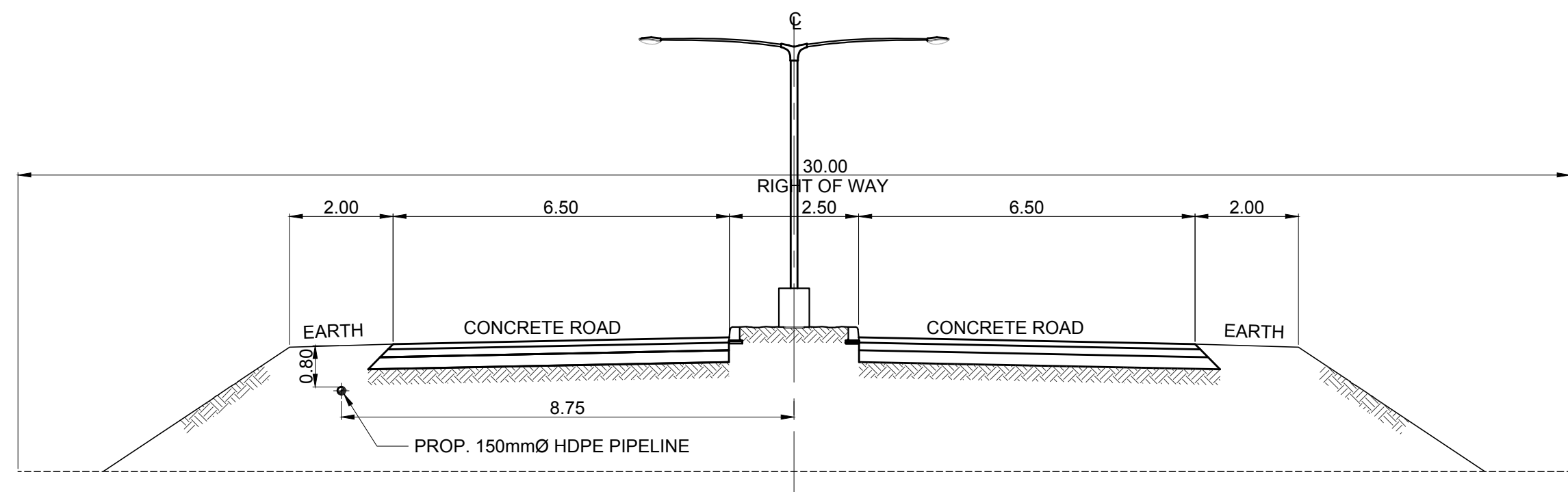
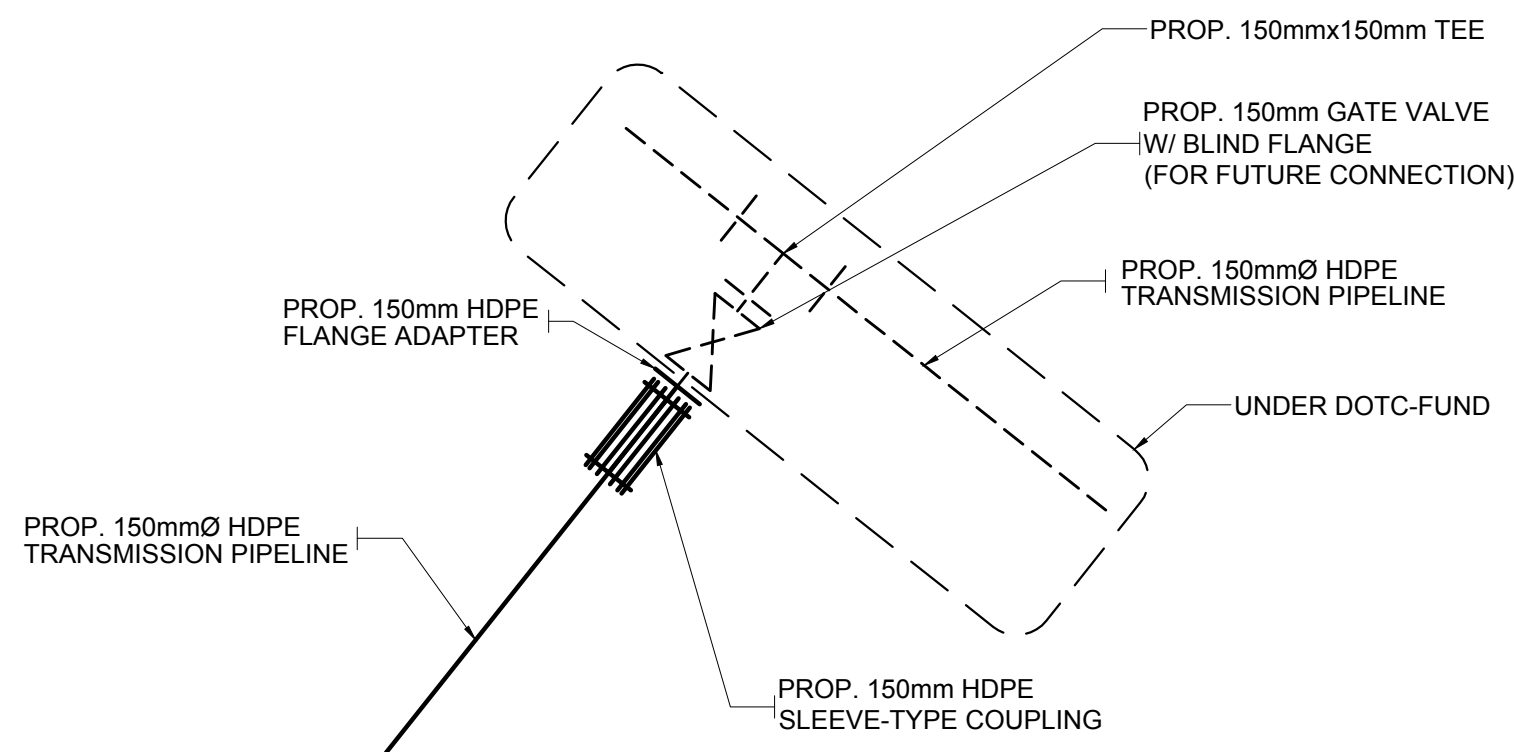
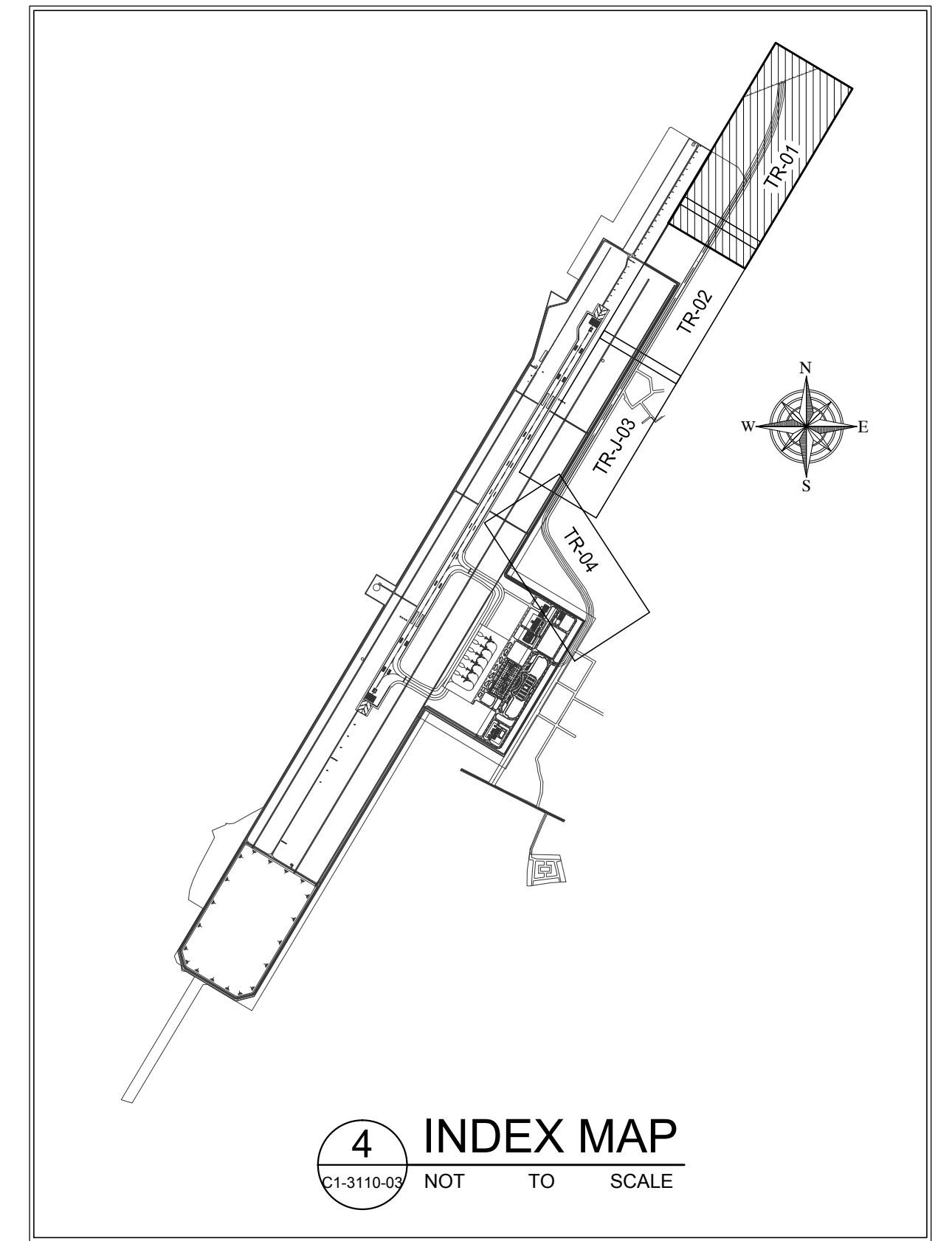




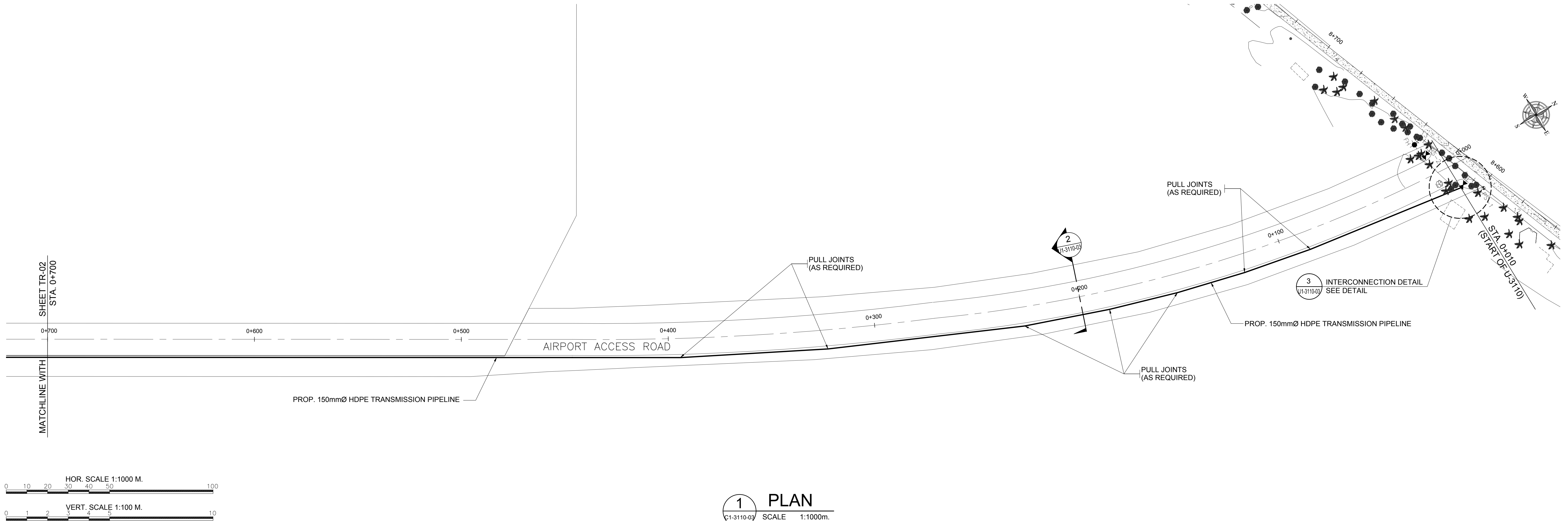
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SCALE 1:100m.



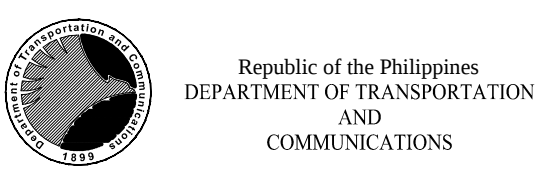
3 INTERCONNECTION DETAIL
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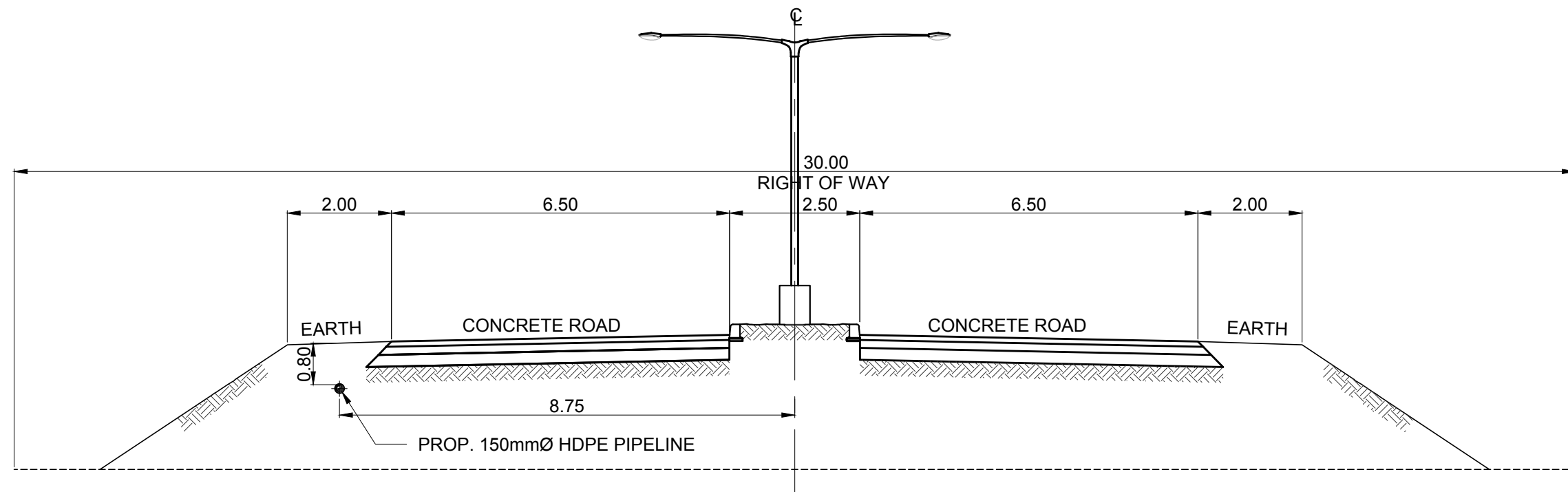


4 INDEX MAP
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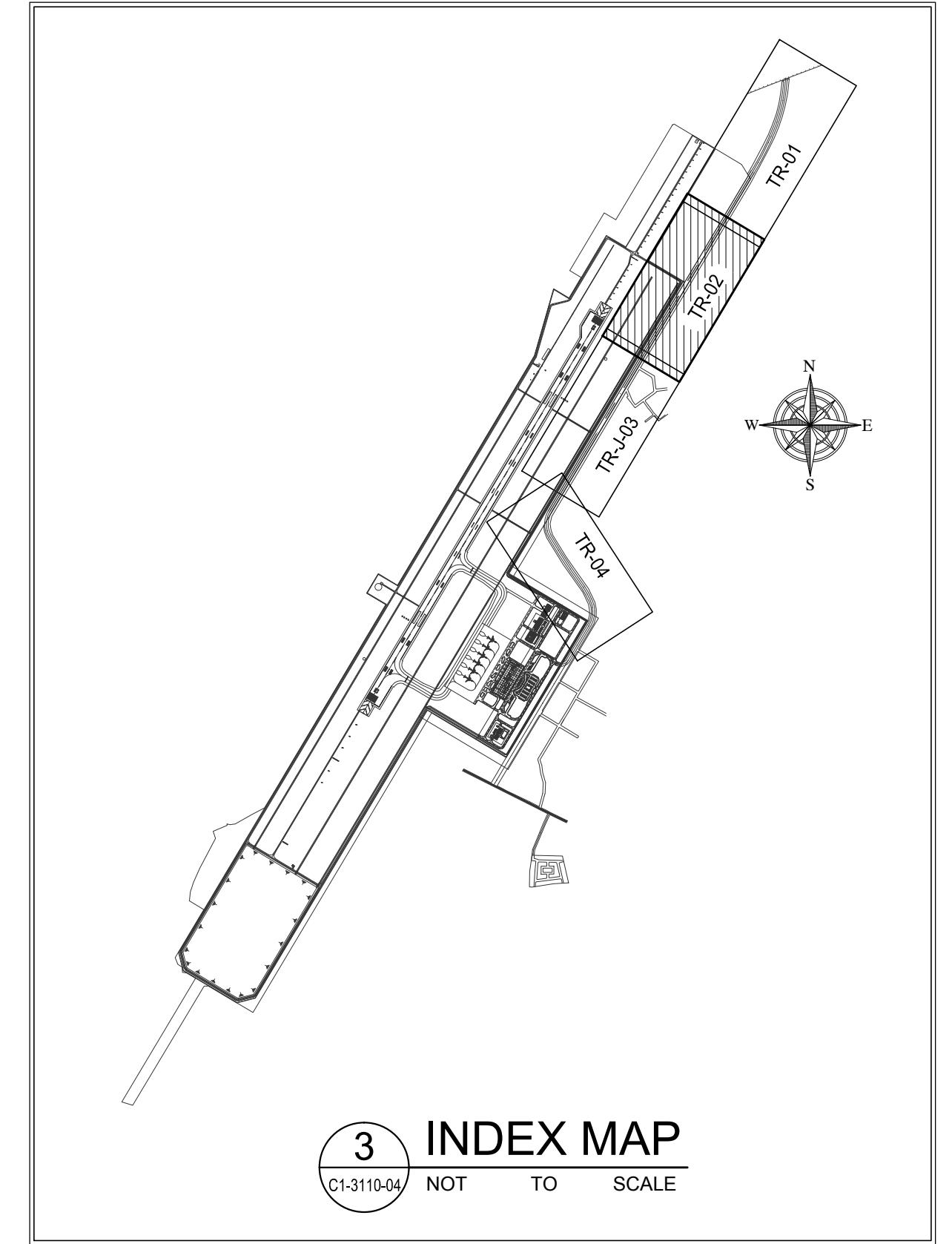


1 PLAN
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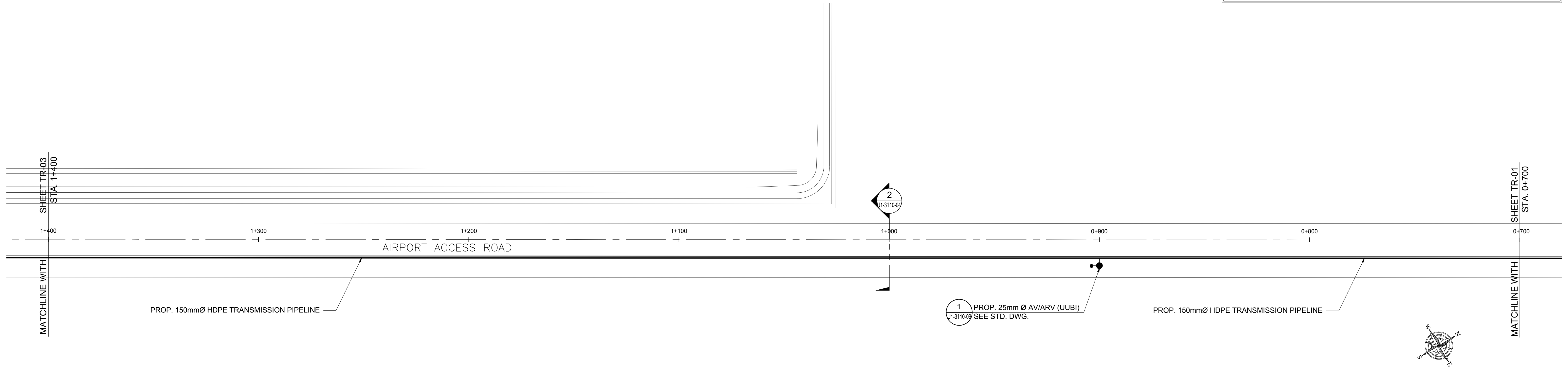
 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS	 JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:							SHEET CONTENTS:	SHEET NO:
		VICTORIA P. ADECER			NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT							COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-1 ACCESS ROAD WATER SUPPLY PIPELINE	C1-3110-03
		PROF. SANITARY ENGINEER PTR. 2055781 REG. NO.: 0001927 DATE: JANUARY 19, 2013 T.JAN. 108-518-662 PLACE: MANDALUYONG CITY										TRANSMISSION PIPE PROFILE (STA.0+010-ST.A.0+700)	DRAWING SCALE:
		TADASHI AOI Team Leader	ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by		AS SHOWN



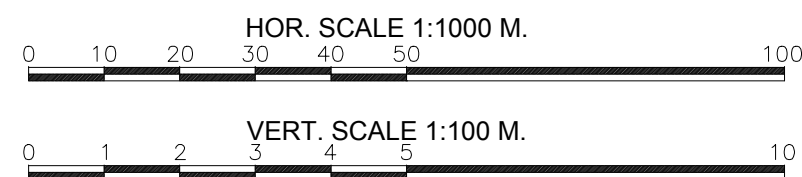
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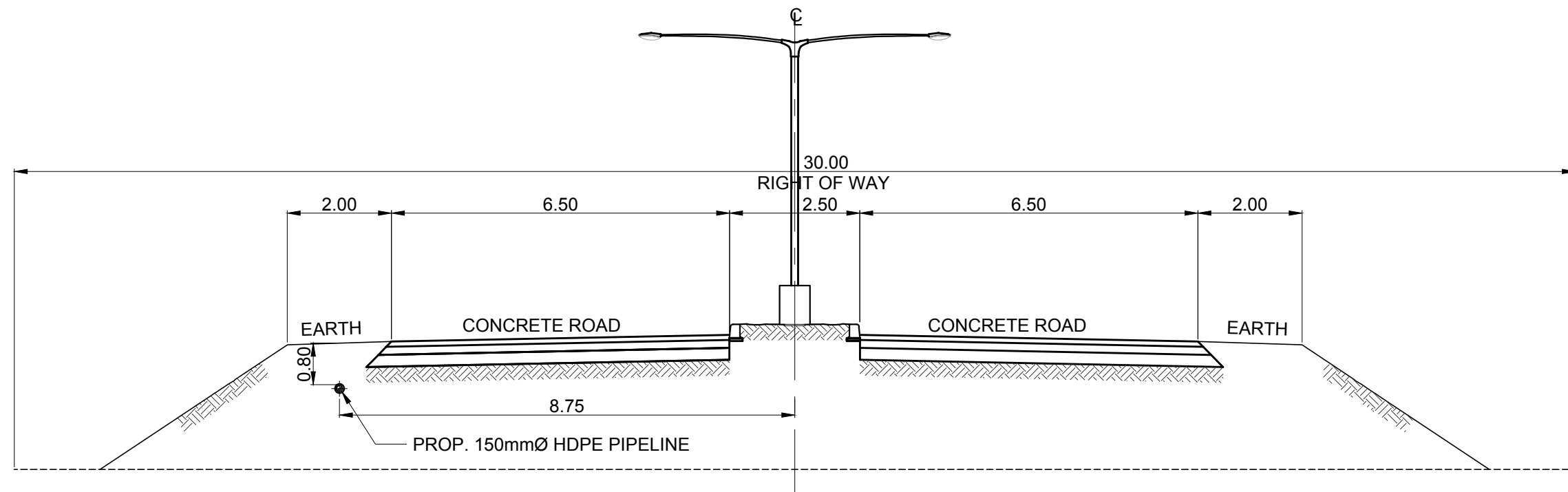
3 INDEX MAP
C1-3110-04 NOT TO SCALE



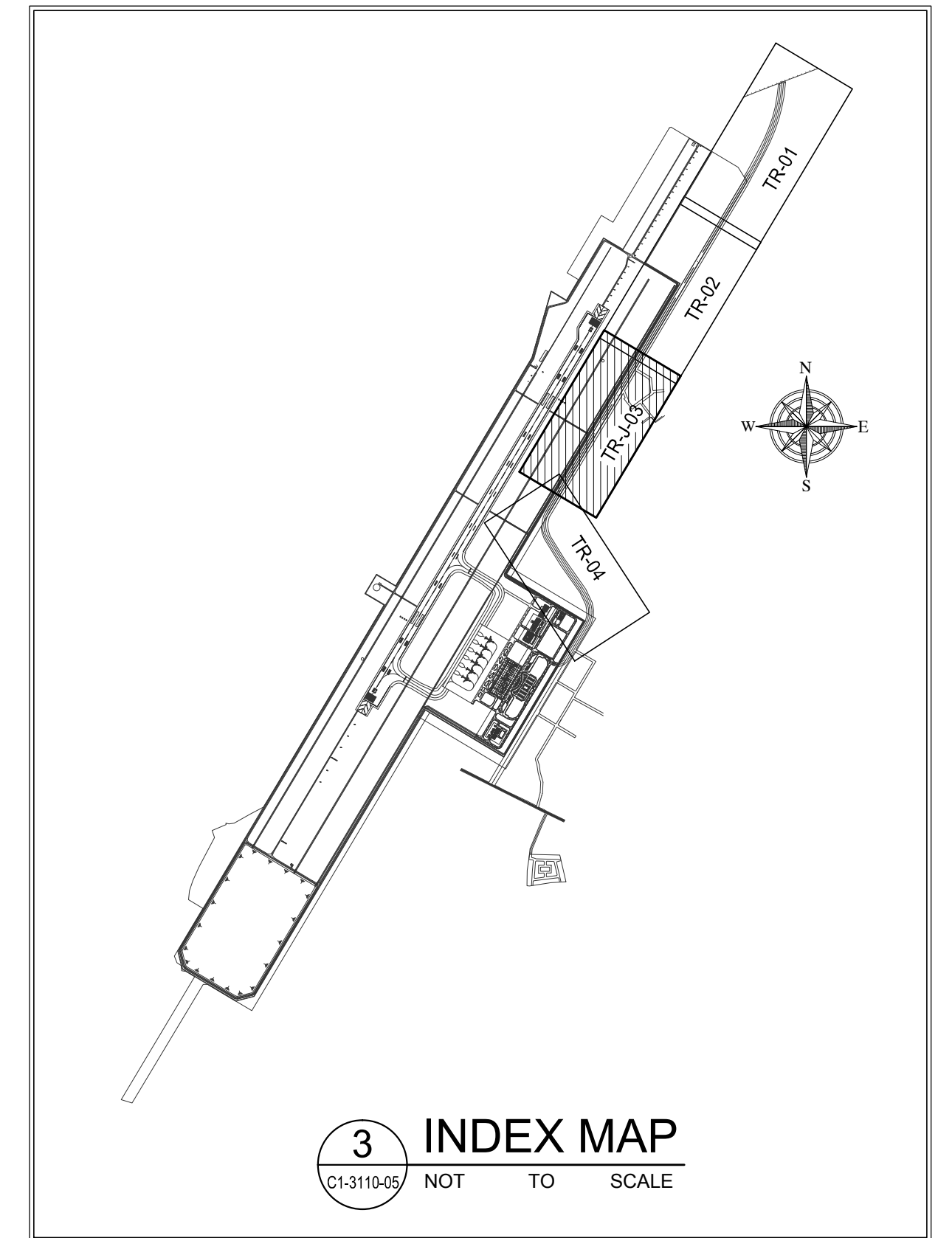
1 PLAN
C1-3110-04 SCALE 1:1000m.



