



**EIGHTH AMENDMENT TO RESTATED AGREEMENT BETWEEN BROWARD COUNTY AND LIFTECH CONSULTANTS, INC., FOR CONSULTANT ENGINEERING SERVICES FOR CRANES (RLI # N1038712R1)**

This Eighth Amendment (“Amendment”) is between Broward County, a political subdivision of the State of Florida (“County”), and Liftech Consultants, Inc., a California corporation (“Consultant”) (each a “Party” and collectively referred to as the “Parties”).

**RECITALS**

A. The Parties entered into the Restated Agreement between Broward County and Liftech Consultants, Inc., for Consultant Engineering Services for Cranes, dated April 8, 2016, which was amended by a First Amendment, dated March 14, 2017; a Second Amendment, dated June 12, 2018; a Third Amendment, dated June 10, 2019; a Fourth Amendment, dated February 25, 2020; a Fifth Amendment, dated March 10, 2021; a Sixth Amendment, dated June 1, 2021; and a Seventh Amendment, dated August 22, 2023 (collectively, as amended, the “Restated Agreement”).

B. The Parties desire to further amend the Restated Agreement to provide for additional meetings, extended project management, extended construction review, extended on-site construction support services related to existing crane upgrades and crane rail infrastructure, and to extend the term of the Restated Agreement from December 31, 2025, to May 31, 2028.

C. This Amendment adds additional compensation and reallocates unused funds across completed phases and tasks, resulting in an increase of \$2,385,083.20 in Maximum Amount Not-to-Exceed compensation, a reduction of \$137,821.00 in Lump Sum compensation, and an increase of \$50,000.00 in Optional Services. The compensation for the additional work adds a total of \$2,297,262.20 to the Restated Agreement, increasing the total amount of the Restated Agreement from \$21,033,121.00 to \$23,330,383.20.

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. The above Recitals are true and correct and are incorporated herein by reference. All capitalized terms not expressly defined within this Amendment shall retain the meaning ascribed to such terms in the Restated Agreement.
2. Unless otherwise expressly stated herein, amendments to the Restated Agreement made pursuant to this Amendment are indicated herein by use of strikethroughs to indicate deletions and underlining to indicate additions. Except as modified herein, all remaining terms and conditions of the Restated Agreement shall remain in full force and effect.

3. Article 5 of the Restated Agreement is amended as follows:

**ARTICLE 5. COMPENSATION AND METHOD OF PAYMENT**

5.1 AMOUNT AND METHOD OF COMPENSATION

5.1 AMOUNT AND METHOD OF COMPENSATION

5.1.1 Maximum Amount Not-To-Exceed Compensation. Compensation to Consultant for the performance of Basic Services and attendance at meetings and site visits in the U.S. and abroad at site of crane manufacturer for Phase 2 identified in Exhibits A and A-1 as payable on a "Maximum Amount Not-To-Exceed" basis, and as otherwise required by this Agreement, shall be based upon the Salary Costs as described in Section 5.2 up to a Maximum Amount Not-To-Exceed of ~~Five Hundred Thirty-eight Thousand Six Hundred Seventeen and 79/100~~ Four Hundred Eighty-two Thousand Five Hundred Ninety-eight and 49/100 Dollars (~~\$538,617.79~~ 482,598.49). The Maximum Amount Not-To-Exceed compensation of ~~Five Hundred Thirty-eight Thousand Six Hundred Seventeen and 79/100~~ Four Hundred Eighty-two Thousand Five Hundred Ninety-eight and 49/100 Dollars (~~\$538,617.79~~ 482,598.49) shall be paid out up to a maximum for each task in accordance with the percentage amount as follows:

<b>Project Phase 2</b>	<b>Fee%</b>	<b>Fee Amount/Task</b>
Exhibit A:		
Task 1—New Cranes Procurement	<del>35.25%</del>	<del>\$189,888.00</del>
	<u>32.83</u>	<u>158,429.84</u>
Task 2—Upgrades to Existing Cranes	<del>14.19%</del>	\$76,407.79
	<u>15.83</u>	
Task 3—Upgrades to Landside Infrastructure, Tasks 3.8 and 3.9	<del>46.30%</del>	<del>\$249,385.00</del>
	<u>46.59</u>	<u>224,823.86</u>
Exhibit A-1:		
Task 3—Revise 100% Design Documents for Electrical Infrastructure	<del>4.26%</del>	\$22,937.00
	<u>4.75</u>	
	=====	=====
	100%	<del>\$538,617.79</del>
		<u>482,598.49</u>

