

**PHILIPPINE
PORTS
AUTHORITY**



PORT MANAGEMENT OFFICE - MARINDUQUE/QUEZON

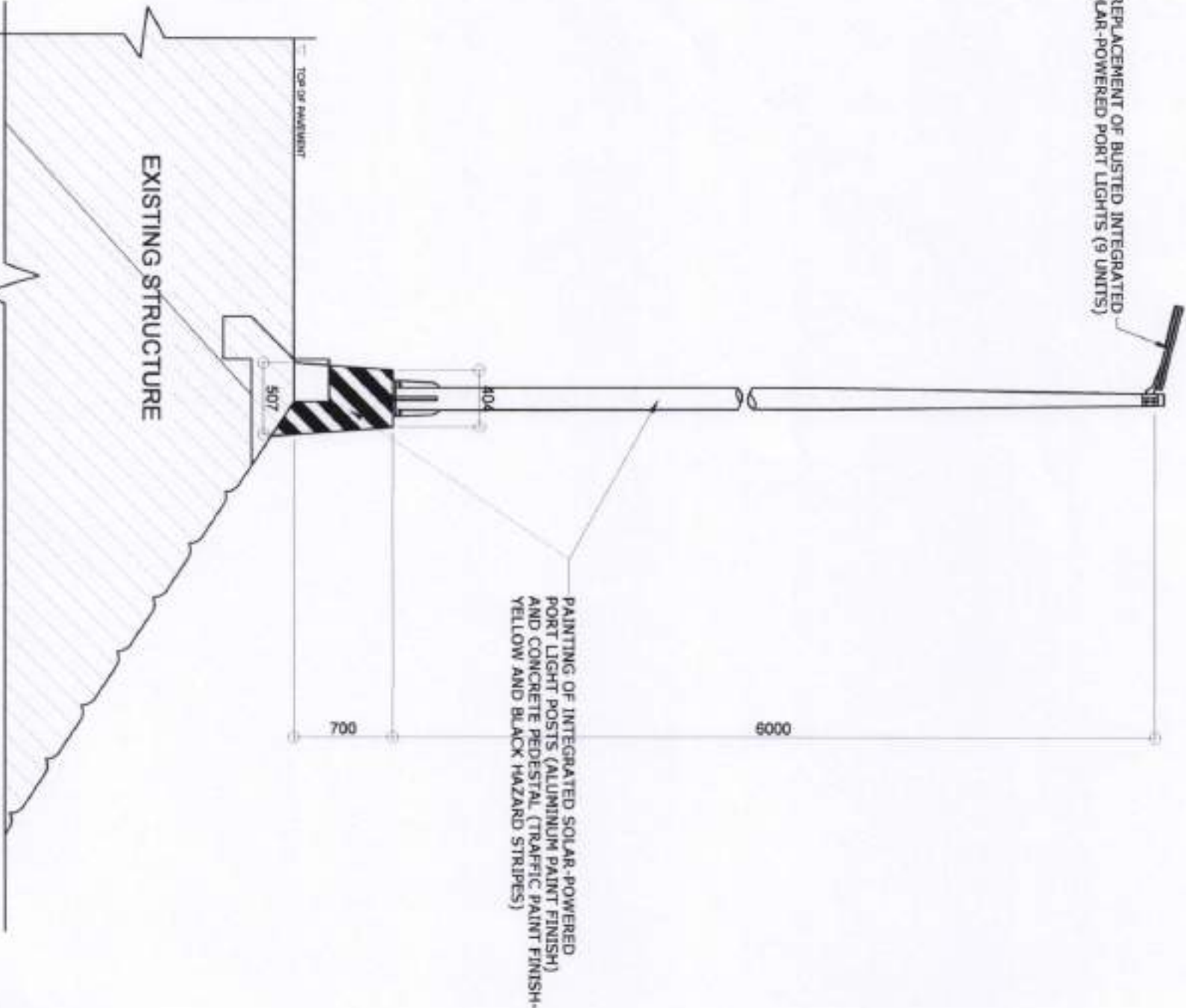
CONSTRUCTION DRAWINGS

**MAINTENANCE OF
PORT FACILITIES**

PORT OF SAN ANDRES

QUEZON

REPLACEMENT OF BUSTED INTEGRATED
SOLAR-POWERED PORT LIGHTS (9 UNITS)



