



**PROCUREMENT AND IMPLEMENTATION  
OF THE MAINTENANCE AND REPAIR OF MAJOR AND  
SECONDARY ROADS**

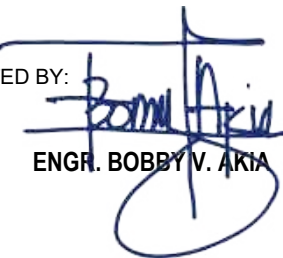
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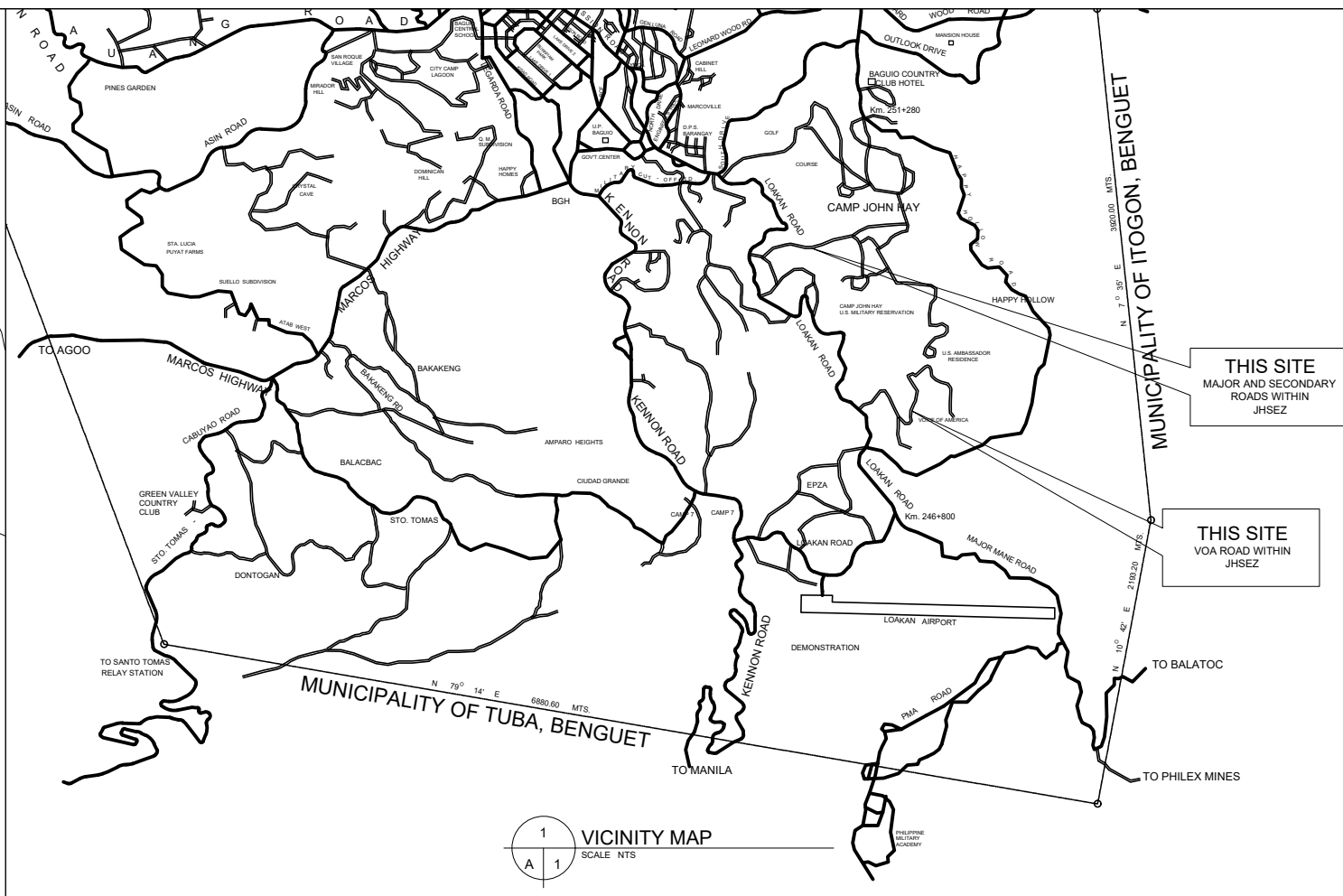
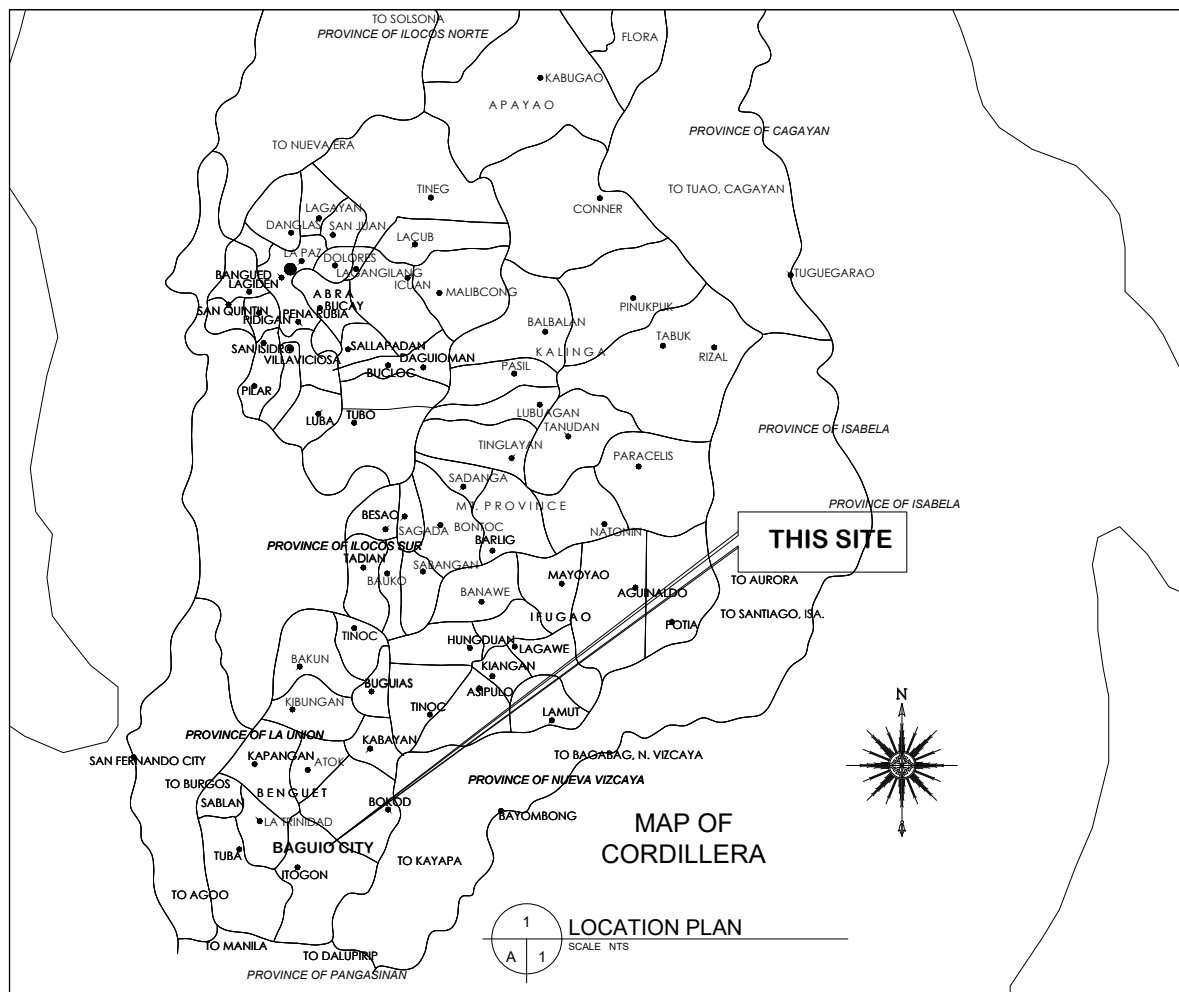
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1. CONCRETE  
UNLESS OTHERWISE INDICATED ON THE PLANS, THE MINIMUM CYLINDER STRENGTH OF CONCRETE @ 28 DAYS SHALL BE 20.70 MPa.

2. REINFORCING STEEL  
REINFORCING BARS FOR ALL STRUCTURES SHALL BE GRADE 60 (Fy=414 MPa) FOR BARS LARGER THAN 16 mm Ø. GRADE 40 (Fy=275.80 MPa) FOR BARS 16mm Ø OR SMALLER. ALL REBARS SHALL BE FREE OF MILL SCALES, OIL OR ANY SUBSTANCE THAT MAY IMPAIR/ WEAKEN BOND WITH CONCRETE.

2.1. REINFORCING BAR SPlicing  
WHERE SPlicing IS PERMITTED, THE MINIMUM LAP LENGTH OF BARS SHALL BE AS PER AASHTO ARTICLE 8.32. ALL SPLICES SHALL BE STAGGERED AT LEAST 40 BAR Ø. WHERE BUTT WELD IS USED IN LIEU OF LAPPED CONNECTIONS, THIS SHALL DEVELOP AT LEAST 125% OF THE SPECIFIED YIELD STRENGTH OF THE REINFORCING STEEL BAR. BARS SHALL BE BENT UNLESS PERMITTED BY THE ENGINEER.

2.2. HOOKS AND BENDS  
HOOKS AND BENDS SHALL BE AS SHOWN IN THE FOLLOWING TABLE

SIZE OF BARS	END HOOKS		STIRRUP & TIE		STIRRUP TIE
	180°	90°	90°	135°	
10	125	150	100	100	125
12	150	200	113	113	163
16	175	250	150	138	200
20	200	300	90Ø	-	-

Do = 6 db for db < 30  
Do = 8.7 db for db < 30

D = 4 db for db < 20  
Do = 6 db for db < 30

3. CONSTRUCTION  
DPWH STANDARD SPECIFICATIONS, 2013 EDITION, VOL. II HIGHWAYS, BRIDGES AND AIRPORTS SHALL BE FOLLOWED. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. IN CASE OF CONFLICT ON INTERPRETATIONS OF DRAWINGS, NUMERICAL FIGURES OF DIMENSION SHALL PREVAIL OVER SCALED VALUES.

UNLESS OTHERWISE SHOWN, ALL BAR SPACING REFER TO THE CENTER OF BARS AND THE MINIMUM COVERING FROM SURFACE OF CONCRETE TO THE FACE OF THE NEAREST BAR SHALL BE 75mm.

ALL CONCRETE SHALL BE POURED WHERE THERE IS PERMISSIBLE WEATHER CONDITION AND NO OTHER ENVIRONMENTAL HAZARD WILL AFFECT THE POURING.

ALL ELEVATIONS AND STATIONING SHALL BE VERIFIED BEFORE CONSTRUCTION.

FOUNDATION OF SLOPE AND EMBANKMENT PROTECTION WORKS SHALL HAVE A PERMISSIBLE BEARING CAPACITY OF NOT LESS THAN A MAXIMUM GROUND PRESSURE OF 113 KN/ SQ.M. SOFT SPOTS UNDER THE FOUNDATION SHALL BE REMOVED AND REPLACED WITH SUITABLE BEDDING MATERIALS OR CONCRETE CLASS "B". SOFT SPOTS BETWEEN THE CUT FACE AND SLOPE/ EMBANKMENT PROTECTION WALLS MUST BE FILLED WITH ROCKS OR SUITABLE MATERIALS. SUCH BACKFILL MATERIALS PLACED BEHIND THE WALL SHALL BE FREE DRAINING, NON EXPANSIVE AND WATER SHALL BE DRAINED BY WEEPHOLES PLACED AT SUITABLE INTERVALS AND ELEVATIONS. THE DEPTH OF PENETRATION SHALL BE MEASURED FROM THE LEVEL OF THE ORIGINAL GROUND SURFACE AND SHALL NOT INCLUDE EXCAVATED MATERIALS.

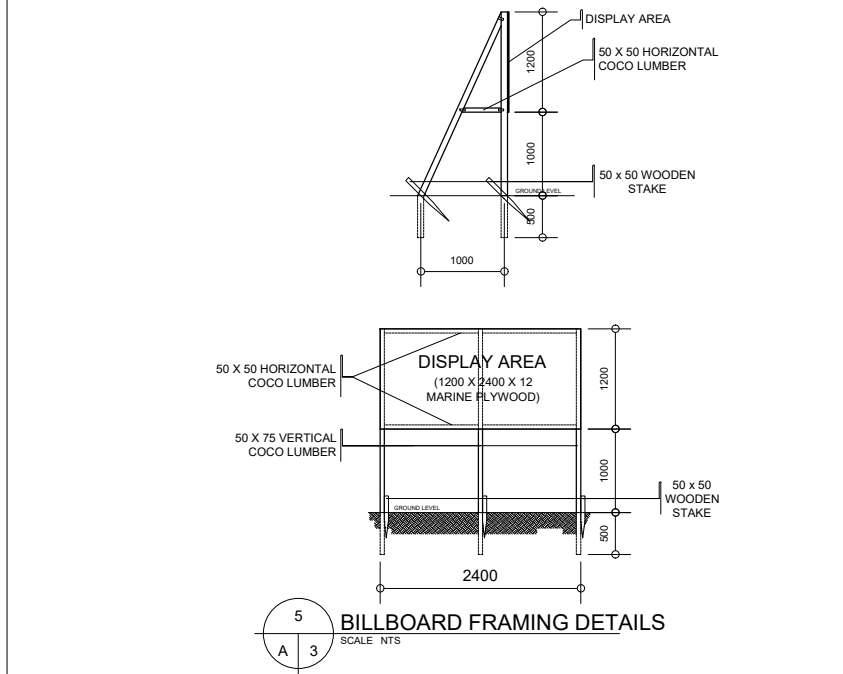
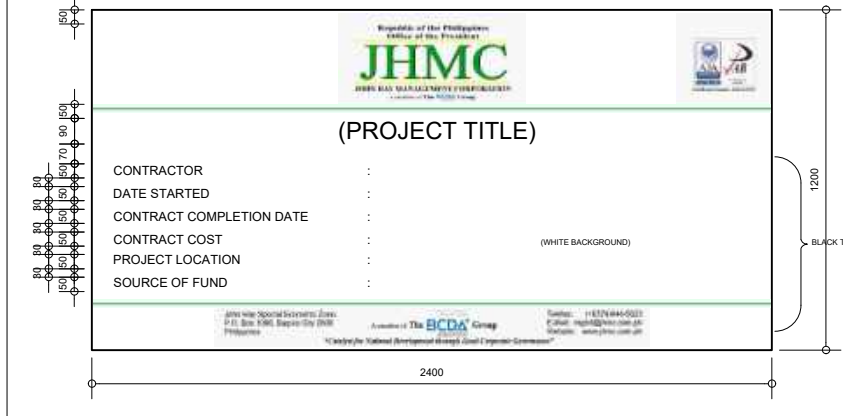
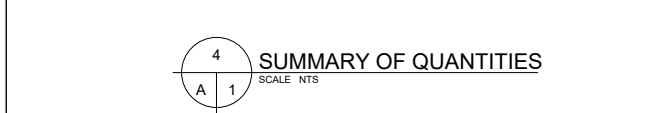
REINFORCING STEEL BARS

A. FABRICATION  
REINFORCING BARS SHALL BE ACCURATELY FORMED TO THE SHAPES AND DIMENSIONS INDICATED ON THE PLAN

B. BAR BENDING  
UNLESS OTHERWISE PERMITTED, ALL REINFORCING BARS REQUIRING BENDING SHALL BE BENT COLD. WHEN REINFORCING BARS ARE BENT BY HEATING, THE ENTIRE OPERATION SHALL BE APPROVED BY THE ENGINEER.