Compensation to Consultant for the performance of Construction Support Services identified in Exhibit A, Phase 3 Task 1, and Basic Services identified in Exhibit A-2, as payable on a "Maximum Amount Not-To-Exceed" basis, and as otherwise required by this Agreement, shall be based upon the Salary Costs as described in Section 5.2 up to a Maximum Amount Not-To-Exceed of ~~Ten Million Two Hundred Fifty-six Thousand Six~~

~~Hundred Forty-four~~ Nine Million Nine Hundred Seventy-three Thousand Eight Hundred Sixty-seven and 99/100 Dollars (\$10,256,644.00 9,973,867.99). The Maximum Amount Not-To-Exceed compensation of ~~Ten Million Two Hundred Fifty-six Thousand Six Hundred Forty-four~~ Nine Million Nine Hundred Seventy-three Thousand Eight Hundred Sixty-seven and 99/100 Dollars (\$10,256,644.00 9,973,867.99) shall be paid out up to a maximum for each task in accordance with the percentage amount as follows:

<b>Project Phase 3</b>	<b>Fee%</b>	<b>Fee Amount/Task</b>
Exhibit A:		
Task 1 – Construction Support Services	<del>90.63%</del>	<del>\$9,295,085.00</del>
	<u>90.76</u>	<u>9,051,945.19</u>
Exhibit A-2:		
Task 2 – Crane Construction Support Services (Tasks 2.10.3B, 2.10.4B, 2.10.6, 2.10.7)	<del>9.37%</del>	<del>\$961,559.00</del>
	<u>9.24</u>	<u>921,922.80</u>
	=====	=====
	100%	\$10,256,644.00
		<u>9,973,867.99</u>

For Basic Services identified in Revised Exhibit A-6, Phase 4 as payable on a “Maximum Amount Not-To-Exceed” basis, compensation to Consultant shall be based upon the Salary Costs as described in Section 5.2 up to a maximum not-to-exceed amount of ~~One Hundred Twenty Thousand Sixty-nine Thousand One Hundred Thirty-two and 39/100 Dollars (\$120,000.00 69,132.39)~~.

<b>Project Phase 4</b>	<b>Fee %</b>	<b>Fee Amount/Task</b>
SP-4 Relocation from Berth 31 to Berth 30	100%	<del>\$120,000.00</del> <u>69,132.39</u>

For Basic Services identified in Revised Exhibit A-6, Phase 5 as payable on a “Maximum Amount Not-To-Exceed” basis, compensation to Consultant shall be based upon the Salary Costs as described in Section 5.2 up to a maximum not-to-exceed amount of ~~One Million Two Hundred Fifty-eight Thousand Seven Hundred Ninety two and 21/100 Three Million Eight Hundred Eight Thousand Seven Hundred Two and 21/100 Dollars (\$1,258,792.21 3,808,702.21)~~.

<b>Project Phase 5</b>	<b>Fee %</b>	<b>Fee Amount/Task</b>
Crane Upgrades & Painting SP-1 through SP-7, P-2, and MHC-1 ( Includes Remaining NTE Amounts for Phase 2, Task 2)	100%	<del>\$1,258,792.21</del> <u>3,808,702.21</u>

For Basic Services identified in Revised Exhibit A-6, Phase 6 as payable on a "Maximum Amount Not-To-Exceed" basis, compensation to Consultant shall be based upon the Salary Costs as described in Section 5.2 up to a maximum not-to-exceed amount of ~~One Million Eight Hundred Thirty five Thousand Six Hundred Four~~ One Million Four Hundred Sixty-one Thousand Eight Hundred Thirty and 17/100 Dollars (\$~~1,835,604.00~~ 1,461,830.17).

<b>Project Phase 6</b>	<b>Fee %</b>	<b>Fee Amount/Task</b>
Procurement of SP-11 through SP-13	100%	<del>\$1,835,526.00</del> <u>1,461,830.17</u>

For Basic Services identified in Revised Exhibit A-6, Phase 7 as payable on a "Maximum Amount Not-To-Exceed" basis, compensation to Consultant shall be based upon the Salary Costs as described in Section 5.2 up to a maximum not-to-exceed amount of Five Hundred Ninety-eight Thousand Five Hundred Thirty-one and 95/100 Dollars (\$598,531.95).

