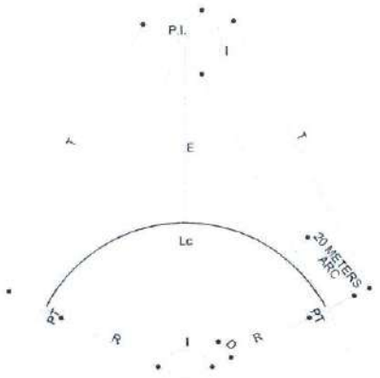


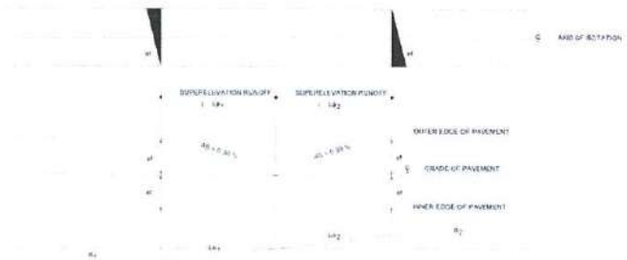
HORIZONTAL CURVE (CIRCULAR)

LEGEND

wf - FULL WIDENING
PI - POINT OF INTERSECTION
I - INTERSECTION ANGLE (CENTRAL ANGLE)
T - TANGENT DISTANCE
R - HORIZONTAL RADIUS
Lc - LENGHT OF CIRCULAR CURVE
E - EXTERNAL DISTANCE
D - DEGREE OF CURVE (ARC DEFINITION)
PC - POINT OF CURVATURE
PT - POINT OF TANGENCY
L - LENGHT OF SUPERELEVATION RUNOFF
Lo - LENGTH OF SUPERELEVATION RUNOFF
ef - FULL SUPERELEVATION
X - LENGTH BETWEEN SUPERELEVATION 0% & N.C. %
S- SLOPE OF EDGE OF PAVEMENT IN % RELATIVE TO
Vd - DESIGN SPEED
N.C. - NORMAL CROSSFALL

CASE 1

SUPERELEVATION TRANSITION



CASE 2

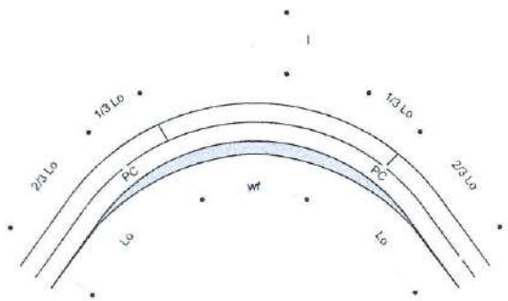
TRANSITION : CIRCULAR CURVE - REVERSED CIRCULAR

NOTES:

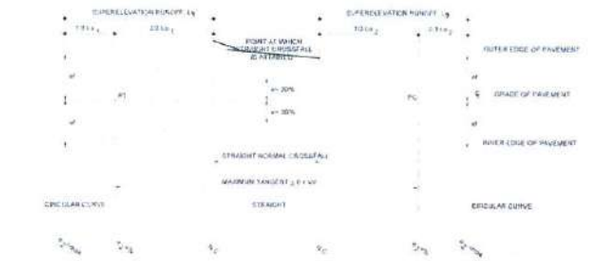
1. FOR EFFECTIVE DRAINAGE ΔS HAS TO BE > 0.30%.
2. WHERE ΔS < 0.30% A SPECIAL METHOD OF SUPERELEVATION TRANSITION HAS TO BE ADOPTED AS INDICATED IN THE DOTTED LINE.
3. ROUNDING OFF ONLY NECESSARY IF ΔS > 0.60%.

Vd	≤50 Km/H	80 Km/H	≥80Km/H
R	500 m	1 000 m	2,000 m

4. *ef* CAN BE TAKEN FROM CHART OF SUPERELEVATION RATE.
5. SUPERELEVATION CAN BE ATTAINED BY REVOLVING THE PAVEMENT ABOUT THE CENTER PROFILE.
6. THE SLOPE OF THE SIDEWALK SHALL ALWAYS FALL TOWARD THE TRAVELLED WAY.
7. THE SLOPE OF THE SHOULDER SHALL ALWAYS FALL IN THE DIRECTION OF THE OUTSIDE EDGE OF TRAVELLED WAY.
8. WHEN SUPERELEVATION IS LARGER THAN 4% THEN THE SLOPE OF LOWER SHOULDER SHALL BE THE SAME FOR TRAVELLED WAY.
9. WHEN SUPERELEVATION IS LESS THAN 6% THE HIGHER SHOULDER SHALL HAVE A SLOPE OF 4% OR 5% FOR PAVED AND UNPAVED SHOULDER RESPECTIVELY.
10. IF THE SUPERELEVATION VARIES FROM 6% TO 8% (BEING THE MAXIMUM PERMITTED IN GEOMETRIC STANDARD FOR THE SECONDARY ROAD) THEN THE SLOPE OF THE HIGHER SHOULDER VARY FROM 4% TO 2%. THE ALGEBRAIC SUM OF THE SLOPES OF TRAVELLED WAY AND THE SHOULDER WHEN SUPERELEVATED SHALL ALWAYS BE EQUAL TO 10%.
11. USED CASE 3 WHEN MINIMUM TANGENT BETWEEN CURVES IS GRATER THAN $\frac{2}{3}$ (Lo + Lo).
12. NO HORIZONTAL CURVE IS REQUIRED WHEN THE INTERSECTION I (CENTRAL ANGLE) IS LESS THAN ONE DEGREE (1°)



METHOD OF WIDENING



CASE 3

TRANSITION : CIRCULAR CURVE - STRAIGHT- CIRCULAR CURVE

RADIUS (m)	DESIGN SPEED (KM/H)						COMMENTS
	40	50	60	70	80	100	120
50	1.75						
60	1.50	1.50					
100	1.50	1.50					
125	1.25	1.25	1.25				
150	1.00	1.25	1.25				
160	1.00	1.25	1.25	1.25			
200	0.75	0.75	1.00	1.00	1.25		
250	0.75	0.75	1.00	1.00	1.00		
300	0.75	0.75	1.00	1.00	1.00		
400	50	0.75	0.75	0.75	1.00	1.00	
500	50	50	0.75	0.75	1.00	1.00	
600		50	50	0.75	0.75	1.00	1.00
800			50	50	0.75	0.75	1.00
1200				50	0.75	0.75	0.75
1500	N.C. WIDENING				50	0.75	0.75
1500						0.75	0.75

THE VALUE GIVEN IN THE TABLE ARE VALID FOR CARRIAGE-WAY WIDTH OF 6.1 METERS.

FOR 7.00 METERS THE GIVEN VALUES ARE TO BE REDUCED BY 0.75 m AND 0.25 m RESPECTIVELY.

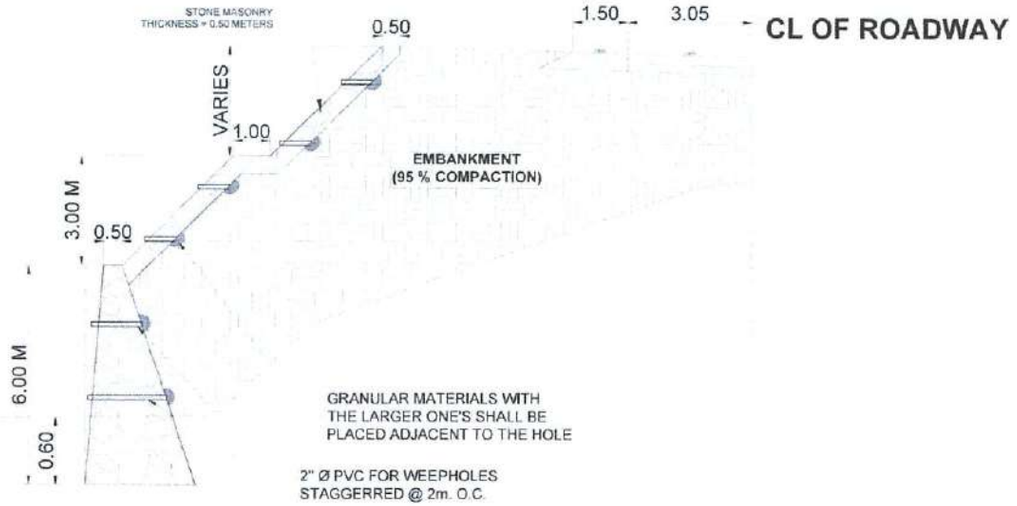
WHERE A SIGNIFICANT NUMBER OF SPECIALLY LARGE VEHICLES IS ENVISAGED EXTRA WIDENING MAY HAVE TO BE CONSIDERED.

VALUES LESS THAN 0.5 MAY BE DISREGARDED.

THE WIDENING IS ATTAINED LINEARLY OVER THE WHOLE SUPERELEVATION RUN OFF AND APPLIED ON THE INSIDE OF THE CURVE.

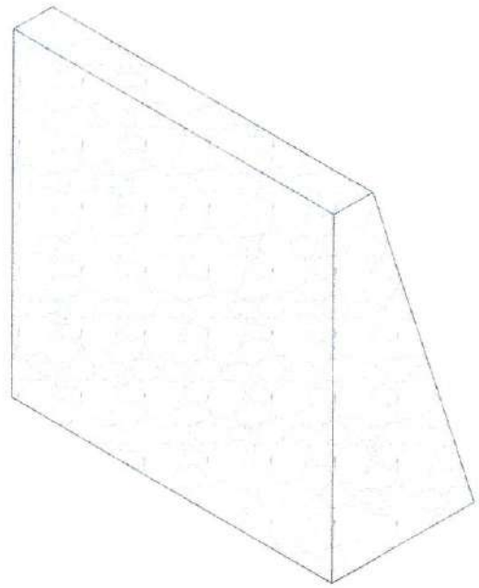
WIDENING OF CURVES

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE VIII BARAS, PALO, LEYTE	PROJECT NAME AND LOCATION SIPAG - ACCESS ROADS AND/OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY TACLOBAN CITY LD	SHEET CONTENTS GEOMETRIC DESIGN STANDARD FOR HORIZONTAL (CIRCULAR CURVE) SUPERELEVATION, WIDENING	PREPARED FRANCIS ASVIN C. NADERA ENGINEER DATE	REVIEWED FELIX R. BACUS CHIEF, HIGHWAY DESIGN SECTION DATE	SUBMITTED AGNES M. BARONDA CHIEF, PLANNING AND DESIGN DIVISION DATE	RECOMMENDED MA. MARGARITA C. NUNIA, D.M. ASSISTANT REGIONAL DIRECTOR DATE	APPROVED EDGAR B. TABACON, CESO IV REGIONAL DIRECTOR DATE	SET NO. A 17 / 175	SHEET NO. 17 175

