

no case later than the signing of the contract by both parties, the Consultant shall furnish the performance security in the forms prescribed in the **ITB** Clause 31.2.

- 42.2. The performance security posted in favor of the Procuring Entity shall be forfeited in the event it is established that the Consultant is in default in any of its obligations under the contract.
- 42.3. The performance security shall remain valid until issuance by the Procuring Entity of the Certificate of Final Acceptance.
- 42.4. The performance security may be released by the Procuring Entity and returned to the Consultant after the issuance of the Certificate of Final Acceptance subject to the following conditions:
 - (a) There are no pending claims against the Consultant or the surety company filed by the **PROCURING ENTITY**;
 - (b) The Consultant has no pending claims for labor and materials filed against it; and
 - (c) Other terms specified in the **SCC**.
- 42.5. In case of a reduction of the contract value, the Procuring Entity shall allow a proportional reduction in the original performance security, provided that any such reduction is more than ten percent (10%) and that the aggregate of such reductions is not more than fifty percent (50%) of the original performance security.

43. Standard of Performance

- 43.1. The Consultant shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods.
- 43.2. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Procuring Entity, and shall at all times support and safeguard the Procuring Entity's legitimate interests in any dealings with Sub-Consultants or third parties.
- 43.3. The Consultant shall furnish to the Procuring Entity such information related to the Services as the Procuring Entity may from time to time reasonably request.
- 43.4. The Consultant shall at all times cooperate and coordinate with the Procuring Entity with respect to the carrying out of its obligations under this Contract.

44. Consultant Not to Benefit from Commissions, Discounts, etc.

The remuneration of the Consultant pursuant to GCC Clause 52.2 hereof shall constitute the Consultant's sole remuneration in connection with this Contract or the Services and, subject to GCC Clause 45 hereof, the Consultant shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations hereunder, and the Consultant shall use its best efforts to ensure that any Sub-Consultants, as well as the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.

45. Procurement by the Consultant

If the Consultant, as part of the Services, has the responsibility of advising or procuring goods, works or services, for the Procuring Entity, the Consultant shall comply with any applicable procurement guidelines of the Funding Source, and shall at all times exercise such responsibility in the best interest of the Procuring Entity. Any discounts or advantages obtained by the Consultant in the exercise of such procurement responsibility shall be for the benefit of the Procuring Entity.

46. Specifications and Designs

46.1. The Consultant shall prepare all specifications and designs using the metric system and shall embody the best design criteria applicable to Philippine conditions. The Consultant shall specify standards which are accepted and well-known among industrial nations.

46.2. The Consultant shall ensure that the specifications and designs and all documentation relating to procurement of goods and services for this Contract are prepared on an impartial basis so as to promote national and international competitive bidding.

47. Reports

The Consultant shall submit to the Procuring Entity the reports, deliverables and documents in English, in the form, in the numbers, and within the time periods set forth in Appendix II.

48. Assistance by the Procuring Entity on Government Requirements

48.1. The Procuring Entity may assist the Consultant, Sub-Consultants, and Personnel in the payment of such taxes, duties, fees and other impositions as may be levied under the Applicable Law by providing information on the preparation of necessary documents for payment thereof.

48.2. The Procuring Entity shall use its best efforts to ensure that the Government shall:

- (a) provide the Consultant, Sub-Consultants, and Personnel with work permits and such other documents as shall be necessary to enable the Consultant, Sub-Consultants, or Personnel to perform the Services;
- (b) arrange for the foreign Personnel and, if appropriate, their eligible dependents to be provided promptly with all necessary entry and exit visas, residence permits, and any other documents required for their stay in the Philippines for the duration of the Contract;
- (c) facilitate prompt clearance through customs of any property required for the Services and of the necessary personal effects of the foreign Personnel and their eligible dependents;
- (d) issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services; and
- (e) grant to foreign Consultant, any foreign Sub-Consultant and the Personnel of either of them the privilege, pursuant to the Applicable Law, of bringing into the Government's country reasonable amounts of foreign currency for purposes of the Services or for the personal use of the foreign Personnel and their dependents.

49. Access to Land

The Procuring Entity warrants that the Consultant shall have, free of charge, unimpeded access to all lands in the Philippines in respect of which access is required for the performance of the Services. The Procuring Entity shall be responsible for any damage to such land or any property thereon resulting from such access and shall indemnify the Consultant and each of the Personnel in respect of liability for any such damage, unless such damage is caused by the default or negligence of the Consultant or any Sub-Consultant or the Personnel of either of them.

50. Subcontract

- 50.1. Subcontracting of any portion of the Consulting Services, if allowed in the **BDS**, does not relieve the Consultant of any liability or obligation under this Contract. The Consultant will be responsible for the acts, defaults, and negligence of any sub-consultant, its agents, servants or workmen as fully as if these were the Consultant's own acts, defaults, or negligence, or those of its agents, servants or workmen.
- 50.2. Sub-consultants disclosed and identified during the bidding may be changed during the implementation of this Contract, subject to compliance with the required qualifications and the approval of the Procuring Entity.

51. Accounting, Inspection and Auditing

51.1. The Consultant shall:

- (a) keep accurate and systematic accounts and records in respect of the Services hereunder, in accordance with internationally accepted accounting principles and in such form and detail as shall clearly identify all relevant time changes and costs, and the bases thereof;
- (b) permit the Procuring Entity or its designated representative and or the designated representative of the Funding Source at least once for short-term Contracts, and annually in the case of long-term Contracts, and up to one year from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Procuring Entity; and
- (c) permit the Funding Source to inspect the Consultant's accounts and records relating to the performance of the Consultant and to have them audited by auditors approved by the Funding Source, if so required.

51.2. The basic purpose of this audit is to verify payments under this Contract and, in this process, to also verify representations made by the Consultant in relation to this Contract. The Consultant shall cooperate with and assist the Procuring Entity and its authorized representatives in making such audit. In the event the audit discloses that the Consultant has overcharged the Procuring Entity, the Consultant shall immediately reimburse the Procuring Entity an amount equivalent to the amount overpaid. If overpayment is a result of the Consultant having been engaged in what the Procuring Entity (or, as the case may be, the Funding Source) determines to constitute corrupt, fraudulent, or coercive practices, as defined in GCC Clause 27.1(e) and under the Applicable Law, the Procuring Entity shall, unless the Procuring Entity decides otherwise, terminate this Contract.

51.3. The determination that the Consultant has engaged in corrupt, fraudulent, coercive practices shall result in the Procuring Entity and/or the Funding Source seeking the imposition of the maximum administrative, civil and criminal penalties up to and in including imprisonment.

52. Contract Cost

52.1. Except as may be otherwise agreed under GCC Clause 10, payments under this Contract shall not exceed the ceiling specified in the SCC. The Consultant shall notify the Procuring Entity as soon as cumulative charges incurred for the Services have reached eighty percent (80%) of this ceiling.

- 52.2 Unless otherwise specified in the SCC, the cost of the Services shall be payable in Philippine Pesos and shall be set forth in the Appendix IV attached to this Contract.

53. Remuneration and Reimbursable Expenditures

- 53.1. Payments of Services do not relieve the Consultant of any obligation hereunder.
- 53.2. Remuneration for the Personnel shall be determined on the basis of time actually spent by such Personnel in the performance of the Services including other additional factors indicated in the SCC after the date determined in accordance with GCC Clause 22, or such other date as the Parties shall agree in writing, including time for necessary travel via the most direct route, at the rates referred to, and subject to such additional provisions as are set forth, in the SCC.
- 53.3. Remuneration for periods of less than one month shall be calculated on an hourly basis for time spent in home office (the total of 176 hours per month shall apply) and on a calendar-day basis for time spent away from home office (1 day being equivalent to 1/30th of a month).
- 53.4. Reimbursable expenditures actually and reasonably incurred by the Consultants in the performance of the Services are provided in the SCC.
- 53.5. Billings and payments in respect of the Services shall be made as follows:
- (a) The Procuring Entity shall cause to be paid to the Consultant an advance payment as specified in the SCC, and as otherwise set forth below. The advance payment shall be due after the Consultant provides an irrevocable standby letter of credit in favor of the Procuring Entity issued by an entity acceptable to the Procuring Entity in accordance with the requirements provided in the SCC.
 - (b) As soon as practicable and not later than fifteen (15) days after the end of each calendar month during the period of the Services, the Consultant shall submit to the Procuring Entity, in duplicate, itemized statements, accompanied by copies of receipted invoices, vouchers and other appropriate supporting materials, of the amounts payable pursuant to GCC Clauses 52.1 and 52.2 for such month. Separate monthly statements shall be submitted in respect of amounts payable in foreign currency and in local currency. Each separate monthly statement shall distinguish that portion of the total eligible costs which pertains to remuneration from that portion which pertains to reimbursable expenditures.

- (c) The Procuring Entity shall cause the payment of the Consultant's monthly statements within sixty (60) days after the receipt by the Procuring Entity of such statements with supporting documents. Only such portion of a monthly statement that is not satisfactorily supported may be withheld from payment. Should any discrepancy be found to exist between actual payment and costs authorized to be incurred by the Consultant, the Procuring Entity may add or subtract the difference from any subsequent payments. Interest shall be paid for delayed payments following the rate provided in the SCC.

54. Final Payment

- 54.1. The final payment shall be made only after the final report and a final statement, identified as such, shall have been submitted by the Consultant and approved as satisfactory by the Procuring Entity. The Services shall be deemed completed and finally accepted by the Procuring Entity and the final report and final statement shall be deemed approved by the Procuring Entity as satisfactory ninety (90) calendar days after receipt of the final report and final statement by the Procuring Entity unless the Procuring Entity, within such ninety (90)-day period, gives written notice to the Consultant specifying in detail deficiencies in the Services, the final report or final statement. The Consultant shall thereupon promptly make any necessary corrections within a maximum period of ninety (90) calendar days, and upon completion of such corrections, the foregoing process shall be repeated.
- 54.2. Any amount which the Procuring Entity has paid or caused to be paid in accordance with this clause in excess of the amounts actually payable in accordance with the provisions of this Contract shall be reimbursed by the Consultant to the Procuring Entity within thirty (30) days after receipt by the Consultant of notice thereof. Any such claim by the Procuring Entity for reimbursement must be made within twelve (12) calendar months after receipt by the Procuring Entity of a final report and a final statement approved by the Procuring Entity in accordance with the above.