<b><u>Project Phase 7</u></b>	<b><u>Fee %</u></b>	<b><u>Fee Amount/Task</u></b>
<u>Landside Infrastructure Upgrades</u>	<u>59.38%</u>	<u>\$355,392.14</u>
<u>Construction Support Services</u>	<u>40.62%</u>	<u>\$243,139.81</u>
	<u>=====</u>	<u>=====</u>
		<u>\$598,531.95</u>

Consultant shall perform all services designated as Maximum Amount Not-To-Exceed set forth herein for total compensation in the amount of or less than that stated above.

5.1.2 Lump Sum Compensation. Compensation to Consultant for the performance of all Basic Services identified in Exhibits A, A-1, A-2, and A-4, and Revised Exhibit A-6 as payable on a "Lump Sum" basis, and as otherwise required by this Agreement, shall be not more than the total lump sum amounts as follows:

...

County agrees to pay Consultant, as compensation for performance of all Basic Services related to Exhibits A, A-1, A-2, and A-4, and Revised Exhibit A-6, for Phase 2, Tasks 1 - 3, including Phase 2 Addition, Phase 2 Addition 2, and Phase 2 Task 3.11 and Task 3.12, that are required under the terms of this Agreement, a lump sum of ~~Four Million Two Hundred Sixty-nine Thousand Four~~ Four Million One Hundred Thirty-one Thousand One Hundred Eighty-three and 00/100 Dollars (\$~~4,269,004.00~~ 4,131,183.00).

The lump sum compensation of ~~Four Million Two Hundred Sixty-nine Thousand Four~~ Four Million One Hundred Thirty-one Thousand One Hundred Eighty-three and 00/100 Dollars (~~\$4,269,004.00~~ 4,131,183.00) shall be paid out in accordance with the percentage amount set forth below:

<b>Project Phase 2</b>	<b>Fee%</b>	<b>Fee Amount/Task</b>
Exhibit A:		
Task 1 – New Cranes Procurement, Tasks 1.1 – 1.8	<del>22.39%</del> <u>23.14</u>	\$956,000.00
Task 2 – Upgrades to Existing Cranes, Tasks 2.1 – 2.8	<del>20.12%</del> <u>17.46</u>	<del>\$858,986.00</del> <u>721,165.00</u>
Task 3 – Upgrades to Landside Infrastructure, Tasks 3.1 – 3.7, 3.11, and 3.12, Phase 2 Addition, and Phase 2 Addition 2	<del>51.47%</del> <u>53.18</u>	\$2,197,116.00
Exhibit A-1:		
Task 2 – Feasibility Study	<del>1.62%</del> <u>1.67</u>	\$69,000.00
Exhibit A-4:		
Task 3 – Upgrades to Landside Infrastructure Tasks 3.13 – 3.14	<del>4.40%</del> <u>4.55</u>	\$187,902.00
	=====	=====
	100%	<del>\$4,269,004.00</del> <u>4,131,183.00</u>

...

5.1.3 Optional Services. County has established a Maximum Amount Not-To-Exceed of ~~Five Hundred Thousand~~ Five Hundred Fifty Thousand and 00/100 Dollars (~~\$500,000.00~~ 550,000.00) for potential Optional Services which may be utilized pursuant to Article 6. Unused amounts of these Optional Services monies shall be retained by County.

5.1.4 Reimbursable Expenses. Reimbursable Expenses. County has established a Maximum Amount Not To Exceed of Six Hundred Ten Thousand Ninety-nine Dollars (\$610,099.00) for potential reimbursable expenses for Phase 2, Phase 3, ~~and Phase 6, and Phase 7~~ work, which may be utilized pursuant to Section 5.3. Unused amounts of those monies established for reimbursable expenses shall be retained by County.

...

4. New Sections 10.33 through 10.36 are added to the Restated Agreement as follows (underlining to show additions omitted):

10.33 Prohibited Telecommunications Equipment. Consultant represents and certifies that Consultant and all Subconsultants do not use, and for the Term will not provide or use, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, as such terms are used in 48 CFR §§ 52.204-24 through 52.204-26.

10.34 Criminal History Screening Practices. If this Agreement is subject to the requirements of Section 26-125(d) of the Code, Consultant represents and certifies that Consultant will comply with Section 26-125(d) of the Code for the duration of the Term.

10.35 Polystyrene Food Service Articles. Consultant shall not sell or provide for use on County property expanded polystyrene products or food service articles (e.g., Styrofoam), unencapsulated expanded polystyrene products, or single-use plastic straws or stirrers, as set forth in more detail in Section 27.173, Broward County Administrative Code.

10.36 Ownership Disclosure Requirement. By January 1 of each year, Consultant must submit, and cause each of its Subconsultants to submit, an Ownership Disclosure Form (or such other form or information designated by County), available at <https://www.broward.org/econdev/Pages/forms.aspx>, identifying the ownership of the entity and indicating whether the entity is majority-owned by persons fitting specified classifications.