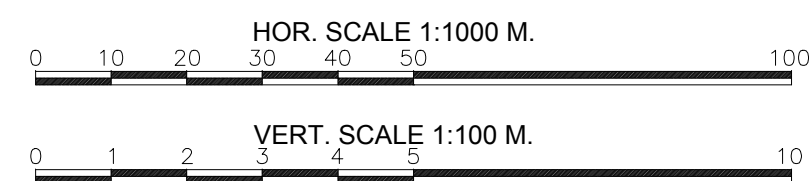
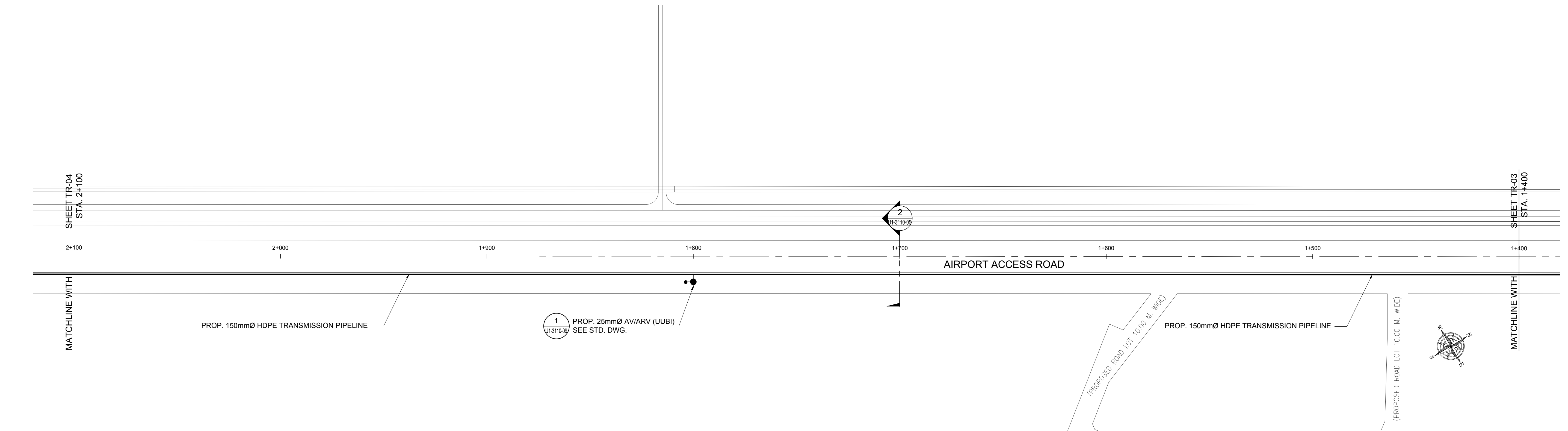
 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS	 JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:							SHEET CONTENTS:	SHEET NO:
		VICTORIA P. ADECER			NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT							COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-1 ACCESS ROAD WATER SUPPLY PIPELINE	C1-3110-04
		PROF. SANITARY ENGINEER PIR. 2055781 REG. NO.: 0001927 DATE: JANUARY 19, 2013 T.JAN. 108-518-662 PLACE: MANDALUYONG CITY										TRANSMISSION PIPE PROFILE (STA.0+700-ST.A.1+400)	DRAWING SCALE:
		TADASHI AOI Team Leader	ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by		AS SHOWN



2 ROAD SECTION
C1-3110-05 SCALE 1:100m.

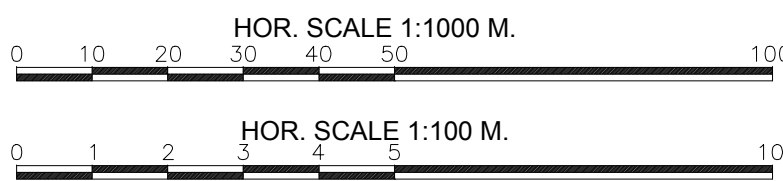
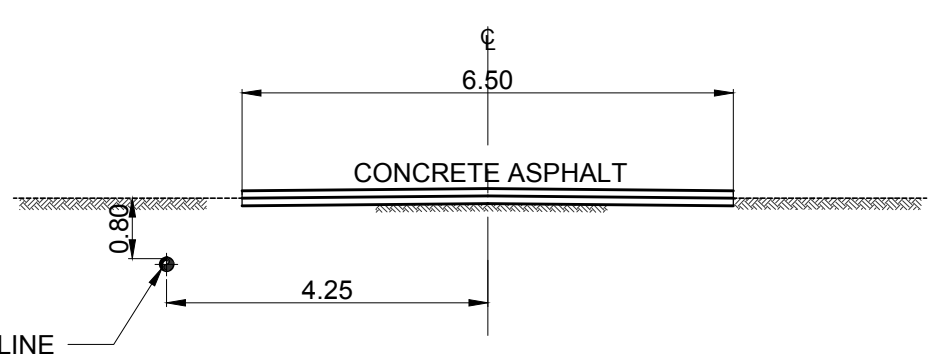
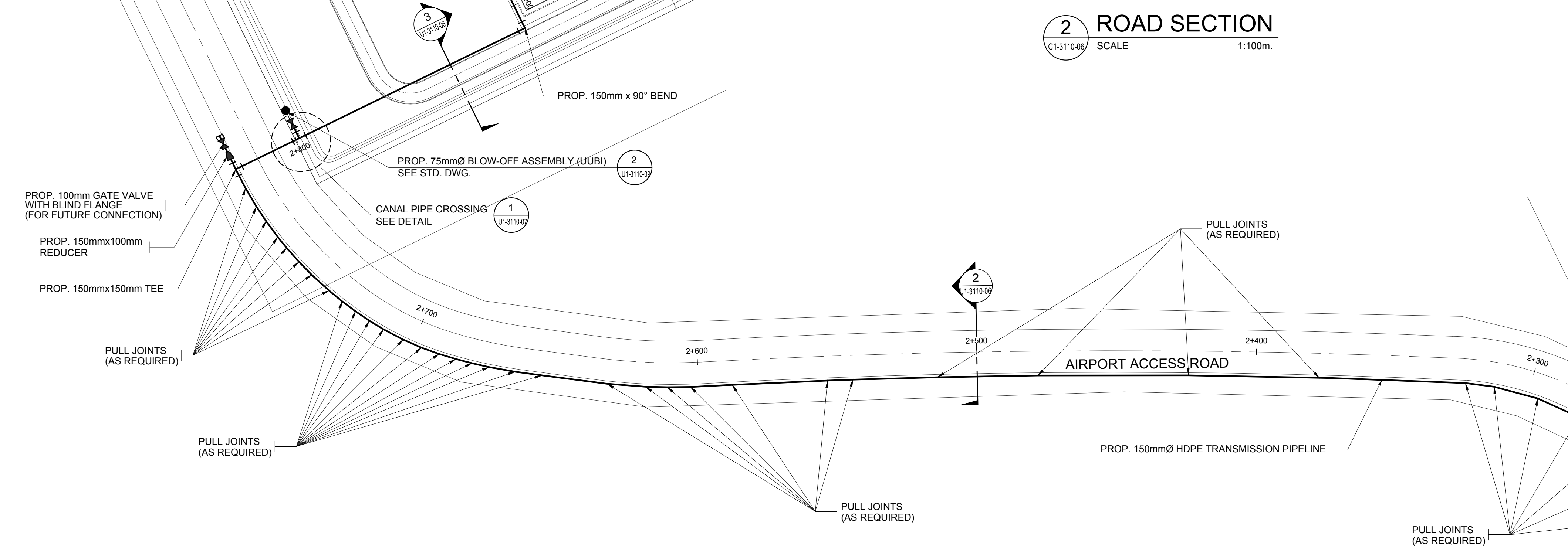
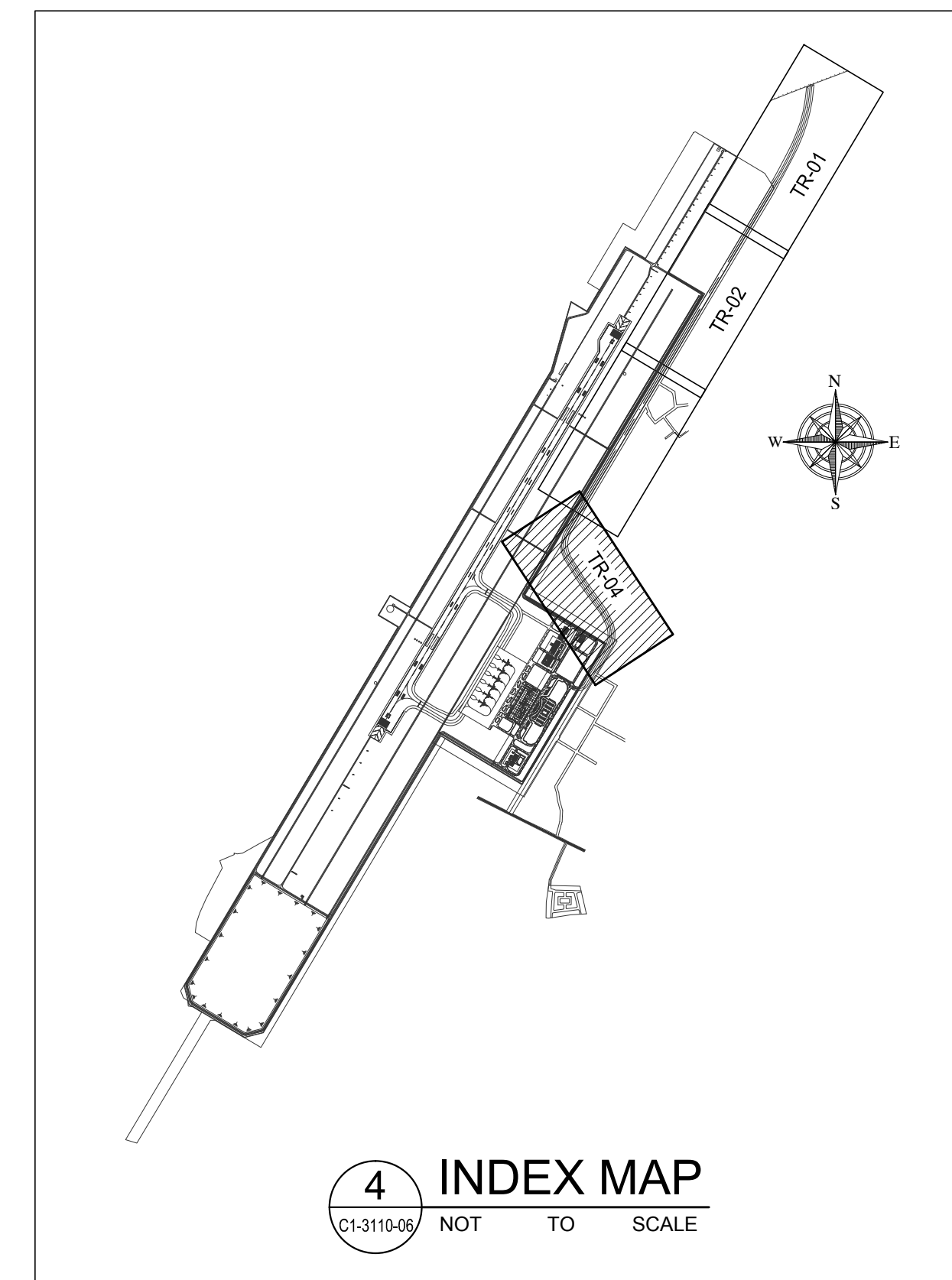
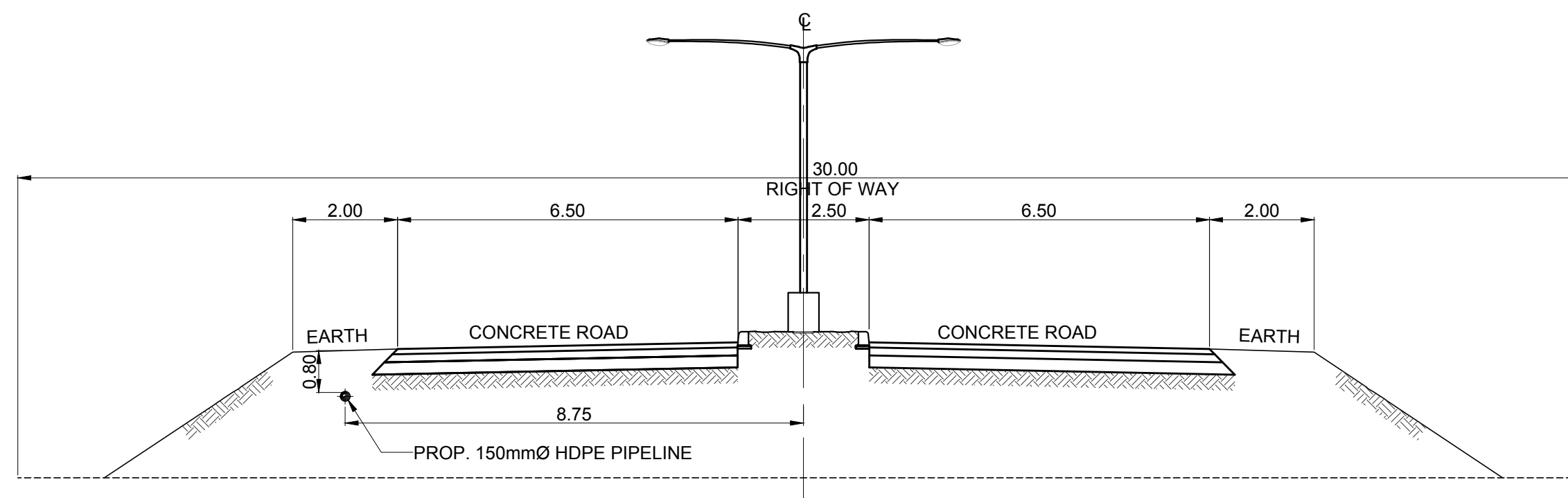
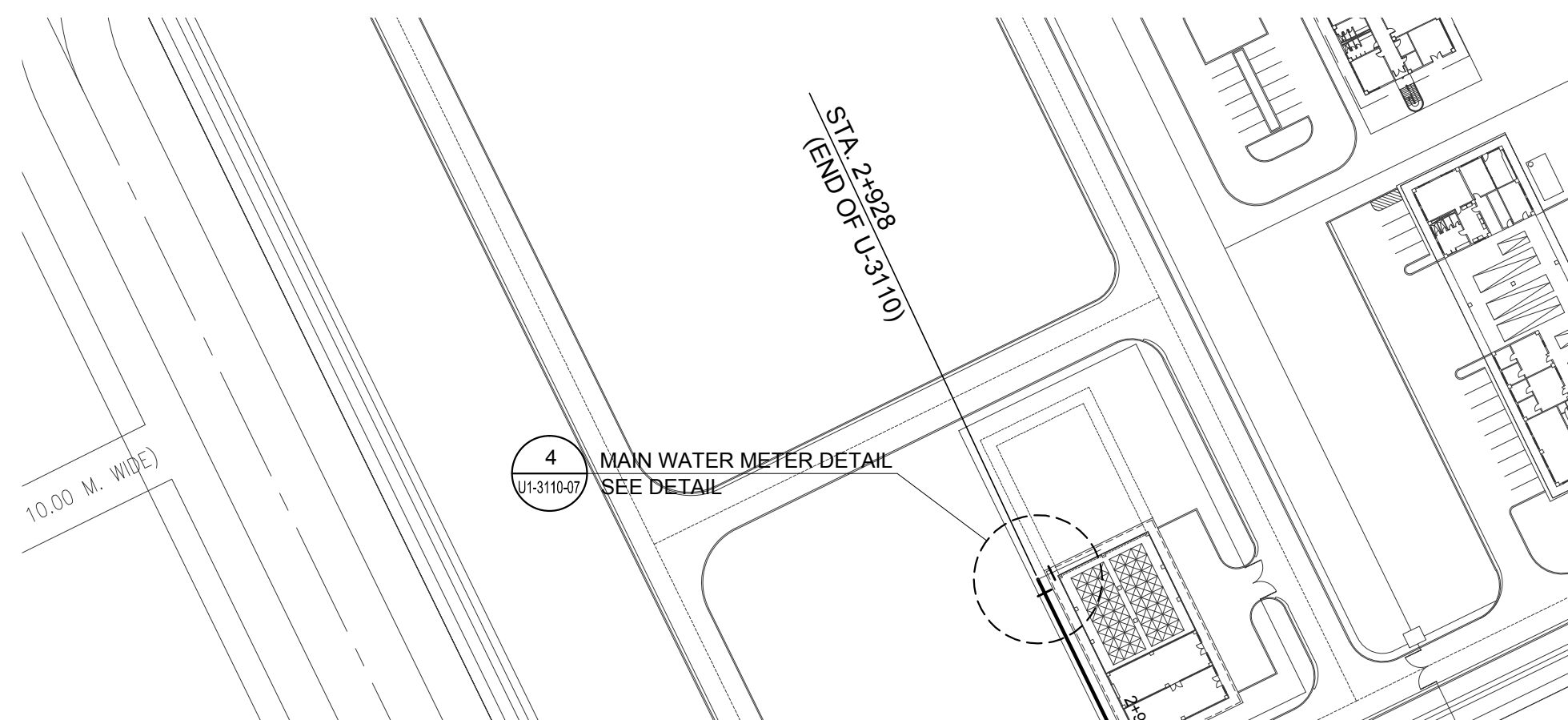


3 INDEX MAP
C1-3110-05 NOT TO SCALE

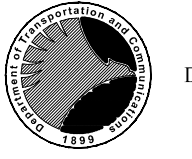


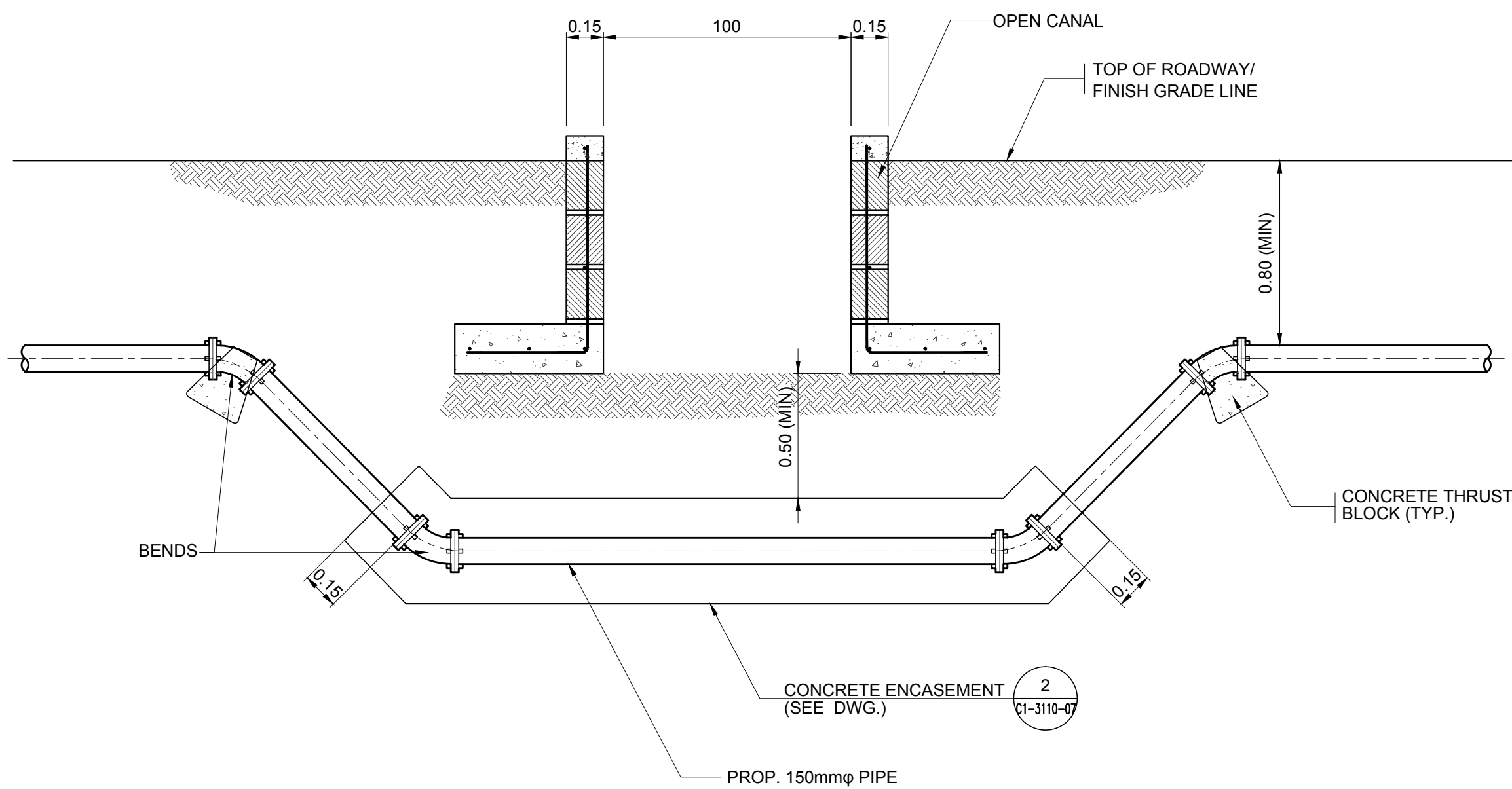
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C1-3110-05 SCALE 1:1000m.

 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS	 JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:								SHEET CONTENTS:	SHEET NO:
		VICTORIA P. ADECER PROF. SANITARY ENGINEER PTR. 2055781 REG. NO.: 0001927 DATE: JANUARY 19, 2013 T.E.N. 108-518-662 PLACE: MANDALUYONG CITY	ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT							COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-1 ACCESS ROAD WATER SUPPLY PIPELINE	C1-3110-05	
JICA DESIGN CONSULTANT JOINT VENTURE												TRANSMISSION PIPE PROFILE (STA.1+400-ST.A.2+100)	DRAWING SCALE:	
 JAPAN AIRPORT CONSULTANTS, INC.	 NIPPON KOEI CO., LTD.	 NJS CONSULTANTS CO., LTD.	TADASHI AOI Team Leader											AS SHOWN
LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES						DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by			

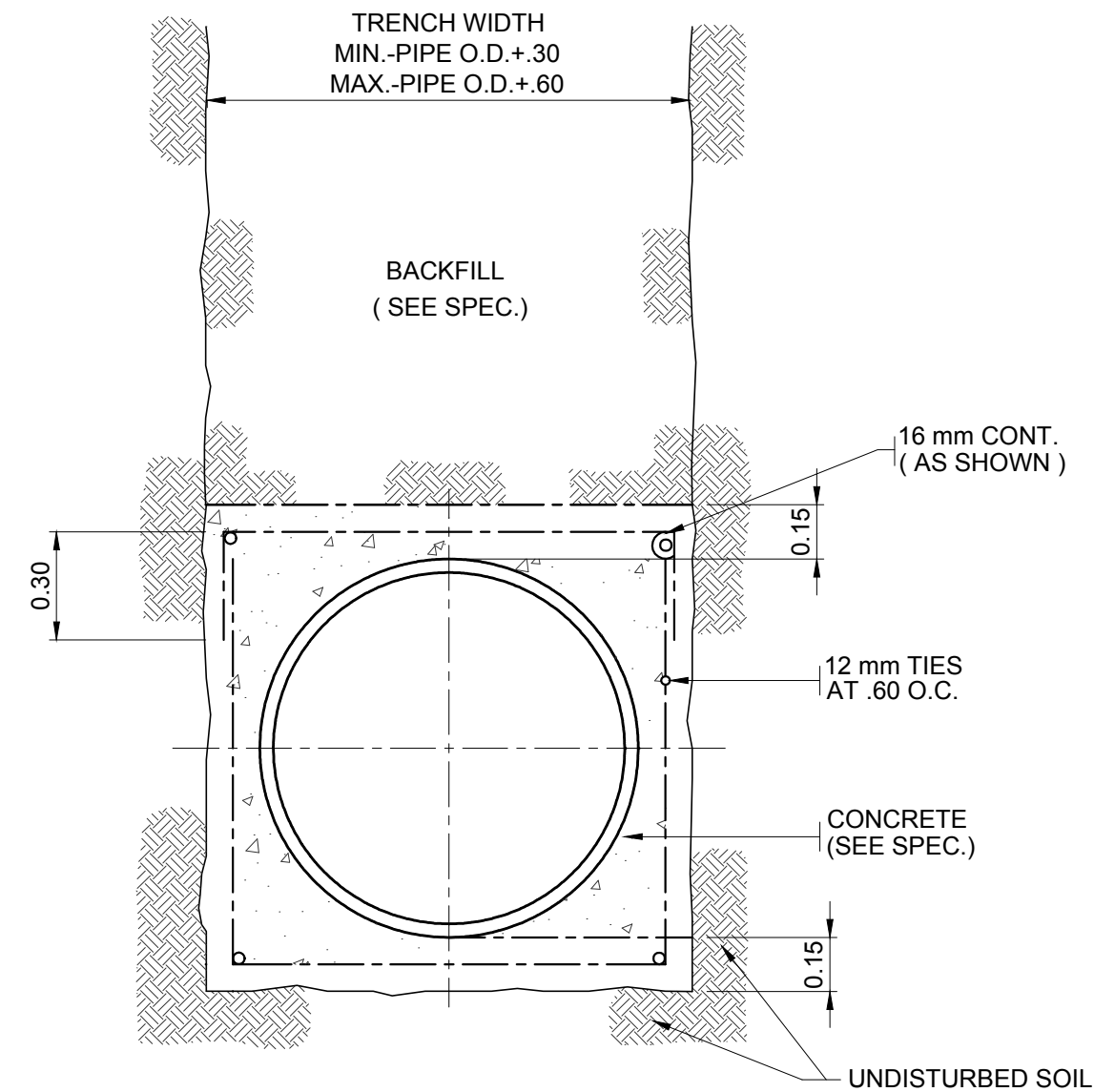


1 PLAN
C1-3110-06 SCALE 1:1000m.

 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS	 JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:							SHEET CONTENTS:	SHEET NO:	
		VICTORIA P. ADECER PROF. SANITARY ENGINEER PIR. 2055781 REG. NO.: 0001927 DATE: JANUARY 19, 2013 TEAM 108-318-662 PLACE: MANDALUYONG CITY	ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT							COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-1 ACCESS ROAD WATER SUPPLY PIPELINE	C1-3110-06	
JICA DESIGN CONSULTANT JOINT VENTURE												TRANSMISSION PIPE PROFILE (STA.2+100-ST.A. 2+939)	DRAWING SCALE:	
 JAPAN AIRPORT CONSULTANTS, INC.  NIPPON KOEI CO., LTD.  NJS CONSULTANTS CO., LTD.													AS SHOWN	
						LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by		