55. Lump Sum Contracts

- 55.1. For Lump Sum Contracts when applicable, notwithstanding the terms of GCC Clauses 10, 18.1, 31(c), 41.3, 53.2, 53.3, 53.4, 53.5, and 54.1, the provisions contained hereunder shall apply.
- 55.2. Personnel - Any replacement approved by the Procuring Entity in accordance with ITB Clause 27.3. shall be provided by the Consultant at no additional cost.
- 55.3. Staffing Schedule - Should the rate of progress of the Services, or any part hereof, be at any time in the opinion of the Procuring Entity too

slow to ensure that the Services are completed in accordance with the Staffing Schedule, the Procuring Entity shall so notify the Consultant in writing and the Consultant shall at its sole cost and expense, thereupon take such steps as necessary, subject to the Procuring Entity's approval, or as reasonably required by the Procuring Entity, to expedite progress so as to ensure that the Services are completed in accordance with the Staffing Schedule.

- 55.4. Final payment pursuant to the Payment Schedule in Appendices IV and V shall be made by the Procuring Entity after the final report has been submitted by the Consultant and approved by the Procuring Entity.
- 55.5. Termination - Upon the receipt or giving of any notice referred to in **GCC** Clause 29 and if the Consultant is not in default under this Contract and has partly or substantially performed its obligation under this Contract up to the date of termination and has taken immediate steps to bring the Services to a close in prompt and orderly manner, there shall be an equitable reduction in the maximum amount payable under this Contract to reflect the reduction in the Services, provided that in no event shall the Consultant receive less than his actual costs up to the effective date of the termination, plus a reasonable allowance for overhead and profit.
- 55.6. Unless otherwise provided in the SCC, no additional payment for variation order, if any, shall be allowed for this Contract.

56. Liquidated Damages for Delay

If the Consultant fails to deliver any or all of the Services within the period(s) specified in this Contract, the Procuring Entity shall, without prejudice to its other remedies under this Contract and under the Applicable Law, deduct from the contract price, as liquidated damages, a sum equivalent to one-tenth of one percent of the price of the unperformed portion of the Services for each day of delay based on the approved contract schedule up to a maximum deduction of ten percent (10%) of the contract price. Once the maximum is reached, the Procuring Entity may consider termination of this Contract pursuant to **GCC** Clause 27.

***Section V. SPECIAL CONDITIONS OF
CONTRACT***

Section V. Special Conditions of Contract

GCC Clause	
1.1(g)	The Funding Source is: PPA's Corporate Budget for CY 2018.
6.2(b)	For a period of two years after the expiration of this Contract, the Consultant shall not engage, and shall cause its Personnel as well as their Subconsultants and its Personnel not to engage, in the activity of a purchaser (directly or indirectly) of the assets on which they advised the Procuring Entity under this Contract nor in the activity of an adviser (directly or indirectly) of potential purchasers of such assets. The Consultant also agree that their affiliates shall be disqualified for the same period of time from engaging in the said activities.
7	"Not applicable".
8	The person designated as resident project manager in Appendix III shall serve in that capacity, as specified in GCC Clause 8.
10	No further instructions.
12	The Authorized Representatives are as follows: For the Procuring Entity: MARK JON S. PALOMAR Chairperson, HO-BAC-EP-CON For the Consultant: _____
15.1	The addresses are: Philippine Ports Authority MARK JON S. PALOMAR Chairperson, HO-BAC-EP-CON Address: PPA Bldg., A. Bonifacio Drive, South Harbor, Port Area, Manila Facsimile: Telephone Nos. 954-8800 loc. 322 Email Address: mjspalomar@ppa.com.ph

	<p>Consultants:</p> <p>Attention:</p> <p>Address: _____</p> <p>Facsimile: _____</p> <p>Email Address: _____</p>
15.2	<p>Notice shall be deemed to be effective as follows:</p> <p>(a) in the case of personal delivery or registered mail, on delivery;</p> <p>(b) in the case of facsimiles, within 1 hour following confirmed transmission; or</p> <p>(c) in the case of telegrams, within 1 day following confirmed transmission.</p>
18.3	<p>Consultant's account where payment may be made: _____</p>
19	<p>No further instructions.</p>
20	<p>All partners to the joint venture shall be jointly and severally liable to the Procuring Entity.</p>
22	<p>None</p>
24	<p>The time period shall be 8 months or such other time period as the parties may agree in writing.</p>
34.2	<p>Any and all disputes arising from the implementation of this contract shall be submitted to arbitration in the Philippines according to the provisions of Republic Acts 876 and 9285, as required in Section 59 of the IRR of RA 9184.</p>
35.1	<p>The drawings, specifications, designs, reports, other documents and software prepared by the Consultant for the Procuring Entity under this Contract that shall become and remain the property of the Procuring Entity are as follows:</p> <p>(a) Technical and Survey Reports</p> <p>(b) Special Reports</p> <p>(c) Draft Final Report (hard & electronic copy)</p> <p>(d) Final Report (hard & electronic copy)</p>

38.1(d)	<p>The Consultant's actions requiring the Procuring Entity's prior approval are:</p> <p>(a) Progress Billing.</p> <p>(b) Key Personnel Replacement.</p> <p>(c) Contract Time Extension (at no cost to Procuring Entity).</p>
39.5	<p>The Consultant may change its Key Personnel only for justifiable reasons as may be determined by the Procuring Entity, such as death, serious illness, incapacity of an individual Consultant, resignation, among others, or until after fifty percent (50%) of the Personnel's man-months have been served.</p> <p>Violators will be fined an amount equal to the refund of the replaced Personnel's basic rate, which should be at least fifty percent (50%) of the total basic rate for the duration of the engagement.</p>
42.1	No further instructions.
42.4(c)	No further instructions.
52.1	The total ceiling amount in Philippine Pesos is ₱23,568,321.35.
52.2	No further instructions.
53.2	No additional instructions.
53.4	<p>The following expenditures in foreign currency shall be reimbursed in local currency at the exchange rate used on the date of Bid opening:</p> <ol style="list-style-type: none"> 1. a per diem allowance for each of the foreign or local Personnel for every day in which such Personnel shall be absent from his home office and shall be outside the country of the Government for the purpose of the Services at the daily rate specified in Appendix IV; 2. the following transportation costs: <ol style="list-style-type: none"> (a) the cost of international transportation of the foreign Personnel and, as specified below, eligible dependents of the foreign Personnel, by the most appropriate means of transport and the most direct practicable route to and from the Consultant's home office; in the case of air travel, this shall be by less than first class; (b) the cost of transportation to and from the Government's country of eligible dependents who shall be the spouse and not more than two (2) unmarried dependent children under eighteen (18) years of age of those of the foreign Personnel assigned to resident duty in the Government's country for the purpose of the Services for periods of six (6)

	<p>consecutive months or longer, provided that the stay of such dependents in the Government's country shall have been for not less than three (3) consecutive months, duration. If the project period for resident staff of the foreign Personnel shall be thirty (30) months or more, one extra economy class air trip for their eligible dependents for every twenty-four (24)-month project shall be reimbursed;</p> <p>(c) for the air travel of each of the foreign Personnel, and each eligible dependent, the cost of excess baggage up to twenty (20) kilograms per person, or the equivalent in cost of unaccompanied baggage or air freight; and</p> <p>(d) miscellaneous travel expenses such as the cost of transportation to and from airports, airport taxes, passport, visas, travel permits, vaccinations, etc., at a fixed unit price per round trip as specified in Appendix IV;</p> <p>3. the cost of communications (other than those arising in the Government's country) reasonably required by the Consultant for the purposes of the Services;</p> <p>4. the cost of printing, reproducing and shipping of the documents, reports, drawings, etc. specified in Appendix IV;</p> <p>5. the cost of acquisition, shipment and handling of the following equipment, instruments, materials and supplies required for the Services: <i>[insert amount]</i>;</p> <p>6. the cost of shipment of personal effects up to <i>[insert amount]</i>;</p> <p>7. the cost of programming and use of, and communication between, the computers for the purposes of the Services at the rate set forth in Appendix IV;</p> <p>8. the cost of training of the Procuring Entity's personnel outside the Government's country, as specified in Appendix IV;</p> <p>9. the cost of laboratory tests on materials, model tests and other technical services authorized or requested by the Procuring Entity, as specified in Appendix IV;</p> <p>10. the foreign currency cost of any subcontract required for the Services and approved in writing by the Procuring Entity;</p> <p>11. the cost of items not covered in the foregoing but which may be required by the Consultant for completion of the Services, subject to the prior authorization in writing by the Procuring Entity; and</p> <p>12. any such additional payments in foreign currency for properly procured items as the Parties may have agreed upon.</p>
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	<p>NOTE: <i>Items that are not applicable should be deleted; others may be added.</i></p> <p>The reimbursable expenditures in local currency shall be as follows:</p> <ol style="list-style-type: none"> 1. the cost of the following locally procured items: local transportation, office accommodations, camp facilities, camp services, subcontracted services, soil testing, equipment rentals, supplies, utilities and communication charges arising in the Government's country, all if and to the extent required for the purpose of the Services, at rates specified in Appendix IV; 2. the cost of equipment, materials and supplies to be procured locally in the Government's country as specified in Appendix IV; 3. the local currency cost of any subcontract required for the Services and approved in writing by the Procuring Entity; 4. any such additional payments in local currency for properly procured items as the Parties may have agreed upon pursuant to this Contract; and 5. the ordinary and necessary cost of such further items as may be required by the Consultant which are actually, directly, and necessarily used for the purpose of the Services, as agreed in writing by the Procuring Entity. <p>NOTE: <i>Items that are not applicable should be deleted.</i></p>
53.5(a)	<p>The following provisions shall apply to the advance payment and the advance payment guarantee:</p> <ol style="list-style-type: none"> (a) An advance payment of 15% in Philippine peso shall be made within 30 days after the Effective Date. The advance payment shall be set off by the Procuring Entity in equal installments against the statements for the first 5 months of the Services until the advance payment has been fully set off. (b) The advance payment shall be made only upon the submission to and acceptance by the Procuring Entity of an irrevocable standby letter of credit issued by an entity acceptable to the agency and of an amount equivalent to the advance payment.
53.5(c)	The interest rate is: 0%.
55.6	No further instructions.

Section VI. TERMS OF REFERENCE

Republic of the Philippines
PHILIPPINE PORTS AUTHORITY
TERMS OF REFERENCE FOR THE TECHNICAL SERVICES
FOR THE CONDUCT OF SOIL INVESTIGATION AT SELECTED PORTS
(Package 9)

I. OBJECTIVE

The purpose of this package of soil investigation is to obtain the needed information for foundation design analysis and for the evaluation of alternative type of structures.

