



TERMS OF REFERENCE

PROJECT NAME: Construction of Perimeter Fence at Abucay Campus
LOCATION: Bataan Peninsula State University, Abucay Campus, Abucay Bataan

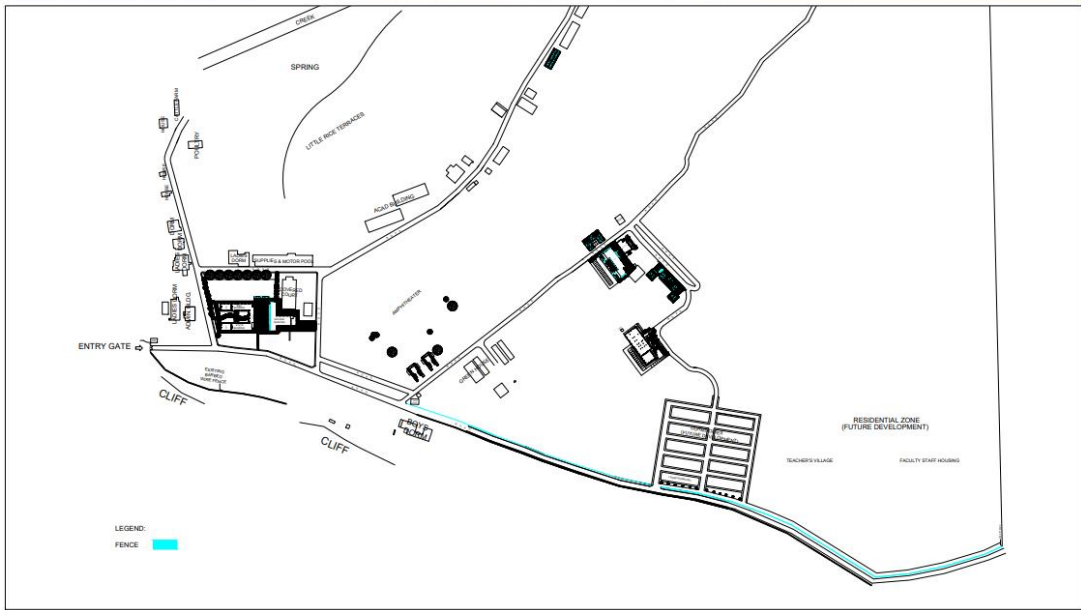
SECTION 1: THE PROJECT

I. PROJECT DESCRIPTION:

PROJECT NAME:	Construction of Perimeter Fence at BPSU Abucay Campus
LOCATION:	Bataan Peninsula State University, Abucay Campus
APPROVED BUDGET FOR CONTRACT (ABC):	Php 3,400,000.00
TOTAL LINEAR METER:	750.00 METERS
PROJECT DURATION:	150 Calendar Days

SCOPE OF WORK:

1. Construction of Perimeter fence from Dormitory to Settlement (Material and Labor works)



** For reference only of the location.
Conduct site visit for accurate location and length.



TERMS OF REFERENCE

- a. Earthworks
- b. Reinforced Concreting and Masonry works of footing and pedestal
- c. Fencing works using:
 - i. 2" dia x 6m B.I. Pipe for main frame
 - ii. Flat bar 20mm x 2mm thk. X 6m
 - iii. 6mm 4" x 4" x 6ft. x 20ft wire mesh
 - iv. Barb wire
- d. Painting Works

II. OBJECTIVES:

1. To provide a background information regarding the preparation and submission of the proposed perimeter fence.
2. To establish a gender-neutral facilities
3. To create a Safe and Secured campus from outsiders.

- END OF SECTION -

SECTION 2: TECHNICAL SPECIFICATIONS

DIVISION 01: GENERAL REQUIREMENTS

1. The work covered under this Contract consists of the furnishing all materials, labor, equipment, transportation, incidentals, facilities, and superintendence necessary to complete the project.
2. The Contractor is expected and **required** to attend the important phases of the bidding process of the said project. All concerns and questions shall be discussed on the Pre-Bid Phase.
3. The Contractor shall be responsible for carefully examining, comparing and verifying the data furnished by the Plans and specifications, the Contractor shall submit the matter to the Architect or his authorized representative for the proper explanation or necessary correction, before any adjustment shall be made. Any adjustment by the Contractor without such determination shall be at his risk and expense.
4. Ommited or wrongly described details of work, which are manifestly necessary to carry out the true intent of the drawings and specifications, shall be performed as if fully and correctly set forth and described in the drawings and specifications.
5. The procuring entity may, from time to time, make changes in the specifications and construction drawings. However, if the cost to the Contractor shall be materially increased by such change, the Procuring Entity shall pay the Contractor for the reasonable cost in accordance with the changes.
6. The contractor shall comply with the laws, City or Municipal Ordinances and all government specifications and regulations in so far as they are binding upon or affecting the portion the work hereto. The Contractor or those engaged thereon shall obtain all necessary licenses and permits and pay all taxes or fees, which may due to the local and/or National



TERMS OF REFERENCE

Government in connection with the prosecution of the work. He shall also be responsible for all damages to persons or property that may occur.

