



## Bid Notice Abstract

### Invitation to Bid (ITB)

**Reference Number** 9595423  
**Procuring Entity** BAGUIO WATER DISTRICT - BAGUIO CITY  
**Title** 1 Lot Surface Restoration and Paving Works for the proposed Installation of 8"ø x 2,730m HDPE Mainline from Marcos Highway to Asin Road via Suello Road project  
**Area of Delivery** Benguet

<b>Solicitation Number:</b> 03-JO-051	<b>Status</b>	<b>Pending</b>
<b>Trade Agreement:</b> Implementing Rules and Regulations		
<b>Procurement Mode:</b> Public Bidding	<b>Associated Components</b>	4
<b>Classification:</b> Goods - General Support Services		
<b>Category:</b> General Engineering Services	<b>Bid Supplements</b>	0
<b>Approved Budget for the Contract:</b> PHP 3,133,515.96		
<b>Delivery Period:</b> 54 Day/s	<b>Document Request List</b>	0
<b>Client Agency:</b>		
	<b>Date Published</b>	23/03/2023
<b>Contact Person:</b> Ma. Luisa C Tenedero BAC In-House Chairman BWD Compound, Utility Road Baguio City Benguet Philippines 2600 63-74-4424858 63-74-4424858 purchasing.bwd2014@gmail.com	<b>Last Updated / Time</b>	22/03/2023 10:19 AM
	<b>Closing Date / Time</b>	12/04/2023 13:30 PM

#### Description

1 Lot Surface Restoration and Paving Works for the proposed Installation of 8"ø x 2,730m HDPE Mainline from Marcos Highway to Asin Road via Suello Road project

Scope of work:

Excavation / Removal of temporary resurfacing

244.50 cu m Boring of holes 5,504.00 holes Cutting and installation of dowelbars

4,550.40 kgs Ready-mix concrete pouring 244.50 cu m Clearing, hauling, and disposal of excavated temporary resurfacing, unwanted materials, & debris

1.00 lot

Please refer to the attached Terms of Reference (TOR) and Drawing Plans for specific details.

Duration: 54 working days

Approved Budget Cost: ₱3,133,515.96 / lot

x x x x x

This is a two (2) envelope system:

Documents Comprising the Bid

The first envelope (Technical Proposal) shall contain the following:

I. CLASS "A" DOCUMENTS

A. LEGAL DOCUMENTS



1. Registration certificate from the Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives.

2. Mayor's/Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas. • In cases of recently expired Mayor's/Business permits, it shall be accepted together with the official receipt as proof that the bidder has applied for renewal within the period prescribed by the concerned local government unit: Provided, That the renewed permit shall be submitted as a post-qualification requirement in accordance with Section 34.2 of the IRR of RA 9184.

3. Tax clearance per Executive Order No.398, series of 2005, as finally reviewed and approved by BIR.

**B. TECHNICAL DOCUMENTS**

1. PhilGEPS Certificate of Registration and membership in accordance with Section 8.5.2 of the IRR of RA 9184, except for foreign bidders participating in the procurement by a Philippines Foreign Service Office or Post, which shall submit their eligibility documents under Section 23.1 of this IRR: Provided, that the winning bidder shall register with the PHILGEPS in accordance with Section 37.1.4 of the IRR of RA9184.

2. Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid within the relevant period as provided in the Bidding Documents. The statement shall include, for each contract, the following:

a. name of the contract

b. date of the contract

c. contract duration

d. owner's name and address

e. nature of work

f. contractor's role (whether sole contractor or partner in a JV) and percentage of participation

g. total contract value at award

h. date of completion or estimated completion time

i. total contract value at completion, if applicable;

j. Percentages of planned and actual accomplishments, if applicable;

k. value of outstanding works, if applicable;

l. the statement shall be supported by the notices of award and/or notices to proceed issued by the owners; and

m. the statement shall be supported by the Constructors Performance Evaluation System (CPES) rating sheets, and/or certificates of completion and owner's acceptance, if applicable;

3. An SLCC that is similar to the contract to be bid, and whose value, adjusted to current prices using the Philippine Statistics Authority (PSA) consumer price indices, must be at least fifty percent (50%) of the ABC. Provided, however, that contractors under Small A and Small B categories without similar experience on the contract to be bid may be allowed to bid if the cost of such contract is not more than the Allowable Range of Contract Cost (ARCC) of their registration based on the guidelines as prescribed by the PCAB.

The SLCC shall be supported by an Owner's Certificate of Final Acceptance issued by the project owner other than the contractor or a final rating of at least Satisfactory in the Constructors Performance Evaluation System (CPES). In case of contracts with the private sector, an equivalent document shall be submitted.

4. Bid security in any of the following:

Form of Bid Security Amount of Bid Security(Not less than therequired percentageof the ABC)

Cash or cashier's/manager's  
check, issued by a Universal or  
Commercial bank 2%

Bank draft/guarantee or  
irrevocable letter of credit  
issued by a Universal or  
Commercial Bank: Provided,  
however, that it shall be  
confirmed or authenticated by  
a Universal or Commercial  
Bank, if issued by a foreign  
bank. 2%

Surety bond callable upon  
demand issued by a surety or  
insurance company duly  
certified by the insurance  
company duly certified by the  
Insurance Commission as  
authorized to issue such  
security. 5%

OR Bid Securing Declaration, which states, among others, that the bidder, shall enter into a Contract with the procuring entity and furnish the required performance security within ten (10) calendar days, or less, as indicated in the bidding documents, from the receipt of the Notice of Award, and committing to pay the corresponding fine and be suspended for a period of time from being disqualified to participate in any government procurement activity in the event it violates any of the conditions stated therein as required in the guidelines issued by the Government Procurement Policy Board(GPPB).

5. Omnibus sworn statement in accordance with Section 25.3 of the IRR of RA 9184 which shall be executed by the prospective bidder or its duly authorized representative

6. Project Requirements:



- a) Organizational chart for the contract to be bid;  
b) List of contractor's personnel (viz: Project Manager, Project Engineers, Safety Officers, Materials Engineers, and Foremen, etc.), to be assigned to the contract to be bid, with their complete qualifications and experience data; and c) List of contractor's equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be. The contractor shall have the following equipment:
1. cargo / dump truck,
  2. rotary driller with bit,
  3. generator set, and
  4. concrete vibrator

7. Proof of payment of bidding documents in the amount of ₱5,000.00

8. Statement of Compliance to all provisions of the Terms of Reference (manner of implementation, qualification, requirements of suppliers / installers, technical specifications)

**C. FINANCIAL DOCUMENTS**

1. Audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities stamped "received" by the Bureau of Internal Revenue (BIR) or its duly accredited and authorized institutions, for the preceding calendar year, which should not be earlier than two (2) years from bid submission.
  2. The prospective bidder's computation of Net Financial Contracting Capacity (NFCC). II. CLASS "B" DOCUMENT
- If applicable, the joint venture bidders shall submit a Joint Venture Agreement in accordance with RA 4566 and its IRR. Each partner of the joint venture shall submit his or her respective PHILGEPS Certificates of Registration in accordance with Section 8.5.2 of the IRR of RA 9184. The submission of technical and financial eligibility documents by any of the joint venture partners constitutes compliance: Provided, that the partner responsible to submit the NFCC shall likewise submit the Statement of all its ongoing contracts and Audited Financial Statements. The second envelope (Financial Proposal) shall contain the following:

- a) Bid Form, which includes bid prices and bill of quantities
- b) 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
- c) Cash flow by the quarter and payments schedule

All Financial Proposals that exceed the ABC shall be rejected.

Pre-bid conference:

9:30am via Zoom Application

Meeting ID: 452 718 8447

Password: 9Buvqr

**Pre-bid Conference**

Date	Time	Venue
31/03/2023	9:30:00 AM	Pre-bid conference: March 31, 2023 9:30am via Zoom Application Meeting ID: 452 718 8447 Password: 9Buvqr

**Created by** Ma. Luisa C Tenedero

**Date Created** 22/03/2023

The PhilGEPS team is not responsible for any typographical errors or misinformation presented in the system. PhilGEPS only displays information provided for by its clients, and any queries regarding the postings should be directed to the contact person/s of the concerned party.





**BAGUIO WATER DISTRICT**  
**BWD Compound, Utility Road, Baguio City 2600**

**REQUEST FOR BIDS/QUOTATION (RQ)**

Document No.	ADM-PUR-F003
Revision Date	February 15, 2020
Revision No.	01

To: \_\_\_\_\_  
(Name of Supplier)

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

Contact no.: \_\_\_\_\_

RQ No.: **03 – JO – 051**  
PR / JO No.: **JO – 051**  
Date of RQ: **March 17, 2023**  
Purpose of RQ:  
Proposed installation of 8"Ø x 2,730M  
HDPE Mainline from Marcos Highway to  
Asin Road via Suello Road (Surface  
restoration and paving works)

NOTE: DATA REQUIRED MUST BE FILLED UP COMPLETELY. FAILURE TO INDICATE THE PRICE VALIDITY, TERMS, WARRANTY PERIOD AND DELIVERY PERIOD SHALL MEAN OUTRIGHT DISQUALIFICATION OF BIDS				
	Qty.	Description	U-Price	Total
<b>VALIDITY DATE:</b> _____ day <b>(30 days minimum)</b>	<b>1 lot</b>	Surface Restoration and Paving Works for the proposed Installation of 8"Ø x 2,730m HDPE Mainline from Marcos Highway to Asin Road via Suello Road project  Scope of work: Excavation / Removal of temporary resurfacing 244.50 cu m Boring of holes 5,504.00 holes Cutting and installation of dowel bars 4,550.40 kgs Ready-mix concrete pouring 244.50 cu m Clearing, hauling, and disposal of excavated temporary resurfacing, unwanted materials, & debris 1.00 lot		
<b>DELIVERY :</b> _____ working days _____ calendar days _____ FOB warehouse				
<b>WARRANTY</b> _____ calendar days upon acceptance.				
<b>TERMS:</b>		Please refer to the attached Terms of Reference (TOR) and Drawing Plans for specific details.  Duration: 54 working days  Approved Budget Cost: ₱3,133,515.96 / lot  X X X X X  <b>This is a two (2) envelope system:</b>  <b>Documents Comprising the Bid</b>  The <b>first envelope (Technical Proposal)</b> shall contain the following:  I. <b>CLASS "A" DOCUMENTS</b>  <b>A. LEGAL DOCUMENTS</b> 1. Registration certificate from the Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives. 2. Mayor's/Business permit issued by the city or municipality where the principal place of business		

Sun





**BAGUIO WATER DISTRICT**  
**BWD Compound, Utility Road, Baguio City 2600**

Document No.	ADM-PUR-F003
Revision Date	February 15, 2020
Revision No.	01

**REQUEST FOR BIDS/QUOTATION (RQ)**

of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas.

