

**PHILIPPINE BIDDING DOCUMENTS**  
(As Harmonized with Development Partners)

**Procurement of  
INFRASTRUCTURE  
PROJECTS**

Government of the Republic of the Philippines

PROPOSED REHABILITATION OF ROAD AND DRAINAGE AT  
ROAD 20 AND ROAD 23

Project No.: 20-00028

**Sixth Edition**  
**July 2020**

# Preface

These Philippine Bidding Documents (PBDs) for the procurement of Infrastructure Projects (hereinafter referred to also as the “Works”) through Competitive Bidding have been prepared by the Government of the Philippines for use by all branches, agencies, departments, bureaus, offices, or instrumentalities of the government, including government-owned and/or -controlled corporations, government financial institutions, state universities and colleges, local government units, and autonomous regional government. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

The PBDs are intended as a model for admeasurements (unit prices or unit rates in a bill of quantities) types of contract, which are the most common in Works contracting.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract; (ii) the eligibility requirements of Bidders; (iii) the expected contract duration; and (iv) the obligations, duties, and/or functions of the winning Bidder.

Care should be taken to check the relevance of the provisions of the PBDs against the requirements of the specific Works to be procured. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, care must be exercised to avoid contradictions between clauses dealing with the same matter.

Moreover, each section is prepared with notes intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They shall not be included in the final documents. The following general directions should be observed when using the documents:

- a. All the documents listed in the Table of Contents are normally required for the procurement of Infrastructure Projects. However, they should be adapted as necessary to the circumstances of the particular Project.
- b. Specific details, such as the “*name of the Procuring Entity*” and “*address for bid submission*,” should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, BDS, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, and Bill of Quantities are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.
- d. The cover should be modified as required to identify the Bidding Documents as to the names of the Project, Contract, and Procuring Entity, in addition to date of issue.

- e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.
- f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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# ***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***

### **Notes on the Invitation to Bid**

The Invitation to Bid (IB) provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The IB shall be posted in accordance with Section 21.2 of the 2016 revised IRR of RA No. 9184.

Apart from the essential items listed in the Bidding Documents, the IB should also indicate the following:

- a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids;
- b. The place where the Bidding Documents may be acquired or the website where it may be downloaded;
- c. The deadline for the submission and receipt of bids; and
- d. Any important bid evaluation criteria.

The IB should be incorporated into the Bidding Documents. The information contained in the IB must conform to the Bidding Documents and in particular to the relevant information in the Bid Data Sheet.



**REPUBLIC OF THE PHILIPPINES**  
**QUEZON CITY GOVERNMENT**



**BIDS AND AWARDS COMMITTEE FOR INFRASTRUCTURE & CONSULTANCY**  
2<sup>nd</sup> floor, Finance Building, Procurement Department, Quezon City Hall Complex, Elliptical Road, Quezon City

October 01, 2020

## INVITATION TO BID

No.	Project No.	Project Name	Location	Amount	Duration Cal. Days	Office	Source Fund
<b>Roads – Small B</b>							
1	20-00020	Proposed Rehabilitation of Road and Drainage at Geronimo Extension	Bagong Silangan	1,124,555.55	90	City Engineering Department	City Engineering Dept-Continuing
2	20-00021	Proposed Concreting of Pathwalk along Road 19 and Road 15	Bahay Toro	2,177,633.62	90	City Engineering Department	General Fund-Engineering Dept.
3	20-00022	Proposed Rehabilitation of Road and Drainage at Akle Street	Claro (Quirino 3-B)	5,623,066.65	120	City Engineering Department	City Engineering Dept-Continuing
4	20-00023	Proposed Rehabilitation of Road and Drainage at Sunrise Drive	Bagong Lipunan ng Crame	7,674,355.39	120	City Engineering Department	City Engineering Dept-Continuing
5	20-00024	Proposed Rehabilitation of Road and Drainage at Red Arrow Street	White Plains	8,649,773.79	120	City Engineering Department	City Engineering Dept-Continuing
6	20-00025	Proposed Rehabilitation of Road and Drainage at Fernsville Street	White Plains	9,474,554.05	150	City Engineering Department	City Engineering Dept-Continuing
7	20-00026	Proposed Rehabilitation of Road and Drainage at Yellowstone Street	White Plains	9,982,063.52	150	City Engineering Department	City Engineering Dept-Continuing
8	20-00027	Proposed Rehabilitation of Road and Drainage at Greenhill Street	White Plains	10,076,428.96	150	City Engineering Department	City Engineering Dept-Continuing
9	20-00028	Proposed Rehabilitation of Road and Drainage at Road 20 and Road 23	Bahay Toro	12,307,641.95	180	City Engineering Department	City Engineering Dept-Continuing
10	20-00029	Proposed Rehabilitation of Road and Drainage at Bayaya Street	Bungad	12,978,525.83	180	City Engineering Department	City Engineering Dept-Continuing
11	20-00030	Proposed Rehabilitation of Road and Drainage at Gumamela Street	Roxas	16,171,478.46	180	City Engineering Department	City Engineering Dept-Continuing
12	20-00031	Proposed Rehabilitation of Road and Drainage at Ilaw Street	Paltok	16,178,831.24	180	City Engineering Department	City Engineering Dept-Continuing
13	20-00032	Proposed Rehabilitation of Road and Drainage at Tabayoc Street	Sienna	18,901,421.05	180	City Engineering Department	City Engineering Dept-Continuing
14	20-00033	Proposed Rehabilitation of Road and Drainage at Maria Clara Street	Talayan	20,563,725.51	210	City Engineering Department	City Engineering Dept-Continuing
<b>Building – Small B</b>							
15	20-00034	Proposed Construction of two (2) storey Damayang Lagi Barangay Hall Building	Damayang Lagi	28,149,031.07	180	City Engineering Department	General Fund-Engineering Dept.



1. The **QUEZON CITY LOCAL GOVERNMENT** now invites bids for Various Projects. Completion of the works is required *as stated above*. 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
2. A complete set of Bidding Documents may be acquired by interested Bidders on **October 02, 2020** upon submission of a Document Request List (DRL) printed from the Philippine Government Electronic Procurement System (PhilGEPS) website from the address below *and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB*.

**STANDARD RATES:**

Approved Budget for the Contract	Maximum Cost of Bidding Documents (in Philippine Peso)
More than 1 Million up to 5 Million	5,000.00
More than 5 Million up to 10 Million	10,000.00
More than 10 Million up to 50 Million	25,000.00

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of the bids.

3. The following are the requirements for purchase of Bidding Documents:
  1. PhilGEPS Registration Certificate (Platinum – 3 Pages)
  2. Document Request List (DRL)
  3. Authorization to purchase bidding documents
    - 3.1 Secretary's Certificate (for corporation)
    - 3.2 Special Power of Attorney (for sole proprietorship)
  4. Notarized Joint Venture Agreement (if applicable)
  5. Letter of Intent

It must be duly received by the BAC Secretariat at 2<sup>nd</sup> Floor, Procurement Department, Finance Building, Quezon City Hall Compound on or before **October 9, 2020 - 5:00PM**

4. The **QC- BAC- INFRASTRUCTURE & CONSULTANCY** will hold a Pre-Bid Conference on **October 12, 2020 at 11:00 AM at 2<sup>nd</sup> Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound** or we encourage the prospective bidders to join through our **Virtual Conference (ZOOM APP)**  
Meeting ID: **89111859539**  
Password : **598996**

5. Bids must be duly received by the BAC Secretariat at the address below on or before **October 26, 2020 – 11:00AM**. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause.

Bid opening will be on **October 26, 2020 - 1:00PM at 2<sup>nd</sup> Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound**. Bids will be opened in the presence of the bidders' representatives who choose to attend at the address below. Late bids shall not be accepted.

6. The **Quezon City Local Government** 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 Section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.

7. For further information, please refer to:

**ATTY. DOMINIC B. GARCIA**

OIC, Procurement Department

2<sup>nd</sup> Floor, Procurement Department,

Finance Building, Quezon City Hall Compound

Elliptical Road, Barangay Central Diliman, Quezon City.

Tel. No. (02)8988-4242 loc. 8506/8710

Email Add: [procurement@quezoncity.gov.ph](mailto:procurement@quezoncity.gov.ph)

Website: [www.quezoncity.gov.ph](http://www.quezoncity.gov.ph)

By:

  
**ATTY. MARK DALE DIAMOND P. PERRAL**  
Chairman BAC-Infra and Consultancy 

## ***Section II. Instructions to Bidders***

### **Notes on the Instructions to Bidders**

This Section on the Instruction to Bidders (ITB) provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Entity. It also provides information on bid submission, eligibility check, opening and evaluation of bids, post-qualification, and on the award of contract.

## 1. Scope of Bid

The Procuring Entity, *[indicate name]* invites Bids for the *[insert Procurement Project]*, with Project Identification Number *[indicate number]*.

*[Note: The Project Identification Number is assigned by the Procuring Entity based on its own coding scheme and is not the same as the PhilGEPS reference number, which is generated after the posting of the bid opportunity on the PhilGEPS website.]*

The Procurement Project (referred to herein as “Project”) is for the construction of Works, as described in Section VI (Specifications).

## 2. Funding Information

2.1. The GOP through the source of funding as indicated below for *[indicate funding year]* in the amount of *[indicate amount]*.

2.2. The source of funding is:

*[If an early procurement activity, select one and delete others:]*

- a. NGA, the National Expenditure Program.
- b. GOCC and GFIs, the proposed Corporate Operating Budget.
- c. LGUs, the proposed Local Expenditure Program.

*[If not an early procurement activity, select one and delete others:]*

- a. NGA, the General Appropriations Act or Special Appropriations.
- b. GOCC and GFIs, the Corporate Operating Budget.
- c. LGUs, the Annual or Supplemental Budget, as approved by the Sanggunian.

## 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:  
[Select one, delete other/s]

- a. Subcontracting is allowed. The portions of Project and the maximum percentage allowed to be subcontracted are indicated in the **BDS**, which shall not exceed fifty percent (50%) of the contracted Works.
- b. Subcontracting is not allowed.

- 7.1. *[If Procuring Entity has determined that subcontracting is allowed during the bidding , state:]* The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criterion stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.
- 7.2. *[If subcontracting is allowed during the contract implementation stage, state:]* The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.
- 7.3. 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 *{[insert if applicable]}* 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:*

*[Select one, delete other/s]*

a. Philippine Pesos.

b. *[indicate currency if procurement involves a foreign-denominated bid as allowed by the Procuring Entity, which shall be tradeable or acceptable by the BSP.]*

#### **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 *[indicate date]*. 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**.

## ***Section III. Bid Data Sheet***

### **Notes on the Bid Data Sheet (BDS)**

The Bid Data Sheet (BDS) consists of provisions that supplement, amend, or specify in detail, information, or requirements included in the ITB found in Section II, which are specific to each procurement.

This Section is intended to assist the Procuring Entity in providing the specific information in relation to corresponding clauses in the ITB and has to be prepared for each specific procurement.

The Procuring Entity should specify in the BDS information and requirements specific to the circumstances of the Procuring Entity, the processing of the procurement, and the bid evaluation criteria that will apply to the Bids. In preparing the BDS, the following aspects should be checked:

- a. Information that specifies and complements provisions of the ITB must be incorporated.
- b. Amendments and/or supplements, if any, to provisions of the ITB as necessitated by the circumstances of the specific procurement, must also be incorporated.

# Bid Data Sheet

ITB Clause	
1.1	<p>The Procuring Entity is <b>Quezon City Government</b></p> <p>The name of the Contract is <b>PROPOSED REHABILITATION OF ROAD AND DRAINAGE AT ROAD 20 AND ROAD 23, BARANGAY BAHAY TORO</b></p> <p>The identification number of the Contract is <b>20-00028</b></p>
2	<p>The Funding Source is:</p> <p>The Government of the Philippines (GOP) through <b>City Engineering Dept-Continuing</b> in the amount of <b>Twelve Million Three Hundred Seven Thousand Six Hundred Forty One Pesos &amp; 95/100 Cts. (₱ 12,307,641.95).</b></p> <p><i>NOTE: In the case of National Government Agencies, the General Appropriations Act and/or continuing appropriations; in the case of Government-Owned and/or –Controlled Corporations, Government Financial Institutions, and State Universities and Colleges, the Corporate Budget for the contract approved by the governing Boards; in the case of Local Government Units, the Budget for the contract approved by the respective Sanggunian.</i></p> <p>The name of the Project is <b>Proposed Rehabilitation of Road and Drainage at Road 20 and Road 23, Barangay Bahay Toro, District 1, Quezon City</b></p>
3.1	No further instructions.
5.1	<p>In addition, eligible bidders shall qualify or comply with the following:</p> <p>1. Bidders with valid Philippine Contractors Accreditation Board (PCAB) Type</p> <p><input type="checkbox"/> <b>Roads - Small B</b></p> <p>2. Completed construction project(s) which is similar to the Project and which cost at least fifty percent (50%) of the ABC.</p>
5.2	Bidding is <b>restricted to eligible bidders</b> as defined in ITB Clause 5.1.
5.4(a)	No further instructions.
5.4(b)	For this purpose, similar contracts shall refer to contracts which have the same major categories of work.
8.1	<b>Subcontracting is not allowed</b>

8.2	Not applicable																																																
9.1	The <b>QC-BAC- Infrastructure and Consultancy</b> will hold a pre-bid conference for this Project on <b>October 12, 2020 11:00 A.M.</b> at 2 <sup>nd</sup> Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound or we encourage the prospective bidders to join through our <b>Virtual Conference (ZOOM APP)</b> Meeting ID: 89111859539 Password : 598996																																																
10.1	The Procuring Entity’s address is:  <b>QUEZON CITY GOVERNMENT</b> Quezon City Hall Compound Barangay Central, Quezon City  <b>ATTY. DOMINIC B. GARCIA</b> Procurement Department 2 <sup>nd</sup> Floor, Finance Building, Quezon City Hall Compound, Barangay Central, Quezon City 8988-4242 loc. 8709/8710 Email Add: <a href="mailto:procurement@quezoncity.gov.ph">procurement@quezoncity.gov.ph</a> Website: <a href="http://www.quezoncity.gov.ph">www.quezoncity.gov.ph</a>																																																
10.4	No further instructions.																																																
12	Bidders are encouraged but not required to comply with the following:  -all copy documents be originally stamped “Certified True Copy”and duly signed by the authorized signatory;  -use of more visible color of ink other than black when stamping for Certified True Copy; and  -tabbing of the required documents																																																
12.1(a)	In the statement of all on-going and completed contracts, all requirements in support of the enumerated projects shall be presented in proper sequence as they appear in the issued bid documents.																																																
12.1(a)(ii)	Each contractor shall submit its relevant and number of completed projects which shall be subjected to detailed evaluation later on.																																																
12.1(b)(ii.2)	<div>The minimum work experience requirements for key personnel are the following:</div> <table><tr><th>Qty.</th><th>Key Personnel</th><th>General Experience</th><th>Relevant Experience</th></tr><tr><td>1</td><td>Project Manager</td><td>3 years</td><td>3 years</td></tr><tr><td>1</td><td>Project Engineer</td><td>3 years</td><td>3 years</td></tr><tr><td>1</td><td>Materials Engineer</td><td>3 years</td><td>3 years</td></tr><tr><td>1</td><td>Safety Officer</td><td>3 years</td><td>3 years</td></tr><tr><td>1</td><td>Surveyor</td><td>3 years</td><td>3 years</td></tr><tr><td>1</td><td>Surveyor Assistant</td><td>3 years</td><td>3 years</td></tr><tr><td>1</td><td>Procurement Officer</td><td>3 years</td><td>3 years</td></tr><tr><td>12</td><td>Equipment Operator</td><td>3 years</td><td>3 years</td></tr><tr><td>8</td><td>Equipment Assistant</td><td>3 years</td><td>3 years</td></tr><tr><td>1</td><td>General Foreman</td><td>3 years</td><td>3 years</td></tr><tr><td>12</td><td>Laborer</td><td>1 year</td><td>3 months</td></tr></table>	Qty.	Key Personnel	General Experience	Relevant Experience	1	Project Manager	3 years	3 years	1	Project Engineer	3 years	3 years	1	Materials Engineer	3 years	3 years	1	Safety Officer	3 years	3 years	1	Surveyor	3 years	3 years	1	Surveyor Assistant	3 years	3 years	1	Procurement Officer	3 years	3 years	12	Equipment Operator	3 years	3 years	8	Equipment Assistant	3 years	3 years	1	General Foreman	3 years	3 years	12	Laborer	1 year	3 months
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12	Laborer	1 year	3 months																																														

	<p><i>In addition, the bidder must execute an affidavit of undertaking duly notarized stating that the foregoing personnel shall perform work exclusively for the project until its completion. Please see attached bid forms.</i></p>																																				
12.1(b)(iii.3)	<p>The minimum major equipment requirements are the following:</p> <table><tr><td><u>Equipment</u></td><td><u>Capacity</u></td><td><u>Number of Units</u></td></tr><tr><td><i>Backhoe with Concrete Breaker</i></td><td></td><td><i>1</i></td></tr><tr><td><i>Jackhammer</i></td><td></td><td><i>1</i></td></tr><tr><td><i>Dumptruck</i></td><td></td><td><i>1</i></td></tr><tr><td><i>Pay Loader</i></td><td></td><td><i>1</i></td></tr><tr><td><i>Motorized Road Roller</i></td><td></td><td><i>1</i></td></tr><tr><td><i>Vibratory Roller</i></td><td></td><td><i>1</i></td></tr><tr><td><i>Water Truck</i></td><td></td><td><i>1</i></td></tr><tr><td><i>Concrete Vibrator</i></td><td></td><td><i>1</i></td></tr><tr><td><i>Concrete Mixer (2-Bagger)</i></td><td></td><td><i>1</i></td></tr><tr><td><i>Plate Compactor</i></td><td></td><td><i>1</i></td></tr><tr><td><i>Elf Truck</i></td><td></td><td><i>1</i></td></tr></table> <p><i>In addition, the bidder must execute an affidavit of undertaking duly notarized stating that the foregoing equipment shall perform work exclusively for the project until its completion. Please see attached bid forms.</i></p>	<u>Equipment</u>	<u>Capacity</u>	<u>Number of Units</u>	<i>Backhoe with Concrete Breaker</i>		<i>1</i>	<i>Jackhammer</i>		<i>1</i>	<i>Dumptruck</i>		<i>1</i>	<i>Pay Loader</i>		<i>1</i>	<i>Motorized Road Roller</i>		<i>1</i>	<i>Vibratory Roller</i>		<i>1</i>	<i>Water Truck</i>		<i>1</i>	<i>Concrete Vibrator</i>		<i>1</i>	<i>Concrete Mixer (2-Bagger)</i>		<i>1</i>	<i>Plate Compactor</i>		<i>1</i>	<i>Elf Truck</i>		<i>1</i>
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12.1.(b).(iii)	<p>The bidder’s authorized signatory is the one who executes the Omnibus Sworn Statement, otherwise, a separate Special Power of Attorney (SPA) shall be attached in support of the Omnibus Sworn Statement.</p> <p>An Affidavit of Site Inspection shall also be submitted or as part of the Omnibus Sworn Statement.</p>																																				
13.1	“No additional Requirements.																																				
13.1(b)	<p>This shall include all of the following documents:</p> <ul style="list-style-type: none"><li>• Bid prices in the Bill of Quantities;</li><li>• Detailed estimates, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; and</li><li>• Cash flow by quarter or payment schedule.</li></ul>																																				
13.2	<p>The ABC is <b>Twelve Million Three Hundred Seven Thousand Six Hundred Forty One Pesos &amp; 95/100 Cts. (₱ 12,307,641.95)</b>. Any bid with a financial component exceeding this amount shall not be accepted.</p>																																				
14.2	No further instructions																																				
15.4	No further instruction																																				
16.1	The bid prices shall be quoted in Philippine Pesos.																																				
16.3	No further instructions.																																				