ITEM NO.	DESCRIPTION	UNIT	QTY
A-1-1	CONCRETE SURFACE PREPARATION FOR THE SIGNPOST	CC	1.5
B-1-1	MISCELLANEOUS SURVEY AND STAKING	CC	1.5
B-2	PROJECT SET, SURVEY, FISHPOLE	CC	5.0
B-3-1	CONSTRUCTION SAFETY AND HEALTH PROGRAM	CC	5.0
B-3-2	ROAD WORKS SAFETY AND TRAFFIC MANAGEMENT	CC	1.5
B-4	REMOVAL AND RECONSTRUCTION OF EXISTING	CC	1.5
B-5	ENVIRONMENTAL MANAGEMENT AND MONITORING	CC	5.0
B-6	REMOVAL OF EXISTING STRUCTURES/CONSTRUCTION OF GROUDED RIPRAP	CC	3.75
B-7	REMOVAL OF EXISTING STRUCTURES/CONSTRUCTION OF CURB AND GUTTER	CC	5.0
B-8	REMOVAL OF EXISTING STRUCTURES/CONSTRUCTION OF CURB AND GUTTER	CC	3.33
B-9	EXCAVATION AND EMBANKMENT	CC	1.0
B-10	ACCURATE SAFE COURSE	CC	4.0
B-11	TEMPORARY PAVEMENT	CC	2.0
B-12	TEMPORARY CONCRETE SURFACE WEARINGS COURSE	CC	2.0
B-13	TEMPORARY CONCRETE PAVEMENT	CC	3.0
B-14	METAL SIGNING	CC	1.0
B-15	REINFORCING STEEL (GRADE 40)	CC	14.0
B-16	STRUCTURAL CONCRETE (CLASS A 20 MPa)	CC	1.0
B-17	PIPE CURBS (S10MM RCP) CLASS II	CC	1.0
B-18	MANHOLE (S10MM CONCRETE)	CC	1.0
B-19	INLET TYPE (COMMON)	CC	1.0
B-20	WHEELS (COMMON)	CC	1.0
B-21	WRAPPING STEEL SIGNING WITH FRAME	CC	1.0
B-22	CONCRETE RIPRAP	CC	1.0
B-23	ROAD SIGN (REGULATORY SIGNS)	CC	1.0
B-24	CURB AND GUTTER (AS IN PLACE)	CC	1.0
B-25	STAKE	CC	1.0
B-26	CONCRETE SURFACE WEARINGS COURSE	CC	1.0
B-27	ROAD SIGN (WARNING SIGNS)	CC	1.0
B-28	ROAD SIGN (REGULATORY SIGNS)	CC	1.0
B-29	ROAD SIGN (INFORMATIVE SIGNS)	CC	1.0
B-30	ROAD SIGN (WEAR MARKERS)	CC	1.0
B-31	REFLECTORIZED THERMOPLASTIC PAVEMENT MARKINGS	CC	1.0
B-32	REFLECTORIZED THERMOPLASTIC PAVEMENT MARKINGS	CC	1.0
B-33	SET DEVELOPMENT	CC	1.0
B-34	PAVEMENT	CC	1.0



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Office of the President

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JOHN HAY MANAGEMENT CORPORATION

SHEET CONTENT:  
LOCATION PLAN  
VICINITY MAP  
CONSTRUCTION GENERAL NOTES  
SUMMARY OF QUANTITIES  
BILLBOARD FRAMING DETAILS

PROJECT TITLE  
**PROCUREMENT AND IMPLEMENTATION OF THE MAINTENANCE AND REPAIR OF MAJOR AND SECONDARY ROADS**

LOCATION OF PROJECT:  
JOHN HAY SPECIAL ECONOMIC ZONE,  
BAGUIO CITY

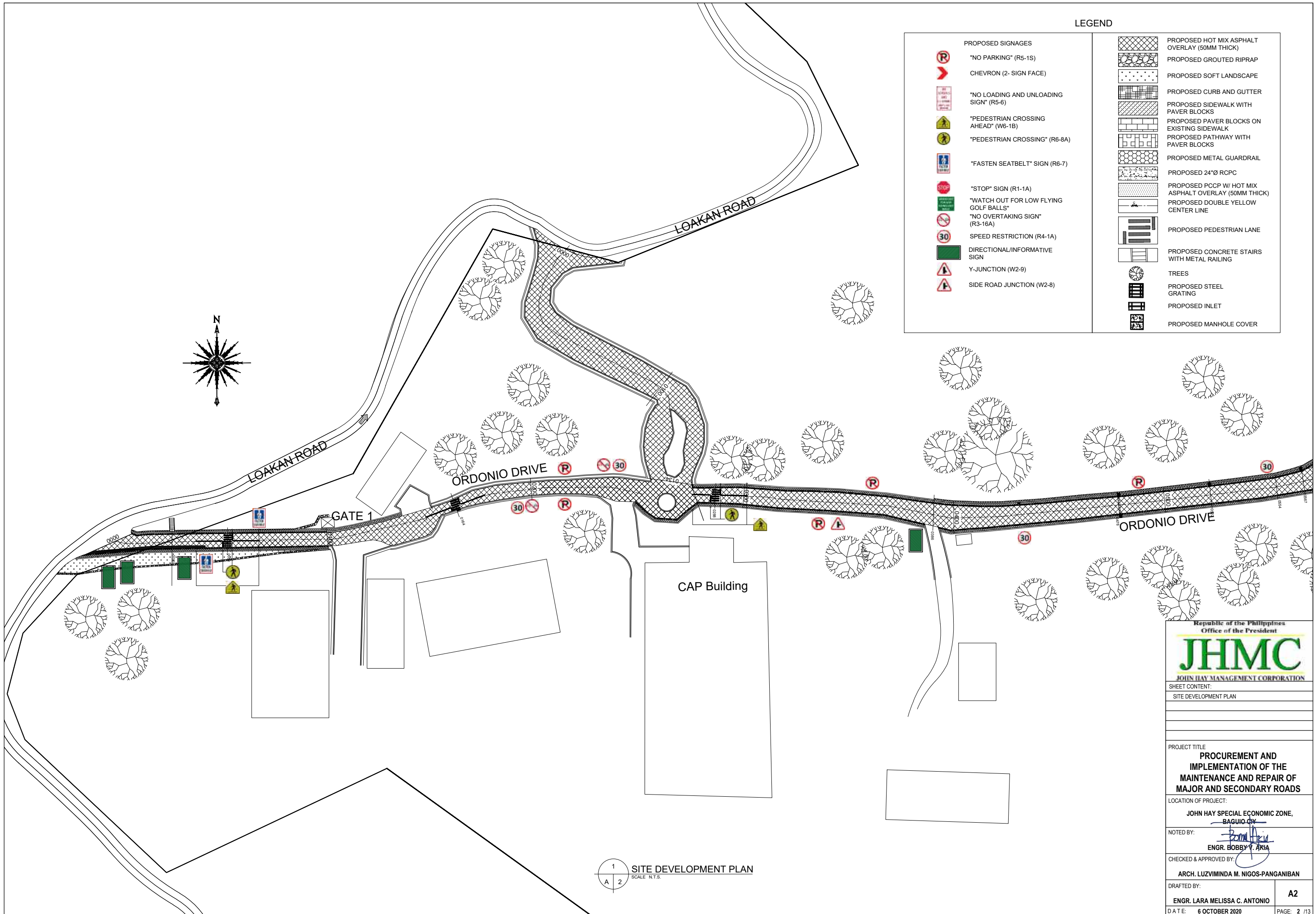
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DATE: 6 OCTOBER 2020

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**LEGEND**

PROPOSED SIGNAGES		
	"NO PARKING" (R5-1S)	
	CHEVRON (2- SIGN FACE)	
	"NO LOADING AND UNLOADING SIGN" (R5-6)	
	"PEDESTRIAN CROSSING AHEAD" (W6-1B)	
	"PEDESTRIAN CROSSING" (R6-8A)	
	"FASTEN SEATBELT" SIGN (R6-7)	
	"STOP" SIGN (R1-1A)	
	"WATCH OUT FOR LOW FLYING GOLF BALLS"	
	"NO OVERTAKING SIGN" (R3-16A)	
	SPEED RESTRICTION (R4-1A)	
	DIRECTIONAL/INFORMATIVE SIGN	
	Y-JUNCTION (W2-9)	
	SIDE ROAD JUNCTION (W2-8)	

1 SITE DEVELOPMENT PLAN  
SCALE: N.T.S.  
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SHEET CONTENT:  
SITE DEVELOPMENT PLAN

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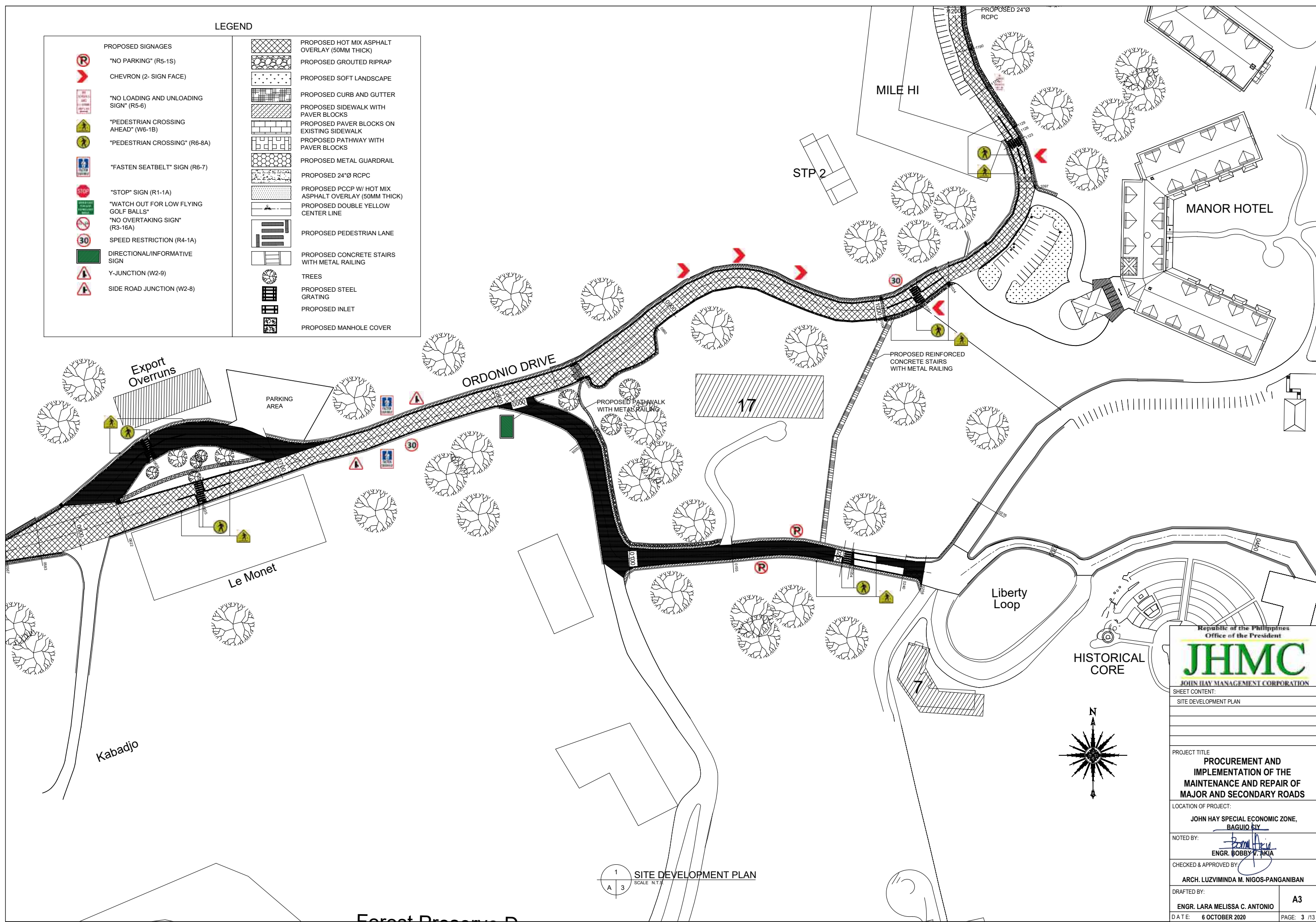
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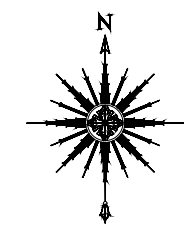
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LEGEND

PROPOSED SIGNAGES		PROPOSED HOT MIX ASPHALT OVERLAY (50MM THICK)	
	"NO PARKING" (R5-1S)		PROPOSED HOT MIX ASPHALT OVERLAY (50MM THICK)
	CHEVRON (2- SIGN FACE)		PROPOSED GROUTED RIPRAP
	"NO LOADING AND UNLOADING SIGN" (R5-6)		PROPOSED SOFT LANDSCAPE
	"PEDESTRIAN CROSSING AHEAD" (W6-1B)		PROPOSED CURB AND GUTTER
	"PEDESTRIAN CROSSING" (R6-8A)		PROPOSED PAVER BLOCKS ON EXISTING SIDEWALK
	"FASTEN SEATBELT" SIGN (R6-7)		PROPOSED PATHWAY WITH PAVER BLOCKS
	"STOP" SIGN (R1-1A)		PROPOSED METAL GUARDRAIL
	"WATCH OUT FOR LOW FLYING GOLF BALLS" (R3-16A)		PROPOSED 24"Ø RCPC
	SPEED RESTRICTION (R4-1A)		PROPOSED PCCP W/ HOT MIX ASPHALT OVERLAY (50MM THICK)
	DIRECTIONAL/INFORMATIVE SIGN		PROPOSED DOUBLE YELLOW CENTER LINE
	Y-JUNCTION (W2-9)		PROPOSED PEDESTRIAN LANE
	SIDE ROAD JUNCTION (W2-8)		PROPOSED CONCRETE STAIRS WITH METAL RAILING
			TREES
			PROPOSED STEEL GRATING
			PROPOSED INLET
			PROPOSED MANHOLE COVER



1 SITE DEVELOPMENT PLAN  
SCALE: N.T.S.



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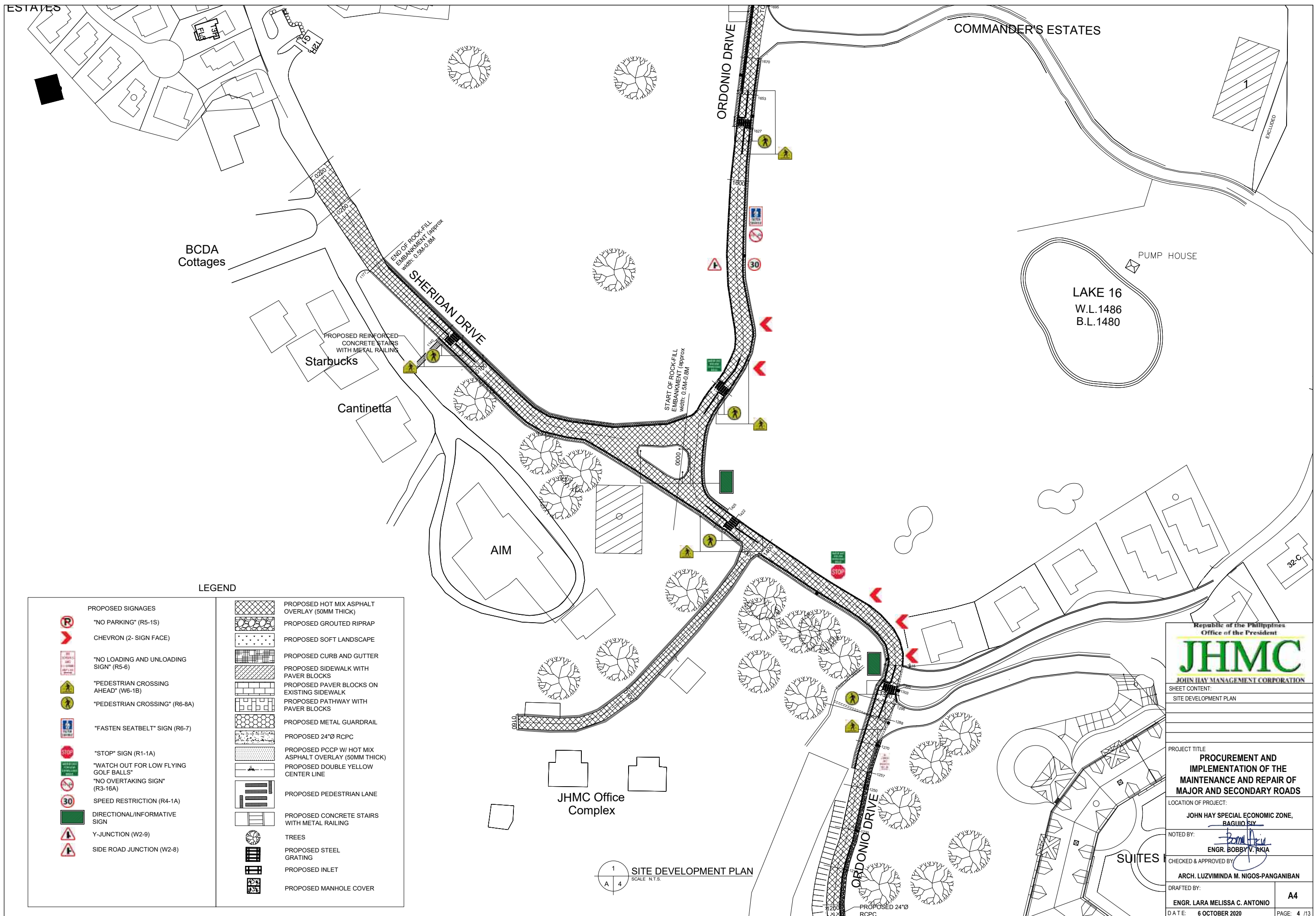
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**LEGEND**

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1 SITE DEVELOPMENT PLAN  
SCALE: N.T.S.

