BAGONG PILIPINAS

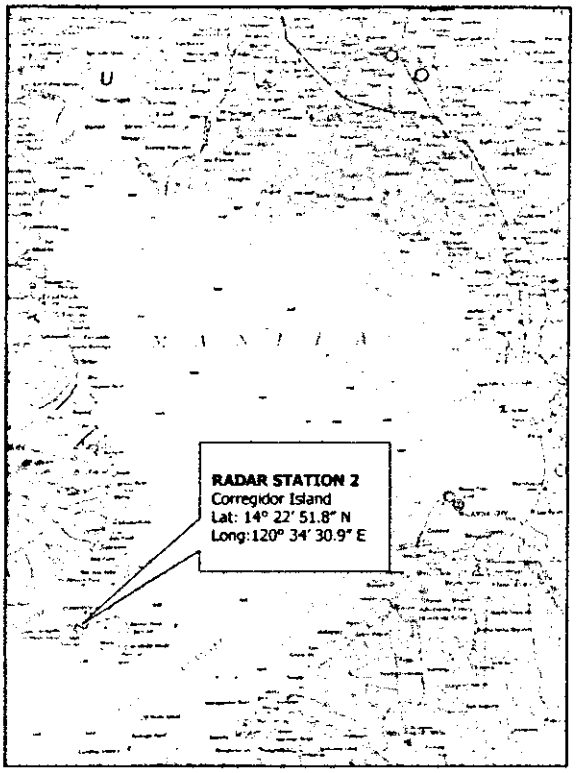
PHILIPPINE PORTS AUTHORITY

RESTORATION/IMPROVEMENT AND REPAINTING OF VTMS RADAR STATION 2 FACILITY

AT CORREGIDOR ISLAND, CAVITE
(HO-RM INFRA-AGME 24-034)

LOCATION MAP

3. Radar Station 2 (Corregidor Island)



BID DOCUMENTS

JUNE 2024

TABLE OF CONTENTS

PAGE

Glossary of Terms, Abbreviations, and Acronyms ..... iii-iv

SECTION I INVITATION TO BID 1-2

SECTION II INSTRUCTIONS TO BIDDERS ..... ITB 1-6

1. Scope of Bid 1
2. Funding Information 1
3. Bidding Requirements 1
4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices 1
5. Eligible Bidders 2
6. Origin of Associated Goods 2
7. Subcontracts 2
8. Pre-Bid Conference 3
9. Clarification and Amendment of Bidding Documents 3
10. Documents Comprising the Bid: Eligibility and Technical Components 3
11. Documents Comprising the Bid: Financial Component 4
12. Alternative Bids 4
13. Bid Prices 4
14. Bid and Payment Currencies 4
15. Bid Security 4
16. Sealing and Marking of Bids 5
17. Deadline for Submission of Bids 5
18. Opening and Preliminary Examination of Bids 5
19. Detailed Evaluation and Comparison of Bids 5
20. Post Qualification 6
21. Signing of Contract 6

SECTION III BID DATA SHEET ..... BDS 1-2

SECTION IV GENERAL CONDITIONS OF CONTRACT ..... GCC 1-4

1. Scope of Contract 1
2. Sectional Completion of Works 1
3. Possession of Site 1
4. The Contractor's Obligations 1
5. Performance Security 2
6. Site Investigation Reports 2
7. Warranty 2
8. Liability of the Contractor 2
9. Termination for Other Causes 2
10. Dayworks 3
11. Program of Work 3
12. Instructions, Inspections and Audits 3
13. Advance Payment 3
14. Progress Payment 3
15. Operating and Maintenance Manuals 4

SECTION V SPECIAL CONDITIONS OF CONTRACT ..... SCC 1

SECTION VI TECHNICAL SPECIFICATIONS ..... TS 1-25

Division 01: Demolition and Removal Works 1-2
Division 02: Metal Works 3-7
Division 03: Welded Structural Steel 8-11
Division 04: Painting Works 12-17
Division 05: Roofing 18
Division 06: Aluminum Glass Windows 19-20

	Division 07: Waterproofing	21
	Division 08: Project Billboard	22-24
	Division 09: Safety Signages and Barricades	25
SECTION VII	DRAWINGS (APPROVED PLANS)	PD 1-9
SECTION VIII	BILL OF QUANTITIES AND ATTACHMENTS	BQ 1-30
	1a Bid Summary	1/1
	1b Bill of Quantities	1-11/11
	2. Annex 1 (Basis of Payments)	13
	3. Annex 2 (Facilities to be Provided)	19
	4. Annex 3 (Minimum Equipment Requirements)	20
	5. Annex 4 (Construction Safety and Health Requirements)	21
	6. Annex 5 (Minimum Testing Requirements)	22
SECTION IX	Checklist of Technical and Financial Documents	CL 1-2
SECTION X	BIDDING FORMS	BF 1-21
	1. Bid Form	1-2
	2. Statement of all On-going Government and Private Contracts, including contracts awarded but not yet started	3
	3. Statement of the Bidder's Single Largest Completed Contracts (SLCC) Similar to the Contract to be Bid	4
	4. Experience Record on Similarly Completed Projects	5
	5. Financial Data	6
	6. List of Contractor's Personnel	7
	7. List of Contractor's Equipment Units	8
	8. Omnibus Sworn Statement for Sole Proprietorship	9-10
	9. Omnibus Sworn Statement for Partnership or Cooperative	11-12
	10. Omnibus Sworn Statement for Corporation or Joint Venture	13-14
	11. Bid-Securing Declaration	15
	12. Construction Methodology	16
	13. Manpower Schedule	17
	14. Equipment Utilization Schedule	18
	15. Cash Flow by Quarter and Payment Schedule	19
	16. Contract Agreement	20-21

GLOSSARY OF TERMS, ABBREVIATIONS, AND ACRONYMS

Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

Contractor – is a natural or juridical entity whose proposal was accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded. Contractor as used in these Bidding Documents may likewise refer to a supplier, distributor, manufacturer, or consultant.

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

Foreign-funded Procurement or Foreign-Assisted Project – Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

GFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term "related" or "analogous services" shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

SECTION I

INVITATION TO BID

BAGONG PILIPINAS

PHILIPPINE PORTS AUTHORITY

INVITATION TO BID

FOR THE

RESTORATION/IMPROVEMENT AND REPAINTING OF VTMS RADAR STATION 2 FACILITY AT CORREGIDOR ISLAND, CAVITE

The Philippine Ports Authority, through the Corporate Budget of the Authority for CY 2024, intends to apply the sum of **P1,353,756.98** being the Approved Budget for the Contract (ABC) to payments under the contract for the **RESTORATION/IMPROVEMENT AND REPAINTING OF VTMS RADAR STATION 2 FACILITY AT CORREGIDOR ISLAND, CAVITE (HO-RM INFRA-AGME 24-034)**. Bids received in excess of the ABC shall be automatically rejected at bid opening.

The Philippine Ports Authority now invites bids for the above Procurement Project. Completion of the Works is required in **Ninety (90) calendar days** from the receipt by the successful bidder of the Notice to Proceed. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).

Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184.

Interested bidders may obtain further information from the Philippine Ports Authority Bids and Awards Committee (BAC) and inspect the Bidding Documents at the address given below from 8:00 a.m. to 5:00 p.m., Monday to Friday.

A complete set of Bidding Documents may be acquired by interested Bidders on **18 July 2024** from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **FIVE THOUSAND PESOS (P5,000.00).** The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person.

The Philippine Ports Authority's Bids and Awards Committee will hold a Pre-Bid Conference on **26 July 2024 at 10:00 a.m.** at the PPA Function Room, 7th Floor, PPA Bldg., Bonifacio Drive, South Harbor, Port Area, Manila, which shall be open to all prospective bidders.

Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below on or before **08 August 2024 at 1:00 p.m.** Late bids shall not be accepted.

All bids must be accompanied by a bid security in any of the acceptable forms and in amount stated in ITB Clause 16.

Bid opening shall be on **08 August 2024 at 2:30 p.m.** at the 7th Floor, PPA Building, A. Bonifacio Drive, South Harbor, Port Area, Manila. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

The Philippine Ports Authority reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.

- Required PCAB Registration: SMALL B – Building and Industrial Plant

For further information, please refer to:

BAC Secretariat, Philippine Ports Authority
5th Floor, PPA Bldg., A. Bonifacio Drive,
South Harbor, Port Area, Manila
Telephone Nos. 8527-47-35
8527-83-56 to 83 loc. 539
PPA Website: www.ppa.com.ph
PhilGEPS Website: www.philgeps.gov.ph

MARK JON S. PALOMAR
Chairperson, PPA Head Office Bids and Awards
Committee for Engineering Projects (HO-BAC-EP)

SECTION II

INSTRUCTIONS TO BIDDERS

1. Scope of Bid

The Procuring Entity, ***Philippine Ports Authority*** invites Bids for the ***Restoration/Improvement and Repainting of VTMS Radar Station 2 Facility at Corregidor Island, Cavite*** with Project Identification Number ***HO-RM INFRA-AGME-24-034.***

The ***Restoration/Improvement and Repainting of VTMS Radar Station 2 Facility at Corregidor Island, Cavite*** is for the construction of Works, as described in Section VI (Specifications).

2. Funding Information

2.1. The ***Philippine Ports Authority*** through the source of funding as indicated below for ***CY 2024*** in the amount of ***₱ 1,353,756.98***

2.2. The source of funding is:

PPA Corporate Fund.

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manual and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or invitation to bid by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have inspected the site, determined the general characteristics of the contracted Works and the conditions for this Project, such as the location and the nature of the work; (b) climatic conditions; (c) transportation facilities; (c) nature and condition of the terrain, geological conditions at the site communication facilities, requirements, location and availability of construction aggregates and other materials, labor, water, electric power and access roads; and (d) other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices

The Procuring Entity, as well as the Bidders and Contractors, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

5.1 Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

5.2 The Bidder must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the PSA's CPI, except under conditions provided for in Section 23.4.2.4 of the 2016 revised IRR of RA No. 9184.

A contract is considered to be "similar" to the contract to be bid if it has the major categories of work stated in the **BDS**.

5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.

5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

There is no restriction on the origin of Goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN.

7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than fifty percent (50%) of the Project.

The Procuring Entity has prescribed that:

Subcontracting is not allowed.

7.2. Subcontracting of any portion of the Project does not relieve the Contractor of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Contractor's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through videoconferencing/webcasting as indicated in paragraph 6 of the **IB.**

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents Comprising the Bid: Eligibility and Technical Components

10.1 The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents.**

10.2 If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

10.3 A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.

10.4 A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.

10.5 A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

11.1. The second bid envelope shall contain the financial documents for the Bid as specified in Section **IX. Checklist of Technical and Financial Documents**.

11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.

11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic technical design as indicated in the drawings and specifications. Unless there is a value engineering clause in the BDS, alternative Bids shall not be accepted.

13. Bid Prices

All bid prices for the given scope of work in the Project as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances as determined by the NEDA and approved by the GPPB pursuant to the revised Guidelines for Contract Price Escalation guidelines.

14. Bid and Payment Currencies

14.1. Bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.

14.2. *Payment of the contract price shall be made in:*

Philippine Pesos.

15. Bid Security

15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the BDS, which shall be not less than the percentage of the ABC in accordance with the schedule in the BDS.

15.2. The Bid and bid security shall be valid until **One Hundred Twenty (120) days from the date set for Bid Opening**. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission to the given website or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

17. Deadline for Submission of Bids

The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

18. Opening and Preliminary Examination of Bids

18.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

18.2. The preliminary examination of Bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "passed" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.

19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 16 shall be submitted for each contract (lot) separately.

19.3 In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

20. Post Qualification

Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS), and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

Bid Data Sheet

<table>
<tr><td>ITB Clause</td><td colspan="3"></td></tr>
<tr><td>5.2</td><td colspan="3">For this purpose, contracts similar to the Project refer to contracts which have the same Major Categories of Works which shall be:
<table>
<tr><td>Description/Clarification</td><td>Unit of Measure</td><td>Quantity (at least)</td></tr>
<tr><td>1. Construction of Building</td><td>sq,m.</td><td>24.00</td></tr>
</table></td></tr>
<tr><td>7.1</td><td>Portion of Works allowed to be subcontracted:

Subcontracting is not allowed</td><td colspan="2">Maximum Percentage allowed to be subcontracted:

Subcontracting is not allowed</td></tr>
<tr><td>10.3</td><td colspan="3">For Joint Venture:

Special PCAB License</td></tr>
<tr><td>10.4</td><td colspan="3">The key personnel must meet the required minimum years of experience set below:
<table>
<tr><td>Key Personnel</td><td>General Experience</td><td>Relevant Experience (Minimum)</td></tr>
<tr><td>a. Project Engineer

b. Materials Engineer I

c. Construction Safety and Health Officer

d. Foreman</td><td></td><td>Three (3) years

One (1) year

One (1) year

Five (5) years</td></tr>
</table></td></tr>
</table>

10.5	*The minimum major equipment requirements are the following:* **Please refer to Section VIII, *Annex 3 Minimum Major Equipment Requirements***
12	*Value Engineering Clause:* **Not Allowed**
15.1	The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts: a. The amount of not less than **₱ 27,075.14,** if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; b. The amount of not less than **₱ 67,687.85,** if bid security is in Surety Bond.
16	Each bidder shall submit one (1) original and six (6) copies of the Technical and Financial Proposals, properly labelled, book-bound, with hard cover and corresponding index tabs. Failure to comply with the requirements is a ground for the automatic disqualification of the bidder.
19.2	Partial bids: **Not Allowed**
20	*Other appropriate licenses and permits required:* **None**
21	*Other contract documents are as follows:* *Construction Schedule and S-Curve, Manpower Schedule, Construction Methods, Equipment Utilization Schedule, Construction Safety and Health Program approved by the Department of Labor and Employment and PERT/CPM or other acceptable tools of project scheduling.*

SECTION IV

GENERAL CONDITIONS OF CONTRACT

1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

2. Sectional Completion of Works

If sectional completion is specified in the **Special Conditions of Contract (SCC)**, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date shall apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

3. Possession of Site

3.1. The Procuring Entity shall give possession of all or parts of the Site to the Contractor based on the schedule of delivery indicated in the **SCC**, which corresponds to the execution of the Works. If the Contractor suffers delay or incurs cost from failure on the part of the Procuring Entity to give possession in accordance with the terms of this clause, the Procuring Entity's Representative shall give the Contractor a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.

3.2. If possession of a portion is not given by the above date, the Procuring Entity will be deemed to have delayed the start of the relevant activities.

The resulting adjustments in contract time to address such delay may be addressed through contract extension provided under Annex "E" of the 2016 revised IRR of RA No. 9184.

4. The Contractor's Obligations

The Contractor shall employ the key personnel named in the Schedule of Key Personnel indicating their designation, in accordance with **ITB** Clause 10.3 and specified in the **BDS**, to carry out the supervision of the Works.

The Procuring Entity will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are equal to or better than those of the personnel listed in the Schedule.

5. Performance Security

5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.

5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

6. Site Investigation Reports

The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the **SCC** supplemented by any information obtained by the Contractor.

7. Warranty

7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.

7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the **SCC**.

