Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
**CAGAYAN 1st DISTRICT ENGINEERING OFFICE**
**REGIONAL OFFICE II**
Aparri, Cagayan

BAGONG PILIPINAS

# REQUEST FOR EXPRESSION OF INTEREST (REI)

## 25CSBB02: CONSULTANCY SERVICES FOR SUBSURFACE INVESTIGATION OF FY 2025 PROJECTS CLUSTER A

1. The **Department of Public Works and Highways (DPWH) Cagayan First District Engineering Office, Aparri, Cagayan**, through **PDE-GAA FY 2025** intends to apply the sum of **ONE MILLION ONE HUNDRED THOUSAND PESOS (Php 1,100,000.00) inclusive of 5% contingency** being the Approved Budget for the Contract (ABC) to payments under the contract for **25CSBB02: CONSULTANCY SERVICES FOR SUBSURFACE INVESTIGATION OF FY 2025 PROJECTS CLUSTER A**

| Project Name/Location | Depth of Each Borehole (m) | No. of Boreholes |
|---|---|---|
| Flood Control | | |
| 1) Construction of River Control, Brgy. Casitan, Gonzaga, Cagayan | 20 | 2 |
| 2) Construction of Flood Control Structures along Baua River, Baua, Gonzaga, Cagayan Phase 2 | 20 | 2 |
| Buildings | | |
| 1) Construction of Multi-Purpose Building, Brgy. Poblacion, Baggao, Cagayan | 10 | 2 |
| 2) Construction of Multi-Purpose Building, Brgy. Ballang, Buguey, Cagayan | 10 | 2 |
| 3) Construction of Multi-Purpose Building, Brgy. Asinga Via, Baggao, Cagayan | 10 | 2 |
| 4) Construction of Multi-Purpose Building, San Lorenzo Lal-lo, Cagayan | 10 | 2 |
| 5) Construction of Multi-Purpose Building Brgy. Naguilian, Lal-lo, Cagayan | 10 | 2 |
| 6) Construction of Multi-Purpose Building, Brgy. Baculod, Alcala, Cagayan | 10 | 2 |
| | **Total** | 16 |

Bids received in excess of the ABC shall be automatically rejected at the opening of the Financial Proposals.

2. The **DPWH Cagayan First District Engineering Office** now calls for the submission of eligibility documents for:

**Project:** **CONSULTANCY SERVICES FOR SUBSURFACE INVESTIGATION OF FY 2025 PROJECTS CLUSTER A**
**Location:** **GONZAGA, BAGGAO, LAL-LO, ALCALA, CAGAYAN**

**Objectives:**

- To obtain information relative to the distribution and properties of soils, groundwater and surface drainage conditions and other pertinent data necessary for a rational and economic design of any infrastructure project
- To determine the arrangement of soil strata or soil profile and engineering properties of the underlying soils, establish its compressibility strength and other characteristics, as well as the soil bearing capacities
- The result of the geotechnical investigation is among the basic data input/ requirements in the detailed engineering design of infrastructure projects in order that a safe and economical foundation and slope protection works may be designed

NOTE: refer to TOR

3. Prospective bidders must submit their Eligibility and Shortlisting Documents not later than **10:00 AM** on **April 16, 2025,** at **Bids and Awards Committee Office, New Conference Room, 2nd Flr. Bldg., DPWH Cagayan First District Engineering Office, Aparri, Cagayan**

4. The Terms of Reference (TOR), Request for Expression of Interest (REI) and the Draft Bidding Documents containing the Eligibility, Technical, Financial Bid Forms and Templates are now available at DPWH and PhilGEPS websites until the deadline of submission and receipt of bids, the above-mentioned documents can be obtained/ downloaded free of charge from these websites.