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SITE DEVELOPMENT PLAN

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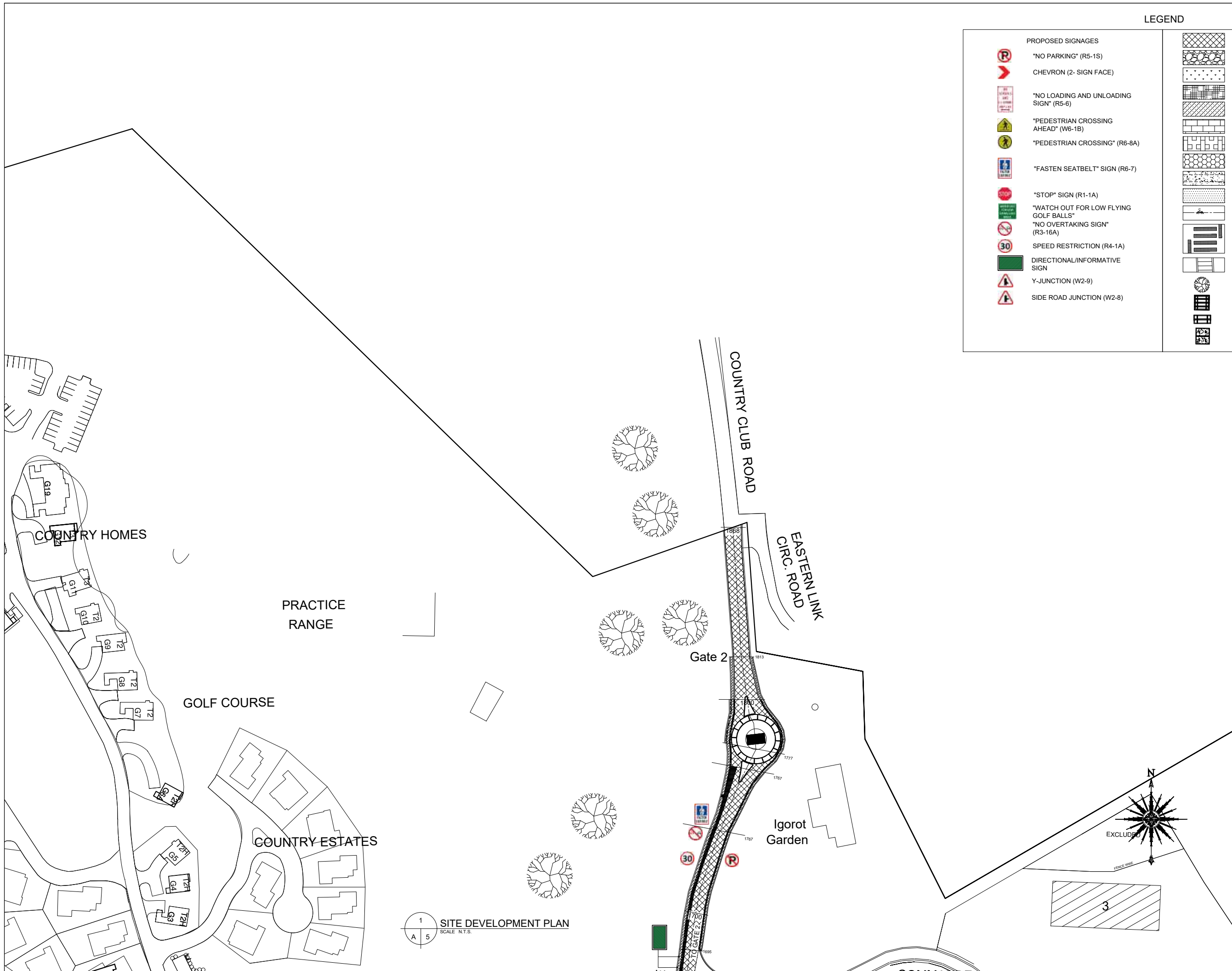
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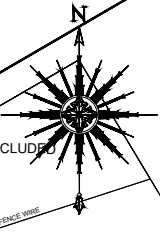
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**LEGEND**

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			PROPOSED INLET
			PROPOSED MANHOLE COVER

1  
A 5  
SITE DEVELOPMENT PLAN  
SCALE: N.T.S.



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SHEET CONTENT:  
SITE DEVELOPMENT PLAN

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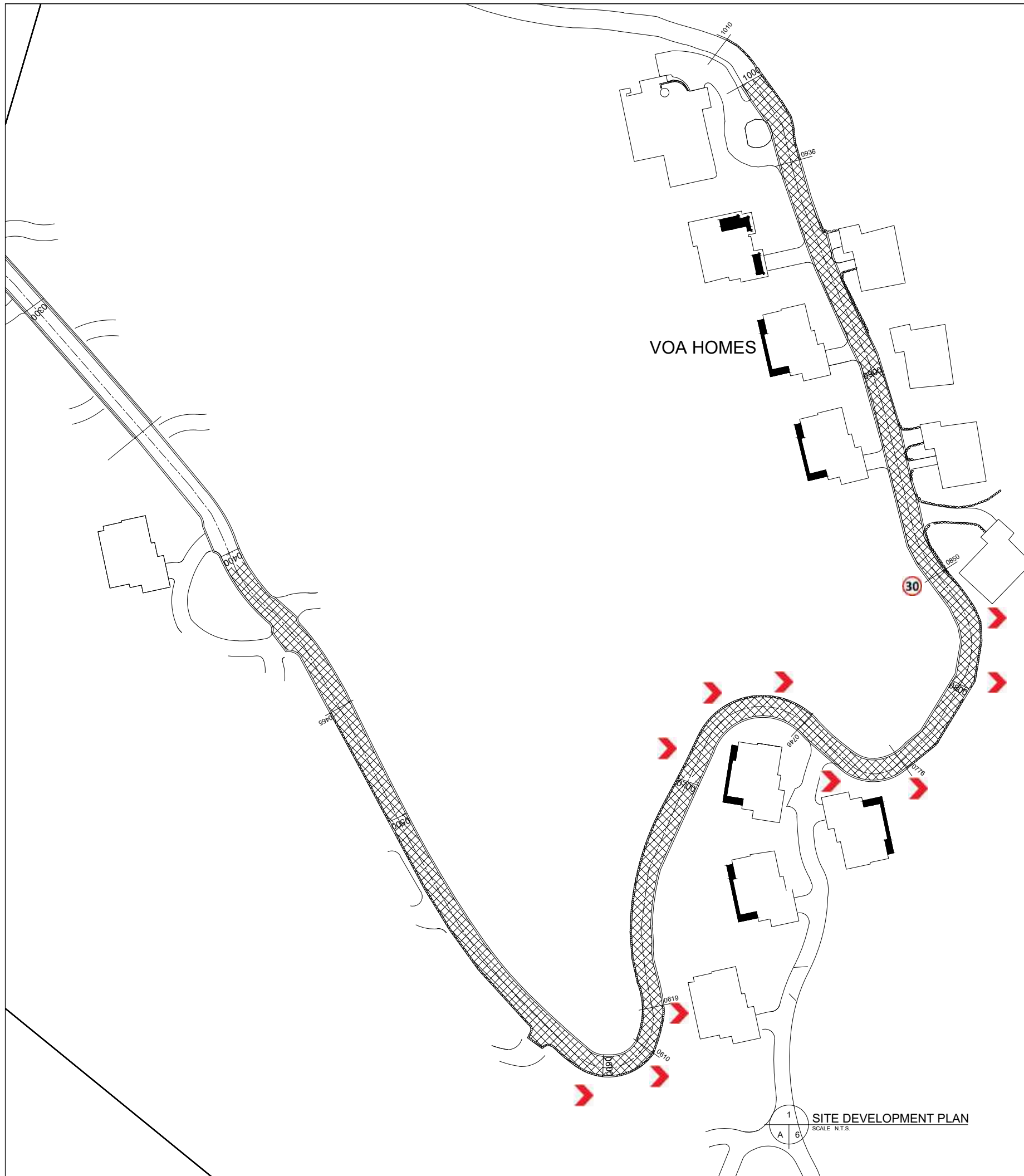
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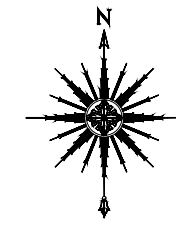
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**LEGEND**

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	SIDE ROAD JUNCTION (W2-8)		TREES
			PROPOSED STEEL GRATING
			PROPOSED INLET
			PROPOSED MANHOLE COVER

Forest Preserve F  
104,916.89 sq m



1  
A 6  
SITE DEVELOPMENT PLAN  
SCALE: N.T.S.

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SHEET CONTENT:  
SITE DEVELOPMENT PLAN

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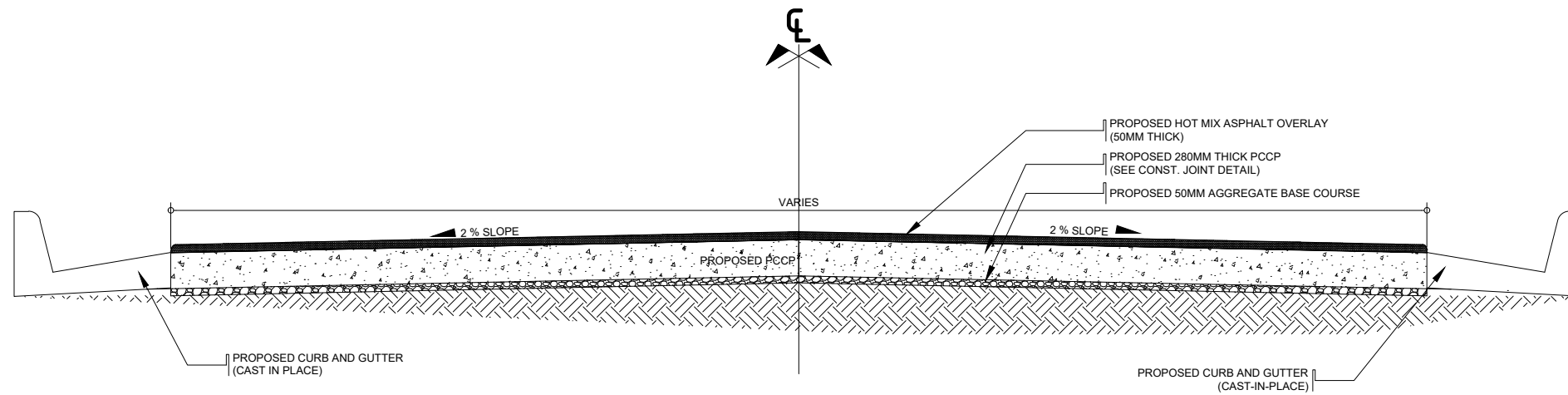
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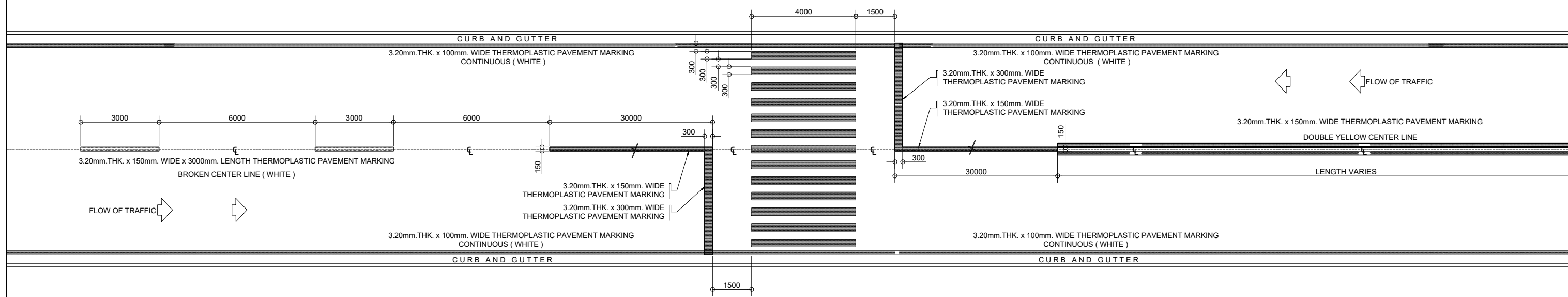
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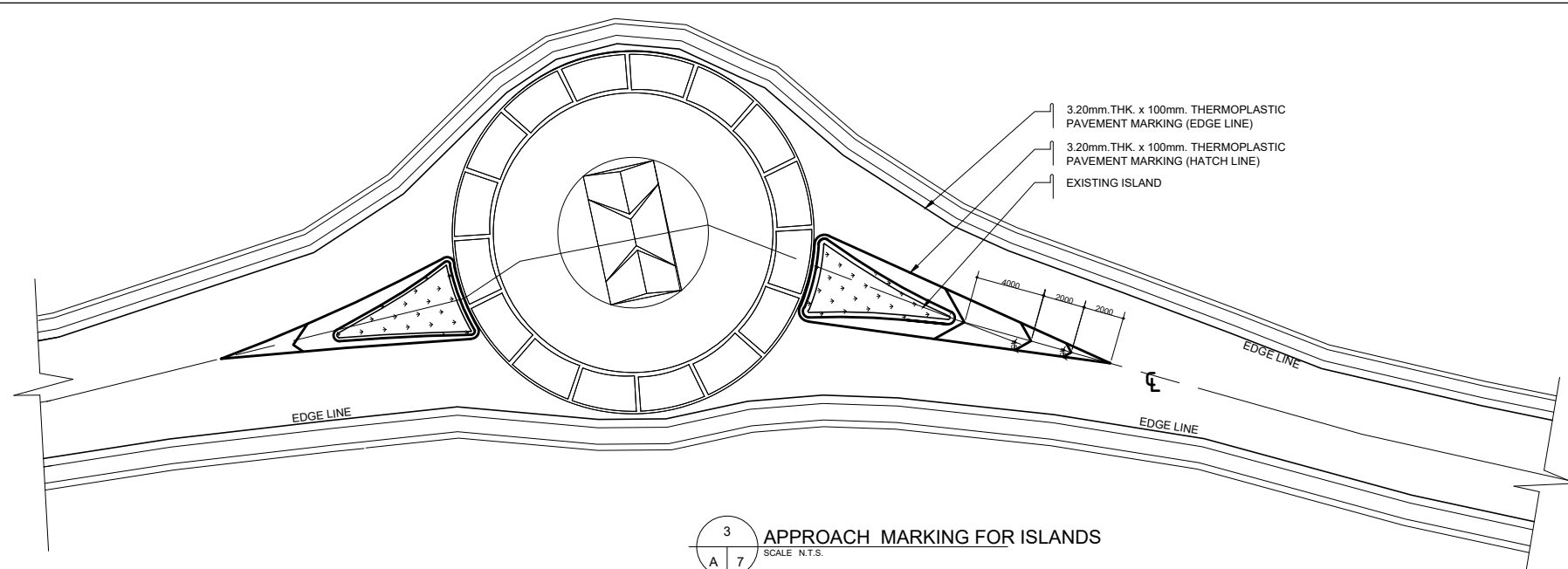
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1 TYPICAL PCCP AND ASPHALT OVERLAY DETAIL  
SCALE N.T.S.