- In cases of recently expired Mayor's/Business permits, it shall be accepted together with the official receipt as proof that the bidder has applied for renewal within the period prescribed by the concerned local government unit: *Provided*, That the renewed permit shall be submitted as a post-qualification requirement in accordance with Section 34.2 of the IRR of RA 9184.
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4. Bid security in any of the following:

Form of Bid Security	Amount of Bid Security (Not less than the required <b>percentage of the ABC</b> )
Cash or cashier's/manager's check, issued by a Universal or Commercial bank	2%
Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank.	2%
Surety bond callable upon demand issued by a surety or insurance company duly certified by the insurance company duly certified by the Insurance Commission as authorized to issue such security.	5%
OR Bid Securing Declaration, which states, among others, that the bidder, shall enter into a Contract with the procuring entity and furnish the required performance security within ten (10) calendar days, or less, as indicated in the bidding documents, from the receipt of the Notice of Award, and committing to pay the corresponding fine and be suspended for a period of time from being disqualified to participate in any government procurement activity in the	





**BAGUIO WATER DISTRICT**  
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**REQUEST FOR BIDS/QUOTATION (RQ)**

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**BAGUIO WATER DISTRICT**  
**BWD Compound, Utility Road, Baguio City 2600**

Document No.

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submission of technical and financial eligibility documents by any of the joint venture partners constitutes compliance: Provided, that the partner responsible to submit the NFCC shall likewise submit the Statement of all its ongoing contracts and Audited Financial Statements.

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**All Financial Proposals that exceed the ABC shall be rejected.**

**Pre-bid conference: 31 MAR 2023**

**9:30am via Zoom Application**

**Meeting ID: 452 718 8447**

**Password: 9Buvqr**

**By: Supplier or Authorized Representative:** \_\_\_\_\_ ( sign over printed name )

**Deadline of submission of bids:** 12 APR 2023

**Opening of bids:** 1:30 pm

**Prepared by:** MaLamangan  
PURCHASING

**Noted by:** ATTY. MA. LUISA C. TENEDERO  
BAC IN-HOUSE

**ENGR. REYNALDO C. JAYCO**  
BAC-TECHNICAL

**BWD RESERVES THE RIGHT TO REJECT BIDS &/OR DECLARE A FAILURE OF BIDDING  
PURSUANT TO THE PERTINENT PROVISIONS OF RA 9184**

**Telefax No. (074) 442-4858 (purchasing) / 444-7246**





# **BAGUIO WATER DISTRICT**

"Serving Mankind is Serving God"

SUBJECT: **TERMS OF REFERENCE**  
PROJECT: PROPOSED INSTALLATION OF 8"Ø X 2,730M HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD (SURFACE RESTORATION AND PAVING WORKS)  
LOCATION: SUELLO ROAD, BAGUIO CITY

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## **I. INTRODUCTION**

Part of the Baguio Water District's strategic direction is to continuously improve its current water supply geared towards addressing Baguio's current and future water requirements. In line with this objective, Baguio Water District has embarked on the augmentation of water supply on areas with limited water sources through installation of transmission line.

## **II. BRIEF DESCRIPTION OF THE PROJECT AND WORK ORDER**

The installation of the 8"Ø x 2,730 meters HDPE pipeline shall be undertaken along Suello Village as determined by the Baguio Water District.

The pipeline shall serve as transmission line to deliver water supply coming from Km. 8 Reservoir through the existing Km. 8 line laid along Marcos Highway to the customers along Brgy. Asin Road.

## **III. MANNER OF IMPLEMENTATION**

The Baguio Water District shall implement the preparation of the pipeline trench through the conduct of concrete breaking, concrete excavation, soil excavation, and sand bedding. Upon laying of pipes by the supplier/installer, BWD shall perform the backfilling and compaction works including installation of temporary resurfacing. BWD shall secure the necessary excavation permit/s and will provide the materials, labor, and equipment for the execution of the said activities.

The surface restoration and paving works, which covered by this Terms of Reference, will be implemented by way of tapping the services of private Contractor. The Contractor of the surface restoration and paving works shall provide all supplies, materials, labor, equipment, water and power supply for the implementation of the scope of work, in accordance with the approved plans and standards.

As the restoration fee/deposit of the excavation permit will be shouldered by BWD, the Contractor of the surface restoration and paving works shall be required to undertake testing of concrete mix and reinforcing bars to ensure the quality of materials to be used/installed. The costs for the testing of the specimens shall be shouldered by the Contractor.

## **IV. QUALIFICATION REQUIREMENTS OF CONTRACTOR**

Interested bidders must have the following minimum requirements:

1. Must have the following equipment: cargo/dump truck, rotary driller with bit, generator set, and concrete vibrator which shall be supported by proof of ownership or, if such will be leased, certification of availability of



equipment from the equipment lessor/vendor for the duration of the activity.

2. Must have previous experience in surface restoration and paving works.

## **V. SCOPE OF WORK**

The scope of work to be undertaken shall include the following:

<b>ITEM / WORK DESCRIPTION</b>	<b>QUANTITY</b>
Surface Restoration and Paving Works	
- Excavation/Removal of temporary resurfacing	244.50 cu. m.
- Boring of holes	5,504.00 holes
- Cutting and installation of dowel bars	4,550.40 kgs.
- Ready-mix concrete pouring	244.50 cu. m.
- Clearing, hauling, and disposal of excavated temporary resurfacing, unwanted materials & debris	1.00 lot

## **VI. PROJECT DURATION**

The surface restoration and paving works which shall be immediately undertaken after hydrotesting of each pipe segment shall be completed within a total duration of fifty-four (54) working days.

## **VII. TECHNICAL SPECIFICATIONS**

The maximum length for open continuous excavation shall be 150 meters thus, upon completion of hydrotesting of a 150-m pipeline segment, the temporary resurfacing shall be immediately replaced with permanent resurfacing.

All works shall comply to the conditions of the Excavation/Digging Permit to be issued by the DPWH.

### **7.1 Materials**

#### **a. Cement**

Except as may be otherwise provided in these specifications, cement shall conform to the "Standard Specifications for Portland Cement" (ASTM C-150, Latest Revision) and shall be Type I.

#### **b. Concrete-Aggregates**

Concrete aggregates shall be well graded, clean, hard particles of gravel or crushed rock conforming to the "Standard Specifications for Concrete Aggregates" (ASTM C-33, Latest Revision).

#### **c. Water**

Water used in mixing concrete shall be clean and free from injurious amounts of oils, acids, alkali, organic materials, or other substances that may be deleterious to concrete or steel.

#### **d. Admixture**

At the Contractor's option or at the request of the Engineer, but in either case at the expense of the Contractor, an admixture may be



added to the concrete to control the set, effect water reduction, and increase workability. Such admixture may be either a hydroxylated carboxylic and acid type or a hydroxylated polymer type, but shall contain no calcium chloride. The required quantities of cement shall be used in the mix regardless of whether or not any admixture is used. The quantity of admixture used and the method of mixing shall be in accordance with the manufacturer's instructions. Where the air temperature at the time of placement is expected to be consistently over 26.7°C (80°F), such admixture shall be Super Concrete Emulsion's "Plastiment", "Master Builder's", "Pozzolith 300R", or substitute.

## 7.2 Controlled Strengths of Concrete

Concrete for structural elements such as the road pavement shall develop a 3-days compressive strength of 24.13 MPa (3,500 psi) and a flexural strength 3.80 MPa (550 psi).

## 7.3 Method of Determining Strength Trial Batch

The Contractor shall submit design mixes and test results of samples (at least 3 specimens per test method) made in accordance with "Standard Method of making and Curing Concrete Compression and Flexure Test Specimens in the Laboratory" (ASTM C-192, Latest Revision) and "Standard method of Test for Compressive Strength of Molded Concrete Cylinders" (ASTM Designation C-39) for each strength required, stating the proposed slump and the proportional weights of cement, saturated surface dry aggregates, and water. These mixes shall be proved by preliminary tests thirty (30) days before concreting. No substitution shall be made in the materials or mixed without additional tests to show that the quality of concrete is satisfactory. The trial mixes shall be at the expense of the Contractor.

## 7.4 Concrete Proportion and Consistency

- a. The proportions of aggregate to cement for any concrete shall be such as to produce a mixture which will work readily into the corners and angles of the forms and around reinforcement with the method of placing employed on the work but without permitting the materials to segregate, or excess free water to collect on the surface. The combined aggregates shall be of such composition of sizes that when separated on the Number 4 standard sieve, the weight passing the sieve (fine aggregate) shall not be less than thirty percent (30%) of the total, except that these proportions do not necessarily apply to lightweight aggregates.
- b. Slump test shall be conducted on site before concrete pouring and shall be within the following limits:

Portion of Structure	Slump	
	millimeter	Inches
Road pavement, slabs on grade	50 – 80	2 – 3

Slumps shall be according to "Test of Slump for Portland Cement Concrete" (ASTM C-143).



- c. Job mix adjustments on water content shall be allowed only with the Engineer's permission and provided that cement is also added to maintain the original water-cement ratio of the design mix.

## 7.5 Exclusion of Water

No concrete shall be placed in any structure until all water entering the space to be filled with concrete has been properly cut off or has been diverted by pipes, or other means, and carried out of the forms, clear of the work. No concrete shall be deposited under water without the explicit permission of the Engineer, and then only in strict accordance with his directions; nor shall the Contractor, without explicit permission, allow still water to rise on any concrete until the concrete has attained its initial set. Water shall not be permitted to flow over the surface of any concrete in such a manner and at such velocity as will injure the surface finish of the concrete. Pumping or other necessary dewatering operations for removing ground water, if required, will be subject to the approval of the Engineer.

## 7.6 Ready-Mixed Concrete

- a. All concrete for structural elements shall be ready-mixed meeting the requirements as to materials, batching, mixing, transporting, and placing as specified herein and in the requirements of the "Specifications for Ready-Mixed Concrete" (ASTM C-94), including the supplementary requirements specified in Subsections (b) through (g) herein.
- b. Ready-mixed concrete shall be delivered to the site of the work, and discharge shall be completed within one hour after the addition of the cement to the aggregates or before the drum has been revolved 250 revolutions, whichever is first. In hot weather, or under conditions contributing to quick stiffening of the concrete, or when the temperature of the concrete is 29.44°C (85°F) or above, the time between the introduction of the cement to the aggregates and discharge shall not exceed forty-five (45) minutes.
- c. Truck mixers shall be equipped with electrically actuated counters by which electrically actuated counters by which the number of revolutions of the drum or blades may be readily verified may readily verify the number of revolutions of the drum or blades. The counter shall be of the resettle, recording type and shall be amounted in the driver's cab. The counters shall be actuated at the time of starting mixers at mixing speeds.
- d. Each batch of concrete shall be mixed in a truck mixer for not less than seventy (70) revolutions of the drum or blades at the rate of rotation designated by the manufacturer of the equipment as agitating speed. All materials including mixing water shall be in the mixer drum before actuating the revolution counter for determining the number of evolutions of mixing.
- e. Truck mixers and their operation must be such that the concrete throughout the mixed batch as discharged is within acceptable limits of uniformity with respect to consistency, mix, and grading. If slump tests taken at approximately the  $\frac{1}{4}$  and  $\frac{3}{4}$  points of the load during discharge give slumps differing by more than 25 mm (1 in.) when the specified slump is more than 76 mm (3 in.) or less, or if they differ by more than 50 mm (2 in.) when the specified slump is more than 76 mm (3 in.), the mixer shall not be used on the work unless the causing condition is corrected and satisfactory performance is verified by additional slump tests. All mechanical details of the mixer, such as water measuring and discharge



apparatus, condition of the blades, speed rotation, general mechanical condition of the unit, and clearance of the drum, shall be checked before a further attempt to use the unit will be permitted.

