PHILIPPINE RECLAMATION AUTHORITY

Republic of the Philippines

BIDDING DOCUMENTS/ REQUEST FOR PROPOSAL (RFP)

CONSULTANCY SERVICES

for the

PROGRAMMATIC ENVIRONMENTAL ASSESSMENT, PLANNING and ENGINEERING STUDIES for the COASTAL ADAPTATION STRATEGY FORMULATION in the MANILA BAY AREA

(PBCONS-15-004) (Negotiated Procurement- Two Failed Biddings)
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Section I

Notice of Eligibility
and Short Listing
Dear [Addressee]:

1. The PHILIPPINE RECLAMATION AUTHORITY (PRA) (hereinafter called “Procuring Entity”) has received financing (hereinafter called “funds”) from the 2018 Corporate Operating Budget (COB) (hereinafter called the “Funding Source”) toward the cost of Programmatic Environmental Assessment, Planning and Engineering Studies for the Coastal Adaptation Strategy Formulation in the Manila Bay Area. The Procuring Entity intends to apply a portion of the funds in the amount of Four Hundred Eight Million Four Hundred Thirty One Thousand Two Hundred Seventy Nine Pesos and 86/100 (Php408,431,279.86) to eligible payments under the contract for the Programmatic Environmental Assessment, Planning and Engineering Studies for the Coastal Adaptation Strategy Formulation in the Manila Bay Area for which the Bidding Documents is issued.

2. The Procuring Entity now invites bids to provide the following Consulting Services: Programmatic Environmental Assessment, Planning and Engineering Studies for the Coastal Adaptation Strategy Formulation in the Manila Bay Area. More details on the services are provided in the Terms of Reference (TOR) for the project.

3. The Consultant shall be selected and employed in accordance with Quality-Cost Based Evaluation (QCBE) procedures as described in the Bidding Documents.

4. This notice has been addressed to the following short listed consultants: [Insert list of short listed consultants]

5. It is not permissible for you to transfer this invitation to any other consultant.

6. The Bidding Documents may be acquired at 7th Floor, Legaspi Towers 200 Bldg., 107 Paseo de Roxas Street, Legaspi Village, Makati City during office hours from Monday to Friday at 8:00am to 5:00pm on October 10 – 29, 2018.

7. The PRA will hold a Pre-Bid Conference on October 16, 2018 at 9:30am at PRA Conference Room, 6th Floor Legaspi Towers 200 Bldg., 107 Paseo de Roxas Street, Legaspi Village, Makati City, which shall be open to all short listed consultants.

Yours sincerely,

_________________________________
Atty. KAREN A. VILLAMIL
BAC Chairperson
Section II

Instruction to Bidders
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A. General

1. Introduction

1.1. The Procuring Entity named in the Bid Data Sheet (BDS) shall select an individual, sole proprietorship, cooperative, partnership, corporation, or a joint venture (JV) (hereinafter referred to as “Consultant”) from among those short listed, in accordance with the evaluation procedure specified in the BDS.

1.2. The Procuring Entity has received financing (hereinafter called “funds”) from the source indicated in the BDS (hereinafter called the “Funding Source”) toward the cost of the Project named in the BDS. The Procuring Entity intends to apply a portion or the whole of the funds to payments for this Project.

1.3. Consultants are invited to submit bids composed of a technical proposal and a financial proposal for Consulting Services required for this Project described in the BDS. Bids shall be the basis for contract negotiations and ultimately for a signed contract with the selected Consultant.

1.4. If the BDS indicates that the Project will be completed in phases, each phase must be completed to the Procuring Entity’s satisfaction prior to the commencement of the next phase.

1.5. Consultants must familiarize themselves with local conditions and take them into account in preparing their bids. To obtain firsthand information on the project and on the local conditions, Consultants are encouraged to visit the Procuring Entity before submitting a bid and to attend the pre-bid conference specified in ITB Clause 7.

1.6. The Consultants’ costs of preparing their bids and negotiating the contract, including a visit to the Procuring Entity, are not reimbursable as a direct cost of the project.

1.7. Consultants shall not be under a declaration of ineligibility for corrupt, fraudulent, collusive, coercive or obstructive practices issued by the Funding Source or the Procuring Entity in accordance with ITB Clause 3.1.

2. Conflict of Interest

2.1. The Funding Source’s policy requires that Consultants provide professional, objective, and impartial advice and at all times hold the Procuring Entity’s interests paramount, without any consideration for future work, and strictly avoid situations where a conflict of interest shall arise with their other projects or their own interests. Consultants shall not be hired for any project that would be in conflict with their prior or current obligations to other entities, or that may place them in a position of not being able to carry out the Project in the best interest of the Procuring Entity. Without limitation on the generality of this rule, Consultants shall not be hired under the circumstances set forth below:

(a) If a Consultant combines the function of consulting with those of contracting and/or supply of equipment for the same Project;
(b) If a Consultant is associated with, affiliated to, or owned by a contractor or a manufacturing firm with departments or design offices offering services as consultants unless such Consultant includes relevant information on such relationships along with a statement in the Technical Proposal cover letter to the effect that the Consultant shall limit its role to that of a consultant and disqualify itself and its associates from work in any other capacity that may emerge from the Project (including bidding for any part of the future project). The contract with the Consultant selected to undertake the Project shall contain an appropriate provision to such effect; or

(c) If there is a conflict among consulting projects, the Consultant (including its personnel and subconsultants) and any subsidiaries or entities controlled by such Consultant shall not be recruited for the relevant project. The duties of the Consultant depend on the circumstances of each case. While continuity of consulting services may be appropriate in particular situations where no conflict exists, a Consultant cannot be recruited to carry out a project that, by its nature, shall result in conflict with a prior or current project of such Consultant. Examples of the situations mentioned are when a Consultant engaged to prepare engineering design for an infrastructure project shall not be recruited to prepare an independent environmental assessment for the same project; similarly, a Consultant assisting a Procuring Entity in privatization of public assets shall not purchase, nor advise purchasers, of such assets; or a Consultant hired to prepare Terms of Reference (TOR) for a project shall not be recruited for the project in question.

2.2. Consultants shall not be related to the Head of the Procuring Entity (HoPE), members of the BAC, the TWG, and the BAC Secretariat, the head of the PMO or the end-user unit, and the project consultants, by consanguinity or affinity up to the third civil degree. The prohibition shall apply as follows:

(a) If the Consultant is an individual or sole proprietorship, then to himself;

(b) If the Consultant is a partnership, then to all its officers and members;

(c) If the Consultant is a corporation, then to all its officers, directors and controlling stockholders;

(d) If the Consultant is a cooperative, to all its officers, directors, and controlling shareholders or members; or

(e) If the Consultant is a JV, the provisions of items (a), (b), (c), or (d) of this Section shall correspondingly apply to each of the members of the said joint venture, as may be appropriate.

Relationship of the nature described above or a failure to comply with the provisions of this clause will result in the rejection of the Consultant’s bid.

2.3. Subject to the provisions of ITB Clause 2, any previous or ongoing participation by the Consultant, its professional staff, or its affiliates or associates under a
contract with the Funding Source or the Procuring Entity in relation to this Project may result in the rejection of its bid. Consultants should clarify their situation in that respect with the Procuring Entity before preparing its bid.

2.4. Failure by a Consultant to fully disclose potential conflict of interest at the time of Bid submission, or at a later date in the event that the potential conflict arises after such date, 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 including imprisonment.

2.5. Consultants are discouraged to include officials and employees of the Government of the Philippines (GoP) as part of its personnel. Participation of officials and employees of the GoP in the Project shall be subject to existing rules and regulations of the Civil Service Commission.

2.6. Fairness and transparency in the selection process require that Consultants do not derive unfair competitive advantage from having provided consulting services related to the Project in question. To this end, the Procuring Entity shall make available to all the short listed consultants together with the Bidding Documents all information that would in that respect give each Consultant a competitive advantage.

3. **Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices**

3.1. The Procuring Entity as well as the Consultants shall observe the highest standard of ethics during the procurement and execution of the contract. In pursuance of this policy, the Procuring Entity:

   (a) defines, for purposes of this provision, the terms set forth below as follows:

   (i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves, others, or induce others to do so, by misusing the position in which they are placed, and includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; entering, on behalf of the GoP, into any contract or transaction manifestly and grossly disadvantageous to the same, whether or not the public officer profited or will profit thereby, and similar acts as provided in Republic Act 3019.

   (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring Entity, and includes collusive practices among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the Procuring Entity of the benefits of free and open competition.
(iii) “collusive practices” means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring Entity, designed to establish bid prices at artificial, non-competitive levels.

(iv) “coercive practices” means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract;

(v) “obstructive practice” is

(aa) deliberately destroying, falsifying, altering or concealing of evidence material to an administrative proceedings or investigation or making false statements to investigators in order to materially impede an administrative proceedings or investigation of the Procuring Entity or any foreign government/foreign or international financing institution into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the administrative proceedings or investigation or from pursuing such proceedings or investigation; or

(bb) acts intended to materially impede the exercise of the inspection and audit rights of the Procuring Entity or any foreign government/foreign or international financing institution herein.

(b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in any of the practices mentioned in this Clause for purposes of competing for the contract.

3.2. Further, the Procuring Entity will seek to impose the maximum civil, administrative, and/or criminal penalties available under applicable laws on individuals and organizations deemed to be involved in any of the practices mentioned in ITB Clause 3.1(a).

3.3. Furthermore, the Funding Source and the Procuring Entity reserve the right to inspect and audit records and accounts of a Consultant in the bidding for and performance of a contract themselves or through independent auditors as reflected in the GCC Clause 51.

4. Consultant’s Responsibilities

4.1. The Consultant or its duly authorized representative shall submit a sworn statement in the form prescribed in Error! Reference source not found. as required in ITB Clause 10.2(d).
4.2. The Consultant is responsible for the following:

(a) Having taken steps to carefully examine all of the Bidding Documents;

(b) Having acknowledged all conditions, local or otherwise, affecting the implementation of the contract;

(c) Having made an estimate of the facilities available and needed for this Project, if any;

(d) Having complied with its responsibility to inquire or secure Supplemental/Bid Bulletin/s as provided under ITB Clause 8.4.

(e) Ensuring that it is not “blacklisted” or barred from bidding by the GoP or any of its agencies, offices, corporations, or LGUs, including foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the GPPB;

(f) Ensuring that 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;

(g) Authorizing the Head of the Procuring Entity or its duly authorized representative/s to verify all the documents submitted;

(h) Ensuring that the signatory is the duly authorized representative of the Bidder, and 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, accompanied by the duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary’s Certificate, whichever is applicable;

(i) Complying with the disclosure provision under Section 47 of RA 9184 and its IRR in relation to other provisions of Republic Act 3019;

(j) Complying with existing labor laws and standards, in the case of procurement of services. Moreover, bidder undertakes to:

(i) Ensure the entitlement of workers to wages, hours of work, safety and health and other prevailing conditions of work as established by national laws, rules and regulations; or collective bargaining agreement; or arbitration award, if and when applicable.

In case there is a finding by the Procuring Entity or the DOLE of underpayment or non-payment of workers’ wage and wage-related benefits, bidder agrees that the performance security or portion of the contract amount shall be withheld in favor of the complaining workers pursuant to appropriate provisions of Republic Act No. 9184 without prejudice to the institution of
appropriate actions under the Labor Code, as amended, and other social legislations.

(ii) Comply with occupational safety and health standards and to correct deficiencies, if any.

In case of imminent danger, injury or death of the worker, bidder undertakes to suspend contract implementation pending clearance to proceed from the DOLE Regional Office and to comply with Work Stoppage Order; and

(iii) Inform the workers of their conditions of work, labor clauses under the contract specifying wages, hours of work and other benefits under prevailing national laws, rules and regulations; or collective bargaining agreement; or arbitration award, if and when applicable, through posting in two (2) conspicuous places in the establishment’s premises; and

(k) Ensuring that it did not give or pay, directly or indirectly, any commission, amount, fee, or any form of compensation, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

Failure to observe any of the above responsibilities shall be at the risk of the Consultant concerned.

4.3. It shall be the sole responsibility of the prospective bidder to determine and to satisfy itself by such means as it considers necessary or desirable as to all matters pertaining to this Project, including: (a) the location and the nature of the contract, project, or work; (b) climatic conditions; (c) transportation facilities; (c) nature and condition of the terrain, geological conditions at the site communication facilities, requirements, location and availability of construction aggregates and other materials, labor, water, electric power and access roads; and (d) other factors that may affect the cost, duration and execution or implementation of the contract, project, or work.

4.4. The Procuring Entity shall not assume any responsibility regarding erroneous interpretations or conclusions by the Consultant out of the data furnished by the Procuring Entity. However, the Procuring Entity shall ensure that all information in the Bidding Documents, including supplemental/bid bulletins issued are correct and consistent.

4.5. Before submitting their bids, the Consultants are deemed to have become familiar with all existing laws, decrees, ordinances, acts and regulations of the GoP which may affect the contract in any way.

4.6. The Consultant shall bear all costs associated with the preparation and submission of his bid, and the Procuring Entity will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
4.7. Consultants should note that the Procuring Entity will only accept bids from those that have paid the applicable fee for the Bidding Documents at the office indicated in the Request for Expression of Interest.

5. Origin of Associated Goods

Unless otherwise indicated in the BDS, there is no restriction on the origin of Goods other than those prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations.

6. Subcontracts

6.1. Unless otherwise specified in the BDS, the Consultant may subcontract portions of the Consulting Services to an extent as may be approved by the Procuring Entity and stated in the BDS. However, subcontracting of any portion shall not relieve the Consultant from any liability or obligation that may arise from the contract for this Project.

6.2. Subconsultant must comply with the eligibility criteria and the documentary requirements specified in the BDS. In the event that any subconsultant is found by the Procuring Entity to be ineligible, the subcontracting of such portion of the Consulting Services shall be disallowed.

6.3. The Consultant may identify the subconsultant to whom a portion of the Consulting Services will be subcontracted at any stage of the bidding process or during contract implementation. If the Consultant opts to disclose the name of the subconsultant during bid submission, the Consultant shall include the required documents as part of the technical component of its bid. A subconsultant that is identified by the Consultant during contract implementation must comply with the eligibility criteria and documentary requirements and secure approval of the Procuring Entity.

B. Contents of Bidding Documents

7. Pre-Bid Conference

7.1. If so specified in the BDS, a pre-bid conference shall be held at the venue and on the date indicated therein, to clarify and address the Consultants’ questions on the technical and financial components of this Project.

7.2. The pre-bid conference shall be held at least twelve (12) calendar days before the deadline for the submission and receipt of bids, but not earlier than seven (7) calendar days from the determination of the shortlisted consultants. If the Procuring Entity determines that, by reason of the method, nature, or complexity of the contract to be bid, or when international participation will be more advantageous to the GoP, a longer period for the preparation of bids is necessary, the pre-bid conference shall be held at least thirty (30) calendar days before the deadline for the submission and receipt of bids.
7.3. Consultants are encouraged to attend the pre-bid conference to ensure that they fully understand the Procuring Entity’s requirements. Non-attendance of the Consultant will in no way prejudice its bid; however, the Consultant is expected to know the changes and/or amendments to the Bidding Documents as recorded in the minutes of the pre-bid conference and the Supplemental/Bid Bulleting. The minutes of the pre-bid conference shall be recorded and prepared not later than five (5) calendar days after the pre-bid conference. The minutes shall be made available to prospective bidders not later than five (5) days upon written request.

7.4. Decisions of the BAC amending any provision of the bidding documents shall be issued in writing through a Supplemental/Bid Bulletin at least seven (7) calendar days before the deadline for the submission and receipt of bids.

8. Clarifications and Amendments to Bidding Documents

8.1. Shortlisted consultants may request for clarification(s) on and/or an interpretation of any part of the Bidding Documents. Such a request must be in writing and submitted to the Procuring Entity at the address indicated in the BDS at least ten (10) calendar days before the deadline set for the submission and receipt of bids.

8.2. The BAC shall respond to the said request by issuing a Supplemental/Bid Bulletin to be made available to all those who have properly secured the Bidding Documents at least seven (7) calendar days before the deadline for the submission and receipt of Bids.

8.3. Supplemental/Bid Bulletins may also be issued upon the Procuring Entity’s initiative for purposes of clarifying or modifying any provision of the Bidding Documents not later than seven (7) calendar days before the deadline for the submission and receipt of bids. Any modification to the Bidding Documents shall be identified as an amendment.

8.4. Any Supplemental/Bid Bulletin issued by the BAC shall also be posted in the PhilGEPS and the website of the Procuring Entity concerned, if available and at any conspicuous place in the premises of the Procuring Entity concerned. It shall be the responsibility of all Consultants who have properly secured the Bidding Documents to inquire and secure Supplemental/Bid Bulletins that may be issued by the BAC. However, Consultants who have submitted bids before the issuance of the Supplemental/Bid Bulletin must be informed and allowed to modify or withdraw their bids in accordance with ITB Clause 20.

C. Preparation of Bids

9. Language of Bids

The eligibility requirements or statements, the bids, and all other documents to be submitted to the BAC must be in English. If the eligibility requirements or statements, the bids, and all other documents submitted to the BAC are in foreign language other than English, it must be accompanied by a translation of the documents in English. The
documents shall be translated by the relevant foreign government agency, the foreign government agency authorized to translate documents, or a registered translator in the foreign bidder’s country; and shall be authenticated by the appropriate Philippine foreign service establishment/post or the equivalent office having jurisdiction over the foreign bidder’s affairs in the Philippines. The English translation shall govern, for purposes of interpretation of the bid.

10. **Documents Comprising the Bid: Technical Proposal**

10.1. While preparing the Technical Proposal, Consultants must give particular attention to the following:

(a) The Technical Proposal shall not include any financial information. Any Technical Proposal containing financial information shall be declared non-responsive.

(b) For projects on a staff-time basis, the estimated number of professional staff-months specified in the BDS shall be complied with. Bids shall, however, be based on the number of professional staff-months estimated by the Consultant.

(c) Proposed professional staff must, at a minimum, have the experience indicated in the BDS, preferably working under conditions similar to those prevailing in the Republic of the Philippines.

(d) No alternative professional staff shall be proposed, and only one Curriculum Vitae (CV) may be submitted for each position.

10.2. The Technical Proposal shall contain the following information/documents:

(a) Technical Proposal Submission Form shall be the cover letter of the Technical Proposal, using the form prescribed in Section VII. Bidding Forms (TPF 1).

(b) Bid security as prescribed in ITB Clause 15. If the bidder opts to submit the bid security in the form of:

(i) a bank draft/guarantee or an irrevocable Letter of Credit issued by a foreign bank, it shall be accompanied by a confirmation from a Universal or Commercial Bank; or

(ii) a surety bond accompanied by a certification coming from the Insurance Commission that the surety or insurance company is authorized to issue such instrument.

(c) Information indicated in the paragraphs below must be provided by the Consultant and each partner and/or subconsultant, if any, following the formats described in the Technical Proposal Forms:

(i) A brief description of the organization and outline of recent experience of the Consultant and each partner and/or subconsultant on projects of a similar and related nature as
required in form TPF2 Consultants References. For each project, the outline should indicate *inter alia*, the project, contract amount and the Consultant’s involvement. Information should be provided only for those projects for which the Consultant was legally contracted by itself or as one of the major participating consultants within an association. Whenever applicable, the experience of individual experts from projects completed independently or when associated with consultants other than the one with whom the individual is currently associated with cannot be claimed as the experience of the current consultant or any one of its partners and/or subconsultants, but can be claimed by the individuals themselves in their CVs. Consultants should be prepared to substantiate the claimed experience if so requested by the Procuring Entity.

(ii) Comments, if any, on the TOR (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) to improve performance in carrying out the Project. Innovativeness shall be appreciated, including workable suggestions that could improve the quality/effectiveness of the Project. In this regard, unless the Consultant clearly states otherwise, it shall be assumed by the Procuring Entity that work required to implement any such improvements, are included in the inputs shown on the Consultant’s Staffing Schedule. It shall include a list of facilities requested by the Consultant to be provided by the Procuring Entity, if any, in addition to those shown on the Data Sheet that may include support facilities such as: counterpart staff, office space, local transportation, equipment, domestic administrative support, etc. that would be needed to carry out the project.

(iii) A concise, complete, and logical description of how the Consultant’s team shall carry out the services to meet all requirements of the TOR using TPF 4. Description of the Methodology and Work Plan for Performing the Project.

(iv) An organization chart of the key and support staff indicating their tasks and relationships amongst the Consultant and any partner and/or subconsultant, the Procuring Entity, the Funding Source and the GoP, and other parties or stakeholders, if any, involved in the project using TPF 5. Team Composition and Task.

(v) The name, age, nationality, background employment record, and professional experience of each nominated expert including ongoing projects, with particular reference to the type of experience required for the tasks assigned should be presented in the CV format shown in TPF 6. Format of Curriculum Vitae (CV) for Proposed Professional Staff. Only one duly notarized
CV for each consultant involved in the Project may be submitted for each position.

(vi) The Procuring Entity requires that each expert confirm that the content of his/her CV is correct and the experts themselves should sign the certification of the CV. In addition, the expert should submit a signed written commitment stating that the expert shall work for the Project once awarded the contract. A zero rating shall be given to a nominated expert if the expert:

(vi.1) is proposed for a domestic position but is not a Filipino citizen;

(vi.2) failed to state nationality on the CV; or

(vi.3) the CV is not signed in accordance with paragraph (v) above.

(vii) A Time Schedule (TPF 7. Time Schedule for Professional Personnel) indicating clearly the estimated duration in terms of person-months (shown separately for work in the field and in the home office) and the proposed timing of each input for each nominated expert, including domestic experts, if required, using the format shown. The schedule shall also indicate when experts are working in the project office and when they are working at locations away from the project office.

(viii) A work plan showing in graphical format (bar chart) the timing of major activities, anticipated coordination meetings, and deliverables such as reports required under the TOR using TPF 8. Activity (Work) Schedule.

(d) Sworn statement in accordance with Section 25.3 of the IRR of RA 9184 and using the form prescribed in Section VII. Bidding Forms.

11. Documents Comprising the Bid: Financial Proposal

11.1. All information provided in a Consultant’s Financial Proposal shall be treated as confidential. The Financial Proposal must be submitted in hard copy using the format shown in Financial Proposal Forms.

11.2. The Financial Proposal requires completion of six (6) forms, particularly, FPF 1, FPF 2, FPF 3, FPF 4, FPF 5, and FPF 6. FPF 1. Financial Proposal Submission Form should form the covering letter of the Financial Proposal. Form FPF 2. Summary of Costs, FPF 3 Breakdown of Price per Activity, FPF 4. Breakdown of Remuneration per Activity, FPF 5. Reimbursables per Activity, and FPF 6. Miscellaneous Expenses, relate to the costs of consulting services under two distinct categories, namely: (a) Remuneration; and (b) Reimbursable Expenditures.
11.3. Remuneration is divided into billing rate estimates for international and domestic consultants. Reimbursable Expenditures are divided into per diem rates for international and domestic consultants and costs for other reimbursable expenditure items required to perform the consulting services.

11.4. The list of experts, and their respective inputs, identified in Financial Proposal Forms, must match the list of experts and their respective inputs shown in Technical Proposal Forms.

11.5. The Consultant shall be subject to Philippine taxes on amounts payable by the Procuring Entity under the contract through mandated withholding by local tax authorities of specified percentages of such amounts or otherwise. The BDS details the taxes payable.

11.6. The Financial Proposal should clearly estimate, as a separate amount, the local taxes (including social security), duties, fees, levies, and other charges imposed under the applicable law, on the Consultants, the subconsultants, and its personnel (other than Philippine Nationals or permanent residents of the Philippines).

11.7. Unless otherwise provided in the BDS, total calculated bid prices, as evaluated and corrected for minor arithmetical corrections, such as computational errors, which exceed the approved budget for the contract (ABC) shall not be considered.

12. **Alternative Bids**

Consultants participating in more than one bid or associating with any other entity other than those already provided in its eligibility documents and allowed by the Procuring Entity shall be disqualified.

13. **Bid Currencies**

13.1. All bid prices shall be quoted in Philippine Pesos unless otherwise provided in the BDS. However, for purposes of bid evaluation, bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate prevailing on the day of the bid opening.

13.2. If so allowed in accordance with ITB Clause 13.1, the Procuring Entity for purposes of bid evaluation and comparing the bid prices will convert the amounts in various currencies in which the bid price is expressed to Philippine Pesos at the exchange rate as published in the Bangko Sentral ng Pilipinas (BSP) reference rate bulletin on the day of the bid opening.

13.3. Unless otherwise specified in the BDS, payment of the contract price shall be made in Philippine Pesos.
14. **Bid Validity**

14.1. Bids shall remain valid for the period specified in the BDS which shall not exceed one hundred twenty (120) calendar days from the date of the opening of bids.

14.2. In exceptional circumstances, prior to the expiration of the bid validity period, the Procuring Entity may request Consultants to extend the period of validity of their bids. The request and the responses shall be made in writing. The bid security described in ITB Clause 15 should also be extended corresponding to the extension of the bid validity period at the least. A Consultant may refuse the request without forfeiting its bid security, but his bid shall no longer be considered for further evaluation and award. A Consultant granting the request shall not be required or permitted to modify its bid.

15. **Bid Security**

15.1. The Consultant shall submit a Bid Securing Declaration or any form of Bid Security in an amount stated in the BDS, which shall be not less than the percentage of the ABC in accordance with the following schedule:

<table>
<thead>
<tr>
<th>Form of Bid Security</th>
<th>Amount of Bid Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Cash or cashier’s/manager’s check issued by a Universal or Commercial Bank.</td>
<td>Two percent (2%)</td>
</tr>
<tr>
<td><em>For biddings conducted by LGUs, the cashier’s/manager’s check may be issued by other banks certified by the BSP as authorized to issue such financial instrument.</em></td>
<td></td>
</tr>
<tr>
<td>b) Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank.</td>
<td></td>
</tr>
<tr>
<td><em>For biddings conducted by LGUs, the Bank Draft/Guarantee, or irrevocable letter of credit may be issued by other banks certified by the BSP as</em></td>
<td></td>
</tr>
</tbody>
</table>
The Bid Securing Declaration mentioned above is an undertaking which states, among others, that the bidder shall enter into contract with the Procuring Entity and furnish the performance security required under ITB Clause 31, within ten (10) calendar days from receipt of the Notice of Award, and commits to pay the corresponding amount as fine, and be suspended for a period of time from being qualified to participate in any government procurement activity in the event it violates any of the conditions stated therein as provided in the guidelines issued by the GPPB.

15.2. The bid security should be valid for the period specified in the BDS. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

15.3. No bid securities shall be returned to the Consultants after the opening of bids and before contract signing, except to those that failed or declared as post-disqualified, upon submission of a written waiver of their right to file a request for reconsideration and/or protest or lapse of the reglementary period without having filed a request for reconsideration or protest. Without prejudice on its forfeiture, bid securities shall be returned only after the bidder with the Highest Rated Responsive Bid (HRRB) has signed the contract and furnished the performance security, but in no case later than the expiration of the bid security validity period indicated in ITB Clause 15.2.

15.4. Upon signing and execution of the contract pursuant to ITB Clause 31, and the posting of the performance security pursuant to ITB Clause 32, the Consultant’s bid security will be discharged, but in no case later than the bid security validity period as indicated in ITB Clause 15.2.

15.5. The bid security may be forfeited:

(a) if a Consultant:

(i) withdraws its bid during the period of bid validity specified in ITB Clause 15.2;

(ii) does not accept the correction of errors pursuant to ITB Clause 11.7;
(iii) has a finding against the veracity of the required documents submitted in accordance with ITB Clause 27.2;

(iv) submission of eligibility requirements containing false information or falsified documents;

(v) any submission of bids that contain false information or falsified documents, or the concealment of such information in the bids in order to influence the outcome of eligibility screening or any other stage of the public bidding;

(vi) allowing the use of one’s name, or using the name of another for purposes of public bidding;

(vii) withdrawal of a bid, or refusal to accept an award, or enter into contract with the Government without justifiable cause, after the Bidder had been adjudged as having submitted the HRRB;

(viii) refusal or failure to post the required performance security within the prescribed time;

(ix) refusal to clarify or validate in writing its bid during post-qualification within a period of seven (7) calendar days from receipt of the request for clarification;

(x) any documented attempt by a Bidder to unduly influence the outcome of the bidding in his favor;

(xi) failure of the potential joint venture partners to enter into the joint venture after the bid is declared successful; or

(xii) all other acts that tend to defeat the purpose of the competitive bidding, such as habitually withdrawing from bidding, submitting late bids or patently insufficient bid, for at least three (3) times within a year, except for valid reasons.

(b) if the successful Consultant:

(i) fails to sign the contract in accordance with ITB Clause 31;

(ii) fails to furnish performance security in accordance with ITB Clause 32; or

(iii) any other reason stated in the BDS.

16. Format and Signing of Bids

16.1. Consultants shall submit their bids through their duly authorized representative using the appropriate forms provided in Error! Reference source not found. on or before the deadline specified in the ITB Clause 18 in two (2) separate
sealed bid envelopes, and which shall be submitted simultaneously. The first shall contain the technical proposal and the second shall contain the financial proposal.

16.2. Forms as mentioned in ITB Clause 16.1 must be completed without any alterations to their format, and no substitute form shall be accepted. All blank spaces shall be filled in with the information requested.

16.3. The Consultant shall prepare an original of the first and second envelopes as described in ITB Clauses 10 and 11. In addition, the Consultant shall submit copies of the first and second envelopes. In the event of any discrepancy between the original and the copies, the original shall prevail.

16.4. Each and every page of the Technical Proposal Submission Form and the Financial Proposal Submission Form under Section 7 hereof shall be signed by the duly authorized representative/s of the Consultant. Failure to do so shall be a ground for the rejection of the bid.

16.5. Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the duly authorized representative/s of the Consultant.

17. Sealing and Marking of Bids

17.1. Unless otherwise indicated in the BDS, Consultants shall enclose their original technical proposal described in ITB Clause 10, in one sealed envelope marked “ORIGINAL - TECHNICAL PROPOSAL”, and the original of their financial proposal in another sealed envelope marked “ORIGINAL - FINANCIAL PROPOSAL”, sealing them all in an outer envelope marked “ORIGINAL BID”.

