

Project Title:	Diverting Waste by Encouraging Reuse and Recycling Activity (DAWERR) USAID-funded project
RFP Title and Number:	Construction of composting station for organic waste and Materials Recovery Facility (MRF) for recyclables in Baskinta RFP No. DAWERR-2024-03
Date of Issue	December 31, 2024
Deadline for submitting questions:	January 8, 2025
Deadline for expressing interest and submitting eligibility documents:	January 13, 2025
Closing Date for submitting proposals:	January 20, 2025
Bid Opening Session Date, Time & Location	21 January 2025 at 11:00 AM, Ecodit Beirut Office, Habib Center 1st floor, Mirna Chalouhi Street, Sin el Fil.

## Dear Bidders:

ECODIT Beirut LLC (*henceforth ECODIT*), implementing the USAID-funded DAWERR project, invites qualified offerors to submit Proposals for the construction of a composting station for organic waste and a Materials Recovery Facility (MRF) for recyclables in Baskinta (Mount Lebanon Governorate) in accordance with the specifications listed under this Request for Proposals (RFP).

Offerors are strongly encouraged to submit any comments or questions concerning this RFP by the deadline for submission of questions as stated above. All questions related to this RFP must be submitted to Carla Hammoud at <a href="mailto:chammoud@dawerr.org">chammoud@dawerr.org</a> with a copy to Jad Sakr at <a href="mailto:jsakr@dawerr.org">jsakr@dawerr.org</a> and Capricia Chabarekh at <a href="mailto:cchabarekh@ecodit.com">cchabarekh@ecodit.com</a>. Unless otherwise notified by an amendment to this RFP, no questions will be accepted after this date. ECODIT will compile all questions and provide answers in an updated RFP before the deadline for expressing interest and submitting eligibility documents. If changes are made prior to the closing date and time, this solicitation will also be amended.

Interested Offerors shall express their interest and submit eligibility documents by email to Carla Hammoud at <a href="mailto:chabarekh@ccodit.com">chabarekh@ccodit.com</a> with a copy to Jad Sakr at <a href="mailto:jsakr@dawerr.org">jsakr@dawerr.org</a> and Capricia Chabarekh at <a href="mailto:cchabarekh@ecodit.com">cchabarekh@ecodit.com</a> by the deadline for expressing interest and submitting eligibility documents.



The Proposal (technical and cost) must be in English and comprised of soft copy and hard copy indicating the RFP number, title, and closing date. The Proposal must be delivered by email at <a href="mailto:chammoud@dawerr.org">chammoud@dawerr.org</a>, <a href="mailto:jsakr@dawerr.org">jsakr@dawerr.org</a> and <a href="mailto:cchabarekh@ecodit.com">cchabarekh@ecodit.com</a> and by hand to Carla Hammoud at ECODIT Beirut LLC office in Habib Center 1<sup>st</sup> floor, Mirna Chalouhi, Sin el Fil no later than January 20<sup>th</sup>, 5:00pm (Beirut time).

Best regards, Carla Hammoud Compliance and Grants Specialist USAID-funded DAWERR project ECODIT Beirut LLC

- I. Purpose The purpose of this solicitation is to receive proposals for the construction of a composting station for organic waste and a MRF for recyclables in Baskinta. Construction of the two facilities will happen in two phases phase 1 will include the construction of the MRF that is slated to start on March 24, 2025; phase 2 will include the construction of the composting station that is slated to start on July 1, 2025. The overall duration for construction works should start on March 24, 2025 and last until December 15, 2025.
- II. Offeror's Agreement with Terms and Conditions The completion of all RFP requirements in accordance with the instructions in this RFP and submission to ECODIT/DAWERR of a Proposal will constitute a proposal and indicate the Offeror's agreement to the terms and conditions in this RFP and any attachments hereto. ECODIT reserves the right to award a subcontract without discussion and/or negotiation; however, ECODIT also reserves the right to conduct discussions and/or negotiations, which among other things may require an Offeror to revise its proposal (technical and/or price). Issuance of this RFP in no way obligates ECODIT to award a subcontract, nor does it commit ECODIT to pay any costs incurred by the Offeror in preparing and submitting a proposal.
- **III. Index of RFP** This RFP is comprised of the following sections and appendices:

## **Sections of RFP**

Section 1 Proposal Instructions/Additional Information

Section 2 Description of Work and Services Requested

Section 3 Evaluation Criteria

Section 4 Special Provisions

## **Appendices**

Appendix A: Proposal Cover Letter

Appendix B1: Bill of Quantity – MRF

Appendix B2: Bill of Quantity – Composting Station

Appendix C: Method Statement – Outline

Appendix D1: Final Design Drawings – MRF

Appendix D2: Final Design Drawings – Composting station

Appendix E1: Project Specifications – MRF

Appendix E2: Project Specifications – Composting Station

Appendix F: QA/QC Procedures

Appendix G1: Environmental Mitigation and Monitoring Plan (EMMP) during

construction of the MRF

Appendix G2: EMMP during construction of the Composting Station

Appendix H: Geotechnical Investigation Report

All documents related to appendices are included in google drive folder here.

## IV. Composition of Proposal

Offeror shall submit Proposal for items detailed in Appendices B1 and B2, Bill of Quantity. The proposal will consist of Appendices A, B1 and B2, and C. Offeror must provide adequate and qualified staff for all works including Site Manager, Construction Manager, and Quality Assurance/Quality Control (QA/QC) Manager in addition to electrical and mechanical engineers. Offeror shall elaborate on Staff Members in its Detailed Method Statement, that will be submitted as part of the Technical Proposal. During implementation, any staff acting irresponsible in an unsafe manner shall be immediately terminated under the awarded subcontract.

Proposals may be accepted by ECODIT and executed as a subcontract without any discussions, or ECODIT may decide to open discussions as necessary to clarify any issues in the proposals. ECODIT also has the option to amend the solicitation as necessary prior to any Subcontract Award. ECODIT will notify and provide all offerors with any amendment pertaining to this RFP.

Proposed prices must be in USD, <u>exempted</u> of VAT. ECODIT Beirut LLC is exempt from paying VAT under license number EFF/2021/64 issued by the Ministry of Finance on 06/29/2020. ECODIT reserves the right to request a breakdown of the price and additional justification for items that are underbudgeted or overbudgeted by the offerors.

Offerors shall submit their proposals signed and stamped in hard copies.

#### SECTION 1 – PROPOSAL INSTRUCTIONS / ADDITIONAL INFORMATION

1. Offerors must submit <u>two sealed envelopes</u> divided as below and delivered to ECODIT Beirut LLC office in Habib Center 1<sup>st</sup> floor, Mirna Chalouhi, Sin el Fil under the attention of Mr. Jad Sakr:

#### i. Administrative & Technical Documents Envelope:

- All pages of the RFP signed and sealed including all appendices.
- Detailed Method Statement for the construction of Baskinta MRF and Composting Station (following the outline included in Appendix C) including a Work Plan (to be developed based on the BOQs included in Appendices B1 and B2).
- Hard copies of all eligibility documents.
- Technical documents including certificates, calculations, warranties if applicable.

#### ii. Financial Offer Envelope:

 Offeror shall submit proposed pricing in prescribed format found in Appendices B1 and B2 for all packages (structural/civil, architectural, mechanical, and electrical), based on final design drawings included in Appendices D1 and D2 and Project Specifications included in Appendices E1 and E2. The offeror shall write his/her prices (in US dollars) in letters and numbers with signature, stamp, and date on each page of the list of works specifications, required quantities, and individual and total prices.

