

Project Title: Proposed New Drilling of PS 24 Northwoods			Prepared By:	Project No.
Project Duration: Sixty (60) Calendar Days				
Owner: City of San Fernando Water District			Approved By:	Sheet No.
Location: Northwoods Subdivision, Brgy. Maimpis, CSFP			Date:	

BREAKDOWN OF COST ESTIMATES

Item No.	DESCRIPTION	Quantity	Unit	MATERIALS		LABOR/EQUIPMENT		DIRECT COST	
				Unit Cost	Amount	Unit Cost	Amount	Unit Cost	Amount
1.00	GENERAL REQUIREMENTS								
1.10	Temporary Facility	15.00	sq.m.						
1.20	Power and Water Supply (includes processing of application)	1.00	lot	-	-	-	-		
1.40	PPEs	1.00	lot	-	-	-	-		
1.50	Permits (all necessary clearances/permits like HOA, Barangay, Building Permit for Affected Structures subject for demolition during construction, NWRB, DPWH, TELECOM and INTERNET (if any) and other related agencies)	1.00	lot	-	-	-	-		
	1.5.1 Plans and Drawings (blue printing, signed and sealed from professionals)	1.00	lot	-	-	-	-		
	1.5.2 As-Built Plans (blue printing, signed and sealed from professionals)	1.00	lot	-	-	-	-		
1.60	Mobilization/Demobilization (includes equipment, manpower, site clearing before and after drilling)	60.00	days	-	-	-	-		
									0.00
2.00	DRILLING WORKS								
2.10	Site Preparation and Equipment Setting	1.00	lot						0.00
2.20	Drilling of pilothole including drilling for installation of 30 meters x 500mm (20") permanent conductor casing	244.00	meters						0.00
2.30	Geophysical borehole logging (electric resistivity)	1.00	lot						0.00

Item No.	DESCRIPTION	Quantity	Unit	MATERIALS		LABOR/EQUIPMENT		DIRECT COST	
				Unit Cost	Amount	Unit Cost	Amount	Unit Cost	Amount
	TOTAL CONSTRUCTION COST								0.00

Prepared and Recommended By:

AR. ROCKY M. DUNGCA, Uap

Division Manager

Planning and Development

Approved By:

ENGR. NELSON G. LINGAT

General Manager

Project Title: Supply, Delivery and Installation of Electro-Mechanical Equipment, Construction of Related Structure at PS 24 Northwoods			Prepared By:	Project No.
Project Duration: Twenty (21) Calendar Days				
Owner: City of San Fernando Water District			Approved By:	Sheet No.
Location: Northwoods Subdivision, Brgy. San Isidro, CSFP			Date:	

BREAKDOWN OF COST ESTIMATES									
Item	DESCRIPTION	Quantity	Unit	MATERIALS		LABOR/EQUIPMENT		DIRECT COST	
No.				Unit Cost	Amount	Unit Cost	Amount	Unit Cost	Amount
1.00	GENERAL REQUIREMENTS								
1.10	Temporary Facility	20.00	sq.m	-	-	-	-	care of CSFWD	care of CSFWD
1.20	Power and Water Supply (includes processing of application)	1.00	lot	-	-	-	-	care of CSFWD	care of CSFWD
1.30	PPEs	1.00	lot	-	-	-	-		0.00
1.40	Permits (Brgy. Clearance, Building Permit, Occupancy Permit)	1.00	lot	-	-	-	-	care of CSFWD	care of CSFWD
	1.4.1 Plans and Drawings (blue printing, signed and sealed from professionals)	1.00	lot	-	-	-	-		0.00
	1.4.2 As-Built Plans (blue printing, signed and sealed from professionals)	1.00	lot	-	-	-	-		0.00
1.50	Mobilization/Demobilization (includes equipment, manpower, site clearing before and after drilling)	21.00	days	-	-	-	-		0.00
	Total I								0.00
2.00	ELECTRO-MECHANICAL EQUIPMENT								
2.10	40HP Stainless Steel Submersible Pump Model SP77-4 with Stainless Steel (AISI 3040) impeller, shaft and intermediate chamber. (subject may be changed after pump testing result) Specification - refer to bidding documents	1.00	unit						0.00
2.20	40HP Electric Submersible Motor, 460V, 3Phase, 60Hz, 3500 rpm. (subject may be changed after pump testing result) Specification - refer to bidding documents	1.00	unit						0.00
2.30	Variable Frequency Drive 440 vac. Specification - refer to bidding documents	1.00	unit						0.00
2.40	100mm diameter x 3.00 m heavy uPVC riser pipe (heavy duty) with L ring	40.00	pcs.						0.00
2.50	SS adaptor 400 x 400 x 100mm riser pipe adaptor SS top and bottom set heavy duty (NPT)	1.00	set						0.00