II. GENERAL

There are no existing or updated records on soil investigations at the following selected ports site on which to base the preliminary or detailed engineering design of structures to be constructed thereat:

<u>Port</u>	<u>Proposed Project</u>
<u>Luzon</u>	
1. Pasig River (South Bank), South Harbor, Manila	Widening of Quay Area of the South Bank and Provision of Rubber Dock Fender, Mooring Fixtures Lighting
2. Capinpin, Orion, Bataan	Port Development Project
3. Bulalacao, Oriental Mindoro	Expansion of Back-up Area
4. Abra de Ilog, Occidental Mindoro	Construction of Port Operations Building
5. Carmen, Romblon	Extension of RC Pier including Construction of One (1) Unit RoRo Ramp
6. Puerto Princesa City, Palawan	Port Development Project
7. Caramoran, Catanduanes	Construction of Rock Causeway with Stairlanding
8. Masbate City, Masbate	Construction of PMO Building
9. Matnog, Sorsogon	Construction of Port Operations Building
10. Balogo, Pasacao, Camarines Sur	Port Development Project
<u>Visayas</u>	
1. ICPC, Iloilo	Construction of POB, Fence, Gates and Guardhouse
2. Dumangas, Iloilo	Proposed Back-up Area and Improvement of Access Road (Phase 2)
3. Tapal, Ubay, Bohol	Proposed Reclamation, Concrete Paving and Security Fence for Cargo Storage Area
4. Jagna, Bohol	Proposed Reclamation, Concrete Paving and Security Fence for PICO and Back-up Area
5. Victorias, Negros Occidental	Construction of RoRo Terminal and Expansion of Brgy. Villa Miranda Feeder Port
<u>Mindanao</u>	
1. Cagayan de Oro City, Misamis Or.	Port Expansion Project
2. Jubang, Dapa, Surigao del Norte	Jubang Cargo Port Project
3. Mati, Davao Oriental	Port Development Project

The PPA may order additions or deletions from this package.

III. SCOPE OF WORK

A. Coverage

The work shall cover the drilling of and testing of soil samples from sixty (60) boreholes, of which forty four (44) shall be drilled offshore each to a depth of about 50 meters below seabed and sixteen (16) shall be drilled inland to a depth of 30 meters below existing ground line maximum for each borehole, respectively and/or there is 5 consecutive SPT N values of at least 50 blows but with less than 1 foot (30 cm.) of soil penetration recorded during (two) 2 – successive 15 cm. penetrations of the Split-Spoon Sampler or 4.5-meters coring into bedrock, whichever comes first. Soil boring/drilling deeper than 50 meters or 30 meters in the case of Offshore boreholes or Inland boreholes, respectively, shall be referred to the PPA Engineer/Authorized Representative witnessing the drilling on-site. However, the minimum depth of drilling for both offshore and inland boreholes is 15 meters deep. All boreholes must be referred to benchmarks designated by the PPA. The actual number of boreholes, their locations and depths are subject to

change depending on field conditions. A Geodetic Engineer shall determine the actual location of the borehole based on the coordinates specified in the development plan using GPS technology/system. The contract duration for this package is eight (8) months.

B. Description of Work

1. Soil Exploration. This shall consist of drilling test holes, classification of soils and making of field tests on soil characteristics. In addition, laboratory tests shall be made as specified. The Consultant should be able to identify areas with geological problems and difficulties, which could affect the stability of the proposed structures i.e. buildings, pier/wharf, back-up area, causeway, etc. A complete report shall be required giving soil classifications and their engineering characteristics including a **3D settlement analysis and analysis on the rate of backfilling to counteract/avoid slip failure for projects where there are proposed reclamation (back-up areas, causeway)**. The dimension of the back-up area shall be coordinated with PPA.

- Depth of seabed with respect to Mean Lower Low Water (MLLW)
- Soil borings through ordinary soils (depth: 0-15m)
- Soil borings through hard soils/rock (depth: 5m)
- Split-spoon sampling (1m interval for the first 3 meters, 1.5m interval thereafter or when there is noticeable change in the soil characteristics based on texture and color, whichever comes first)
- Standard Penetration Tests (similar to split-spoon sampling criteria)
- Undisturbed sampling using thin-walled Shelby tube sampler (one sampler every 10m deep when there is encountered soft to medium stiff cohesive samples with SPT readings ranging from 2 to 7 blows per foot of soil penetration)
- Stop criterion of soil boring for each borehole when: there is 5 consecutive SPT N values of at least 50 blows but with less than 1 foot (30 cm.) of soil penetration recorded during (two) 2 – successive 15 cm. penetrations of the Split-Spoon Sampler or 4.5-meters coring into bedrock or 50 meters below sea bed level in the case of offshore boreholes or 30 meters deep below Existing Ground Line in the case of inland boreholes, whichever comes first. Soil boring/drilling deeper than 50 meters or 30 meters in the case of offshore boreholes or inland boreholes, respectively shall be referred to the PPA Engineer/Authorized Representative witnessing the drilling on-site. However, the minimum depth of drilling for both offshore and inland boreholes is 15 meters deep.

Pertinent ASTM standards are to be met in the conduct of the investigation.

If rock is encountered, holes shall be terminated after core drilling continuously for five (5) meters in the rock.

- a. Soil Classification. Soils shall be described according to the Unified Classification System of ASTM D2487. A visual field classification of soils by a competent Geologist or Geotechnical Engineer supplemented by laboratory tests shall be made.
- b. Penetration. The Standard Penetration Test (SPT) shall be carried out in accordance with ASTM D1586. Disturbed (split-spoon) samples shall be performed at intervals of 1 meter for the first 3 meters and every 1.5 meters thereafter. Representative samples shall be collected and shipped for laboratory testing. At least one undisturbed (Shelby tube) sample, 2½ inch diameter x 24" long or larger, shall be extracted from each distinct soft to medium stiff cohesive stratum. The depth of the undisturbed sample shall be subject to the directions of PPA.
- c. Testing. The soil/rock samples to be scheduled for laboratory tests shall be selected by the Consultant. The types of test shall be referred to ASTM standard procedures as follows:

1)	Visual Soil Classification (SPT)	ASTM D2488/D2487 2217/ASTM D1586
2)	Gradation	ASTM D422/E100 Part 41
3)	Atterberg Limits	ASTM 421/423

4)	Natural Water Content	ASTM D2216
5)	Unit Weight	ASTM 2049/D1556/D2167
6)	Organic Content	ASTM D2974
7)	Specific Gravity	ASTM D854/C127
8)	Consolidation Test	ASTM D2435
9)	Unconfined Compression Test	ASTM D2166-06

The Consultant shall have their owned laboratory where the testing of soil samples shall be done.

2. Procedure

- a. Pre-drilling Coordination Meeting. Prior to the mobilization of the drilling teams/crews of the Contractor to the priority port sites, a coordination meeting with the PPA Engineers in charge of monitoring the project activities to discuss among others, other parameters that maybe required relevant to the specific structure to be constructed, the type and size of structures (pier, causeway, wharf, back-up area, building, among others) to be built on each port site as clearly indicated in the Port Development Plan in relation to the borehole location and designation as superimposed therewith.
- b. Technical Advice. The Contractor's Experts/Engineers shall be available, if consulted, to give/submit their professional written opinion on technical matters that may arise in the course of the PPA Engineer's design of such foundation structures and during the implementation of the proposed structure.

- c. Inspection. No work shall be performed in the absence of an authorized representative of the PPA.

The Contractor shall not remove casing or equipment from any completed boring except with the express permission of the authorized representative and until said representative has had the opportunity to obtain all relevant data prior to removal.

- d. Size of Boring in Sampling. Samples shall be obtained either intermittently or continuously as specified herein with a minimum diameter of 1-3/8 inch. The sizes of boreholes shall be sufficient for the above size of sample. Intermittent sampling shall mean disturbed (split-spoon) samples taken at specified intervals and undisturbed (Shelby tube) samples at each change of soil type or if soft cohesive soils are required, they shall be obtained with thin-wall samplers. Samples shall be prepared in accordance with the applicable requirements of the section herein on "Preserving Samples."
- e. Penetration on Boulders or Rock Layers. Boulders or rock layers encountered in drilling shall be cored to determine the character and size or thickness of the materials. After coring, the hole may be enlarged by reaming or by other means as approved by the PPA. Where it will be necessary to reduce the size of the borehole in order to reach the target depth and obtain the required samples, the minimum casing diameter shall be of such size as to permit the use of a 1-5/8 inch core bit.

3. Supplemental Boring

- a. Abandoned Borings. Borings that are abandoned or lost before reaching the required depth, or from which unsatisfactory samples are obtained, shall be supplemented by other borings adjacent to the original in order to obtain satisfactory samples and the required information. Penetration to the depth where the original boring was abandoned may be made by any method selected by the Contractor that in the opinion of the

PPA will permit satisfactory completion and sampling below the elevation not satisfactorily reached by the abandoned boring.

- b. False Start. It is intended that the borings be made so as to clear all underwater pipes, conduits, and other underwater structures. However, should the Contractor be unable to complete any boring due to underwater structures, obstacles or obstructions which the PPA considers are of unusual nature and that failure to penetrate them is not the fault of the Contractor's method or equipment, a false start will be allowed. In such cases, if directed by the PPA representative, another boring will be made in the adjacent vicinity.

4. Casing

- a. Advancing. Boring through overburden soils shall be suitably cased to permit obtaining samples of the size or sizes specified or as directed. Casing may consist of standard pipes and couplings or flush pointed pipes, and shall be advanced vertically by driving, chopping and washing, coring or by any method consistent with the manner and type of sampling described for the specified boring, and as approved by the PPA. In all borings where rock is to be cored below the cased overburden, the casing shall be firmly seated to the rock, and the hole cleaned of all loose material before commencing coring operations.
- b. Removal. All casings shall remain the property of the Contractor and shall be removed on the completion of the work.

IV. SOIL INVESTIGATION FOR PROPOSED STRUCTURES

Sub-surface exploration shall be carried out at proposed sites for revetment and proposed engineering structures in order to obtain sufficient and adequate subsoil data for the preliminary or detailed engineering design of the project.

a.) Soil Borings and Core Drilling

Borings through underlying soils shall be advanced by drilling with either diamond or carbide NW casing shoe bits or such other method consistent with the manner and types of soil sampling to be employed, as may be approved by the PPA Engineer. Borings shall be cased to permit soil sampling by split-spoon and Shelby tube methods and shall extend down to the program depth of boreholes at respective area covered by the survey or deeper as directed by the PPA Engineer on-site.