5. Exhibit A-6 of the Agreement is replaced by Revised Exhibit A-6, attached hereto, which is incorporated into the Agreement. All references to Exhibit A-6 in the Agreement are deemed to refer to Revised Exhibit A-6 attached to this Eighth Amendment.

6. Anti-Human Trafficking. By execution of this Amendment by an authorized representative of Consultant, Consultant hereby attests under penalty of perjury that Consultant does not use coercion for labor or services, as such terms are defined in Section 787.06, Florida Statutes. Under penalties of perjury, the undersigned authorized representative of Consultant declares that they have read the foregoing statement and that the facts stated in it are true.

7. In the event of any conflict or ambiguity between this Amendment and the Restated Agreement, the Parties agree that this Amendment shall control. The Restated Agreement, as amended herein by this Amendment, incorporates and includes all prior negotiations, correspondence, conversations, agreements, and understandings applicable to the matters contained herein, and the Parties agree that there are no commitments, agreements, or understandings concerning the subject matter hereof that are not contained in the Restated

Agreement as amended in this Amendment. Accordingly, the Parties agree that no deviation from the terms hereof shall be predicated upon any prior representations or agreements, whether oral or written.

8. Preparation of this Amendment has been a joint effort of the Parties and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the Parties than any other.

9. Consultant acknowledges that through the date this Amendment is executed by Consultant, Consultant has no claims or disputes against County with respect to any of the matters covered by the Restated Agreement.

10. The effective date of this Amendment shall be the date of complete execution by the Parties.

11. This Amendment may be executed in multiple originals or in counterparts, whether signed physically or electronically; each of which shall be deemed to be an original, and all of which, taken together, shall constitute one and the same agreement.

*(The remainder of this page is blank.)*

IN WITNESS WHEREOF, the Parties hereto have made and executed this Amendment: Broward County through its Board of County Commissioners, signing by and through its Mayor or Vice-Mayor, authorized to execute same by Board action on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_; and \_\_\_\_\_, signing by and through its duly authorized representative.

COUNTY


ATTEST:


BROWARD COUNTY, by and through  
its Board of County Commissioners

By: \_\_\_\_\_  
Broward County Administrator, as  
ex officio Clerk of the Broward County  
Board of County Commissioners

By: \_\_\_\_\_  
Mayor  
\_\_\_\_ day of \_\_\_\_\_, 20\_\_

Approved as to form by  
Andrew J. Meyers  
Broward County Attorney  
1850 Eller Drive, Suite 302  
Fort Lauderdale, Florida 33316  
Telephone: (954) 523-3404

ANTONIO  
By LOZADA  Digitally signed by ANTONIO  
LOZADA  
Date: 2024.11.19 10:58:17  
-05'00'  
Antonio Lozada (Date)  
Assistant County Attorney

CARLOS A.  
RODRIGUEZ-  
By CABARROCAS  Digitally signed by CARLOS A.  
RODRIGUEZ-CABARROCAS  
Date: 2024.11.19 15:26:02  
-05'00'  
Carlos Rodriguez-Cabarrocas (Date)  
Senior Assistant County Attorney

AL/cr  
Liftech 8th Amendment 11.15.24 Final  
11/15/2024  
#80040-6005



**EIGHTH AMENDMENT TO RESTATED AGREEMENT BETWEEN BROWARD COUNTY AND  
LIFTECH CONSULTANTS, INC., FOR CONSULTANT ENGINEERING SERVICES FOR CRANES  
(RLI # N1038712R1)**

**CONSULTANT**

LIFTECH CONSULTANTS, INC.

**Erik Soderberg**

Digitally signed by Erik Soderberg  
DN: C=US, E=esoderberg@liftech.net,  
O=Liftech Consultants Inc., OU=President,  
CN=Erik Soderberg  
Contact Info: adix@liftech.net  
Date: 2024.11.18 14:06:46-08'00'

By: \_\_\_\_\_

Authorized Signer

Erik Soderberg, President \_\_\_\_\_

Print Name and Title

18 day of November, 2024

## **REVISED EXHIBIT A-6**

Modifications to this exhibit made pursuant to the Eighth Amendment are indicated herein by use of strikethroughs to indicate deletions and underlining to indicate additions. Except as modified herein, all remaining terms and conditions of the Restated Agreement shall remain in full force and effect.