Item No.	DESCRIPTION	Quantity	Unit	MATERIALS		LABOR/EQUIPMENT		DIRECT COST	
				Unit Cost	Amount	Unit Cost	Amount	Unit Cost	Amount
4.10	Chloronitor Motor: Beta BT4b 0708 PVM 2000UA010000 7.10 lph at 7 bars (102 psi), 1-phase, 100-230 v 50/60Hz, 16 watts, IP 66, stroke rate: 180 spm PVDF material of dosing head; with Pure Teflon Diaphragm for Chlorine Dioxide use; with 2 functions setting for dosing pump rate adjustment via Stroke Frequencies from 0-180 spm and Stroke Length adjustments from 0-100% with increments of 10% ratings; with ready available input connections and controls for 2 Stage Level Float Switch and External control via contact or pulse; complete with standard accessories like - Foot valve w/strainer, PVT - Injection Valve, PVT - 5 meters PE (Discharge) tubing, 8mm x 5mm - 2 meters. Soft PVC (Suction) tubing, 8mm x 5 mm. Made in Germany Chemical Tank, 100-liter capacity made of transparent UV-stabilized PE material; with liter and gallon scale; mounting flange with integral sintered threaded bushes for manual or electric stirrers/mixers; with lockable screw crap cover and key; with drain plug. Size 500mm diameter x 760mm Ht. Est. Wt.: 10 kgs. PN:1001490. Made in Germany	1.00	set						0.00
4.20	Installation, testing	1.00	lot						0.00
	Total 5								0.00
	ESTIMATED DIRECT COST								0.00
	OCM (____% of EDC)								0.00
	PROFIT (____% of EDC)								0.00
	VAT (____%)								
	TOTAL CONSTRUCTION COST								0.00

Prepared and Recommended By:

AR. ROCKY M. DUNGCA, Uap

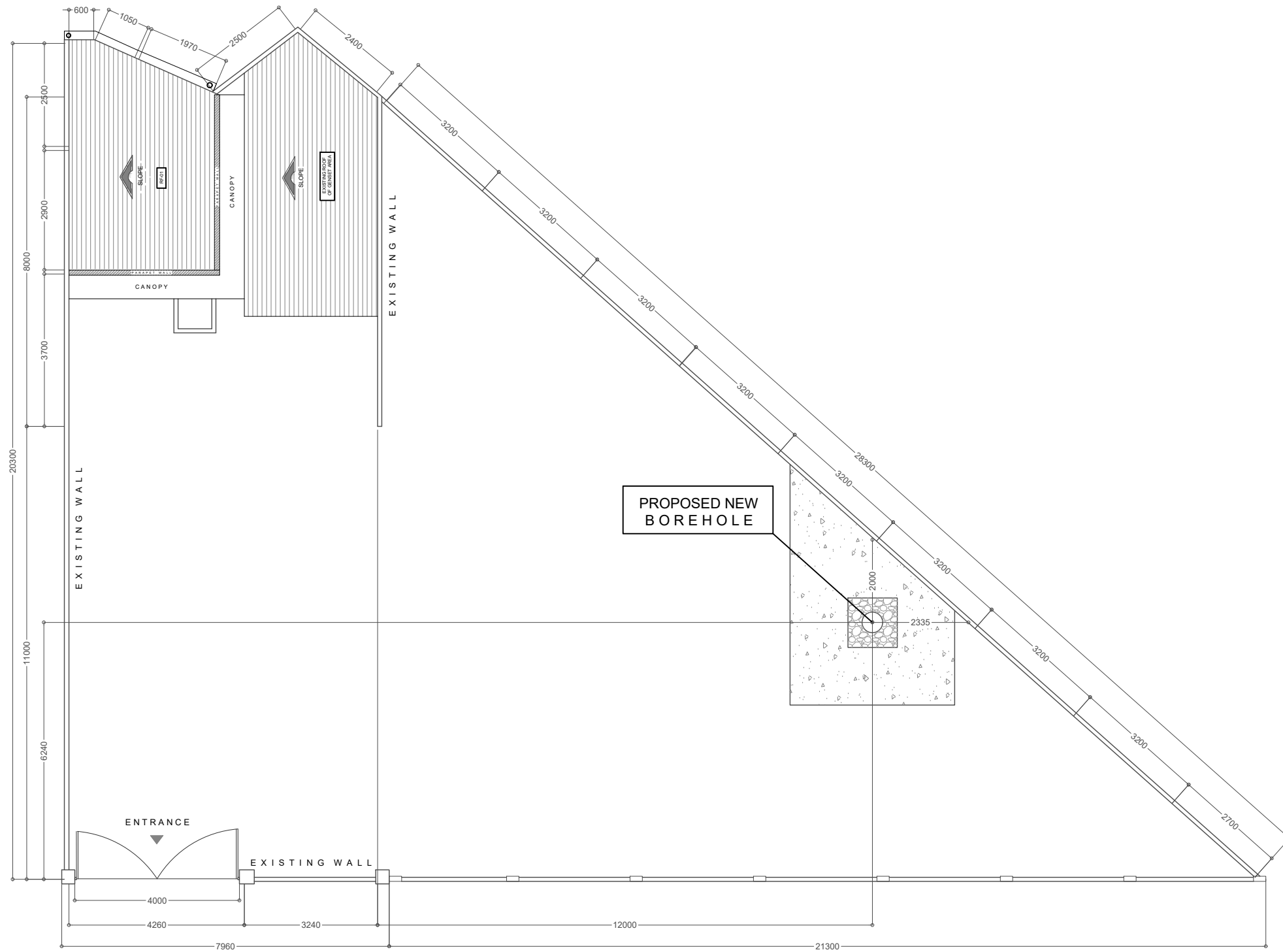
Division Manager

Planning and Development

Approved By:

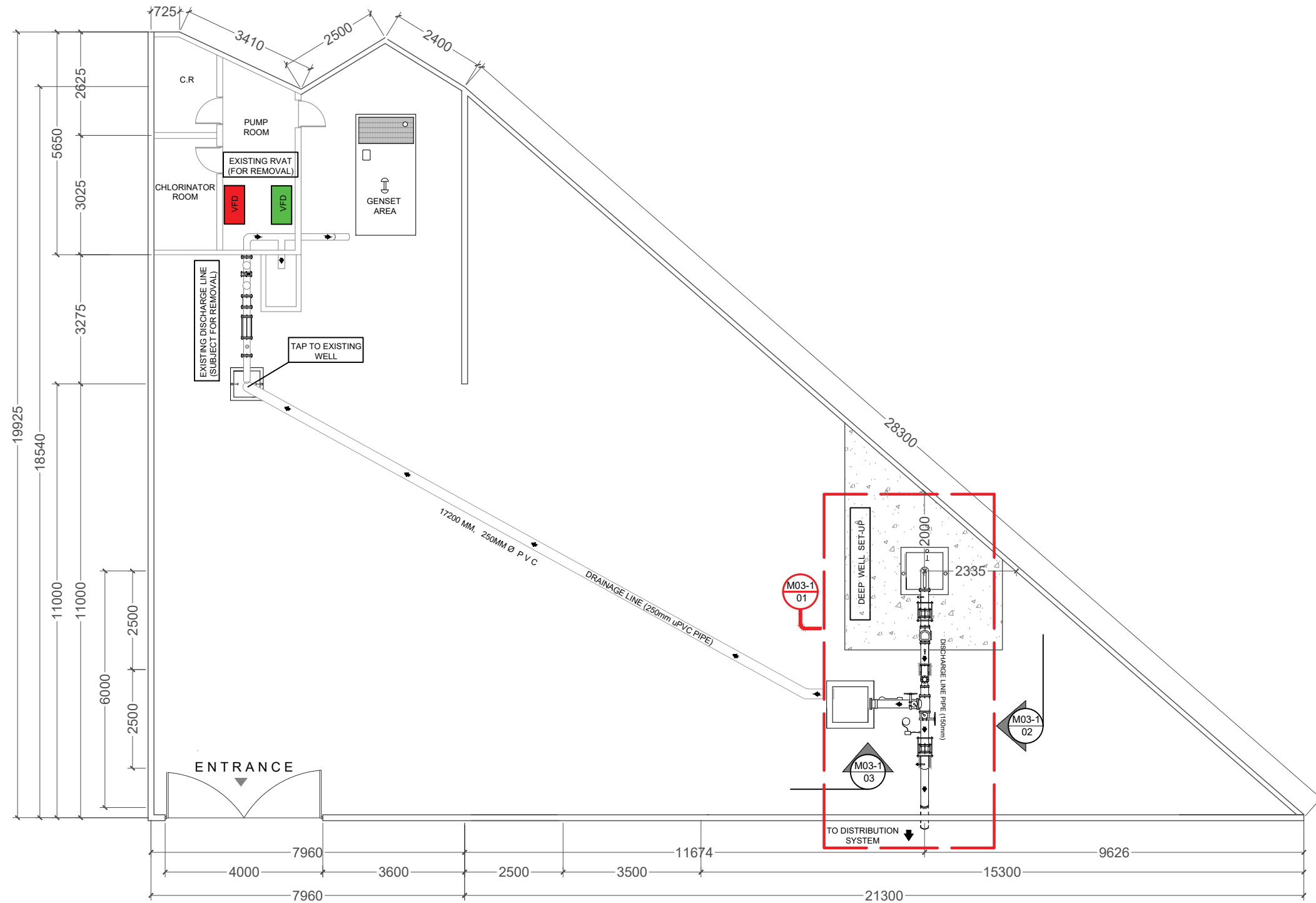
ENGR. NELSON G. LINGAT

General Manager



M01-1
01
SOURCE DEVELOPMENT
 SCALE 1:120

 CITY OF SAN FERNANDO WATER DISTRICT <small>B. MENDOZA ST., STO. ROSARIO, CITY OF SAN FERNANDO, PAMPANGA</small>	ARCHITECT: JOSE S. GALICIA JR., RME	THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF THE ARCHITECT. ANY UNAUTHORIZED DUPLICATION OR REPRODUCTION, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT IS STRICTLY PROHIBITED. R.A. 9266, ART IV SEC 33.	PROJECT NAME: PROPOSED SOURCE DEVELOPMENT & SITE DEVELOPMENT FACILITY AT PS. 24 NORTHWOODS, BRGY. SAN ISIDRO, CSFP	RECOMMENDED: AR. ROCKY M. DUNGCA <small>DIVISION MANAGER PLANNING AND DEVELOPMENT DIVISION</small>	APPROVED: ENGR. NELSON G. LINGAT, DPA <small>GENERAL MANAGER CITY OF SAN FERNANDO WATER DISTRICT</small>	REVISION: <table border="1" style="width: 100%; height: 20px;"> <tr><td> </td><td> </td></tr> </table>			SHEET CONTENT: SOURCE DEVELOPMENT	CAD BY: DESIGNED BY: CHECKED BY: DATE:	SHEET NO. <div style="font-size: 24px; font-weight: bold; text-align: center;">01</div> <div style="font-weight: bold; text-align: center;">M-01</div>
	PRC NO: _____ DATE: _____ PTR NO: _____ PLACE: <small>CITY OF SAN FERNANDO PAMPANGA</small>		LOCATION: NORTHWOODS, BRGY. SAN ISIDRO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	DATE:					
	POSITION: SENIOR PROJECT PLANNING OFFICER DIVISION: PLANNING & DEVELOPMENT		ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	DATE:					
ARCHITECT: JOSE S. GALICIA JR., RME PRC NO: _____ DATE: _____ PTR NO: _____ PLACE: <small>CITY OF SAN FERNANDO PAMPANGA</small> POSITION: SENIOR PROJECT PLANNING OFFICER DIVISION: PLANNING & DEVELOPMENT	LOCATION: NORTHWOODS, BRGY. SAN ISIDRO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	DATE:							