For coring into rock or hard strata, rotary drilling method shall be employed. Core drillings shall be performed in accordance with ASTM or AASHTO procedures and the following provisions. At the start of coring, the casings through the substrata shall be tightly seated. The coring of rocks shall employ NQ size double tube core barrels or triple tube core barrels, to provide a sample run from 0.5 m to 1.5 m long within the liner, and shall be continued 4.50 m penetration deep into the bedrock. Length of recovered rock in each run shall be recorded and recovery expressed as a percentage of total recovery for each drilling run. Cores shall be recovered and placed in core boxes in the correct sequence. Core boxes shall be of robust timber construction and to the satisfaction of the PPA Engineer. The Contractor shall exercise particular care in recording water losses, rod jerks, and other unusual coring experience that is supplementary to the core record, and shall indicate, the nature and the extent of any fracturing.

The Contractor shall record groundwater levels in each boring upon completion of boring, during the removal of the casings and 24 hours after the removal of the casing. Where the borings are made over a period of several days, the ground water readings shall be made each evening at the end of the drilling operations, and each morning prior to the resumption of drilling. In all cases the recorded data shall include the date and time of reading.

b.) Standard Penetration Test and Split-Spoon Sampling

This work shall be performed in accordance with ASTM or AASHTO standard procedures, and the following provisions. Where discrepancies exist, these specifications shall govern. All procedures are subject to the approval of the PPA Engineer.

Representative soil samples (disturbed) shall be obtained at regular intervals of 1.0 meter for the first 3 meters or every 1.50 meters interval, thereafter or every change in soil characteristics, whichever is observed first.

Split-spoon sampler shall be driven into the soil at the bottom of the cleaned out casing using a 64.0 kg. hammer falling 75 cm. The hammer will be raised preferably by means of a mechanical free drop system. The sampler shall have a steel shoe with a sharp cutting edge, and a reliable check valve. A record shall be made of the number of blows for the sampler to penetrate the first 15 cm. and is called the seating drive. The sampler shall be driven a further 30 cm. or until 60 to 70 blows of the hammer have been applied. The number of blows for each 15 cm penetration shall be recorded. The penetration resistance, N, will be the total number of blows required to drive the sampler the last 30 cm.

If the sampler is driven less than a total of 45 cm, the penetration resistance shall be number of blows for the last 30 cm of penetration. If less than 30 cm. is penetrated, the number of blows shall be stated and the depth of penetration measured. If the rate of penetration of the sampler is less than 2.5 cm for the 50 blows, refusal shall be considered to have been obtained.

The sampler shoe shall be provided or fitted with a flap valve to obtain samples in soils that are too granular to be retained in the sampler.

Tests shall be repeated if necessary to obtain acceptable samples. However, the sampler shall not be driven more than 60 cm below the bottom of the casing, in which case, the casing shall be advanced before repeating the test procedure.

The split-spoon retrieved from the hole shall be handled carefully and shall be opened, with minimum disturbance of the sample, then placed into a clean plastic sheeting bag for visual classification. The soil sample shall be preserved and stored as specified in Section III. If the sampler is found to contain more than one type of soil, each type shall be classified and preserved separately.

1. Split Spoon Drive Sampling

a. Sampler Description. Samplers for drive samples shall be of the standard split spoon type having an outside diameter of two (2) inches and an inside diameter of one and three eighths (1-3/8) inches for NW size holes. The sampler shall have a minimum inside length of sixteen (16) inches and shall be equipped with hardened tool shoe valve at the top. The Contractor shall also provide a core catcher at the bottom of the sampler when difficulty is experienced in recovering samples.

b. Sampling Procedures. At the points where drive samples are to be taken, advancement of the borehole shall be stopped and the hole or casing shall be completely cleaned of disturbed soil, segregated coarse material and any clay adhering to the walls of the casing. The cleaning shall extend to at least the bottom edge of the casing and should preferably advance the hole a few inches further in order to by-pass disturbance caused by the cutting edge of the casing. Cleaning shall be done with shielded jets suitable to the relative resistance of the various subsurface strata; the drive sampler shall be driven in the following manner:

- 1) The 1-3/8 inch inside diameter drive sampler shall be driven with a 140-lb. hammer a free fall of 30 inches.

- 2) The drive sampler shall be driven to a depth of 18 inches or as directed by the PPA representative and the number of blows shall be recorded for each 6-inch depth of penetration. If the samples obtained are less than 12 inches long, the sampling operation shall be repeated.

2. Undisturbed Sampling of Soils

1. Shelby-Tube

This work shall be performed in accordance with ASTM or ASSHTO procedure and the following provisions. Where discrepancies exist between these provisions and ASTM and ASSHTO specifications, these specifications will prevail. All procedures are subject to the approval of the PPA Engineer.

In layers of soft to medium stiff cohesive soils (i.e. N-values ranging between 2 to 7 blows per foot of soil penetration), undisturbed Shelby-tube samples shall be obtained at intervals of not more than ten (10) meters or otherwise directed by the PPA Engineer. Undisturbed samples are required for consolidation and unconfined compression tests and other specified laboratory tests.

The following procedures shall be adopted:

Clean out the hole to the depth of sampling such that the soil immediately below the casing shall be as undisturbed as possible. The casing shall be kept above the sampling position.

Attach a 70 mm diameter thin-wall tube sample to the drill rod and let it rest on the bottom of the hole.

Push the sampler into the soil either manually or by hydraulic jack with a continuous and rapid motion without impact or twisting to fill the sampler. In no case shall the sampler tube be driven with a hammer or pushed further than the length provided for the soil sampler. If resistance is encountered when manually pushing the sampler tube, a heavy weight may be used without hammering to drive the sampler.

Before retrieving the tube, turn the rod at least two (2) revolutions to shear the sampler off, at the bottom. Raise the rod and detach the tube sampler.

Remove and store the disturbed material at the ends of the tube and preserve the undisturbed section in the tube as specified in Section III. Great care must be observed in handling and transporting the samples.

- a. General. Undisturbed Shelby tube samples, 2-1/2 inches in diameter x 24 inches long, shall be taken from all holes as specified herein and called for in these Technical Specifications.

Undisturbed samples shall be taken in cohesive soils whenever the soil conditions would permit driving of the Shelby tube sampler.

- b. Sampler Description. The thin wall tube (Shelby tube) sampler shall consist of 16 or 18 gauge barrel, approximately 36 inches, or longer and will be equipped with a reliable check valve at the top. The tubes shall be provided with a sharp cutting edge and a positive inside clearance. The inside diameter of the cutting edge shall be 0.7 to 1.5 percent less than the inside diameter of the sampler tube.

- c. Sampling Procedure. Before each sample is taken, the casing or borehole shall be carefully cleaned out with a deflected jet or clean out auger as approved by the PPA. The inside of the tube shall be thoroughly cleansed prior to taking the sample. The sampler shall be forced into the soil at a distance of 24 inches at the rate ranging from $\frac{1}{4}$ to $\frac{1}{2}$ foot per second by hydraulic pressure. The sampler shall not be driven with a drop hammer to obtain samples. No undisturbed samples shall be accepted if the recovery is less than 24 inches long, unless expressly approved by the PPA field representative. After an acceptable undisturbed sample is obtained, the sample shall be preserved as specified in Section 8 "Preserving Samples."

In layers of soft to medium stiff cohesive soils (i.e. N-values ranging between 2 to 7 blows per foot of soil penetration), undisturbed Shelby-tube samples shall be obtained at an interval of not more than ten meters or as otherwise directed by the PPA Engineer.

3. Rock Coring

- a. General. The term rock shall apply to any material that cannot be sampled by drive sampling as described herein. Where rock layers or boulders are encountered in the overburden above the specified bottom elevation of any borings, it shall be cored as described under "Penetration on Boulders or Rock Layers." Where ledge rock is encountered above the specified bottom elevation of any boring, it shall be cored to the depths as specified in the Proposal and as directed by PPA representative.
- b. Sampler Description. Rock coring shall be performed with a double tube swivel type core barrel as standardized by the Diamond Core Drill Manufacturers Association (DCMA) equipped with diamond-set bottom discharge core bits and standard core lifters and core gage. Core barrels shall be of 5 to 10 ft. length to obtain a continuous rock core 5 feet long, and unless otherwise specified or directed by PPA representative, the sampler shall produce a minimum core of 1-3/4 inches in diameter.
- c. Sampling Procedure. Casing through overburden shall be seated tightly on the rock at the elevation of the rock coring. The Contractor shall operate his drills at such speeds and with such water pressures that will ensure maximum core recovery in whatever kind of rock is being drilled. Where soft or broken rocks are encountered the Contractor shall reduce the length of "runs" to less than 1.5m. as may be required to reduce core loss and core disturbance to the minimum.

Failure to comply with the foregoing procedures shall constitute justification for PPA to require redrilling at the Contractor's expense of any boring from which the core recovery is unsatisfactory. The Contractor shall exercise particular care in recording water losses, rod jerks and other unusual experience that will throw light on the nature and extent of any fractures in the core samples.

4. Preserving Samples

- a. General. The Contractor shall provide material, equipment and labor necessary for preserving samples. Wax or masking tape shall be used to ensure proper sealing of sample containers.
- b. Drive Samples. Representative specimen of each sample shall be preserved. The containers for preserving samples shall be maximum ten-ounce large-necked, round, screw top, air-tight, durable clear plastic jars, and the specimen shall be sealed with a threaded cap, and cohesive soil

samples shall be further sealed by dipping the cap and threads into wax immediately after capping.

Each glass jar or undisturbed sample core liner shall have weatherproof labels giving the following information:

Project: _____
Type of Sample: _____
Borehole No.: _____ Elevation: _____ Location: _____
Coordinates of the borehole: _____
Jar No.: _____
Top Elevation of Hole: _____ Depth of Sample: _____
Visual Description of Samples: _____
Penetration (Blows/15 cm): _____

Shipping boxes: Each box of samples shall be identified with weatherproof labels or marking indicating the following:

Project Description: _____
Project Location: _____
Boring No.: _____ Sample No.: _____

- c. Undisturbed Samples. Undisturbed samples from boring for preservation shall be treated in the following manner: A maximum of one inch of the undisturbed materials from the top and bottom of each sample shall be preserved as prescribed for Drive Samples. The ends of the sample tube shall be filled to the top with wax added in the increments to prevent voids, after which they shall be capped with tight fitting copper or galvanized steel caps bound on with friction tape and dipped in wax. Undisturbed samples shall be labeled and identified as directed by PPA.
- d. Rock Cores. Rock cores shall be suitably boxed, marked and identified in a manner satisfactory to PPA. Cores shall be boxed in the same sequence in which they were obtained in the field.

Cores from each drilling run shall be separated from adjacent with from wooden blocks on which the depths of the beginning and end of the run shall be clearly, accurately and permanently indicated. Cores of soft rock which may be damaged in the normal course of shipping shall be further preserved by wrapping them first in polyethylene plastic. The container itself shall be marked to show borehole number, box number, depth and the date the sample was taken.

