

13.2KV DISTRIBUTION LINE RECONDUCTOR & REBUILD



CITY OF WAUCHULA, FLORIDA

Prepared By:
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FL PE License #82804



13kV Distribution Line Reconductor & Rebuild
City of Wauchula, FL
W. Main Street

ITB No. _____ 2023-02
Date: August 13, 2023
Rev.: _____ 00

SECTION 00 01 07
SEALS PAGE

DESIGN PROFESSIONALS OF RECORD

A. Electrical Engineer:

P. Anthony Hanson
FL PE License #82804

END OF SECTION 00 01 07

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<u>SECTION</u>	<u>DESCRIPTION</u>
33 71 75	Overhead Electrical System Construction
33 71 95	Grounding of Overhead Lines

REVISION HISTORY

Revision No.	Date	Description
00	August 13, 2023	Issued for bid

END OF SECTION 00 01 10



13kV Distribution Line Reconstructor & Rebuild
City of Wauchula, FL
W. Main Street

ITB No. _____ 2023-02
Date: August 13, 2023
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SECTION 00 01 15
LIST OF DRAWINGS AND EXHIBITS

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EXHIBIT B:	Units By Location
EXHIBIT C:	Summary Unit Sheets
EXHIBIT D:	Standard Unit Modification

END OF SECTION 00 01 15

**SECTION 00 11 16
INVITATION TO BID****1.02 PROJECT INFORMATION**

- A. Notice to Bidders: Bidders are invited to submit bids for Project as described in this Document according to the Instructions to Bidders. Contractor's proposal shall include Contractor's plans for completing the project referencing the attached drawings and specifications. The proposal shall state compliance with the drawings, specifications and General Conditions provided in the contract. Any exceptions shall be clearly stated in Section 00 45 05.
- B. Project Description: 7.0 Miles of 13kV Electric Distribution Line Reconductor & Rebuild along W. Main Street.
- C. Owner: City of Wauchula FL
1. Owner's Representative: Olivia Minshew
126 S. 7th Ave, Wauchula, FL 33873
Phone: (863) 773-3115 Email: ominshew@cityofwauchula.com
- D. Engineer: Patterson and Dewar Engineers, Inc.
1. Engineer's Representative: Anthony Hanson, PE
1531 Hunt Club Blvd, Suite 200, Gallatin, TN 37066
Phone: (615) 527-7077, Email: ahanson@pdengineers.com

1.03 POINT OF DESTINATION

West Main Street from Hwy 35A to Hwy 64, Wauchula, FL 33873

1.04 BID DOCUMENTS

One electronic set of Bidding Documents may be obtained by emailing Valerie Crawford at vcrawford@pdengineers.com

1.05 BID SECURITY

Bid security shall be submitted with each bid in the amount of **5-percent** of the bid amount. No bids may be withdrawn for a period of 60 days after opening of bids. Owner reserves the right to reject bids and to waive informalities and irregularities.

1.06 PREBID CONFERENCE

- A. A virtual pre-bid conference will be held at **10:00 a.m. local time on August 24, 2023**. All prospective bidders will be sent a calendar invitation with Zoom information. Attendance is optional.
- B. Post-meeting notes will be distributed to all bidders.



13kV Distribution Line Reconductor & Rebuild
City of Wauchula, FL
W. Main Street

ITB No. _____ 2023-02
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1.07 BID SUBMITTAL AND OPENING

- A. Owner will receive sealed bids until the bid time and date at the location indicated below. Owner will consider bids prepared in compliance with the Instructions to Bidders herein, and delivered as follows:
1. Bid Date: **September 12, 2023**
 2. Bid Time: **2:00 pm, local time.**
 3. Location: **City of Wauchula, FL**
126 S. 7th Ave, Wauchula, FL 33873
Attention: Stephanie Camacho
- B. Proposals must be clearly marked as bids and include **“Bid for Wauchula 13kV Line Reconductor & Rebuild”** on the exterior of the mailing package.

1.08 TIME OF COMPLETION

- A. Bidders shall begin the Work on receipt of the Notice of Award. In accordance with Paragraphs 15.03 and 15.06 of the General Conditions defining Substantial Completion and Final Completion, the Work shall be completed on or before dates listed below.
- Anticipated Notice of Award: **October 10, 2023**
 - Anticipated Notice to Proceed: **October 24, 2023**
 - Substantially completed on or before: **April 30, 2024**
 - All Work completed and ready for final payment on or before: **May 31, 2024**

1.09 CONTRACT AWARD

Owner reserves the right to reject any or all bids and to waive any informality in bids. Furthermore, Owner reserves the right to award the project to the best evaluated bid as determined by Owner and Engineer.

END OF DOCUMENT 00 11 16

**SECTION 00 21 13
INSTRUCTIONS TO BIDDERS****ARTICLE 1 – DEFINED TERMS**

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents may be obtained in the number and for the deposit sum, if any, stated in the Invitation to Bid.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit information required by Section 00 45 13. Additionally, at Owner's request, Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be called for below.
- A. Evidence of Bidder's authority to do business in the state where the Project is located.
 - B. Bidders must be licensed contractors as required by the state of Florida.
 - C. Bidder's state contractor license number, if applicable.
 - D. Bidders must be properly licensed under the laws governing their respective trades and be able to obtain insurance and bonds required for the Work. A Performance Bond, a separate Labor and Material Payment Bond, and Insurance in a form acceptable to Owner will be required of the successful Bidder.
- 3.02 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.03 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – SITE CONDITIONS AND ACCESS, OWNER'S SAFETY PROGRAM AND OTHER WORK AT SITE

- 4.01 The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of Contractor. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Bidding Documents. Additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

4.02 Existing Site Conditions**A. Subsurface and Physical Conditions; Hazardous Environmental Conditions:****1. The Supplementary Conditions identify:**

- a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
- b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
- c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
- d. Technical Data contained in such reports and drawings.

2. Owner will make copies of reports and drawings referenced above, if any, available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, is provided in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.**C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.**

4.03 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with applicable Laws and Regulations relative to excavation and utility locates.

4.04 Owner's Safety Program

- A. Site visits and work at the Site may be governed by Owner's safety program. If an Owner safety program exists, it will be noted in the General Conditions.

4.05 Other Work at the Site

- A. Reference is made to Section 01 11 00 – Summary of Work for the identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request, Owner will provide to each Bidder for examination access to or copies of contract documents (other than portions thereof related to price) for such other work.

ARTICLE 5 – BIDDER’S REPRESENTATIONS

- 5.01 It is the responsibility of each Bidder before submitting a Bid to:
- A. examine and carefully study the Bidding Documents, and the other related data identified in the Bidding Documents;
 - B. visit the Site and become familiar with and satisfy visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
 - C. become familiar with and satisfy itself as to Laws and Regulations that may affect cost, progress, and performance of the Work;
 - D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
 - E. consider the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder’s safety precautions and programs;
 - F. agree based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
 - G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
 - H. promptly give Engineer written notice of conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
 - I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of terms and conditions for the performance and furnishing of the Work; and
 - J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

- 6.01 A non-mandatory pre-bid conference will be held at the time stated in the invitation or advertisement to bid. Representatives of Owner and Engineer will be present to discuss the Project. Engineer will transmit to prospective Bidders of record such Addenda as Engineer considers necessary in

response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.01 Questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to parties recorded by Engineer as having received the Bidding Documents. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.

ARTICLE 8 – BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of five percent of Bidder's maximum Bid price (determined by adding the base bid and alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

- 9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in Invitation to Bid and in the Agreement.

ARTICLE 10 – SUBSTITUTE AND "OR-EQUAL" ITEMS

- 10.01 The Contract for the Work, as awarded, will be on the basis of equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or "or-equal" items. In cases in which the Contract allows Contractor to request that Engineer authorize the use of a substitute or "or-equal" item of equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.
- 10.02 Prices that Bidder sets forth in its Bid shall be based on the presumption that Owner will furnish the materials and that Contractor will furnish equipment specified or described in the Bidding

Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.

ARTICLE 11 – SUBCONTRACTORS, SUPPLIERS AND OTHERS

- 11.01 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- 11.02 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.
- 11.03 The Bidding Documents require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner with the Bid on forms included in Sections 00 43 33 and 00 43 36.
- 11.04 If requested by Owner, Contractor, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, in which case apparent Successful Bidder shall submit an acceptable substitute, Bidder’s Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.
- 11.05 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.06 of the General Conditions.

ARTICLE 12 – PREPARATION OF BID

- 12.01 The Bid Form is included with the Bidding Documents.
- A. Blanks on the Bid Form shall be completed in ink or typewritten and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each Bid item, alternative, adjustment unit price item, and unit price item listed therein.
- B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”
- 12.02 Deviations from and exceptions to the Contract Documents shall be fully itemized and explained in Section 00 45 05 of the Bidding Documents. Owner is not obligated to consider, acknowledge, or accept such deviations and exceptions, and wholesale substitution of terms and conditions may render the Bid non-responsive.

- 12.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.
- 12.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.
- 12.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 12.06 A Bid by an individual shall show the Bidder's name and official address.
- 12.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 12.08 Names shall be printed below the signatures.
- 12.09 The Bid shall contain an acknowledgment of receipt of Addenda, the numbers of which shall be filled in on the Bid Form.
- 12.10 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 12.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 13 – BASIS OF BID; COMPARISON OF BIDS**13.01 Lump Sum**

- A. Bidders shall submit a Bid on a lump sum basis as set forth in the Bid Form.

13.02 Unit Price

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.
- B. The "Bid Price" (sometimes referred to as the "extended price") for each unit price Bid Item will be the product of the "Estimated Quantity" (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

13.03 Completion Time Comparisons

- A. Bid prices will be compared after adjusting for differences in the time designated by Bidders for Substantial Completion. The adjusting amount will be determined at the rate set forth in the Contract Documents for liquidated damages for failing to achieve Substantial Completion for each day before or after the desired date appearing in Article 9 above.

ARTICLE 14 – SUBMITTAL OF BID

- 14.01 A Bid Form shall be submitted no later than the date and time prescribed and at the place indicated in the invitation to bid and shall be enclosed in a package marked with the Project title, the name and address of Bidder, and shall be accompanied by the following documents:
- A. Completed Unit Bid Price Sheet(s)
 - B. Proposed work schedule
 - C. 00 43 33 Proposed Products and Suppliers Form
 - D. 00 43 36 Proposed Subcontractors Form
 - E. 00 45 05 Proposed Exceptions and Deviations
 - F. 00 45 13 Bidder's Qualifications
 - G. Evidence of ability to meet insurance and bonding requirements of the General Conditions
- 14.02 If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.
- 14.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 15 – MODIFICATION AND WITHDRAWAL OF BID

- 15.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.
- 15.02 If a Bidder wishes to modify its Bid prior to bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 15.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 16 – OPENING OF BIDS

- 16.01 Bids will be opened at the time and place indicated in the Invitation to Bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, may be made available to Bidders after the opening of Bids.

ARTICLE 17 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 17.01 Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 18 – EVALUATION OF BIDS AND AWARD OF CONTRACT

- 18.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsive. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then Owner may reject the Bid as nonresponsive. Owner may also reject the Bid of any Bidder if Owner believes that it would

not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.

- 18.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of Bids in which that Bidder has an interest.
- 18.03 Evaluation of Bids
- A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- B. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.
- 18.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.
- 18.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work in accordance with the Contract Documents.
- 18.06 If the Contract is to be awarded, Owner will award the Contract to the Bidder whose Bid is in the best interests of the Project.

ARTICLE 19 – CONTRACT SECURITY AND INSURANCE

- 19.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it shall be accompanied by such required bonds and insurance documentation.

ARTICLE 20 – SIGNING OF AGREEMENT

- 20.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with copies of the Contract Documents as noted in Paragraph 2.02 of the General Conditions.

ARTICLE 21 – SALES AND USE TAXES

- 21.01 Owner is exempt from state sales and use taxes on materials and equipment to be incorporated in the Work. Refer to Paragraph 7.09 of the General Conditions for additional information.

END OF SECTION 00 21 13



**SECTION 00 41 13
BID FORM**

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted by: _____

- A. This Bid is submitted to: City of Wauchula FL
126 S. 7th Ave, Wauchula, FL 33873

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

- A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____
_____	_____

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the

specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.

- F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of terms and conditions for the performance of the Work for which this Bid is submitted.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):
- A. Bidder shall complete the attached Unit Bid Sheets, and then transfer Unit Bid Price totals into the table below. Bidder shall submit the completed unit bid sheets in print form with this bid. Upon request, Bidder shall submit the completed unit bid sheets in Excel format. **Math calculation errors will default to unit bid prices.**
 - B. Total Lump Sum Price below shall encompass pricing for all work.

BID ITEMS	LUMP SUM PRICE
INSTALLS	\$
REMOVALS	\$
Total Lump Sum Price	\$

- C. Unit Prices have been computed in accordance with Paragraph 13.03 of the General Conditions.
- D. Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids. Final payment for all unit price bid items will be based on actual quantities, determined as provided in the Contract Documents.

5.02 CONTRACT PRICE MODIFICATIONS

Owner reserves the right to adjust measurements by an amount no greater than 25% of measurements specified in the Unit Price Bid Sheets. Adjustments to the Contract Price will be at the unit prices quoted.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated are of the essence of the Contract.
- 6.02 Bidders shall begin the Work on receipt of the Notice of Award. In accordance with Paragraphs 15.03 and 15.06 of the General Conditions defining Substantial Completion and Final Completion, the Work shall be completed on or before dates listed below.
- Anticipated Notice to Proceed: October 24, 2023
 - Substantially completed on or before: April 30, 2024
 - All Work completed and ready for final payment on or before: May 31, 2024

ARTICLE 7 – LIQUIDATED DAMAGES

- 7.01 Terms for liquidated damages that shall apply to this Contract are defined in Paragraph 4.03 of the Agreement, Section 00 52 13.
- 7.02 Bidder hereby accepts the provisions of the Agreement as to liquidated damages or has fully itemized and explained in Section 00 45 05 of the Bidding Documents any exceptions or clarifications to the terms for liquidated damages.

ARTICLE 8 – ATTACHMENTS TO THIS BID

- 8.01 The following documents are submitted with and made a condition of this Bid:
- A. Completed Unit Bid Price Sheet(s)
 - B. Proposed work schedule
 - C. 00 43 13 Bid Bond or other form of required Bid security



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- D. 00 43 33 Proposed Products and Suppliers Form
- E. 00 43 36 Proposed Subcontractors Form
- F. 00 45 05 Proposed Exceptions and Deviations
- G. 00 45 13 Bidder's Qualifications
- H. Evidence of ability to meet insurance and bonding requirements of the General Conditions

ARTICLE 9 – DEFINED TERMS

9.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 10 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

 By:
[Signature] _____

[Printed name] _____
 (If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:
[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

Telephone Number: _____

Contact Name and Email address: _____

Bidder's License No.: _____
(where applicable)

END OF SECTION 00 41 13



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ATTACHMENT:

Unit Price Bid Sheets

WAUCHULA RECONDUCTOR & REBUILD PROJECT ALONG W. MAIN STREET

BID UNIT	DESCRIPTION	# OF UNITS	UNIT	LABOR	UNIT PRICE	EXT. PRICE
INSTALLS						
	SPAN GUY	589	FT			
	WIRE, 336.4 ACSR	140676	EA			
	POLE, 35' CLASS 4	4	EA			
	POLE, 35' CLASS 5	4	EA			
	POLE, 40' CLASS 3	120	EA			
	POLE, 40' CLASS 4	3	EA			
	POLE, 45' CLASS 3	24	EA			
	POLE, 50' CLASS 2	1	EA			
	POLE, 50' CLASS 3	1	EA			
	POLE, 55' CLASS 2	1	EA			
	POLE, 55' CLASS 3	1	EA			
M5-20/M5-23	STANDARD CONFIGURATION, PRIMARY TAP TAKEOFF	17	EA			
A7	SINGLE PHASE DEAD, NEUTRAL DEADENDS ON CROSSARM	1	EA			
B7S	STANDARD CONFIGURATION, HORIZONTAL DEADEND	2	EA			
C1-ALT MATERIALS	STANDARD CONFIGURATION, STRAIGHT LINE CONSTRUCTION	104	EA			
C1- POST/STEEL ARM	STANDARD CONFIGURATION, STRAIGHT LINE CONSTRUCTION	3	EA			
C2-ALT MATERIALS	STANDARD CONFIGURATION, MEDIUM ANGLE, CROSSARM	52	EA			
ALT MATERIALS	DOUBLE SUPPORT 10FT FIBERGLASS ARMS	10	EA			
C2-POST/ STEEL ARM	STANDARD CONFIGURATION, MEDIUM ANGLE CONSTRUCTION	1	EA			
C3-ALT MATERIAL	STANDARD CONFIGURATION, VERTICAL SUSPENSION	2	EA			
C7-STEEL ARM	STANDARD CONFIGURATION, HORIZONTAL DEADEND	18	EA			
C8-STEEL ARM	STANDARD CONFIGURATION, HORIZONTAL DOUBLE DEADEND	11	EA			
DC-C1	DOUBLE CIRCUIT, STRAIGHT LINE CONSTRUCTION	2	EA			
E1	ANCHOR GUY DETAIL	61	EA			
E1-S	SIDEWALK GUY	4	EA			
E6	DOUBLE DOWN GUY	3	EA			
E9	SPAN GUY DETAIL	15	EA			
F1-S	ANCHOR, SCREW (HELIX)	70	EA			
G110	SINGLE TRANSFORMER INSTALLATION, DEADEND POLE MOUNTED	1	EA			
G210	TWO TRANSFORMERS, CLUSTER MOUNTED OPEN DELTA	1	EA			
J10	SECONDARY SQUARE CLEVIS	38	EA			
K10	SERVICE ASSEMBLY	1	EA			
M2	TYPICAL GROUND ROD LOCATION FOR UTILITY POLE	157	EA			
M5-10	SECTIONALIZING - FUSED, SINGLE PHASE PRIMARY	5	EA			
M5-2	INSULATOR-POLETOP SINGLE	2	EA			
M5-23	INSULATOR LINK	64	EA			
M5-4	INSULATOR-HORIZONTAL	2	EA			
M5-5	INSULATOR-VERTICAL SINGLE	18	EA			
M5-6	ARRESTER	2	EA			
M5-9	CUTOUT	2	EA			
M5-6	SURGE ARRESTER	84	EA			
M5-10	CUTOUT ARRESTER COMBO	5	EA			
M3-3A	UNDERARM DISCONNECT SWITCH	27	EA			
UM2	SINGLE PHASE OH TO UG TERMINATION	4	EA			
UM5	TYPICAL UNDERGROUND SERVICE INSTALLATION	10	EA			
INSTALL TOTAL:						\$ -