- The total value of the works must be clearly indicated for each item separately, as well as the overall total, all in US dollars (fresh USD).
- Cover Letter on the Offeror's letterhead, signed by a person authorized to sign on behalf of the Offeror. Use the template in Appendix A.
- 2. **Bid Opening Session:** DAWERR will hold a bid opening session on **January 21**<sup>st</sup>, at **11:00 AM**, in ECODIT Beirut LLC's offices, in the presence of the Baskinta Mayor, a representative from Baskinta Municipal Solid Waste Management Committee, DAWERR's Chief of Party, DAWERR's Local Development Lead, DAWERR's Field coordinator, DAWERR's Compliance and Grants Specialist, DAWERR's Finance and Administration Manager and offerors' representatives. The bid opening session will be divided to two parts:
  - **Part 1**: DAWERR's Compliance and Grants Specialist will open the administrative and technical documents sealed envelopes and will read out loud the offeror's name and confirm eligibility of the application by ensuring that all requested documents have been provided.
  - **Part 2**: Once the offeror's eligibility has been confirmed, DAWERR's Compliance and Grants Specialist will open the financial offer envelopes and read out loud the offeror's name and their financial offer. The lowest price is not necessarily the determining factor for winning this award. DAWERR's Compliance and Grants Specialist will reread the evaluation criteria (see Section 3).
- 3. **Type of Subcontract**: ECODIT intends to issue a Fixed Unit Price Not-To-Exceed (NTE) Fixed Price Ceiling subcontract for construction work. The fixed unit prices or the NTE fixed price ceiling will not be subject to any increase during the implementation of construction works by the subcontractor. ECODIT will not allow any variation orders during implementation of construction works. The subcontractor shall submit invoices to ECODIT based on actual **executed** quantities substantiated with supporting documentation and following the QA/QC procedures included in Appendix F.
- 4. Payment terms: Deliverables and payment schedule will be included in the subcontract. Upon award, the subcontractor shall submit a Mobilization Plan corresponding to the first payment/mobilization payment under the subcontract (considered as upfront payment and will be deducted from subsequent payments). During implementation and following every payment request submitted by the construction subcontractor, ECODIT will review and issue a payment verification report including QA/QC approved documentation (refer to Appendix F for QA/QC Procedures). Based on the payment verification report, and unless the Subcontractor can provide a performance bond and a retention bond, ECODIT will pay to the construction subcontractor the amount invoiced and approved after deducting 15% as a retention and the mobilization payment or part of it. ECODIT will release two-thirds of the retention (or 10% of the total amounts invoiced and approved) upon completion of work/ after USAID issuance of completion verification and keep the remaining one- third (or 5% of the total amounts invoiced and approved) as financial guarantee during the defect liability period (12 months).
- 5. **Proposal Pricing validity**: Net 120 days from date of proposal submission

- 6. Offerors must fulfill the following **eligibility requirements**:
- Be classified in the second category and above of buildings and public works classification at the Ministry of Public Works and Transport<sup>1</sup>, and provide a proof of such classification;
- Be registered in the Commercial Registry with a valid registration, and provide a copy of registration showing validity period and expiration date (if any);
- Be registered with the Directorate of Value Added Tax (VAT) and provide a copy of the certificate of registration;
- Operate a non-bankrupt business and provide (1) a non-bankruptcy statement issued by the competent bankruptcy court, and (2) a statement of the Bidder that he/she is not under judicial liquidation, issued by the Commercial Court; both statements should be dated no more than six months before the deadline:
- Have a Professional Liability Insurance Policy with coverage for at least \$500,000 for any one claim and \$1,000,000 in the aggregate and provide a copy of it, or provide a signed Commitment letter to obtain such insurance prior to contract execution;
- Provide a signed Commitment letter to obtain a Contractor's All Risk (CAR) insurance policy, Contractor General Liability Insurance policy, Workers' Compensation Insurance (all-in-one or separate policies) prior to contract execution;
- Have implemented at least one similar project worth at least \$150,000 successfully in the past five years and provide relevant supporting documentation
- Have a Unique Entity Identifier (UEI) number (request a Unique Entity ID only without having to complete a full registration) which can be obtained here: <a href="https://sam.gov/content/entity-registration">https://sam.gov/content/entity-registration</a>. Provide the UEI number, or a signed Commitment letter to obtain UEI number if selected.

Interested bidders are required to express their interest and submit soft copies of eligibility documentation via email to Carla Hammoud <a href="mailto:chammoud@dawerr.org">chammoud@dawerr.org</a> with a copy to Jad Sakr at <a href="mailto:jsakr@dawerr.org">jsakr@dawerr.org</a> and Capricia Chabarekh at <a href="mailto:chabarekh@ecodit.com">chabarekh@ecodit.com</a> by January 13, 2025.