7. Unless otherwise specified, all materials shall be new and free from defects and imperfection. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall be performed in the best and acceptable manner in strict accordance with the requirements of the Plans and Specifications. Preference will be given to articles or materials that are locally manufactured, conditions of quality and price being equal.
8. When called for by the Architect, the Contractor shall furnish, for approval, full information and satisfactory evidence as to the kind and quality of materials or articles he will incorporate in the work. The contractor shall furnish, for Architect's approval, all samples when so directed.
9. The work shall be in accordance with approved samples. Materials and articles installed or used without such approval shall be at the risk of subsequent rejection. Any failure on the part of the Contractor to conform use materials that are not specified herein shall be under subsequent rejection, unless subject for approval.
10. Any alteration or revision of material usage without approval from the Architect shall make the Contractor responsible and liable in terms of guarantee, workmanship and defects.
11. Workmanship shall be in accordance with the best standard practices and all operations required under any and all parts of the Specification shall be undertaken in a neat, workman-like manner. Only skilled personnel with sufficient experience in similar operations shall be allowed to undertake the same.
12. Any alteration or revision on the execution of drawings without approval from the Architect shall be under subsequent rejection and shall make the Contractor responsible and liable for any workmanship and execution defects.
13. Defective workmanship shall be remedied by the Contractor, at his expense. He shall not be entitled to any payment hereunder until defective workmanship has been remedied.
14. The Contractor shall provide and maintain adequate weather-tight facilities with water, light, and toilet facilities. He shall keep such places clean and free from flies. He shall remove all connections and appliances connected there with prior to the completion of the Contract and leave the premises perfectly clean.
15. The Contractor shall furnish all temporary water, lights and power and shall pay all expenses in connection therewith. Furthermore, the Contractor shall provide and pay for all water expenses for building purposes that are required by all trades.
16. The Contractor shall put up safety measures and continuously maintain adequate protection of all his work from damage and shall protect the Procuring Entity's property, as well as all materials furnished and delivered to him by the Entity. He shall make good any such damage, injury or loss, except such as may be caused by agents or employees of the Procuring Entity, or due to causes considered as an Act of God.
17. The Contractor shall enclose the site he possessed by a security fence with gate. See-through security fence shall not be allowed.
18. With respect to the construction of the buildings and other structures, the design and specifications shall conform to the standards set by:
 - a. Department of Public Works and Highways (DPWH)



TERMS OF REFERENCE

- b. National Building Code of the Philippines (NBCP) National Structural Code of the Philippines, 2010
- c. Environmental Impact Statement as defined by the DENR other Engineering Standards.

DIVISION 02: SITE CONSTRUCTION

SEC. 02100 SITE PREPARATION:

SCOPE

Furnish equipment and perform labor required to complete demolition of the existing structures, removal of salvaged materials, and disposal of resulting trash, waste, and other vegetation. See drawings for area coverage of work involved.

EXAMINATION OF SITE

Visit the site of the work and examine the premises to fully understand all existing conditions relative to the work. No increase in cost or extension of performance time will be considered from failure to verify and know actual site conditions.

PERMITS

Secure and pay for all necessary permits needed for the work.

PROTECTION

Protect adjacent properties, persons, shrubs, trees, lawns, structures, and utilities against harm or damage.

CLEARING AND GRUBBING

1. Uproot trees or cut down as shown in the plans or as directed by the Architect.
2. Protect trees indicated in the plans as "trees to be preserved".
3. Cut down trees in a manner to avoid damage to trees to be preserved. Prevent injury to structures or minimize danger to traffic.
4. Remove trees and roots and holes left behind shall be filled with suitable material and compacted in accordance with Section 02200: EARTHWORK.
5. Grub up or clear undergrowth, bushes, vegetation rubbish and all objectionable materials and dispose in accordance with item 2.01 of the Section.