2 PAVEMENT MARKING DETAILS  
SCALE N.T.S.



3 APPROACH MARKING FOR ISLANDS  
SCALE N.T.S.



SHEET CONTENT:
TYPICAL PCCP & ASPHALT OVERLAY DETAIL
PAVEMENT MARKING DETAILS
APPROACH MARKING FOR ISLANDS

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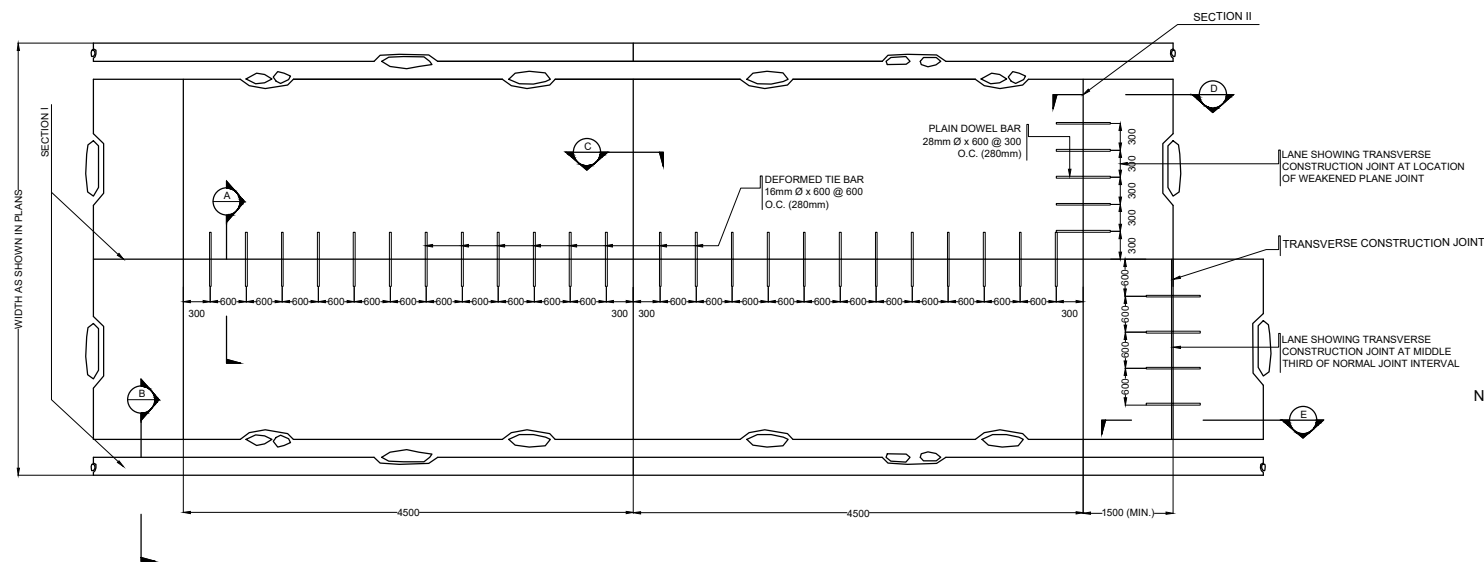
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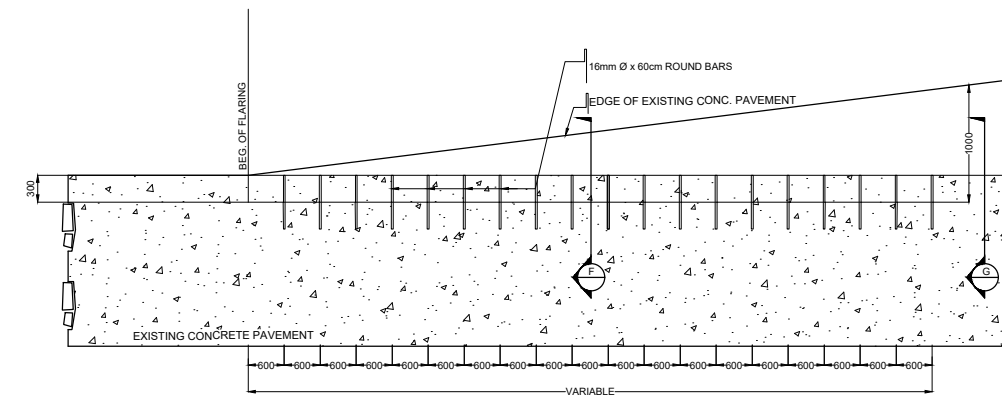
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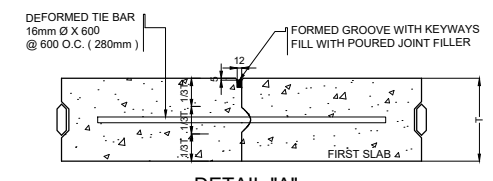


TYPICAL PLAN OF TWO LANE PAVEMENT  
NOT TO SCALE

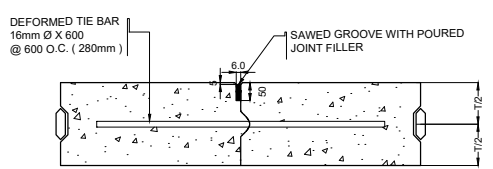


PLAN (SHOWING FLARING OF EXISTING CONC. PAVEMENT)  
NOT TO SCALE

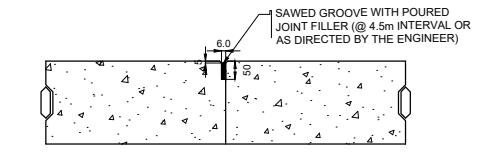
NOTE:  
THE EXISTING CONCRETE PAVEMENT SHALL BE CHIPPED OFF PERPENDICULARLY TO THE EXISTING BASE ABOUT 300mm WIDE TO A DISTANCE WHERE THE FLARE IS LESS THAN 1000mm AND NECESSARY DOWEL BARS SHALL BE PROVIDED TO CONNECT THE NEW PAVEMENT WITH THE EXISTING PAVEMENT.



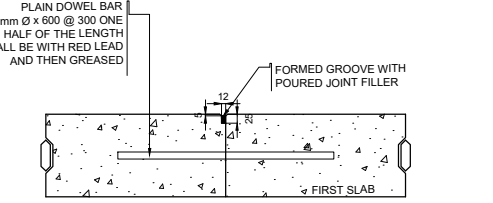
DETAIL "A"  
SCALE 1:10 M



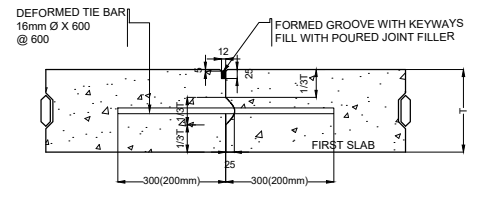
DETAIL "B"  
SCALE 1:10 M



DETAIL "C"  
SCALE 1:10 M

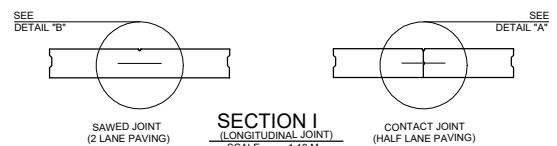


DETAIL "D"  
SCALE 1:10 M

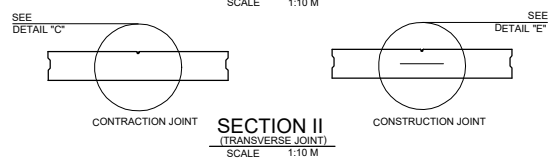


SECTION "E"  
SCALE 1:10 M

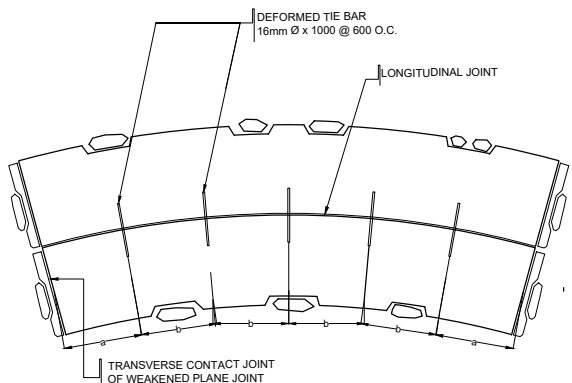
KEYED TRANSVERSE CONSTRUCTION JOINT (TO BE PLACED ONLY IN MIDDLE THIRD OF NORMAL JOINT INTERVAL)



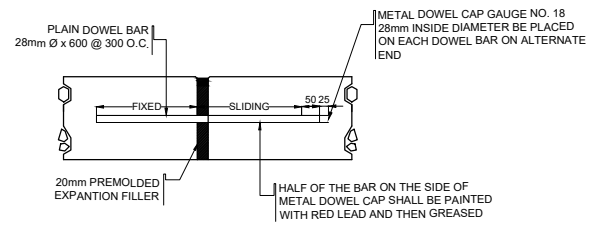
SECTION I  
(LONGITUDINAL JOINT)  
SCALE 1:10 M



SECTION II  
(TRANSVERSE JOINT)  
SCALE 1:10 M

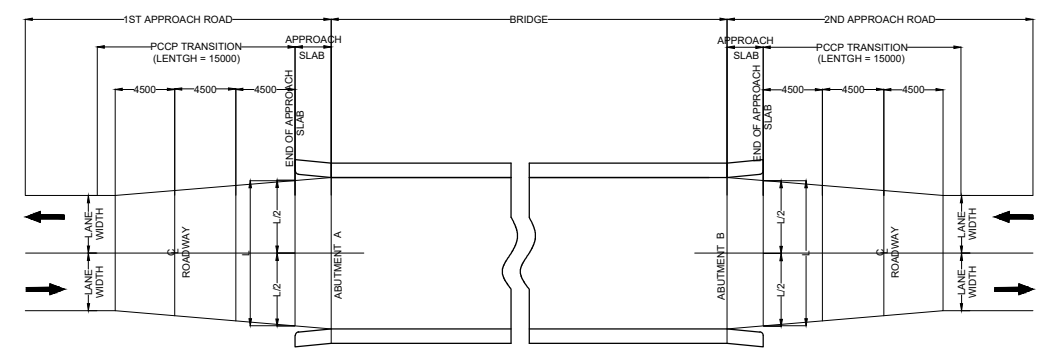


DETAIL OF BAR SPACING ALONG CURVES



SECTIONS  
SCALE 1:10 M

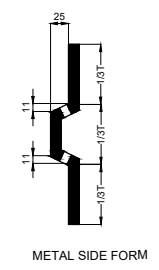
CONSTRUCTION JOINT TO BE USED FOR FLARING EXISTING CONCRETE PAVEMENT



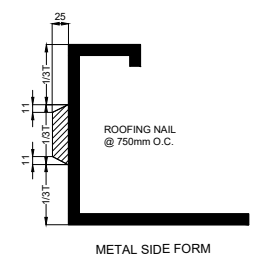
PAVEMENT LAYOUT

GENERAL NOTES:

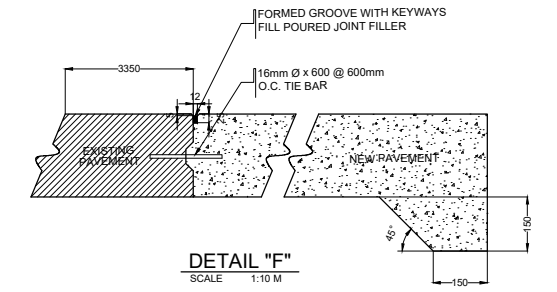
1. MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE "DPWH STANDARD SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND AIRPORTS, 2004".
2. CONSTRUCTION (CONTACT) JOINTS ARE FORMED WHEN CONCRETE ON ONE SIDE OF THE JOINT IS POURED AHEAD AND ALLOWED TO SET BEFORE POURING ON THE OTHER SIDE.
3. AT CONSTRUCTION JOINTS (LONGITUDINAL OR TRANSVERSE) CARE SHOULD BE TAKEN THAT NO CONCRETE FROM THE LAST SLAB PLACED OVERHANGS ANY PORTION OF THE FIRST SLAB.
4. THE BARS SHOULD BE DEFORMED STEEL BARS, ALL DOWEL BAR SHALL BE SMOOTH ROUND STEEL BAR FREE FROM RUST AND OTHER DEFECTS WHICH MIGHT RESTRICT THEIR MOVEMENT.
5. TYPE OF WEAKENED JOINT TO BE USED SHALL BE AS SPECIFIED IN THE PLANS AND ONLY ONE TYPE SHALL BE USED FOR THE WHOLE PROJECT.
6. MATERIAL FOR THE METAL SIDE FORM SHALL BE BRAND NEW SHEET METAL GAUGE NO. 18 OF BLACK IRON FREE FROM RUST AND LINKS.
7. AT LEAST SIX (6) SUCCESSIVE DOWELLED BUTT JOINTS AT NORMAL JOINT SPACING SHALL BE PROVIDED BEFORE OR AFTER AN EXPANSION JOINT.
8. THE GROOVE OR CRACK ABOVE JOINTS (LONGITUDINAL OR TRANSVERSE) SHALL BE SEALED WITH 30-50 PENETRATION ASPHALT SEAL OR COLD APPLIED LIQUID RUBBER COMPOUND AFTER THE CONCRETE HAD BEEN CURED AND BEFORE OPENING PAVEMENT TO TRAFFIC.
9. ALL TRANSVERSE JOINTS, EXCEPT CONSTRUCTION JOINT, SHALL BE CONTINUOUS FROM EDGE TO EDGE.
10. ALL LONGITUDINAL JOINT SHALL MEET AT INTERSECTIONS WITH NO GAPS OR OFFSET.
11. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
12. AVOID STOPPAGE OF FORMWORKS ALONG CURVES.
13. TRANSVERSE CONSTRUCTION (CONTACT) JOINT SHALL BE PROVIDE AT THE END OF ANY RUN WHERE LAYING OF CONCRETE HAS BEEN STOPPED FOR THIRTY (30) MINUTES OR LONGER.
14. TRANSVERSE CONSTRUCTION JOINTS WHICH OCCUR AT LOCATION OF WEAKENED PLANE JOINTS WITH DOWELS. IF JOINT OCCURS IN THE MIDDLE THIRD OF THE WEAKENED JOINT INTERVAL (1500 - 3000mm) IT SHOULD BE KEYED JOINTS WITH THE BARS.