17.2. Each copy of the first and second envelopes shall be similarly sealed duly marking the inner envelopes as “COPY NO. ___ - TECHNICAL PROPOSAL” and “COPY NO. ___ – FINANCIAL PROPOSAL” and the outer envelope as “COPY NO. ___”, respectively. These envelopes containing the original and the copies shall then be enclosed in one single envelope.

17.3. The original and the number of copies of the bid as indicated in the BDS shall be typed or written in ink and shall be signed by the bidder or its duly authorized representative/s.

17.4. All envelopes shall:

(a) contain the name of the contract to be bid in capital letters;

(b) bear the name and address of the Consultant in capital letters;

(c) be addressed to the Procuring Entity’s BAC in accordance with ITB Clause 18.1;

(d) bear the specific identification of this bidding process indicated in the ITB Clause 1.2; and
bear a warning “DO NOT OPEN BEFORE…” the date and time for the opening of bids, in accordance with ITB Clause 18.

17.5. Bid envelopes that are not properly sealed and marked, as required in the bidding documents, shall not be rejected, but the bidder or its duly authorized representative shall acknowledge such condition of the Bid as submitted. The BAC or the Procuring Entity shall assume no responsibility for the misplacement of the contents of the improperly sealed or marked Bid, or for its premature opening.

D. Submission and Opening of Bids

18. Deadline for Submission of Bids

Bids must be received by the Procuring Entity’s BAC at the address and on or before the date and time indicated in the BDS. In case the deadline for submission of bids fall on a non-working day duly declared by the President, Governor or Mayor or other government official authorized to make such declaration, the deadline shall be the next working day.

19. Late Bids

Any bid submitted after the deadline for submission and receipt of bids prescribed by the Procuring Entity, pursuant to ITB Clause 18, shall be declared “Late” and shall not be accepted by the Procuring Entity. The BAC shall record in the minutes of Bid submission and opening, the Consultant’s name, its representative and the time the late bid was submitted.

20. Modification and Withdrawal of Bids

20.1. The Consultant may modify its bid after it has been submitted; provided that the modification is received by the Procuring Entity prior to the deadline prescribed for submission and receipt of bids. The Consultant shall not be allowed to retrieve its original bid, but shall be allowed to submit another bid equally sealed, properly identified in accordance with ITB Clause 17.4, linked to its original bid marked as “TECHNICAL MODIFICATION” or “FINANCIAL MODIFICATION” and stamped “received” by the BAC. Bid modifications received after the applicable deadline shall not be considered and shall be returned to the Consultant unopened.

20.2. A Consultant may, through a letter of withdrawal, withdraw its bid after it has been submitted, for valid and justifiable reason; provided that the letter of withdrawal is received by the Procuring Entity prior to the deadline prescribed for submission and receipt of bids. The letter of withdrawal must be executed by the authorized representative of the Bidder identified in the Omnibus Sworn Statement, a copy of which should be attached to the letter.

20.3 Bids requested to be withdrawn in accordance with ITB Clause 20.1 shall be returned unopened to the Bidders. A Consultant, who has acquired the bidding documents, may also express its intention not to participate in the bidding
through a letter which should reach and be stamped by the BAC before the deadline for submission and receipt of bids. A Consultant that withdraws its bid shall not be permitted to submit another bid, directly or indirectly, for the same contract.

20.4 No bid may be modified after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Consultant on the Financial Bid Form. Withdrawal of a bid during this interval shall result in the forfeiture of the Consultant’s bid security, pursuant to ITB Clause 15.5, and the imposition of administrative, civil, and criminal sanctions as prescribed by R.A. 9184 and its IRR.

E. Evaluation and Comparison of Bids

21. Opening and Preliminary Examination of Bids

21.1 Only bids from short listed bidders shall be opened and considered for award of contract. These short listed bidders, whether single entities or JVs, should confirm in their Technical Proposal Submission Form that the information contained in the submitted eligibility documents remains correct as of the date of bid submission.

21.2 The BAC shall open the bids immediately after the deadline for the submission and receipt of bids in public, as specified in the BDS. In case the bids cannot be opened as scheduled due to justifiable reasons, the BAC shall take custody of the bids submitted and reschedule the opening on the next working day or at the soonest possible time through the issuance of a Bulletin to be posted at the PhilGEPS website and the website of the Procuring Entity concerned.

21.3 To determine each bidder’s compliance with the documents prescribed in ITB Clause 10, the BAC shall open the first envelope (Technical Proposal) and check the submitted documents of each bidder in accordance with ITB Clause 10.2 to ascertain if they are all present, using a non-discretionary “pass/fail” criterion. If a bidder submits the required document, it shall be rated “passed” for that particular requirement. In this regard, bids that fail to include any requirement or are incomplete or patently insufficient shall be considered as “failed”. Otherwise, the BAC shall rate the said first bid envelope as “passed”.

21.4 Letters of withdrawal shall be read out and recorded during bid opening, and the envelope containing the corresponding withdrawn bid shall be returned to the Consultant unopened.

21.5 All members of the BAC who are present during bid opening shall initial every page of the original copies of all bids received and opened.

21.6 All technical envelopes shall be resealed. Those rated “passed” shall be secured for the detailed technical bid evaluation, while those rated “failed” will be secured for purposes of possible filing of a request for reconsideration unless
the bidder waive its right to file a request for reconsideration, in which case, the envelope shall be returned to the bidder immediately.

21.7 The Procuring Entity shall prepare the minutes of the proceedings of the bid opening that shall include, as a minimum: (a) names of Bidders, their bid price (per lot, if applicable, and/or including discount, if any), bid security, findings of preliminary examination, and whether there is a withdrawal or modification; and (b) attendance sheet. The BAC members shall sign the abstract of bids as read.

22. **Process to be Confidential**

22.1 Members of the BAC, including its staff and personnel, as well as its Secretariat and TWG, are prohibited from making or accepting any kind of communication with any Consultant regarding the evaluation of their bids until the approval by the HoPE of the ranking of shortlisted Consultants, unless otherwise allowed in the BDS or in the case of ITB Clause 23.

22.2 Any effort by a bidder to influence the Procuring Entity in the Procuring Entity’s decision in respect of bid evaluation, bid comparison or contract award will result in the rejection of the Consultant’s bid.

23. **Clarification of Bids**

To assist in the evaluation, comparison and post-qualification of the bids, the Procuring Entity may ask in writing any Consultant for a clarification of its bid. All responses to requests for clarification shall be in writing. Any clarification submitted by a Consultant in respect to its bid and that is not in response to a request by the Procuring Entity shall not be considered.

24. **Bid Evaluation**

24.1 For the evaluation of bids, numerical ratings shall be used. In order to eliminate bias in evaluating the Bids, it is recommended that the highest and lowest scores for each Consultant for each criterion shall not be considered in determining the average scores of the Consultants, except when the evaluation is conducted in a collegial manner.

24.2 For complex or unique undertakings, such as those involving new concepts/technology or financial advisory services, participating short listed consultants may be required, at the option of the Procuring Entity concerned, to make an oral presentation to be presented by each Consultant, or its nominated Project Manager or head, in case of consulting firms, within fifteen (15) calendar days after the deadline for submission of Technical Proposals.

24.3 The entire evaluation process, including the submission of the results thereof to the HoPE for approval, shall be completed in not more than twenty-one (21)
calendar days after the deadline for receipt of bids. The bid with the highest rank shall be identified as the Highest Rated Bid. The HoPE shall approve or disapprove the recommendations of the BAC within two (2) calendar days after receipt of the results of the evaluation from the BAC.

24.4 All participating short listed consultants shall be furnished the results (ranking and total scores only) of the evaluation after the approval by the HoPE of the ranking. Said results shall also be posted in the PhilGEPS and the website of the Procuring Entity, if available, for a period of not less than seven (7) calendar days.

25 Evaluation of Technical Proposals

25.1 The BAC shall then conduct a detailed evaluation of technical bids following the procedures specified in the BDS depending on the evaluation procedure identified in the Request for Expression of Interest and ITB Clause 1.1.

25.2 The BAC evaluates the Technical Proposals on the basis of their compliance with the requirements under ITB Clause 10 and responsiveness to the TOR using the following criteria:

(a) Quality of personnel to be assigned to the Project which covers suitability of key staff to perform the duties for the Project and general qualifications and competence including education and training of the key staff;

(b) Experience and capability of the Consultant which include records of previous engagement and quality of performance in similar and in other projects; relationship with previous and current clients; and, overall work commitments, geographical distribution of current/impending projects and attention to be given by the consultant. The suitability of the Consultant to the Project shall consider both the overall experiences of the firm and the individual experiences of the principal and key staff including the times when employed by other consultants; and

(c) Plan of approach and methodology with emphasis on the clarity, feasibility, innovativeness and comprehensiveness of the plan approach, and the quality of interpretation of project problems, risks, and suggested solutions.

25.3 The BAC shall assign numerical weights and the minimum required technical score to each of the above criteria which shall be indicated in the BDS. A Bid shall be rejected at this stage if it does not respond to important aspects of the TOR or if it fails to achieve the minimum Technical Score (St) indicated in the BDS.

25.4 Technical Proposals shall not be considered for evaluation in any of the following cases:

(a) late submission, i.e., after the deadline set in the ITB Clause 18;
(b) failure to submit any of the technical requirements provided under this ITB and TOR;

(c) the Consultant that submitted a Bid or any of its partner and/or subconsultant belongs to one of the conflict of interest cases as described in ITB Clauses 2.1(a) to (c) and failed to make a proper statement to that effect in the cover letter; or

(d) the Technical Proposal included any cost of the services.

26 Opening and Evaluation of Financial Proposals

26.1 Financial Proposals shall be opened on the date indicated in the BDS.

26.2 The Financial Proposals opened shall be evaluated based on the evaluation procedure indicated in ITB Clause 1.1 using the corresponding procedure provided in the BDS.

27 Negotiations

27.1 Negotiations with the Consultant that submitted the Highest Rated Bid shall be held at the address indicated in the BDS. The aim is to reach agreement on all points.

27.2 Negotiations shall cover the following:

(a) Discussion and clarification of the TOR and Scope of Services;

(b) Discussion and finalization of the methodology and work program proposed by the Consultant;

(c) Consideration of appropriateness of qualifications and pertinent compensation, number of man-months and the personnel to be assigned to the job, taking note of over-qualified personnel to be commensurate with the compensation of personnel with the appropriate qualifications, number of man-months and schedule of activities (manning schedule);

(d) Discussion on the services, facilities and data, if any, to be provided by Procuring Entity concerned;

(e) Unless otherwise indicated in the BDS, discussion on the Financial Proposal submitted by the Consultant; and

(f) Provisions of the contract.

27.3 Having selected the Consultant on the basis of, among other things, an evaluation of the proposed key professional staff, the Procuring Entity expects to negotiate a contract on the basis of the experts named in the bid. Before contract negotiations, the Procuring Entity shall require assurances that the experts shall be actually available. The Procuring Entity shall not consider substitutions during contract negotiations except for justifiable reason as may be determined by the Procuring Entity, such as illness, death, or resignation,
unless both parties agree that undue delay in the selection process makes such substitution unavoidable or that such changes are critical to meet the objectives of the Project. If this is not the case and if it is established that key staff were offered in the bid without confirming their availability, the Consultant may be disqualified. Once the contract has been awarded, no replacement shall be allowed until after fifty percent (50%) of the personnel’s man-months have been served, except for justifiable reasons as may be determined by the Procuring Entity. Violators shall 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.

27.4 Negotiations shall include a discussion of the technical proposal, the proposed methodology (work plan), staffing and any suggestions made by the Consultant to improve the TOR. The Procuring Entity and Consultant shall then work out the final TOR, staffing, and bar charts indicating activities, staff, periods in the field and in the home office, staff-months, logistics, and reporting. The agreed work plan and final TOR shall then be incorporated in Appendix I and form part of the contract. Special attention shall be paid to getting the most the Consultant can offer within the available budget and to clearly defining the inputs required from the Procuring Entity to ensure satisfactory implementation of the Project.

27.5 The financial negotiations shall include a clarification of the Consultant’s tax liability in the Philippines, if any, and the manner in which it shall be reflected in the contract; and shall reflect the agreed technical modifications in the cost of the services. The negotiations shall conclude with a review of the draft form of the contract. To complete negotiations, the Procuring Entity and the Consultant shall initial the agreed contract. If negotiations fail, the Procuring Entity shall invite the Consultant whose Bid received the second highest score to negotiate a contract. If negotiations still fail, the Procuring Entity shall repeat the process for the next-in-rank Consultant until the negotiation is successfully completed.

28 Post Qualification

28.1 The BAC shall determine to its satisfaction whether the Consultant that is evaluated as having submitted the Highest Rated Bid (HRB) complies with and is responsive to all the requirements and conditions specified in the Eligibility Documents and ITB Clauses 10 and 11.

28.2 Within a non-extendible period of five (5) calendar days from receipt by the Consultant of the notice from the BAC that it submitted the Highest Rated Bid, the Consultant shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (EFPS) and other appropriate licenses and permits required by law and stated in the BDS.

Failure to submit any of the post-qualification requirements on time, or a finding against the veracity thereof, shall disqualify the bidder for award. Provided, in the event that a finding against the veracity of any of the documents submitted is made, it shall cause the forfeiture of the bid security in accordance with Section 69 of the IRR of RA 9184.
28.3 The determination shall be based upon an examination of the documentary evidence of the Consultant’s qualifications submitted pursuant to ITB Clauses 10 and 11, as well as other information as the Procuring Entity deems necessary and appropriate, using a non-discretionary “pass/fail” criterion, which shall be completed within a period of twelve (12) calendar days.

28.4 If the BAC determines that the Consultant with the Highest Rated Bid passes all the criteria for post-qualification, it shall declare the said bid as the Consultant with the HRRB, and recommend to the HoPE the award of contract to the said Consultant at its submitted price or its calculated bid price, whichever is lower, subject to ITB Clause 30.3.

28.5 A negative determination shall result in rejection of the Consultant’s bid, in which event the BAC shall proceed to the next Highest Rated Bid with a fresh period to make a similar determination of that Consultant’s capabilities to perform satisfactorily. If the second Consultant, however, fails the post qualification, the procedure for post qualification shall be repeated for the Consultant with the next Highest Rated Bid, and so on until the HRRB is determined for recommendation of contract award.

28.6 Within a period not exceeding fifteen (15) calendar days from the determination by the BAC of the HRRB and the recommendation to award the contract, the HoPE or his duly authorized representative shall approve or disapprove the said recommendation.

28.7 In the event of disapproval, which shall be based on valid, reasonable, and justifiable grounds as provided for under Section 41 of the IRR of RA 9184, the HoPE shall notify the BAC and the Consultant in writing of such decision and the grounds for it. When applicable, the BAC shall conduct negotiations, and if successful, post-qualification of the Consultant with the next Highest Rated Bid. A request for reconsideration may be filed by the bidder with the HoPE in accordance with Section 37.1.3 of the IRR of RA 9184.

29 Reservation Clause

29.1 Notwithstanding the eligibility, short listing, or post-qualification of a Consultant, the Procuring Entity concerned reserves the right to review its qualifications at any stage of the procurement process if it has reasonable grounds to believe that a misrepresentation has been made by the said Consultant, or that there has been a change in the Consultant’s capability to undertake this Project from the time it submitted its eligibility requirements. Should such review uncover any misrepresentation made in the eligibility and bidding requirements, statements or documents, or any changes in the situation of the Consultant which will affect its capability to undertake the project so that it fails the preset eligibility or bid evaluation criteria, the Procuring Entity shall consider the said Consultant as ineligible and shall disqualify it from submitting a bid or from obtaining an award or contract.

29.2 Based on the following grounds, the Procuring Entity reserves the right to reject any and all bids, declare a failure of bidding at any time prior to the contract
award, or not to award the contract, without thereby incurring any liability, and make no assurance that a contract shall be entered into as a result of the bidding:

(a) If there is *prima facie* evidence of collusion between appropriate public officers or employees of the Procuring Entity, or between the BAC and any of the bidders, or if the collusion is between or among the bidders themselves, or between a bidder and a third party, including any act which restricts, suppresses or nullifies or tends to restrict, suppress or nullify competition;

(b) If the Procuring Entity’s BAC is found to have failed in following the prescribed bidding procedures; or

(c) For any justifiable and reasonable ground where the award of the contract will not redound to the benefit of the GoP as follows:

(i) If the physical and economic conditions have significantly changed so as to render the project no longer economically, financially or technically feasible as determined by the HoPE;

(ii) If the project is no longer necessary as determined by the HoPE; and

(iii) If the source of funds for the project has been withheld or reduced through no fault of the Procuring Entity.

29.3 In addition, the Procuring Entity may likewise declare a failure of bidding when:

(a) No bids are received;

(b) All prospective bidders are declared ineligible;

(c) All bids fail to comply with all the bid requirements or there is no successful negotiation, or fail post-qualification; or

(d) The bidder with the HRRB refuses, without justifiable cause to accept the award of contract, and no award is made in accordance with Section 40 of the IRR of RA 9184.

**F. Award of Contract**

**30. Contract Award**

30.1 Subject to ITB Clause 28, the HoPE or its authorized representative shall award the contract to the Bidder whose bid has been determined to be the HRRB.

30.2 Prior to the expiration of the period of bid validity, the Procuring Entity shall notify the successful Consultant in writing that its bid has been accepted, through a Notice of Award duly received by the Consultant or its authorized representative personally or by registered mail or electronically, receipt of which must be confirmed in writing within two (2) days by the Consultant with
the HRRB and submitted personally or sent by registered mail or electronically to the Procuring Entity.

30.3 Notwithstanding the issuance of the Notice of Award, award of contract shall be subject to the following conditions:

(a) Submission of the following documents within the (10) calendar days from receipt of the Notice of Award:

(i) Valid JVA, if applicable;

(ii) SEC Certificate of Registration of the foreign consulting firm, and/or the authorization or license issued by the appropriate GoP professional regulatory body of the foreign professionals engaging in the practice of regulated professions and allied professions, where applicable.

(b) Posting of the performance security in accordance with ITB Clause 32;

(c) Signing of the contract as provided in ITB Clause 31; and

(d) Approval by higher authority, if required, as provided in Section 37.3 of the IRR of RA 9184.

31. Signing of the Contract

31.1 At the same time as the Procuring Entity notifies the successful Bidder that its bid has been accepted, the Procuring Entity shall send the Contract Form to the Bidder, which contract has been provided in the Bidding Documents, incorporating therein all agreements between the parties.

31.2 Within ten (10) calendar days from receipt of the Notice of Award, the successful Bidder shall post the required performance security and sign and date the contract and return it to the Procuring Entity.

31.3 The Procuring Entity shall enter into contract with the successful Bidder within the same ten (10) calendar day period provided that all the documentary requirements are complied with.

31.4 The following documents shall form part of the contract:

(1) Contract Agreement;

(2) Bidding Documents;

(3) Winning bidder’s bid, including the Technical and Financial Proposals, 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;

(4) Performance Security;
32. **Performance Security**

32.1 Unless otherwise provided in the BDS, to guarantee the faithful performance by the winning Consultant of its obligations under the contract, it shall post a performance security within a maximum period of ten (10) calendar days from the receipt of the Notice of Award from the Procuring Entity and in no case later than the signing of the contract.

32.2 The performance security shall be denominated in Philippine Pesos and posted in favor of the Procuring Entity in an amount not less than the percentage of the total contract price in accordance with the following schedule:

<table>
<thead>
<tr>
<th>Form of Performance Security</th>
<th>Amount of Performance Security (Not less than the Percentage of the Total Contract Price)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Cash or cashier’s/manager’s check issued by a Universal or Commercial Bank;</td>
<td>Five percent (5%)</td>
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<tr>
<td><em>For biddings conducted by the LGUs, the Cashier’s/Manager’s Check may be issued by other banks certified by the BSP as authorized to issue such financial instrument.</em></td>
<td></td>
</tr>
<tr>
<td>(b) Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank; and/or</td>
<td></td>
</tr>
<tr>
<td><em>For biddings conducted by the LGUs, the Bank Draft/Guarantee or Irrevocable Letter of Credit may be issued by other banks certified by the BSP as authorized to issue such financial instrument.</em></td>
<td></td>
</tr>
<tr>
<td>(c) Surety bond callable upon demand issued by a surety or insurance company duly</td>
<td>Thirty percent (30%)</td>
</tr>
</tbody>
</table>

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(5) Notice of Award of Contract; and

(6) Other contract documents that may be required by existing laws and/or specified in the BDS.
32.3 Failure of the successful Consultant to comply with the above-mentioned requirement shall constitute sufficient ground for the annulment of the award and forfeiture of the bid security, in which event the Procuring Entity shall have a fresh period to initiate negotiation and if successful, complete post-qualification of the second Highest Rated Bid. The procedure shall be repeated until the HRRB is identified and selected for recommendation of contract award. However, if no Consultant had a successful negotiation or passed post-qualification, the BAC shall declare the bidding a failure and conduct a re-bidding with re-advertisement, if necessary.

33. **Notice to Proceed**

33.1 Within seven (7) calendar days from the date of approval of the contract by the appropriate government approving authority, the Procuring Entity shall issue the Notice to Proceed together with copies of the approved contract to the successful Consultant. All notices called for by the terms of the contract shall be effective only at the time of receipt thereof by the successful Consultant.

33.2 The contract effectivity date shall be the date of contract signing. The Consultant shall commence performance of its obligations only upon receipt of the Notice to Proceed.

34. **Protest Mechanism**

Decision of the Procuring Entity at any stage of the procurement process may be questioned in accordance with Section 55 of the IRR of RA 9184.
Section III

Bid Data Sheet
## Bid Data Sheet

<table>
<thead>
<tr>
<th>ITB Clause</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1.1 | The Procuring Entity is the **Philippine Reclamation Authority**.  
The evaluation procedure is **Quality Cost Based Evaluation (QCBE)**.  |
| 1.2 | The Funding Source is the Government of the Philippines (GOP) through the 2018 Corporate Operating Budget (COB) of the Philippine Reclamation Authority.  
The name of the project is **Consultancy Services for the Programmatic Environmental Assessment, Planning and Engineering Studies for the Coastal Adaptation Strategy Formulation in the Manila Bay Area**.  |
| 1.3 | The Project involves the engagement of reputable multi-disciplinary Consultant to undertake the land use planning and conduct scientific, environmental and technical/engineering studies pertaining to the Manila Bay Area and prepare the necessary reports, plans, designs and computer system/s as vital inputs to the Reclamation Planning Decision Support System (RPDSS).  |
| 1.4 | The Project shall not be phased.  |
| 5 | No further instructions.  |
| 6.1 | The following work item can be sub-contracted:  
<table>
<thead>
<tr>
<th>Particulars</th>
<th>Cost, Php (inclusive of 12% VAT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geotechnical Investigation</td>
<td>54,345,076.80</td>
</tr>
<tr>
<td>6.2</td>
<td>Subcontractor’s Eligibility Criteria and Documentary Requirements:</td>
</tr>
</tbody>
</table>

For purposes of clarity, subcontracting means the Consultant has a contract with an independent contractor that will provide some portions of the work or services of the Project which the latter (independent contractor) has agreed to perform for the Consultant.
1) Experience as a firm in related projects should be at least ten (10) years

2) Equipment and Personnel
   a) Five (5) sets of drilling equipment
   b) Geotechnical Engineer (Must be a licensed Civil Engineer with experience in site investigation and evaluation of materials for land development works, and have a minimum of five (5) years of experience as Geotechnical Engineer)
   c) Material Testing Engineer (Must be a licensed engineer and accredited by the appropriate regulatory body and have a minimum of five (5) years of experience as Material Testing Engineer)
   d) Geologist (Must be a licensed Geologist or a licensed Engineer with training or post-graduate diploma in Engineering Geology/Structural Geology and have a minimum of five (5) years of experience)
   e) Geotechnical Laboratory Technician (Must have a minimum of five (5) years of experience as Geotechnical Laboratory Technician)

3) Laboratory Facilities

4) Must have undertaken contracts of geotechnical investigation/exploration of at least 10% of the cost of Category IIB - Geotechnical Investigation amounting to Fifty Four Million Three Hundred Forty Five Thousand Seventy Six and 80/100 Pesos (Php54,345,076.80) which is Five Million Four Hundred Thirty Four Thousand Five Hundred Seven and 68/100 Pesos (Php5,434,507.68).

5) Eligibility Submission Form

6) PhilGEPS Certificate of Registration and Membership

7) DTI / SEC / CDA Registration Certificate

8) Statement of completed government and private contracts both in the Philippines and other countries similar in nature within the last five (5) years and must at least have completed one contract which is 10% of the cost of Category IIB - Geotechnical Investigation equivalent to Five Million Four Hundred Thirty
Four Thousand Five Hundred Seven and 68/100 Pesos (Php5,434,507.68).

9) Statement of ongoing government and private contracts both in the Philippines and other countries for the past five (5) years including contracts awarded but not yet started. (See SF-CONS-15B)

10) Statement of Owners / Principals / Partners and Key Staff (See SF-CONS-17)

11) Statement of Citizenship and Professional Registration

12) Letter of Authority to validate submitted documents. (See-SF-CONS-23)

7.1 The Procuring Entity will hold a pre-bid conference for this Project on **October 16, 21018** at 9:30am at the **PRA Conference Room 6th Floor Legaspi Towers 200 Bldg., 107 Paseo de Roxas St., Legaspi Village, Makati City**.

8.1 Procuring Entity’s address is:

**PHILIPPINE RECLAMATION AUTHORITY**
7th Floor Legaspi Towers 200, No. 107 Paseo de Roxas Street
Legaspi Village, Makati City

Contact Person: **Atty. KAREN A. VILLAMIL**, BAC Chairperson
Telephone Nos.: (632)4595000
Facsimile: (02) 894-2464
Email Address: info@pea.gov.ph
Website: [www.pea.gov.ph](http://www.pea.gov.ph)

10.1 (b) Not applicable.

10.1 (c) The minimum required experience of proposed professional staff per category is as follows:

**Category I – General Land Use Planning**

<table>
<thead>
<tr>
<th>KEY STAFF</th>
<th>Years of Relevant Experience</th>
<th>No. of Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Architect/Architect-in-Charge/Urban Planner</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Civil Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Structural Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Position</td>
<td>Years of Relevant Experience</td>
<td>No. of Personnel</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Sr. Sanitary Engr./Environmental/Solid/Waste Management Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Geotechnical Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Geodetic Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Geologist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Electrical Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Financial/Economics/Social Dev. Specialist</td>
<td>5</td>
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</tbody>
</table>

**Category II – Hydrodynamics and Hydraulic Modelling and Related Works including Programmatic Environmental Assessment Study**

(a) Category IIA – Hydrographic Survey

<table>
<thead>
<tr>
<th>KEY STAFF</th>
<th>Years of Relevant Experience</th>
<th>No. of Personnel</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>10</td>
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</tr>
<tr>
<td>Sr. Geodetic Engineer</td>
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(b) Category IIB – Geotechnical Investigation

<table>
<thead>
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<tbody>
<tr>
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<td>1</td>
</tr>
<tr>
<td>Sr. Geotechnical Engineer</td>
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</table>

(c) Category IIC – Modeling and Programmatic Environmental Assessment Study

<table>
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<th>KEY STAFF</th>
<th>Years of Relevant Experience</th>
<th>No. of Personnel</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Marine Biologist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Environmental Engr./EIA Specialist</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Social Scientist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Phytoplanktons Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Zooplanktons Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Benthos Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Corals Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Position</td>
<td>Years</td>
<td>Personnel</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------</td>
<td>-----------</td>
</tr>
<tr>
<td>Sea Grasses Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Fisheries Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Chemist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Air Environment Expert</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Land Use Expert</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Physical Oceanographer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Coastal Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Hydraulic Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Mangrove Ecologist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Coastal Morphologist</td>
<td>5</td>
<td>1</td>
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<tr>
<td>Meteorologist</td>
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Category III – Engineering Geological and Geohazard Assessment (EGGA)

<table>
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<th>KEY STAFF</th>
<th>Years of Relevant Experience</th>
<th>No. of Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Civil Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Structural Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Geotechnical Engineer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Geologist</td>
<td>5</td>
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Category IV – Marine and Surface Water Module

<table>
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<tr>
<th>KEY STAFF</th>
<th>Years of Relevant Experience</th>
<th>No. of Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Phytoplanktons Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Zooplanktons Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Benthos Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Fisheries Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sea Grasses Specialist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Corals Specialist</td>
<td>5</td>
<td>1</td>
</tr>
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</table>

Category V – The Socio-Economic-Political Profile
<table>
<thead>
<tr>
<th>KEY STAFF</th>
<th>Years of Relevant Experience</th>
<th>No. of Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Social Scientist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Economist</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Political Scientist</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Category VI – Reclamation Planning Decision Support System

<table>
<thead>
<tr>
<th>KEY STAFF</th>
<th>Years of Relevant Experience</th>
<th>No. of Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Director</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Project Manager</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Web Programmer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sr. Data Base Programmer</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Computer Programmer</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Notwithstanding the above table, it is understood that the Consultant shall hire and/or secure the services of other qualified support and/or second level staff needed to properly implement the Project.

11.5 Creditable withholding tax equivalent to 2% of the Total Remuneration cost and creditable withholding VAT equivalent to 5% of the Total Remuneration Cost.

11.7 The ABC is **FOUR HUNDRED EIGHT MILLION FOUR HUNDRED THIRTY ONE THOUSAND TWO HUNDRED SEVENTY NINE AND 86/100 PESOS** (Php408,431,279.86). Any bid with a financial component exceeding this amount shall not be accepted.

13.1 The bid prices shall be quoted in Philippine Pesos.

13.3 No further instructions.

14.1 Bids will be valid within 120 calendar days from the date of opening of bids.

15.1 The BID SECURITY shall be limited to a Bid Securing Declaration **OR** any of the following forms and amounts:
1. The amount of not less than **2% of ABC** or **EIGHT MILLION ONE HUNDRED SIXTY EIGHT THOUSAND SIX HUNDRED TWENTY FIVE AND 60/100 PESOS** (Php8,168,625.60), if bid...
security is in cash, cashier’s/manager’s check, bank draft/guarantee or irrevocable letter of credit; or

2. The amount of not less than 5% of ABC or TWENTY MILLION FOUR HUNDRED TWENTY ONE THOUSAND FIVE HUNDRED SIXTY THREE AND 99/100 PESOS (Php20,421,563.99) if bid security is in Surety Bond.