17.1	<p>Bids will be valid until <b>120 calendar days from opening of bids</b></p> <p>Surety Bond issued by the private insurance company shall be callable on demand, valid up to 120cd, affixed with documentary stamps, with original Official Receipt of premium payment, and accompanied by a Certificate of Authority to issue such security by the Insurance Commission. For bonds issued by the GSIS certification by the Insurance Commission and documentary stamps are not required.</p>
18.1	<p>The bid security shall be in the form of a <b>Bid Securing Declaration</b> or any of the following forms and amounts:</p> <ul style="list-style-type: none"> <li>• The amount of not less than ₱ <b>246,152.84 [2% of ABC]</b>, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;</li> <li>• The amount of not less than ₱ <b>615,382.10 [5% of ABC]</b> if bid security is in Surety Bond.</li> </ul>
18.2	<p>The bid security shall be valid until <b>120 calendar days from opening of bids</b></p>
20.3	<p>Each Bidder shall submit <i>one (1) original )</i> and one (1) copies of the first and second components of its bid.</p>
21	<p>The address for submission of bids is at Bids and Awards Committee (BAC) <i>Bidding Room, Procurement Department, 2<sup>nd</sup> Floor, Civic Center Building F, Quezon City Hall Compound, Barangay Central, Quezon City</i></p> <p>The deadline for submission of bids is <b>11:00 AM, October 26, 2020.</b></p>
24.1	<p>The place of bid opening is at Bids and Awards Committee (BAC) <i>Bidding Room, Procurement Department, 2<sup>nd</sup> Floor, Civic Center Building F, Quezon City Hall Compound, Barangay Central, Quezon City</i></p> <p>The date and time of bid opening is <b>1:00 PM, October 26, 2020.</b></p>
24.2	<p>No further instructions.</p>
24.3	<p>No further instructions.</p>
27.3	<p><b>Partial bid is not allowed.</b> The infrastructure project is packaged in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award.</p>
27.4	<p>No further instructions.</p>
28.2	<p><b>None</b></p>
31.4(f)	<p><b>Additional Contract Documents relevant to the Project as required:</b></p> <ol style="list-style-type: none"> <li><b>1. Construction Schedule and S-curve,</b></li> <li><b>2. Manpower Schedule,</b></li> <li><b>3. Construction Methods,</b></li> <li><b>4. Equipment Utilization Schedule,</b></li> <li><b>5. PERT/CPM or other acceptable tools of project scheduling, shall be included in the submission of Technical Proposal.</b></li> </ol>



## ***Section IV. General Conditions of Contract***

### **Notes on the General Conditions of Contract**

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Contractor, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information, which may be needed, shall be introduced only through the Special 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

4.1. 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.

4.2. 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***

### **Notes on the Special Conditions of Contract**

Similar to the BDS, the clauses in this Section are intended to assist the Procuring Entity in providing contract-specific information in relation to corresponding clauses in the GCC found in Section IV.

The Special Conditions of Contract (SCC) complement the GCC, specifying contractual requirements linked to the special circumstances of the Procuring Entity, the Procuring Entity's country, the sector, and the Works procured. In preparing this Section, the following aspects should be checked:

- a. Information that complements provisions of the GCC must be incorporated.
- b. Amendments and/or supplements to provisions of the GCC as necessitated by the circumstances of the specific purchase, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of the GCC should be incorporated herein.

## ***Section VI. Specifications***

### **Notes on Specifications**

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying or conditioning their Bids. In the context of international competitive bidding, the specifications must be drafted to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of economy, efficiency, and fairness in procurement be realized, responsiveness of Bids be ensured, and the subsequent task of bid evaluation facilitated. The specifications should require that all goods and materials to be incorporated in the Works be new, unused, of the most recent or current models, and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.

Samples of specifications from previous similar projects are useful in this respect. The use of metric units is mandatory. Most specifications are normally written specially by the Procuring Entity or its representative to suit the Works at hand. There is no standard set of Specifications for universal application in all sectors in all regions, but there are established principles and practices, which are reflected in these PBDs.

There are considerable advantages in standardizing General Specifications for repetitive Works in recognized public sectors, such as highways, ports, railways, urban housing, irrigation, and water supply, in the same country or region where similar conditions prevail. The General Specifications should cover all classes of workmanship, materials, and equipment commonly involved in construction, although not necessarily to be used in a particular Works Contract. Deletions or addenda should then adapt the General Specifications to the particular Works.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for goods, materials, and workmanship, recognized international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that goods, materials, and workmanship that meet other authoritative standards, and which ensure substantially equal or higher quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the SCC.

#### **Sample Clause: Equivalency of Standards and Codes**

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be

accepted subject to the Procuring Entity's Representative's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Procuring Entity's Representative at least twenty-eight (28) days prior to the date when the Contractor desires the Procuring Entity's Representative's consent. In the event the Procuring Entity's Representative determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

These notes are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final Bidding Documents.





NAME OF PROJECT : **PROPOSED REHABILITATION OF ROAD AND DRAINAGE AT ROAD 20 AND ROAD 23**

LOCATION : **BARANGAY BAHAY TORO, DISTRICT 1, QUEZON CITY**

## **TECHNICAL SPECIFICATIONS**

**20 - 00028**

### **GENERAL NOTES:**

1. The above-mentioned project is subject to the Standards Specifications listed herein where applicable.
2. **STANDARD SPECIFICATIONS**  
All works shall comply with DPWH STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES 2013 Edition supplemental specification pertaining to this project and provision of the contract.
3. **DIMENSIONS**  
Unless otherwise specified, all dimensions which include stationing, distances between control points and elevations are measured in meters.
4. **ALIGNMENT AND GRADE**  
No alteration or change in alignment and grade shall be made unless existing field condition so warrant and only upon the written order by the Engineer-in-charge and approved by the proper authority concerned.
5. **REMOVAL OF EXISTING STRUCTURES AND OBSTRUCTIONS**
  - a. Existing structures affected in this project shall be done with the required tools and equipment. All debris shall be immediately disposed.
  - b. Portion of existing utilities such as MWSS Pipelines, PLDT Posts, MERALCO Posts, etc. that may cause obstructions to the construction of this project shall be relocated by the entity or owner concerned. Extreme precaution shall be exercised, damaged thereof shall be the account of the contractor.
6. **SUB-GRADE, SUB BASE AND BASE**
  - a. Unsuitable sub-grade material shall be excavated below the ground surface to the required width and depth. The area to be excavated shall be backfilled with approved material.
  - b. No embankment material shall be placed until the foundation is stable.
  - c. All aggregate sub-base and base course shall be spread, laid and compacted in accordance with the required thickness and proposed elevation.
7. **CONCRETE AND CONCRETE PAVEMENT**
  - a. All concrete to be used in this project shall be Class "A" unless otherwise indicated.
  - b. No Admixtures or additives will be allowed for all concrete works without prior approval by the City Engineer or his duly representative.
  - c. Traffic shall be required to reduced speed when passing the vicinity of the newly laid concrete pavement until such time that it has obtained the required strength.
8. **ASPHALT PAVEMENT**
  - a. Prepared or Existing Base shall be thoroughly cleaned and free from dirt by utilizing a push broom as required. Emulsified asphalt (SS1) shall be used and spread evenly on the surface prepared by utilizing an asphalt distributor as required.
  - b. Asphalt Plant Hot Mix shall be laid evenly by utilizing an asphalt paver to a thickness as required in the plan or program of work.

**9. REINFORCING STEEL BARS**

Reinforcing steel shall conform to AASHTO M31 (ASTM615), Grade 40 for Bars 16 mm. diameter and smaller (40,000 psi),  $f_y = 275$  MPa, and for Bars greater than 16 mm Diam., Grade 60 (60,000 psi)  $f_y = 414$  MPa.

**20-00028**

**10. DRAINAGE**

- a. Exact location, slope, outfalls and invert elevation of drainage structures shall be checked in the field by the Engineer-In-Charge, minor adjustment maybe made by the approval of the Engineer to suit actual field condition.
- b. Existing drainage structures or part thereof removed by the contractor that are still serviceable shall be turned over to the Government and shall be deposited at a place within the project site designated by the Engineer-In-Charge without any extra compensation. Extreme precaution shall be exercised by the contractor not to damage these materials during the removal and handling.

**11. CONSTRUCTION STAKES**

- a. The contractor will be responsible for the true and proper setting out of the work or improvement and for correctness of position, level slope and continuous profile grade in road work. He will set construction stakes, establishing lines, slope and continuous profile work and other line and benchmark for bridge work.

Grade in road protective and necessary structures and appurtenances culvert work, as are deemed necessary from the reference date to be furnished by the Engineer-In-Charge in writing.

- b. The checking of construction stakes by the Engineer-In-Charge shall not in any way relieve the contractor of his responsibility for the correctness thereof and the contractor shall carefully protect preserve all benchmark, pegs and other things used in setting out of the work.

**ITEM 104 – REMOVAL OF EXISTING STRUCTURES**  
**DESCRIPTION**

This Item shall consist of the removal wholly or in part, and satisfactory disposal of all buildings, fences, structures, old pavements, abandoned pipe lines, and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed off under other items in the Contract. It shall also include the salvaging of designated materials and backfilling the resulting trenches, holes, and pits.

**ITEM 105 – ROADWAY EXCAVATION**  
**DESCRIPTION**

Roadway excavation will include excavation and grading for roadways, parking areas, intersections, approaches, slope rounding, benching, waterways and ditches; removal of unsuitable material from the roadbed and beneath embankment areas; and excavating selected material found in the roadway as ordered by the Engineer for specific use in the improvement.

**ITEM 106 – EXCAVATION FOR STRUCTURES**  
**DESCRIPTION**

This item shall consist of the necessary excavation for reinforced concrete pipes, lined canal, box culverts and other structures not otherwise provided for in the Specifications. Except as otherwise provided for pipe culverts, the backfilling of completed structures and the disposal of all excavated materials shall be in accordance with this specification and in reasonably close conformity with the Plans or as established by the Engineer-In-Charge. This Item shall include necessary diverting of live streams, bailing, pumping, draining, sheeting, bracing, and the necessary construction of cribs and cofferdams, and furnishing the materials therefore, and the subsequent removal of cribs and cofferdams and the placing of all necessary backfill. It shall also include the furnishing and placing of approved foundation fill material to replace unsuitable material encountered below the foundation elevation of structures.



**ITEM 107 - COMMON BORROW**  
**DESCRIPTION**

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This item shall consist of the construction of embankment in accordance with this Specification and in conformity with the lines, grades and dimensions shown on the Plans or established by the Engineer-In-Charge.

Construction of Embankment shall consist of constructing roadway embankments, including preparation of the areas upon which they are to be placed; the construction of dikes within or adjacent to the roadway; the placing and compacting of approved material within roadway areas where unsuitable material has been removed; and the placing and compacting of embankment material in holes, pits, and other depressions within the roadway area. Embankments and backfills shall contain no muck, peat, sod, roots or other deleterious matter. Rocks, broken concrete or other solid, bulky materials shall not be placed in embankment areas where piling is to be placed or driven.

**MATERIAL REQUIREMENTS**

Embankments shall be constructed of suitable materials, in consonance with the following definitions:

1. Suitable Material - Material which is acceptable in accordance with the Contract and which can be compacted in the manner specified in this Item. It can be common material or rock.
2. Unsuitable Material - Material other than suitable materials such as:
  - a. Materials containing detrimental quantities of organic materials, such as grass, roots and sewerage.
  - b. Organic soils such as peat and muck.
  - c. Soils with liquid limit exceeding 80 and/or plasticity index exceeding 55.
  - d. Soils with a natural water content exceeding 100%.
  - e. Soils with very low natural density, 800 kg/m<sup>3</sup> or lower.
  - f. Soils that cannot be properly compacted as determined by the Engineer-In-Charge.

**ITEM 200 - AGGREGATE BASE COURSE**  
**DESCRIPTION**

This item shall consist of furnishing, placing and compacting an aggregate base course on a prepared subgrade/subbase in accordance with this Specification and the lines, grades, thickness and typical cross-sections shown on the Plans, or as established by the Engineer-In-charge.

**MATERIAL REQUIREMENTS**

Aggregate for base course shall consist of hard, durable particles or fragments of crushed stone, crushed slag or crushed or natural gravel and filler of natural or crushed sand or other finely divided mineral matter. The composite material shall be free from vegetable matter and lumps or balls of clay, and shall be of such nature that it can be compacted readily to form a firm, stable base. In some areas where the conventional base course materials are scarce or non-available, the use of 40% weathered limestone blended with 60% crushed stones or gravel shall be allowed, provided that the blended materials meet the requirements of this Item. The base course material shall conform to Table 201.1, whichever is called for in the Bill of Quantities.

**Table 201.1 - Grading Requirements**

Sieve Designation		Mass Percent Passing	
Standard, mm	Alternate US Standard	Grading A	Grading B
50	2"	100	
37.5	1-1/2"	-	100
25.0	1"	60 - 85	-
19.0	3/4"	-	60 - 85
12.5	1/2"	35 - 65	-
4.75	No. 4	20 - 50	30 - 55
0.425	No. 40	5 - 20 0 -	8 - 25 2
0.075	No. 200	12	- 14

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The fraction passing the 0.075 mm (No. 200) sieve shall not be greater than 0.66 (two thirds) of the fraction passing the 0.425 mm (No. 40) sieve.

The fraction passing the 0.425 mm (No. 40) sieve shall have a liquid limit not greater than 25 and plasticity index not greater than 6 as determined by AASHTO T 89 and T 90, respectively. The coarse portion, retained on a 2.00 mm (No. 10) sieve shall have a mass percent of wear not exceeding 50 by the Los Angeles Abrasion test determined by AASHTO T 96. The material passing the 19 mm (3/4 inch) sieve shall have a soaked CBR value of not less than 80% as determined by AASHTO T 193. The CBR value shall be obtained at the maximum dry density (MDD) as determined by AASHTO T 180, Method D. If filler, in addition to that naturally present, is necessary for meeting the grading requirements or for satisfactory bonding, it shall be uniformly blended with the base course material on the road or in a pug mill unless otherwise specified or approved. Filler shall be taken from sources approved by the Engineer, shall be free from hard lumps and shall not contain more than 15 percent of material retained on the 4.75 mm (No. 4) sieve.

#### **ITEM 316 – PORTLAND CEMENT CONCRETE PAVEMENT DESCRIPTION**

This Item shall consist of pavement of Portland Cement Concrete, with or without reinforcement, constructed on the prepared base in accordance with this Specification and in conformity with lines, grades, thickness and typical cross- section shown on the Plans. Compressive strength for concrete mix to be used shall not be less than 4,000 psi.

#### **MATERIAL REQUIREMENTS**

##### **PORTLAND CEMENT**

It shall conform to the applicable requirements of Item 700, Hydraulic Cement. Only Type I Portland Cement shall be used unless otherwise provided for in the Special Provisions. Different brands or the same brands from different mills shall not be mixed nor shall they be used alternately unless the mix is approved by the Engineer. However, the use of Portland Pozzolana Cement Type IP meeting the requirements of AASHTO M 240/ASTM C 695, Specifications for Blended Hydraulic Cement shall be allowed, provided that trial mixes shall be done and that the mixes meet the concrete strength requirements, the AASHTO/ASTM provisions pertinent to the use of Portland Pozzolana Type IP shall be adopted. Cement which for any reason, has become partially set or which contains lumps of caked cement shall be rejected. Samples of cement shall be obtained in accordance with AASHTO T 127.

##### **FINE AGGREGATES**

It shall consist of natural sand, stone screenings or other inert materials with similar characteristics, or combinations thereof, having hard, strong and durable particles. Fine aggregate from different sources of supply shall not be mixed or stored in the same pile nor used alternately in the same class of concrete without the approval of the Engineer.

It shall not contain more than three (3) mass percent of material passing the 0.075 mm (No. 200 sieve) by washing nor more than one (1) mass percent each of clay lumps or shale. The use of beach sand will not be allowed without the approval of the Engineer.

If the fine aggregate is subjected to five (5) cycles of the sodium sulfate soundness test, the weighted loss shall not exceed 10 mass percent.

The fine aggregate shall be free from injurious amounts of organic impurities. If subjected to the colorimetric test for organic impurities and a color darker than the standard is produced, it shall be



rejected. However, when tested for the effect of organic impurities of strength of mortar by AASHTO T 71, the fine aggregate may be used if the relative strength at 7 and 28 days is not less than 95 mass percent.

The fine aggregate shall be well-graded from coarse to fine and shall conform to Table 311.1

**Table 311.1 - Grading Requirements for Fine Aggregate**

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Sieve Designation	Mass Percent Passing
9.5 mm (3/8 in)	100
4.75 mm (No. 4)	95 - 100
2.36 mm (No. 8)	-
1.18 mm (No. 16)	45 - 80
0.600 mm (No. 30)	-
0.300 mm (No. 50)	5 - 30.0 -
0.150 mm (No. 100)	10

#### COARSE AGGREGATES

It shall consist of crushed stone, gravel, blast furnace slag, or other approved inert materials of similar characteristics, or combinations thereof, having hard, strong, durable pieces and free from any adherent coatings.

It shall contain not more than one (1) mass percent of material passing the 0.075 mm (No. 200) sieve, not more than 0.25 mass percent of clay lumps, nor more than 3.5 mass percent of soft fragments.

If the coarse aggregate is subjected to five (5) cycles of the sodium sulfate soundness test, the weighted loss shall not exceed 12 mass percent.

It shall have a mass percent of wear not exceeding 40 when tested by AASHTO T 96.

If the slag is used, its density shall not be less than 1120 kg/m<sup>3</sup> (70 lb./cu. ft.). The gradation of the coarse aggregate shall conform to Table 311.2. Only one grading specification shall be used from any one source.

**Table 311.2 - Grading Requirement for Coarse Aggregate**

Sieve Designation		Mass Percent Passing		
Standard Mm	Alternate U. S. Standard	Grading A	Grading B	Grading C
75.00	3 in.	100	-	-
63.00	2-1/2 in.	90-100	100	100
50.00	2 in.	- 90-100	95-100 37.5	1-1/2 in.
	25-60	35-70	-	
25.0	1 in.	- 0-15	35-70 19.0	3/4 in.
	0-10	- -		
12.5	1/2 in.	0-5	0-5	10-30
4.75	No. 4	-	-	0-5

#### WATER

Water used in mixing, curing or other designated application shall be reasonably clean and free of oil, salt, acid, alkali, grass or other substances injurious to the finished product. Water will be tested in accordance with and shall meet the requirements of Item 714, Water. Water which is drinkable may be used without test. Where the source of water is shallow, the intake shall be so enclosed as to exclude silt, mud, grass or other foreign materials.

#### REINFORCING STEEL

It shall conform to the requirements of Item 404, Reinforcing Steel. Dowels and tie bars shall conform to the requirements of AASHTO M 31 or M 42, except that rail steel shall not be used for tie bars that are to be bent and straightened during construction. Tie bars shall be deformed bars. Dowels shall be plain round bars. Before delivery to the site of work, one-half of the length of each dowel shall be painted with one coat of approved lead or tar paint. The sleeves for dowel bars shall be metal of approved design to cover 50 mm (2 inches), plus or minus 5 mm (1/4 inch) of the dowel, with a closed end, and with a suitable stop to hold the end of the sleeve at least 25 mm (1 inch) from the end of the dowel. Sleeves shall be of such design that they do not collapse during construction.

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#### *JOINT FILLERS*

Poured joint fillers shall be mixed asphalt and mineral or rubber filler conforming to the applicable requirements of Item 705, Joint Materials.

Preformed joint filler shall conform to the applicable requirements of Item 705. It shall be punched to admit the dowels where called for in the Plans. The filler for each joint shall be furnished in a single piece for the full depth and width required for the joint.

#### *ADMIXTURES*

Air-entraining admixture shall conform to the requirements of AASHTO M 154. Chemical admixtures, if specified or permitted, shall conform to the requirements of AASHTO M 194. Fly Ash, if specified or permitted as a mineral admixture and as 20% partial replacement of Portland Cement in concrete mix shall conform to the requirements of ASTM C 618. Admixture should be added only to the concrete mix to produce some desired modifications to the properties of concrete where necessary, but not as partial replacement of cement.

#### *CURING MATERIALS*

Curing materials shall conform to the following requirements as specified:

- a) Burlap cloth - AASHTO M 182
  - b) Liquid membrane forming compounds - AASHTO M 148
  - c) Sheeting (film) materials - AASHTO M 171
- Cotton mats and water-proof paper can be used.

#### *CALCIUM CHLORIDE/CALCIUM NITRATE*

It shall conform to AASHTO M 144, if specified or permitted by the Engineer-in-charge, as accelerator.

#### *STORAGE OF CEMENT AND AGGREGATE*

All cement shall be stored, immediately upon delivery at the Site, in weatherproof building which will protect the cement from dampness. The floor shall be raised from the ground. The buildings shall be placed in locations approved by the Engineer. Provisions for storage shall be ample, and the shipments of cement as received shall be separately stored in such a manner as to allow the earliest deliveries to be used first and to provide easy access for identification and inspection of each shipment. Storage buildings shall have capacity for storage of a sufficient quantity of cement to allow sampling at least twelve (12) days before the cement is to be used. Bulk cement, if used, shall be transferred to elevated air tight and weatherproof bins. Stored cement shall meet the test requirements at any time after storage when retest is ordered by the Engineer-in-charge. At the time of use, all cement shall be free-flowing and free of lumps. The handling and storing of concrete aggregates shall be such as to prevent segregation or the inclusion of foreign materials. The Engineer may require that aggregates be stored on separate platforms at satisfactory locations. In order to secure greater uniformity of concrete mix, the Engineer may require that the coarse aggregate be separated into two or more sizes. Different sizes of aggregate shall be stored in separate bins or in separate stockpiles sufficiently removed from each other to prevent the material at the edges of the piles from becoming intermixed.