5. GPPB resolution No. 15- 2021 states, "Lifting the Suspension on the Implementation of the Mandatory Submission of PhilGEPS Certificate of Platinum Registration and Membership in Competitive Bidding and Limited Source Bidding; Amending Sections 8.5.2, 23.1 (a)(ii), 23.3, 24.1 (a)(ii), 24.4.3, 34.3 and 54.6 of the 2016 Revised IRR of RA No. 9184, Items IV (G)(1) and V (D)(1)(b) as well as Appendix "A" of Annex "H" thereof, Items 4 and 6 of the Guidelines for the use of the Government of the Philippines – Official Merchants Registry, and Item 1 of Section VIII and IX of the 6th Edition of the Philippine Bidding Documents for Goods and Infrastructure Projects", dated October 14, 2021. In lieu of the above, prospective bidders shall submit in their bid the **Updated PhilGEPS Certificate of Platinum Registration and Membership** in accordance with Sections 23.3, 24.4.3 and 54 of Republic Act 9184 (RA9184).

6. The BAC shall draw up the short list of Consulting Firms from those who have submitted (Eligibility Documents/Expression of Interest) and have been determined as eligible in accordance with the provisions of Republic Act 9184 (RA 9184), otherwise known as the "Government Procurement Reform Act", and its 2016 Revised Implementing Rules and Regulations (IRR).

The short list shall consist a maximum of **Five (5)** prospective bidders/consultants who will be entitled to submit bids.

The criteria and rating system for short listing as per D.O. 143 Series of 2022, are:

| | |
|---|---|
| Experience of the Firm | 60 points |
| Availability of Required Personnel of the Firm | 10 points |
| Workload | 30 points |
| **Total** | **100 points** |

The Passing score is **80 Points.**

7. Prospective Bidders must submit a copy a notified Contract Agreement and Certificate of Employment of all the staff (key and non- key personnel) as an attachment to the *Statement of the Consultant Specifying its Nationality and Profession* along with their respective Curriculum Vitae (CV).

8. Bidding will be conducted through open competitive bidding procedures using non-discretionary "pass/fail" criterion as specified in the 2016 IRR of RA 9184.

   Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines.

9. The procurement and employment of Corporation(s) as consultant(s) in this project is **ALLOWED**.

10. The Procuring Entity shall evaluate bids using the ***Quality Cost Based Evaluation/Selection (QCBE/QCBS)*** procedure. The minimum passing score for the evaluation of the technical proposal is Eighty Points (80.00). Only the financial proposal of the bidder with the Highest Rated Bid (HRB) shall be opened and evaluated.

11. The contract duration is **Thirty (30)** calendar days.

12. Bidders are prohibited from making or accepting any communication with Members of the BAC, its staff and personnel, Secretariat, Technical Working Group (TWG) and/or observers, regarding matters connected to their bids from submission and receipt of bids until approval by the Head of the Procuring Entity (HOPE) of the ranking bidders per Section 33.1 of 2016 Revised IRR of R.A. 9184. However, the BAC, through its Secretariat, may ask in writing the bidder for a clarification of its bid. All responses to request for clarification shall be in writing.

13. The Department of Public Works and Highways – Cagayan First District Engineering Office reserves the right to reject any and all bids, annul the bidding process, or not award the contract at any time prior to contract award, without thereby incurring any liability to the affected bidder or bidders.

14. For further information, please refer to:

**BERNADETTE A. JACINTO**
Head, Procurement Staff/Engineer III
DPWH, Cagayan First District Engineering Office
Aparri, Cagayan
Tel. No.: (078) 888-04-58; Local 27020
Email Address: jacinto.bernadeth@dpwh.gov.ph

APPROVED BY:

**MARIO L. ALLAG**
Officer-In-Charge, Office of the Asst. District Engineer
BAC Chairperson
allag.mario@dpwh.gov.ph

Date of Posting:
DPWH and PhilGEPS websites:
**July 9, 2025 – July 15, 2025**

Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
**CAGAYAN FIRST**
**DISTRICT ENGINEERING OFFICE**
REGIONAL OFFICE II
Aparri, Cagayan

# TERMS OF REFERENCE

## I. PROJECT DESCRIPTION AND PURPOSE

| | |
|---|---|
| **Project Name** | **Consultancy Services for Subsurface Investigation of FY 2025 Projects Cluster A** |
| **Location** | Alcala, Lal-lo, Baggao and Gattaran, Cagayan |
| **Boreholes** | 8 project site **(2 Boreholes each); Borehole depth** (minimum) **: 30.00 m** (Flood Control) **and 15.00 m** (Buildings) |
| **Duration** | 30 C.D. |

