**Tender for Demolition Works, Construction Works and Other Civil Works, the Construction of an Aviary the Installation of Sun Pipes and Building Monitoring Sensors as part of ERDF Project ERDF.05.121 – Wildlife Rehabilitation Centre - ERDF.05.0121 – Tender 008**

## TENDERER’S TECHNICAL OFFER (Note 3)

***N.B. The Key Experts Form (including Self-declaration form for Key Experts and the Statement re Exclusivity and Availability) are under Note 2A whereas the Literature is under Note 2B. Any other components of the technical offer are under Note 3.***

In response to Section 1, Article 7 (C) (i), Prospective bidders are requested to submit a Technical Offer in response to the specifications outlined in Section 4 of the Same tender Document. This shall include a method statement about how the bidder intends to carry out the works. In this regard, bidders are invited to use the present document to provide the required information, and serve as a checklist of all the documents they intend to submit. Without prejudice, nothing precludes bidders from using an alternative document, provided all the information requested below is provided. However, the submission shall be in a structured form and is to be in the same sequence as provided for ease of reference and evaluation

# NB – All supporting documents necessary (including the manufacturer’s Technical Literature) are listed in the Literature List. Bidders are advised to submit any Technical Literature with the offer.

**Technical Offer in respect of Lot 1**

**Question 1**

**How does the bidder envisage to carry out the works envisaged in the tender document?**

NB: Bidders should provide a brief methodology about how they intend to carry out the different works identified in Section 4.2 Lot 1 – Civil Works of the tender document. The methodology shall also look into the drafting of the different method statements, how they will inform operations and the safety measures they will be taking.

**Question 2**

**How does the bidder envisage to ensure quality control in line with the different standards identified in the Technical Specifications?**

NB: Bidders should outline how they will be ensuring the quality of the works to be carried out, in particular, but not limited to, the quality of the concrete used and the laying of such concrete. Inter alia they should advise on the role of their key experts, including the architect, the engineer as well as any external certifying bodies.

**Question 3**

Fill in the following table

|  |  |  |
| --- | --- | --- |
| Item | Reference in the Tender Document | Reference/s in the Literature |
| Independent Body\* responsible for the Testing of Concrete Quality | Section 4, Subsection 4.2.2, Specification 4, Clause 4.63 |  |
| Competent Person in Health and Safety | Section 4, Subsection 4.2 Article 4.1.3 |  |
| Curing membranes | Section 4, Subsection 4.2.2, Specification 4, Clause 4.45 |  |
| proprietary surface hardener and dust inhibitor | Section 4, Subsection 4.2.2, Specification 4, Clause 4.59 |  |
| poxy injection material | Section 4, Subsection 4.2.2, Specification 8, Clause 8.2 |  |
| damp proofing material | Section 4, Subsection 4.2.2, Specification 10. |  |
| thermal insulation material | Section 4, Subsection 4.2.2, Specification 11. |  |
| light pipes/sun pipes/sun tunnels | Section 4, Subsection 4.2.2, Specification 12 |  |

\* Independent body shall mean not forming part of the same undertaking in line with EU Recommendation 2003/361/EC.

|  |  |
| --- | --- |
| **Name**: |  |
| **Signature**: |  |
| **Date**: |  |

**Technical Offer in respect of Lot 2**

**Question 1**

**How does the bidder envisage to carry out the works envisaged in the tender document?**

NB: Bidders should provide a brief methodology about how they intend to carry out the different works identified in Section 4.2 Lot 2 – Works on the Aviary of the tender document. The methodology shall also look into the drafting of the different method statements, how they will inform operations and the safety measures they will be taking.

**Question 2**

**How does the bidder envisage to ensure quality control in line with the different standards identified in the Technical Specifications?**

NB: Bidders should outline how they will be ensuring the quality of the works to be carried out, in particular, but not limited to, the quality of the concrete used and the laying of such concrete. Inter alia they should advise on the role of their key experts, including the architect.

**Question 3**

Fill in the following table

|  |  |  |
| --- | --- | --- |
| Item | Reference in the Tender Document | Reference/s in the Literature |
| Mesh | Section 4, Subsection 4.3, Specification 2 |  |
| Hot dip galvanized corrosion protection for the aviary | Section 4, Subsection 4.3, Specification 1, Article 1.25 |  |

|  |  |
| --- | --- |
| **Name**: |  |
| **Signature**: |  |
| **Date**: |  |

**Technical Offer in respect of Lot 3**

**Question 1**

**How does the bidder envisage to carry out the works envisaged in the tender document?**

NB: Bidders should provide a brief methodology about how they intend to carry out the different works identified in Section 4.2 Lot 3 – Installation of Building Monitoring System of the tender document. The methodology shall also look into the drafting of the different method statements, how they will inform operations and the safety measures they will be taking.