#### *PROPORTIONING, CONSISTENCY AND STRENGTH OF CONCRETE*

The Contractor shall prepare the design mix based on the absolute volume method as outlined in the American Concrete Institute (ACI) Standard 211.1, "Recommended Practice for Selecting Proportions for Normal and Heavyweight Concrete". It is the intent of this Specification to require at least 364 kg of cement per cubic meter of concrete to meet the minimum strength requirements. The Engineer shall determine from laboratory tests of the materials to be used, the cement content and the proportions of aggregate and water that will produce workable concrete having a slump of between 40 and 75 mm (1-1/2 and 3 inches) if not vibrated or between 10 and 40 mm (1/2 and 1-1/2 inches) if vibrated, and a flexural strength of not less than 3.8 MPa (550 psi) when tested by the third-point method or 4.5 MPa (650 psi) when tested by the mid-point method at fourteen (14) days in accordance with AASHTO T97



and T177, respectively; or a compressive strength of 24.1 MPa (3500 psi) for cores taken at fourteen (14) days and tested in accordance with AASHTO T24. Slump shall be determined using AASHTO T 119. The designer shall consider the use of lean concrete (econocrete) mixtures using local materials or specifically modified conventional concrete mixes in base course and in the lower course composite, monolithic concrete pavements using a minimum of 75 mm (3 inches) of conventional concrete as the surface course. The mix design shall be submitted to the Engineer for approval and shall be accompanied with certified test data from an approved laboratory demonstrating the adequacy of the mix design. A change in the source of materials during the progress of work may necessitate a new design mix.

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#### ITEM 405 – STRUCTURAL CONCRETE DESCRIPTION

This Item shall consist of furnishing, bending, placing and finishing concrete in all structures except pavements in accordance with this Specification and conforming to the lines, grades, and dimensions shown on the Plans. Concrete shall consist of a mixture of Portland Cement, fine aggregate, coarse aggregate, admixture when specified, and water mixed in the proportions specified or approved by the Engineer-in-Charge.

#### MATERIAL REQUIREMENTS

##### PORTLAND CEMENT

it shall conform to all the requirements in Portland Cement section

##### FINE AGGREGATES

it shall conform to all the requirements in Fine Aggregates section.

##### COARSE AGGREGATES

It shall conform to all the requirements in Fine Aggregates section.

Except that gradation shall conform to Table 405.1.

Table 405.1 - Grading Requirements for Coarse Aggregate

Sieve Designation		Mass Percent Passing				
Standard Mm	Alternate US Standard	Class A	Class B	Class C	Class P	Class Seal
63	2-1/2"		100			
50	2"	100	95 - 100			
37.5	1-1/2"	95 - 100	-			100
25	1"	-	35 - 70		100	95 - 100
19.0	3/4"	35 - 70	- 100	95 - 100	-12.5	1/2" -
	10 - 30	90 - 100	- 25 - 60			
9.5	3/8"	10 - 30	- 40 - 70	20 - 55	-4.75	No.4
	0-5	0-5	0 - 15*	0 - 10*	0 - 10*	

The measured cement content shall be within plus (+) or minus (-) 2 mass percent of the design cement content.

##### WATER

It shall conform to all the requirements in water section.

##### REINFORCING STEEL

Reinforcing steel shall conform to the requirements of the following specifications:

(For concrete reinforcement)

Deformed Billet-Steel Bars  
Deformed Steel Wire  
Welded Steel Wire Fabric  
Cold-Drawn Steel Wire  
Fabricated Steel Bar or Rod Mats  
Welded Deformed Steel Wire Fabric  
Plastic Coated Dowel Bars  
Type A Low Alloy Steel Deformed Bars

AASHTO M 31 (ASTM A615)  
AASHTO M 225 (ASTM A 496)  
AASHTO M 55 (ASTM A 185)  
AASHTO M 32 (ASTM A 82)  
AASHTO M 54 (ASTM A 184)  
AASHTO M 221 (ASTM A 497)  
AASHTO M 254  
ASTM A 206

Bar reinforcement for concrete structures, except No. 2 bars shall be deformed in accordance with AASHTO M 42, M 31 and M 53 for Nos. 3 through 11. Dowel and tie bars shall conform to the requirements of AASHTO M 31 or AASHTO M 42 except that rail steel shall not be used for tie bars that are to be bent and re-straightened during construction. Tie bars shall be deformed bars. Dowel bars shall be plain round bars. They shall be free from burring or other deformation restricting slippage in the concrete. Before delivery to the site of the work, a minimum of one half (1/2) the length of each dowel bar shall be painted with one coat of approved lead or tar paint. The sleeves for dowel bars shall be metal of an approved design to cover 50 mm (2 inches), plus or minus 6.3 mm of the dowel, with a closed end, and with a suitable stop to hold the end of the sleeve at least 25 mm (1 inch) from the end of the dowel bar. Sleeves shall be of such design that they do not collapse during construction. Plastic coated dowel bar conforming to AASHTO M 254 may be used.

#### ADMIXTURES

Admixtures shall conform to the requirements in admixture section.

#### CURING MATERIALS

Curing materials shall conform to the requirements in curing materials section.

#### EXPANSION JOINT MATERIALS

Expansion joint materials shall be:

Preformed Sponge Rubber and Cork, conforming to AASHTO M 153.

Hot-Poured Elastic Type, conforming to AASHTO M 173.

Preformed Fillers, conforming to AASHTO M 213.

#### ELASTOMERIC COMPRESSION JOINT SEALS

These shall conform to AASHTO M 220.

#### ELASTOMERIC BEARING PADS

These shall conform to AASHTO M 251 or Item 412 - Elastomeric Bearing Pads.

#### STORAGE OF CEMENT AND AGGREGATES

Storage of cement and aggregates shall conform to all the requirements of Subsection 311.2.10.

#### SAMPLING AND TESTING OF STRUCTURAL CONCRETE

As work progresses, at least one (1) sample consisting of three (3) concrete cylinder test specimens, 150 x 300mm (6 x 12 inches), shall be taken from each seventy-five (75) cubic meters of each class of concrete or fraction thereof placed each day.

### ITEM 413 - PIPE CULVERT AND STORM DRAINS

#### DESCRIPTION

This item shall consist of the construction or reconstruction of pipe culverts and storm drains, hereinafter referred to as "conduit" in accordance with this Specification and in conformity with the lines and grades shown on the Plans or as established by the Engineer.

#### MATERIAL REQUIREMENTS

Material shall meet the requirements specified in the following specifications:

Zinc coated (galvanized) corrugated iron or steel culverts and underdrains	AASHTO M 36
Cast iron culvert pipe	AASHTO M 64
Concrete sewer, storm drain and culvert pipe	AASHTO M 86
Reinforced concrete culvert, storm drain and sewer pipe	AASHTO M 170
Bituminous coated corrugated metal culvert pipe and pipe arches	AASHTO M 190
Reinforced concrete arch culvert, storm drain and sewer pipe	AASHTO M 206
Reinforced concrete elliptical culvert, storm drain	AASHTO M 207



and sewer pipe	
Asbestos cement pipe for culverts and storm drains	AASHTO M 217

#### **JOINT MORTAR**

Joint mortar for concrete pipes shall consist of 1 part, by volume of Portland Cement and two (2) parts of approved sand with water as necessary to obtain the required consistency. Portland Cement and sand shall conform to the requirements of Item 405, Structural Concrete. Mortar shall be used within 30 minutes after its preparation.

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Rubber gaskets	AASHTO M 198
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#### **OAKUM**

Oakum for joints in bell and spigot pipes shall be made from hemp (*Cannabis Sativa*) line or Benares Sunn fiber or from a combination of these fibers. The oakum shall be thoroughly corded and finished and practically free from lumps, dirt and extraneous matter.

Hot poured joint sealing compound	AASHTO M 173
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Bedding material shall conform to the requirements of Subsection 500.3.2, Bedding. Backfill material shall conform to the requirements of Subsection 500.3.6, Backfilling. When the location of manufacturing plants allows, the plants will be inspected periodically for compliance with specified manufacturing methods, and material samples will be obtained for laboratory testing for compliance with materials quality requirements. This shall be the basis for acceptance of manufacturing lots as to quality. Prior to and during incorporation of materials in the work, these materials will be subjected to the latest inspection and approval of the Engineer.

### **ITEM 502 – CONCRETE CURB AND GUTTER**

#### **DESCRIPTION**

This Item shall consist of the construction of curb and gutter either Precast or Cast in place, made of concrete in accordance with this Specification at the location, and in conformity with the lines, grades, dimensions and design, shown on the Plans or as required by the Engineer-in-charge.

#### **MATERIAL REQUIREMENTS**

##### **MATERIAL FOR BED COURSE**

Bed course materials as shown on the Plans shall consist of cinders, sand, slag, gravel, crushed stone, or other approved porous material of such grading that all the particles will pass through 12.5 mm (1/2 inch) sieve.

##### **CONCRETE**

Concrete shall be of the class indicated on the Plans and shall conform to the requirements of Item 405, Structural Concrete.

##### **EXPANSION JOINT FILLER**

Expansion joint filler shall conform to the requirements of AASHTO M 153/joint materials.

##### **CEMENT MORTAR**

Cement mortar shall consist of one part of Portland cement and two parts of fine aggregates with water added as necessary to obtain the required consistency. The mortar shall be used within 30 minutes of preparation.

##### **BONDING COMPOUND**

Where bonding compound is used, it shall conform to AASHTO M 200.

#### *FORMS*

Forms shall be of wood or metal as approved by the Engineer and shall extend to the full depth of the concrete. All forms shall be straight, free from warps and of adequate strength to resist distortion.

#### **ITEM 503 – CONCRETE SIDEWALK DESCRIPTION**

This Item shall consist of the construction of asphalt or Portland Cement concrete sidewalk in accordance with this Specification and to the lines, grades, levels and dimensions shown on the Plans, or as required by the Engineer-in-charge.

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#### **MATERIAL REQUIREMENTS**

##### *PORTLAND CEMENT CONCRETE*

The cement concrete shall be Class A as specified in Item 405, Structural Concrete.

##### *ASPHALT*

Asphaltic material shall be as specified in Item 308, Bituminous Plant-Mix Surface Course, Cold-Laid, or Item 310, Bituminous Concrete Surface Course, Hot-Laid.

##### *EXPANSION JOINT FILLER*

Unless otherwise ordered, the preformed joint filler shall have a thickness of 5 mm and shall conform to the requirements of Item 311, Portland Cement Concrete Pavement.

#### *FORMS*

Forms shall be of wood or metal as approved by the Engineer and shall extend to the full depth of the concrete. All forms shall be straight, free from warps and of adequate strength to resist distortion.

##### *BED COURSE MATERIAL*

Bed course material consists of cinders, sand, slag, gravel, crushed stone or other approved permeable granular material of such grading that all particles shall pass a 12.5 mm (1/2 inch) sieve.

##### *ASPHALTIC PRIME COAT*

Prime coat shall be cut-back asphalt conforming to the requirements of Item 301, Bituminous Prime Coat.

#### **ITEM 505 – CMH WITH AB AND CAST IRON DESCRIPTION**

This item shall consist of construction of manholes and inlets in accordance with the Standard Specifications for Public Works and Highways and in reasonably close conformity with the lines and grades shown on the plans or as established by the Engineer-In-Charge.

#### **MATERIAL REQUIREMENTS**

Concrete for these structures shall meet the requirements of Item 405, Structural Concrete. Other materials shall meet the following specifications:

##### *CORRUGATED METAL UNITS*

The units shall conform to Plan dimensions and the metal to AASHTO M 36. Bituminous coating, when specified, shall conform to ASTM D 1187, Asphalt-base Emulsion for use as Protective Coating for Metal.

Sewer and manhole brick (Made from clay or shale)	AASHTO M 91
Building brick (Solid masonry units made from clay or shale)	AASHTO M 114

##### *JOINT MORTAR*

Unless otherwise indicated on the Plans, joints mortar shall be composed of one part Portland Cement and two parts fine aggregate by volume to which hydrated lime has been added in an amount equal to 10 percent of the cement by weight. All materials for mortar shall meet the requirements of Item 405, Structural Concrete.

#### FRAMES, GRATINGS, COVERS AND LADDER RUNGS

Metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials. Metal gratings and covers which are to rest on frames shall bear on them evenly. They shall be assembled before shipment and so marked that the same pieces may be reassembled readily in the same position when installed. Inaccuracy of bearings shall be corrected by machining, if necessary. A frame and a grating or cover to be used with it shall constitute one pair.

All castings shall be uniformly coated with asphalt-based emulsion meeting the requirements of ASTM D 1187, Asphalt-base Emulsion for use as Protective Coating for Metal. Samples of the material in casting shall be taken during the casting of the units and shall be separate casting poured from the same material as the casting they represent.

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Gray iron casting	AASHTO M 105
Mild to medium-strength carbon steel castings for general application	AASHTO M 103
Structural steel	AASHTO M 183
Galvanizing, where specified for these units, shall conform to the requirements of	AASHTO M 111
Reinforcing Steel	AASHTO M 31

#### PRE-CAST CONCRETE UNITS

These units shall be cast in substantial permanent steel forms. Structural concrete used shall attain a minimum 28-day compressive strength of 20.682 MPa (3000 psi). The pre-cast units shall be cured in accordance with AASHTO M 171. Water absorption of individual cores taken from such units shall not exceed 7 percent. Additional reinforcement shall be provided as necessary to provide for handling of the pre-cast units. A sufficient number of cylinders shall be cast from the concrete for each unit permit compression tests at 7, 14 and 28 days, and to allow for at least 3 cylinders for each test. If the strength requirement is met at 7 or 14 days, the units shall be certified for use 14 days from the date of casting. If the strength is not met at 28 days, all units made from that batch or load will be rejected. Cracks in units, honeycombed or patched areas in excess of 2,000 square millimeters, excessive water absorption and failure to meet strength requirements shall be the causes for rejection. Pre-cast reinforced concrete manhole risers and tops shall conform to the requirements of AASHTO M 199. The plants will be inspected periodically for compliance with specified manufacturing methods, and material samples will be obtained for laboratory testing for compliance with material quality requirements. This may be the basis for acceptance of manufacturing lots as the quality. All materials shall be subjected to inspection for acceptance as to condition at the latest practicable time the Engineer has the opportunity to check for compliance prior to or during incorporation of materials into the work.

#### ITEM SPL1 – CMH WITH AB AND CAST IRON (Rdwy.) DESCRIPTION

This item shall consist of construction of manholes and inlets in accordance with the Standard Specifications for Public Works and Highways and in reasonably close conformity with the lines and grades shown on the plans or as established by the Engineer-In-Charge.

#### MATERIAL REQUIREMENTS

Concrete for these structures shall meet the requirements of Item 405, Structural Concrete. Other materials shall meet the following specifications:

#### CORRUGATED METAL UNITS

The units shall conform to Plan dimensions and the metal to AASHTO M 36. Bituminous coating, when specified, shall conform to ASTM D 1187, Asphalt-base Emulsion for use as Protective Coating for Metal.

Sewer and manhole brick (Made from clay or shale)	AASHTO M 91
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Building brick (Solid masonry units made from clay or shale)	AASHTO M 114
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#### JOINT MORTAR

Unless otherwise indicated on the Plans, joints mortar shall be composed of one part Portland Cement and two parts fine aggregate by volume to which hydrated lime has been added in an amount equal to 10 percent of the cement by weight. All materials for mortar shall meet the requirements of Item 405, Structural Concrete.

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#### FRAMES, GRATINGS, COVERS AND LADDER RUNGS

Metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials. Metal gratings and covers which are to rest on frames shall bear on them evenly. They shall be assembled before shipment and so marked that the same pieces may be reassembled readily in the same position when installed. Inaccuracy of bearings shall be corrected by machining, if necessary. A frame and a grating or cover to be used with it shall constitute one pair.

All castings shall be uniformly coated with asphalt-based emulsion meeting the requirements of ASTM D 1187, Asphalt-base Emulsion for use as Protective Coating for Metal. Samples of the material in casting shall be taken during the casting of the units and shall be separate casting poured from the same material as the casting they represent.

Gray iron casting	AASHTO M 105
Mild to medium-strength carbon steel castings for general application	AASHTO M 103
Structural steel	AASHTO M 183
Galvanizing, where specified for these units, shall conform to the requirements of	AASHTO M 111
Reinforcing Steel	AASHTO M 31

#### PRE-CAST CONCRETE UNITS

These units shall be cast in substantial permanent steel forms. Structural concrete used shall attain a minimum 28-day compressive strength of 20.682 MPa (3000 psi). The pre-cast units shall be cured in accordance with AASHTO M 171. Water absorption of individual cores taken from such units shall not exceed 7 percent. Additional reinforcement shall be provided as necessary to provide for handling of the pre-cast units. A sufficient number of cylinders shall be cast from the concrete for each unit permit compression tests at 7, 14 and 28 days, and to allow for at least 3 cylinders for each test. If the strength requirement is met at 7 or 14 days, the units shall be certified for use 14 days from the date of casting. If the strength is not met at 28 days, all units made from that batch or load will be rejected. Cracks in units, honeycombed or patched areas in excess of 2,000 square millimeters, excessive water absorption and failure to meet strength requirements shall be the causes for rejection. Pre-cast reinforced concrete manhole risers and tops shall conform to the requirements of AASHTO M 199. The plants will be inspected periodically for compliance with specified manufacturing methods, and material samples will be obtained for laboratory testing for compliance with material quality requirements. This may be the basis for acceptance of manufacturing lots as the quality. All materials shall be subjected to inspection for acceptance as to condition at the latest practicable time the Engineer has the opportunity to check for compliance prior to or during incorporation of materials into the work.

## ITEM SPL 2 – CHB LINED CANAL

### DESCRIPTION

This item shall consist of construction of lined canal in accordance with the Standard Specification for Public Works and Highways and in reasonably close conformity with the lines and grades shown on the plans or as established by the Engineer-In-Charge.

### MATERIAL REQUIREMENTS

Concrete for these structures shall meet the requirements of Item 405, Structural Concrete. Other materials shall meet the following specifications:

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### CORRUGATED METAL UNITS

The units shall conform to Plan dimensions and the metal to AASHTO M 36. Bituminous coating, when specified, shall conform to ASTM D 1187, Asphalt-base Emulsion for use as Protective Coating for Metal.

Sewer and manhole brick (Made from clay or shale)	AASHTO M 91
Building brick (Solid masonry units made from clay or shale)	AASHTO M 114

### JOINT MORTAR

Unless otherwise indicated on the Plans, joints mortar shall be composed of one part Portland Cement and two parts fine aggregate by volume to which hydrated lime has been added in an amount equal to 10 percent of the cement by weight. All materials for mortar shall meet the requirements of Item 405, Structural Concrete.

### FRAMES, GRATINGS, COVERS AND LADDER RUNGS

Metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials. Metal gratings and covers which are to rest on frames shall bear on them evenly. They shall be assembled before shipment and so marked that the same pieces may be reassembled readily in the same position when installed. Inaccuracy of bearings shall be corrected by machining, if necessary. A frame and a grating or cover to be used with it shall constitute one pair.

All castings shall be uniformly coated with asphalt-based emulsion meeting the requirements of ASTM D 1187, Asphalt-base Emulsion for use as Protective Coating for Metal. Samples of the material in casting shall be taken during the casting of the units and shall be separate casting poured from the same material as the casting they represent.

Gray iron casting	AASHTO M 105
Mild to medium-strength carbon steel castings for general application	AASHTO M 103
Structural steel	AASHTO M 183
Galvanizing, where specified for these units, shall conform to the requirements of	AASHTO M 111
Reinforcing Steel	AASHTO M 31

### PRE-CAST CONCRETE UNITS

These units shall be cast in substantial permanent steel forms. Structural concrete used shall attain a minimum 28-day compressive strength of 20.682 MPa (3000 psi). The pre-cast units shall be cured in accordance with AASHTO M 171. Water absorption of individual cores taken from such units shall not exceed 7 percent. Additional reinforcement shall be provided as necessary to provide for handling of the pre-cast units. A sufficient number of cylinders shall be cast from the concrete for each unit permit compression tests at 7, 14 and 28 days, and to allow for at least 3 cylinders for each test. If the strength requirement is met at 7 or 14 days, the units shall be certified for use 14 days from the date of casting. If the strength is not met at 28 days, all units made from that batch or load will be rejected. Cracks in units, honeycombed or patched areas in excess of 2,000 square millimeters, excessive water absorption and failure to meet strength requirements shall be the causes for rejection. Pre-cast reinforced concrete manhole risers and tops shall conform to the requirements of AASHTO M 199. The plants will be inspected periodically for compliance with specified manufacturing methods, and material samples will be obtained for laboratory testing for compliance with material quality requirements. This may be the basis for acceptance of manufacturing lots as the quality. All materials shall be subjected to inspection for



acceptance as to condition at the latest practicable time the Engineer has the opportunity to check for compliance prior to or during incorporation of materials into the work.