8. Liability of the Contractor

Subject to additional provisions, if any, set forth in the **SCC**, the Contractor's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Contractor is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

9. Termination for Other Causes

Contract termination shall be initiated in case it is determined prima facie by the Procuring Entity that the Contractor has engaged, before, or during the implementation of the contract, in unlawful deeds and behaviors relative to contract acquisition and implementation, such as, but not limited to corrupt, fraudulent, collusive, coercive, and obstructive practices as stated in **ITB** Clause 4.

10. Dayworks

Subject to the guidelines on Variation Order in Annex "E" of the 2016 revised IRR of RA No. 9184, and if applicable as indicated in the SCC, the Dayworks rates in the Contractor's Bid shall be used for small additional amounts of work only when the Procuring Entity's Representative has given written instructions in advance for additional work to be paid for in that way.

11. Program of Work

11.1. The Contractor shall submit to the Procuring Entity's Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the **SCC.**

11.2. The Contractor shall submit to the Procuring Entity's Representative for approval an updated Program of Work at intervals no longer than the period stated in the **SCC.** If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity's Representative may withhold the amount stated in the **SCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

12. Instructions, Inspections and Audits

The Contractor shall permit the GOP or the Procuring Entity to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors of the GOP or the Procuring Entity, as may be required.

13. Advance Payment

The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the **SCC**, subject to the requirements in Annex "E" of the 2016 revised IRR of RA No. 9184.

14. Progress Payments

The Contractor may submit a request for payment for Work accomplished. Such requests for payment shall be verified and certified by the Procuring Entity's Representative/Project Engineer. Except as otherwise stipulated in the **SCC**, materials and equipment delivered on the site but not completely put in place shall not be included for payment.

15. Operating and Maintenance Manuals

15.1. If required, the Contractor will provide "as built" Drawings and/or operating and maintenance manuals as specified in the **SCC.**

15.2. If the Contractor does not provide the Drawings and/or manuals by the dates stated above, or they do not receive the Procuring Entity's Representative's approval, the Procuring Entity's Representative may withhold the amount stated in the **SCC** from payments due to the Contractor.

SECTION V

SPECIAL CONDITIONS OF CONTRACT

Special Conditions of Contract

GCC Clause	
2	*Sectional Completion:* **None**
3.1	The Procuring Entity shall give possession of all parts of the Site to the Contractor upon commencement of the project.
6	*Site Investigation Report:* **None**
7.2	*Permanent structures: Fifteen (15) years* Buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures
10	No dayworks are applicable to the contract.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within ____ days of delivery of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is _____.
13	The provision on advance payments or mobilization fees in the terms and conditions of all contracts/ purchase orders/ job orders for goods, services and infrastructure projects that will be signed or executed shall henceforth be excluded.
14	No further instructions.
15.1	The date by which operating and maintenance manuals are required is _____. The date by which "as built" drawings are required is _____.
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is _____.

SECTION VI

TECHNICAL SPECIFICATIONS

DIVISION 01 : DEMOLITION AND REMOVAL WORKS

DESCRIPTION

The work includes the furnishing of all labor, materials and equipment required to carry out the demolition and removal of old structures, port accessories and obstructions including demolition of miscellaneous concrete curbs etc., as required for the execution of the Contract.

The Contractor shall submit the proposed methodology or procedure of demolition work with detailed drawings and calculations, if necessary, to the Engineer for approval, before the execution of the Works.

The Contractor shall keep all pavements and landing areas to and from the site of the disposal area clean and free of mud, dirt and debris during and after the execution of disposal. Disposal of debris and materials shall be as directed by the Engineer.

GENERAL PROVISIONS

1. The Contractor shall be deemed to have satisfied himself of the site conditions, and to have included in his unit prices provision for all risks that may arise during or in connection with the work.

2. The demolition shall be carried out by approved methods and equipment such as concrete breakers, gas-cutters, hydraulic jacks, compressed air disintegrators, etc., however, no blasting shall be used unless approved in writing by the Engineer and after obtaining the written permission of the concerned authorities.

3. The Contractor shall provide suitable equipment, skilled labor and appropriate temporary works such as scaffoldings to ensure safety in his demolition works as well as in the adjacent area.

4. Contractor shall demolish all the structural members above the level on which the subsequent and permanent works under this Contract will begin. To this end, the temporary construction works such as excavation shall be conducted by the Contractor.

5. Materials coming from the demolition works, except general earth, shall remain the property of the Procuring Entity, the designated part of which shall be stored by the Contractor at places specified by the Engineer/ Accepting authority. Receiving copy of Turn-Over Report shall be provided.

6. In case of demolition of wharf deck and platform, the contractor shall ensure that no debris will be remained/deposited at seabed.

INTERFERENCE WITH PORT OPERATIONS

During the execution of the work, the Contractor shall not interfere with the shipping, navigation, and other traffic in the port.

The Contractor shall make arrangements with the operations people on the schedule of demolition and related works to keep port operation activities undisturbed at all times.

Prior to commencement of the demolition works, the Contractor shall inform/announce to port users the schedule of disconnection of utilities.

STORAGE AND DUMPING

Prior to the commencement of the demolition work, the Engineer shall submit to the Contractor a list in which all the materials to be salvaged and overhauled, as property of PPA, and the description of the location of their storage. Materials embedded in concrete units shall not be salvaged.

The Contractor shall separate materials to be salvaged from debris. Salvaged materials shall be loaded, transported and unloaded by the Contractor at the specified locations.

The Contractor may dump debris or extracted rocks on land areas but out of the site, which areas shall be procured and prepared at his own expense. In this case, safety measures shall be undertaken in the transporting, unloading, covering and others as requested by the Engineer.

The approximate distance of the disposal site from the project site is about five (5) kms., as designated by the PMO thru the implementing office.

EXECUTION

1. Prior to the commencement of demolition works, the alignment of the new construction works to the existing structure shall be checked.

2. The width and alignment of portion of existing structure to be demolished shall be marked by paint.

3. With these lines as guides, concrete shall be broken and reinforcing bars cut, such that panels or portions of the structure can be lifted out for disposal elsewhere outside of the operational work area.

4. Rocks removed from existing slope protection shall be stored for re-use in new construction.

5. Demolish pavements, curbs, fences, utilities, services, navigation aids and the likes as determined in the field for each project and as shown in the drawings or as directed by the Engineer.

6. Materials coming from the demolition works shall be properly disposed of by the Contractor.

SAFETY

During the course of survey and clearing, any obstacles which are recognized and seemed to be explosive or hazardous to workers shall be removed from the site by the proper Authority.

At the end of each day's work, the Contractor shall keep the workplace in safe condition and clean so that no part is in danger of falling or creating hazard to personnel or equipment.

DIVISION 02 : METAL WORKS

1. SCOPE OF WORK

The work includes the furnishing and installation of miscellaneous metal necessary to complete the work in accordance with this specification unless required otherwise on the plans.

2. GENERAL PROVISIONS

The AISC Specification for the Design, Fabrication and Erection of Structural Steel for Buildings, Association of Structural Engineers of the Philippines (ASEP) Handbook of Structural Steel Shapes and Sections shall govern the Work. Welding shall be in accordance with the AWS Code and as herein specified or any other welding standard, approved by the Engineer.

Certification: Two (2) certified copies of mill test reports including names and locations of mills and shops shall be furnished for all structural steel.

Responsibility for Errors: The Contractor shall be responsible for all errors of detailing, fabrication and for the correct fitting of the structural members.

Storage of Materials: The materials shall be stored out of contract with the ground in such manner and location as will minimize contamination and deterioration.

3. MATERIALS

Structural steel shall conform to ASTM A 36. All materials shall be of new stock, free from surface imperfections and shall conform to the applicable ASTM, API Specifications or other equivalent standards.

Steel Plates, Bars and Rods – Plates, bars and rods shall be local standard commercial steel of sizes as indicated on the plans and approved by the Engineer.

Fastener and Anchor Bolts – Fasteners, anchor bolts necessary for the installation of the work shown on the plans shall be of a standard commercial grade approved by the Engineer.

Bolts, Nuts and Washers – Bolts, nuts and washers shall be local standard commercial grade of size as indicated on the plans conforming to ASTM A 325 or AASHTO M164.

Welding – Employ only welding equipment electrodes welding wire and fluxes capable of producing satisfactory welds when used by a qualified welder or welding operator using qualified welding procedures. It shall conform to this AWS D1.1-183, E70XX Series.

4. DELIVERY OF MATERIALS

Deliver anchor bolts and other anchorage devices which are embedded in cast-in-place concrete construction to the project site in time to be installed before the start of work.

Provide setting drawings, templates, and directions for installation of anchor bolts and other devices.

Number in accordance with shop drawings the materials tested and approved by the Engineer before delivery to the site. Prepare a list showing number, size, quality and quantities of materials.

Transport materials in accordance with material list and transportation. Schedule approved by the Engineer.

Protect materials to prevent damage during transportation. Package and label small parts such as bolts or rivets.

5. FABRICATION

Fabricate structural steel in the shop to the greatest extent possible for transporting in accordance with the AISC Building Code and ASEP Handbook with the modification and additional specified in this section.

The Contractor shall verify all measurements in the field, submit shop drawings to the Engineer showing sizes, gauges, detailed of construction, method of assembly and installation.

Fabrication of work shall not commence until all shop drawings are approved by the Engineer.

Shop connections: As approved by the Engineer.

a. Provide bolted or welded connections as shown on the Drawings or as approved by the Engineer.

b. Use high strength threaded fasteners for bolted connections, except where standard threaded fasteners are permitted.

High strength bolted construction assembly shall be tightened in accordance with Specification for Structural Joints, AISC.

6. FIELD ERECTION

Steel erection shall conform to the requirements of this specification and to the applicable requirements of AISC "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings", and the AISC "Code of Structural Practice for Steel Buildings and Bridges".

Set and wedge or shim loose bearing plates.

Erect individual pieces not deviating from vertical level and alignment more than 1 in 500.

7. FIELD ASSEMBLY

Assemble structural steel frames accurately to the line and elevations indicated within the specified tolerance.

Align and adjust accurately various members forming parts of a complete frame or structure before fastening.

Fasten splices of compression members after the abutting surfaces have been brought completely into contact.

Clean bearing surfaces and surfaces in permanent contact, of rust and scale before members are assembled.

Splices shall be permitted only where indicated.

Bolt and weld field connections as specified in "Fabrication".

Remove weld backing strips from welds designated for ultrasonic testing.

Remove run-off tabs and grind surfaces when requested by the Engineer.

Clean weld splatter from surfaces contacted.

Field correction of fabrication by gas cutting is not permitted on any major member in the structural framing without prior approval of the Engineer.

Mark structural steel members of high strength steels to permit visual verification of the grade of steel used.

8. PAINTING

Shop Paintings – Except for galvanized surfaces and items to be encased in concrete, clean ferrous metal surfaces shall be given one coat of red led or zinc chromate primer. An additional coat shall be applied to surface that will be concealed on inaccessible for finish painting.

9. REPAIR OF DAMAGED COATING

Coated metal damaged in the process of work shall be repaired in 2 manners approved by the Engineer.

10. LIGTH STEEL FRAMING SYSTEM

Light steel framing system will be used for ceiling assemblies of gypsum ceiling board. Provide steel materials for metal support system galvanized coating, ASTM A525; aluminum coating, ASTM A463 on a 55% aluminum-zinc coating. Materials for attachment of gypsum board (suspended and furred ceiling systems) shall conform with ASTM C645. Installation shall conform with ASTM C754, except that framing members shall be 400mm o.c.b.w. unless otherwise indicated in the plans.

11. SUSPENSION SYSTEM

Suspension system for mineral fiber acoustical lay-in panel and fiberglass ceiling board shall be concealed, direct hung, upward access. Hangers and adhesive shall be recommended by the manufacturers and approved by the Engineer.

Install the suspension system in accordance with ASTM C636, and the following additional requirements:

a. Ceiling framing shall consist of 25 mm T-runner sections suspended plumb from structural slab on frame by hanger wires on straps.

b. Space hangers 1.2 meters on centers each direction. Hangers shall be laid out for each individual room or space. Install additional hangers where required to support the framing around beams, ducts, columns and other penetrations through the ceiling. Hanger wires shall be wrapped around the reinforcing bars of the supporting concrete-slab construction with twists before concrete is placed or shall be shaped into a 100 mm diameter loop and embedded at least 50 mm in the concrete or shall be attached to approved inserts.

c. Keep main runners and carrying channels clear of abutting walls and partitions. Provide at least two main runners for each ceiling span.

d. The acoustical board shall be placed in between. T-runners in full contact with the metal frames. The ceiling system shall be leveled and squared with no sign of deflection.

12. SPANDREL METAL CEILING

For exterior ceiling, use 0.4 mm metal thick, Rib 2 Spandrel 165, white color as manufactured by DN Steel or equivalent.

13. METAL TOILET PARTITIONS

Toilet partitions shall be the flush-metal type with sound-deadening cores and baked-enamel finish. The partitions shall be provided complete with all fastening, fittings, and hardware necessary for a satisfactory installation.

Steel shall be cold-rolled and zinc-coated steel for face plated doors, panels, and pilasters shall be stretcher-leveled of standard flatness. Concealed reinforcement may be hot-rolled or cold-rolled steel.

Toilet partitions shall be floor-supported, with pilasters extending from the floor to the top of the panels. Panels and doors shall be gauge 20, approximately 1.5m high, and their bottom edges shall be approximately 250 mm above the floor, unless otherwise indicated in the drawings. The width, from center to center of dividing partitions, shall be as indicated in the drawings.

The work shall be secured to contiguous construction in a rigid and substantial manner, straight and plumb. Evidence of drilling in walls shall be concealed in the finished work. Hardware shall be adjusted for proper alignment, and hinges shall be set to hold the doors about 30 degrees when unlatched. After installation, all exposed surfaces shall be thoroughly cleaned, and all damaged work shall be restored to its original condition or replaced with new work. The exposed heads of unfinished steel bolts and screws shall be neatly painted to match the color of adjoining partition surfaces, if required.

14. URINAL SCREEN

The urinal screen shall be wall hung and to be secured with a minimum of three wall stirrup brackets. It shall have a baked enamel finish.

Secure the work to contiguous construction straight and plumb. In the finished work, conceal evidence of drilling in walls. Screws and bolts shall be stainless steel. After installation, thoroughly clean exposed surface and restore damaged.

DIVISION 03 : WELDED STRUCTURAL STEEL

1. Description

This work shall consist of the joining of structural steel members with welds of the type, dimensions, and design shown on the plans and in accordance with this Specification.

It is the intent of this specification to provide for work of a quality comparable to that required under the Standards Specifications for Welded Highway and Railway Bridges of the American Welding Society. In case of dispute of for situations not adequately provided for in this Specification, those designated Standard Specifications shall be considered as the final authority and shall govern except as amended by the Special Provisions.

Welding of structural Steel shall be done only when shown on the Plans or authorized in writing by the Engineer.

2. Material Requirements

Steel base metal to be welded shall be open-hearth or electric furnace steel conforming to AASHTO M 183.

All arc-welding electrodes shall conform to the requirements of American Welding Society Specifications. Electrodes shall be of classification numbers E7016, E7018 or E7028 as required for the positions, type of current and polarity, and other conditions of intended use, and to conform to any special requirements indicated on the plans.

Filler material to be used in the repair or strengthening of old structures or for joining new parts to existing steel members, shall be adopted to the material to be welded and may depart from the foregoing requirements only if agreed by the Engineer.