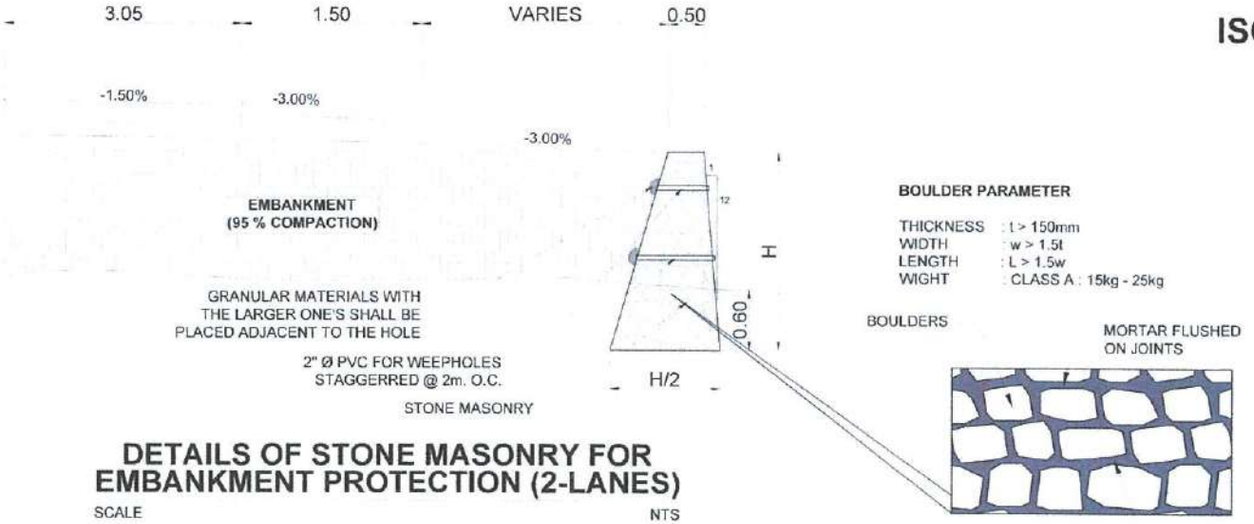


DETAILS OF STONE MASONRY FOR MORE THAN 6 METERS OF EMBANKMENT PROTECTION (2-LANES)

SCALE NTS



ISOMETRIC VIEW



DETAILS OF STONE MASONRY FOR EMBANKMENT PROTECTION (2-LANES)

SCALE NTS

BOULDER PARAMETER

THICKNESS	:	t > 150mm
WIDTH	:	w > 1.5t
LENGTH	:	L > 1.5w
WIGHT	:	CLASS A : 15kg - 25kg

BOULDERS

MORTAR FLUSHED ON JOINTS

MORTAR BED

DESIGN PARAMETERS (STONE MASONRY)

Wsc	=	UNIT WEIGHT OF CONCRETE	= 24.00 kN/m³
Wsm	=	UNIT WEIGHT OF STONE MASONRY	= 26.75 kN/m³
Wss	=	UNIT WEIGHT OF SOIL	= 15.00 kN/m³
qs	=	SURCHARGE	= 9.81 kN/m²
Ø	=	ANGLE OF FRICTION OF SOIL	= 40.00 °
μ	=	COEFFICIENT OF FRICTION B/N CONC.	= 0.50
Θ	=	SLOPE OF OUTSIDE WALL	= 8.94 °
h'	=	HEIGHT EQUIVALENT OF SURCHARGE	= 0.70 m
bw	=	CONSIDERED STRIP OF MASONRY	= 1.00 m
		ASSUMED BEARING CAPACITY	= 196 kPA

(STONE MASONRY)

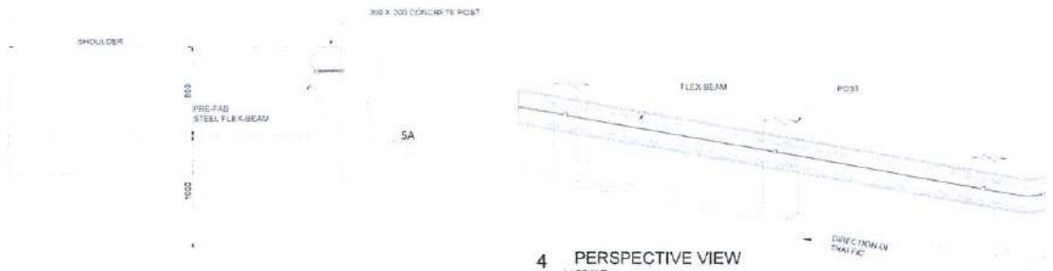
PRIOR TO CONSTRUCTION CONDUCT SOIL BEARING INVESTIGATION IN ACCORDANCE WITH THE STANDARD TESTING REQUIREMENT ALONG THE ALIGNMENT OF STONE MASONRY WALL TO VERIFY THE REQUIRED DESIGN SOIL BEARING CAPACITY OF THE FOUNDATION BED.

ALLOWABLE SOIL BEARING CAPACITY (qa) = 196 kPa

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE VIII BARAS, PALO, LEYTE	PROJECT NAME AND LOCATION SIPAG - ACCESS ROADS AND/OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY TACLOBAN CITY LD	SHEET CONTENTS DETAIL OF STONE MASONRY	PREPARED FRANCIS ALVIN C. NADERA ENGINEER II DATE	REVIEWED FELIXIR BACUS CHIEF, HIGHWAY DESIGN SECTION DATE	SUBMITTED AGNES M. BARONDA CHIEF, PLANNING AND DESIGN DIVISION DATE	RECOMMENDED MA. MARGARITA C. LAUNIA, D.M. ASSISTANT REGIONAL DIRECTOR DATE	APPROVED EDGAR B. TABACON, CESO III REGIONAL DIRECTOR DATE	SET NO. A 18 OF 33	SHEET NO. 18 175

1 PLAN
SCALE NTS

2 ELEVATION
SCALE NTS



4 PERSPECTIVE VIEW
SCALE
NTS

3 SECTION
SCALE NTS

GENERAL NOTES:

1. MATERIALS AND WORKMANSHIP SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES REVISED 2004.
2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
3. CONCRETE POST SHALL CONFORM WITH THE REQUIREMENTS OF CLASS "C" CONCRETE AND REINFORCING STEEL.
4. GAUGE OF FLEX-BEAM GUARDRAIL SHALL BE AS INDICATED IN PLAN AND SPECIFICATIONS.
5. ALL NUTS SHALL BE WELDED TO THE BOLTS AFTER TIGHTENING.
6. ALL LAPS OF GUARD RAILS SHALL BE IN THE DIRECTION OF TRAFFIC FLOW.
7. PROVIDE ALTERNATING BLACK AND YELLOW BAND STRIPE REFLECTORIZED TO APPLIED ON FRONT FACE OF FLEX-BEAM FOR AGDED SAFETY AND MATERIAL PROTECTION AGAINST RUST.

TYPE	TYPE WIDTH (mm)	DEPTH OF CORR (mm)	GROSS SECTIONAL AREA (sq mm)	WT. PER l.m (kg)	WT. OF 1 (12'-0") SECTION (kg)	WT. OF BOLTS PER SECTION (kg)	NO. OF RAIL PLACE IN PLACE	WT. PER m IN PLACE (kg)
STANDARD (GAUGE 12)	3.30	75.00	13.00	10.27	43.86	1.50	4	11.51
HEAVY DUTY (GAUGE 10)	3.32	78.00	16.53	13.29	56.00	1.50	4	14.69

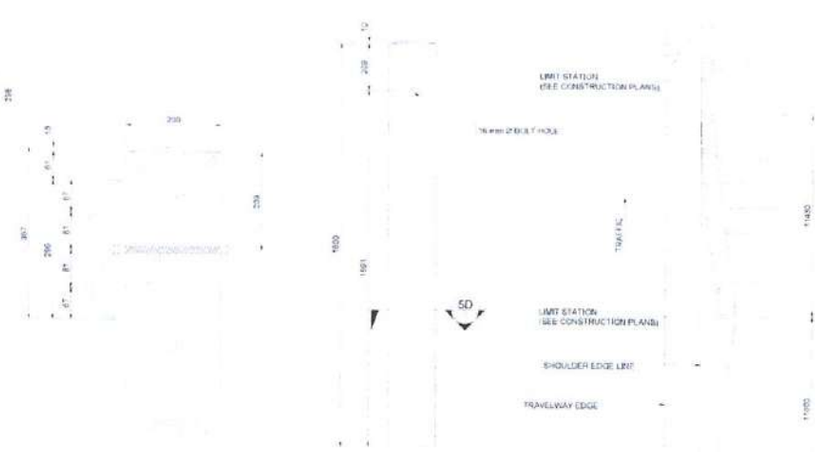
1 - 16 X 254 mm POST BOLT, 5 - 16 X 32 mm SPLICE BOLTS, 16 mm WASHERS.
MULTIPLY BY LENGTH AND ADD 16.41 kg (FOR 2 END WINGS AND BOLTS) TO OBTAIN TOTAL WEIGHT OF FLEX BEAM INSTALLED ON 3.81 m (ft) CENTERS.

TABLE OF FLARE

LENGTH	OFFSET
0	0
2	35
4	125
6	300
8	500
10	850
12	1200

5B FLEX-BEAM END DETAIL
SCALE
NTS

5D SECTION (POST)
SCALE NTS



5A DETAIL
SCALE NTS

5C ELEVATION (POST)
SCALE NTS

5 FLEX-BEAM DETAIL
SCALE NTS

6 GUARDRAIL SET-OUT STANDARD INSTALLATION FOR END TERMINAL
SCALE
NTS

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE VIII
BARAS, PALO, LEYTE

PROJECT NAME AND LOCATION:
SIPAG - ACCESS ROADS AND/OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY
TACLOBAN CITY LD

SHEET CONTENTS: DETAIL FOR FLEX BEAM

PREPARED: FRANCIS ALVIN C. NADERA, ENGINEER II — DATE

REVIEWED: FELIX R. [illegible], CHIEF, HIGHWAY DESIGN SECTION — DATE

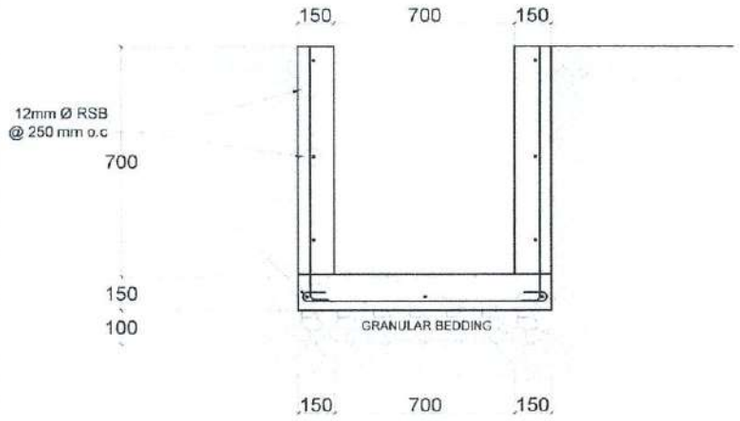
SUBMITTED: [illegible], CHIEF, PLANNING AND DESIGN DIVISION — DATE

