

**Request for Proposals**

**Title: Consultancy on Ecological Mangrove-Wetland Restoration Engineering Design and Implementation Oversight**

**RFP No:** FY 24 -Mangrove 004

**Date of Issuance: Wednesday, August 16, 2023 Reposted: Monday, September 11, 2023**

---

- 1. Background** Vulnerable coastal communities around the world are among the first to experience and be exposed to climate threats. By 2030 the number of people impacted by coastal floods will double worldwide, from 7 million to 15 million, while urban property damage will increase tenfold due to storm surge and sea level rise — from \$17 billion to \$177 billion.

These predictions are even more dire in Indonesia where, by 2030, the number of people impacted by coastal flooding will increase by almost five times—from 230,000 to 1.1 million. With an associated 20x increase in urban property damage due to coastal storm surge and sea level rise — from \$1.3 billion to \$27 billion. Indonesia has the fifth highest population globally living in low-elevation coastal zones, with 39.3 million people living in high-risk areas. Additionally, one meter of sea level rise in Indonesia could inundate up to 405,000 hectares of lands and affect 39 percent of the GDP in coastal regions.

Globally, farmed shrimp production grew by more than 1,000 percent over the last three decades to produce an estimated 6.5 million metric tons of shrimp in 2018. This dramatic growth has come at the expense of ecosystems, destroying more than 50 percent of mangrove forests worldwide and causing significant harm to the environment and the climate resilience of coastal communities. Mangroves serve as natural infrastructure or structural barriers that reduce coastal erosion, dissipate wave energy, and moderate storm surges, and provide habitat for aquatic and terrestrial species.

Historically, approximately 3.7 million hectares, almost 70 percent of all mangroves in Indonesia, have been damaged or degraded by aquaculture activities and industrial development. While deforestation from the expansion of aquaculture has slowed substantially due to government bans on cutting mangroves, enforcement challenges and pollution impacts remain. The legacy ecosystem benefits of mangroves also remain lost. Restoring coastal ecosystems, like mangroves and seagrass, which filter pollutants and absorb nutrients, can improve water quality in receiving waters while also providing habitat and climate adaptation benefits.

Shrimp prices have also fluctuated dramatically and have generally decreased over the last decade, leaving farmers grappling with ways to reduce costs or increase production volumes to remain profitable. Intensification, where farmers use technology and additional production inputs to increase yields while reducing costs, is largely seen as a requirement to remain cost competitive. At the same time, barriers to intensification include access to capital, expertise, and guaranteed markets.

As the aquaculture sector struggles to intensify, there is both a challenge and opportunity to leverage these changes to incentivize both sustainable intensification and restoration of mangrove ecosystems as a nature-based solution.

Climate Smart Shrimp (CSS) is a novel approach that incentivizes mangrove restoration while also increasing the amount of shrimp a farm can produce. By applying this model, shrimp farmers, local communities, and other stakeholders work together to sustainably intensify production in a portion of a farm's ponds in exchange for restoring mangroves on the remaining ponds. Conservation International (CI) and partners are ready to pilot this approach at a site in Indonesia, where years of inadequate management of the aquaculture sector have degraded the coastline and left communities vulnerable to climate impacts such as coastal flooding, storm surge, and sea level rise. Accessing shrimp aquaculture as a sustained partner in mangrove

restoration will increase both funding for restoration and expand the number and diversity of stakeholders conserving, protecting, and rebuilding natural infrastructure at scale.

The CSS approach is grounded in a green-gray engineering philosophy, where “green” ecosystem conservation and restoration is combined with “gray” conventional engineering approaches to generate more benefits for people and nature than either strategy applied alone. The CSS model applies a green-gray climate adaptation approach to working with communities, farmers, supply chain companies, governments, and other stakeholders to restore coastal ecosystems, improve livelihoods, and reduce marine pollution while increasing productivity, profitability, and resilience on shrimp farms and catalyzing replicable opportunities for investors.