3. Construction Requirements

a) Equipment

1) General

All items of equipment for welding and gas cutting shall be so designed and manufactured and in such condition as to enable qualified welders to follow the procedures and attain the results prescribed in this specification

2) Arc-Welding Equipment

Welding generators and transformers shall be designed expressly for welding. They shall be capable of delivering steady currents adjustable through a range ample for the work requirements. They shall respond automatically and quickly to changes in power requirements due to variations in arc length and shall deliver full current promptly on striking an arc.

Welding cable shall have sufficient conductivity to avoid overheating and inadequate current at the arc and shall be effectively insulated against welding circuit voltage. Earth or ground connections and circuits shall be secured and adequate to carry the welding currents.

Electrode holders shall grip the electrode firmly and with good electrical contact. Approved automatic welding heads may be used, with suitable auxiliary handling equipment to provide automatic instead of manual control of electrode and welding arc.

3) Gas-Cutting Equipment

Torches and tips shall be of proper size and type of the work at hand. Suitable regulators shall afford the welder complete control over the pressure and rate of flow of each gas.

4) Protective Equipment

All personnel protective equipment shall conform to the American Standard Association Code for such equipment.

The contractor shall enforce the use of approved accessories necessary for the protection and convenience of the welders and for the proper and efficient execution of the work.

Suitable protection against the light of the arc shall be maintained by the contractor when arc-welding operation might be viewed within harmful range by persons other than the actual welders and inspectors.

b) Welding

1) General

Welding shall be performed by the metal-arc process using the electrodes specified with either direct or alternating current.

Surfaces to be welded shall be smooth, uniform and free from fins, tears and other defects which would adversely affect the quality of the weld. Edges of the material shall be trimmed by machining, chipping, grinding or machine gas-cutting to produce a satisfactory welding edge wherever such edge is thicker than: 13mm for sheared edge of material; 16mm for toes of angles or rolled shapes (other than twice flange sections); 25mm for universal mill plate or edges of flange sections.

The width of root face used, shall be not more than 1.5mm for parts less than 10mm in thickness nor more than 3mm for parts 10mm or more in thickness.

Butt welds shall be proportioned so that their surface contours will lie in gradual transition curves. For butt welded joints between base metal parts of unequal thickness, a transition shall be provided on a slope or level not greater than 1 in 2.5 to join the offset surfaces. This transition may be provided by sloping the surface of the weld material or beveling the thicker part or by combination of these two methods.

Surfaces to be welded shall be free from loose scale, slag, rust grease or other material that will prevent proper welding. Scale mill that withstands vigorous wire brushing or a light film of drying oil or rust inhibitive coating may remain.

2) Welders

All welding shall be done by approved competent and experienced and fully qualified welders.

3) Preparation of Materials for Welding

Dimensional tolerance, straightness and flatness of the structure shapes and plates shall be within the limits prescribed in the Specification.
Structural steel which is to be welded shall preferably not be painted until all welding is completed.

Preparation of edges by gas-cutting shall, wherever practicable, be done by machine gas -cutting. Machine gas-cutting edges shall be substantially as smooth and regular as those produced by edge planning and shall be left free of slag. Manual gas cutting shall be permitted only where machine gas-cutting is not practicable and with the approval of the Engineer. The edge resulting from manual gas cutting shall be inspected and smoothed with special care. All re-entrant corners shall be filleted to a radius at least 19mm. The cut lines shall not extend beyond the fillet and all cutting shall follow closely the line prescribed.

4) Assembly

The parts to be joined by fillet welds shall be brought into a close contact as practicable, and no event shall be separated more than 5mm. If the separation is 1.5mm or greater, the leg of the fillet weld shall be increased by the amount of separation. The separation between faying surfaces of lap joints and of butt joints landing on a backing structure shall not exceed 1.5mm. The fits of joints which are not sealed by welds throughout their length shall be sufficiently close to exclude water after painting. Where irregularities in rolled shape or plates, after straightening, do not permit contact within the above limits, the procedure necessary to bring the material within these limits shall be subject to the approval of the Engineer.

Cutting parts to joined by butt welds shall be carefully aligned. Where the parts are effectively restrained against bending due to eccentricity or alignment, a maximum offset of 10 percent of the thickness or the thinner part joined, but in no case more than 3mm, may be permitted as a departure from the theoretical alignment. In connecting alignment in such cases, the parts shall not be drawn into a greater slope than two (2) degrees (1 in 30). Measurement of offset shall be between centerline of parts unless otherwise shown on the plans.

When parts abutting edge to edge differ in thickness, the joint shall be of such from that the slope of either surface through the transition zone does not exceed 1 in 2.5, the thicker part being beveled, if necessary.

Members to be welded shall be brought into correct alignment and held in position by bolts, clamps, wedges, guy lines, strut and other suitable devices or tack welds until welding has been completed. The use of jigs and fixtures is recommended where applicable. Such fastening devices as may be used shall be adequate to insure safety.

Plug and slot welds may be used to transmit shear in a lap joint or to prevent the buckling or separation of lapped parts.

The diameter of the hole for a plug weld shall not be less than the thickness of the part containing it plus 8mm nor shall it be greater than 2.25 times the thickness of the weld.

The minimum center spacing of plug welds shall be four times the diameter of the hole.

The length of the slot shall be semicircular or shall have the corners rounded to a radius not less than the thickness of the part containing it plus 8mm nor shall it be greater than 2.25 times the thickness or the weld.
The end of the slot shall be semicircular or shall have the corners rounded to a radius not less than the thickness of the part containing it, except those ends which extend to the edge of the part.

The minimum spacing of lines of slot welds in a direction transverse to their length shall be 4 times the width of the slot. The minimum center to center spacing in a longitudinal direction on any line shall be 2 times the length of the slot.

The thickness of plug or slot welds in material 16mm or less in thickness shall be equal to the thickness of the material. In material over 16mm in thickness, it shall be at least one-half the thickness of the material but not less than 16mm.

Tack welds, located where the final welds will later be made, shall be subject to the same quality requirements as the final weld. Tack welds shall be as small as practicable and where encountered in the final welding, shall be cleaned and fused thoroughly with the final weld. Defective, cracked or broken tack welds shall be removed before final welding.

Members or component parts of structures shall be assembled and matchmarked prior to erection to insure accurate assembly and adjustment of position on final erection. Painted assembly marks shall be removed from any surface to be welded.

DIVISION 04 : PAINTING WORKS

1. GENERAL

The work shall include all labor, materials, equipment, plant and other facilities and the satisfactory performance of all works necessary to complete all field painting and as specified herein. All paints and coatings shall be applied by painting subcontractors and workmen approved by the Engineer.

2. SCOPE

The following surfaces to be painted except where otherwise specified or shown:

a. Above ground piping and other metal surfaces.
b. All exposed concrete.
c. All structural and miscellaneous metal.
d. All equipment furnished without factory finished surfaces.
e. All exposed steel mullions, tubular frames, door frames, steel sash, and metal windows.
f. All sheet metal and ferrous metal trim.
g. Interior and exterior surfaces of the building including all concrete block masonry.

The following surfaces are not to be painted:

a. Ferrous metal having approved plating or factory paint finishes.
b. Non-ferrous metals, unless otherwise noted or indicated; galvanized metal shall not be considered a non-ferrous metal.
c. Equipment with factory finished surfaces unless otherwise noted.

No concrete, wood, metal or any other surfaces requiring protection shall be left unpainted even though not specifically defined herein.

3. RIGHT OF REJECTION

Exterior painting or interior finishing shall be done under conditions which shall not jeopardize the appearance or quality of the painting or finishing in any way. The Engineer shall have the right to reject all material or work that is unsatisfactory, and require the replacement of either or both at the expense of the Contractor.

4. PROTECTION OF THE WORK

The Contractor shall endeavor to protect the work of others during the time painting work is in progress. The Contractor shall be responsible for any and all damage3 to any other work in the course of his painting job.

Protective coverings shall be used to protect floors, fixtures, and equipment. while painting., Care shall be exercised to prevent paint being spattered unto surfaces which are not to be painted.

5. WORKMANSHIP

All painting work shall be first class and in accordance with the best standard practices of the trade.

The Contractor shall examine carefully all surfaces to be painted and before beginning any of his work shall make sure that the work of other trades has been installed in a workman like condition ready to receive paint. Metal surfaces shall be clean, dry and free from mill scale, rust, grease, oil or any other substance which could affect the quality of the painting.

Paint shall be applied at the proper consistency and each coat shall be brushed evenly free of brush marks, sags, and runs. Care shall be exercised to avoid lapping of paint on glass or hardwares. Paint shall be sharply applied to required lines. Finished paint surfaces shall be free from defects or blemishes. Surfaces from which such paint cannot be removed satisfactorily shall be painted or repainted, as required to produce a finish satisfactory to the Engineer.

Succeeding paint coatings shall be applied only when the previous coat is hard and dry.

All painting materials shall be used in strict accordance with manufacturers directions, spread or flowed on smoothly with proper film thickness and without runs, sags, skips or other defects.

6. STORAGE OF MATERIALS

All painting materials and equipment not for immediate use shall be stored in a room approved by the Engineer for that purpose. The receiving, opening and mixing of all paint shall be removed form the premises at the end of each day's work, or stored in metal containers with metal covers.

7. PREPARATION OF PAINT

Paint containers shall be delivered to the job site in manufacturer's unopened containers and shall be opened only when required for use. Paint shall be mixed only in the designated room or space in the presence of the Engineer of his representative. Paint shall be thoroughly stirred or agitated to uniformly smooth consistency suitable for proper application. Unless otherwise specified
or approved, no materials shall be reduced, changed, or used except in accordance with manufacturer's label or tag on container. In all cases, paint shall be prepared and handled in a manner to prevent deterioration and inclusion of foreign matter.

8. CLEAN-UP

Upon completion of his work, the Contractor shall remove all surplus materials. All paint spills shall be removed and the entire premises shall be cleaned of all rubbish, and debris, caused by his work. He shall present the work clean and free form blemishes so that it is acceptable in every way. All glass, fixtures and doors shall be cleaned of paint spots and polished, and the job made for occupancy by the owner.

9. MATERIALS

a. Materials – The Contractor may substitute other paint materials for those specified in Section 15.12 provided he first receives written approval from the Engineer stating that said proposed substituted materials are equal to that specified and are approved for use. The painting material shall be delivered to job site in original containers properly labeled without evidence of tampering, substitution of contents, or of deterioration. A complete list of materials proposed for use shall be submitted for the Engineer's approval.

b. Colors and Samples – All finish colors shall be as selected by the Owner. In milticoat work using color pigmented paints, each coat shall have sufficient variation of color to easily distinguish it from preceding coat.

Using specified or approved materials, 3 sample panels of each finish, including all coats thereof shall be prepared and submitted for the Owner's approval. Completion work shall match approved colors and samples.

10. PREPARATION OF SURFACES

a. General – Except as otherwise specified, surfaces to be painted shall be clean, smooth and dry. The Contractor shall report to the Engineer in writing any surface which cannot be properly prepared for painting. If work is commenced before defects have been reported and corrected, any resulting unsatisfactory finish shall be rectified at no cost to the PPA.

b. Concrete and Masonry – all concrete and masonry surfaces shall be cured thirty days prior to painting. Dirt, dust, oil, grease, efflorescences, loose cement, chalk and other deleterious matter shall be removed and surface roughened when necessary to insure good paint adhesion. the method of surface preparation shall be left to the discretion of the contractor, but results obtained shall be satisfactory to the Engineer. Before application of resin emulsion paint, surfaces shall be prepared in accordance with manufacturer's directions. Before application of oil base or latex paints, surfaces shall be tested for presence of alkali; if alkali is present, neutralized as recommended by the manufacturer of the paint materials to be applied.

c. Plaster – Dirt, dust, loose plaster and other deleterious matter which would prevent good paint adhesion shall be removed. All holes, cracks and depression shall be neatly filled with patching plaster, missed and applied to match existing plaster. Patches shall be sanded flush and smooth and properly sealed before applying prime coat. After priming surfaces, suction spots shall be touched up with additional prime coat material until surfaces evidence a uniform coating. Enamel undercoats on smooth plaster shall be sandpapered by hand (with No. 00 sandpaper) and dusted clean before applying succeeding coat.

d. Metal – Dirt, weld, splatter, rust, scale and other contaminants shall be removed by scrapping, wire brushing and sanding or sandblasting as required. Oil and grease shall be removed with mineral spirits or appropriate solvent. Before painting ferrous metal surfaces, including galvanized ferrous metal, surfaces shall be pretreated with approved phosphoric acid etching cleaner in accordance with manufacturer's

directions to produce a chemically clean surface. Unless already performed in accordance with specifications of other sections, abrasions and bare spots in shop prime coatings shall be touched up with metal primer matching the shop coatings. Enamel undercoats shall be sandpapered by hand (with No. 00 sandpaper) and dusted clean before applying succeeding coat.

e. Woodwork – Unless already properly sanded, woodwork shall be sandpapered smooth by hand. Before priming surfaces, knots, pitch pockets and sap streaks shall be thoroughly cleaned of residue and touched up with shellac varnish coating. After priming surface, nail holes, cracks and depressions shall be neatly filled with putty or other approved filler, colored to match required finish. Enamel undercoats shall be sanded by hand (with No. 00 sandpaper) and dusted clean before applying succeeding coat.

11. APPLICATION OF PAINT

a. General – All painting and finishing shall be performed by skilled craftsmen. Each coat of paint shall be applied with proper consistency, evenly, free of laps, sags and runs and cut sharply to required lines. Paint shall be applied only under dry and dust free conditions that will insure properly finished surfaces, free of defects and blemishes unless otherwise directed by the Engineer. Paint shall not be applied when temperature is likely to be above 90°F. Sufficient time shall be allowed between application of coats to insure proper drying of the preceding coat. All primer and intermediate coats shall be unscarred and completely integral at

time of application of each succeeding coat. The Engineer shall be notified when each coat has been applied and is ready for inspection; until coat is inspected and approved by the Engineer, no succeeding coats shall be applied. Whenever two coats of a dark colored paint are specified the first coat shall contain sufficient powdered aluminum to act as an indicator for proper coverage when applying the second coat.

b. Method of Application – Paint should be applied by brush, spray, or other application method approved by the Engineer.

c. Priming and Back Painting

1. Priming – Before installation, all surfaces of millwork which are to be painted shall be primed giving particular attention to sealing of cross-grained surfaces. In all cases, all work shall be primed as soon as possible after delivery to buildings, before or after installation, as required, or in case prefabricated items, at fabricator's shop or mill before shipment, if practicable. Except as otherwise specified, primings shall consists of first coat herein after specified under "Finishes".

2. Back-Painting – Woodwork, millwork and casework to be installed against concrete, masonry or plaster shall be back painted with one coat of exterior oil paint.