M02-1
01

PROPOSED SYSTEM LAYOUT

SCALE

1:120

LEGEND:

- V F D (PROPOSED)
- V F D (EXISTING)



CITY OF SAN FERNANDO WATER DISTRICT
B. MENDOZA ST., STO. ROSARIO, CITY OF SAN FERNANDO, PAMPANGA

ENGINEER:
JOSE S. GALICIA JR., RME
PRC NO: _____ DATE: _____
PTR NO: _____ PLACE: _____
POSITION: SENIOR PROJECT PLANNING OFFICER
DIVISION: PLANNING & DEVELOPMENT

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R.A. 9266, ART IV SEC 33.

PROJECT NAME:
PROPOSED SOURCE DEVELOPMENT & SITE DEVELOPMENT FACILITY AT PS. 24 NORTHWOODS, BRGY. SAN ISIDRO, CSFP
LOCATION:
NORTHWOODS, BRGY. SAN ISIDRO, CSFP

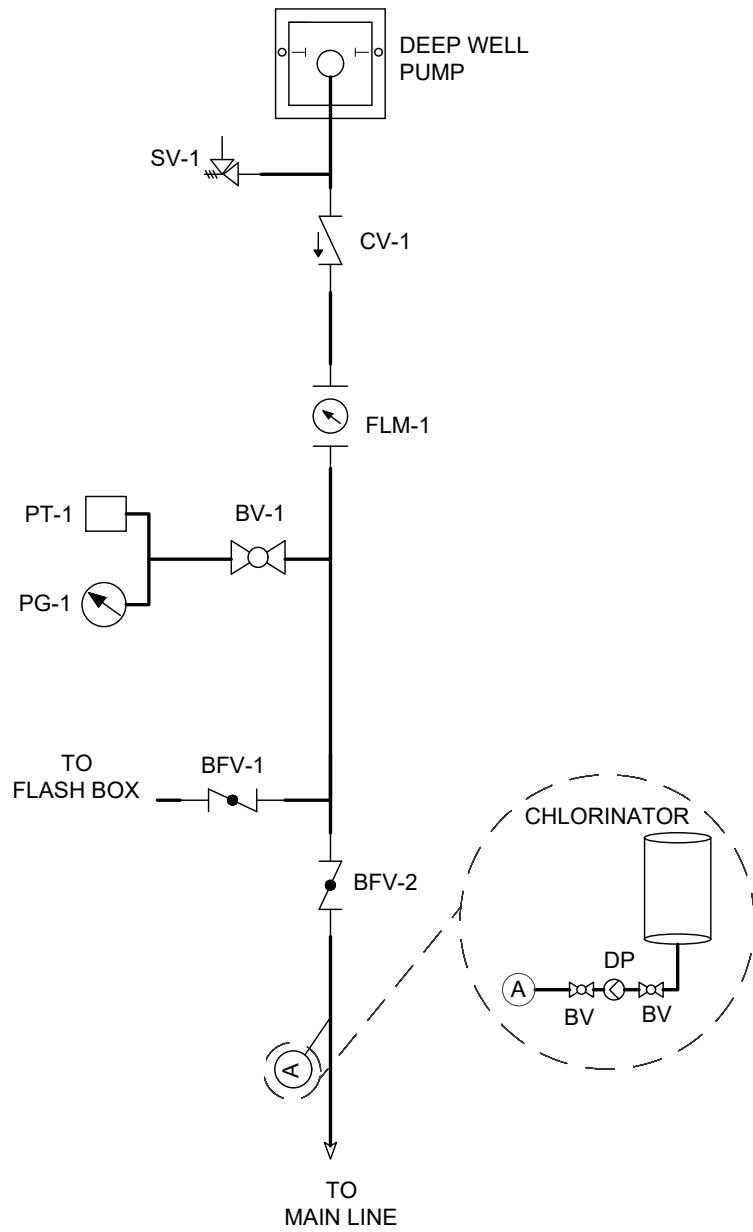
RECOMMENDED:
AR. ROCKY M. DUNGCA
DIVISION MANAGER
PLANNING AND DEVELOPMENT DIVISION
ADDRESS:
B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP

APPROVED:
ENGR. NELSON G. LINGAT, DPA
GENERAL MANAGER
CITY OF SAN FERNANDO WATER DISTRICT
ADDRESS:
B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP

REVISION:

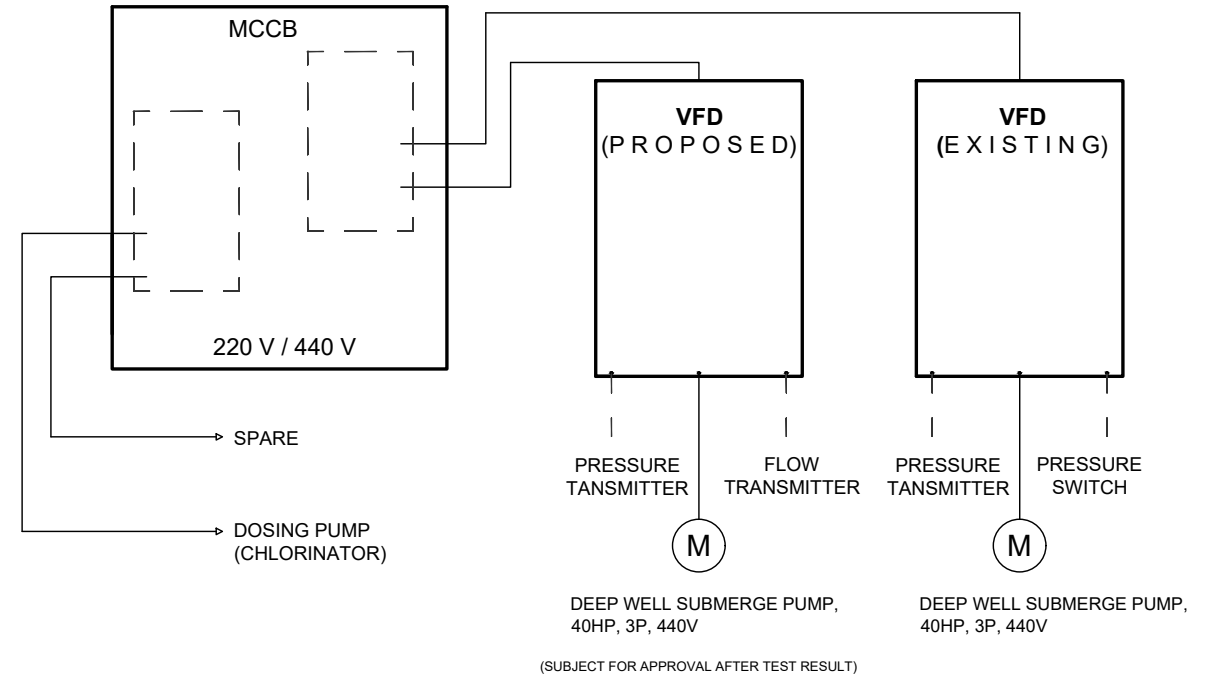
SHEET CONTENT:
PROPOSED SYSTEM LAYOUT

CAD BY:
DESIGNED BY:
CHECKED BY:
DATE:
02
M-02



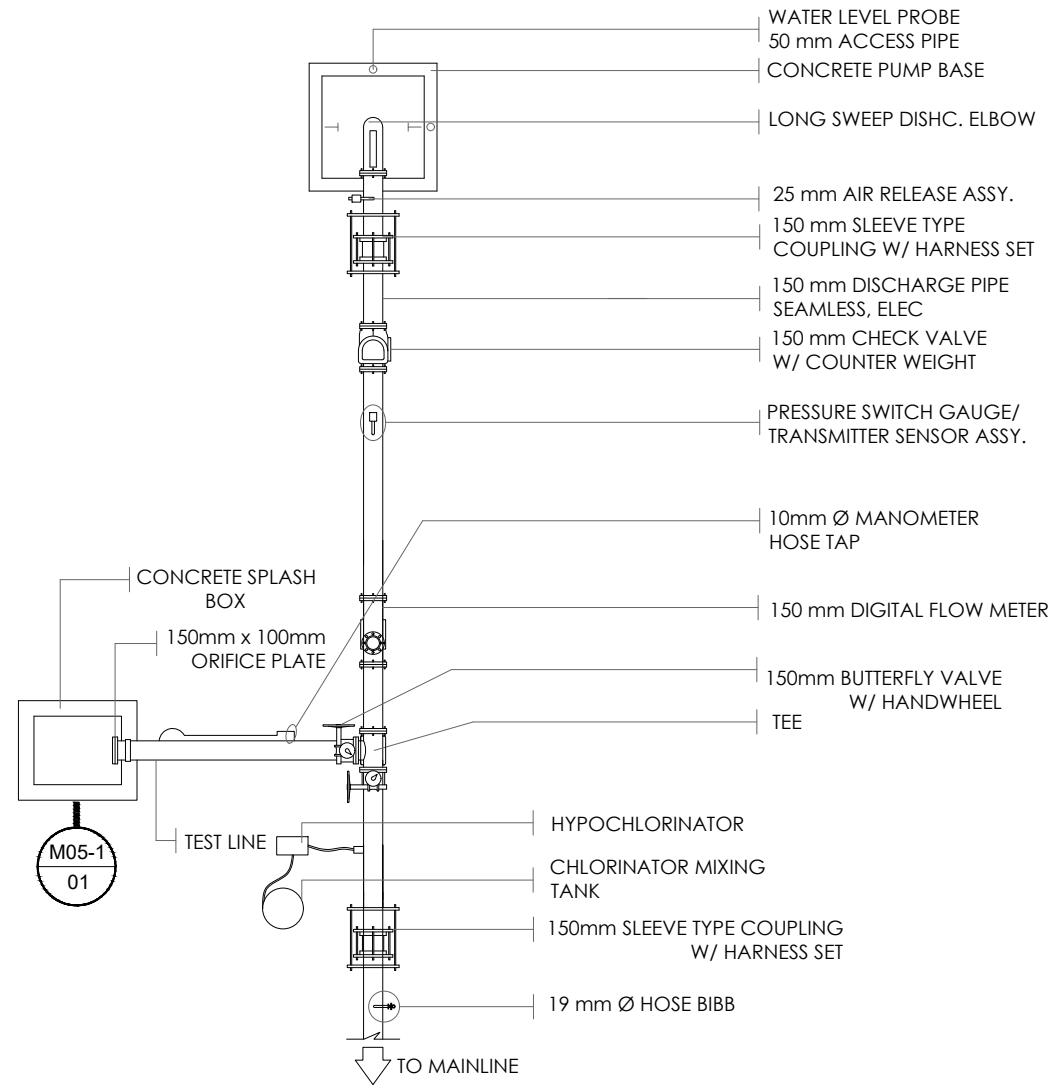
LEGEND	
SYMBOL	DESCRIPTION
	BALL VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	GEAR OPERATED BUTTERFLY VALVE
	AIR RELEASE / SAFETY VALVE
	DIGITAL FLOW METER
	PRESSURE TRANSMITTER
	DOSING PUMP
	INJECTION POINT
	PRESSURE GAUGE