## II. SCOPE OF WORK

The Consultant shall provide all the labor, instrument/equipment materials and supplies, vehicles, bunkhouses, etc., necessary to perform satisfactorily the sub-surface exploration herein required, viz:

A. Field Works
B. Laboratory Testing
C. Soil Investigation and Preparation of Report
D. Geotechnical Evaluation Report

The Consultant shall be held solely responsible for the result of this boring/drilling exploration and other activities under This Terms of Reference (TOR).

## III. DETAILED EXPLORATION REQUIREMENTS/SPECIFICATION

### A. FIELD WORKS

#### 1. Borehole Location

The geotechnical investigation shall also include a geotechnical assessment of the site with at least two boreholes at the proposed location of the project.

For Flood Control structures, a minimum of two borings shall be conducted.

For Bridge Structure One in each Abutment.

Additional boreholes shall be drilled when there is a significant difference between adjacent boreholes or in areas where subsurface condition is complex or variable. This shall be made upon the instruction of the geotechnical Engineer.

In case the location of the proposed structure is realigned after boring activities were done along the original alignment, confirmatory boreholes should be conducted, the locations and numbers of which, shall be determined by the Geotechnical Engineer.

#### 2. Borehole Depth

If foundation type has not been specified, boring shall be carried out to a minimum depth of 15.00 m in ordinary soil or to 3 m into sound rock if rock is encountered above the depth. In case bearing layer is not encountered beyond 15.00 m, boring shall be continued until preferred layer is encountered and/or upon the instruction of the Geotechnical Engineer.

Borings are to be conducted at the proposed location, or as close as possible if there are obstructions that cannot be removed. The location coordinates shall be recorded to 0.1m accuracy (x,y,z) by global positioning.

**3. Procedure**

a. Deep drilling with Standard Penetration Test (SPT) shall be conducted at 1.50 meter interval. Minimum depth shall be determined based on confirmation of hard strata or bed rock. Drilling can be stopped after three (3) meters minimum penetration into hard strata or bed rock.

b. The Consultant shall perform analysis and testing on disturbed and undisturbed soil samples. These analyses and testing shall be performed in accordance with AASHTO and ASTM standards.

c. The soil. Samples for foundation design shall be tested for the determination of the main characteristics (grain size distribution and classification, moisture content, Atterberg limits, etc.)

d. Submit design recommendations, foundation condition scheme, bearing capacity and settlement, groundwater table, hydrological influences, excavation stability, seismic design consideration and liquefaction potential.

e. Geological structure, especially active faults might traverse the area, should be delineated and potential mass movement areas should be identified. Analysis for liquefaction potential during earthquake and consolidation due to soft ground should be included.

**4. Handling and Core Samples**

The contractor shall provide all the materials, equipment and labor necessary for preserving samples.

## B. LABORATORY TESTING

The preparation of samples for testing shall be made in accordance with AASHTO. The following tests shall be made on samples obtained from boring and drilling.

**Standard Penetration Test**

The test shall be carried out through ordinary soil encountered to the depths specified above. Standard penetration test shall be performed using 5.08 cm (2.0 inch O.D.) diameter split spoon sampler, driven by a 63.60 kg. (140 lbs.) free falling drop hammer of 76.20 cm (30 inch) at 1.50 meter interval or closer if necessary.

**Grain Size Analysis as per ASTM D422**

The contractor shall conduct this test in accordance with AASHTO D422 to determine the gradational characteristics of the soil in order to come up with soil classification information.

**Determination of Moisture Content as per ASTM D2216**

The method determines the water (moisture) content of soil by weight. Moisture content of soil is the ratio of the mass of pore water in a given soil mass to the mass of the solid material particles, given in percentage.

**Liquid Limit**

Liquid Limit test shall be performed on material passing the 0.425 mm. (No. 40) sieve. AASHTO T 89 & 90 27. There are two methods approved by AASHTO, any of the two methods can be used by the contractor. Blow count must be within 22-28 blows. Liquid Limit is a calculation based on moisture content and number of blows to closure.