### **PHASE 4: RELOCATION OF CRANE SP-4**

The Port Everglades Department (PED) of Broward County plans to relocate Crane SP-4 (Crane) from Berth 31 to Berth 30 and place it east of Crane SP-6. Consultant shall provide engineering services related to relocating the Crane over land. PED will provide allowable bearing pressure on the paving structure along the Crane relocation path. The following services are payable on a Maximum Amount Not-To-Exceed basis.

#### **PRE-AWARD**

- Crane and Route Layout – Consultant shall prepare a layout of the crane route over the wharf and container yard and review with PED. The layout will show the proposed location of other cranes and boom positions.
- SP-4/ B30/30 Extension Interface – Consultant shall confirm that the Crane stow pins and tie-down anchors align with wharf hardware on Berth 30/30 Extension. If the Crane stow pins and tie-down anchors may not align properly, Consultant will request authorization from PED for additional engineering services to address the concern.
- Technical Specifications – Consultant shall prepare technical specifications to relocate the Crane on land and include provisions to test Crane cable and modify software for Crane position control.
- Procurement Documents – Consultant shall review procurement documents prepared by PED for consistency with the technical documents and provide comments and recommendations.

#### **SOLICITATION SUPPORT**

Consultant shall:

- Participate in remote meetings with PED and the prospective contractors to clarify technical issues.
- Respond to Requests for Information (RFIs) from prospective bidders and issue technical addenda, as required.
- Review technical aspects of submitted proposals and provide comments for evaluation by PED.

#### **POST-AWARD**

Consultant shall:

- Participate in a kick-off meeting with the Contractor. Consultant shall ensure Consultant's Site Representative (SR) will attend the meeting in person and Liftech Oakland engineers will attend remotely. Consultant shall prepare an agenda and provide it to participants at least 24 hours in advance of the meeting. Consultant shall record and maintain minutes for these meetings.
- Observe site conditions with the Contractor upon mobilization and document the conditions for comparing those with conditions observed after the completion of the Crane relocation.

## **REVISED EXHIBIT A-6**

- Review Contractor's submittals for Crane relocation related to the Crane structure and return submittals within two weeks with "No Comments Noted" or request additional information.
- Compare bearing pressures from Crane relocation equipment provided by the Contractor with the allowable pressure and provide comments. If necessary, Consultant shall retain the services of Craven Thompson & Associates, Inc. and Tierra South Florida, Inc. to review the paving design and provide recommendations. If the bearing pressures from the Crane relocation equipment exceed the allowable pressure, Consultant shall advise the Contractor to revise the equipment arrangement to comply with the allowable bearing pressure.
- Provide an engineer to visit the site to:
  - Observe the interface between the Crane and Contractor's lifting equipment and provide comments and recommendations about structural design issues that may require corrective measures by the Contractor.
  - Witness Crane relocation, report issues that need attention, and provide a site visit report.
- Provide services of a Site Representative for up to 108 hours as directed by PED during the Contractor's work.
- Retain Hall Engineering Group for electrical work, as needed, related to disconnecting and reconnecting Crane cable at the vaults.
- Observe the wharf surface and crane areas for damage or unfinished work after the relocation and prepare a report with comments and recommendations.

Consultant shall provide engineering services to modify crane SP-4 for the interface with SP-11 through SP-13 under a separate Notice to Proceed.

### **SCHEDULE**

#### **Pre-Award**

Consultant shall provide technical specifications for Crane relocation to PED for review and comment within three weeks from the date of issuance of the Notice to Proceed.

#### **Post-Award**

Consultant shall review and provide to PED comments and recommendations on Contractor's submittals within two weeks of receiving the specified documentation and information.

## **PHASE 5: UPGRADING CRANES SP-1 THROUGH SP-7 AND PAINTING CRANES SP-1 THROUGH SP-7, P-2, AND MHC-1**

Consultant has provided engineering services to upgrade cranes SP-1 through SP-7 (Cranes) under the Agreement. Consultant provided additional engineering services to upgrade the Cranes as noted below and incorporated findings into the technical specifications under Lump Sum Work Performed, which is payable on a Lump Sum Basis. Additionally, Consultant shall provide engineering services to replace operator's cabins on the Cranes with Brieda cabins (SP-1 through SP-7) and paint the Cranes, Paceco crane (Crane P-2), and the Gottwald mobile harbor crane (MHC-1) (All Existing cranes), which are payable on a Maximum Amount Not-To-Exceed basis.