#### ITEM SPL 4 – BARRICADE FOR EXCAVATION & MH WITH CAUTION TAPE DESCRIPTION

This item shall consist of furnishing, placing and finishing concrete and reinforcing bars in all structures of the concrete barricade in conformity to the lines, grades, and dimensions shown on the Plans. Compressive strength of concrete shall be 4000 psi and reinforcing steel bars shall not be less than Grade 60.

#### MATERIAL REQUIREMENTS

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##### PORTLAND CEMENT

It shall conform to the applicable requirements of AASHTO M 85, Hydraulic Cement. Only Type I Portland Cement shall be used unless otherwise provided for in the Special Provisions. Different brands or the same brands from different mills shall not be mixed nor shall they be used alternately unless the mix is approved by the Engineer. Cement which for any reason, has become partially set or which contains lumps of caked cement shall be rejected. Samples of cement shall be obtained in accordance with AASHTO T 127.

##### FINE AGGREGATES

It shall consist of natural sand, stone screenings or other inert materials with similar characteristics, or combinations thereof, having hard, strong and durable particles. Fine aggregate from different sources of supply shall not be mixed or stored in the same pile nor used alternately in the same class of concrete without the approval of the Engineer.

It shall not contain more than three (3) mass percent of material passing the 0.075 mm (No. 200 sieve) by washing nor more than one (1) mass percent each of clay lumps or shale. The use of beach sand will not be allowed without the approval of the Engineer.

If the fine aggregate is subjected to five (5) cycles of the sodium sulfate soundness test, the weighted loss shall not exceed 10 mass percent.

The fine aggregate shall be free from injurious amounts of organic impurities. If subjected to the colorimetric test for organic impurities and a color darker than the standard is produced, it shall be rejected. However, when tested for the effect of organic impurities of strength of mortar by AASHTO T 71, the fine aggregate may be used if the relative strength at 7 and 28 days is not less than 95 mass percent.

The fine aggregate shall be well-graded from coarse to fine and shall conform to Table 311.1

**Table 311.1 - Grading Requirements for Fine Aggregate**

Sieve Designation	Mass Percent Passing
9.5 mm (3/8 in)	100
4.75 mm (No. 4)	95 - 100
2.36 mm (No. 8)	-
1.18 mm (No. 16)	45 - 80
0.600 mm (No. 30)	-
0.300 mm (No. 50)	5 - 300 -
0.150 mm (No. 100)	10

##### COARSE AGGREGATES

It shall consist of crushed stone, gravel, blast furnace slag, or other approved inert materials of similar characteristics, or combinations thereof, having hard, strong, durable pieces and free from any adherent coatings.

It shall contain not more than one (1) mass percent of material passing the 0.075 mm (No. 200) sieve, not more than 0.25 mass percent of clay lumps, nor more than 3.5 mass percent of soft fragments.

If the coarse aggregate is subjected to five (5) cycles of the sodium sulfate soundness test, the weighted loss shall not exceed 12 mass percent.

It shall have a mass percent of wear not exceeding 40 when tested by AASHTO T 96.

If the slag is used, its density shall not be less than 1120 kg/m<sup>3</sup> (70 lb./cu. ft.). The gradation of the coarse aggregate shall conform to Table 311.2.

Only one grading specification shall be used from any one source.

**Table 311.2 - Grading Requirement for Coarse Aggregate**

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Sieve Designation		Mass Percent Passing		
Standard Mm	Alternate U. S. Standard	Grading A	Grading B	Grading C
75.00	3 in.	100	-	-
63.00	2-1/2 in.	90-100	100	100
50.00	2 in.	- 90-100	95-100 37.5	1-1/2 in.
	25-60	35-70	-	
25.0	1 in.	- 0-15	35-70 19.0	3/4 in.
	0-10	- -		
12.5	1/2 in.	0-5	0-5	10-30
4.75	No. 4	-	-	0-5

#### **WATER**

Water used in mixing, curing or other designated application shall be reasonably clean and free of oil, salt, acid, alkali, grass or other substances injurious to the finished product. Water will be tested in accordance with and shall meet the requirements of Item 714, Water. Water which is drinkable may be used without test. Where the source of water is shallow, the intake shall be so enclosed as to exclude silt, mud, grass or other foreign materials.

#### **REINFORCING STEEL**

It shall conform to the requirements of Item 404, Reinforcing Steel. Dowels and tie bars shall conform to the requirements of AASHTO M 31 or M 42, except that rail steel shall not be used for tie bars that are to be bent and straightened during construction. Tie bars shall be deformed bars. Dowels shall be plain round bars. Before delivery to the site of work, one-half of the length of each dowel shall be painted with one coat of approved lead or tar paint. The sleeves for dowel bars shall be metal of approved design to cover 50 mm (2 inches), plus or minus 5 mm (1/4 inch) of the dowel, with a closed end, and with a suitable stop to hold the end of the sleeve at least 25 mm (1 inch) from the end of the dowel. Sleeves shall be of such design that they do not collapse during construction.

#### **ADMIXTURES**

Air-entraining admixture shall conform to the requirements of AASHTO M 154. Chemical admixtures, if specified or permitted, shall conform to the requirements of AASHTO M 194. Fly Ash, if specified or permitted as a mineral admixture and as 20% partial replacement of Portland Cement in concrete mix shall conform to the requirements of ASTM C 618. Admixture should be added only to the concrete mix to produce some desired modifications to the properties of concrete where necessary, but not as partial replacement of cement. If specified, monofilament polypropylene synthetic fibrin fibers, which are used as admixture to prevent the formation of temperature/shrinkage cracks and increase impact resistance of concrete slabs shall be applied in the dosage rate recommended by its manufacturer.

#### **STORAGE OF CEMENT AND AGGREGATE**

All cement shall be stored, immediately upon delivery at the Site, in weatherproof building which will protect the cement from dampness. The floor shall be raised from the ground. The buildings shall be placed in locations approved by the Engineer. Provisions for storage shall be ample, and the shipments of cement as received shall be separately stored in such a manner as to allow the earliest deliveries to be used first and to provide easy access for identification and inspection of each shipment. Storage buildings shall have capacity for storage of a sufficient quantity of cement to allow sampling at least twelve (12) days before the cement is to be used. Bulk cement, if used, shall be transferred to elevated air tight and weatherproof bins. Stored cement shall meet the test requirements at any time after storage when retest is ordered by the Engineer-in-charge. At the time of use, all cement shall be free-flowing and



free of lumps. The handling and storing of concrete aggregates shall be such as to prevent segregation or the inclusion of foreign materials. The Engineer may require that aggregates be stored on separate platforms at satisfactory locations. In order to secure greater uniformity of concrete mix, the Engineer may require that the coarse aggregate be separated into two or more sizes. Different sizes of aggregate shall be stored in separate bins or in separate stockpiles sufficiently removed from each other to prevent the material at the edges of the piles from becoming intermixed.

#### *FORM LUMBER*

It shall be specified on the plans. It shall be free from loose knots, splits, worm holes, decay, warp, ring separation, or any defects which will impair its strength or render it unfit for its intended use.

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### **ITEM SPL5 – TAPPING DRAINAGE DESCRIPTION**

This item shall consist of tapping of affected drainage systems of houses and other building structures within the road-right-of-way in conformity with the Standard Specifications for Public Works and Highways and on location as shown on the plans.

#### **MATERIAL REQUIREMENTS**

##### *JOINT MORTAR*

Joint mortar for concrete pipes shall consist of one-part, by volume of Portland Cement and two-parts of approved sand with water as necessary to obtain the required consistency. Mortar shall be used within 30 minutes after its preparation.

##### *PORTLAND CEMENT*

It shall conform to the applicable requirements of AASHTO M 85, Hydraulic Cement. Only Type I Portland Cement shall be used unless otherwise provided for in the Special Provisions. Different brands or the same brands from different mills shall not be mixed nor shall they be used alternately unless the mix is approved by the Engineer-in-charge. Cement which for any reason, has become partially set or which contains lumps of caked cement shall be rejected. Cement salvaged from the discarded or used bags shall not be used. Samples of cement shall be obtained in accordance with AASHTO T 127.

##### *FINE AGGREGATES*

It shall consist of natural sand, stone screenings or other inert materials with similar characteristics, or combinations thereof, having hard, strong and durable particles. Fine aggregate from different sources of supply shall not be mixed or stored in the same pile nor used alternately in the same class of concrete without the approval of the Engineer.

It shall not contain more than three (3) mass percent of material passing the 0.075 mm (No. 200 sieve) by washing nor more than one (1) mass percent each of clay lumps or shale. The use of beach sand will not be allowed without the approval of the Engineer.

If the fine aggregate is subjected to five (5) cycles of the sodium sulfate soundness test, the weighted loss shall not exceed 10 mass percent.

The fine aggregate shall be free from injurious amounts of organic impurities. If subjected to the colorimetric test for organic impurities and a color darker than the standard is produced, it shall be rejected. However, when tested for the effect of organic impurities on strength of mortar by AASHTO T 71, the fine aggregate may be used if the relative strength at 7 and 28 days is not less than 95 mass percent.



The fine aggregate shall be well-graded from coarse to fine and shall conform to Table 311.1

**Table 311.1 - Grading Requirements for Fine Aggregate**

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Sieve Designation	Mass Percent Passing
9.5 mm (3/8 in)	100
4.75 mm (No. 4)	95 - 100
2.36 mm (No. 8)	-
1.18 mm (No. 16)	45 - 80
0.600 mm (No. 30)	-
0.300 mm (No. 50)	5 - 300 -
0.150 mm (No. 100)	10

**ITEM SPL 6 – NAWASA LEAK / 20 Meters**  
**DESCRIPTION**

This item shall consist of repair of any MWSS/NAWASA lines that would be affected in excavation of roadway in accordance with the MWSS Standard Specification.

Based on MWSS MATERIAL REQUIREMENTS

**ITEM SPL 7 – BILLBOARD**  
**DESCRIPTION**

This item shall consist of installation of Billboards on locations as established by the Engineer-In-Charge in conformity with the standard size, design, layout and dimension as shown in the Plans.

**MATERIAL REQUIREMENTS**

Based on the standard design approved by and material requirement of the implementing agency.

**ITEM SPL 8 – CONCRETE CURB**  
**DESCRIPTION**

This item shall consist of the construction of concrete curb made of concrete in accordance with the Standard Specifications for Public Works and Highways at the location and in conformity with the lines, grades, dimensions and design shown on the Plans or as required by the Engineer-In-Charge. Compressive strength for concrete mix to be used shall not be less than 4,000 psi.

**MATERIAL REQUIREMENTS**

**MATERIAL FOR BED COURSE**

Bed course materials as shown on the Plans shall consist of cinders, sand, slag, gravel, crushed stone, or other approved porous material of such grading that all the particles will pass through 12.5 mm (1/2 inch) sieve.

**CONCRETE**

Concrete shall be of the class indicated on the Plans and shall conform to the requirements of Item 405, Structural Concrete.

**EXPANSION JOINT FILLER**

Expansion joint filler shall conform to the requirements of AASHTO M 153/joint materials.

**CEMENT MORTAR**

Cement mortar shall consist of one part of Portland cement and two parts of fine aggregates with water added as necessary to obtain the required consistency. The mortar shall be used within 30 minutes of preparation.

#### *BONDING COMPOUND*

Where bonding compound is used, it shall conform to AASHTO M 200.

#### *FORMS*

Forms shall be of wood or metal as approved by the Engineer and shall extend to the full depth of the concrete. All forms shall be straight, free from warps and of adequate strength to resist distortion.

### **ITEM SPL9-CONCRETE PATHWALK**

#### **DESCRIPTION**

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This item shall consist of the construction of pathwalk made of concrete in accordance with the Standard Specifications for Public Works and Highways at the location and in conformity with the lines, grades, dimensions and design shown on the Plans or as required by the Engineer-In-Charge. Compressive strength for concrete mix to be used shall not be less than 4,000 psi.

#### **MATERIALS REQUIREMENT**

##### *PORTLAND CEMENT CONCRETE*

The cement concrete shall be Class A as specified in Item 405, Structural Concrete.

##### *EXPANSION JOINT FILLER*

Unless otherwise ordered, the preformed joint filler shall have a thickness of 5 mm and shall conform to the requirements of Item 311, Portland Cement Concrete Pavement.

#### *FORMS*

Forms shall be of wood or metal as approved by the Engineer and shall extend to the full depth of the concrete. All forms shall be straight, free from warps and of adequate strength to resist distortion.

##### *BED COURSE MATERIAL*

Bed course material consists of cinders, sand, slag, gravel, crushed stone or other approved permeable granular material of such grading that all particles shall pass a 12.5 mm (1/2 inch) sieve.

### **ITEM SPL10 – DOUBLE HANDLING OF CONSTRUCTION MATERIALS**

#### **DESCRIPTION**

this item shall consist of the transport and delivery of all materials necessary in the implementation of all scope of works covered by the contract.

### **ITEM SPL 10a/10b – THERMOPLASTIC MARKINGS (WHITE/YELLOW)**

#### **MATERIAL REQUIREMENTS**

Reflectorized thermoplastic pavement material shall be homogeneously composed of pigment, filler, resins, and glass reflectorizing spheres.

The thermoplastic materials shall be available to both white and yellow.

Glass Beads (Pre-mix) shall be uncoated and shall comply with the following requirements:

Refractive Index, min. – 1.5

Spheres Percent, min. – 90

Gradation:

Sieve, mm	Mass Percent Passing
0.850	100
0.600	75 – 95
0.425	-
0.300	15 – 35
0.180	-
0.150	0 – 5

**ITEM SPL 11- MANHOLE WITH ANGULAR BAR and SG (Ht. = Variable)**  
**DESCRIPTION**

This item shall consist of construction of manholes and inlets in accordance with the Standard Specifications for Public Works and Highways and in reasonably close conformity with the lines and grades shown on the plans or as established by the Engineer-In-Charge.

**MATERIAL REQUIREMENTS**

Concrete for these structures shall meet the requirements of Item 405, Structural Concrete. Other materials shall meet the following specifications:

**CORRUGATED METAL UNITS**

The units shall conform to Plan dimensions and the metal to AASHTO M 36. Bituminous coating, when specified, shall conform to ASTM D 1187, Asphalt-base Emulsion for use as Protective Coating for Metal.

Sewer and manhole brick (Made from clay or shale)	AASHTO M 91
Building brick (Solid masonry units made from clay or shale)	AASHTO M 114

**JOINT MORTAR**

Unless otherwise indicated on the Plans, joints mortar shall be composed of one part Portland Cement and two parts fine aggregate by volume to which hydrated lime has been added in an amount equal to 10 percent of the cement by weight. All materials for mortar shall meet the requirements of Item 405, Structural Concrete.

**FRAMES, GRATINGS, COVERS AND LADDER RUNGS**

Metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials. Metal gratings and covers which are to rest on frames shall bear on them evenly. They shall be assembled before shipment and so marked that the same pieces may be reassembled readily in the same position when installed. Inaccuracy of bearings shall be corrected by machining, if necessary. A frame and a grating or cover to be used with it shall constitute one pair.

All castings shall be uniformly coated with asphalt-based emulsion meeting the requirements of ASTM D 1187, Asphalt-base Emulsion for use as Protective Coating for Metal. Samples of the material in casting shall be taken during the casting of the units and shall be separate casting poured from the same material as the casting they represent.

Gray iron casting	AASHTO M 105
Mild to medium-strength carbon steel castings for general application	AASHTO M 103
Structural steel	AASHTO M 183
Galvanizing, where specified for these units, shall conform to the requirements of	AASHTO M 111
Reinforcing Steel	AASHTO M 31

**PRE-CAST CONCRETE UNITS**

These units shall be cast in substantial permanent steel forms. Structural concrete used shall attain a minimum 28-day compressive strength of 20.682 MPa (3000 psi). The pre-cast units shall be cured in accordance with AASHTO M 171. Water absorption of individual cores taken from such units shall not exceed 7 percent. Additional reinforcement shall be provided as necessary to provide for handling of the pre-cast units. A sufficient number of cylinders shall be cast from the concrete for each unit permit compression tests at 7, 14 and 28 days, and to allow for at least 3 cylinders for each test. If the strength requirement is met at 7 or 14 days, the units shall be certified for use 14 days from the date of casting. If the strength is not met at 28 days, all units made from that batch or load will be rejected. Cracks in units, honeycombed or patched areas in excess of 2,000 square millimeters, excessive water absorption and failure to meet strength requirements shall be the causes for rejection. Pre-cast reinforced concrete manhole risers and tops shall conform to the requirements of AASHTO M 199. The plants will be inspected

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periodically for compliance with specified manufacturing methods, and material samples will be obtained for laboratory testing for compliance with material quality requirements. This may be the basis for acceptance of manufacturing lots as the quality. All materials shall be subjected to inspection for acceptance as to condition at the latest practicable time the Engineer has the opportunity to check for compliance prior to or during incorporation of materials into the work.

#### **ITEM SPL 12 CONSTRUCTION SAFETY AND HEALTH DESCRIPTION**

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This item shall include necessary provision of construction safety and health gear such as safety vest, Safety helmet, First Aid Kit, Safety Boots and Gloves. All materials delivered and utilized for the project shall be turned-over to the Implementing agency after the completion of the project.

#### **MATERIAL REQUIREMENTS**

Based on the standard design and specifications approved by and material requirement of the implementing agency.

#### **ITEM SPL 13 STEEL BARRIER (RENTAL) DESCRIPTION**

This item shall consist of installation of steel barriers on locations as established by the Engineer-In-Charge in conformity with the Standard size, design, layout and dimension as shown in the Plans.

#### **MATERIAL REQUIREMENTS**

Based on the standard design approved by and material requirement of the implementing agency.

#### **ITEM SPL – DRAINAGE INTERCEPTOR DESCRIPTION**

This item shall consist of construction of drainage interceptor in accordance with the Standard Specifications for Public Works and Highways and in reasonably close conformity with the lines and grades shown on the plans or as established by the Engineer-In-Charge.

#### **MATERIAL REQUIREMENTS**

Concrete for these structures shall meet the requirements of Item 405, Structural Concrete. Other materials shall meet the following specifications:

#### **CORRUGATED METAL UNITS**

The units shall conform to Plan dimensions and the metal to AASHTO M 36. Bituminous coating, when specified, shall conform to ASTM D 1187, Asphalt-base Emulsion for use as Protective Coating for Metal.

Sewer and manhole brick (Made from clay or shale)	AASHTO M 91
Building brick (Solid masonry units made from clay or shale)	AASHTO M 114

#### **JOINT MORTAR**

Unless otherwise indicated on the Plans, joints mortar shall be composed of one part Portland Cement and two parts fine aggregate by volume to which hydrated lime has been added in an amount equal to 10 percent of the cement by weight. All materials for mortar shall meet the requirements of Item 405, Structural Concrete.

#### **FRAMES, GRATINGS, COVERS AND LADDER RUNGS**

Metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials. Metal gratings and covers which are to rest on frames shall bear on them evenly. They shall be assembled before shipment and so marked that the same pieces may be reassembled readily in the same position when installed. Inaccuracy of bearings shall be corrected by machining, if necessary. A frame and a grating or cover to be used with it shall constitute one pair.

All castings shall be uniformly coated with asphalt-based emulsion meeting the requirements of ASTM

D 1187, Asphalt-base Emulsion for use as Protective Coating for Metal. Samples of the material in casting shall be taken during the casting of the units and shall be separate casting poured from the same material as the casting they represent.

Gray iron casting	AASHTO M 105
Mild to medium-strength carbon steel castings for general application	AASHTO M 103
Structural steel	AASHTO M 183
Galvanizing, where specified for these units, shall conform to the requirements of	AASHTO M 111
Reinforcing Steel	AASHTO M 31

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#### **PRE-CAST CONCRETE UNITS**

These units shall be cast in substantial permanent steel forms. Structural concrete used shall attain a minimum 28-day compressive strength of 20.682 MPa (3000 psi). The pre-cast units shall be cured in accordance with AASHTO M 171. Water absorption of individual cores taken from such units shall not exceed 7 percent. Additional reinforcement shall be provided as necessary to provide for handling of the pre-cast units. A sufficient number of cylinders shall be cast from the concrete for each unit permit compression tests at 7, 14 and 28 days, and to allow for at least 3 cylinders for each test. If the strength requirement is met at 7 or 14 days, the units shall be certified for use 14 days from the date of casting. If the strength is not met at 28 days, all units made from that batch or load will be rejected. Cracks in units, honeycombed or patched areas in excess of 2,000 square millimeters, excessive water absorption and failure to meet strength requirements shall be the causes for rejection. Pre-cast reinforced concrete manhole risers and tops shall conform to the requirements of AASHTO M 199. The plants will be inspected periodically for compliance with specified manufacturing methods, and material samples will be obtained for laboratory testing for compliance with material quality requirements. This may be the basis for acceptance of manufacturing lots as the quality. All materials shall be subjected to inspection for acceptance as to condition at the latest practicable time the Engineer has the opportunity to check for compliance prior to or during incorporation of materials into the work.