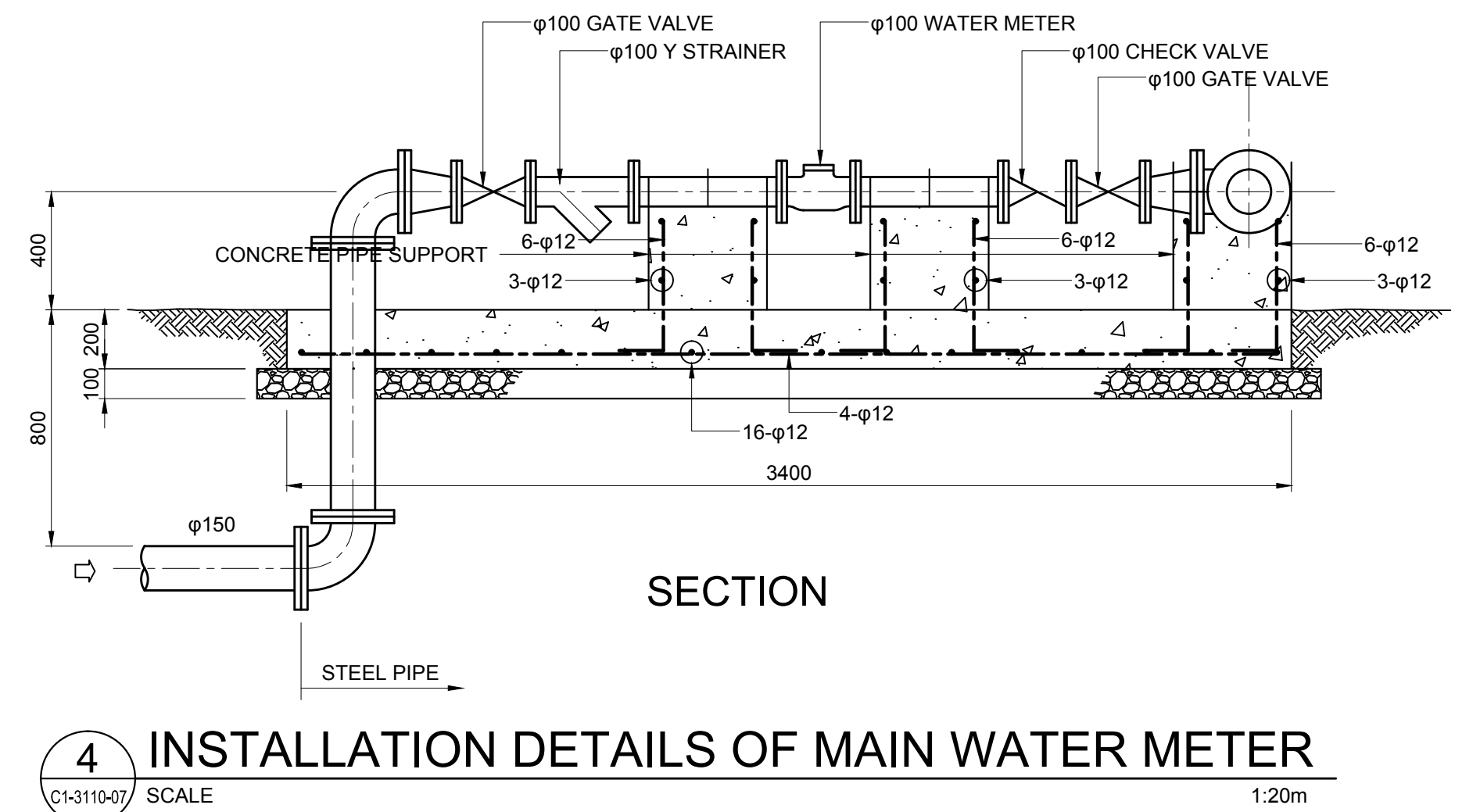
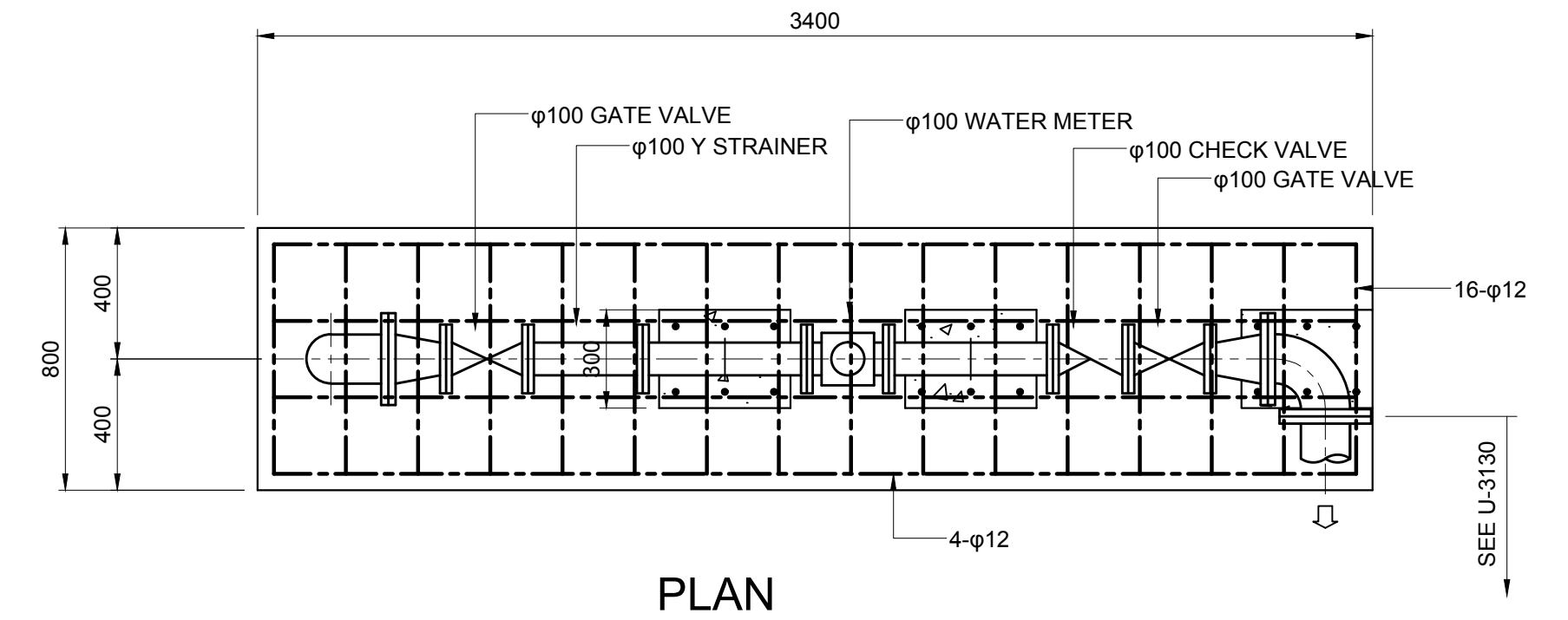


1 PIPE CROSSING DETAIL
C1-3110-07 SCALE 1:30m.

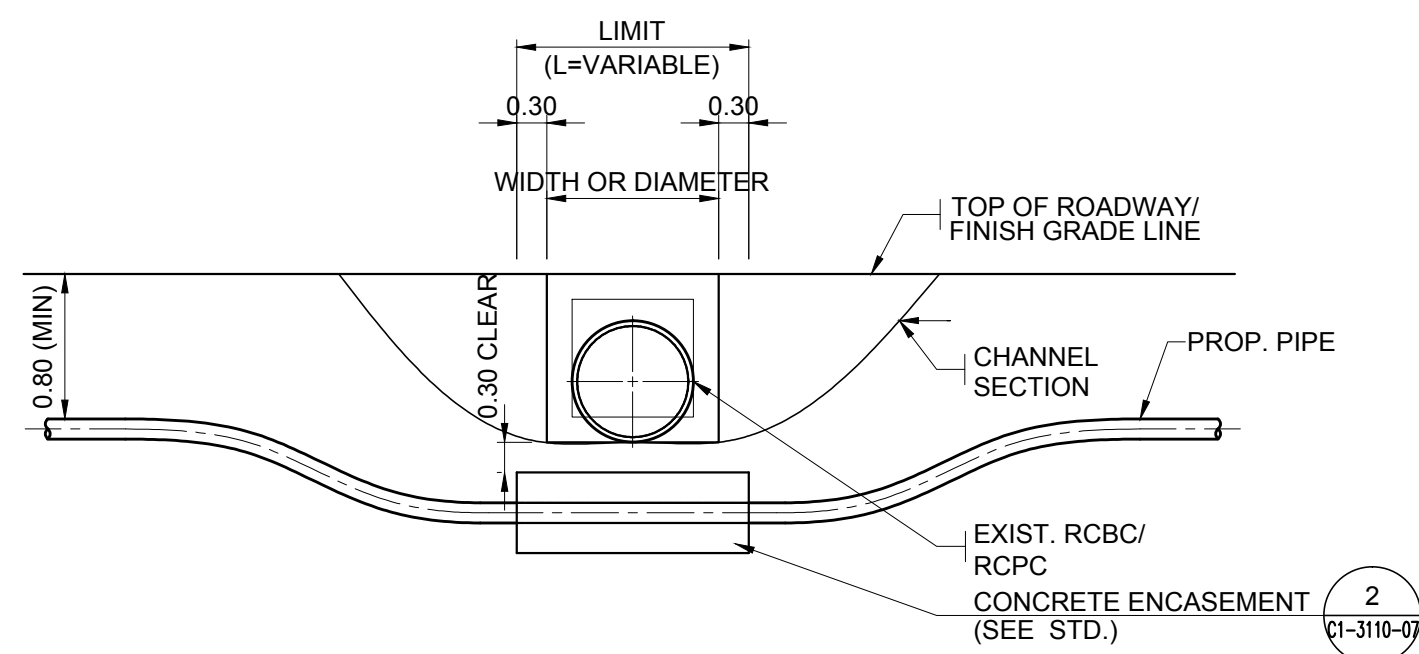


NOTES:
① ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

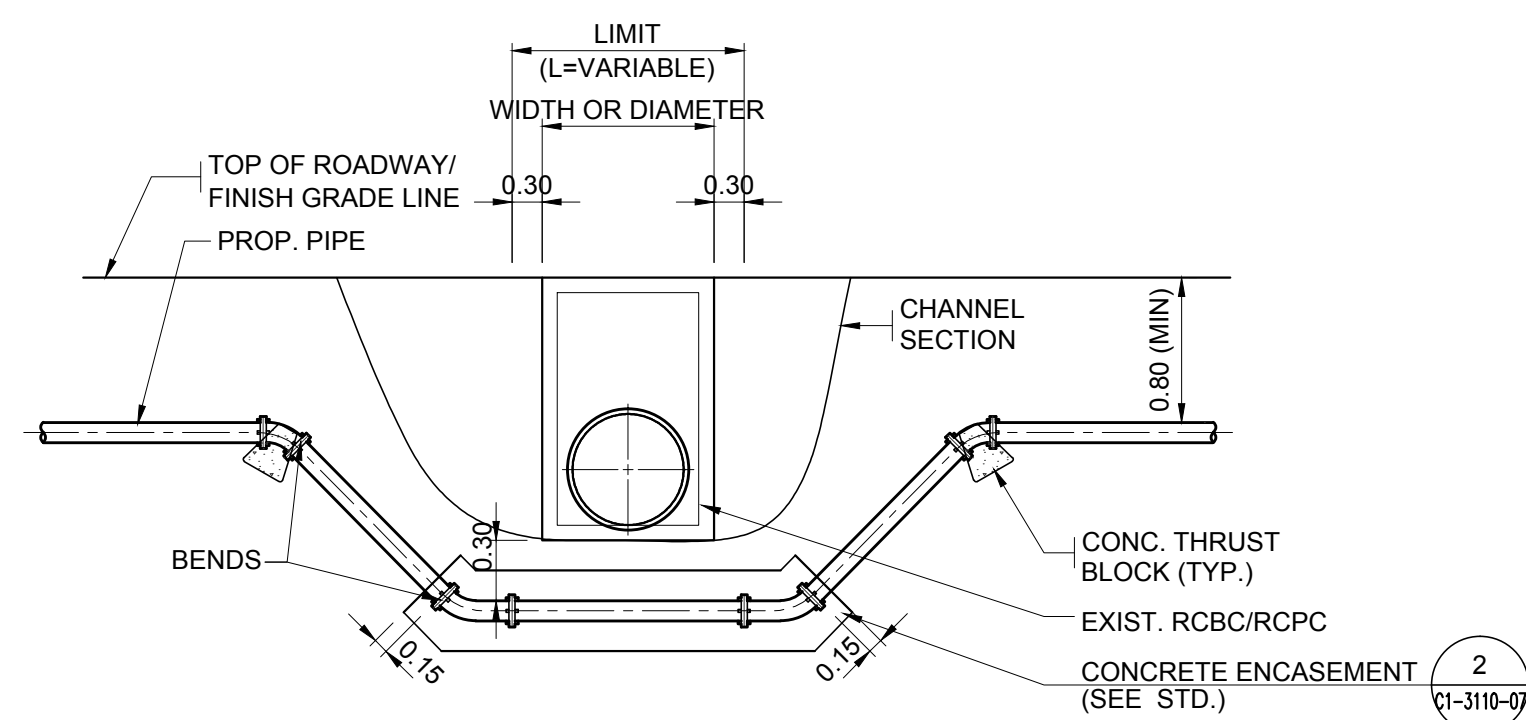
2 CONCRETE ENCASEMENT DETAIL
C1-3110-07 SCALE 1:30m.



4 INSTALLATION DETAILS OF MAIN WATER METER
C1-3110-07 SCALE 1:20m



**3a CULVERT WITH INVERT DEPTH
EQUAL TO OR LESS THAN 1.25m**
C1-3110-07 SCALE TO SCALE

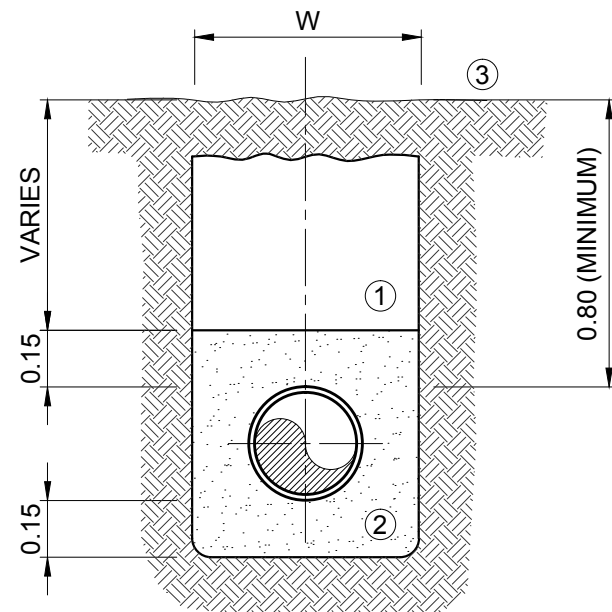


**3b CULVERT WITH INVERT DEPTH
MORE THAN 1.25m**
C1-3110-07 SCALE TO SCALE

3 TYPICAL CULVERT CROSSING DETAILS
C1-3110-07 NOT TO SCALE

NOTES:
① WHENEVER A PROPOSED PIPE ENCOUNTERS AN OBSTRUCTING CULVERT, SUCH PIPE SHALL BE DEFLECTED BELOW CULVERT AS SHOWN IN TYPICAL DETAIL 3a IF INVERT OF CULVERT DOES NOT EXCEED 1.25m BELOW GROUND SURFACE, OTHERWISE TYPICAL DETAIL 3b SHALL BE USED.
② D=RCP (OUTSIDE OR INSIDE) DIAMETER OR RCBC (OUTSIDE OR INSIDE) WIDTH.
③ LIMIT=TOTAL OF RCPC DIAMETER OR RCBC WIDTH PLUS 0.30m ON BOTH SIDES AS THE CASE MAY BE WHICH ARE INDICATED ON THE PIPELINE PLANS.

 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS	 JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY: VICTORIA P. ADECER PROF. SANITARY ENGINEER PIR. 2055781 REG. NO.: 0001927 DATE: JANUARY 19, 2013 T.E.N. 108-518-662 PLACE: MANILA/LYONG CITY TADASHI AOI Team Leader	RECOMMENDING APPROVAL: ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	APPROVED: JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC PROJECT TITLE: NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	JUNE 2013 DATE INDEX AMENDMENTS Prepared by WIM HC Checked by Validated by	SHEET CONTENTS: COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-1 ACCESS ROAD WATER SUPPLY PIPELINE TYPICAL CULVERT CROSSING DETAILS	SHEET NO: C1-3110-07 DRAWING SCALE: AS SHOWN
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1 TYPICAL TRENCH DETAIL
C1-3110-08 NOT TO SCALE

LEGEND:

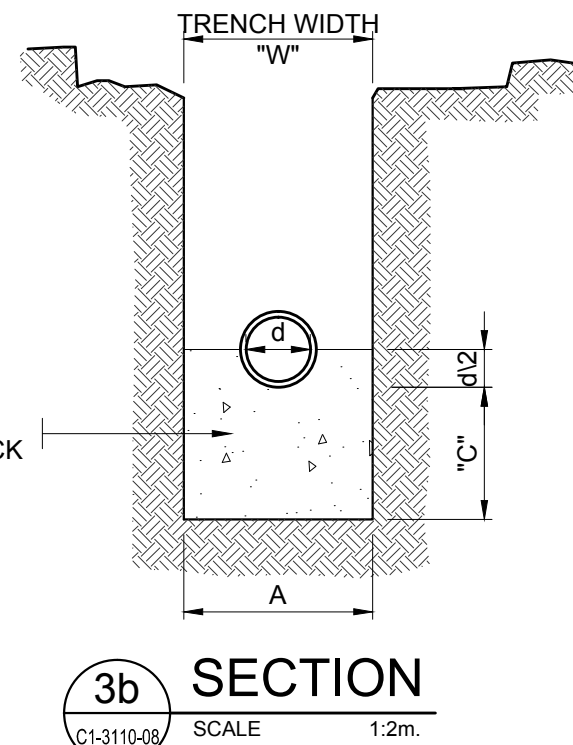
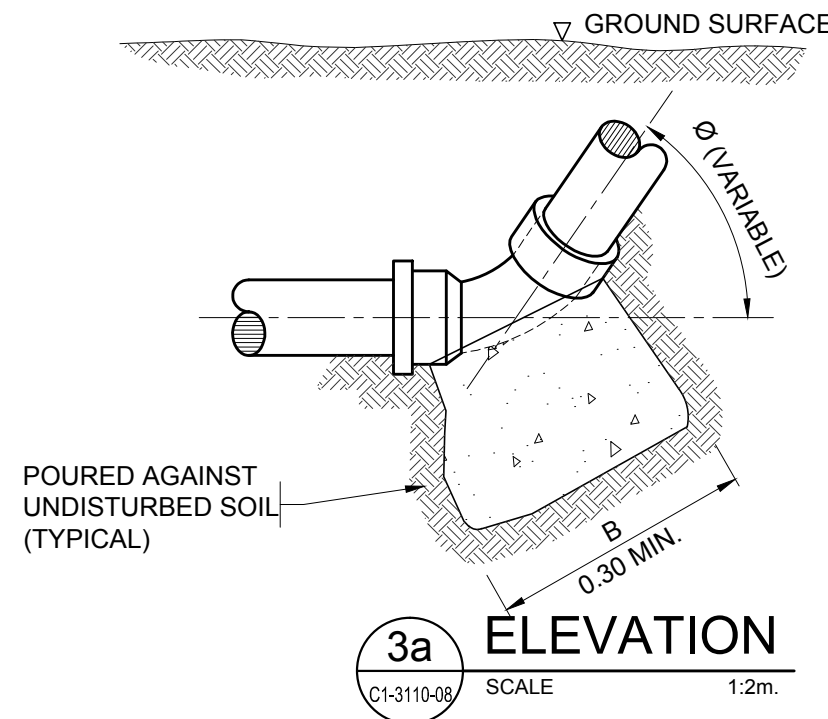
- ① COMPACTED SELECTED NATIVE MATERIALS BACKFILL (SEE SPEC.).
- ② APPROVED SAND BEDDING & BACKFILL HAND PLACED AND COMPACTED.
- ③ PAYMENT FOR ANY RESURFACING WILL BE BASED ON MAXIMUM TRENCH WIDTHS PER SIZE PIPE SHOWN. RESTORATION OF PAVEMENT SUB-BASE AND COURSE SAME THICKNESS AS EXISTING.

NOTE:

ALL DIMENSIONS IN METERS EXCEPT WHERE OTHERWISE SHOWN. SPACE SHALL BE PROVIDED FOR PIPE JOINTS TO PREVENT BRIDGING.

TABLE OF TRENCH DIMENSION (IN METERS)

PIPE DIAMETER	in.	3" & UNDER	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
	mm	75mm & UNDER	100	150	200	250	300	350	400	450	500	600
MINIMUM 'W'		0.20	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.90
MAXIMUM 'W'		0.30	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.20



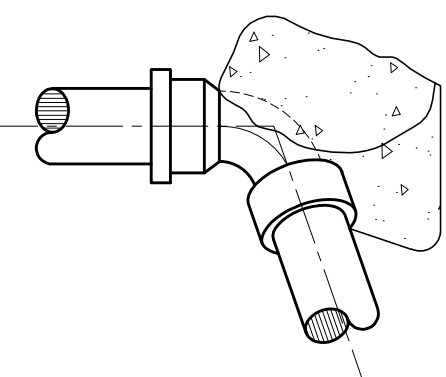
NOTES:

- ① ABOVE AREAS BASED ON AN ASSUMED SOIL BEARING PRESSURE OF 96 kPa (2000psf.).
- ② REDUCE OR INCREASE AREAS PROPORTIONATELY TO SUIT ACTUAL FIELD CONDITIONS UPON APPROVAL OF ENGINEER.
- ③ CONCRETE FOR FOR THRUST BLOCK SHALL BE 13.8 MPa (2000psi.).
- ④ TRUST BLOCKS NOT REQUIRED ON STEEL PIPE LINES WITH WELDED OR FLANGED JOINTS OR ON SOLVENT WELDED PVC PIPE.
- ⑤ WHERE PIPE CONNECTS TO A FITTING ON A STEEL PIPELINE, THE STEEL PIPELINE SHALL BE BLOCKED AS SHOWN HEREON.
- ⑥ BEARING AREAS BASED ON INTERNAL PRESSURE OF 106m (150psi).

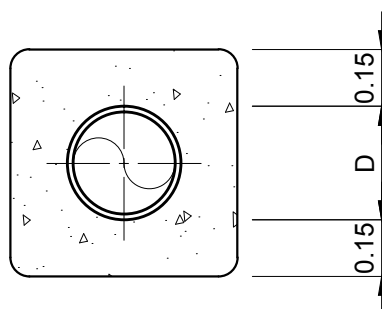
TABLE OF MINIMUM THRUST BLOCK DIMENSIONS FOR PIPE SIZES 75mm TO 600mm Ø				
PIPE SIZE	"C"	THRUST BLOCK BEARING AREAS IN SQ. METERS		
mm (in.)	METERS	90° BEND	45° BEND	22 1/2° BEND
75 (3") & 100(4")	0.25	0.14	0.12	-
150 (6")	0.25	0.31	0.17	0.12
200 (8")	0.25	0.54	0.30	0.15
250 (10")	0.25	0.85	0.46	0.24
300 (12")	0.30	1.23	0.66	0.34
350 (14")	0.30	1.67	0.90	0.46
400 (16")	0.30	2.18	1.18	0.60
450 (18")	0.35	2.76	1.49	0.76
500 (20")	0.35	3.41	1.84	0.94
600 (24")	0.40	4.91	2.65	1.35

* THRUST BLOCK NOT REQUIRED

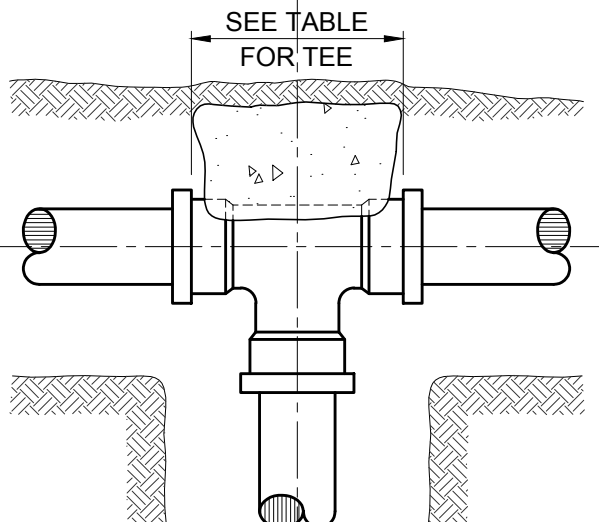
3 VERTICAL CONCRETE THRUST BLOCKS (DOWNWARD THRUST)
C1-3110-08 NOT TO SCALE



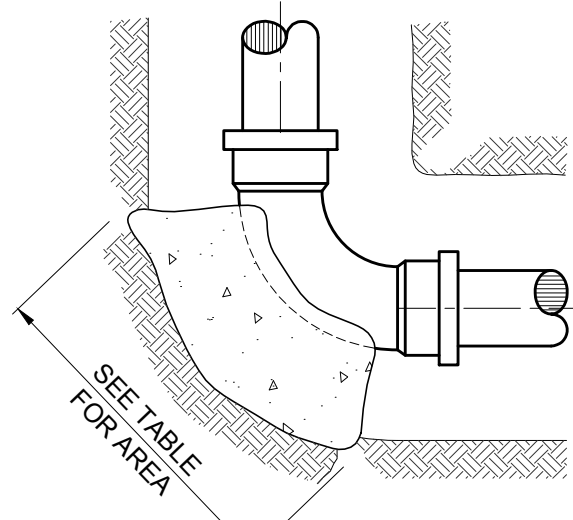
2a ISOMETRY OF THRUST BLOCK AREA
C1-3110-08 SCALE 1:2m.



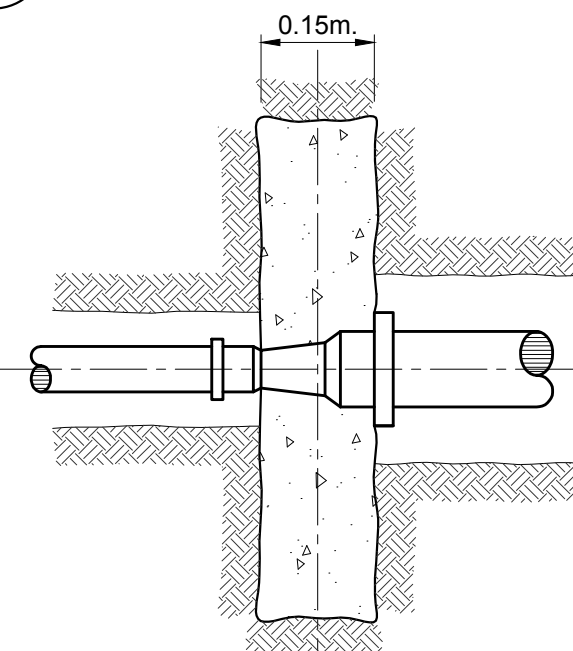
2d SECTION FOR BLOCK AREA
C1-3110-08 SCALE 1:2m.



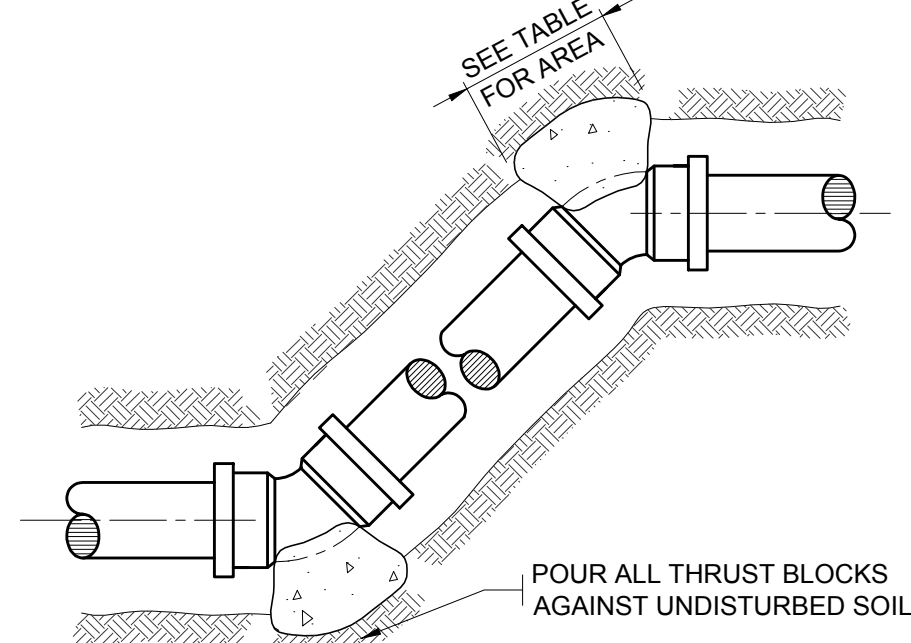
2f TEE
C1-3110-08 SCALE 1:2m.



2b 90° ELBOW OR BEND
C1-3110-08 SCALE 1:2m.



2c REDUCER*
C1-3110-08 SCALE 1:2m.