REPAIRS

Repair damage done to property of any person or persons on or of the premises, by reason of the required work for Demolition. Clearing and Grubbing.

SEC. 02200 EARTHWORK:

SCOPE

- a.) Furnish material and equipment and perform labor required to complete.
 - Stripping
 - Site Grading
 - Trenching
 - Back filling
 - Compaction
 - De-watering
- b.) See drawings for location and extent of work required.

VERIFICATION OF EXISTING CONDITIONS

- a.) Verify and examine the site of work to familiarize with the character of materials to be encountered and all other existing conditions affecting the work.



TERMS OF REFERENCE

PROTECTION

- a.) Provide adequate protection measures to protect materials, men and adjoining property.
- b.) Provide shoring, sheeting and bracing to prevent caving, erosions, or gullyng of sides of excavation.
- c.) Provide for surface drainage during the period of construction in such manner as to avoid creating a nuisance to adjacent areas. Keep all excavation free of water at all times.

EXCAVATION

- a.) Excavate to the dimensions and elevations indicated on the drawings. Carry excavation to depths directed by the Architect. Should unsuitable bearing be encountered at elevations indicated, contract price shall be adjusted according to the unit price agreed upon by the Owner and the Contractor.
- b.) Excavation carried to a greater depth or size indicated or required through error, shall be corrected by filling such additional depth or size with class “D” concrete at Contractor’s expense.
- c.) Bottoms of excavations shall be level, free from loose material, and brought to indicated or required levels in undisturbed earth or in compacted fill.
- d.) Excavate with proper allowance made for floor slabs, from erection, shoring, drain tile, waterproofing, masonry and adequate space for inspection of foundations.

DIVISION 03 – MATERIAL TECHNICAL SPECIFICATIONS

I. Concreting Works – Use Portland Cement

II. Reinforcement – Use 10mm rebar grade 33

Use 12 mm rebar grade 40

III. Fence - Use 2’ dia x 6m B.I. Pipe for main frame

Use Flat bar 20mm x 2mm thk. X 6m

Use 6mm 4” x 4” x 6ft. x 20ft wire mesh

IV. Painting Work - Use Epoxy Primer for all metal works and QDE for final coating

SECTION 3: PROJECT COST ESTIMATES

The bidders shall submit the quantities and cost of the different types of works to be carried out in accordance with DPWH Department Order No. 72 series of 2012 dated October 5, 2012. In particular, the quantities and cost of each work item shall be calculated and a bill of quantities shall be prepared. The bidders shall draw up a unit price analysis for each of the main pay work items.

The unit price of each of the main work pay items shall include:

A. Cost of the Preliminary and Detailed Architectural and Engineering Design – Should be in accordance with NEDA guidelines.

B. Construction Cost of the Project;

1. The Direct Cost are the following:

a. Cost of Materials to be used in doing the work item called for, which shall include the following:

a.1. Cost of source, including processing, crushing, stockpiling, loading, local taxes, construction and/or maintenance of haul roads, etc.

a.2. Expenses for hauling to project site.



TERMS OF REFERENCE

- a.3. Handling expenses
 - a.4. Storage
 - a.5. Allowance for waste and/or losses, not to exceed 5% of materials requirement.
 - b. Cost of Labor:
 - b.1. Salaries and wages as authorized by the Department of Labor and Employment
 - c. Equipment Expenses:
 - c.1. Rental of equipment which shall be based on the prevailing "Associated Construction Equipment Lessors, Inc." (ACEL) rental rates approved for use by the DPWH (Presently it is the 2009 ACEL Rates). Rental rates of equipment not indicated in the ACEL booklet shall be taken from the rental rates prepared by the DPWH Bureau of Equipment. For simplicity in computation, the operated rental rates are preferred over the bare rental rates as the former includes operator's wages, fringe benefits, fuel, oil, lubricants and equipment maintenance. The make, model and capacity of the equipment should be indicated in the detailed unit cost analysis.
 - c.2. Mobilization and demobilization, shall be treated as a separate pay item. It shall be computed based on the equipment requirements of the project stipulated in the proposal and contract booklet. In no case shall mobilization and demobilization exceed 1% of the Estimated Direct Cost (EDC) of the civil works items.
2. The Indirect Cost shall consist of the following:
 - a. Overhead Expenses - ranges from 5 - 8% of the EDC, which includes the following:
 - a.1. Engineering and Administrative Supervision.
 - a.2. Transportation allowances.
 - a.3. Office Expenses, e.g., for office equipment and supplies, power and water consumption, communication and maintenance.
 - a.4. Premium on Contractor's All Risk Insurance (CARI).
 - a.5. Financing Cost.
 - Premium on Bid Security
 - Premium on Performance Security
 - Premium on Surety for Advance Payment
 - Premium on Warranty Bond (one year)
 - b. Contingencies - ranges from 0.5 - 3% of the EDC. These include expenses for meetings, coordination with other stakeholders, billboards (excluding Project Billboard which is a pay item under the General requirements), stages during ground breaking & inauguration ceremonies and other unforeseen events
 - c. Miscellaneous Expenses - ranges from 0.5 - 1% of the EDC. These include laboratory tests for quality control and plan preparation.
 - d. Contractor's Profit Margin – shall be 8% of EDC: for projects above Php5 Million and 10%