#### 7. Conflict of Interest

In accordance with FAR 9.505 the Offerors shall take all reasonable and legal means to (a) prevent the existence of conflicting roles that might bias subcontractor's judgment, and (b) prevent unfair competitive advantage. See <u>FAR 9.505</u> for additional details.

تصنيف فئة ثانية وما فوق من تصنيف مبانى وأشغال عامّة 1

## SECTION 2 – DESCRIPTION OF WORK AND SERVICES REQUESTED

This RFP concerns the construction works for the MRF and composting station in Baskinta municipality (Baabda District). DAWERR will support Baskinta municipality and its local community to develop sustainable composting value chains for organic waste and strengthening recycling value chains. DAWERR will train the local community on source separation of waste in three bins and assist the municipality to implement selective collection.

DAWERR (through construction contractors) will construct (1) a high-quality cost-efficient MRF for sorting/separating and preparing recyclable materials for reuse/sale and (2) a small-scale, low-tech, low-cost composting station for organic waste using the container composter technology - creating local demand for the compost produced for agricultural, landscaping, or other uses as soil conditioner/fertilizer supplement.

For the construction of the MRF, the Construction Contractor shall execute the following:

- 1. The earth works and foundation excavations.
- 2. The reinforced concrete works that include blinding concrete, foundations, tie beams, slab on grade, etc.
- 3. The steel works for block C hangar including painting and finishes.
- 4. Electrical installation including power, lighting and low current, networks, etc.
- 5. Mechanical installation including drainage and fire extinguishers, etc.

For the construction of the Composting Station, the Construction Contractor shall execute the following:

- 1. The earth works and foundation excavations.
- 2. The reinforced concrete works including blinding concrete, foundations, tie beams, channels and pits, slab on grade, channels, pits etc.
- 3. The steel works for block A hangar including painting and finishes as per the Engineer's drawings and specifications.
- 4. The parapet and steel works for the steel fence, the project's gates, etc.
- 5. Electrical installation including power, lighting and low current, networks, etc.
- 6. Mechanical installation including drainage and water supply networks, etc.
- 7. Landscaping works including the asphalting of the external yards, and the access road, construction of concrete edges and water channels for the access road etc.

The environmental requirements specified in the MRF BOQ and EMMPS are mandatory throughout the entire construction period, including the MRF and composting station phases, and should be priced accordingly.

Please also refer to Appendices B1, B2, C, D1, D2, E1 and E2.

The Construction Contractor will be expected to take possession of the site and begin construction upon receiving the order to proceed from ECODIT – see details in Exhibit 1.

ECODIT will arrange site visits for interested prospective bidders after two days of issuing this RFP. ECODIT will communicate by email the date and time of the site visits with the prospective bidders. DAWERR Field Coordinators will accompany each prospective bidder to the site separately.

EXHIBIT 1. CONSTRUCTION WORKS TO BE COMPLETED BY THE CONSTRUCTION CONTRACTOR AND OTHER ENTITIES IN BASKINTA FOR THE CONSTRUCTION OF THE MRF AND COMPOSTING STATION

Implementing Entity	Baskinta MRF – SOW	Baskinta Composting Station – SOW
Municipality	<ul> <li>The topographic surveys during the project implementation, where needed.</li> <li>The bulk excavation works, Cut &amp; Fill and the land preparation for the project's site following the designs and specification.</li> <li>The Construction of the retaining walls type wall A and the slope stability of the project area to the north side of the new MRF.</li> <li>Connecting the project to the public water supply and electrical power supply.</li> </ul>	<ul> <li>The topographic surveys during the project implementation, where needed.</li> <li>Excavation for the widening of the access road leading to the project's site as per the design drawings.</li> <li>The bulk excavation works, Cut &amp; Fill and the land preparation for the project's site following the designs and specification.</li> <li>The Construction of the retaining walls Type Wall A and the slope stability of the project area to the north side of the composting station.</li> <li>The dismantling of the existing hangar that is currently used as a sorting facility.</li> <li>Planting trees all around the project's fence.</li> <li>Connecting the project to the public water supply and electrical power supply.</li> <li>Municipality's contribution in construction works will be implemented under the design and supervision of DAWERR engineers.</li> </ul>
Construction Contractor	<ul> <li>The earth works and foundation excavations.</li> <li>The reinforced concrete works including blinding concrete, foundations, tie beams, slab on grade, etc.</li> </ul>	<ul> <li>The earth works and foundation excavations.</li> <li>The reinforced concrete works including blinding concrete, foundations, tie beams, channels and pits, slab on grade, etc.</li> </ul>
	<ul> <li>The steel works for block C hangar including painting and finishes.</li> <li>Electrical installation including power, lighting and low current, networks, etc.</li> </ul>	<ul> <li>The steel works for block A hangar including painting and finishes.</li> <li>The parapet and steel works for the steel fence, the project's gates, etc.</li> <li>Electrical installation including power, lighting and low current, networks, etc.</li> </ul>