WAUCHULA RECONDUCTOR & REBUILD PROJECT ALONG W. MAIN STREET

BID UNIT	DESCRIPTION	# OF UNITS	UNIT	LABOR	UNIT PRICE	EXT. PRICE
REMOVALS						
	WIRE, 1/0 ACSR RAVEN	8072	FT			
	WIRE, 2 TRIPLEX CONCH SEC	66	FT			
	WIRE, 4 ACSR SWANATE	2805	FT			
	WIRE, 6A CWC	128876	FT			
	POLE, 30' CLASS 5	1	EA			
	POLE, 35' CLASS 4	1	EA			
	POLE, 35' CLASS 5	3	EA			
	POLE, 40' CLASS 3	138	EA			
	POLE, 40' CLASS 4	3	EA			
	POLE, 45' CLASS 3	12	EA			
A1	STANDARD CONFIGURATION, STRAIGHT LINE CONSTRUCTION	2	EA			
A5	STANDARD CONFIGURATION, DEADEND	4	EA			
M5-20/M5-23	STANDARD CONFIGURATION, PRIMARY TAP TAKEOFF	13	EA			
A7	SINGLE PHASE DEAD, NEUTRAL DEADENDS ON CROSSARM	2	EA			
A8	SINGLE PHASE DOUBLE DEADEND ON CROSSARM	1	EA			
B7	CROSSARM CONSTRUCTION, DEADEND, ON ARMS	2	EA			
C1-ALT MATERIALS	STANDARD CONFIGURATION, STRAIGHT LINE CONSTRUCTION	84	EA			
C1- POST/STEEL ARM	STANDARD CONFIGURATION, STRAIGHT LINE CONSTRUCTION	1	EA			
C2-ALT MATERIALS	STANDARD CONFIGURATION, MEDIUM ANGLE, CROSSARM	1	EA			
C2-1	ALTERNATE CONFIGURATION, MEDIUM ANGLE, CROSSARM	1	EA			
C2- FIBERGLASS	STANDARD CONFIGURATION, MEDIUM ANGLE CONSTRUCTION	1	EA			
C2-POST/ STEEL ARM	STANDARD CONFIGURATION, MEDIUM ANGLE CONSTRUCTION	2	EA			
C7	CROSSARM CONSTRUCTION, DEADEND, ON ARMS	20	EA			
C8	CROSSARM CONSTRUCTION, HORIZONTAL DOUBLE NEUTRAL ON CROSSARM CONSTRUCTION, STANDARD	83	EA			
E1	ANCHOR GUY DETAIL	26	EA			
E1-S	SIDEWALK GUY	2	EA			
E6	DOUBLE DOWN GUY	1	EA			
E9	SPAN GUY DETAIL	6	EA			
F1-S	ANCHOR, SCREW (HELIX)	29	EA			
G110	SINGLE TRANSFORMER INSTALLATION, DEADEND POLE MOUNTED	2	EA			
J10	SECONDARY SQUARE CLEVIS	40	EA			
K10	SERVICE ASSEMBLY	1	EA			
M3-25A	TWO OR THREE SECTIONALIZING OIL CIRCUIT RECLOSER	1	EA			
M5-2	INSULATOR-POLETOP SINGLE	2	EA			
M5-23	INSULATOR LINE	2	EA			
M5-4	INSULATOR-HORIZONTAL	2	EA			
M5-5	INSULATOR-VERTICAL SINGLE	11	EA			
M5-6	ARRESTER	2	EA			
M5-9	CUTOUT	8	EA			
M9-13-M2	POLE MOUNTED FIXED SHUNT CAPACITOR INSTALLATION	1	EA			
M5-6	SURGE ARRESTER	43	EA			
M5-6	SURGE ARRESTER ON STANDOFF	3	EA			
M3-30	3PH RECLOSER BANK W / BYPASS	1	EA			
M5-9	CUTOUT	8	EA			
M3-3A	UNDERARM DISCONNECT SWITCH	3	EA			
UM2	SINGLE PHASE OH TO UG TERMINATION	4	EA			
UM5	TYPICAL UNDERGROUND SERVICE INSTALLATION FRAMING	10	EA			

REMOVAL TOTAL: \$ -

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
 - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2 All Bids are rejected by Owner, or
 - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.



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Description	Price Adjustment Amount (Indicate deductions in parentheses)

Presentation of Specific Details of Exceptions and Deviations

- A. Describe specific details of exceptions and deviations by referencing the applicable page number, section number, and section title from the Bidding Documents. Include this information directly in "Description" column of table above and/or include a separate attachment referencing it in the "Description" column.
- B. Present proposed deletions by setting off in brackets, thus: [delete this language], and present proposed substitute or new language by underlining, thus: substitute this language.
- C. Exceptions which are general, which make reference to Contractor's standard terms and conditions, or which make reference to Contractor's descriptive information as a whole are not acceptable.
- D. Each exception or deviation is to be separately priced. Bidders may price the exception or deviation at zero dollars.

END OF SECTION 00 45 05



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D. The following list of supervisory personnel are currently employed by the Bidder and available for assignment to the Project (project manager, superintendents, principal foremen and engineers).

Name	Title	Years of Experience

Attach detailed resumes of qualifications, previous employers and experience for each.

E. Following is a list of equipment owned by Bidder's organization which is available for use on the Project.

Type of Equipment	Size or Capacity	Present Location



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F. Following is a list of projects Bidder has undertaken in the last five years which have resulted in partial or final settlement of the contract by arbitration or litigation.

Name of Client and Project	Contact Name/ Telephone No.	Original Contract Amount	Total Claims	Arbitrated or Litigated Amount of Settlement of Claims

G. Bidder and Subcontractor(s) current licenses.

Name	State	Type	License number



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H. Following is a list of safety citations issued to the Bidder over the last 3 years.

Name of Client and Project	Contact Name/ Telephone No.	Type of Citation	Issued by

END OF SECTION 00 45 13



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SECTION 00 51 00
NOTICE OF AWARD

Project:	Date:
Owner:	Owner's Contract No.:
Contract:	Engineer's Project No.:
Bidder:	
Bidder's Address:	

You are notified that your Bid dated _____ for the above Contract has been considered. You are the Successful Bidder and are awarded a Contract for _____

[Indicate total Work, alternates, or sections of Work awarded.]

The Contract Price of your Contract is _____ Dollars (\$_____).

[Insert appropriate data if unit prices are used. Change language for cost-plus contracts.]

Three sets of the Contract and Drawings will be delivered separately to you immediately.

You must comply with the following conditions precedent within [15] days of the date you receive this Notice of Award.

1. Deliver to Owner three fully executed counterparts of the Contract Documents.
2. Deliver with the executed Contract Documents the Contract Bonds as specified.
3. Other conditions precedent: _____

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Contract Documents.

_____ Owner

By: _____
 Authorized Signature

_____ Title

Copy to Engineer

SECTION 00 52 13
FORM OF AGREEMENT
BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

THIS AGREEMENT is by and between City of Wauchula, Florida (Owner) and _____
_____ (Contractor). Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

1.01 Contractor shall complete Work as specified or indicated in the Contract Documents. The Work is generally described in the Summary of Work.

ARTICLE 2 – THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as the Relocation of 7.0 Miles of 13kV Electric Distribution Line along W. Main Street.

ARTICLE 3 – ENGINEER

3.01 The Project has been designed by Patterson & Dewar Engineers, Inc. (Engineer), which is to act as Owner's representative, assume duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 Time of the Essence

A. Time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 Dates for Substantial Completion and Final Payment

A. The Work will be substantially completed in accordance with Paragraph 15.03 of the General Conditions on or before _____ and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before _____.

4.03 Liquidated Damages

A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

1. Substantial Completion: Contractor shall pay Owner **\$500.00** for each calendar day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.

2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner **\$500.00** for each calendar day that expires after such time until the Work is completed and ready for final payment.

3. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.

ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

BID ITEMS	LUMP SUM PRICE
INSTALLS	\$
REMOVALS	\$
Total Lump Sum Price	\$

- A. Unit Prices have been computed in accordance with Paragraph 13.03 of the General Conditions.
- B. Contractor acknowledges that estimated quantities are not guaranteed. Final payment for all unit price bid items will be based on actual quantities, determined as provided in the Contract Documents.

5.02 CONTRACT PRICE MODIFICATIONS

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer. Unit Pricing shall be valid for $\pm 25\%$ of estimated quantities. Owner reserves the right to adjust measurements by an amount no greater than 25% of measurements specified. Adjustments to the Contract Price will be at the unit prices quoted in Contractor’s Unit Price Bid Sheets.

ARTICLE 6 – PAYMENT PROCEDURES

6.01 Submittal and Processing of Payments

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 Progress Payments; Retainage

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor’s Applications for Payment on or about the 1st day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below. Such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Conditions.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.

a. 90 percent of Work completed (with the balance being retainage).

B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 15 of the General Conditions and less 200% of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

6.03 Final Payment

A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

7.01 Moneys not paid when due shall bear interest at the rate of six percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

8.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:

A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.

B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.

- F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 Contents

- A. The Contract Documents consist of the following:
 - 1. Notice of Award
 - 2. This Agreement
 - 3. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid, including Unit Price Bid Sheets
 - b. Documentation submitted by Contractor prior to Notice of Award
 - 4. Performance bond
 - 5. Payment bond
 - 6. Evidence or Certificate of Insurance
 - 7. General Conditions
 - 8. Supplementary Conditions
 - 9. Specifications as listed in the table of contents of the Contract.
 - 10. Drawings listed in Section 00 01 15.
 - 11. Addenda
 - 12. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Change Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).

- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 Terms

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and



13kV Distribution Line Reconductor & Rebuild
City of Wauchula, FL
W. Main Street

ITB No. _____ 2023-02
 Date: August 13, 2023
 Rev.: _____ 00

- 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 Other Provisions

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to Contractor in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement. Counterparts have been delivered to Owner and Contractor. Portions of the Contract Documents have been signed or have been identified by Owner and Contractor or on their behalf.

This Agreement will be effective on _____ (which is the Effective Date of the Agreement).

OWNER:

CONTRACTOR:

By: _____

By: _____

Title: _____

Title: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____

Attest: _____

Title: _____

Title: _____

Address for giving notices: _____

Address for giving notices: _____

License No.: _____

(Where applicable)

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

Agent for service of process: _____



13kV Distribution Line Reconductor & Rebuild
City of Wauchula, FL
W. Main Street

ITB No. 2023-02
 Date: August 13, 2023
 Rev.: 00

SECTION 00 55 00
NOTICE TO PROCEED

Project:

Owner:

Owner's Contract No.:

Contract:

Engineer's Project No.:

Contractor:

Contractor's Address:

You are notified that the Contract Times under the above Contract will commence to run on *DATE*. On or before that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 4 of the Agreement, the date of Substantial Completion is *DATE*, and the date of readiness for final payment is *DATE*.

Before you may start any Work at the Site, Paragraph 2.01.B of the General Conditions provides that you and Owner must each deliver to the other (with copies to Engineer and other identified additional insureds and loss payees) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

The Total Price of your Contract is:

_____ Dollars (\$ _____).

Engineer: Patterson & Dewar Engineers, Inc.

Given by _____

Signature _____

Title _____

Date _____

Copy to Owner

PERFORMANCE BOND – FORM C-00 61 13.13

CONTRACTOR (*Name and Address*): SURETY (*Name, and Address of Principal Place of Business*):

OWNER (*Name and Address*):

CONTRACT

Effective Date of Agreement:

Amount:

Description (*Name and Location*):

BOND

Bond Number:

Date (*Not earlier than Effective Date of Agreement*):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal (Seal)

Surety's Name and Corporate Seal (Seal)

By: _____
Signature

By: _____
Signature (Attach Power of Attorney)

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Note: Provide execution by additional parties, such as joint venturers, if necessary.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance

of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted

within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

N/A

PAYMENT BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER *(name and address)*:

CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location)*:

BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:

Amount:

Modifications to this Bond Form: None See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal *(seal)*

Surety's Name and Corporate Seal *(seal)*

By: _____
Signature

By: _____
Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the

Construction Contract, which is incorporated herein by reference, subject to the following terms.

2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
 - 5.1 Claimants who do not have a direct contract with the Contractor,
 - 5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

- 7.2 Pay or arrange for payment of any undisputed amounts.
- 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the

construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. Definitions

16.1 **Claim:** A written statement by the Claimant including at a minimum:

1. The name of the Claimant;
2. The name of the person for whom the labor was done, or materials or equipment furnished;
3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
4. A brief description of the labor, materials, or equipment furnished;
5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and
8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page,

including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4 **Owner Default:** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18. Modifications to this Bond are as follows:

N/A

**REQUEST FOR
INTERPRETATION/INFORMATION
(Form C-00 63 13)**

RFI #: _____ Attachment

To: _____

From: _____

Attn: _____

Issue Date: _____

Project: _____

Required Reply Date: _____

DISTRIBUTION:

<u>Contractor</u>	<u>Owner</u>	<u>Engineer</u>
<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____

REFERENCES:

- Specifications: _____ Section: _____ Page/Paragraph: _____
- Drawings: _____ Issue Date: _____ Detail/Sections: _____
- Work Area: _____ Grid/Level: _____

RFI DESCRIPTION:

From: _____ Tel No: _____ Fax: No: _____

Initial: _____ E-mail: _____

RFI REPLY:

Possible Cost Effect Yes: No:

Possible Schedule Effect Yes: No:

From: _____ Reply Date: _____ xc: _____

Initial: _____

Change Order (Form C-00 63 63)

No. _____

Date of Issuance: _____ Effective Date: _____

Project:	Owner:	Owner's Contract No.:
Contract:	Date of Contract:	
Contractor:	Engineer's Project No.:	

The Contract Documents are modified as follows upon execution of this Change Order:

Description:

Attachments (list documents supporting change):

CHANGE IN CONTRACT PRICE:

CHANGE IN CONTRACT TIMES:

Original Contract Price:

\$ _____

Original Contract Times: Working days Calendar days
Substantial completion (days or date): _____
Ready for final payment (days or date): _____

[Increase] [Decrease] from previously approved
Change Orders No. _____ to No. _____:

\$ _____

[Increase] [Decrease] from previously approved Change Orders
No. _____ to No. _____:

Substantial completion (days): _____
Ready for final payment (days): _____

Contract Price prior to this Change Order:

\$ _____

Contract Times prior to this Change Order:
Substantial completion (days or date): _____
Ready for final payment (days or date): _____

[Increase] [Decrease] of this Change Order:

\$ _____

[Increase] [Decrease] of this Change Order:
Substantial completion (days or date): _____
Ready for final payment (days or date): _____

Contract Price incorporating this Change Order:

\$ _____

Contract Times with all approved Change Orders:
Substantial completion (days or date): _____
Ready for final payment (days or date): _____

RECOMMENDED:
By: _____
Engineer (Authorized Signature)
Date: _____

ACCEPTED:
By: _____
Owner (Authorized Signature)
Date: _____

ACCEPTED:
By: _____
Contractor (Authorized)
Date: _____

Approved by Funding Agency (if applicable):

Date: _____

Change Order

Instructions

A. GENERAL INFORMATION

This document was developed to provide a uniform format for handling contract changes that affect Contract Price or Contract Times. Changes that have been initiated by a Work Change Directive must be incorporated into a subsequent Change Order if they affect Price or Times.

Changes that affect Contract Price or Contract Times should be promptly covered by a Change Order. The practice of accumulating Change Orders to reduce the administrative burden may lead to unnecessary disputes.

If Milestones have been listed in the Agreement, any effect of a Change Order thereon should be addressed.

For supplemental instructions and minor changes not involving a change in the Contract Price or Contract Times, a Field Order should be used.

B. COMPLETING THE CHANGE ORDER FORM

Engineer normally initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by Contractor, or requests from Owner, or both.

Once Engineer has completed and signed the form, all copies should be sent to Owner or Contractor for approval, depending on whether the Change Order is a true order to the Contractor or the formalization of a negotiated agreement for a previously performed change. After approval by one contracting party, all copies should be sent to the other party for approval. Engineer should make distribution of executed copies after approval by both parties.

If a change only applies to price or to times, cross out the part of the tabulation that does not apply.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by



Issued and Published Jointly by



These General Conditions have been prepared for use with the Agreement between Owner and Contractor for Construction Contract (EJCDC® C-520, Stipulated Sum, or C-525, Cost-Plus, 2013 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other.

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www.acec.org

American Society of Civil Engineers
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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.
 11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing

liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative.
33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals and the performance of related construction activities.
35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
40. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any

geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.

45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:*
 1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:*
 1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:*
 1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).