15.2 The bid security shall be valid within 120 calendar days from the date of opening of bids.

15.5 (b) (iii) No further instructions.

17.1 No further instructions.

17.3 Each Bidder shall submit one (1) original and two (2) copies of the first and second components of its bid.

18 The address for submission of bids is:

PHILIPPINE RECLAMATION AUTHORITY
7th Floor Legaspi Towers 200, No. 107 Paseo de Roxas Street, Legaspi Village, Makati City.

The deadline for submission of bids is on October 29, 2018 at 9:00am.

21.2 The address for opening of bids is at PRA Conference Room 6th Floor Legaspi Towers 200 Bldg., 107 Paseo de Roxas St., Legaspi Village, Makati City.

The date and time for opening of bids is on October 29, 2018 at 9:30am.

22.1 No further instructions.

25.1 The following processes for the opening and evaluation of bids shall be adopted:

a) The technical proposal together with the financial proposal shall be considered in the ranking of consultants. The technical proposals shall be evaluated first using the criteria in ITB Clause 25.2. The financial proposals of the consultants who meet the minimum technical score shall then be opened.

b) The financial and technical proposals shall be given corresponding weights with the financial proposal given a minimum weight of fifteen percent (15%) up to a maximum of
forty percent (40%). The weight of the technical criteria shall be adjusted accordingly such that their total weight in percent together with the weight given to the financial proposal shall add to one hundred percent (100%). The BAC shall rank the consultants in descending order based on the combined numerical ratings of their technical and financial proposals and identify the Highest Rated Bid.

c) The HoPE shall approve or disapprove the recommendations of the BAC after receipt of the results of the evaluation from the BAC.

d) After approval by the HoPE of the Highest Rated Bid, the BAC shall, within three (3) calendar days, notify and invite the consultant with the Highest Rated Bid for negotiation in accordance with ITB Clause 27.

| 25.3 | The numerical weight and the minimum required St for each criterion are as follows:
|      | a) Quality of Personnel to be assigned to the Project – 70%
|      | b) Experience and Capability of the Consultant (Company) – 10%
|      | c) Plan of Approach and Methodology – 20%
|      | The minimum St required to pass is 75%.
|      | The attention of the Consultant is drawn to Technical Proposal Forms – Bids must adhere to the maximum number of pages outlined in Clause 10.2 (b).

| 26.1 | The opening of Financial Proposals shall be on November 16, 2018 at 9:00am at the PRA Conference Room, 6th Floor Legaspi Towers 200 Bldg., 107 Paseo de Roxas St., Legaspi Village, Makati City. Financial Proposals shall be opened in public.

| 26.2 | For Quality Cost Based Evaluation (QCBE): After the evaluation of quality is completed, the Procuring Entity shall notify those Consultants whose Bids did not meet the minimum qualifying mark or were considered non-responsive to the Bidding Documents and TOR, indicating that their Financial Proposals shall be returned unopened after completing the selection process. The Procuring Entity shall simultaneously notify the Consultants that have secured the minimum qualifying mark, indicating the date and time set for opening the Financial Proposals. The opening date shall not be sooner than two weeks after the notification date unless otherwise
specified in ITB Clause 26.1. The notification may be sent by registered letter, facsimile, or electronic mail.

The Financial Proposals shall be opened publicly in the presence of the Consultants’ representatives who choose to attend. The name of the Consultant, the quality scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. The Procuring Entity shall prepare minutes of the public opening.

The BAC shall determine whether the Financial Proposals are complete, i.e., whether all the documents mentioned in ITB Clause 11 are present and all items of the corresponding Technical Proposals that are required to be priced are so priced. If not, the Procuring Entity shall reject the proposal. The BAC shall correct any computational errors, and convert prices in various currencies to the Philippine Peso at the rate indicated in ITB Clause 13. The Financial Proposal shall not exceed the ABC and shall be deemed to include the cost of all taxes, duties, fees, levies, and other charges imposed under the applicable laws. The evaluation shall include all such taxes, duties, fees, levies, and other charges imposed under the applicable laws; where special tax privileges are granted to a particular class or nationality of Consultant by virtue of the GoP’s international commitments, the amount of such tax privileges shall be included in the Financial Proposal for purposes of comparative evaluation of Bids.

The lowest Financial Proposal (Fl) shall be given a Financial Score (Sf) of 100 points. The Sf of other Financial Proposals shall be computed based on the formula indicated below:

\[
S_f = 100 \times \frac{F_l}{F}
\]

Where:

Sf is the financial score of the Financial Proposal under consideration,

Fl is the lowest Financial Proposal, and

F is the Financial Proposal under consideration.

Using the formula \(S = S_t \times T\% + S_f \times F\%\), the Bids shall then be ranked according to their combined St and Sf using the weights (St is the technical score of the Technical Proposal under consideration; T = the weight given to the Technical Proposal; F = the weight given to the Financial Proposal; T + F = 1) indicated below:
provided that the total weights given to the Technical and Financial Proposals shall add up to 1.0.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>27.1</td>
<td>The address for negotiations is:</td>
</tr>
<tr>
<td></td>
<td><strong>PHILIPPINE RECLAMATION AUTHORITY</strong></td>
</tr>
<tr>
<td></td>
<td>7th Floor Legaspi Towers 200, No. 107 Paseo de Roxas Street, Legaspi Village, Makati City.</td>
</tr>
<tr>
<td>27.2 (e)</td>
<td>No negotiations pertaining to the Financial Proposal shall be undertaken.</td>
</tr>
<tr>
<td>28.2</td>
<td>The Consultant must submit licenses and permits relevant to the Project and the corresponding law requiring it.</td>
</tr>
<tr>
<td>31.4.6</td>
<td>No additional contract documents required.</td>
</tr>
<tr>
<td>32.1</td>
<td>No further instructions.</td>
</tr>
<tr>
<td>33.2</td>
<td>The effective date of the contract is upon receipt by the Consultant of the Notice to Proceed (NTP) from PRA.</td>
</tr>
</tbody>
</table>
Section IV

General Conditions of Contract
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<td>32.</td>
<td>DISPUTES ABOUT EVENTS OF TERMINATION</td>
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<tr>
<td>33.</td>
<td>CESSATION OF RIGHTS AND OBLIGATIONS</td>
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<td>35.</td>
<td>DOCUMENTS PREPARED BY THE CONSULTANT AND SOFTWARE DEVELOPED TO BE THE PROPERTY OF THE PROCURING ENTITY</td>
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</tr>
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<td>36.</td>
<td>EQUIPMENT AND MATERIALS FURNISHED BY THE PROCURING ENTITY</td>
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<td>SERVICES, FACILITIES AND PROPERTY OF THE PROCURING ENTITY</td>
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<td>CONSULTANT’S ACTIONS REQUIRING PROCURING ENTITY’S PRIOR APPROVAL</td>
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<td>39.</td>
<td>PERSONNEL</td>
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<td>40.</td>
<td>WORKING HOURS, OVERTIME, LEAVE, ETC.</td>
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<td>COUNTERPART PERSONNEL</td>
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<td>PERFORMANCE SECURITY</td>
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<td>STANDARD OF PERFORMANCE</td>
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<td>CONSULTANT NOT TO BENEFIT FROM COMMISSIONS, DISCOUNTS, ETC.</td>
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<td>PROCUREMENT BY THE CONSULTANT</td>
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<td>SPECIFICATIONS AND DESIGNS</td>
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<td>ASSISTANCE BY THE PROCURING ENTITY ON GOVERNMENT REQUIREMENTS</td>
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<td>49.</td>
<td>ACCESS TO LAND</td>
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<td>ACCOUNTING, INSPECTION AND AUDITING</td>
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<td>CONTRACT COST</td>
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<td>REMUNERATION AND REIMBURSABLE EXPENDITURES</td>
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1. Definitions

1.1 Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

(a) “Applicable Law” means the laws and any other instruments having the force of law in the Philippines as they may be issued and enforced from time to time.

(b) “Consultant” refers to the short listed consultant with the HRRB determined by the Procuring Entity as such in accordance with the ITB.

(c) “Consulting Services” refer to services for Infrastructure Projects and other types of projects or activities of the Government of the Philippines (GoP) requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the Procuring Entity to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies.

(d) “Contract” means the agreement signed by the Parties, to which these General Conditions of Contract (GCC) and other sections of the Bidding Documents are attached.

(e) “Effective Date” means the date on which this Contract comes into full force and effect.

(f) “Foreign Currency” means any currency other than the currency of the Philippines.

(g) “Funding Source” means the entity indicated in the SCC.

(h) “GCC” means these General Conditions of Contract.

(i) “Government” means the Government of the Philippines (GoP).

(j) “Local Currency” means the Philippine Peso (Php).

(k) “Member,” in case the Consultant is a Joint Venture (JV) of two (2) or more entities, means any of these entities; and “Members” means all these entities.

(l) “Party” means the Procuring Entity or the Consultant, as the case may be, and “Parties” means both of them.

(m) “Personnel” means persons hired by the Consultant or by any Subconsultant as employees and assigned to the performance of the Services or any part thereof; “Foreign Personnel” means such persons who at the time of being so hired had their domicile outside the Government’s country; “Local Personnel” means such persons who at
the time of being so hired had their domicile inside the Philippines; and “Key Personnel” means the Personnel referred to in GCC Clause 39.

(n) “Procuring Entity” refers to any branch, constitutional commission or office, agency, department, bureau, office or instrumentality of the Government, including GOCC, GFI, SUC, LGU, and autonomous regional government procuring Goods, Consulting Services, and Infrastructure Projects.

(o) “SCC” means the Special Conditions of Contract by which the GCC may be amended or supplemented.

(p) “Services” means the work to be performed by the Consultant pursuant to this Contract, as described in Appendix I.

(q) “Subconsultant” means any person or entity to whom/which the Consultant subcontracts any part of the Services in accordance with the provisions of GCC Clause 50.

(r) “Third Party” means any person or entity other than the Government, the Procuring Entity, the Consultant or a Subconsultant.

2. **Headings**

The headings shall not limit, alter or affect the meaning of this Contract.

3. **Location**

The Services shall be performed at such locations as are specified in Appendix I and, where the location of a particular task is not so specified, at such locations, whether in the Philippines or elsewhere, as the Procuring Entity may approve.

4. **Law Governing Contract and Services**

4.1 This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

4.2 The Consultant shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Subconsultant, as well as the Personnel of the Consultant and any Subconsultant, complies with the Applicable Law. The Procuring Entity shall notify the Consultant in writing of relevant local customs, and the Consultant shall, after such notification, respect such customs.

4.3 If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost incurred by the Consultant in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Consultant under this Contract shall be increased or decreased on a no loss-no gain basis, and corresponding
adjustments shall be made to the ceiling amounts specified in GCC Clause 52, provided that the cost is within the Approved Budget for the Contract (ABC).

5. **Language**

This Contract has been executed in the English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

6. **Consultants and Affiliates Not to Engage in Certain Activities**

6.1 The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, as well as any Subconsultant and any entity affiliated with such Subconsultant, shall be disqualified from providing goods, works, or consulting services for any project resulting from or closely related to this Contract other than the Services and any continuation thereof provided there is no current or future conflict.

6.2 The Consultant shall not engage, and shall cause their Personnel as well as their Subconsultants and their Personnel not to engage, either directly or indirectly, in any of the following activities:

(a) during the term of this Contract, any business or professional activities in the Government’s country which would conflict with the activities assigned to them under this Contract; and

(b) after the termination of this Contract, such other activities as may be specified in the SCC.

7. **Authority of Member in Charge**

In case the Consultant is a JV, the Members hereby authorize the entity specified in the SCC to act on their behalf in exercising all the Consultant’s rights and obligations towards the Procuring Entity under this Contract, including without limitation the receiving of instructions and payments from the Procuring Entity.

8. **Resident Project Manager**

If required by the SCC, the Consultant shall ensure that at all times during the Consultant’s performance of the Services in the Government’s country, a resident project manager, acceptable to the Procuring Entity, shall take charge of the performance of such Services.

9. **Entire Agreement**

This Contract, including the documents specified in Section 37.2.3 of the IRR of RA 9184, contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make any statement, representation, promise, or agreement not set forth herein of which the Parties shall not be bound by or be liable for.
10. Modification

Unless otherwise specified in the SCC, no modification of the terms and conditions of this Contract, including any modification of the scope of the Services shall be allowed. Pursuant to GCC Clause 14 hereof, however, each Party shall give due consideration to any proposal for modification made by the other Party.

11. Relationship of Parties

11.1 Nothing contained herein shall be construed as establishing a relation of employer and employee or of principal and agent as between the Procuring Entity and the Consultant. The Consultant, subject to this Contract, has complete charge of its Personnel and Subconsultants, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

11.2 The Consultant shall during the performance of the Services be an independent contractor, retaining complete control over its Personnel, conforming to all statutory requirements with respect to all its employees, and providing all appropriate employee benefits.

12. Authorized Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Procuring Entity or the Consultant may be taken or executed by the officials specified in the SCC.

13. Good Faith

The Parties undertake to act in good faith with respect to each other’s rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

14. Operation of the Contract

The Parties recognize that it is impractical for this Contract to provide for every contingency which may arise during the life of this Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them; and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties shall use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but no failure to agree on any action pursuant to this Clause shall give rise to a dispute subject to arbitration in accordance with GCC Clause 34 hereof.

15. Notices

15.1 Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when received by the concerned
party, either in person or through an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram or facsimile to such Party at the address specified in the SCC.

15.2 Notice shall be deemed to be effective as specified in the SCC.

15.3 A Party may change its address for notice hereunder by giving the other Party notice of such change pursuant to the provisions listed in the SCC with respect to GCC Clause 15.2.

16. Warranty as to Eligibility

16.1 The Consultant represents, warrants, and confirms that it, as well as its Subconsultant, if any, is eligible, i.e., has the legal personality to act as a consultant in accordance with Part I, Error! Reference source not found. issued for this project.

16.2 The Consultant shall fulfill its obligations under this Contract by using knowledge according to the best accepted professional standards. The Consultant shall exercise all reasonable skill, care and diligence in the discharge of duties agreed to be performed and shall work in the best interest of the GoP.

17. Confidentiality

Except with the prior written consent of the Procuring Entity, the Consultant and the Personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Consultant and the Personnel make public the recommendations formulated in the course of, or as a result of, the Services. For purposes of this clause, “confidential information” means any information or knowledge acquired by the Consultant and/or its Personnel arising out of, or in connection with, the performance of the Services under this Contract that is not otherwise available to the public.

18. Payment

18.1 In consideration of the Services performed by the Consultant under this Contract, the Procuring Entity shall make to the Consultant such payments and in such manner as is provided by GCC Clause 53 of this Contract. However, the Procuring Entity may refuse to make payments when the terms and conditions of the contract are not satisfactorily performed by the Consultant.

18.2 Subject to the ceilings specified in GCC Clause 52 hereof, the Procuring Entity shall pay to the Consultant: (i) remuneration as set forth in GCC Clause 53.2; and (ii) reimbursable expenditures as set forth in GCC Clause 53.4. Said remuneration shall not be subject to price adjustment.

18.3 All payments under this Contract shall be made to the account of the Consultant specified in the SCC.
19. **Currency of Payment**

Unless otherwise specified in the SCC, all payments shall be made in Philippine Pesos.

20. **Liability of the Consultant**

Subject to additional provisions, if any, set forth in the SCC, the Consultant’s liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

21. **Insurance to be Taken Out by the Consultant**

21.1 The Consultant, at its own cost, shall be responsible for taking out or maintaining any insurance policy against any risk related to the project.

21.2 The Procuring Entity undertakes no responsibility in respect of life, health, accident, travel or any other insurance coverage for the Personnel or for the dependents of any such Personnel.

22. **Effectivity of Contract**

The contract effectivity date shall be the date of contract signing, provided that the effectiveness of the conditions, if any, listed in the SCC have been met.

23. **Commencement of Services**

The Consultant shall begin carrying out the Services starting from the effectivity date of this Contract, as mentioned in GCC Clause 22.

24. **Expiration of Contract**

Unless sooner terminated pursuant to GCC Clauses 27 or 28 hereof, this Contract shall terminate at the end of such time period after the effectivity date as shall be specified in the SCC.

25. **Force Majeure**

25.1 For purposes of this Contract the terms “force majeure” and “fortuitous event” may be used interchangeably. In this regard, a fortuitous event or force majeure shall be interpreted to mean an event which the Consultant could not have foreseen, or which though foreseen, was inevitable. It shall not include ordinary unfavorable weather conditions; and any other cause the effects of which could have been avoided with the exercise of reasonable diligence by the Consultant.

25.2 The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of force majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.
25.3 Unless otherwise agreed herein, force majeure shall not include:

(a) any event which is caused by the negligence or intentional action of a Party or such Party’s Subconsultants or agents or employees;

(b) any event which a diligent Party could reasonably have been expected to both take into account at the time of the conclusion of this Contract and avoid or overcome in the carrying out of its obligations hereunder;

(c) insufficiency of funds or failure to make any payment required hereunder; or

(d) the Procuring Entity’s failure to review, approve or reject the outputs of the Consultant beyond a reasonable time period.

25.4 A Party affected by an event of force majeure shall take all reasonable measures to remove such Party’s inability to fulfill its obligations hereunder immediately or within a reasonable time.

25.5 A Party affected by an event of force majeure shall notify the other Party of such event as soon as possible, and in any event not later than fifteen (15) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.

25.6 The Parties shall take all reasonable measures to minimize the consequences of any event of force majeure.

25.7 Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a direct and proximate result of force majeure.

25.8 During the period of their inability to perform the Services as a direct and proximate result of an event of force majeure, the Consultant shall be entitled to continue receiving payment under the terms of this Contract as well as to be reimbursed for additional costs reasonably and necessarily incurred by it during such period for the purposes of the Services and in reactivating the Services after the end of such period, provided that such costs are still within the total contract price. However, the foregoing provision shall not apply if the Procuring Entity suspends or terminates this Contract in writing, notice thereof duly received by the Consultant, pursuant to GCC Clauses 26 and 27 hereof with the exception of the direct and proximate result of force majeure.

25.9 Not later than fifteen (15) days after the Consultant, as the direct and proximate result of an event of force majeure, has become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agreeing on appropriate measures considering the circumstances.
25.10 In the case of disagreement between the parties as to the existence, or extent of force majeure, the matter shall be submitted to arbitration in accordance with GCC Clause 34 hereof.

26. Suspension

26.1 The Procuring Entity shall, by written notice of suspension to the Consultant, suspend all payments to the Consultant hereunder if the Consultant fail to perform any of their obligations due to their own fault or due to force majeure or other circumstances beyond the control of either party (e.g. suspension of civil works being supervised by the consultant) under this Contract, including the carrying out of the Services, provided that such notice of suspension:

(a.1) shall specify the nature of the failure; and

(a.2) shall request the Consultant to remedy such failure within a period not exceeding thirty (30) days after receipt by the Consultant of such notice of suspension.

26.2 The Consultant may, without prejudice to its right to terminate this Contract pursuant to GCC Clause 28, by written notice of suspension, suspend the Services if the Procuring Entity fails to perform any of its obligations which are critical to the delivery of the Consultant’s services such as, non-payment of any money due the Consultant within forty-five (45) days after receiving notice from the Consultant that such payment is overdue.

27. Termination by the Procuring Entity

27.1 The Procuring Entity shall terminate this Contract when any of the following conditions attends its implementation:

(a.1) Outside of force majeure, the Consultant fails to deliver or perform the Outputs and Deliverables within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring Entity pursuant to a request made by the Consultant prior to the delay;

(a.2) As a result of force majeure, the Consultant is unable to deliver or perform a material portion of the Outputs and Deliverables for a period of not less than sixty (60) calendar days after the Consultant’s receipt of the notice from the Procuring Entity stating that the circumstance of force majeure is deemed to have ceased;

(a.3) In whole or in part, at any time for its convenience, the HoPE may terminate the Contract for its convenience if he has determined the existence of conditions that make Project Implementation economically, financially or technically impractical and/or unnecessary, such as, but not limited to, fortuitous event(s) or changes in law and National Government policies;
(a.4) If the Consultant is declared bankrupt or insolvent as determined with finality by a court of competent jurisdiction; in which event, termination will be without compensation to the Consultant, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring Entity and/or the Consultant;

(a.5) In case it is determined prima facie that the Consultant has engaged, before or during the implementation of this Contract, in unlawful deeds and behaviors relative to contract acquisition and implementation, such as, but not limited to, the following: corrupt, fraudulent, collusive, coercive, and obstructive practices; drawing up or using forged documents; using adulterated materials, means or methods, or engaging in production contrary to rules of science or the trade; and any other act analogous to the foregoing. For purposes of this clause, corrupt, fraudulent, collusive, coercive, and obstructive practices shall have the same meaning as that provided in ITB Clause 3.1(a):

(a.6) The Consultant fails to remedy a failure in the performance of their obligations hereunder, as specified in a notice of suspension pursuant to GCC Clause 15.2 hereinabove, within thirty (30) days of receipt of such notice of suspension or within such further period as the Procuring Entity may have subsequently approved in writing;

(a.7) The Consultant’s failure to comply with any final decision reached as a result of arbitration proceedings pursuant to GCC Clause 34 hereof; or

(a.8) The Consultant fails to perform any other obligation under the Contract.

27.2 In case of termination, written notice shall be understood to mean fifteen (15) days for short term contracts, i.e., four (4) months or less, and thirty (30) days for long term contracts.

28. Termination by the Consultant

The Consultant must serve a written notice to the Procuring Entity of its intention to terminate this Contract at least thirty (30) calendar days before its intended termination. This Contract is deemed terminated if no action has been taken by the Procuring Entity with regard to such written notice within thirty (30) calendar days after the receipt thereof by the Procuring Entity. The Consultant may terminate this Contract through any of the following events:

(a.1) The Procuring Entity is in material breach of its obligations pursuant to this Contract and has not remedied the same within sixty (60) calendar days following its receipt of the Consultant’s notice specifying such breach;

(a.2) The Procuring Entity’s failure to comply with any final decision reached as a result of arbitration pursuant to GCC Clause 34 hereof
(a.3) As the direct and proximate result of force majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days; or

(a.4) The Procuring Entity fails to pay any money due to the Consultant pursuant to this Contract and not subject to dispute pursuant to GCC Clause 32 hereof within eighty four (84) days after receiving written notice from the Consultant that such payment is overdue.

29. Procedures for Termination of Contracts

The following provisions shall govern the procedures for the termination of this Contract:

(a) Upon receipt of a written report of acts or causes which may constitute ground(s) for termination as aforementioned, or upon its own initiative, the Procuring Entity shall, within a period of seven (7) calendar days, verify the existence of such ground(s) and cause the execution of a Verified Report, with all relevant evidence attached;

(b) Upon recommendation by the Procuring Entity, the HoPE shall terminate this Contract only by a written notice to the Consultant conveying such termination. The notice shall state:

(i) that the contract is being terminated for any of the ground(s) aforementioned, and a statement of the acts that constitute the ground(s) constituting the same;

(ii) the extent of termination, whether in whole or in part;

(iii) an instruction to the Consultant to show cause as to why the contract should not be terminated; and

(iv) special instructions of the Procuring Entity, if any.

The Notice to Terminate shall be accompanied by a copy of the Verified Report;

(c) Within a period of seven (7) calendar days from receipt of the Notice of Termination, the Consultant shall submit to the HoPE a verified position paper stating why this Contract should not be terminated. If the Consultant fails to show cause after the lapse of the seven (7) day period, either by inaction or by default, the HoPE shall issue an order terminating this Contract;

(d) The Procuring Entity may, at anytime before receipt of the Consultant’s verified position paper to withdraw the Notice to Terminate if it is determined that certain services subject of the notice had been completed or performed before the Consultant’s receipt of the notice;

(e) Within a non-extendible period of ten (10) calendar days from receipt of the verified position paper, the HoPE shall decide whether or not to terminate this Contract. It shall serve a written notice to the Consultant of its decision and,
unless otherwise provided, this Contract is deemed terminated from receipt of the Consultant of the notice of decision. The termination shall only be based on the ground(s) stated in the Notice to Terminate; and

(f) The HoPE may create a Contract Termination Review Committee (CTRC) to assist him in the discharge of this function. All decisions recommended by the CTRC shall be subject to the approval of the HoPE.

30. Cessation of Services

Upon termination of this Contract by notice of either Party to the other pursuant to GCC Clauses 27 or 28 hereof, the Consultant shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultant and equipment and materials furnished by the Procuring Entity, the Consultant shall proceed as provided, respectively, by GCC Clauses 35 or 36 hereof.

31. Payment Upon Termination

Upon termination of this Contract pursuant to GCC Clauses 27 or 28 hereof, the Procuring Entity shall make the following payments to the Consultant:

(a) remuneration pursuant to GCC Clause 53 hereof for Services satisfactorily performed prior to the effective date of termination;

(b) reimbursable expenditures pursuant to GCC Clause 53 hereof for expenditures actually incurred prior to the effective date of termination; and

(c) in the case of termination pursuant to GCC Clause 27(a.2) hereof, reimbursement of any reasonable cost incident to the prompt and orderly termination of this Contract including the cost of the return travel of the Personnel and their eligible dependents.

32. Disputes about Events of Termination

If either Party disputes whether an event specified in GCC Clause 27.1 or in GCC Clause 28 hereof has occurred, such Party may refer the matter to arbitration pursuant to GCC Clause 34 hereof, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

33. Cessation of Rights and Obligations

Upon termination of this Contract pursuant to GCC Clauses 27 or 28 hereof, or upon expiration of this Contract pursuant to GCC Clause 24, all rights and obligations of the Parties hereunder shall cease, except:

(a) such rights and obligations as may have accrued on the date of termination or expiration;
(b) the obligation of confidentiality set forth in GCC Clause 17 hereof; and

(c) the Consultant’s obligation to permit inspection, copying and auditing of their accounts and records set forth in GCC Clauses 51(a.2) and 51(a.3) hereof, any right which a Party may have under the Applicable Law.

34. Dispute Settlement

34.1 If any dispute or difference of any kind whatsoever shall arise between the Parties in connection with the implementation of this Contract, the Parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.

34.2 Any and all disputes arising from the implementation of this Contract shall be submitted to arbitration in accordance with the rules of procedure specified in the SCC.

35. Documents Prepared by the Consultant and Software Developed to be the Property of the Procuring Entity

35.1 All plans, drawings, specifications, designs, reports, other documents and software prepared by the Consultant for the Procuring Entity under this Contract shall become and remain the property of the Procuring Entity, and the Consultant shall, prior to termination or expiration of this Contract, deliver all such documents to the Procuring Entity, together with a detailed inventory thereof. The Consultant may retain a copy of such documents and software. The plans, drawings, specifications, designs, reports, other documents and software, including restrictions on future use of such documents and software, if any, shall be specified in the SCC.

35.2 All computer programs developed by the Consultant under this Contract shall be the sole and exclusive property of the Procuring Entity; provided, however, that the Consultant may use such programs for its own use with prior written approval of the Procuring Entity. If license agreements are necessary or appropriate between the Consultant and third parties for purposes of development of any such computer programs, the Consultant shall obtain the Procuring Entity’s prior written approval to such agreements. In such cases, the Procuring Entity shall be entitled at its discretion to require recovering the expenses related to the development of the program(s) concerned.

36. Equipment and Materials Furnished by the Procuring Entity

Equipment and materials made available to the Consultant by the Procuring Entity, or purchased by the Consultant with funds provided by the Procuring Entity, shall be the property of the Procuring Entity and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultant shall make available to the Procuring Entity an inventory of such equipment and materials and shall dispose of such equipment and materials in accordance with the Procuring Entity’s instructions. While in possession of such equipment and materials, the Consultant, unless otherwise instructed by the
Procuring Entity in writing, shall insure it at the expense of the Procuring Entity in an amount equal to their full replacement value.

37. **Services, Facilities and Property of the Procuring Entity**

The Procuring Entity shall make available to the Consultant and the Personnel, for the purposes of the Services and free of any charge, the services, facilities and property described in Appendix V at the terms and in the manner specified in said appendix, provided that if such services, facilities and property shall not be made available to the Consultant as and when so specified, the Parties shall agree on:

(a) any time extension that it may be appropriate to grant to the Consultant for the performance of the Services;

(b) the manner in which the Consultant shall procure any such services, facilities and property from other sources; and

(c) the additional payments, if any, to be made to the Consultant as a result thereof pursuant to GCC Clause 52 hereinafter which should be within the agreed contract ceiling.

38. **Consultant’s Actions Requiring Procuring Entity’s Prior Approval**

The Consultant shall obtain the Procuring Entity’s prior approval in writing before taking any of the following actions:

(a) appointing such members of the Personnel as are listed in Appendix III merely by title but not by name;

(b) entering into a subcontract for the performance of any part of the Services, it being understood that:

(i) the selection of the Subconsultant and the terms and conditions of the subcontract shall have been approved in writing by the Procuring Entity prior to the execution of the subcontract; and

(ii) the Consultant shall remain fully liable for the performance of the Services by the Subconsultant and its Personnel pursuant to this Contract;

(c) replacement, during the performance of the contract for any reason, of any Personnel as listed in Appendix III of this Contract requiring the Procuring Entity’s prior approval; and

(d) any other action that may be specified in the SCC.

39. **Personnel**

39.1 The Consultant shall employ and provide such qualified and experienced Personnel and Subconsultants as are required to carry out the Services.
39.2 The title, agreed job description, minimum qualification and estimated period of engagement in the carrying out of the Services of each of the Consultant’s Key Personnel are described in Appendix III.

39.3 The Key Personnel and Subconsultants listed by title as well as by name in Appendix III are hereby approved by the Procuring Entity. In respect of other Key Personnel which the Consultant proposes to use in the carrying out of the Services, the Consultant shall submit to the Procuring Entity for review and approval a copy of their biographical data and, in the case of Key Personnel to be assigned within the GoP, a copy of a satisfactory medical certificate attached as part of Appendix III. If the Procuring Entity does not object in writing; or if it objects in writing but fails to state the reasons for such objection, within twenty-one (21) calendar days from the date of receipt of such biographical data and, if applicable, such certificate, the Key Personnel concerned shall be deemed to have been approved by the Procuring Entity.