### **LUMP SUM WORK PERFORMED**

Consultant previously provided engineering tasks to incorporate the following into the upgrade design drawings and specifications for Cranes:

- Analysis and Revised Design for Heavier Boom after Crane Weighing*
- Analysis and Revised Design for New Transformer House Solution including Structural, Mechanical, and Electrical Drawings and/or Specifications. House is to be design-build with a performance specification.*
- Anti-Racking Retrofit Using Transponder System for New Gantry Drive System*
- Updated Specifications for Initial Plan of SP4 Relocation by Barge*
- Revised Crane Modification Schedule of Modified and New Cranes*
- Main Hoist Machinery Design for Replacement Emergency Motors and Drives*
- T/L/S/S Hydraulic System Replacement included in Design and Specifications.*
- Boom Machinery Replacement Component Design due to AC Conversion*
- Trolley Machinery Replacement Component Design due to AC Conversion*
- Gantry Machinery Replacement Design due to AC Conversion*
- Electrical Control Room Inclusion in Pre-Bid Package*
- Trolley Anti-sway System Removal and Design of New Sheave Block Assembly*
- Ground Level Communications Included in Specifications*
- Boom Energy Chain Replacement & Other Cable Replacement*
- MV Stationary Cabling Replacement*
- Addition of Maintenance & Diagnostic Laptop to Specifications*
- Associated Project Management related to the above*

Consultant has provided an updated set of plans and specifications for the above tasks.

## **NOT-TO-EXCEED LABOR COSTS – CRANE UPGRADES**

Consultant shall provide the following services:

*Work is to include the balance of the scope not previously performed under Phase 2, Task 2.*

### *Engineering Support for Expanded Work*

Consultant shall provide additional engineering support for the expanded scope of work during the procurement phase and crane upgrade phase.

### *On-site Construction Support*

Consultant shall provide services of a Site Representative (SR), for up to 40 hours per week and a project manager for 6 hours per week to support PED with managing the crane upgrade project for approximately the first 10 months, and SR for up to 40 hours per week and a project manager for 18 hours per week for the remaining 41 months of the construction project. Consultant may reduce SR hours on this task if the SR is needed to support the PED infrastructure project.

### *Construction Review Trips*

Consultant shall travel to the site to support the construction process, such as meetings, out-of-service assessments, and installation review, for up to 16 two-day trips, and 14 three-day trips.

### *Inspection Agency Reports*

PED will retain services of an independent structural inspection agency, if required, to inspect structural modification work performed by the Contractor. Consultant shall review the inspection reports, provide comments and recommendations, and advise PED to direct the Contractor to correct the work as needed.

### *Resolving Disputes Between County and Contractor*

Consultant shall assist PED with resolving disputes with the Contractor. A budget has been included as a placeholder.

### *Engineering Services Related to Replacing Operator Cabins of Samsung Cranes*

Consultant shall incorporate specifications and drawings to replace operator's cabins on the Samsung cranes with new Brieda cabins into the crane upgrade specifications. Consultant shall review proposed specification changes with PED and incorporate comments and recommendations into the documents.

Consultant shall respond to inquiries from the proposed bidders.

Consultant shall review Contractor submittals for cabin replacement and provide comments and recommendations to PED within two weeks of receiving the specified documentation and information.

### *Engineering Services Related to Painting All Existing Cranes*

Consultant shall provide the following services:

- *Provide specifications and existing drawings or photos to paint All Existing Cranes as an attachment to the existing specifications.*
- *Incorporate provisions provided by PED for sandblasting or water blasting the cranes into the paint specifications.*
- *Provide sequencing and schedule to paint the cranes as part of the combined project.*
- *Review Contractor proposals for painting cranes as part of the combined project and provide comments and recommendations to PED.*
- *Review Contractor submittals for painting cranes as part of the combined project and provide review comments and recommendations to PED within two weeks of receiving the specified documentation and information.*
- *Provide construction support services related to painting All Existing Cranes, including review of paint inspection reports provided by the inspection agency retained by PED, and provide comments and recommendations for corrective action by the Contractor.*

## **SCHEDULE**

### **Pre-Award**

Consultant shall provide technical specifications to replace operator cabins on Samsung cranes and paint all nine cranes within five weeks from the date of issuance of the Notice to Proceed.

### **Post-Award**

Consultant shall review Contractor's submittals and provide to PED comments and recommendations within two weeks of receiving the specified documentation and information.

## **PHASE 6: PROCUREMENT OF SP-11 THROUGH SP-13**

Consultant shall provide procurement services for cranes SP-11 through SP-13 to be ordered by PED from ZPMC by June 30, 2021 and expected Substantial Completion within 25 months of PED's issuing a First Notice to Proceed to ZPMC.