RECOMMENDED: MA. MARGARITA C. JUNIA, CESO III, ASSISTANT REGIONAL DIRECTOR — DATE

APPROVED: EDGAR B. TABACON, CESO IV, REGIONAL DIRECTOR — DATE

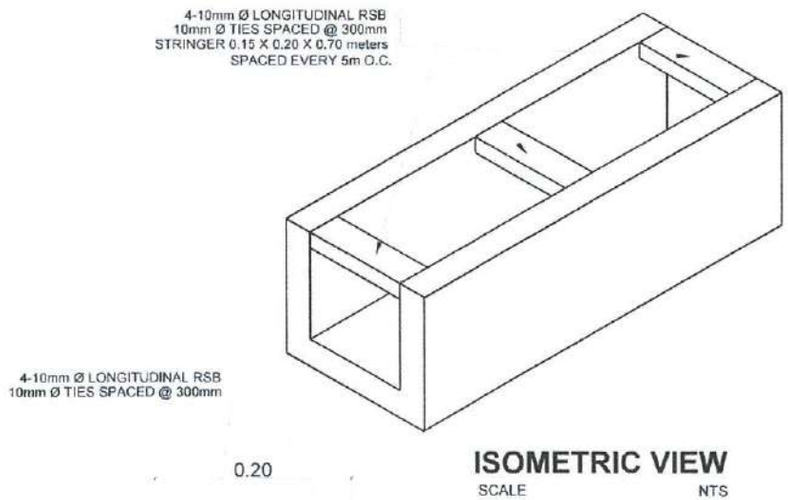
SET NO. A 19 33

SHEET NO. 19 175



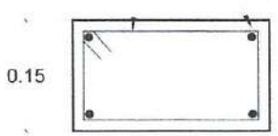
DET. CONCRETE LINED CANAL WITHOUT COVER

SCALE NTS



ISOMETRIC VIEW

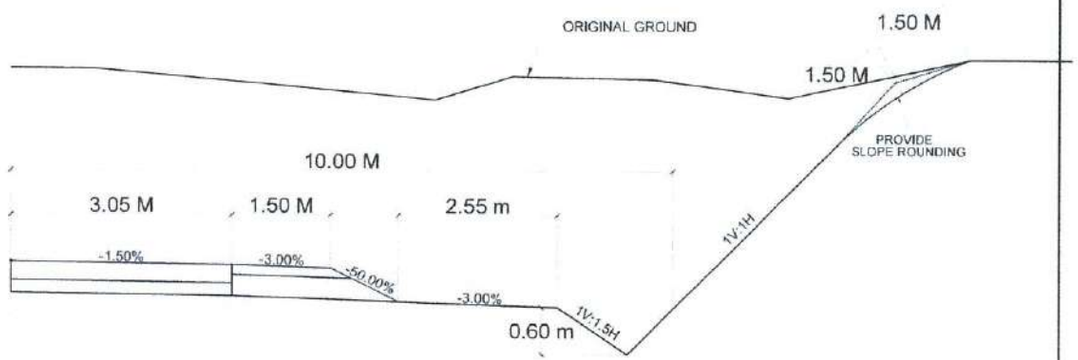
SCALE NTS



SECTION

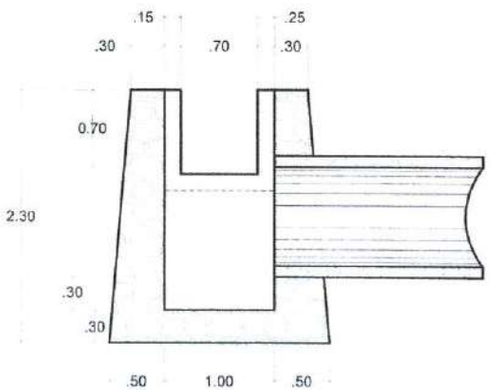
SCALE NTS

CL OF ROADWAY



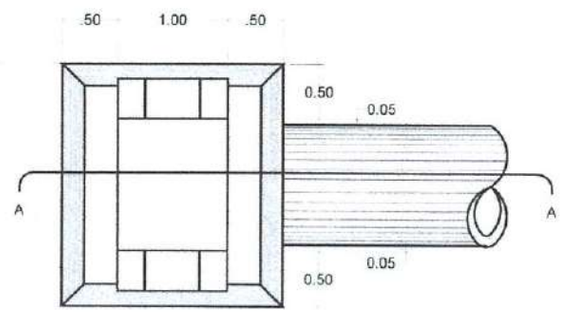
DETAIL OF SIDE DITCH

SCALE NTS



SECTION A-A

SCALE NTS



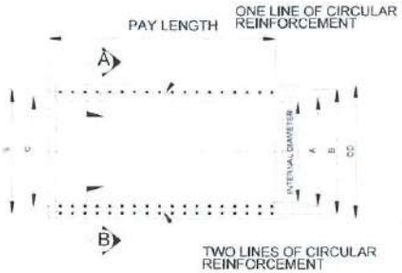
PLAN

SCALE NTS

DETAIL OF STONE MASONRY CATCH BASIN

SCALE NTS

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE VIII SANTA FAUS LEYTE	PROJECT NAME AND LOCATION: SIPAG - ACCESS ROADS AND/OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJORU STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGIHAY, TACLOBAN CITY TACLOBAN CITY LD	SHEET CONTENTS: DETAIL OF LINED CANAL, DITCH, AND CATCH BASIN	PREPARED: FRANCIS ALVIN C. NADERA ENGINEER II DATE	REVIEWED: FELIX R. MACOS CHIEF, HIGHWAYS DESIGN SECTION DATE	SUBMITTED: AGNES M. BARONDA CHIEF, PLANNING AND DESIGN DIVISION DATE	RECOMMENDED: MA. MARGARITA C. JUNIA, D.M. ASSISTANT REGIONAL DIRECTOR DATE	APPROVED: EDGAR B. TABACON, CESO III REGIONAL DIRECTOR DATE	SET NO: 20 33	SHEET NO: 20 175



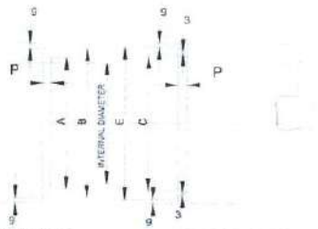
LONGITUDINAL SECTION

SECTION A

SECTION B

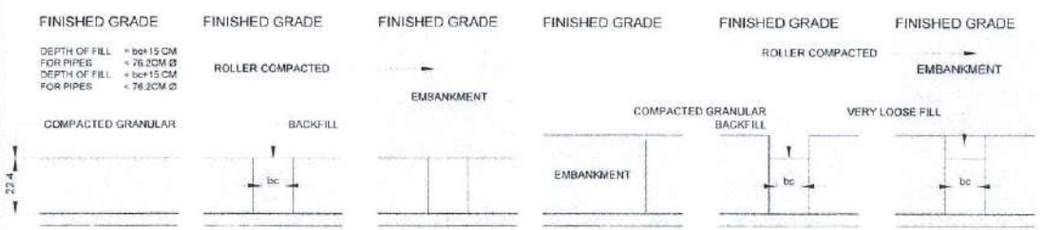
REINFORCED CONCRETE PIPE CULVERTS

DETAIL OF PIPE COLLAR



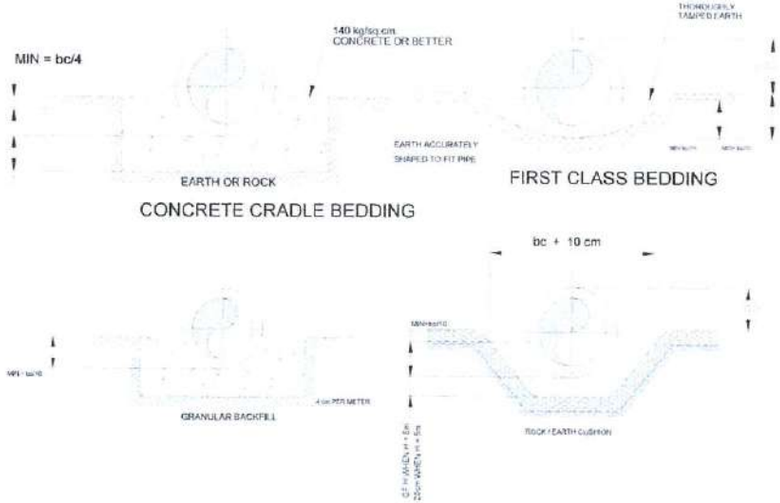
TONGUE END GROOVE END

DETAIL OF RCPC ENDS



CALIFORNIA METHOD " A "

CALIFORNIA METHOD " B "

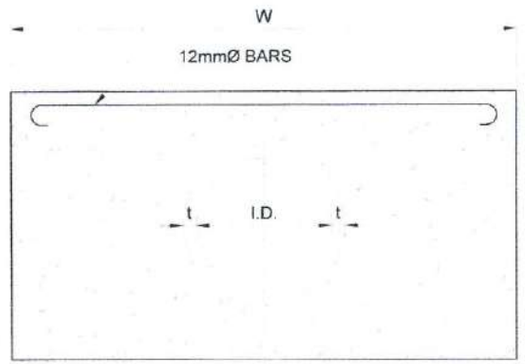


STANDARD STRENGTH REINFORCED CONCRETE PIPE CULVERTS																			EXTRA STRENGTH REINFORCED CONCRETE PIPE CULVERTS													
SIZE OF PIPE (mm)	CONCRETE 247 kg/cm² (3,500 lb/in²)									CONCRETE 317 kg/cm² (4,500 lb/in²)									STRENGTH TEST REQUIREMENTS kg/m OF PIPE		SIZE OF PIPE (mm)	CONCRETE 317 kg/cm² (4,500 lb/in²)									STRENGTH TEST REQUIREMENTS kg/m OF PIPE	
	WALL THICKNESS (mm)	TONGUE (mm)		GROOVE (mm)		DEPTH (mm)	MINIMUM REINFORCEMENT cm²/m OF PIPE			WALL THICKNESS (mm)	TONGUE (mm)		GROOVE (mm)		DEPTH (mm)	MINIMUM REINFORCEMENT cm²/m OF PIPE			THREE-EDGE-BEARING METHOD			WALL THICKNESS (mm)	TONGUE (mm)		GROOVE (mm)		DEPTH (mm)	MINIMUM REINFORCEMENT cm²/m OF PIPE			THREE-EDGE-BEARING METHOD	
Internal Diameter	t	A	B	C	E	P	CIRCULAR REINFORCEMENT	ELLIPTICAL REINFORCEMENT		t	A	B	C	E	P	CIRCULAR REINFORCEMENT	ELLIPTICAL REINFORCEMENT		0.00025m CRACK LOAD	ULTIMATE LOAD	Internal Diameter	t	A	B	C	E	P	CIRCULAR REINFORCEMENT	ELLIPTICAL REINFORCEMENT		0.00025m CRACK LOAD	ULTIMATE LOAD
300	57	344	383	351	370	44	1 LINE 1.48			51	495	514	502	521	44	1 LINE 1.36			3,355	5,218	300	-	-	-	-	-	-	-				
380	57	344	383	351	370	44	1 LINE 1.90			51	495	514	502	521	44	1 LINE 2.33			3,914	6,088	380	-	-	-	-	-	-	-				
460	64	508	527	514	534	44	1 LINE 2.54	1 LINE 2.12		51	495	514	502	521	44	1 LINE 2.96			4,473	6,705	460	-	-	-	-	-	-	-				
610	76	673	692	680	699	44	1 LINE 3.60	1 LINE 2.75		64	660	680	667	686	44	1 LINE 4.22	1 LINE 3.60		4,473	7,454	610	76	673	692	680	699	44	1 LINE 5.50	1 LINE 4.22		5,964	8,945
760	89	853	857	845	864	51	1 LINE 4.66	1 LINE 3.60		76	825	845	832	851	51	1 LINE 5.92	1 LINE 4.44		5,032	8,572	760	89	838	857	845	864	51	1 LINE 6.56	1 LINE 5.08		7,454	11,182
910	102	1003	1022	1010	1029	64	2 LINES EACH 3.81	1 LINE 3.81		89	148	1007	994	1013	64	2 LINES EACH 4.66	1 LINE 4.66		6,338	9,840	910	102	1003	1427	1010	1029	64	2 LINES EACH 5.92	1 LINE 5.92		8,945	13,418
1070	114	1158	1187	1175	1194	64	2 LINES EACH 4.44	1 LINE 4.44		89	1158	1185	1158	1175	64	2 LINES EACH 5.28	1 LINE 5.28		7,945	10,958	1070	114	1168	1187	1175	1194	64	2 LINES EACH 6.68	1 LINE 6.68		10,436	15,655
1220	127	1334	1383	1348	1369	64	2 LINES EACH 5.29	1 LINE 5.29			1315	1334	1321	1340	64	2 LINES EACH 8.56	1 LINE 5.56		8,051	11,927	1220	127	1334			1358	64	2 LINES EACH 8.04	1 LINE 8.04		11,927	17,891
1520	152	1664	1683	1679	1660	64	2 LINES EACH 6.98	1 LINE 6.60		127	1638	1658	1645	1664	64	2 LINES EACH 8.88	1 LINE 4.48		8,945	14,998	1520	152	1664			1680	64	2 LINES EACH 10.58	1 LINE 10.58		13,418	22,364