39.4 The Procuring Entity may request the Consultants to perform additional services not covered by the original scope of work but are determined by the Procuring Entity to be critical for the satisfactory completion of the Services, subject to GCC Clause 55.6.

39.5 No changes shall be made in the Key Personnel, except for justifiable reasons as may be determined by the Procuring Entity, as indicated in the SCC, and only upon prior approval of the Procuring Entity. If it becomes justifiable and necessary to replace any of the Personnel, the Consultant shall forthwith provide as a replacement a person of equivalent or better qualifications. If the Consultant introduces changes in Key Personnel for reasons other than those mentioned in the SCC, the Consultant shall be liable for the imposition of damages as described in the SCC.

39.6 Any of the Personnel provided as a replacement under GCC Clauses 39.5 and 39.7, the rate of remuneration applicable to such person as well as any reimbursable expenditures the Consultant may wish to claim as a result of such replacement, shall be subject to the prior written approval by the Procuring Entity. Except as the Procuring Entity may otherwise agree, the Consultant shall bear all additional travel and other costs arising out of or incidental to any removal and/or replacement, and the remuneration to be paid for any of the Personnel provided as a replacement shall not exceed the remuneration which would have been payable to the Personnel replaced.

39.7 If the Procuring Entity finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action as defined in the Applicable Law, or has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultant shall, at the Procuring Entity’s written request specifying the grounds therefore, forthwith provide as a replacement a person with qualifications and experience acceptable to the Procuring Entity.
40. **Working Hours, Overtime, Leave, etc.**

40.1 Working hours and holidays for Key Personnel are set forth in Appendix III. Any travel time prior to and after contract implementation shall not be considered as part of the working hours.

40.2 The Key Personnel shall not be entitled to claim payment for overtime work, sick leave, or vacation leave from the Procuring Entity since these items are already covered by the Consultant’s remuneration. All leaves to be allowed to the Personnel are included in the staff-months of service set forth in Appendix III. Taking of leave by any Personnel should not delay the progress and adequate supervision of the Services.

40.3 If required to comply with the provisions of GCC Clause 43.1 hereof, adjustments with respect to the estimated periods of engagement of Key Personnel set forth in Appendix III may be made by the Consultant by prior written notice to the Procuring Entity, provided that:

- (a) such adjustments shall not alter the originally estimated period of engagement of any individual by more than ten percent (10%); and

- (b) the aggregate of such adjustments shall not cause payments under this Contract to exceed the ceilings set forth in GCC Clause 52.1 of this Contract. Any other such adjustments shall only be made with the Procuring Entity’s prior written approval.

41. **Counterpart Personnel**

41.1 If so provided in Appendix III hereto, the Procuring Entity shall make available to the Consultant, as and when provided in such Appendix III, and free of charge, such Counterpart Personnel to be selected by the Procuring Entity, with the Consultant’s advice, as shall be specified in such Appendix III. Counterpart Personnel shall work with the Consultant. If any member of the Counterpart Personnel fails to perform adequately any work assigned to such member by the Consultant which is consistent with the position occupied by such member, the Consultant may request the replacement of such member, and the Procuring Entity shall not unreasonably refuse to act upon such request.

41.2 The responsibilities of the Counterpart Personnel shall be specified in Appendix III, attached hereto, and the Counterpart Personnel shall not perform any work beyond the said responsibilities.

41.3 If Counterpart Personnel are not provided by the Procuring Entity to the Consultant as and when specified in Appendix III, and or if the Counterpart Personnel lack the necessary training, experience or authority to effectively undertake their responsibilities, the Procuring Entity and the Consultant shall agree on how the affected part of the Services shall be carried out, and the additional payments, if any, to be made by the Procuring Entity to the Consultant as a result thereof pursuant to GCC Clause 52 hereof.
42. **Performance Security**

42.1 Unless otherwise specified in the **SCC**, within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the Consultant shall furnish the performance security in any the forms prescribed in the **ITB** Clause 32.2.

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 Subconsultants 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 53 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 Subconsultants, 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, Subconsultants, 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, Subconsultants, and Personnel with work permits and such other documents as shall be necessary to enable the Consultant, Subconsultants, 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 Subconsultant 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 Subconsultant 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 subconsultant, 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 Subconsultants 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.1) 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;

(a.2) 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

(a.3) 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(a.5) 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 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 53 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
## Special Conditions of Contract

<table>
<thead>
<tr>
<th>GCC Clause</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1(g)</td>
<td>The Funding Source is the Government of the Philippines (GOP) through the 2018 Corporate Budget of the Philippine Reclamation Authority.</td>
</tr>
<tr>
<td>6.2 (b)</td>
<td>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 agrees that their affiliates shall be disqualified for the same period of time from engaging in the said activities.</td>
</tr>
<tr>
<td>7</td>
<td>The Member in Charge is (name of member, address and other necessary contact information).</td>
</tr>
<tr>
<td>8</td>
<td>The person designated as resident project manager in Appendix III shall serve in that capacity, as specified in GCC Clause 8.</td>
</tr>
<tr>
<td>10</td>
<td>No further instructions.</td>
</tr>
<tr>
<td>12</td>
<td>The Authorized Representatives are as follows:</td>
</tr>
<tr>
<td></td>
<td>For the Procuring Entity:</td>
</tr>
<tr>
<td></td>
<td><strong>Atty. JANILO E. RUBIATO</strong></td>
</tr>
<tr>
<td></td>
<td>General Manager and CEO</td>
</tr>
<tr>
<td></td>
<td>Philippine Reclamation Authority</td>
</tr>
<tr>
<td></td>
<td>For the Consultant: (to be filled up after the award of the contract)</td>
</tr>
<tr>
<td>15.1</td>
<td>The addresses are:</td>
</tr>
<tr>
<td></td>
<td>Procuring Entity: Philippine Reclamation Authority</td>
</tr>
<tr>
<td></td>
<td>Attention: Atty. JANILO E. RUBIATO– General Manager &amp; CEO</td>
</tr>
<tr>
<td></td>
<td>Address: 7F Legaspi Towers 200 Bldg. 107 Paseo de Roxas Street, Legaspi Village, Makati City</td>
</tr>
<tr>
<td></td>
<td>Facsimile: (02) 894-2464</td>
</tr>
<tr>
<td></td>
<td>Email Address: <a href="mailto:info@pea.gov.ph">info@pea.gov.ph</a></td>
</tr>
<tr>
<td></td>
<td>Consultants: [insert name of the Consultant]</td>
</tr>
<tr>
<td></td>
<td>Attention: [insert name of the Consultant’s authorized representative]</td>
</tr>
<tr>
<td>15.2</td>
<td>Notice shall be deemed to be effective as follows:</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>(a)</td>
<td>in the case of personal delivery or registered mail, on delivery;</td>
</tr>
<tr>
<td>(b)</td>
<td>in the case of facsimiles, within <em>(Insert hours)</em> following confirmed transmission; or</td>
</tr>
<tr>
<td>(c)</td>
<td>in the case of telegrams, within <em>(Insert hours)</em> following confirmed transmission.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>18.3</th>
<th>State here Consultant’s account where payment may be made.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTE: Details of account to be filled out by winning consultant prior to contract signing.</td>
<td></td>
</tr>
</tbody>
</table>

| 19 | No further instructions. |

| 20 | “No additional provision.” |
| | “All partners to the joint venture shall be jointly and severally liable to the Procuring Entity.” |

| 22 | None. |

| 24 | The time period shall be ten (10) years from the date of acceptance by PRA of the Final Reports from the Consultant. |

| 34.2 | 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. |

<table>
<thead>
<tr>
<th>35.1</th>
<th>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, among others, are as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Programmatic Environmental Assessment (PEA) Report</td>
</tr>
<tr>
<td>2.</td>
<td>General Land Use Plan together with all required studies pertaining thereto as enumerated in Annex B – Scope of Works of the Terms of Reference (TOR)</td>
</tr>
<tr>
<td>3.</td>
<td>Hydrographic Survey Report</td>
</tr>
<tr>
<td>4.</td>
<td>Geotechnical Investigation Report</td>
</tr>
<tr>
<td>5.</td>
<td>Hydrodynamics and Hydraulics Modeling Reports</td>
</tr>
</tbody>
</table>
7. Marine and Surface Water Module Report  
8. Decision Support System  
9. Among others. |

| 38.1 (d) | The Consultant’s actions requiring the Procuring Entity’s prior approval are:  
1. Methodologies in the conduct of field surveys/investigation and the outline of the studies and progress reports  
2. Clearance prior to conduct of field surveys/investigations  
3. Draft inception and progress reports  
4. Conduct of public consultations  
5. Coordination with the LGUs and other Government Agencies |

| 39.5 | 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.  
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. |

| 42.1 | No further instructions. |

| 42.4 (c) | No further instructions. |

| 52.1 | The total ceiling amount in Philippine Pesos is:  
FOUR HUNDRED EIGHT MILLION FOUR HUNDRED THIRTY ONE THOUSAND TWO HUNDRED SEVENTY NINE AND 86/100 (Php408,431,279.86). |

| 52.2 | No further instructions. |

| 53.2 | No additional instructions. |

| 53.4 | The reimbursable expenditures in local currency shall be as follows:  
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 Government’s country as specified in Appendix IV;

3. 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.

| 53.5 (a) | The following provisions shall apply to the advance payment and the advance payment guarantee:

(a) An advance payment of fifteen percent of the Remuneration Cost equivalent to _____________ in Philippine peso shall be made within seven (7) days after the Effective Date. Recoupment of the advance payment shall be computed at twenty percent (20%) of the progress billings to be submitted by the Consultant from effectivity of this contract 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 of equivalent value from a commercial bank, a bank guarantee or a surety bond callable upon demand, issued by a duly licensed surety or insurance company and confirmed by the Procuring Entity.

| 53.5(c) | The interest rate is zero.

| 55.6 | No further instructions. |
Section VI

Terms of Reference
TERMS OF REFERENCE

Consultancy Services
for the

PROGRAMMATIC ENVIRONMENTAL ASSESSMENT, PLANNING AND ENGINEERING STUDIES FOR THE COASTAL ADAPTATION STRATEGY FORMULATION IN THE MANILA BAY AREA

I. INTRODUCTION

Land reclamation in the Philippines since the decade of the 1970’s attained modest gains in its developmental contributions to the country. Three decades ago, the State pioneered and contracted the creation of new land at Manila Bay, stretching from Manila and southward to Cavite. Nowadays, that stretch of reclaimed land paralleled by Roxas Boulevard and connecting to the Manila-Cavite Tollway is a vibrant hub of commercial establishments, recreational centers, hotels, government buildings & facilities, the largest mall, condominiums, a medical school, an environmental habitat and posh residential homes. The affluent sprawl is still at an unending pace in the next few years, with new prospects for reclamation driven by demand from private sector and local government.

The new pursuit for land reclamation, as relearned from the past will be considerate of environmental hazards, socio-economic concerns, and protective of modest gains; will require institutional and collaborative action, guided by a comprehensive plan for mid-term execution. The ripe opportunity introduces itself, under the Aquino administration, armed with the desire to build in transparency, good governance and public-private partnerships. Congruently, at no time in our nation’s history has there ever been a keen interest to reclaim land by local government units (LGU’s) as well as by private entities and individuals via the expressed initiatives to PRA over the years for reclamation projects in various locations in the Philippines.

Translating the above unprecedented interest both by the government units and private entities in reclamation projects into a unitized plan, resulted to the drafting of the National Reclamation Plan (NRP) by the PRA. The NRP is a conceptual plan that will serve as blueprint of areas within the archipelago where reclamation maybe feasible. The NRP is not an implementation plan but will serve to guide investors and local government units (LGUs) if and when they pursue their interest to implement reclamation projects.

The conceptual plan is clustered into five (5) major sectors in key areas of the country. Foremost is the Manila Bay Sector (MBS) with untapped areas in Cavite and Central Luzon coastal sites. Envisioned for the MBS are possible reclamation sites
in the adjacent areas south and north of the almost completed Boulevard 2000; that will include the construction of engineering structures that will alleviate inland flooding in low-lying areas of Metro-Manila as well as of other coastal areas of the Bay covered by the plan. Moreover, reclamation works will also include intervening measures that will address certain environmental and ecological concerns, perceived to affect Manila Bay. As the state of Manila Bay is currently parochial in its development, the NRP in its proposals for the Manila Bay Sector may catalyze new socio-economic realizations that will spur unprecedented commercial activities.

The conceptual plan submits doable engineering feat(s) based on medium-term plan(s), ensuing with the Manila Bay Sector (MBS) as a strategic concept and can be replicated in the other four (4) major sectors in Laguna (Laguna de Bay Sector), Central Visayas (Cebu Sector), Cagayan-Iligan Corridor (Northern Mindanao Sector) and the Davao Gulf (Southern Mindanao Sector) not only for commercial endeavors but as viable considerations for coastal protection and adaptation strategy. The MBS in its realization will require the construction of an integrated coastal road system / extensive 8-lane toll way with railway track at the middle, stretching from Ternate, Cavite to Balanga, Bataan, as its major development feature. The coastal road system links up with existing toll ways to the SLEX via the Governor’s Drive (roughly 25-kilometer distance from Carmona Exit) and to the NLEX and SCTEX via Roman Highway (roughly 37-kilometer distance to Dinalupihan Exit). The PRA has conceptualized such road alignment traversing along a coastal highway and to link up with existing thoroughfares to decongest the same; thereby, offering the public alternative routes north to south of Metro Manila and vice versa. A segment of the road system proposes a viaduct approximately 19 kilometers long traversing Manila Bay from the Las Piñas-Parañaque Coastal Bay Project in the south to the portion of NRP along the Navotas City area.

The comprehensive plan enjoins the agencies under the Executive Branch of government and the solicited support from the nation’s Congress. The strategic action requires unitary support from the National Government and strong financial support from the private sector. Thus, leading to opportunities for continued and sustainable economic growth, similar to those achieved by SEA neighbours like Singapore, Hongkong and Macau. The proactive posture of pinpointing key areas for reclamation espouses the rational and pecuniary uses of coastal areas and also the prevention of the misuse of these areas and their protection from environmental threat.

The plan, as may form part of the nation’s development strategies (Philippine Development Plan or PDP and Philippine Investment Plan or PIP), is a “road map” for local and foreign investments. Foremost, among our nation’s leaders are advocates of coastal development who foresee it as a means to arrest poverty and curative measure against the fiscal deficit. Notably in favor are public stewards, Department of Finance, Secretary Cesar Purisima in one of his statements to legislators, was quoted, “We want reclamation projects to form part of our privatization program, which is
seen as a sustainable means to generating income for the government (Manila Times, August 25, 2010).” Likewise, former House Speaker Jose de Venecia, Jr., who in his seven-page letter to President Benigno Aquino III included a document, titled, “Twelve Point Program to Create New Wealth for the Country.” The 4th point in his discourse is titled, “A Massive Reclamation Plan,” where he espouses the potentials of land reclamation as one of the means to combat poverty. Significantly, he identifies similarly the locations already identified by the NRP - Manila Bay, Cebu and Mindanao.

Beyond the key areas for development by creation of new land, PRA expects independent pursuits (the “Minor Sector”) involving other areas in the country. The challenge in the NRP, should it be affirmed, is worth the synergy of the entire Philippine Government.

Envisioned for project proposals within the PRA Medium-Term Plan, comprehensively to be undertaken from 2011 to 2015 and beyond, it is significant to set apart the areas where major reclamation proposals may be expected (major sector) that are viable under the NRP from others that are comparatively marginal in terms of economic and social impact (minor sector), to wit:

1. **The Major Sectors**

<table>
<thead>
<tr>
<th>Indicative Island Size (Hectares)</th>
<th>No. of Islands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Manila Bay</td>
<td>26,234</td>
</tr>
<tr>
<td>2. Laguna de Bay</td>
<td>10,734</td>
</tr>
<tr>
<td>3. Central Visayas (Cebu)</td>
<td>6,000</td>
</tr>
<tr>
<td>4. Mindanao Sector</td>
<td>238</td>
</tr>
<tr>
<td>5. Others</td>
<td>5,800</td>
</tr>
</tbody>
</table>

For the major sector as abovementioned, specifically the Manila Bay Sector, viable areas had been identified so far in thirty two (32) islands as shown herein Annex A with complementary land uses.

2. **The Minor Sector**

Those that represent the Minor Sector, that is, those areas not covered by the major sector, if realized will contribute to the collective gains envisioned by the NRP as well.

Dictated by the success of the development thrusts by the Government in its Boulevard 2000 Project, PRA plans to initially impose the land uses of each project/sector in the Manila Bay Sector of the NRP using the Boulevard 2000 area as
the focal point. Further studies shall be undertaken to ascertain the appropriate land uses in the said sector. The same process shall be replicated in the sectors of the NRP.

Considering the critical nature and vulnerability of the Manila Bay environment, the implementation of these projects within the Manila Bay Sector requires in-depth and comprehensive technical/scientific, engineering and environmental studies that will assess and quantify the sum total impacts of the projects within the MBS to the Manila Bay. Thus, both the PRA and the proponents will generate the pertinent studies as basis for the planning, design and eventual implementation of reclamation projects within the MBS over the next 50 years and beyond.

The same studies above shall be replicated in the other major sectors indicated in the NRP as among the bases of PRA in exercising its regulatory mandate.

In order to realize the above studies, PRA has earmarked a budget for the engagement of reputable consultants to undertake comprehensive technical/scientific, engineering and environmental studies. The award of consultancy services shall be through public bidding pursuant to Republic Act (R.A.) No. 9184 or the Philippine Government Procurement Law.

II. OBJECTIVES

This Terms of Reference (TOR) is for the purpose of bidding the procurement of consultancy services in undertaking the **PROGRAMMATIC ENVIRONMENTAL ASSESSMENT, PLANNING AND ENGINEERING STUDIES FOR THE COASTAL ADAPTATION STRATEGY FORMULATION IN THE MANILA BAY AREA** as per Republic Act No. 9184 and its Implementing Rules and Regulations (IRR). This TOR has the following objectives:

1. Engage the services of a most qualified Consultant to undertake the **PROGRAMMATIC ENVIRONMENTAL ASSESSMENT, PLANNING AND ENGINEERING STUDIES FOR THE COASTAL ADAPTATION STRATEGY FORMULATION IN THE MANILA BAY AREA** and to submit the outputs as herein required;

2. Provide eligible bidder(s) / Consultant(s) with sufficient / necessary data and information about the Project and instructions for the preparation and submission of proposals;

3. Outline the detailed scope of work / consultancy services required, expected output and timetable; and

4. Prescribe the terms and conditions of the consultancy services contract.
III. SCOPE OF SERVICES

1. The Services to be rendered by the successful bidder under the Consultancy Contract shall include, but not limited to, the provision of all expert technical advice and skills and the procurement of all necessary works required. For effective management of the project, the Scope of Works is divided into six (6) general categories, namely:

Category I. General Land Use Planning
Category II. Hydrodynamics and Hydraulic Modelings and Related Works including Programmatic Environmental Study
   A) Hydrographic survey
   B) Geotechnical Investigation
   C) Modeling and Programmatic Environmental Assessment Study
Category III. EGGA (Eng’g., Geological & Geohazard Assessment)
Category IV. Marine and Surface Water Module
Category V. Socio-Economic-Political Profile
Category VI. Reclamation Planning Decision Support System (DSS)

2. Bidders shall refer to Annex B, provided herein, for the detailed scope of works under each specific category.

3. Bidders must submit proposal that include all of the above Categories, otherwise, will be sufficient ground for Bidders’ disqualification.

4. Further, payments to be made to Bidders shall be based on progress and completion of works under each individual category. Payments corresponding to completion of works for each category shall not be held by PRA for reason that the works under the other categories have not been completed yet.

IV. DELIVERABLES

Requirements: The Consultant shall submit to the PRA five (5) copies each of the various studies, properly bounded and labeled with title blocks as well as electronic copies such stored in Flash Drive or CD.

1. Surveys

Horizontal Control and Vertical Control Survey (drawn to an appropriate scale in the Bureau of Lands (BL) Form with Technical Description indicating the reference points and/or tie-line used duly signed and sealed by a professional Geodetic Engineer)
a) Sketch Plan of the Preliminary Land Form of proposed islands within the MBS Plan; and,

b) Hydrographic/Bathymetric Survey Plans.

2. **Planning and Engineering Studies**

   a) Geotechnical Investigation Report

   b) Engineering Geological and Geohazards Assessment Report (EGGAR);

   c) Conceptual Engineering Report

   d) The Land-use Review and Master Planning Report (including Development Plans and Schematics; such as Planning Layers, Perspectives, Aerial Views, Design Schematics and Panels, and any other format necessary to fully illustrate the planning process and its recommendations) to consist of:

      i. 5 sets (up to 2 Volumes per set) - coloured final book bound report copies in A4 format (English Version).

      ii. 10 - A1 size coloured copies of selected final plans.

      iii. 8 – A1 size illustrative plans:

          - Rendered site plan (2 nos.)
          - Eye level perspectives (3 nos.)
          - Aerial perspectives (3 nos.)

   e) Conceptual Infrastructure Planning Report

3. **Programmatic Environmental Assessment (PEA) Report** - is the documentation of comprehensive studies on environmental baseline conditions of a contiguous area. It also includes an assessment of the carrying capacity of the area to absorb impacts from co-located projects such as those in industrial estates or economic zones (ecozones). The following reports shall be prepared in A4 format (English Version) and shall be submitted in four (4) sets:

   a) Marine and Surface Water Module Report

   b) Socio-Economic-Political Profiling

   c) Hydrodynamic and Hydraulics Modeling Reports
d) Functional Reclamation Planning Decision-Support System (RPDSS)

V. PROJECT MEETINGS & PROGRESS REPORTS

1. The Consultant’s Project Manager/Project Director and the PRA during the continuance of these Services:

   a) shall meet from time to time together with such members of their respective teams as they may deem necessary;

   b) shall hold monthly project meetings at such time and place in order to facilitate the efficient handling of all issues and matters relating to the performance of the Services; and,

   c) shall keep minutes of each project meetings, which shall be confirmed and signed by the PRA and the Consultant’s Project Manager/Project Director not later than seven (7) days from the date of the meeting.

2. The Consultant’s Project Manager/Project Director shall be responsible for the day to day management of the project and in addition shall be responsible for the following activities:

   a) submitting and accepting Deliverables and other materials and documents required to be delivered for the project;

   b) overseeing the progress of the project and acting on request for minor variations to the individual components of the Deliverables and preparing proposals for variations to the Deliverables and/or the project for submission to and acceptance by PRA;

   c) arranging special meetings to be held between the parties;

   d) ensuring that the Consultant submits a Monthly Progress Report on or before the 7th day of the following month (the format to be mutually agreed upon);

   e) maintaining, for record keeping purposes, a log book or notes containing summaries of all material communications and deliveries between the parties; and,

   f) implementing best practices and procedures to assure the security of the documents and items delivered under these Services.

3. All instructions and directions for the project issued by the PRA shall be given to the Consultant’s Project Manager/Project Director. All instructions and
directions so given or issued shall be reduced into writing not later than seven (7) calendar days from the date it is given or issued.

4. All requests and advice shall be made or given by the Consultant’s Project Manager/Project Director to the PRA which shall be confirmed in writing within seven (7) calendar days thereof.

VI. REPORTORIAL REQUIREMENTS

1. Throughout the duration of the contract, the Consultant shall submit to the PRA the following reports:

   a) **Inception Report** - to be submitted thirty (30) calendar days from receipt of Notice to Proceed (NTP), in five (5) copies containing the detailed work program and methodology for the various plans / studies / output to be submitted. The PRA will comment on the report, which the consultant will take into consideration in the preparation of the plans / studies; 

   b) **Monthly Progress Report** - to be submitted on or before the 7th day of the following month, thereafter, in five (5) copies showing the progress of the consultancy work vis-à-vis the detailed work program submitted in the Inception Report; 

   c) **Draft Final Reports** - except for Category VI, draft final reports shall be submitted to PRA thirty (30) calendar days before the end of duration of each category in accordance with the Inception Report as approved by PRA; and, 

   d) **Final Reports** - to be submitted within fifteen (15) calendar days from receipt of the PRA’s comments on the draft Final Report to be submitted together with all the other required outputs as enumerated hereinabove; or on or before the end of the contract or four hundred twenty (420) calendar days, whichever will come first, from receipt of the NTP subject to the PRA’s approval and acceptance.

2. The reports shall be in a format to be agreed by the parties but shall contain details of work done, the resources committed, level or percentage of work done and such other relevant information to support the amount of Fees invoiced by the Consultant.

3. If the PRA does not agree with the reports, the PRA shall inform the Consultant in writing of its reason or reasons not later than fourteen (14) calendar days from the date of receiving the reports. The Consultant’s Project Manager/Project Director and the PRA shall discuss and mutually agree as to
the best steps to be taken immediately by the Consultant to remedy the faults, defects and/or omissions and/or address the issues raised by the PRA.

VII. MANNING REQUIREMENTS AND QUALIFICATIONS OF KEY PERSONNEL

The Consultant shall provide the qualified experts in the following field to fulfill the detailed scope of work described in Annex B of this TOR:

(1) Category I - General Land Use Planning

<table>
<thead>
<tr>
<th>KEY STAFF</th>
<th>No. of Personnel</th>
<th>QUALIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>Must be a licensed Civil Engineer/Architect/Environmental Planner with experience in designing, land use planning and/or implementation of site development works, and have a minimum of ten (10) years of experience as Project Manager.</td>
</tr>
<tr>
<td>Senior Architect/Architect-in-charge /Urban Planner</td>
<td>1</td>
<td>Must be a licensed Architect with experience in designing and/or land use planning and have a minimum of five (5) years of experience as Senior Architect/Architect-in-charge /Urban Planner.</td>
</tr>
<tr>
<td>Senior Civil Engineer</td>
<td>1</td>
<td>Must be a licensed Civil Engineer with experience in designing, land use planning and/or implementation of site development works and have a minimum of five (5) years of experience as Senior Civil Engineer.</td>
</tr>
<tr>
<td>Senior Structural Engineer</td>
<td>1</td>
<td>Must be a licensed Civil Engineer with experience in structural design of reclamation and have a minimum of five (5) years of experience as Senior Structural Engineer.</td>
</tr>
<tr>
<td>Senior Sanitary Engr./Environmental/Solid/Waste Management Engineer</td>
<td>1</td>
<td>Must be a licensed Sanitary Engineer with experience in the design of primary utilities for land development such as water supply, sewerage and drainage systems or waste management system, and have a minimum of five (5) years of experience as Senior Sanitary Engineer.</td>
</tr>
<tr>
<td>Senior Geotechnical Engineer</td>
<td>1</td>
<td>Must be a licensed Civil Engineer with experience in site investigation and evaluation of materials for land development works, and have a minimum of</td>
</tr>
<tr>
<td>KEY STAFF</td>
<td>No. of Personnel</td>
<td>QUALIFICATIONS</td>
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<tr>
<td></td>
<td></td>
<td>five (5) years of experience as Senior Geotechnical Engineer.</td>
</tr>
<tr>
<td>Senior Geodetic Engineer</td>
<td>1</td>
<td>Must be a licensed Geodetic Engineer with experience in Detailed Engineering Design / Construction Supervision involved in the Conduct of Feasibility Studies / Master Planning and have a minimum of five (5) years of experience as Senior Geodetic Engineer.</td>
</tr>
<tr>
<td>Senior Geologist</td>
<td>1</td>
<td>Must be a licensed Geologist with experience in geological and geophysical studies to provide information for use in regional development, site selection, and the development of public works projects and have a minimum of five (5) years of experience as Senior Geologist.</td>
</tr>
<tr>
<td>Senior Electrical Engineer</td>
<td>1</td>
<td>Must be a licensed Electrical Engineer with experience in the design of electrical system for land development projects for mixed-use and similar projects and have a minimum of five (5) years of experience as Senior Electrical Engineer.</td>
</tr>
<tr>
<td>Financial/Economics/ Social Dev. Specialist</td>
<td>1</td>
<td>Must have a degree in applied Social Science, e.g., Anthropology, Sociology, Economics, Development or Human Geography or other related fields combined with specialized experience in similar organization/s with at least five (5) years of experience. Must have a Master's Degree or equivalent in Social Sciences / development studies or other related fields.</td>
</tr>
</tbody>
</table>
(2) Category II - Hydrodynamics and Hydraulic Modeling and Related Works including Programmatic Environmental Assessment Study

a) Category IIA - Hydrographic Survey

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<tr>
<th>KEY STAFF</th>
<th>No. of Personnel</th>
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</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>Must be a licensed Geodetic Engineer and/or Hydrographic Surveyor with at least ten (10) years of experience as Project Manager.</td>
</tr>
<tr>
<td>Senior Geodetic Engineer</td>
<td>3</td>
<td>Must be a licensed Geodetic Engineer with experience in conducting hydrographic survey for the Conduct of Feasibility Studies/ Master Planning and have a minimum of five (5) years of experience as Senior Geodetic Engineer.</td>
</tr>
</tbody>
</table>

b) Category IIB - Geotechnical Investigation

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<tr>
<th>KEY STAFF</th>
<th>No. of Personnel</th>
<th>QUALIFICATIONS</th>
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</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>Must be a licensed Civil Engineer specializing in geotechnical works providing technical leadership in geotechnical and/or geological projects and tasks, and have a minimum of ten (10) years of experience as Project Manager.</td>
</tr>
<tr>
<td>Senior Geotechnical Engineer</td>
<td>3</td>
<td>Must be a licensed Civil Engineer with experience in site investigation and evaluation of materials for land development works, and have a minimum of five (5) years of experience as Senior Geotechnical Engineer.</td>
</tr>
</tbody>
</table>

c) Category IIC - Modeling and Programmatic Environmental Assessment Study

<table>
<thead>
<tr>
<th>KEY STAFF</th>
<th>No. of Personnel</th>
<th>QUALIFICATIONS</th>
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</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>Must have a degree in engineering/science and have a minimum of ten (10) years of experience as Project Manager.</td>
</tr>
<tr>
<td>KEY STAFF</td>
<td>No. of Personnel</td>
<td>QUALIFICATIONS</td>
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</tr>
<tr>
<td>Marine Biologist</td>
<td>1</td>
<td>Must be a graduate of Marine Biology specializing in the conduct of study for marine environment, the physical and chemical characteristics of the seas and oceans with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Environmental Engineer/EIA Specialist</td>
<td>1</td>
<td>Must be an Environmental Impact Statement Preparer with at least eight (8) years of experience.</td>
</tr>
<tr>
<td>Social Scientist</td>
<td>1</td>
<td>Must have a master’s degree in applied Social Science, e.g., Anthropology, Sociology, Economics, Development or Human Geography or other related fields combined with specialized experience in similar organization/s with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Phytoplanktons Specialist</td>
<td>1</td>
<td>Must have a degree in Biology with specialized experience on the methodology and taxonomic principles for the study of marine phytoplankton with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Zooplanktons Specialist</td>
<td>1</td>
<td>Must have a degree in Biology with specialized experience on the methodology and taxonomic principles for the study of marine zooplanktons with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Benthos Specialist</td>
<td>1</td>
<td>Must have a degree in Biology with specialized experience on the methodology and taxonomic principles for the study of marine benthos with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Corals Specialist</td>
<td>1</td>
<td>Must have a degree in Biology with specialized experience on the methodology and taxonomic principles for the study of corals with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Sea Grasses Specialist</td>
<td>1</td>
<td>Must have a degree in Biology with specialized experience on the methodology and taxonomic principles for the study of sea grasses with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Fisheries Specialist</td>
<td>1</td>
<td>Must have a degree in Fisheries with specialized experience on the methodology and taxonomic principles.</td>
</tr>
<tr>
<td>KEY STAFF</td>
<td>No. of Personnel</td>
<td>QUALIFICATIONS</td>
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</tr>
<tr>
<td>Chemist</td>
<td>1</td>
<td>Must have a degree in Chemistry with specialized experience in quantitative study/treatment of chemical processes in aquatic systems such as lakes, oceans, rivers, estuaries, groundwater, or wastewaters with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Air Environment Expert</td>
<td>1</td>
<td>Must have a degree in Science or equivalent degree course specializing in air and noise modeling, environmental impact studies evaluation work as well as in development of air quality standards/regulation, and calculations of greenhouse gases, air emissions etc. with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Land Use Expert</td>
<td>1</td>
<td>Must be a licensed Architect/Engineer with Masters in Urban and Regional Planning specializing on the organizing and designing of plans for land use and responsible for evaluating population number and the environmental and economic factors that will be affected, to establish a cost-effective, healthy, and ethical habitat with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Physical Oceanographer</td>
<td>1</td>
<td>Must have a degree in Science or equivalent degree specializing in the study of the attributes of the ocean like temperature, waves, currents and tides with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Coastal Engineer</td>
<td>1</td>
<td>Must be a licensed Civil Engineer with further studies or training on Coastal engineering specializing in the study of coastal and river systems, design of coastal structures such as sea walls, marinas and ports, and assess the environmental effects of these developments with at least five (5) years of experience as Coastal Engineer.</td>
</tr>
</tbody>
</table>
| Hydraulic Engineer        | 1                | Must be a licensed Civil Engineer with further studies or training on hydraulic engineering specializing in the studies of the environment, the 89
<table>
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<tr>
<td></td>
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<td>water, its forces, and creating concepts and designing structures to support the assigned purpose and adept in the use of software programs related to hydrologic modeling and data analysis with at least five (5) years of experience as Hydraulic Engineer.</td>
</tr>
<tr>
<td>Mangrove Ecologist</td>
<td>1</td>
<td>Must have a degree in Biology with at least five (5) years of experience specializing in the study and forecasting of future change in mangrove biodiversity and ensuing consequences for ecosystem, able to model past and present mangrove communities under different geographical, environmental and socio-economic settings to define which abiotic factors and biotic interactions drive community composition and positioning.</td>
</tr>
<tr>
<td>Coastal Morphologist</td>
<td>1</td>
<td>Must have a degree in Engineering/Science or equivalent degree course with at least five (5) years of experience specializing on the prediction of how coastal regions and areas will evolve in the long term, depending on sediment transport forecasts.</td>
</tr>
<tr>
<td>Meteorologist</td>
<td>1</td>
<td>Must have a degree in Meteorology or equivalent degree course with at least five (5) years of experience specializing on predicting the weather and study the causes of particular weather conditions using information obtained from the land, sea and upper atmosphere with the aid of computerized and mathematical models to make short and long-range forecasts concerning weather and climate patterns.</td>
</tr>
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</table>
### Category III - Engineering Geological and Geohazard Assessment (EGGA)