### **LUMP SUM FEE**

#### **Manufacturing, Assembly, Shop Testing, and Seafastening Installation Review**

Consultant shall retain Leader Firm to perform on-site crane manufacturing audit services for 19 months of manufacturing at ZPMC's CX Island facility and to provide weekly inspection reports. Leader Firm lump sum cost for the three cranes is \$288,300.00. Potential additional costs associated with manufacturing delays are not included in the Lump Sum or Not-to-Exceed amounts. Any additional costs due to manufacturing delays will be handled as an Optional Service.

### **NOT-TO-EXCEED (NTE) FEES**

#### **Crane Specifications Update and Design Review**

##### *Specification Addendum*

Consultant shall compile and evaluate project documents for Base Cranes (SP-8, SP-9, and SP-10) and review with PED to update the specifications for the SP-11 through SP-13 based on lessons learned from the Base Crane project. Consultant shall prepare a specification addendum, review it remotely with PED and ZPMC, and issue the agreed addendum.

##### *Design Review*

ZPMC's design for the SP-11 through SP-13 may differ from the Base Cranes to reflect changes found during the design review of the Base Cranes. Consultant shall compare SP-11 through SP-13 design drawings supplied by ZPMC with the current Base Crane drawings, document and evaluate design changes, and attend a remote meeting with ZPMC to review and confirm design changes.

Consultant shall review seafastening drawings and calculations prepared by ZPMC to ship SP-11 through SP-13 to Port Everglades and will provide comments and recommendations to PED and ZPMC to take corrective action, as needed.

#### **Manufacturing & Crane Offload Document Review**

##### *Manufacturing, Assembly, Shop Testing, and Seafastening Installation Review*

Consultant shall ensure one Liftech engineer, two McKay engineers, and two Liftech Shanghai Ltd. engineers attend a two-day manufacturing kickoff meeting at ZPMC's CX Island facility, review the manufacturing plan and schedule, and provide meeting notes documenting actions required.

Consultant shall ensure Liftech/McKay engineers and Liftech Shanghai Ltd. engineers periodically visit CX Island during crane manufacturing to observe select manufacturing milestones and commissioning activities and provide a report for each visit documenting actions required. For crane manufacturing observations, Consultant shall provide for up to four two-day visits by a structural designer/ engineer, two three-day visits by a mechanical

engineer, two three-day visits by an electrical engineer, and weekly visits by a Liftech Shanghai Ltd. engineer averaging one day per week.

For crane commissioning observations at ZPMC's CX Island facility, Consultant shall provide two six-day visits by a mechanical engineer and two six-day visits by an electrical engineer to CX Island facility. Consultant shall provide a report for each visit documenting actions required.

A structural designer/ engineer shall visit CX Island for two days to observe crane seafastening installation. Consultant shall provide a report of the visit documenting actions required.

For each visit by a U.S.-based engineer to CX Island, Consultant will invoice an additional three days for visit preparation, travel time, and report preparation time. NTE fees are for the actual time spent performing services by Consultant personnel at the specified billing rates. Consultant shall provide timesheets documenting services performed for any NTE fees billed during travel time. Consultant shall adhere to Section 112.061, Florida Statutes, when invoicing travel-related expenses. If travel to China is impractical for any of the above meetings, U.S.-based engineers will attend meetings remotely.

Consultant shall ensure two Liftech Shanghai Ltd. engineers provide support for up to six three-day visits by PED personnel to ZPMC during crane manufacturing and commissioning.

Consultant shall review crane manuals, offload documents, and as-built documentation and provide comments and recommendations documenting actions required. Consultant shall prepare a punch list for crane acceptance. Consultant shall assist PED with preparing a spare parts inventory list.

Consultant shall ensure that Liftech and McKay engineers attend meetings in person, unless authorized to attend remotely by the Contract Administrator in writing, or unless there are government-issued travel advisories.

#### *Crane Receiving, Commissioning Audit, and Acceptance at Port Everglades*

After the cranes arrive at PED, Consultant shall support PED with attending up to 20 weekly remote meetings of one hour each and provide in-office engineering support to track significant commissioning issues through the Substantial Completion Date for cranes SP-11 through SP-13. Consultant shall provide notes for each meeting documenting actions required.

Consultant shall ensure one engineer will visit PED for three days to witness crane offloading. Consultant's engineers shall make periodic visits to PED to observe commissioning activities and witness endurance testing through the Substantial Completion Date for the three cranes. Consultant shall provide a report for each visit documenting actions required. Consultant has budgeted for one two-day visit by a structural designer/ engineer to observe structural condition of the cranes, four four-day visits by a mechanical engineer, two four-day visits by an electrical engineer, and office support time.