- f. Each batch of ready-mixed concrete delivered at the job site shall be accompanied by a ticket furnished to the Engineer and showing volume of concrete, the weight of cement in kilograms (pounds), and total weight of all ingredients in kilograms (pounds). The ticket shall also show the time of day at which the materials were batched.
- g. The use of non-agitating equipment for transporting ready-mixed concrete will not be permitted. Combination truck and trailer equipment for transporting ready-mixed concrete will not be permitted. The quality and quantity of materials used in ready-mixed concrete and in batch aggregates shall be subject to continuous inspection at the batching plant by the BWD Engineer.

#### 7.7 Mixing Concrete

- a. Hand mixing shall only be allowed for non-structural elements such as cradles, unreinforced encasements, thrust blocks, and partition walls.
- b. Re-tempering, i.e., re-mixing with the addition of water to concrete that has been partially hardened will not be permitted.

#### 7.8 Preparation of Surfaces for Concreting

- a. Earth surfaces shall be thoroughly wetted by sprinkling prior to the placing of any concrete, and these surfaces shall be kept moist by frequent sprinkling up to the time of placing concrete thereon. The surface shall be free from standing water, mud, and debris at the time of placing concrete.
- b. Concrete surfaces upon or against which concrete is to be placed, where the placement of the old concrete has been stopped or interrupted so that, in the opinion of the Engineer, the new concrete cannot be incorporated integrally with that previously placed, are defined as construction joints. The surfaces of horizontal joints shall be leveled with a wooden float to provide a reasonably smooth surface. A surface consisting largely of coarse aggregate shall be avoided. Except where the drawings call for joint surfaces to be painted, the joint surfaces shall be cleaned of all laitance, loose or defective concrete, and foreign material. Such cleaning shall be accomplished by sandblasting followed by thorough washing. All pools of water shall be removed from the surface of construction joints before the new concrete is placed. After the surfaces have been prepared to the satisfaction of the BWD Engineer, all approximately horizontal construction joints shall be covered with a layer of mortar approximately 25 mm (1 in) thick. The mortar shall have the same proportion of cement and sand as the regular concrete mixture, unless otherwise directed by the Engineer. The water cement ratio of the mortar shall be suitable for placing and working and a manner hereinafter specified. The mortar shall be spread uniformly and shall be worked thoroughly into all irregularities of the surface, and wire brooms shall be used where possible to scrub the mortar into the surface. Concrete shall be placed immediately upon the fresh mortar.
- c. When the placing of concrete is to be interrupted long enough for the concrete to take a set, the working face shall be given a shape by the use of forms or other means that will secure proper union with



subsequent work, provided that the construction joints shall be made only when approved by the BWD Engineer.

#### 7.9 Dowel Bars

- a. The Contractor shall furnish the materials, labor and equipment in the installation of dowel bars in accordance to the plans.
- b. Drilling of holes to the existing concrete pavement for the installation of 16mmØ dowels bars shall have a depth of 150mm.
- c. The dowel bars, spaced as shown in the drawing, shall be applied with structural epoxy to bond the existing concrete pavement and the reinforcing bar.
- d. Tensile test for the reinforcing bar shall be undertaken in an accredited laboratory at the expense of the Contractor. The samples shall be taken from the project site and the required number of samples shall be based on the total weight of rebars to be installed (at 1.0 meter per 1,000kg). The tests shall be witnessed by BWD representatives.

#### 7.10 Placing Concrete

- a. Concrete which upon or before placing is found not to conform with the requirements specified herein shall be rejected and immediately removed from the work. Concrete which is not place with the accordance with these specifications, or which is of inferior quality, as determined by the Engineer, shall be removed and replaced by and at the expense of the Contractor. No concrete shall be placed except in the presence of a duly authorized representative of the BWD Engineer. Concrete shall not be placed when unsuitable heat or wind conditions will prevent proper placement and curing, as determined by the BWD Engineer. Prior to placing any concrete, the contractor shall give the BWD Engineer twenty-four (24) hours written notice.
- b. Concrete shall be deposited in its final position without segregation, re-handling, or flowing. Placing shall be done preferably with buggies, buckets, or wheelbarrows. No chutes will be allowed except to transfer concrete from hoppers to luggies, wheelbarrows, or buckets in which case, they shall not exceed six (6) meters (20 ft) in aggregate length.
- c. Placing of the concrete with a free drop or fall more than 1.20 meters (4 ft) shall not be allowed, except when approved by the BWD Engineer and when approved sheet metal conduits, pipes, or "elephant trucks" are removed. When employed, these conveyors shall be kept full of concrete and the ends kept buried in the newly placed concrete as pouring progresses.
- d. Concrete in forms shall be deposited in uniform horizontal layers not deeper than 450 mm (18 in) and care shall be taken to avoid inclined layers or inclined construction joints except where such are required for sloping members. Each layer shall be placed while the previous layer is still soft. The rate of placing concrete in forms shall not exceed 1.5 meters (5 ft) of vertical rise per hour.

#### 7.11 Construction of Joints

##### a. General

Construction joints shall be provided where shown on the drawings. Special care shall be used to prepare concrete surfaces at joints where bonding



between two sections of concrete is required. Unless otherwise indicated on the drawings, such bonding will be required at all horizontal joints in walls. Except where otherwise shown is specified, at all joints where waterstops are required, the joint face of the first pour shall be coated with an approved bond breaker applied in accordance with the recommendations of the manufacturer. It shall contain a coloring agent so that areas of applications will be readily distinguishable for a six-month period in sunlight. The surfaces of the groove for the sealant shall not be coated.

b. Construction Joint Sealant

Construction joints shall be poured with asphalt to serve as a sealant. For proper bonding, tapered grooves shall be created along the surface of the joints prior to pouring of asphalt sealant.

7.12 Tamping and Vibrating

As concrete is placed in the forms or in excavations, it shall be thoroughly settled and compacted throughout the entire depth of the layer which is being consolidated, into a dense, homogenous mass, filling all corners and angles, thoroughly embedding the reinforcement, eliminating rock pockets, and bringing only a slight excess of water to the exposed surface of concrete during placement.

7.13 Care and Repair of Concrete

The Contractor shall protect all concrete against injury or damage from excessive heat, lack of moisture, overstress, or any other cause until final acceptance by the owner. Particular care shall be taken to prevent the drying of concrete and to avoid roughening or otherwise damaging the surface. Any concrete to be damaged or which may have been originally defective, or which becomes defective at any time prior to the final acceptance of the complete work, or which departs from the established line or grade, or which for any other reason does not conform with the Specifications, shall be satisfactorily repaired or removed and replaced with acceptable concrete at the Contractor's expense.

7.14 Finish of Concrete Surfaces

- a. All finished or formed surfaces shall conform accurately to the shape, alignment, grades and sections as indicated on the plans or as prescribed by the Engineer. Surfaces shall be free from fins, bulges, ridges, offsets, honeycombing, or roughness of any kind, and shall present a finished, smooth, continuous hard surface.
- b. Except as otherwise provided herein, unformed top surfaces of concrete shall be brought to uniform surfaces and worked with suitable tools to a reasonably smooth wood float finish. Excessive floating of surfaces while the concrete is plastic will not be permitted.

7.15 Test on Concrete

- a. At least one (1) set of samples consisting of three (3) concrete cylinders, 150mm x 300mm in size, and three (3) concrete beam specimens shall be taken from each batch of concrete placed each day, and each set to represent not more than 75 cubic meters of concrete.



Samples shall be secured and molded in accordance with "Standard Method of Sampling Fresh Concrete" (ASTM C-172 – Latest Revision) and "Standard Method of Making and Curing Test Specimens in the Field" (ASTM C-31 – Latest Revision). Strength test shall be made in accordance with the "Standard Method of Test for Compressive Strength of Cylindrical Concrete Specimens" (ASTM C-39 – Latest Revision).

The Contractor shall provide the samples to be taken at the place of deposit and as specified by the BWD Engineer and shall also box samples for shipment, packing them to prevent damage from sharp blows. The Contractor together with the BWD Engineer shall transport the test cylinders to a laboratory for testing.

The required compressive strength and flexural strength of the concrete shall be 3,500psi and 550 psi, respectively, at 3-days curing period.

All three (3) specimens of each set of samples shall be subjected to the 3-day test requirement and all must attain the target design strength. If one specimen fails to give the required minimum strength, the BWD shall have the right to order the "remove and replace" of the poured concrete.

#### 7.16 Site Clean-Up

After completion of the surface restoration works, all equipment and residual materials shall be removed from the site by the Contractor. Excavated temporary resurfacing, unwanted materials & debris shall be hauled out and disposed of by the Contractor.

### VIII. TERMS OF PAYMENT

The Contractor may submit a request for payment for work accomplished. Such request for payment shall be verified and certified by the BWD's Representative.

The BWD shall have the right to deduct from the Contractor's progress billing such amount as may be necessary to cover third party liabilities, as well as uncorrected discovered defects in the project.

Payments shall be adjusted by deducting therefore the amounts for advance payments and retention.

### IX. LIQUIDATED DAMAGES

"When the supplier fails to satisfactory deliver the materials under the contract and complete the installation work within the specified delivery schedule, inclusive of duly granted time extensions, if any, the supplier shall be liable for damages for the delay and shall pay the procuring entity liquidated damages, not by way of penalty, an amount equal to one-tenth (1/10) of one percent (1%) of the cost of the delayed goods scheduled for delivery for every day of delay until such materials are finally delivered, the installation work is completed and accepted by BWD.

BWD need not prove that it has incurred actual damages to be entitled to liquidated damages. Such amount shall be deducted from any money due or which may become due to the supplier, or collected from any securities or warranties posted by the supplier, whichever is convenient to BWD. In no



case shall the total sum of liquidated damages exceed ten percent (10%) of the total contract price, in which event BWD may rescind the contract and impose appropriate sanctions over and above the liquidated damages to be paid."

**X. WARRANTY**

The work shall be guaranteed against workmanship defects for a period of one (1) year from BWD's date of acceptance. Defects discovered within the 1-year warranty period shall be repaired by the Contractor at his own expense within seven (7) calendar days upon receipt of the notice to be issued by BWD. The obligation for the warranty shall be covered by either retention money equivalent to at least one percent (1%) of every progress payment or a special bank guarantee equivalent to at least one percent (1%) of the total contract price. The said amounts shall only be released after the lapse of the 1-year warranty period.