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<tr>
<th>KEY STAFF</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>Must be a licensed Geologist or a licensed Engineer with training or post-graduate diploma in Engineering Geology/Structural Geology with a minimum of ten (10) years of experience as Project Manager.</td>
</tr>
<tr>
<td>Senior Civil Engineer</td>
<td>1</td>
<td>Must be a licensed Civil Engineer with training or post-graduate diploma in Engineering Geology/ Structural Geology and have a minimum of five (5) years of experience as Senior Civil Engineer.</td>
</tr>
<tr>
<td>Senior Structural Engineer</td>
<td>1</td>
<td>Must be a licensed Civil Engineer training or post-graduate diploma in Engineering Geology/ Structural Geology and have a minimum of five (5) years of experience as Senior Structural Engineer.</td>
</tr>
<tr>
<td>Senior Geotechnical Engineer</td>
<td>1</td>
<td>Must be a licensed Civil Engineer with training or post-graduate diploma in Engineering Geology/ Structural Geology and have a minimum of five (5) years of experience as Senior Geotechnical Engineer.</td>
</tr>
<tr>
<td>Senior Geologist</td>
<td>1</td>
<td>Must be a licensed Geologist or a licensed Engineer with training or post-graduate diploma in Engineering Geology/Structural Geology and have a minimum of five (5) years of experience as Senior Geologist.</td>
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### Category IV - Marine and Surface Water Module

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<tr>
<th>KEY STAFF</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>Must have a degree in environmental planning or marine science with at least ten (10) years of experience as Project Manager.</td>
</tr>
</tbody>
</table>
| Phytoplankton Specialist   | 1                | Must have a degree in Biology with specialized experience on the methodology and taxonomic principles for the study of marine
<table>
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<th>KEY STAFF</th>
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<th>QUALIFICATIONS</th>
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<tbody>
<tr>
<td>phytoplankton</td>
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<td>with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Zooplankton Specialist</td>
<td>1</td>
<td>Must have a degree Biology with specialized experience on the methodology and taxonomic principles for the study of marine zooplankton with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Benthos Specialist</td>
<td>1</td>
<td>Must have a degree in Biology with specialized experience on the methodology and taxonomic principles for the study of marine benthos with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Fisheries Specialist</td>
<td>1</td>
<td>Must have a degree in Biology with specialized experience on the methodology and taxonomic principles for the study of aquatic fisheries with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Sea Grasses Specialist</td>
<td>1</td>
<td>Must have a degree in Biology with specialized experience on the methodology and taxonomic principles for the study of sea grasses with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Corals Specialist</td>
<td>1</td>
<td>Must have a degree in Biology with specialized experience on the methodology and taxonomic principles for the study of corals with at least five (5) years of experience.</td>
</tr>
</tbody>
</table>

(5) Category V - The Socio-Economic-Political Profile

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<tr>
<th>KEY STAFF</th>
<th>No. of Personnel</th>
<th>QUALIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>Must have a master’s degree in applied Social Science, e.g., Anthropology, Sociology, Economics, Development or Human Geography combined with specialized experience in similar organization/s on Socio-Economic-Political Profiling with at least ten (10) years of experience.</td>
</tr>
<tr>
<td>KEY STAFF</td>
<td>No. of Personnel</td>
<td>QUALIFICATIONS</td>
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</tr>
<tr>
<td>Social Scientist</td>
<td>1</td>
<td>Must have a degree in any of the natural sciences, including anthropology, archaeology, criminology, economics, history, linguistics, political science and international relations, sociology, geography, law, and psychology. Responsible for studying and researching the link between society and human behavior with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Economist</td>
<td>1</td>
<td>Must have a degree in Economics specialized in studying data and statistics and understanding the economic relationships to uncover trends to assess feasibility, produce forecasts of economic trends, determine the implications of their findings and make recommendations of ways to improve efficiency with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Political Scientist</td>
<td>1</td>
<td>Must have a degree in Political Science specializing on the examination of how a particular policy affects a social group, economy, or environment. They provide information and analysis that help in planning, developing, or carrying out policies with at least five (5) years of experience.</td>
</tr>
<tr>
<td>Project Director</td>
<td>1</td>
<td>Must have a degree in engineering/science and have a minimum of fifteen (15) years of experience as Project Manager/Project Director.</td>
</tr>
<tr>
<td>Project Manager</td>
<td>1</td>
<td>Must have a degree in engineering/science and have a minimum of ten (10) years of experience as Project Manager.</td>
</tr>
<tr>
<td>Senior Web Programmer</td>
<td>1</td>
<td>Must have at least a bachelor's degree in computer engineering, information technology or computer science with at least five (5) years of relevant experience as Senior Web Programmer.</td>
</tr>
</tbody>
</table>

(6) Category VI - Reclamation Planning Decision Support System (RPDSS)
### KEY STAFF

<table>
<thead>
<tr>
<th>KEY STAFF</th>
<th>No. of Personnel</th>
<th>QUALIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Data Base Programmer</td>
<td>1</td>
<td>Must have at least a bachelor's degree in computer engineering, information technology or computer science with at least five (5) years of relevant experience as Senior Data Base Programmer.</td>
</tr>
<tr>
<td>Computer Programmer</td>
<td>1</td>
<td>Must have at least a bachelor's degree in computer engineering, information technology or computer science with at least five (5) years of relevant experience.</td>
</tr>
</tbody>
</table>

### VIII. OTHER SERVICES REQUIRED

The Consultant shall issue a written commitment that during the implementation of the project it shall be ready to appear / face / answer any investigating body which may conduct inquiries / investigation concerning its undertaking and output herein.

### IX. ACCESS TO INFORMATION & REPORTING BY CONSULTANT ON PROGRESS OF SERVICES.

1. The PRA shall at all times during the continuance of these Services have the right to examine and review the performance of the Services by the Consultant and reject and require amendments or corrections to any work done which in the reasonable opinion of the PRA is not in accordance with the Contract.

The Consultant shall on request of the PRA give to the PRA or any persons authorized by him access at all times to all documents, investigations, information and data obtained from investigations and any other materials in the possession of the Consultant in connection with the performance of the Services and/or the project (whether in its complete state or not) and all changes and amendments made to them for any purpose whatsoever; and to provide copies thereof to the PRA on its request.

2. The PRA and any of its authorized personnel shall, at all times, have access to all places in which the Services are executed or performed, whether in Philippines or elsewhere. Where access to a place involves the presence of any dangers or risks to the PRA or any of its authorized personnel, the Consultant shall advise the PRA of the same in writing and in order to prevent any injury or death, the Consultant may require the PRA or its authorized personnel to abide by the safety precautions recommended by the Consultant.
X. CONTRACT IMPLEMENTATION GUIDELINES

The contract for the consultancy services shall be between the PRA and the Highest Rated Responsive Bid submitted by the Consultant. Payment for services rendered shall be made by PRA based on the stipulations of the contract.

The Approved Budget for the Contract (ABC) is FOUR HUNDRED EIGHT MILLION FOUR HUNDRED THIRTY ONE THOUSAND TWO HUNDRED SEVENTY NINE AND 86/100 PESOS (Php408,431,279.86), Philippine Currency, inclusive of the twelve percent (12%) Value Added Tax or VAT.

NOTE: ELIGIBILITY OF CONSULTANTS and CONDITIONS OF THE CONTRACT shall be as per RA 9184.

XI. LIST OF INFORMATION TO BE PROVIDED TO THE CONSULTANT

The list of data/information that will be provided to the Consultant upon award of the Contract:

1) Book Title: Geology of the Philippines
   
   Edition : 2nd Edition
   
   Year Published : 2010
   
   Author : Mines and Geosciences Bureau
   
   Publisher : Mines and Geosciences Bureau, Department of Environment and Natural Resources, Quezon City, Philippines

2) Book Title: Manila Bay Area Environmental Atlas
   
   Year Published : 2007
   
   Publisher : GEF/UNDP/IMO Regional Programme on Building Partnerships in Environmental management for the Seas of East Asia (PEMSEA) and the Manila Bay Environmental Management Project (MBEMP) of the Department of Environment and Natural Resources (DENR), Philippines
3) Boulevard 2000 Integrated Framework Plan (IFP)

Prepared by:

Planning & Evaluation Department
ANNEX B: DETAILED SCOPE OF SERVICES

CONSULTANCY SERVICES FOR THE PROGRAMMATIC ENVIRONMENTAL ASSESSMENT (PEA), PLANNING AND ENGINEERING STUDIES FOR THE COASTAL ADAPTATION STRATEGY FORMULATION IN THE MANILA BAY AREA

The Consultant shall carry out a planning and engineering appraisal and evaluation of the proposed reclamations (26,234 Hectares, more or less) and developments along the Manila Bay Sector.

1. CATEGORY I. GENERAL LAND USE PLANNING

1.1. The Consultant shall discuss with the PRA on the vision for reclamations and developments, establish a basic framework, and employ an integrated planning approach, which encompasses urban trends, urban planning and design, infrastructure and urban development, for the review of the current land-use or master plans on reclamations and developments. The planning strategies and urban studies shall include (but not limited to) an analysis of:

a) Vision, objectives and strategies for waterfront type related township development including industrial clusters;
b) Reclamation land profile studies and scenarios;
c) Planning inventory and regional analysis;
d) Site analysis - Constraints and Opportunities;
e) Broad Spatial Distribution Concepts;
f) Concept Plans- Spatial layouts;
g) Broad Land-use Plan;
h) Projected development data of the various land uses;
i) Provisions of public amenities;
j) Provisions of community support services (health, education etc);
k) Provisions of public parks, green connectors & recreation; and
l) Possible coastal defense structures or disaster risk reduction structures.

1.2. The Consultant shall recommend the design and engineering criteria on land use, road system, utilities, building layout, landscaping, open spaces, floor area ratios and other site planning, urban and engineering design criteria. Conceptual infrastructure planning on the power supply, water supply, roads, drainage and sewerage shall be prepared based on the preferred land use option and shall include:

a) Reviewing the capacity and requirements of power, water supply,
drainage and sewerage networks.
b) Projection and estimation of the future infrastructure demands for power, water supply, roads, drainage, sewerage and solid waste disposal.
c) Analysis of the expansion possibilities for water supply, drainage, sewerage network and power supply network.
d) Develop and establish the design criteria and considerations for the infrastructure, site utilities and the supporting facilities in preparing the final site development master plan.
e) Identify suitable locations for utility sites and the respective required land areas to be included in the master plan.
f) Prepare schematic routing of the major infrastructure and utilities.

1.3 As part of the overall transport planning and traffic circulation strategies, the Consultant shall analyze and assess the present traffic pattern in the vicinity and recommend and plan the most efficient exclusive access to and from the proposed reclamation sites through Roxas Boulevard and other major national roads. The Consultant shall also conduct a Traffic Impact Assessment (TIA) which shall include, but not limited to:

a) Assessment of the present transport mode and system
b) Analysis and forecasts
   i. Trip generation forecasts;
   ii. Internal circulation; and,
   iii. Impacts of the proposed developments on the existing transport system.
c) Traffic surveys, inventories, and secondary data gathering
   i. Classified vehicular volume count surveys;
   ii. Inventory; and,
   iii. Secondary data gathering.

1.4 Based on the available subsurface conditions and soil profiles established from the Geotechnical Investigations (refer to Appendix B-1), the Consultant shall recommend the most appropriate seawall treatment, slopes and coping levels for the proposed developments based on the land-use and functions of the marine facilities, both which shall be discussed in consultation with the PRA.

1.5 The Consultant shall evaluate any drawings and reports, which may be provided by PRA to draw all relevant data or information to be compiled as a comprehensive description of conditions of the physical and natural environmental receptors. The evaluation shall also identify all constraints such as the submarine utilities (both existing and in-service and out of
service) that may exist in the vicinity of the proposed reclamations and developments. The Consultant may also contact the relevant private and government authorities in order to carry out a research and review of all available information in the private and government domain.

1.6 From the Hydrographic Surveys (refer to Appendix B-1), the Consultant shall pre-compute the land area to be reclaimed, estimate the fill quantities required and prepare preliminary cost estimate and implementation programme for each of the proposed reclamations. As part of the concept engineering study, the Consultant shall provide the possible construction method, equipment, construction duration including preparation of good engineering practice for coastal constructions that are environmentally friendly including monitoring/survey requirements, foundation materials, crest elevations, design criteria, and adopting the concept of "working with nature".

1.7 The Consultant shall also identify suitable designated areas for the disposal of dredged materials in connection with the proposed reclamations. In addition, the Consultant is to recommend suitable treatment of the dredged material including but not limited to disposal if the use of dredged materials as reclamation fill is not appropriate.

1.8 As part of the concept engineering study, the Consultant shall study and identify potential sources of fill materials and sand mining sites. The Consultant shall provide technical specifications, including methods of investigation for the sourcing of suitable fill materials for proposed reclamation projects.

2. CATEGORY II. HYDRODYNAMICS AND HYDRAULICS MODELING AND RELATED WORKS INCLUDING PROGRAMMATIC ENVIRONMENTAL ASSESSMENT STUDY

2.1 The Consultant shall conduct a met-ocean analysis through Hydraulic Modeling using calibrated and validated hydrodynamic, spectral wave and rainfall runoff models to determine met-ocean design conditions for the proposed reclamation and development. The analysis shall include the following:

a) Establishing the met-ocean design parameters, including:

   i. Design current speeds
   ii. Design water levels
   iii. Design wave heights
   iv. Design wind speeds
v. Extreme rainfall-runoff (of all river systems discharging into the Manila Bay)

The met-ocean design conditions shall be obtained from extreme value analyses considering critical settings induced by typhoons or large storm events, tsunamigenic events, and peak tidal conditions.

In addition, a joint occurrence analysis of extreme significant wave height (HmO) and residual water levels shall be undertaken. This will allow establishing the most probable residual water level associated to peak wave events. This analysis is to be based on internationally recognized approaches.

The Consultant shall procure the necessary historical data, either measured or hindcasted, that are required to carry out the extreme value analyses for 1:1, 1:5, 1:10, 1:50, 1:100, 1:150 years return-period. However, at least two (2) months of measured data on current speed and direction, water level and wave height and period are required to be collected as part of this project. The data shall be collected using an ADCP (or similar). At least one month of data shall be collected during the typhoon season, in order to maximize the chance of capturing a storm event.

b) Hydraulic Modeling

The Consultant shall use any two (2) of the following internationally recognized suites of numerical models for the met-ocean analysis with one suite to be used to validate the results of the other suite:

i. Delft 3D
ii. Delft SWAN
iii. MIKE by DHI
iv. TUFLOW

The hydrodynamic model shall be of sufficient spatial and temporal resolution to resolve local current flows and features (in the order of 20m in the immediate project area, maximum of 250m in the wider Manila Bay). The model shall be calibrated using the first month's measurement of the site specific current, wave and water level collected as part of this project, as well as any additional suitable historical data available at the project area.

The model shall then be validated against the second month of site specific current, wave and water level measurements collected as part of this project. The model validation shall meet the following
requirements:

i. Tidal elevations:
   - Visually a very close match with replication of semi-diurnal, diurnal and spring/neap tide characteristics; and
   - RMS error of water level < 10% of the spring tidal range for stations with measured time series of water levels.

ii. Currents:
   - Visually a close match with replication of temporal variation in depth averaged current speed and direction;
   - Visually a close match with replication of transects variation in speed, direction and flow structure (e.g. magnitude and persistence of eddies).
   - Root-mean square error (RMSE) of depth-averaged current speed < 10% of the peak spring tide depth-averaged tidal current for periods with current strength > 0.2m/s; and
   - Root-mean square error (RMSE) on depth-averaged current direction < 20 degrees for periods with current strength > 0.2m/s (for areas not strongly effected by dynamic micro-eddies).

iii. Waves
   - Visually a close match with replication of temporal variation in significant wave height, peak wave period, and mean wave directions.
   - Comparison of significant wave height statistics shall produce similar trend, and able to reproduce measured wave or storm events.

iv. Non-tidal water levels
   - Key extreme events shall be selected and available 2D time-variable wind/pressure maps for these events shall be validated against available meteorological measurements, in order to select the most valid wind/pressure field maps, which shall then be used to force the hydrodynamic models
   - The best wind fields will provide the forcing for the validation of the numerical models with respect to storm surge. The hydrodynamic model shall be run for the extreme event periods, and validated against water level measurements from each event. An accuracy of ±0.1m would be acceptable criteria.
2.2 The Consultant shall carry out a Programmatic Environmental Assessment (PEA) Study in accordance with international standards for the appraisal and evaluation of reclamations (up to 26,234 Ha) and developments along the Manila Bay Sector.

2.2.1 Scoping & Stakeholder Meetings

In order to confirm the required scope and strategic issues to be addressed in the PEA, the Consultant shall undertake expert scoping and a series of stakeholder workshops. The expert scoping shall be used to refine relevant strategic environment issues, whereas the workshops shall seek additional input from the client, government stakeholders, non-government stakeholders and the local communities.

The scope of work presented in the following sections shall therefore be considered indicative only, but is anticipated to cover the main issues and scale of studies required.

2.2.2 Baseline

Prior to the PEA, the Consultant shall conduct detailed surveys to establish baseline conditions in the area where reclamations may be established and development, which may include, but not necessarily be limited to those outlined in Category IV: Marine and Surface Water Module. The Consultant shall use the data collected, combined with available historical data, studies and literature, to document the baseline conditions of the study area, and identify all of the environmental receptors that shall be addressed during the PEA.

2.2.3 Programmatic Environmental Assessment (PEA)

The Programmatic Environmental Assessment is the documentation of comprehensive studies on environmental baseline conditions of a contiguous area. It also includes an assessment of the carrying capacity of the area to absorb impacts from co-located projects such as those in industrial estates or economic zones (ecozones). PEA report shall be prepared in A4 format (English Version) and shall be submitted in four (4) sets.

The purpose of the PEA is to establish the overall feasibility of the proposed reclamations (up to 26,234 Ha) and developments along the Manila Bay Sector, identify any incompatibilities with existing land uses/spatial plans or any unacceptable environmental impacts, and to propose and test mitigation measures to resolve these.
Model simulations shall be used to screen and offer various alternative reclamation profiles and fine tune the preferred profiles and/or orientation of the layouts according to the proposed land use and the hydrodynamic effect around the project area.

The scope of work for the PEA will be based on the outcomes of the scoping and stakeholder consultation, but should include:

a) Collation and documentation of baseline data, including:
   i. Ecological data (habitats, protected species, migratory species, etc.)
   ii. Physico-Chemical data (water quality, sediment quality, air quality, etc.)
   iii. Land use data (current and proposed land uses, spatial plans, conservation areas, etc.)
   iv. Socio-economic data (population spatial distribution and demographics, employment, income, social infrastructure, cultural and heritage issues, etc.)

b) Numerical Modeling

   The calibrated and validated hydrodynamic model developed as part of the Met-Ocean Analysis should also be used as a basis for additional numerical modeling to study the following potential effects within and around the influence area of the proposed reclamations and developments:

   i. Flooding

   Flooding impact shall be evaluated via comparison between baseline and post-reclamation conditions, as well as key intermediate stages that are likely to have negative flooding impacts different from the final scenario. Agreement on key intermediate stages shall be reached with the client prior to the start of simulations. Modelling shall be based on critical storm events at a minimum 1:150 years return period at mean highest high water spring tidal level. A 1:500 years return period is also required for record purposes.

   The results of the flooding model shall be presented in terms of Time series plots for key locations (e.g. mouth of each major river) showing a comparison of the surface elevation of the baseline, the final reclamation profile and any
mitigation scenarios for the modeling duration.

ii. Flushing and Water Quality

Flushing impact shall be evaluated via comparison between baseline and post-reclamation conditions, as well as a range of likely intermediate stages. Agreement on key intermediate stages shall be reached with the client prior to the start of simulations. Modelling shall be based on dry Season without storm, wet Season with typical storm event of 1:1 years return period, and coupled with tidal level to produce the weakest flushing conditions.

A 3D water quality model shall be calibrated and validated based on the water quality and pollution load measurements collected during the baseline. The horizontal resolution of the model shall be in the order of 50-100m in the general project area, with a vertical resolution of a minimum of 10 layers. The hydrodynamics for the model shall be provided from a calibrated 3D hydrodynamic model which shall be validated against the same data and performance criteria used to validate the 20 hydrodynamic model used to determine the met-ocean design conditions for the project. The water quality model shall be run for a 1 year period for both the baseline and final reclamation shoreline profiles, as well as key intermediate stages that are likely to have negative water quality impacts different from the final scenario based on the flushing results. Agreement on key intermediate stages shall be reached with the client prior to the start of simulations. The results of the model shall be presented in terms of 20 plots of at least 3 layers from the 3D model - surface, mid-depth and bottom - showing:

- Change in Mean and Maximum concentrations of nutrients, heavy metals, chlorophyll-a and other relevant water quality parameters.
- Change in the percent exceedence of relevant legislative limits for key water quality parameters.

iii. Coastal Processes and Morphology (Erosion and/or Sedimentation)

A morphology model shall be developed and calibrated based on data from the Geotechnical Investigation and the sediment grading samples collected across the project area as
part of the Baseline. The spatial resolution of the model shall be in the order of 50-100m in the general project area. The hydrodynamics for the model shall be driven by the calibrated and validated Hydrodynamic model. The model shall be run for a 1 year period for both the baseline and final reclamation shoreline profiles, as well as key intermediate stages that are likely to have negative morphological impacts different from the final scenario. Agreement on key intermediate stages shall be reached with the client prior to the start of simulations. The results of the model shall be presented in terms of 2D plots showing change in net sedimentation, net erosion, and net bed level across the project area for the duration of the modeling period.

Specifically, the modelling should also be able to quantify the rate of sediment deposition coming from and/or contributed by all river systems discharging to the bay. The model should also be able to show the qualitative parameters and characteristics of sediments deposited to the bay through the above river systems. More importantly, the modeling should also be able to ascertain and quantify the impact and/or contribution, if any, of said river systems to the sediment build up in the vicinity of the San Nicholas Shoal (SNS) in Cavite.

iv. Sediment Plumes (During Construction)

An internationally recognized sediment transport model shall be used to determine the sediment plume and sedimentation impacts associated with the reclamation construction. The spatial resolution of the model shall be in the order of 10-25m in the general project area, and the model shall be capable of simulating multiple moving and/or stationary sediment release sources simultaneously. The hydrodynamics for the model shall be driven by the calibrated and validated Hydrodynamic model. The model shall be used to simulate the sediment plumes and sedimentation from various representative stages of the reclamation construction. Agreement on intermediate profiles, reclamation and dredging methods, and sediment release rates shall be reached with the client prior to the start of simulations. Results of the modeling shall be presented in terms of:

- 2D plots showing Mean, Maximum and Minimum TSS during the modeling period
• 2D plots showing %Exceedence during the modeling period of critical environmental threshold levels (e.g. 5mg/L, 10mg/L, etc.)
• 2D plots showing sedimentation rate (in terms of mm/14 days and/or mg/cm²/day) and total sedimentation (in terms of mm and/or mg/cm²) for the modeling period
• Timeseries plots showing instantaneous TSS at each timestep throughout the modeling period at key locations (e.g. coral reefs, fish farms, beaches, etc.)

v. Air Quality

Air quality analyses should be based on existing air quality conditions and available plans for end land uses and internationally accepted emissions factors for specific industry types/land uses (API, AP42 of US-EPA, European PRTR/EPER, EMEP/CORINAIR Emission Inventory Guidebook, UN FCCC/IPCC Reporting Guidelines, IPC of World Bank). Internationally recognized air quality models shall be used to undertake the quantitative analysis of air quality impacts, such as AERMOD, CALPUFF or Car International (e.g. for traffic emission).

c) Assessment of potential cumulative impacts in the proposed reclamations and developments, including:

i. Flooding Impacts

The results of the numerical modeling shall be used to identify any incremental flooding impacts related to the project (either increased severity or increased frequency of flooding, due to either rainfall/drainage or storm-surge related flooding)

ii. Water Quality Impacts

The results of the sediment plume and water quality numerical modeling shall be used to identify any incremental water quality impacts related to the project (e.g. eutrophication due to poor circulation or increased nutrient inputs, exceedence of legislative limits, etc.)

iii. Morphology Impacts
The results of the Morphology modeling shall be used to determine any areas of erosion or sedimentation occurring as a result of the reclamation, via comparison between baseline and post-reclamation model results. The Morphology model shall also be used to identify any long-term changes in background TSS concentrations as a result of the reclamation.

iv. Air Quality Impacts

The results of the numerical modeling shall be used to identify any predicted exceedence of Philippine and/or international air quality standards.

v. Ecological Impacts

Ecological impacts of the proposed development shall be assessed in terms of the direct physical footprint (in terms of habitat loss) as well as any secondary impacts to habitats, flora or fauna (e.g. due to water quality or sediment plume impacts). Impacts to any protected habitats or species shall be clearly documented.

vi. Socio-Economic Impacts

Analysis of socio-economic issues such as, or related to, immigration, public health and safety concerns, changes to livelihoods; and impacts to cultural heritage, aquaculture, fisheries, tourism or recreation shall be performed in accordance with the IFC Performance Standards on Social and Environmental Sustainability (2006).

d) Identification of Mitigation and Management Measures

Mitigation and management measures for any impacts identified as part of the PEA should be identified and tested using the numerical models to confirm their effectiveness. Individual component(s) of the project responsible for impacts should be identified as part of this process, and mitigation options, including optimization of reclamation profiles, and requirements for the staging of developments, should be discussed and agreed with the client.
e) Recommendations for Spatial Planning and Further Studies

The Consultant shall provide clear and practical recommendations to resolve any strategic issues or concerns identified in the PEA. This may include changes to spatial plans, policies or strategies to resolve land use conflicts. Any further studies required or recommended shall be clearly identified, including draft scopes (TORs).