120W LED INTEGRATED SOLAR-POWERED PORT LIGHT
(WARM WHITE)

DESCRIPTION:	
LED CHIPS	120W
LUMENS	MINIMUM 19,200 LUMENS
SOLAR PANEL	MIN. 18V / 130W MONO-CRYSTALLINE
BATTERY	MIN. 12V / 56AH LITHIUM BATTERY
MATERIAL	ALUMINUM CASING
PROTECTION GRADE	MINIMUM IP65

SPECIFICATION: INTEGRATED SOLAR-POWERED
PORT LIGHTING

DETAIL OF INTEGRATED SOLAR POWERED
PORT LIGHTS (SINGLE)

SCALE

1:40

PHILIPPINE PORTS AUTHORITY 	PROJECT/LOCATION:		PREPARED BY:		CHECKED/REVIEWED BY:		RECOMMENDING APPROVAL:		APPROVED:		SHEET CONTENTS		SHEET NO.
	MAINTENANCE OF PORT LIGHTING SYSTEM PORT OF SAN ANDRES QUEZON		 JOHN PAULO G. GONZALES ACTING SENIOR ENGINEER A		 GERLIE D. TABOCCO PRINCIPAL ENGINEER A		 PAUL A. LIBAQUE ESD MANAGER		 ANNA THERESA M. BISCOCHO ACTING PORT MANAGER		●DETAIL OF INTEGRATED SOLAR POWERED PORT LIGHT (SINGLE) ●SPECIFICATION: INTEGRATED SOLAR-POWERED PORT LIGHTING		
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PORT MANAGEMENT OFFICE - MARQUEZ

PORT OF SAN ANDRES

QUEZON

4-UNITS 200W/LED
FLOOD LIGHTS

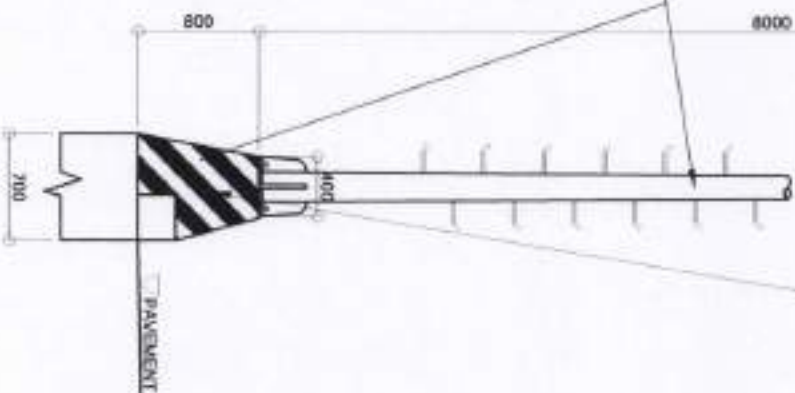


REPLACEMENT OF DAMAGED T-POST WITH FOUR (4) UNITS OF FLOODLIGHTS
INCLUDING CHIPPING AND RESTORATION OF EXISTING CONCRETE PEDESTAL

T-POST DETAIL:

HOT-DIP GALVANIZED TAPERED STEEL POST, 8 METERS, 101.6MM TOP X 177.8MM BASE
X 3MM THK., WITH DETACHABLE DOUBLE CROSS ANGLE BAR ON TOP 75MM X 75MM X 2M,
WELDED WITH 400MM X 400MM X 18MM THK. BASE PLATE, 16MM STEP LADDER,
COMPLETE WITH 4 PCS. 1" X 33" ANCHOR BOLTS, NUTS AND WASHERS.