**Soil Classification Tests as per ASTM D2487**

This standard classifies soils from any geographic location into categories representing the results of prescribed laboratory test to determine the particle-size characteristics, the liquid limit, and the plasticity index. There should be assigned group name and symbol(s) along with the descriptive information. Practice D2488 can be used to describe a soil to aid in the evaluation of its significant properties for engineering use. Engineering behavior of the soils must be seen.

**Unconfined Compression Test ASTM D2938**

This method determines the mechanical properties of rocks and fine-grained soil. It gives a measure of the undrained strength and the stress-strain characteristics of the rock or soil. UCT is included in the laboratory test program of geotechnical investigation specially when dealing with rocks.

## C. KEY PERSONNEL'S DETAILED TASKS/RESPONSIBILITIES AND QUALIFICATION

| Position | Qualification | Duration |
|---|---|---|
| Geotechnical Engineer | • Must have at least **five (5)** years experience in carrying out sampling and analysis for Geotechnical/Soil Investigation and or Surveys, Test Borings.<br>• Must be a registered Civil Engineer.<br>• Must have a Bachelor's Degree in Civil Engineering. MS or Doctorate degree is an advantage | 1.00 man-months |
| Laboratory Technician | • Must have at least **Three (3)** years experience in carrying out sampling and analysis for Geotechnical/Soil Investigation and or Surveys, Test Borings.<br>• Must be a registered Civil Engineer.<br>• Must have a Bachelor's Degree in Civil Engineering. MS or Doctorate degree is an advantages | 1.00 man-months |

**Detailed Tasks and Responsibilities of Key Personnel**

**A. Geotechnical Engineer/Materials Engineer**

1. Overall guidance, direction, supervision and coordination of members of the Team.
2. Collection and evaluation of geological information on the project sites.
3. Study and determination of items and method of soil investigation and laboratory test.
4. Perform necessary subsoil investigations on representative sections of the road with samples to be taken at suitable intervals.
5. Investigate the physical properties of materials to facilitate the design of structure.

**B. Laboratory Technician**

1. Investigate the physical properties of materials to facilitate the design of structures.
2. Assist the Team Leader in the collection of necessary data and information, in carrying out detailed soil investigations.

## D. REPORTS AND DELIVERABLES

The Consultant shall prepare the following reports and deliverables:

### 1. Inception Report

The consultant is required to submit seven (7) days after commencement of services. It shall outline a detailed work program and briefly describe the methodology and project schedule (GANTT and S-Curve) proposed to meet the terms of reference. The reports shall include the initial findings as well as preliminary layout of the forms to be used for various investigations and calculations. Inception Reports shall be submitted in soft-bound copy title of the report written at the spine.

### 2. Final Report

The Consultant is required to submit Fifteen (15) calendar days from the commencement of work in three (3) bound copies to the DPWH Cagayan First District Engineering Office, Aparri Cagayan upon receipt of the Notice to Proceed. The Final Report Shall not be limited to the following:

a. Field Investigation and Methodology
b. Borehole Drilling and Sampling
c. Laboratory Testing
d. Final Boring Logs (BL)
e. Final Laboratory Tests Results (FLTR)
f. Borehole Location Plan
g. Soil Profile along structures showing boring/drilling logs
h. Soil Liquefaction Investigation Report
i. Soil Bearing Capacity
j. Recommendation if called for such as type of measure/ structure of work

## 3. OTHER DATA TO BE SUBMITTED

### A. Boring Logs

1) Job, boring hole number, date, time, boring/drilling, foreman, supervisor
2) Weather condition
3) Depth of boring at start of day
4) Water level in casing at start of day
5) Method of penetration and flushing system
6) Description of soil strata encountered
7) Depth of soil boundaries
8) Size, type and depth of samples and sample number
9) Type and depth of in-situ tests
10) Standard Penetration Tests Resistance, "N" value

11) Recovery ratios of samples
12) Detailed notes on boring/drilling procedure, casing and resistance to driving, description of water or spoil from boring/drilling tools
13) Depth of boring at end of day
14) Other relevant information such RDQ, percent core recovery, angle of friction etc.