**XI. AWARD OF CONTRACT**

The contract shall be awarded to the Contractor determined as the lowest calculated and responsive bidder.

**XII. APPLICABLE STANDARDS**

All pertinent provisions of RA9184 shall be applicable and shall form as an integral part of this Terms of Reference.

Baguio Water District reserves the right to reject any or all bids which deemed disadvantageous to the Baguio Water District.

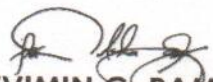
**XIII. APPROVED BUDGET COST**

The approved budget for the contract is Three Million One Hundred Thirty-Three Thousand Five Hundred Fifteen and 96/100 (Php 3,133,515.96).

Prepared by:

  
**JANEL J. BALANGCOD**  
OIC, Planning Section Supervisor

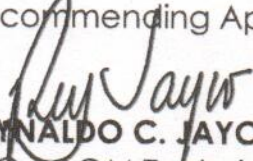
Audited by:

  
**LUZVIMIN G. RAMOS**  
Internal Auditor


Reviewed by:

  
**NORIEL C. CALPITO**  
Projects & Construction Div. Manager

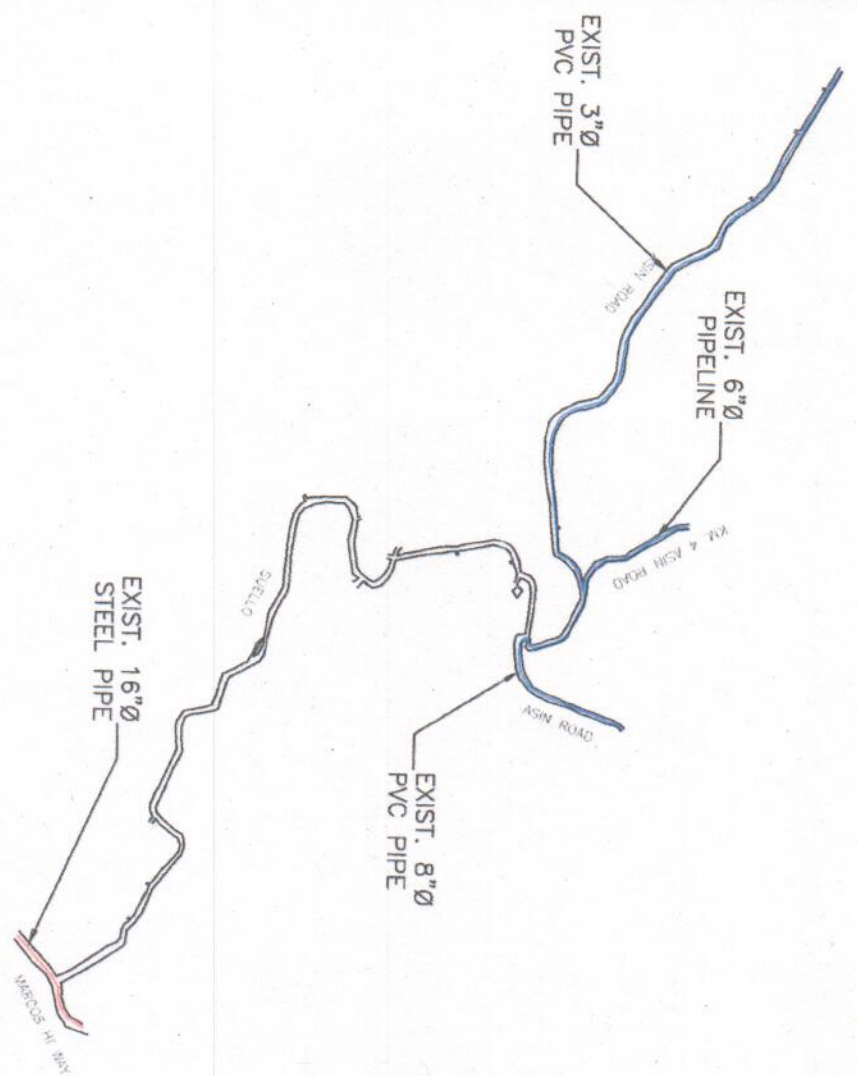
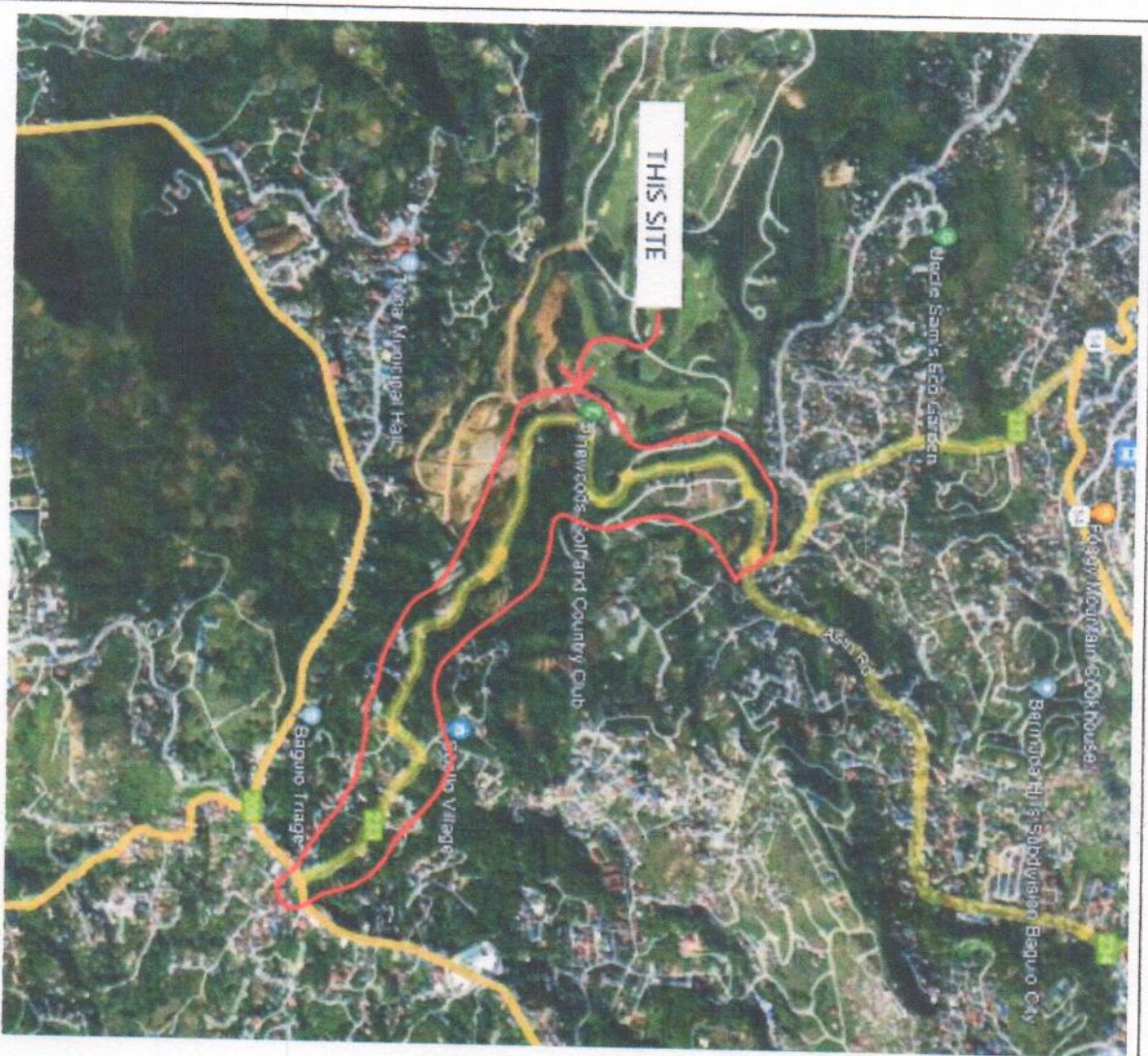
Recommending Approval:

  
**REYNALDO C. JAYCO**  
OIC - AGM Technical

Approved by:

  
**SALVADOR M. ROYECA**  
General Manager





VICINITY MAP/EXISTING PIPELINE SET-UP



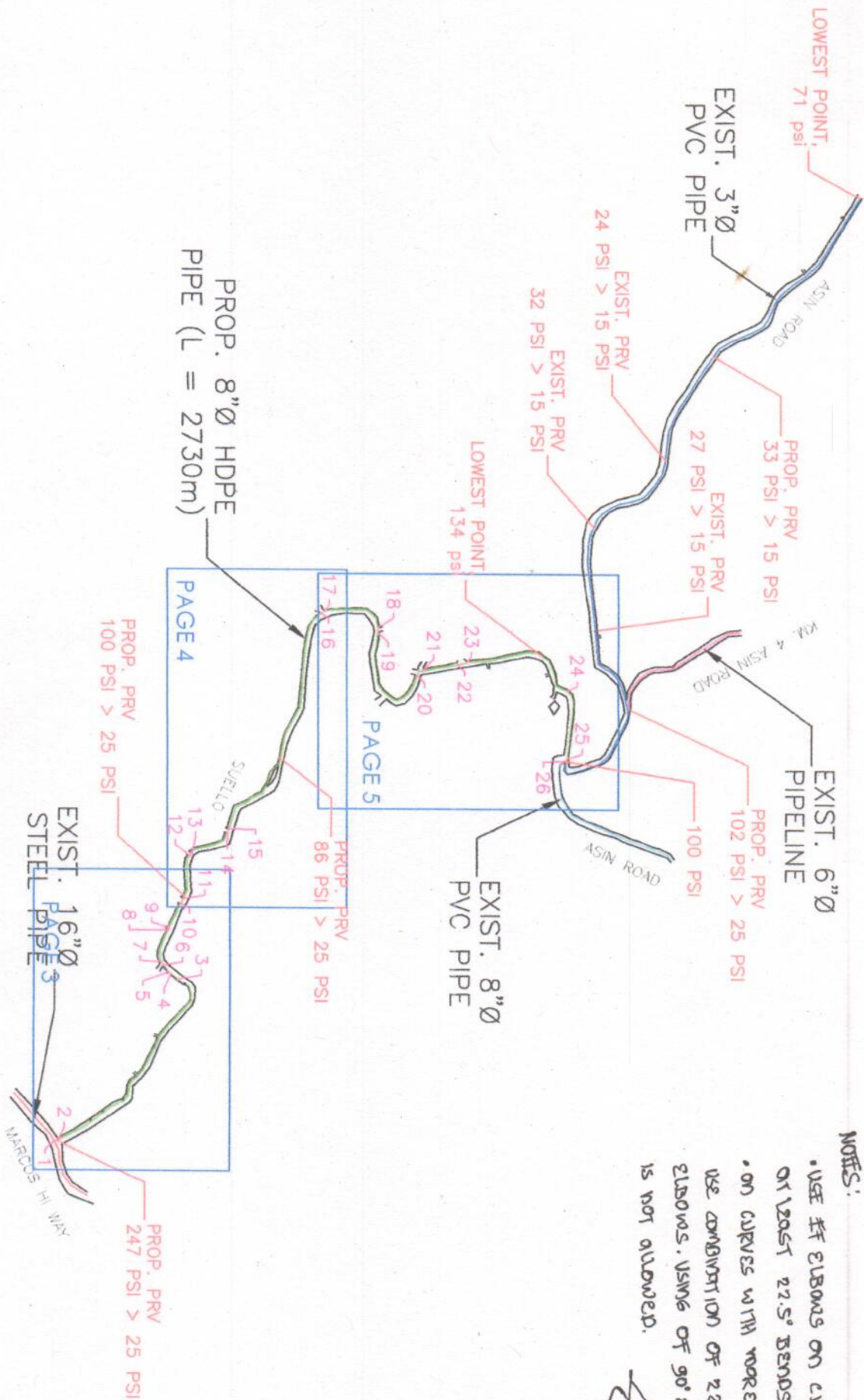
PREPARED BY:	REVIEWED BY:
RALPH REYES B. MANZANO	NORMAN CRISTO
CHECKED BY:	RECO. APPROVAL BY:
JANIEL MANZANO	REYNALDO C. JAYCO
CO. ENGINEER	CO. SUPERVISOR
APPROVED BY:	
SALVADOR M. ROYCECA GENERAL MANAGER	
PROJECT TITLE AND LOCATION:	
PROPOSED INSTALLATION OF 8"Ø X 2730LMDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD	
SHEET CONTENT:	SHEET NO.:
VICINITY MAP	1
EXISTING PIPELINE SET-UP	11