PAINTING OF T-POST (ALUMINUM PAINT)
AND CONCRETE PEDESTAL (TRAFFIC PAINT -
YELLOW AND BLACK HAZARD STRIPES)



200W LED FLOODLIGHT

LIGHTING FACTS

INPUT VOLTAGE (V)	AC85-265V, 50/60Hz
POWER	200W
POWER FACTOR	>0.95
POWER EFFICIENCY	>90%
CRI	>70
LIGHT ANGLE	25°, 40°, 60°, 120°
IP CLASS	IP68
LUMINOUS EFFICIENCY	100lm/watt
LUMINOUS FLUX	200,000lm
EQUAL LUMINOUS FLUX	400,000lm
LIFE SPAN	>80,000 hours
WORK TEMP	-25°C - 55°C
WORK HUMIDITY	10% - 90%
LIFE ATTENUATION	at 80,000hrs. 30%
SIZE (L W H)	450 X 320X 180

200W LED FLOODLIGHT SPECIFICATION

DETAIL OF T-POST

SCALE

1:50

PROJECT/LOCATION:

PREPARED BY:

CHECKED/REVIEWED BY:

RECOMMENDING APPROVAL:

APPROVED:

SHEET CONTENTS

SHEET NO.

PHILIPPINE
PORTS
AUTHORITY



MAINTENANCE OF
PORT LIGHTING SYSTEM
PORT OF SAN ANDRES
QUEZON

JOHN PAUL GONZALES
ACTING SENIOR ENGINEER A

GERLIE D. TABERO
PRINCIPAL ENGINEER A

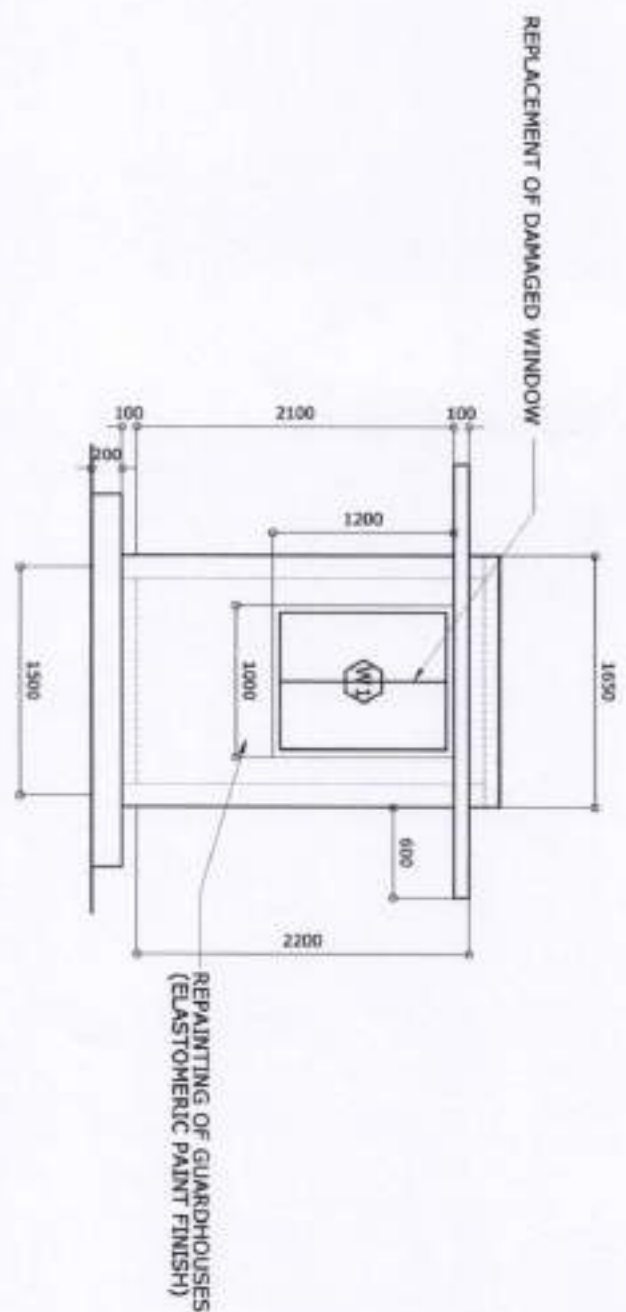
RAUL A. LIBARTIQUE
ESD MANAGER

ANNA LYNESKIM, BISCOCHO
ACTING PORT MANAGER

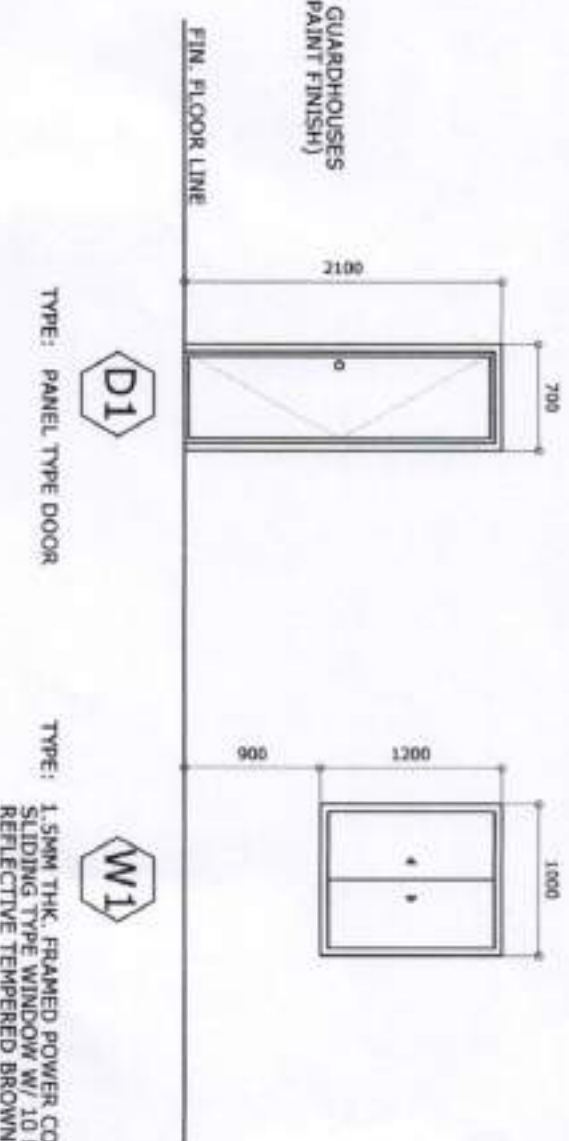
●DETAIL OF T-POST
●200W LED FLOODLIGHT
SPECIFICATION

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- REPAIRING OF GUARDBOUSES (64.00 SQ.M.)
- REPLACEMENT OF DAMAGED DOORS AND WINDOWS (7.74 SQ.M.)



SCALE



SCALE



