



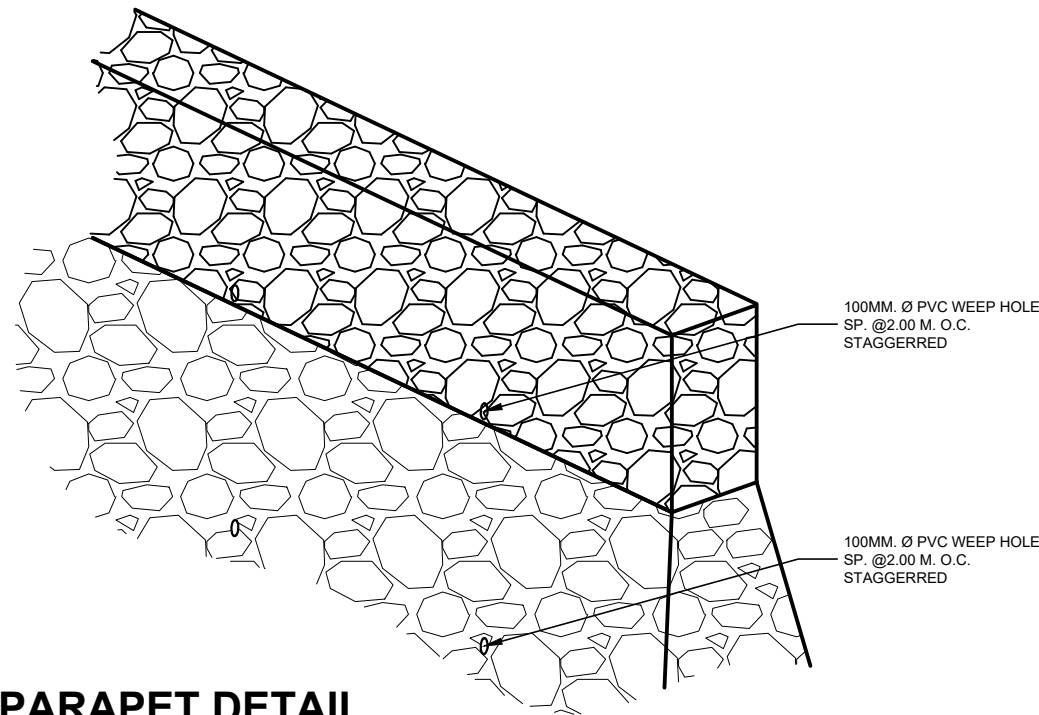
 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE No. IV-A BATANGAS 2ND DISTRICT ENGINEERING OFFICE KUMINTANG ILAYA, BATANGAS CITY	PROJECT NAME AND LOCATION:	SHEET CONTENT:	DRAFTED:	REVIEWED:	SUBMITTED:	RECOMMENDED:	APPROVED:	SET NO.	SHEET NO.
	REHABILITATION AND RECONSTRUCTION OF DAMAGED STRUCTURES ALONG TINGLOY CIRCUMFERENTIAL ROAD, SAN JUAN SECTION, BRGY. SAN JUAN, TINGLOY, BATANGAS TINGLOY, BATANGAS	DPWH STANDARD PROJECT BILLBOARD	<u>CHARLIE M. PEREZ</u> ENGINEER II PREPARED: <u>CHRISTIAN S. BAGIT</u> ENGINEER II	<u>MARICRIS P. VILLANUEVA</u> ENGINEER II DATE:	<u>GEMMA L. OLAN</u> CHIEF - PLANNING AND DESIGN SECTION DATE:	<u>ARIEL V. ARMEDILLA</u> ASSISTANT DISTRICT ENGINEER DATE:	<u>SONIA D. PAGLICAUAN</u> DISTRICT ENGINEER DATE:	G 4 5	4 7



DETAIL OF PILE CAP
SCALE 1:50M

PROPOSED PILE CAP SCHEDULE

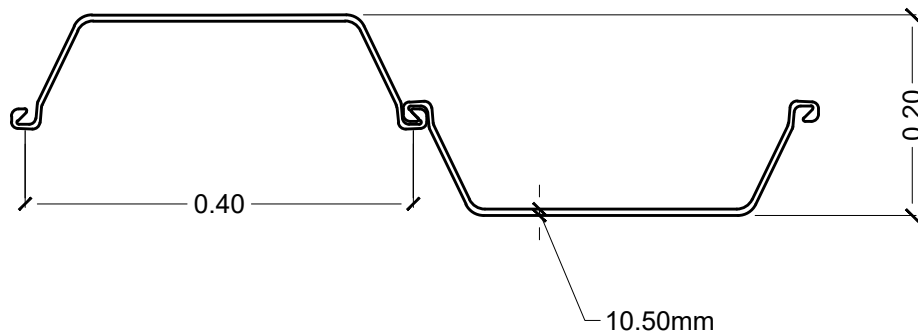
LOCATION	LENGTH	REMARKS
STA.0+000.00 - STA.0+500.00	500.00 m.	



PARAPET DETAIL
NTS SC.

PROPOSED PARAPET SCHEDULE

LOCATION	LENGTH	REMARKS
STA.0+000.00 - STA.0+500.00	500.00 m.	