ELECTRO MECHANICAL LAYOUT
 M03-1 01 SCALE NTS

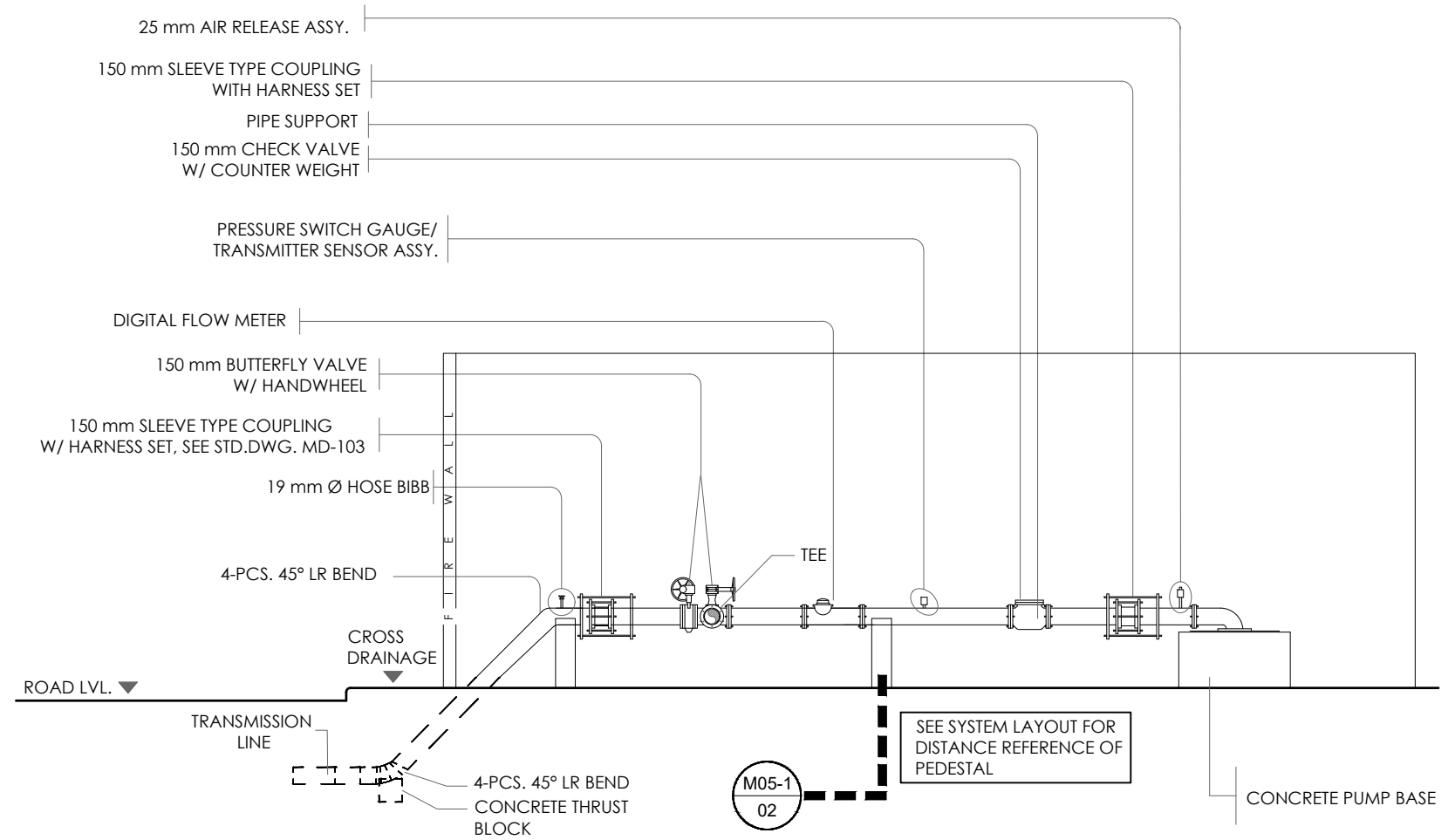


ELECTRO MECHANICAL DIAGRAM
 M03-1 02 SCALE NTS

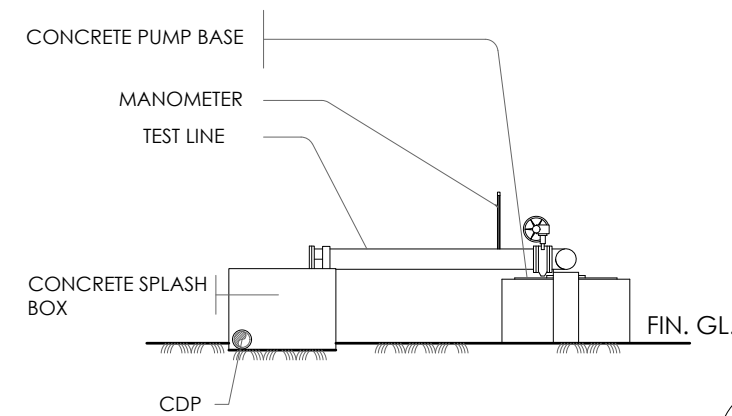
<p>CITY OF SAN FERNANDO WATER DISTRICT B. MENDOZA ST., STO. ROSARIO, CITY OF SANFERNANDO, PAMPANGA</p>	ENGINEER: JOSE S. GALICIA JR., RME	THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF THE ARCHITECT. ANY UNAUTHORIZED DUPLICATION OR REPRODUCTION, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT IS STRICTLY PROHIBITED. R.A. 9266, ART IV SEC 33.	PROJECT NAME: PROPOSED SOURCE DEVELOPMENT & SITE DEVELOPMENT FACILITY AT PS. 24 NORTHWOODS, BRGY. SAN ISIDRO, CSFP	RECOMMENDED: ARCH'T ROCKY M. DUNGCA <small>DIVISION