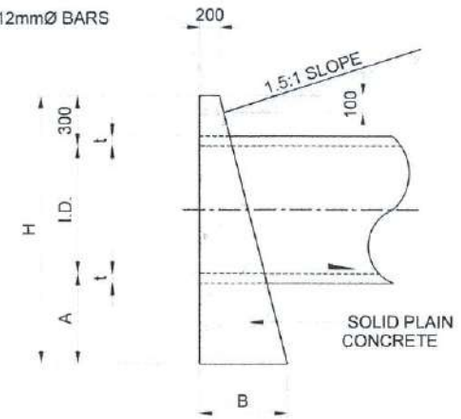
NOTE:

1. **LOCATION AND NUMBER OF PIPE CULVERT IS SUBJECT TO CHANGE AS PER ACTUAL IMPLEMENTATION, VERIFICATION AND APPROVED BY THE PROJECT ENGINEER.**

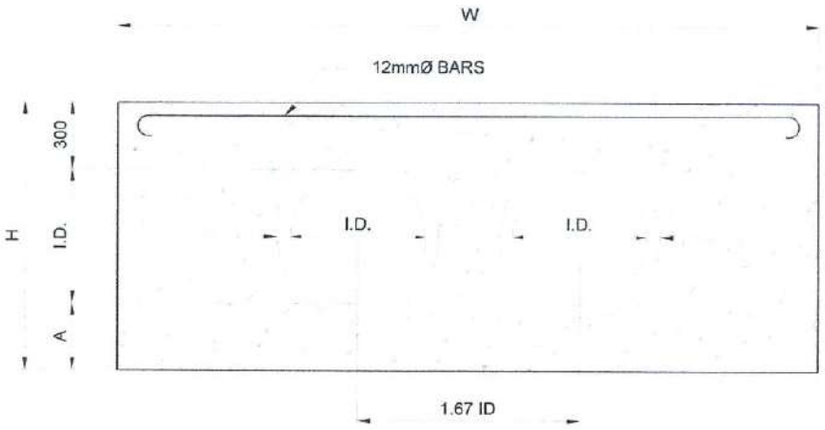
REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE VIII BARAS PALO, LEYTE	PROJECT NAME AND LOCATION: DPAG - ACCESS ROADS AND/OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY. TACLOBAN CITY LD	SHEET CONTENTS: DETAILS FOR STANDARD RCPC	PREPARED: FRANCIS ALVIN C. NADERA, ENGINEER II, DATE	REVIEWED: FELIX R. BACUS, CHIEF, HIGHWAY DESIGN SECTION, DATE	APPROVED: AGNES M. BARONDA, CHIEF, PLANNING AND DESIGN DIVISION, DATE	RECOMMENDED: MA. MARGARITA C. UNIA, D.M., ASSISTANT REGIONAL DIRECTOR, DATE	APPROVED: EDGAR D. TABACON, CESO IV, REGIONAL DIRECTOR, DATE	SET NO. A 21 33	SHEET NO. 21 175



ELEVATION
SCALE NTS



SECTION
SCALE NTS



ELEVATION
SCALE NTS

TABLE C (ONE STRAIGHT TYPE HEADWALL)

DIAMETER & THICKNESS (mm)		DIMENSIONS (mm)			SINGLE PIPE				DOUBLE PIPE				TRIPLE PIPE			
INTERNAL DIAMETER (I.D.)	MIN. THK. SHELL (t)	A	B	H	W (mm)	AREA OF WATERWAY m^2	CONCRETE m^3 mm	REINF. STEEL kg.	W (mm)	AREA OF WATERWAY m^2	CONCRETE m^3 mm	REINF. STEEL kg.	W (mm)	AREA OF WATERWAY m^2	CONCRETE m^3 mm	REINF. STEEL kg.
460	51	310	350	1070	1500	0.15	0.46	3.48	2600	0.33	0.63	4.90	3400	0.45	0.80	5.97
610	64	410	430	1320	2400	0.29	0.87	4.55	3500	0.58	1.20	6.50	4600	0.87	1.51	8.45
910	86	610	600	1820	3800	0.65	2.28	6.68	5200	1.30	3.16	9.52	6800	1.95	3.85	12.36
1070	95	710	780	2080	4300	0.90	3.84	7.57	6050	1.80	5.09	10.67	7900	2.70	6.43	13.96
1220	108	810	870	2330	4800	1.17	4.43	8.81	6900	2.34	6.70	12.54	9000	3.51	7.97	16.14
1520	127	1010	980	2830	6000	1.81	8.80	10.94	8600	3.63	11.93	15.56	11200	5.43	15.05	19.82

STRAIGHT TYPE HEADWALL
SCALE NTS

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE VIII
BARAS, PALO, LEYTE

PROJECT NAME AND LOCATION: SIPAG - ACCESS ROADS AND/ OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY
TACLOBAN CITY LD

SHEET CONTENTS: STRAIGHT TYPE HEADWALL

PREPARED: FRANCIS ALVIN C. NADERA, ENGINEER II — DATE

REVIEWED: FELIX N. ANGUS, CHIEF, HIGHWAY SERVICES SECTION — DATE

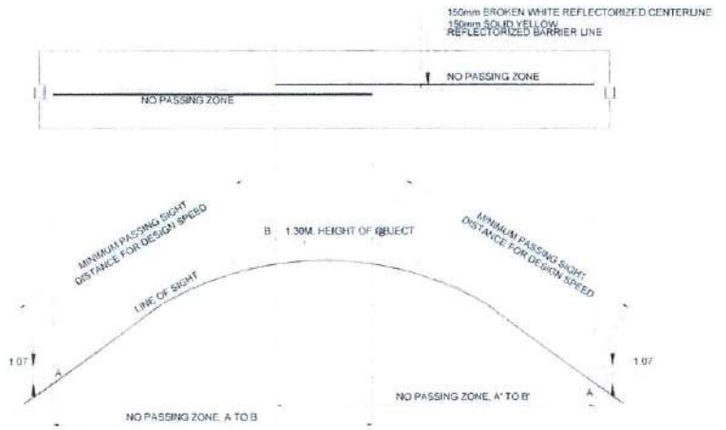
SUBMITTED: AGNES B. BARONDA, CHIEF, PLANNING AND DESIGN DIVISION — DATE

RECOMMENDED: MA. MARGARITA C. JUNIA, D.M., ASSISTANT REGIONAL DIRECTOR — DATE

APPROVED: EDGARDO T. TABACON, CESO III, REGIONAL DIRECTOR — DATE

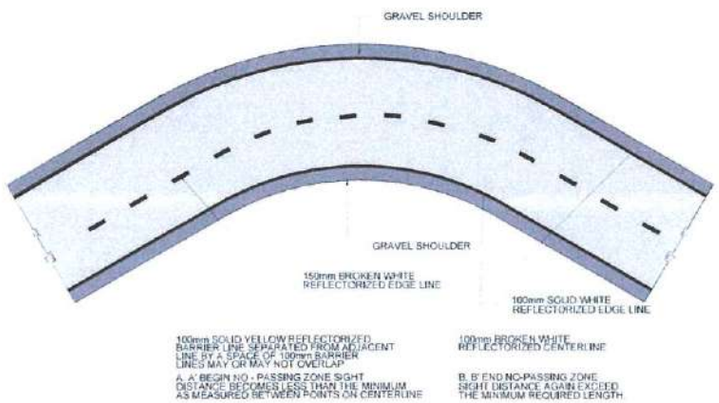
SET NO. 2 of 33

SHEET NO. 22 / 175



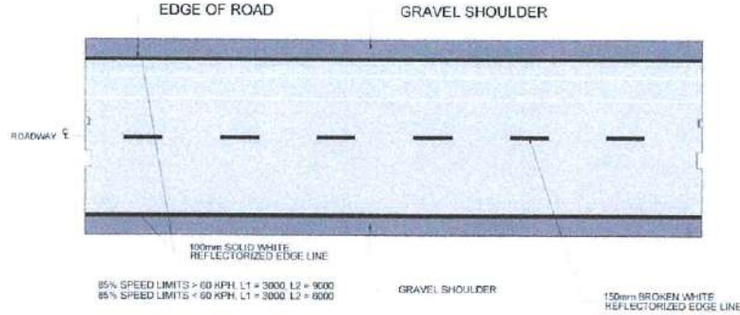
1D 43 METHOD OF LOCATING AND DETERMINING THE LIMIT OF NO - PASSING ZONES ON VERTICAL CURVES

NOT TO SCALE



1C 43 METHOD OF LOCATING AND DETERMINING THE LIMIT OF NO - PASSING ZONES ON HORIZONTAL CURVES

NOT TO SCALE



1A 43 TWO LANE PAVEMENT MARKING

DESIGN SPEED (KPH)	MINIMUM PASSING SIGHT DISTANCE M
30	200
40	285
50	345
60	407
40	482
40	541
40	605
100	670
110	728
120	792

1B 43 PAVEMENT MARKING APPLICATION OF NO PASSING ZONES

(WHERE PASSING MUST BE PROHIBITED BECAUSE OF HAZARDOUS CONDITIONS)

1 43 STANDARD PAVEMENT MARKING

NOT TO SCALE

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE VIII
BARAS PALO, LEYTE

PROJECT NAME AND LOCATION: SIPAG - ACCESS ROADS AND/ OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY
TACLOBAN CITY LD

SHEET CONTENTS: DETAILS OF REFLECTORIZED THERMOPLASTIC PAVEMENT MARKING

PREPARED: FRANCIS ALVIN C. NADERA, ENGINEER II — DATE

REVIEWED: FELIX R. ERGOS — DATE

SUBMITTED: AGNES M. BARONDA, CHIEF, PLANNING AND DESIGN DIVISION — DATE

RECOMMENDED: MA. MARGARITA C. [illegible], ASSISTANT REGIONAL DIRECTOR — DATE

APPROVED: EDGARDO T. TABACON, CESO IV, REGIONAL DIRECTOR — DATE

SET NO: A (23 of 33)

SHEET NO.: 23 / 175

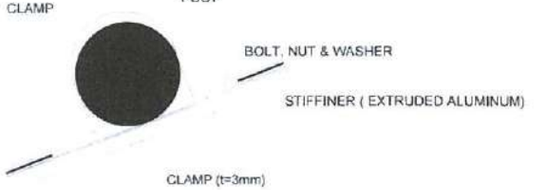
PLAN

SCALE NTS

RECOMMENDED SPACING FOR CHEVRON SIGNS

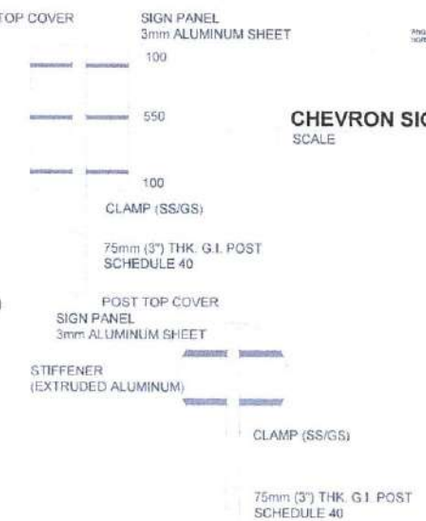
Advisory Speed limit (Kph)	Radius (m)	Chevron Spacing (m)
≤ 20	≤ 60	12
30-50	60-120	24
60-70	120-210	35
80-90	210-300	48
> 90	> 300	60

THE ABOVE SPACING DISTANCES SHALL APPLY TO POINTS WITHIN THE CURVE. APPROACH AND DEPARTURE SPACING DISTANCES SHALL BE TWICE THOSE SHOWN ABOVE.