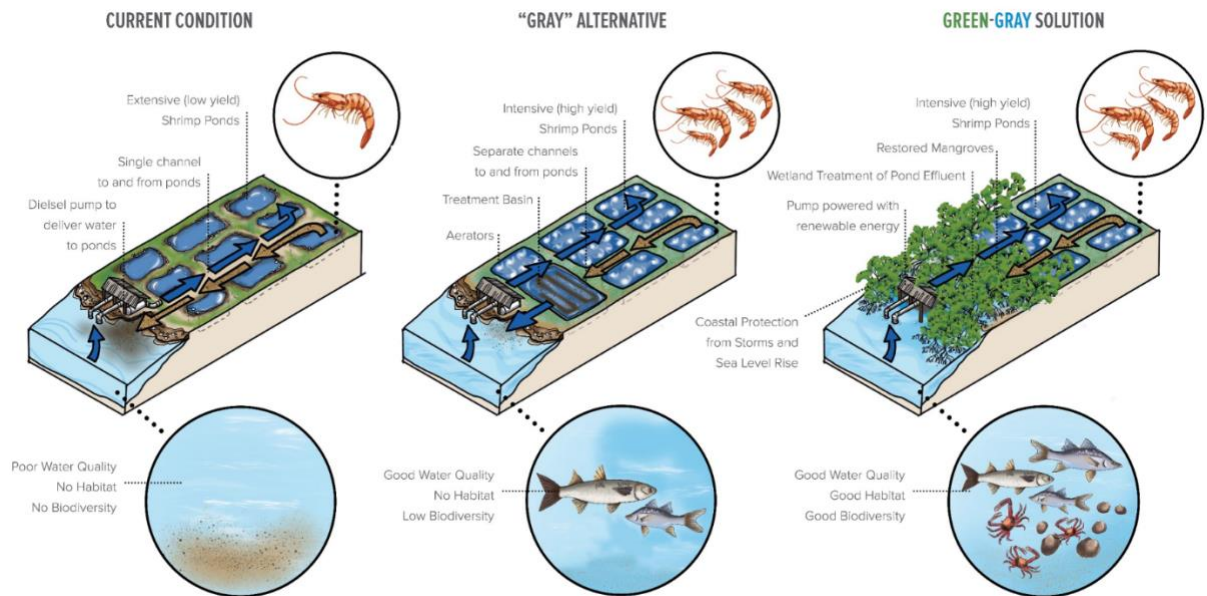


Figure 1. A visual comparison of the “gray” alternative to intensification (middle) versus applying a green-gray climate adaptation approach to sustainably intensify shrimp production using the CSS model (right).

To achieve these outcomes, CSS involves working with shrimp pond farmers to sustainably intensify shrimp production, constructing water quality treatment wetlands, and restoring coastal ecosystems, while securing buyers for the “Climate Smart Shrimp” produced (**Figure 1**). For small and medium farmers, primary incentives to participate include access to capital and technical assistance, while larger farmers, who often already have access to capital and expertise, are more strongly incentivized by connections to sustainability-oriented buyers in North American and European markets who are willing to preferentially source responsibly produced shrimp. The CSS approach can realize climate change resilience and adaptation benefits while also increasing production and profitability to meet development goals.

Transitioning CSS from a pilot to implementation at landscape scale in Indonesia and globally will require strategic partnerships, policies, and science. This pilot project will produce the essential analysis to outline the strategic path to scale CSS – so it can move beyond just a pilot, to a global scale climate adaptation and sustainable production solution. We will leverage the site-scale pilot project in Indonesia to enable CI and partners to quantify and prioritize efforts to scale CSS in Indonesia and globally by quantifying the economic and ecologic viability of CSS to inform adoption of the approach in shrimp aquaculture geographies globally. For Indonesia, we will recommend specific technical, policy, and stakeholder actions to enable implementation at scale within the shrimp producing provinces in the country.

**2. Project Overview** CI is seeking an Indonesian-based consultant or a global firm with offices in southeast Asia to join our international and multidisciplinary project team to perform design

development and oversee implementation of ecological mangrove wetland restoration and water quality treatment areas for the CSS pilot project located in Lalombi, Central Sulawesi, Indonesia. With input from the project team, the selected bidder will be the engineer of record for design development, preparation of construction drawings that meet local standards and international expectations for a high quality, innovative, and environmentally responsible green-gray approach. The selected bidder will also be the engineer of record during construction activities and will provide implementation oversight.

