

|                                                                       |  |  |              |             |
|-----------------------------------------------------------------------|--|--|--------------|-------------|
| Project Title: Proposed New Source Development at ST. FRANCIS VILLAGE |  |  | Prepared By: | Project No. |
| Project Duration: Sixty (60) Calendar Days                            |  |  |              |             |
| Owner: City of San Fernando Water District                            |  |  | Approved By: | Sheet No.   |
| Location: Barangay Dolores, 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 |
| <b>1.00</b>                 | <b>GENERAL REQUIREMENTS</b>                                                                                                                                                                                             |          |        |           |        |                 |        |             |        |
| 1.10                        | Temporary Facility                                                                                                                                                                                                      | 15.00    | sq.m   |           |        |                 |        |             |        |
| 1.20                        | Power and Water Supply (includes processing of application)                                                                                                                                                             | 1.00     | lot    |           |        |                 |        |             |        |
| 1.30                        | PPEs                                                                                                                                                                                                                    | 1.00     | lot    |           |        |                 |        |             |        |
| 1.40                        | 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                       | 1.5.1 Plans and Drawings (blue printing, signed and sealed from professionals)                                                                                                                                          | 1.00     | lot    |           |        |                 |        |             |        |
| 1.5.2                       | 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   |           |        |                 |        |             |        |
|                             |                                                                                                                                                                                                                         |          |        |           |        |                 |        |             |        |
| <b>2.00</b>                 | <b>DRILLING WORKS</b>                                                                                                                                                                                                   |          |        |           |        |                 |        |             |        |
| 2.10                        | Site Preparation and Equipment Setting                                                                                                                                                                                  | 1.00     | lot    |           |        |                 |        |             |        |
| 2.20                        | Drilling of pilothole including drilling for installation of 30 meters x 500mm (20") permanent conductor casing                                                                                                         | 244.00   | meters |           |        |                 |        |             |        |
| 2.30                        | Geophysical borehole logging (electric resistivity)                                                                                                                                                                     | 1.00     | lot    |           |        |                 |        |             |        |
| 2.40                        | Water conductivity test                                                                                                                                                                                                 | 244.00   | meters |           |        |                 |        |             |        |
| 2.50                        | Reaming of pithole                                                                                                                                                                                                      | 244.00   | meters |           |        |                 |        |             |        |
| 2.60                        | Installation of uPVC casing and screens                                                                                                                                                                                 | 244.00   | meters |           |        |                 |        |             |        |
| 2.70                        | Furnishing and installation of casing centralizer every 12 meter interval                                                                                                                                               | 21.00    | pieces |           |        |                 |        |             |        |
| 2.80                        | Furnishing and installation of gravel packing                                                                                                                                                                           | 220.00   | meters |           |        |                 |        |             |        |
| 2.90                        | Development by backwashing                                                                                                                                                                                              | 12.00    | hours  |           |        |                 |        |             |        |
| 2.9.10                      | Treatment of well sodium hexametaphosphate                                                                                                                                                                              | 1.00     | ls     |           |        |                 |        |             |        |
| 2.9.20                      | Development by high pressure water jetting                                                                                                                                                                              | 12.00    | hours  |           |        |                 |        |             |        |

| Item     | DESCRIPTION                                                                                                                 | Quantity | Unit   | MATERIALS |        | LABOR/EQUIPMENT |        | DIRECT COST |        |
|----------|-----------------------------------------------------------------------------------------------------------------------------|----------|--------|-----------|--------|-----------------|--------|-------------|--------|
| No.      |                                                                                                                             |          |        | Unit Cost | Amount | Unit Cost       | Amount | Unit Cost   | Amount |
| 2.9.30   | Development by air-lifting                                                                                                  | 12.00    | hours  |           |        |                 |        |             |        |
| 2.9.40   | Development by surging and bailing-out of sediments                                                                         | 12.00    | hours  |           |        |                 |        |             |        |
| 2.9.50   | Step-drawdown pumping test                                                                                                  | 5.00     | hours  |           |        |                 |        |             |        |
| 2.9.60   | Continuous constant discharge rate pumping test                                                                             | 72.00    | hours  |           |        |                 |        |             |        |
| 2.9.70   | Furnishing and install well head cap, gravel fill pipe and water level sounding tube                                        | 1.00     | lot    |           |        |                 |        |             |        |
| 2.9.80   | Well disinfection                                                                                                           | 1.00     | ls     |           |        |                 |        |             |        |
| 2.9.90   | 500mm (20") dia.x 6 meter spiral welded BI permanent conductor casing with minimum thickness of 6mm                         | 5.00     | pieces |           |        |                 |        |             |        |
| 2.9.9.10 | 250mm (10") dia.x 3 meter length uPVC Casing Pipe Corrosion Resistance, thickness = 17.60mm, submit sample for approval     | 130.00   | meters |           |        |                 |        |             |        |
| 2.9.9.20 | 250mm (10") dia.x 3 meter length uPVC Screen Rib-Type Corrosion Resistance, thickness = 17.60mm, submit sample for approval | 114.00   | meters |           |        |                 |        |             |        |
|          |                                                                                                                             |          |        |           |        |                 |        |             |        |
|          |                                                                                                                             |          |        |           |        |                 |        |             |        |
|          |                                                                                                                             |          |        |           |        |                 |        |             |        |
|          |                                                                                                                             |          |        |           |        |                 |        |             |        |
|          | ESTIMATED DIRECT COST                                                                                                       |          |        |           |        |                 |        |             |        |
|          | OCM (12% of EDC)                                                                                                            |          |        |           |        |                 |        |             |        |
|          | PROFIT (10% of EDC)                                                                                                         |          |        |           |        |                 |        |             |        |
|          | VAT (5%)                                                                                                                    |          |        |           |        |                 |        |             |        |
|          | TOTAL CONSTRUCTION COST                                                                                                     |          |        |           |        |                 |        |             |        |

