

KEYS BID 01-23 SPECIFICATIONS FOR TRANSMISSION LINE INSULATOR ASSEMBLY REPLACEMENT FOR 138KV LINE

Addendum 1

In the event of any conflict between the terms of this Addendum 1 and the original bid, the terms of this Addendum 1 shall control.

The "SCHEDULE" section is amended as follows (deleted language ~~struck through~~, added language underlined):

A mandatory pre-bid meeting will take place on ~~October 14, 2022 at 1:00 PM~~ Friday, November 4, 2022 at 1:00pm at Keys Energy Services in the Board Room located at 1001 James Street, Key West, Florida 33040. Contractors not in attendance of the meeting will be disqualified from the bid opening and award. KEYS will not take contractors to pole sites; all site visits must be conducted independently.

Vendors with questions pertaining to this bid specification must submit them in writing via email to purchasing@keysenergy.com no later than ~~October 21, 2022~~ November 18, 2022 at noon.

Proposals will be received by KEYS electronically until ~~1:30 p.m. on November 4, 2022~~ 10:00 a.m. on Friday, December 16, 2022.

KEYS expects to tentatively award this Contract ~~on December 14, 2022~~ in January of 2023. Actual construction work under this Contract is tentatively set to start on November 1, 2023. Work shall be completed by March 31, 2024. Contractor shall not work on the blackout dates. Prior to commencement of Work, a pre-construction meeting will be held. Attendees will include KEYS Engineering Representative, Project Manager, and Contractor's General Superintendent.

The "SPECIFICATIONS" section is amended to include the following additional requirements:

1. 14 Additional Dead-End and Corner structures to add to work list.

Table 1 ADDITIONAL STRUCTURES WORK

Pole#	GIS ELEMENT NAME	TOWER OVER WATER	YR INSTALL	POLE SIZE	CONSTRUCTION	POLE MATERIAL	INSULATOR ASSEMBLY			STATIC LINE	VIBRATION DAMPERS
1	T4-1	YES	1965	80	TA (DDE, 3L)	SQUARE CONCRETE	Unit-11			Unit-13	Unit-8
2	T4-2	YES	1965	80	TA (DDE, 3L)	SQUARE CONCRETE	Unit-11			Unit-13	Unit-8
6	T4-6	YES	1965	80	H (DDE 2L/1R)	SQUARE CONCRETE	Unit-11			Unit-14	Unit-8
11	T4-11	YES	1965	80	H (DDE 2L/1R)	SQUARE CONCRETE	Unit-11			Unit-14	Unit-8
19	T4-19	YES	1965	80, 65	3C (ANGLE DE)	SQUARE CONCRETE	Unit-12			Unit-15	Unit-8
22	T4-22	YES	1965	80	H (DDE 2L/1R)	SQUARE CONCRETE	Unit-11			Unit-14	Unit-8
33	T4-33	YES	1965	80	H (DDE 2L/1R)	SQUARE CONCRETE	Unit-11			Unit-14	Unit-8

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45	T4-45	YES	1965	80	H (DDE 2L/1R)	SQUARE CONCRETE	Unit-11			Unit-14	Unit-8
54	T4-54	YES	1965	80	H (DDE 2L/1R)	SQUARE CONCRETE	Unit-11			Unit-14	Unit-8
64	T4-64	YES	1965	80	H (DDE 2L/1R)	SQUARE CONCRETE	Unit-11			Unit-14	Unit-8
74	T4-74	YES	1965	90	H (DDE 2L/1R)	SQUARE CONCRETE	Unit-11			Unit-14	Unit-8
92	BC12-1-3	NO	1965	70	C (ANGEL DE)	SQUARE CONCRETE	Unit-12			Unit-15	Unit-8
93	BC12	NO	1965	80	C (ANGEL DE)	SQUARE CONCRETE	Unit-12			Unit-15	Unit-8
100	BC26	NO	1983	75	C (ANGEL DE)	SQUARE CONCRETE	Unit-12			Unit-15	Unit-8

2. Additional Unit lists to be added to bid.

- Unit 11 – Dead-End Bell with Post Insulator Jumper Assembly (60 Suspension Bells, 30 Jumper Post Insulator, 10 Concrete Structure) Include in these prices removal of existing assemblies, Hardware and Grounding, assembly and installation of new insulator assembly, Hardware and Grounding, transfer of the existing conductor, and any other materials and labor necessary for the completion of the Work as described in the Drawings. Payment will be made for each structure Completed.
 - a. Key Components to be used:
 - Jumper Post Insulator- LAPP – CL2-068-12-173-A1 (See drawing: UNIT-3_TAN- CONC_SQUARE)
 - Dead-End Bell Assembly (See drawing: L06-138A4-ASY-001-0)
 - HARDWARE – See drawings for Guidelines:
 1. Structure: H (Drawing T-280)
 2. Structure: TA (Drawing T-278)
 3. Machine Bolts Lengths Adjusted for New Post Insulator base.
 - 3. Replace Bracket Angle with Dead-End Plates. (Item-40 Drawings for H and TA: See Drawing LINE-7_TYPE 1-4, items 9 & 10 for guidance)