3. CATEGORY III. EGGA (ENG’G., GEOLOGICAL & GEOHAZARD ASSESSMENT)

3.1 The Consultant shall conduct engineering/technical studies needed to accomplish the conceptual engineering design of the various proposed reclamation sites such as but not limited to the following studies: Engineering Geological and Geohazards Assessment Report (EGGAR) including other pertinent engineering studies that are prerequisites and are vital to the preparation and finalization of the conceptual engineering design of the proposed reclamation and which should address and resolve the following major concerns in proposed reclamation design:

a) settlement of the foundation of the fill;
b) settlement, bearing capacity and liquefaction potential of the reclamation fill; and
c) stability of the shore protection works and/or seawalls.

3.2 From the Geotechnical Investigations, the Consultant shall carry out an engineering appraisal and evaluation of the soil data to establish the subsurface conditions and soil profiles. The Consultant shall also identify the necessary data to be used in the engineering design and construction planning.

3.3 Tectonic stability studies (e.g., neo-tectonics, coastal uplift, Sea level rise, paleomagnetics), structural geology (with special attention to the Manila Trench, Valley Fault System, Philippine Fault Zone, Subic Bay Fault Zone and the Macolod Corridor as possible earthquake generators),

3.4 Volcanological studies, mantle tomography and focal mechanism studies (depth and angle of subducting plate, effects on volcanologic regimes, crustal/island arc evolution) and other means of evaluating present-day geologic hazards and predicting possible geohazard scenarios related to regional tectonics.
3.5 Hydrometeorological conditions in the area. As such, studies on hydrometeorological hazards must also be considered as it affects the offshore area and the surrounding onshore areas. Macro and micro-climatic factors and the corresponding modelling must also be incorporated. Wave modelling, considering the susceptibility of the area to storm surges and possible tsunami (or seiche) is critical in the geohazard assessment of the area.

3.6 Others as per the table below, when applicable; If not, applicable Bidder must adequately explain reasons why not applicable

<table>
<thead>
<tr>
<th>A. Geologic Hazard</th>
<th>B. Hydrologic Hazard</th>
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</thead>
<tbody>
<tr>
<td>1. Fault related/Seismic Hazards</td>
<td>1. Fluvial</td>
</tr>
<tr>
<td>a. Ground acceleration</td>
<td>a. Flooding (Overflow)</td>
</tr>
<tr>
<td>b. Ground rupture</td>
<td>b. Flooding (Sheetflow, concentrated run-off)</td>
</tr>
<tr>
<td>c. Liquefaction</td>
<td>c. Scouring of riverbed</td>
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<tr>
<td>d. Differential settlement</td>
<td>d. Channel erosion and migration</td>
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<tr>
<td>e. Landslides</td>
<td>e. Rill erosion</td>
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<tr>
<td>f. Fault creep</td>
<td>f. Gully erosion</td>
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<tr>
<td>g. Lateral spread</td>
<td>g. Sedimentation</td>
</tr>
<tr>
<td>h. Tsunami</td>
<td>i. Seiches</td>
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<tr>
<td>i. Seiches</td>
<td></td>
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</tbody>
</table>

2. Mass Movement

<table>
<thead>
<tr>
<th>a. Landslides</th>
<th>2. Coastal Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.1. Fall</td>
<td>a. Flooding</td>
</tr>
<tr>
<td>a.2 Topple</td>
<td>b. Coastal erosion</td>
</tr>
<tr>
<td>a.3 Slump</td>
<td>c. Coastal aggradation</td>
</tr>
<tr>
<td>a.4 Slide</td>
<td>d. Storm surge</td>
</tr>
<tr>
<td>a.5 Spread</td>
<td>e. Coastal subsistence/Sea level rise</td>
</tr>
<tr>
<td>a.6 Flow</td>
<td>f. Submarine landslide</td>
</tr>
<tr>
<td>a.7 Complex</td>
<td></td>
</tr>
</tbody>
</table>

b. Creep |
c. Subsidence |
d. Settlement |

3. Volcanic Hazards

| a. Lava flow | a. Flooding |
| b. Debris flow | b. Coastal erosion |
| c. Pyroclastic flow | c. Coastal aggradation |
| d. Debris avalanche | d. Storm surge |
| e. Lahar | e. Coastal subsistence/Sea level rise |
| f. Lateral blast and pyroclastic surge | f. Submarine landslide |
| g. Bombs and ballistic projectiles | |
h. Ash fall |
i. Tsunami |
j. Flooding |
k. Volcanic gases |
l. Volcanic earthquakes |

C. Others

| a. Airborne | a) Impacts on Carbon Emissions |
| b. Cosmic | b) Disaster Prediction and Mitigation |

3.7 Climate Change Considerations

a) Sea Level Rise

b) Disaster Prediction and Mitigation
4. CATEGORY IV. MARINE AND SURFACE WATER MODULE

The consultant shall undertake a full range of environmental baseline surveys and data gathering to establish the environmental baseline for the PEA, and to provide calibration and validation data for the modelling studies. These surveys shall include, but not necessarily be limited to those summarized in the following table. More details on the requirements for the surveys are provided in the following sections.

<table>
<thead>
<tr>
<th>Study/Area/Component</th>
<th>SOW</th>
<th>Methods</th>
<th>EIS Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water quality parameters</td>
<td>\textit{In situ} water quality measurements (temperature, percent DO, conductivity, pH, alkalinity, and turbidity); Collection of samples for laboratory testing for key parameters, including BOD, COD, nutrients, heavy metals and other pollutants</td>
<td>Standard methods (e.g. ASEAN Marine Water Quality Management Guidelines and Monitoring Manual), including use of a calibrated water quality sensor for in-situ measurements, and a niskin bottle or similar for collection of water samples for analysis.</td>
<td>Baseline characterization of water quality condition comparative; reference of anthropogenic disturbances in the future, calibration and validation data for water quality model</td>
</tr>
<tr>
<td>Sediment Quality Parameters</td>
<td>Collection of samples for laboratory testing for key parameters, including TOC, nutrients, heavy metals and other pollutants</td>
<td>Bottom-grab sampler</td>
<td>Baseline characterization of sediment quality condition comparative; reference of anthropogenic disturbances in the future, calibration and validation data for water quality, sediment plume and morphology models</td>
</tr>
<tr>
<td>Air Quality Monitoring</td>
<td>\textit{In situ} air quality measurements (PM10, PM2.5, Sox, NOx)</td>
<td>Combination of passive and active samples</td>
<td>Baseline characterization of air quality condition comparative; reference of anthropogenic disturbances in the future, calibration</td>
</tr>
<tr>
<td>Study/Area/Component</td>
<td>SOW</td>
<td>Methods</td>
<td>EIS Applications</td>
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</table>
| Phytoplankton, Zooplankton communities and similar microorganisms in the marine food web | Composition, abundance and density: to include phytoplankton, zooplankton, nanoplankton, faunal benthos, benthic macroinvertebrates (acrobenhos), ichthyoplankton, epibenthic macroinvertebrate, infaunal soft bottom benthos, primary productivity (Chlorophyll-a) and hytoplankton standing crop (Cell Counts), and fish. Segregation of phytoplankton according to functional groups.  
• Phytoplankton primary productivity (chlorophyll-a measurements) and standing crop (cell counts);  
• Composition, abundance, density, biomass and diversity of soft bottom infaunal benthos;  
• Composition and abundance of subtidal epibenthic macroinvertebrates | Plankton net surveys; Shannon-Weaver Diversity / Evenness Indices and bioassessment metrics for benthic macroinvertebrates; wet displacement method for biomass; Bottom-grab sampler for soft bottom; Underwater video transects for macroinvertebrates | The objective of an aquatic ecology baseline study is to evaluate important components of the aquatic ecosystems in the Project area Qualitative and quantitative changes in the phytoplankton, zooplankton, periphyton, infaunal benthos, epifaunal macroinvertebrates, and fish communities provide reliable indices of the state of the aquatic ecosystems in and near the project area and can be used for both short-term impact assessment and long-term ecological monitoring. |
<p>| Coral cover and associated benthic life forms | Distribution and composition and cover of coral and other benthic lifeforms and present conditions of the coral reefs and factors and environmental events affecting coral mortality and survival. | Manta tows, spot dives and Line Intercept technique | Characterization of corals and its associated benthic life forms provide indices for biodiversity in terms of species richness, distribution and relative abundance. |</p>
<table>
<thead>
<tr>
<th>Study/Area/Component</th>
<th>SOW</th>
<th>Methods</th>
<th>EIS Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demersal Fish populations</td>
<td>Species composition, relative abundance, density, biomass and diversity of associated reef fish communities.</td>
<td>FVC; actual test fishing in selected stations</td>
<td>Demersal fish productivity, growth, maturation and recruitment.</td>
</tr>
<tr>
<td>Pelagic fish populations</td>
<td>Species composition, catch and catch rates, seasonality and population structure of pelagic fish and fisheries resources.</td>
<td>KII, actual test fishing</td>
<td>Pelagic fisheries resources, including mariculture, indicate productivity and therefore economic value of surface and sub-surface fisheries.</td>
</tr>
<tr>
<td>Fisheries profiling</td>
<td>Fishing practices, fishing capacity, CPUE, issues and potential fishing activities that may be displaced and their values.</td>
<td>Rapid Appraisal of Fisheries Management Systems (RAMFS); Secondary data gathering; FGDs Accounting of resource use practices, potentials and issues</td>
<td></td>
</tr>
<tr>
<td>Occurrence of megafauna (dolphins, dugong, whales, Sea turtles and Sea birds)</td>
<td>Documentation of megafauna incidence</td>
<td>Actual at Sea surveys; mark tracking, KII</td>
<td>Biodiversity; Avian fauna assessment and abundance</td>
</tr>
<tr>
<td>Seagrasses and associated true marine plants</td>
<td>Species, composition, density, biomass and diversity of seagrasses and associated macrobenthic algae (seaweeds) and macroinvertebrates</td>
<td>Saito-Atobe quadrat-transect method (English et al., 1994) Standard quadrant method</td>
<td>Being true plants, seagrass beds contribute to sediment sequestration and hosts many species of fish and invertebrates. Mangroves are some of the most productive ecosystems in the coastal environment and source of nutrients. Mangrove associated-avian fauna is critically considered</td>
</tr>
<tr>
<td>Mangrove resources</td>
<td>Species composition and present condition of the mangrove stand within the study area; Associated avian fauna and dependency factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine Biotoxin</td>
<td>Bioaccumulation (fish/invertebrate tissue metal and cyanide concentrations) HAB-causing organisms and potential triggers,</td>
<td>Plankton net sampling; shellfish sampling and mouse biotoxin assay</td>
<td>Existing conditions to indicate potential HABs and PSP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study/Area/Component</td>
<td>SOW</td>
<td>Methods</td>
<td>EIS Applications</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td>subsequent impacts; Shellfish ID - species ID, distribution utilization</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**a) Water Quality Surveys**

Water quality surveys shall be undertaken at 15 separate locations across the project area, covering a range of water depths, focused in the Manila coastal area, but including 1 sampling point located at each of the following:

- Entrance to Manila Bay, south of Corregidor Island
- Northwest sector of Manila Bay, offshore from Pampanga Delta
- Northeast Sector of Manila Bay, offshore and east of Angat River
- Within Bacoor Bay.

An accredited laboratory shall be used to undertake the sample analyses. Samples shall be collected during either neap tide or spring tide periods. Samples shall be collected during both ebb tide and flood tide during each sampling event (i.e., a total of two repeats at each station), with a total of 20 sampling events timed strategically to cover seasonal variability. The following parameters shall be measured during each repeat at each station:

<table>
<thead>
<tr>
<th>Parameter Types</th>
<th>Parameters</th>
<th>Minimum Detection Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>In situ</td>
<td>Temperature</td>
<td>0.1°C</td>
</tr>
<tr>
<td>Parameters</td>
<td>pH</td>
<td>0.01 pH &amp; 0.1°C</td>
</tr>
<tr>
<td>(profile at 1m</td>
<td>Transparency (Secchi Depth)</td>
<td>0.1m</td>
</tr>
<tr>
<td>intervals</td>
<td>Turbidity</td>
<td>0.02NTU</td>
</tr>
<tr>
<td>through the water Column)</td>
<td>Salinity</td>
<td>0.01pppt</td>
</tr>
<tr>
<td></td>
<td>Dissolved Oxygen</td>
<td>0.01 mg/l</td>
</tr>
<tr>
<td></td>
<td>Light (PAR)</td>
<td>4µA per</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,000µmol/m2 in water</td>
</tr>
<tr>
<td>Laboratory</td>
<td>E. Coli bacteria</td>
<td>2MPN/ml</td>
</tr>
<tr>
<td>Analyses</td>
<td>Total Fecal Coliform</td>
<td>2MPN/ml</td>
</tr>
<tr>
<td>(water samples</td>
<td>Enterococci</td>
<td>1cfu/ml</td>
</tr>
<tr>
<td>taken at 1m</td>
<td>Chlorophyll-A</td>
<td>0.1ug/l</td>
</tr>
<tr>
<td>below the</td>
<td>Total Suspended Solids</td>
<td>2mg/l</td>
</tr>
<tr>
<td>surface, mid-depth, and 1m above the seabed)</td>
<td>Ammonia-Nitrogen (NH3-N)</td>
<td>0.01mg/l</td>
</tr>
<tr>
<td></td>
<td>Total Nitrogen (TN)</td>
<td>0.01mg/l</td>
</tr>
<tr>
<td></td>
<td>Phosphate-Phosphorous (PO4-P)</td>
<td>0.01mg/l</td>
</tr>
</tbody>
</table>
### Parameter Types

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Minimum Detection Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorous (TP)</td>
<td>0.01mg/l</td>
</tr>
<tr>
<td>PCBs</td>
<td>0.1µg/l</td>
</tr>
<tr>
<td>BTEX</td>
<td>0.1µg/l</td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbon</td>
<td>0.01mg/l</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand (BOD5)</td>
<td>2mg/l</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>0.5mg/l</td>
</tr>
<tr>
<td>Dissolved Organic Carbon</td>
<td>0.5mg/l</td>
</tr>
<tr>
<td>Particulate Organic Carbon</td>
<td>0.5mg/l</td>
</tr>
<tr>
<td>Silicate (Si02)</td>
<td>0.1mg/l</td>
</tr>
<tr>
<td>Hydrogen Sulfide (H2S)</td>
<td>0.1mg/l</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.1µg/l</td>
</tr>
<tr>
<td>Arsenic</td>
<td>5µg/l</td>
</tr>
<tr>
<td>Cadmium</td>
<td>5µg/l</td>
</tr>
<tr>
<td>Lead</td>
<td>5µg/l</td>
</tr>
<tr>
<td>Hexavalent Chromium</td>
<td>5µg/l</td>
</tr>
<tr>
<td>Copper</td>
<td>5µg/l</td>
</tr>
<tr>
<td>Zinc</td>
<td>5µg/l</td>
</tr>
<tr>
<td>Nickel</td>
<td>5µg/l</td>
</tr>
</tbody>
</table>

### Sediment Quality Surveys

Sediment quality surveys should be undertaken once at the same 15 locations as the water quality sampling. An accredited laboratory shall be used to undertake the sample analyses. The following parameters shall be measured.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Minimum Detection Limit (MDL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particle Size Distribution</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total Organic Carbon (TOC)</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total Organic Nitrogen</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Total Organic Phosphorous</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Total Ammonium</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Total Nitrate</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Total Inorganic Phosphate</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Total iron adsorbed phosphate</td>
<td>0.2mg/kg</td>
</tr>
<tr>
<td>Total Silicate</td>
<td>2 mg/kg</td>
</tr>
<tr>
<td>Total reduced sulphurous substances</td>
<td>1 mg/kg</td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbon</td>
<td>5mg/kg</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.005mg/kg</td>
</tr>
<tr>
<td>Arsenic</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Cadmium</td>
<td>0.1mg/kg</td>
</tr>
</tbody>
</table>
In addition, 300 surface grab samples shall be collected across project area, and analysed for sediment grain size distribution. Locations of samples shall be based on the seabed sediment maps produced as part of the Geotechnical Investigation. These samples shall be used to calibrate the morphological model for the PEA.

c) Pollution Load Surveys

Water quality-samples shall be collected within the 15 largest rivers and major drains discharging into the project area, while ensuring coverage around the full extent of Manila Bay. Samples from these 15 major rivers and drains should be collected during five (5) separate dry periods, when there is minimal flow, and another five(S) sets of samples should be collected during five separate wet periods, when there is strong flow. These 10 sampling events shall be timed strategically to cover seasonal variability. An accredited laboratory shall be used to undertake the sample analyses. The following parameters shall be measured:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Minimum Detection Limit (MDL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Hexavalent Chromium</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Copper</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Zinc</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Nickel</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Tin</td>
<td>0.1mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter Types</th>
<th>Parameters</th>
<th>Minimum Detection Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>In situ Parameters</td>
<td>Temperature</td>
<td>0.1°C</td>
</tr>
<tr>
<td>(profile at 1m intervals</td>
<td>pH</td>
<td>0.01pH &amp; 0.1°C</td>
</tr>
<tr>
<td>through the water column, or</td>
<td>Transparency (Secchi Depth)</td>
<td>0.1m</td>
</tr>
<tr>
<td>at mid-depth only if total</td>
<td>Turbidity</td>
<td>0.02NTU</td>
</tr>
<tr>
<td>water depth is less than 1m)</td>
<td>Salinity</td>
<td>0.01ppt</td>
</tr>
<tr>
<td></td>
<td>Dissolved Oxygen</td>
<td>0.01 mg/l</td>
</tr>
<tr>
<td>Laboratory analyses</td>
<td>E. coli bacteria</td>
<td>2 MPN/ml</td>
</tr>
<tr>
<td>(water samples taken at 1m</td>
<td>Total Fecal Coliform</td>
<td>2 MPN/ml</td>
</tr>
<tr>
<td>below the surface, mid-depth,</td>
<td>Enterococci</td>
<td>1cfu/ml</td>
</tr>
<tr>
<td>and 1m above the bed, or</td>
<td>Chlorophyll-A</td>
<td>0.1ug/l</td>
</tr>
<tr>
<td>mid-depth only if total</td>
<td>Total Suspended Solids</td>
<td>2mg/l</td>
</tr>
<tr>
<td>water depth is</td>
<td>Ammonia-Nitrogen (NH3-N)</td>
<td>0.01mg/l</td>
</tr>
<tr>
<td></td>
<td>Total Nitrogen (TN)</td>
<td>0.01mg/l</td>
</tr>
<tr>
<td></td>
<td>Phosphate-Phosphorous (PO4-P)</td>
<td>0.01mg/l</td>
</tr>
<tr>
<td></td>
<td>Total Phosphorous (TP)</td>
<td>0.01mg/l</td>
</tr>
<tr>
<td>Parameter Types</td>
<td>Parameters</td>
<td>Minimum Detection Limit</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>less than 1m)</td>
<td>PCBs</td>
<td>0.1µg/l</td>
</tr>
<tr>
<td></td>
<td>BTEX</td>
<td>0.1µg/l</td>
</tr>
<tr>
<td></td>
<td>Total Petroleum Hydrocarbon</td>
<td>0.01mg/l</td>
</tr>
<tr>
<td></td>
<td>Biochemical Oxygen Demand (BOD₅)</td>
<td>2 mg/l</td>
</tr>
<tr>
<td></td>
<td>Total Organic Carbon</td>
<td>0.5mg/l</td>
</tr>
<tr>
<td></td>
<td>Dissolved Organic Carbon</td>
<td>0.5mg/l</td>
</tr>
<tr>
<td></td>
<td>Particulate Organic Carbon</td>
<td>0.5mg/l</td>
</tr>
<tr>
<td></td>
<td>Silicate (SiO₂)</td>
<td>0.1mg/l</td>
</tr>
<tr>
<td></td>
<td>Hydrogen Sulfide (H₂S)</td>
<td>0.1mg/l</td>
</tr>
<tr>
<td></td>
<td>Mercury</td>
<td>0.1µg/l</td>
</tr>
<tr>
<td></td>
<td>Arsenic</td>
<td>5µg/l</td>
</tr>
<tr>
<td></td>
<td>Cadmium</td>
<td>5µg/l</td>
</tr>
<tr>
<td></td>
<td>Lead</td>
<td>5µg/l</td>
</tr>
<tr>
<td></td>
<td>Hexavalent Chromium</td>
<td>5µg/l</td>
</tr>
<tr>
<td></td>
<td>Copper</td>
<td>5µg/l</td>
</tr>
<tr>
<td></td>
<td>Zinc</td>
<td>5µg/l</td>
</tr>
<tr>
<td></td>
<td>Nickel</td>
<td>5µg/l</td>
</tr>
<tr>
<td></td>
<td>Tin</td>
<td>0.1mg/kg</td>
</tr>
</tbody>
</table>

**d) Bioaccumulation Surveys**

Samples of fish and shellfish shall be collected from 10 different aquaculture farms across the project area, in order to document the baseline tissue concentrations of heavy metals and contaminants. The same species, of similar size/age, (i.e.) shall be collected from each farm, with three replicate samples collected at each farm. An accredited laboratory shall be used to undertake the sample analyses. The following parameters shall be measured:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Minimum Detection Limit (MDL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyanide</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbon</td>
<td>5mg/kg</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.005mg/kg</td>
</tr>
<tr>
<td>Arsenic</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Cadmium</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Lead</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Hexavalent Chromium</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Copper</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Zinc</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Nickel</td>
<td>0.1mg/kg</td>
</tr>
<tr>
<td>Tin</td>
<td>0.1mg/kg</td>
</tr>
</tbody>
</table>
e) Air Quality Surveys

A combination of active and passive sampling techniques shall be used to document the baseline air quality conditions at a total of 10 locations across the project area and nearby residential areas. Active sampling shall be carried out using a calibrated Air Monitoring Device (e.g. TSI Dustrak) for a period of 3 days at each site. Passive sampling tubes shall be deployed for a period of 2 weeks at each site. The following parameters shall be measured at each site:

<table>
<thead>
<tr>
<th>Parameter Types</th>
<th>Sampling Method</th>
<th>Minimum Detection Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter &lt; 10µm (PM$_{10}$)</td>
<td>Active</td>
<td>N/A</td>
</tr>
<tr>
<td>Particulate Matter &lt; 2.5µm (PM$_{2.5}$)</td>
<td>Active</td>
<td>N/A</td>
</tr>
<tr>
<td>Sulphur Oxides (SOx)</td>
<td>Passive</td>
<td>BS EN 13528 Parts 1-3: 2002/3</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>Passive</td>
<td>BS EN 13528 Parts 1-3: 2002/3</td>
</tr>
</tbody>
</table>

f) Marine Habitat and Fauna Surveys

Surveys of marine habitats and fauna shall be carried out to document location, spatial extent, condition and biodiversity. These shall include:

<table>
<thead>
<tr>
<th>Habitat</th>
<th>Sampling Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corals and associated benthic lifeforms</td>
<td>Manta tows, spot dives and Line Intercept Transects</td>
</tr>
<tr>
<td>Seagrasses</td>
<td>Manta tows, spot dives and Line Intercept Transects or quadrats</td>
</tr>
<tr>
<td>Mangroves</td>
<td>Walk-through and quadrat surveys</td>
</tr>
<tr>
<td>Soft Seabed Macrobenthos</td>
<td>Seiving and identification of samples from 15 water quality / sediment quality stations</td>
</tr>
<tr>
<td>Inter-tidal benthos</td>
<td>Transect/quadrat surveys at low tide</td>
</tr>
<tr>
<td>Plankton</td>
<td>Plankton net surveys</td>
</tr>
<tr>
<td>Demersal and Pelagic Fish</td>
<td>Interviews with local fishermen, test fishing</td>
</tr>
<tr>
<td>Marine Megafauna (dolphins, dugongs, whales, and turtles)</td>
<td>Review of secondary data, boat – based surveys</td>
</tr>
<tr>
<td>Avifauna (Seabirds and migratory birds)</td>
<td>Review of secondary data, boat – based and land – based surveys</td>
</tr>
</tbody>
</table>
g) Socio-Economic Surveys

Surveys of the local population and stakeholders that may be affected by the proposed development shall be carried out. These shall include:

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Survey Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjacent landuse</td>
<td>Site visits, secondary data/remote sensing</td>
</tr>
<tr>
<td>Vessel traffic</td>
<td>Electronic vessel ID data, secondary data</td>
</tr>
<tr>
<td>Land Traffic</td>
<td>Traffic Impact Assessment (Engineering Scope)</td>
</tr>
<tr>
<td>Fisheries and aquaculture</td>
<td>Site visits, secondary data</td>
</tr>
<tr>
<td>Infrastructure and services</td>
<td>Site visits, secondary data</td>
</tr>
<tr>
<td>Demographics &amp; Education</td>
<td>Stakeholder survey, secondary data</td>
</tr>
<tr>
<td>Employment &amp; Income</td>
<td>Stakeholder survey, secondary data</td>
</tr>
<tr>
<td>Cultural heritage</td>
<td>Stakeholder survey, secondary data</td>
</tr>
<tr>
<td>Values, attitudes and perceptions</td>
<td>Stakeholder survey / consultation</td>
</tr>
</tbody>
</table>

5. CATEGORY V. SOCIO-ECONOMIC-POLITICAL PROFILE

5.1 Identification of the Direct and Indirect Impact Areas using the Guidelines of MC-14

5.2 The profiling will include

a) Demographic Profile, Last Five Years and Projections
   - Population (Growth, Density)
   - Health Profile, including Health Facilities
   - Sanitation
   - Morbidity and Mortality, Including for Infants
   - Employment
   - Livelihood

b) Migration Patterns and Projections

c) Changes in Lifestyle

d) City/Municipality Profiles in the Impact Zones
   - City/Municipal Plans and Harmony or Conflict with the Reclamation Projects

e) Resource Competition
f) Conduct of Perception Survey, Description Statistical Method to Be Used

g) Opportunities or Threats from the Project on
  • Food Security
  • Agriculture

6. CATEGORY VI. RECLAMATION PLANNING DECISION SUPPORT SYSTEM

The Reclamation Planning Decision Support System (RPDSS) is aimed at providing PRA with a tool that can:

• Facilitate decision making with respect to the specific configuration and scheduling of new reclamation developments in Manila Bay

• Provide met-ocean design information for all reclamation developments in Manila Bay to ensure that frontage and platform levels are safe and sustainable

• Provide site and reclamation specific guidance on flood mitigation requirements associated with reclamation developments in Manila Bay

• Establish relevant environmental controls for specific reclamation plans to ensure that the developments are environmentally suitable both during and after construction

• Facilitate decision making with respect to the maintenance and modification of the overall reclamation master plan due to changes in reclamation land requirements and changes in land use in the immediate hinterland of reclamation areas within Manila Bay

The primary concern of the RPDSS shall be a web GIS based solution utilizing one or more linked data bases and modelling systems to achieve the Functional requirements. Expert users within the authority shall, however, have local network access to the core systems.

6.1 Modelling System

The modelling systems shall be pre-calibrated and validated and shall, as a minimum, contain:

• Hydrodynamic modelling system (2D) for coastal currents and water levels
• Flushing modelling system (2D) for surrogate water quality modelling
• Wave modelling system (spectral) for wave propagation modelling
• Sediment Transport modelling system for morphological and sediment plume applications

Calibration and validation of the modelling systems shall be carried out by the Consultant and shall be made against site specific monitoring data (currents, Water levels and waves) and shall be documented against appropriate international standards, for example Foundation for Water Research publication Ref FR0374'A framework for marine and estuarine model specification in the UK.'

In broad terms, this can be categorised by the following performance limits for open marine applications:

• Tidal elevations RMS (error) < 15% on spring tide and < 20% on neap tide ranges;
• Current speed deviation RMS (error) ~ 10-20% (maximum deviation 0.2 rn/s): and
• Direction error RMS (error) < 20 deg.

The modelling system shall be set-up for the following scenarios:

• Dry season scenario (14 day simulation period)
• Wet season scenario (14 day simulation period) including time series of river inflows
• Extreme Event scenarios (a selection (minimum 5) of historical 7 day simulation periods) including time series of river inflows and waves
• Met Ocean Design scenarios (comprehensive simulation matrix for calculation of design water levels, waves and currents including relevant statistical tools)
• Spatial resolution in the reclamation areas (20 m of finer)

**NOTE:** The models shall be established and maintained by the Consultant for a period of 10 years. Access to the models by the authority shall generally be via a web GIS interface. This interface shall provide the authority with access to the modelling systems for changes in reclamation layouts and changes in reclamation equipment/schedule only, plus job execution and results processing. Execution of the modelling scenarios (for example a flushing scenario) shall be hidden to the user with generation of model set-up files, job execution (HD and AD for a flushing scenario) and results post processing (retention time for a flushing scenario) fully automated.

Job execution shall enforce a suitable naming convention and versioning system to facilitate scenario recovery and documentation.
The Web GIS interface shall have a range of pre-programmed results analysis and presentation tools such that standardized results comparisons between development options can be used to ensure a transparent assessment of alternatives etc. Such standardized presentations shall include items including but not necessarily limited to:

- Tabulated values of indicators at environmental receptors (e.g. water level change at river mouths)
- Time series of impacts at environmental receptors (e.g. tracer concentration)
- 2D maps of changes in indicators (absolute and statistical descriptors) highlighting the key environmental receptors for each indicator

For each receptor environmental sensitivity limits shall be established and programmed in the system (with the ability of expert users to update) to enable the results to be assessed against a ranking of impact severity.

The reclamation layout definition tools in the Web GIS shall have as a minimum the following functionality:

- Import/digitization of reclamation boundary co-ordinates (E/N text files, polygon shape files etc. for a defined level), platform level (crest of the reclamation) and frontage slope
- Specification of channel alignment, depth, width and side slope
- The system shall automatically extrapolate frontage and channel slopes to the prevailing water depth with appropriate smoothing to ensure well discretised slopes.
- Basic calculation of required fill and dredge volume

The reclamation impact definition tools in the Web GIS shall have as a minimum the following functionality:

- Definition of reclamation location, type, production rate and spill. Realistic spill rates and characteristic spill files shall be generated automatically from a range of relatively simple menu selections.
- Definition of dredging location, dredger type (moving/stationary etc.), production rate and spill. Realistic spill rates and characteristic spill files shall be generated automatically from a range of relatively simple menu selections.
- The system shall have volume continuity checking tools to enable the user to confirm that the spill scenarios generated meet with the project production schedules.