Prepared and Recommended By:

**AR. ROCKY M. DUNGCA, Uap**

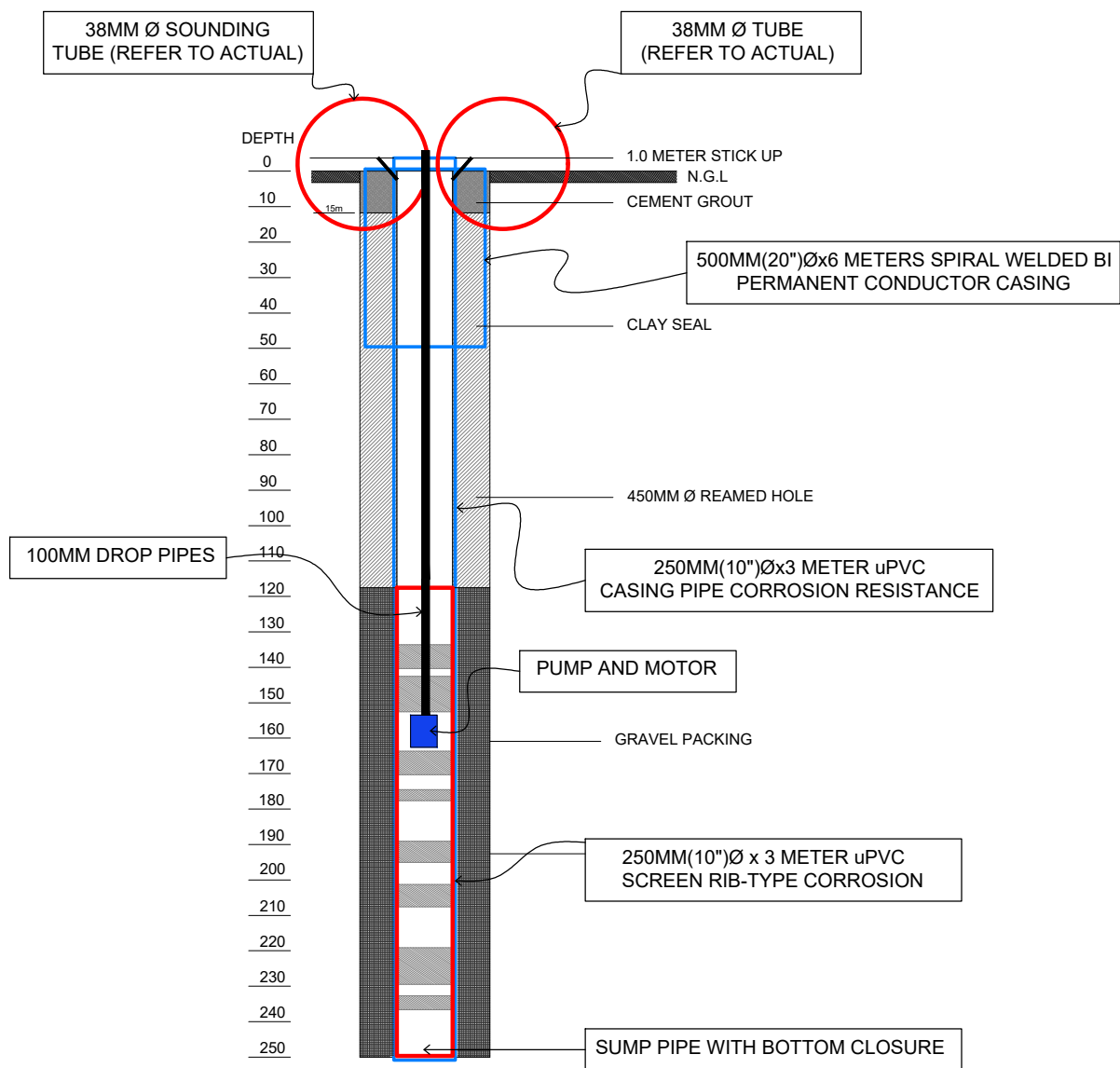
Division Manager

Planning and Development

Approved By:

**ENGR. NELSON G. LINGAT**

General Manager

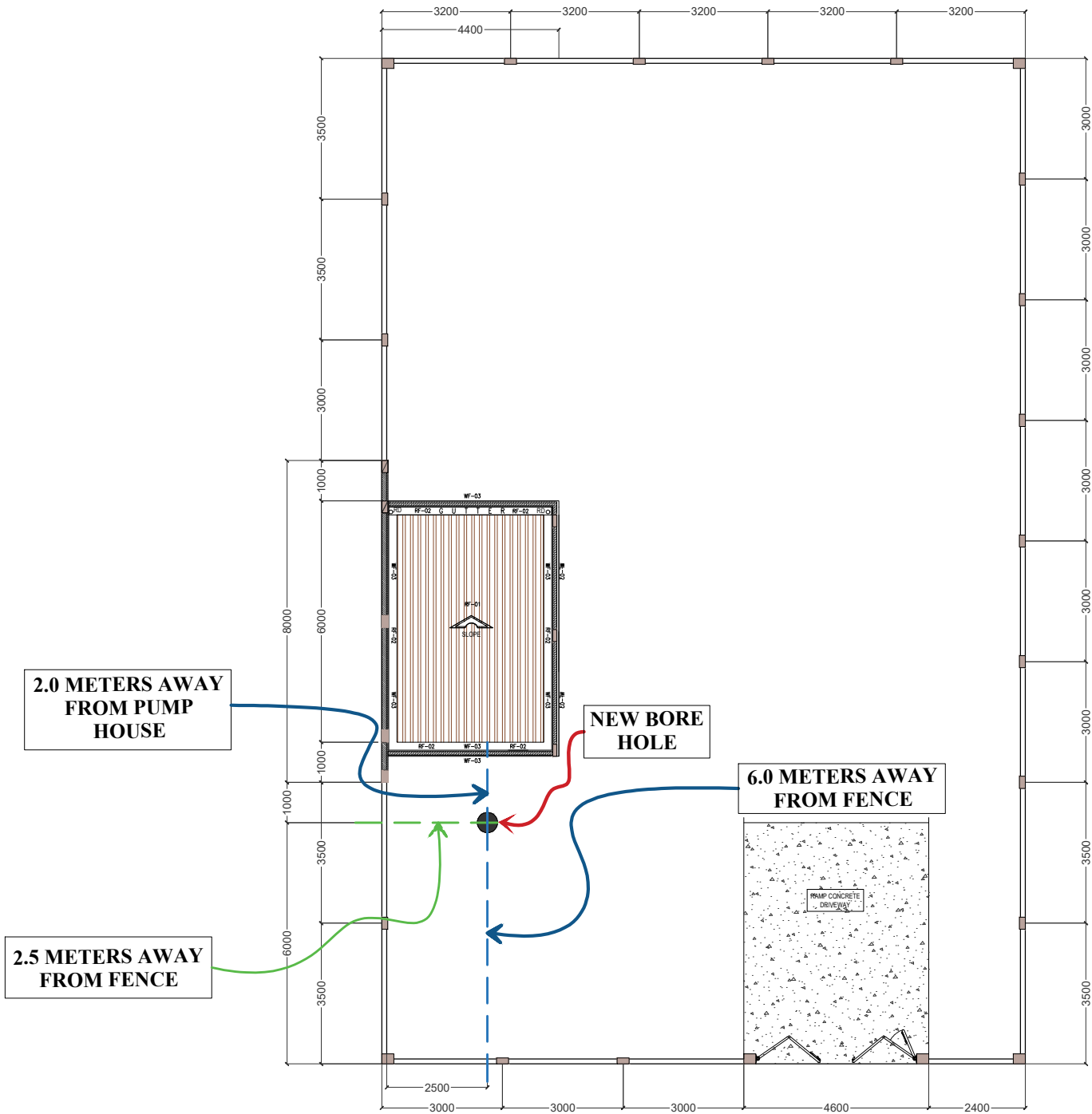


CSFWD TYPICAL WELL DESIGN

NOT TO SCALE



THIS SITE  
P.S ST. FRANCIS



## 1 LOCATION MAP

SCALE: NTS

## 2 SOURCE DEVELOPMENT

SCALE: 1:150



B. MENDOZA ST., STO. ROSARIO, CITY OF SANFERNANDO, PAMPANGA

ENGINEER:

**JOSE S. GALICIA JR, RME**

PRC NO: PTR NO: DATE: CITY OF SAN FERNANDO, PAMPANGA

POSITION: SENIOR PROJECT PLANNING OFFICER

DIVISION: PLANNING & DEVELOPMENT

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R.A. 9266, ART IV SEC 33.

PROJECT NAME:

**PROPOSED NEW SOURCE DEVELOPMENT AT ST. FRANCIS VILLAGE**

LOCATION:

ST.FRANCIS VILLAGE PHASE 3, 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:

**LOCATION MAP  
SOURCE DEVELOPMENT**

CAD BY:

DESIGNED BY:

CHECKED BY:

DATE:

SHEET NO.

**M-01**