- E. *Furnish, Install, Perform, Provide:*
1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

- A. *Bonds:* When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Contractor’s Insurance:* When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner’s Insurance:* After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor one printed copy of the Contract (including one fully executed counterpart of the Agreement), and, upon request, one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

3.02 *Reference Standards*

- A. Standards Specifications, Codes, Laws and Regulations
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies:*

- 1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
- 2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
- 3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the

Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. abnormal weather conditions;

3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
 - E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
 - F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.
 - G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 Use of Site and Other Areas

- A. *Limitation on Use of Site and Other Areas:*
 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs,

losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
 - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
 - 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
 - 1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or

2. is of such a nature as to require a change in the Drawings or Specifications; or
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Possible Price and Times Adjustments:*
 1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.

3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
 - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.
- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments:*
 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or

indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
 - d. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 2. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.

- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of

insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 *Contractor's Insurance*

- A. *Workers' Compensation*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
 - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
 - 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).
 - 4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered*: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence

basis, against:

- 1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
- 2. claims for damages insured by reasonably available personal injury liability coverage.
- 3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.

- C. *Commercial General Liability—Form and Content*: Contractor’s commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage:
 - a. Such insurance shall be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor’s contractual indemnity obligations in Paragraph 7.18.
 3. Broad form property damage coverage.
 4. Severability of interest.
 5. Underground, explosion, and collapse coverage.
 6. Personal injury coverage.
 7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, “Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured” or its equivalent.
- D. *Automobile liability*: Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. *Umbrella or excess liability*: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer’s liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. *Contractor’s pollution liability insurance*: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor’s operations and completed operations. This insurance shall be maintained for no less than three years after final completion.
- G. *Additional insureds*: The Contractor’s commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor’s professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are

performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.

- I. *General provisions:* The policies of insurance required by this Paragraph 6.03 shall:
 1. include at least the specific coverages provided in this Article.
 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
 3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
 4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
 5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

- A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other

earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.

3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
 4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
 5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
 6. extend to cover damage or loss to insured property while in transit.
 7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
 9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
 10. not include a co-insurance clause.
 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
 12. include performance/hot testing and start-up.
 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.

- F. *Insurance of Other Property*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 *Waiver of Rights*

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other

insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.

- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.04 *"Or Equals"*

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or

equal" item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.

1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) it has a proven record of performance and availability of responsive service; and
 - 4) it is not objectionable to Owner.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 *Substitutes*

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.

- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- O. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

7.09 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and

Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.12 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.

- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16 *Shop Drawings, Samples, and Other Submittals*

A. *Shop Drawing and Sample Submittal Requirements:*

1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

- d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.
1. *Shop Drawings:*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.
 2. *Samples:*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.
 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. *Engineer's Review:*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or

accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.

5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance nor approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.

E. *Resubmittal Procedures:*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 1. observations by Engineer;
 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. use or occupancy of the Work or any part thereof by Owner;
 5. any review and approval of a Shop Drawing or Sample submittal;

6. the issuance of a notice of acceptability by Engineer;
 7. any inspection, test, or approval by others; or
 8. any correction of defective Work by Owner.
- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

7.19 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 2. an itemization of the specific matters to be covered by such authority and responsibility; and
 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.
- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

- 9.03 *Furnish Data*
- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.
- 9.04 *Pay When Due*
- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.
- 9.05 *Lands and Easements; Reports, Tests, and Drawings*
- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.
- 9.06 *Insurance*
- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.
- 9.07 *Change Orders*
- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.
- 9.08 *Inspections, Tests, and Approvals*
- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.
- 9.09 *Limitations on Owner's Responsibilities*
- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- 9.10 *Undisclosed Hazardous Environmental Condition*
- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.
- 9.11 *Evidence of Financial Arrangements*
- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).
- 9.12 *Safety Programs*
- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

10.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. *Change Orders:*
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
 - 2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change

Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. *Field Orders:* Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
 1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.
 1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
 2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy

provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

3. *Binding Decision*: Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12 – CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The

responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.
 - 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval:* If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim:* If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results:* If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work:* The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 - 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.

- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
 5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
 - g. The cost of utilities, fuel, and sanitary facilities at the Site.
 - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
 - 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 - 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 - 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 - 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee:* When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.
- E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

- B. *Cash Allowances*: Contractor agrees that:
 - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.
- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments:*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
 - 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
 - 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications:*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;

- c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
- d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due:*

- 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner:*

- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - l. there are other items entitling Owner to a set off against the amount recommended.
- 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's

performance of the remainder of the Work, subject to the following conditions:

1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment:*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full,

Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.

D. *Payment Becomes Due:* Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 1. correct the defective repairs to the Site or such other adjacent areas;
 2. correct such defective Work;
 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.

- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.

- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude

Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 - 2. agree with the other party to submit the dispute to another dispute resolution process; or
 - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

**SECTION 00 73 00
SUPPLEMENTARY CONDITIONS**

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC® C-00 72 00 (2013 Edition). All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof. The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

SC-2.02 Delete Paragraph 2.02.A in its entirety and insert the following new paragraph in its place:

- A. Owner shall furnish to Contractor one copy of conformed Contract Documents incorporating and integrating Contractor's Bid Documents, all Addenda and any amendments negotiated prior to the Effective Date of the Contract (including one fully executed counterpart of the Agreement), and, upon request, one copy in electronic portable document format (PDF). Additional printed copies of the conformed Contract Documents will be furnished upon request at the cost of reproduction.

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.B:

- C. The following reports of explorations and tests of subsurface conditions at or adjacent to the Site are known to Owner:
1. NONE
- D. The following drawings of physical conditions relating to existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities) are known to Owner:
1. NONE
- E. Contractor may examine copies of reports and drawings identified in SC 5.03.C and SC 5.03.D that were not included with the Bidding Documents at the office of the Engineer during regular business hours, or may request copies from Engineer, at the cost of reproduction.

SC 5.06 Delete Paragraphs 5.06.A and 5.06.B in their entirety and insert the following:

- A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.
- B. Not Used.

SC 6.05 Delete Paragraphs 6.05.B in its entirety and insert the following:

- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given by the property insurance carrier to the purchasing policyholder and all other insureds. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.

SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.A:

- B. On this Project, by agreement with the Owner, Engineer will not furnish a Resident Project Representative to represent Engineer at the Site or assist Engineer in observing the progress and quality of the Work.

END OF SECTION 00 73 00

**SECTION 01 11 00
SUMMARY OF WORK****PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Point of Destination
- B. Description of Work
- C. General Work Requirements
- D. Notification And Underground Utility Locates
- E. Outages
- F. Site Visit
- G. Work by Owner / Owner-Furnished Items

1.02 POINT OF DESTINATION

West Main Street from Hwy 35A to Hwy 64

1.03 DESCRIPTION OF WORK

A new agricultural customer is developing a site within the service area of the City of Wauchula. The circuit identified to feed this new facility will require the reconductor and rebuild of approximately seven miles of overhead three-phase construction. Construction includes:

1. Installation of approximately 150 wood poles of three-phase construction and the required equipment to continue feeding customers along the route.
2. Installation of 33,170-feet of 336 ACSR three-phase.
3. Removal/Topping of 153 poles, framing and equipment.
4. Removal of 35,160-feet of ACSR and/or #6 CU conductor.

1.04 GENERAL WORK REQUIREMENTS

The scope of Work includes the installation of a complete and functional system for serving distribution customers. The general scope of tasks is described as follows:

- A. Owner will furnish all material.
- B. Engineer shall be responsible for layout and surveying of the proposed modifications. Engineer shall provide survey locations of structures and anchors.
- C. Contractor shall be responsible for providing supervisor(s) and personnel qualified to perform the Work as specified.
- D. The methods of framing and construction practices must conform to the latest and best current practice for the type of construction required for the application. The system shall be complete with all necessary accessories for proper operation.
- E. Actual construction shall be based on the Contract Drawings. Any change to the Contract Drawings must be approved by Owner. If any departure from the Contract or Contract Drawings is deemed necessary by Contractor, details of such departure and the reasons therefor shall be submitted as soon as practicable to Engineer and Owner for approval. No such departures shall be made without prior written approval of Owner. Within 10 days after return of approved prints, copies of the revised drawings shall be furnished to Owner for retention as a matter of record. Prior to completion of the Work, the originals, available from Owner, shall be revised to show all changes subsequent to original plans and submitted for retention as a matter of record.
- F. Contractor shall be responsible for providing for proper handling, storing and protection of materials.

- G. Contractor shall be responsible for demolition, removing and disposing of existing wood poles, concrete poles and equipment as specified.
- H. Contractor shall disassemble, store, protect and return removed materials to Owner's warehouse.
- I. Contractor shall be responsible for transferring existing facilities, removing old facilities, and installing new facilities, as identified on the Contract Drawings.
- J. All pole-top assembly units include installation and proper requirements for sagging of primary and neutral conductors.
- K. All pole change-outs includes the transferring, dead-ending, and reattachment of conductors.
- L. Contractor shall be responsible for landscape and concrete repair (due to construction activities including restoring, planting, seeding new areas and areas disturbed during construction). Contractor is responsible for landscape repair on property outside ROW.
- M. Contractor shall be responsible for cleaning-up and disposing of debris and waste as project progresses.
- N. Contractor shall be responsible for coordinating construction activities with Owner, other agencies and utilities as required by these specifications and associated permits. Contractor shall coordinate with other pole-mounted utilities.
- O. Contractor shall attend kickoff, progress, scheduling, and closeout meetings in person or by teleconference as allowed by Owner.
- P. Contractor shall be responsible for providing barricading and traffic control during construction activities. Contractor shall abide by all Federal, State, local and Transportation Cabinet regulations. Use Proper Transportation Cabinet traffic control procedures.
- Q. Owner and Engineer reserve the right to make ground inspections. Contractor shall make any corrections required to bring project into compliance with original specifications at no cost to Owner.
- R. It is the responsibility of Contractor to verify the location of any and all underground utilities including water, gas, telephone, and sewage either privately or publicly owned. Contractor assumes sole responsibility for damages to facilities in or near work area if damage occurs. Contractor shall abide by state and utility notifications "One Call Law".
- S. Temporary work necessary in the normal course of construction should be identified prior to bidding. No additional payment will be made.
- T. Contractor is advised that construction will involve performing work adjacent to and on energized electrical power facilities owned by Owner and others.
- U. Owner will perform walk-through inspection after completion; Contractor shall remedy identified issues before closeout.
- V. Construction is not complete until Contractor has energized lines at operating voltage after Owner's inspection.

1.05 NOTIFICATION AND UNDERGROUND UTILITY LOCATES

- A. Contractor must notify Engineer/Owner minimum 48 hours in advance of starting work.
- B. Contractor shall notify all companies with underground utilities in the work area via the state or local "one-call" to obtain utility locates. Once the utilities have been located Contractor shall physically identify the exact location of the utilities by vacuum or hand excavation, when possible, in order to

determine the actual location and path of any underground utilities which might be within 20 feet of the installation path.

- C. Contractor shall not commence operations until the location of all underground utilities within the work area have been verified.

1.06 OUTAGES

- A. Contractor is advised that existing distribution line outages shall be held to an absolute minimum, may be prohibited at times, and at all times shall not remove any substation from service. The duration of outages may be restricted to maintain a satisfactory operating condition. In general, Contractor shall maintain the system in such condition that, in the event of any emergency, service can be restored with minimum effort and lost time. All outages must be approved in advance by Owner and Engineer. Outages may be required on evenings and weekends.
- B. Distribution line outages may be prohibited at certain times and may be restricted to maintain a satisfactory operating condition. In general, Contractor shall maintain the system in such condition that, in the event of any emergency, service can be restored with minimum effort and lost time.
- C. All outages must be coordinated and approved by Owner prior to customer notification and are limited to a maximum of 4 hours.
- D. Customer notification of outages
1. Residential – Contractor must notify residential customers with 48-hour notice. Owner will provide door tags for notification.
 2. Commercial/Industrial – Contractor must notify commercial customers **in-person** with 72-hour notice. Contractor shall schedule/coordinate outage in conjunction with customer, and then notify Owner of set schedule.
- E. Contractor shall provide detailed schedule of upcoming planned outages to Owner at the beginning of every week. Schedule shall specify manpower involved, number of customers affected, anticipated duration of outage, and work plan for re-energization

1.07 SITE VISIT

- A. The Work stated and specified herein involves construction adjacent to energized overhead electric lines. Though Engineer has attempted to depict construction conditions as accurately as possible, Contractor is strongly advised to undertake the following:
1. Visit the proposed locations of construction prior to submitting a bid for Work. Contractor should visit the location to examine types of soil and terrain Contractor may encounter.
 2. Pay special attention to scheduling Work activities to permit expeditious accomplishment of the requirements.
- B. Owner will not consider adjustments to the Contract Price after award due to Contractor's failure to recognize the conditions under which Work is to be performed.

1.08 WORK BY OWNER / OWNER-FURNISHED ITEMS

- A. Owner will coordinate necessary outages and notifications of affected customers.
- B. Owner will provide a switch/hot line tag selection upon Contractor's request.
- C. Contractor shall be responsible for inventorying all units, construction drawings, and construction documents for material quantity requirements. All units shall be complete, functional and meet applicable safety standards.

PART 2 - PROJECTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 11 00

**SECTION 01 20 00
PRICE AND PAYMENT PROCEDURES****PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Payment Procedures
- B. Change Procedures
- C. Measurement and Payment for Unit Prices
- D. Correlation of Submittals

1.02 PAYMENT PROCEDURES

- A. Reference Article 15 of General Condition and Supplementary Conditions. Submit one copy of each invoice (Application for Payment).
- B. Utilize latest approved Unit Bid Price Sheets for listing items in Application for Payment.
- C. Payment Period: monthly.
- D. Submit an updated Progress Schedule with each Application for Payment.

1.03 CHANGE PROCEDURES

- A. Reference Articles 11 and 13 of General Conditions.
- B. Change Order: issued by Engineer or Owner using C-00 63 63 included herein in accordance with the General Conditions.
 - 1. Stipulated Price Change Order: based on Contractor's maximum price quotation or Contractor's request for a Change Order as approved by Engineer or Owner.
 - 2. Unit Price Change Order: for pre-determined unit prices and quantities and executed on a fixed unit price basis. Execute Work under a Work Change Directive for unit costs or quantities of work not pre-determined. Changes in Contract Price and Contract Time to be computed as specified for Time and Material Change Order.
 - 3. Time and Material Change Order: based on itemized account and supporting data after completion of change within time limits indicated in the General Conditions. Engineer or Owner and Contractor to determine the change allowable in Contract Price and Contract Time as provided in the General Conditions. Maintain detailed records of work done on this basis, provide full information required for evaluation of proposed changes, and substantiate costs for changes in the Work.

1.04 MEASUREMENT AND PAYMENT FOR UNIT PRICES

- A. Take measurements and compute quantities. Engineer or Owner to verify measurements and quantities.
- B. Unit Quantities: quantities and measurements indicated in the Bid Form are for contract purposes only. Actual quantities and measurements supplied or placed in the Work determine payment.
- C. Payment includes full compensation for required labor, material and equipment, tools, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; and overhead and profit.



13kV Distribution Line Reconductor & Rebuild
City of Wauchula, FL
W. Main Street

ITB No. 2023-02
Date: August 13, 2023
Rev.: 00

1.06 CORRELATION OF SUBMITTALS

- A. Promptly revise Unit Bid Price Sheets and Applications for Payment to record each authorized Change Order as a separate line item and adjust the Contract Price.
- B. Promptly revise Progress Schedules to reflect any change in Contract Time and revise sub-schedules to adjust time for other items of the Work affected by the change.
- C. Promptly enter changes in Project Record Documents.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 20 00

SECTION 01 31 00
PROJECT MANAGEMENT AND COORDINATION**PART 1 – GENERAL****1.01 SECTION INCLUDES**

- A. General
- B. Project Meetings

1.02 GENERAL

- A. Inform Owner and Engineer of the address for sending official correspondence and the address and telephone number of Contractor's representative who will be Project Manager for the Contract and responsible and available outside of normal working hours for emergency repairs and maintenance of safety devices.
- B. During periods of construction, keep Owner and Engineer informed in writing with name, address, and telephone number of Contractor's representative who will be responsible and available outside of normal working hours for emergency repairs and the maintenance of safety devices.
- C. Identify correspondence, drawings, data and materials, packing slips or other items associated with this Contract as: **Wauchula 13kV Line Reconductor & Rebuild.**
- D. Coordinate scheduling, submittals, and Work of the various Specifications to effectuate an efficient and orderly sequence for installing interdependent construction elements, with provisions for accommodating items installed later.
- E. Coordinate Work of the various Specifications with interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.
- F. Coordinate completion and cleanup of Work of separate sections in preparation for Substantial Completion and for portions of Work designated for Owner's partial occupancy.
- G. After Owner occupancy of premises, coordinate access to site for correction of defective Work and/or incomplete Work to minimize disruption of Owner's activities.
- H. Provide coordination in accordance with Article 7 of the General Conditions.

1.03 PROJECT MEETINGS

- A. Pre-Construction Conference
 - 1. Owner may schedule a meeting at the Project site before Contractor occupancy and onset of Work.
 - 2. Attendance Required: Owner, Contractor, Engineer, Contractor's Superintendent, Suppliers and Subcontractors.
- B. Progress Meetings
 - 1. Owner may schedule a progress meeting weekly throughout progress of the Work.
 - 2. Attendance: Contractor, major Subcontractors and Suppliers, Owner and Engineer as appropriate to agenda topics for each meeting.