CROSS SECTION OF STEEL SHEET PILE
SCALE : NTS

PROPOSED STEEL SHEET PILE SCHEDULE

LOCATION	LENGTH	REMARKS
STA.0+000.00 - STA.0+500.00	500.00 m.	



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TINGLOY, BATANGAS

CROSS SECTION OF STEEL SHEET PILE
DETAIL OF PILE CAP
PARAPET DETAIL

CHARLIE M. PEREZ
ENGINEER II
PREPARED:
CHRISTIAN S. BAGSIT
ENGINEER II

MARICRIS P. VILLANUEVA
ENGINEER II
DATE:

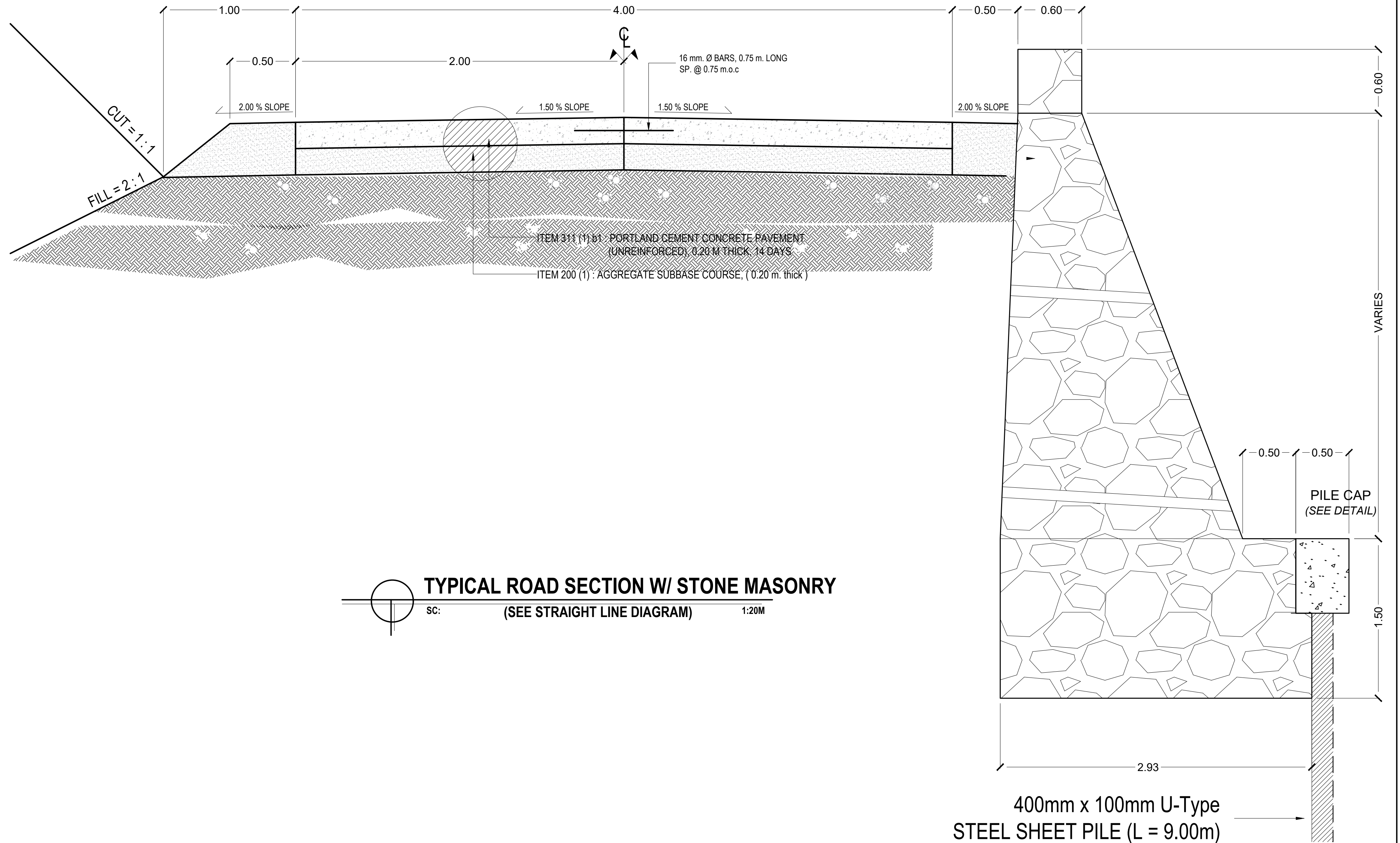
GEMMA L. OLAN
CHIEF - PLANNING AND DESIGN SECTION
DATE:

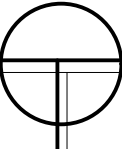
ARIEL V. ARMEDILLA
ASSISTANT DISTRICT ENGINEER
DATE:

SONIA D. PAGLICAUAN
DISTRICT ENGINEER
DATE:

FC
1 2

6
7



 **TYPICAL ROAD SECTION W/ STONE MASONRY**
SC: (SEE STRAIGHT LINE DIAGRAM) 1:20M



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TYPICAL ROAD SECTION
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FC	7
2 2	7