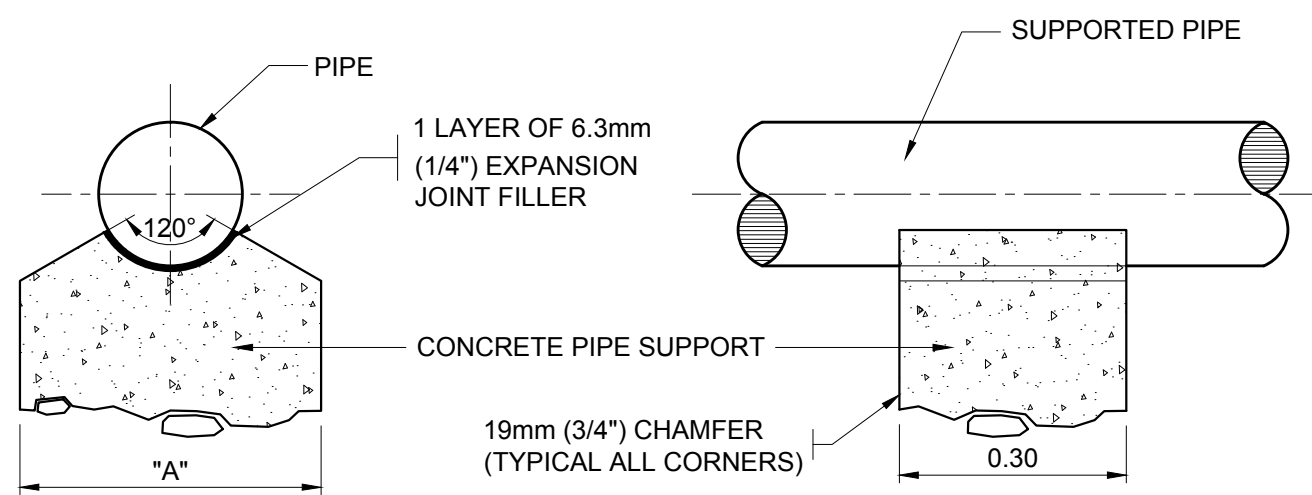
2e OFFSETS & BEND
C1-3110-08 SCALE 1:2m.

NOTES:

- ① ABOVE AREAS BASED ON AN ASSUMED SOIL BEARING PRESSURE OF 96 kPa (2000psf.).
- ② REDUCE OR INCREASE AREAS PROPORTIONATELY TO SUIT ACTUAL FIELD CONDITIONS UPON APPROVAL OF ENGINEER.
- ③ CONCRETE FOR FOR THRUST BLOCK SHALL BE 13.8 MPa (2000psi.).
- ④ ALL CONCRETE SHALL BE POURED TO AVOID INTERFERENCE WITH JOINTS.
- ⑤ THRUST BLOCKS NOT REQUIRED ON STEEL PIPE LINE WITH WELDED OR FLANGED JOINTS OR ON SOLVENT WELDED PVC PIPE.
- ⑥ WHERE PIPE CONNECTS TO A FITTING IN A STEEL PIPELINE, THE STEEL PIPELINE SHALL BE BLOCKED AS SHOWN HEREON.
- ⑦ BEARING AREAS BASED ON INTERNAL PRESSURE OF 106m (150 psi.).

* SEE PLANS FOR BEARING AREAS.

2 HORIZONTAL CONCRETE THRUST BLOCKS
C1-3110-08 SCALE 1:2m.



DIMENSION "A" IN METERS		
PIPE SIZE	SUPPORTING	
mm (in.)	PIPE	FLANGE
100 (4")	0.30	0.30
150 (6")	0.30	0.35
200 (8")	0.30	0.45
250 (10")	0.35	0.50
300 (12")	0.40	0.55
350 (14")	0.45	0.60
400 (16")	0.50	0.70
450 (18")	0.55	0.75
500 (20")	0.60	0.80
600 (24")	0.70	0.90

NOTES:

- ① ALL CONCRETE SHALL BE POURED TO AVOID INTERFERENCE WITH BOLTED CONNECTIONS.
- ② PIPE SUPPORTS TO BE LOCATED AS SHOWN ON THE PLANS.
- ③ SPECIAL PIPE SUPPORTS SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS SHOWN ON THE PLANS.
- ④ WHEN SUPPORTING PIPE AND FLANGE ON THE SAME LINE OF PIPE, CONCRETE PIERS FOR ALL PIPE SUPPORTS SHALL HAVE DIMENSION "A" AS A FLANGE SUPPORT.

4 PIPE SUPPORT DETAIL
C1-3110-08 SCALE 1:1m.

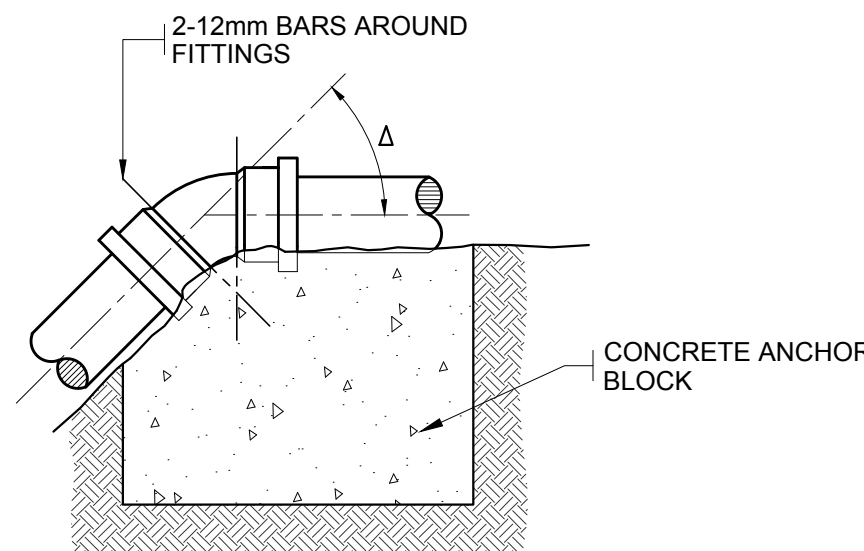


TABLE OF MINIMUM ANCHOR BLOCK VOLUMES IN CUBIC METERS FOR PIPE SIZES 75 TO 300mm				
PIPE SIZE	mm (in.)	PIPE DEFLECTION (Δ)		
		45°	22 1/2°	11 1/4°
75 (3")	0.23	0.12	0.06	
100 (4")	0.41	0.21	0.10	
150 (6")	0.92	0.47	0.23	
200 (8")	1.63	0.83	0.42	
250 (10")	2.55	1.30	0.65	
300 (12")	3.68	1.87	0.96	

NOTES:

- ① EMBED END OF BARS A MINIMUM OF 0.30 METER INTO CONCRETE.
- ② CONCRETE FOR ANCHOR BLOCKS SHALL BE 13.8 Mpa. (2000psi).
- ③ ANCHOR BLOCK DIMENSIONS BASED ON INTERNAL PRESSURE OF 106m (150 psi) AND A SAFETY FACTOR OF 1.5.
- ④ THRUST BLOCKS NOT REQUIRED ON STEEL PIPELINES WITH WELDED OR FLANGED JOINTS OR ON SOLVENT WELDED PVC PIPE.

5 CONCRETE ANCHOR BLOCK DETAIL FOR PIPE SIZES 75mm TO 300mm
C1-3110-08 NOT TO SCALE



JICA DESIGN CONSULTANT JOINT VENTURE



PREPARED BY:
VICTORIA P. ADECER
PROF. SANITARY ENGINEER PIRL 2005/781
REG. NO.: 0001927 DATE: JANUARY 19, 2013
T.E.N. 106-518-662 PLACE: MANDALUYONG CITY
TADASHI AOI
Team Leader

RECOMMENDING APPROVAL:
ILDEFONSO T. PATDU, JR.
Assistant Secretary
for Project Implementation, DOTC

APPROVED:
JULIANITO G. BUCAYAN, JR.
Undersecretary
for Project Implementation, DOTC

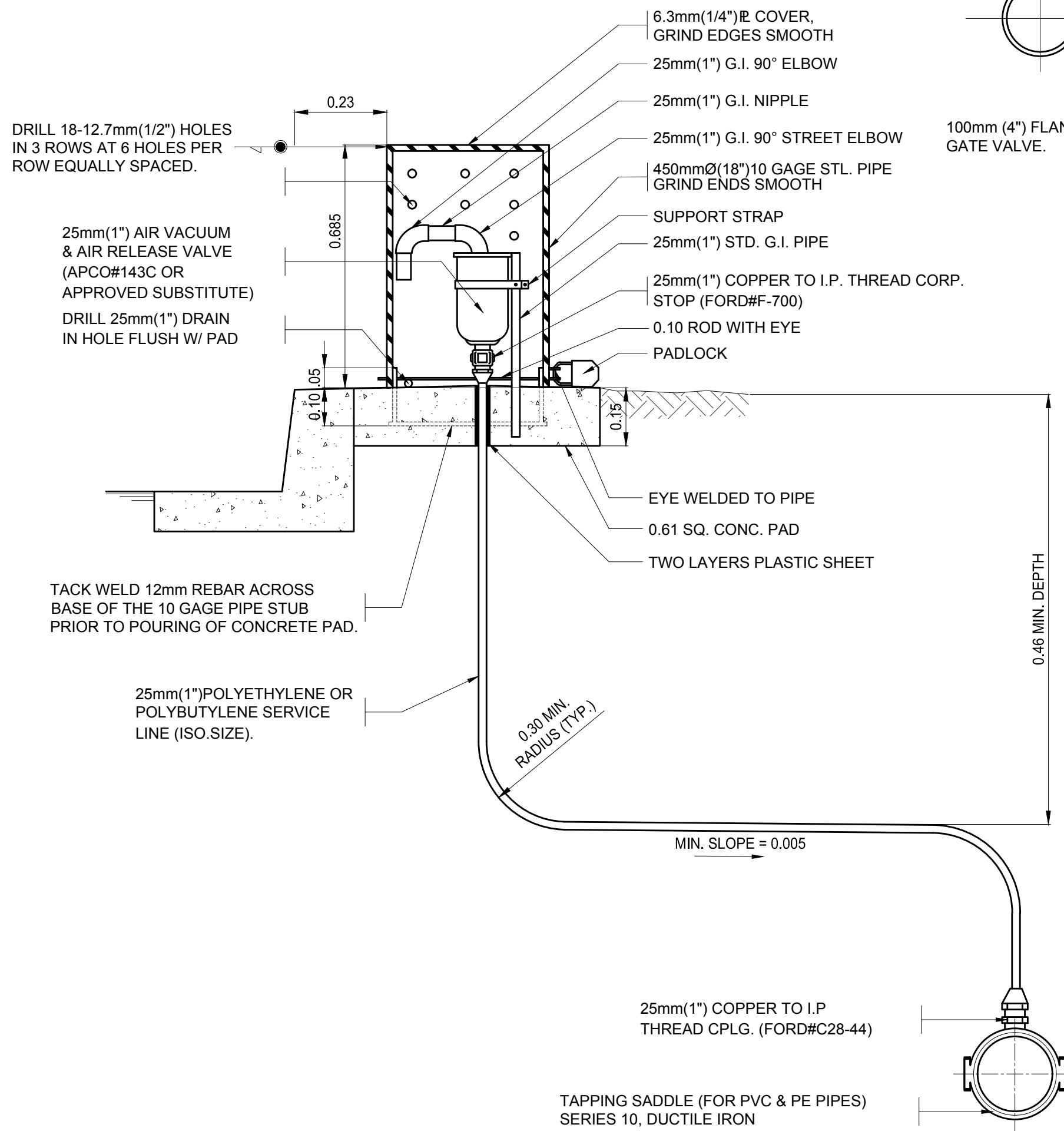
PROJECT TITLE:
NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT
LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES

DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by
JUNE 2013					

SHEET CONTENTS:
COMPONENT-2 CIVIL WORKS (C)
SUBCOMPONENT-2-1 ACCESS ROAD WATER SUPPLY PIPELINE
MISCELLANEOUS DETAILS - 1
SHEET NO.: **C1-3110-08**
DRAWING SCALE:
AS SHOWN

NOTES:

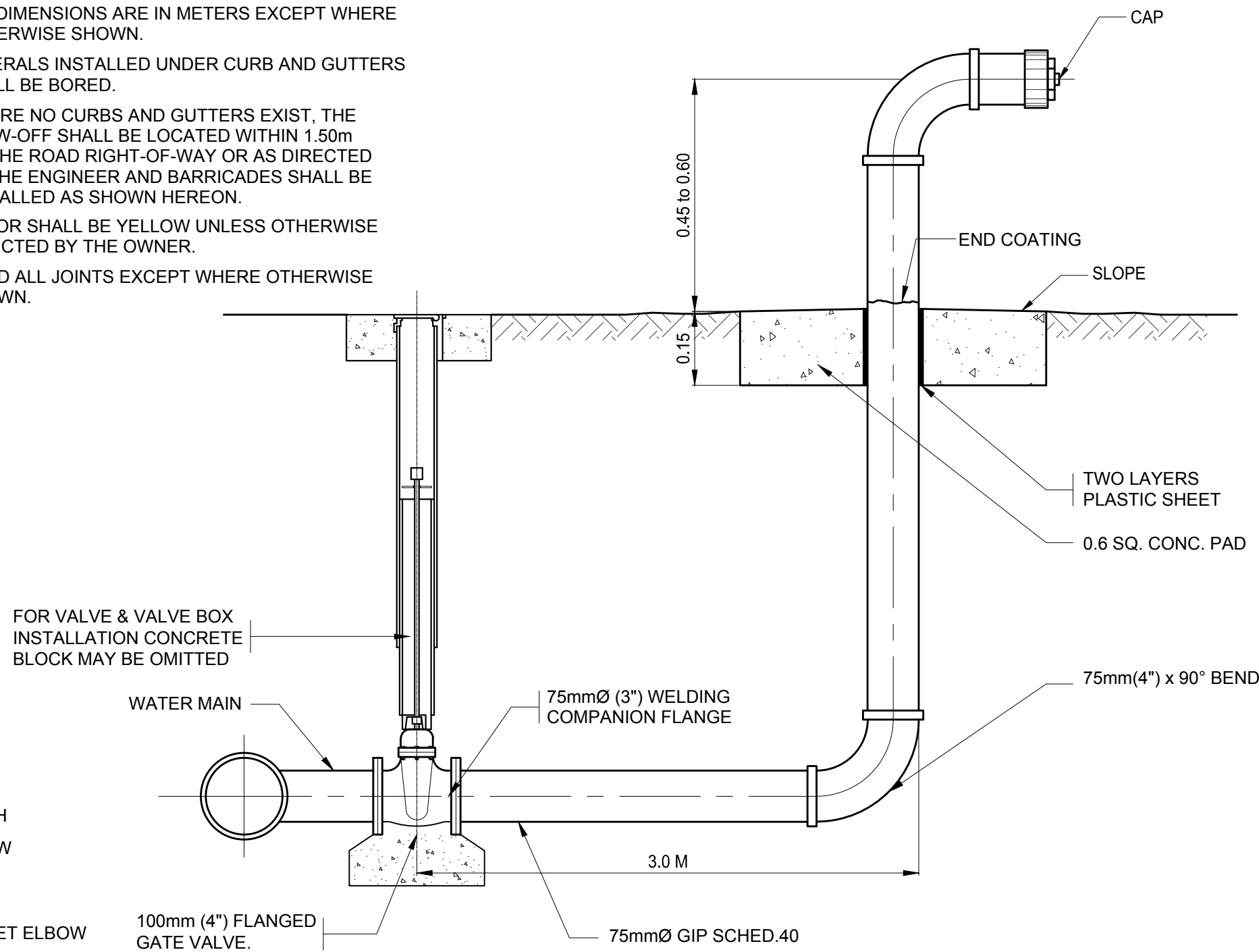
- ① ALL DIMENSIONS ARE IN METERS EXCEPT WHERE OTHERWISE SHOWN.
- ② MANUFACTURER'S NAME SHOWN ONLY FOR ILLUSTRATIVE PURPOSES. (SEE SPECS.)
- ③ ALL FITTINGS BETWEEN AND INCLUDING THE COUPLING AND CORP. STOP SHALL:
A) BE MADE OF BRASS OR BRONZE.
B) BE DESIGNED FOR A MIN. OF 106m (150PSI) (COLD) WATER WORKING PRESSURE.
- ④ PRESSURE TEST SHALL BE MADE PRIOR TO BACKFILLING.
- ⑤ SERVICE SHALL BE LAID ON A CONSTANT SLOPE. DIPS AND POCKETS WILL NOT BE PERMITTED.
- ⑥ NOTATIONS:
I.P. = IRON PIPE THREAD; ISO SIZE
- ⑦ WHERE NO CURBS OR GUTTERS EXIST, THE AIR VALVE SHALL BE INSTALLED WITHIN 1.50m OF THE ROAD RIGHT-OF-WAY, OR AS DIRECTED BY THE ENGINEER AND TWO BARRICADES SHALL BE INSTALLED SIMILAR TO STD. DWG 3/U1-3110-09
- ⑧ THE AIR VACUUM & AIR RELEASE ASSEMBLY ABOVE GROUND SHALL BE PAINTED IN ACCORDANCE WITH THE SPECIFICATIONS.
- ⑨ EQUIVALENT 25mm ISO SIZE TUBING AND SERVICES FITTINGS WILL BE ALLOWED IN LIEU OF BRITISH UNITS SHOWN.
- ⑩ USE COPPER TO I.P. THREAD CORP. STOP (FORD# F-700) IN LIEU OF COPPER TO L.P. THREAD CPLG. FOR WET TAP.
- ⑪ MINIMUM TUBING TRENCH WIDTH SHALL BE 0.15 m. PAYMENT FOR ANY RESURFACING WILL BE BASED ON 0.20 m. TRENCH WIDTH.



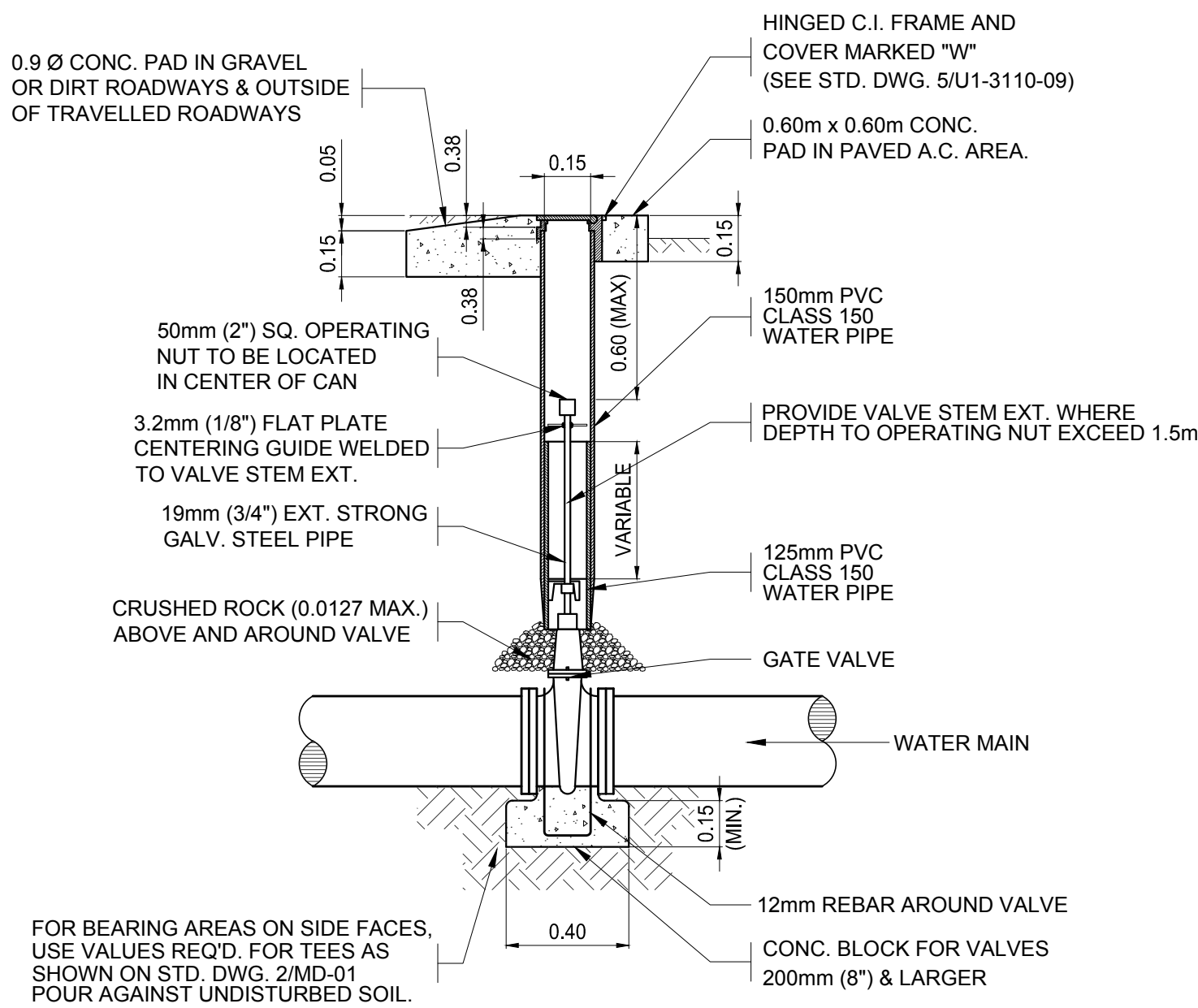
1 25mm(1") AIR VACUUM AND AIR RELEASE ASSEMBLY (AV/AR)

NOTES:

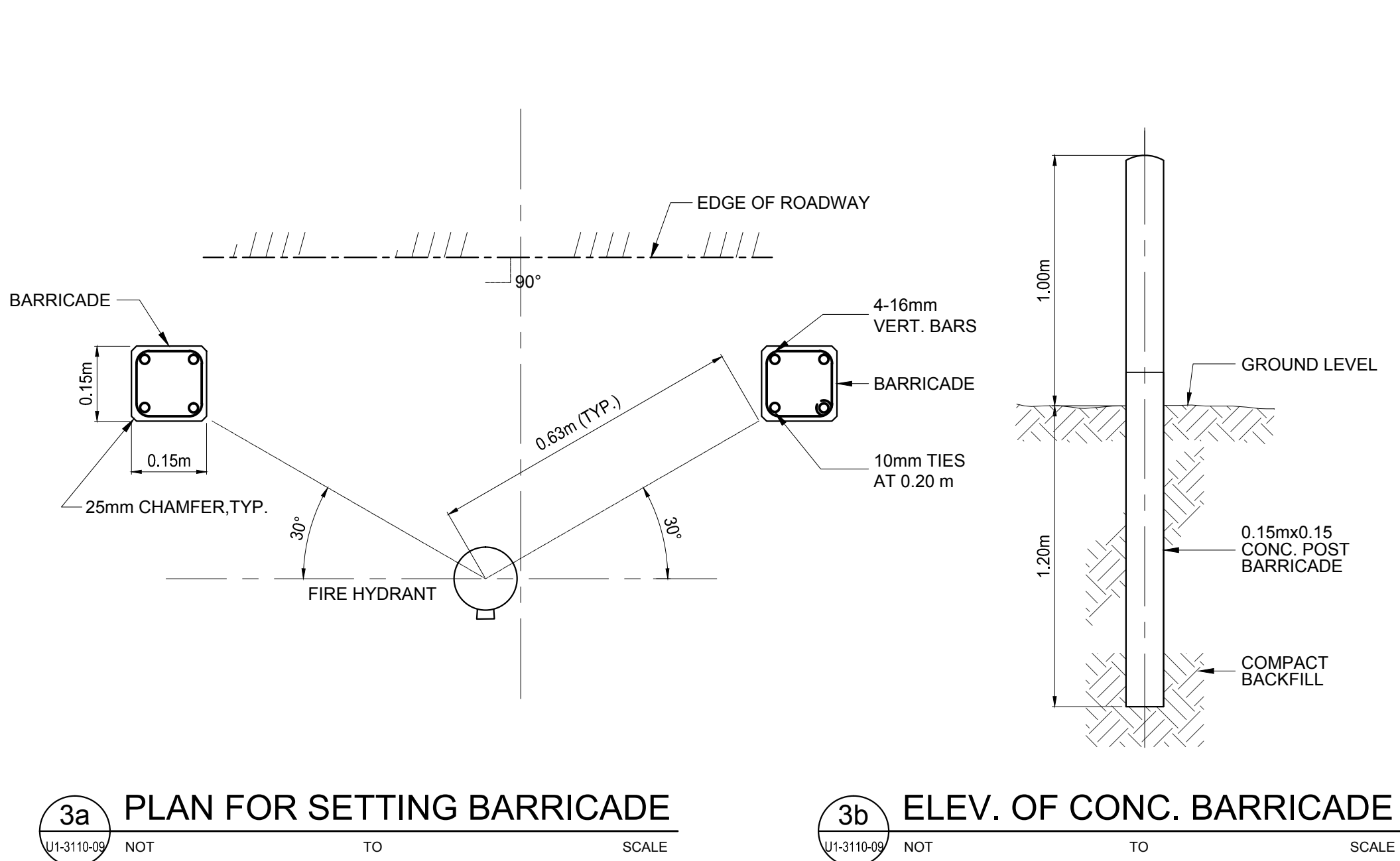
- ① ALL DIMENSIONS ARE IN METERS EXCEPT WHERE OTHERWISE SHOWN.
- ② LATERALS INSTALLED UNDER CURB AND GUTTERS SHALL BE BORED.
- ③ WHERE NO CURBS AND GUTTERS EXIST, THE BLOW-OFF SHALL BE LOCATED WITHIN 1.50m OF THE ROAD RIGHT-OF-WAY OR AS DIRECTED BY THE ENGINEER AND BARRICADES SHALL BE INSTALLED AS SHOWN HEREON.
- ④ COLOR SHALL BE YELLOW UNLESS OTHERWISE DIRECTED BY THE OWNER.
- ⑤ WELD ALL JOINTS EXCEPT WHERE OTHERWISE SHOWN.