MANAGER PLANNING AND DEVELOPMENT DIVISION</small>	APPROVED: ENGR. NELSON G. LINGAT, DPA <small>GENERAL MANAGER CITY OF SAN FERNANDO WATER DISTRICT</small>	REVISION: SHEET CONTENT:	CAD BY:	SHEET NO.	
	POSITION: SENIOR PROJECT PLANNING OFFICER		LOCATION: NORTHWOODS, BRGY. SAN ISIDRO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	DESIGNED BY:	CHECKED BY:	DATE:	03
	DIVISION: PLANNING & DEVELOPMENT		NORTHWOODS, BRGY. SAN ISIDRO, CSFP	B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	ELECTRO-MECHANICAL LAYOUT ELECTRO-MECHANICAL DIAGRAM	DATE:	M-03	




M04-1 01 PLAN VIEW
DISCHARGE LINE ASSEMBLY
 SCALE NTS

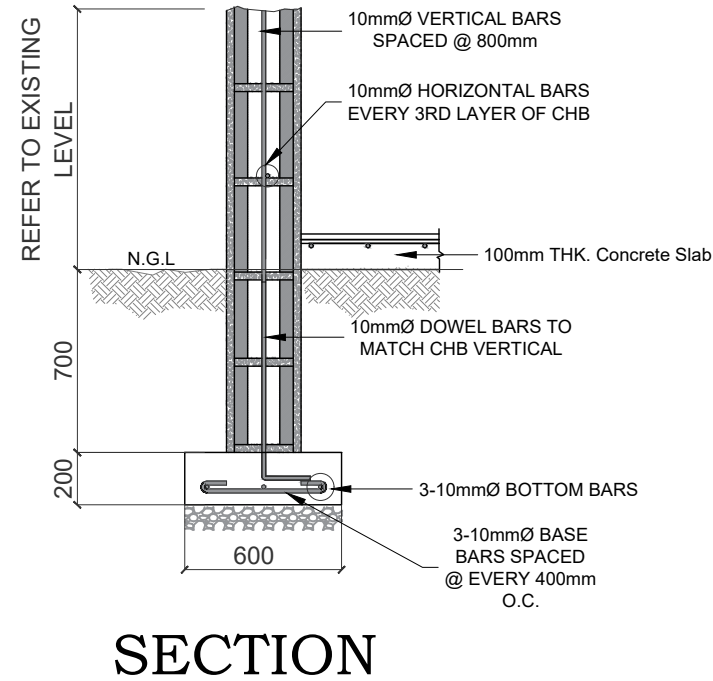
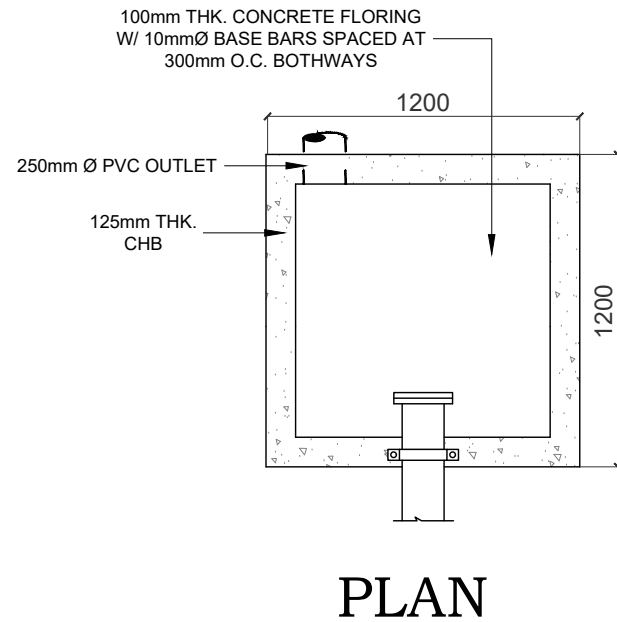