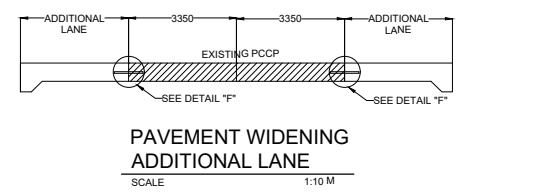
METAL SIDE FORM



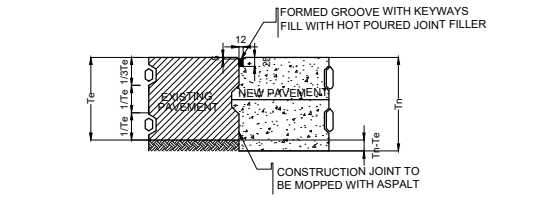
DETAILS OF JOINTS IN RIGID PAVEMENT



DETAIL "F"  
SCALE 1:10 M



PAVEMENT WIDENING ADDITIONAL LANE  
SCALE 1:10 M



SECTION "G"  
SCALE 1:10 M

TRANSVERSE AND LONGITUDINAL CONSTRUCTION JOINT TO BE USED ONLY ON CONNECTIONS

Republic of the Philippines  
Office of the President  
**JHMC**  
JOHN HAY MANAGEMENT CORPORATION

SHEET CONTENT:  
PAVEMENT CONSTRUCTION JOINT

PROJECT TITLE  
**PROCUREMENT AND IMPLEMENTATION OF THE MAINTENANCE AND REPAIR OF MAJOR AND SECONDARY ROADS**

LOCATION OF PROJECT:  
**JOHN HAY SPECIAL ECONOMIC ZONE, BAGUIO CITY**

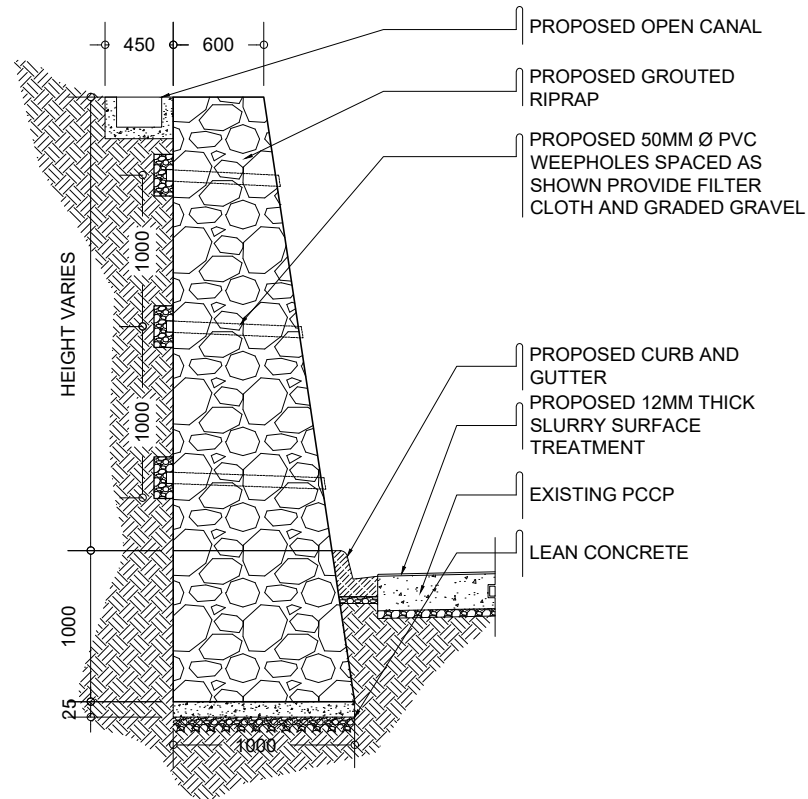
NOTED BY:  
*Bobby V. Akja*  
ENGR. BOBBY V. AKJA

CHECKED & APPROVED BY:  
*Arch. Luzviminda M. Nigos-Panganiban*  
ARCH. LUZVIMINDA M. NIGOS-PANGANIBAN

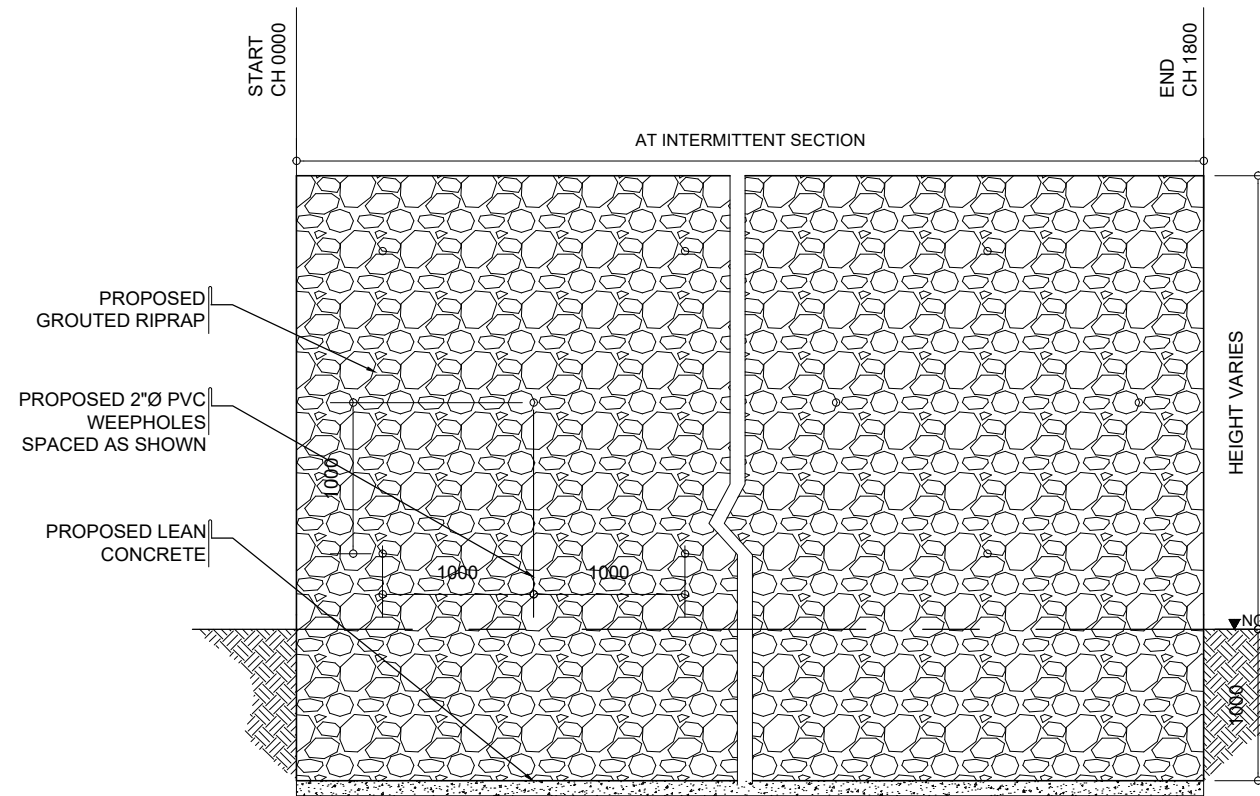
DRAFTED BY:  
ENGR. LARA MELISSA C. ANTONIO

D A T E : 6 OCTOBER 2020

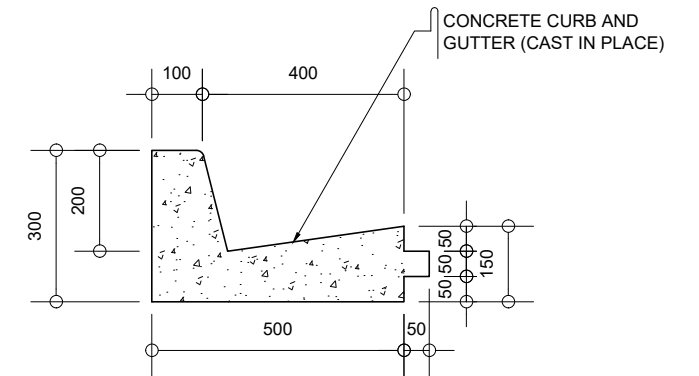
PAGE: 8 / 13



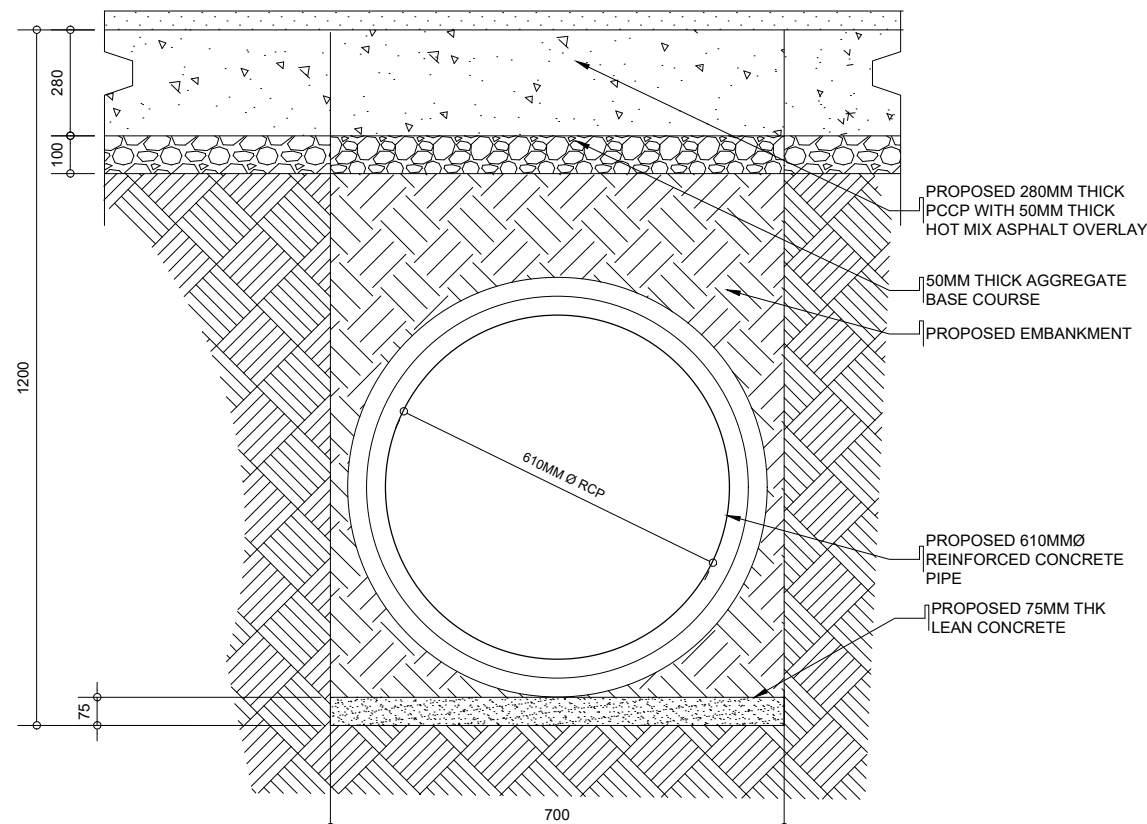
1 TYPICAL GROUDED RIPRAP SECTION  
SCALE: 1:50 M



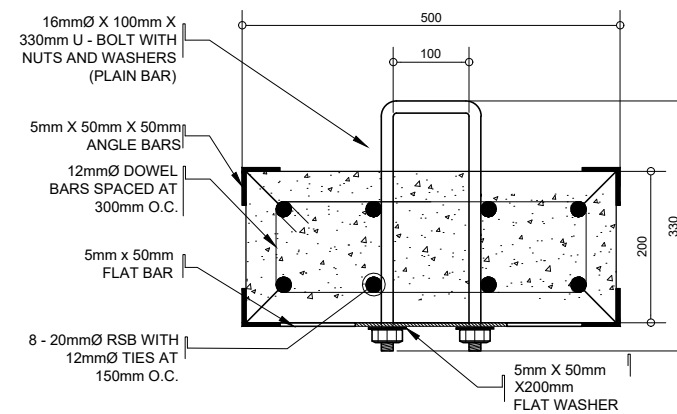
2 GROUDED RIPRAP ELEVATION  
SCALE: 1:50 M




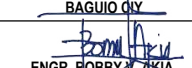
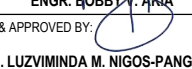
3 CURB AND GUTTER DETAIL  
SCALE: 1:15 M