The met-ocean design data tools in the Web GIS shall access an underlying data base of met-ocean statistics which on first installation shall be pre-
calculated by the Consultant. This calculation shall include met-ocean design data with the following return periods: 1:1 year, 5 years, 10 years, 25 years, 50 years, 100 years and 1000 years. It is recognised that the reliability of higher return period events will be lower, however, the Consultant shall undertake the assessment (e.g. by selecting an appropriately large number of extreme events) to secure meaningful data also at high return periods. The data base shall include design water levels, waves, wind and current. For water levels the assessments shall include best estimate and ranges for climate change and regional phenomena such as ENSO. The user shall be able to access any point in the domain of the RPDSS to extract the design data (tabulated form or individual extreme event from matrix). The RPDSS shall be able to execute an update of the Met-Ocean design data based on changes in reclamation configuration. Such updates are understood to be computationally intensive and the system shall only execute an update once per year. If additional extreme event information is to be incorporated in the met-ocean data base (for example inclusion of a new typhoon event) this will be carried out by the Authorities expert user (see below), once included such additional extreme event scenario shall be incorporated automatically in all future updating of the met-ocean data base.

Although the normal model of access to the RPDSS modelling system will be via the Web GIS, expert access to the full range of functionality of the underlying models shall be available for specific modelling tasks by expert users in the Authority. Expert access shall be on a local system established at the Authority. Base model systems (i.e. standard current, wave, flushing and sediment transport model set-ups) shall be updated, on server request from the independent system, from the central RPDSS modelling system maintained by the consultant.

6.2 Database System

The database component of the RPDSS shall be a repository for relevant data that may influence the reclamation planning decision making process. Data to be incorporated in the system shall include, but may not necessarily be limited to:

- Marine environmental receptors (such as location of coral reefs, seagrass beds, fisheries etc.)
- Inter-tidal environmental receptors (such as mangroves)
- Industrial receptors (such as power station intakes and outfalls, fish landing areas etc.)
- Maritime receptors (such as port facilities, navigation channels and anchorages)
- Recreational receptors (such as public beaches)
- Socio-cultural receptors (such as housing, fishing activities)
• Infrastructure receptors (such as pipelines, coastal defence structures, nearshore roads etc)
• Agriculture and Aquaculture receptors
• Drainage receptors (river mouths, drains etc)
• Shoreline, coastal and hinterland land use
• Remote sensing data (satellite images, TRM data etc)
• Model results files (2D maps, 2D time series, and point time series)
• Physical Data (currents, wind, rainfall, water levels, waves, bathymetry, sediment characteristics, water quality, topography etc)
• Met-ocean design data (currents, water levels, waves) determined from the met-ocean design models

The data shall be stored in a spatial data base accessible through the Web GIS interface. The web based interface shall allow comparison of data sets, display of data sets, overlay of data sets etc. Modification of data via the Web GIS shall not be possible for standard users. Updating arid uploading of new data shall be done via the independent system for expert users. The independent system shall include versioning quality control routines. Quality controlled data shall become accessible though the Web GIS on publishing by the expert user.

6.3 Online Monitoring System

The data base system shall also be able to access online sensors measuring a wide range of physical data such as water levels, waves, wind, rainfall etc. The system shall as a minimum:

• Handle direct communication with online instrumentation (GSM/3G/VHF etc.)
• Handle push data from instrumentation (e.g. via ftp)
• Handle incoming data quality control
• Handle storage and retrieval of incoming data
• Handle display of incoming data
• Handle overview of sensor location and status
• Handle statistical analysis of incoming data

The system shall be able to handle a minimum of 100 online sensors. Sensor deployment and maintenance will be handled under other contracts or via other agencies. Population of the online data base shall be made by the Authorities expert users as and when on line sensor data becomes available to add to the system.

As part of the present RPDSS the Consultant shall however deploy
one (1) online water level monitoring sensor and the consultant shall be responsible for the service and maintenance of this instrument for the duration of the contract (10 years). The consultant shall choose a suitable location for the instrument deployment with the purpose of monitoring for Sea level rise as a result of climate change and storm surge during the passage of extreme events. The consultant shall be responsible for securing approvals for the deployment of the instrument and the security of the instrument. The online water level monitoring station shall be tied into a local benchmark and shall be accurate to ±1cm. Data shall be recorded every 10 minutes. Transmission shall be every 10 minutes. Data shall be stored on the instrument and any dropped data shall be re-sent and/or recovered during regular servicing. The online instrument shall be serviced as a minimum once per 2 months or when erroneous data is recorded for more than 3hrs, with a system alert being generated to require service. Execution of service shall be governed by the service level availability (see later) with erroneous data counting against availability.

6.4 Service and Maintenance

6.4.1 Model base

The consultant will be responsible for setting up all the base models including calibration and validation against the stipulated performance criteria.

While it is recognised that a completely stable solution will be unobtainable when changes in reclamation configuration are made, the models shall be rigorously tried and tested to minimize the risk of model blow up due to numerical stability problems. Error codes developed during model execution shall be presented in the web GIS interface in a manner that will enable the user to make relevant adjustments and re-execute. If the web GIS user cannot obtain a stable and reliable simulation based upon reconfiguration of reclamation boundaries and dredging, the user shall be able to request the consultant to update the base model until such a time as a stable solution can be obtained for the specific reclamation plan generating issues. All costs associated with such base model updating shall be contained in the service and maintenance contract.

The consultant shall update the base models as a minimum once per year. This updating shall include regularization of shorelines based on the latest remote sensing information. Updating of bathymetry based upon any new bathymetric survey data which may have been provided to the Authority. Updating of boundary conditions based upon any new
information concerning PEA-level rise etc. Updating of rainfall run-off models based upon any new information on hinterland land use and drainage. Revalidation of the model against the control water level monitoring station shall be carried out after every base model update.

6.4.2 GIS database

The data layers in the GIS data base will be maintained by the authority.

6.4.3 Software

The Consultant shall provide the authorities will regular updates to software to ensure the system remains current with best practice. At the least it is expected that the base modelling software shall be updated once per year. The consultant shall ensure that all updates to the modelling systems do not influence the stability and functionality of the DSS.

For purposes of clarity, update shall mean provision for bug fixes for features that are not working properly including minor software enhancements which may or may not include new drivers for hardware.

6.4.4 Hardware

Supply and maintenance of the hardware at the Authority will be the responsibility of the authority. Supply and maintenance of the hardware at the Consultant in terms of data and web servers and modelling machines will be the responsibility of the consultant.

6.4.5 Service Level

The consultant shall provide a 95% service level availability to all components of the web GIS based RPDSS except for the online sensor, which shall have a 90% service level availability (data capture). Planned service and maintenance resulting in system down time shall be notified a minimum of 14 days prior to the planned maintenance.

6.5 Users

The RPDSS shall be accessible over a standard broad band internet connection for a maximum of 3 concurrent users. Dedicated local systems for expert user access to the modelling system (1 user) and data base (1 user) shall also be provided.
6.6 Training

It is recognised that considerable staff training will be required in PRA to maximize the benefit of the RPDSS at the cost of the Consultant.

6.6.1 Standard Users

PRA will identify 5 standard users who will access the system via the Web GIS. The Consultant shall provide the following minimum training for the standard users:

- Introductory course in marine environmental hydraulics (1 week)
- Introductory and advanced course in marine environmental impact assessment using modelling tools (total 1 week)
- Introductory and advanced course in reclamation planning (total 1 week)
- Application course for the Web GIS RPDSS (total 1 week)
- On the job training (1 month) in reclamation assessment
- Annual refresher course (1 week)

6.6.2 Expert Users

PRA will identify 2 expert users who will access the system via the Web GIS and the full functionality modelling and GIS systems installed locally. The Consultant shall provide the following minimum training for the expert users:

- Full standard user course
- Advanced course in marine environmental hydraulics (1 week)
- Introductory and advanced course in the installed modelling software (2 weeks)
- Introductory and advanced course in the installed GIS/data base software (1 week)

6.7 Time Schedule

The consultant shall prepare a draft specification of the system as part of their technical proposal to PRA. This shall be refined over a period of ninety (90) calendar days from issuance of Notice to Proceed (NTP) by PRA to the Consultant. This final specification document will form the basis for assessing conformance with specifications during the user acceptance trials.

The RPDSS shall enter user acceptance trials two hundred forty (240) calendar days from notification to proceed. Training shall be executed in parallel with user acceptance trials over a period of ninety (90) calendar days. Final commissioning of the system shall be latest three hundred sixty (360) calendar days after notification to proceed.
APPENDIX B-1: HYDROGRAPHIC SURVEY AND GEOTECHNICAL INVESTIGATIONS

1 INTRODUCTION

The contents of this Appendix B-1 "Hydrographic survey and Geotechnical Investigations" shall be read in conjunction with the Bid Documents. In case of discrepancies among the Bid Documents, the Consultant shall refer the matter to the PRA before commencement of the services specified in this Appendix. The PRA shall decide as to which document shall take precedence and this decision shall be final and binding. No claim on the contrary will be entertained.

2 HYDROGRAPHIC SURVEY

2.1 The hydrographic survey shall be carried out for reclamation areas may be established guided by the National Reclamation Plan (NRP), Manila Bay Sector (MBS) [Refer to Annex A].

2.2 The Consultant shall engage a Licensed Hydrographic Surveyor, subject to the approval by the PRA. The Licensed Hydrographic Surveyor should be accredited by the International Hydrographic Organization IHO/FIG Category A/B course and should produce documented proof of such accreditation. The Licensed Hydrographic Surveyor shall be responsible for all Survey Works carried out and for submission of plans and reports. The Licensed Hydrographic Surveyor shall also ensure that all Works are carried out in accordance with IHO Standards for Hydrographic Surveys S44 and meet the requirement, accuracies, format etc. specified under this Appendix.

2.3 The Licensed Hydrographic Surveyor shall be fully responsible to obtain the necessary approval, including any marine notice, if necessary, required by the local government units or relevant authorities for permission to conduct the hydrographic survey. All the costs involved in obtaining the necessary approval shall be borne by the Consultant and shall be deemed as included in the Contract sum.

2.4 The hydrographic survey shall be carried out as follows:

(a) All structures, floating or fixed within the working limits shall be surveyed and shown on the plan. Any obstructions detected shall be shown clearly on the survey plan. The composition or the nature of the obstructions shall be described in details in the report. Where applicable, hydrographic survey must cover up to
High Water Line or coastline or embankments.

(b) Sounding lines are to be at 50 m interval for the surveys and cross lines at 500 m interval. However, interlines and cross lines are to be run whenever bottom irregularities occur.

(c) The horizontal positioning is to be controlled by Differential Global Positioning System (DGPS) or electronic positioning system providing an accuracy of +/- 1 m or better. All DGPS equipment must be calibrated before they are permitted to be used for the Works.

(d) Depth accuracy shall be ± 0.1 m. Depths shall be logged at 4m interval simultaneous with x-y coordinates derived from the DGPS.

(e) The Chart Datum or local/common datum, subject to the approval of the PRA, shall be used for the reduction of soundings and shall be stated clearly in all survey plans and records.

(f) For the sounding surveys, the Consultant shall provide a dual frequency echo sounder (viz about 30 kHz and 210 kHz) or equivalent (e.g., multi-beam system) subjected to approval by PRA. The echo sounder shall be calibrated by Bar Checks, up to the maximum depth of the survey area, daily before and after sounding. The records of such Bar Checks shall be marked on the same echo roll used for the particular day’s sounding and shall be subjected to inspection by the PRA.

(g) Tidal readings shall be taken and monitored for correlation, corrections and/or the reduction of the survey data.

(h) All high spots detected on the echo trace between fixes shall be plotted.

2.5 Setting Out and Survey for Field Measurements

(a) The Consultant shall provide all labor and other necessary equipment for the setting out of the entire works in accordance with requirements of the Specifications and Drawings. The Surveyor shall ensure that the survey equipment that is to be used shall be appropriate for the scale of survey and shall be properly calibrated before use. The calibration records shall be submitted to the PRA for inspection.

(b) The PRA shall at all reasonable times have access to the Site and
survey facilities. The Surveyor shall arrange for a survey check or inspection upon request and all costs incurred for such an inspection shall be borne by the Consultant.

(c) A maximum setting out error of $\pm 1\text{m}$ from the given positions of stations is permitted. Where, in the opinion of the PRA, the number of errors discovered in the checking exceed the given tolerance, the PRA may in writing order the Consultant to re-execute such work in such a manner so as to ensure that the Works conform with the Specifications and the Consultant shall commence such corrective measures within seven (7) days from the date of the written instruction all at his own expense.

2.6 Field Survey Records

(a) The following field records shall be maintained by the Surveyor for inspection at anytime by the PRA and whenever requested, duly certified copies shall be provided to the PRA:
(b) Echo trace and bar-check records.
(c) Daily record of fixes.
(d) Daily record of tidal height measurement.
(e) Record of field equipment calibration.
(f) Plots of the actual tracks traveled by the survey vessels.
(f) Sounding plots, and any other relevant records.

2.7 Survey Plans

Main sounding lines shall be plotted at intervals of not more than 3 mm on plan at survey scale and at closer intervals where seabed is irregular and high spots are detected. All symbols, abbreviations and terms depicted on the plan shall be in accordance with the local charts published by the relevant authorities or according to IHO Standards. Depths shown on plans shall be clear, legible and free from over plotting. Any heights of isolated features shall be shown. The Consultant shall allow in his Contract sum to prepare the results of hydrographic survey plotted to a scale of 1:1000. The depth contours of 0 m, 2 m, 5 m, 10 m, 15 m, 20 m and 25 m shall be drawn on all relevant survey plans.

2.8 Submission of Plans and Survey Records

(a) The Consultant shall submit the followings **within two weeks** after the completion of the survey:

i. **Certification** - The Registered Surveyor shall certify all plans, field records, reports, data sheet, equipment
calibration records, sounding plots, etc. before submitting them to the PRA.

ii. **Survey Plans** - The Consultant shall submit at least two (2) intermediate copies' and four (4) paper prints of the survey plans (not larger than AO size) to the PRA. The intermediate shall be of photo print on matte or clear film.

iii. **Survey Reports** - The Consultant shall submit Comprehensive Survey Report (four (4) hard copies) to the PRA giving details on Outlines of Equipment and Operation, Field Operation, Data Processing, Findings, List of Accompany Documents, and any other relevant information of each survey carried out by the Surveyor.

iv. **Computer Data File** - The Consultant shall submit a set of all survey data prepared in **ASCII** and **dxf** or **dwg** format with the following data:

v. Provide contour lines at 0 m, 2 m, 5 m, 10 m, 15 m, 20 m and 25 m,

vi. Assign a "z" value to all contour lines, and;

vii. Assign a "z" value to all levels where contour lines are not provided. The "z" value can be either attached to a point or the first number of the level and all points must be inserted close to the levels.

(b) The survey data file shall be stored in CD-Rom together with an index chartlet showing the survey areas covered by each data file and the coordinates for those points defining the surveyed areas. The data file shall be structured in accordance with the format approved by the PRA. A copy of the CD-Rom shall be included in each of the Survey Reports to be submitted to the PRA.

(c) All cost incurred in the above submissions are deemed to be included in the Contract sum.

(d) All survey data and results shall become the property of the PRA and while in the custody of the Consultant or his nominated sub-contractors; no copies may be supplied to any person or persons or otherwise made use of by the Consultant without the written consent of the PRA.
3. GEOTECHNICAL INVESTIGATIONS

3.1 It is anticipated that the number of rotary boreholes shall be in the order of one hundred and eighty (180), distributed across the reclamation areas as may be established guided by the National Reclamation Plan (NRP), Manila Bay Sector (MBS) [Refer to Annex A]. However, location of boreholes shall be proposed by the Consultant subject to approval of PRA.

3.2 Setting-up of Boreholes Positions and Movement of Boring Rigs

The Consultant shall provide proper survey instrument whereby physical constraints will not hinder the setting up and positioning of the boreholes. The Consultant's attention is also drawn to the difficult conditions on the movement of boring rigs/plants within the fishponds and/or shallow water along the coastline of the Manila Bay Sector. All cost for the shifting and setting-up of the drilling rig shall be deemed to be included in the Contract Sum.

3.3 Setting Out and Survey Control

3.3.1 The Consultant's licensed Surveyor shall provide all labour and other necessary equipment for the setting out of the entire works in accordance with requirements of the Specifications and Drawings. The licensed Surveyor may be employed on a part-time basis but his services must be made available whenever required by the PRA.

3.3.2

(a) The licensed Surveyor shall supply promptly to the PRA, all preliminary and final copies of the field and office computations, and one (1) complete set of master transparencies of the setting out plans, on completion of the survey works.

(b) The licensed Surveyor shall at all times when instructed by the PRA supply any plans, drawings, plots, maps, transparencies, field records, computation sheets, records and correspondences in his possession relevant to the survey.

(c) The licensed Surveyor shall, when so requested by the PRA, submit for approval preliminary copies of drawings, plans and plots for the purpose of the setting out survey but no such approval shall absolve the licensed Surveyor from his responsibility in connection with the setting out survey.
(d) The necessary benchmarks and control points for the setting out of the exact locations and details of the boreholes shall be from the Local Government Unit or relevant Authorities and all costs arising from this shall be included in the Contract Sum.

(e) The licensed Surveyor shall maintain a set of the calibration records and a list of coordinates and station description of all control stations for inspection by the PRA when so requested.

(f) A maximum setting out error of 5m from the given positions of borehole is permitted. Where, in the opinion of the PRA, the number of errors discovered in the checking exceed the given tolerance, the PRA may in writing order the Consultant to re-execute such work in such a manner so as to ensure that the work conforms with the Specifications and the Consultant shall commence such corrective measures within seven (7) days from the date of the written instruction all at his own expense.

3.4 Soil Investigation Works on Fishponds and Very Shallow Water

As the soil investigation works may be carried out at very shallow water and/or in the fishponds, the Consultant shall provide suitable platform or equivalent for the work. Safety must be ensured during the operation of the equipment especially to safeguard against overturning of the platform. The Consultant shall also take note that the work can only be carried out according to the tidal conditions at very shallow water.

3.5 Depth of Bored Samples and Test

3.5.1 All boreholes shall extend to a minimum of 30m below the existing ground levels or Standard Penetration Test (SPT) of 50 blows/30cm or hard stratum such as rock whichever is reached first: The final depth of every borehole must be measured and certified by the Consultant.

3.5.2 The SPT, extraction of undisturbed samples shall be carried out at depth spacing of not more than 3m or a change of soil strata during the course of drilling. The field Vane Shear Test shall be carried out at 3 m interval up to 15 m below the seabed when soft clays are encountered.
3.6 Sampling, Coring and Testing

3.6.1 All field tests such as Standard Penetration Test (SPT) and Vane Shear Test and extraction of undisturbed samples shall be performed on the drilling platform all in accordance with BS 5930:1999-Site Investigations.

3.6.2 All samplers must be free of dents and other defects and all undisturbed samples shall be sealed with wax immediately after sampling at the site and kept under cover with minimum disturbance:

(a) Thin-walled samplers shall be used for extraction of undisturbed samples wherever possible. For undisturbed sample of 75 mm diameter, standard sampler with minimum length of 500mm is required. The Consultant shall take every measure on site to ensure that the highest quality of undisturbed soil samples is extracted from the boreholes.

(b) For extraction of undisturbed samples of very soft, sensitive, soft to firm clays, the Consultant shall take all necessary measures and ensure that only thin-walled piston samplers are to be used.

3.6.3 If the very soft, sensitive, soft to firm clays samples are found not extracted by thin-walled piston samplers, the said samples may be subjected to rejection by the PRA. The PRA shall have the full discretion to decide the acceptance or rejection of the said samples taking into consideration the degree of disturbance and its effect on the test result. The acceptance of such samples by the PRA shall not in any way relieve any of the Consultant’s responsibilities and obligations under this contract.

3.6.4 The Consultant shall send the undisturbed soil samples to one of the laboratory specified under Clause 4.0 of this Appendix or to any accredited geotechnical laboratory subject to the acceptance by the PRA to carry out the following laboratory tests conforming to BS1377:

(a) Atterberg Limit Tests - Liquid Limit and Plastic Limit Tests

(b) Unconsolidated Undrained (UU) Triaxial Compression Test (3 different confining pressures)

(c) Consolidated Undrained (CU) Triaxial Compression Test (3
different confining pressures)
(d) One Dimensional Consolidation Tests
(e) Direct Shear Test
(f) Grain Size Analysis and Hydrometer test where applicable
(g) Bulk Density, Natural Moisture Content, Specific Gravity and Void Ratio

3.6.5 Chemical/Toxicity test shall also be conducted for the undisturbed samples, which shall follow approved methods (latest revision) from the United States - Environmental Protection Agency, EPA methods 3051/6010B. The chemical/toxicity test shall be carried out for the following metals (in mg/kg):

(a) Arsenic (As)
(b) Copper (Cu)
(c) Cadmium (Cd)
(d) Chromium (Cr)
(e) Lead (Pb)
(f) Mercury (Hg)
(g) Zinc (Zn)
(h) Nickel (Ni)

3.6.6 The Consultant shall submit all necessary analysis, calculations, plotting of graphs for the test results and test records together with the Soil Investigation Report as mentioned in Clause 3.7 of this Appendix.

3.6.7 All used and unused soil samples are to be preserved for not less than 28 days after submission of the final Soil Investigation Report.

3.7 Soil Investigation Report

3.7.1 The Consultant's Contract Sum should include the submission of each of the following type-written and signed reports:

(a) A copy of the log of boring - 3 days after completion of each borehole. As a minimum, the log of boring shall show:
   i. Date, time, drilling method
   ii. Location, seabed level, seabed depth, total depth below
seabed level
iii. Description of strata with depths from seabed level
iv. SPT graphic presentation
v. Grain size analysis
vi. SPT test results

(b) Four (4) sets of the Preliminary Report - 14 days after completion of the site investigation work, the Contractor shall submit preliminary reports which should consist of the following but not limited to:

i. Layout Plan of borehole locations. The Consultant shall engage a licensed Surveyor to prepare "as-built" survey drawings of the completed boreholes locations. The information shown in the "as-built" survey drawings shall be accurate and adequately detailed. The "as-built" survey drawings shall include co-ordinates and the location of all boreholes.

ii. Log of boring.

iii. Recommendation on probable geological soil profiles

iv. Summary of all the laboratory testing.

v. Dated photographs of the cored samples.

Upon completion of the soil investigation at the Manila Bay Sector, and 7 days after the approval of the preliminary report, four (4) printed hardcopies and four (4) softcopies stored in CD-ROM of the final Soil Investigation Report duly certified by a Qualified Engineer shall be submitted to the PRA. This shall include all items mentioned in (a) and (b) above and a comprehensive written factual and interpretative report detailing any refinements and changes in the interpretation from the preliminary report and including any additional borehole data. The report shall also include sections covering equipment used, comments of the geological formation, quality and engineering properties of the soils. The softcopy shall include an Adobe PDF file containing the images of borehole location map and all borehole logs. The softcopy shall include a project folder containing the borehole location map, descriptive report, borehole logs, interpretation of geo-logical soil profiles and all laboratory test results. The Consultant shall submit to the PRA for approval, the layouts of the borehole logs and laboratory test results. The naming conventions of all folders and files in the softcopy shall comply with the standard determined by the PRA. All software required for producing the softcopy shall be provided by the Consultant. The printed copies of the borehole log shall be
produced from AGS-compliant system.

3.7.2 The Consultant shall ensure that the final Soil Investigation Report contains all acquired information and test results must be duly certified and endorsed by a Qualified Engineer. The Qualified Engineer appointed to endorse on the soil reports must have a minimum of 8 years of experience in the interpretation of field and laboratory soil investigation data and information. The Consultant is required to submit the track records and relevant experience of the Qualified Engineer for acceptance by the PRA.
Section VII

Bidding Forms
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ATTY. KAREN A. VILLAMIL
Chairperson
Bids and Awards Committee
Philippine Reclamation Authority
7F Legaspi Towers 200 Bldg.
107 Paseo de Roxas Street
Legaspi Village, Makati City

Dear Atty. Villamil:

In connection with your Request for Expression of Interest dated __________, 2018 for the Programmatic Environmental Assessment, Planning and Engineering Studies for the Coastal Adaptation Strategy Formulation in the Manila Bay Area, [Name of Consultant] hereby expresses interest in participating in the eligibility and short listing for said Project and submits the attached eligibility documents in compliance with the Eligibility Documents therefor.

In line with this submission, we certify that:

a) [Name of Consultant] is not blacklisted or barred from bidding by the GoP or any of its agencies, offices, corporations, LGUs, or autonomous regional government, including foreign government/foreign or international financing institution; and

b) Each of the documents submitted herewith is an authentic copy of the original, complete, and all statements and information provided therein are true and correct.

We acknowledge and accept the Procuring Entity’s right to inspect and audit all records relating to our submission irrespective of whether we are declared eligible and short listed or not.

We further acknowledge that failure to sign this Eligibility Document Submission Form shall be a ground for our disqualification.

Yours sincerely,

Signature
Name and Title of Authorized Signatory
Name of Consultant
Address
Notes for Consultants

The following summarizes the content and maximum number of pages permitted for the Technical Proposal. A page is considered to be one printed side of A4 or letter sized paper.

Cover Letter

Use TPF 1. Technical Proposal Submission Form

Experience of the Firm

Maximum of ten (10) pages introducing the background and general experience of the Consultant, including its partner(s) and subconsultants, if any.

Maximum of ten (10) pages completed projects in the format of TPF 2. Consultant’s References illustrating the relevant experience of the Consultant, including its partner and subconsultants, if any. No promotional material should be included.

General approach and methodology, work and staffing schedule


If the Consultant will engage a subconsultant for the portions of the Consulting Services allowed to be subcontracted, the Consultant shall indicate which portions of the Consulting Services will be subcontracted, identify the corresponding subconsultant, and include the legal eligibility documents of such subconsultant.

Curriculum Vitae (CV)

Use TPF 6. Format of Curriculum Vitae (CV) for Proposed Professional Staff.

The same CV may be submitted for the following professionals under Category IIC and Category IV: Phytoplankton Specialist, Zooplankton Specialist, Benthos Specialist, Fisheries Specialist, Sea Grasses Specialist, and Corals Specialist.

The same CV may also be submitted for Social Scientist under Category IIC and Category V.

Comments on the terms of reference and data and facilities to be provided by the Procuring Entity

Not more than five (5) pages using TPF 3. Comments and Suggestions of Consultant on Terms of Reference and on Data, Services, and Facilities to be Provided by the Procuring Entity
Ladies/Gentlemen:

We, the undersigned, offer to provide the consulting services for the Programmatic Environmental Assessment, Planning and Engineering Studies for the Coastal Adaptation Strategy Formulation in the Manila Bay Area in accordance with your Bidding Documents dated _____, 2018 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 _____, 2018, 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 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 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.

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Country:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location within Country:</td>
<td>Professional Staff Provided by Your Firm/Entity(profiles):</td>
</tr>
<tr>
<td>Name of Client:</td>
<td>No of Staff:</td>
</tr>
<tr>
<td>Address:</td>
<td>No of Staff-Months; Duration of Project:</td>
</tr>
<tr>
<td>Start Date (Month/Year):</td>
<td>Completion Date (Month/Year):</td>
</tr>
<tr>
<td>Name of Associated Consultants, if any:</td>
<td>No of Months of Professional Staff Provided by Associated Consultants:</td>
</tr>
<tr>
<td>Name of Senior Staff (Project Director/Coordinator, Team Leader) Involved and Functions Performed:</td>
<td></td>
</tr>
<tr>
<td>Narrative Description of Project:</td>
<td></td>
</tr>
<tr>
<td>Description of Actual Services Provided by Your Staff:</td>
<td></td>
</tr>
</tbody>
</table>

Consultant’s Name: __________________________

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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

## 1. Technical/Managerial Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

## 2. Support Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

3 Where applicable, indicate relationships among the Consultant and any partner and/or subconsultant, the Procuring Entity, the Funding Source and other parties or stakeholders.
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.

Date: ___________________________ Day/Month/Year

[Signature of staff member and authorized representative of the firm]

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Reports Due/Activities</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>Number of Months</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

Subtotal (1)
Subtotal (2)
Subtotal (3)
Subtotal (4)

<table>
<thead>
<tr>
<th>Full-time:</th>
<th>Part-time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reports Due:</td>
<td>Reports Due:</td>
</tr>
<tr>
<td>Activities Duration:</td>
<td>Activities Duration:</td>
</tr>
<tr>
<td>Location</td>
<td>Location</td>
</tr>
</tbody>
</table>

Signature:__
(Authorized representative)

Full Name:__________________________
Title:______________________________
Address:___________________________
TPF 8. Activity (Work) Schedule

A. Field Investigation and Study Items

<table>
<thead>
<tr>
<th>Activity (Work)</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

B. Completion and Submission of Reports

<table>
<thead>
<tr>
<th>Reports</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inception Report</td>
<td></td>
</tr>
<tr>
<td>2. Interim Progress Report</td>
<td></td>
</tr>
<tr>
<td>(a) First Status Report</td>
<td></td>
</tr>
<tr>
<td>(b) Second Status Report</td>
<td></td>
</tr>
<tr>
<td>3. Draft Report</td>
<td></td>
</tr>
<tr>
<td>4. Final Report</td>
<td></td>
</tr>
</tbody>
</table>
OMNIBUS SWORN STATEMENT

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. Select one, delete the other:
   
   If a sole proprietorship: I am the sole proprietor or authorized representative of [Name of Consultant] with office address at [address of Consultant];
   
   If a partnership, corporation, cooperative, or joint venture: I am the duly authorized and designated representative of [Name of Consultant] with office address at [address of Consultant];

2. Select one, delete the other:
   
   If a sole proprietorship: 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];
   
   If a partnership, corporation, cooperative, or joint venture: 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 Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. **Select one, delete the rest:**

   *If a sole proprietorship:* 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;

   *If a partnership or cooperative:* 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;

   *If a corporation or joint venture:* 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:

   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 ___. 2017 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 ____. 
Bid-Securing Declaration

(REPUBLIC OF THE PHILippINES)
CITY OF _______________________ ) S.S.