#### **ITEM SPL – LINTEL BEAM DESCRIPTION**

This item shall consist of furnishing, placing and finishing concrete and reinforcing bars in all structures of the concrete barricade in conformity to the lines, grades, and dimensions shown on the Plans. Compressive strength of concrete shall be 4000 psi and reinforcing steel bars shall not be less than Grade 60.

#### **MATERIAL REQUIREMENTS**

##### **PORTLAND CEMENT**

It shall conform to the applicable requirements AASHTO M 85, Hydraulic Cement. Only Type I Portland Cement shall be used unless otherwise provided for in the Special Provisions. Different brands or the same brands from different mills shall not be mixed nor shall they be used alternately unless the mix is approved by the Engineer. However, the use of Portland Pozzolana Cement Type IP meeting the requirements of AASHTO M 240/ASTM C 695, Specifications for Blended Hydraulic Cement shall be allowed, provided that trial mixes shall be done and that the mixes meet the concrete strength requirements, the AASHTO/ASTM provisions pertinent to the use of Portland Pozzolana Type IP shall be adopted. Cement which for any reason, has become partially set or which contains lumps of caked cement shall be rejected. Samples of cement shall be obtained in accordance with AASHTO T 127.

##### **FINE AGGREGATES**

It shall consist of natural sand, stone screenings or other inert materials with similar characteristics, or combinations thereof, having hard, strong and durable particles. Fine aggregate from different sources of supply shall not be mixed or stored in the same pile nor used alternately in the same class of concrete without the approval of the Engineer.



It shall not contain more than three (3) mass percent of material passing the 0.075 mm (No. 200 sieve) by washing nor more than one (1) mass percent each of clay lumps or shale. The use of beach sand will not be allowed without the approval of the Engineer.

If the fine aggregate is subjected to five (5) cycles of the sodium sulfate soundness test, the weighted loss shall not exceed 10 mass percent.

The fine aggregate shall be free from injurious amounts of organic impurities. If subjected to the colorimetric test for organic impurities and a color darker than the standard is produced, it shall be rejected. However, when tested for the effect of organic impurities of strength of mortar by AASHTO T 71, the fine aggregate may be used if the relative strength at 7 and 28 days is not less than 95 mass percent.

The fine aggregate shall be well-graded from coarse to fine and shall conform to Table 311.1

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**Table 311.1 - Grading Requirements for Fine Aggregate**

Sieve Designation	Mass Percent Passing
9.5 mm (3/8 in)	100
4.75 mm (No. 4)	95 - 100
2.36 mm (No. 8)	-
1.18 mm (No. 16)	45 - 80
0.600 mm (No. 30)	-
0.300 mm (No. 50)	5 - 30
0.150 mm (No. 100)	10

#### COARSE AGGREGATES

It shall consist of crushed stone, gravel, blast furnace slag, or other approved inert materials of similar characteristics, or combinations thereof, having hard, strong, durable pieces and free from any adherent coatings.

It shall contain not more than one (1) mass percent of material passing the 0.075 mm (No. 200) sieve, not more than 0.25 mass percent of clay lumps, nor more than 3.5 mass percent of soft fragments.

If the coarse aggregate is subjected to five (5) cycles of the sodium sulfate soundness test, the weighted loss shall not exceed 12 mass percent.

It shall have a mass percent of wear not exceeding 40 when tested by AASHTO T 96.

If the slag is used, its density shall not be less than 1120 kg/m<sup>3</sup> (70 lb./cu. ft.). The gradation of the coarse aggregate shall conform to Table 311.2.

Only one grading specification shall be used from any one source.

**Table 311.2 - Grading Requirement for Coarse Aggregate**

Sieve Designation		Mass Percent Passing		
Standard Mm	Alternate U. S. Standard	Grading A	Grading B	Grading C
75.00	3 in.	100	-	-
63.00	2-1/2 in.	90-100	100	100
50.00	2 in.	- 90-100	95-100 37.5	1-1/2 in.
	25-60	35-70	-	
25.0	1 in.	- 0-15	35-70 19.0	3/4 in.
	0-10	- -		
12.5	1/2 in.	0-5	0-5	10-30
4.75	No. 4	-	-	0-5

#### **WATER**

Water used in mixing, curing or other designated application shall be reasonably clean and free of oil, salt, acid, alkali, grass or other substances injurious to the finished product. Water will be tested in accordance with and shall meet the requirements of Item 714, Water. Water which is drinkable may be used without test. Where the source of water is shallow, the intake shall be so enclosed as to exclude silt, mud, grass or other foreign materials.

**20 - 00028**

#### **REINFORCING STEEL**

It shall conform to the requirements of AASHTO M 225, Reinforcing Steel. Dowels and tie bars shall conform to the requirements of AASHTO M 31 or M 42, except that rail steel shall not be used for tie bars that are to be bent and straightened during construction. Tie bars shall be deformed bars. Dowels shall be plain round bars. Before delivery to the site of work, one-half of the length of each dowel shall be painted with one coat of approved lead or tar paint. The sleeves for dowel bars shall be metal of approved design to cover 50 mm (2 inches), plus or minus 5 mm (1/4 inch) of the dowel, with a closed end, and with a suitable stop to hold the end of the sleeve at least 25 mm (1 inch) from the end of the dowel. Sleeves shall be of such design that they do not collapse during construction.

#### **ADMIXTURES**

Air-entraining admixture shall conform to the requirements of AASHTO M 154. Chemical admixtures, if specified or permitted, shall conform to the requirements of AASHTO M 194. Fly Ash, if specified or permitted as a mineral admixture and as 20% partial replacement of Portland Cement in concrete mix shall conform to the requirements of ASTM C 618. Admixture should be added only to the concrete mix to produce some desired modifications to the properties of concrete where necessary, but not as partial replacement of cement. If specified, monofilament polypropylene synthetic fibrin fibers, which are used as admixture to prevent the formation of temperature/shrinkage cracks and increase impact resistance of concrete slabs shall be applied in the dosage rate recommended by its manufacturer.

#### **STORAGE OF CEMENT AND AGGREGATE**

All cement shall be stored, immediately upon delivery at the Site, in weatherproof building which will protect the cement from dampness. The floor shall be raised from the ground. The buildings shall be placed in locations approved by the Engineer. Provisions for storage shall be ample, and the shipments of cement as received shall be separately stored in such a manner as to allow the earliest deliveries to be used first and to provide easy access for identification and inspection of each shipment. Storage buildings shall have capacity for storage of a sufficient quantity of cement to allow sampling at least twelve (12) days before the cement is to be used. Bulk cement, if used, shall be transferred to elevated air tight and weatherproof bins. Stored cement shall meet the test requirements at any time after storage when retest is ordered by the Engineer-in-charge. At the time of use, all cement shall be free-flowing and free of lumps. The handling and storing of concrete aggregates shall be such as to prevent segregation or the inclusion of foreign materials. The Engineer may require that aggregates be stored on separate platforms at satisfactory locations. In order to secure greater uniformity of concrete mix, the Engineer may require that the coarse aggregate be separated into two or more sizes. Different sizes of aggregate shall be stored in separate bins or in separate stockpiles sufficiently removed from each other to prevent the material at the edges of the piles from becoming intermixed.

#### **FORM LUMBER**

It shall be specified on the plans. It shall be free from loose knots, splits, worm holes, decay, warp, ring separation, or any defects which will impair its strength or render it unfit for its intended use.

**NOTES:**

All other item of works not covered by this listed TECHNICAL SPECIFICATIONS shall be ISSUED with supplemental specifications by the Implementing Agency based on the Program of Work and Approved Plan(s) for the proposed project.

20-00028

PREPARED BY:

  
**ANDRAE RENZ B. LEE**  
Planning and Programming Division

CHECKED BY:

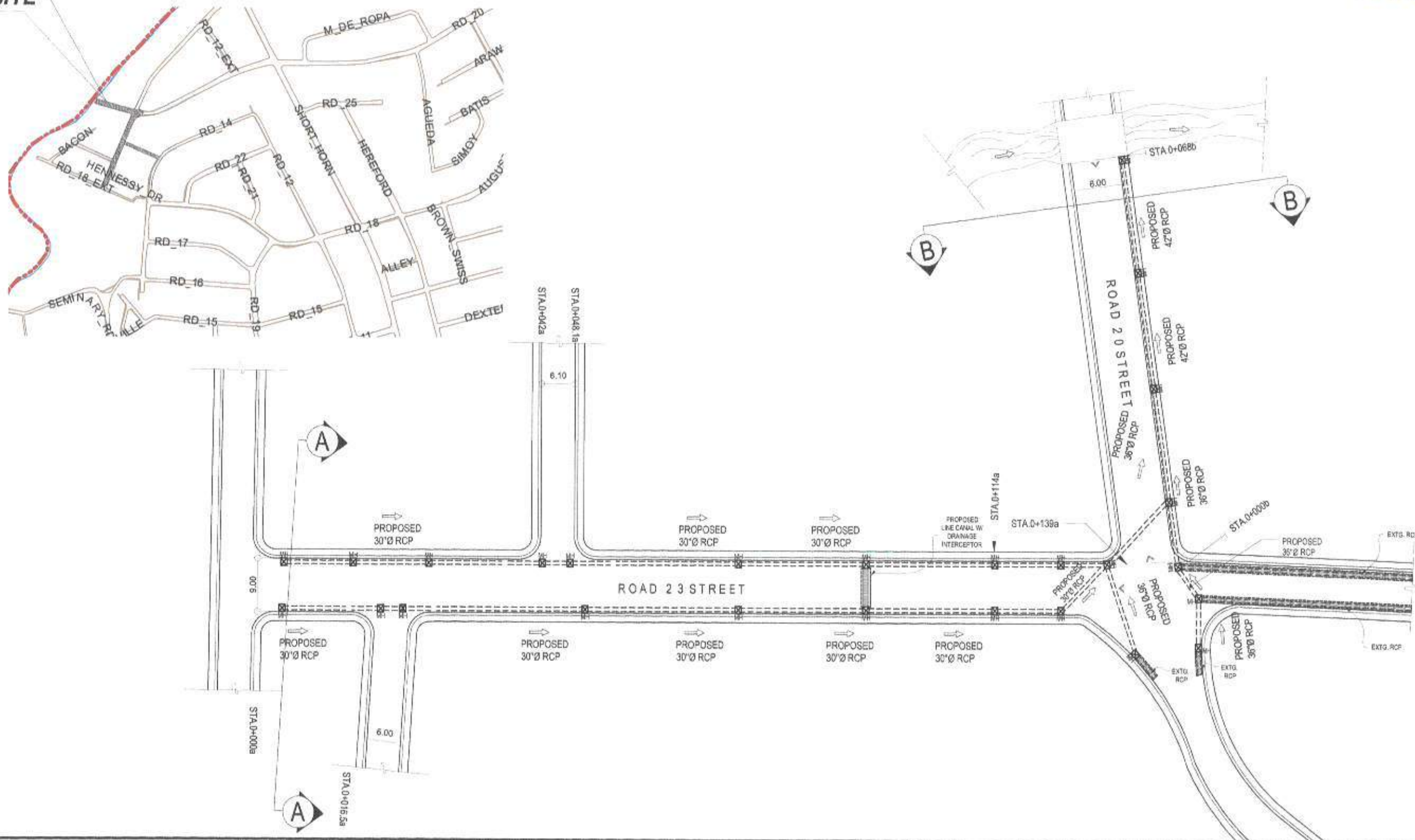
  
**MARILEN F. COMENDADOR**  
Planning and Programming Division



## ***Section VII. Drawings***

*[Insert here a list of Drawings. The actual Drawings, including site plans, should be attached to this section, or annexed in a separate folder.]*

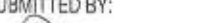
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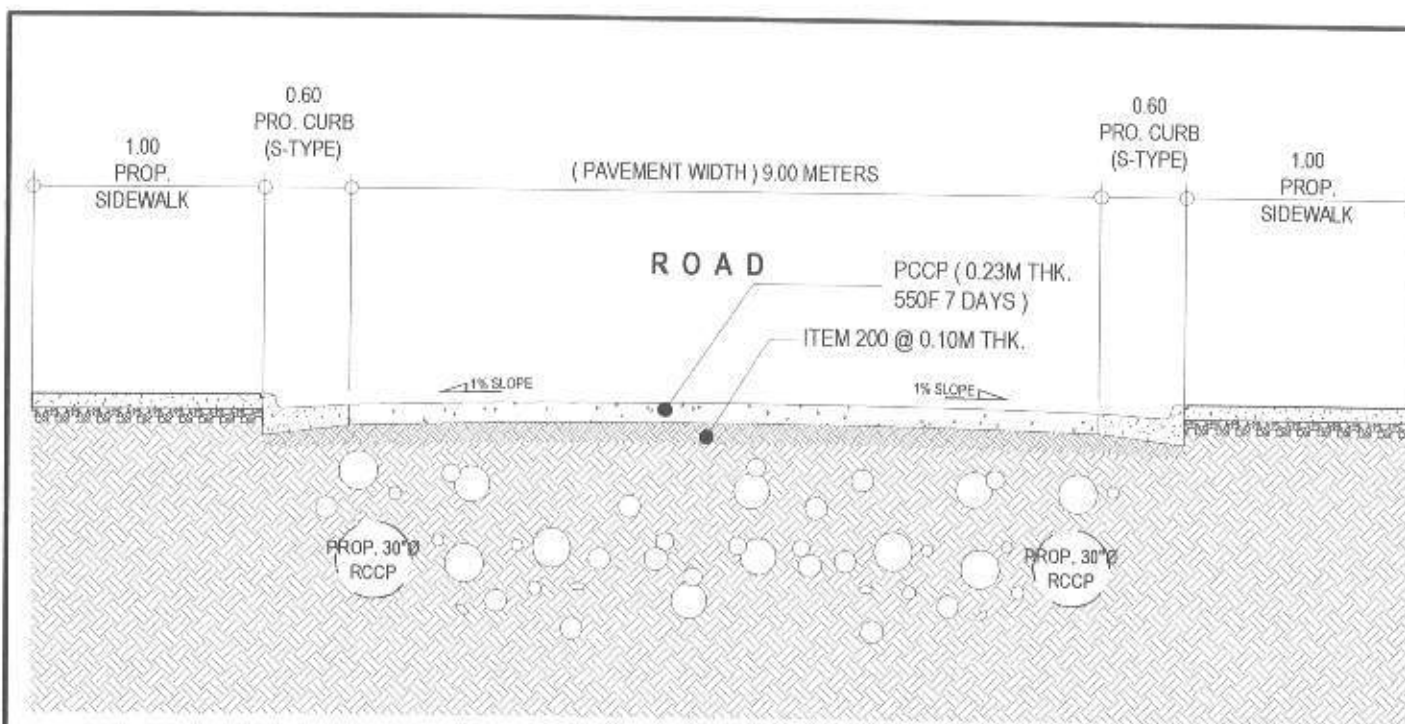
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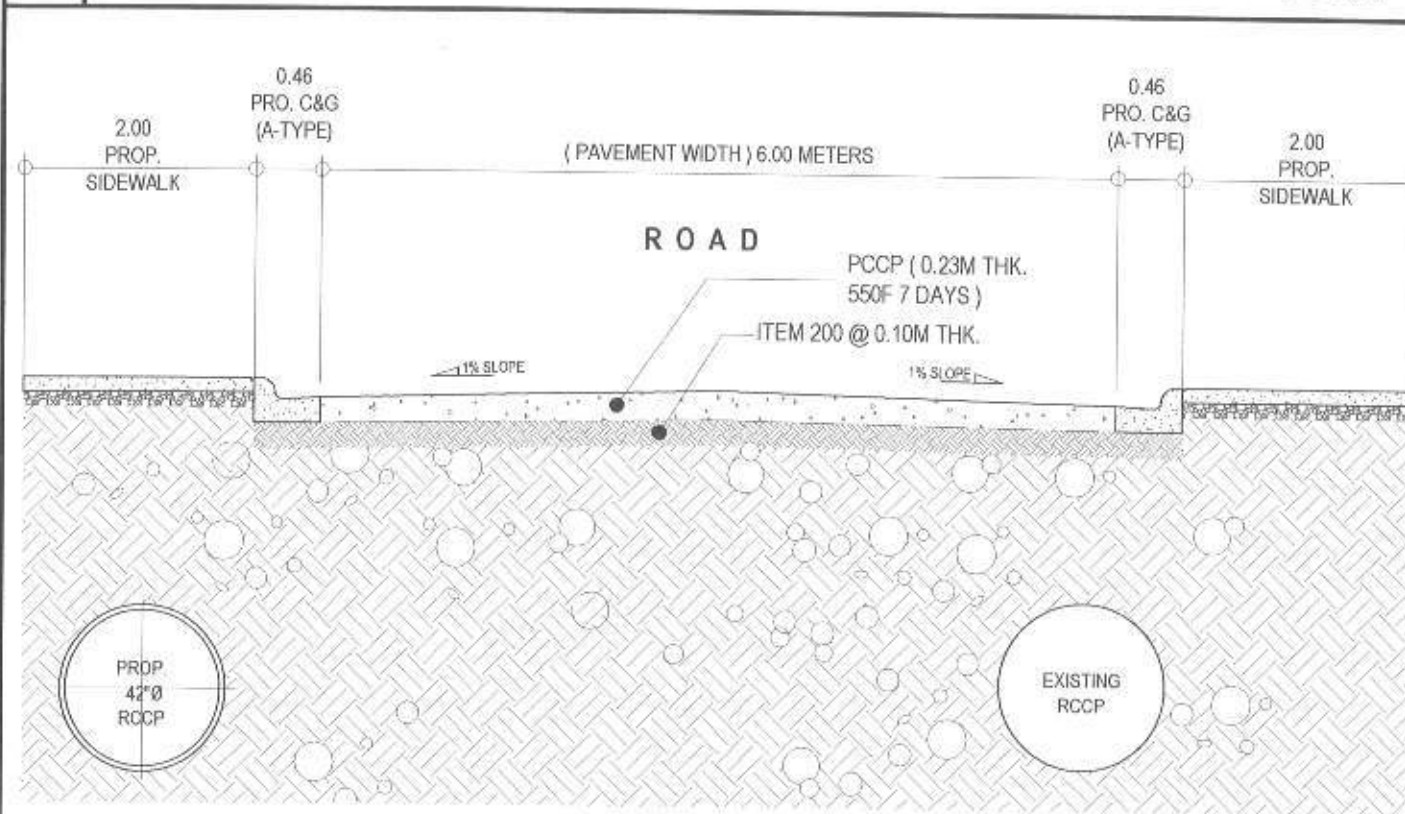
Republika ng Pilipinas  
Lungsod ng Quezon  
**TANGGAPAN NG INHINYERYA**  
Office of the City Engineer

PROJECT TITLE :	DRAWN BY : PIMSREY	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT	SHEET NO.
PROPOSED REHABILITATION OF ROAD AND DRAINAGE AT ROAD 20 AND ROAD 23	DATE : MAY 15, 2020	 ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & PROGRAMMING DIVISION	 ENGR. ISAGANI R. VERZOSA JR CITY ENGINEERING DEPARTMENT	 HON. MA. JOSEFINA G. BELMONTE CITY MAYOR, QUEZON CITY	VICINITY MAP PLAN	CW-01
	CHECKED BY :					
LOCATION : BARANGAY BAHAY TORO DISTRICT 1, QUEZON CITY						

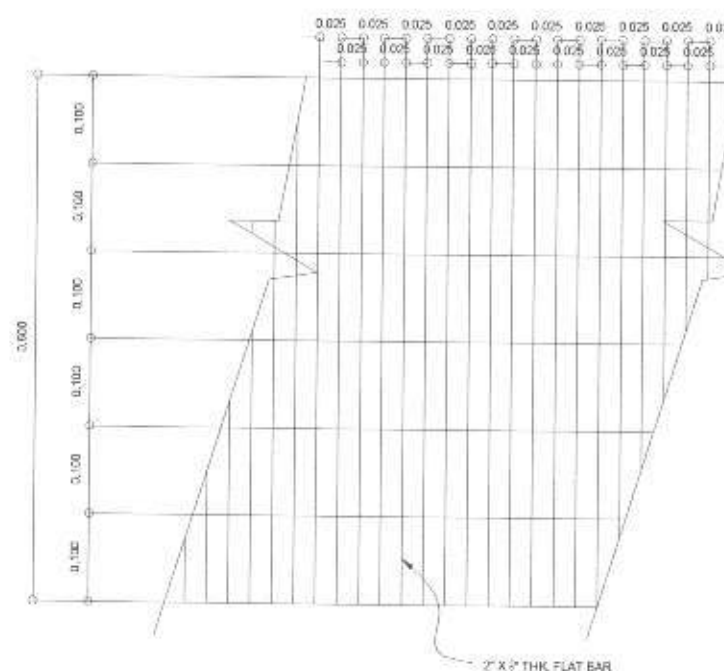
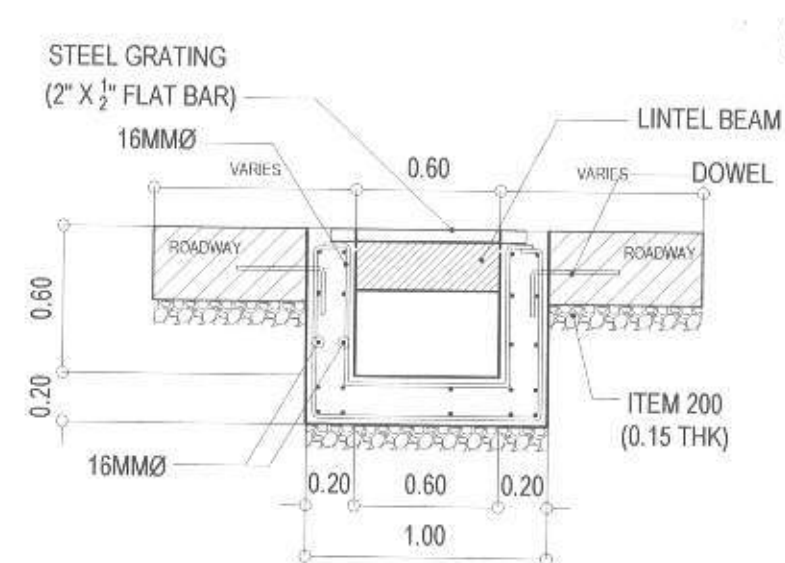