Implementing Entity	Baskinta MRF – SOW	Baskinta Composting Station – SOW
	<ul> <li>Mechanical installation including drainage and fire extinguishers, etc.</li> </ul>	<ul> <li>Mechanical installation including drainage and water supply networks, etc.</li> </ul>
		<ul> <li>Landscaping works including the asphalting of the external yards, the access road, construction of the road edges and storm water channels, etc.</li> </ul>
		<ul> <li>Assist other DAWERR contractors, as needed, to connect and operate the wastewater treatment unit, solar PV system, container composters, fixed weighbridge scale etc.</li> </ul>
Other DAWERR Contractors	Two high cube shipping containers 40 FT (Container A & B)	• Fabrication (off-site) and installation (on- site) of three container composter 40' (Blocks C) with all related equipment.
		Installation of one Wastewater treatment unit.
		<ul> <li>Installation of one screening machine to screen the compost produced.</li> </ul>
		<ul> <li>Installation of one generator for the electrical power supply.</li> </ul>
		Installation of Solar Photovoltaic (PV) system for the Electrical power supply.

Tentative timeline for construction activities:

Construction of the two facilities will happen in two phases:

Phase 1 will include the construction of the MRF that is slated to start on March 24, 2025 Phase 2 will include the construction of the composting station that is slated to start on July 1, 2025

Overall construction works need to be completed by December 15, 2025.

Total estimated cost for the construction contractor's SOW for the MRF and composting station in Baskinta is in the range of \$250,000-\$300,000.

#### **SECTION 3 – EVALUATION CRITERIA**

All <u>eligible</u> proposals received in response to this solicitation will be evaluated by DAWERR based on evaluation criteria listed below. The subcontract shall be awarded based on the best value to DAWERR. The lowest price is not the determining factor for this award.

RATINGS					
Criteria	Weight				
Total Price	60				
Method Statement including Work Plan	40				
Total	100				

#### **SECTION 4 – SPECIAL PROVISIONS**

## 4.1 Source and Nationality

This RFP and resultant subcontract will be funded by USAID and will be subject to U.S. Government and USAID regulations. The authorized USAID geographic code for this RFP is Code 937. Code 937 is defined as the United States, the cooperating/recipient country, and developing countries other than advanced developing countries, and excluding prohibited sources. A list of developing countries, advanced developing countries, and prohibited sources is available in USAID's Automated Directives System, ADS 310 http://www.usaid.gov/policy/ads/300/310.pdf.

The following applies to this RFP and any resulting subcontract:

#### Definition

- i. **Cooperating Country:** "Cooperating country" means Lebanon.
- ii. **Source:** "Source" means the country from which a commodity is shipped to the cooperating country or the cooperating country itself if the commodity is located therein at the time of purchase. However, where a commodity is shipped from a free port or bonded warehouse in the form in which received therein, "source" means the country from which the commodity was shipped to the free port or bonded warehouse.
- iii. **Nationality**: "Nationality" refers to the place of incorporation, ownership, citizenship, residence, etc. of suppliers of this good and must fall under the 937 Code.
- iv. **Prohibited Source:** The Bidder may not supply any goods or services manufactured in or shipped from the following countries: Cuba, Iraq, Iran, Laos, Libya, North Korea, or Syria.