**B. Photographs**

Photographs showing the borehole drilling and sampling at each proposed sites shall be taken by the Contractor and incorporated in the report:

1) Equipment used
2) Core drilling operation
3) Water level measurements
4) Performance of SPT and Shelby Tube sampling
5) All cores in the core boxes, SPT and Shelby tube samples
6) Date photographs was taken

## IV. WORK SCHEDULE

The Consultant's contract period for undertaking the sub-surface exploration works including laboratory tests shall be Thirty (30) Calendar days and the Consultant shall commence work after receipt of Notice to Proceed.

Prepared by:

**MARIANNE-MAY G. ATILANO**
Engineer II
Planning and Design Section

Submitted by:

**NESSEL JAMES B. ABAD**
OIC- Chief, Planning and Design Section

Reviewed (BIDS & AWARDS COMMITTEE):

**CHARLYMORE C. SANA**
Chief, Construction Section
BAC Member

**NESSEL JAMES B. ABAD**
OIC-Chief, Planning & Design Section
BAC Member

**ROGER D. CABACUNGAN**
Chief, Maintenance Section
BAC Member

**FLORFINA P. UPANO**
Chief, Quality Assurance Section
BAC Member

**ROMEO V. VICENTE**
Chief, Administrative Section
BAC Vice Chairman

**MARIO L. ALLAG**
Chief, Construction Section
BAC Chairman

Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
**CAGAYAN 1st DISTRICT ENGINEERING OFFICE**
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Aparri, Cagayan

BAGONG PILIPINAS

# DETAILED CRITERIA AND RATING SYSTEM FOR SHORTLISTING OF ELIGIBLE BIDDERS FOR THE 25CSBB02: CONSULTANCY SERVICES FOR SUBSURFACE INVESTIGATION OF FY 2025 PROJECTS CLUSTER A

| Project Name/Location |
|---|
| Flood Control |
| 1) Construction of River Control, Brgy. Casitan, Gonzaga, Cagayan |
| 2) Construction of Flood Control Structures along Baua River, Baua, Gonzaga, Cagayan Phase 2 |
| Buildings |
| 1) Construction of Multi-Purpose Building, Brgy. Poblacion, Baggao, Cagayan |
| 2) Construction of Multi-Purpose Building, Brgy. Ballang, Buguey, Cagayan |
| 3) Construction of Multi-Purpose Building, Brgy. Asinga Via, Baggao, Cagayan |
| 4) Construction of Multi-Purpose Building, San Lorenzo Lal-lo, Cagayan |
| 5) Construction of Multi-Purpose Building Brgy. Naguilian, Lal-lo, Cagayan |
| 6) Construction of Multi-Purpose Building, Brgy. Baculod, Alcala, Cagayan |

## I. EXPERIENCE OF THE FIRM (60 Points)

**The score for this criterion shall be based on similar work experience on completed consulting assignments, local or overseas. Projects with the biggest consultancy cost shall be considered in the evaluation (maximum of 10 projects)**

| No. of Completed Contracts | Cost of Completed Contract as % of ABC | Rating |
|---|---|---|
| | 50% or more | 4 |
| | 40% to <50% | 3 |
| | 30% to <40% | 2 |
| | <30% | 1 |

$$\text{Score (I)} = \left[0.60 + \frac{4}{30} \text{ x } \left(\frac{TS}{10} - 1\right)\right] \text{ x } 60$$

Where:

**TS** - Total Score, number of similar experience of the firm, or any of its permanent technical personnel of the bidder
- Number of Completed Contract multiplied to equivalent rating

*Note:*

1. *If the bidder or its permanent technical personnel has not completed any similar contract, it shall be disqualified.*

2. *The score for this criterion shall not exceed 60 points.*

3. *In case of association, whether in the form of Joint Venture (JV) or Sub - consulting, all experiences shall be considered.*