**Question 2**

**How does the bidder envisage to ensure quality control in line with the different standards identified in the Technical Specifications?**

NB: Bidders should outline how they will be ensuring the quality of the works to be carried out, in particular, but not limited to, the quality of the installation of the sensors. Inter alia they should advise on the role of their key experts, including the architect and the qualified engineer. #

**Question 3**

Fill in the following table

|  |  |  |
| --- | --- | --- |
| Item | Reference in the Tender Document | Reference/s in the Literature |
| Galvanic Sensors installed within Cores | Section 4, Subsection 4.4, Article 4.4.2.6 |  |
| Resistive Sensors installed within Cores | Section 4, Subsection 4.4, Article 4.4.2.6 |  |
| Temperature Sensor | Section 4, Subsection 4.4, Article 4.4.2.3 |  |
| Embeddable electrodes | Section 4, Subsection 4.4, Article 4.4.2.4 |  |
| Strain Gauges | Section 4, Subsection 4.4, Article 4.4.2.1 |  |
| Accelerometer | Section 4, Subsection 4.4, Article 4.4.2.2 |  |
| data logger | Section 4, Subsection 4.4, Article 4.4.2.7 |  |
| Computer and peripherals | Section 4, Subsection 4.4, Article 4.4.3 |  |

**A Warranty/Guarantee Declaration in Section 4 Sub-Section 4.4, Article 4.4.6 Warranties**

The Undersigned, duly authorised to represent \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, hereby confirm that this bidder is providing a warranty, inclusive of parts and labour, as follows:

* The sensors, metering equipment, wiring and ancillary equipment is warranted to be free from defects in material and workmanship for a minimum period of five (5) years.I am attaching the manufacturer’s warranty as part of the literature submitted with this technical offer.
* The Computer is be covered with a five year warranty covering BOTH parts and labour.
* The installation is covered by a five (5) year warranty on its good workmanship, quality of connectors used and that comforts to IET regulations.

Bidder MAY opt to increase such a warranty beyond the indicated minima.

This Guarantee/Warranty forms an integral part of the Contract entered into by the Contractor and the Contracting Authority for the implementation of the tender in caption.

|  |  |
| --- | --- |
| **Name**: |  |
| **Signature**: |  |
| **Date**: |  |

The Bidder is to fill in the following Gantt Chart to indicate when and how each activity is to be carried out. Within the five month period allowed as Execution of the Contract as per Special Conditions. Bidders are asked to indicate sub-tasks as necessary. The Gantt Chart is split in Weeks, and covers 26-weeks