- Unit 12 – Corner Bell Assembly (24 Suspension Bells, 4 Concrete Structure) Include in these prices removal of existing assemblies, Hardware and Grounding, assembly and installation of new insulator assembly, Hardware and Grounding, transfer of the existing conductor, and any other materials and labor necessary for the completion of the Work as described in the Drawings. Payment will be made for each structure Completed.
 - a. Key Components to be used:
 - Dead-End Bell Assembly (See drawing: L06-138A4-ASY-001-0)
 - HARDWARE – See drawings for Guidelines:
 1. Structure: C (Drawing T-274)
 2. Structure: 3C (Drawing T-275)
 3. Machine Bolts Lengths Adjusted for New Post Insulator base.
 4. Replace Bracket Angle with Dead-End Plates.
(Item-40 Drawings for C and 3C: See Drawing LINE-7_TYPE 1-4, items 9 & 10 for guidance)

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- Unit 13 – OHGW Suspension Assembly 3#5 Alumoweld (2 Structures)
Include in these prices removal of existing assemblies and hardware, assembly and installation of new suspension assembly and hardware, transfer of the existing conductor, grounding and any other materials and labor necessary for the completion of the Work as described in the document. Payment will be made for each structure Completed.
 - a. Key Components to be used:
 - HARDWARE – See drawings for Guidelines:
 1. Structure: TA (Drawing T-278)
 2. Structure: Grounding (Drawing T-289, Detail-4)

- Unit 14 – OHGW Suspension Assembly 3#5 Alumoweld (8 Structures)
Include in these prices removal of existing assemblies and hardware, assembly and installation of new suspension assembly and hardware, transfer of the existing conductor, grounding and any other materials and labor necessary for the completion of the Work as described in the document. Payment will be made for each structure Completed.
 - a. Key Components to be used:
 - HARDWARE – See drawings for Guidelines:
 1. Structure: TA (Drawing T-280)
 2. Structure: Grounding (Drawing T-289, Detail-1)
 3. Structure: Brace details (Drawing T-290)

- Unit 15 – OHGW Suspension Assembly 3#5 Alumoweld (4 Structures)
Include in these prices removal of existing assemblies and hardware, assembly and installation of new suspension assembly and hardware, transfer of the existing conductor, grounding and any other materials and labor necessary for the completion of the Work as described in the document. Payment will be made for each structure Completed.
 - a. Key Components to be used:
 - HARDWARE – See drawings for Guidelines:
 1. Structure: C and 3C (Drawing T-274, T-275)
 4. Structure: Grounding (Drawing T-289, Detail-3)

The “PROPOSAL PAGE” is amended as follows. Please use revised Proposal pages, attached herein.

The “INSURANCE” section is amended to include the following insurance requirements, if applicable to vendor proposal.

AVIATION LIABILITY INSURANCE

This insurance shall cover those sources of liability which would be covered by the latest General Aviation Liability/Hull Insurance Coverage Form, as filed for use in Florida without the attachment of restrictive endorsements.

General Aggregate	\$5,000,000.00
Limit of Insurance per project	
Each Occurrence	\$5,000,000.00

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Questions and Answers:

1. Can Keys Energy provide a KMZ file for this project?

Yes. The link to access reference material is provided under **Attachments** herein.

2. There is conflicting information in the bid document on page 13 in regard to the dates such as pre-bid meeting date, questions date, due date, and award date. I want to confirm that these dates are incorrect and are overridden by the dates on page 1.

Yes, the "Schedule" section dates are amended as listed above.

3. Is helicopter work, whether it be long line or short platform work, acceptable for structure access and construction?

Yes.

4. Is there opportunity to do any of this work energized?

Yes.

5. Please also confirm construction start and end.

Construction start date was determined to be the 1st of November 2023 providing ample time for materials due to supply chain issues and to enable a transmission outage at the end of Hurricane season. If these barriers can be mitigated an earlier start time will be allowed. The end date of March 2024 was provided due to the above mentioned. De-energized work can only be done between November and March due to summer loads.

6. Material assembly drawings are blurry and illegible to the point we cannot accurately read material descriptions or Cat ID#'s. Can you provide a clearer copy?

Yes. The link to access reference material is provided under **Attachments** herein.

7. Is there a preferred or acceptable landing zone to utilize for helicopter construction?

Keys has no preference in this case. Please reach out to County, City and local air officials for references. The vendor is responsible for acquiring a landing zone.

8. If helicopter construction is utilized over open water areas, will a marine vessel be required to accompany construction as a safety precautionary measure?

Reach out to County, City and local air officials for references. The contractor is responsible for complying with federal, state and local laws.

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9. If helicopter method is utilized over open water areas, will it be necessary to install turbidity around each structure?

Reach out to County, City and local air officials for references. Please be aware the Line 4 poles are located within the Florida Keys National Marine Sanctuary.. The contractor is responsible for complying with federal, state and local laws.

10. Is it required to employ state marine patrol officers to help police surrounding waters in order to prevent the public from entering our work zone?