2 BLOW-OFF ASSEMBLY



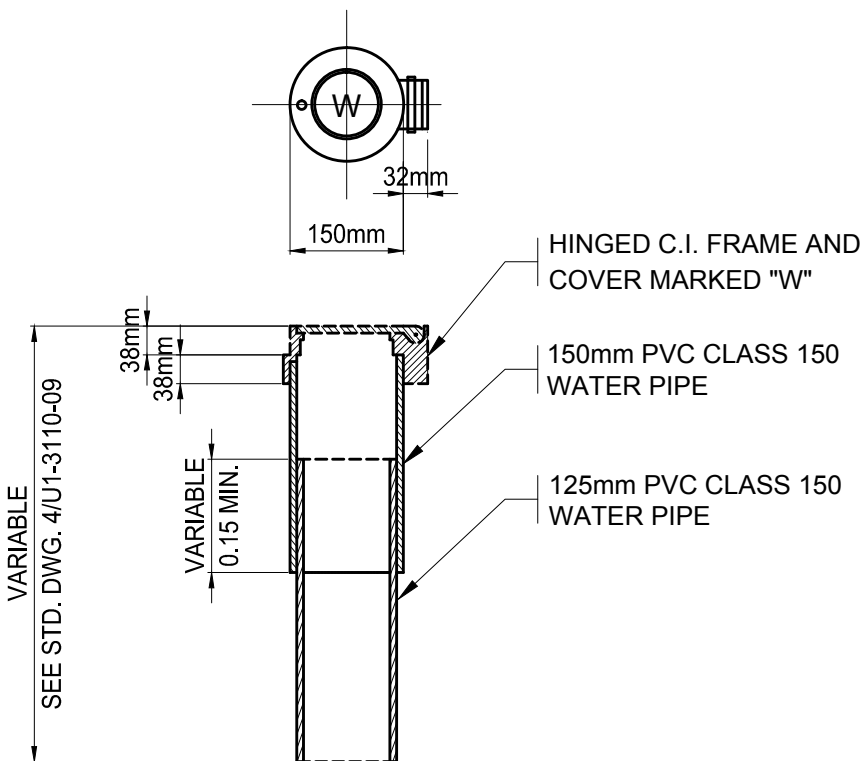
4 INSTALLATION OF BURIED GATE VALVE 300mm (12\") & SMALLER



3 BARRICADE INSTALLATION

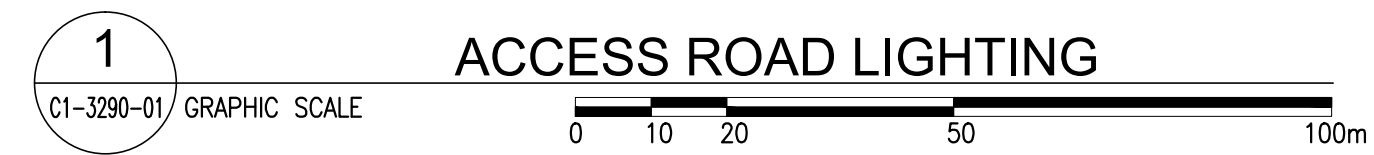
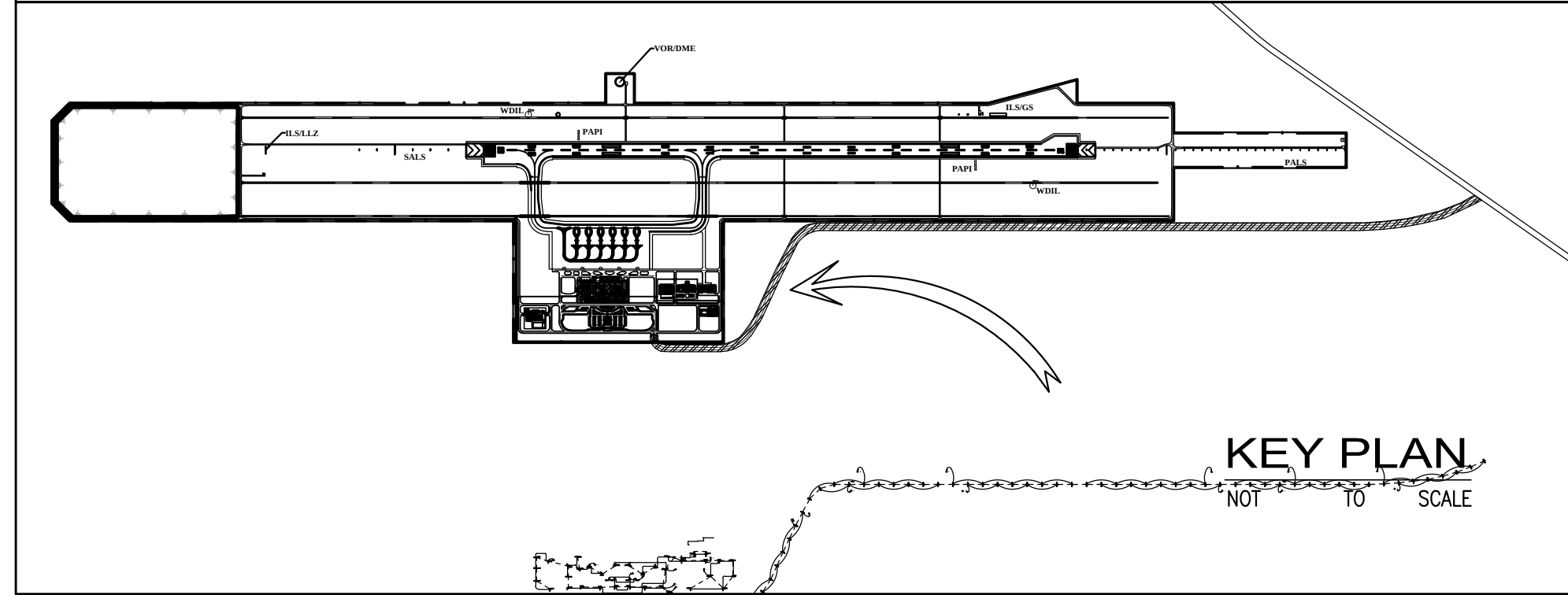
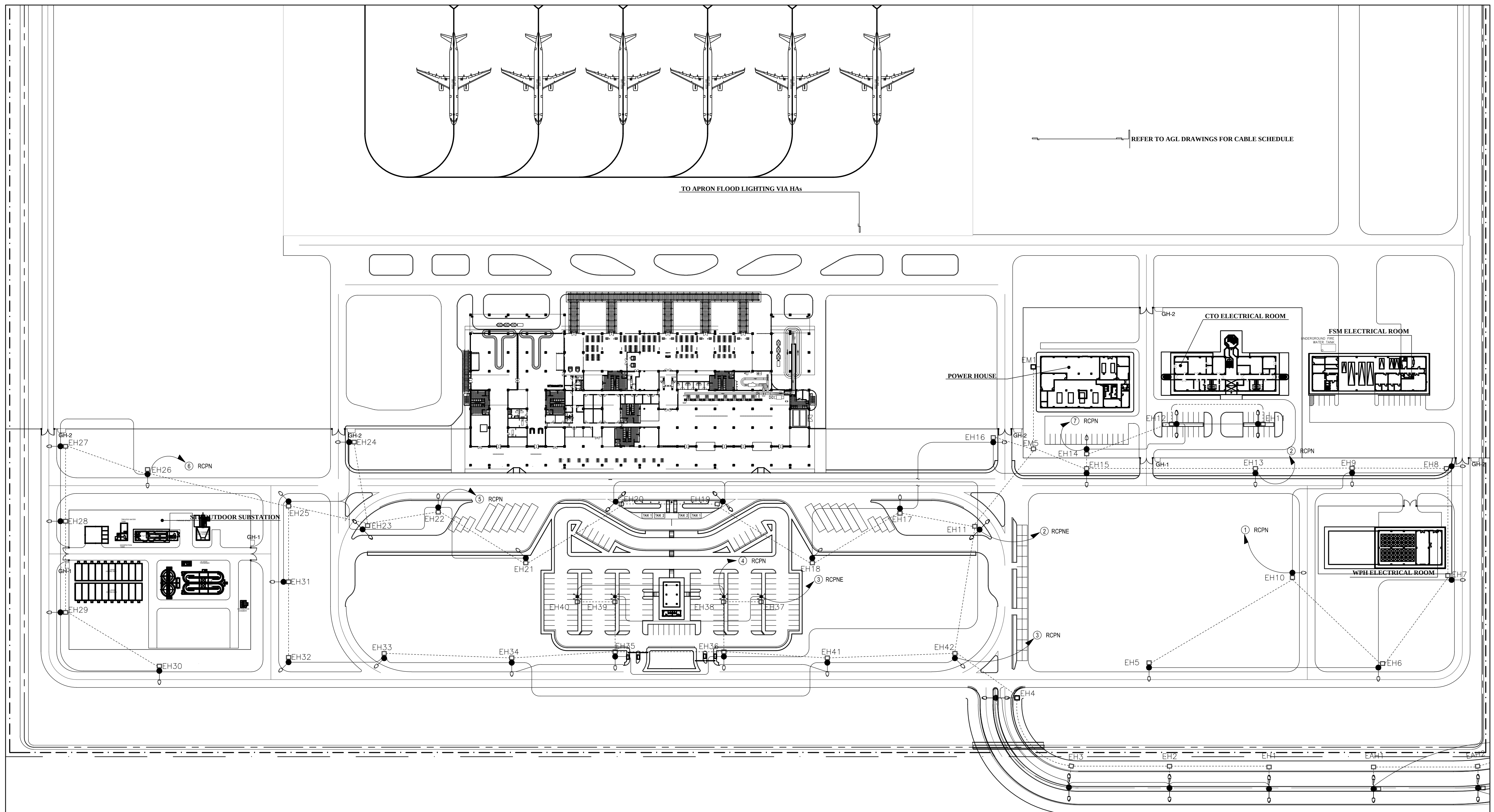
NOTES:

- ① ALL DIMENSION IN METERS UNLESS OTHERWISE SHOWN.
- ② VALVE SHALL HAVE A MINIMUM COVER OF 0.30m. MEASURED TO THE TOP OF THE OPERATING NUT.
- ③ VALVES SHALL BE INSTALLED ON EXTENSION OF PROPERTY LINES EXCEPT WHERE OTHERWISE SHOWN OR SPECIFIED.
- ④ USE FLANGED END GATE VALVES ON STEEL AND PVC PIPELINE INSTALLATIONS.
- ⑤ CAST IRON OR STEEL COVER SHALL BE ADEQUATELY DESIGNED TO CARRY TRAFFIC LOADS.
- ⑥ CONC. BLOCK MAY BE OMITTED ON WELDED STEEL PIPELINES AT OPTION OF CONTRACTOR.

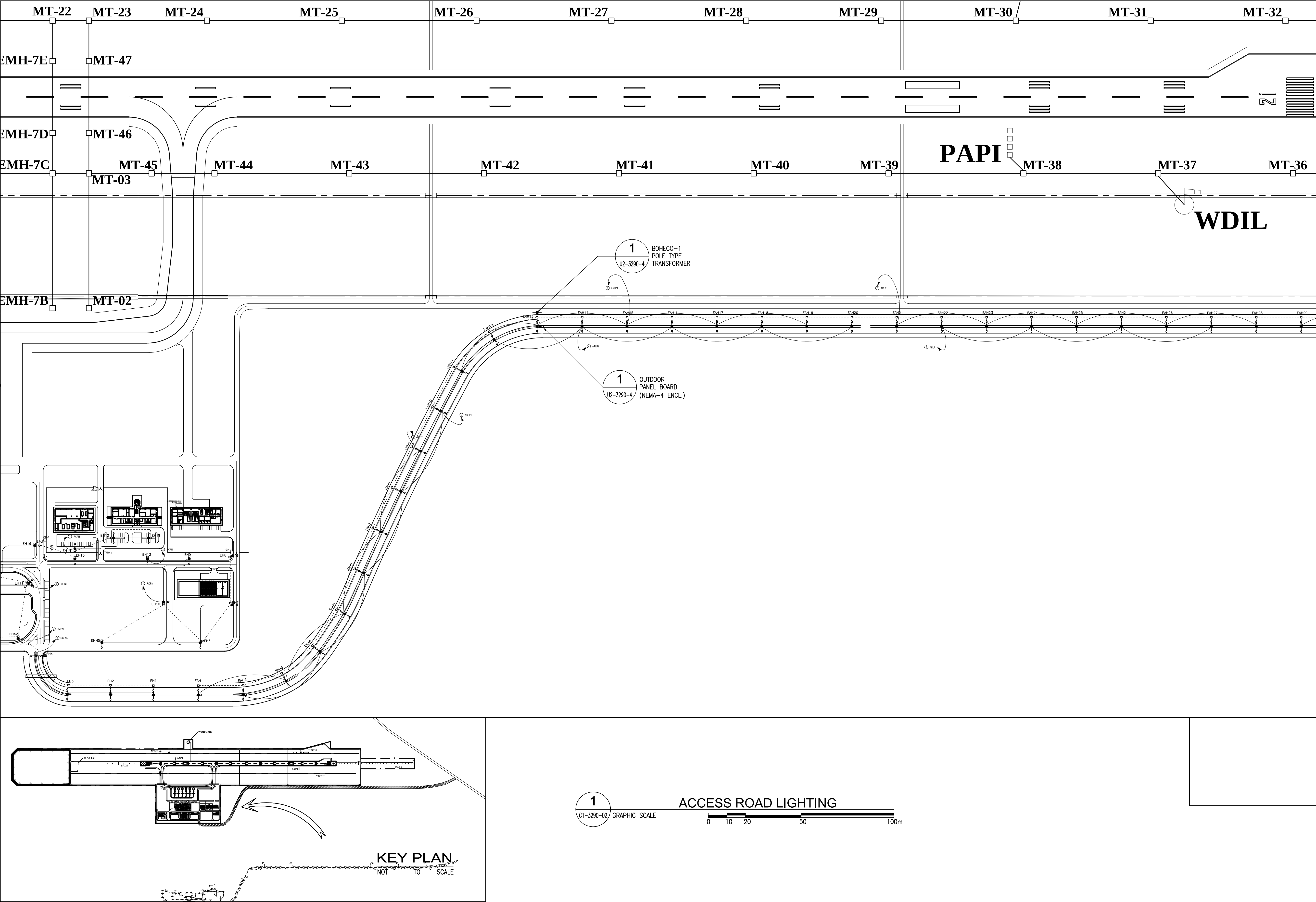


5 VALVE BOX AND COVER

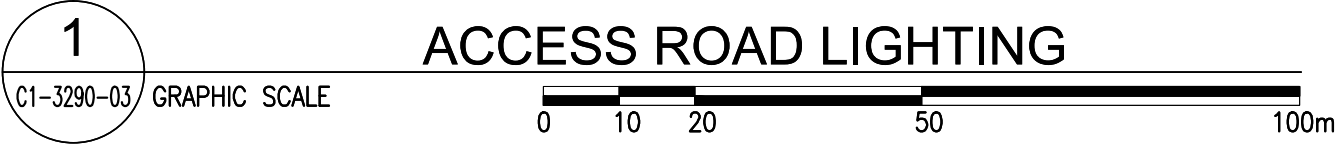
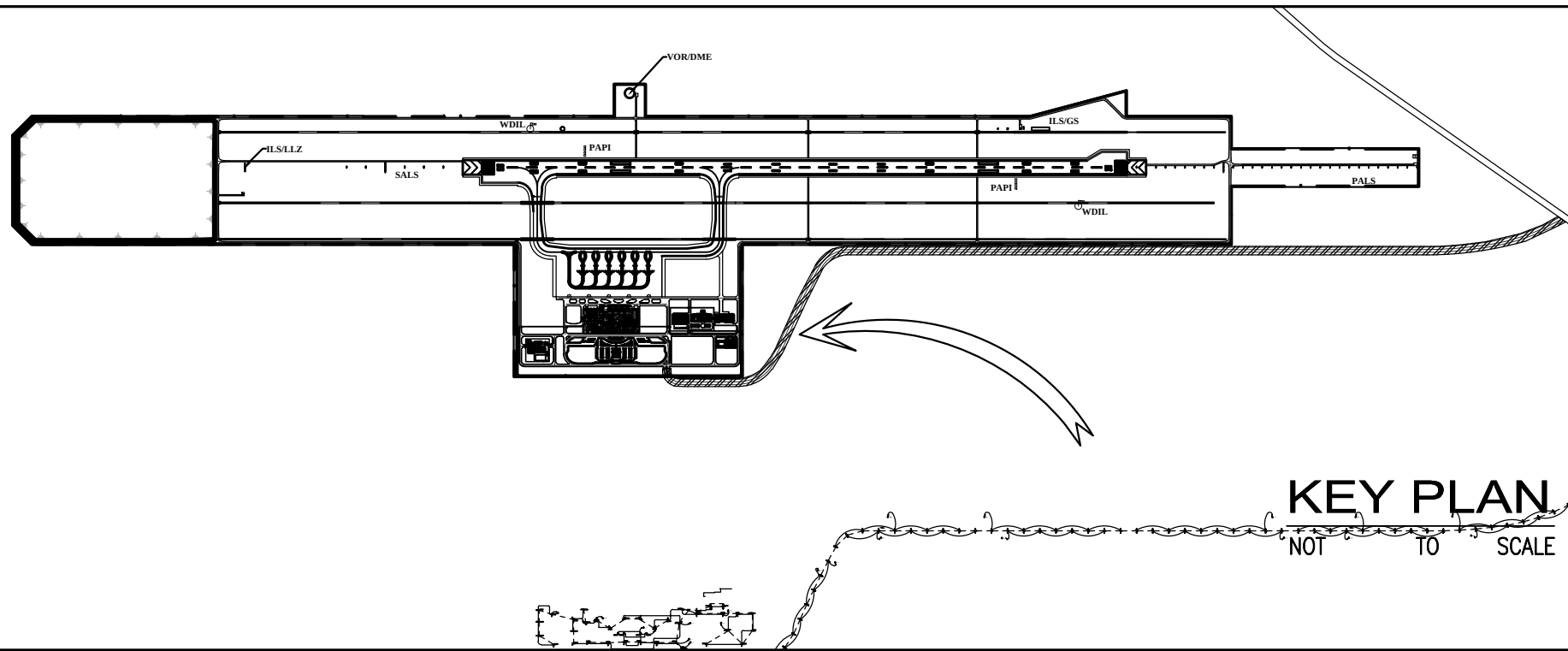
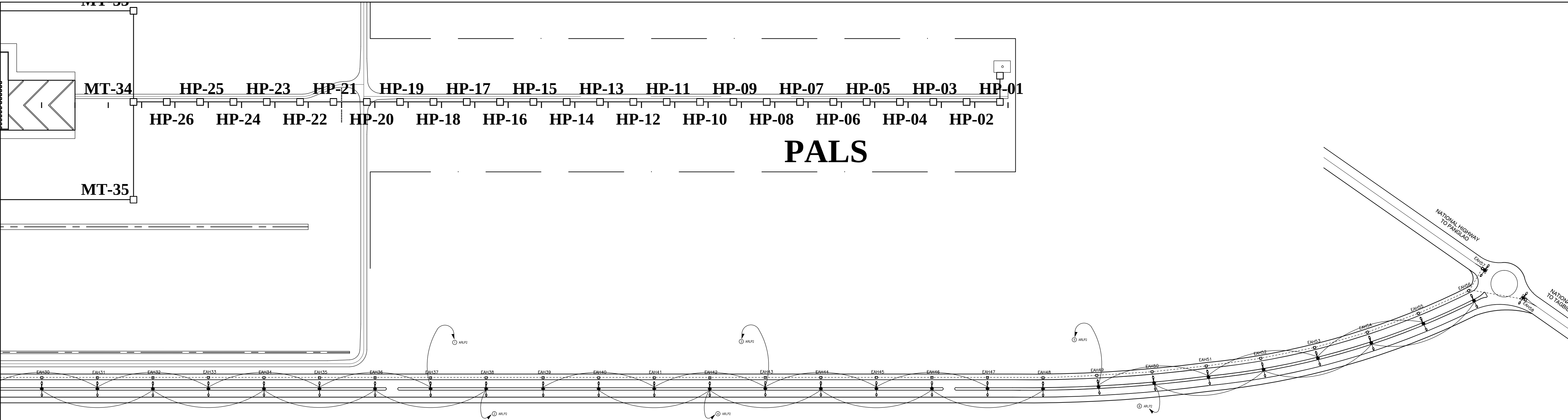
 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS		 JICA JAPAN INTERNATIONAL COOPERATION AGENCY		PREPARED BY: VICTORIA P. ADECER	RECOMMENDING APPROVAL: ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	APPROVED: JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	PROJECT TITLE: NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT	DATE: JUNE 2013				INDEX				AMENDMENTS				Prepared by: WIM Checked by: HC Validated by:				SHEET CONTENTS: COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-1 ACCESS ROAD WATER SUPPLY PIPELINE MISCELLANEOUS DETAILS - 2	SHEET NO: C1-3110-09
JICA DESIGN CONSULTANT JOINT VENTURE		JAC JAPAN AIRPORT CONSULTANTS, INC.		NIPPON KOEI CO., LTD.		NJS CONSULTANTS CO., LTD.		TADASHI AOI Team Leader				TADASHI AOI Team Leader				TADASHI AOI Team Leader				TADASHI AOI Team Leader				DRAWING SCALE: AS SHOWN	



Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY: TEODORO N. PAMATMAT PROF: ELECTRICAL ENGINEER PIR: 1403773 REG. NO.: 1927 DATE: JANUARY 01, 2013 T.J.N. 119-747-900 PLACE: MANILA	RECOMMENDING APPROVAL: ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	APPROVED: JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	PROJECT TITLE: NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	JUNE 2013 DATE INDEX AMENDMENTS Prepared by Checked by Validated by WIM HC	SHEET CONTENTS: COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-1 ACCESS ROAD ACCESS ROAD LIGHTING ACCESS ROAD LIGHTING LAYOUT (AIRPORT SIDE - 1/3)	SHEET NO: C1-3290-01 DRAWING SCALE: AS SHOWN
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Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY: TEODORO N. PAMATMAT PROF: ELECTRICAL ENGINEER PIR. 1403773 REG. NO.: 1927 DATE: JANUARY 01, 2013 TIN. 119-747-900 PLACE: MANILA	RECOMMENDING APPROVAL: ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	APPROVED: JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	PROJECT TITLE: NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	JUNE 2013 DATE INDEX AMENDMENTS Prepared by Checked by Validated by WIM HC	SHEET CONTENTS: COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-1 ACCESS ROAD ACCESS ROAD LIGHTING ACCESS ROAD LIGHTING LAYOUT (AIRPORT SIDE - 2/3)	SHEET NO: C1-3290-02 DRAWING SCALE: AS SHOWN
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Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS JICA JAPAN INTERNATIONAL COOPERATION AGENCY	JICA DESIGN CONSULTANT JOINT VENTURE JAPAN AIRPORT CONSULTANTS, INC. NIPPON KOEI CO., LTD. NJS CONSULTANTS CO., LTD.	PREPARED BY: TEODORO N. PAMATMAT PROF: ELECTRICAL ENGINEER PIR: 1403773 REG. NO.: 1927 DATE: JANUARY 01, 2013 T.I.N.: 119-747-900 PLACE: MANILA TADASHI AOI Team Leader	RECOMMENDING APPROVAL: ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	APPROVED: JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	PROJECT TITLE: NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	JUNE 2013 DATE INDEX AMENDMENTS Prepared by Checked by Validated by	SHEET CONTENTS: COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-1 ACCESS ROAD ACCESS ROAD LIGHTING ACCESS ROAD LIGHTING LAYOUT (HIGHWAY SIDE - 3/3)	SHEET NO: C1-3290-03 DRAWING SCALE: AS SHOWN

MANHOLE AND HANDHOLE	PIPES SIZE AND QUANTITY
POWER HOUSE TO EM1 TO EM10 (ONLY FOR ROAD AND CARPARK LIGHTING)	8–50mmØ PVC
EM10 TO EHH15	3–50mmØ PVC
EM10 TO EHH11	8–50mmØ PVC
EM10 TO EHH16	1–50mmØ PVC
EHH11 TO EHH42	2–50mmØ PVC
EHH42 TO EHH4	1–50mmØ PVC

MANHOLE AND HANDHOLE	PIPES SIZE AND QUANTITY
EHH42 TO 41 TO 36 TO 35 TO 34 TO 33 TO 32	2–50mmØ PVC
EHH11 TO EHH17 TO EHH18	4–50mmØ PVC
EHH18 TO EHH19 TO EHH20	3–50mmØ PVC
EHH20 TO EHH21 TO EHH22 TO EHH23 TO EHH 25	2–50mmØ PVC
EHH23 TO EHH24	1–50mmØ PVC

MANHOLE AND HANDHOLE	PIPES SIZE AND QUANTITY
EHH25 TO 26 TO 27 TO 28 TO 29 TO EHH30	1–50mmØ PVC
EHH15 TO EHH14	1–50mmØ PVC
EHH14 TO 12 TO 11	1–50mmØ PVC
EHH15 TO EHH13 TO EHH9	2–50mmØ PVC
EHH9 TO EHH8 TO EHH7	1–50mmØ PVC
EHH9 TO EHH10 TO EHH5 TO EHH6	1–50mmØ PVC
EHH4 TO EHH3 TO EHH2 TO EHH1	1–50mmØ PVC

1

CONCRETE DUCT SCHEDULE

C1–3290–04 / NOT TO SCALE

PANEL: ARLP1		VOLTAGE: 230V 1Ø 2W				SUPPLY: NORMAL DIRECT FROM BOHECO			
TO: BOHECO POLE TYPE TRANSFORMER									
CKT NO.	LOAD DESCRIPTION	VA	AMPERE LOAD				WIRE	PVC CONDUIT (IN DUCT)	PROTECTION
			ØAB	ØBC	ØCA	3Ø LOAD			
1	10 – 120W LED ROADLIGHT	1500	6.52				2–60mm ² THHN 1–8.0mm ² TW	50mmØ	20AT, 2P CB
2	10 – 120W LED ROADLIGHT	1500		6.52			2–60mm ² THHN 1–8.0mm ² TW	50mmØ	20AT, 2P CB
3	10 – 120W LED ROADLIGHT	1500			6.52		2–30mm ² THHN 1–5.5mm ² TW	45mmØ	20AT, 2P CB
4	10 – 120W LED ROADLIGHT	1500	6.52				2–60mm ² THHN 1–5.5mm ² TW	45mmØ	20AT, 2P CB
5	10 – 120W LED ROADLIGHT	1500		6.52			2–60mm ² THHN 1–8.0mm ² TW	50mmØ	20AT, 2P CB
6	8 – 120W LED ROADLIGHT	1200			5.21		2–50mm ² THHN 1–8.0mm ² TW	50mmØ	20AT, 2P CB
7	SPARE	1000	4.35						20AT, 2P CB
8	SPARE	1000		4.35					20AT, 2P CB
9	SPARE	1000			4.35				20AT, 2P CB
		11700	17.39	17.39	16.08				
It = 17.39 × 1.732 = 30.12 A									
MAIN PROTECTION:		50AT, 100AF, 230V, 3P, MCCB, 10KAIC				NOTE: ENCLOSURE SHALL BE NEMA 4X			
FEEDER SIZE:		3–10mm ² XLPE							

PANEL: ARLP2		VOLTAGE: 230V 3Ø 3W				SUPPLY: DIRECT FROM BOHECO			
TO: BOHECO POLE TYPE TRANSFORMER									
CKT NO.	LOAD DESCRIPTION	VA	AMPERE LOAD				WIRE	PVC CONDUIT (IN DUCT)	PROTECTION
			ØAB	ØBC	ØCA	3Ø LOAD			
1	10 – 120W LED ROADLIGHT	1500	6.52				2–60mm ² THHN 1–8.0mm ² TW	50mmØ	20AT, 2P CB
2	10 – 120W LED ROADLIGHT	1500		6.52			2–60mm ² THHN 1–8.0mm ² TW	50mmØ	20AT, 2P CB
3	10 – 120W LED ROADLIGHT	1500			6.52		2–30mm ² THHN 1–5.5mm ² TW	40mmØ	20AT, 2P CB
4	10 – 120W LED ROADLIGHT	1500	6.52				2–30mm ² THHN 1–5.5mm ² TW	40mmØ	20AT, 2P CB
5	8 – 120W LED ROADLIGHT	1200		5.21			2–50mm ² THHN 1–8.0mm ² TW	50mmØ	20AT, 2P CB
6	10 – 120W LED ROADLIGHT	1500			6.52		2–50mm ² THHN 1–8.0mm ² TW	50mmØ	20AT, 2P CB
7	SPARE	1000	4.35						20AT, 2P CB
8	SPARE	1000		4.35					20AT, 2P CB
9	SPARE	1000			4.35				20AT, 2P CB
		11700	17.39	16.08	17.39				
It = 17.39 X 1.732 = 30.12 A									
MAIN PROTECTION: 50AT, 100AF, 230V, 3P, MCCB, 10KAIC									
FEEDER SIZE: 3–10mm ² XLPE									
							NOTE: ENCLOSURE SHALL BE NEMA 4X		

PANEL: RCPN		VOLTAGE: 230V 3Ø 3W				SUPPLY: NORMAL		
TO: LVSGNE-PWH								
CKT NO.	LOAD DESCRIPTION	VA	AMPERE LOAD			WIRE	PVC CONDUIT (IN DUCT)	PROTECTION
			ØAB	ØBC	ØCA			
1	5 – 120W LED LAMP ROAD	750	3.26			2–14mm² THHN 1–5.5mm² TW	32mmØ	20AT, 2P CB
2	5 – 120W LED LAMP ROAD	750		3.26		2–14mm² THHN 1–5.5mm² TW	32mmØ	20AT, 2P CB
3	5 – 120W LED LAMP ROAD	750			3.26	2–22mm² THHN 1–5.5mm² TW	32mmØ	20AT, 2P CB
4	8 – 120W LED LAMP CAR PARK 1	1200	5.22			2–30mm² THHN 1–5.5mm² TW	50mmØ	20AT, 2P CB
5	7 – 120W LED LAMP ROAD	1050		4.56		2–30mm² THHN 1–5.5mm² TW	50mmØ	20AT, 2P CB
6	5 – 120W LED LAMP ROAD	750			3.26	2–38mm² THHN 1–5.5mm² TW	50mmØ	20AT, 2P CB
7	4 – 120W LED LAMP CARPARK 2 (PLOH AND CTO)	600			2.60	2–8.0mm² THHN 1–5.5mm² TW	25mmØ	20AT, 2P CB
8	SPARE	1150	5					20AT, 2P CB
9	SPARE	1150		5				20AT, 2P CB
10	SPARE	1150			5			20AT, 2P CB
		9300	13.48	12.82	14.12			
It = 14.12 x 1.732 = 24.45 A								
MAIN PROTECTION:		50AT, 100AF, 230V, 3P, MCCB, 10KAIC						
FEEDER SIZE:		3–10mm² XLPE + 1–3.5mm² TW						