3. Agenda
 - a. Review minutes of previous meetings
 - b. Unresolved Issues
 - c. Review Work progress
 - d. Observations, problems, and decisions
 - e. Identification of problems which impede planned progress
 - f. Review of Schedule of Submittals and status of submittals
 - g. Review of off-site fabrication and delivery schedules
 - h. Maintenance of progress schedule
 - i. Corrective measures to regain projected schedules
 - j. Planned progress during succeeding work period
 - k. Coordination of projected progress
 - l. Maintenance of quality and work standards
 - m. Effect of proposed changes on Progress Schedule and coordination
 - n. Other business relating to Work.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 31 00

SECTION 01 33 00
SUBMITTAL PROCEDURES**PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. General Procedures
- B. Construction Progress Schedule
- C. Schedule of Submittals
- D. Shop Drawings and Samples
- E. Record documents

1.02 GENERAL PROCEDURES

- A. Email submittals to Engineer with copy to Owner. Schedule submittals to expedite the Project and coordinate with schedules required by Article 1.04 of this Section. Coordinate submission of related items.
 - 1. Send to Engineer as follows: Anthony Hanson (ahanson@pdengineers.com) and (shopdrawings@pdengineers.com)
 - 2. CC Owner as follows: Chris Collier (ccollier@cityofwauchula.com)
- A. Complete the submittal transmittal form as indicated, numbering each submittal consecutively. Assign resubmittals the same transmittal number as the original with a suffix of a sequential letter to indicate the resubmittal (e.g. the first resubmittal of submittal 25 would be number 25A.) Do not combine new submittals with resubmittals.
- B. Revise and resubmit documents as required. Identify changes made since previous submittal. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions. Submittals not requested on the submittal schedule will not be recognized or processed.

1.03 CONSTRUCTION PROGRESS SCHEDULE

- A. Submit preliminary and final Progress Schedule as specified in Article 2 of the General Conditions or as established in Notice to Proceed.
- B. Submit revised Progress Schedule on monthly basis and with each Application for Payment, identifying changes since previous version.
- C. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.
- D. Indicate estimated percentage of completion for each item of Work at each submission.
- E. Indicate dates for fabrication, factory testing, delivery, shipping and field testing, and material and equipment delivery dates, including those furnished by Owner. Coordinate with Schedule of Submittals.
- F. Include a narrative of problems experienced that could impact progress of work.

1.04 SCHEDULE OF SUBMITTALS

- A. Submit preliminary and final Schedule of submittals as specified in Article 2 of the General Conditions or as established in Notice to Proceed. Include submittals specified in the Specifications.

- B. Include description of each Submittal, date by which each Submittal will be delivered to Engineer and Owner date by which each submittal must be approved to maintain project schedule, and relevant specification section reference.
- C. Allow 10-15 days for Engineer review of submittals and possible resubmittal from receipt of submittal/resubmittal.

1.05 SHOP DRAWINGS AND SAMPLES

- A. Submit in accordance with paragraph 7.16 of the General Conditions and coordinate with the Schedule of Submittals required in Article 1.02 of this Section.
- B. Submission of any Shop Drawing or Sample bearing Contractor's and Engineer's approval shall constitute a representation to Owner that the requirements of paragraph 7.16 of the General Conditions have been fulfilled.
- C. Submit test results, data, and reports and certifications to Engineer based on tests performed. Submit test reports and certifications for Independent Testing Services as specified in Section 01 44 00.
- D. Identify variations from Contract Documents and material and equipment or system limitations which may be detrimental to successful performance of the completed Work and identify reasons therefore in the space provided on the transmittal form or in a referenced serial letter. Clearly identify requests for "Or-Equal" items and submit per paragraph 7.04 of General Conditions. Requests for Substitutions shall be made in accordance with Paragraph 7.05 of the General Conditions.
- E. Engineer to complete review in accordance with Paragraph 7.16 of the General Conditions and will return reviewed submittals to Contractor with the following provided for each item submitted.

SUBMITTAL REVIEW BY ENGINEER	
PROJECT	
SUBMITTAL NO.	
Review of this shop drawing/submittal by Engineer is for general conformance with the requirements specified and compatibility with the design concept of the completed project. This review does not extend to means, methods, sequences, or procedures of construction (except where specifically called for in the specified requirements) or to issues of safety incident thereto. This review shall not relieve the contractor from its responsibility for full compliance with the requirements specified and to determine and verify the information contained therein. Provide final disposition of the comments made prior to issuance for fabrication or construction.	
ACTION:	
<input type="checkbox"/> No Exceptions Taken <input type="checkbox"/> Make Corrections Noted (no resubmittal required) <input type="checkbox"/> Revise and Resubmit (see comments) <input type="checkbox"/> None <input type="checkbox"/> Not Required <input type="checkbox"/> Information Only	
REVIEWED BY:	Date:

Where:

"No Exceptions Taken" indicates submittal has been reviewed and appears to be in conformance with requirements of the Contract Documents. Proceed as shown on the submittal.

"*Make Corrections Noted*" indicates submittal appears to be in conformance with requirements of the Contract Documents. Incorporate the corrections noted and proceed as shown on the submittal. No resubmittal is required.

"*Revise and Resubmit*" indicates submittal does not appear to be in conformance with the Contract Documents. Engineer's comments will be noted on the submittal or in a separate, cross-referenced document. Re-check, make necessary revisions and resubmit to Engineer for approval.

"*None – Not Required or Information Only*" indicates that the submittal is not called for by the Contract Documents and that Engineer has not reviewed the material.

1.06 RECORD DOCUMENTS

- A. Submit full set of record documents to Engineer per paragraph 7.11 of the General Condition with claim for final Application for Payment. Coordinate with closeout procedures in accordance with Section 01 77 00.
- B. Store Record Documents separate from documents used for construction. Record information concurrent with construction progress.
- C. Legibly mark each item to record description of actual equipment and material installed actual construction on approved submittals, including the following
 - Manufacturer's name and equipment and material model and number
 - Material and equipment substitutions or alternates utilized
 - Approved changes
 - Measured depths of foundations
 - Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements
 - Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work
 - Field changes of dimension and detail
 - Details not on original Contract Documents or Shop Drawings
- D. Construction Record Drawings: Submit to Engineer electronic files in ".DWG" format. Indicate "Conformed by Contractor to Construction Records" in revision block and sign. Show changes and revisions to date of completion.
- E. Warranties: Submit duplicate notarized copies of warranty documents which are executed and transferable from Subcontractors, Suppliers, and manufacturers. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within 10 days after acceptance, listing date of acceptance as start of warranty period. Assemble in three ring binders with durable plastic cover with a table of contents.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 33 00

**SECTION 01 44 00
QUALITY REQUIREMENTS****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Reference Standards and Regulatory Requirements
- B. Qualifications
- C. Material and Equipment
- D. Source Quality Control
- E. Quality Assurance and Control of Installation
- F. Independent Testing
- G. *Attachments*

1.02 REFERENCE STANDARDS AND REGULATORY REQUIREMENTS

Reference to standards, specifications, manuals or codes of any technical society, organization or association, or Laws or Regulations of any governmental authority are used in accordance with Paragraph 3.02 of the General Conditions.

1.03 QUALIFICATIONS

- A. Meet or provide capability to meet the following criteria in connection with the Work of the Contract Documents.
- B. Contractor's Experience and Qualifications Criteria
 - 1. Has performed similar work on at least 5 projects within the last 5 years for an electric utility.

1.04 MATERIAL AND EQUIPMENT

- A. Material and equipment means new material and equipment forming the Work and may also include existing material and equipment required for reuse. This does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- C. Furnish interchangeable components of the same manufacturer, for similar components.
- D. Transportation and Handling
 - 1. Transport and handle material and equipment in accordance with manufacturer's instructions.
 - 2. Promptly inspect shipments to assure that material and equipment comply with requirements, quantities are correct, and material and equipment are undamaged.
 - 3. Furnish equipment and personnel to handle material and equipment by methods to prevent soiling, disfigurement, or damage.
 - 4. Uncrate equipment and dispose of packing material properly.

E. Storage and Protection

1. Store and protect material and equipment in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive material and equipment in weather-tight, climate-controlled enclosures.
2. For exterior storage of fabricated material and equipment, place on sloped supports, above ground.
3. Provide for off-site storage and protection when site does not permit on-site storage or protection.
4. Cover material and equipment subject to deterioration with impervious sheet covering. Furnish ventilation to avoid condensation or potential degradation of material and equipment.
5. Store loose granular materials on solid flat surfaces in a well-drained area. Avoid mixing with foreign matter.
6. Furnish equipment and personnel to store material and equipment by methods to prevent soiling, disfigurement, or damage.
7. Arrange storage of material and equipment to permit access for inspection. Periodically inspect to assure material and equipment are undamaged and are maintained in acceptable conditions.
8. After receipt of material and equipment, assume responsibility for loss and damage including but not limited to breakage, corrosion, weather damage, and distortion.
9. Notify Engineer and Owner in writing upon acceptance of a shipment.

F. "Or Equal" items will be considered in accordance with Section 01 33 30.

G. Substitute Items

1. Request substitute items as a Change Request per Section 01 20 00 with complete data substantiating compliance of proposed substitution with Contract Documents.
2. Substitute items will be considered in accordance with paragraph 7.04 of the General Conditions.
3. Substitute items will not be considered when indicated or implied on Shop Drawing or material and equipment data submittals without separate written request, or when acceptance will require revision to the Contract Documents.

1.05 SOURCE QUALITY CONTROL

- A. Subject material and equipment furnished under these Contract Documents to a complete factory testing program.
- B. Shop Drawings and submittals: reviewed by Engineer before initiating testing program.
- C. Perform checks and tests in accordance with manufacturer's recommendations and referenced standards.
- D. Evaluate test results and advise Owner immediately of any discrepancy between test results and test limits or the failure of any device or system under test. Include test limits for acceptability applicable to each test on the certified test records.

- E. Record test information, including the evaluation of testing results, on forms approved by Owner and Engineer.
- F. Independent Testing Agency Certification
 - 1. If specified, furnish certificates from an independent testing agency.
 - 2. Independent testing agency to certify that material and equipment components have been examined and tested and are in conformance with the requirements specified in the Contract Documents.
 - 3. Take Samples in accordance with the requirements specified in the Contract Documents, as selected by Owner or independent testing agency. Furnish and ship at no additional cost to Owner.

1.06 QUALITY ASSURANCE AND CONTROL OF INSTALLATION

- A. Monitor quality control of Subcontractors, Suppliers, manufacturers, material, equipment, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturers' installation instructions, including each step in sequence.
- C. If manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work using persons qualified to produce workmanship of specified quality.
- F. Secure material and equipment in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.07 INDEPENDENT TESTING

- A. Employ and pay for specified services of an independent firm, to be approved by Owner, to perform inspection and testing as specified and in accordance with paragraph 14.02 of the General Conditions.
- B. Reports will be submitted by the independent firm to Owner, in duplicate indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents per Section 01 33 00.
- C. Inspection, testing, and source quality control may occur on or off the Project Site.
- D. Cooperate with independent firm. Furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
 - 1. Notify Owner and independent firm 24 hours before expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.

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- E. Retesting required because of non-conformance to specified requirements will be performed by the same independent firm if instructed by Owner. Payment for retesting will be charged to Contractor by deducting inspection or testing charges from the Contract Price.

- F. Testing or inspecting does not relieve Contractor from performing Work in accordance with requirements of the Contract Documents.

1.08 ATTACHMENTS

- A. Independent Materials Testing

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 44 00

**ATTACHMENT #A
INDEPENDENT MATERIALS TESTING SERVICES**

Obtain and pay for independent testing services to perform concrete and soils testing. Obligation to perform work in accordance with requirements of Contract Documents is not relieved by employment of independent testing services.

QUALITY ASSURANCE

- A. Testing Service Staff
1. Maintain a full-time registered Engineer on staff to supervise services.
 2. Personnel trained and experienced in the necessary skills, familiar with the standards specified for inspection and testing and familiar with local conditions.
- B. Testing equipment: equipment calibration shall be up-to-date and calibrated at reasonable intervals with devices of and accuracy traceable to either the National Institute of Standards and Technology (NIST) or accepted values of natural physical constants. Calibration documentation to be submitted upon request by Owner.
- C. Owner has right to inspect the operations of the testing service at any time.
- D. If incongruences or unacceptable testing practices are observed, Contractor will be notified that action is required to correct the situation. If such incongruences continue, Owner has the right to require 1) replacement of any testing service personnel, or 2) a new testing service be obtained.

SUBMITTALS

- A. Within 14 days after Execution of Contract, submit complete data relative to the testing service proposed for this work for approval by Owner. Information shall include, but not be limited to a listing of work done by the testing service within the past five years. Include location, name of project, Owner, and a summary of services performed.

TESTING REPORTS

- A. After each inspection and test, promptly submit two copies of laboratory report to Owner in accordance with Sections 01 33 00. Include the following:
- Date issued
 - Project title and location
 - Name of Inspector
 - Date and time of sampling, testing or inspection
 - Identification of specification section
 - Location on the site
 - Type of inspection or test
 - Date of test
 - Results of tests
 - Conformance with Contract Documents
- B. Provide interpretation of test results when requested by Owner.



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SOILS AND CONCRETE

- A. Provide supervision, labor, equipment, materials to conduct the tests and inspections specified.
- B. Inform Owner immediately upon finding tests that do not conform to the specifications.
- C. Perform and pay for additional tests that are requested by Owner.

**SECTION 01 50 00
TEMPORARY FACILITIES AND CONTROLS****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Temporary Utilities
- B. Construction Facilities
- C. Temporary Controls
- D. Removal of Temporary Utilities, Facilities, and Controls

1.02 TEMPORARY UTILITIES

- A. Furnish and maintain utilities (e.g. electricity, communications, lighting, water, sanitation facilities, etc.) necessary for temporary office space established in execution of this Project.

1.03 CONSTRUCTION FACILITIES

- A. Barriers
 - 1. Furnish barriers to prevent unauthorized entry to construction areas to allow for Owner's use of site, and to protect existing facilities and adjacent properties from damage from construction operations.
 - 2. Furnish barricades required by governing authorities for public rights-of-way.
 - 3. Provide protection for plant life designated to remain. Replace damaged plant life.
 - 4. Protect non-owned vehicular traffic, stored materials, site and structures from damage.
- B. Protection of Installed Work
 - 1. Protect installed Work and provide special protection where specified in individual Specification Sections.
 - 2. Furnish temporary and removable protection for installed equipment and material. Control activity in immediate work area to minimize damage.
 - 3. Prohibit traffic from landscaped areas.
- C. Security
 - 1. Provide security and facilities to protect Work and Owner's operations from unauthorized entry, vandalism, or theft.
 - 2. Coordinate with Owner's security program.
 - 3. Maintain site protection of energized facilities.
- D. Access Roads
 - 1. Construct and maintain temporary roads accessing public thoroughfares to serve construction area. Control dust and water.
 - 2. Extend and relocate as Work progress requires. Provide detours necessary for unimpeded traffic flow.
 - 3. Provide and maintain access to fire hydrants, free of obstructions.

E. Progress Cleaning and Waste Removal

1. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
2. Collect and remove waste materials, debris, and rubbish from site weekly and dispose off-site.

1.04 TEMPORARY CONTROLS**A. Water Control**

1. Grade site to drain. Maintain excavations free of water.
2. Dewater and dispose of water in a manner that will not cause injury to public and private property.
3. Protect site from puddling, ponding or running water.

B. Dust Control

1. Execute Work by methods to minimize raising dust from construction operations.
2. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

C. Erosion and Sediment Control

1. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
2. Minimize amount of bare soil exposed at one time.
3. Provide temporary measures such as berms, dikes and drains to prevent water flow.
4. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
5. Periodically inspect earthwork to detect evidence of erosion and sedimentation. Promptly apply corrective measures.

D. Noise Control

1. Provide methods, means, and facilities to minimize noise from construction operations.

E. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.**1. Water Pollution Control**

- a. Assure that sediment, debris, petroleum, chemicals, or other contaminants will not enter existing drainage facilities and channels. Use construction methods that will prevent entrance of pollutants and wastes into existing streams, rivers, lakes, and flowing and dry watercourses.
- b. Obtain legal disposal sites and dispose of pollutants and wastes in a legal manner.
- c. Respond immediately to emergencies as directed when water quality of existing streams, rivers, lakes and flowing and dry watercourses is threatened. Take corrective action to remove or contain pollutants until a permanent solution is determined.

2. Air Pollution Control

- a. Equipment and vehicles that exhibit excessive exhausts emissions due to poor engine adjustments or inefficient operation will not be permitted to operate until corrective repairs or adjustments are made.

- b. Burning of materials from clearing or grubbing operations, combustible construction materials, and rubbish will not be allowed.

F. Traffic Regulation

1. Control and maintain traffic within the project area. Coordinate traffic control plans with Owner and local agencies.
2. Provide and maintain traffic control and maintenance devices, including, but not limited to, flag persons, advance warning sign barricades, traffic cones. Use of such control and maintenance devices shall be in accordance with the current edition of the "Manual on Uniform Traffic Control Devices for Street and Highways" as prepared by the National Joint Committee on Uniform Traffic Control Devices, and other applicable codes and standards.
3. Operate devices 24 hours per day as required. Submit plan for traffic control to Owner for review 14 days in advance of any street closure or detour.
4. Provide for access by emergency traffic, such as police, fire, and disaster units at all times. Contractor shall be liable for damages resulting from failure to provide such access.

1.05 REMOVAL OF TEMPORARY UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, and facilities before Final Application for Payment inspection.
- B. Remove temporary underground installations and grade site as indicated. Clean and repair damage caused by installation or use of temporary utilities, facilities, and controls.
- C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified conditions.