**3 SECTION THRU A** SCALE: NOT TO SCALE



**1 SECTION THRU B** SCALE: NOT TO SCALE



**2 R.C. LINE CANAL W/ INTERCEPTOR DETAIL** SCALE: NOT TO SCALE



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**TANGGAPAN NG INHINYERYA**  
Office of the City Engineer

PROJECT TITLE:  
**PROPOSED REHABILITATION  
OF ROAD AND DRAINAGE AT  
ROAD 20 AND ROAD 23**  
LOCATION:  
BARANGAY BAHAY TORO DISTRICT 1, QUEZON CITY

DRAWN BY: PIMSREY  
DATE: MAY 15, 2020  
CHECKED BY:   
REV No.: 01

SUBMITTED BY:  
  
ENGR. LEO S. DEL ROSARIO  
HEAD PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:  
  
ENGR. SAGANI R. VERZOSA JR.  
CITY ENGINEERING DEPARTMENT

APPROVED BY:  
  
HON. MA JOSEFA G. BELMONTE  
CITY MAYOR, QUEZON CITY

SHEET CONTENT  
SECTION THRU A  
SECTION THRU B  
R.C. LINE CANAL W/  
INTERCEPTOR DETAIL  
SHEET NO.  
**CW-02**

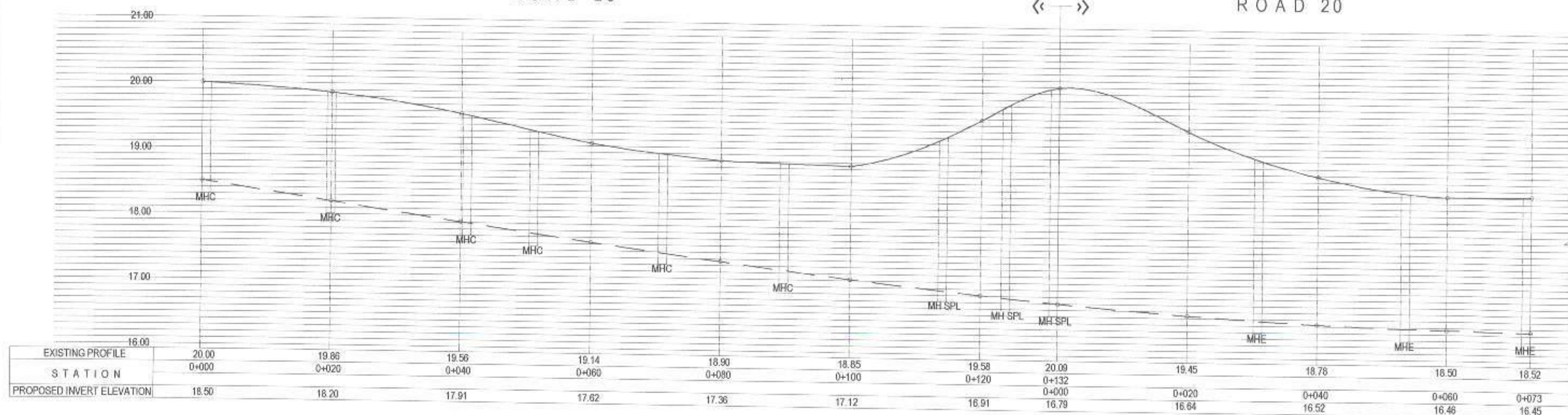


20-00028

ROAD 23

&lt;&lt; &gt;&gt;

ROAD 20



## 1 EXISTING PROFILE

SCALE: NOT TO SCALE



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Lungsod ng Quezon  
**TANGGAPAN NG INHINYERYA**  
Office of the City Engineer

PROJECT TITLE:

**PROPOSED REHABILITATION  
OF ROAD AND DRAINAGE AT  
ROAD 20 AND ROAD 23**

LOCATION:

BARANGAY BAHAY 1 (ROAD DISTRICT 1), QUEZON CITY

DRAWN BY: RIMSREY

DATE: MAY 15, 2020

CHECKED BY:

REV No. 01

SUBMITTED BY:

ENGR. LEO S. DEL ROSARIO  
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:

ENGR. JUAN R. VERZOSA JR.  
CITY ENGINEERING DEPARTMENT

APPROVED BY:

HON. MA. JOSEFINA G. BELMONTE  
CITY MAYOR, QUEZON CITY

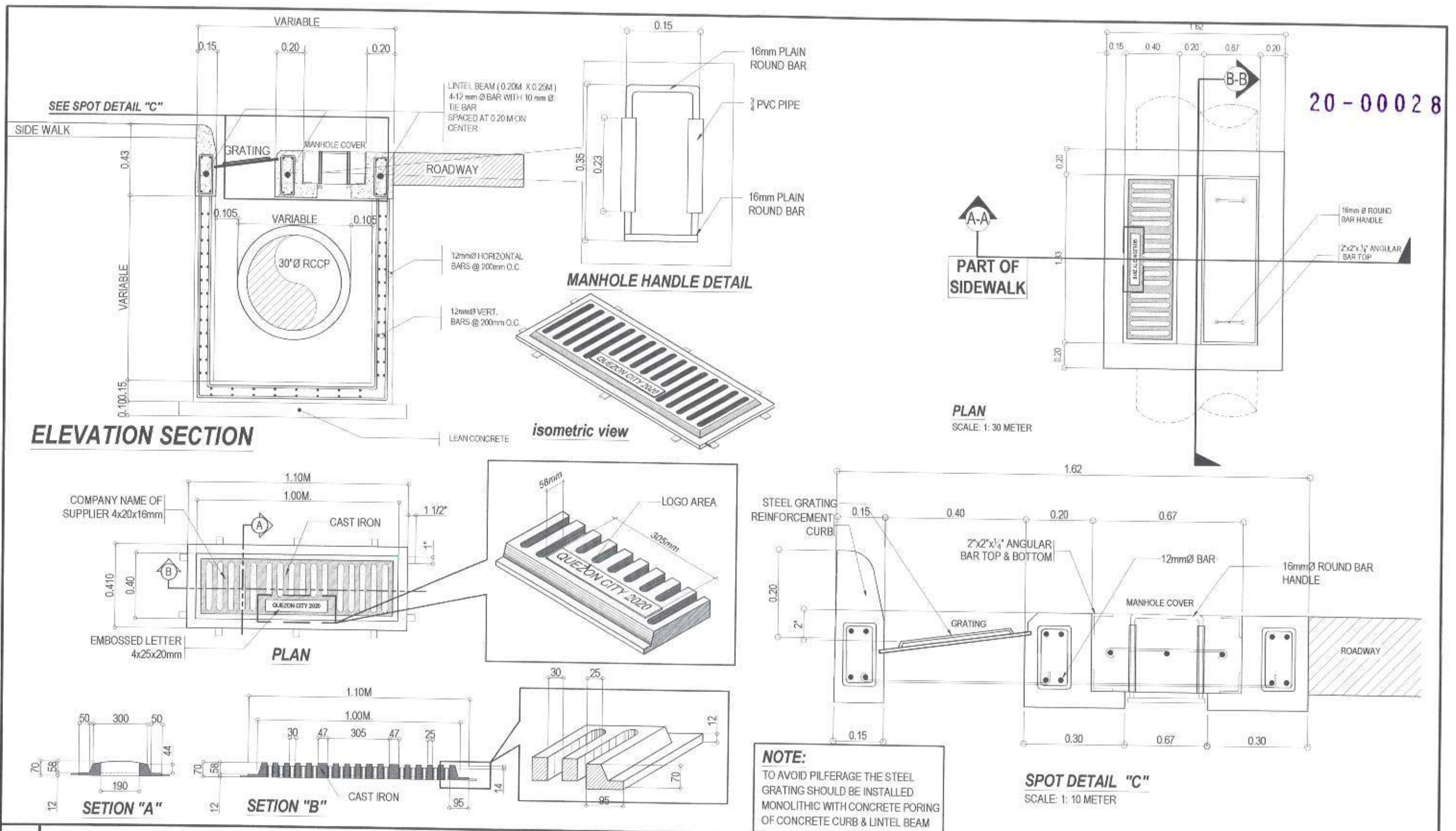
SHEET CONTENT

EXISTING PROFILE

SHEET NO.

CW-03





# 1 DETAIL OF MANHOLE @ ROADWAY

SCALE: 1: 60 METER



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Lungsod ng Quezon  
**TANGGAPAN NG INHINYERYA**  
Office of the City Engineer

PROJECT TITLE:

**PROPOSED REHABILITATION  
OF ROAD AND DRAINAGE AT  
ROAD 20 AND ROAD 23**

LOCATION:

BARANGAY BAHAY TORO DISTRICT 1, QUEZON CITY

DRAWN BY: PIMSREY

DATE: MAY 15, 2020

CHECKED BY:

REV No. 01

SUBMITTED BY:

ENGR. LEO S. DEL ROSARIO  
HEAD PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:

ENGR. ISAGANI R. VERZOSA JR.  
CITY ENGINEERING DEPARTMENT

APPROVED BY:

HON. MA JOSEFA G. BELMONTE  
CITY MAYOR, QUEZON CITY

SHEET CONTENT

DETAIL MANHOLE  
@ ROADWAY

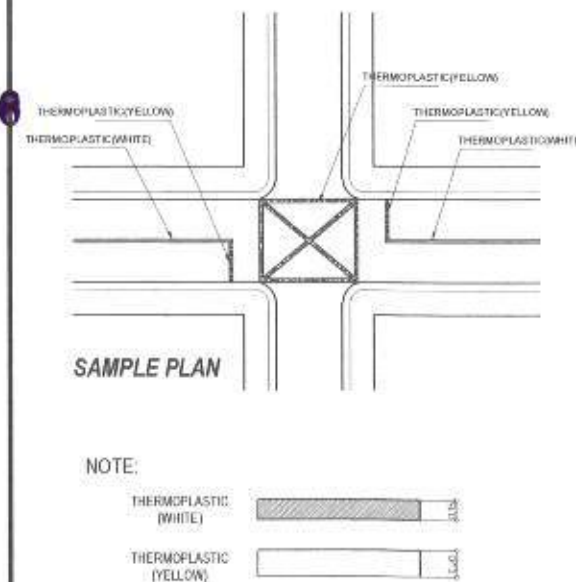
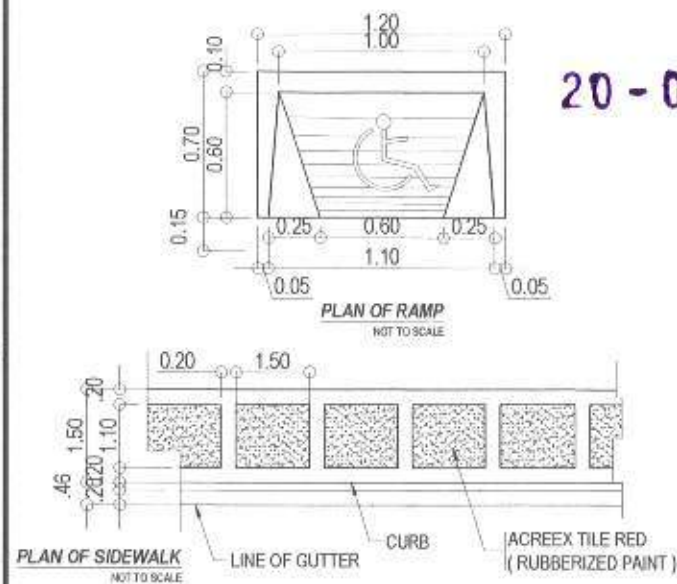
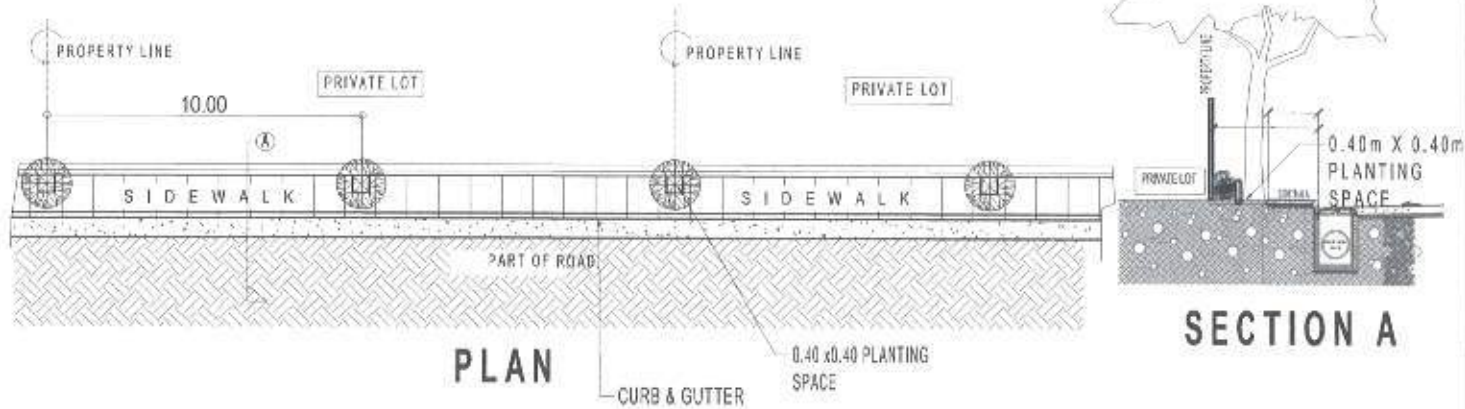
SHEET NO.

**CW-04**









## 1 PLANTING DETAILS ON ROAD SIDES

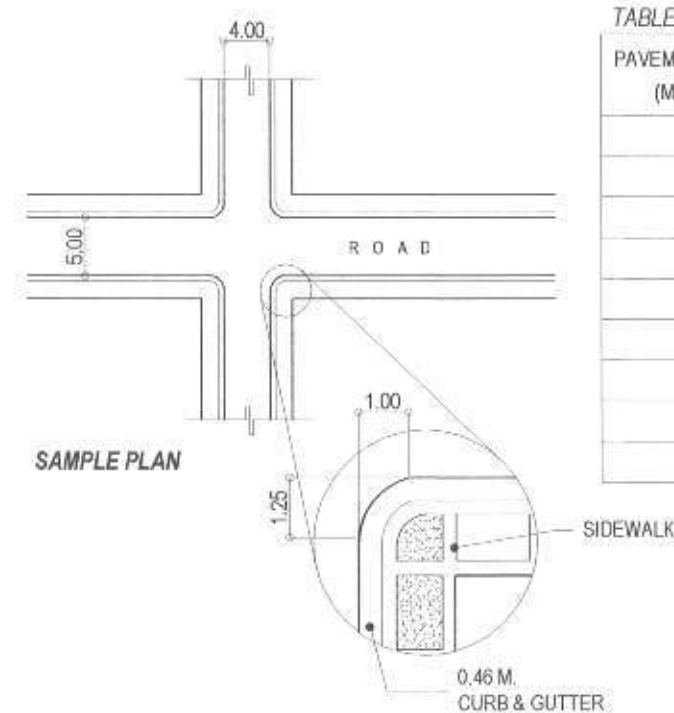
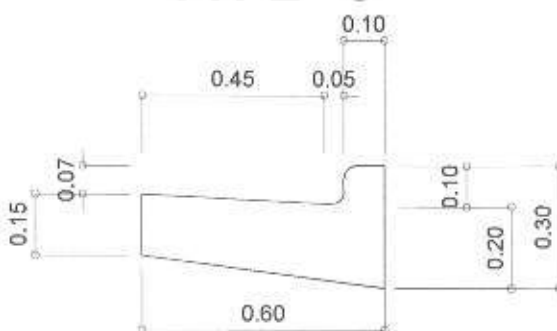
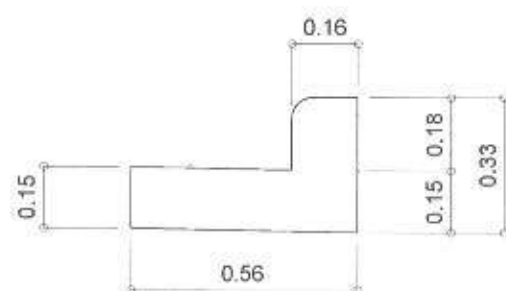
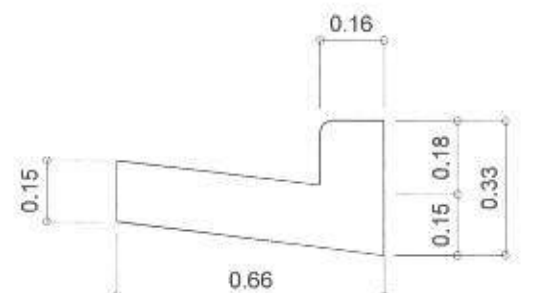
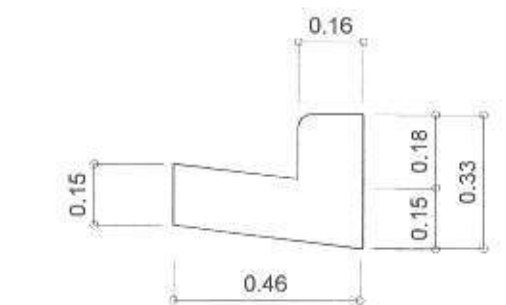
SCALE : NTS

## 3 PLAN OF RAMP & SIDEWALK

SCALE : NTS

## 4 THERMOPLASTIC DETAIL

SCALE : NTS



PAVEMENT WIDTH (METERS)	CURVATURE LENGTH (METERS)
4.00	1.00
5.00	1.25
6.00	1.50
7.00	1.75
8.00	2.00
9.00	2.25
10.00	2.50
11.00	2.75
12.00	3.00

## 2 CONCRETE CURB DETAIL

SCALE 1:20M

## 5 CHAFLAN DETAIL

SCALE 1:700 M



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Office of the City Engineer

PROJECT TITLE:

**PROPOSED REHABILITATION  
OF ROAD AND DRAINAGE AT  
ROAD 20 AND ROAD 23**

LOCATION:  
BARANGAY BAHAY TORO, DISTRICT 1, QUEZON CITY

DRAWN BY: PMSREY

DATE: MAY 15, 2020

CHECKED BY: *[Signature]*

REV No. 01

SUBMITTED BY:

*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:

*[Signature]*  
**ENGR. JAGAN R. VERZOSA JR.**  
ENGINEERING DEPARTMENT

APPROVED BY:

*[Signature]*  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY MAYOR, QUEZON CITY