5. Records

- a. General. The Contractor shall keep accurate driller's logs and records of all work accomplished under this contract and shall deliver complete, legible copies of these logs and records to PPA upon completion of the work or at such other time or times as he may be directed. The PPA or his representative shall have the right to examine such records at any time prior to their delivery to him. Separate logs shall be made for each boring. All depths and elevations shall be measured in meters, and shall be referenced to proper benchmarks or datum as designated by PPA representative.
- b. Records. Records shall contain the following information:
- 1) Results of all details of each borehole arranged in tabular form, giving full information on the location, type of boring, vertical arrangement, and the thickness and classification of the materials penetrated.
 - 2) Location, elevation and depth, type, number and date of each sample and test taken.
 - 3) Heights of drop and weight of drop hammer for taken drive samples.

- 4) Size and length of casing used in each borehole.
- 5) Length in inches of samples of coring run.
- 6) Length in recovery for all samples and coring.
- 7) Elevation of refusal or rock if encountered.
- 8) Approximate force required to press in undisturbed samples.
- 9) Driving energy in inch-pounds and blow count data for six-inch penetration of drive sampler and for each twelve-inch penetration of casing.

6. Reference Elevation

The seabed elevation of each borehole should be included in the boring log based on Mean Lower Low Water (MLLW). Elevations above MLLW shall be marked positive (+) while those below shall be marked negative (-). In the absence of Tide Gauge in the area for locating the level of the MLLW, the elevation of the permanent existing structures such as pier, wharf, finish pavement of back-up area, may be used as reference.

7. Submission of Samples

At such time as PPA may direct, all samples and cores selected by the Consultant shall be carefully boxed and shipped accordingly. Boxing shall be made in such a manner that will protect all soil and core samples from excessive disturbance while being shipped to the Soils Laboratory for testing. Payment for shipping samples shall be included in the bid proposal.

V. MEASUREMENT AND PAYMENT

The quantities listed in the Proposal are approximate only and do not govern final payment. Payments to the Contractor will be made only for the actual quantities of the contract items performed in accordance with the Technical Specifications and shall be considered as full compensation for furnishing all labor, materials, equipment plant, facilities, and services for the performance of the work.

VI. SETS OF TESTS REQUIRED AND REPORTS

- A. Soil Classification. Soils shall be described in accordance with the Unified Soil Classification System (USCS). Each individual stratum shall be measured and described in writing. All thin layers, joints or partings shall be noted. Slices of samples may be prepared and slowly air-dried to reveal stratifications and laminations.

The visual description shall state the color, class of soil (gravel, sand, silt, clay or peat), the relative sizes of non-cohesive soil particles (coarse, medium or fine sand) and the relative cohesiveness and strength of clayey soils (high, medium or low). Any significant factors shall be noted such as the presence of shells, varves, roots and odor of the soil. All soil samples shall be tested in accordance with the ASTM or AASHTO specifications where applicable.

a Monthly Progress Report

The Consultant shall prepare the Monthly Progress Report (MPR) in a form to be approved by the PPA qualified representative and submit to Port Planning and Design Department (PPDD) on the 25th day of each reporting period. The MPR shall consist, but not limited to the following:

1. Overall summary of accomplishment
2. Core drilling progress
3. Laboratory test accomplished
4. Schedule of work
5. List of equipment used
6. Organizational chart
7. Detailed progress chart or S-Curve

b. Partial Reports of Investigation Results

The Consultant shall submit partial reports consisting of completed results of boring in the form of a final boring log and soil profile for immediate use in the preliminary design work.

c. **Photographs**

Photographs showing the borehole drilling and sampling at each site shall be taken by the Consultant and form part of the report. The photographs shall depict the following:

1. Equipment used
2. Core drilling operation
3. Water level measurements
4. Performance of SPT sampling
5. All cores and SPT sample placed in core boxes
6. Date photographs were taken
7. Location or station

- B. **Final Report.** After completion of the laboratory-testing program, a draft report clearly defining and summarizing all the works performed together with the 3D settlement analysis and analysis on the rate of backfilling to counteract/avoid slip failure for projects where there are proposed reclamation (back-up areas, causeway), for traffic load of 500 and 750 pounds per square foot (psf), soil bearing capacity, pile capacity, recommended foundation and pile length depending on the type of structure to be constructed, including the findings and recommendations of a competent Soils Engineer of the Contractor, shall be submitted to PPA. The draft report shall be book-bound and shall contain among others a description of the test procedure, the number of tests for each type, boring logs, maps, summary tables of the results and complete details and analysis/computation and evaluation of the results of each test, grain size analysis curves, summary or recommended soil particles and Atterberg Limit worksheets.

In determining the pile bearing capacity as option/recommendation for foundation works, the Soil Engineer shall use the Design Manual for Ports and Harbor Facilities in the PPA. The provisions in the Design Manual shall serve as the technical reference in computing the bearing capacity of pile foundation based on the recorded borehole logs.

The Final Geotechnical Report shall contain the methodology of geotechnical investigation performed, the result of field investigation including field logs, description of site conditions, profile of soil conditions, result of laboratory tests, summary of geotechnical data and photos. The Final Report (6 copies) in book-bound form and (1 copy) in electronic media (CD-R disks and/or CD-RW disks) in a format and form replicating the paper-print copies, incorporating all revisions deemed appropriate by the Philippine Ports Authority should be submitted within 20 days after receipt of comments on the Draft Final Report from the PPA. The boreholes logs, development plan indicating the actual borehole location and soil profile shall be submitted in AUTOCAD format.

VII. **PAY ITEMS**

A. **Mobilization and Demobilization**

1. Payment will be made at the contract lump sum price for mobilization and demobilization for this exploration work, and shall include full compensation for all labor, materials, transportation charges, and incidentals necessary to complete the mobilization, manning and demobilization of all equipment, including the drilling rigs, appurtenances, supports, etc. Payment on this item will be made only after completion of fieldwork for this exploration.

B. **Boring**

1. Measurement will be made based on the actual depth of soil boring in lineal meter of the borehole in place and accepted.
2. Payment will be computed based on the number of linear meters, measured as provided above using the contract unit price for borings. Such payment shall

include full compensation for furnishing, installing and removing the drill rig and accessories for all drilling work, penetrating boulders or hard layers encountered, installing and removing casing, for submitting records or borings and/or excavation for incidentals necessary to complete the item.

C. Standard Penetration Tests (SPT)

1. Each test performed and accepted will be measured as a complete unit.
2. Payment will be made and measured based on the actual number of units performed and at the applicable unit price for SPT.

D. Undisturbed Sample (UDS)

1. Each sample taken and accepted will be measured as a complete unit.
2. Payment will be made and measured based on the actual number of units performed and at the applicable unit price for UDS.

E. Coring in Rocks

1. Measurement for payment will be made based on the actual number of lineal meters penetrated with the use of coring bit in rock, boulder, gravel, or hard formations.
2. Payment will be computed based on the actual number or lineal meters measured as specified above and at the applicable contract unit price for coring in rock.

F. Laboratory Tests.

Payment will be made based on the actual number of specified tests, as required in the specification, or as may be required by PPA, and at the applicable contract unit price.

G. Equipment and Miscellaneous Items

The Contractor shall specify the major equipment whether owned, rented or leased and to be purchased that will be utilized in the performance of these services, their main specifications and the estimated times of use shown in an equipment utilization schedule. The minimum equipment requirements for this undertaking are as follows:

Quantity	Unit	Particulars
4	units	Rotary Spindle Hydraulic Rig;
		three (3) – owned; one (1) - leased
4	units	3.5hp Water Supply Pump; (four (4) - owned)
1	unit	5hp Duplex (two piston) Engine Water Pump;
		Owned or leased
4	sets	Tripod (four (4) - owned)
32	pcs.	NW Casing (thirty two (32) - owned)
80	pcs.	AW Rod (eighty (80) - owned)
4	sets	Split Spoon with 70 kgs. Jar Hammer plus Plate
		(four (4) – owned)
4	pcs.	NQ Core Barrel (four (4) - owned)
4	pcs.	Startling Barrel (four (4) - owned)
4	sets	Water Swivel (four (4) - owned)
4	assemblies	Drilling Barge or Pontoon with at least 4 anchors for
		each project site (four (4) - owned)
1	unit	Motorized Service Boat (owned or leased)
2	sets	Surveying Equipment (Total Station, Theodolite or GPS)
		(One (1) – owned and One (1) - leased)

Payment of purchased office and other equipment such as computers, printers, copiers, peripherals and accessories shall be made upon turnover to PPA. Similarly, miscellaneous items such as rental of service vehicles, shipment of samples, and employment of security services, provision of safety signage (caution tape and barricades) and individual safety gears/gadgets of the drilling team e.g safety shoes.

safety vest, hard hat, goggles, gloves, safety belts, among others, shall be made in lump sum after the work has been completed.

VIII. BILLING AND OTHER FORMS

The Contractor shall prepare their billing and other forms in accordance with those that may be prescribed by PPA.

IX. REQUIRED EXPERTISE AND PROPOSALS

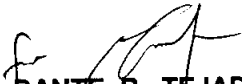
The Contractor shall specify the key personnel or experts that will be utilized in the performance of these services, their qualifications (education, training and experience) and the times that they will serve shown in a manpower schedule. The following minimum specialization is anticipated to be required in the Study:

- Project Manager/Geotechnical Engineer/Planner
- Deputy Project Manager/Port Engineer/Planner
- Geologist/Geotechnical Engineer
- Civil Engineer
- Geodetic Engineer
- Laboratory Chief

X. REPORTS

The Draft and Final Reports shall include the results of all required tests performed and accepted on this exploration work including the settlement analysis and analysis on the rate of backfilling to counteract/avoid slip failure for projects where there are proposed reclamation (back-up areas, causeway). The report shall include the findings, evaluations and recommendations as more specifically defined in Section No. VI.B.


Prepared by:


DANTE B. TEJADA
Principal Engineer A


Checked/Reviewed by:


MELODY E. ESPIRIDION
Acting Manager, PPD

Recommending Approval:


REYNAND C. PARAFINA
Manager, PPDD

Approved:


CONSTANTE T. FARIÑAS, JR.
Assistant General Manager
Engineering Office

Section VII. BIDDING FORMS

TPF 1. TECHNICAL PROPOSAL SUBMISSION FORM

[Date]

[Name and address of the Procuring Entity]

Ladies/Gentlemen:

We, the undersigned, offer to provide the consulting services for the PROCUREMENT OF TECHNICAL SERVICES FOR THE SOIL INVESTIGATION AT SELECTED PORTS (PACKAGE 9) in accordance with your Bidding Documents dated *[insert date]* and our Bid. We are hereby submitting our Bid, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope.