NOTES:

- USE # ELBOWS ON CURVES WITH AT LEAST 22.5° BENDS.
- ON CURVES WITH MORE THAN 45° BENDS USE COMBINATION OF 22.5° + 45° CF ELBOWS. USING OF 90° CF ELBOWS IS NOT ALLOWED.

58

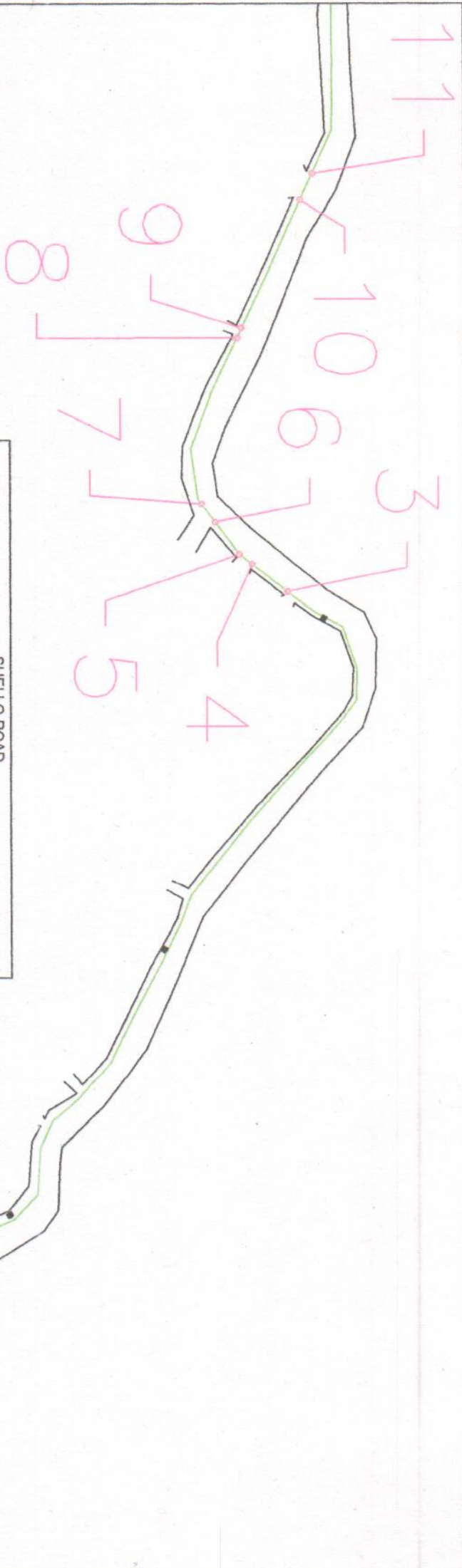


**PROPOSED PIPELINE SET-UP**



PREPARED BY:	REVIEWED BY:	APPROVED BY:	PROJECT TITLE AND LOCATION/S:	SHEET CONTENTS:	SHEET NO.
RALPH RENCIE D. MANZANO ENGINEER	HONORABLE CALIBO ENGINEER	SALVADOR C. ROYCECA GENERAL MANAGER	PROPOSED INSTALLATION OF 8"Ø X 2730LM HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD	PROPOSED PIPELINE SET-UP	2
CHECKED BY:	RECO. APPROVAL BY:				11
JANET J. MANZANO OFFICE ASSISTANT	REYNALDO C. MANAO OFFICE ASSISTANT				





SUELLO ROAD		
STATION	LENGTH	DESCRIPTION
1-2	8m	DOUBLE CUT, ACROSS CONCRETE
2-3	561m	SINGLE CUT, CONCRETE ROAD
3-4	23m	CURB & GUTTER
4-5	4m	SINGLE CUT, CONCRETE ROAD
5-6	15m	CURB & GUTTER
6-7	9m	SINGLE CUT, CONCRETE ROAD
7-8	121m	CURB & GUTTER
8-9	7m	SINGLE CUT, CONCRETE ROAD
9-10	45m	CURB & GUTTER
10-11	7m	SINGLE CUT, CONCRETE ROAD

PROPOSED PIPELINE SET-UP

PREPARED BY:

RALPH RENE D. MANZANO

REVIEWED BY:

MORRIS CALIBLO

APPROVED BY:

SA VADOR

PROJECT TITLE AND LOCATION/S

PROPOSED INSTALLATION OF 8"Ø X 2730LMDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD

SHEET CONTENTS

PROPOSED PIPELINE SET-UP

SHEET NO.:

3

11



CHECKED BY:

JANIEL J. BANGSOG

RECO. APPROVAL BY:

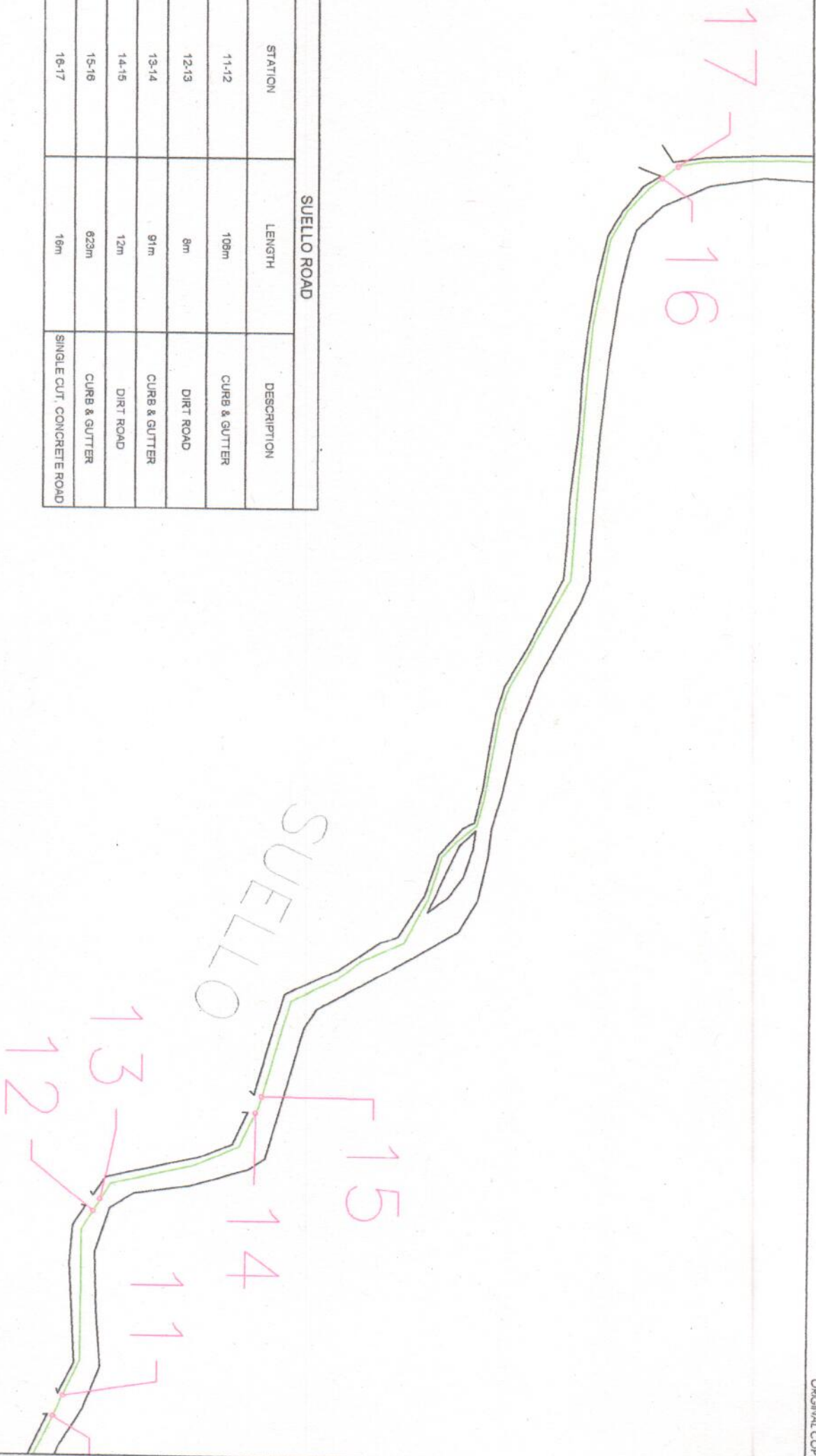
REYNALDO J. JACO

GENERAL MANAGER

SA VADOR



SUELLO ROAD		
STATION	LENGTH	DESCRIPTION
11-12	108m	CURB & GUTTER
12-13	8m	DIRT ROAD
13-14	91m	CURB & GUTTER
14-15	12m	DIRT ROAD
15-16	623m	CURB & GUTTER
16-17	16m	SINGLE CUT, CONCRETE ROAD