| **Lot 1** | **Weeks** | | | | | | | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** |
| **Excavation and Clearing Works** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Removal of steel elements and adjustment of all defects in floor including any reinstatment of shallow openings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Carefully demolish existing reinforced concrete suspended slabs and beams, including concrete screed, torba, etc. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Carefully demolish existing reinforced concrete ground slabs. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dismantling of limestone masonry stone blockwork |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Excavaton in made-up ground to required levels for casting of 150mm thick ground slab and binding, including carting away and disposal of material. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trenching within existing concrete slab in depth not exceeding 300mm to lay pipes to connect to sewage treatment plant and infill of concrete surrounding pipes. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trenching within existing road in depth not exceeding 1000mm to lay pipes to connect to sewage treatment plant, infill of concrete surrounding pipes and re-applying of one layer of hot asphalt,. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Repair works** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Removal of spalled concrete, carefully clean any existing concrete surfaces, treat exposed steel reinforcement with specified approved material and apply repair mortar, including any primer, to bring concrete element to original section in order to receive finishes. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply and install structural strengthening steel mesh and grout to external faces of existing concrete elements |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Concrete and reinforcing steel works** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Casting of cast-in situ concrete blinding C15/20 50mm thick. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply, place and tie steel reinforcement for concrete ground slab and suspended slabs. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Casting of cast-in situ concrete ground slab in concrete grade C35/45 150mm thick. Surface in powerfloat finish. *(External area Block A)* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Casting of cast-in situ concrete ground suspended slab in concrete grade C35/45 200mm thick. Surface in bull-float finish. *(Inside Block A & outbuildings)* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Casting of cast-in situ concrete suspended roof slabs in concrete grade C35/45 200mm thick. Surface in bull-float finish. *(Inside Block A & outbuildings)* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Casting of cast-in situ concrete suspended slabs in concrete grade C35/45 250mm thick Surface in bull-float finish. *(for outbuildings)* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Casting of cast-in situ concrete suspended beams in concrete grade C35/45. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Casting of cast-in situ concrete topping on prestressed precast slabs in concrete grade C35/45 including shear key and surround grouting. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Casting of water spouts in concrete grade C35/45. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cast roof screed laid to falls in concrete grade C35/45, containing polypropylene fibres and detailing of expansion joints. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Prestressed Concrete Planks** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply and lay in place precast prestressed concrete slabs. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Masonry works** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction only of 230mm thick limestone masonry stone blockwork. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Formation of small opening in the form of doors and/or windows within existing masonry skin fabric. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Formation of large opening in the form of doors and/or windows within existing masonry skin fabric. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Miscellaneous** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply and lay 3.5mm thick torch welded bituminious waterproofing membrane to top of concrete slab. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50mm expanded polystyrene (jablo) insulation panels on roof as per specifications. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Installation of lightpipes. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply and install uPVC drain pipe |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply and install uPVC pipe work to serve as sleeve for electrical cores within trench |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply and install uPVC drain pipe from roof level to ground floor for rainwater surface runoff |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply and install PPR pipe work to serve as mains water supply within trench |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Install gutter within existing ground slab |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lay torba laid to falls |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Formation of manholes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Aviary Civil Works** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clearing and excavation of existing fill and rock |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lay Type 1 fill compacted material |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Casting of cast-in situ concrete blinding |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Casting of cast-in situ concrete ground slab. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply, place and tie steel reinforcement for concrete ground slab. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction only of 230mm thick limestone masonry stone blockwork, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Formation of floor drain to sump |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construct only of 230mm masonry stone blockwork wall 1m high above ramp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Formation of sump as per detail, including concrete floor slab, roof and walls. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| **Lot 2** | **Weeks** | | | | | | | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** |
| **Steel work** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply, lay and install Steel Structure |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mesh |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply and install aviary mesh |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| **Lot 3** | **Weeks** | | | | | | | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** |
| **Installation of Sensors** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Galvanic Sensors installed within Cores |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Resistive Sensors installed within Cores |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Temperature Sensor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Embeddable electrodes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Strain Gauges |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Accelerometer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Data logger |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Computer and peripherals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Web interface |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Checklist of documents to be provided

|  |  |
| --- | --- |
| All Lots |  |
| Tender Form and Tenderer’s Declaration |  |
| Technical offer |  |
| Self Declaration Form |  |
| Financial Bid Form |  |
| Statement on Conditions of Employment |  |
| Power of Attorney (if applicable) |  |
| Information re Joint Venture/Consortium |  |
| European Single Procurement Document (ESPD) |  |
| Key Experts Form, |  |
| Key Experts Statement of Exclusivity and Availability Form |  |
| Key Experts’ Self Declaration Form |  |

|  |  |
| --- | --- |
| **Lot 1** |  |
| Literature curing membranes |  |
| Literature of the proprietary surface hardener and dust inhibitor |  |
| Literature of the epoxy injection material |  |
| Literature of the damp proofing material |  |
| Literature of the thermal insulation material |  |
| Literature of the light pipes/sun pipes/sun tunnels |  |
| Proof that the Economic Operator, an employee or a Sub-contractor is licensed as a mason in terms of the Building Regulations Act |  |
| Proof that the Economic Operator, an employee or a Sub-contractor is registered as a Demolition Contractor in terms of the Avoidance of Damage to Third Party Property Regulations (2019) |  |
| Document proving services of an Architect in terms of Periti Act (Chapter 390) |  |
| Document proving services of a warranted Engineer in terms of the Engineering Profession Act (Chapter 321). |  |
| Lot 2 |  |
| Literature of the mesh |  |
| Literature on Hot dip galvanized corrosion protection for the aviary |  |
| Document proving services of an Architect in terms of Periti Act (Chapter 390) |  |
| Lot 3 |  |
| Literature of the Galvanic Sensors installed within Cores |  |
| Literature of the Resistive Sensors installed within Cores |  |
| Literature of the Temperature Sensor |  |
| Literature of the Embeddable electrodes |  |
| Literature of the Strain Gauges |  |
| Literature of the Accelerometer |  |
| Literature of the data logger |  |
| Literature of the computer and peripherals |  |
| Document proving the availability of the services of an Architect in terms of the Periti Act (Chapter 390) |  |
| Documents proving the availability of the services of qualified engineer having an MQF/EQF level 6 level qualification or higher in Engineering, with proven knowledge in the installation of Building Monitoring Sensor Systems. |  |
| Manufacturer’s warranty confirming that the sensors, metering equipment, wiring and ancillary equipment shall be warranted to be free from defects in material and workmanship for a minimum period of five (5) years. |  |