The project team consists of Konservasi Indonesia (KI), CI, and JALA. KI and CI are partnering with JALA to implement the CSS pilot project. KI is based in Jakarta, Indonesia and CI is based in the United States. Both are responsible for implementing the CSS approach and developing an ecological mangrove wetland restoration plan. JALA is an aquaculture tech startup based in Yogyakarta, Indonesia. As the landowner, JALA is responsible for site development including design, construction, and operation of intensive shrimp ponds and associated features at the CSS pilot project site. Additionally, JALA is contracting with CV Marina Visi Tama for design and construction of the shrimp intensification plan. It is anticipated that CV Marina Visi Tama will also perform construction activities for the ecological mangrove wetland restoration.

The CSS pilot project site is located in Lalombi, Central Sulawesi, Indonesia approximately 65 km from Mutiara SIS Al-Jufri Airport in Palu, Central Sulawesi, Indonesia. General coordinates for the CSS pilot project site are 0°50'28.63" S and 119°36'7.92" E. The CSS pilot project site is approximately 12 hectares (ha) in size, and it consists of several extensive shrimp ponds separated by earthen berms, roads, and vegetated upland areas (**Figures 2 and 3**). The project team has determined that ecological mangrove wetland restoration will occur on approximately six (6) ha of the CSS pilot project site. However, the layout and configuration of the shrimp intensification area has not been finalized by CV Marina Visi Tama.

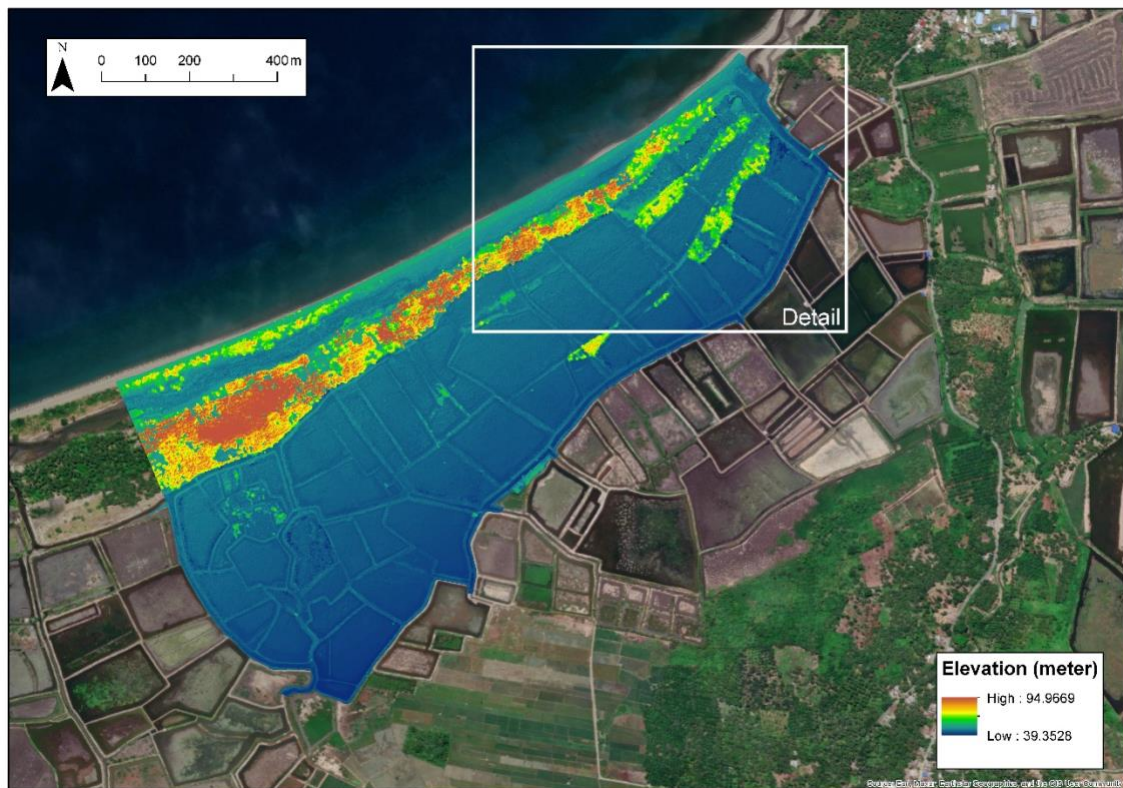


Figure 2. Digital Elevation Model for CSS Pilot Project Area



Figure 3. Detail of CSS Pilot Project Area with Property Boundary (red)