12. PAINTING ITEMS

Architectural Items	MANUFACTURE Number	: Number
a) Exterior Finishes		
1. On Concrete Walls		
Two Coats, Concrete Masonry Paint	BT01/B715 B710	A69EXZ
2. Uprimed Ferrous Metal Including GI Roofing		
First Coat: Rush inhibitive ferrous Metal primer	B320	20724
Second Coat: Exterior Enamel	B2501	20-125
3. On Concrete Block Wall		
First Coat: Concrete block primer sealer	B701	103
Second Coat: Concrete Masonry Paint	B701	55B00
Third Coat: Concrete Masonry Paint	B701	55B00
4. On Wood		
First Coat: Exterior Wood Primer	B800	25F
Second Coat: Exterior Enamel	B600	10X
Third Coat: Exterior Enamel	B600	10X
b. Interior Finishes Location of the various finishes are listed in the Finish Schedule on the Drawings or else will be confirmed by the PPA.		
1) On primer & coated metal two coats of interior semi-gloss enamel or as indicated in the schedule finish	B200	22101
2) On Plaster		
First Coat: Pigmented Sealer		
Second Coat: Enamel undercoater	B701	103
Third Coat: Interior flat enamel	B701	22

3)	<u>On Wood</u>		
	First Coat:		
	Enamel undercoater	B800	.001
	Second Coat:		
	Enamel undercoater	B800	.001
	Third Coat:		
	Interior flat enamel	B800	23-001
4)	<u>Wood Stain Finish</u>		
	Oil Stain with Filler	B2700	23-11
	Boiled on top coat		36-001
5)	<u>Wood Lacquer Finish</u>		
	Wood Paste Filler w/ natural	B60/B1258	23-11
	Oil top coat of lacquer	B60/B1253	68-064

c) <u>Non-Architectural items</u>
(Piping, Valves, Equipment, etc.

1)	Piping, valves, equipment etc. in rooms are to be painted		
2)	Galvanized pipes & ducts		
	Primer – one coat	B320	70-56
	Finish	B2501/B600	22-101
3)	Black Steel Pipes		
	Primer – one coat	B320	.041
	Finish – one coat	B2501/B600	22-101
4)	Mechanical Items		
	a) Ungalvanized Ferrous Metal		
	Primer – one coat	B320	37-745
	Finish – one coat	B2501/B600	22-101
	b) Galvanized Ferrous Metal		
	Primer – one coat	B320	70-56
	Finish – one coat	B2501/B600	22-101
	c) Submerged Galvanized Ferrous Metal		
	Primer – one coat	B2200	60-709
	d) Burried Miscellaneous Ferrous surface, valves, & flanged joints (excl. pipe)	B2199	
	Primer – one coat	Coal-tar enamel or Match adjacent pipe	

DIVISION 05 : ROOFING

1. SCOPE OF WORK

The work shall include all labor, materials and equipment necessary to install roofing/ceiling materials, complete as shown on the drawings and as specified herein.

2. GENERAL REQUIREMENTS

a) The work includes the installation of roofing sheets, steel ridge roll, gutter, flashing and all miscellaneous roofing items not specifically noted, but required for the proper execution of the work. Surfaces shall be thoroughly dry and clean, painted with protective coatings and free from any defect that might affect the metalwork.

b) All miscellaneous roofing items shall be fabricated and installed in accordance with the requirements as specified herein or as indicated in the drawings. The Contractor shall verify all measurements in the field, submit shop drawings to the Engineer showing sizes, gauges, detailed of construction, method of assembly and installation. Fabrication of work shall not commence until all shop drawings are approved by the Engineer.

c) Roofing/Ceiling materials and accessories shall be carefully handled and stored to prevent damage to the damage to the surface and edges.

3. MATERIALS

a. Roofing shall be of MILANO type corrugated G.I. sheets or equivalent.
b. Ridge rolls, facia, gutters, capping, flashings, fastening devices and all similar items required to complete the roofing installations shall be colorbonded G.I. sheets. Thickness shall be as indicated in the drawings.

4. INSTALLATION

Installation of roofing materials including ridge rolls, roof gutters, flashing and other accessories shall be performed with precise method and a manner in accordance with the specifications, professional skilled experienced and that the roofing materials shall be installed to enable to withstand the wind and rain.

DIVISION 06 : ALUMINUM GLASS WINDOW

1. Description

This item shall consist of furnishing all aluminum glass windows materials, labor, tools and equipment required as shown on the Plans and in accordance with this Specification.

2. Material Requirements

a) Frame and panel members shall be lubricated from extruded aluminum section true to details with clean, straight, sharply defined profiles and free from defects impairing strength or durability. Extruded aluminum section shall conform to the specification requirements defined in ASTM B 211.
b) Screws, nuts, washers, bolt, rivets and other miscellaneous fastening devices shall be made of non-corrosive materials such as aluminum, stainless steel, etc.
c) Hardware for fixing and locking device shall be closely matched to the extruded aluminum section and adaptable to the type and method of opening.
d) Weatherstrip shall be first class quality flexible vinyl forming an effective seal and without adverse deformation when installed.
e) Glazing shall conform to the requirements specified in the plan.
f) Pile weatherstrip shall be silicon treated and free from residual wetting agents made of soft fine hair as on wool, fur, etc.

3. Construction Requirements

For all assembly and fabrication works the cut end shall be true and accurate, free of burrs and rough edges. Cut-outs receses, mortising and grinding operations for hard wares shall be accurately made and properly reinforced.

Casement window type shall be provided with two hinges fabricated from extruded aluminum alloy. They shall open on stay arms having adjustable sliding friction shoes to control window panel operations complete with strike plate.

Window panel shall be provided with nylon sheave. Sliding panels shall be suspended with concealed roller overhead tracks with bottom guide pitch outward and slotted for complete drainage. The sliding panels shall be provided with interior handles. That locking device shall be a spring loaded extruded latch that automatically engages special frame hips.

All joints between metal surface and masonry shall be fully caulked.

Weatherstrip shall be furnished on edges at the meeting stiles.

4. Shop Finish

Exposed aluminum surfaces shall be electrotype hard coats such as anodize, satin, etc.

5. Protection

All aluminum parts shall be protected adequately to ensure against damage during transit and construction phase.

6. Cleaning

The constructor does not only protect all entrance units during the construction phase but shall also be responsible for removal of protective materials and cleaning the aluminum surface including glazing before work is accepted by the Engineer.

Aluminum shall be thoroughly cleaned with kerosene or gasoline diluted with water And then wipe surface using clean cloth rugs.

No abrasive cleaning materials shall be permitted in cleaning surface.

DIVISION 07 : WATERPROOFING

1. Description

This item shall consist of furnishing all waterproofing materials, labor, tools, equipment and facilities and undertaking the proper installation works required as shown on the Plans and in accordance with this Specification.

2. Material Requirements

a) Membrane Waterproofing

Primer shall be as asphalt cold applied, free from water and other foreign matters, and shall conform to the specification requirements defined in ASTM D-41

Built-up membrane shall be made of smoothly woven fibers that are impervious to acid, heat, dampness and totting. It should permit complete penetration of asphalt compound or bituminous coating in the woven glass fiber.

Preformed membrane shall be self-sealing flexible cold applied bituminous sheets bonded to 0.15 mm thick polythelene film.

3. Construction Requirements

Roof Deck

1) Surface Preparation

Concrete surface to be applied with waterproofing shall be structurally sound, clean and free of dirt, loose mortar particles, paints film oil, protective coats, efflorescence laitance, etc.

All defects shall be properly corrected and carefully formed to provide a smooth surface that is free of marks and properly cured prior to application works.

Inside corners where vertical and horizontal structure meet shall be provided with cant measuring 50 mm or rounded at corners a minimum of 50 mm radius.

2) Protective Coatings

Where laying of the built-up or preformed membrane conforms with the number of plies required as shown on the plans lay a mixture or sand mastic in the proportion of one part asphalt or bituminous material and four parts coarse screened sand by volume. With a steel trowel at an average of 3 mm thick over the surface of membrane.

Then at the rate of one gallon per (100 square feet) apply aluminum heat reflecting finish thoroughly over the dried sand mastic coating.

4. Method of Measurement

This item shall be measured in square meters for areas actually rendered with membrane waterproofing and number of packages for integrally waterproofing and number of packages for integrally waterproofed areas accepted to the satisfaction of the Engineer.

DIVISION 0 8 : PROJECT BILLBOARD

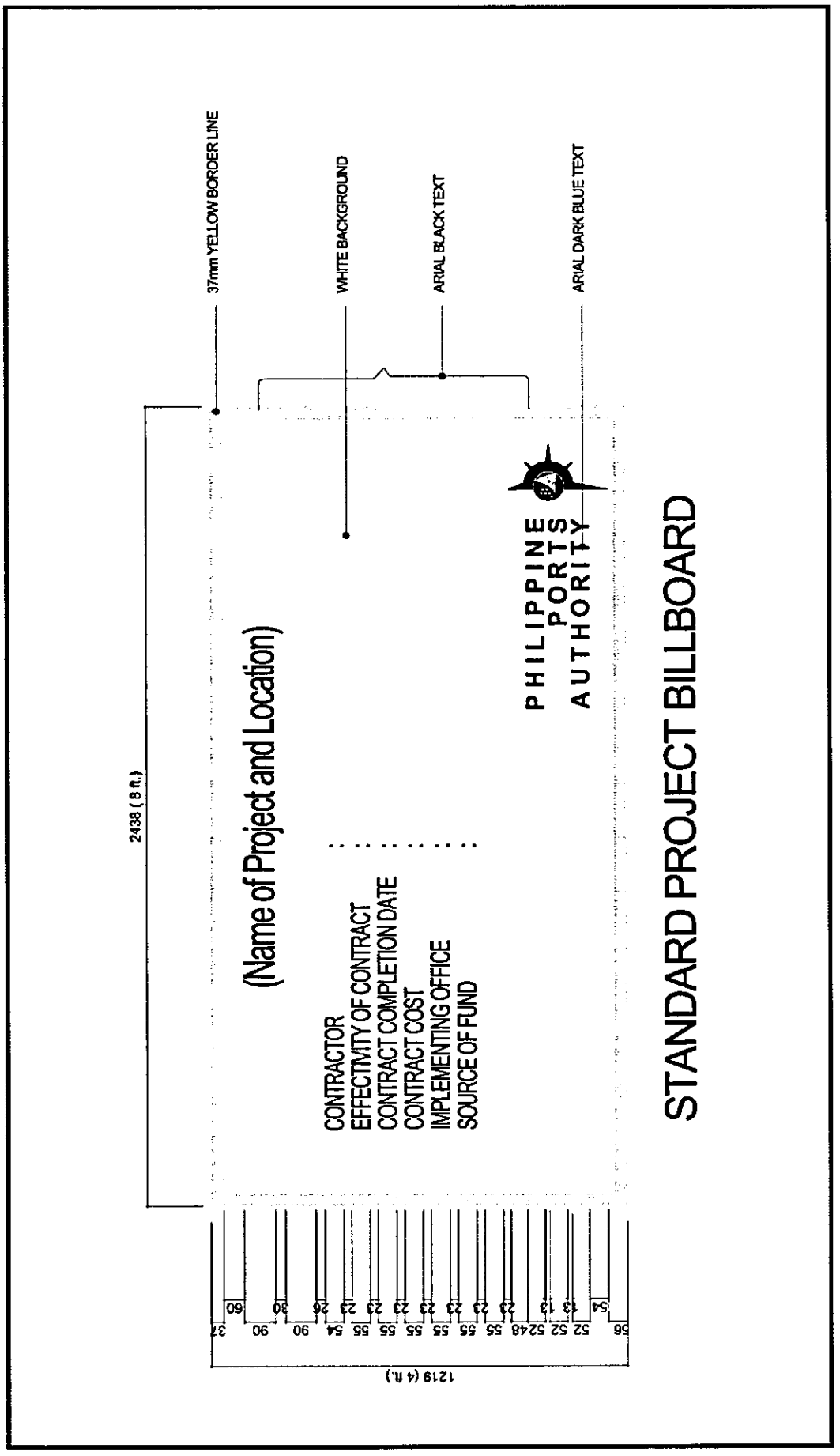
SPECIFICATION

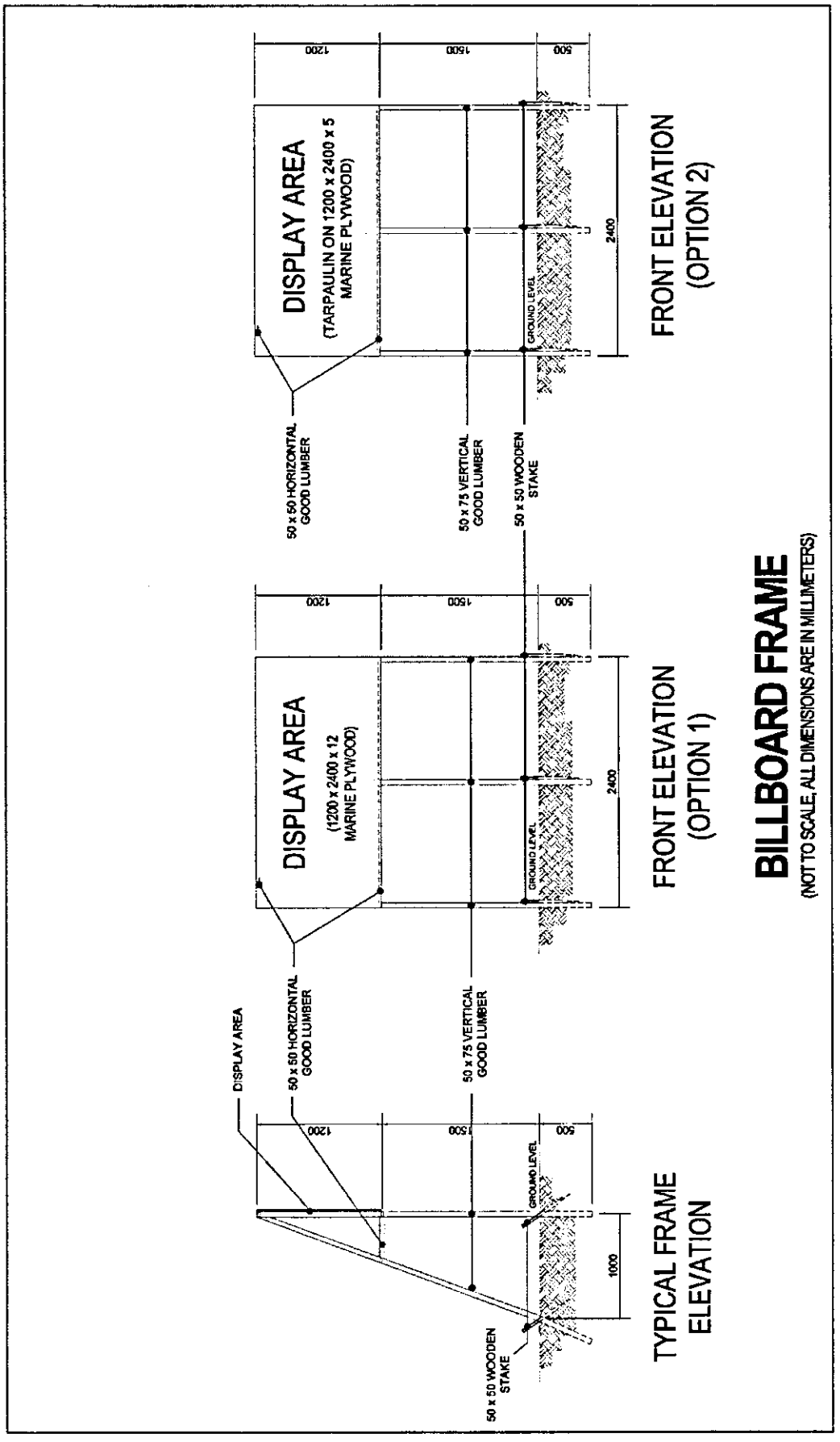
The Project Billboard shall be installed at location(s) designated by the Engineer.