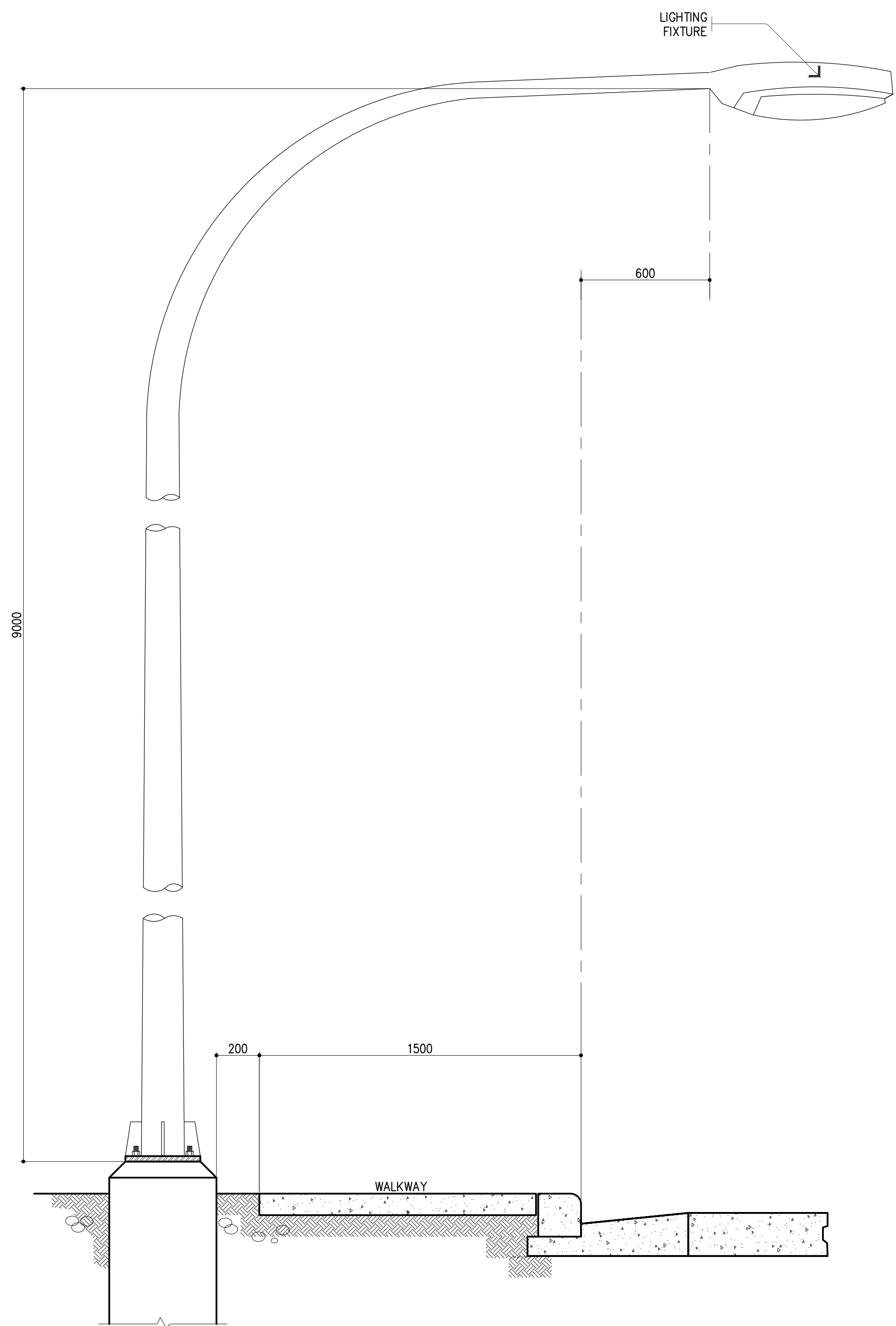
PANEL: RCPNE		VOLTAGE: 230V 3ø 3W				SUPPLY: NORMAL/EMERGENCY			
TO: LVSGNE-PWH									
CKT NO.	LOAD DESCRIPTION	VA	AMPERE LOAD				WIRE	PVC CONDUIT (IN DUCT)	PROTECTION
			øAB	øBC	øCA	3ø LOAD			
1	8 – 120W LED LAMP AIRPORT ACCESS ROAD ENTRANCE	1200	5.22				2–30mm² THHN 1–5.5mm² TW	50mmø	20AT, 2P CB
2	8 – 120W LED LAMP	1200		5.22			2–22mm² THHN 1–5.5mm² TW	32mmø	20AT, 2P CB
3	8 – 120W LED LAMP CARPARK	1200			5.22		2–30mm² THHN 1–5.5mm² TW	50mmø	20AT, 2P CB
4	SPARE	1150	5						20AT, 2P CB
5	SPARE	1150		5					20AT, 2P CB
6	SPARE	1150			5				20AT, 2P CB
		7050	10.22	10.22	10.22				
It = 10.22 x 1.732 = 17.7 A									
MAIN PROTECTION: 30AT, 100AF, 230V, 3P, MCCB, 10KAIC									
FEEDER SIZE: 3–6mm² XLPE + 1–3.5mm² TW									

1

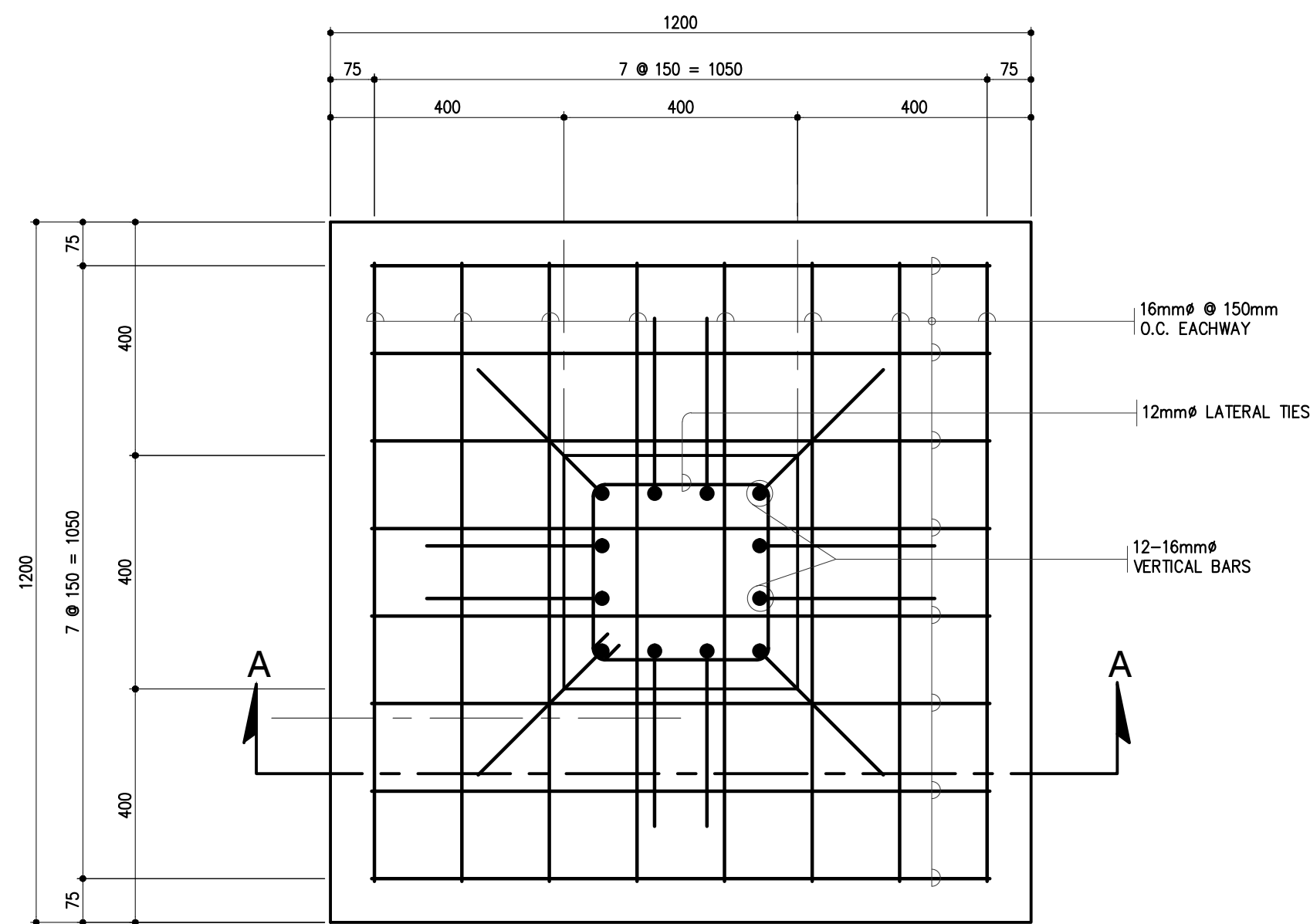
PANEL SCHEDULE

C1–3290–04 / NOT TO SCALE

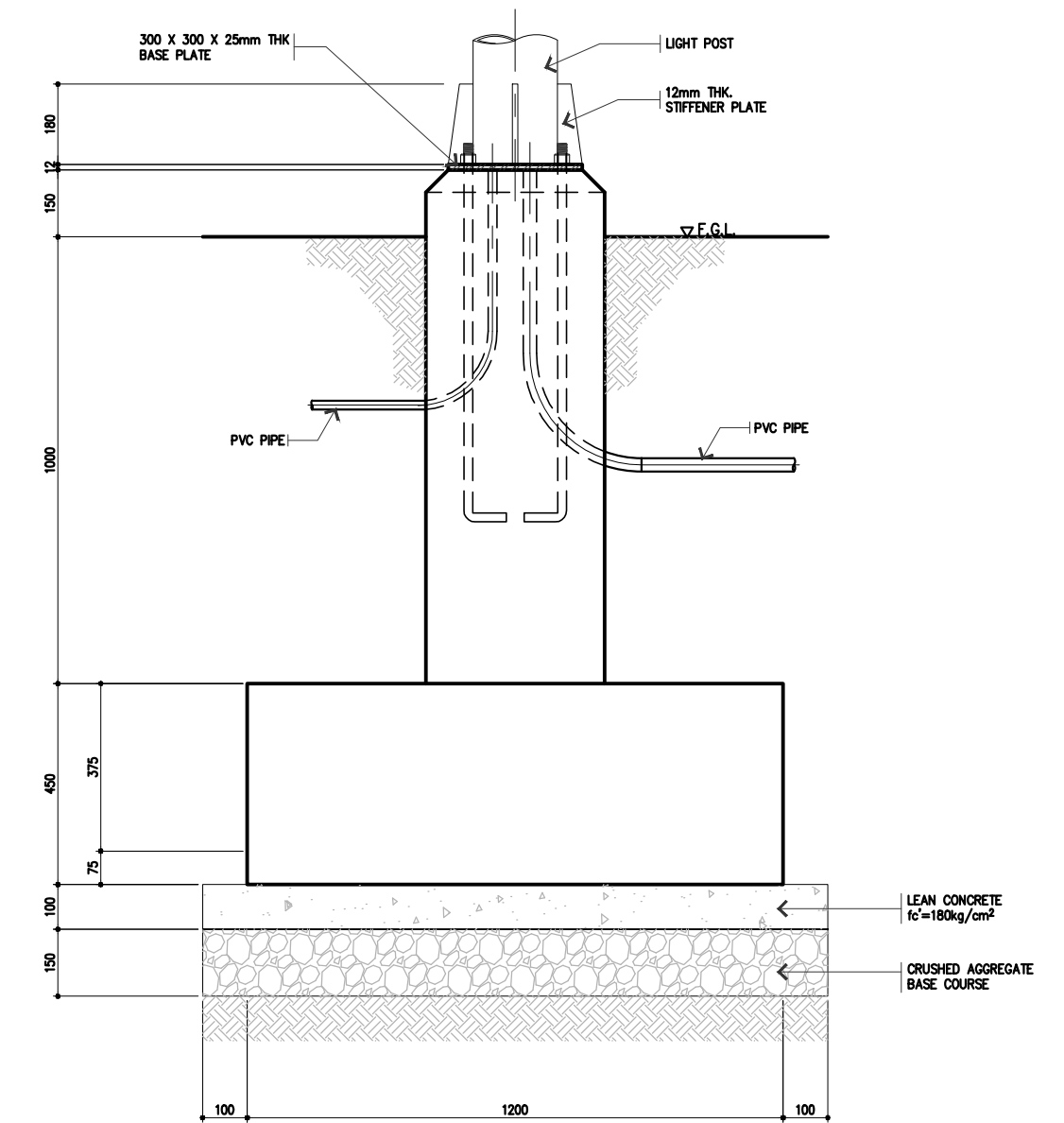
Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS JICA JAPAN INTERNATIONAL COOPERATION AGENCY JICA DESIGN CONSULTANT JOINT VENTURE JAC JAPAN AIRPORT CONSULTANTS, INC. NIPPON KOEI CO., LTD. NJS CONSULTANTS CO., LTD.	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:							SHEET CONTENTS:	SHEET NO:
	TEODORO N. PAMATMAT			NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT							COMPONENT–2 CIVIL WORKS (C) SUBCOMPONENT–2–1 ACCESS ROAD ACCESS ROAD LIGHTING	C1–3290–04
	PROF. ELECTRICAL ENGINEER PIR. 1403773 REG. NO.: 1927 TEAM 119–747–900										DUCT AND PANEL SCHEDULE	DRAWING SCALE:
	TADASHI AOI Team Leader	ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by		AS SHOWN



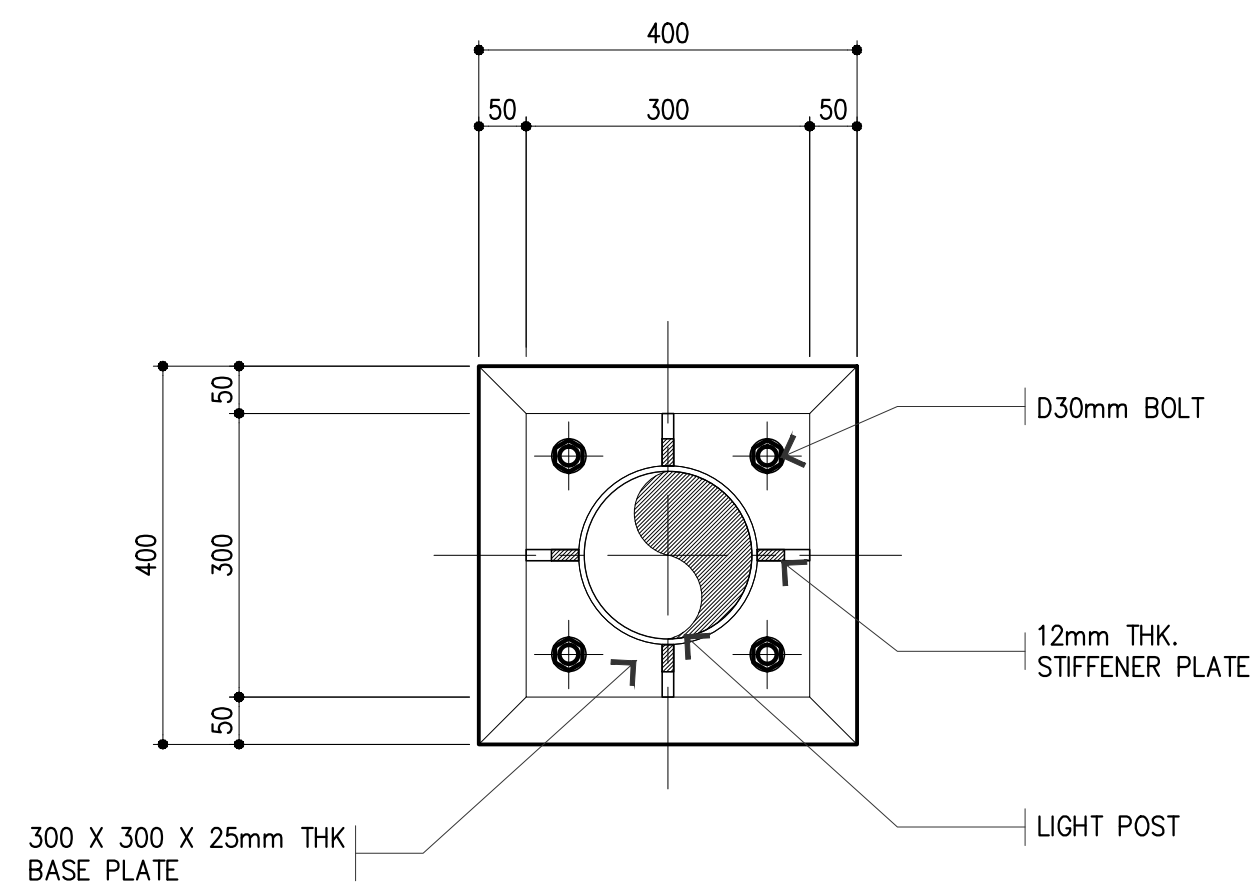
1 TYPICAL 9m HIGH ROAD LIGHTING DETAIL
C1-3290-05 SCALE: AS SHOWN



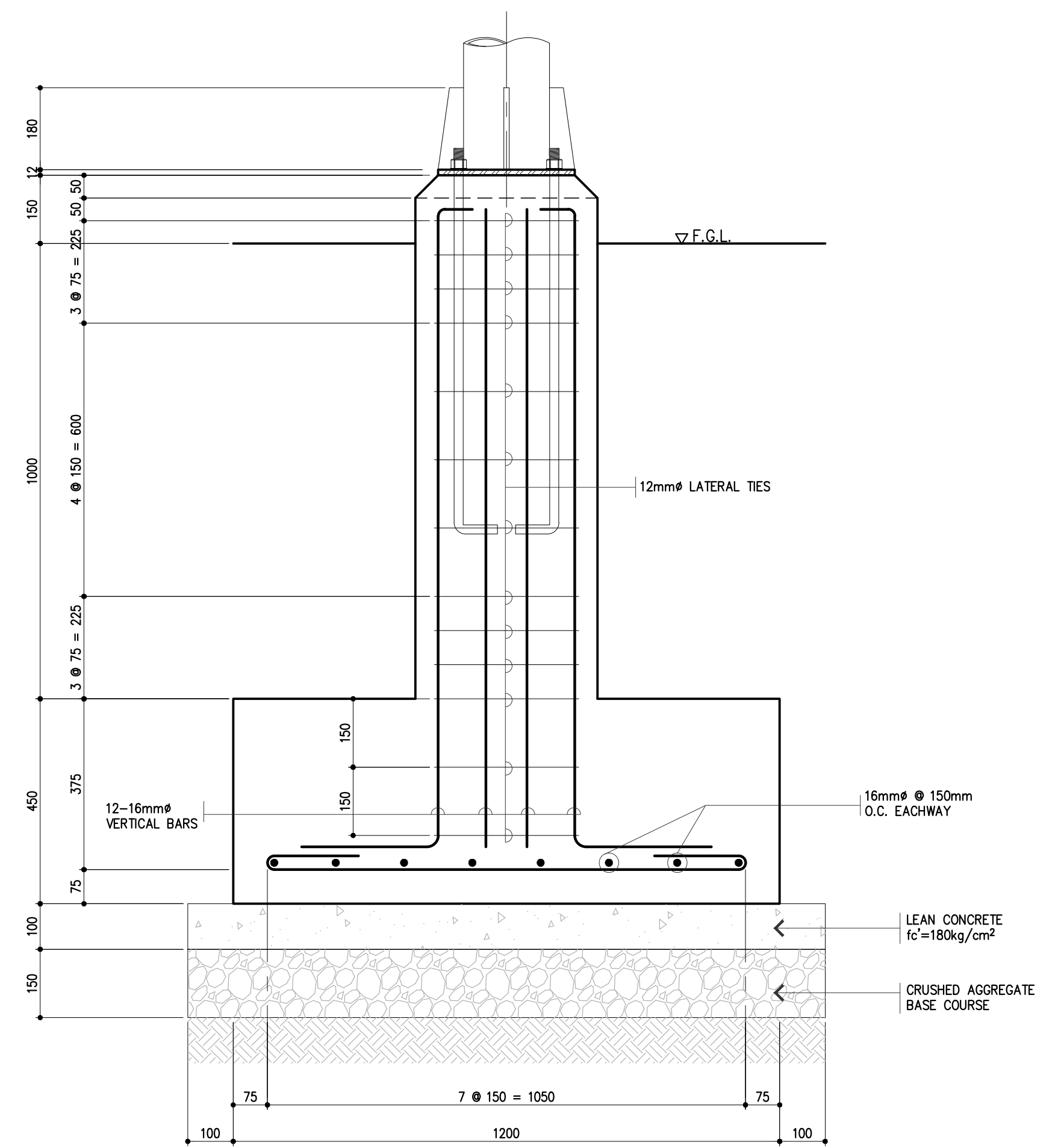
BASE FOUNDATION PLAN
SCALE: AS SHOWN



TYPICAL FOOTING ELEVATION
SCALE: AS SHOWN



TYPICAL PEDESTAL PLAN
SCALE: AS SHOWN



DETAIL OF REINFORCEMENT
SCALE: AS SHOWN



PREPARED BY:
TEODORO N. PAMATMAT
PROF. ELECTRICAL ENGINEER PIR. 1403773
REG. NO.: 1927 DATE: JANUARY 01, 2013
T.JAN. 119-747-900 PLACE: MANILA
TADASHI AOI
Team Leader

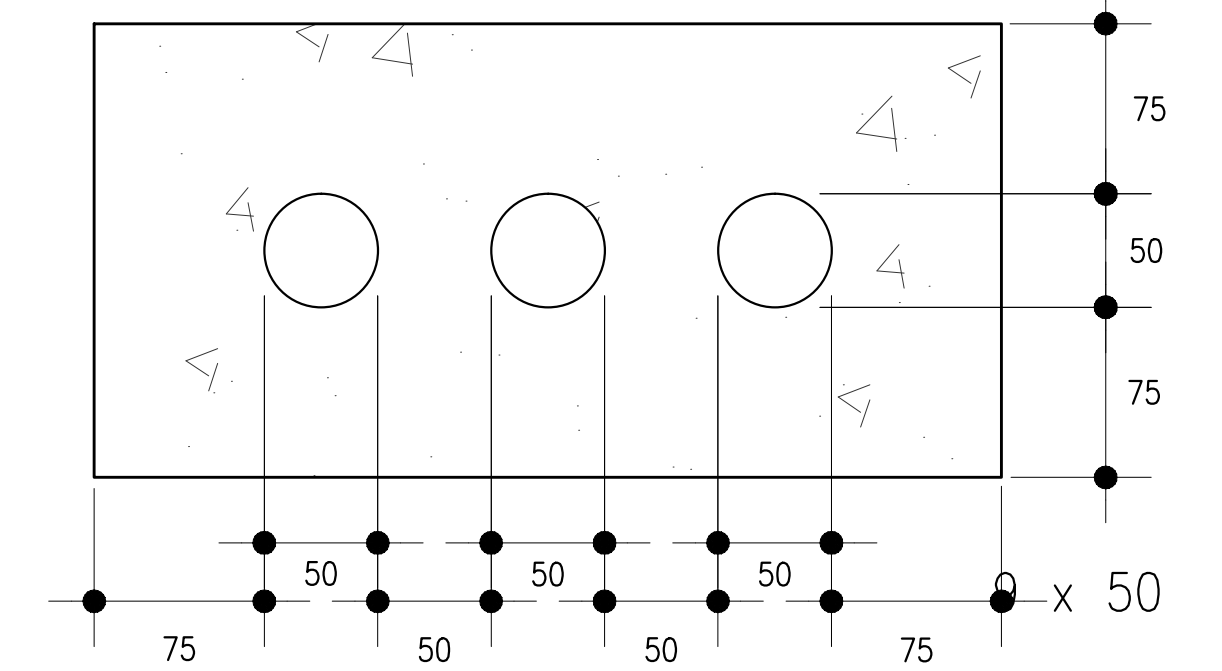
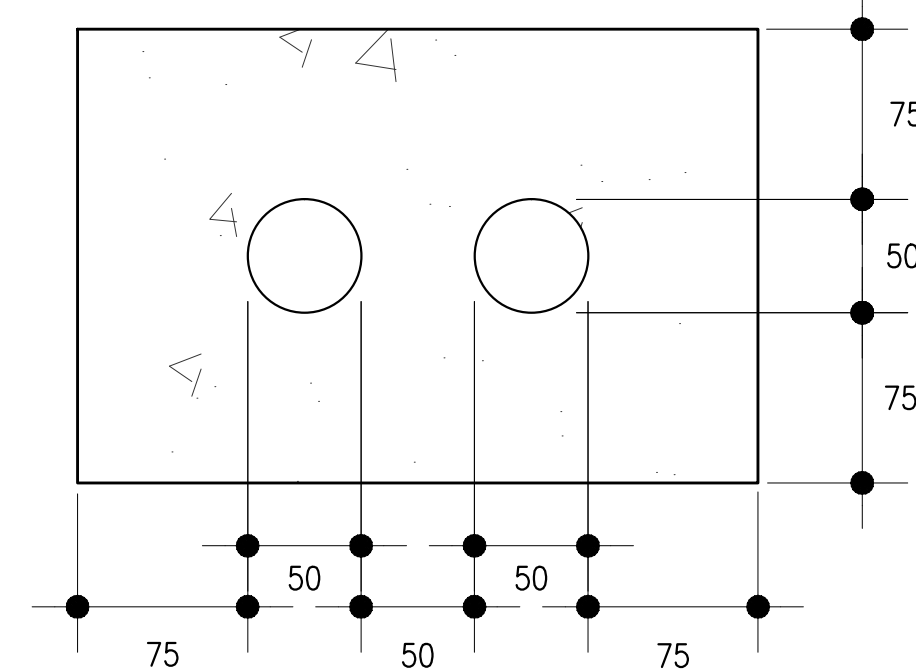
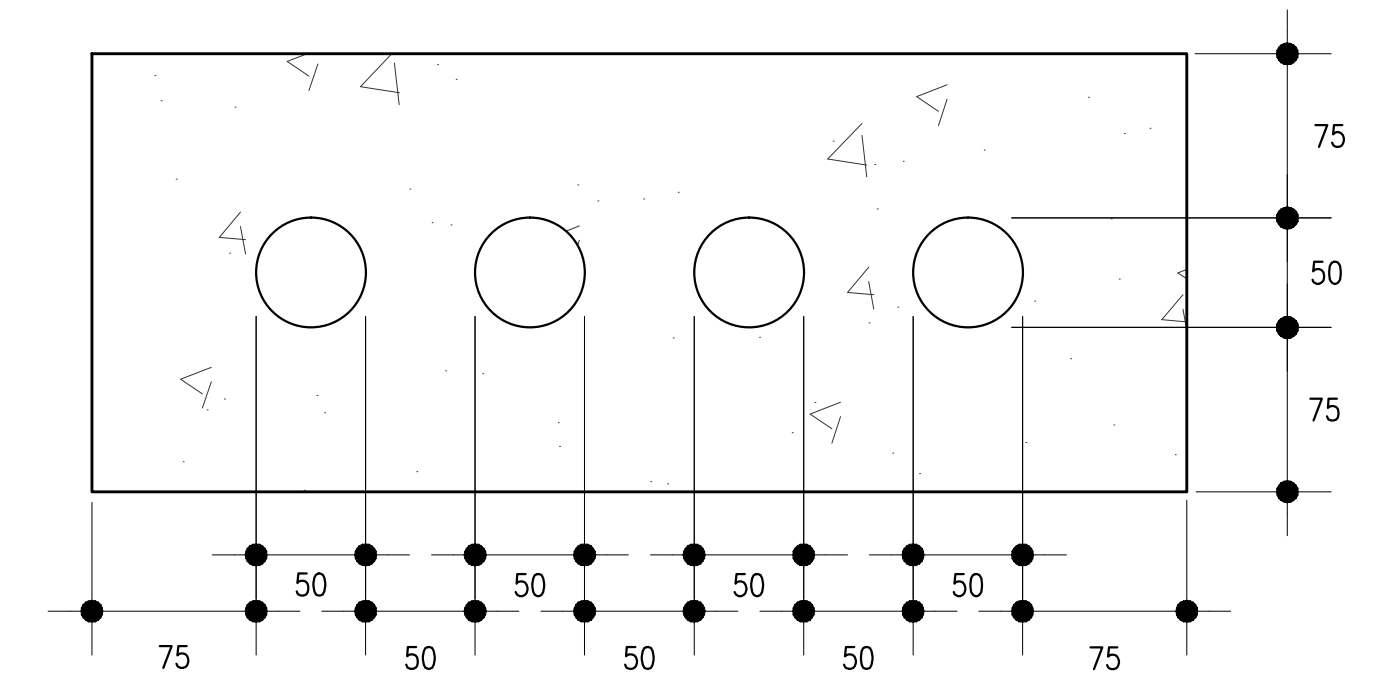
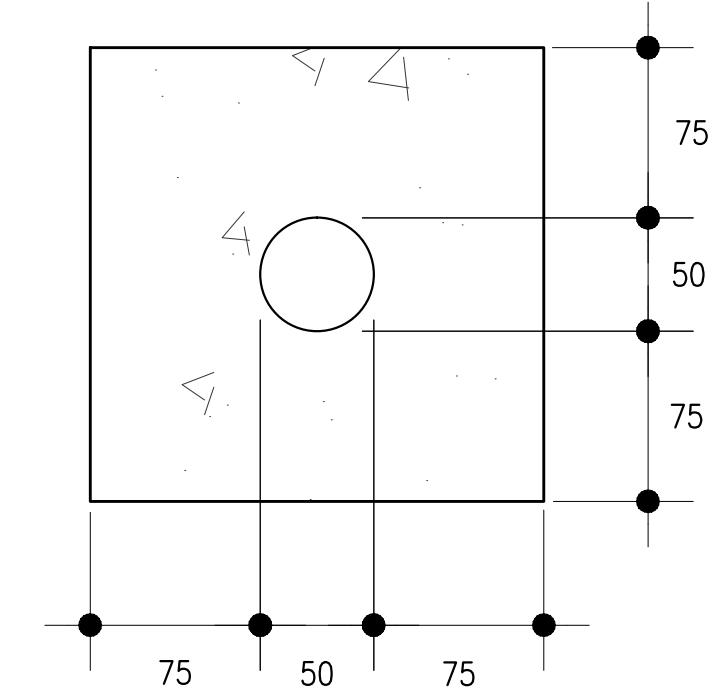
RECOMMENDING APPROVAL:
ILDEFONSO T. PATDU, JR.
Assistant Secretary
for Project Implementation, DOTC