### 3. Terms of Reference

- a. Purpose. The purpose of the CSS pilot project is to quantify the economic and ecological viability and prioritize efforts for scaling the CSS approach in Indonesia. Essential analysis generated by the CSS pilot project will also be used to inform adoption of the CSS approach in shrimp aquaculture geographies worldwide.
- b. Objective. The objective for this Request for Proposal (RFP) is to select the most responsive and responsible bidder to perform design development services and oversee implementation of ecological mangrove wetland restoration and water quality treatment areas at the CSS pilot project located in Lalombi, Central Sulawesi, Indonesia.
- c. Scope of Work.
  - i. Preliminary Site Investigations and Evaluations. The selected bidder will conduct additional site investigations and associated evaluations deemed necessary for design development and construction activities for ecological mangrove wetland restoration at the CSS pilot project site. Data gathered during additional site investigations and evaluations will be used to establish design criteria for restoring hydrology and improving coastal resilience.
  - ii. Design Development Services. The selected bidder will be responsible for performing design development with input from the project team. This will include frequent calls and virtual meetings with the project team as well as preparation of meeting agendas or minutes, presentations, and design development documents for review and feedback from the project team.

- iii. Preparation of Construction Drawings, Technical Specifications, and Cost Estimate. The selected bidder will be responsible for preparation of construction drawings and technical specifications that provide sufficient detail for securing applicable permits and for the landowner's contractor to complete construction activities for ecological mangrove wetland restoration at the CSS pilot project site. The selected bidder will also be responsible for the preparation of an engineer's cost estimate for construction.
- iv. Permitting Services. The selected bidder will be responsible for preparation and submittal of necessary permit applications for implementation of ecological mangrove wetland restoration at the CSS pilot project site. This will also involve correspondence with the regulatory authorities and responding to requests for additional information (RAI) through receipt of final authorizations.
- v. Construction Engineering and Inspection Services. The selected bidder will be responsible for oversight of construction activities for ecological mangrove restoration at the CSS pilot project site. As the engineer of record, the selected bidder will ensure that the construction activities, performed by others, conform to the final Construction Drawings and Technical Specifications or the intent of the design. The engineer of record will be expected to provide clarification and direction to the landowner's contractor during construction activities. The selected bidder will also be expected to review and approve any design modifications or similar requests by the landowner's contractor.

d. Deliverables.

- i. Summary Report. The selected bidder will provide a summary report following completion of additional preliminary site investigations and evaluations. The summary report should include key findings and relevant details that support design development.
- ii. 30% Design Development Documents. The selected bidder will provide 30% design development documents including an initial plan set of drawings showing the layout of major features and a preliminary engineer's cost estimate for construction.
- iii. 90% Design Development Documents. The selected bidder will provide 90% design development documents including an updated plan set of drawings and an updated engineer's cost estimate for construction.
- iv. Final Construction Drawings, Technical Specifications, and Cost Estimate. The selected bidder will provide a final set of construction drawings, technical specifications, and cost estimate for construction.
- v. Permit Applications and Authorizations. The selected bidder will provide copies of submitted applications, final authorizations, and associated correspondence to regulatory authorities for necessary permits to implement ecological mangrove wetland restoration.
- vi. Monthly Reports. The selected bidder will provide monthly reports during construction activities for ecological mangrove wetland restoration, which will be performed by the landowner's contractor. The monthly reports should provide key findings and relevant details for overseeing construction activities by the landowner's contractor. For bidding purposes, it is expected that construction activities will be three (3) months in duration.
- vii. As-Built Drawings and Certification of Completion. The selected bidder will provide redlined as-built drawings and certification that ecological mangrove wetland restoration at the CSS pilot project site is complete and satisfactory.

e. Deliverable Schedule.