4. *The similar completed contract cost must be adjusted using the latest Philippine Statistics Authority Consumer Price Index as follows:*

$$\frac{Contract\ Cost_{YEAR\ OF\ CONTRACT}}{CPI_{YEAR\ OF\ CONTRACT}} = \frac{Contract\ Cost_{CURRENT\ YEAR}}{CPI_{CURRENT\ YEAR}}$$

5. *In the evaluation of the applicable experience of the bidders, the procuring entity shall observe the additional guidelines a ttached in Appendix 1 - Completed Similar Services to be considered and Appendix 2 - Completed Similar Infrastructure Projects to be considered.*

**Table 1. Completed Similar Services and Similar Infrastructure to be Considered in the Shortlisting of Eligible Bidders**

| **Consulting Services to be Procured** | **Completed Similar Consulting Services to be Considered** |
|---|---|
| Soil Investigations | 1. Preliminary Engineering Design (PED)<br>2. Pre-Design Services which include but are not limited to reconnaissance, topographical and other engineering and land surveys, soil investigations, preparation of preliminary architectural/engineering designs, layouts, outline specifications, preliminary cost estimates and specific recommendations prior to actual design [Annex B of 2016 IRR of RA 9184]<br>3. Detailed Engineering Design (DED) |
| **Infrastructure Project** | **Completed Similar Infrastructure to be Considered** |
| River works | 1. Revetment/River Walls;<br>2. Dike, Spur Dike;<br>3. Ground Sill;<br>4. Floodway;<br>5. Dams;<br>6. Dredging |
| Buildings | |

*Note:*

1. *If the bidder or any of its permanent technical employee has no SLCSCSC, the bidder shall be disqualified per Sec. 24.5.1 of the 2016 Revised IRR of R.A. 9184.*

2. *The Value of Cost Factors ($CF_1$ and $CF_2$) shall not exceed 1.*

## II. AVAILABILITY OF REQUIRED PERSONNEL OF THE FIRM (10 Points)

The score in this criterion shall be equivalent to the number of Permanent Technical Personnel of the bidders in comparison to the required Technical Personnel of the Terms of Reference (TOR), using the following criterion:

$$\text{Score II} = [0.60 + PF * 0.40]10$$

Where:

**PF** - Personnel Factor, Ratio of Number of Permanent Technical Personnel to the Number of Required personnel of the TOR

$$- \frac{Np}{NT}$$

**NP** - Number of Permanent Technical Personnel of the bidders

**NT** - Number of required Technical Personnel as indicated in the TOR

*Note:*

1. Permanent Technical personnel refers to the regular employees of the bidders and do not have a predetermined end date of employment.
2. The value of the ratio (NP/NT) shall not exceed one (1). The maximum allowable points for this criterion shall not exceed ten (10) points.
3. In case of JV, the total number of permanent technical personnel shall be the sum of the permanent technical personnel of each firm comprising the JV.

## III. CURRENT WORKLOAD RELATIVE TO CAPACITY (30 Points)

### A. ON-GOING PROJECTS (20 Points)

The score in this criterion shall be based on the on-going workload of the bidder. In case of associate, whether in the form of Joint Venture (JV) or Sub-consulting, the total workload shall be the sum of the present workload of each firm comprising the associate:

| No. of On-Going Contracts, Government and Private | Rating |
|---|---|
| 0 | 100% |
| 1-5 | 90% |
| 6-10 | 70% |
| >10 | 50% |

***Score III = (%Rating) 20***

*Note: Non - disclosure of on - going contracts shall be sanctioned in accordance to Section 69 of the Revised Implementing Rules and Regulations of Republic Act 9184.*

### B. FINANCIAL CAPACITY (10 Points)

The financial capacity of the firm shall be rated as follows:

$$\text{Financial Capacity} = \left[\frac{a}{b}\right]$$

Where:

**a** - Average of Total Net Worth within two (2) years
**b** - Cost of the Approved Budget for the Contract

**Score III = (Financial Capacity) x 10**

Note:

1. The value of the ratio of (a/b) shall not exceed to one (1).
2. For partners of Joint Venture Agreement (JVA), the Net Worth shall be equivalent to the Total Net Worth of both partners.