In accordance with ITB Clause 21.1, we confirm that the information contained in the eligibility documents submitted earlier together with the Expression of Interest remain correct as of the date of bid submission.

If negotiations are held during the period of bid validity, *i.e.*, before *[insert date]*, we undertake to negotiate on the basis of the proposed staff. Our Bid is binding upon us and subject to the modifications resulting from contract negotiations.

In accordance with GCC Clause 18 we acknowledge and accept the PROCURING ENTITY's right to inspect and audit all records relating to our Bid irrespective of whether we enter into a contract with the Procuring Entity as a result of this Bid or not.

We understand you are not bound to accept any Bid received for the selection of a consultant for the Project.

We acknowledge that failure to sign this Technical Proposal Submission Form and the abovementioned Financial Proposal Submission Form shall be a ground for the rejection of our Bid.

We remain,

Yours sincerely,

Authorized Signature:
Name and Title of Signatory:
Name of Firm:
Address:

TPF 2. CONSULTANT'S REFERENCES

Relevant Services Carried Out in the Last Five Years That Best Illustrate Qualifications

Using the format below, provide information on each project for which your firm/entity, either individually, as a corporate entity, or as one of the major companies within an association, was legally contracted.

Project Name:		Country:
Location within Country:		Professional Staff Provided by Your Firm/Entity(profiles):
Name of Client:		Nº of Staff:
Address:		Nº of Staff-Months; Duration of Project:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services (in Current US\$):
Name of Associated Consultants, if any:		Nº of Months of Professional Staff Provided by Associated Consultants:
Name of Senior Staff (Project Director/Coordinator, Team Leader) Involved and Functions Performed:		
Narrative Description of Project:		
Description of Actual Services Provided by Your Staff:		

Consultant's Name: _____

**TPF 3. COMMENTS AND SUGGESTIONS OF CONSULTANT ON THE TERMS OF
REFERENCE AND ON DATA, SERVICES, AND FACILITIES TO BE PROVIDED BY
THE PROCURING ENTITY**

On the Terms of Reference:

- 1.
- 2.
- 3.
- 4.
- 5.

On the data, services, and facilities to be provided by the Procuring Entity:

- 1.
- 2.
- 3.
- 4.
- 5.

**TPF 4. DESCRIPTION OF THE METHODOLOGY AND WORK PLAN FOR
PERFORMING THE PROJECT**

TPF 5. TEAM COMPOSITION AND TASK PROJECTS

1. Technical/Managerial Staff		
Name	Position	Task

2. Support Staff		
Name	Position	Task

3 Where applicable, indicate relationships among the Consultant and any partner and/or subconsultant, and relationship to the Procuring Entity, the Funding Source and other parties or stakeholders, if any, involved in the project.

TPF 6. FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

Proposed Position: _____

Name of Firm: _____

Name of Staff: _____

Profession: _____

Date of Birth: _____

Years with Firm/Entity: _____ Nationality: _____

Membership in Professional Societies: _____

Detailed Tasks Assigned: _____

Key Qualifications:

[Give an outline of staff member's experience and training most pertinent to tasks on project. Describe degree of responsibility held by staff member on relevant previous projects and give dates and locations. Use about half a page.]

Education:

[Summarize college/university and other specialized education of staff members, giving names of schools, dates attended, and degrees obtained. Use about one quarter of a page.]

Employment Record:

[Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of projects. For experience in last ten years, also give types of activities performed and client references, where appropriate. Use about two pages.]

Languages:

[For each language, indicate proficiency: excellent, good, fair, or poor in speaking, reading, and writing.]

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

Commitment:

I also commit to work for the Project in accordance with the time schedule as indicated in the contract once the firm is awarded the Project.

[Signature of staff member and authorized representative of the firm] Date: _____
Day/Month/Year

Full name of staff member: _____
Full name of authorized representative: _____

SUBSCRIBED AND SWORN to before me this ____ day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. _____.

Witness my hand and seal this ____ day of [month] [year].

NAME OF NOTARY PUBLIC

Serial No. of Commission _____
Notary Public for _____ **until** _____
Roll of Attorneys No. _____
PTR No. __, [date issued], [place issued]
IBP No. __, [date issued], [place issued]
Doc. No. ____
Page No. ____
Book No. ____
Series of ____.

TPF 7. TIME SCHEDULE FOR PROFESSIONAL PERSONNEL

Name	Position	Reports Due/Activities	Months (in the Form of a Bar Chart)												Number of Months		
			1	2	3	4	5	6	7	8	9	10	11	12			
																	Subtotal (1)
																	Subtotal (2)
																	Subtotal (3)
																	Subtotal (4)

Full-time: _____
 Reports Due: _____
 Activities Duration: _____
 Location: _____

Part-time: _____
 Signature: _____
 (Authorized representative)
 Full Name: _____
 Title: _____
 Address: _____

TPF 8. ACTIVITY (WORK) SCHEDULE

A. Field Investigation and Study Items

	<i>[1st, 2nd, etc. are months from the start of project.]</i>												
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
Activity (Work)													

B. Completion and Submission of Reports

Reports	Date
1. Inception Report	
2. Interim Progress Report (a) First Status Report (b) Second Status Report	
3. Draft Report	
4. Final Report	

OMNIBUS SWORN STATEMENT

OMNIBUS SWORN STATEMENT FOR CORPORATION OR JOINT VENTURE

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____)S.S.

AFFIDAVIT

I, *[Name of Affiant]*, of legal age, *[Civil Status]*, *[Nationality]*, and residing at *[Address of Affiant]*, after having been duly sworn in accordance with law, do hereby depose and state that:

1. I am the duly authorized and designated representative of *[Name of Consultant]* with office address at *[address of Consultant]*;
2. I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]*, accompanied by the duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary's Certificate, whichever is applicable;
3. (Name of Consultant) is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government / foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
5. (Name of Consultant) is authorizing the PPA General Manager or its duly authorized representative(s) to verify all the documents submitted;
6. None of the officers, directors, and controlling stockholders of *[Name of Consultant]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;
7. (Name of Consultant) complies with existing labor laws and standards;
and
8. (Name of Consultant) is aware of and has undertaken the following responsibilities as a Bidder:

OMNIBUS SWORN STATEMENT

- a. Carefully examine all of the Bidding Documents;
 - b. Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
 - c. Made an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquire or secure Supplemental / Bid Bulletin(s) issued for the (Name of the Project).
9. (Name of Bidder) did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of _____,
20___ at _____, Philippines.

[Bidder's Representative/Authorized Signatory]

SUBSCRIBED AND SWORN to before me this ___ day of *[month]* *[year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____.

Witness my hand and seal this ___ day of *[month]* *[year]*.

NAME OF NOTARY PUBLIC

Serial No. of Commission _____

Notary Public for _____ **until** _____

Roll of Attorneys No. _____

PTR No. ___, *[date issued]*, *[place issued]*

IBP No. ___, *[date issued]*, *[place issued]*

Doc. No. _____

Page No. _____

Book No. _____

Series of _____.

OMNIBUS SWORN STATEMENT

OMNIBUS SWORN STATEMENT FOR PARTNERSHIP OR COOPERATIVE

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____)S.S.

AFFIDAVIT

I, *[Name of Affiant]*, of legal age, *[Civil Status]*, *[Nationality]*, and residing at *[Address of Affiant]*, after having been duly sworn in accordance with law, do hereby depose and state that:

1. I am the duly authorized and designated representative of *[Name of Consultant]* with office address at *[address of Consultant]*;
2. I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]*, accompanied by the duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary's Certificate, whichever is applicable;
3. (Name of Consultant) is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government / foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
5. (Name of Consultant) is authorizing the PPA General Manager or its duly authorized representative(s) to verify all the documents submitted;
6. None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;
7. (Name of Consultant) complies with existing labor laws and standards; and
8. (Name of Consultant) is aware of and has undertaken the following responsibilities as a Bidder:

OMNIBUS SWORN STATEMENT

- a. Carefully examine all of the Bidding Documents:
 - b. Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
 - c. Made an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquire or secure Supplemental / Bid Bulletin(s) issued for the (Name of the Project).
9. (Name of Bidder) did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of _____,
20___ at _____, Philippines.

[Bidder's Representative/Authorized Signatory]

SUBSCRIBED AND SWORN to before me this ___ day of *[month]* *[year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____.

Witness my hand and seal this ___ day of *[month]* *[year]*.

NAME OF NOTARY PUBLIC

Serial No. of Commission _____
Notary Public for _____ **until** _____
Roll of Attorneys No. _____
PTR No. ___, *[date issued]*, *[place issued]*
IBP No. ___, *[date issued]*, *[place issued]*
Doc. No. _____
Page No. _____
Book No. _____
Series of _____.

OMNIBUS SWORN STATEMENT

OMNIBUS SWORN STATEMENT FOR SOLE PROPRIETORSHIP

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____)S.S.

AFFIDAVIT

I, *[Name of Affiant]*, of legal age, *[Civil Status]*, *[Nationality]*, and residing at *[Address of Affiant]*, after having been duly sworn in accordance with law, do hereby depose and state that:

1. I am the sole proprietor or authorized representative of *[Name of Consultant]* with office address at *[address of Consultant]*;
2. As the owner and sole proprietor or authorized representative of *[Name of Consultant]*, I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]**[insert "as shown in the attached duly notarized Special Power of Attorney" for authorized representative]*;
3. (Name of Consultant) is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government / foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
5. (Name of Consultant) is authorizing the PPA General Manager or its duly authorized representative(s) to verify all the documents submitted;
6. The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;
7. (Name of Consultant) complies with existing labor laws and standards;
and
8. (Name of Consultant) is aware of and has undertaken the following responsibilities as a Bidder:

- a. Carefully examine all of the Bidding Documents;
- b. Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
- c. Made an estimate of the facilities available and needed for the contract to be bid, if any; and
- d. Inquire or secure Supplemental / Bid Bulletin(s) issued for the (Name of the Project).

9. (Name of Bidder) did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

[Bidder's Representative/Authorized Signatory]

Witness my hand and seal this ____ day of [month] [year].

Serial No. of Commission _____
Notary Public for _____ **until** _____
Roll of Attorneys No. _____
PTR No. __, *[date issued]*, *[place issued]*
IBP No. __, *[date issued]*, *[place issued]*
Doc. No. _____
Page No. _____
Book No. _____
Series of _____.

Bid-Securing Declaration

(REPUBLIC OF THE PHILIPPINES)
CITY OF _____) S.S.
x-----x

Invitation to Bid *[Insert reference number]*

To: *[Insert name and address of the Procuring Entity]*

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid-Securing Declaration.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1 (f), of the IRR of RA 9184; without prejudice to other legal action the government may undertake.
3. I/We understand that this Bid-Securing Declaration shall cease to be valid on the following circumstances:
 - a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;
 - c. I am/we are declared as the bidder with the Highest Rated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of
[month] [year] at [place of execution].