PART 2 PRODUCTS - NOT USED**PART 3 EXECUTION - NOT USED**

END OF SECTION 01 50 00

**SECTION 01 77 00
CLOSEOUT PROCEDURES****PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Substantial Completion
- B. Final Completion

1.02 SUBSTANTIAL COMPLETION

- A. Substantial Completion shall mean when Contractor has achieved completion of the following and met the requirements of Paragraph 15.03 of the General Conditions.
 - 1. An inspection of the Facility is completed by Engineer and Owner.
 - 2. An updated Punch List is provided.
 - 3. A Certificate of Substantial Completion has been provided in accordance with paragraph 15.03 of the General Conditions.
- B. Owner and Engineer shall proceed in accordance with Paragraph 15.04 of the General Conditions.
- C. Contractor shall have sole care, custody, and control of the Facility until achievement of Substantial Completion. During the one-month period after Substantial Completion, Contractor shall be given limited access to correct items on the Punch List and achieve Final Completion.
- D. The date of achieving Substantial Completion is defined in the Agreement.

1.03 FINAL COMPLETION

- A. Final Completion shall be achieved when the Work is complete and following is achieved:
 - 1. Substantial Completion has been achieved and Liquidated Damages for failure to meet Substantial Completion Date have been paid.
 - 2. Work including Punch List Items has been completed.
 - 3. Contractor equipment and supplies including waste materials have been removed from the Site.
 - 4. Record Documents required by the Contract have been delivered.
 - 5. Certificate of Occupancy or other permits to operate have been issued
 - 6. A request for final inspection in accordance with Paragraph 15.05 of the General Conditions has been submitted to Engineer and the inspection has been completed and the results accepted by Owner.
 - 7. A Final Application for Payment has been submitted to Owner identifying total adjusted Contract Price, previous payments, and balance due, in accordance with Paragraph 14.07 of the General Conditions have been completed and provided to Owner.



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- B. Owner and Engineer shall proceed in accordance with Article 15 of the General Conditions.

- C. Owner shall make Final payment and acceptance in accordance with Paragraph 15.06 of the General Conditions.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 77 00

**SECTION 02 41 00
DEMOLITION****PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Existing Conditions
- B. Continuity of Electrical Service
- C. Coordination
- D. Preparation for Demolition
- E. Execution of Demolition

1.02 EXISTING CONDITIONS

- A. Conduct demolition to minimize interference with adjacent structures.
- B. Provide, erect, and maintain temporary barriers and security devices.

1.03 CONTINUITY OF ELECTRICAL SERVICE

- A. Maintain electrical service to customers during construction, wherever feasible.
- B. Coordinate customer outages with designated utility personnel and customers.

1.04 COORDINATION

Arrange for required power outages with Owner, customers, and other utilities as appropriate.

PART 2 - PRODUCTS - NOT USED**PART 3 - EXECUTION****3.01 PREPARATION FOR DEMOLITION**

- A. Locate and protect existing utilities.
- B. Prevent movement or settlement of adjacent structures. Provide bracing and shoring.
- C. Protect existing landscaping, materials, appurtenances, and structures that are not to be demolished.

3.02 EXECUTION FOR DEMOLITION

- A. Demolish indicated structures and appurtenances in an orderly and careful manner. Take all precautions necessary for working near exposed, energized electrical equipment.
- B. Cease operations and notify Engineer immediately if adjacent structures appear to be endangered. Do not resume operations until corrective measures have been taken.
- C. Remove demolished materials from site as Work progresses. Leave site in clean condition.

- D. Demoeed materials become the property of Contractor and are to be disposed of in accordance with applicable codes, with the exception of the following materials of which Owner will retain ownership: Transformers, switches, capacitors, lights and other materials specified by Owner.
- E. Remove materials to be reinstalled or retained in manner to prevent damage.
- F. Remove and promptly dispose of contaminated, vermin infested, special or dangerous materials encountered.
- G. Do not burn or bury materials onsite.
- H. Resurface areas disturbed by demolition activities with surfacing equal to the existing surfacing.
- I. Rough grade and compact areas affected by demolition to maintain site grades and contours.
- J. Backfill excavated areas, open pits, and holes caused as a result of demolition.
- K. Do not use explosives.
- L. Immediately notify Owner of damage to materials specified for reinstallation or return to stores.
- M. Damaged materials shall not be reinstalled.
- N. Materials returned to stores in damaged condition without notification to Owner will not be credited.

END OF SECTION 02 41 00

**SECTION 33 71 16.43
POLE CONSTRUCTION AND INSTALLATION****PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Poles
- B. Installation Notes
- C. Pole Handling
- D. Pole Structure Erection

1.02 QUALITY ASSURANCE

Installation and removal work shall be done in a thorough and workmanlike manner, in accordance with the Contract. Work shall comply with applicable ordinances and codes. The 2017 (or latest edition) of the National Electric Safety Code (ANSI-C2) shall be followed, except where local regulations or these Specifications are more stringent, in which case the most stringent qualifications shall be met.

PART 2 – PRODUCTS**2.01 POLES**

- A. Poles shall be Owner-furnished.

PART 3 - EXECUTION**3.01 INSTALLATION NOTES**

- A. Coordination shall be provided as follows:
 - 1. Contractor and all Subcontractors for the various branches of work employed on the Project shall cooperate fully with each other to facilitate the progress of the work, and to avoid all interferences between the various parts of the work.
 - 2. Contractor shall cooperate fully with any other contractor that is engaged in work on the Project for Owner or any other contractor working in the Project area.
- B. Practices relative to right-of-way shall be observed by Contractor during construction as follows:
 - 1. The right-of-way shall consist of an area as determined by Owner or property lines.
 - 2. All rights-of-way and easements across private or public property required for performance of the work herein will be obtained by Owner. Access to the Project area outside the rights-of-way limits specified shall be the responsibility of Contractor. Owner shall be informed of all arrangements made for such access. Promptly restore to at least the conditions which existed prior to the commencement of work any ruts or damage made by equipment whether on or off the right-of-way.

3.02 POLE HANDLING

Poles shall be handled with care so as not to damage the pole. Poles shall not be dragged along the ground. Poles stored after delivery shall be arranged with care and shall be placed so that no pole will come in contact with standing water or the ground.

3.03 POLE STRUCTURE ERECTION

- A. The depth of setting shall be as follows unless otherwise specified on the construction drawings:

POLE HEIGHT (Per Ft.)	SETTING DEPTH	
	In Earth (Ft.)	In Rock (Ft.)
35	5.5	3.5
40	6.0	4.0
45	6.5	4.5
50	7.0	5.0
55	7.5	5.5
60	8.0	6.0
70	9.0	7.0
75	9.5	7.5
80	10.0	8.0
85	10.5	8.5
90	11.0	9.0

- B. Poles shall be set plumb and in alignment if not raked.
- C. Poles shall be set no deeper than 3" than the values in the table above. No pole will be set less than "earth" depth without Engineer's approval.
- D. Poles set in holes partly in earth and partly in rock shall be set to the depths shown for "earth". Holes may be shortened only upon Engineer's approval.
- E. Excavation is unclassified. No additional pay for rock excavation shall be provided.
- F. All holes shall be dug in the correct locations and shall be large enough to provide space for use of power tamping bars all around poles to the full depth of the holes. The poles shall be carefully placed in the holes so that the structure grounding materials will not be damaged or displaced.
- G. Holes will be hand dug where requested by Underground Protective Services markings or Engineer.
- H. Structure Setting Tolerances
1. Owner will stake new pole locations.
 2. Poles shall be set according to the Drawings and Construction Schedule. No pole will be moved without Engineer's approval.
 3. Each structure shall be set within 1.5" of the centerline specified.
 4. Contractor will install a permanent identifiable mark 15' above pole butt as a check of setting depth. This mark may be a tack or other mark as approved by Engineer. Tolerance of $\pm 1"$.
 5. Angle poles will be raked at $\frac{1}{2}"$ for each 10' above ground.

- I. Backfill of Pole Structures
1. Poles shall be properly aligned before backfilling. Tangent poles to be set plumb in both directions. Angle poles raked as required.
 2. Backfill shall contain enough natural or added moisture to be approximately equal to density of surrounding soils. Backfill shall be material excavated from hole unless directed by Engineer. All backfill shall be placed in 6" layers and each layer power tamped to a density, after completion, equal to surrounding soils. Where rocks, gravel, sand, swampy or murky type soils are encountered in hole digging, this shall not be used as backfill. Do not use sod or grassy soil or place foreign objects in the backfill.
 3. Holes excavated for aggregate backfill shall be a minimum 4" greater in diameter than the pole butt or bearing plate if used.
 4. Holes, over excavated, shall be backfilled with crushed rock until hole depth is that of appropriate setting depth of specified pole at no cost to Owner. Holes with excessive moisture shall be over excavated by 1'-0 and backfilled with crushed rock in over excavation.
- J. Excavation shall not be left open for more than two days.

END OF SECTION 33 71 16.43

**SECTION 33 71 17
WOOD POLE AND CROSSARMS****PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Wood Poles
- B. Wood Pole Structure Erection
- C. Wood Pole Handling

1.02 QUALITY ASSURANCE

Installation work shall be done in a thorough and workmanlike manner, in accordance with the Contract. Work shall comply with applicable ordinances and codes. The 2017 (or latest edition) of the National Electric Safety Code (ANSI-C2) and National Electric Code shall be followed, except where local regulations or these Specifications are more stringent, in which case the most stringent qualifications shall be met.

PART 2 – PRODUCTS**2.01 WOOD POLES**

- A. Wood poles shall be Owner-furnished.

PART 3 - EXECUTION**3.01 WOOD POLE STRUCTURE ERECTION**

- A. Contractor is responsible for compacting excavated areas to minimize settlement of roads and ground. If settlement occurs, Contractor is responsible for repair for a warranty period of one year.
- B. The depth of setting wood poles shall be 10% plus 2' in earth and 10% in rock or where depth is indicated on construction drawings.
- C. Poles shall be set no deeper than 3" than the values in the table above. No pole will be set less than "earth" depth without Engineer's approval.
- D. Poles set in holes partly in earth and partly in rock shall be set to the depths shown for "earth". Holes may be shortened only upon Engineer's approval.
- E. Excavation is unclassified.
- F. Unless directed by Owner, it will not be permissible to cut off the top of any pole. It will not be permissible to cut off the bottom of any pole.
- G. All holes shall be dug in the correct locations and shall be large enough to provide space for use of power tamping bars all around poles to the full depth of the holes. The poles shall be carefully placed in the holes so that the structure grounding materials will not be damaged or displaced.
- H. Holes will be hand dug where requested by Underground Protective Services markings or Engineer.
- I. Structure Setting Tolerances

1. Owner will inspect staked pole locations before construction setting activities. 48 hour notice shall be given for approval inspection.
2. Poles shall be set according to the Drawings and Construction Schedule. No pole will be moved without Engineer's approval.
3. Each structure shall be set within 2" of the centerline specified.
4. Contractor will install a permanent identifiable mark 15' above pole butt as a check of setting depth.
5. Angle poles will be raked not less than 1" for each 10' above ground.
6. Poles shall be set so that the crossarm gains face in opposite directions on every other pole. However at line deadends, the last two poles shall be set so that the pole gains face the deadend.

J. Backfill of Wood Pole Structures

1. Poles shall be properly aligned before backfilling. Tangent poles to be set plumb in both directions. Angle poles raked as required.
2. Loose dirt shall be removed from all holes and bottom tamped with hydraulic tamp. All backfill shall be done with a hydraulic tamp from bottom of hole to grade.
3. Backfill shall contain enough natural or added moisture to be approximately equal to density of surrounding soils. Backfill shall be material excavated from hole unless directed by Engineer. All backfill shall be placed in 6" layers and each layer power tamped to a density, after completion, equal to surrounding soils. Where rocks, gravel, sand, swampy or murky type soils are encountered in hole digging, this shall not be used as backfill. Do not use sod or grassy soil or place foreign objects in the backfill.
4. Holes excavated for aggregate backfill shall be a minimum 4" greater in diameter than the pole butt or bearing plate if used.
5. Holes, over excavated, shall be backfilled with crushed rock until hole depth is that of appropriate setting depth of specified wood pole at no cost to Owner. Holes with excessive moisture shall be over excavated by 1'-0 and backfilled with crushed rock in over excavation.

K. Excavation shall not be left open for more than two days.

L. Additional pole holes shall not be tolerated. Should unnecessary or improperly bored holes compromise the strength, the pole shall be replaced by Contractor at Contractor's expense.

3.02 WOOD POLE HANDLING

- A. Poles shall be handled with care so as not to damage the wood or the preservative treatment. Pole tongs or Cant hooks shall be handled so as to avoid excessive tearing of the wood. Contractor shall not use tongs or cant hooks on any portion of the pole required to go underground. Poles shall not be dragged along the ground. Poles stored after delivery shall be arranged with care and shall be placed so that no pole will come in contact with standing water or the ground.
- B. Poles shall be set plumb and in alignment if not raked.

END OF SECTION 33 71

**SECTION 33 71 23
INSULATORS, LINE HARDWARE, CROSSARMS AND ANCHORS**

PART 1 - GENERAL**1.01 SECTION INCLUDES**

- A. Materials
- B. Insulators
- C. Hardware
- D. Crossarms
- E. Guys
- F. Anchors

1.02 QUALITY ASSURANCE

All insulator ties, connectors, and guy grips are considered part of the units and will be supplied by Contractor at no additional cost.

PART 2 – PRODUCTS**2.01 WOOD POLES**

All materials shall be Owner-furnished.

PART 3 – EXECUTION**3.01 INSULATORS**

- A. Handle insulators with care. Protect fiberglass continuously with packaging until installed.
- B. Insulators shall be thoroughly cleaned of all foreign material before installation. Cotter pins must be fully inserted in insulator caps. If suspension insulators are raised separately from the pole structure, they shall be lifted from one (1) end of the assembly only. Bending of insulator strings, resulting in deformation of fittings or hardware, including cotter pins, shall result in rejection of the string, in which case Contractor shall re-fabricate the string at no cost to Owner. The movements of insulator strings for construction purposes shall be accomplished by pulling the string from the bottom. All movement of insulator string away from or back to vertical shall be controlled movement. All post insulators shall be handled in a manner to prevent damage. Damaged, chipped or cracked insulators shall be replaced by Contractor.
- C. Do not transport insulators and fiberglass units in any manner that will scratch, mar, or deface coating.

3.02 HARDWARE

- A. Before installation, inspect hardware for missing parts, visual defects, and damage to galvanizing. Clean hardware by removing dirt, corrosion, and foreign matter. Repair damage to galvanizing to Engineer's satisfaction.
- B. Tighten all hardware firmly, using properly installed lock washers, lock nuts and spring washers.
- C. Provide a washer at each point where a bolt head or nut bears on the surface of a pole or crossarm. Provide a locknut with each nut, eye nut, or other fastener on all bolts or threaded hardware.

- D. Bore or drill all bolt holes such that the attached hardware and bolt is on the same horizontal or vertical plane. If required, bore bolt holes so they are in a level plane and in-line with deadend pulls, or at right angles to the line in tangent construction.
- E. Bolt exposure shall be restricted to 2.5" maximum exposure. Contractor shall use correct size and length. Do not cut bolts to achieve this tolerance. Contractor will replace bolts deemed too short with correct size at no cost to the Owner.**
- F. Tighten nuts firmly with properly installed lock washers, lock nuts, spring washers, and cotter pins. Orient nuts and cotter pins toward pole or downward, as applicable Spread and bend back straight cotter pins in hardware bolts so as to be shielded by the outer face of the unit to prevent corona. Do not use wrenches. Do not flake or damage galvanizing.
- G. Hardware and other attachments to the pole shall be tightened to the point where sufficient compression is obtained to offset the effects of future pole shrinkage. Each item of hardware shall be thoroughly tightened and shall be set with locknuts and where necessary or suitable to the application with spring-type lock washers. Suitable flat, curved or reinforced washers shall be used to provide adequate bearing on wood surfaces.
- H. Anchor shackles shall be installed, as required by Contract Drawings.

3.03 GUYS

- A. Guys shall be provided where and as required by the Contract Drawings, and at other locations where required by changes in proposed line routing. Guys shall be of the strength, size and types specified herein. Where necessary, additional extension lengths shall be provided to screw anchors to ensure its placement into firm soil and shall be included as Work of this Contract. Guys shall be installed sufficiently tight to snug hardware, to prevent radio noise, and to set the anchor. The ground line at the top anchor rod shall be marked prior to loading. Creepage in excess of 1.5" shall be considered excessive, requiring anchors to be re-set as Work of this Contract. All hardware fittings and connections shall be tight. All down guys shall be equipped with approved guy guards.
- B. Install all guy strands prior to conductor stringing operations. Guys shall be evenly pre-tensioned such that structure loads remain balanced during stringing.
- C. Place all guys before conductors are transferred or installed. Attach guys to poles as specified in the Drawings. Ensure proper adjustment of guys when transferring and tensioning conductors so that loading on structures is balanced.
- D. All guys shall be installed prior to loading the structures. If, after loading the structures, Owner determines that final adjustments to the guys are necessary, Contractor shall make such adjustments to the satisfaction of Owner.
- E. Guy insulators shall be installed as specified in the Contract Drawings.
- F. Install guy anchors in-line with slope of guy strand. Install double-guy anchors on a slope equal to the average slope of guy strands.
- G. Guys must be of size and types shown on the Contract Drawings. Test anchors at the time of installation for 100 percent of manufacturer- specified holding capacity using the sheer pin/torque method or other methods recommended by the anchor manufacturer and approved by Engineer. Contractor shall submit written documentation of anchor tests, before conductor installation, indicating pole number, type of anchor, and proof of holding capacity.
- H. Field drilling on poles will require a touchup to prevent exposure to bare steel.