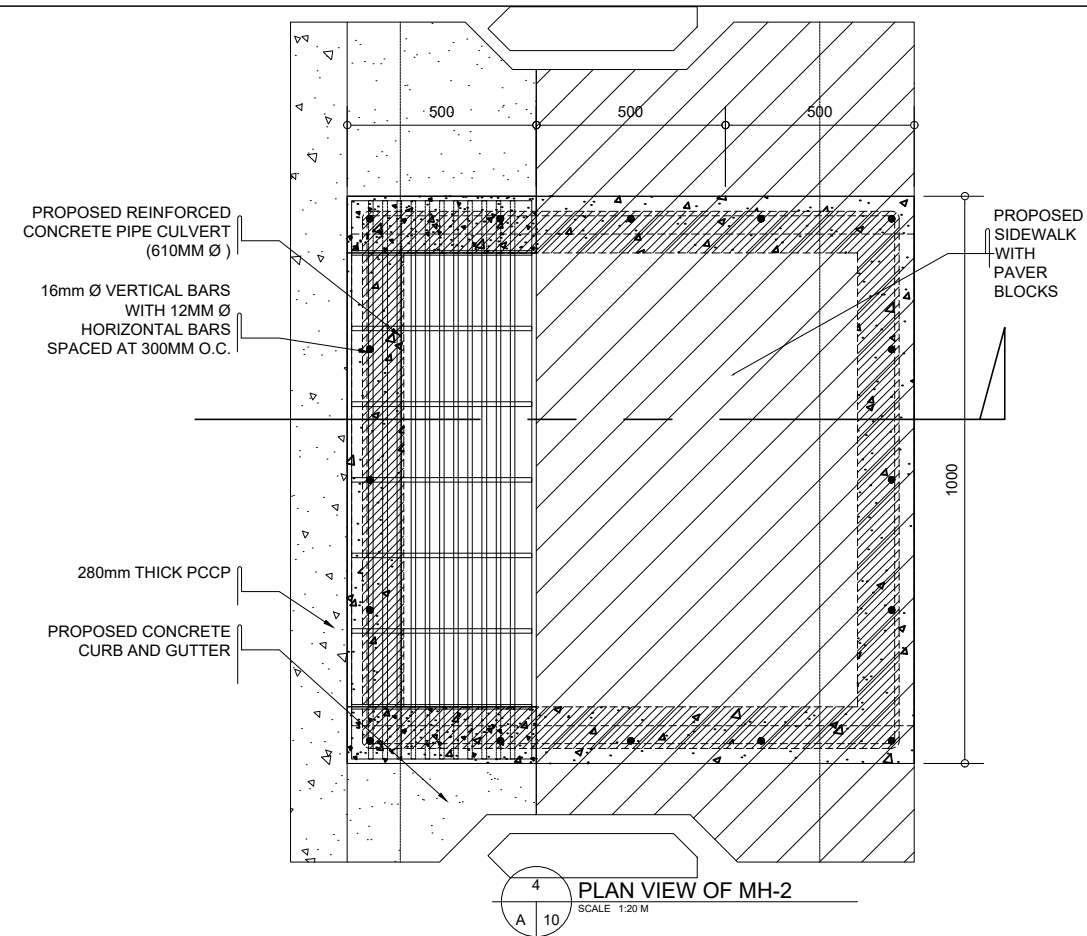
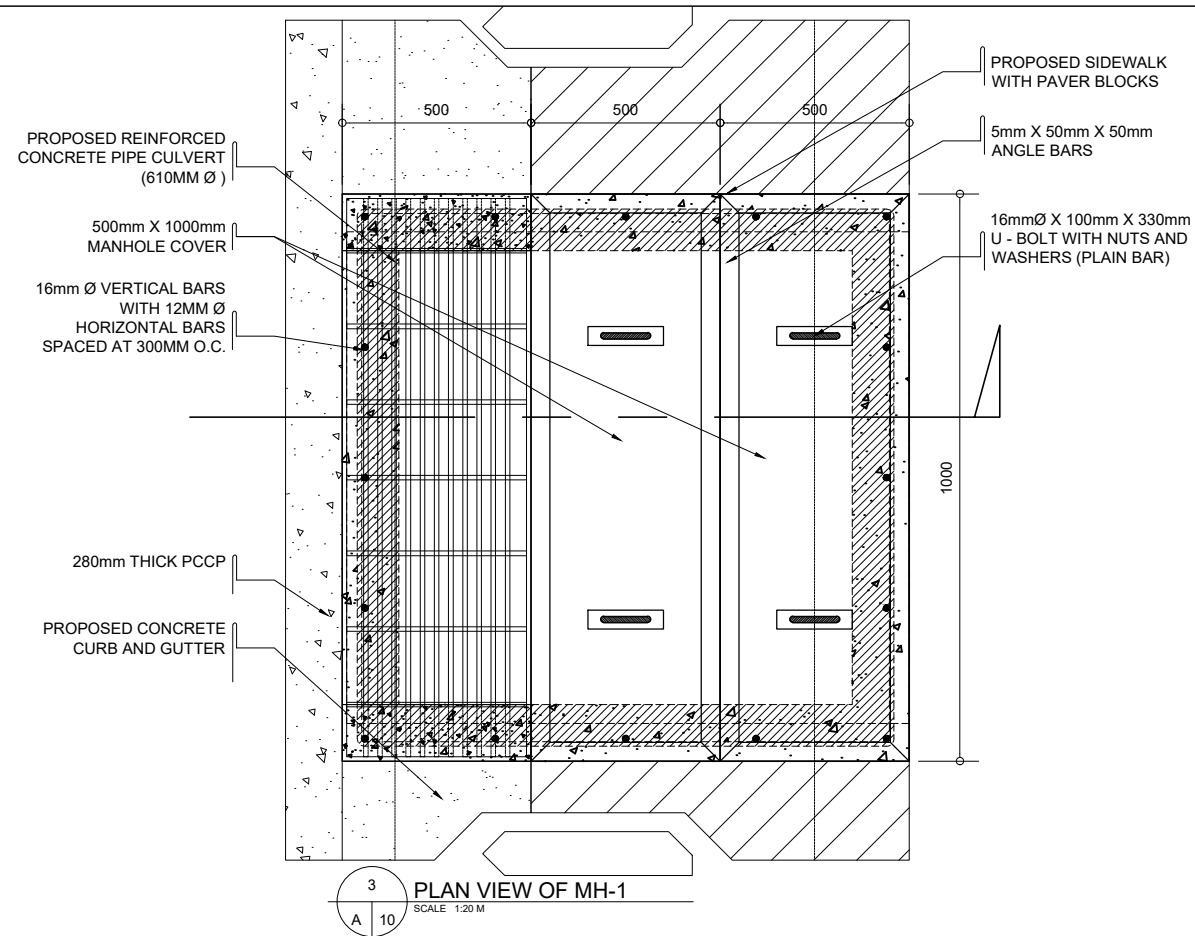
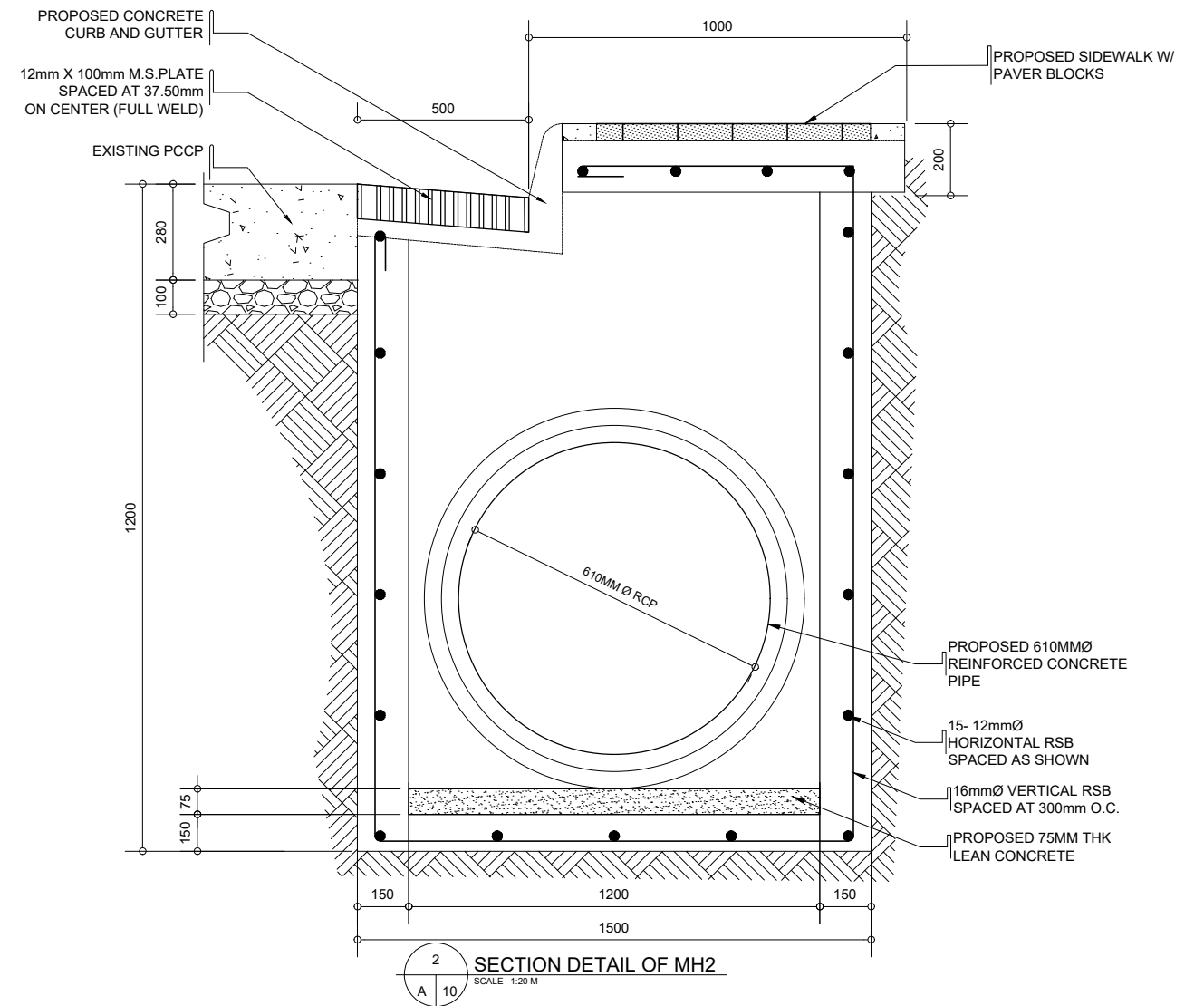
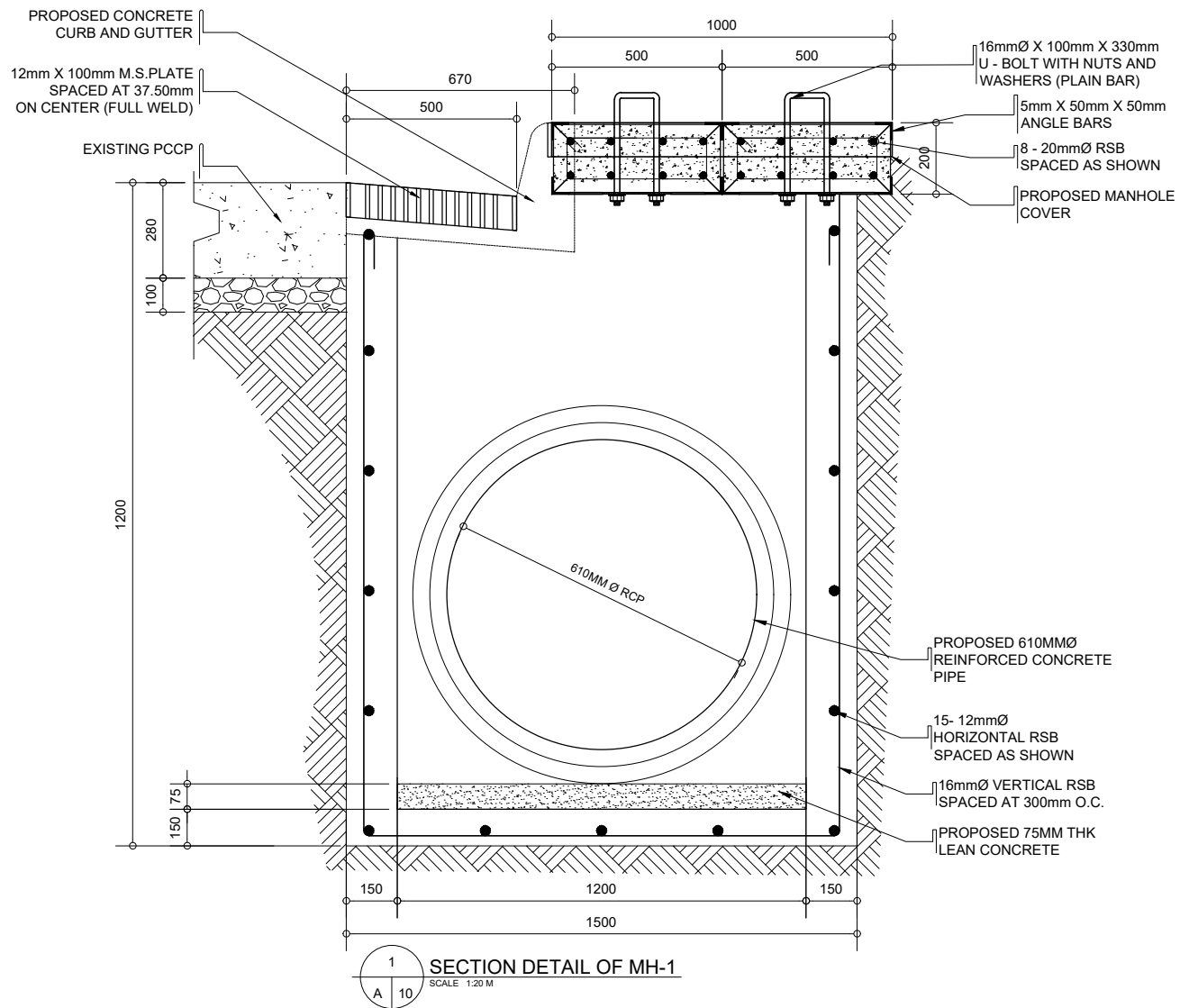



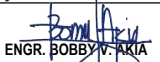
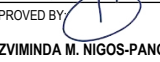
4 TYPICAL SECTION OF PROPOSED RCPC  
SCALE: 1:20 M

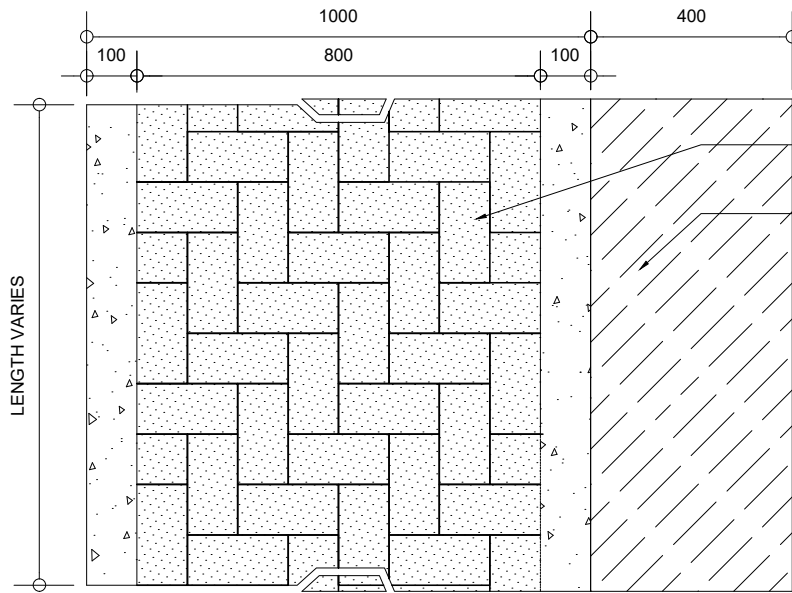


5 MANHOLE COVER DETAIL  
SCALE: 1:10 M

Republic of the Philippines Office of the President  <b>JHMC</b> JOHN HAY MANAGEMENT CORPORATION	
SHEET CONTENT:	
TYPICAL GROUDED RIPRAP SECTION	
GROUDED RIPRAP ELEVATION	
CURB AND GUTTER DETAIL	
TYPICAL SECTION OF PROPOSED RCPC	
MANHOLE COVER DETAIL	
PROJECT TITLE	
<b>PROCUREMENT AND          IMPLEMENTATION OF THE          MAINTENANCE AND REPAIR OF          MAJOR AND SECONDARY ROADS</b>	
LOCATION OF PROJECT:	
<b>JOHN HAY SPECIAL ECONOMIC ZONE,          BAGUIO CITY</b>	
NOTED BY:	
 <b>ENGR. BOBBY Y. AKIA</b>	
CHECKED & APPROVED BY:	
 <b>ARCH. LUZVIMINDA M. NIGOS-PANGANIBAN</b>	
DRAFTED BY:	
<b>ENGR. LARA MELISSA C. ANTONIO</b>	
D A T E:	PAGE: 9 /13
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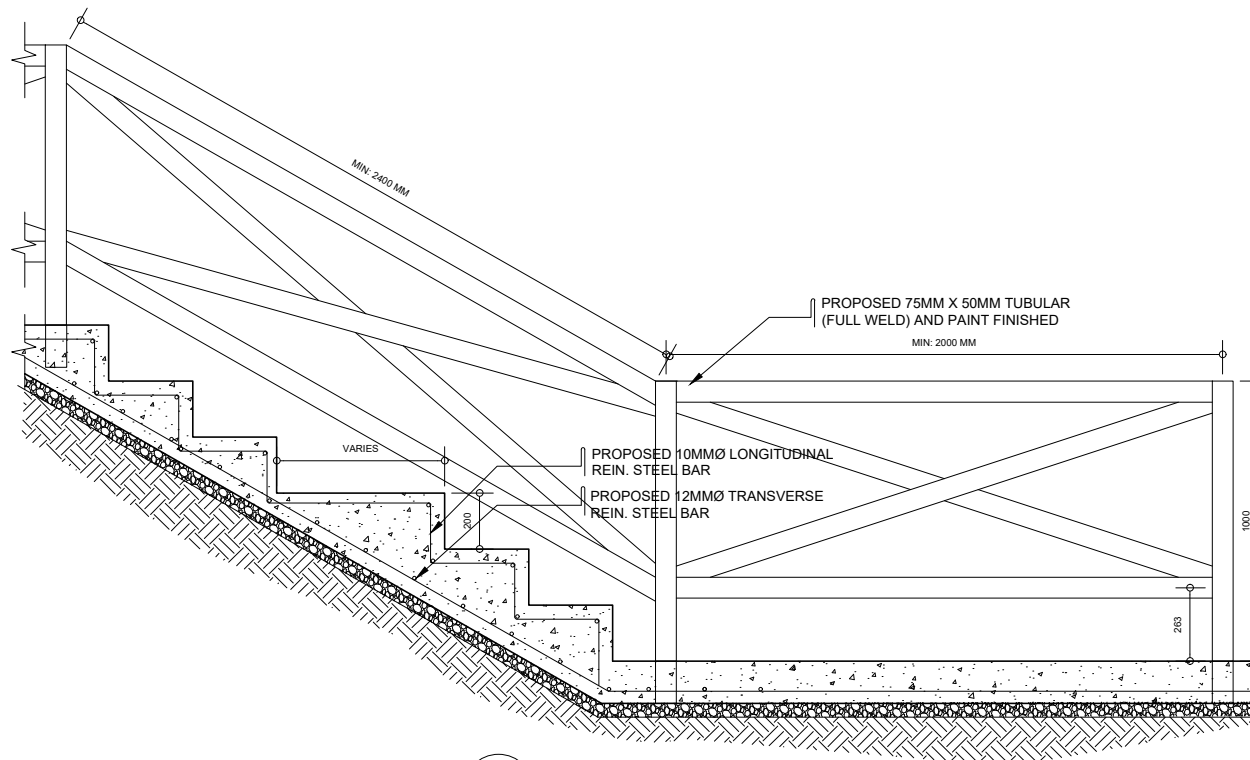