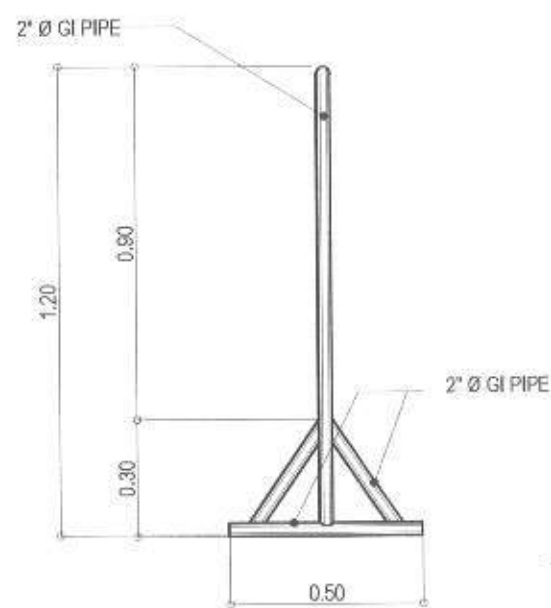
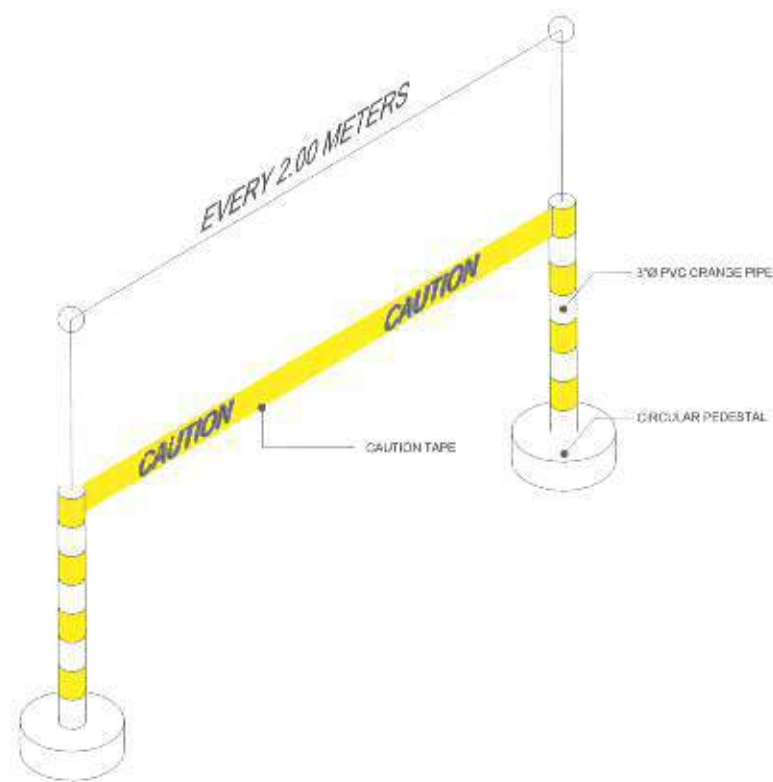
SHEET CONTENT

PLANTING DETAILS ON  
ROAD SIDES  
CONCRETE CURB DETAIL  
PLAN OF RAMP &  
SIDEWALK  
THERMOPLASTIC  
DETAIL  
CHAFLAN DETAIL

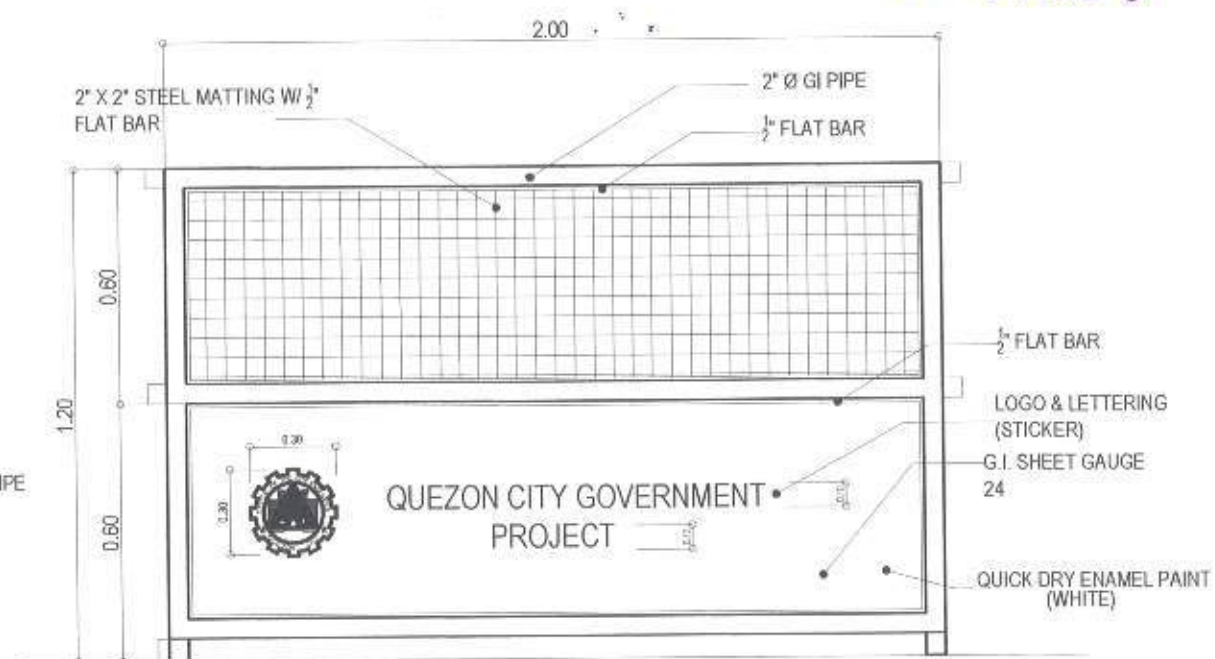
SHEET NO.

**CW-06**

20-00028



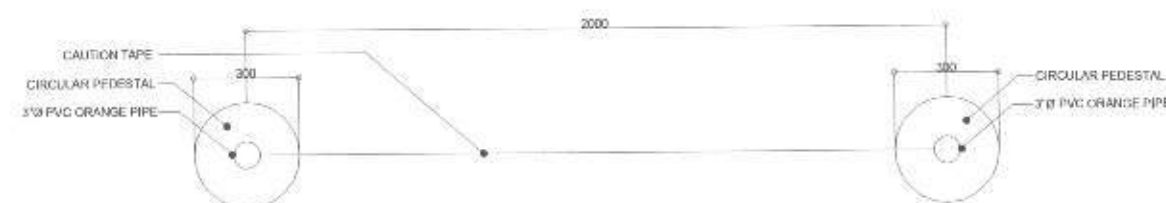
SIDE VIEW



FRONT VIEW

## 2 STEEL BARRICADE DETAIL

SCALE : NTS



## 1 SAFETY STRUCTURE

SCALE : NTS



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Lungsod ng Quezon  
**TANGGAPAN NG INHINYERYA**  
Office of the City Engineer

PROJECT TITLE:

PROPOSED REHABILITATION  
OF ROAD AND DRAINAGE AT  
ROAD 20 AND ROAD 23

LOCATION:

BARANGAY BAY TORO DISTRICT 1, QUEZON CITY

DRAWN BY: RIMSREY

DATE: MAY 15, 2020

CHECKED BY:

REV No. 01

SUBMITTED BY:

ENGR. LEO S. DEL ROSARIO  
HEAD PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:

ENGR. JESSE R. VERZOSA JR.  
CHIEF ENGINEERING DEPARTMENT

APPROVED BY:

HON. MA. JOSEFINA G. BELMONTE  
CITY MAYOR, QUEZON CITY

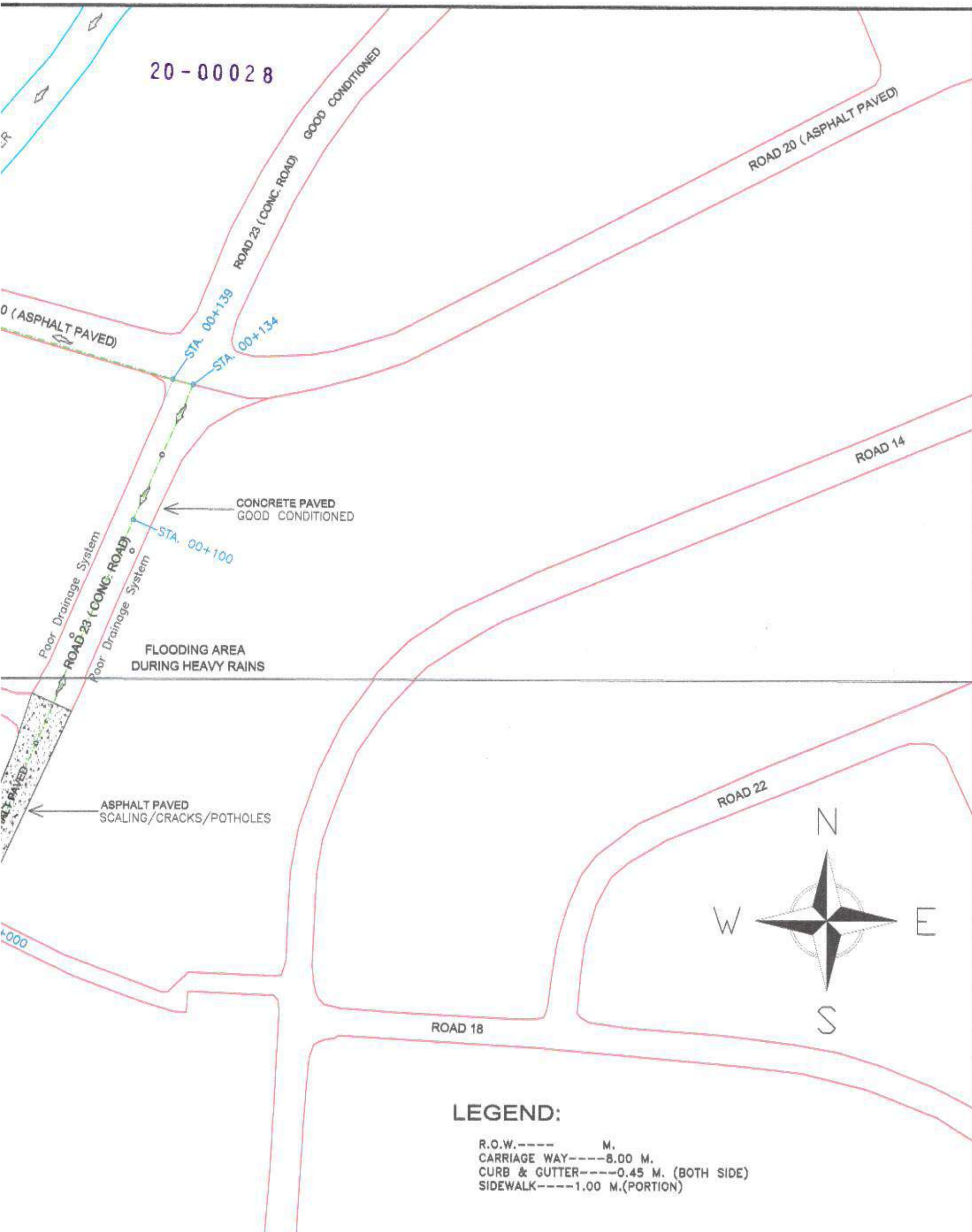
SHEET CONTENT

SAFETY STRUCTURE  
STEEL BARRICADE DETAIL

SHEET NO.

CW-07





ROAD 23 AND ROAD 20  
(CONC. ROAD)  
QUEZON CITY DISTRICT I

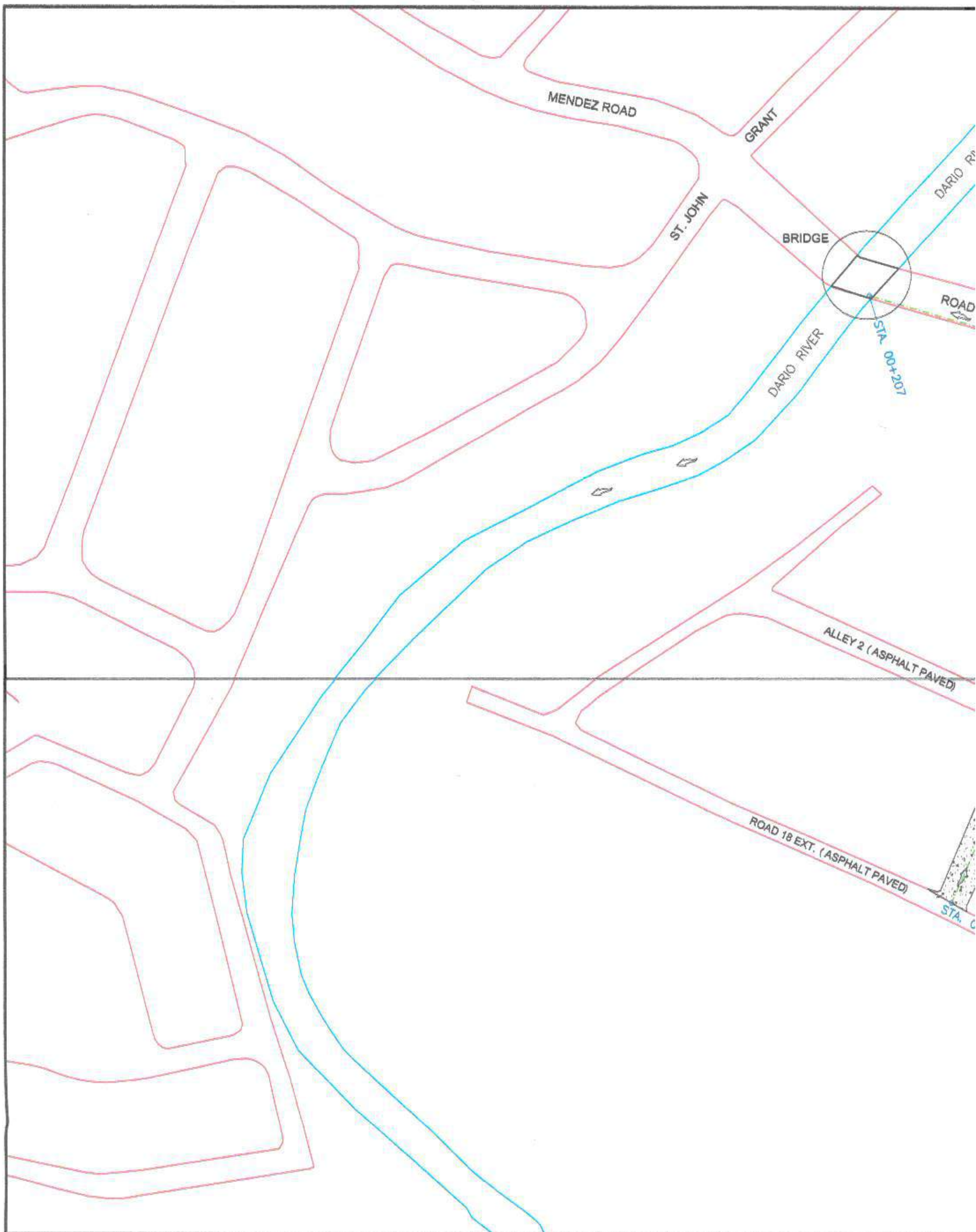
PREPARED & SURVEYED BY:

SURVEY SECTION  
PLANNING AND PROGRAMMING DIVISION  
DEPARTMENT OF ENGINEERING, QUEZON CITY

SCALE 1:800 M.

DATE OF SURVEY; FEBRUARY 18, 2020





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**TANGGAPAN NG INHINYERA**  
Office of the City Engineer

VERIFICATION SURVEY

PROPOSED IMPROVEMENT OF ROAD AND DRAINAGE AT  
(SHOWING THE EXISTING CONDIT

LOCATION: BARANGAY BAHAY TORO, DISTRICT 3, C

## ***Section VIII. Bill of Quantities***

### **Notes on the Bill of Quantities**

#### **Objectives**

The objectives of the Bill of Quantities are:

- a. to provide sufficient information on the quantities of Works to be performed to enable Bids to be prepared efficiently and accurately; and
- b. when a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed.

In order to attain these objectives, Works should be itemized in the Bill of Quantities in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and content of the Bill of Quantities should be as simple and brief as possible.

#### **Daywork Schedule**

A Daywork Schedule should be included only if the probability of unforeseen work, outside the items included in the Bill of Quantities, is high. To facilitate checking by the Entity of the realism of rates quoted by the Bidders, the Daywork Schedule should normally comprise the following:

- a. A list of the various classes of labor, materials, and Constructional Plant for which basic daywork rates or prices are to be inserted by the Bidder, together with a statement of the conditions under which the Contractor will be paid for work executed on a daywork basis.
- b. Nominal quantities for each item of Daywork, to be priced by each Bidder at Daywork rates as Bid. The rate to be entered by the Bidder against each basic Daywork item should include the Contractor's profit, overheads, supervision, and other charges.

#### **Provisional Sums**

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Procuring Entity's Representative's).

The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Procuring Entity to select such specialized contractors. To provide an element of competition among the Bidders in respect of any facilities, amenities, attendance, etc., to be provided by the successful Bidder as prime Contractor for the use and convenience of the specialist contractors, each related provisional sum should be followed by an item in the Bill of Quantities inviting the Bidder to quote a sum for such amenities, facilities, attendance, etc.

### **Signature Box**

A signature box shall be added at the bottom of each page of the Bill of Quantities where the authorized representative of the Bidder shall affix his signature. Failure of the authorized representative to sign each and every page of the Bill of Quantities shall be a cause for rejection of his bid.

These Notes for Preparing a Bill of Quantities are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final documents.

**BILL OF QUANTITIES**  
(Road Construction/Rehabilitation Project)

**PROJECT TITLE :** PROPOSED REHABILITATION OF ROAD AND DRAINAGE AT ROAD 20 AND ROAD 23

**LOCATION :** Barangay Bahay Toro, District 1, Quezon City

**PROJECT NO. :** 20 - 00028

**DURATION :** One Hundred Eighty (180) Calendar Days

ITEM NO.	DESCRIPTION	QTY.	UNIT	UNIT COST	TOTAL AMOUNT
104a	Removal of Extg. Sidewalk/Driveways	405	sq.m.		
104b	Removal of Existing Asphalt Pavement	1,045	sq.m.		
104c	Removal of Existing Concrete Pavement	1,713	sq.m.		
104d	Removal of Existing Conc. Curb & Gutter	402	l.m.		
105	Roadway Excavation	176	cu.m.		
106c	Excavation for Structures, Solid Rock Adobe	946	cu.m.		
200	Aggregate Base Course	242	cu.m.		
316c	P.C.C.P.,0.23 m. thk., 550 F, 7 days	1,668	sq.m.		
413d	760 mm. diam./30" diam. R.C.C.P.	263	l.m.		
413e	910 mm. diam./36" diam. R.C.C.P.	60	l.m.		
413f	1070 mm. diam./42" diam. R.C.C.P.	38	l.m.		
502c	Concrete Curb & Gutter (S-Type)	427	l.m.		
503	Restoration/Concrete Sidewalk/Driveways	386	sq.m.		
505e	C.M.H.,w / AB & Cast Iron, For 1070 mm (Sdwlk)	4	each		
SPL 1c	C.M.H. w/ AB & Cast Iron,For 760mm. (Rdwy.)	15	each		
SPL 1d	C.M.H. w/ AB & Cast Iron,For 910mm. (Rdwy.)	3	each		
SPL 4	Barricade for Excavation & MH with Caution Tape	340	each		
SPL 5	Tapping Drainage	30	set		
SPL 6	NAWASA Leak/ 20 meters	16	set		
SPL 7	Billboard	2	pc		
SPL10a	Thermoplastic Markings (White)	16	sq.m.		
SPL10b	Thermoplastic Markings (Yellow)	12	sq.m.		
SPL 11a	Manhole w/ Angular bar & S.G.,Ht.=2.00m.	2	each		
SPL 11b	Manhole w/ Angular bar & S.G.,Ht.=3.00m.	2	each		
SPL12	Construction Safety and Health	1	unit		
SPL13	Steel Barricade for Excavation	4	each		
SPL19	Drainage Interceptor	6	l.m.		
		TOTAL COST :			

TOTAL LUMP SUM IN WORDS : \_\_\_\_\_

\_\_\_\_\_

Contractor : \_\_\_\_\_

## ***Section IX. Checklist of Technical and Financial Documents***

### **Notes on the Checklist of Technical and Financial Documents**

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary “pass/fail” criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