3.04 ANCHORS

- A. Anchors must be of size and types shown on the Drawings.
- B. Install anchors according to the manufacturer's written instructions. Install anchors and verify the holding capacity of all new anchors before conductors are transferred or installed.
- C. All anchors and rods shall be in line on the bi-sector of multiple strain anchors. Each anchor rod shall be aligned with its connected guys and shall extend not less than 3", not more than 18" above the ground surface after the connected structure has been loaded.
- D. The backfill of all anchor holes must be thoroughly tamped the full depth.
- E. Excavation shall not be left open for more than two days. Any open holes left open shall be covered and barricaded to prevent injury.
- F. Contractor shall have all equipment required to install the screw anchors according to manufacturer's instructions. Torque capacity of the driving rig shall be at least 120 percent of the installation torque specified by the anchor manufacturer. The driving rig must be capable of applying an axial downward force on the anchor, as recommended by the manufacturer. This axial force shall be applied consistently throughout anchor installation to insure the anchor advances the proper depth for each revolution, as specified by the anchor manufacturer.
- G. Drive all anchors, adding extension shafts and couplings, as required, until the manufacturer's recommended installation torque is achieved. The anchor must then be advanced for the distance specified by the manufacturer while maintaining torque. If the torque decreases, continue driving until the specified torque is reached again, and maintain torque for the specified distance.
- H. Immediately notify Engineer if difficulties are experienced during installation. Engineer will instruct Contractor whether to proceed with installation or to remove the screw anchor and install an alternate anchor.
- I. All anchor assemblies requiring abandonment in soil shall be cut off 18 inches below grade. All anchor assemblies requiring abandonment in rock shall be cut off at grade.
- J. Unless an alternate location is specifically approved by Engineer, all anchors shall be installed within 6 inches of the location specified on the Contract Drawings.

END OF SECTION 33 71 23

**SECTION 33 71 25
CONDUCTOR AND GUY WIRE****PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Conductor and Accessories
- B. Wire Sagging and Clipping
- C. Splices, Deadends, and Connections
- D. Inspection and Testing

1.02 SUBMITTALS

- A. Provide stringing plans and setup locations.
- B. Engineer will provide sag charts for installation.
- C. Test results of ground resistance.

1.03 QUALITY ASSURANCE

Installation work shall be done in a thorough and workmanlike manner, in accordance with the Contract. Work shall comply with applicable ordinances and codes. The 2017 (or latest edition) of the National Electric Safety Code (ANSI-C2) shall be followed, except where local regulations or these Specifications are more stringent, in which case the most stringent qualifications shall be met.

PART 2 – PRODUCTS**2.01 CONDUCTOR AND ACCESSORIES**

All materials will be Owner-furnished.

2.02 GROUNDING MATERIALS

All grounding materials will be Owner-furnished.

PART 3 – EXECUTION**3.01 WIRE SAGGING AND CLIPPING**

- A. Follow practice recommended in the latest edition of IEEE No. 524 “IEEE Guide to the Installation of Overhead Transmission Line Conductors”.
- B. Installation shall provide necessary clearances between conductors and ground, between conductors, or between conductors and other surfaces. All necessary precautions shall be taken to ensure that the conductors, poles, insulators, or other facilities are not damaged. Particular care must be taken to ensure that the conductors are not damaged in any manner. Conductors must not be drawn across the ground and shall not be drawn over crossarms without proper protection. Conductor installation shall be accomplished, using approved sheaves and other equipment. All sections of conductor damaged by application of gripping attachments shall be repaired or replaced prior to completion of Work
- C. Initial or Final Sag tables, as applicable, shall be provided by Engineer. Sagging of the conductor by the controlled tension method is acceptable.
- D. Tighten all guys before the conductors are transferred to new structures.

- E. Contractor's sagging procedure must be approved by Engineer. Regardless of the procedure used, the resulting final sags must be within a tolerance of ± 3 " of the specified sags.
- F. Determine sag temperature by using an accurate thermometer placed in the open at a height approximately equal to the sagged height of the wire.
- G. After sagging the wire, record, in a format approved by Engineer, all pertinent sagging information including but not limited to temperature, span length, time, and sag. Provide such information to Engineer in writing.
- H. Make up jumper loops such that they present a smooth, uniformly curving appearance. Form the jumper such that the completed jumper meets clearance requirements from live parts to ground as given in the NESC current at the time of bid opening.

3.02 SPLICES, DEADENDS, AND CONNECTIONS

- A. Make full-tension splices, if required, in the presence of Owner's representative.
- B. Thoroughly clean conductor surfaces of all foreign matter at the fitting location. Remove conductor sections damaged by the application of gripping attachments before the conductors are spliced with the permanent compression splices.
- C. Remove all wrapping, binding, and excess grease and compound at the completion of pressing operations. The strands of the conductors or wire must be snugly seated when the splice is completed. Remove slight bends in the fitting using a method that protects the fitting from damage.
- D. Remove all burrs and die marks from splices, deadend fittings, and jumper terminals.
- E. Install the compression splices in accordance with manufacturer instructions. Use manufacturer-recommended filler compound. Select the correct die by matching the index numbers stamped on both the fitting and die set. Do not allow the weight of the conductor or wire to be applied to the dies.
- F. Install compression deadend assemblies in accordance with manufacturer recommendations.

3.03 INSPECTION AND TESTING

Before energizing any circuit, inspect the complete section of line circuit that will be energized to verify that the circuit segment is complete and free from all extraneous connections and unsafe conditions. Test each section of line that will be energized for absence of shorts and grounds, as well as for conductor continuity and correct phasing. Notify Owner not less than 48 hours in advance of scheduled times for energizing line circuits.

END OF SECTION 33 71 25

SECTION 33 71 75
OVERHEAD ELECTRICAL SYSTEM CONSTRUCTION**PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Description of Units
- B. Construction

1.02 QUALITY ASSURANCE

- A. Installation work shall be done in a thorough and workmanlike manner, in accordance with the Contract. Work shall comply with applicable ordinances and codes. The 2017 (or latest edition) of the National Electric Safety Code (ANSI-C2) shall be followed, except where local regulations or these Specifications are more stringent, in which case the most stringent qualifications shall be met.
- B. If any materials, equipment or workmanship shall be deemed defective after delivery or installation before final acceptance of project. The replacement or remedy shall be at the expense of Contractor.
- C. In the event Owner determines the construction contains numerous defects, it shall be the duty of Contractor to have inspection, if any, made by an engineer approved by Owner.

PART 2 - PRODUCTS**2.01 DESCRIPTION OF UNITS**

- A. Special units and descriptions are included in Contract. Remainder of unit descriptions will be found in Electric City of Georgia (ECG) construction specification.
- B. Fiberglass braceless crossarms and manufacturer provided material will be used in place of wood crossarms and braces on poles. Crossarms to be installed as shown on construction drawings provided in this contract. It is Contractor's responsibility to verify what material is supplied from manufacturer.
- C. Maintain careful and accurate records of all materials removed or reused as specified.
- D. The construction assemblies are on a unit basis so that Owner may authorize any combination, addition or deletion, of construction units desired. The descriptions apply to those assemblies on the Contract Drawings on the Assembly Guide Drawings and includes all necessary labor and Owner-furnished material required to make the assemblies complete, including testing and submitting report forms where required, as follows:
 - 1. Installation (Add) Units
 - a. Specified by designation of the assembly unit to be installed, e.g. "ADD: C8" signifies the installation of a C8 assembly unit as identified on the Assembly drawings.
 - b. Maintain careful and accurate records of all materials removed or reused as specified.

2. Pole Installation
 - a. Consists of one pole in place. The first digits indicate length, the following shows classification. Thus, "45-3" signifies a 45-foot class 3 wood or steel wood-equivalent poles. Similar designations may be used for varying pole manufacturers. If "DI" is indicated ductile iron pole is to be installed. Steel pole is indicated with "SP"..
 - b. Site restoration at pole and along access to pole is a part of unit requirements.
 - c. Includes the "covering" up of existing conductors and/or the transfer of conductors to "Hot Arms" for work clearance/code requirements.
3. Overhead Conductor Installation
 - a. Conductor is measured horizontal distance between conductor supports. The unit includes tie wires, clamping, sleeves for splicing, connectors, and armor rods; jumpers and connections at deadends, junctions and taps.
 - b. Unit will include the spreading of existing conductors onto hot arms as required.
4. Pole Top Assembly Installation
 - a. Consists of the hardware, crossarms and their appurtenances, insulators, connectors, hot-line clamps, and stirrups, etc., except tie wire required to support the conductors. Unit does not include the pole ground downlead wire.
 - b. Includes the "covering" up of existing conductors and/or the transfer of conductors to "Hot Arms" for work clearance/code requirements.
5. Ground Installation
 - a. Consists of the ground wire, staples, ground molding where required, ground rod, all connectors, clamps and associated hardware as indicated on the various guide drawings. Includes testing and report form submittal.
6. Guy Installation
 - a. Consists of the necessary length, both overhead and down guys, of guy wire, all bolts and fasteners, lag screws, guy bonding bolt, deadend hardware, grounding jumpers and connectors. Guy markers are part of this assembly.
7. Anchor Installation
 - a. Consists of the anchor with rod complete with applicable bonding clamp and ready for attaching the guy wire, including testing, and report form submittal. Anchor rod extensions required to meet the holding capacity will be additional units.
8. Transfer Assembly
 - a. Specified under "Transfer" and followed by the designation of existing assembly unit to be transferred. Indicated by the color orange on the construction drawings.
 - b. Transfer unit will be used when a unit may be removed and installed from one set up of truck as determined by Owner.
 - c. Consists of furnishing of all labor for removing and reinstalling the unit specified from one location to another on the same or new pole, as required. Material in the transfer unit such as brackets, braces, etc. may be reused if in satisfactory condition and only when approved by Owner.

- d. Includes the removal and reattachment of any or all conductors associated with the unit, any sagging or re-sagging, tying, untying and re-tying, armor rodding or re-armor rodding, all splices, connectors, etc., and any other labor required to make a complete assembly.
 - e. Transferring of guys is not acceptable.
 - f. Splicing of guy wire is not acceptable.
9. Removal Units
- a. All assembly units specified by the "REMOVE" shown as green and followed by the assembly unit designation of existing assembly unit to be removed. Shown as Green on construction drawings.
 - b. Includes the furnishing of all labor for removal of existing units of construction from existing lines, disassembling into material items, and all labor and transportation for the returning of all materials in groups of like items to the warehouse of the Owner in an orderly manner, or transporting elsewhere to the site of the Project or for reuse in the prosecution of this Contract as specified.
 - c. Do not place removed materials or equipment where it will be damaged by or cause damage to vehicular traffic, livestock, persons and property. Immediately remove from the job site.
 - d. Includes, in addition to the removal of the assembly itself, any necessary transferring, holding and handling, re-sagging, splicing, re-armor rodding, and retying and all connectors and reconnecting of all conductors, jumpers and leads in those cases where an existing assembly will be removed and replaced by a new assembly and where any existing conductor is to be reused.
10. Pole Removal
- a. Includes all poles of the same height, regardless of pole class, and designated by the same unit.
 - b. Includes pulling and salvage of all poles designated as removals. Poles are not to be cut off unless specified.
 - c. Includes immediate backfill of holes with solidly tamped earth in 6" maximum thickness layers and refill to the ground line of any settlement that occurs during the contract period.
 - d. When backfilling holes at pole removal locations, do not dig holes in the landscape to obtain backfill. Obtain backfill dirt by scooping or scraping within the designated right-of-way or by fill dirt obtained locally. Do not dig seeded areas within highway or public rights-of-way. Do not place foreign objects in backfill.
 - e. Includes the replacement of the surrounding surface where concrete, asphalt, or other man-made surfaces are encountered.
 - f. Poles that are designated to be "removed" shall not have the tops cut off unless the existing pole conflicts with the safe operation and construction of the new facilities.
 - g. Joint Use Poles designated for "removal" shall not be topped without providing prior notification to Owner. Before topping any Joint Use pole designated for "removal", Contractor shall be responsible for contacting the occupying Joint Use Utility and request that said Utility vacate the subject pole. Contractor shall provide Owner verification of contact if requested. If the Joint Use Utility cannot or will not vacate the pole, Contractor may top the pole, if such pole conflicts with the safe operation and construction of the new facilities. This function is considered "means and methods", and no additional

compensation will be made for topping poles designated for removal or for coordinating work with the Joint.

- h. Use Utility unless prior approval has been received from Owner. Contractor, for the duration of the construction contract, shall be responsible for the removal of all "topped" poles previously designated for "removal" and upon removal will be compensated the "removal" unit bid price.

11. Pole-Top Assembly Removal

- a. Includes, in addition to the removal of the assembly itself, any necessary holding and handling, resagging, splicing, re-armor rodding, and retying and all connectors and reconnecting of all conductors, jumpers and leads in those cases where an existing assembly will be removed and replaced by a new assembly and where any existing conductor is to be reused.
- b. Includes any holding or handling of mainline or tap conductors at tap lines, angles, and deadends where such is involved, and reinstalling of any conductor as required by the assembly. The new unit of construction will be specified separately.

12. Conductor Removal

- a. Includes the removal unit for each size of conductor or cable shown by the "Remove" followed by the conductor or cable type.
- b. Includes removal in the longest practical length, preferably between deadends, without unnecessary kinking or nicking. It also includes coiling or reeling of all conductors, and removing and retaining possession of all tie wire, armor rods, jumpers, and miscellaneous connectors.

13. Guy Removal

- a. Includes all guys, attachments, hardware, grounds, and insulation regardless of length, type of attachment, size of guy strand or accessories. Thus, REMOVE: "E" signifies removal of any down guy or span guy assembly including attachment, hardware, grounds, and insulation.
- b. Includes removal and coiling of guy strand in the longest practical length and the dismantling of all three-bolt clamps, guy attachments, bonding bolts and guy guards.

14. Anchor Removal

- a. Includes only anchor rod removal in the anchor removal units. The anchors will be left in the ground. Rods unable to be removed will be cut off 18" below grade.

PART 3 - EXECUTION

3.01 CONSTRUCTION

- A. Removing and Replacing Fences, Sod, etc. shall be completed as follows:
- B. Contractor shall carefully remove and store all interfering fences, mailboxes, culverts, shrubs, flowers, other planting, etc. After installation of work and backfilling, reinstalling these items and restoring to at least the conditions which existed prior to commencement of work using materials and workmanship to match those of original construction and installation.
- C. Poles shall be installed per Section 33 71 16.43 - Pole Construction and Installation.

- D. Pole Top Assemblies shall be installed as follows:
1. Pole top assemblies shall be framed in accordance with drawings.
 2. Switches shall be installed in accordance with manufacture specifications.
- E. Insulators shall be installed per Section 33 71 23 – Insulators, Hardware and Anchors.
- F. Practices relative to right-of-way shall be observed by Contractor during construction as follows:
1. The ROW shall consist of an area as determined by the state highway markers on both sides of the center line of the route of the Project lines.
 2. Limit the movement of crews and equipment so as to cause as little damage as possible to cultivated land, pastures, bridges, crops, orchards, or other property, and endeavor to avoid marring the lands. Replace all fences which are necessarily opened or moved during the construction of the Project, in as good condition as they were found and take precautions to prevent the escape of livestock. Contractor shall be responsible for all damage and loss, outside right-of-way, as specified herein, caused by the construction of the Project.

END OF SECTION 33 71 75

**SECTION 33 71 95
GROUNDING OF OVERHEAD LINES****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section Includes
 - 1. Ground Rods
 - 2. Grounding Connections
 - 3. Ground Resistance Tests
- B. Related Requirements
 - 1. Section 01 33 00 – Submittals
 - 2. Section 01 77 00 – Closeout
 - 3. Section 33 71 25 – Conductor, Guy Wire and Grounding Wire

1.02 REFERENCES

- A. Reference Standards
 - 1. IEEE 81, Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System
 - 2. ASTM B 8, Standard Specification for Concentric-Lay-Stranded Copper Conductors
 - 3. ANSI/IEEE C2, National Electric Safety Code
 - 4. NFPA 70, National Electric Code

1.03 SUBMITTALS**1.04 QUALITY ASSURANCE**

- A. Design and Performance Requirements
 - 1. Measure the grounding resistance in accordance with the provisions of Paragraph 3.02 of this Section.

PART 2 – PRODUCTS**PART 3 – EXECUTION****3.01 GROUND RODS – OVERHEAD LINES**

- A. Drive ground rods vertically at spacing and to full depth shown on Contract Drawings. If refusal is encountered before full depth is reached and relocation of rod is impractical, remove rod and drill a 2-inch diameter vertical hole to full depth, place ground rod, and fill remaining space with bentonite clay.
- B. Ground rods are required at each pole location.
- C. Install ground rods along centerline.

- D. Placing ground rods in pole embedment hole is not acceptable.

3.02 GROUNDING CONNECTIONS

- A. Clean electrical contact surfaces with solvent or abrasion, as recommended by connector manufacturer, to provide a clean contact.
- B. Apply a liberal coat of oxidation inhibiting compound to all buried and bimetallic connections. Remove excess compound after installation.
- C. Torque connection bolts as recommended by the manufacturer.
- D. Do not extend bolts more than 1/2-inch beyond the face of the nut.

3.03 GROUND RESISTANCE TESTS

- A. Conduct structure ground resistance tests for each grounded structure using either the fall-of-potential (three-pin) method or the direct reading ground resistance described as follows:
 - 1. Follow guidelines in IEEE Standard 81-1983.
 - 2. Use test equipment designed specifically for these ground resistance measurements. Retest all anomalous test results. Avoid, to the maximum extent practical, buried metallic features and other objects that could significantly distort readings.
 - 3. Test the equipment calibration daily; recalibrate as necessary in accordance with manufacturer recommendations.
 - 4. Record test conditions and factors that could affect readings. Note whether neutral is installed and whether ground rod is connected to structure.
 - 5. Test and record ground resistance after each grounding system modification at a structure. Based on ground resistance measurements, the ENGINEER may specify additional grounding. The target ground resistance for distribution is 20 ohms; install additional grounding where measured resistance is greater than 25 ohms. The target ground resistance for switch installations is 20 ohms; install additional grounding where measured resistance is greater than 25 ohms.