APPROVED:
JULIANITO G. BUCAYAN, JR.
Undersecretary
for Project Implementation, DOTC

PROJECT TITLE:
NEW BOHOL AIRPORT CONSTRUCTION AND
SUSTAINABLE ENVIRONMENT PROTECTION PROJECT
LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES

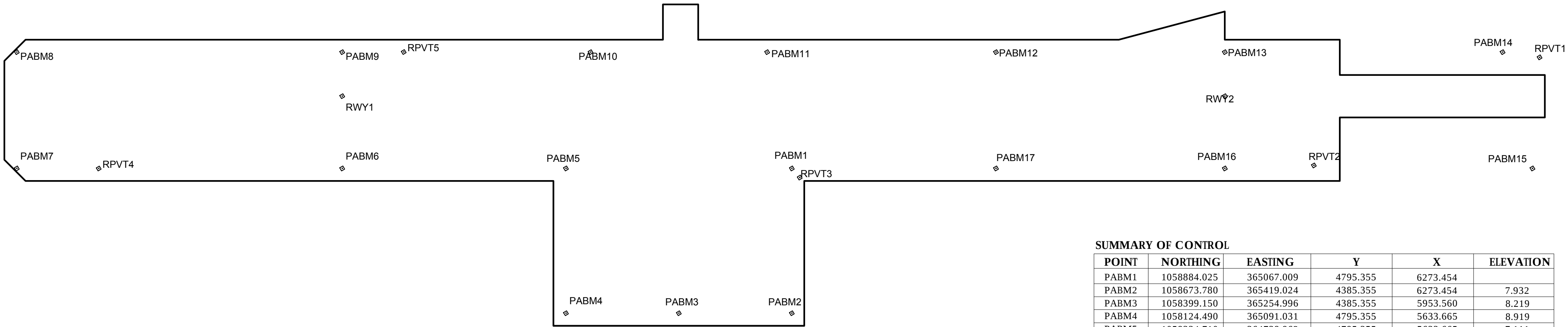
JUNE 2013			WIM	HC	
DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by

SHEET CONTENTS:
COMPONENT-2 CIVIL WORKS (C)
SUBCOMPONENT-2-1 ACCESS ROAD
ACCESS ROAD LIGHTING
TYPICAL ROAD LIGHTING DETAILS
SHEET NO:
C1-3290-05
DRAWING SCALE:
AS SHOWN



C1-3290-06 NOT TO SCALE

 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS		 JAPAN INTERNATIONAL COOPERATION AGENCY		PREPARED BY: TEODORO N. PAMATMAT PROF. ELECTRICAL ENGINEER P.R. TAGUJIS REG. NO.: 1927 DATE: JANUARY 01, 2013 T.A.N. 119-747-900 PLACE: MANILA		RECOMMENDING APPROVAL: ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC		APPROVED: JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC		PROJECT TITLE: NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT										SHEET CONTENTS: COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-1 ACCESS ROAD ACCESS ROAD LIGHTING		SHEET NO: C1-3290-06	
JICA DESIGN CONSULTANT JOINT VENTURE JAC 2 JAPAN AIRPORT CONSULTANTS, INC. NKK NIPPON KOEI CO., LTD. NKS NKS CONSULTANTS CO., LTD.										DUCT BANK DETAILS												DRAWING SCALE: AS SHOWN	
JUNE 2013		DATE		INDEX		AMENDMENTS		Prepared by		Checked by		Validated by											

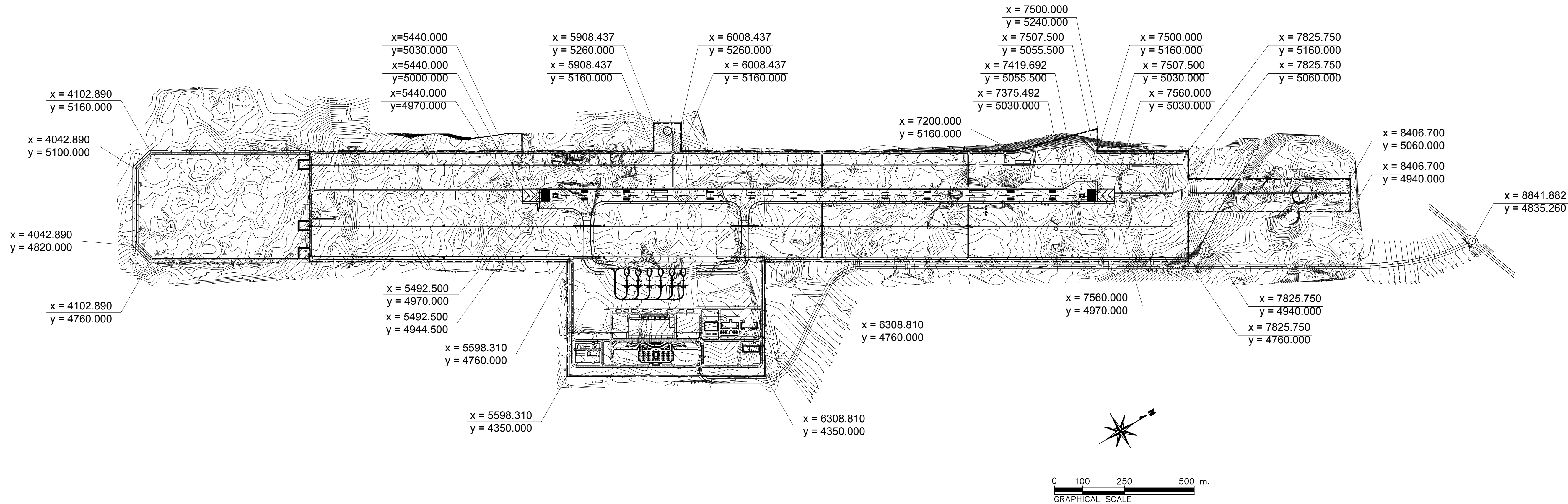


SUMMARY OF CONTROL					
POINT	NORTHING	EASTING	Y	X	ELEVATION
PABM1	1058884.025	365067.009	4795.355	6273.454	
PABM2	1058673.780	365419.024	4385.355	6273.454	7.932
PABM3	1058399.150	365254.996	4385.355	5953.560	8.219
PABM4	1058124.490	365091.031	4795.355	5633.665	8.919
PABM5	1058334.710	364738.962	4795.355	5633.665	7.111
PABM6	1057790.680	364414.119	4795.355	5000.000	7.509
PABM7	1056999.230	363941.577	4795.355	4078.245	3.402
PABM8	1057168.070	363658.861	5124.645	4078.245	1.542
PABM9	1057959.500	364131.434	5124.645	5000.000	5.562
PABM10	1058563.540	364492.127	5124.645	5703.560	6.163
PABM11	1058992.830	364748.448	5124.645	6203.560	6.395
PABM12	1059549.380	365080.794	5124.645	6851.780	7.198
PABM13	1060105.940	365413.086	5124.645	7500.000	7.605
PABM14	1060781.480	365816.471	5124.645	8286.799	12.210
PABM15	1060685.230	366142.531	4795.355	8371.345	13.157
PABM16	1059937.120	365695.812	4795.355	7500.000	8.453
PABM17	1059380.550	365363.499	4795.355	6851.780	8.387
RPVT 1	1060863.171	365882.604	5109.884	8391.539	12.994
RPVT 2	1060156.860	365821.720	4803.865	7752.059	9.362
RPVT 3	1058889.967	365100.642	4769.525	6295.798	7.470
RPVT 4	1057186.790	364082.420	4795.079	4310.199	3.911
RPVT 5	1058109.270	364220.500	5124.966	5174.280	6.676
RWY1	1057895.571	364238.442	5000.000	5000.000	-
RWY2	1060042.035	365520.118	5000.000	7500.000	-

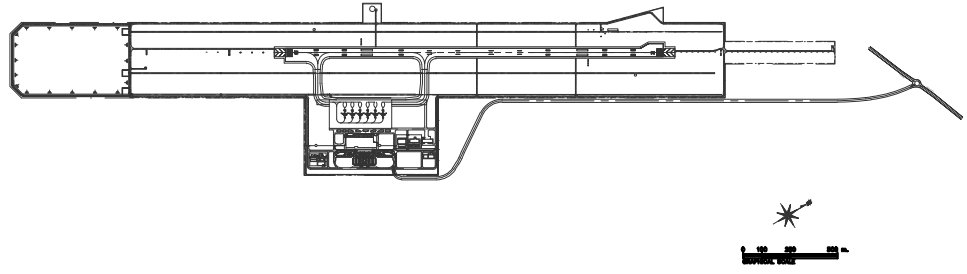
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PRIMARY CONTROL POINTS

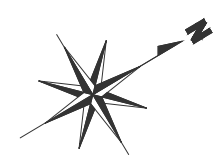
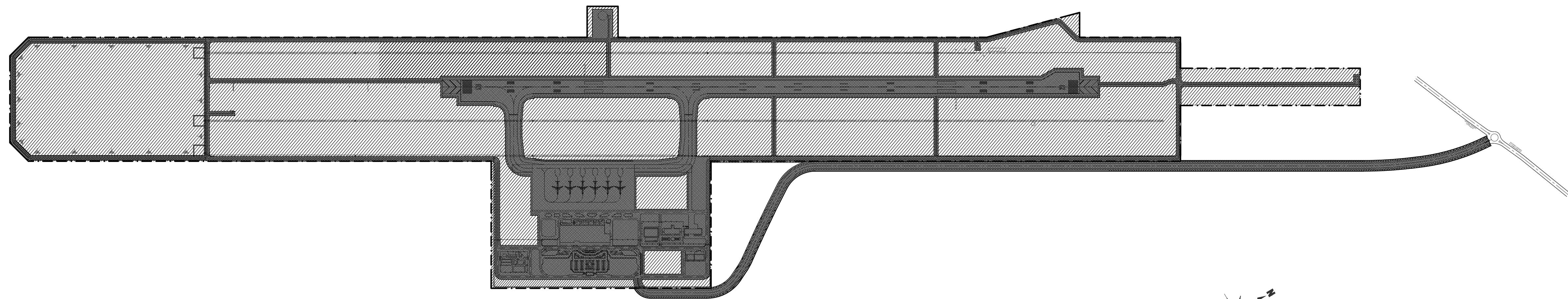
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 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS JICA JAPAN INTERNATIONAL COOPERATION AGENCY	JICA DESIGN CONSULTANT JOINT VENTURE JAPAN AIRPORT CONSULTANTS, INC. NIPPON KOEI CO., LTD. NJS CONSULTANTS CO., LTD.	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:								SHEET CONTENTS:	SHEET NO:
		ERACIO T. PATDU			NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT								COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-2 AIRPORT INFRASTRUCTURE EARTH WORKS	C2-2100-02
		PROF. CIVIL ENGINEER PIR. 3158241 REG. NO.: 34252 DATE: JULY 18, 2013 T.JAN. 199-699-561 PLACE: CAGAYAN DE ORO CITY											SITE TOPOGRAPHIC MAP	DRAWING SCALE:
		TADASHI AOI Team Leader	ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	JUNE 2013					WIM	HC	1 : 8000 M	
						DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by			

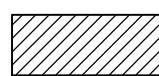


KEY PLAN



A graphical scale bar is shown below the map. It is a horizontal line with tick marks at 0, 100, 250, and 500 m. The text "GRAPHICAL SCALE" is written below the bar.

LEGEND:



CLEARING AND GRUBBING



TOPSOIL REMOVAL

NOTE:

TOPSOIL REMOVAL MINIMUM OF 0.30 M. DEPTH AND SHALL
EXTEND 5.00M. OUTWARD FROM THE LIMITS OF PROPOSED
PAVEMENT EDGES.

CLEARING & GRUBBING AND TOPSOIL REMOVAL



Republic of the Philippines
DEPARTMENT OF TRANSPORTATION
AND
COMMUNICATIONS



JAPAN
INTERNATIONAL
COOPERATION
AGENCY

PREPARED BY:

ERACIO T. PATDU

PROF:	CIVIL ENGINEER	PTR.	3158241
REG. NO.:	34252	DATE:	JULY 18, 2013
T.J.N.	199-899-561	PLACE:	CAGAYAN DE ORO CITY

RECOMMENDING APPROVAL:

ILDEFONSO T. PATDU, JR.
Assistant Secretary
for Project Implementation, DOTC

APPROVED:

JULIANITO G. BUCAYAN, JR.
Undersecretary
for Project Implementation, DOTC

PROJECT TITLE:

NEW BOHOL AIRPORT CONSTRUCTION AND
SUSTAINABLE ENVIRONMENT PROTECTION PROJECT

LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES

JUNE 2013

	DATE
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INDEX

AMENDMENTS

Prepared by	
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Checked
byValidated
by

SHEET CONTENTS:

COMPONENT-2 CIVIL WORKS (C)	C
SUBCOMPONENT-2-2 AIRPORT INFRASTRUCTURE	
EARTH WORKS	

CLEARING & GRUBBING AND TOPSOIL REMOVAL	
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SHEET NO:

2-2100-03

DRAWING SCALE:

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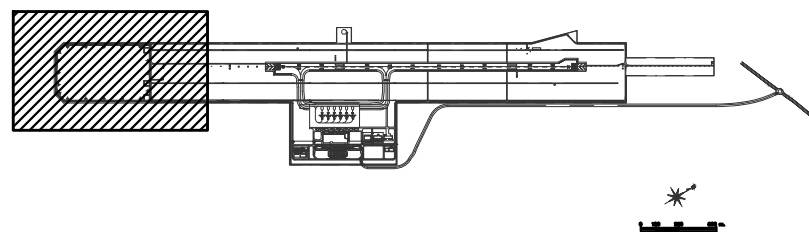
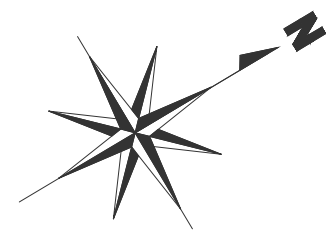
JAPAN AIRPORT
CONSULTANTS,
INC.



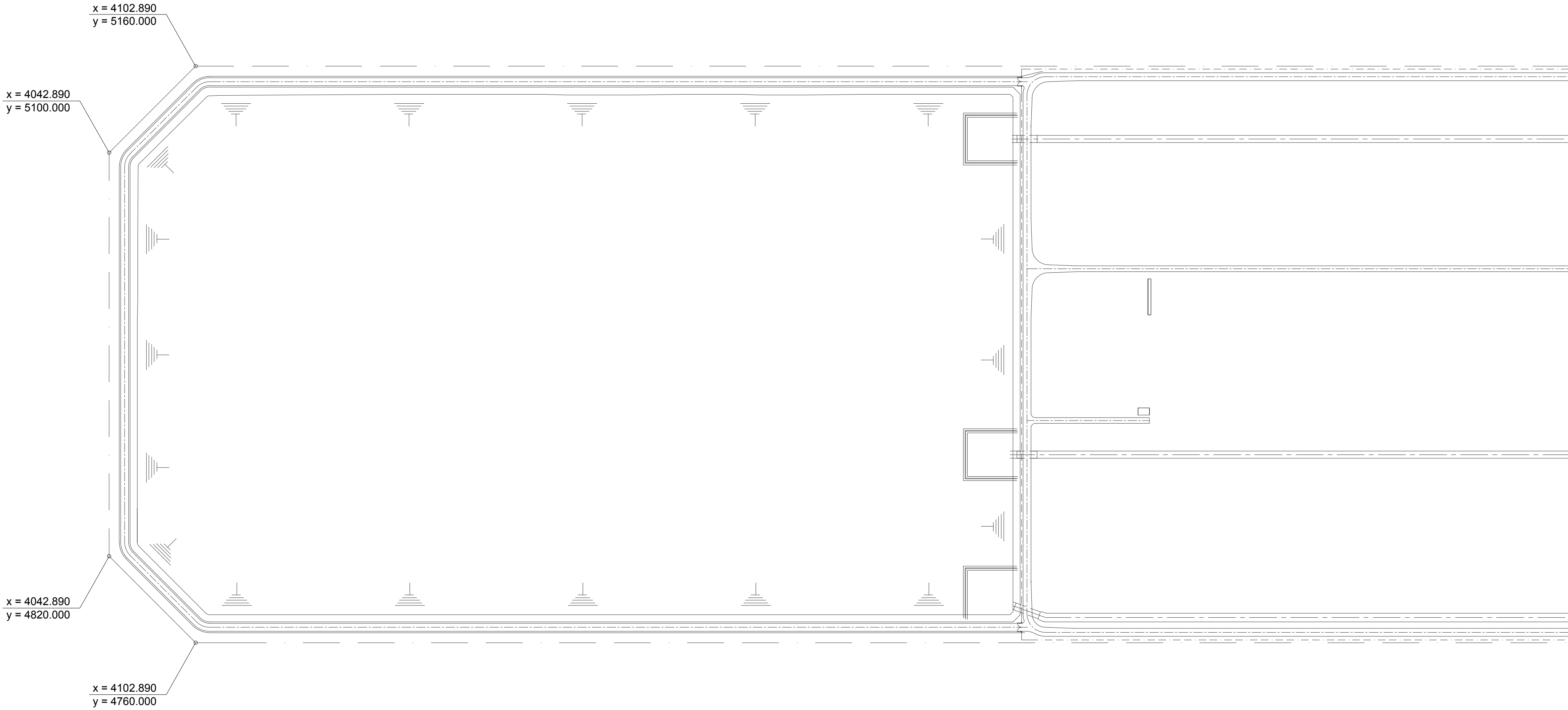
NIPPON KOEI
CO., LTD.



NJS CONSULTANTS
CO., LTD.



KEY PLAN



MATCH LINE
FOR CONTINUATION REFER TO
SHEET NO. C1-2100-06

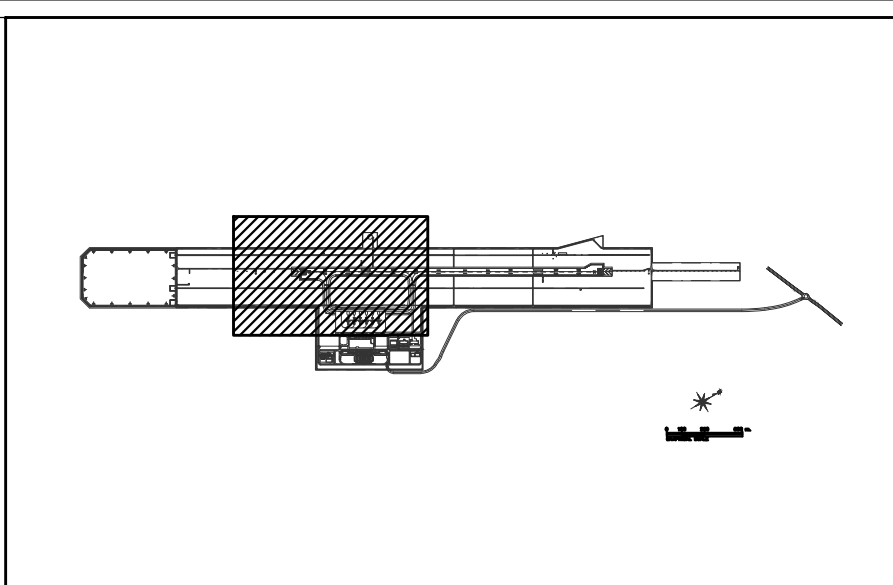
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C2-2100-04

GEOMETRIC AND BASIC POINTS (1) AERONAUTICAL AREAS

SCALE

1:2000 m.

 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS  JAPAN INTERNATIONAL COOPERATION AGENCY		PREPARED BY:		RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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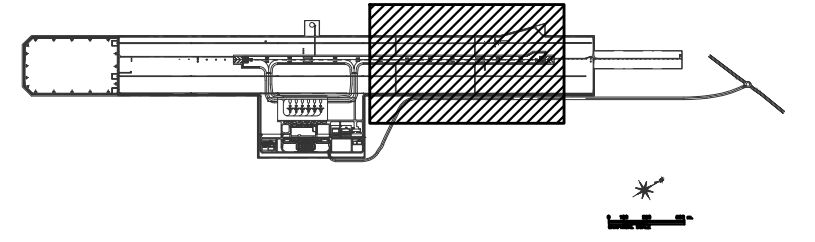
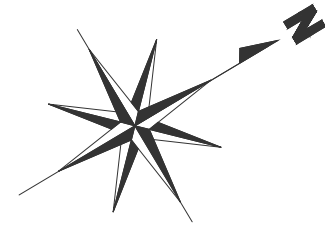
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C2-2100-05

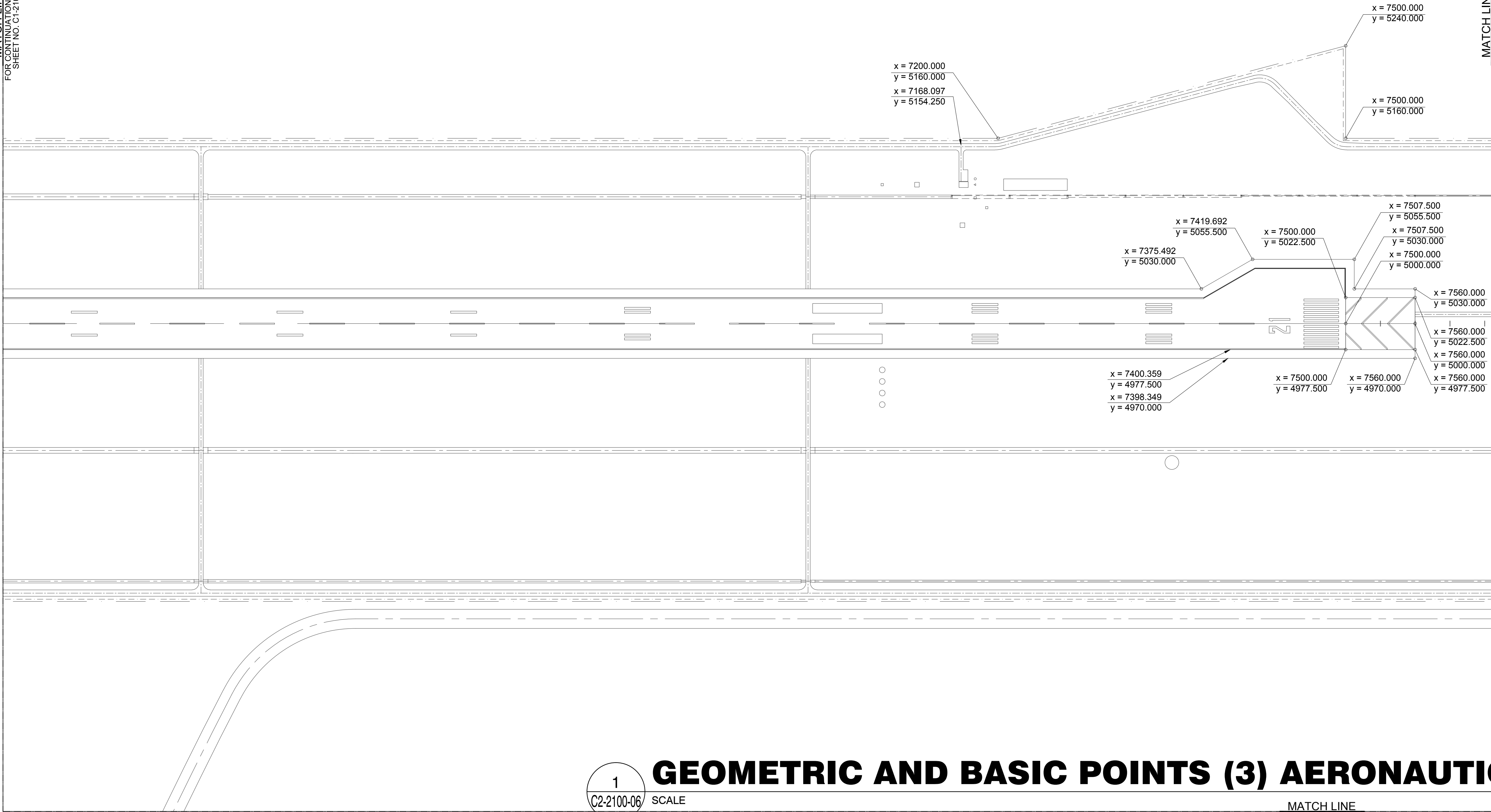
 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS		 JICA JAPAN INTERNATIONAL COOPERATION AGENCY		PREPARED BY: ERACIO T. PATDU PROJ: CIVIL ENGINEER PIR: 3158241 REG. NO.: 34252 DATE: JULY 18, 2013 T.A.N. 199-899-561 PLACE: CAGAYAN DE ORO CITY		RECOMMENDING APPROVAL: <u>ILDEFONSO T. PATDU, JR.</u> Assistant Secretary for Project Implementation, DOTC		APPROVED: <u>JULIANITO G. BUCAYAN, JR.</u> Undersecretary for Project Implementation, DOTC		PROJECT TITLE: NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT										SHEET CONTENTS: COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-2 AIRPORT INFRASTRUCTURE EARTH WORKS		SHEET NO: C2-2100-05					
JICA DESIGN CONSULTANT JOINT VENTURE  JAPAN AIRPORT CONSULTANTS, INC.  NIPPON KOEI CO., LTD.  NJS CONSULTANTS CO., LTD.										LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES		DATE		INDEX		AMENDMENTS		Prepared by		Checked by		Validated by		GEOMETRIC AND BASIC POINTS (2) AERONAUTICAL AREAS		DRAWING SCALE: 1 : 2000 M	
										JUNE 2013						WIM		HC									