Republic of the Philippines Office of the President  <b>JHMC</b> JOHN HAY MANAGEMENT CORPORATION	
SHEET CONTENT:	
SECTION DETAIL OF MH-1	
SECTION DETAIL OF MH-2	
PLAN VIEW OF MH-1	
PLAN VIEW OF MH-2	
PROJECT TITLE	
<b>PROCUREMENT AND IMPLEMENTATION OF THE MAINTENANCE AND REPAIR OF MAJOR AND SECONDARY ROADS</b>	
LOCATION OF PROJECT:	
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DRAFTED BY:	<b>A10</b>
ENGR. LARA MELISSA C. ANTONIO	
D A T E:	6 OCTOBER 2020
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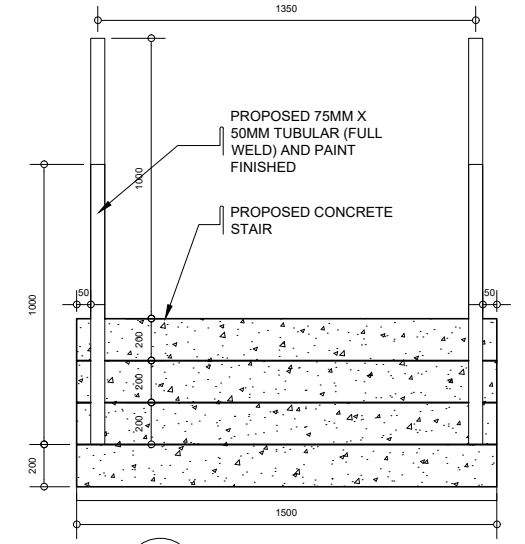
PROPOSED SIDEWALK WITH 4"x8" PAVER BLOCKS  
 PROPOSED CURB AND GUTTER CAST-IN PLACE

1 SIDEWALK PLAN DETAIL  
 SCALE 1:15 M

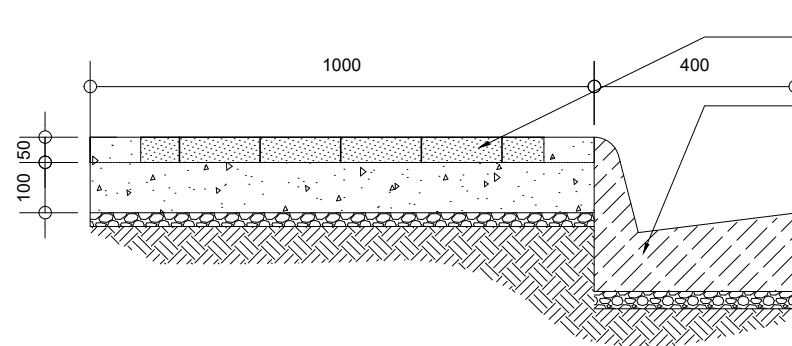


PROPOSED 10MMØ LONGITUDINAL REIN. STEEL BAR  
 PROPOSED 12MMØ TRANSVERSE REIN. STEEL BAR  
 PROPOSED 75MM X 50MM TUBULAR (FULL WELD) AND PAINT FINISHED

2 STAIRS CROSS SECTION DETAIL  
 SCALE 1:30 M

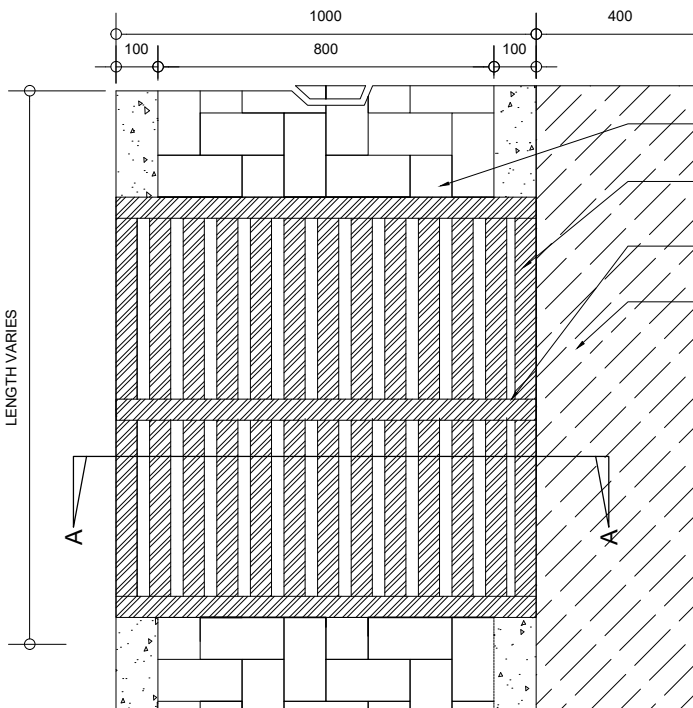


3 STAIRS ELEVATION PLAN  
 SCALE 1:30 M



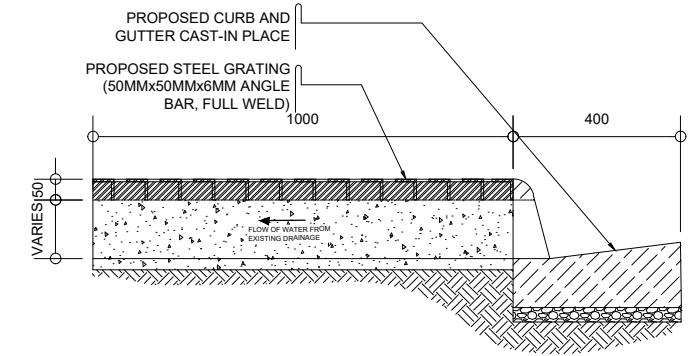
PROPOSED SIDEWALK WITH 4"x8" PAVER BLOCKS  
 PROPOSED CURB AND GUTTER CAST-IN PLACE

4 SIDEWALK CROSS SECTION DETAIL  
 SCALE 1:15 M



PROPOSED SIDEWALK WITH 4"x8" PAVER BLOCKS  
 PROPOSED STEEL GRATING (50MMx50MMx6MM ANGLE BAR, FULL WELD)  
 PROPOSED 50MM FLAT BAR  
 PROPOSED CURB AND GUTTER CAST-IN PLACE

5 STEEL GRATING DETAILS  
 SCALE NTS



PROPOSED CURB AND GUTTER CAST-IN PLACE  
 PROPOSED STEEL GRATING (50MMx50MMx6MM ANGLE BAR, FULL WELD)



SHEET CONTENT:
SIDEWALK PLAN DETAIL, STAIRS CROSS SECTION DETAIL
STAIRS ELEVATION PLAN, SIDEWALK CROSS SECTION DETAIL, STEEL GRATING DETAILS
METAL GUARD RAIL CROSS SECTION
METAL GUARD RAIL ELEVATION PLAN

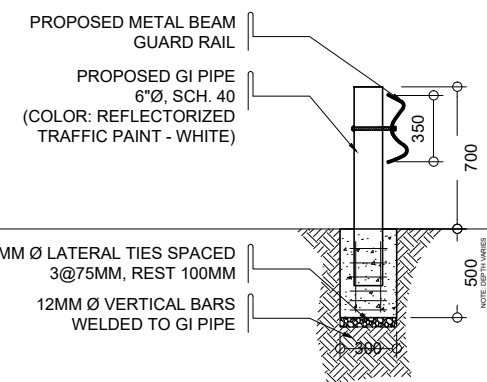
PROJECT TITLE  
**PROCUREMENT AND IMPLEMENTATION OF THE MAINTENANCE AND REPAIR OF MAJOR AND SECONDARY ROADS**

LOCATION OF PROJECT:  
**JOHN HAY SPECIAL ECONOMIC ZONE, BAGUIO CITY**

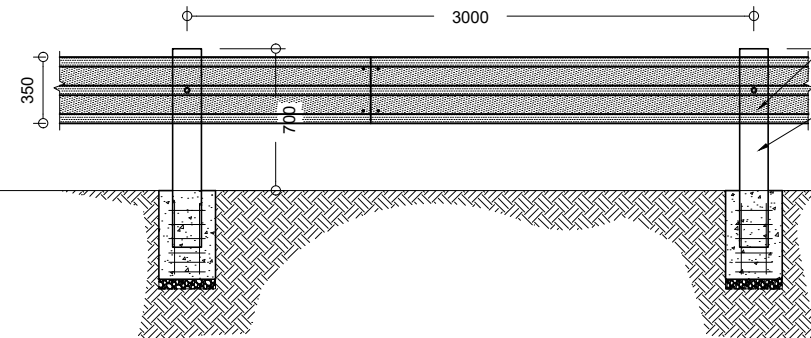
NOTED BY:  
 ENGR. BOBBY V. AKIA

CHECKED & APPROVED BY:  
 ARCH. LUZVIMINDA M. NIGOS-PANGANIBAN

DRAFTED BY:  
 ENGR. LARA MELISSA C. ANTONIO

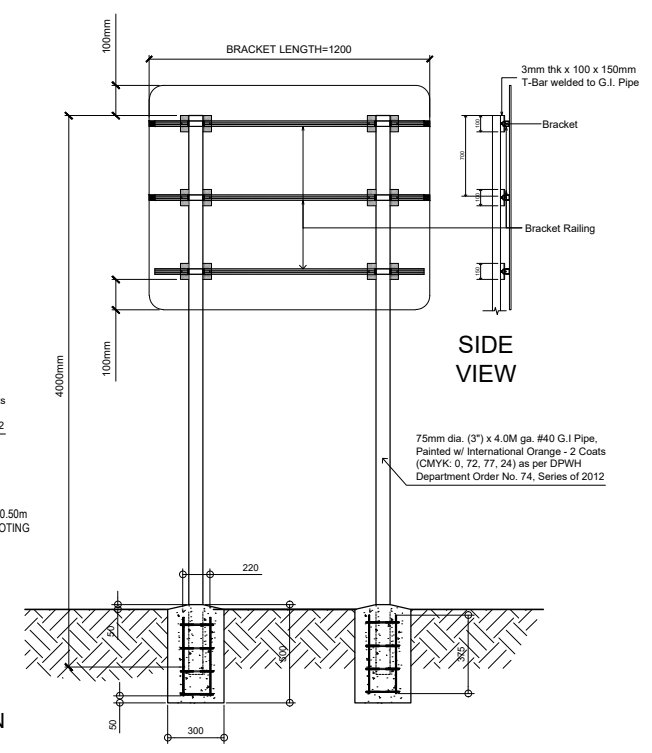
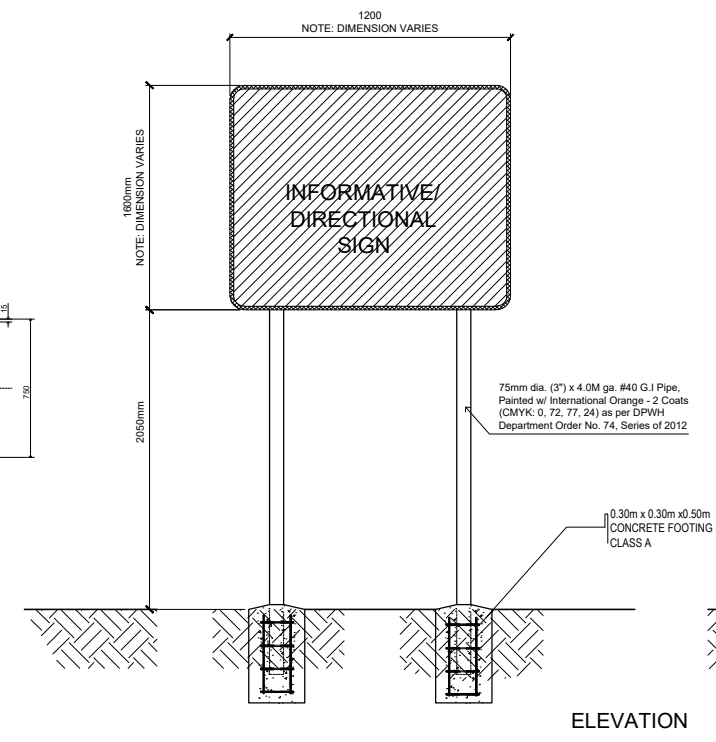
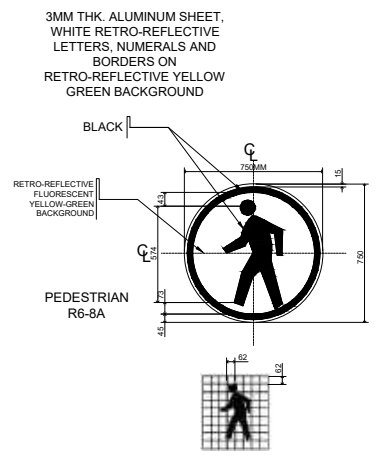
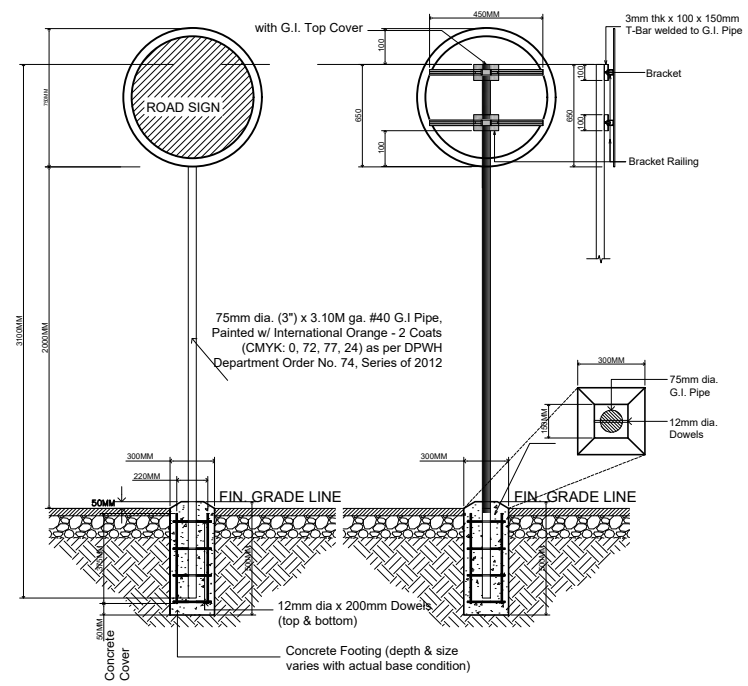


6 METAL GUARD RAIL CROSS SECTION  
 SCALE 1:15 M



PROPOSED METAL BEAM GUARD RAIL  
 PROPOSED GI PIPE 6"Ø, SCH. 40 (COLOR: REFLECTORIZED TRAFFIC PAINT - WHITE)