## 4.2 Inspection

ECODIT shall have reasonable time to inspect the work of the subcontractor anytime during the performance period of the subcontract based on the QA/QC Procedures (in Appendix F) as well as after handing over, and to reject acceptance if not conforming to the specifications of

the subcontract and offer. Recovery of the rejected item (s) shall be the sole responsibility of the subcontractor.

## 4.3 Insurances

Offerors must have a Professional Liability Insurance Policy with coverage for at least \$500,000 for any one claim and \$1,000,000 in the aggregate and provide a copy of it or provide a signed Commitment letter to obtain such insurance prior to subcontract execution. Offerors must have or provide a signed Commitment letter to obtain a Subcontractor's All Risk (CAR) insurance policy, Subcontractor General Liability Insurance policy, Workers' Compensation Insurance (all-in-one or separate policies) prior to subcontract execution. If Offerors cannot provide such Worker's Compensation Insurance, Offerors must purchase a Defense Base Act (DBA) Insurance upon execution of the subcontract (details will be provided in the subcontract).

## 4.4 Warranty

Warranty service and repair is required for the work under this RFP. The warranty coverage must be valid for 1 year after the delivery, installation, and acceptance of completed work/provisional handing over date, unless ECODIT otherwise specified in the technical specifications. As part of the Method Statement, Offerors shall describe their warranty and demonstrate how they will provide the services/construction works covered under the warranty period.

Also, the Subcontractor shall be responsible for sharing with ECODIT copies of all warranties provided by third party vendors. The cost of any construction, item or materials will be replaced at no cost to ECODIT. The only exception to this warranty is if an occurrence of destruction or defect occurs due to an act caused by either climate or an act beyond the control of any person. All replacements or repairs shall be provided within 10 days after notification to ECODIT.

If the Subcontractor chooses not to repair or replace any defect or damage, then the Subcontractor shall reimburse ECODIT for all cost incurred to perform the repair or replacement. If the Subcontractor will not reimburse any defect or damage, then ECODIT shall use the 5% retention to repair or replace any defect or damage. If the cost of defect/damage exceeds the 5% and the subcontractor is not reimbursing the difference and/or is not cooperating with ECODIT, then any failure of the Subcontractor shall be reported to the Government of Lebanon's Department of Justice for review, consideration, and enforcement. All fines and/or costs resulting from this referral will be the whole responsibility of the Subcontractor.

## APPENDIX A - PROPOSAL COVER LETTER

[On Letterhead]

TO: DAWERR Procurement Department Ladies and Gentlemen:

We, the undersigned, offer to provide the RFP - \*project title and RFP #\* Construction of composting station for organic waste and Materials Recovery Facility (MRF) for recyclables in Baskinta \* in accordance with your Request for Proposal dated and our enclosed Proposal.

Our proposal of \$\\$ shall be binding upon us subject to any revisions resulting from contract negotiations, up to expiration of the validity period of 120 days of the proposal, i.e., <>.

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

Yours Sincerely,

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

Address, email and Phone No.

# APPENDIX B1 - BILL OF QUANTITY

# APPENDIX B2 - BILL OF QUANTITY

Shared via google drive link.

## APPENDIX C - METHOD STATEMENT - OUTLINE

Contractor shall submit one Method Statement for the construction works (MRF and Composting Station

- A. Site Access
- **B.** Protection of Other works
- C. Health and Safety Plan refer to Appendix G
- D. QA/QC Protocol including implementation method.
- E. Workplan
  - A timeline for completing the Construction Works for Baskinta Material recovery facility and Composting Station over a 9-month period starting March 24, 2025 till December 15 2025.