Reach out to County, City and local air officials for references. The contractor is responsible for complying with federal, state and local laws.

11. Will FAA permits be issued for this project? If so, will a copy be provided before bidding deadline? Are you aware of air restrictions?

All permitting is to be pursued and acquired by Contractor. See "LICENSING AND PERMITS" within the specifications. Please note that Boca Chica Naval Air Station is located nearby.

12. Will DOT, County, or city traffic control permits be issued for this project? If so, will a copy be provided before bidding deadline? Are you aware of working hour restrictions?

All permitting is to be pursued and acquired by Contractor. See "LICENSING AND PERMITS" within the specs.

13. Can you provide a complete bill of materials?

Please see and read the complete "Description of Work" and "Description of Unit Prices" within the specifications. Some materials should be updated with recommendations by Contractors and updated in the new Drawings Package "Unit 10" of the specifications.

14. Will there be a continuous de-energization of the 138kV line, or will the line need to be placed back into service periodically?

See "Description of Work":

all work can be done on deenergized 138kV lines during the Hurricane offseason November thru April. Plans should be in place and prepared to re-energize in the event of load emergency.

15. Is there pole attachments to support men or equipment on the transmission space of the concrete pole structures?

Yes. The poles were installed with ladder rungs. Some of the lower rungs have been removed due to rust. Caution should be used with the upper rungs.

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16. Could KEYS please provide another copy of the drawings for Figures 4, 5, 7, 8, and 13 in the provided package? Some of text in these drawings are blurry and difficult to read even when zooming in, such as the vendor part numbers and catalog numbers.

Yes. The link to access reference material is provided under **Attachments** herein.

Attachments

1. Please use the following link to access reference material:
https://keysenergy0.sharepoint.com/:f:/s/Purchasing/EvyiuoIpfuCjmwWvMxvgoQBicUB41mn3_d4s86U7au1Bw?e=kVsReM
2. Revised Proposal Page, attached herein.

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Proposal Page 1 of 2- REVISED

(Please type or print all information)

Pursuant to and in compliance with your advertisement for bids and other contract documents relating thereto, the undersigned bidder, having familiarized himself with the terms and conditions affecting the performance of the contract contained in the specifications, hereby proposes and agrees to perform within the contract documents, schedules, and specifications for the following amounts.

UNIT PRICE BID SCHEDULE - BASE BID					
Item	Description	Unit	Estimated Quantity	Unit Price	Total Price
1	Mobilization/Demobilization	1	1	\$	\$
2	Horizontal Post Insulator Assembly (234 insulators, 78 Concrete Structure)	EA	78	\$	\$
3	Horizontal Post Insulator Assembly (24 insulators, 8 Concrete Round Structure)	EA	8	\$	\$
4	Drop Tongue Extension (27 insulators, 9 Structures)	EA	9	\$	\$
5	Suspension Assembly 559.5 KCMIL AAAC (258 insulators, 86 Structures)	EA	86	\$	\$
6	OHGW Angle Suspension Assembly 3#5 Alumoweld (78 insulators, 78 Structures)	EA	78	\$	\$
7	OHGW Suspension Assembly 3#5 Alumoweld (24 insulators, 8 Structures)	EA	8	\$	\$
8	Vibration Dampeners 3#5 Alumoweld & 559.5 KCMIL AAAC (1 Static & 3 conductors, 86 Structures)	EA	86	\$	\$
9	Spare Material	EA	1	\$	\$
10	Drawings Package	EA	1	\$	\$
11	Dead-End Bell with Post Insulator Jumper Assembly (60 Suspension Bells, 30 Jumper Post Insulator, 10 Concrete Structure)	EA	10	\$	\$
12	Corner Bell Assembly (24 Suspension Bells, 4 Concrete Structure)	EA	4	\$	\$

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13	OHWG Suspension Assembly 3#5 Alumoweld (2 Structures)	EA	2	\$	\$
14	OHWG Suspension Assembly 3#5 Alumoweld (8 Structures)	EA	8	\$	\$
15	OHWG Suspension Assembly 3#5 Alumoweld (4 Structures)	EA	4	\$	\$
16	Indemnity Fee				\$ 10.00
17	Total Project Estimated Cost (line 1+2+3+4+5+6+7+8+9+10+11+12+13+14+15+16)				\$

In addition to the above listed units, Bidders shall also submit the following:

1. Three (3) reference projects, 138kV and above, where work was done on energized line.
2. Equipment list and staging plan for work to be performed.
3. List of qualified personnel to perform inspection and review of work. Do not include identification cards or personal information.
4. Project Schedule.
5. Hourly rate sheets for both labor and equipment.

Company: _____

Contact Person: _____

Telephone: _____

Email: _____

Address: _____

Subcontractor (s): _____

Submitted by: _____
(Signature and Print Name)

Bid Bond Enclosed (Yes / No) or Cashier's Check: \$ _____

KEYS reserves the right to accept and/or reject any proposal or any portion of a proposal. Bidder shall submit with the proposal any constraints, if any.