STIFFENER & CLAMP DETAILS

SCALE 1:50



REAR SIDE ELEVATION

SCALE 1:20

CHEVRON SIGN DETAILS

SCALE NTS

NOTE:

ALL POSTS SHALL BE THOROUGHLY CLEANED, FREE FROM GREASE, SCALE AND RUSTS AND SHALL BE GIVEN ONE COAT OF RUST-INHIBITING PRIMING PAINT AND TWO COATS OF GRAY PAINT IN ACCORDANCE W/ ITEM 411, PAINT DPWH STANDARD SPEC.

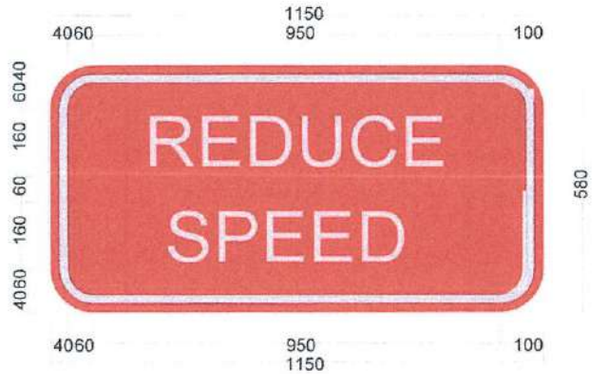
THE NUMBER OF HAZARD MARKERS PER CURVE MAY BE CHANGED IF DEEMED NECESSARY. SPECIAL CARE SHOULD BE EXERCISED IN THE PLACEMENT OF SAID SIGNS TO ENSURE THEY ARE PROMINENTLY DISPLAYED TO APPROACHING DRIVERS.

INSTALLATION OF CHEVRON SHALL CONFORM WITH DEPARTMENT ORDER NO 10, SERIES OF 2011, DPWH STANDARD SPECIFICATION FOR CHEVRON SIGN.

TYPICAL DETAIL FOR ROAD SIGN POST

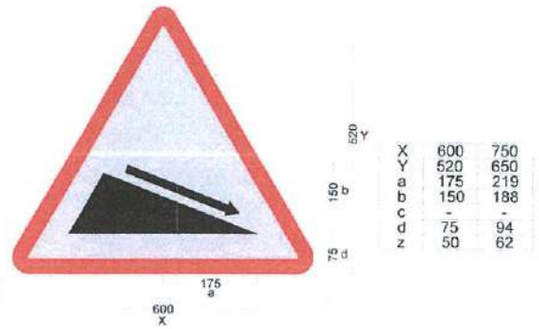
SCALE 1:20

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE VIII BARAS, PALO, LEYTE	PROJECT NAME AND LOCATION: SIPAG - ACCESS ROADS AND OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY TACLOBAN CITY LD	SHEET CONTENTS: DETAIL OF CHEVRON SIGNS AND SCHEDULE OF CHEVRON SIGN	PREPARED: FRANCIS KEVIN C. NADERA ENGINEER II DATE	REVIEWED: FELIX REGACUS CHIEF, HIGHWAYS DEVELOPMENT SECTION DATE	SUBMITTED: AGNES M. BARONDA CHIEF, PLANNING AND DESIGN DIVISION DATE	RECOMMENDED: MA. MARGARITA C. DUNIA, D.M. ASSISTANT REGIONAL DIRECTOR DATE	APPROVED: EDGARDO TABACON, CESO IV REGIONAL DIRECTOR DATE	SET NO. A 24 33	SHEET NO. 24 175



S2 - 1 - REDUCE SPEED

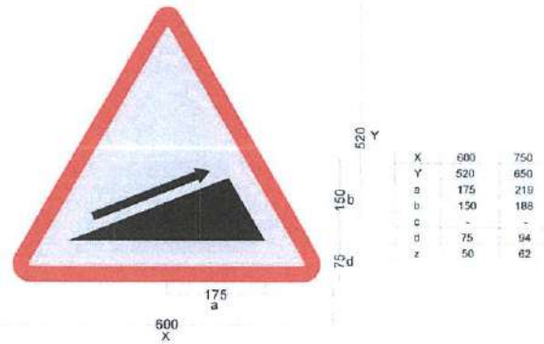
SCALE NTS



X	600	750
Y	520	650
a	175	219
b	150	188
c	-	-
d	75	94
z	50	62

W5 - 4B - STEEP DESCENT

SCALE NTS



X	600	750
Y	520	650
a	175	219
b	150	188
c	-	-
d	75	94
z	50	62

W5 - 5B - STEEP CLIMB

SCALE NTS

X	600	750
Y	520	650
a	50	62
b	350	437
c	153	190
d	50	62
z	50	62

W1-5A - WINDING ROAD

SCALE NTS

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE VIII
BARAS PALO, LEYTE

PROJECT NAME AND LOCATION: SIPAG - ACCESS ROADS AND/OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY
TACLOBAN CITY LD

SHEET CONTENTS: DETAIL OF REGULATORY SIGNS
DETAIL OF WARNING SIGNS

PREPARED: FRANCIS ALVIN C. NADERA, ENGINEER II — DATE

REVIEWED: FELIX [illegible], CHIEF, HIGHWAY DESIGN SECTION — DATE

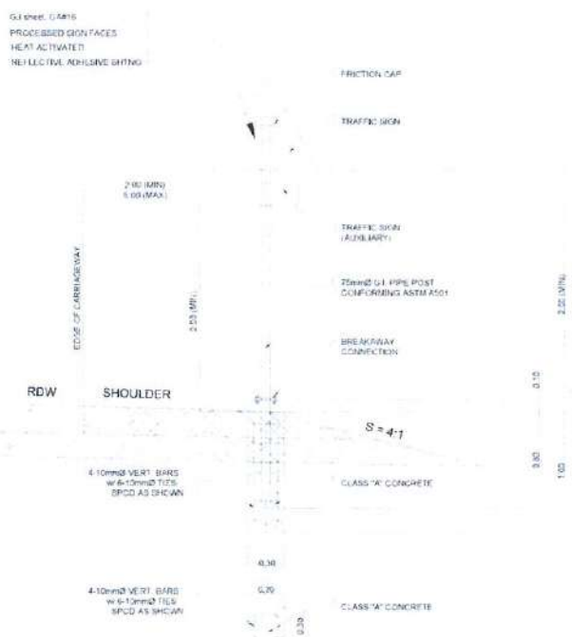
SUBMITTED: AGNES M. BARONDA, CHIEF, PLANNING AND DESIGN DIVISION — DATE

RECOMMENDED: MA. MARGARITA C. JUNIA, CESO III, ASSISTANT REGIONAL DIRECTOR — DATE

APPROVED: EDGAR B. TABACON, CESO III, REGIONAL DIRECTOR — DATE

SET NO. A (175 | 33)

SHEET NO. 25 / 175



1 INSTALLATION DETAILS (TYPE 'A')

SCALE 1:30 MTS

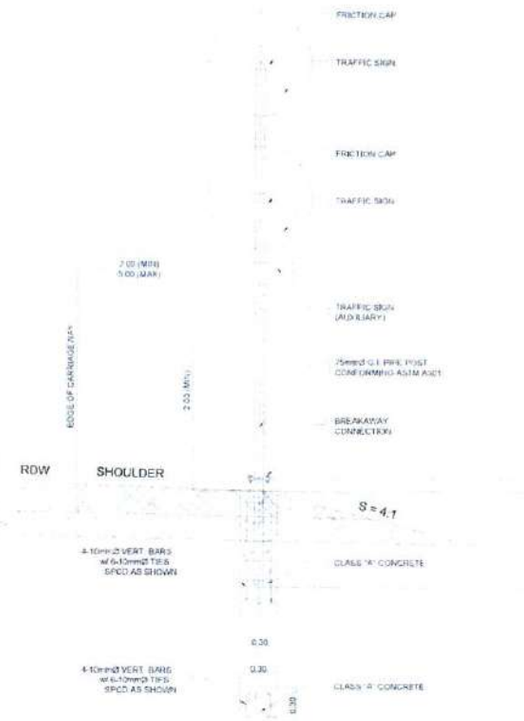
NOTES:

FRICTION CAPS MAY BE MANUFACTURED FROM EITHER HOT ROLLED OR COLD ROLLED STEEL SHEETS MINIMUM SHEET THICKNESS SHALL BE GAUGE 24

THE RIM EDGE SHALL BE REASONABLY STRAIGHT AND SMOOTH

CAPS SHALL BE SIZED AND FORMED IN SUCH MANNER AS TO PRODUCE A DRIVE-ON FRICTION FIT AND HAVE NO TENDENCY TO ROCK WHEN SEATED ON THE PIPE. THE DEPTH SHALL BE SUFFICIENT TO GIVE POSITIVE PROTECTION AGAINST THE ENTRANCE OF RAIN WATER THEY SHALL BE FREE OF SHARP CREASES OR INDENTATION AND SHOW NO EVIDENCE OF METAL FAILURE

CAPS SHALL HAVE AN ELECTRO DEPOSITED COATING OF ZINC IN ACCORDANCE WITH TH QUIREMENTS OF ASTM SPECS. A164, TYPE QS



2 INSTALLATION DETAILS (TYPE 'B')

SCALE 1:30 MTS

NOTES:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

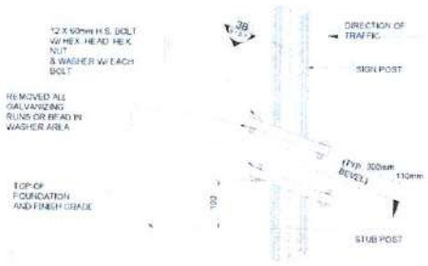
MATERIAL AND FABRICATION SHALL CONFORM TO THE REQUIREMENTS OF GENERAL SPECIFICATIONS

ALL PIPE POST, STRUCTURAL STEEL, BOLTS AND WASHER SHALL BE GALVANIZED AS PER AASHTO M36

ALL HIGH STRENGTH BOLTS AND WASHER SHALL CONFORM TO ASTM A325 AND ALL HIGH STRENGTH NUTS SHALL BE OF SUCH CAPACITY AS TO DEVELOP THE BOLT STRENGTH

TIGHTEN THE HIGH STRENGTH BOLTS IN THE BASE CONNECTION BY THE USE OF TORQUE. DO NOT OVERTIGHTEN.

DESIGN TORQUE EQUALS TO 230m lb (269 BTu 12E-4 KNUm)



3A ELEVATION

SCALE NTS

4 FRICTION DETAIL

SCALE NTS

3B SECTION

SCALE NTS

SECTION SHOWN ARE FOR INSTALLATIONS ON RIGHT SHOULDER AND IN CORE PLATE SLOTS SLEVES ARE OPPOSITE HAND FROM THAT SHOW FOR INSTALLATIONS ON LEFT SHOULDER.
PLATES FOR BASE CONNECTION SHALL CONFORM WITH THE REQUIREMENTS OF ASTM A36.

