

PROJECT REQUIREMENTS

FOR THE PROJECT - CONSTRUCTION OF RAINWATER COLLECTION SYSTEM

*Of the Philippine Science High School Central Mindanao Campus (PSHS-CMC)
Located at Nangka, Balo-i, Lanao de Norte*

1. BACKGROUND

PSHS-CMC at present has three academic buildings (one still under construction), three dormitories (one still under construction). The campus water needs is sourced from a deep well. The bulk of water consumption goes to its toilets. These buildings have roof gutters, but the water is only channeled into the drainage canal. In order to make use of this rain water, hence this project.

2. PROJECT DESCRIPTION AND LOCATION

The existing buildings in the campus have roof gutters where rain water is channeled thru downspouts and into the drainage canal.

In order to utilize the rain water for useful application, concrete water tanks with ample capacities has to be constructed. This project proposes constructing five (5) reinforced concrete ground water tanks at strategic locations to act a reservoir to impound the rain water.

The said rain water will then be utilized for toilet flushing, campus maintenance and irrigation purpose.

The project approved budget for construction is **Three Million Eight Hundred Fourteen Thousand Nine Hundred Eighty Four & 32/100 Pesos** (Php 3,814,984.32) inclusive of taxes.

The proposed project is located in the Philippine Science High School Central Mindanao Campus, Nangka, Balo-i, Lanao de Norte.

3. SELECTION OF CONTRACTOR

- 3.1 Bidding shall be conducted by the Bids and Awards Committee (BAC) constituted to conduct the procurement of the project.
- 3.2 The CONTRACTOR shall be PCAB accredited.

4. SCOPE OF WORK

4.1 Pre-Construction Phase

- 4.1.1 Preparation of the PERT-CPM/ Gantt chart of the construction phase.
- 4.1.2 Provide all other necessary documents that shall be required by PSHS-CMC

4.2 Construction Phase

- 4.2.1 Implement all works as indicated in the approved construction drawings and specifications.
- 4.2.2 Construction of five (5) reinforced concrete water tank as per plan located in various locations within the campus.
- 4.2.3 Repair and remodel the existing building Downspouts to be able to collect rain water and channel it into catch basins and to the concrete ground water tank.
- 4.2.4 Application of waterproofing for the said ground water tanks and painting the interior with food grade paint.
- 4.2.5 Supply and Installation of Stainless Steel Catch Basins and or Plastic Drums (200-lts).
- 4.2.6 Supply and install water booster pump (1-hp) with pressure tank (25-gal.) and its accessories. Including riser pipe 1" diameter and foot valve.
- 4.2.7 Supply and install piping system from the ground water tank booster pump to the building existing piping system (to be verified at site).
- 4.2.8 Supply and install PE pipe, 2" dia. and necessary fittings from deep well to ground water tank # 3 (at dorm 3).
- 4.2.9 Supply and install PE pipe, 2" dia. and necessary fittings from deep well to ground water tank #2 (at ACA3).
- 4.2.10 Supply and Install First Flush Diverter (by Emerald Vinyl Corp.) or approved equal.
- 4.2.11 Perform leak test (hydro testing).
- 4.2.12 Rectification of punch-listing works to be inspected and issued by PSHS-CMC and/or by the Consultant.
- 4.2.13 Provide all other necessary documents that shall be required by PSHS-CMC.

4.3 Post-Construction Phase

4.3.1 Preparation of as-built plans where necessary.

5. MINIMUM REQUIREMENTS

5.1 Personnel

- 5.1.1 Civil Engineer- Licensed with at least three (3) years experience in building construction works.
- 5.1.2 Electrical Engineer - Licensed Electrical Engineer with at least three (3) years experience in building electrical works.
- 5.1.3 Safety Officer – Should be a Construction Occupational Safety and Health (COSH) or BOSH Certified.

5.2 Minimum Equipment

- 5.2.1 Backhoe
- 5.2.2 Dump Truck, 1-unit
- 5.2.3 Concrete Mixer , 1-bagger
- 5.2.4 Concrete Vibrator

6. PROJECT TIME SCHEDULE

The CONTRACTOR shall complete the project within **one hundred fifty (150) calendar days** from signing of the Contract.

7. PSHS-CMC GENERAL RESPONSIBILITY

- 7.1 Coordinate with the CONTRACTOR and the Designer pertaining to issues during the construction.
- 7.2 Conducts regular coordination meetings between the CONTRACTOR and the Designer.

8. CONTRACTORS GENERAL RESPONSIBILITY

- 8.1 The CONTRACTOR shall certify that he has, at his own expense, inspected and examined the proposed project site, its surroundings and existing infrastructure and facilities related to the execution of the work and has obtained all the of information that are considered necessary for the proper execution of the work.

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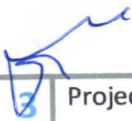
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8.2 The CONTRACTOR shall be PCAB accredited and shall have a Construction Safety and Health Program approved by DOLE and designed specifically for this project.

8.3 The CONTRACTOR will be held accountable for accidents that might occur during the execution of the project. The CONTRACTOR is required to install warning signs and barriers for the safety of the general public and the avoidance of any accidents and provide appropriate personal protective equipment for their construction personnel.

9. SUBMITTALS DURING THE PROJECT

9.1 Project detailed schedule in PERT-CPM and or Gantt Chart format.

9.2 Provide Project Billboard per COA requirement.

9.3 Test Results.

9.4 All other necessary documents to be required by PSHS-CMC.

10. MODE OF PAYMENT

10.1 PSHS-CMC shall pay the CONTRACTOR progress payments based on billings for actual works accomplished, as certified by PSHS-CMC and the Designer. In no case shall progress billing be made more than once every thirty (30) calendar days. Materials or equipment delivered on the site but not completely installed in place or used in the project shall not be included for payment.

10.2 All progress payment shall be subject to retention of ten percent (10%) based on the amount due.

10.3 The CONTRACTOR may request in writing which must be submitted to form part of the Contract Documents, for an advanced payment equivalent to fifteen percent (15%) of the total Contract Price. The advance payment shall be made once the CONTRACTOR issues its irrevocable standby letter of credit from a reputable bank acceptable to PSHS-CMC, or GSIS Surety Bond of equivalent value, within fifteen (15) days from the signing of the Contract Agreement to cover said advanced payment.

10.4 First Payment/Billing shall have an accomplishment of at least 20%.

10.5 The following documents must be submitted to PSHS-CMC before processing of payments to the CONTRACTOR can be made:

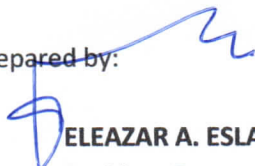
10.5.1 Progress Billing

10.5.2 Request for Payment by the Contractor.

10.5.3 Pictures/photographs of original site conditions (for First Billing only)

10.5.4 Pictures/photographs of work accomplished

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