END OF SECTION 33 79 50



13kV Distribution Line Reconstructor & Rebuild
City of Wauchula, FL
W. Main Street

ITB No. _____ 2023-02
Date: August 13, 2023
Rev.: _____ 00

EXHIBIT A

Maps- Pole Locations



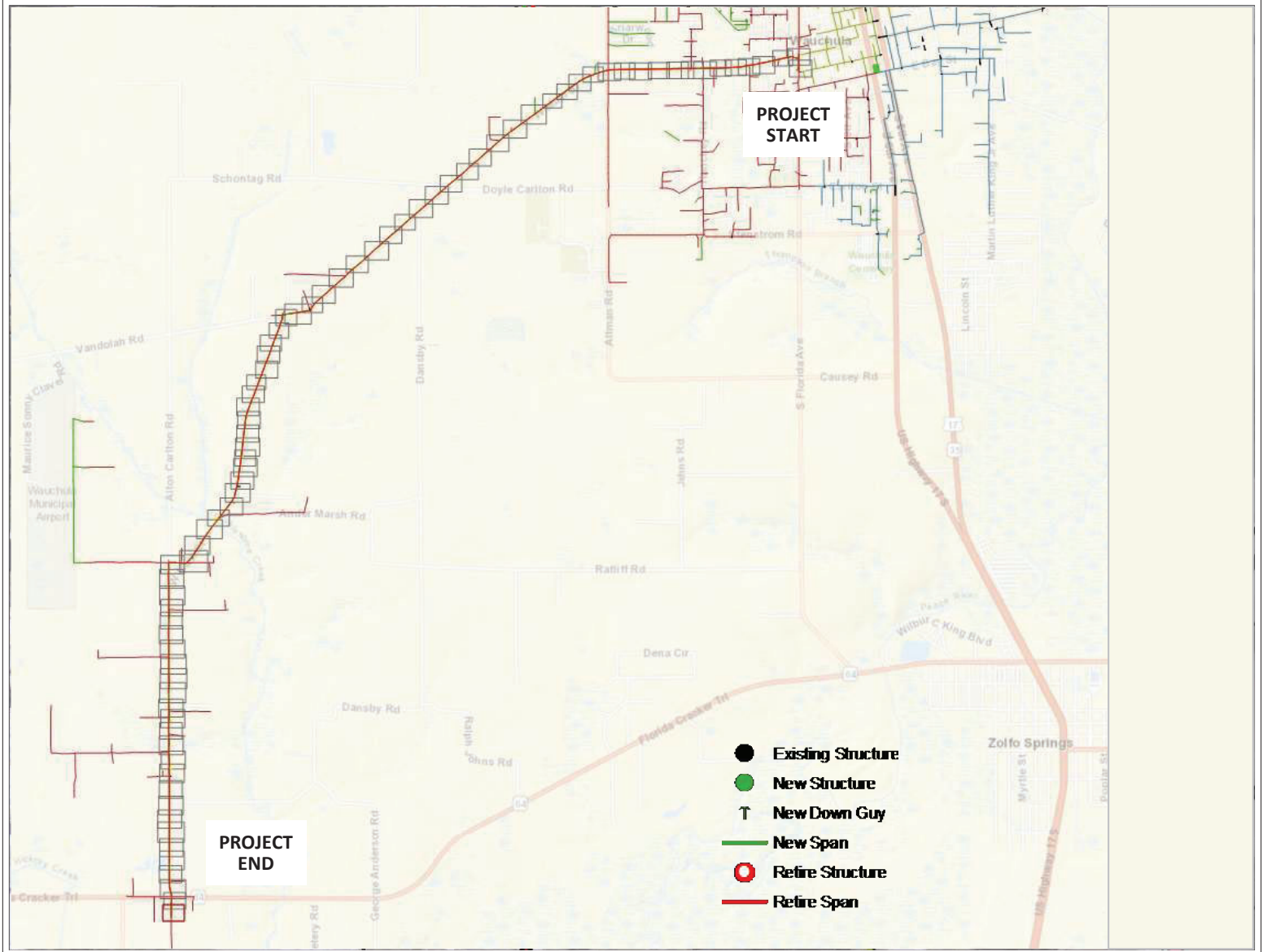
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 Service Order:
 Staked By: **SHAY HOBBS**
 Date: **08/06/2022**

Notes:
PROJECT OVERVIEW

Notes:

8/6/2022

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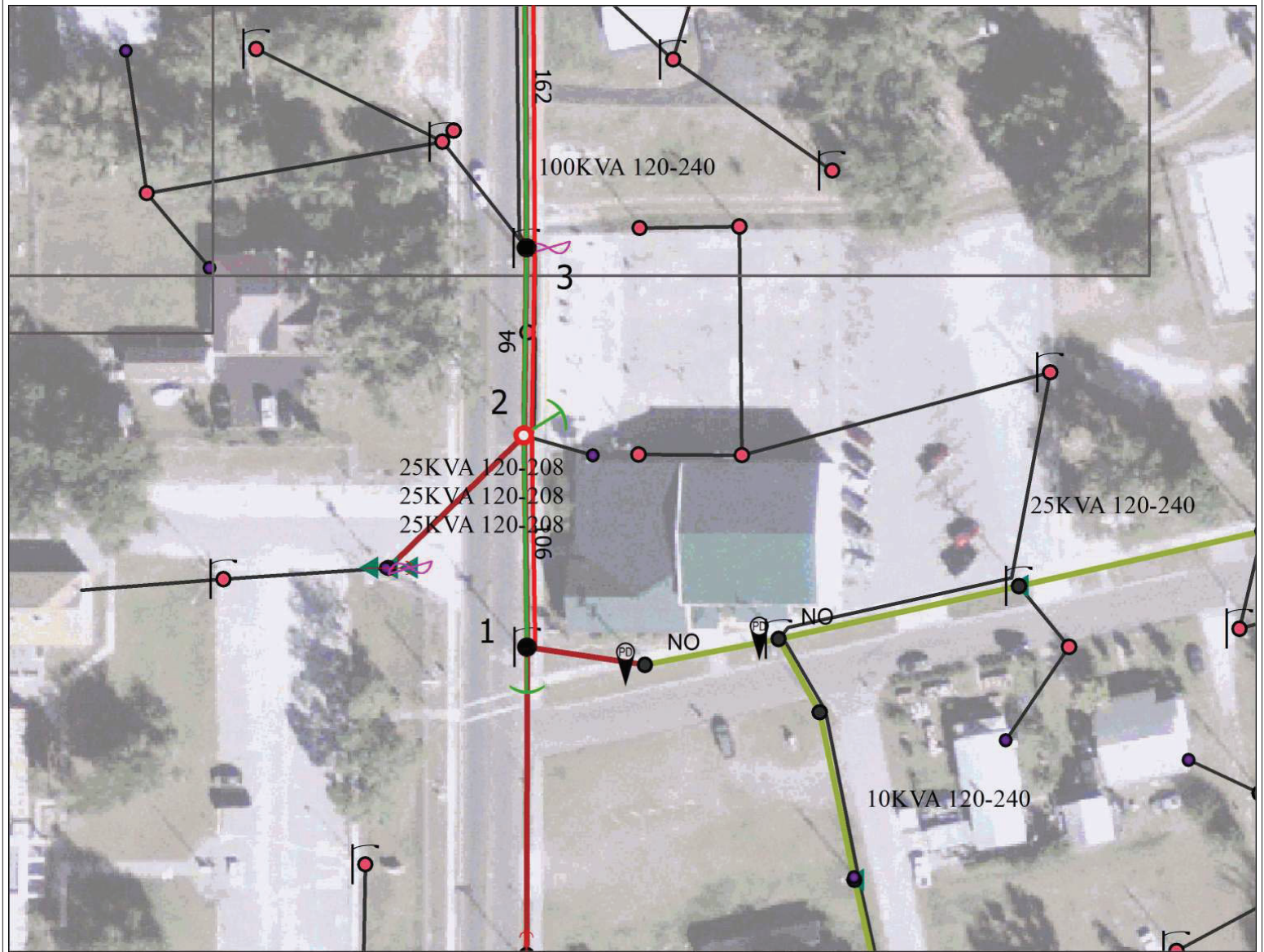
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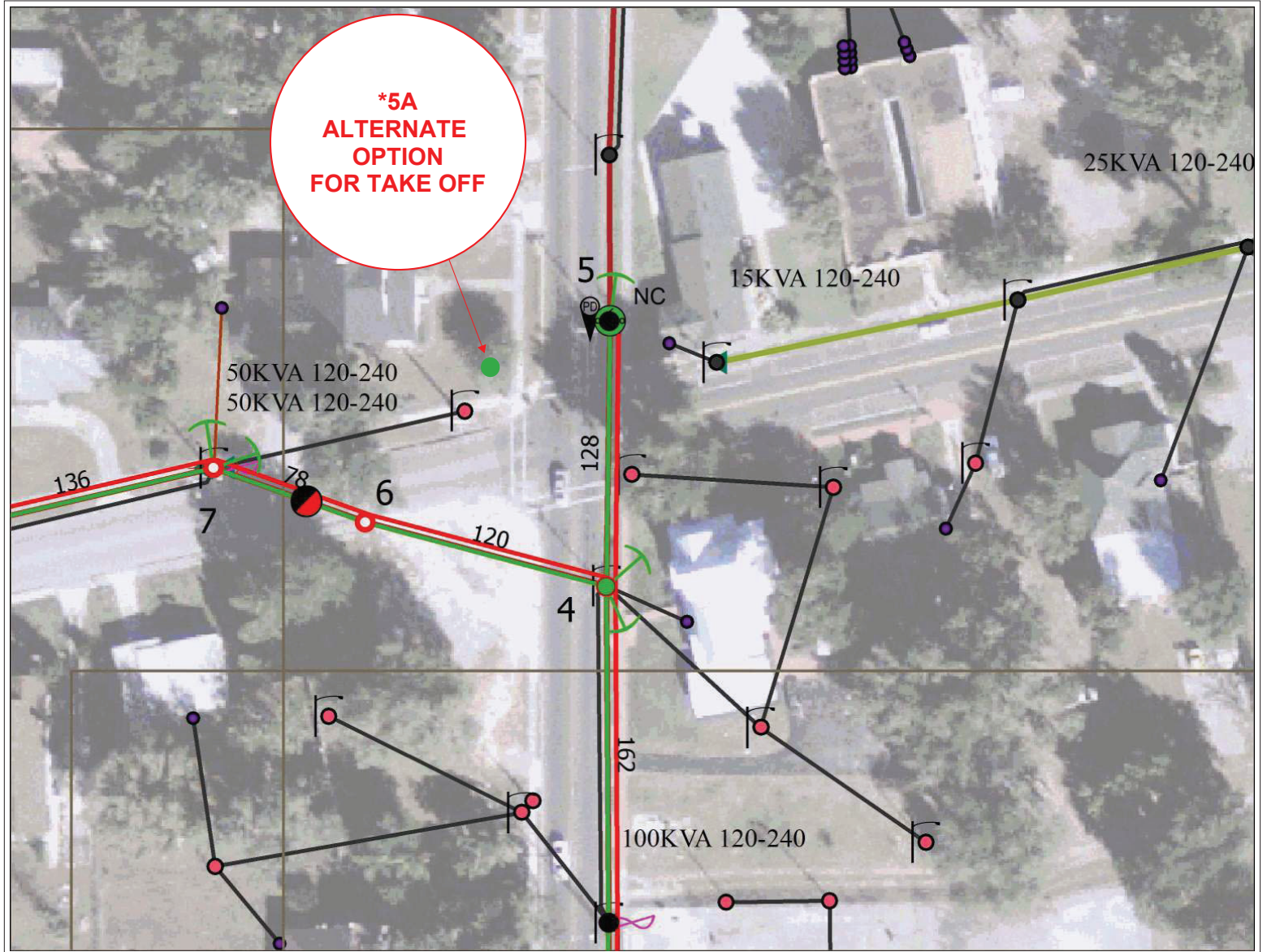
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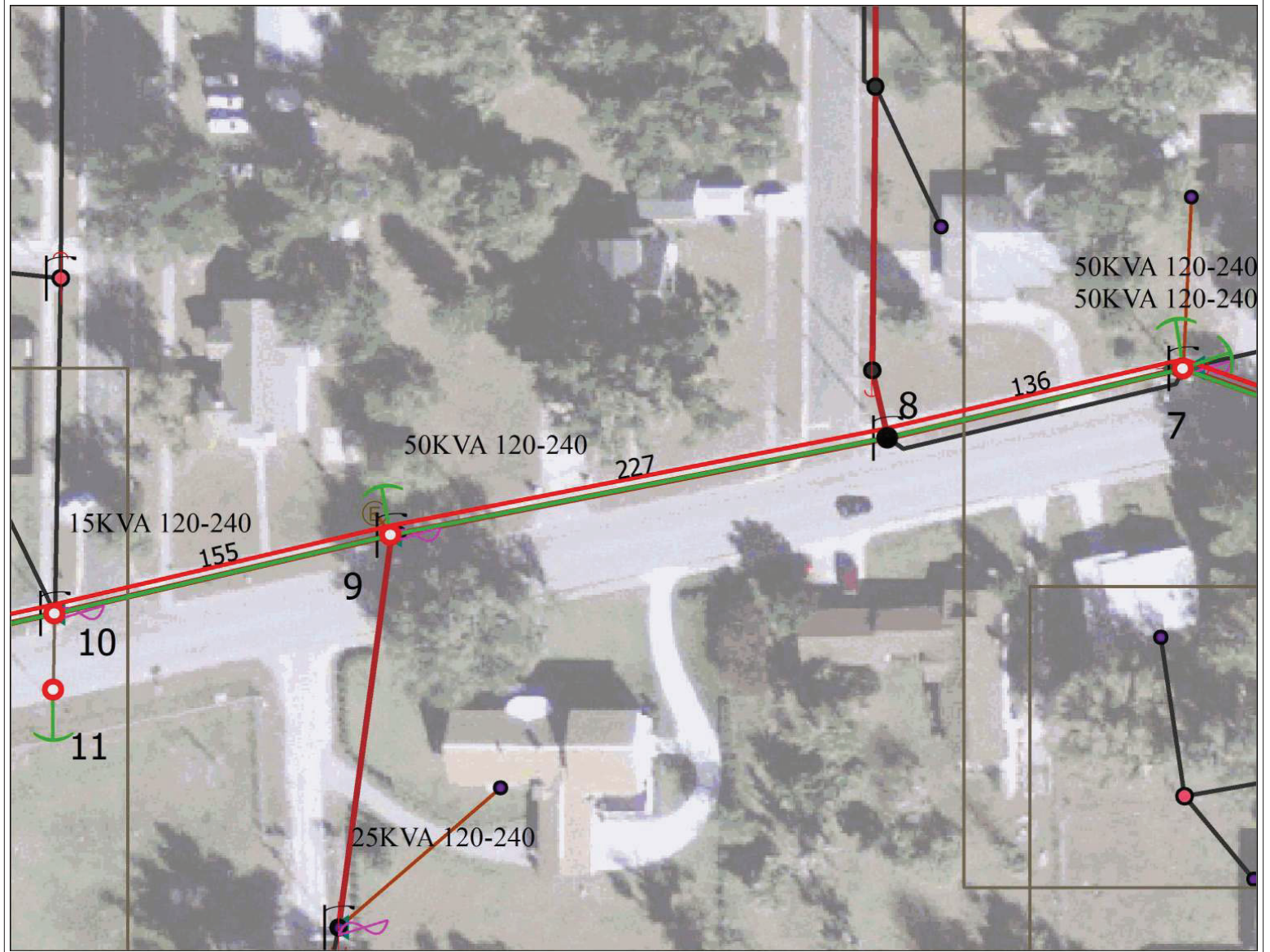
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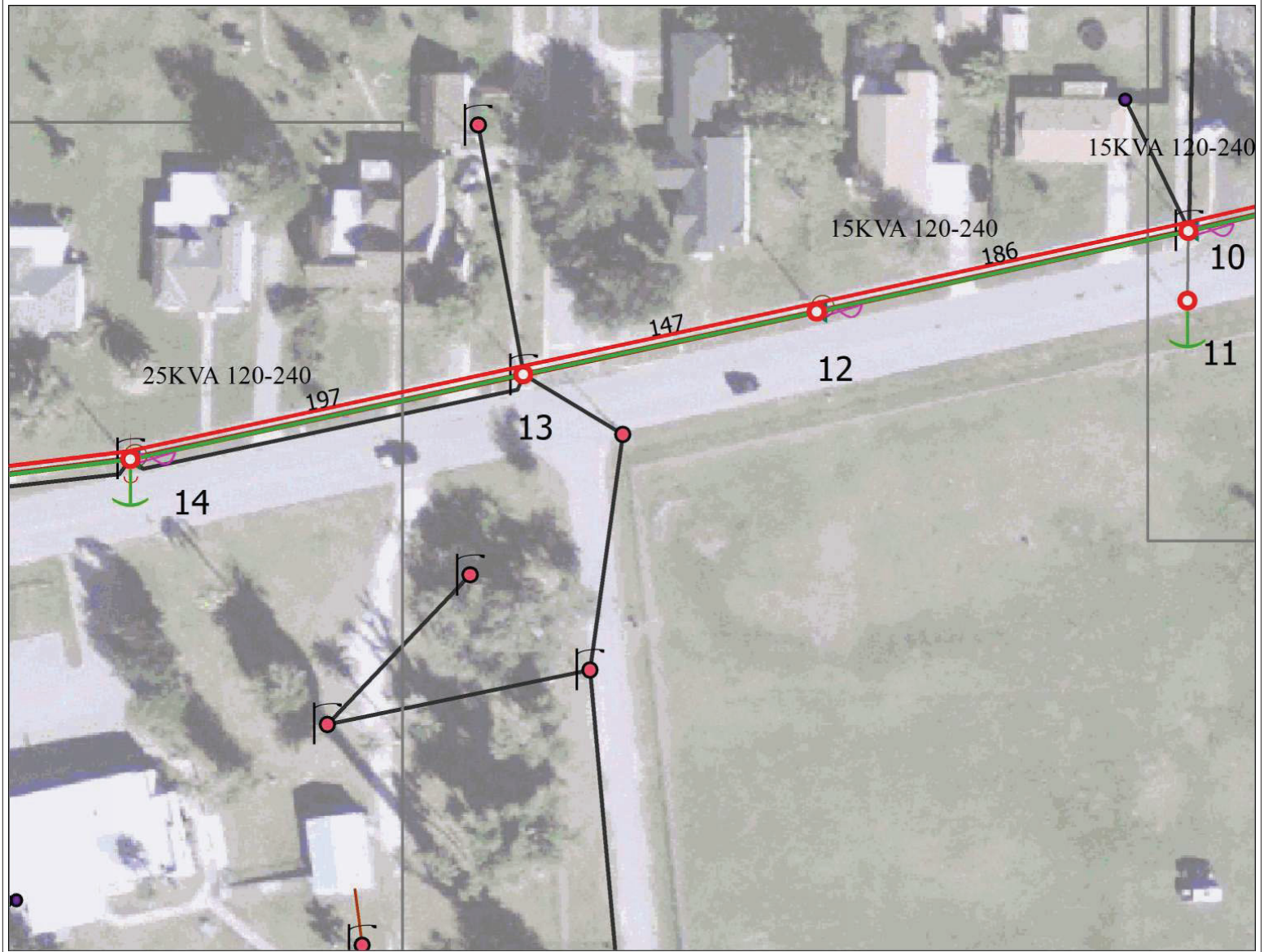
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8/6/2022