The size and specifications of materials for the standard billboard shall be 4ft. x 8ft. (1,200mm x 2,400mm) using ½ inch (12mm) marine plywood or tarpaulin poster on 3/16 inch (5mm) marine plywood.

Project billboards shall not contain Name(s) and/or picture(s) of any personages.

See attached drawings for further details of the standard billboard.


STANDARD PROJECT BILLBOARD
PHILIPPINE PORTS AUTHORITY
(Name of Project and Location)
CONTRACTOR
EFFECTIVITY OF CONTRACT
CONTRACT COMPLETION DATE
CONTRACT COST
IMPLEMENTING OFFICE
SOURCE OF FUND
37mm YELLOW BORDER LINE
WHITE BACKGROUND
ARIAL BLACK TEXT
ARIAL DARK BLUE TEXT
2438 (8 ft.)
1219 (4 ft.)


BILLBOARD FRAME
(NOT TO SCALE, ALL DIMENSIONS ARE IN MILLIMETERS)
FRONT ELEVATION
(OPTION 2)
DISPLAY AREA
(TARPAULIN ON 1200 x 2400 x 5
MARINE PLYWOOD)
50 x 50 HORIZONTAL
GOOD LUMBER
50 x 75 VERTICAL
GOOD LUMBER
50 x 50 WOODEN
STAKE
GROUND LEVEL
1200
1500
500
2400
FRONT ELEVATION
(OPTION 1)
DISPLAY AREA
(1200 x 2400 x 12
MARINE PLYWOOD)
TYPICAL FRAME
ELEVATION
DISPLAY AREA
1000

DIVISION 09 : SAFETY SIGNAGES AND BARRICADES

DESCRIPTION

This work includes the furnishing and installing of safety signages and barricades in accordance with the specifications and to the details shown below in the drawings, or as directed by the Engineer.

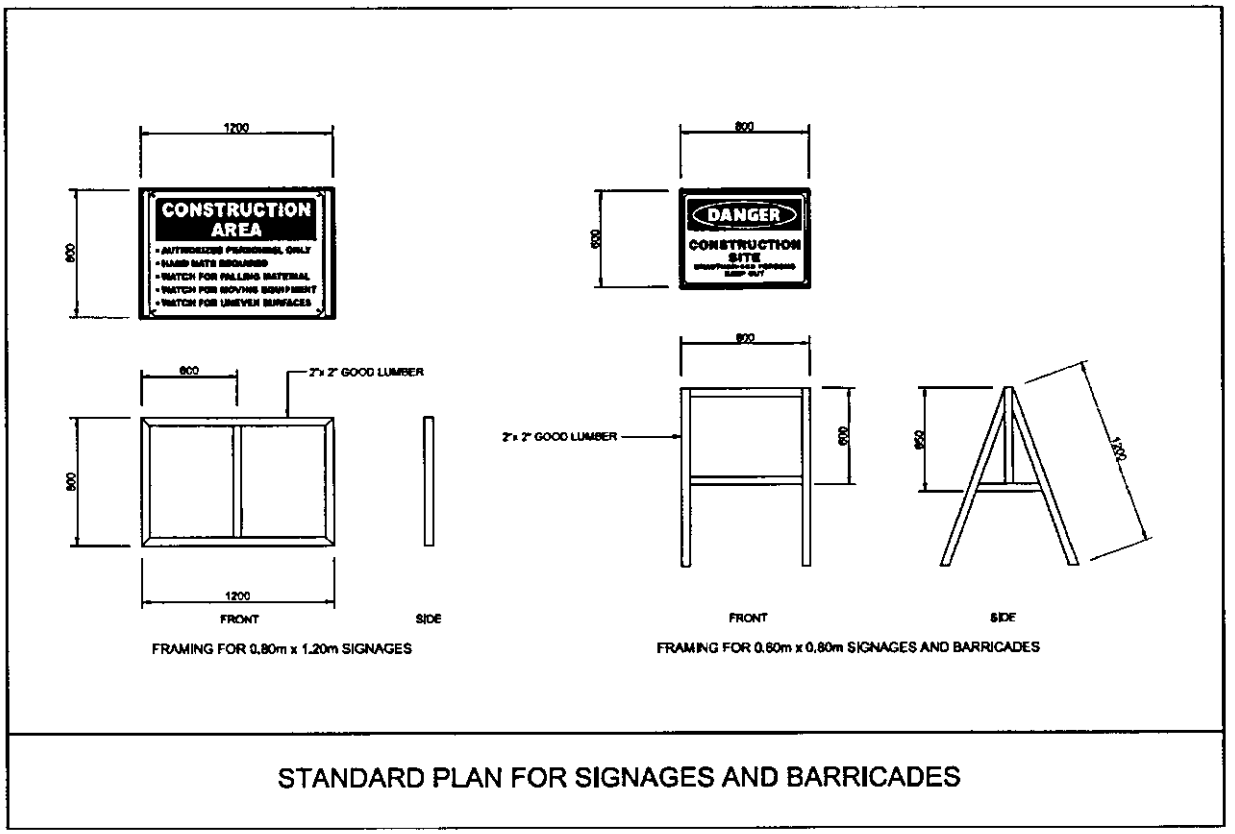
SPECIFICATION

The Signage's and Barricades shall be installed at location(s) designated by the Engineer.

The sizes of the standard signages shall be 2-2/3ft x 4ft (800mm X 1,200mm) for fixed type and 2ft x 2–2/3ft (600mm x 800mm) for mobile type. For barricade standard 2ft x 2–2/3ft (600mm x 800mm) shall be provided.

The materials to be used for signages and barricades are ½ inch (12mm) marine plywood or tarpaulin poster on 2" x 2" (50mm x 50mm) good lumber frame (see drawing below).

The printing or painting shall be the discretion of the Engineer.



STANDARD PLAN FOR SIGNAGES AND BARRICADES

SECTION VII

DRAWINGS (APPROVED PLANS)

SECTION VII

DRAWINGS AND APPROVED PLANS
(SEE ISSUED APPROVED PLANS)

LIST OF DRAWINGS:

A1 - Floor Plans, Site Development Plan

A2 - Front and Left Side Elevation

A3 - Right and Rear Side Elevation

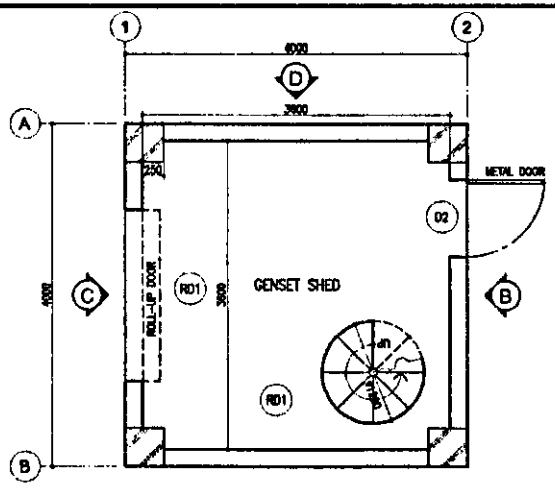
B1 - Proposed Location of Roofing, Barbed Wire to be Removed, Round Steel Hatch Door

B2 - Proposed Roof Framing, Proposed Roofing Side Elevation, Proposed Roofing Side Elevation

C1 - Existing Doors and Windows, Proposed New Windows

D1 - 35 m. Cylindrical Radar Tower Elevation

D2 - Spiral Stair Plan Detail @ 6^{th} to 7^{th} Level, Spiral Stair Plan Detail @ 9^{th} to 10^{th} Level



A GROUND FLOOR PLAN
SCALE 1:30M

NOTES:

INTERIOR WALLS REPAINTING

1.) SURFACE PREPARATION

2.) SUPPY AND APPLY 2 COATS OF SEMI-GLOSS LATEX PAINT AS FINISH

CONCRETE CEILING REPAINTING

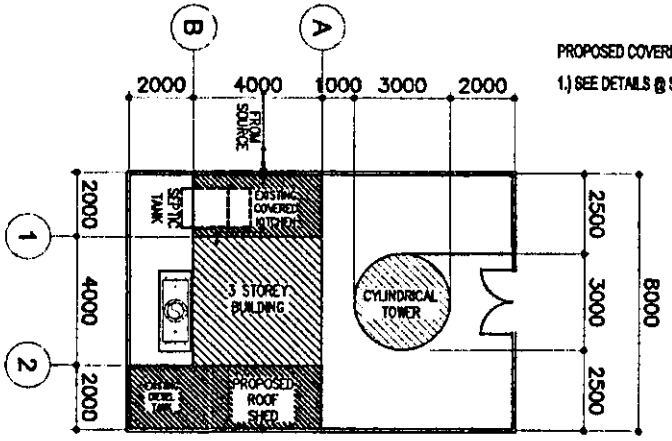
1.) SURFACE PREPARATION

2.) SUPPY AND APPLY 2 COATS OF FLAT LATEX PAINT AS FINISH

EXTERIOR WALLS REPAINTING

1.) SURFACE PREPARATION

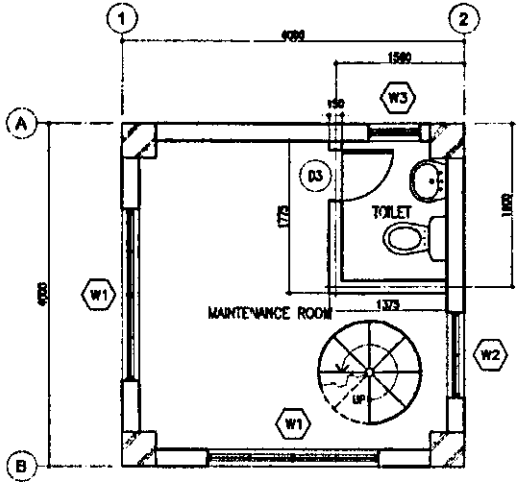
2.) SUPPY AND APPLY 2 COATS OF ELASTOMERIC PERMACOAT PAINT AS FINISH



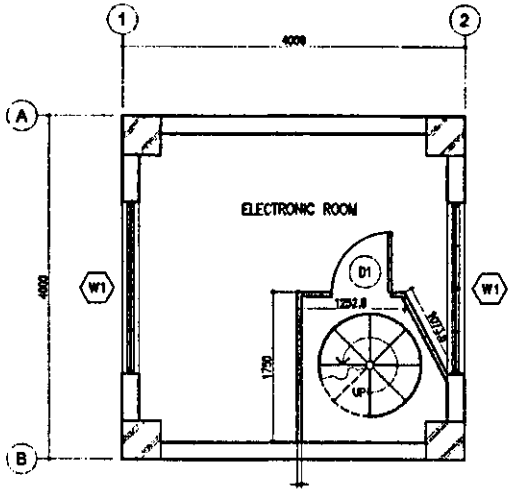
PROPOSED COVERED ROOFING & WATERPROOFING

1.) SEE DETAILS @ SHEET B-1 & B-2

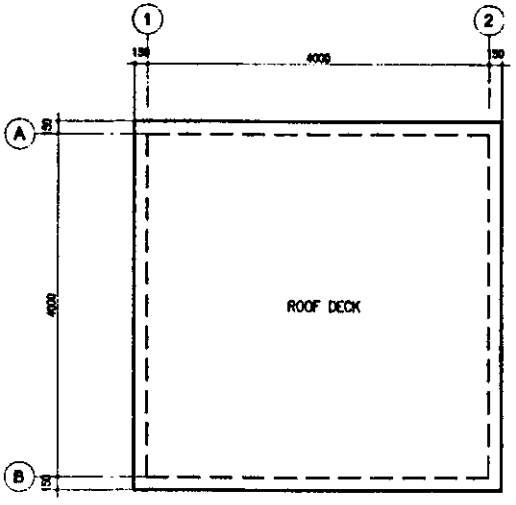
B SITE DEVELOPMENT PLAN (CORREGIDOR)
SCALE 1 : 80