[Insert NAME OF BIDDER'S AUTHORIZED REPRESENTATIVE]
[Insert signatory's legal capacity]

Affiant

SUBSCRIBED AND SWORN to before me this ____ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____.

Witness my hand and seal this ____ day of *[month] [year]*.

NAME OF NOTARY PUBLIC

Serial No. of Commission _____
Notary Public for _____ **until** _____
Roll of Attorneys No. _____
PTR No. __, *[date issued]*, *[place issued]*
IBP No. __, *[date issued]*, *[place issued]*
Doc. No. ____
Page No. ____
Book No. ____
Series of ____.

FPF 1. FINANCIAL PROPOSAL SUBMISSION FORM

[Date]

[Name and address of the Procuring Entity]

Ladies/Gentlemen:

We, the undersigned, offer to provide the consulting services for the PROCUREMENT OF TECHNICAL SERVICES FOR THE SOIL INVESTIGATION AT SELECTED PORTS (PACKAGE 9) in accordance with your Bidding Documents dated [insert date] and our Bid (Technical and Financial Proposals). Our attached Financial Proposal is for the sum of [amount in words and figures]. This amount is exclusive of the local taxes, which we have estimated at [amount(s) in words and figures].

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the bid validity period, i.e., [Date].

In accordance with GCC Clause 51, we acknowledge and accept the Procuring Entity's right to inspect and audit all records relating to our Bid irrespective of whether we enter into a contract with the Procuring Entity as a result of this Bid.

We confirm that we have read, understood and accept the contents of the Instructions to Bidders (ITB), the Bid Data Sheet (BDS), General Conditions of Contract (GCC), Special Conditions of Contract (SCC), Terms of Reference (TOR), the provisions relating to the eligibility of Consultant and the applicable guidelines for the procurement rules of the Funding Source, any and all Bid bulletins issued and other attachments and inclusions included in the Bidding Documents sent to us.

We understand you are not bound to accept any Bid you receive.

We remain,

Yours sincerely,
Authorized Signature:
Name and Title of Signatory:
Name of Firm:
Address:

FPF 2. SUMMARY OF COSTS

Costs	Currency(ies) ⁷	Amount in Philippine Peso
Subtotal		
Local Taxes		
Total Amount of Financial Proposal		

⁷ In cases of contracts involving foreign consultants, indicate the exchange rate used.

FPF 3. BREAKDOWN OF PRICE PER ACTIVITY

Activity No.: _____	Activity No.: _____	Description: _____
Price Component	Currency(ies) ⁸	Amount in Philippine Peso
Remuneration		
Reimbursables		
Miscellaneous Expenses		
Subtotal		_____

⁸ In cases of contracts involving foreign consultants, indicate the exchange rate used.

FPF 4. BREAKDOWN OF REMUNERATION PER ACTIVITY

Activity No. _____		Name: _____	
Names	Position	Input ⁹	Remuneration Currency(ies) Rate Amount
Regular staff			
Local staff			
Consultants			
Grand Total			_____

⁹ Staff months, days, or hours as appropriate.

FPF 5. REIMBURSABLES PER ACTIVITY

Activity No: _____

Name: _____

No.	Description	Unit	Quantity	Unit Price In	Total Amount In
1.	International flights _____	Trip			
2.	Miscellaneous travel expenses	Trip			
3.	Subsistence allowance	Day			
4.	Local transportation costs ¹⁰				
5.	Office rent/accommodation/ clerical assistance				
	Grand Total				_____

¹⁰ Local transportation costs are not included if local transportation is being made available by the Entity. Similarly, in the project site, office rent/accommodations/clerical assistance costs are not to be included if being made available by the Entity.

FPF 6. MISCELLANEOUS EXPENSES

Activity No. _____ Activity Name: _____

No.	Description	Unit	Quantity	Unit Price	Total Amount
1.	Communication costs between _____ and _____ (telephone, telegram, telex)				
2.	Drafting, reproduction of reports				
3.	Equipment: vehicles, computers, etc.				
4.	Software				
	Grand Total				_____

FORM OF CONTRACT AGREEMENT

THIS AGREEMENT, made this *[insert date]* day of *[insert month]*, *[insert year]* between *[name and address of Procuring Entity]* (hereinafter called the "Entity") and *[name and address of Consultant]* (hereinafter called the "Consultant").

WHEREAS, the Entity is desirous that the Consultant execute *[name and identification number of contract]* (hereinafter called "the Works") and the Entity has accepted the bid for *[insert the amount in specified currency in numbers and words]* by the Consultant for the execution and completion of such Consulting Services and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be attached, deemed to form, and be read and construed as part of this Agreement, to wit:
 - (a) General and Special Conditions of Contract;
 - (b) Terms of Reference
 - (c) Request for Expression of Interest;
 - (d) Instructions to Bidders;
 - (e) Bid Data Sheet;
 - (f) Addenda and/or Supplemental/Bid Bulletins, if any;
 - (g) Bid forms, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents/statements submitted (*e.g.*, bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
 - (h) Eligibility requirements, documents and/or statements;
 - (i) Performance Security;
 - (j) Notice of Award of Contract and the Bidder's conforme thereto;
 - (k) Other contract documents that may be required by existing laws and/or the Entity.
3. In consideration of the payments to be made by the Entity to the Consultant as hereinafter mentioned, the Consultant hereby covenants with the Entity to execute and complete the Consulting Services and remedy any defects therein in conformity with the provisions of this Consultant in all respects.

4. The Entity hereby covenants to pay the Consultant in consideration of the execution and completion of the Consulting Services, the Contract Price or such other sum as may become payable under the provisions of this Contract at the times and in the manner prescribed by this Contract.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

Binding Signature of Procuring Entity

Binding Signature of Consultant

*[Addendum showing the corrections, if any, made during the bid evaluation should be
attached with this agreement]*

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
South Bank, Pasig River Manila

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
BILL NO. 2	FIELD WORK				
BILL NO. 3	LABORATORY TEST				
BILL NO. 4	TECHNICAL EVALUATION REPORT				
BILL OF QUANTITIES					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)

South Bank, Pasig River Manila

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1 1.01	MOBILIZATION AND DEMOBILIZATION Mobilization, demobilization	Lump Sum	1		
TOTAL FOR BILL NO. 1					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
South Bank, Pasig River Manila

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 2	FIELD WORK				
	OFFSHORE BOREHOLE (3 BH @ 50m)				
2.01	Fabrication and drilling platform	lump sum	1		
2.02	Hole to hole transfer and setting-up including staking of borehole locations	holes	3		
2.03	Drilling on ordinary soils	meter	90		
2.04	Coring of rocks/gravel	meter	10		
2.05	SPT at 1.5m interval	test	90		
2.06	Undisturbed sampling (UDS)	sample	10		
2.07	Safety gears/equipment	set	1		
	INLAND BOREHOLE (BH @ 30m)				
2.08	Hole to hole transfer and setting-up including staking of borehole locations	holes			-
2.09	Drilling on ordinary soils	meter			-
2.10	Coring of rocks/gravel	meter			-
2.11	SPT at 1.5m interval	test			-
2.12	Undisturbed sampling (UDS)	sample			-
2.13	Safety gears/equipment	set			-
TOTAL FOR BILL NO. 2					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
South Bank, Pasig River Manila

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 3	LABORATORY TEST				
3.01	Visual Classification	test	100		
3.02	Moisture Content	test	100		
3.03	Grain Size analysis	test	100		
3.04	Atterberg Units	test	100		
3.05	Organic Content	test	100		
3.06	Specific Gravity	test	90		
3.07	Unit Weight	test	100		
3.08	Unconfined Compression	test	100		
3.09	Consolidation	test	15		
TOTAL FOR BILL NO. 3					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
South Bank, Pasig River Manila

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 4 4.01	TECHNICAL EVALUATION REPORT Technical Evaluation Report	Lump sum	1		
TOTAL FOR BILL NO. 4					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Capinpin, Orion Bataan

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
BILL NO. 2	FIELD WORK				
BILL NO. 3	LABORATORY TEST				
BILL NO. 4	TECHNICAL EVALUATION REPORT				
BILL OF QUANTITIES					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Capinpin, Orion Bataan

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1 1.01	MOBILIZATION AND DEMOBILIZATION Mobilization, demobilization	lump sum	1		
TOTAL FOR BILL NO. 1					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Capinpin, Orion Bataan

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 2	FIELD WORK				
	OFFSHORE BOREHOLE (3 BH @ 50m)				
2.01	Fabrication and drilling platform	lot	1		
2.02	Hole to hole transfer and setting-up including staking of borehole locations	no.	3		
2.03	Drilling on ordinary soils	meter	90		
2.04	Coring of rocks/gravel	meter	10		
2.05	SPT at 1.5m interval	test	90		
2.06	Undisturbed sampling (UDS)	sample	10		
2.07	Safety gears/equipment	lot	1		
	INLAND BOREHOLE (BH @ 30m)				
2.01	Hole to hole transfer and setting-up including staking of borehole locations	holes			
2.02	Drilling on ordinary soils	meter			
2.03	Coring of rocks/gravel	meter			
2.04	SPT at 1.5m interval	test			
2.05	Undisturbed sampling (UDS)	sample			
2.06	Safety gears/equipment	set			
TOTAL FOR BILL NO. 2					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Capinpin, Orion Bataan

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 3	LABORATORY TEST				
3.01	Visual Classification	test	100		
3.02	Moisture Content	test	100		
3.03	Grain Size analysis	test	100		
3.04	Atterberg Units	test	100		
3.05	Organic Content	test	100		
3.06	Specific Gravity	test	90		
3.07	Unit Weight	test	100		
3.08	Unconfined Compression	test	100		
3.09	Consolidation	test	15		
TOTAL FOR BILL NO. 3					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Capinpin, Orion Bataan

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 4 4.01	TECHNICAL EVALUATION REPORT Technical Evaluation Report	lump sum	1		
TOTAL FOR BILL NO. 4					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)

Bulalacao Oriental Mindoro

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
BILL NO. 2	FIELD WORK				
BILL NO. 3	LABORATORY TEST				
BILL NO. 4	TECHNICAL EVALUATION REPORT				
BILL OF QUANTITIES					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Bulalacao Oriental Mindoro

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
1.01	Mobilization, demobilization	Lump Sum	1		
TOTAL FOR BILL NO. 1					-

BILL OF QUANTITIES
Conduct of Soil Investigation/Exploration (Package 9)
Bulalacao Oriental Mindoro