Invitation to Bid [Insert reference number]

To: PHILIPPINE RECLAMATION AUTHORITY
    7F Legaspi Towers 200 Bldg.,
    107 Paseo de Roxas Street,
    Legaspi Village, Makati City

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 ____.
Notes for Consultants

The following summarizes the content of the Financial Proposal.

Cover Letter

Use FPF 1. Financial Proposal Submission Form, which is an acknowledgement that, in preparation and submission of the Technical and Financial Proposals, Consultants have:

(a) followed the applicable rules and guidelines indicated in this ITB;

(b) not taken any action which is or constitutes a corrupt, fraudulent, or coercive practice as defined in the applicable rules and guidelines; and

(c) agrees to allow the Procuring Entity and the Funding Source, at their option, to inspect and audit all accounts, documents, and records relating to the its Bid and to the performance of the ensuing contract.

Costs of Consulting Services

Use FPF 2. Summary of Costs; FPF 3. Breakdown of Price per Activity; FPF 4. Breakdown of Remuneration per Activity; FPF 5. Reimbursables per Activity; and FPF 6. Miscellaneous Expenses
ATTY. KAREN A. VILLAMIL  
Chairperson, Bids and Awards Committee  
Philippine Reclamation Authority  
7/F Legaspi Towers 200 Bldg.,  
107 Paseo de Roxas St.,  
Legaspi Village, Makati City  

Ladies/Gentlemen:

We, the undersigned, offer to provide the consulting services for the Programmatic Environmental Assessment, Planning and Engineering Studies for the Coastal Adaptation Strategy Formulation in the Manila Bay Area in accordance with your Bidding Documents dated ________ and our Bid (Technical and Financial Proposal(s)). 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., ______, 2018.

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

<table>
<thead>
<tr>
<th>Costs</th>
<th>Currency(ies)(^1)</th>
<th>Amount in Philippine Peso</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Taxes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Amount of Financial Proposal</td>
<td></td>
<td>______________________</td>
</tr>
</tbody>
</table>

\(^1\) In cases of contracts involving foreign consultants, indicate the exchange rate used.
### FPF 3. Breakdown of Price per Activity

<table>
<thead>
<tr>
<th>Activity No.:____________________</th>
<th>Activity No.:____________________</th>
<th>Description:____________________</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price Component</strong></td>
<td><strong>Currency(ies)(^2)</strong></td>
<td><strong>Amount in Philippine Peso</strong></td>
</tr>
<tr>
<td>Remuneration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reimbursables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>_______________________________</td>
</tr>
</tbody>
</table>

\(^2\) In cases of contracts involving foreign consultants, indicate the exchange rate used.
### FPF 4. Breakdown of Remuneration per Activity

<table>
<thead>
<tr>
<th>Activity No.</th>
<th>Name:</th>
<th>Names</th>
<th>Position</th>
<th>Input&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Remuneration Currency(ies) Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Regular staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Local staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consultants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grand Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>3</sup> Staff months, days, or hours as appropriate.
### FPF 5. Reimbursables per Activity

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Price In</th>
<th>Total Amount In</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>International flights</td>
<td>Trip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Miscellaneous travel expenses</td>
<td>Trip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Subsistence allowance</td>
<td>Day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Local transportation costs&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Office rent/accommodation/clerical assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Grand Total

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

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Communication costs between ____________________________________________ and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(telephone, telegram, telex)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Drafting, reproduction of reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Equipment: vehicles, computers, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Software</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grand Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CONSULTANCY SERVICES CONTRACT
(PROGRAMMATIC ENVIRONMENTAL ASSESSMENT, PLANNING AND ENGINEERING STUDIES FOR THE COSTAL ADAPTATION STRATEGY FORMULATION IN MANILA BAY AREA)

THE PUBLIC IS INFORMED:

This Contract entered into this ____ day of _____, 2018 at the City of Makati by and between:

PHILIPPINE RECLAMATION AUTHORITY [Public Estates Authority], a government corporation created by P.D. No. 1084, as amended, with office address at 7th and 8th Floors, Legaspi Towers 200, Paseo de Roxas, Makati City Metro Manila and herein represented by its General Manager and CEO ATTY. JANILIO E. RUBIATO, duly authorized for this purpose under PRA Board Resolution No. _______, Series of _______, herein referred to as “PRA”;

- and -

domestic corporation duly organized and existing under and by virtue of the laws of the Republic of the Philippines, with principal office address at __________________________, represented herein by its ________________, duly authorized for this purpose, hereinafter referred to as the “CONSULTANT”

ANTECEDENTS

Presidential Decree No. 3-A, dated January 11, 1973, mandates that all reclamation of foreshore and offshore areas shall be limited to the national Government or any person authorized by it in a proper contract.

PRA is the government agency primarily responsible for integrating and coordinating all reclamation projects pursuant to Presidential Decree No. 1084 as amended by Executive Order (E.O.) No. 525.

Pursuant to Resolution Nos. 4414, 4486 and 4591, Series of 2013, 2014, & 2015 respectively, the PRA Board of Directors approved the procurement of consultancy Services for the Programmatic Environmental Assessment, Planning and Engineering Studies for the Coastal Adaptation Strategy Formulation in the Manila Bay Area with an Approved Budget for the Contract (ABC) in the amount of Four Hundred Eight
Million Four Hundred Thirty One Thousand Two Hundred Seventy Nine & 86/100 (Php 408,431,279.86).

The Request for Expression of Interest for the procurement of consultancy services for the Programmatic Environmental Assessment, Planning and Engineering Studies for the Coastal Adaptation Strategy Formulation in the Manila Bay Area was posted in the Government Electronic Procurement System (G-EPS), the PRA website and within the PRA Building premises and was published in four (4) newspapers of general circulation from December 29, 2015 to January 27, 2016.

A Public Bidding was conducted on February 2, 2016 wherein five (5) Consultancy Firms bided namely: (1) Ove Arup & Partners Hongkong, (2) PT Witteveen & Perconsult International, (3) Certeza Infosystem Corp., (4) Royal Haskoning, and (5) DHI/Surbanajurong.

After applying the non-discretionary “pass/fail” criteria under RA 9184 and its Revised Implementing Rules and Regulations (IRR), all the bidders were declared ineligible and two (2) bidders namely Certeza Infosystem Corp. and Ove Arup & Partners Hongkong filed their Motion for Considerations but their Motions were denied by the PRA on February 9, 2016.

In view of the failed bidding, the PRA Bids and Awards Committee (BAC), in its Resolution No. CONS. 16-012, Series of 2016, resolved to re-post the Request for Expression of Interest for the procurement of the said Consultancy Services.

On December 22, 2016, The PRA Board of Directors, in its Resolution No. 4722, series of 2016, approved the following: (1) Declaration of failure of bidding for the procurement of Consultancy Services Programmatic Environmental Assessment, Planning and Engineering Studies for the Coastal Adaptation Strategy Formulation in the Manila Bay Area, (2) Conduct of Second Bidding and (3) revision of the Terms and Conditions in the Bidding Documents as recommended by the PRA BAC.

For the second public bidding, four (4) bidders submitted their respective Eligibility Requirements for Eligibility Check and are as follows: 1. JV of Certeza Infosys Corp. (CIC) & Berkman System, Inc., 2. Consortium of DHI, Surbana Jurong & SMEC, 3. Association of Engineering & Development Corp. of the Phils, (EDCOP), International Marine & Dredging (IMDC, DCCD Engineering Corp., Geotechnica Corp. and SRDP Consulting Inc., and 4. JV of Haskoning DHV Nederland B.V., Woodfields Engineers Company and Test Consultants, Inc.

After applying the non-discretionary “pass/fail” criteria under RA 9184 and its IRR, only the JV of CIC was found to be eligible but was subsequently declared ineligible after evaluation. Only the JV of Haskoning DHV Nederland B.V., Woodfields Engineers Company and Test Consultants, Inc. filed its Motion for
Reconsideration which was denied by the BAC in its letter dated February 13, 2017. All four (4) bidders were subsequently issued a Notices of Ineligibility.

The JV of CIC filed its Motion for Reconsideration on February 27, 2017 which was denied by the BAC on March 16, 2017. A Letter Protest was filed but was also denied on March 20, 2017 for failing to avail the correct protest procedure prescribed under Section 55 of R.A. No. 9184.

The PRA BAC, in its Resolution No. CONS. 17-006, Series of 2017, dated March 29, 2017 resolved to declare a second failure of bidding and recommended to resort to a Negotiated Procurement pursuant to Sections 35.1 and 53 of the IRR of R.A. No. 9184.

On July 19, 2017, the PRA Board of Directors, in its Resolution No. 4781, series of 2017, approved the following: (1) Declaration of second failure of bidding (2) granted authority to the Management to conduct a Negotiated Procurement, and (3) Revision of the Mode of Procurement in the Annual Procurement Plan (APP) for 2017.

On August 09, 2017, the PRA Board of Directors, in its Resolution No. 4784, series of 2017, approved the revised terms and conditions for the conduct of the Negotiated Procurement of the Requirement as recommended by the BAC.

On August 16, 2017, the PRA Board of Directors, in its Resolution No. 4792, series of 2017, approved the amendment of certain terms and conditions in the Request for Expression of Interest for the Requirement.

Three (3) Consultancy Firms submitted their expression of interest in the Negotiated Procurement, namely: Berkman Systems, Inc., Joint Venture of HaskoningDHV Nederland B.V., Woodfields Consultants, Inc. and TEST Consultants Inc. (Haskoning JV) and DHI-Surbana Jurong-SMEC Consortium (DHI Consortium). However, only Haskoning JV and DHI Consortium submitted their respective Eligibility Requirements for Eligibility Check on 03 October 2017.

After applying the non-discretionary “pass/fail” criteria under RA 9184 and its IRR, both consultants (Haskoning JV and DHI Consortium) were declared eligible but were subsequently declared non-compliant after evaluation. Haskoning JV and DHI Consortium filed their Motions for Reconsideration on October 24, 2017 and October 27, 2017, respectively which were denied by the BAC in its letter dated December 08, 2017.

The PRA BAC, in its Resolution No. CONS18-001, series of 2018, dated January 05, 2018 resolved to declare failure of Negotiated Procurement and recommended to repost the Request for Expression of Interest for another Negotiated Procurement.
On ____________, the PRA Board of Directors, in its Resolution No. __________, series of 2018, approved the following: ____________________________.

On ____________, the negotiated procurement of the Consultancy Services was re-posted in the Government Electronic Procurement System (G-EPS), the PRA website and within the PRA Building premises.

________ (___) Consultancy Firms participated to the Negotiated Procurement, namely:_______________________________________________________.

After evaluation and in compliance with Republic Act No. 9184 and its revised IRR, the CONSULTANT was declared as the Highest Rated and Responsive Bid and the recommendation of the PRA BAC to award the contract to the CONSULTANT was approved by the PRA Board of Directors under Resolution No. ________, Series of ________.

On ____________, PRA issued a Notice of Award in favor of the CONSULTANT.

NOW, THEREFORE, for and in consideration of the foregoing premises and terms and conditions herein set forth, the parties hereto have agreed as follows:

ARTICLE I

In this CONTRACT, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to supplementing this Contract, unless context indicates otherwise.

ARTICLE II

CONTRACT DOCUMENTS

The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:

a) Request for Expression of Interest as Annex “A”;
b) Eligibility Documents as Annex “B”;
c) Eligibility Date Sheet as Annex “C”;
d) Eligibility Documents submitted by the CONSULTANT as Annex “D”;
e) Notice of Eligibility and Short Listing as Annex “E”;
f) Instructions to Bidders as Annex “F”;
g) Bid Date Sheet as Annex “G”;
h) Technical and Financial Proposals submitted by the CONSULTANT as Annex “H”;

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ARTICLE III
BRIEF DESCRIPTION OF THE PROJECT

The Reclamation Planning Decision-Support System (RPDSS) shall be the final output of the Consultancy Services being procured. The RPDSS is a computer system intended to simulate the physical, geologic and environmental and other attributes of the Manila Bay Region. The RPDSS is envisioned to serve as, among others, PRA’s tool in ascertaining certain environmental impacts and validating the results of studies undertaken by proponents of reclamation projects within the bay. It is a vital tool in the planning and implementation of PRA’s reclamation projects in the Manila Bay area.

In order to simulate the Manila Bay Area, the system requires various studies as inputs to the whole computer system. The studies required include the General Land Use Plan of Prospective Island Reclamations, Hydrodynamics and Hydraulics Modeling, the Programmatic Environmental Assessment (PEA) Study, Engineering, Geological and Geo-hazard Assessment (EGGA), Marine and Surface Water Studies and the Socio-Economic-Political Profiling.

The system shall require on-need maintenance over a period of ten (10) years from acceptance by PRA of the RPDSS.

ARTICLE IV
SCOPE OF SERVICES

The CONSULTANT shall provide all the required consultancy works to deliver the output and services under the following six (6) categories:

Category I General Land Use Planning
Category II Hydrodynamics and Hydraulics Modeling including Programmatic Environmental Study
   A) Hydrographic Survey
   B) Geotechnical Investigation
C) Modelling and Programmatic Environmental Assessment Study

Category III Engineering, Geological and Geo-hazard Assessment (EGGA)
Category IV Marine and Surface Water Module
Category V Socio-Economic Political Profile
Category VI Reclamation Planning Decision Support System

The detailed scope of services for each category is provided in Annex I-2 hereof.

ARTICLE V
OUTPUT OF THE CONSULTANT

The CONSULTANT shall be required to submit to PRA the following, among others:

a) The Surveys

Horizontal Control and Vertical Control Survey (drawn to an appropriate scale in the BL Form with Technical Description indicating the reference points and/or tie-line used duly signed and sealed by a professional Geodetic Engineer)

i. Sketch Plan of the Preliminary Land Form of proposed

ii. Hydrographic/Bathymetric Survey Plans.

b) Geotechnical Investigation Report;

c) Engineering Geological and Geo-hazard Assessment Report (EGGAR)

d) Conceptual Engineering Report;

e) The Land-Use Review and Master Planning Report (including Development Plans and Schematics; such as Planning Layers, Perspective, Aerial Views, Design Schematics and Panels, and any other format necessary to fully illustrate the planning process and its recommendations) to consists of:

i. 5 sets (up to 2 Volumes per set) - coloured final book bound report copies in A4 format (English Version).

ii. 10 – A1 size coloured copies of selected final plans.

iii. 8 – A1 size illustrative plans;
• Rendered site plan (2 nos.)
• Eye level perspective (3 nos.)
• Aerial perspectives (3 nos.)

f) Conceptual Infrastructure Planning Report

g) Programmatic Environmental Assessment (PEA) Report – is the documentation of comprehensive studies on environmental baseline conditions of a contiguous area. It also includes as assessment of the carrying capacity of the area to absorb impacts from co-located projects such as those in industrial estates or economic zones (ecozones). PEA report shall be prepared in A4 format (English Version) and shall be submitted in four (4) sets. The PEA Report shall include the Hydrodynamics and Hydraulics Modeling Studies.

h) The Decision-Support System (DSS) as designed and customized for the PRA pertaining to the Manila Bay Region.

ARTICLE VI
UNDERTAKINGS OF THE PRA

1. PRA shall provide the CONSULTANT the following:

   a) Book Title: Geology of the Philippines
      Edition : 2nd Edition
      Year Published : 2010
      Author : Mines and Geosciences Bureau
      Publisher : Mines and Geosciences Bureau, Department of Environment and Natural Resources, Quezon City, Philippines

   b) Book Title: Manila Bay Area Environmental Atlas
      Year Published : 2007
      Publisher : GEF/UNDP/IMO Regional Programme on Building Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) and the Manila Bay Environmental Management Project (MBEMP) of the Department of Environment and Natural Resources (DENR), Philippines

   c) Storm Surge Affecting Western Philippine Seas (Manila Bay), (Marino L. Mendoza, 2006).

   d) Storm Surge Numerical Model for Manila Bay (Santiago T. Martin).
e) Operational Plan for the Manila Bay Coastal Strategy (OPMBCS), MBCO.


2. The PRA shall review and approve all the studies/reports to be submitted by the CONSULTANT.

ARTICLE VII
UNDERTAKINGS OF THE CONSULTANT

1. The CONSULTANT shall faithfully and satisfactorily comply with the scope of services mentioned in Article IV hereof.

2. The CONSULTANT shall submit to the PRA five (5) copies each of the various studies, properly bounded and labeled with title blocks as well as electronic copies of such and stored in USB or CD.

3. The CONSULTANT must be ready to appear/face/answer any investigating body which may conduct inquiries/investigation concerning its undertaking and output as mentioned herein.

4. The CONSULTANT shall maintain and update the RPDSS in accordance with Annex I-2 hereof for a period of ten (10) years from acceptance by PRA of the RPDSS.

ARTICLE VIII
CONTRACT PERIOD AND EXTENSION

1. This Contract shall be for a period of eleven (11) years and two (2) months with the following schedule:

   a) Completion period for the scope of works for the six (6) Categories referred to in Article III hereof shall be four hundred twenty (420) calendar days from receipt by the CONSULTANT of the Notice To Proceed; and

   b) Ten (10) year maintenance period of the RPDSS to commence from acceptance by PRA of the RPDSS.

2. Extension of the four hundred twenty (420) - calendar day period for the completion of the Six Categories in Article III hereof may be allowed by PRA only for good and valid reasons and upon the CONSULTANT’s written
request at least thirty (30) calendar days before the end of the four hundred twentieth (420th) calendar day period, specifying therein the reason/s for such request. Any extension of contract time shall not involve any additional cost.

3. In the event that the CONSULTANT is prevented from performing its undertakings in view of an order from judicial or quasi-judicial bodies or orders, directives, policies or resolutions of local government units or any government agency/entity, the PRA shall not be liable for the payment of any fees/costs/damages that may arise in view of the said orders. In case the contract period shall be extended in view of the said orders, the same shall not entail any additional cost.

ARTICLE IX
SCHEDULE OF SUBMISSION OF REPORTS

1. The CONSULTANT shall submit to PRA the required study, reports and programs within fourteen (14) calendar months from receipt of the Notice to Proceed (NTP) under the following schedule:

   d) Inception Report – to be submitted within thirty (30) calendar days from receipt of Notice to Proceed (NTP), in five (5) copies containing the detailed work program and methodology for the various plans/studies/output to be submitted and approved by the PRA;

   e) Monthly Progress Report – to be submitted forty five (45) calendar days from receipt of the NTP and every thirty (30) calendar days thereafter, in five (5) copies showing the progress of the consultancy work vis-à-vis the detailed work program as approved by the PRA;

   f) Draft Final Reports – to be submitted within three hundred (300) calendar days from receipt of Notice to Proceed (NTP) in five (5) copies for the PRA’s review and comments in accordance with work program as approved by the PRA; and,

   g) Final Reports – to be submitted within fifteen (15) calendar days from receipt of the PRA’s comments on the draft Final Report to be submitted together with all the other required outputs as enumerated hereinabove in accordance with work program as approved by the PRA.

   h) Reclamation Planning Decision Support System (RPDSS) – to be functional and accepted by PRA on or before the four hundred twentieth (420th) calendar day of the Contract per Article VIII hereof.
ARTICLE X
PAYMENT

In consideration of the faithful and satisfactory performance of its services and subject to applicable taxes, PRA hereby agrees to pay the CONSULTANT the amount of ______________________________ (Php____________), inclusive of all reimbursable expenditures, under the following schedule:

1. An advance payment of fifteen percent (15%) of the remuneration cost equivalent to ________________________ shall be paid to the CONSULTANT within seven (7) days after the effectivity of this contract subject to the posting in favor of PRA of an irrevocable standby letter or bank guarantee issued by a commercial bank acceptable to PRA, or surety bond callable upon demand issued by reputable and duly licensed surety or insurance company, of an amount equal to the advance payment.

Recoupment of the advance payment shall be computed at twenty percent (20%) of the progress billings to be submitted by the Consultant from effectivity of this contract until the advance payment has been fully set off.

2. As soon as practicable and not later than fifteen (15) calendar days after the end of each calendar month during the period of Services, the CONSULTANT shall submit its monthly progress billing accompanied by pertinent supporting documents.

3. As regards the Consultancy Fee corresponding to Category VI of the Scope of Services, the amount equivalent to 25% thereof shall be paid only to the CONSULTANT during the maintenance period of the RPDSS on ten (10) equal annual payments over a period of ten (10) years on the anniversary date of acceptance by PRA of the RPDSS.

ARTICLE XI
OWNERSHIP OF THE CONSULTANT'S OUTPUT

1. The term “output” shall mean all the work output under Article III hereof generated by the CONSULTANT solely or jointly with others in the performance of this Consultancy Services, including, but not limited to any and all information, reports, studies, notes, materials, drawings, records, diagrams, formula, processes, technology, surveys, design, ideas, discoveries, software, know-how, improvements, and copyrights.

2. All the output shall be the sole and exclusive property of the PRA and the CONSULTANT will not have any rights of any kind whatsoever in such output.
ARTICLE XII
CONSULTANT’S EMPLOYEES

The employees of the CONSULTANT or its sub-contractors are not employees of the PRA. Hence, the PRA shall not in any be liable or responsible for any personal injury or damage to properties, including death sustained or caused by or to any of the employees/sub-contractors of the CONSULTANT during the performance of their work under this Contract. The CONSULTANT shall at all times be solely liable/responsible for the enforcement of all existing laws/issuances, particularly the Labor Code of the Philippines that may affect its services under this Contract. The CONSULTANT hereby binds itself to hold and save PRA free and harmless from any liabilities in respect of the foregoing or arising therefrom.

ARTICLE XIII
LIQUIDATED DAMAGES

If the CONSULTANT fails to deliver any or all of the services within the period specified in the detailed work program specified in the Inception report as approved by the PRA, the PRA shall 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 work schedule up to maximum deduction of ten percent (10%) of the contract price. Once the maximum is reached, the PRA may consider termination of this contract pursuant to Clause 27 of the General Conditions of the Contract attached as Annex “L” hereof.

ARTICLE XIV
TERMINATION OF CONTRACT

The grounds and procedures for termination of this Contract shall be in accordance with Clause 27 to 33 of the General Conditions of the Contract attached as Annex “L” hereof.

ARTICLE XV
WARRANTY

1. The CONSULTANT warrants that it shall not knowingly incorporate to its output any material that would infringe any intellectual property rights of any third party.

2. The CONSULTANT warrants that it has not given or promised to give any money or gift to any official or employees of the PRA or the Government to
secure this CONTRACT. Any violation of said warranty shall be sufficient ground for the PRA to revoke or cancel this CONTRACT.

ARTICLE XVI
EFFECTIVITY

This CONTRACT shall become effective upon receipt by the CONSULTANT of the Notice to Proceed.

IN WITNESS WHEREOF, the parties have hereunto affixed their signatures on the date and at the place first above mentioned.

PHILIPPINE RECLAMATION AUTHORITY Winning Bidder

By: ATTY. JANILO E. RUBIATO By: ____________________
General Manager/CEO

SIGNED IN THE PRESENCE OF:

(signature over printed name) (signature over printed name)

Funds Availability:

ARISTEO A. LEGION
Manager- Budget Division

ACKNOWLEDGEMENT

REPUBLIC OF THE PHILIPPINES)
BEFORE ME, a Notary Public for and in the above-jurisdiction this ___ day of __________, personally appeared the following persons:

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all known to me and to me known to be the same persons who executed the foregoing Consultancy Services Contract and who acknowledged to me that the same is their free and voluntary act and deed as well as of the corporations/entities they respectively represent.

WITNESS MY HAND AND SEAL on the date and at the place first written above.

NOTARY PUBLIC

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

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Section VIII

Appendices
I. **Description of Services**

Give detailed descriptions of the Services to be provided, dates for completion of various tasks, place of performance for different tasks, specific tasks to be approved by Client, etc.

II. **Reporting Requirements**

List format, frequency, and contents of reports; persons to receive them; dates of submission; etc. If no reports are to be submitted, state here “Not applicable.”

III. **Key Personnel and Subconsultants**

List under:

1. Titles [and names, if already available], detailed job descriptions and minimum qualifications, and staff-months of service, and estimated periods of engagement for each, including a copy of a satisfactory medical certificate.

2. Same information as in no. 1 for Key foreign Personnel to be assigned to work outside the Government’s country.

3. Same information as in no. 1 for Key Local Personnel.

4. List of approved Subconsultants (if already available) and Counterpart personnel (if allowed); same information with respect to their Personnel as in no.’s 1 and 2.

IV. **Breakdown of Contract Price**

List here the elements of cost, including expenditures in foreign currency(ies) denominated and payable in Philippine Peso, used to arrive at the itemized breakdown of the contract price:

1. Monthly rates for Personnel (Key Personnel and other Personnel)

2. Reimbursable expenditures

3. Applicable taxes

V. **Services and Facilities Provided by the Client**

Give detailed description of the services and facilities made available to the Consultant, and the time and manner of its availment.
VI. Consultant’s Representations Regarding Costs and Charges

Breakdown of Remuneration Rates, WB funded projects using Quality Based Selection, Selection Based on the Consultant’s Qualifications and Single Source Selection.

1. Review of Remuneration Rates

1.1 The remuneration rates for staff are made up of salary, social costs, overheads, fee that is profit, and any premium or allowance paid for projects away from headquarters. To assist the Consultant in preparing for financial negotiations, a sample form giving a breakdown of rates is attached (no financial information should be included in the Technical Proposal). Agreed breakdown sheets shall form part of the negotiated contract.

1.2 The Procuring Entity is charged with the custody of Government funds and is expected to exercise prudence in the expenditure of these funds. The Procuring Entity is, therefore, concerned with the reasonableness of the firm’s Financial Proposal, and, during negotiations, it expects to be able to review audited financial statements backing up the Consultant’s remuneration rates, certified by an independent auditor. The Consultant shall be prepared to disclose such audited financial statements for the last three years, to substantiate its rates, and accept that its proposed rates and other financial matters are subject to scrutiny. Rate details are discussed below.

(i) Salary

This is the gross regular cash salary paid to the individual in the Consultant’s home office. It shall not contain any premium for work away from headquarters or bonus (except where these are included by law or government regulations).

(ii) Bonus

Bonuses are normally paid out of profits. Because the Procuring Entity does not wish to make double payments for the same item, staff bonuses shall not normally be included in the rates. Where the Consultant’s accounting system is such that the percentages of social costs and overheads are based on total revenue, including bonuses, those percentages shall be adjusted downward accordingly. Where national policy requires that thirteen (13) months’ pay be given for twelve (12) months’ work, the profit element need not be adjusted downward. Any discussions on bonuses shall be supported by audited documentation, which shall be treated as confidential.

(iii) Social Costs

Social costs are the costs to the Consultant of staff’s non-monetary benefits. These items include, inter alia, pension, medical and life insurance costs, and the cost of a staff member being sick or on vacation. In this regard, the cost of leave for public holidays is not an acceptable social cost nor is the cost of leave taken during the Contract if no additional staff replacement has been provided. Additional leave taken at the end of the Contract in accordance with the Consultant’s leave policy is acceptable as a social cost.
(iv) Cost of Leave

The principles of calculating the cost of total days leave per annum as a percentage of basic salary shall normally be as follows:

\[ \text{Leave cost as percentage of salary} = \frac{\text{total days leave} \times 100}{365 - w - ph - v - s} \]

It is important to note that leave can be considered a social cost only if the Procuring Entity is not charged for the leave taken.

(v) Overheads

Overhead expenses are the firm’s business costs that are not directly related to the execution of the project and shall not be reimbursed as separate items under the Contract. Typical items are home office costs (partner’s time, non-billable time, time of senior staff monitoring the project, rent, support staff, research, staff training, marketing, etc.), the cost of staff not currently employed on revenue-earning projects, and business promotion costs. During negotiations, audited financial statements, certified as correct by an independent auditor and supporting the last three years’ overheads, shall be available for discussion, together with detailed lists of items making up the overheads and the percentage by which each relates to basic salary. The Procuring Entity does not accept an add-on margin for social charges, overhead expenses, etc., for staff who are not permanent employees of the firm. In such case, the firm shall be entitled only to administrative costs and fee on the monthly payments charged for subcontracted staff.

(vi) Fee or Profit

The fee or profit shall be based on the sum of the salary, social costs, and overhead. If any bonuses paid on a regular basis are listed, a corresponding reduction in the profit element shall be expected. Fee or profit shall not be allowed on travel or other reimbursable expenses, unless in the latter case an unusually large amount of procurement of equipment is required. The Consultant shall note that payments shall be made against an agreed estimated payment schedule as described in the draft form of the Contract.

(vii) Away from Headquarters Allowance or Premium

Some consultants pay allowances to staff working away from headquarters. Such allowances are calculated as a percentage of salary and shall not draw overheads or profit. Sometimes, by law, such allowances may draw social costs. In this case, the amount of this social cost shall still be shown under social costs, with the net allowance shown separately. For concerned staff, this allowance, where paid, shall cover home education, etc.; these and similar items shall not be considered as reimbursable costs.

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5 Where w = weekends, ph = public holidays, v = vacation, and s = sick leave.
Subsistence Allowances

Subsistence allowances are not included in the rates, but are paid separately and in local currency. No additional subsistence is payable for dependents — the subsistence rate shall be the same for married and single team members.

UNDP standard rates for the particular country may be used as reference to determine subsistence allowances.

2. Reimbursables

2.1 The financial negotiations shall further focus on such items as out-of-pocket expenses and other reimbursables. These costs may include, but are not restricted to, cost of surveys, equipment, office rent, supplies, international and local travel, computer rental, mobilization and demobilization, insurance, and printing. These costs may be either fixed or reimbursable in foreign or local currency.

3. Bank Guarantee

3.1 Payments to the Consultant, including payment of any advance based on cash flow projections covered by a bank guarantee, shall be made according to an agreed estimated schedule ensuring the firm regular payments in local and foreign currency, as long as the services proceed as planned.
VII. BREAKDOWN OF AGREED FIXED RATES

[Currencies: ________]

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Philippines

Home Office

Signature of Consultant: __________________________ Date: ______________________
Authorized Representative: ______________________ Name: ______________________
Title: ______________________

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6 This model form is given for negotiation purposes only. It is not part of the proposals (technical or financial).
7 If different currencies, a different table for each currency should be used.
8 Per month, day, or hour as appropriate.