TERMS OF REFERENCE

for projects Php5Million and below

- e. VAT Component - shall be 7% of the sum of the EDC, OCM and Profit.
The following items shall not be subjected to OCM and Profit mark-up:
 - e.1. Mobilization and demobilization
 - e.2. Provision of Service Vehicle
- f. The following non-civil works items shall not be subjected to OCM mark-up:
 - f.1. Field/Laboratory Office & Living Quarters (Rental Basis)
 - f.2. Furnishing, Laboratory Equipment, Survey Equipment and Consumables
 - f.3. Assistance to the Engineers
 - f.4. Photographs B.7.5 Health and Safety B.7.6 Traffic Management
 - f.5. Environmental Compliance
 - f.6. Communication Equipment, etc.

SECTION 5: CONSTRUCTION PHASE CONSIDERATIONS

1. Permits and Clearance

The bidders shall defray and all expenses necessary and incidental for the Project be able to secure the Environmental Clearance Certificate (ECC), including the corresponding Tree Cutting Permit (if any tree needs to be cut from the concerned government agencies, if necessary). The contractor shall, upon authorization of the Municipal Government, make representations with the government agencies concerned to expedite the release of the same. Obtain and pay the corresponding fees for all necessary approvals, permits and certificates such as the following:

- 1. Fencing Permit

2. Temporary Structures & Facilities

The contractor shall provide and maintain the following:

- 1. Temporary office and/or quarters for the contractor's project team personnel with water, light, telephone and toilet facilities.
- 2. Temporary bunkhouse/quarters for the contractor's workforce complete with toilet and bath facilities.

3. Mobilization

The contractor shall mobilize all the required project team personnel, equipment, tools and manpower with the required skills and insufficient number as may be necessary for his efficient undertaking of the project.

4. Construction Proper

The contractor shall prosecute all the works under the contract in strict accord with standard engineering methodology and procedures and shall be responsible for maintaining cleanliness and orderliness in the project area throughout the duration of the contract. The Contractor shall deploy qualified workers with necessary certification.



TERMS OF REFERENCE

5. Electrification

The contractor shall pay to the local power utility the cost of providing the additional electrical distribution facilities for the project.

6. Material Testing

All material testing shall be conducted by the accredited testing laboratories.

7. Subcontracts

Subcontracting is not allowed.

8. Key Personnel

The key personnel must meet the required minimum years of experience set below:

Key Personnel	General Experience	Relevant Experience
1 – Project Engineer	5 years	5 years
1- Safety Officer 3	Completed 88 hours	n/a
1 – Foreman	10 years	5 years
5 – Skilled	5 years	3 years
8 – Helper	1 year	1 year

9. Equipment

The minimum major equipment requirements are the following:

Equipment	Capacity	Number of Units
Bar Cutter	-	1
Welding Machine	-	1
Concrete Vibrator	-	1

SECTION 6: SUBMITTALS

I. BIDDING REQUIREMENTS:

A. Documents Comprising the Bid: Eligibility and Technical Components

4 Copies (1 original copy and 3 triplicate copies) of bid documents

- a. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- b. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder’s affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.
- c. A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.
- d. A List of Contractor’s key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.



TERMS OF REFERENCE

A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

B. Documents Comprising the Bid: Financial Component

4 Copies (1 original copy and 3 triplicate copies) of bid documents

- a. The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- b. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- c. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

Prepared by:


Ar. Roxette S. Umerez, uap
BPSU, TWG Head for Infrastructure

Noted by:


Dr. Alfredo D. Valentos, PME
PPES Director

Recommending Approval by:

(Original copy signed)
Dr. Edmundo C. Tungol
Vice President, Admin and Finance

Approved by:

(Original copy signed)
Dr. Gregorio J. Rodis
University President