FURNISH 2-012" x THICK & 2-032" x THICK SHIMS
POST SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B36

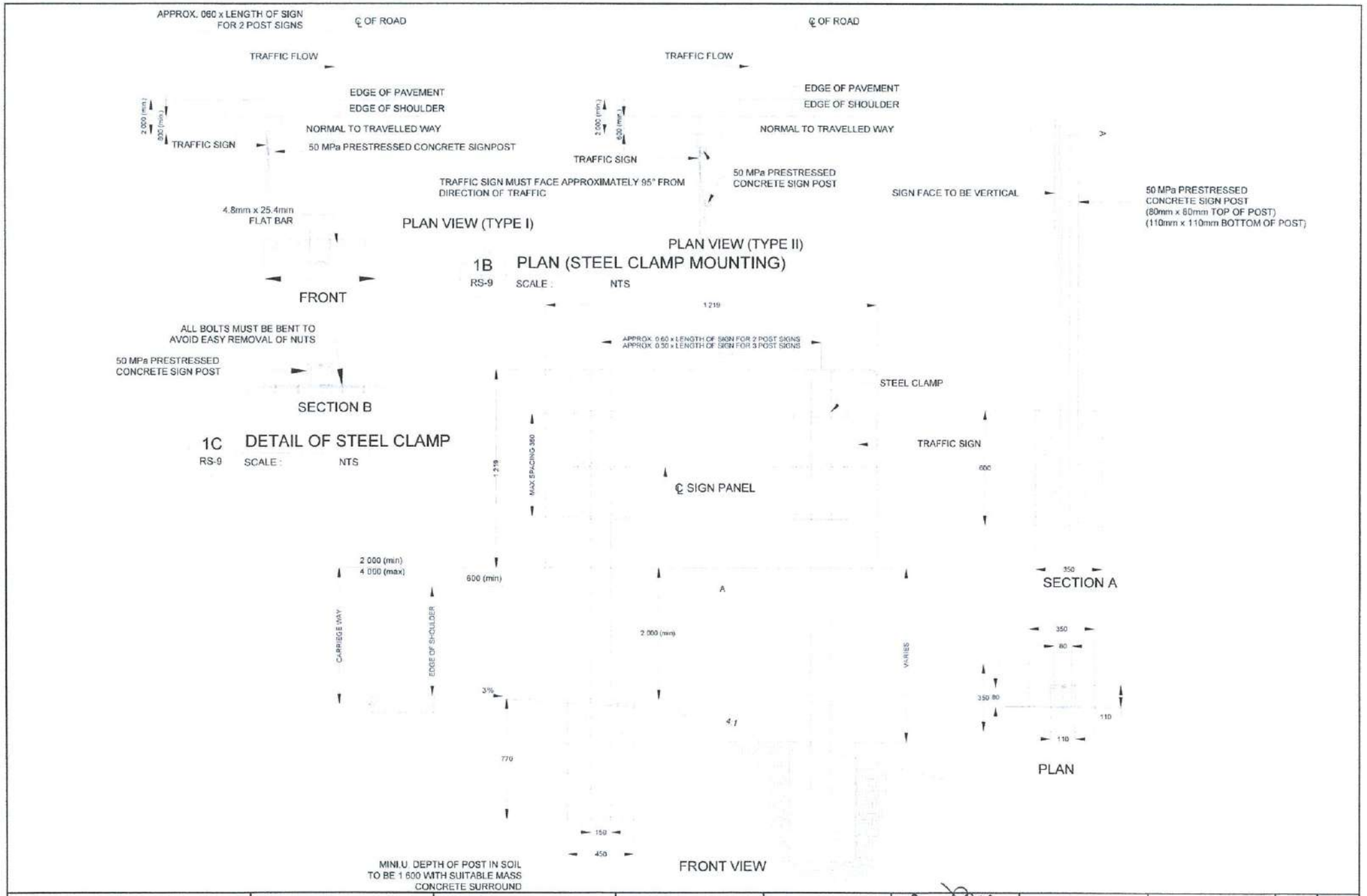
5 SHIM DETAIL

SCALE NTS

PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:

1. ASSEMBLE POST TO STUB WITH BOLTS AND ONE FLAT WASHER ON EACH BOLT BETWEEN PLATES.
2. SHIM AS REQUIRED TO PLUMB POST.
3. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 300 TO 380mm WRENCH TO SEAT WASHER AND SHIMS AND CLEAN NUT THREADS THEN LOOSEN.
4. RETIGHTEN BOLT IN A SYSTEMATIC ORDER TO A TORQUE OF 200m-lb (265.0 N x 10E-2 KNm-m).
5. LOOSEN EACH BOLT AND RETIGHTEN TO THE PRESCRIBED TORQUE IN THE SAME ORDER AS INITIAL TIGHTENING.
6. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE VIII BARAS, PALO, LEYTE	PROJECT NAME AND LOCATION: SIPAG - ACCESS ROADS AND/OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY TACLOBAN CITY LD	SHEET CONTENTS: DETAIL OF SIGN POSTS	PREPARED: FRANCIS ALVIN C. NADERA ENGINEER II DATE	REVIEWED: FELIX R. MAGUS CHIEF, HIGHWAYS DESIGN SECTION DATE	SUBMITTED: AGNES M. BARONDA CHIEF, PLANNING AND DESIGN DIVISION DATE	RECOMMENDED: MA. MAGDALENA C. JUNIA, CESO III ASSISTANT REGIONAL DIRECTOR DATE	APPROVED: EDGAR B. TABACON, CESO III REGIONAL DIRECTOR	SHT NO. A 26 33	SHEET NO. 26 175

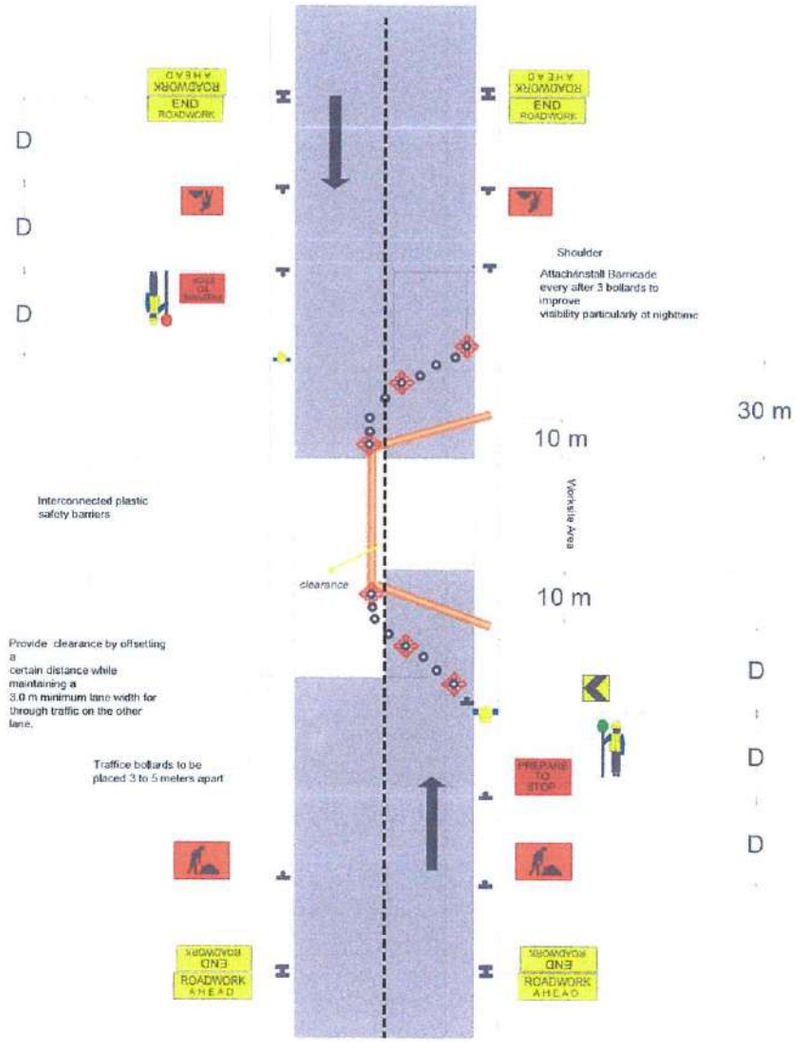


REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE VIII BARAS, PALO LEYTE	PROJECT NAME AND LOCATION SIPAG - ACCESS ROADS AND/OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY TACLOBAN CITY LD	SHEET CONTENTS DETAIL OF SIGN POSTS	PREPARED FRANCIS ALVIN C. NADERA ENGINEER II DATE	REVIEWED FELIX E. BARCUS CHIEF, HIGHWAY DESIGN SECTION DATE	SUBMITTED AGNES M. BARONDA CHIEF, PLANNING AND DESIGN DIVISION DATE	RECOMMENDED MA. MARGARITA G. JUNIA, D.M. ASSISTANT REGIONAL DIRECTOR DATE	APPROVED EDGAR B. TABACON, CESO IV REGIONAL DIRECTOR DATE	SET NO A 27 33	SHEET NO 27 175

DRAWN NOT TO SCALE

DIMENION "D"

A DISTANCE EXPRESSED IN METERS EQUAL TO THE APPROACH SPEED OF TRAFFIC IN KILOMETERS PER HOUR



TRAFFIC MANAGEMENT PLAN

SCALE NOTE

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE No. VIII BARAS, PALO, LEYTE	PROJECT NAME AND LOCATION: CONSTRUCTION/ IMPROVEMENT OF ACCESS ROADS LEADING TO SEAPORTS (KALSADA TUNGO SA PALIPARAN, RLES AT DAUNGAN PROGRAM - KATUPARAN) - ACCESS ROAD LEADING TO HILONGOS PORT, HILONGOS , LEYTE LEYTE 5TH L.D	SHEET CONTENTS: TRAFFIC MANAGEMENT	PREPARED: JOEL PAUL C. AVORQUE ENGINEER II DATE	REVIEWED: FELIX R. BACUS CHIEF, HIGHWAY OPERATION SECTION DATE	NOTED: AGNES M. BARONDA CHIEF, PLANNING AND DESIGN DIVISION DATE	RECOMMENDED: MA. MARGARITA C. JUAN, D.M. ASSISTANT REGIONAL DIRECTOR DATE	APPROVED: EDGAR B. TABACON, DESO IV REGIONAL DIRECTOR DATE	SET NO. A 28 | 33	SHEET NO. 28 206

ROAD WORK SITE TEMPORARY SIGNAGE

		SIGNAGE DESCRIPTION			
	Sign No.	Size (mm) (Width X Height)	Letters/Symbols	Background
ADVANCE WARNING SIGNS				
ROADWORK AHEAD — ROADWORK AHEAD (T1-1, T1-31)	T1-1	1800 x 600	Line 1- Black 200 DM Line 2- Black 160 DM	Yellow Reflectorized
WORKMEN AHEAD (Symbolic) (T1-5)	T1-5	900 x 600	Black	Red / Orange -Fluorescent for day use (Short Term) -Reflectorized for night use (Long Term)
END ROADWORK — END ROADWORK (T2-16, T2-17)	T2-16	1800 x 600	Line 1- Black 200 DM Line 2- Black 160 DM	Yellow Reflectorized
REGULATORY SIGNS				
PREPARE TO STOP — PREPARE TO STOP (T1-18)	T1-18	900 x 600	Line 1- White 120 DM Line 2- White 120 DM Line 3- White 120 EM Reflectorized	Red Reflectorized
TEMPORARY HAZARD MARKERS				
TEMPORARY HAZARD MARKER (T5-5)	T5-5	600X600 Type B-3	Black 194 wide at 45°	Yellow Reflectorized

NOTE :

1. Height of Bollards and Guide Signs is 1.05 m from ground.
2. Height of Advance Warning Sign post is 1.50 m Rural & 2.20 m Urban from the ground.