No.	Deliverable	Timeline (From Contract start)	Expected Date of Completion
1	Summary Report	+4 weeks	17 November 2023
2	30% Design Documents	+8 weeks	15 December 2023
3	90% Design Documents	+12 weeks	12 January 2024
4 – 5	Final Construction Drawings and Technical Specifications, and Final Cost Estimate	+16 weeks	9 February 2024
6	Permit Applications, Authorizations, and RAIs	+16 weeks	9 February 2024
7	Monthly Reports (3)	+20 weeks +24 weeks +28 weeks	8 March 2024 5 April 2024 May 3 2024
8	As-Built Drawings and Certification of Completion	+32 weeks	31 May 2024

#### 4. Submission Details

- a. Deadline. Proposals must be received no later than **11:59 pm Central Indonesian Time on Monday, September 25, 2023**. Late submissions will not be accepted. Proposals must be submitted via email to [marine@conservation.org](mailto:marine@conservation.org). All proposals are to be submitted following the guidelines listed in this RFP.
- b. Validity of bid. 120 days from the submission deadline
- c. Clarifications. Questions may be submitted via email to [marine@conservation.org](mailto:marine@conservation.org) by the specified date and time in the timeline below. The subject of the email must contain the RFP number and title of the RFP. CI will respond in writing to submitted clarifications by the date specified in the timeline below. Responses to questions that may be of common interest to all bidders or offerors will be posted to the CI website and/or communicated via email.
- d. Amendments. At any time prior to the deadline for submission of proposals, CI may, for any reason, modify the RFP documents by amendment which will be posted to the CI website and/or communicated via email.

#### 5. Minimum Requirements

- a. Fluency in Indonesian and English
- b. Possess or have ability to obtain (within 30 days) applicable business and/or professional certifications or licenses to practice engineering and perform engineering services including surveys, field inspections, and construction oversight in Indonesia.
- c. Experience developing technical specifications and designing drainage plans and/or stormwater management systems for low-elevation coastal zones of southeast Asia, preferably Indonesia.
- d. Experience developing technical specifications and designing habitat restoration plans for low-elevation coastal zones of southeast Asia, preferably Indonesia.

- e. Experience submitting permit applications and expediting permits for site development or construction work, drainage plans and/or stormwater management systems, and habitat restoration projects within low-elevation coastal zones of southeast Asia, preferably Indonesia.
- f. Familiarity with mangroves and intertidal ecology of southeast Asia, preferably Indonesia.
- g. Familiarity with the geography, climate, and coastal hazards of southeast Asia, preferably Indonesia.

**6. Proposal Documents to Include**

- a. Signed cover page on bidder’s letterhead with the bidder’s contact information.
- b. Signed Representation of Transparency, Integrity, Environmental and Social Responsibility (Attachment 1)
- c. Technical Proposal.
  - i. Capabilities, Experience, and Past Performance. Please include descriptions of similar projects or assignments that demonstrate minimum requirements in **Section 5** and provide at least three (3) client references.
  - ii. Qualifications of Key Personnel. Please attach resumes or CVs that demonstrate how the bidder’s proposed team meets the minimum requirements listed in **Section 5**.
  - iii. Technical Approach, Methodology and Detailed Work Plan. The Technical Proposal should describe in detail how the bidder intends to carry out the requirements described in the Terms of Reference (**Section 3**). The Technical Proposal should not exceed 12 pages.
- d. Financial Proposal. Bidders/offerors shall use the cost proposal template (Attachment 3).

**7. Evaluation Criteria** In evaluating proposals, CI will seek the best value for money considering the merits of the technical and costs proposals. Proposals will be evaluated using the following criteria:

<b>Evaluation Criteria</b>	<b>Score (out of 100)</b>
Is the bidder’s proposed technical approach and methodology practical; and does it adequately achieve the project objective and scope of work described in Section 3?	25% / Max points: 25
Is the bidder’s detailed work plan and logical framework clear; and does it present a realistic timeline and effective sequence of activities for implementing the scope of work described in Section 3?	25% / Max points: 25
Does the bidder’s capabilities, experience, and past performance demonstrate sufficient expertise to implement the scope of work described in Section 3?	15% / Max points: 15
Does the bidder’s proposed key personnel meet the minimum requirements described in Section 5 of the RFP?	15% / Max points: 15
Are the proposed costs reasonable; and do they reflect a solid understanding of the project objectives and scope of work described in the Terms of Reference?	20% / Max points: 20