#### F. Staff Members

- o Key Personnel
- o Other Personnel
- o Organizational chart

#### G. Mobilization

- o Equipment required on each site
- o Labors on site
- o Materials data sheets

## H. Material procurement and storage

- I. Construction Works contractor shall specify if any of the works will be subcontracted to any other party.
  - I.1 Electrical installation
    - Scope
    - o Method for:
      - Power supply installation.
      - Lighting system installation.
      - Trenches and manholes.
      - Lightning and earthing (preferably to be subcontracted).
      - Panel boards.
    - o Group of labors required
    - o Reference documents
    - o Description of sequence
    - Testing
    - o Machineries and tools
    - o Safety

#### I.2 Mechanical installation.

- o Scope
- Method for:
  - Drainage and rainwater
  - Water supply
  - Trenches and manholes
  - Air conditioning
  - Firefighting
- Group of labors required
- Reference documents.
- Testing
- o Machineries and tools
- o Safety

#### I.3 Excavation & Earth Works.

- o Scope
- Method of excavation for building foundations and cleaning of the site and removing of residual materials to an approved dumping area.
- Group of labors required.
- o Reference documents.
- o Machineries and tools.
- o Safety.

## I.4 Filling - backfilling & Base coarse

- Scope
- o Method for spreading and compacting backfilling and base coarse layers.
- o Group of labors required.
- Reference documents
- Machineries and tools
- Safety.

## I.5 Reinforced concrete

- Scope
- Method for:
  - Plain concret\e works
  - Reinforcement Concrete Footings
  - Breaking into pipes and Installation of valves, fittings, and accessories
  - Reinforcement Concrete walls and columns.
  - Reinforcement Concrete slab on grade and tie beams
  - Reinforcement Concrete slabs, beams.
  - Reinforcement Concrete for pits and channels.
  - Reinforcement Concrete for the protection layer of the water proofing system.
  - Concrete Curing.
  - Concrete repairing.
  - Water proofing to all concrete surfaces in contact with soil where required.
- o Group of labors required.
- Reference documents
- o Testing

- Machineries and tools
- Safety

#### I.6 Steel Works:

- o Scope
- Method for installation of:
  - Steel Hangars.
  - Steel fence.
  - Steel gate.
- Group of labors required.
- Reference documents.
- o Testing.
- Machinery and tools.
- o Safety.

## I.7 Finishing works

- o Scope
- Method for:
  - Masonry works.
  - Plastering works
  - Tilling works
  - Painting works internal and external.
  - Epoxy Paints to Floor Surfaces.
  - Waterproofing system.
  - Doors and windows
- Group of labors required.
- o Reference documents
- o Machineries and tools
- o Safety

## I.8 Landscaping

- o Scope
- Method for:
  - Base coarse.
  - Asphalting.
  - Cyclopean concrete walls for the fence and the road edges.
- o Group of labors required.
- Machineries and tools
- o Reference documents
- o Safety

## J. Substantial Completion

## K. Warranty

• Warranty plan including maintenance/repair of any construction works.

#### L. Handing Over

- o Testing & Commissioning including description of minor and major work components.
- o Snag list implementation.

# $\label{eq:appendix} \textbf{APPENDIX D1 - FINAL DESIGN DRAWING-MRF}$ $\label{eq:appendix} \textbf{APPENDIX D2 - FINAL DESIGN DRAWING-Composting Station}$

Shared via google drive link.

# APPENDIX E1 - PROJECT SPECIFICATIONS – MRF APPENDIX E2 - PROJECT SPECIFICATIONS – Composting Station

Shared via google drive link.

APPENDIX F - QA/QC PROCEDURES

Submission	Frequency	Prepared by	Validated by	Approved by	Contract	Record Reference
Project organizational chart	Contract award/ Beginning of the project	Local Development Lead	Construction manager	Chief of Party	LDL will prepare the project organizational chart and will specify the human resources needed to develop the project.  The Organizational chart will be adapted to every Project under DAWERR	Project Organizational chart
Mobilization						
Mobilization Plan (including Schedule)	Beginning of the project	Contractor	Site supervisor/ Field Coordinator	Construction manager	As per contract requirements	Document submittal <b>DS Form</b>
Submittals						
Material submittal*	As per schedule	Contractor	Site supervisor/ Field Coordinator	Construction manager/ Other Engineering Specialists	As per contract requirements	Material Submittal MS Form
Shop Drawing submittal*	As per schedule	Contractor	Site supervisor/ Field Coordinator	Construction manager/ Specialist	As per contract requirements	Shop drawing submittal SDS Form