B SECOND FLOOR PLAN

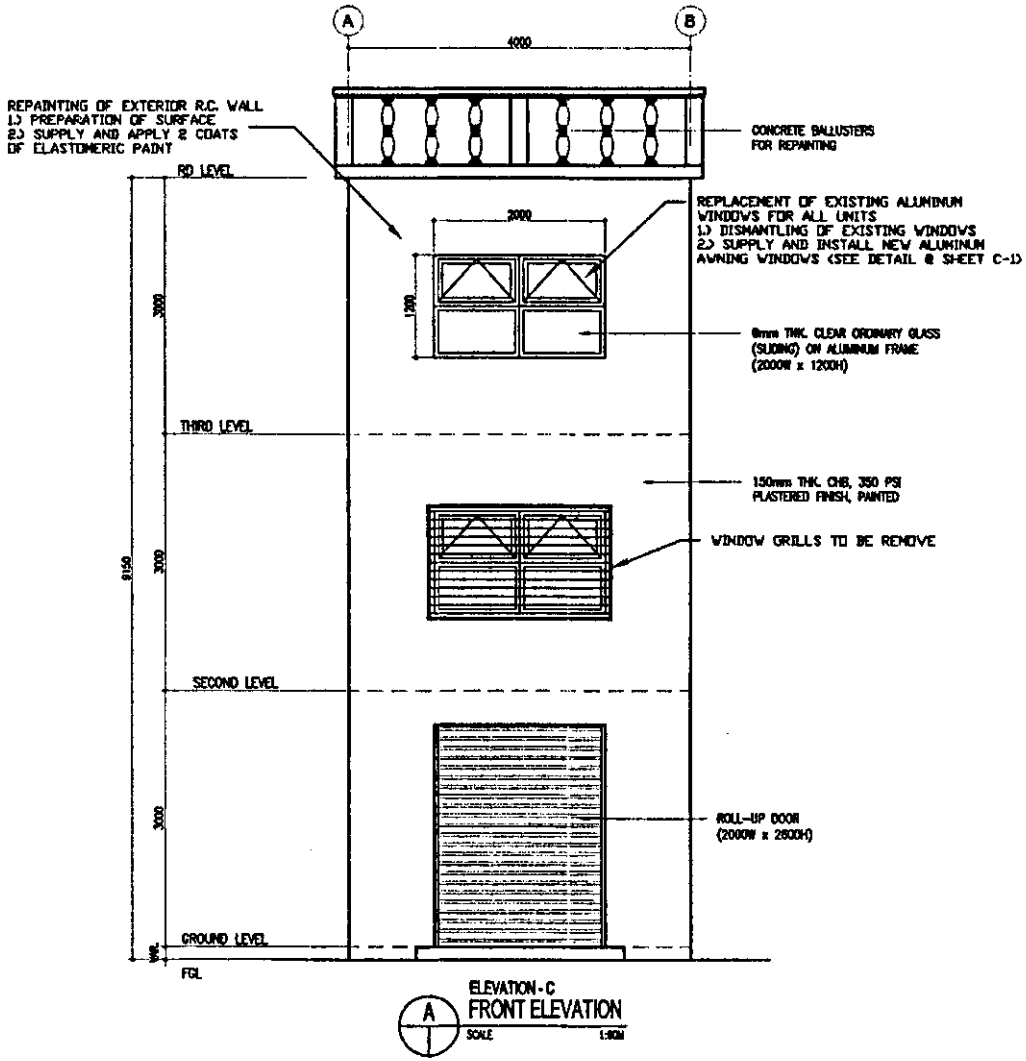


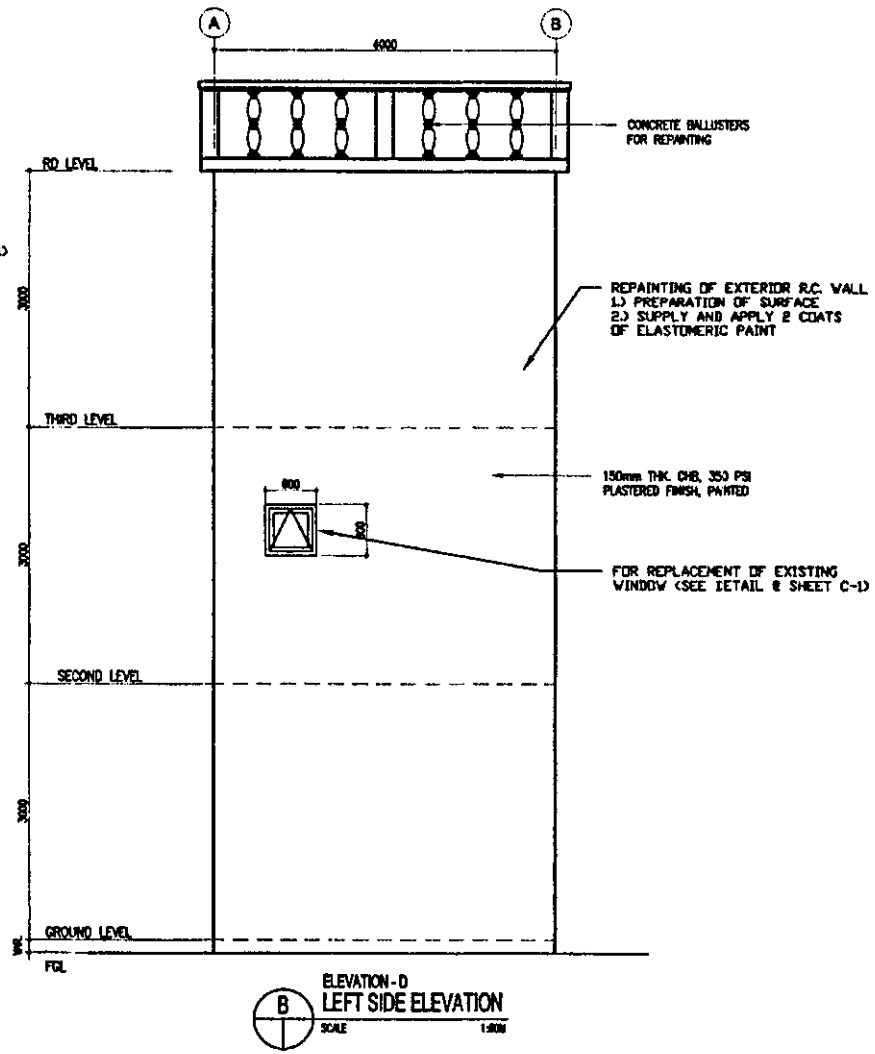
C THIRD FLOOR PLAN



D ROOF DECK FLOOR PLAN
SCALE 1:30M

PHILIPPINE PORTS AUTHORITY	PROJECT TITLE: Restoration / Improvement and Repainting of VTMS Radar Station 2 Facility at Corregidor Island, Cavite				
PORT MANAGEMENT OFFICE-NCR NORTH	PREPARED BY: JEVETTE LAN, Architect II	REVIEWED AND RECOMMENDED BY: JOENEL D. MANALON, Principal Engineer A	APPROVED: JON GABRIELL M. MANANSALA, Acting Port Manager, PMO-NCR North	SHEET CONTENT: FLOOR PLANS SITE DEVT. PLAN	SHEET NO: A-1





PHILIPPINE PORTS AUTHORITY

PROJECT TITLE: Restoration / Improvement and Repainting of VTMS Radar Station 2 Facility at Corregidor Island, Cavite

PORT MANAGEMENT OFFICE-
NCR NORTH

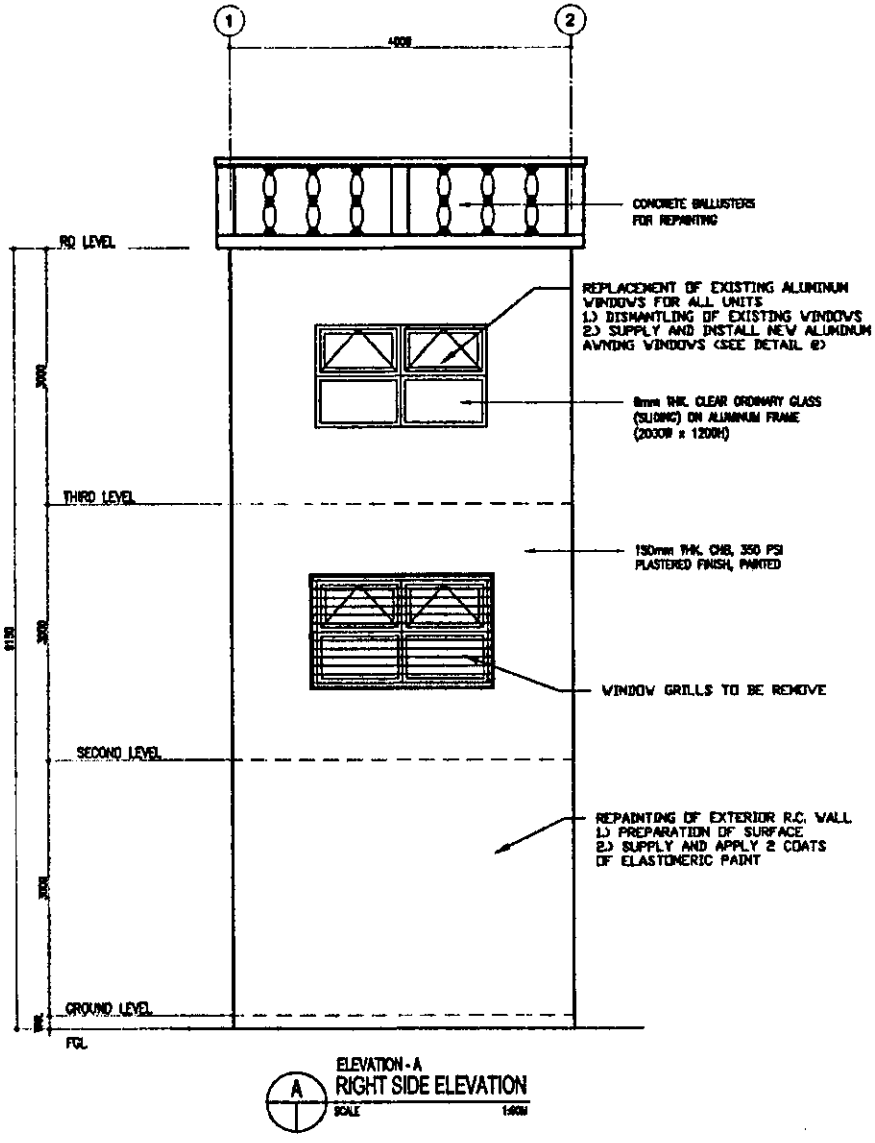
PREPARED BY:
JEVETTE ILAN
Architect II

REVIEWED AND RECOMMENDED BY
JOENEL C. MANALON
Principal Engineer A

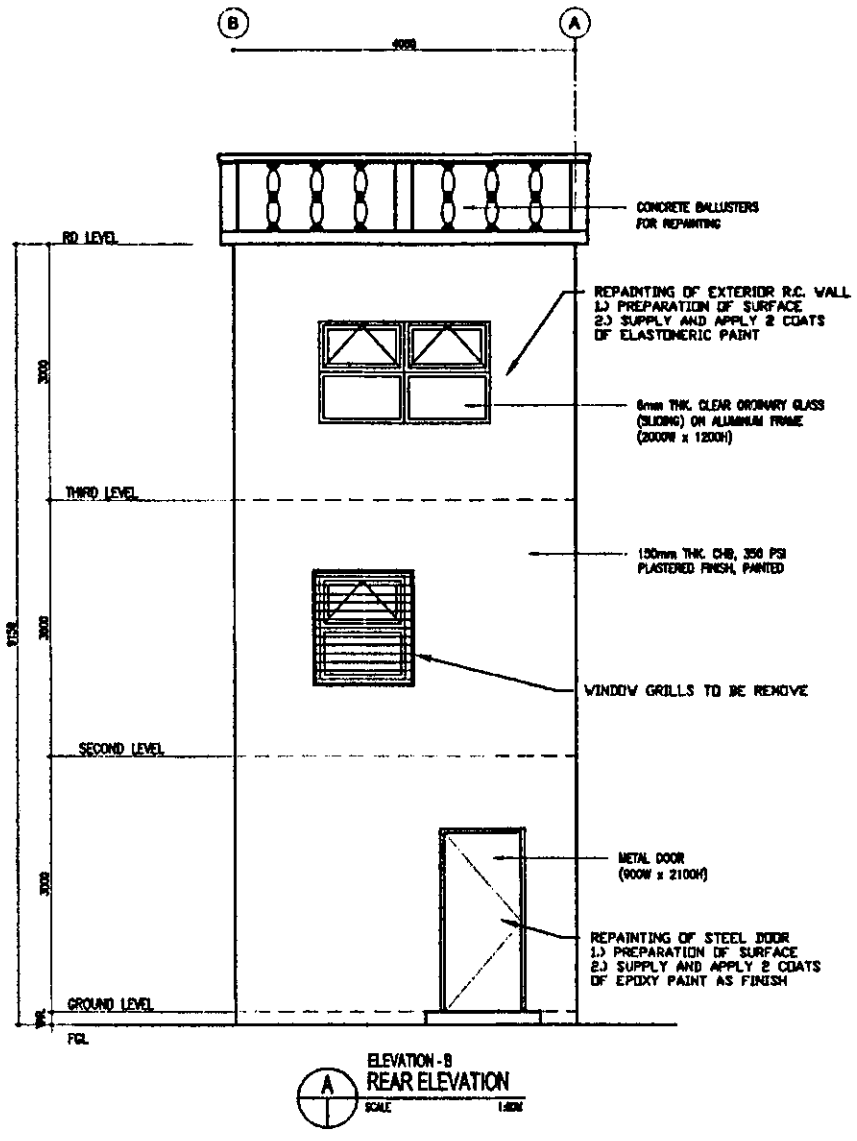
APPROVED:
JON GABRIELL M. MANANSALA
Acting Port Manager, PMO-NCR North

SHEET CONTENT:
FRONT AND LEFT ELEV.
EXTERIOR WALL REPAINTING

SHEET NO
A-2



ELEVATION - A
RIGHT SIDE ELEVATION
SCALE 1:40



ELEVATION - B
REAR ELEVATION
SCALE 1:40

PHILIPPINE PORTS AUTHORITY

PROJECT TITLE: Restoration / Improvement and Repainting of VTMS Radar Station 2 Facility at Corregidor Island, Cavite

PORT MANAGEMENT OFFICE-NCR NORTH

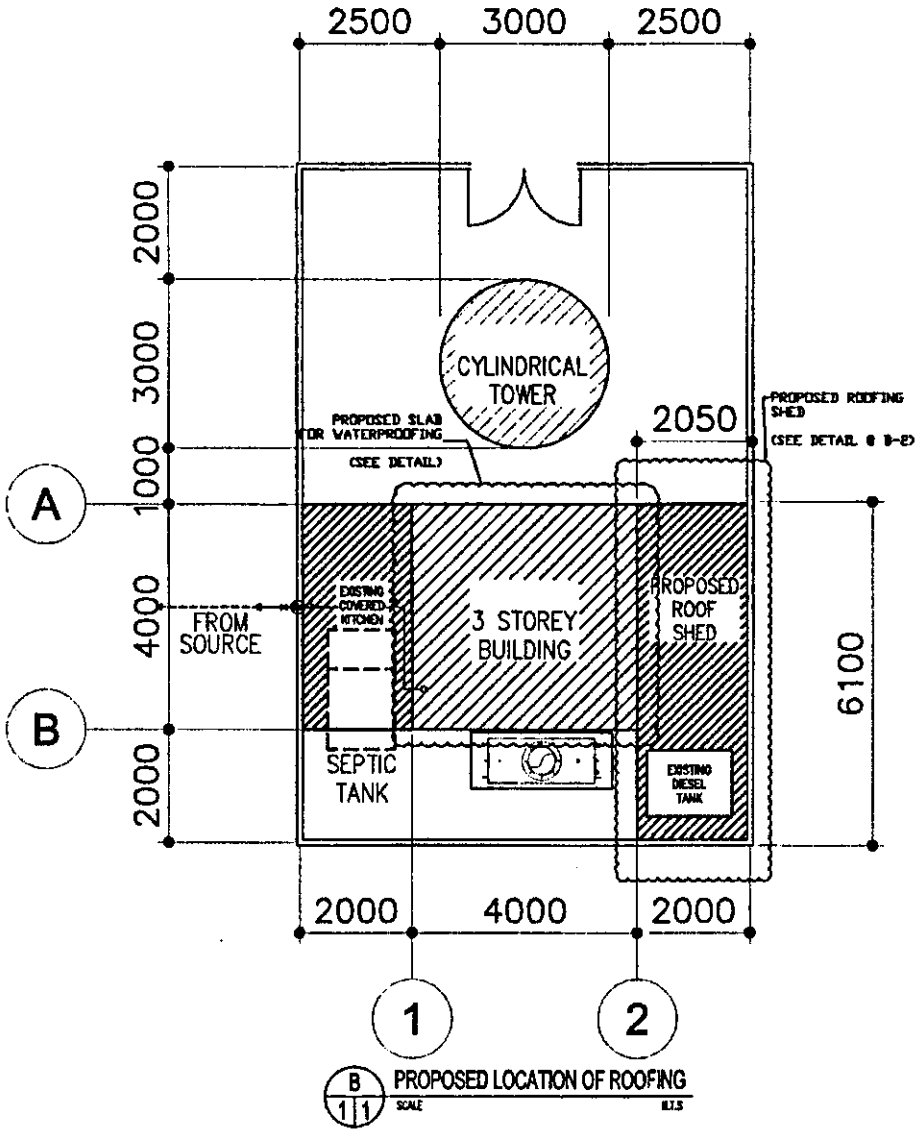
PREPARED BY: JEVETTE TEAN, Architect II

REVIEWED AND RECOMMENDED BY: JOENEL C. MANALON, Principal Engineer A

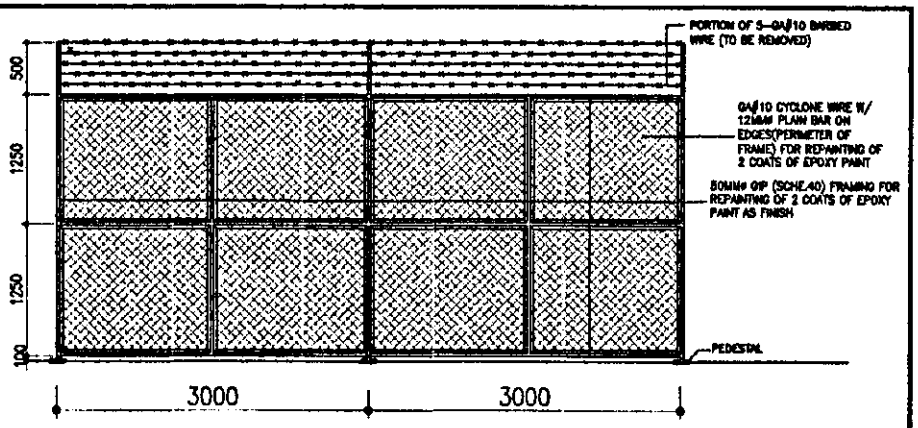
APPROVED: JON GABRIELL M. MANANSALA, Acting Port Manager, PMO-NCR North