## 8. Proposal Timeline

RFP Issued	16 August 2023
RFP re-posted	11 September 2023
Clarifications submitted to CI	15 September 2023
Clarifications provided to known bidders/offerors	19 September 2023
Complete proposals due to CI	25 September 2023
Final selection	3 October 2023
Execute agreement	16 October 2023

- 9. Resulting Award** CI anticipates entering into an agreement with the selected bidder by **Monday, October 16, 2023**. Any resulting agreement will be subject to the terms and conditions of CI's Services Agreement. A model form of agreement can be provided upon request.

This RFP does not obligate CI to execute a contract, nor does it commit CI to pay any costs incurred in the preparation or submission of the proposals. Furthermore, CI reserves the right to reject any and all offers, if such action is considered to be in the best interest of CI. CI will, in its sole discretion, select the winning proposal and is not obligated to share individual evaluation results.

- 10. Confidentiality** All proprietary information provided by the bidder shall be treated as confidential and will not be shared with potential or actual applicants during the solicitation process. This includes but is not limited to price quotations, cost proposals and technical proposals. CI may, but is not obliged to, post procurement awards on its public website after the solicitation process has concluded, and the contract has been awarded. CI's evaluation results are confidential and applicant scoring will not be shared among bidders/offerors.

- 11. Code of Ethics** All Offerors are expected to exercise the highest standards of conduct in preparing, submitting and if selected, eventually carrying out the specified work in accordance with CI's Code of Ethics. Conservation International's reputation derives from our commitment to our values: Integrity, Respect, Courage, Optimism, Passion, and Teamwork. CI's Code of Ethics (the "Code") provides guidance to CI employees, service providers, experts, interns, and volunteers in living CI's core values, and outlines minimum standards for ethical conduct which all parties must adhere to. Any violation of the Code of Ethics, as well as concerns regarding the integrity of the procurement process and documents should be reported to CI via its Ethics Hotline at [www.ci.ethicspoint.com](http://www.ci.ethicspoint.com).

## 12. Attachments:

Attachment 1: Representation of Transparency, Integrity, Environmental and Social Responsibility  
Attachment 2: Cost Proposal Template: Directions below; template attached to RFP announcement.

Attachment 3: CSS Lalombi Site Survey: Zip files are attached to RFP announcement and must be opened with ArcGIS or equivalent program.



**Attachment 1: Representation of Transparency, Integrity, Environmental and Social Responsibility**

RFP No. FY24-004

UEI Number (if applicable): N/A

All Offerors are expected to exercise the highest standards of conduct in preparing, submitting and if selected, eventually carrying out the specified work in accordance with CI's Code of Ethics. CI's Code of Ethics provides guidance to CI employees, service providers, experts, interns, and volunteers in living CI's core values, and outlines minimum standards for ethical conduct which all parties must adhere to. Any violations of the Code of Ethics should be reported to CI via its Ethics Hotline at [www.ci.ethicspoint.com](http://www.ci.ethicspoint.com).

CI relies on the personal integrity, good judgment and common sense of all third parties acting on behalf, or providing services to the organization, to deal with issues not expressly addressed by the Code or as noted below.

**I. With respect to CI's Code of Ethics, we certify:**

- a. We understand and accept that CI, its contractual partners, grantees and other parties with whom we work are expected to commit to the highest standards of Transparency, Fairness, and Integrity in procurement.

**II. With respect to social and environmental standards, we certify:**

- a. We are committed to high standards of ethics and integrity and compliance with all applicable laws across our operations, including prohibition of actions that facilitate trafficking in persons, child labor, forced labor, sexual abuse, exploitation or harassment. We respect internationally proclaimed human rights and take no action that contributes to the infringement of human rights. We protect those who are most vulnerable to infringements of their rights and the ecosystems that sustain them.
- b. We fully respect and enforce the environmental and social standards recognized by the international community, including the fundamental conventions of International Labour Organization (ILO) and international conventions for the protection of the environment, in line with the laws and regulations applicable to the country where the contract is to be performed.