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 2	FIELD WORK				
	OFFSHORE BOREHOLE (3 BH @ 50m)				
2.01	Fabrication and drilling platform	lump sum	1		
2.02	Hole to hole transfer and setting-up including staking of borehole locations	holes	3		
2.03	Drilling on ordinary soils	meter	90		
2.04	Coring of rocks/gravel	meter	10		
2.05	SPT at 1.5m interval	test	90		
2.06	Undisturbed sampling (UDS)	sample	10		
2.07	Safety gears/equipment	set	1		
	INLAND BOREHOLE (BH @ 50m)				
2.08	Hole to hole transfer and setting-up including staking of borehole locations	holes			
2.09	Drilling on ordinary soils	meter			
2.10	Coring of rocks/gravel	meter			
2.11	SPT at 1.5m interval	test			
2.12	Undisturbed sampling (UDS)	sample			
TOTAL FOR BILL NO. 2					-

BILL OF QUANTITIES
Conduct of Soil Investigation/Exploration (Package 9)
Bulalacao Oriental Mindoro

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 3	LABORATORY TEST				
3.01	Visual Classification	test	100		
3.02	Moisture Content	test	100		
3.03	Grain Size analysis	test	100		
3.04	Atterberg Units	test	100		
3.05	Organic Content	test	100		
3.06	Specific Gravity	test	90		
3.07	Unit Weight	test	100		
3.08	Unconfined Compression	test	100		
3.09	Consolidation	test	15		
TOTAL FOR BILL NO. 3					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Bulalacao Oriental Mindoro

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 4	TECHNICAL EVALUATION REPORT				
4.01	Technical Evaluation Report	Lump sum	1		
TOTAL FOR BILL NO. 4					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)

Abra de Ilog Occidental Mindoro

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
BILL NO. 2	FIELD WORK				
BILL NO. 3	LABORATORY TEST				
BILL NO. 4	TECHNICAL EVALUATION REPORT				
BILL OF QUANTITIES					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)

Abra de Ilog Occidental Mindoro

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
1.01	Mobilization, demobilization	lump sum	1		
TOTAL FOR BILL NO. 1					-

BILL OF QUANTITIES
Conduct of Soil Investigation/Exploration (Package 9)
Abra de Ilog Occidental Mindoro

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 2	FIELD WORK				
	OFFSHORE BOREHOLE (BH @ 50m)				
2.01	Fabrication and drilling platform	lot			
2.02	Hole to hole transfer and setting-up including staking of borehole locations	no.			
2.03	Drilling on ordinary soils	meter			
2.04	Coring of rocks/gravel	meter			
2.05	SPT at 1.5m interval	test			
2.06	Undisturbed sampling (UDS)	sample			
2.07	Safety gears/equipment	lot			
	INLAND BOREHOLE (3 BH @ 30m)				
2.01	Hole to hole transfer and setting-up including staking of borehole locations	holes	3		
2.02	Drilling on ordinary soils	meter	50		
2.03	Coring of rocks/gravel	meter	10		
2.04	SPT at 1.5m interval	test	50		
2.05	Undisturbed sampling (UDS)	sample	10		
2.06	Safety gears/equipment	set	1		
TOTAL FOR BILL NO. 2					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Abra de Ilog Occidental Mindoro

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 3	LABORATORY TEST				
3.01	Visual Classification	test	60		
3.02	Moisture Content	test	60		
3.03	Grain Size analysis	test	60		
3.04	Atterberg Units	test	60		
3.05	Organic Content	test	60		
3.06	Specific Gravity	test	50		
3.07	Unit Weight	test	60		
3.08	Unconfined Compression	test	60		
3.09	Consolidation	test	15		
TOTAL FOR BILL NO. 3					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)

Abra de Ilog Occidental Mindoro

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 4	TECHNICAL EVALUATION REPORT				
4.01	Technical Evaluation Report	lump sum	1		
TOTAL FOR BILL NO. 4					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)

Carmen Romblon

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
BILL NO. 2	FIELD WORK				
BILL NO. 3	LABORATORY TEST				
BILL NO. 4	TECHNICAL EVALUATION REPORT				
BILL OF QUANTITIES					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)

Carmen Romblon

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
1.01	Mobilization, demobilization	Lump Sum	1		
TOTAL FOR BILL NO. 1					-

BILL OF QUANTITIES
Conduct of Soil Investigation/Exploration (Package 9)
Carmen Romblon

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 2	FIELD WORK				
	OFFSHORE BOREHOLE (2 BH @ 50m)				
2.01	Fabrication and drilling platform	lump sum	1		
2.02	Hole to hole transfer and setting-up including staking of borehole locations	holes	2		
2.03	Drilling on ordinary soils	meter	60		
2.04	Coring of rocks/gravel	meter	7		
2.05	SPT at 1.5m interval	test	60		
2.06	Undisturbed sampling (UDS)	sample	7		
2.07	Safety gears/equipment	set	1		
	INLAND BOREHOLE (BH @ 50m)				
2.08	Hole to hole transfer and setting-up including staking of borehole locations	holes			
2.09	Drilling on ordinary soils	meter			
2.10	Coring of rocks/gravel	meter			
2.11	SPT at 1.5m interval	test			
2.12	Undisturbed sampling (UDS)	sample			
TOTAL FOR BILL NO. 2					-

BILL OF QUANTITIES
 Conduct of Soil Investigation/Exploration (Package 9)
 Carmen Romblon

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 3	LABORATORY TEST				
3.01	Visual Classification	test	67		
3.02	Moisture Content	test	67		
3.03	Grain Size analysis	test	67		
3.04	Atterberg Units	test	67		
3.05	Organic Content	test	67		
3.06	Specific Gravity	test	60		
3.07	Unit Weight	test	67		
3.08	Unconfined Compression	test	67		
3.09	Consolidation	test	15		
TOTAL FOR BILL NO. 3					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Carmen Romblon

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 4	TECHNICAL EVALUATION REPORT				
4.01	Technical Evaluation Report	Lump sum	1		
TOTAL FOR BILL NO. 4					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Puerto Princesa Palawan

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION FIELD WORK LABORATORY TEST TECHNICAL EVALUATION REPORT				
BILL NO. 2					
BILL NO. 3					
BILL NO. 4					
BILL OF QUANTITIES					
					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Puerto Princesa Palawan

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1 1.01	MOBILIZATION AND DEMOBILIZATION Mobilization, demobilization	Lump Sum	1		
TOTAL FOR BILL NO. 1					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Puerto Princesa Palawan

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 2	FIELD WORK				
	OFFSHORE BOREHOLE (5 BH @ 50m)				
2.01	Fabrication and drilling platform	lump sum	1		
2.02	Hole to hole transfer and setting-up including staking of borehole locations	holes	5		
2.03	Drilling on ordinary soils	meter	150		
2.04	Coring of rocks/gravel	meter	17		
2.05	SPT at 1.5m interval	test	150		
2.06	Undisturbed sampling (UDS)	sample	17		
2.07	Safety gears/equipment	set	1		
	INLAND BOREHOLE (BH @ 50m)				
2.08	Hole to hole transfer and setting-up including staking of borehole locations	holes			
2.09	Drilling on ordinary soils	meter			
2.10	Coring of rocks/gravel	meter			
2.11	SPT at 1.5m interval	test			
2.12	Undisturbed sampling (UDS)	sample			
TOTAL FOR BILL NO. 2					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Puerto Princesa Palawan

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 3	LABORATORY TEST				
3.01	Visual Classification	test	167		
3.02	Moisture Content	test	167		
3.03	Grain Size analysis	test	167		
3.04	Atterberg Units	test	167		
3.05	Organic Content	test	167		
3.06	Specific Gravity	test	150		
3.07	Unit Weight	test	167		
3.08	Unconfined Compression	test	167		
3.09	Consolidation	test	15		
TOTAL FOR BILL NO. 3					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Puerto Princesa Palawan

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 4 4.01	TECHNICAL EVALUATION REPORT Technical Evaluation Report	Lump sum	1		
TOTAL FOR BILL NO. 4					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Caramoran Catanduanes

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
BILL NO. 2	FIELD WORK				
BILL NO. 3	LABORATORY TEST				
BILL NO. 4	TECHNICAL EVALUATION REPORT				
BILL OF QUANTITIES					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Caramoran Catanduanes

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
1.01	Mobilization, demobilization	Lump Sum	1		
TOTAL FOR BILL NO. 1					-

BILL OF QUANTITIES
Conduct of Soil Investigation/Exploration (Package 9)
Caramoran Catanduanes

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 2	FIELD WORK				
	OFFSHORE BOREHOLE (3 BH @ 50m)				
2.01	Fabrication and drilling platform	lump sum	1		
2.02	Hole to hole transfer and setting-up including staking of borehole locations	holes	3		
2.03	Drilling on ordinary soils	meter	90		
2.04	Coring of rocks/gravel	meter	10		
2.05	SPT at 1.5m interval	test	90		
2.06	Undisturbed sampling (UDS)	sample	10		
2.07	Safety gears/equipment	set	1		
	INLAND BOREHOLE (BH @ 50m)				
2.08	Hole to hole transfer and setting-up including staking of borehole locations	holes			
2.09	Drilling on ordinary soils	meter			
2.10	Coring of rocks/gravel	meter			
2.11	SPT at 1.5m interval	test			
2.12	Undisturbed sampling (UDS)	sample			
TOTAL FOR BILL NO. 2					-

BILL OF QUANTITIES
Conduct of Soil Investigation/Exploration (Package 9)
Caramoran Catanduanes

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 3	LABORATORY TEST				
3.01	Visual Classification	test	100		
3.02	Moisture Content	test	100		
3.03	Grain Size analysis	test	100		
3.04	Atterberg Units	test	100		
3.05	Organic Content	test	100		
3.06	Specific Gravity	test	90		
3.07	Unit Weight	test	100		
3.08	Unconfined Compression	test	100		
3.09	Consolidation	test	15		
TOTAL FOR BILL NO. 3					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)
Caramoran Catanduanes

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 4	TECHNICAL EVALUATION REPORT				
4.01	Technical Evaluation Report	Lump sum	1		
TOTAL FOR BILL NO. 4					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)

Masbate Masbate

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
BILL NO. 2	FIELD WORK				
BILL NO. 3	LABORATORY TEST				
BILL NO. 4	TECHNICAL EVALUATION REPORT				
BILL OF QUANTITIES					-

BILL OF QUANTITIES

Conduct of Soil Investigation/Exploration (Package 9)

Masbate Masbate

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	MOBILIZATION AND DEMOBILIZATION				
1.01	Mobilization, demobilization	Lump Sum	1		
TOTAL FOR BILL NO. 1					-