**PROPOSED PIPELINE SET-UP**

SCALE

1:1

	<b>PREPARED BY:</b> RALPH RENEE D. MANZANO PLANNING AND DESIGN ENGINEER	<b>REVIEWED BY:</b> ALBERTO GALERO SENIOR ENGINEER IN CHARGE	<b>APPROVED BY:</b> SALVADOR M. KOYECA GENERAL MANAGER	<b>PROJECT TITLE AND LOCATION/S:</b> PROPOSED INSTALLATION OF 8"Ø X 2730LW-HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD	<b>SHEET CONTENTS:</b> PROPOSED PIPELINE SET-UP	<b>SHEET NO.:</b> 4 11
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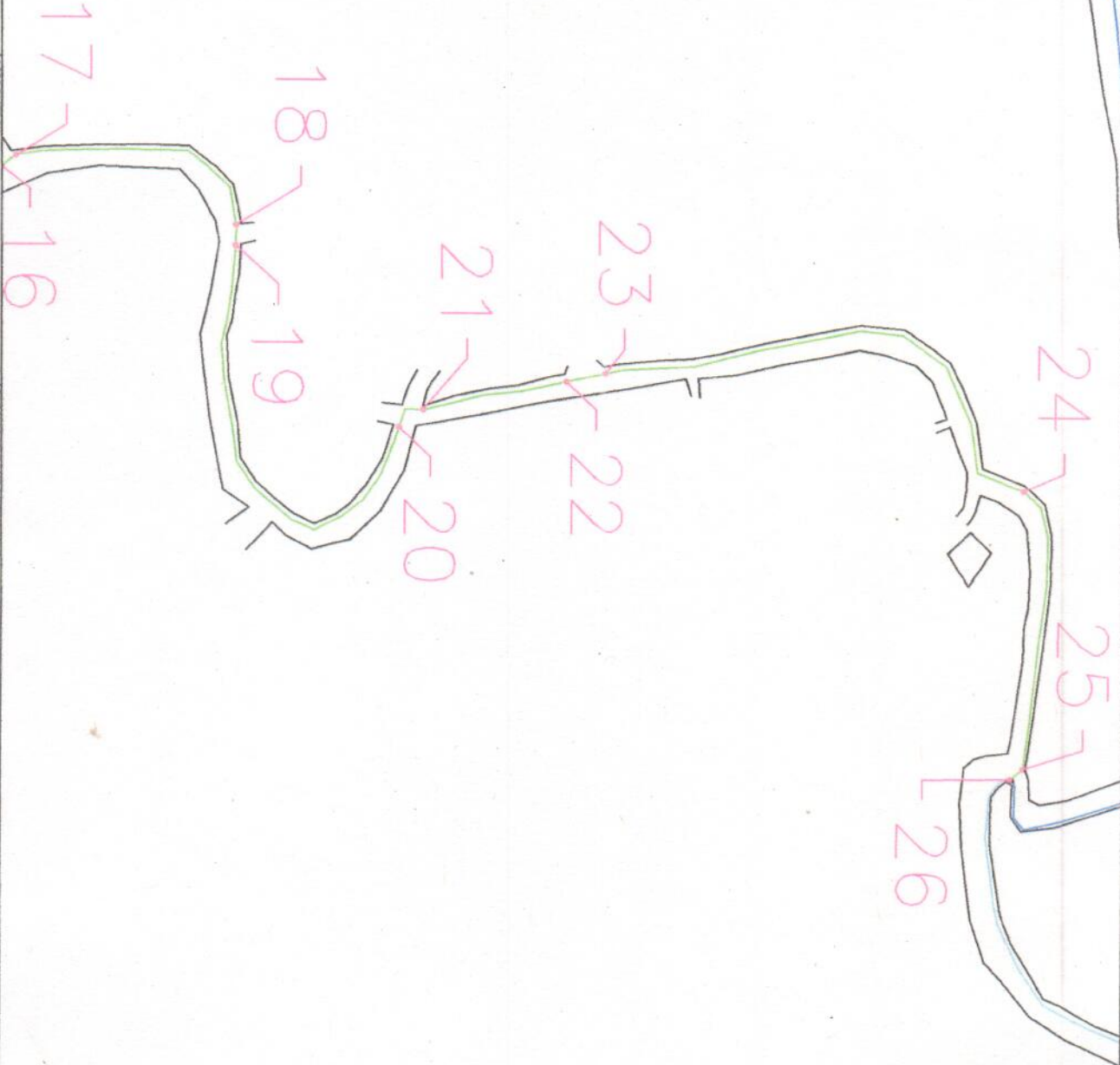


SUELLO ROAD		
STATION	LENGTH	DESCRIPTION
17-18	168m	CURB & GUTTER
18-19	9m	SINGLE CUT, CONCRETE ROAD
19-20	262m	CURB & GUTTER
20-21	23m	SINGLE CUT, CONCRETE ROAD
21-22	93m	CURB & GUTTER
22-23	8m	SINGLE CUT, CONCRETE ROAD
23-24	328m	CURB & GUTTER
24-25	163m	SINGLE CUT, CONCRETE ROAD
25-26	10m	DOUBLE CUT, ACROSS CONCRETE
TOTAL	2730m	

PROPOSED PIPELINE SET-UP

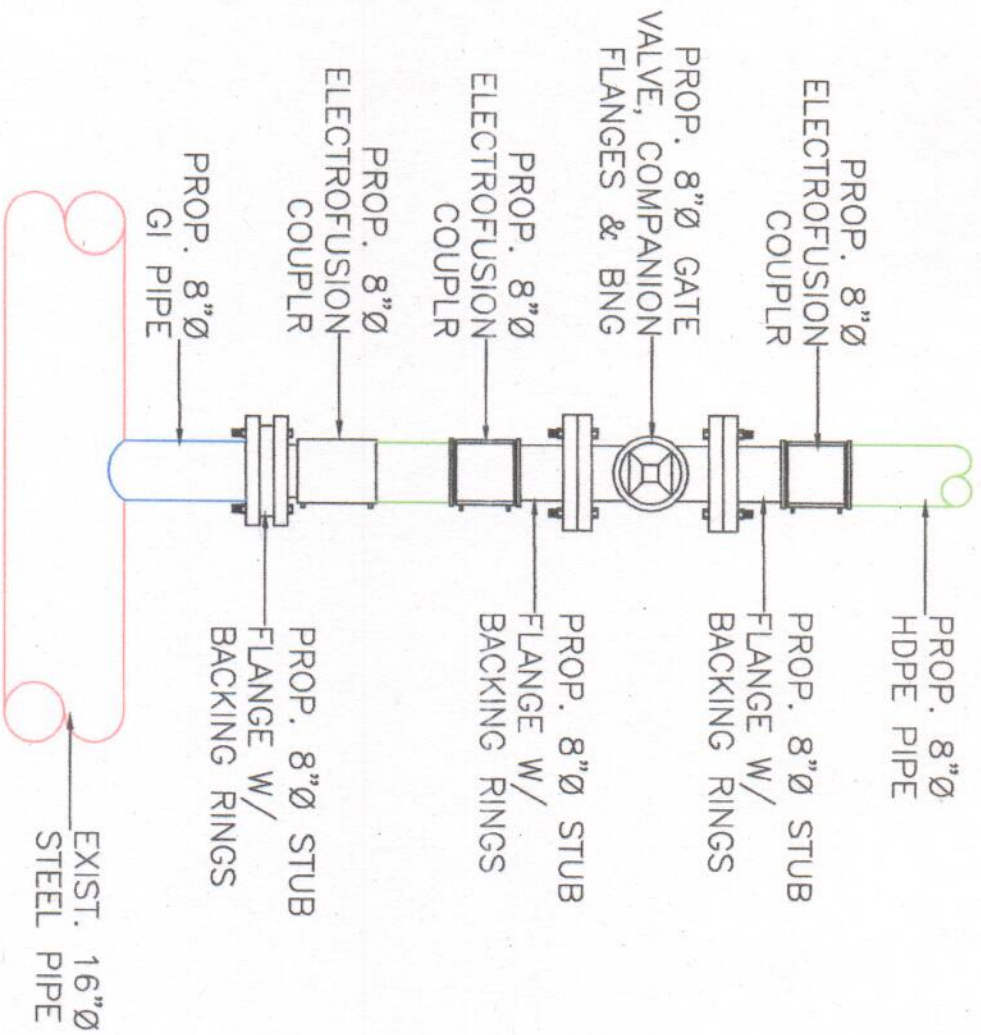
SCALE

1:1



PREPARED BY: RALPH REYES MANZANO ENGINEER IN CHARGE	REVIEWED BY: NGEN B. QUINERO ENGINEER IN CHARGE	APPROVED BY: SALVADOR M. ROJAS GENERAL MANAGER	PROJECT TITLE AND LOCATION: PROPOSED INSTALLATION OF 8"Ø X 2730LM HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD	SHEET CONTENTS: PROPOSED PIPELINE SET-UP	SHEET NO.: 5
CHECKED BY: JANET B. LAROC OFFICE ENGINEER	REVIEWED BY: REYNALDO C. JAVCO OFFICE ENGINEER				11





**PROPOSED TIE-IN DETAIL AT PT. 1**



SCALE

PREPARED BY:

RALPH RENEGEO MANZANO

REVIEWED BY:

REVIEWED BY: [Signature]

APPROVED BY:

SALVADOR ROYCEA

PROJECT TITLE AND LOCATION:

PROPOSED INSTALLATION OF 8" X 2730L/HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD

SHEET CONTENTS:

PROPOSED TIE-IN DETAIL

SHEET NO.

6

11



CHECKED BY:

MANUEL J. BALANGCO

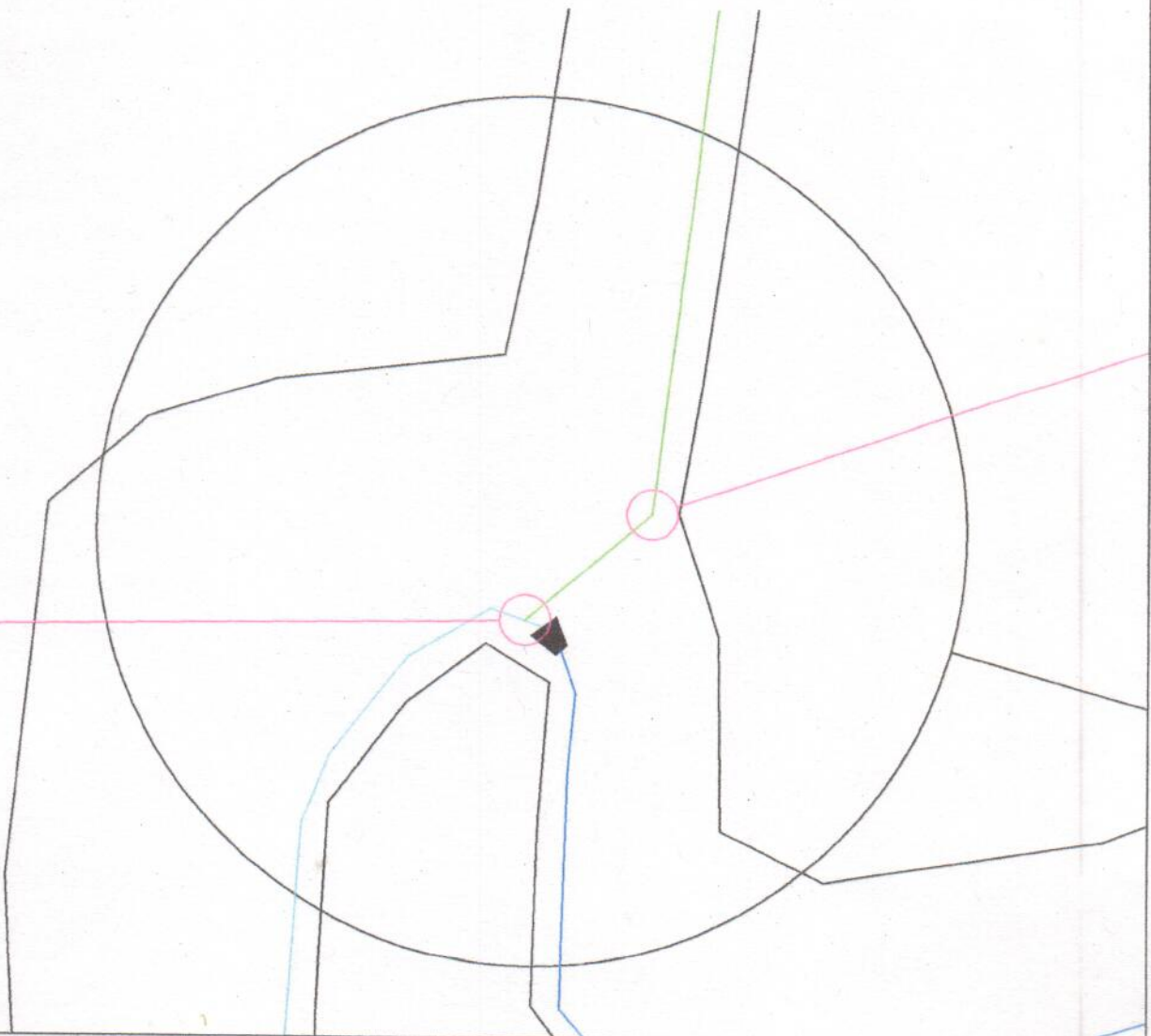
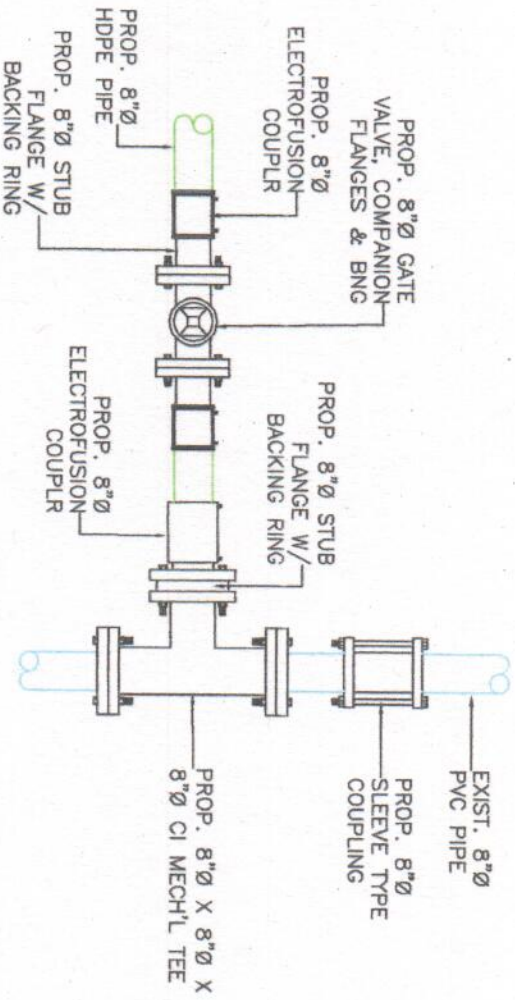
RECO. APPROVAL:

RECO. APPROVAL: [Signature]

GENERAL MANAGER

GENERAL MANAGER





**PROPOSED INTERCONNECTION DETAIL AT PT. 26**



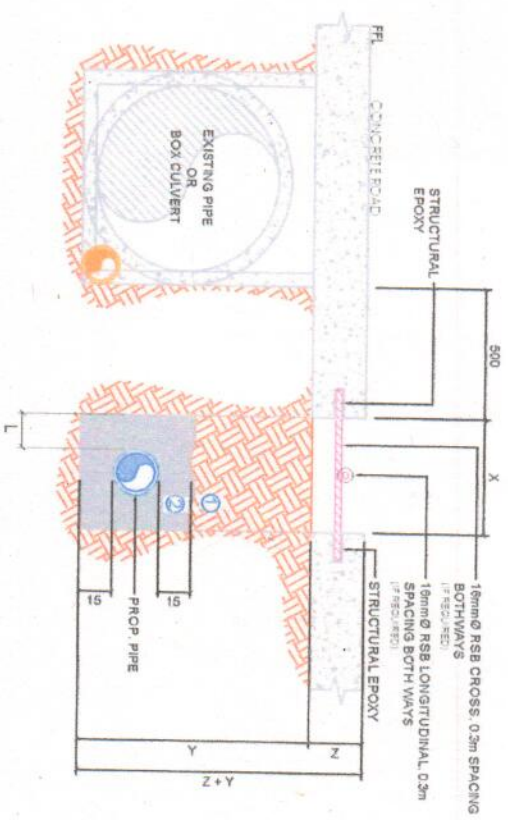
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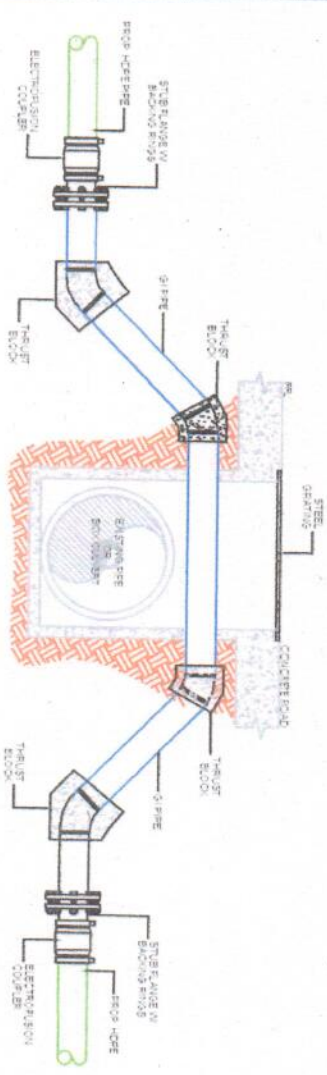


PREPARED BY:	REVIEWED BY:	APPROVED BY:	PROJECT TITLE AND LOCATION/S:	SHEET CONTENT/S:	SHEET NO.:
RALPH RENE D. MANZANO ENGINEER	NORIEA D. GARCIA ENGINEER	SALVADOR R. ROYCEA GENERAL MANAGER	PROPOSED INSTALLATION OF 8"Ø X 27'30" L HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD	PROPOSED INTERCONNECTION DETAIL	7
CHECKED BY:	REC'D APPROVAL:	REVISED BY:			11
JANIEA BALANCO ENGINEER	REYNOLDO C. JAYCO ENGINEER				





- 1- COMPACTED SELECTED NATIVE MATERIAL BACKFILL.
- 2- APPROVED SAND BEDDING AND FILLING.



NOTE:

- 1. WHENEVER A PROPOSED PIPE ENCOUNTERS AN OBSTRUCTING CULVERT/SEWER LINE, SUCH PIPE SHALL BE DEFLECTED ABOVE THE CULVERT WITH AT LEAST 0.075M CLEARANCE FROM THE BASE OF THE CONCRETE PAVEMENT.
- 2. WHENEVER A PROPOSED PIPE IS ADJACENT TO AN EXISTING CULVERT/SEWER LINE, A MINIMUM SPACING OF 0.50M SHALL BE OBSERVED. PIPE JOINTS SHALL BE GROUTED TO PREVENT POSSIBLE INTRUSION OF WASTE WATER.
- 3. STEELGI PIPES SHALL BE PAINTED WITH RED OXIDE PRIMER AND FINISHED WITH AZURE BLUE PAINT

TABLE OF TRENCH DIMENSION IN METERS

PIPE SIZE, mm (in)	TRENCH DEPTH, m (Z+Y)	MIN. WIDTH, m (X)	MAX. WIDTH, m (X)
13 - 75 (½ - 3)	0.85	0.35	0.65
100 (4)	1.00	0.40	0.70
150 (6)	1.05	0.45	0.75
200 (8)	1.10	0.50	0.80
250 (10)	1.15	0.55	0.85
300 (12)	1.35	0.60	0.90
350 (14)	1.40	0.65	0.95
400 (16)	1.45	0.70	1.00
450 (18)	1.50	0.75	1.05

NOTES:

- 1. ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE SHOWN.
- 2. FOR TWO OR MORE PARALLEL PIPES, PROVIDE 0.15m. CLEAR SPACING. DISTANCE "L" BETWEEN THE SIDE OF TRENCH AND ADJACENT PIPES MUST BE WITHIN THE RANGE OF 0.15m (Min.) and 0.30m (Max.).
- 3. STANDARD THICKNESS OF CONCRETE (Z) FOR NATIONAL/CITY ROAD AND BARANGAY ROAD SHALL BE 0.30m AND 0.25m, RESPECTIVELY.
- 4. ONE (1) SQ. M. TRENCH EXCAVATIONS SHALL BE RESTORED WITH 16mmØ DOWEL BARS.