**III. With respect to our eligibility and professional conduct, we certify:**

- a. We are not and none of our affiliates [members, employees, contractors, subcontractors, and consultants] are in a state of bankruptcy, liquidation, legal settlement, termination of activity, or guilty of grave professional misconduct as determined by a regulatory body responsible for licensing and/or regulating the offeror's business
- b. We have not and will not engage in criminal or fraudulent acts. By a final judgment, we were not convicted in the last five years for offenses such as fraud or corruption, money laundering or professional misconduct.
- c. We are/were not involved in writing or recommending the terms of reference for this solicitation document.
- d. We have not engaged in any collusion or price fixing with other offerors.
- e. We have not made promises, offers, or grants, directly or indirectly to any CI employees involved in this procurement, or to any government official in relation to the contract to

be performed, with the intention of unduly influencing a decision or receiving an improper advantage.

- f.** We have taken no action nor will we take any action to limit or restrict access of other companies, organizations or individuals to participate in the competitive bidding process launched by CI.
- g.** We have fulfilled our obligations relating to the payment of social security contributions or taxes in accordance with the legal provisions of the country where the contract is to be performed.
- h.** We have not provided, and will take all reasonable steps to ensure that we do not and will not knowingly provide, material support or resources to any individual or entity that commits, attempts to commit, advocates, facilitates, or participates in terrorist acts, or has committed, attempted to commit, facilitate, or participated in terrorist acts, and we are compliant with all applicable Counter-Terrorist Financing and Anti-Money Laundering laws (including USA Patriot Act and U.S. Executive Order 13224).
- i.** We certify that neither we nor our directors, officers, key employees or beneficial owners are included in any list of financial or economic sanctions, debarment or suspension adopted by the United States, United Nations, the European Union, the World Bank, or General Services Administration's List of Parties Excluded from Federal Procurement or Non-procurement programs in accordance with E.O.s 12549 and 12689, "Debarment and Suspension".

Offeror: \_\_\_\_\_

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment 3: Cost Proposal Template**

All cost information must be expressed in Indonesian Rupiah (Rp) and United States Dollars (USD) using this cost proposal template. The Offerors cost proposal must be all-inclusive of profit, fees, or taxes (lump sum). Subcontractor and expected travel expenses, if any, should also be included. Subcontractors that will be used to support the Bid Items should be identified. Expected travel expenses for the Bid Items should be identified as well. Please note, additional costs cannot be included after award, and revisions to these proposed costs may not be made after submission unless expressly requested by CI should the offeror’s proposal be accepted.

If selected, Offeror shall use its best efforts to minimize the financing of any taxes on goods and services, or the importation, manufacture, procurement, or supply thereof. If Offeror is eligible to apply for refunds on taxes paid, Offeror shall do so. Any tax savings should be reflected in the total cost.

Total Bid Price Summary

Bid Item	Description	Deliverables	Bid Price	
			Rp	USD
1	Preliminary Site Investigations and Evaluations	1. Summary Report		
2	Design Development Services	2. 30% Design Documents 3. 90% Design Documents		
3	Preparation of Construction Drawings, Technical Specifications, and Cost Estimates	4. Final Construction Drawings and Technical Specifications 5. Final Cost Estimate		
4	Permitting Services	6. Permit Applications, Authorizations, and RAIs		
5	Construction Engineering and Inspection Services	7. Monthly Reports (3) 8. As-Built Drawings and Certification of Completion		
<b>Total Bid Price (Lump Sum)</b>				

Details for Subcontractor Costs (add rows/columns as needed)

For Bid Item	Subcontractor	Description of Services	Bid Price	
			Rp	USD

Details for Travel Costs (add rows/columns as needed)

For Bid Item	Description	Quantity	Units	Unit Price		Subtotal	
				Rp	USD	Rp	USD
	Airfare						
	Train/Bus Fare						
	Taxi/Shuttle						
	Rental Car						
	Fuel for Rental Car						
	Hotels/Lodging						
	Meals						
	Other						
	<b>Total</b>						
	Airfare						
	Train/Bus Fare						
	Taxi/Shuttle						
	Rental Car						
	Fuel for Rental Car						
	Hotels/Lodging						
	Meals						
	Other						
	<b>Total</b>						

(Please use the financial proposal template attached to the RFP announcement.)