Submission	Frequency	Prepared by	Validated by	Approved by	Contract	Record Reference
As-Built Submittal*	End of the project	Contractor	Site supervisor/ Field Coordinator	Construction manager/ Specialist	As per contract requirements	As built submittal AsBS Form
Documents Submittal*	As per schedule/ End of the project	Contractor	Site supervisor/ Field Coordinator	Construction manager/ Specialist	As per contract requirements	Documents submittal DS Form
Site operations & reports						
Work plan	Beginning of the project	Contractor	Site supervisor/ Field Coordinator	Construction manager	As per contract requirement	Documents submittal <b>DS Form</b>
Method Statement	Beginning of the project	Contractor	Engineering Specialists	Construction manager	As per contract requirement	Documents submittal DS Form
Kick Off Meeting	Beginning of the project	Site supervisor/ Field Coordinator		Attendees	After the site meeting the Site supervisor will issue the minutes of meeting and will share it with all concerned parties at the end of the meeting for approval.	Minutes of Meeting MOM Kick Of Form
Minutes of Meeting	As needed	Site supervisor/ Field Coordinator		Attendees	After each site meeting the Site supervisor will issue the minutes of meeting and will share it with all concerned parties at the end of the meeting for approval.	Minutes of Meeting MOM Form
Site visit report	As needed	Field Coordinator/ Environmenta l officer (ECODIT Liban)/	-	-	Each party visiting the site will prepare a site visit report and will share it with other parties.	-

Submission	Frequency	Prepared by	Validated by	Approved by	Contract	Record Reference
		DAWERR engineer/ USAID A&E firm			Comments will be included in the MOM of the next meeting for follow up.	
QA/QC						
Inspection Request (IR)	As needed	Contractor	Site supervisor/ Field Coordinator	Engineering Specialist	As per contract requirements	Inspection Request IR Form
Non-conformity report (NCR)	As needed	Site supervisor/ Field Coordinator	Engineering Specialist	Construction manager	As needed	NCR
Modifications/Changes						
Claims	When needed	Contractor	Engineering Specialist/ Manager	Chief of Party	As per contract requirement	Letter (External Document)
Request for Extension of time	When needed	Contractor	Engineering Specialist/ Manager	Chief of Party	As per contract requirement	Letter for extension of time (External Document)
Payments						

Submission	Frequency	Prepared by	Validated by	Approved by	Contract	Record Reference		
Quantity surveying preparation	When needed	Contractor	Engineering Specialist	Construction manager	As per contract requirement	Bill of Quantity and associated quality control reports on billed items		
Request for payment review	When needed	Engineering Specialist	Construction manager, then Supply Chain and Grants Specialist	Chief of Party	Submitted quantities are checked by Engineering Specialist(s), corrected as needed, and forwarded to the Construction Manager. The Supply Chain and Grants Specialist then validates quantities, unit rates, multiplications and totals.  COP provides final approval of the above and of payment in order to be forwarded to accounting/ finance for payment processing.	Bill of Quantity and associated quality control reports on billed items		
Interim payment log/Summary	When needed	Procurement Officer	Supply Chains and Grants Specialist	Finance Manager and COP	As per contract requirement	Interim payment log		
Handing over/Final acceptance	Handing over/Final acceptance							
Request for provisional handing over	When construction works are completed	Contractor	Site supervisor/ Field coordinator	Construction manager	As per contract requirement	External Letter for provisional handing over		

Submission	Frequency	Prepared by	Validated by	Approved by	Contract	Record Reference
Provisional Handing Over	When needed	Site supervisor/ Field coordinator	Engineering specialists	Construction manager	As per contract requirement	MOM - Handing Over form + Punch List
Request for final handing over	After snag Lists clearance	Contractor	Construction manager	Chief of Party	As per contract requirement	External - Letter for final handing over
Final Handing Over	End of the project	Site supervisor	Construction manager	Chief of Party	As per contract requirement	MOM - Handing Over form + Snag List

## APPENDIX G1 – EMMP DURING CONSTRUCTION FOR BASKINTA MRF

## APPENDIX G2: EMMP DURING CONSTRUCTION FOR BASKINTA COMPOSTING STATION

Shared via google drive link.

## APPENDIX H – GEOTECHNICAL INVESTIGATION REPORT

Shared via google drive link.