KEY PLAN

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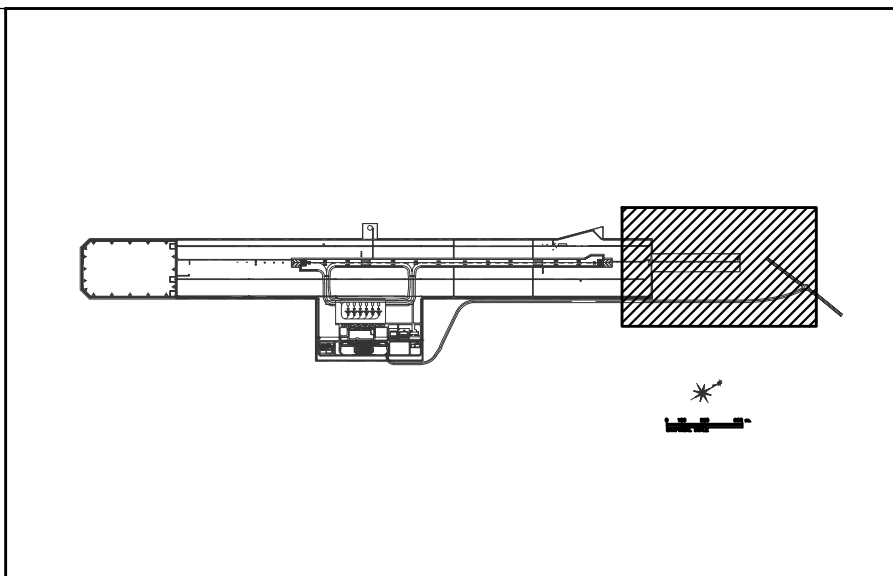
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C2-2100-06 SCALE

GEOMETRIC AND BASIC POINTS (3) AERONAUTICAL AREAS

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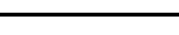
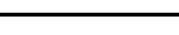
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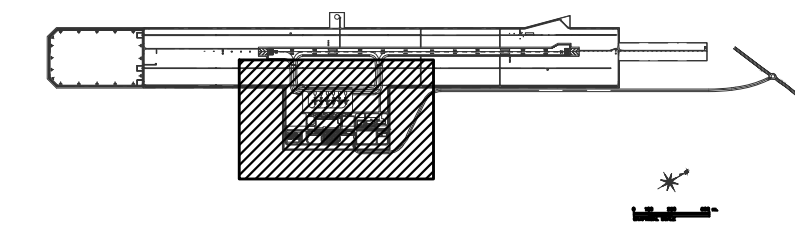
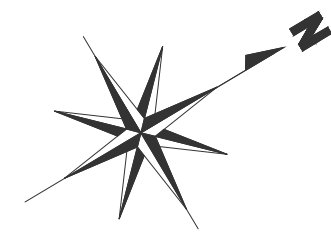
 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS	 JICA JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:							SHEET CONTENTS:	SHEET NO:	
		ERACIO T. PATDU PROF. CIVIL ENGINEER PTR. 3158241 REG. NO.: 34252 DATE: JULY 18, 2013 T.JAN. 199-699-561 PLACE: CAGAYAN DE ORO CITY			NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT							COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-2 AIRPORT INFRASTRUCTURE EARTH WORKS	C2-2100-06	
JICA DESIGN CONSULTANT JOINT VENTURE												GEOMETRIC AND BASIC POINTS (3) AERONAUTICAL AREAS	DRAWING SCALE:	
 JAC JAPAN AIRPORT CONSULTANTS, INC.	 NIPPON KOEI CO., LTD.	 NJS CONSULTANTS CO., LTD.	TADASHI AOI Team Leader	ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	JUNE 2013					WIM	HC	1 : 2000 M
						DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by			



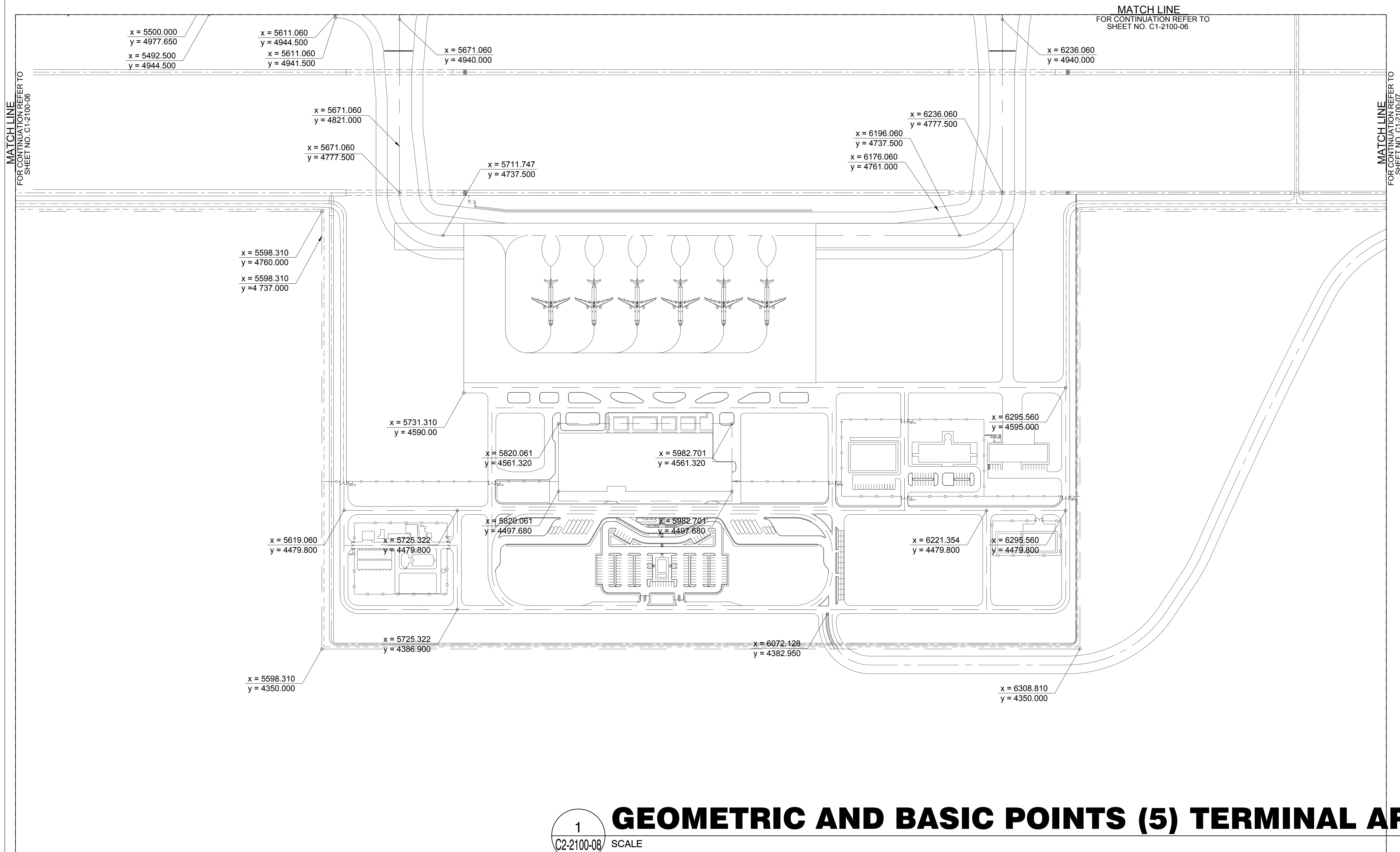
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SHEET NO. C1-2100-07



 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS		 JAPAN INTERNATIONAL COOPERATION AGENCY		PREPARED BY: ERACIO T. PATDU PROF. CIVIL ENGINEER PTR. 3192641 REG. NO.: 34252 DATE: JULY 18, 2013 T.A.N. 199-899-561 PLACE: CAGAYAN DE ORO CITY		RECOMMENDING APPROVAL: ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC		APPROVED: JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC		PROJECT TITLE: NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT										SHEET CONTENTS: COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-2 AIRPORT INFRASTRUCTURE EARTH WORKS		SHEET NO: C2-2100-07			
JICA DESIGN CONSULTANT JOINT VENTURE  JAPAN AIRPORT CONSULTANTS, INC.  NIPPON KOEI CO., LTD.  NIS CONSULTANTS CO., LTD.										LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES		DATE JUNE 2013		INDEX		AMENDMENTS		Prepared by		Checked by		Validated by		DRAWING SCALE: 1 : 2000 M	

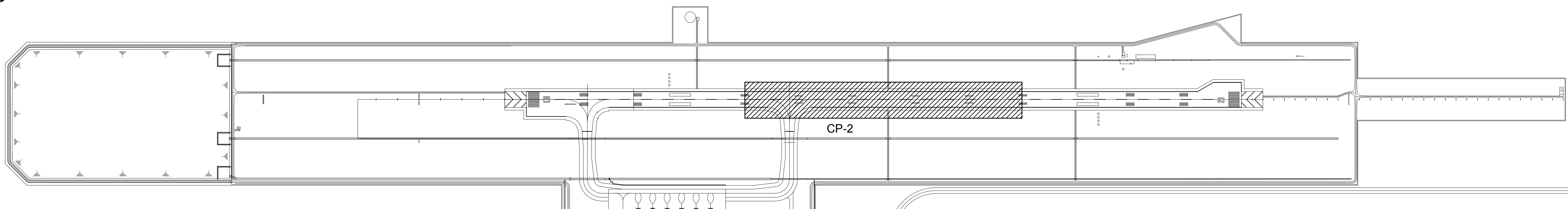


KEY PLAN



1 GEOMETRIC AND BASIC POINTS (5) TERMINAL AREAS
C2-2100-08 SCALE 1:2000 m.

 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS	 JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:							SHEET CONTENTS:	SHEET NO:
		ERACIO T. PATDU PROF. CIVIL ENGINEER PIR. 3158241 REG. NO.: 34252 DATE: JULY 18, 2013 TJAN. 199-699-561 PLACE: CAGAYAN DE ORO CITY	ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	JUNE 2013						COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-2 AIRPORT INFRASTRUCTURE EARTH WORKS GEOMETRIC AND BASIC POINTS (5) TERMINAL AREAS	C2-2100-08 DRAWING SCALE: 1 : 2000 M



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C2-2100

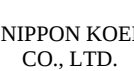


(2)
C2-2100

VERTICAL	1:100 m.
HORIZONTAL	1:1000 m.



JICA DESIGN CONSULTANT JOINT VENTURE



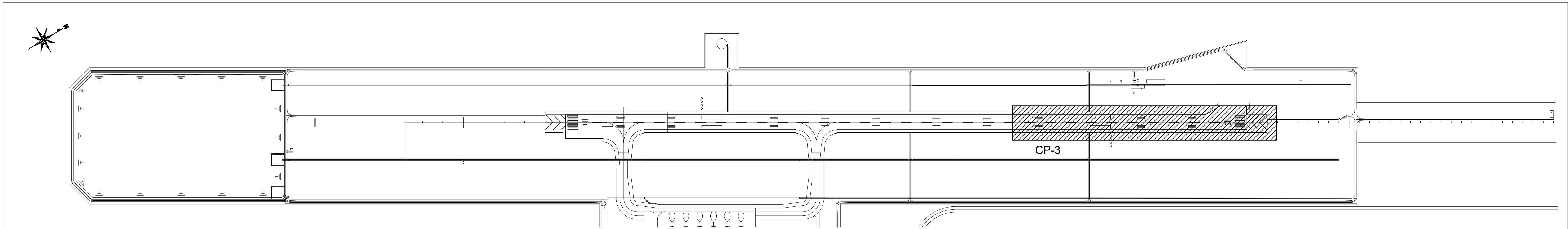
TADASHI AOI
Team Leader

ILDEFONSO T. PATDU, JR.
Assistant Secretary
for Project Implementation, DOT

JULIANITO G. BUCAYAN, JR.
Undersecretary
for Project Implementation, DOTC

LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES

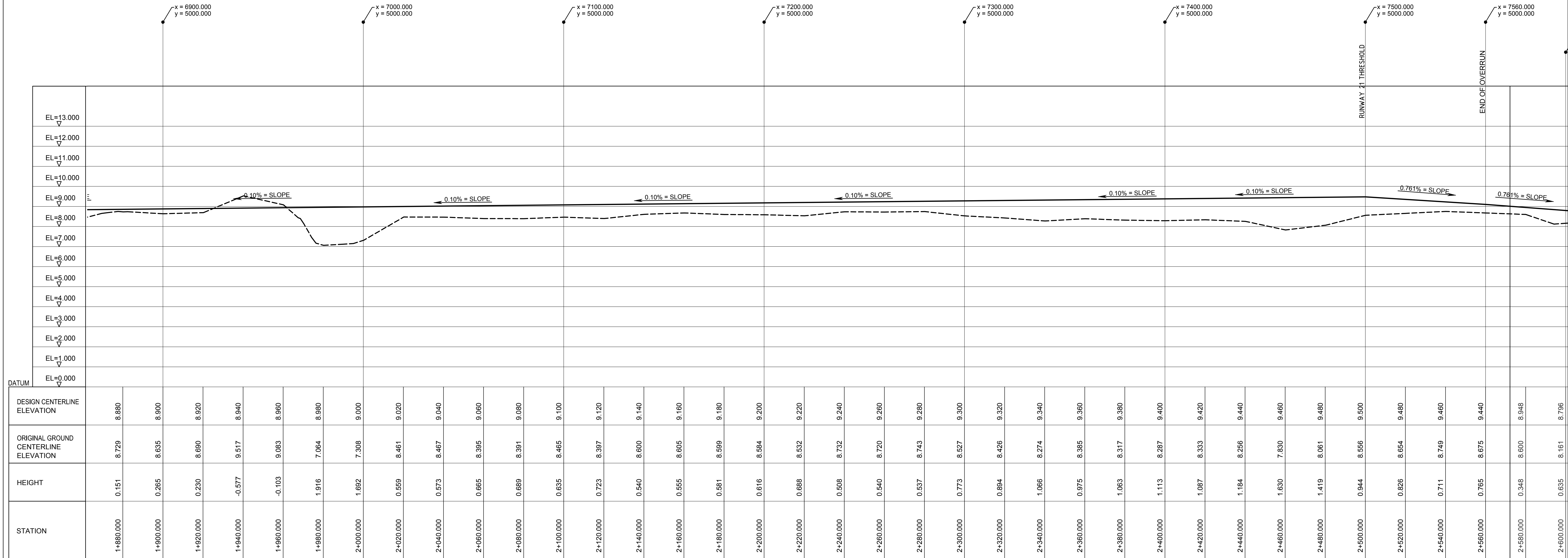
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							COMPONENT-2 CIVIL WORKS (C)	C2-2100-10
							SUBCOMPONENT-2-2 AIRPORT INFRASTRUCTURE EARTH WORKS	
							RUNWAY PROFILE (2)	DRAWING SCALE:
JUNE 2015					WIM	HC		AS SHOWN
DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by			



1
C2-2100-11

AIRSIDE KEYPLAN

SCALE 1:6000 m.

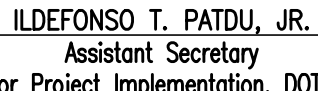
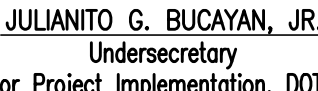


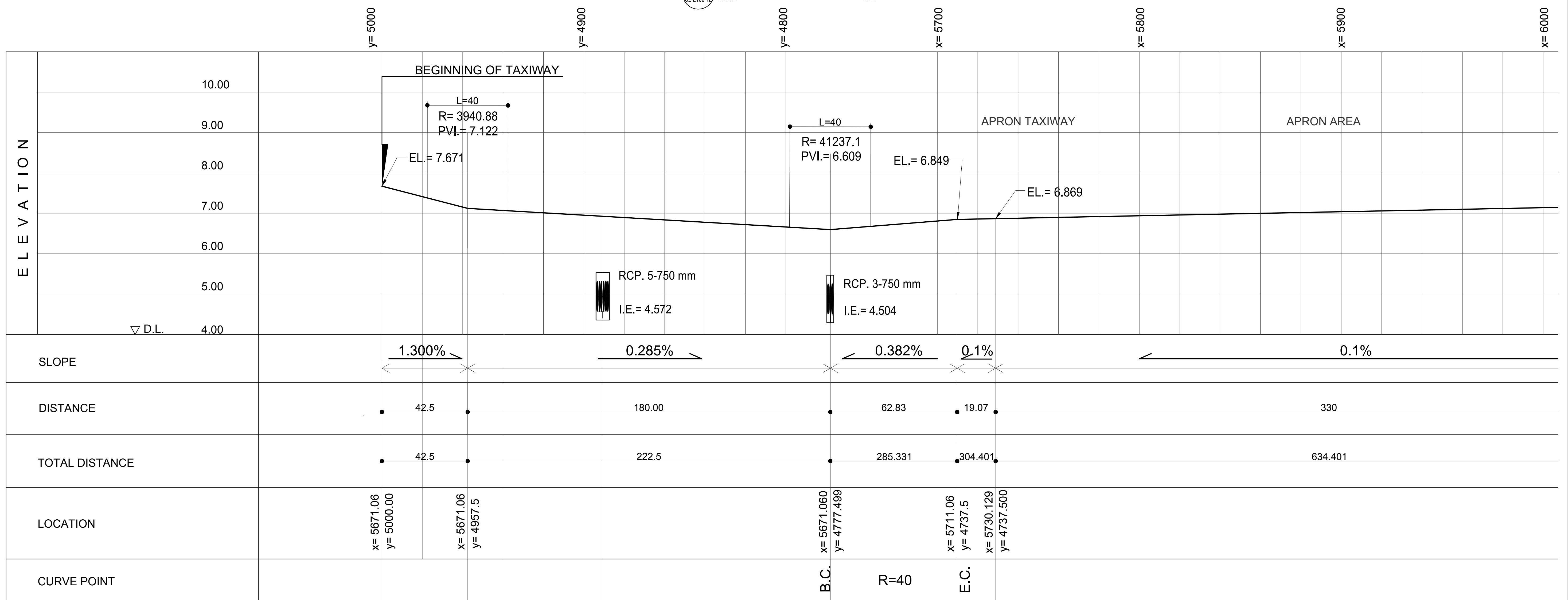
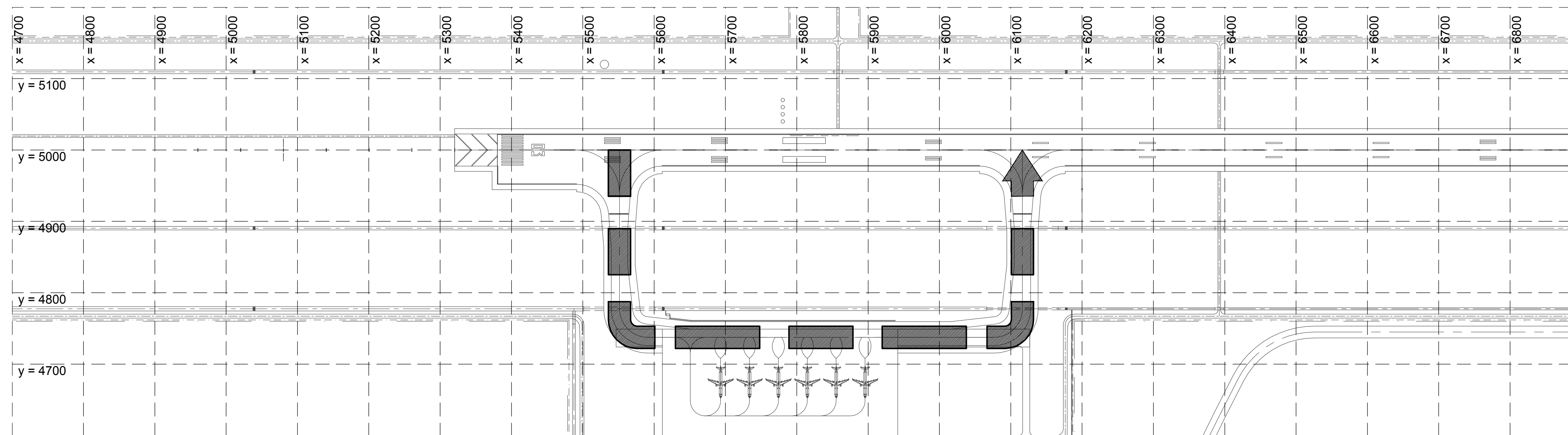
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C2-2100-11

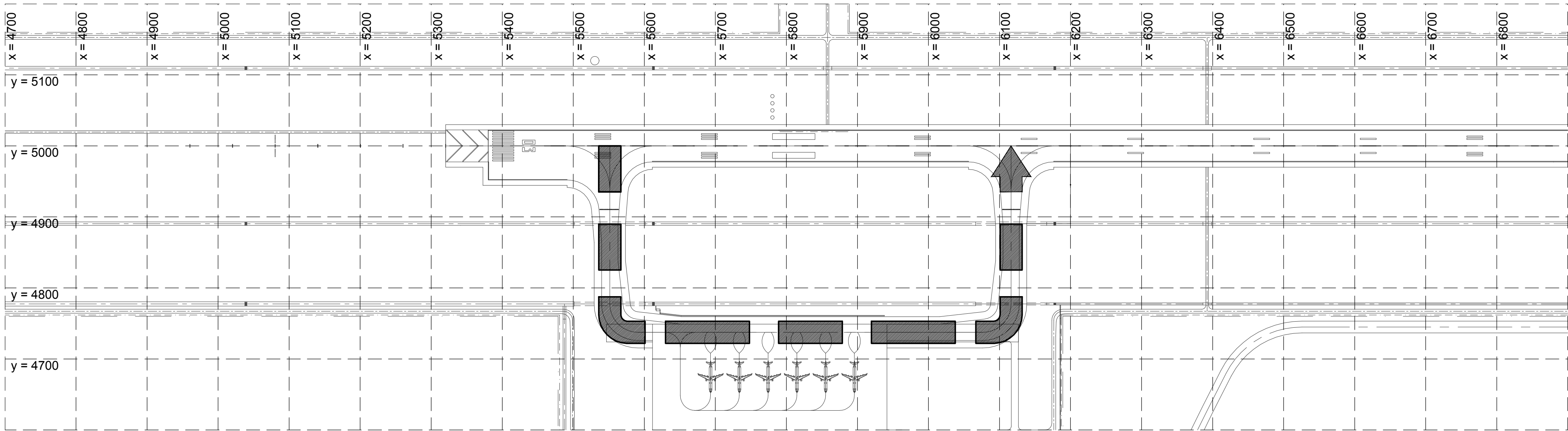
RUNWAY PROFILE (3)

VERTICAL SCALE 1:100 m.
HORIZONTAL SCALE 1:1000 m.

LEGEND:

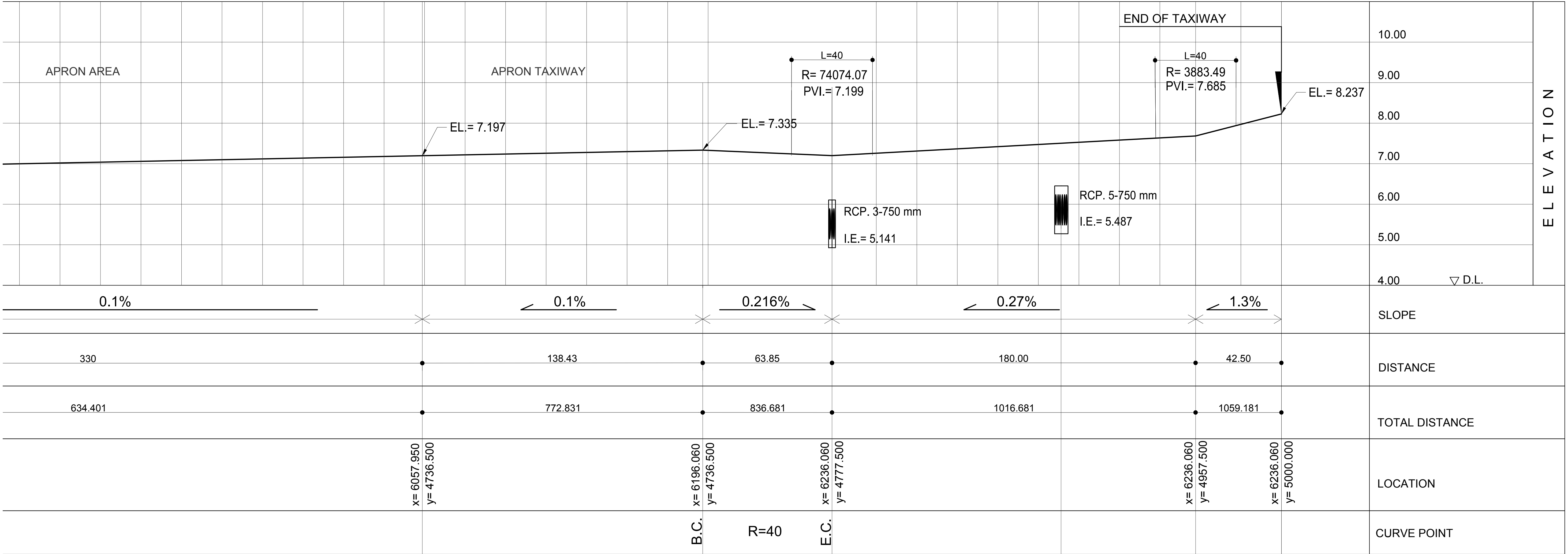
 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS	 JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:							SHEET CONTENTS:	SHEET NO:	
		ERACIO T. PATDU PROF. CIVIL ENGINEER PIR. 3158241 REG. NO.: 34252 DATE: JULY 18, 2013 T.JAN. 199-699-561 PLACE: CAGARIAN DE ORD CITY	 ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC	 JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC	NEW BOHOL AIRPORT CONSTRUCTION AND SUSTAINABLE ENVIRONMENT PROTECTION PROJECT	LOCATION: MUNICIPALITY OF PANGLAO, PROVINCE OF BOHOL, PHILIPPINES	JUNE 2013	DATE	INDEX	AMENDMENTS	Prepared by	Checked by	Validated by	COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-2 AIRPORT INFRASTRUCTURE EARTH WORKS
JICA DESIGN CONSULTANT JOINT VENTURE  JAPAN AIRPORT CONSULTANTS, INC.  NIPPON KOEI CO., LTD.  NJS CONSULTANTS CO., LTD.	DRAWING SCALE:													
													RUNWAY PROFILE (3)	AS SHOWN





1
C2-2100-13
SCALE
MTS.

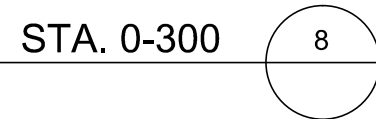
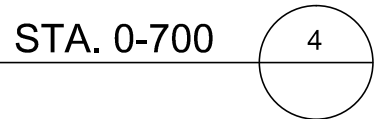
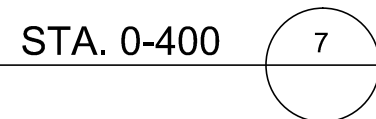
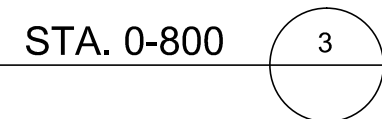
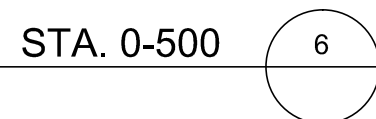
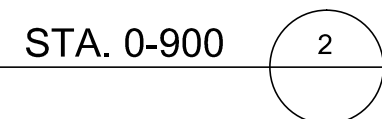
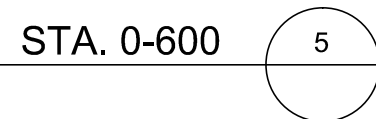
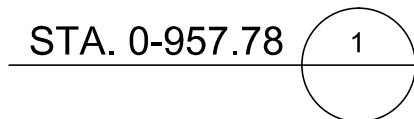
TAXIWAY PLAN



1
C2-2100-13
SCALE
MTS.

TAXIWAY PROFILE

 Republic of the Philippines DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS	 JAPAN INTERNATIONAL COOPERATION AGENCY	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	PROJECT TITLE:	SHEET CONTENTS:			SHEET NO:	
		ERACIO T. PATDU PROF. CIVIL ENGINEER REG. NO.: 34252 T.JAN. 199-699-561		ILDEFONSO T. PATDU, JR. Assistant Secretary for Project Implementation, DOTC		JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC		COMPONENT-2 CIVIL WORKS (C) SUBCOMPONENT-2-2 AIRPORT INFRASTRUCTURE EARTH WORKS TAXIWAY PROFILE (2)		
JICA DESIGN CONSULTANT JOINT VENTURE JAPAN AIRPORT CONSULTANTS, INC. NIPPON KOEI CO., LTD. NJS CONSULTANTS CO., LTD.		TADASHI AOI Team Leader		JULIANITO G. BUCAYAN, JR. Undersecretary for Project Implementation, DOTC		DATE INDEX AMENDMENTS			Prepared by Checked by Validated by	DRAWING SCALE: AS SHOWN



1
C2-2100-14 SCALE

STA. 0-300 8



AS SHOWN