1 " Reflectorize white sticker .

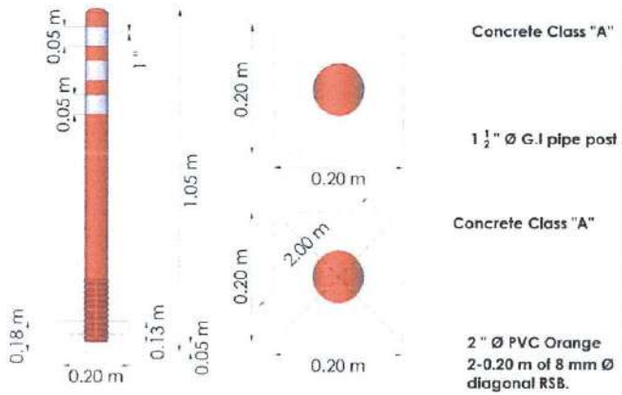
2 " Ø PVC Orange

TRAFFIC BOLLARD WITH BARRICADE FLASHER LIGHT

Concrete Class "A"

TRAFFIC BOLLARD

2-0.20 m of 8 mm Ø diagonal RSB.



TRAFFIC BOLLARD

SCALE NTS

PLASTIC SAFETY BARRIER

SCALE NTS

SPACING	CONDITION
	ON TAPERS
5 - 10 M	WHEN USED AROUND SMALL WORK SITES *(MAY BE REDUCED TO 3m TO GUIDE PEDESTRIANS OR TO PREVENT TRAFFIC TAKING A WRONG TURN THROUGH A GAP IN THE LINE OF BOLLARDS)*
	WHEN USED AS LONGITUDINAL SEPARATION BETWEEN OPPOSING TRAFFIC FLOWS
10 - 20 M	WHEN USED AS LONGITUDINAL SEPARATION OF TRAFFIC FROM THE WORKSITE OR A CLOSED LANE *(MAY BE INCREASED TO 50m WHERE THE LENGTH OF BOLLARDS EXCEEDS 1 KM)*

NOTES :

1. BOLLARDS SHALL BE FLUORESCENT RED OR ORANGE PLASTIC THAT IS RESILIENT TO IMPACT AND WILL NOT DAMAGE VEHICLES WHEN HIT AT LOW SPEED.
2. HEIGHT: UP TO 1 M.
3. AT NIGHT TIME OPERATION THE BOLLARDS MUST BE FITTED WITH REFLECTIVE TAPE WITH A MINIMUM BANDWIDTH OF 250mm.

DESIGN CRITERIA

- GENERAL SPECIFICATIONS FOR ROADS AND BRIDGES, 2013/ LATEST DPWH MANUALS/SPECIFICATIONS 2013
- AASHTO A POLICY ON GEOMETRIC DESIGN STANDARDS OF HIGHWAYS AND STREETS, 2011, 6TH EDITION
- AASHTO GUIDE FOR DESIGN OF PAVEMENT STRUCTURES, 4TH EDITION, 1993
- EXECUTIVE ORDER NO. 113, ESTABLISHING THE CLASSIFICATION OF ROADS
- P.D. 187 AS AMENDED BY P.D. 749 AND BATAS PAMBANSA BLG. 8, AN ACT DEFINING THE METRIC SYSTEM AND ITS UNITS, PROVIDING FOR ITS IMPLEMENTATION AND FOR OTHER PURPOSES, AND DPWH MEMORANDUM CIRCULAR NO. 6, DATED JANUARY 6, 1983, RE METRIC SYSTEM (SI) TABLES
- DPWH ROAD SIGNS AND PAVEMENT MARKINGS, 2012 EDITION
- DPWH ROAD SAFETY MANUAL 2012
- DPWH STANDARDS SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND AIRPORTS REVISED 2013 EDITION
- DPWH DESIGN GUIDELINES, CRITERIA AND STANDARDS (DGCS), VOLUME 4, 2015 EDITION

DESIGN SPECIFICATIONS:

ALL DESIGN SHALL CONFORM TO THE DPWH STANDARD SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND AIRPORTS, 2013 EDITION, VOLUME II, THE ASSOCIATION OF STATE HIGHWAYS AND TRANSPORTATION OFFICIALS (AASHTO) STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES, 17TH EDITION 2002 AND DPWH DESIGN GUIDELINES, CRITERIA AND STANDARDS, 2015

CONSTRUCTION SPECIFICATIONS:

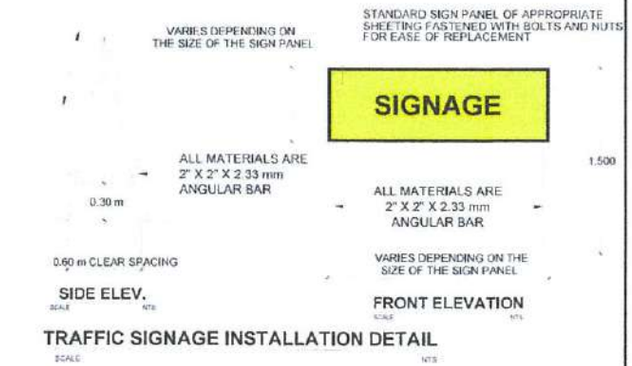
ALL CONSTRUCTION SHALL CONFORM TO THE SPECIAL PROVISIONS, THE DPWH STANDARD SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND AIRPORTS, 2013 EDITION, VOLUME II, AS MODIFIED IN THE SPECIAL PROVISIONS & SUPPLEMENTAL SPECIFICATIONS.

TRAFFIC MANAGEMENT

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEVELOPING AND MAINTAINING AN EFFECTIVE TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE SPECIAL PROVISIONS SUBJECT TO THE APPROVAL OF THE ENGINEER AND THE CORRESPONDING LOCAL AUTHORITIES.

NOTE:

- NO ONE SET TEMPORARY TRAFFIC CONTROL ZONE CAN SATISFY ALL CONDITIONS FOR GIVEN PROJECT OR INCIDENT. THE PRINCIPLES OF WORK SITE TRAFFIC MANAGEMENT PROVIDED SHOULD STILL BE APPLIED WITH CONSIDERATION GIVEN TO THE FOLLOWING.
- SIGN LOCATIONS AND SPACING MAY NEED ADJUSTMENT TO SUIT ROAD ALIGNMENT, VISIBILITY, TRAFFIC SPEEDS, ETC.
- LANE TAPERS USING CONES, BOLLARDS, OR TEMPORARY HAZARD MARKERS SHOULD BE GRADUAL AND REINFORCED WITH APPROPRIATE SIGNS.
- ALL LAYOUT SHOULD BE DRIVEN AT THE EXPECTED TRAFFIC SPEED AND ADJUSTMENTS MADE IF NECESSARY.
- **ADJUSTMENT OF TRAFFIC MANAGEMENT PLAN SHALL BE MADE DURING PROJECT PROJECT IMPLEMENTATION . ADDITIONAL ROADWORKS SIGNAGES SHALL BE IDENTIFIED BY THE PROJECT ENGINEER.**



TRAFFIC SIGNAGE INSTALLATION DETAIL

SCALE NTS

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE No. VIII
BARAS, PALO, LEYTE

PROJECT NAME AND LOCATION: CONSTRUCTION/ IMPROVEMENT OF ACCESS ROADS LEADING TO SEAPORTS (KALSADA TUNGO SA PALIPARAN, RILES AT DAUNGAN PROGRAM - KATUPARAN) - ACCESS ROAD LEADING TO HILONGOS PORT, HILONGOS , LEYTE
LEYTE 5TH L.D.

SHEET CONTENTS: TRAFFIC MANAGEMENT

PREPARED: JOEL PAUL C. AVORQUE, ENGINEER II, DATE

REVIEWED: FELIX R. BRIAS, CHIEF, HIGHWAYS DESIGN SECTION, DATE

SUBMITTED: AGNES M. BARONDA, CHIEF, PLANNING AND DESIGN DIVISION, DATE

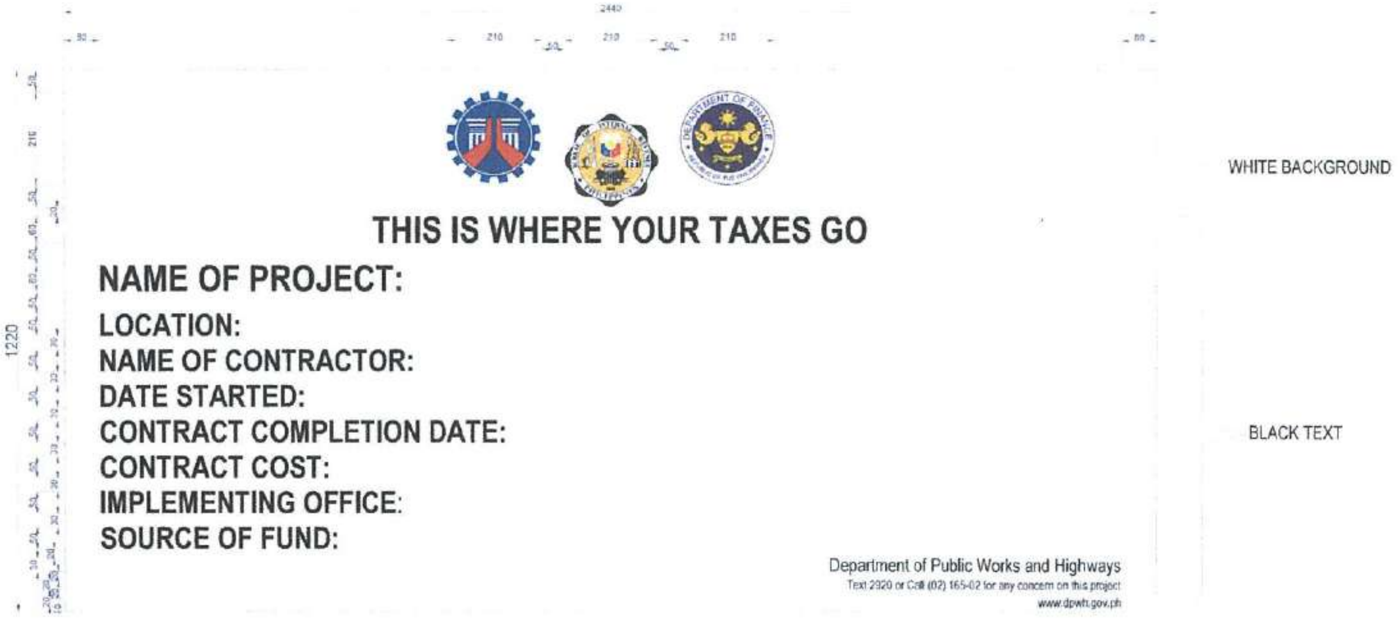
RECOMMENDED: MA. MARGARITA G. JUNIA, D.M.D., ASSISTANT REGIONAL DIRECTOR, DATE

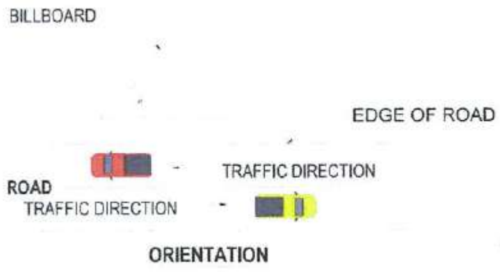
APPROVED: EDGARDO S. TABACON, CESO III, REGIONAL DIRECTOR, DATE

SET NO. A (29 33)

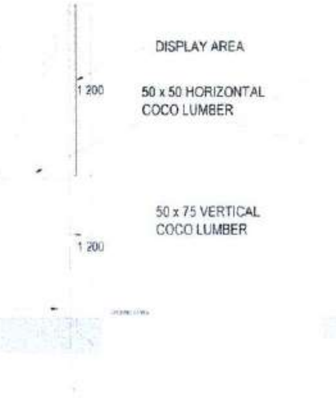
SHEET NO. 29 (206)

NOTE:
INSTALLATION OF BILLBOARD SHALL CONFORM WITH DEPARTMENT ORDER NO. 11, SERIES OF 2022, REVISED GUIDELINES ON THE INSTALLATION PROJECT BILLBOARDS.