**TOTAL SCORE = Score I + Score II + Score III**

The Minimum Passing Score is **80 Points.**

Prepared by:

**BERNADETTE A. JACINTO**
Head, Procurement Staff

Approved by:

**MARIO L. ALLAG**
Officer-In-Charge, Office of the Asst. District Engineer
BAC, Chairperson

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
**CAGAYAN FIRST DISTRICT ENGINEERING OFFICE**
Aparri, Cagayan

PDE Fund CS 258302

# APPROVED BUDGET FOR THE CONTRACT

**Consultancy Services for Subsurface Investigation of FY 2025 Projects Cluster A**

## SUMMARY OF COST

| | ITEM | COST (Php) |
|---|---|---|
| I | **Remuneration Costs** | 84,000.00 |
| II | **Reimbursable Items** | 20,760.00 |
| III | **Miscellaneous Expenses** | 933,259.05 |
| IV | **Sub-total** (I + II + III) | 1,038,019.05 |
| V | **VAT** *(12% of Remuneration )* | 10,080.00 |
| VI | **Contingency** *(5% IV)* | 51,900.95 |
| VII | **Grand Total** *(IV+V+VI)* | **1,100,000.00** |

**Prepared by:**

**NESSEL JAMES B. ABAD**
Officer-In-Charge
Office of the Chief, Planning and Design Section

**Recommending Approval:**

**MARIO L. ALLAG**
Officer-In-Charge
Office of the Assistant District Engineer

**Approved:**

**OSCAR G. GUMIRAN, PhD**
District Engineer

## Consultancy Services for Subsurface Investigation of FY 2025 Projects Cluster A

### I. Breakdown of Renumeration Costs

| | Positions | No. of Personnel | Man-months | Billing Rate | Amount |
|---|---|---|---|---|---|
| A. | **Key Staff** | | | | |
| 1 | Geotechnical/Materials Engineer | 1.0 | 1.00 | 48,000.00 | 48,000.00 |
| 2 | Laboratory Technician | 1.0 | 1.00 | 36,000.00 | 36,000.00 |
| | | | | | |
| | **Total I** | | | | **84,000.00** |

### II. Breakdown of Reimbursable Costs

| No. | Description | Unit | Quantity | Unit Cost | Amount |
|---|---|---|---|---|---|
| 1 | Transportation | Veh Days | 4.00 | 990.00 | 3,960.00 |
| 2 | Hole To Transfer Per Move | move | 8.00 | 1,000.00 | 8,000.00 |
| 3 | Ring Bounded reports on A4 Bond Paper with attached Test Reports, Sub-soil Profile and Pictures (With Soft Copy) 3 copies per project | Projects | 8.00 | 1,100.00 | 8,800.00 |
| | **Sub-total II. B** | | | | **20,760.00** |
| | **Total II** | | | | **20,760.00** |