SHEET CONTENT: RIGHT AND REAR ELEV. EXTERIOR WALL REPAINTING

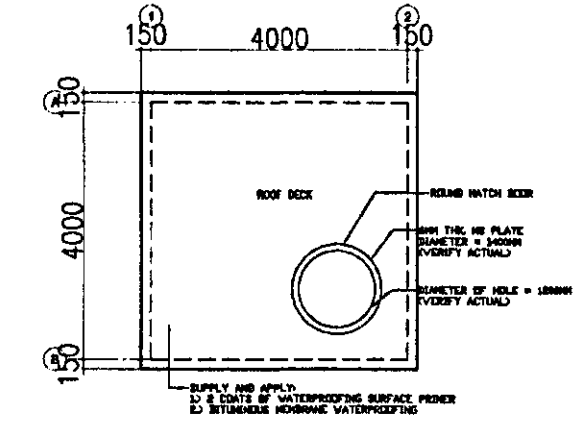
SHEET NO: A-3

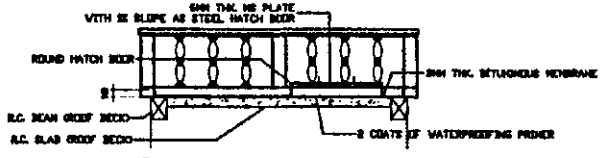


B 1|1 PROPOSED LOCATION OF ROOFING
SCALE N.T.S



B 1|2 BARBED WIRE TO BE REMOVE
SCALE N.T.S





B 1|2 ROUND STEEL HATCH DOOR
SCALE N.T.S

PHILIPPINE PORTS AUTHORITY

PROJECT TITLE: Restoration / Improvement and Repainting of VTMS Radar Station 2 Facility at Corregidor Island, Cavite

PORT MANAGEMENT OFFICE-NCR NORTH

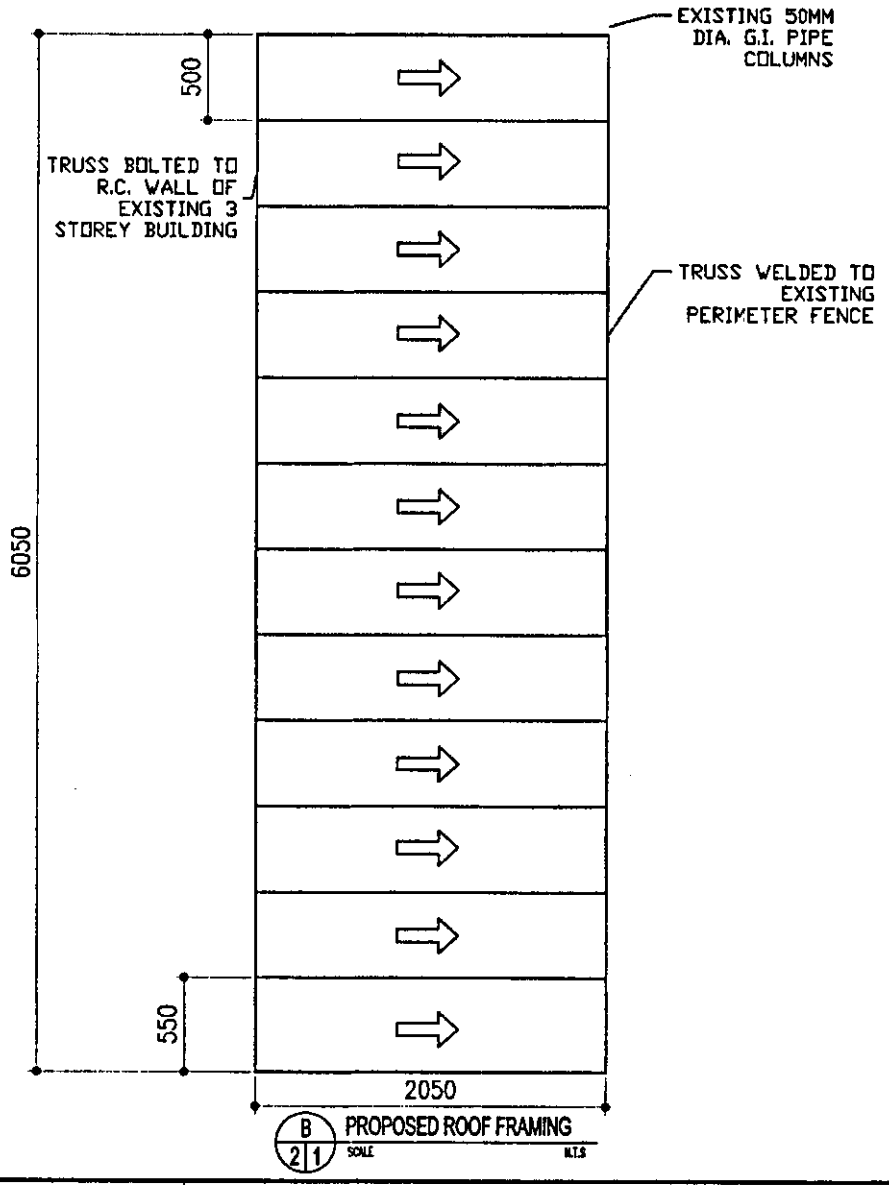
PREPARED BY: JEVETTE LAN, Architect II

REVIEWED AND RECOMMENDED BY: JOENEL C. MANALON, Principal Engineer A

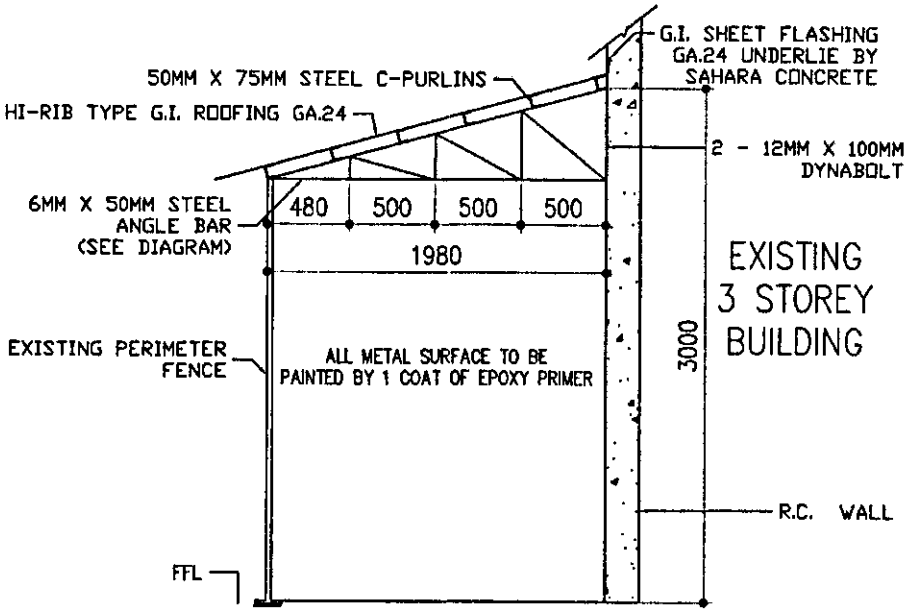
APPROVED: JONNA GABRIELL M. MANANSALA, Acting Port Manager, PMO-NCR North

SHEET CONTENT: EXISTING DOORS & WINDOWS PROPOSED NEW WINDOWS

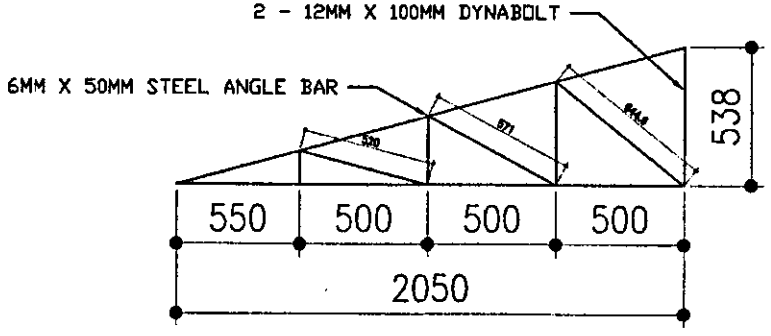
SHEET NO: B-1



B 2|1 PROPOSED ROOF FRAMING
SCALE N.T.S



B 2|2 PROPOSED ROOFING SIDE ELEVATION
SCALE N.T.S



B 2|3 PROPOSED TRUSS DIAGRAM
SCALE N.T.S

PHILIPPINE PORTS AUTHORITY

PROJECT TITLE: Restoration / Improvement and Repainting of VTMS Radar Station 2 Facility at Corregidor Island, Cavite

PORT MANAGEMENT OFFICE-NCR NORTH

PREPARED BY: JEVETT V. ILAN, Architect II

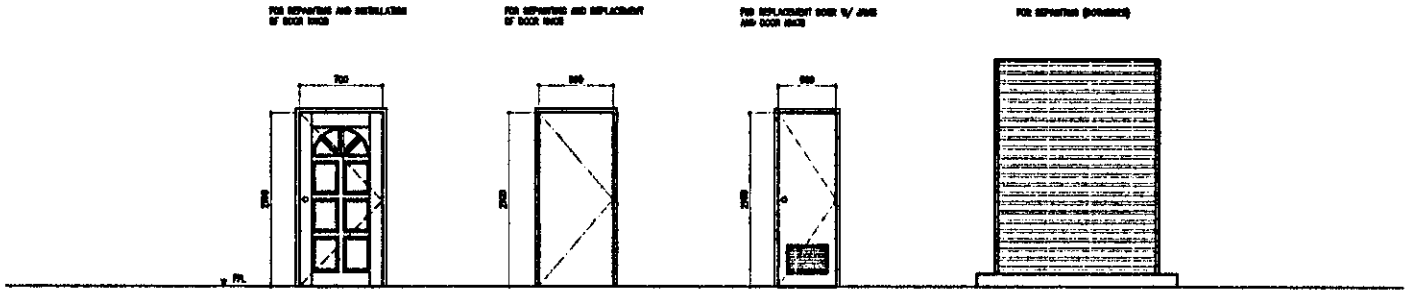
REVIEWED AND RECOMMENDED BY: JOENEL C. MANALON, Principal Engineer A

APPROVED: JOY GABRIELL M. MANANSALA, Acting Port Manager, PMO-NCR North

SHEET CONTENT: EXISTING DOORS & WINDOWS PROPOSED NEW WINDOWS

SHEET NO. B-2

NOTES:



D1

TYPE: WOODEN FLUSH DOOR

QUANTITY: 1 SET

LOCATION: THIRD FLOOR ELECTRONIC EQP. ROOM

D2

TYPE: METAL FLUSH DOOR

QUANTITY: 1 SET

LOCATION: GROUND FLOOR KITCHEN SHED ACCESS

D3

TYPE: PVC DOOR

QUANTITY: 1 SETS

LOCATION: GROUND FLOOR 'TOILET'

RD1

TYPE: PVC DOOR

QUANTITY: 1 SETS

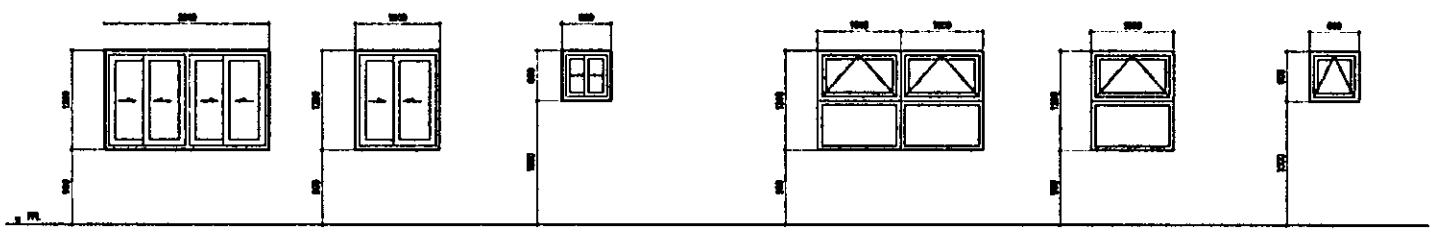
LOCATION: SECOND FLOOR TOILET

C 1|1 EXISTING DOORS AND WINDOWS

SCALE N.T.S

EXISTING WINDOWS TO BE REMOVE:

PROPOSED NEW WINDOWS:



W1

TYPE: ALUMINUM WINDOW FRAME W/ 6mm THK CLEAR GLASS AND 12mmø BAR GRILLS

QUANTITY: 8 SETS

LOCATION: 2 @ ELECTRONIC ROOM & 2 @ MAINTENANCE ROOM

W2

TYPE: ALUMINUM WINDOW FRAME W/ 6mm THK CLEAR GLASS AND 12mmø BAR GRILLS

QUANTITY: 1 SET

LOCATION: GENERATOR ROOM

W3

TYPE: ALUMINUM WINDOW FRAME W/ 6mm THK CLEAR GLASS

QUANTITY: 1 SET

LOCATION: CHIEF FOR OPERATION ROOM

W1

TYPE: uPVC WINDOW FRAME W/ 6mm THK CLEAR GLASS

QUANTITY: 8 SETS

LOCATION: 2 @ ELECTRONIC ROOM & 2 @ MAINTENANCE ROOM

W2

TYPE: uPVC WINDOW FRAME W/ 6mm THK CLEAR GLASS

QUANTITY: 1 SET

LOCATION: GENERATOR ROOM

W3

TYPE: uPVC WINDOW FRAME W/ 6mm THK CLEAR GLASS

QUANTITY: 1 SET

LOCATION: CHIEF FOR OPERATION ROOM

C 1|2 PROPOSED NEW WINDOWS

SCALE N.T.S

PHILIPPINE PORTS AUTHORITY

PROJECT TITLE: Restoration / Improvement and Repainting of VTMS Radar Station 2 Facility at Corregidor Island, Cavite