# Checklist of Technical and Financial Documents

## CHECKLIST & EVALUATION SHEET ELIGIBILITY & TECHNICAL PROPOSAL (FIRST ENVELOPE)

<b>CONTROL NUMBER</b>	<b>PROJECT NUMBER</b>
-----------------------	-----------------------

**NAME OF BIDDER:** \_\_\_\_\_

**Project Title :** \_\_\_\_\_

\_\_\_\_\_

**ABC : Php** \_\_\_\_\_

	REQUIREMENT	MARK APROPRIATE BOXES		REMARKS	RATING
		(✓) IF YES.	(x) IF NO		
<b>1</b>	PhilGEPS Registration Certificate <input type="checkbox"/> Platinum Membership Date Issued: _____ Valid Until: _____	<input type="checkbox"/> ATTACHED  <input type="checkbox"/> SIGNED/INITIALED			
<b>1A</b>	<ul style="list-style-type: none"> <li>If CONTRACTOR is a sole proprietorship: - Copy of DTI Certificate of Registration</li> </ul>	ATTACHED <input type="checkbox"/>  SIGNED/INITIALED <input type="checkbox"/>	PHILGEPS DATA ONLY  <input type="checkbox"/>		
	<ul style="list-style-type: none"> <li>If CONTRACTOR is Partnership - Copy of SEC Certificate of Registration</li> </ul>				
	<ul style="list-style-type: none"> <li>If CONTRACTOR is a Corporation: - Copy of SEC Certificate of Registration</li> </ul>				
	<ul style="list-style-type: none"> <li>If CONTRACTOR is a Cooperative: - Copy of the Certificate of Registration with the Cooperative Development Authority</li> </ul>				
<b>1B</b>	<ul style="list-style-type: none"> <li>If CONTRACTOR is a Joint-Venture Partner Copy of the Joint Venture Agreement, or if none yet, duly notarized statement to enter into JVA if bid is successful</li> </ul>	<input type="checkbox"/> ATTACHED  <input type="checkbox"/> SIGNED/INITIALED	<input type="checkbox"/> NOTARIZED  <input type="checkbox"/> WITH SPECIAL PCAB		
<b>2A</b>	Mayor's (Business) Permit by the City/Municipality where Principal Office is located	<input type="checkbox"/> ATTACHED  <input type="checkbox"/> SIGNED/INITIALED	<input type="checkbox"/> PHILGEPS DATA ONLY  <input type="checkbox"/> VALID & CURRENT	City/Municipality: _____  Expiration: _____	
<b>3A</b>	Largest Single completed contract similar to the project to be bid Project Title: _____ _____ Amount: _____ Year: _____	<input type="checkbox"/> ATTACHED  <input type="checkbox"/> SIGNED/INITIALED  <input type="checkbox"/> WITH ATTACHMENTS	<input type="checkbox"/> NOTICE OF AWARD/PROCEED  <input type="checkbox"/> CERT. OF FINAL ACCEPTANCE		
<b>3B</b>	List of <b>on-going</b> contracts with Notice of Award or Notice to Proceed Total Value: ₱ _____	<input type="checkbox"/> ATTACHED  <input type="checkbox"/> SIGNED/INITIALED	<input type="checkbox"/> FORM ISSUED BY QCBAC		
<b>3C</b>	List of Contracts already <b>awarded but not yet started</b> with Notice of Award or Notice to Proceed Total Value: ₱ _____	<input type="checkbox"/> ATTACHED  <input type="checkbox"/> SIGNED/INITIALED	<input type="checkbox"/> FORM ISSUED BY QCBAC		



<b>4</b>	Copy of the contractor's License by the <b>PCAB</b> License Expiry: _____ Reg. Part. Expiry: _____	<input type="checkbox"/> ATTACHED <input type="checkbox"/> SIGNED/INITIALED	<input type="checkbox"/> VALID & CURRENT	Registration Particular for project to be bid:	
<b>5</b>	Certified copy of Financial Statement (Income Statement & Balance Sheet) stamped received by the BIR/Bank ITR Year: _____	<input type="checkbox"/> ATTACHED <input type="checkbox"/> COMPLETE <input type="checkbox"/> SIGNED/INITIALED	<input type="checkbox"/> PHILGEPS DATA ONLY <input type="checkbox"/> STAMPED RECEIVED BY BIR / BANK	Current Asset: _____ Current Liabilities: _____	
	Auditor's or Accountant's Certificate attached to the Financial Statement stamped received by the BIR/Bank	<input type="checkbox"/> ATTACHED <input type="checkbox"/> SIGNED/INITIALED	<input type="checkbox"/> STAMPED RECEIVED BY BIR / BANK <input type="checkbox"/> PHILGEPS DATA ONLY		
	Tax Clearance	<input type="checkbox"/> ATTACHED <input type="checkbox"/> SIGNED/INITIALED	<input type="checkbox"/> PHILGEPS DATA ONLY <input type="checkbox"/> VALID & CURRENT	Expiration: _____	
<b>6</b>	Computation of NFCC: Php _____ % to ABC: _____ <b>Requirement: 100% of ABC</b>	<input type="checkbox"/> ATTACHED <input type="checkbox"/> SIGNED/INITIALED <input type="checkbox"/> FORM ISSUED BY QCBAC	<input type="checkbox"/> CORRECT COMPUTATION <input type="checkbox"/> ADEQUATE IF $\geq$ 100% OF ABC		
<b>7</b>	<b>BID SECURITY / FORM</b>	<b>REQUIRED AMOUNT</b>	<b>AMOUNT SUBMITTED</b>	<b>VALIDITY</b>	
	Bid Securing Declaration	None	N/A	<input type="checkbox"/> WITH PROJECT IDENTIFICATION <input type="checkbox"/> NOTARIZED	
	Cash or Cashier's/Manager's Check, bank draft, guarantee or irrevocable letter of credit Issued by a bank certified by BSP - Required 2% of ABC			<input type="checkbox"/> ATTACHED <input type="checkbox"/> SIGNED/INITIALED	
	Bidder's Bond – Required <b>5% of ABC</b> Name of Bank/Surety Company: _____			<input type="checkbox"/> CALLABLE ON DEMAND <input type="checkbox"/> 120 CAL. DAYS <input type="checkbox"/> SIGNED/INITIALED <input type="checkbox"/> O.R. Attached	
<b>8</b>	Organizational Chart for the contract to be bid	<input type="checkbox"/> ATTACHED	<input type="checkbox"/> SIGNED/INITIALED		
<b>9A</b>	<b>List of Contractor's Key Personnel</b> (i.e. Project Manager, Project Engineer/s, Materials Engineer, Foreman) to be assigned to the Contract to be bid, with their qualification and experience supported by Curriculum Vitae, PRC License, Cert. of Accreditation for Materials Engineer	<input type="checkbox"/> ATTACHED <input type="checkbox"/> QCBAC FORM <input type="checkbox"/> WITH ATTACHMENTS	<input type="checkbox"/> SIGNED/INITIALED		
<b>9B</b>	Manpower Schedule	<input type="checkbox"/> ATTACHED	<input type="checkbox"/> SIGNED/INITIALED		
<b>10A</b>	List of Contractor's Equipment Units, owned and/or leased and/or under purchase agreements available to be used exclusively for the Contract to be bid	<input type="checkbox"/> ATTACHED	<input type="checkbox"/> SIGNED/INITIALED	<input type="checkbox"/> Project Title Specified	

		<input type="checkbox"/> QCBAC FORM		<input type="checkbox"/> Lease Contract	
<b>10B</b>	Proof of ownership/lease contracts etc., for all the equipment listed to be used for the project to be bid	<input type="checkbox"/> ATTACHED <input type="checkbox"/> COMPLETE ATTACHMENT	<input type="checkbox"/> SIGNED/INITIALED		
<b>10C</b>	Equipment Utilization Schedule	<input type="checkbox"/> ATTACHED	<input type="checkbox"/> SIGNED/INITIALED		
<b>11A</b>	Construction Schedule (Gantt Chart and S-Curve)	<input type="checkbox"/> BAR CHART <input type="checkbox"/> S-CURVE	<input type="checkbox"/> SIGNED/INITIALED		
<b>11B</b>	PERT-CPM	<input type="checkbox"/> ATTACHED	<input type="checkbox"/> SIGNED/INITIALED		
<b>11C</b>	Construction Methods	<input type="checkbox"/> ATTACHED	<input type="checkbox"/> SIGNED/INITIALED		
<b>12</b>	1. Sworn Statement on appointment/designation and authority of person managing the affairs of the contractor's organization 2. <b>If corporation / partnership / joint venture / cooperative</b> attach copy of Corporate Secretary's Certification attesting to such appointment 3. Sworn Statement on <b>NON-INCLUSION</b> in CIAP/GPPB & other Government Institutions List of blacklisted contractors 4. Sworn Statement that documents submitted is complete, authentic and that all information is true and correct. 5. Sworn Statement authorizing the Mayor or BAC-INFRA or its duly authorized representative to verify any and all information and/or documents submitted 6. Sworn Statement on DISCLOSURE of relations 8. It is aware and has undertaken the following: a) Carefully examine all of the Bidding Documents; b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract; c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the Project. 9. It did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity. 10. Sworn Statement on conduct of site Inspection	<input type="checkbox"/> ATTACHED <input type="checkbox"/> SIGNED/INITIALED  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/> NOTARIZED		

<b>13</b>	Copy of Instruction to Bidders and Bid Bulletin(s) issued for the project	<input type="checkbox"/> ATTACHED	<input type="checkbox"/> SIGNED/INITIALED		
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Result of Evaluation :	PASSED <input type="checkbox"/>	FAILED <input type="checkbox"/>
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Evaluated by: \_\_\_\_\_  
Date: \_\_\_\_\_

<b>REASON OF FAILURE :</b>  <div style="text-align: center;"> <hr/><hr/><hr/><hr/><hr/><hr/> </div>
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<b>Reviewed by:</b>	<b>Noted by:</b>
<b>ADELFO DE ASIS MENDOZA III</b>	<b>ATTY. DOMINIC B. GARCIA</b>

☐ **APPROVED FOR BID EVALUATION**

☐ **FOR PREPARATION OF NOTICE OF FAILURE**

**APPROVED BY:**

BAC MEMBERS	SIGNATURE
ATTY. MARK DALE DIAMOND P. PERRAL	
ARCH. LUCILLE H. CHUA	
MR. CARLOS I. VERZONILLA	
MS. MARIAN C. ORAYANI	
MR. RAMON T. ASPRER	

OBSERVERS	SIGNATURE
ATTY. RESURECCION C. QUIETA	
ARCH. BENJAMIN K. PANGANIBAN, JR.	
MR. BARRY G. PAULINO	
ATTY. NOEL EMMANUEL C. GASCON	


**CHECKLIST & EVALUATION SHEET**  
**FINANCIAL PROPOSAL**  
**(SECOND ENVELOPE)**

<b>CONTROL NUMBER</b>	<b>PROJECT NUMBER</b>
-----------------------	-----------------------

**NAME OF BIDDER:** \_\_\_\_\_

**Project Title :** \_\_\_\_\_

**ABC : Php** \_\_\_\_\_

	REQUIREMENT	MARK APPROPRIATE BOXES	RATING
		(✓) IF YES, (x) IF NO	PASS "P" or FAIL "F"
<b>1</b>	Bid Prices in the BID PROPOSAL using the form issued by the QCBAC-INFRA	<input type="checkbox"/> ATTACHED <input type="checkbox"/> QCBAC FORM <input type="checkbox"/> SIGNED	
<b>2</b>	Detailed Estimates / Derivation of Unit Prices with Summary Sheet indicating unit prices of construction materials, labor rates and equipment rentals inclusive of all indirect costs and taxes	<input type="checkbox"/> ATTACHED <input type="checkbox"/> SIGNED	
<b>3</b>	Cash Flow by quarter and Payment Schedule	<input type="checkbox"/> ATTACHED <input type="checkbox"/> SIGNED	

Result of Evaluation: <div style="display: inline-block; margin-left: 100px;">           PASSED <input style="width: 40px; height: 20px;" type="checkbox"/> </div>	FAILED <input style="width: 40px; height: 20px;" type="checkbox"/>
--	--

**BID AMOUNT (₱)** \_\_\_\_\_

**REASON OF FAILURE :**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Evaluated by: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Reviewed by:</b> _____ <b>Signature</b>	<b>Noted by:</b> _____ <b>Signature</b>
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<b>ADELFO DE ASIS MENDOZA III</b>		<b>ATTY. DOMINIC B. GARCIA</b>	
-----------------------------------	--	--------------------------------	--

**APPROVED BY:**

<b>BAC MEMBERS</b>	<b>SIGNATURE</b>
<b>ATTY. MARK DALE DIAMOND P. PERRAL</b>	
<b>ARCH. LUCILLE H. CHUA</b>	
<b>MR. CARLOS I. VERZONILLA</b>	
<b>MS. MARIAN C. ORAYANI</b>	
<b>MR. RAMON T. ASPRER</b>	

<b>OBSERVERS</b>	<b>SIGNATURE</b>
<b>ATTY. RESURECCION C. QUIETA</b>	
<b>ARCH. BENJAMIN K. PANGANIBAN, JR.</b>	
<b>MR. BARRY G. PAULINO</b>	
<b>ATTY. NOEL EMMANUEL C. GASCON</b>	



## Bid Form

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Date: \_\_\_\_\_

IB<sup>1</sup> N°: \_\_\_\_\_

To: *[name and address of PROCURING ENTITY]*

Address: *[insert address]*

We, the undersigned, declare that:

- (a) We have examined and have no reservation to the Bidding Documents, including Addenda, for the Contract *[insert name of contract]*;
- (b) We offer to execute the Works for this Contract in accordance with the Bid and Bid Data Sheet, General and Special Conditions of Contract accompanying this Bid;

The total price of our Bid, excluding any discounts offered below is: *[insert information]*;

The discounts offered and the methodology for their application are: *[insert information]*;

- (c) Our Bid shall be valid for a period of *[insert number]* days from the date fixed for the Bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (d) If our Bid is accepted, we commit to obtain a Performance Security in the amount of *[insert percentage amount]* percent of the Contract Price for the due performance of the Contract;
- (e) Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from the following eligible countries: *[insert information]*;
- (f) We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
- (g) Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers for any part of the Contract, has not been declared ineligible by the Funding Source;

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<sup>1</sup> If ADB, JICA and WB funded projects, use IFB.

- (h) We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and
- (i) We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.
- (j) We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the [Name of Project] of the [Name of the Procuring Entity].
- (k) We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

Name: \_\_\_\_\_

In the capacity of: \_\_\_\_\_

Signed: \_\_\_\_\_

Duly authorized to sign the Bid for and on behalf of: \_\_\_\_\_

Date: \_\_\_\_\_

## Form of Contract Agreement

---

THIS AGREEMENT, made this *[insert date]* day of *[insert month]*, *[insert year]* between *[name and address of PROCURING ENTITY]* (hereinafter called the “Entity”) and *[name and address of Contractor]* (hereinafter called the “Contractor”).

WHEREAS, the Entity is desirous that the Contractor execute *[name and identification number of contract]* (hereinafter called “the Works”) and the Entity has accepted the Bid for *[insert the amount in specified currency in numbers and words]* by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be attached, deemed to form, and be read and construed as integral part of this Agreement, to wit:
  - (a) General and Special Conditions of Contract;
  - (b) Drawings/Plans;
  - (c) Specifications;
  - (d) Invitation to Bid;
  - (e) Instructions to Bidders;
  - (f) Bid Data Sheet;
  - (g) Addenda and/or Supplemental/Bid Bulletins, if any;
  - (h) Bid form, including all the documents/statements contained in the Bidder’s bidding envelopes, as annexes, and all other documents submitted (e.g., Bidder’s response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity’s bid evaluation;
  - (i) Eligibility requirements, documents and/or statements;
  - (j) Performance Security;
  - (k) Notice of Award of Contract and the Bidder’s conforme thereto;
  - (l) Other contract documents that may be required by existing laws and/or the Entity.
3. In consideration of the payments to be made by the Entity to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Entity to execute and complete the Works and remedy any defects therein in conformity with the provisions of this Contract in all respects.

4. The Entity hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects wherein, the Contract Price or such other sum as may become payable under the provisions of this Contract at the times and in the manner prescribed by this Contract.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_ (for the Entity)

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_ (for the Contractor).

Binding Signature of Procuring Entity

\_\_\_\_\_

Binding Signature of Contractor

\_\_\_\_\_

*[Addendum showing the corrections, if any, made during the Bid evaluation should be attached with this agreement]*

## Omnibus Sworn Statement

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REPUBLIC OF THE PHILIPPINES )  
CITY/MUNICIPALITY OF \_\_\_\_\_ ) S.S.

### AFFIDAVIT

I, *[Name of Affiant]*, of legal age, *[Civil Status]*, *[Nationality]*, and residing at *[Address of Affiant]*, after having been duly sworn in accordance with law, do hereby depose and state that:

1. **Select one, delete the other:**

*If a sole proprietorship:* I am the sole proprietor or authorized representative of *[Name of Bidder]* with office address at *[address of Bidder]*;

*If a partnership, corporation, cooperative, or joint venture:* I am the duly authorized and designated representative of *[Name of Bidder]* with office address at *[address of Bidder]*;

2. **Select one, delete the other:**

*If a sole proprietorship:* As the owner and sole proprietor or authorized representative of *[Name of Bidder]*, I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]* *[insert "as shown in the attached duly notarized Special Power of Attorney" for the authorized representative]*;

*If a partnership, corporation, cooperative, or joint venture:* I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]*, accompanied by the duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary's Certificate, whichever is applicable;

3. *[Name of Bidder]* is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;



5. *[Name of Bidder]* is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. ***Select one, delete the rest:***

*If a sole proprietorship:* The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

*If a partnership or cooperative:* None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

*If a corporation or joint venture:* None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. *[Name of Bidder]* complies with existing labor laws and standards; and
8. *[Name of Bidder]* is aware of and has undertaken the following responsibilities as a Bidder:
- a) Carefully examine all of the Bidding Documents;
  - b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
  - c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and
  - d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

IN WITNESS WHEREOF, I have hereunto set my hand this \_\_\_\_ day of \_\_\_\_, 20\_\_ at \_\_\_\_\_, Philippines.

\_\_\_\_\_  
Bidder's Representative/Authorized Signatory

**SUBSCRIBED AND SWORN** to before me this \_\_\_\_ day of *[month]* *[year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. \_\_\_\_\_ and his/her Community Tax Certificate No. \_\_\_\_\_ issued on \_\_\_\_ at \_\_\_\_\_.

Witness my hand and seal this \_\_\_\_ day of *[month]* *[year]*.

**NAME OF NOTARY PUBLIC**

Serial No. of Commission \_\_\_\_\_

Notary Public for \_\_\_\_\_ until \_\_\_\_\_

Roll of Attorneys No. \_\_\_\_\_

PTR No. \_\_\_\_\_ *[date issued]*, *[place issued]*

IBP No. \_\_\_\_\_ *[date issued]*, *[place issued]*

Doc. No. \_\_\_\_\_

Page No. \_\_\_\_\_

Book No. \_\_\_\_\_

Series of \_\_\_\_\_

\* This form will not apply for WB funded projects.

## Bid-Securing Declaration

(REPUBLIC OF THE PHILIPPINES)

CITY OF \_\_\_\_\_ ) S.S.

X-----X

**Invitation to Bid** *[Insert reference number]*

To: *[Insert name and address of the Procuring Entity]*

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid-Securing Declaration.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1 (f), of the IRR of RA 9184; without prejudice to other legal action the government may undertake.
3. I/We understand that this Bid-Securing Declaration shall cease to be valid on the following circumstances:
  - a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
  - b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;
  - c. I am/we are declared as the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

**IN WITNESS WHEREOF**, I/We have hereunto set my/our hand/s this \_\_\_\_ day of *[month]* *[year]* at *[place of execution]*.

***[Insert NAME OF BIDDER'S AUTHORIZED REPRESENTATIVE]***  
***[Insert signatory's legal capacity]***

Affiant

**SUBSCRIBED AND SWORN** to before me this \_\_\_\_ day of *[month]* *[year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. \_\_\_\_\_.

Witness my hand and seal this \_\_\_\_ day of *[month]* *[year]*.

**NAME OF NOTARY PUBLIC**

**Serial No. of Commission** \_\_\_\_\_  
**Notary Public for** \_\_\_\_\_ **until** \_\_\_\_\_  
**Roll of Attorneys No.** \_\_\_\_\_  
**PTR No.** \_\_, *[date issued]*, *[place issued]*  
**IBP No.** \_\_, *[date issued]*, *[place issued]*  
**Doc. No.** \_\_\_\_  
**Page No.** \_\_\_\_  
**Book No.** \_\_\_\_  
**Series of** \_\_\_\_.

REPUBLIC OF THE PHILIPPINES)

\_\_\_\_\_ ) S. S.

### AFFIDAVIT OF UNDERTAKING

I, \_\_\_\_\_, of legal age, Filipino, \_\_\_\_\_ **[OFFICER OR REPRESENTATIVE]**

with office address at \_\_\_\_\_ after having been duly sworn to in accordance with law, hereby voluntary depose and state:

That I am duly authorized representative of the **[Name of Bidder]** to execute this undertaking as evidenced by Secretary's Certificate and Board Resolution.

That **[Name of Bidder]** bidding for the (Name of Project)

That relative to the aforementioned Project, the **[Name of Bidder]** hereby undertake that the equipment to be use and the key personnel to be assign shall exclusively be used and will only perform to the said project until its completion.

That I am executing this affidavit to attest to the truth of the foregoing and in compliance with the submission of the technical requirements for the public bidding of the said project.

IN WITNESS HEREOF, I have hereunto signed my name below this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ at \_\_\_\_\_.

AFFIANT FURTHER SAYETH NAUGHT.

\_\_\_\_\_  
Affiant

**SUBSCRIBED AND SWORN TO BEFORE ME** this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ in \_\_\_\_\_,

affiant exhibiting to me his/her \_\_\_\_\_ issued at \_\_\_\_\_ on \_\_\_\_\_.

Doc. No. ;

Page No. ;

Book No. ;

Series of 2020

\_\_\_\_\_  
Notary Public