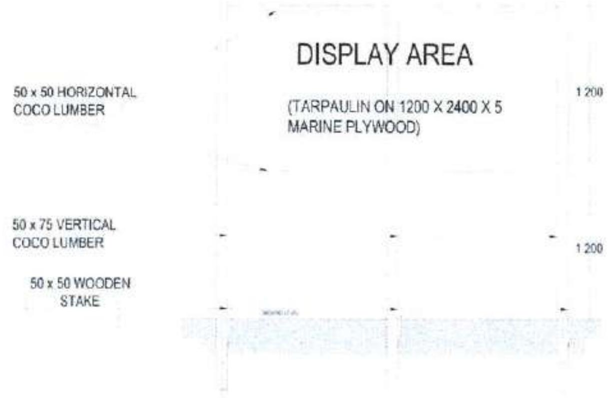


ORIENTATION



TYPICAL FRAME ELEVATION

FRONT ELEVATION (OPTION 1)



FRONT ELEVATION (OPTION 2)

BILLBOARD FRAME

(NOT TO SCALE, ALL DIMENSIONS ARE IN MILLIMETERS)

REPUBLIC OF THE PHILIPPINES **DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS** REGIONAL OFFICE VIII BARAS, PALO, LEYTE	PROJECT NAME AND LOCATION: **SIPAG - ACCESS ROADS AND/ OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY** TACLOBAN CITY LD	SHEET CONTENTS: DPWH PROJECT BILLBOARD/SIGNBOARD	PREPARED: **FRANCIS ALVIN C. NADERA** ENGINEER II DATE:	REVIEWED: **FELIX R. BACUS** CHIEF, HIGHWAY DESIGN SECTION DATE:	SUBMITTED: Baronda **AGNES M. BARONDA** CHIEF, PLANNING AND DESIGN DIVISION DATE:	RECOMMENDED: **MA. MARGARITA C. JUNIA, DM** ASSISTANT REGIONAL DIRECTOR DATE:	APPROVED: **EDGAR B. TABACON, CESO IV** REGIONAL DIRECTOR DATE:	SET NO. A 30 | 33	SHEET NO. 30 175

Government Center Candahug, Palo, Leyte

Project :

Cost :

Location :

Fund Source/s :

Implementing Agency/ies:

Development Partner/s :

Contractor/Supplier :

Brief Description of Project :

Project Details :

Project Date			Project Status			
Duration	Started	Target Date of Completion	Percentage of Completion	As of (Date)	Cost Incurred to Date	Date Completed	Remarks

For particulars or complaints about this project, please contact the Regional Office or Cluster which has audit jurisdiction on this project :

COA Regional Office No /Cluster :

Address :

Contact No. : or Text COA Citizen's Desk at 0915-5391957

Commission on Audit

Regional Office/Cluster

Consolidated Quarterly Report on Government Projects/Programs/Activities

For the _____ Quarter, CY _____

Agency/ Address	Project/ Program/ Activity Name	Location	Total Cost	Date Started	Project Status				Remarks
					No. of Extensions	Target Completion Date	% of Completion	Total Cost Incurred to Date	

Submitted by :

Regional/Cluster Director

SPECIFICATIONS :

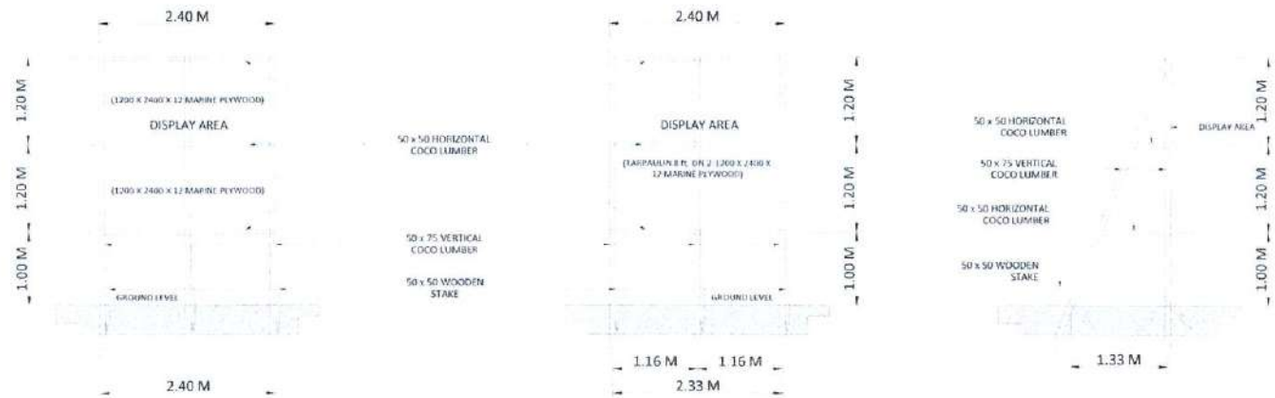
Tarpaulin, white, 8 ft x 8 ft
Resolution : 70 dpi
Font : Helvetica
Font size : Main Information - 3"
Sub-Information - 1"
Font Color : Black

NOTE:

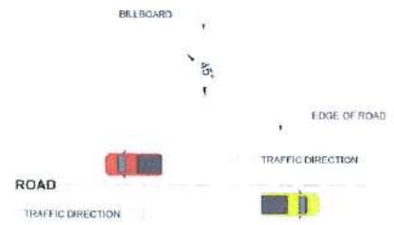
INSTALLATION OF COA BILLBOARD SHALL CONFORM WITH COMMISSION ON AUDIT CIRCULAR NO. 2013-004, DATED JANUARY 30, 2013, SUBJECT: "INFORMATION AND PUBLICITY ON PROGRAM/PROJECTS/ACTIVITIES OF GOVERNMENT AGENCIES"

COA STANDARD PROJECT BILLBOARD

SCALE NTS



FRONT ELEVATION
(OPTION 1)



BILLBOARD FRAME

(NOT TO SCALE. ALL DIMENSIONS ARE IN MILLIMETERS)

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE VIII BARAS, PALO, LEYTE	PROJECT NAME AND LOCATION: SIPAG - ACCESS ROADS AND/OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY TACLOBAN CITY LD	SHEET CONTENTS: COA PROJECT BILLBOARD/SIGNBOARD	PREPARED: FRANCIS ALVIN C. NADERA, ENGINEER II, DATE	REVIEWED: FELIX R. BACOS, CHIEF HIGHWAY DESIGN SECTION, DATE	SUBMITTED: AGNES M. BARONDA, CHIEF PLANNING AND DESIGN DIVISION, DATE	RECOMMENDED: MA. MARGARITA C. JUBIA, O.M., ASSISTANT REGIONAL DIRECTOR, DATE	APPROVED: EDGAR B. TABACON, CESO III, REGIONAL DIRECTOR, DATE	SET NO. A 31 33	SHEET NO. 31 175

2 440 mm (8 ft)

1 220 mm (4 ft)

NOTICE TO THE PUBLIC

This is to inform that (name of proponent) has been issued with **Environmental Compliance Certificate** No. ECC-OL-R08-_____ by the **DENR-Environmental Management Bureau R8** for the (name of project) Located at (project location). Issued on _____.

ECC BILLBOARD

(NOT TO SCALE. ALL DIMENSIONS ARE IN MILLIMETERS)

2 440 mm (8 ft)

1 220 mm (4 ft)

Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE VIII
Baras, Palo, Leyte

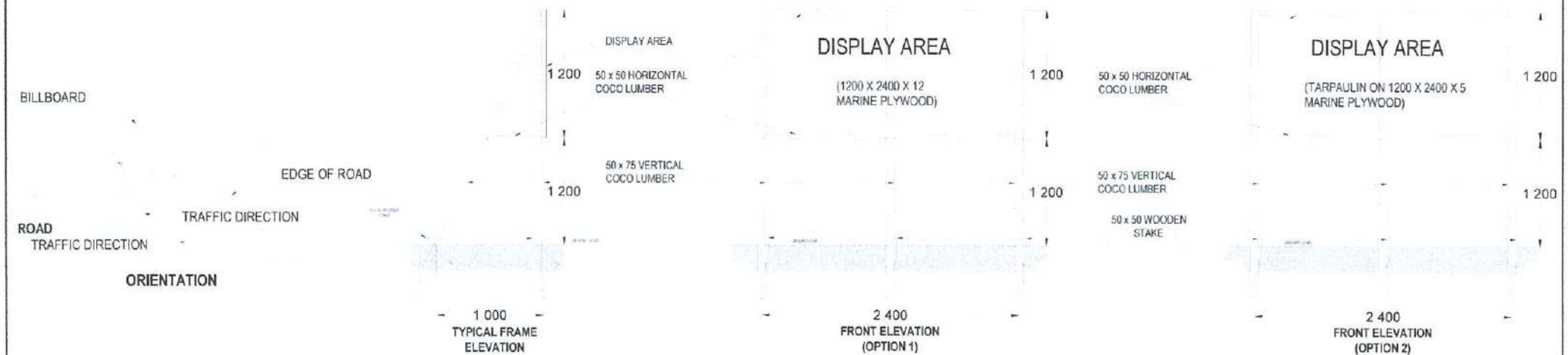
PURPOSE: TREE CUTTING FOR THE PROJECT

NO. OF TREES TO BE CUT:

DENR - SPECIAL TREE CUTTING PERMIT No.:
DATE ISSUED:
EXPIRY DATE:

TREE CUTTING SIGNBOARD

(NOT TO SCALE. ALL DIMENSIONS ARE IN MILLIMETERS)



BILLBOARD FRAME

(NOT TO SCALE. ALL DIMENSIONS ARE IN MILLIMETERS)

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE VIII BARAS, PALO, LEYTE	PROJECT NAME AND LOCATION SIPAG - ACCESS ROADS AND/OR BRIDGES FROM THE NATIONAL ROADS LEADING TO MAJOR/ STRATEGIC PUBLIC BUILDINGS/ FACILITIES - CONSTRUCTION OF ROAD, SEGMENT 1 - PHASE 1, BARANGAY PAGLAUM TO BARANGAY TABANGOHAY, TACLOBAN CITY TACLOBAN CITY LD	SHEET CONTENTS ECC AND TREE CUTTING BILLBOARD/SIGNBOARD	PREPARED FRANCIS ALVIN C. NADERA ENGINEER II DATE	REVIEWED FELIX C. BAGUS CHIEF, HIGHWAYS DESIGN SECTION DATE	RECOMMENDED AGNES M. BARONDA CHIEF, PLANNING AND DESIGN DIVISION DATE	RECOMMENDED MA. MARGARITA T. JUNIA, CPA ASSISTANT REGIONAL DIRECTOR DATE	APPROVED EDGAR B. TABACON, CESO IV REGIONAL DIRECTOR DATE	SET NO. 32 175	SHEET NO. 32 175