PORT MANAGEMENT OFFICE-NCR NORTH

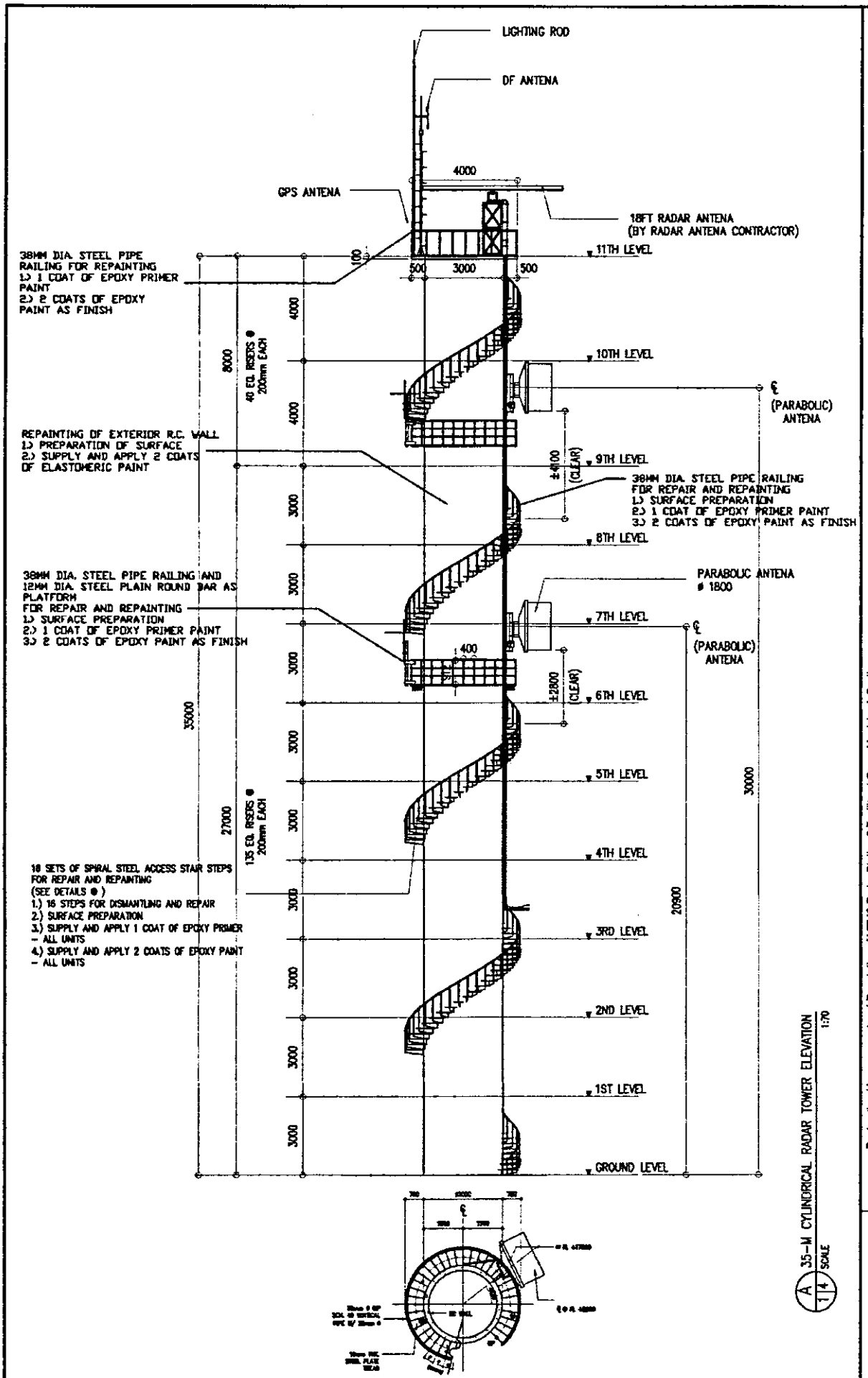
PREPARED BY: JEVETTE LAN, Architect II

REVIEWED AND RECOMMENDED BY: JOENEL C. MANALON, Principal Engineer A

APPROVED: JON GABRIELL M. MANANSALA, Acting Port Manager, PMO-NCR North

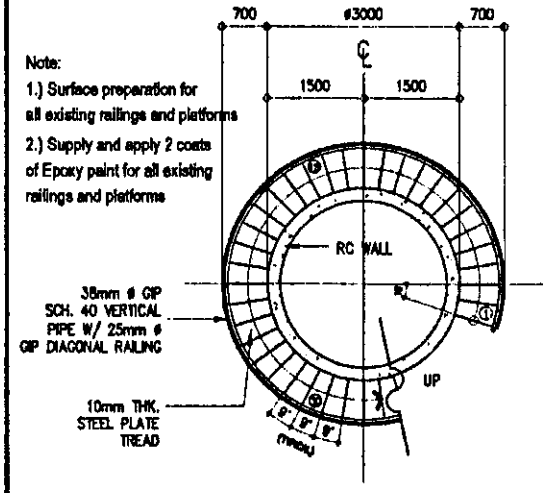
SHEET CONTENT: EXISTING DOORS & WINDOWS PROPOSED NEW WINDOWS

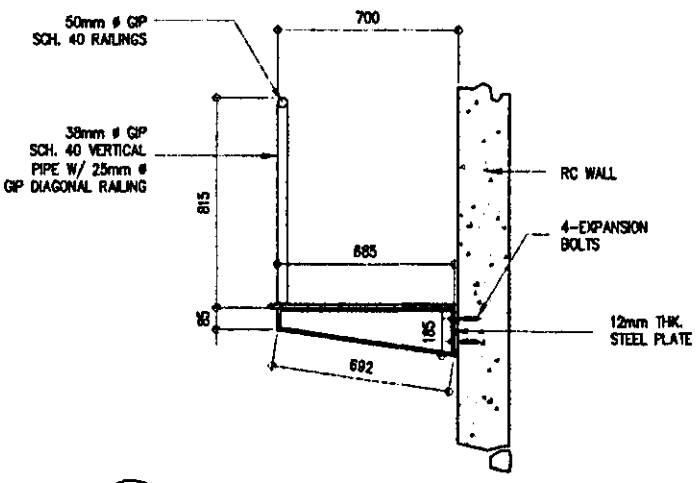
SHEET NO.: C-1


LIGHTING ROD
DF ANTENA
4000
GPS ANTENA
18FT RADAR ANTENA
(BY RADAR ANTENA CONTRACTOR)
11TH LEVEL
38MM DIA. STEEL PIPE
RAILING FOR REPAINTING
1.) 1 COAT OF EPOXY PRIMER
PAINT
2.) 2 COATS OF EPOXY
PAINT AS FINISH
500
3000
500
40 EQL RISERS @
200mm EACH
8000
4000
4000
10TH LEVEL
℄
(PARABOLIC)
ANTENA
REPAINTING OF EXTERIOR R.C. WALL
1.) PREPARATION OF SURFACE
2.) SUPPLY AND APPLY 2 COATS
OF ELASTOMERIC PAINT
±4100
(CLEAR)
9TH LEVEL
38MM DIA. STEEL PIPE RAILING
FOR REPAIR AND REPAINTING
1.) SURFACE PREPARATION
2.) 1 COAT OF EPOXY PRIMER PAINT
3.) 2 COATS OF EPOXY PAINT AS FINISH
8TH LEVEL
38MM DIA. STEEL PIPE RAILING AND
12MM DIA. STEEL PLAIN ROUND BAR AS
PLATFORM
FOR REPAIR AND REPAINTING
1.) SURFACE PREPARATION
2.) 1 COAT OF EPOXY PRIMER PAINT
3.) 2 COATS OF EPOXY PAINT AS FINISH
PARABOLIC ANTENA
ø 1800
7TH LEVEL
℄
(PARABOLIC)
ANTENA
400
±2800
(CLEAR)
6TH LEVEL
35000
135 EQL RISERS @
200mm EACH
27000
3000
5TH LEVEL
4TH LEVEL
18 SETS OF SPIRAL STEEL ACCESS STAIR STEPS
FOR REPAIR AND REPAINTING
(SEE DETAILS ⊕)
1.) 18 STEPS FOR DISMANTLING AND REPAIR
2.) SURFACE PREPARATION
3.) SUPPLY AND APPLY 1 COAT OF EPOXY PRIMER
- ALL UNITS
4.) SUPPLY AND APPLY 2 COATS OF EPOXY PAINT
- ALL UNITS
30000
20900
3RD LEVEL
2ND LEVEL
1ST LEVEL
GROUND LEVEL
A 35-M CYLINDRICAL RADAR TOWER ELEVATION 1:70
1/4 SCALE
PROJECT TITLE: Restoration / Improvement and Repainting of VTMS Radar Station 2 Facility at Corregidor Island, Cavite
PREPARED BY:
JEVETTE ILAN
Architect II
REVIEWED AND RECOMMENDED BY:
JOENEL S. BANALON
Principal Engineer A
APPROVED:
JON GABRIELL M. MANANSALA
Acting Port Manager, PMO-NCR North
SHEET CONTENT:
RADAR TOWER STAIR 1
RAILING PLAN AND ELEV.
SHEET NO:
D-1
PORT MANAGEMENT OFFICE-
NCR NORTH
PHILIPPINE
PORTS
AUTHORITY

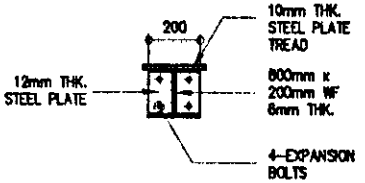
35 METRES CYLINDRICAL STRUCTURE - CORREGIDOR

Note:
1.) Surface preparation for all existing railings and platforms
2.) Supply and apply 2 coats of Epoxy paint for all existing railings and platforms

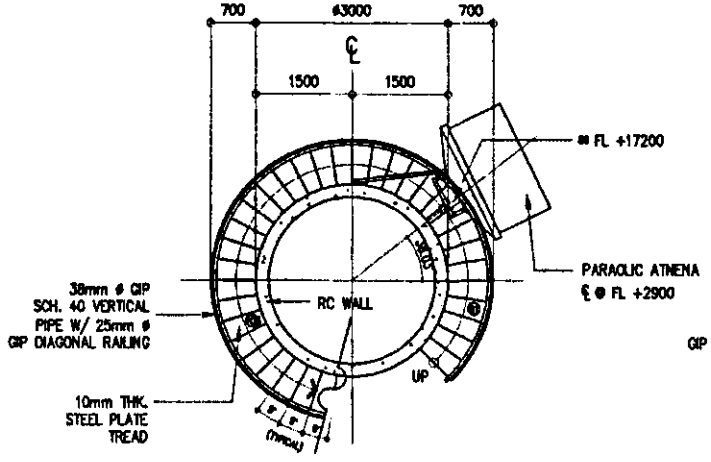




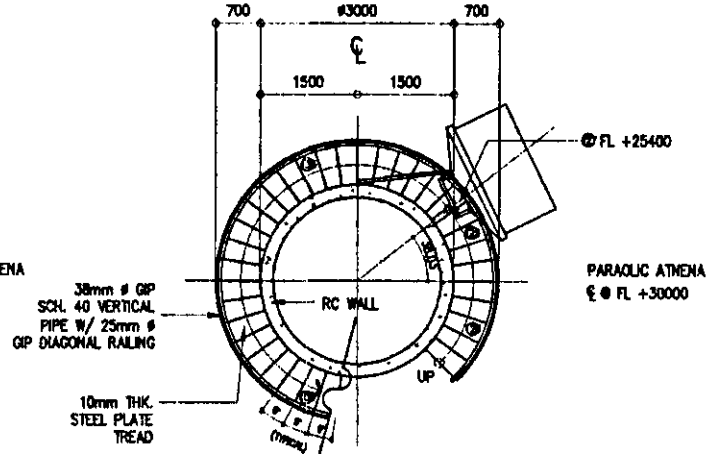
Note:
1.) Supply, Fabrication and installation of Steel steps - 16 units (including framing)
2.) Supply and apply 1 coat of Epoxy primer for all metal surfaces.
3.) Supply and apply 2 coats of Epoxy paint as finish for all metal surfaces.
(Color to be assign by the End-user)



D / A-1 TYPICAL SPIRAL STAIR TREAD SECTION DETAIL
SCALE 1:10 M

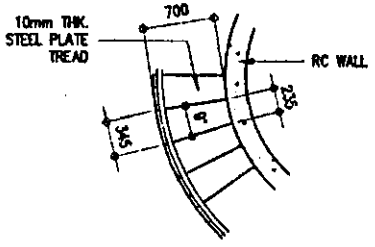


B / A-1 SPIRAL STAIR PLAN DETAIL @ 6TH TO 7TH LEVEL
SCALE 1:40 M



C / A-1 SPIRAL STAIR PLAN DETAIL @ 9TH TO 10TH LEVEL
SCALE 1:40 M

Note:
1.) Surface preparation for all existing railings and platforms
2.) Supply and apply 2 coats of Epoxy paint for all existing railings and platforms



F / A-1 THREAD DETAIL
SCALE 1:25 M

PHILIPPINE PORTS AUTHORITY	PROJECT TITLE: Restoration / Improvement and Repainting of VTMS Radar Station 2 Facility at Corregidor Island, Cavite				
PORT MANAGEMENT OFFICE-NCR NORTH	PREPARED BY: JEVETTE SLAN, Architect II	REVIEWED AND RECOMMENDED BY: JOENEL G. MANALON, Principal Engineer A	APPROVED: JON GABRIELL M. MANANSALA, Acting Port Manager, PMO-NCR North	SHEET CONTENT: RADAR TOWER SPIRAL STAIR CONNECTION DETAILS	SHEET NO: D-2

SECTION VIII

BILL OF QUANTITIES AND ATTACHMENTS

BID SUMMARY

RESTORATION/IMPROVEMENT AND REPAINTING OF VTMS RADAR STATION 2 FACILITY AT CORREGIDOR ISLAND, CAVITE

NO.	DESCRIPTION OF WORK	AMOUNT (Pesos)
1.	GENERAL EXPENSES	
2.	RESTORATION AND REPAINTING OF 35-M CYLINDRICAL R.C. RADAR TOWER	
3.	RESTORATION/IMPROVEMENT AND REPAINTING OF 3-STOREY RADAR STATION BUILDING	
4.	INSTALLATION OF ROOF EAVE PROTECTION FOR THE GENSET/GENSET DIESEL TANK	
5.	TRANSPORTATION OF SALVAGE SCRAP MATERIALS AND OTHER UNSERVICEABLE MATERIALS	
	BID PRICE	

Name of Firm	Name of Bidder/Authorized Representative (Signatory's Legal Capacity)	Date

BILL OF QUANTITIES

RESTORATION/IMPROVEMENT AND REPAINTING OF VTMS RADAR STATION 2 FACILITY AT CORREGIDOR ISLAND, CAVITE

ITEM NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
	BILL NO. 1 - GENERAL EXPENSES				
1.1	Mobilization and Demobilization/Cleaning-Up of the Project Area.	lot	1.0		
1.2	Provide construction safety and health program in the execution of the project	mos.	3.00		
	TOTAL FOR BILL NO. 1				

Name of Bidder/Authorized Representative
Signatory's Legal Capacity)

BILL OF QUANTITIES

RESTORATION/IMPROVEMENT AND REPAINTING OF VTMS RADAR STATION 2 FACILITY AT CORREGIDOR ISLAND, CAVITE

ITEM NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 2	**RESTORATION AND REPAINTING OF 35-M CYLINDRICAL R.C. RADAR TOWER BUILDING**				
2.1	**Replacement of Dilapidated/Corroded Spiral Steel Stair Riser Steps and Railings:**				
2.1.1	Erection of scaffoldings and Removal of dilapidated/ corroded steel stair riser steps and railings.	sets	16.00		
2.1.2	Supply, fabricate and install steel stair riser steps and railings including associated builder's to complete the work and painted with 1-coat epoxy primer. as indicated in the plan.	sets	16.00		

Name of Bidder/Authorized Representative
Signatory's Legal Capacity)