7 METAL GUARD RAIL ELEVATION PLAN  
 SCALE 1:15 M

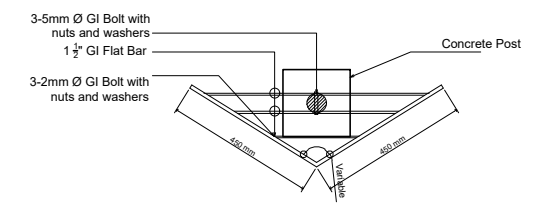
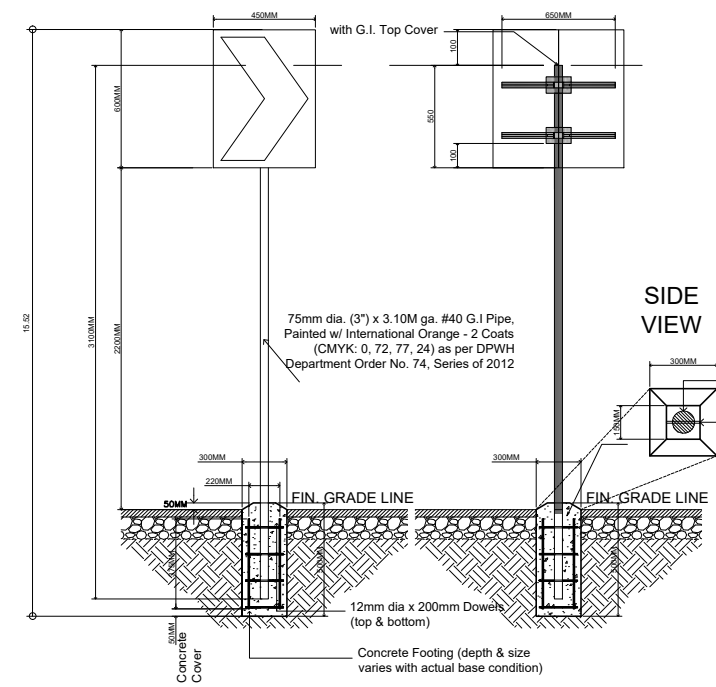
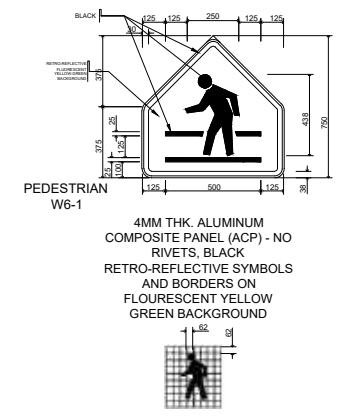
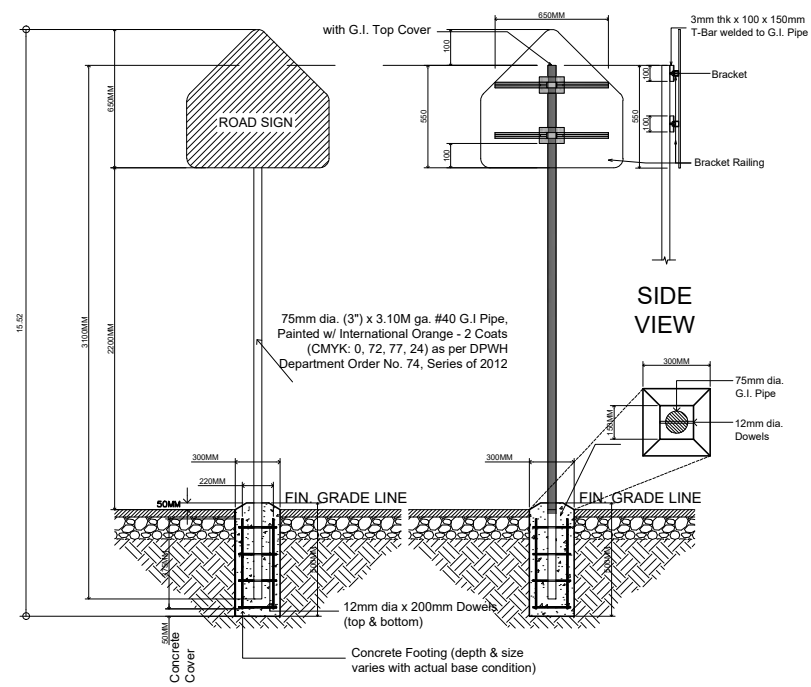



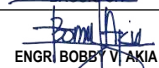
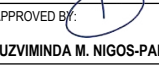
**GENERAL NOTES:**

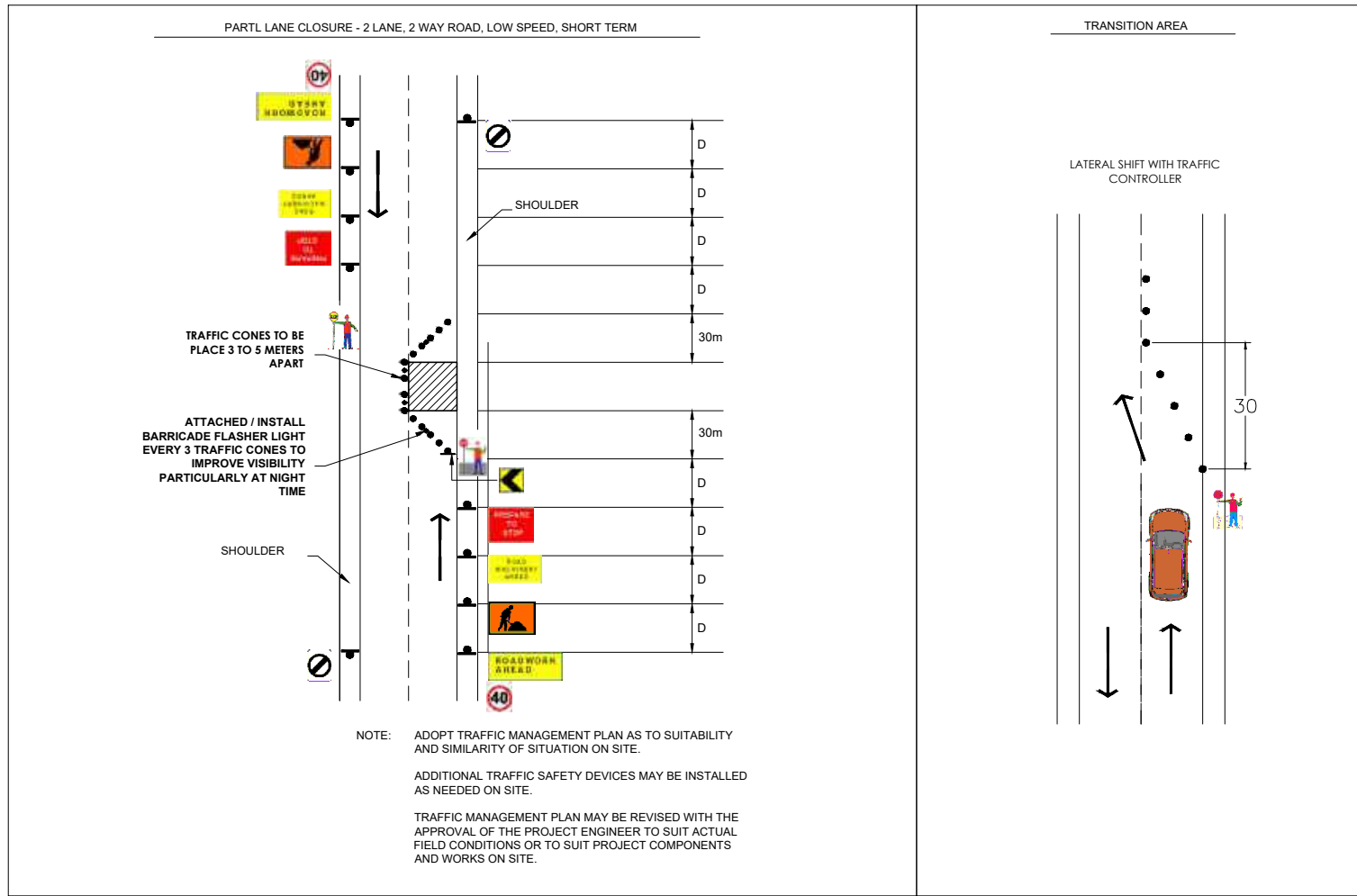
ALL PROPOSED REGULATORY SIGNS, WARNING SIGNS, DIRECTIONAL SIGNS AND HAZARD MARKERS SHOULD BE IN ACCORDANCE WITH THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH), "HIGHWAY SAFETY DESIGN STANDARDS" PART 2: "ROAD SIGNS AND PAVEMENT MARKINGS MANUAL"

FOR DIMENSIONS, PLEASE REFER TO THE SAME MANUAL

DETAILS OF THE PROPOSED INFORMATIVE AND DIRECTIONAL SIGNS WILL BE BASED ON THE EXISTING SIGNAGE TO BE REPLACED.

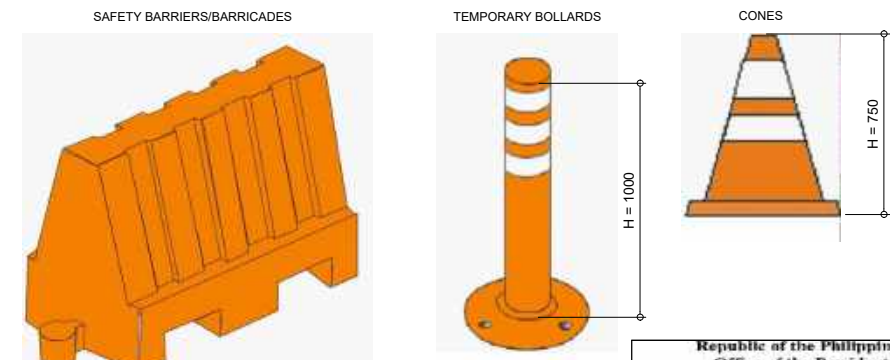
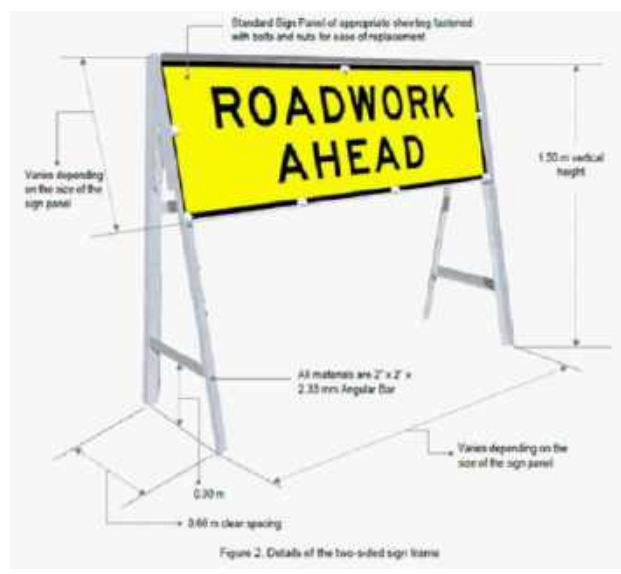


Republic of the Philippines Office of the President  <b>JHMC</b> JOHN HAY MANAGEMENT CORPORATION	
SHEET CONTENT:	
ROAD SIGN DETAILS	
PROJECT TITLE:	
<b>PROCUREMENT AND IMPLEMENTATION OF THE MAINTENANCE AND REPAIR OF MAJOR AND SECONDARY ROADS</b>	
LOCATION OF PROJECT:	
<b>JOHN HAY SPECIAL ECONOMIC ZONE, BAGUIO CITY</b>	
NOTED BY:	 <b>ENGR. BOBBY V. AKIA</b>
CHECKED & APPROVED BY:	 <b>ARCH. LUZVIMINDA M. NIGOS-PANGANIBAN</b>
DRAFTED BY:	<b>A12</b>
D A T E:	6 OCTOBER 2020
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Road and Bridges Temporary Work Sign		Signage Description			
		Sign No.	Size (mm) (Width x Height)	Letters/Symbols	Back Ground
	ROADWORK AHEAD (T1-1, T1-31)	T1	1800 x 600	Line 1- Black 200 DM Line 2- Black 160 DM	Yellow Reflectorized
	ROAD MACHINERY AHEAD (T1-3)	T1-3	1200 x 600	Line 1- Black 100 EM Line 2- Black 120 DM Line 3- Black 100 EM	Yellow Reflectorized
	WORKMEN AHEAD (Symbolic) (T1-5)	T1-5	900 x 600	Black	Red / Orange Fluorescent for day Reflectorized for Night
	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 MARKER (T5-5)	T5-5	600 x 600 TYPE B-3	Chevron Black 194 wide at 45°	Yellow Reflectorized
	SPEED RESTRICTION (R4-1)	R4-1	600 x 800 (size B)	Black 240 DN Circle - 600 dia. Red	White Reflectorized Red circle Reflectorized
	END SPEED RESTRICTION (R4-12, R4-2) De-restriction	R4-2	600 x 800 (size B)	Symbol - 600 dia. Black	White Reflectorized

- NOTES.**
- THIS GUIDELINES IS WITH REGARDS TO DEPARTMENT ORDER NO. 125 OR THE STRICT COMPLIANCE TO ROAD WORKS SAFETY & TRAFFIC MANAGEMENT AND CONSTRUCTION SAFETY & HEALTH REQUIREMENTS DURING CONSTRUCTION AND MAINTENANCE OF ROADS AND BRIDGES.
  - SPEED CONSIDERATIONS:**
    - LOW SPEED ROAD - TRAFFIC APPROACH SPEED IS LESS THAN 60 KPH.
    - HIGH SPEED ROAD - TRAFFIC APPROACH SPEED IS BETWEEN 60 KPH AND 80 KPH.
    - VERY HIGH SPEED ROAD - TRAFFIC APPROACH GREATER THAN 80 KPH.
  - INSTALLATION OF SIGNS MUST BE SECURELY MOUNTED ON POSTS SO THEY ARE NOT AFFECTED BY WEATHER, VANDALS OR TRAFFIC.**
    - FOR RURAL AREAS, THE HEIGHT OF SIGN MUST BE 1.5 METERS FROM THE TOP OF THE ROADWAY TO THE UNDERSIDE OF THE SIGN
  - TRANSITION AREA (TAPER) -AN AREA WHERE DRIVERS ARE REDIRECTED OUTSIDE OF THEIR NORMAL PATH.**
    - DEVICES USED FOR FORMING THE TAPER MAY BE TEMPORARY HAZARD MARKERS, TRAFFIC CONES OR TEMPORARY BOLLARDS.
    - THE SPACING FOR TRAFFIC CONES OR BOLLARDS TO CREATE A TAPER SHOULD BE 5 TO 10 METERS.
    - NORMALLY EQUAL TO "D", HOWEVER WHEN WITH TRAFFIC CONTROLLER IT IS 30 METERS.
  - SPACING DISTANCE - "D"**
    - A BASIC SYSTEM FOR REMEMBERING THE SPACING OF SIGNS AND TAPER LENGTHS.
    - A DISTANCE EXPRESSED IN METER EQUAL TO THE APPROACH SPEED OF TRAFFIC IN KILOMETERS PER HOUR.
  - THE FIRST ADVANCED WARNING SIGN SEEN BY DRIVERS IS GENERALLY "WORK AHEAD"**
    - FIRST SIGN IS LOCATED 2D METERS BEFORE THE WORKS OR START OF TAPER - E.G. FOR 60 KPH APPROACH SPEED, THE DISTANCE IS 120 METERS PRIOR TO THE TAPER OR WORK AREA.
  - ADJACENT CLEARANCE AREA FOR WORKERS OR CLEARANCE BETWEEN TAPERS AND THE WORK AREA.**
    - IT IS A LATERAL SAFETY BUFFER BESIDE THE WORK AREA THAT INCREASES PROTECTION AND SAFETY FOR WORKERS.
    - IN SLOW SPEED AREA IT WOULD GENERALLY BE A MINIMUM OF 1.2 METERS
    - IN HIGH SPEED AREAS A LARGER ADJACENT CLEARANCE IS DESIRABLE OR CONSIDERATION GIVEN TO PROVIDING SPEED LIMIT.
  - A TRAFFIC CONTROLLER IS A PERSON WHOSE DUTY IS TO CONTROL TRAFFIC AT ROADWORK SITES**
    - THE TRAFFIC CONTROLLER MUST HAVE A 'WORKMAN SYMBOLIC SIGN' AND A 'PREPARE TO STOP' SIGN.



Republic of the Philippines  
Office of the President  
**JHMC**  
JOHN HAY MANAGEMENT CORPORATION

SHEET CONTENT:  
TRAFFIC MANAGEMENT PLAN

PROJECT TITLE:  
**PROCUREMENT AND IMPLEMENTATION OF THE MAINTENANCE AND REPAIR OF MAJOR AND SECONDARY ROADS**

LOCATION OF PROJECT:  
JOHN HAY SPECIAL ECONOMIC ZONE,  
BAGUIO CITY

NOTED BY:  
*Bobby T. Akia*  
ENGR. BOBBY T. AKIA

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DATE: 6 OCTOBER 2020

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