### III. Breakdown of Miscellaneous Expenses

| No. | Description | Unit | Quantity | Unit Cost | Remarks |
|---|---|---|---|---|---|
| | Mobilization/Demobilization | LS | All | | *10,621.85* |
| | | | | | |
| | Drilling Through: **Ordinary Soil** | ln.m | 200.00 | 1,300.00 | *260,000.00* |
| | Drilling Through: **Hard Strata** (Gravel/Rocks, using Diamond Tungsten Bit) | ln.m | 100.00 | 2,600.00 | *260,000.00* |
| | Standard Penetration Test (SPT) | sample | 16.00 | 80.00 | *1,280.00* |
| | Drill Rig/Crew Rig Set- Up | Set | 1 | 3,500.00 | *3,500.00* |
| | Geodetic Survey of Borehole (Elev & Coordinates) | Set | 1 | 2,500.00 | *2,500.00* |
| | Core Box (3m Core Run) | ln.m | 1 | 500.00 | *500.00* |
| | | | | | |
| **Laboratory Test** | | | | | |
| | Soil Classification | Test | 133.32 | 50.00 | *6,666.00* |
| | Combined Sieve and Hydrometer | Test | 133.32 | 700.00 | *93,324.00* |
| | Specific Gravity | Test | 133.32 | 220.00 | *29,330.40* |
| | Natural Moisture Content | Test | 133.32 | 90.00 | *11,998.80* |
| | Grading Analysis | Test | 133.32 | 270.00 | *35,996.40* |
| | Attenberg Limits | Test | 133.32 | 210.00 | *27,997.20* |
| | Unit Weight | Test | 133.32 | 170.00 | *22,664.40* |
| | Consolidation Test | Test | 16.00 | 1,000.00 | *16,000.00* |
| | Triaxial Test | Test | 16.00 | 2,000.00 | *32,000.00* |
| | Core Box | box | 16.00 | 1,000.00 | *16,000.00* |
| | | | | | |
| **Core Samples** | | | | | |
| | Specific Gravity | Sample | 32.00 | 250.00 | *8,000.00* |
| | Natural Moisture Content | Sample | 32.00 | 225.00 | *7,200.00* |
| | Attenbergs Limit | Sample | 32.00 | 250.00 | *8,000.00* |
| | Grading Analysis | Sample | 32.00 | 280.00 | *8,960.00* |
| | Soil Classification | Sample | 32.00 | 90.00 | *2,880.00* |
| | Moisture Density Relation | Sample | 32.00 | 720.00 | *23,040.00* |
| | CBR | Sample | 32.00 | 1,000.00 | *32,000.00* |
| | Unconfined Compression Test | Sample | 32.00 | 400.00 | *12,800.00* |
| | | | | | |
| | **Total III** | | | | ***933,259.05*** |

# Consultancy Services for Subsurface Investigation of FY 2025 Projects Cluster A

| No. | Name Of Project | Location | No. of Borehole | Depth of Borehole (Common Soil) | Depth of Hard Strata | Total depth per Borehole | Common soil | Hard strata | Sample |
|---|---|---|---|---|---|---|---|---|---|
| | Flood Control | | | | | | | | |
| 1 | Construction of River Control, Brgy. Casitan, Gonzaga, Cagayan | Gonzaga, Cagayan | 2 | 20 | 10.00 | *60.00* | 40.00 | 20.00 | 26.67 |
| 2 | Construction of Flood Control Structures along Baua River, Baua, Gonzaga, Cagayan Phase 2 | Gonzaga, Cagayan | 2 | 20 | 10.00 | *60.00* | 40.00 | 20.00 | 26.67 |
| | Buildings | | | | | | | | |
| 1 | Construction of Multi-Purpose Building, Brgy. Poblacion, Baggao, Cagayan | BAGGAO Gonzaga, Cagayan | 2 | 10 | 5.00 | *30.00* | 20.00 | 10.00 | 13.33 |
| 2 | Construction of Multi-Purpose Building, Brgy. Ballang, Buguey, Cagayan | BAGGAO Gonzaga, Cagayan | 2 | 10 | 5.00 | *30.00* | 20.00 | 10.00 | 13.33 |
| 3 | Construction of Multi-Purpose Building, Brgy. Asinga Via, Baggao, Cagayan | Baggao, Cagayan | 2 | 10 | 5.00 | *30.00* | 20.00 | 10.00 | 13.33 |
| 4 | Construction of Multi-Purpose Building, Brgy. San Lorenzo, Lal-lo, Cagayan | Lal-lo, Cagayan | 2 | 10 | 5.00 | *30.00* | 20.00 | 10.00 | 13.33 |
| 5 | Construction of Multi-Purpose Building, Brgy. Naguilian, Lal-lo, Cagayan | Lal-lo, Cagayan | 2 | 10 | 5.00 | *30.00* | 20.00 | 10.00 | 13.33 |
| 6 | Construction of Multi-Purpose Building, Brgy. Baculod, Alcala, Cagayan | Alcala, Cagayan | 2 | 10 | 5.00 | *30.00* | 20.00 | 10.00 | 13.33 |
| | | | **16.00** | | | **300.00** | **200.00** | **100.00** | **133.32** |
| | | **TOTAL** | **16.00** | | | **300.00** | **200.00** | **100.00** | **133.32** |