STANDARD TRENCH DETAILS



PREPARED BY: RALPH REMPE D. MANZANO  
REVIEWED BY: NERIE D. ALITO  
APPROVED BY: SALVADOR M. ECA  
PROJECT TITLE AND LOCATION: PROPOSED INSTALLATION OF 8"Ø X 27.30M HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD

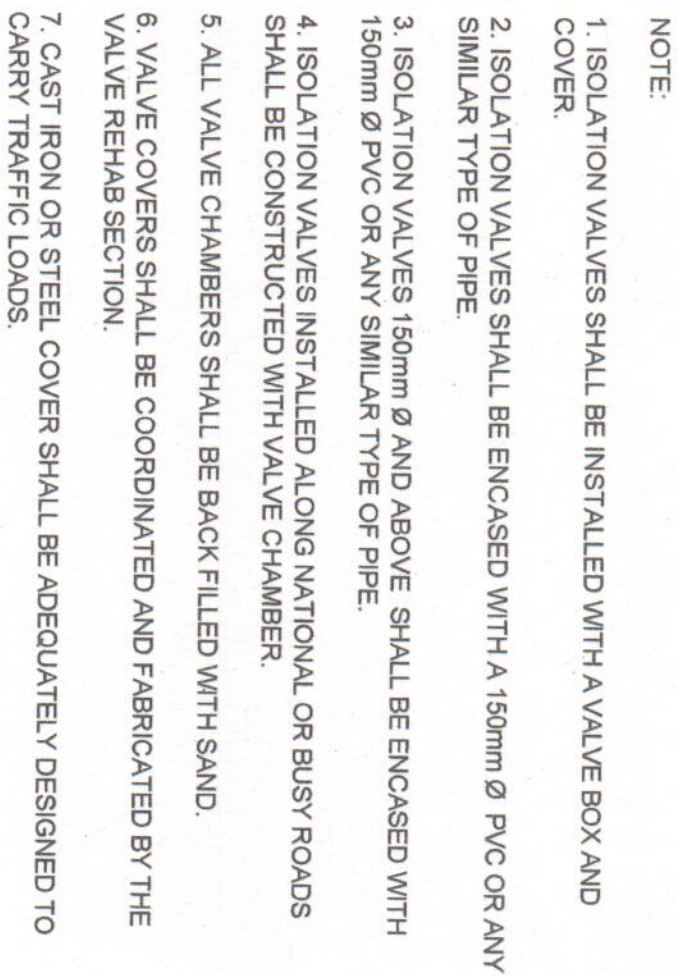
CHECKED BY: JAMEL B. ANICOD  
RECO. APPROVAL: REYNALDO D. JAYDO  
GENERAL MANAGER



SHEET NO.: 8

11



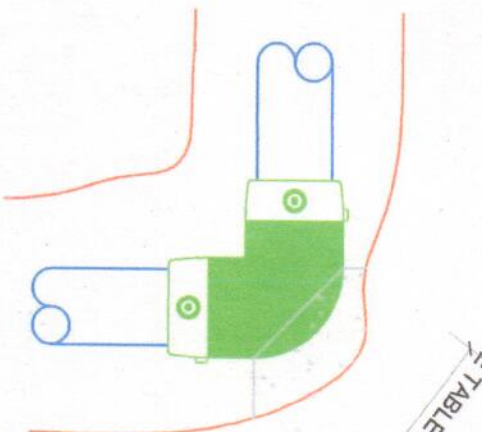


## STANDARD VALVE CHAMBER DETAILS

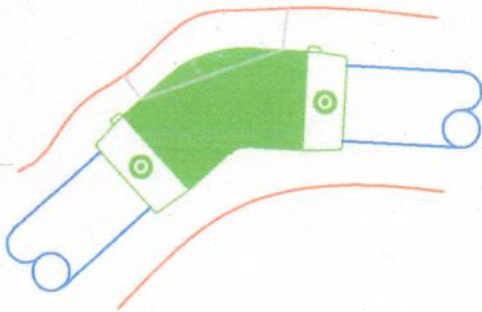
PREPARED BY:  RALPH RENDON CIVIL ENGINEER	REVIEWED BY:  NORMA G. SANTIAGO CIVIL ENGINEER	APPROVED BY:  SALVADOR W. HOYECA GENERAL MANAGER	PROJECT TITLE AND LOCATION/S: PROPOSED INSTALLATION OF 8"Ø X 27'30" L.H.D.PE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD	SHEET CONTENT/S: STANDARD VALVE CHAMBER DETAIL	SHEET NO.: 9
CHECKED BY:  JANE J. BALANCO CIVIL ENGINEER	REVISIONS: REVISION NO. 1 REVISION DATE 10/10/2010 REVISION BY JANE J. BALANCO				11



SEE TABLE FOR AREA



SEE TABLE FOR AREA



SEE TABLE FOR AREA

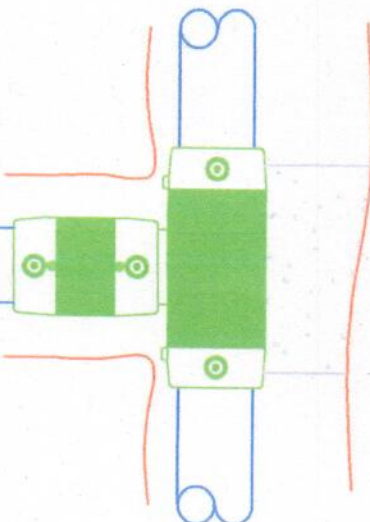
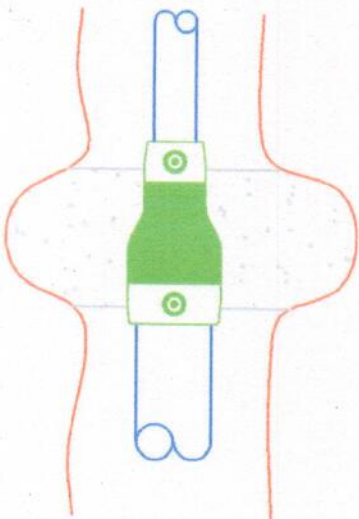


TABLE OF MINIMUM THRUST BLOCK BEARING AREA IN SQUARE METRES FOR PIPE SIZES 75mm TO 300mm Ø					
PIPE SIZE, mm (in)	TEE AND DEAD END	90° BEND	45° BEND	22 1/2° BEND	
75 (3)	0.05	0.07	0.04	0.02	
100 (4)	0.09	0.12	0.07	0.04	
150 (6)	0.20	0.28	0.15	0.08	
200 (8)	0.35	0.50	0.27	0.14	
250 (10)	0.55	0.77	0.42	0.21	
300 (12)	0.79	1.11	0.60	0.31	

NOTES:

1. ABOVE AREAS ON AN ASSUMED SOIL BEARING PRESSURE OF 98KPA (2000psf).
2. REDUCE OR INCREASE AREA PROPORTIONALITY TO SUIT ACTUAL FIELD CONDITION UPON APPROVAL OF FIELD ENGINEER.
3. CONCRETE FOR THRUST BLOCK SHALL BE 13.8MPa (2000 psi).
4. ALL CONCRETE SHALL BE POURED TO AVOID INTERFERENCE WITH JOINTS.
5. THRUST BLOCKS NOT REQUIRED ON STEEL PIPELINE WITH WELDED OR FLANGED JOINTS OR ON SOLVENT WELDED PVC PIPE.
6. WHERE PIPE CONNECTS TO A FITTING IN A STEEL PIPELINE, THE STEEL PIPELINE SHALL BE BLOCKED AS SHOWN HEREON.
7. BEARING AREAS BASED ON INTERNAL PRESSURE OF 106m (150psi).



STANDARD THRUST BLOCK DETAILS

75

PREPARED BY:

RALPH REMEDIO MANZANO

REVIEWED BY:

NORBERTO GARCIA

APPROVED BY:

SALVADOR M. ROMERO

PROJECT TITLE AND LOCATION:

PROPOSED INSTALLATION OF 8"Ø X 27'3"Ø HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELO ROAD

SHEET CONTENTS:

STANDARD THRUST BLOCK DETAILS

SHEET NO.:

10

11



CHECKED BY:

JANET P. BALINGO

RECO. APPROVAL BY:

REYNALDO C. JAYCO

APPROVED BY:

SALVADOR M. ROMERO

PROJECT TITLE AND LOCATION:

PROPOSED INSTALLATION OF 8"Ø X 27'3"Ø HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELO ROAD

SHEET CONTENTS:

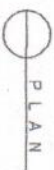
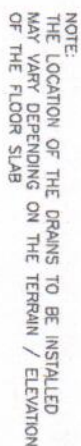
STANDARD THRUST BLOCK DETAILS

SHEET NO.:

10

11






## STANDARD PRESSURE RELIEF VALVE DETAILS



	PREPARED BY: <u>[Signature]</u> <u>RALPH BENEDICT MANZANO</u> <small>ENGINEER IN CHARGE</small>	REVIEWED BY: <u>[Signature]</u> <u>NOBLE B. CALERO</u> <small>SENIOR CIVIL ENGINEER</small>	APPROVED BY: <u>[Signature]</u> <u>SALVADOR M. NOBLECA</u> <small>GENERAL MANAGER</small>	PROJECT TITLE AND LOCATION:  PROPOSED INSTALLATION OF 8"Ø X 27'36"LMHDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD	SHEET CONTENTS: STANDARD PRESSURE RELIEF VALVE DETAIL	SHEET NO.: <div style="display: flex; justify-content: space-between; width: 100%;"> <span>11</span> <span>11</span> </div>
	CHECKED BY: <u>[Signature]</u> <u>JANEL L. BALANCO</u> <small>OFF. PROJECT SUPERVISOR</small>	RECOMM. APPROVAL BY: <u>[Signature]</u> <u>REYNALDO C. JAYCO</u> <small>LOCAL GOVERNMENT ENGINEER</small>				



	<b>BAGUIO WATER DISTRICT</b>		Document Code	JOB ORDER
	JOB ORDER REQUEST	Document No.	P&C JOR F09	
		Effectivity Date	March 2020	
		Revision No.	0	


Date: March 1, 2023 JO No.: 052

☐ Internal Repair ☒ Outside Repair

Note: Outside repair/s shall be approved by the GM while internal repair/s shall be approved by the concerned AGMs.

Description	Works/Repairs to be Done (Please specify and give complete details of works to be done)	ABC/Estimated Cost of Repair
1 lot	<b>PIPELAYING WORKS FOR THE PROPOSED INSTALLATION OF 8"Ø X 2.730M HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD PROJECT</b>  <b>Scope of Work:</b> - Supply and installation of materials, labor, & equipment for the complete installation of 8"Ø (225mm) x 2.730m HDPE pipeline through electrofusion method (refer to attached Terms of Reference (TOR) and drawing plans for details).  Duration: 98 Working Days	ABC = ₱ 31,709,572.67
Purpose/Usage: PROPOSED INSTALLATION OF 8"Ø X 2.730M HDPE MAINLINE FROM MARCOS HIGHWAY TO ASIN ROAD VIA SUELLO ROAD (PIPELAYING WORKS)		
Included in the Budget under Acct. Name: CAPEX- Public Infrastructures/Improvements		Requested by: Janet J. Balangood Supervisor
Annual Budget:	Php52,839,000.00	
Less to Date:	( )	
Less on-going repairs but not yet Received	( )	Recommending Approval: <i>[Signature]</i> Noriel C. Calpito Division Manager
Less This JO:	( )	
Budget balance After This JO:	Php52,839,000.00	
Prepared by: Janet J. Balangood Requesting Unit - End-user	Approved: <i>[Signature]</i> Salvador M. Royeca Asst. Gen. Mgr. / General Manager	

Note: This form must be accomplished in 2 copies Forward approved form to Purchasing Section

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Less to Date:	( )	
Less on-going repairs but not yet Received	( )	Recommending Approval: <i>[Signature]</i> Noriel C. Calpito Division Manager
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Budget balance After This JO:	Php52,839,000.00	
Prepared by: Janet J. Balangood Requesting Unit - End-user	Approved: <i>[Signature]</i> Salvador M. Royeca Asst. Gen. Mgr. / General Manager	

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