SCALE



PHILIPPINE PORTS AUTHORITY  PORT MANAGEMENT OFFICE - MARQUEZ	PROJECT/LOCATION:	PREPARED BY:	CHECKED/REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS	SHEET NO.
	MAINTENANCE OF PORT FACILITIES PORT OF SAN ANDRES QUEZON	 JOHN PAULO D. GONZALES ACTING SENIOR ENGINEER A	 GERLIE D. TAPOD PRINCIPAL ENGINEER A	 RAUL A. LIBATIQUE ESD MANAGER	 ANNA THEA S. BISCOCHO ACTING PORT MANAGER	● G+1 FLOOR PLAN ● FRONT & LEFT SIDE ELEV. ● REAR ELEVATION ● SECTION A ● SCHED. OF DOORS & WINDOWS	4 / 5

Technical drawing of a mechanical part. The part consists of a main body with a width of 300 and a height of 1000. A central section of the main body is filled with diagonal black and white stripes. To the right of the main body is a smaller section with a width of 50 and a height of 400. The total width of the part is 300 + 50 = 350.

DETAIL OF MOORING POST AND BASE
SCALE 1:20

1:20

Figure 1 is a plan view of the bridge deck. The overall width is 600 cm and the depth is 375 cm. The deck is divided into sections with widths of 385 cm, 2558 mm, and 3000 mm. Reinforcement details include 25 mm bars, 480 mm spacing, and 150 mm spacing. A 4-22 # bar is shown at the bottom. The deck is supported by a 150 mm wide base.

DETAIL OF MOORING BOLLARD

NTS