M04-1 02 SECTION A - A
 SCALE NTS

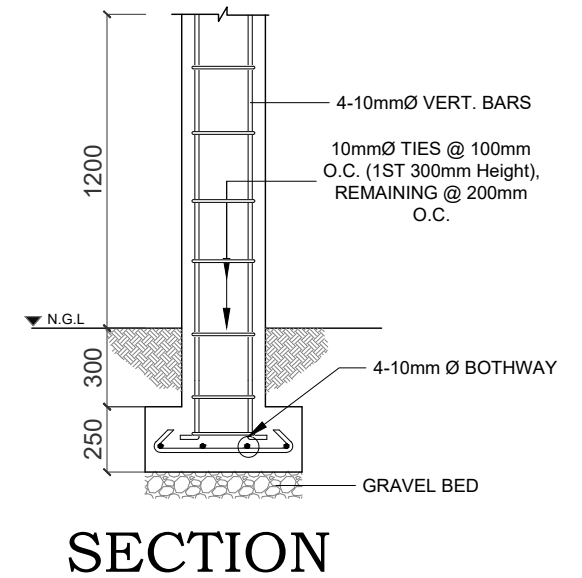
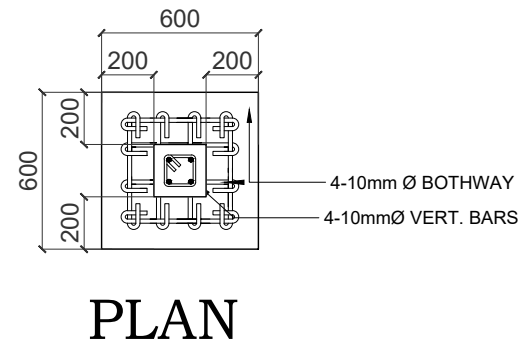


M04-1 03 SECTION B - B
 SCALE NTS

 CITY OF SAN FERNANDO WATER DISTRICT B. MENDOZA ST., STO. ROSARIO, CITY OF SANFERNANDO, PAMPANGA	ENGINEER: JOSE S. GALICIA JR.	THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF THE ARCHITECT. ANY UNAUTHORIZED DUPLICATION OR REPRODUCTION, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT IS STRICTLY PROHIBITED. R.A. 9266, ART IV SEC 33.	PROJECT NAME: PROPOSED SOURCE DEVELOPMENT & SITE DEVELOPMENT FACILITY AT PS. 24 NORTHWOODS, BRGY. SAN ISIDRO, CSFP	RECOMMENDED: ARCH'T ROCKY M. DUNGCA DIVISION MANAGER PLANNING AND DEVELOPMENT DIVISION	APPROVED: ENGR. NELSON G. LINGAT, DPA GENERAL MANAGER CITY OF SAN FERNANDO WATER DISTRICT	REVISION:	SHEET CONTENT:	CAD BY:	SHEET NO.
	POSITION: SENIOR PROJECT PLANNING OFFICER		LOCATION: NORTHWOODS, BRGY. SAN ISIDRO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	DESIGNED BY: 04			
	DIVISION: PLANNING & DEVELOPMENT		ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	ADDRESS: B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP	CHECKED BY:				
	DATE:		DATE:	DATE:	DATE:				

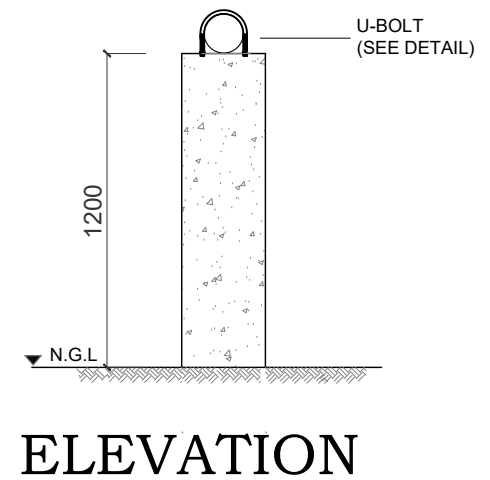


M05-1
01 **SPLASH BOX DETAIL**
SCALE NTS



HEAVY DUTY U-BOLT W/ WASHER/
NUTS - TO SECURE 150mm PIPE BI
SEAMLESS PIPE

(SUBMIT SAMPLE FOR APPROVAL)



M05-1
02 **CONCRETE PEDESTAL DETAIL**
SCALE NTS



ARCHITECT:
ROCKY M. DUNGCA

PRC NO. 0021874 DATE: 01-05-2026
PTR NO. 6621206 PLACE: CITY OF SAN FERNANDO, PAMPANGA

POSITION: DIVISION MANAGER

DIVISION: PLANNING & DEVELOPMENT

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PROJECT NAME:
PROPOSED SOURCE DEVELOPMENT & SITE DEVELOPMENT FACILITY AT PS. 24 NORTHWOODS, BRGY. SAN ISIDRO, CSFP

LOCATION:
NORTHWOODS, BRGY. SAN ISIDRO, CSFP

RECOMMENDED:
ARCH'T ROCKY M. DUNGCA
DIVISION MANAGER
PLANNING AND DEVELOPMENT DIVISION

ADDRESS:
B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP

APPROVED:
ENGR. NELSON G. LINGAT, DPA
GENERAL MANAGER
CITY OF SAN FERNANDO WATER DISTRICT

ADDRESS:
B. MENDOZA STREET, BRGY. SANTO ROSARIO, CSFP

REVISION:

SHEET CONTENT:
**DETAIL OF SPLASH BOX
CONCRETE PEDESTAL DETAIL**

CAD BY:

DESIGNED BY:
05

CHECKED BY:

DATE:

SHEET NO.
M-05