*Assist with Resolving Disputes Between County and ZPMC, Review Change Order Requests*

As requested by PED, Consultant shall review ZPMC change order requests and provide comments and recommendations.

*Potential Manufacturing Delay*

For up to three months of delay over the budgeted 18 months from the start of manufacturing at ZPMC's CX Island facility, Consultant shall provide manufacturing audit support by Liftech Shanghai Ltd. engineers and remote support by Liftech and McKay engineers.

*Process ZPMC Payment Requests*

Consultant shall review and provide comments on ZPMC payment requests based on payment milestones as was provided for the Base Cranes.

## **PHASE 7: LANDSIDE INFRASTRUCTURE UPGRADES**

Consultant has provided engineering services for landside infrastructure under the Agreement. As of the Eighth Amendment, Consultant has already provided and has already been paid for all work performed on a Lump Sum Basis under the Agreement. As part of the Eighth Amendment, consultant shall perform the following services, payable on a Maximum Amount Not-To-Exceed basis.

Phase 7 work includes the balance of services previously identified as Phase 2, Task 3 and Phase 3, Task 1.

### *SR Time for additional eight months*

Consultant shall provide SR services for an additional eight months beyond previously authorized scope due to schedule extension through December 2024.

### *Additional Engineer's Site Visits*

Consultant shall provide four additional site visits of one week duration each for the EOR or PM to perform project reviews, punch list acceptance review, crane wharf stowage hardware connection review, and project closeout review, which was not in the original scope.

### *Rail Weld Cracks Repair, Inspection, and Expert Advice*

Consultant previously provided services to re-inspect rail welds that failed prior to handover to PED.

Additionally, a significant number of rail welds cracked on Berth 30 Extension after the cranes began operating. Consultant shall provide inspection and construction support for the rail weld crack repairs to be performed by WSP. Additional services related to rail welds beyond those contemplated in this section may be authorized as an Optional Service.

## **ELECTRONIC SUBMITTAL OF DELIVERABLES**

All documents, reports, or other submissions required under this scope constitute deliverables. Except for all documents provided by Leader Firm, Consultant shall submit all deliverables under this scope in electronic digital format and in accordance with the Electronic Media Submittal Requirements previously set forth in Exhibit A, Attachment 2. Documents provided by Leader Firm to PED shall be in PDF or Microsoft Word Format.

## **OPTIONAL SERVICES**

Upon prior written approval by Contract Administrator, Consultant shall provide the following optional services as authorized by PED or other services as requested by PED:

- *During relocation of Crane SP-4, if PED or the Contractor report unforeseen conditions requiring mitigation, Consultant shall visit PED to observe the unforeseen condition if needed, provide engineering services to mitigate the condition, observe the mitigation work, review inspection reports, and provide comments and recommendations for additional corrective action.*
- *During modification of the existing cranes, if PED or the Contractor report unforeseen conditions requiring mitigation, Consultant shall visit PED to observe the unforeseen condition if needed, provide engineering services to mitigate the condition, observe the mitigation work, review inspection reports, and provide comments and recommendations for additional corrective action.*
- *During painting of any of the crane, if PED or the painting Contractor reports cracking of welds or plates or significant degradation of structural areas of a crane, Consultant shall provide engineering services to repair, replace, or reinforce the subject areas. The Consultant shall also provide engineering services to observe the repairs if necessary, review inspection reports, and provide comments and recommendations for additional corrective action.*
- *Update crane upgrade sequencing and schedule as directed by PED and incorporate crane painting work, beyond the basic services as described in Phase 5, as needed.*
- *Participate in meetings requested by PED related to Florida Power and Light (FPL) switchgear testing protocol and provide engineering services requested by PED related to crane to wharf electrical interface.*
- *Provide engineering services to review structural condition of Samsung crane gantry truck assemblies and provide repair procedures as required.*
- *Beyond the 3 months of delay provided for under the basic services described in Phase 6, Consultant shall provide manufacturing audit support by Liftech Shanghai Ltd. engineers and remote support by Liftech and McKay engineers.*
- *Extended on-site crane manufacturing audit services by Leader Firm associated with manufacturing delays of SP-11 through SP-13, at a Lump Sum cost of \$11,700 per month or \$4,000 per week, at the discretion of the Contract Administrator.*

- Additional work related to, but beyond the level of effort contemplated by the Scope of Services as set forth herein, including additional site visits, inspections, and expert consultations.