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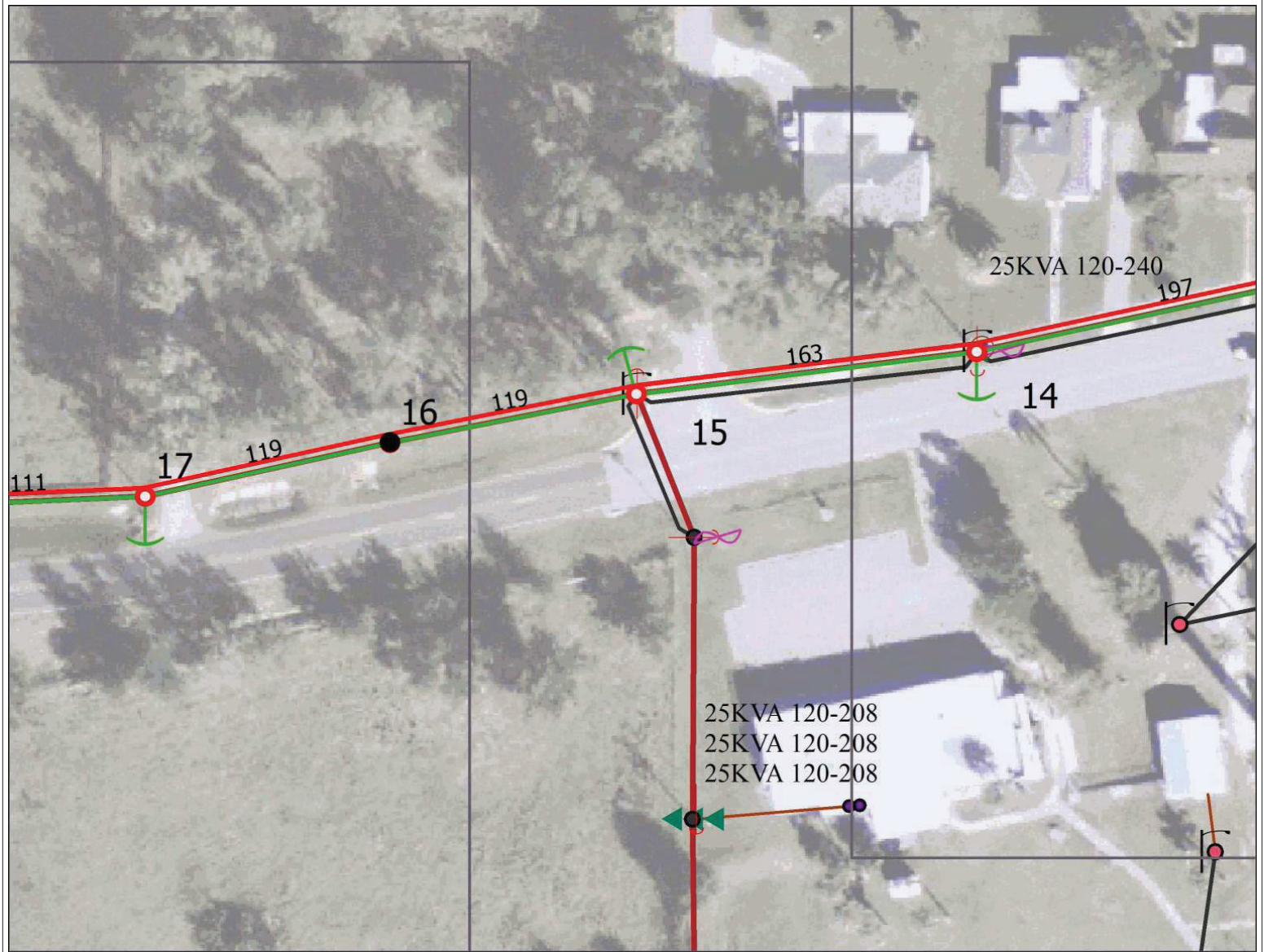
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Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

Notes:

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

Notes:

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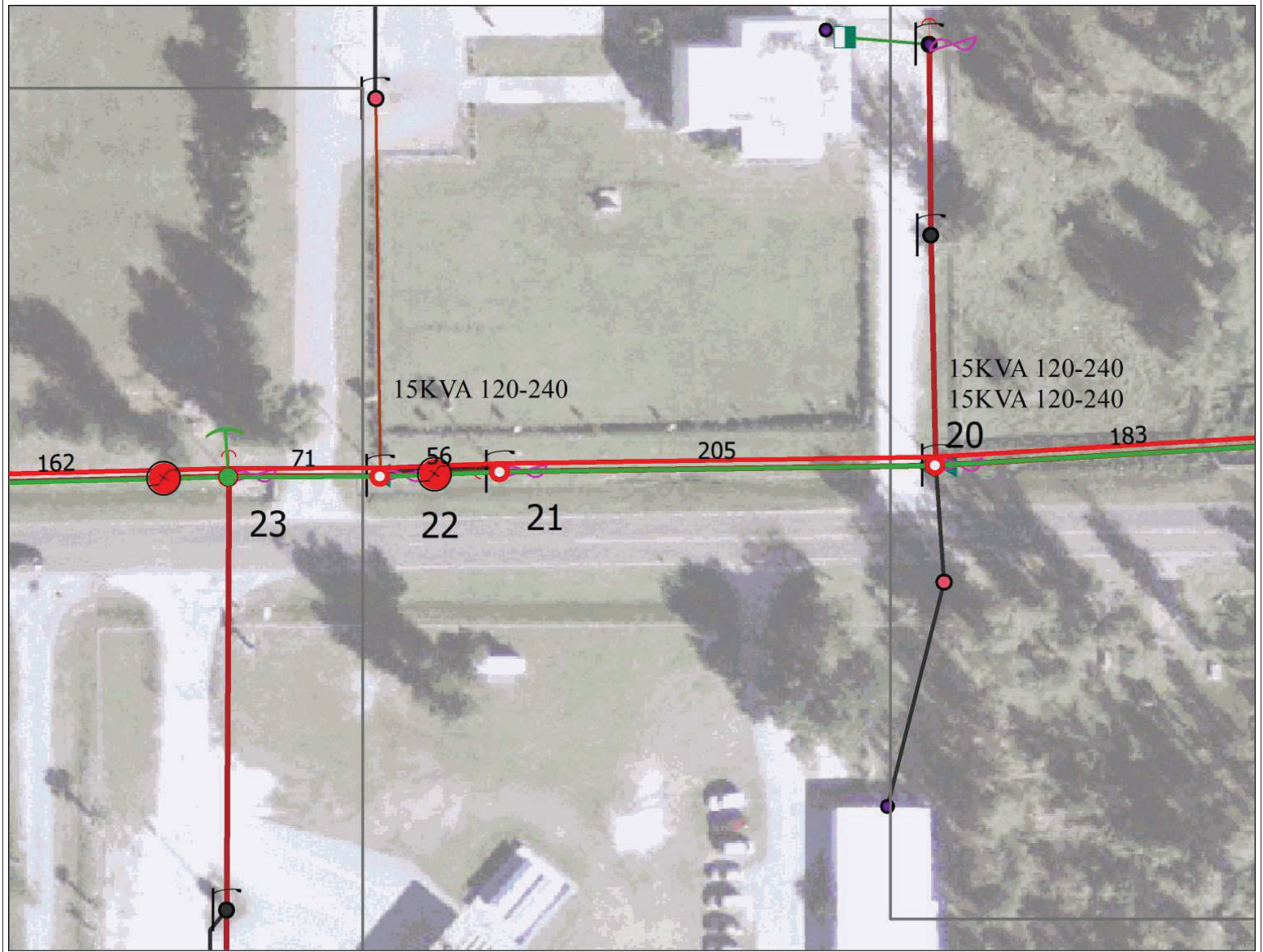
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Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

Notes:

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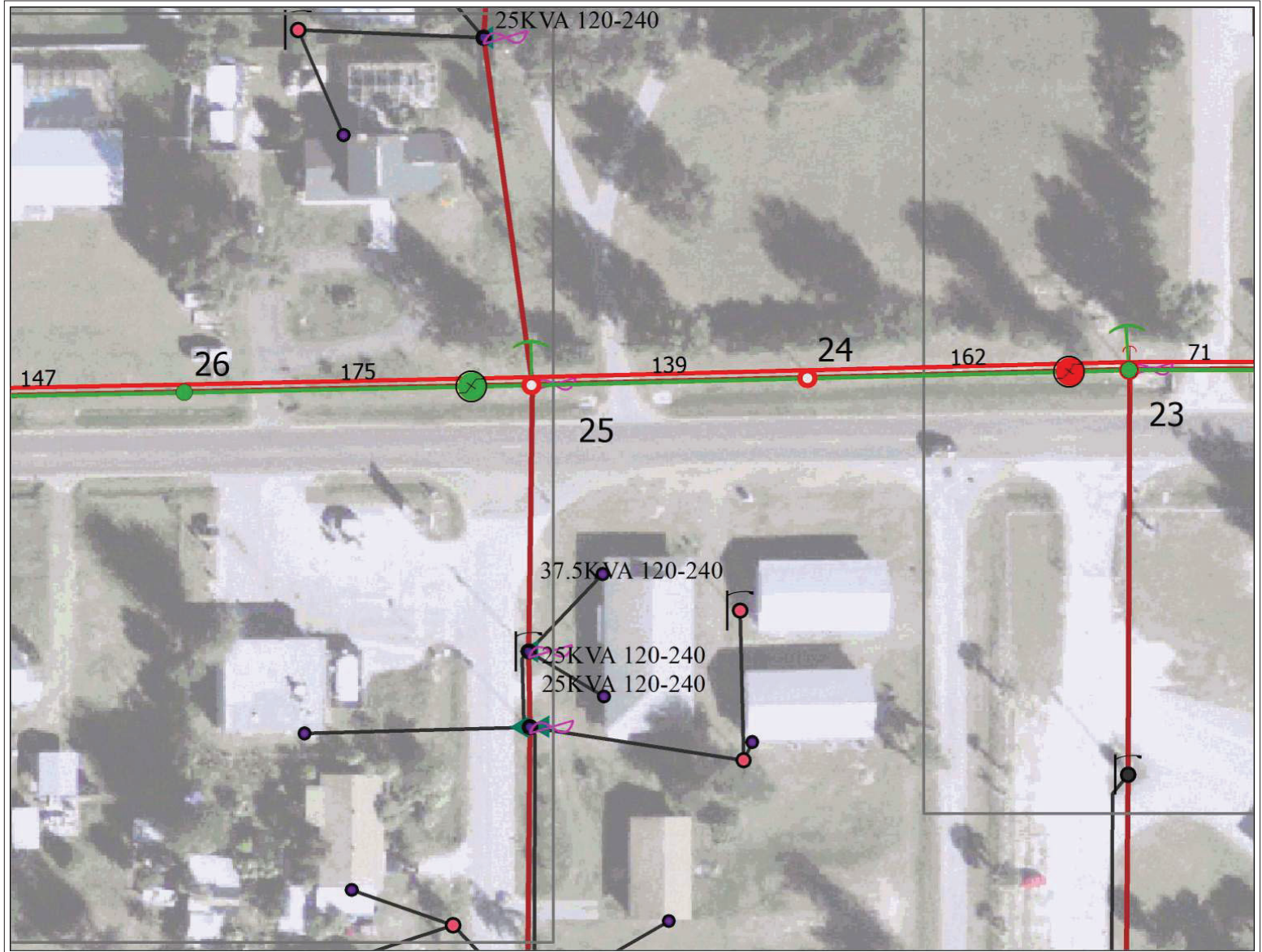
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Job Name: WAUCHULA RECONDUCTOR
Address:
Service Order:
Staked By: SHAY HOBBS
Date: 08/06/2022

Notes:

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Job ID: **STK10001**
 Job Name: **WAUCHULA RECONDUCTOR**
 Address:
 Service Order:
 Staked By: **SHAY HOBBS**
 Date: **08/06/2022**

Notes:

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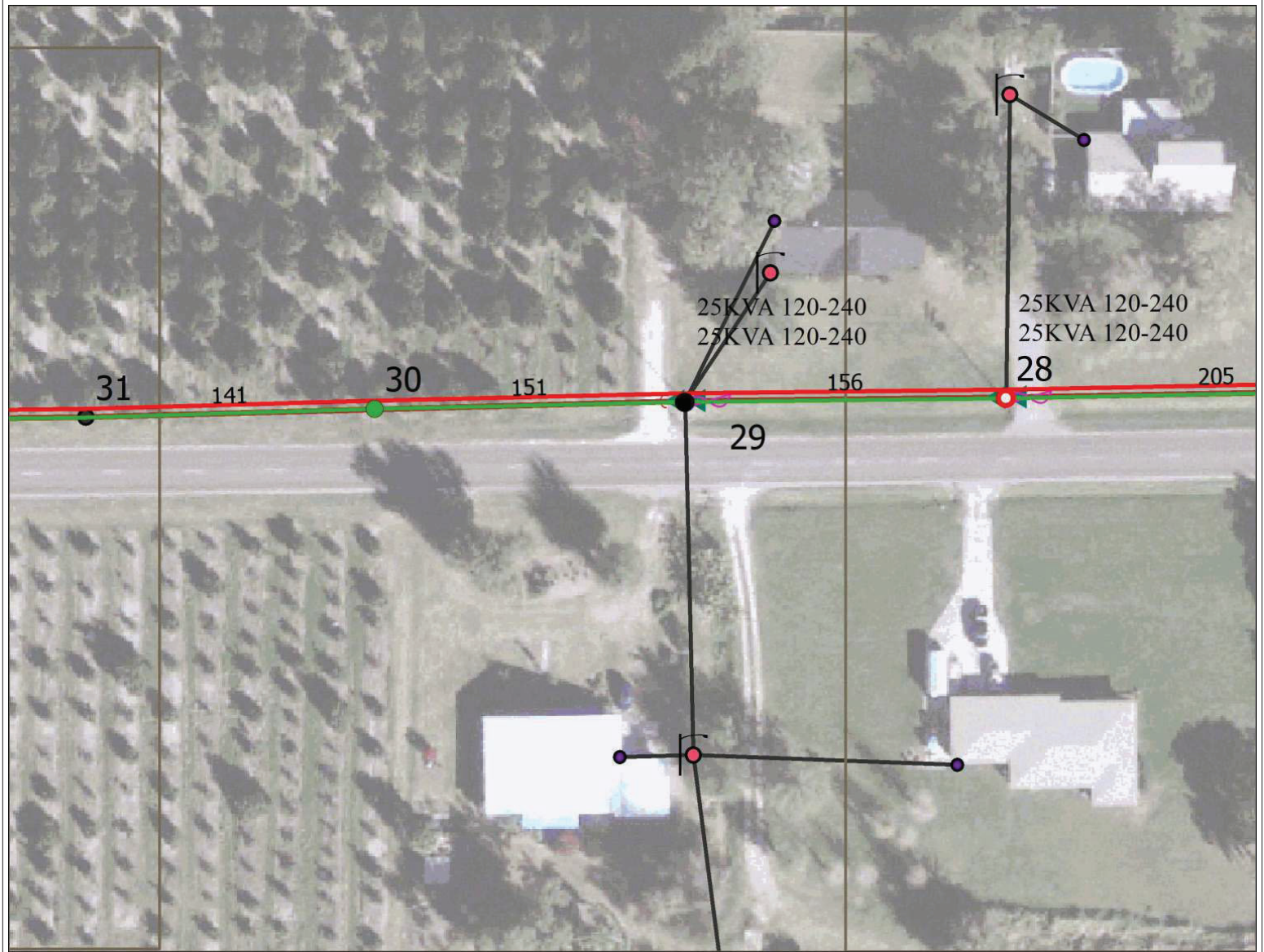
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Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

Notes:

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

Notes:

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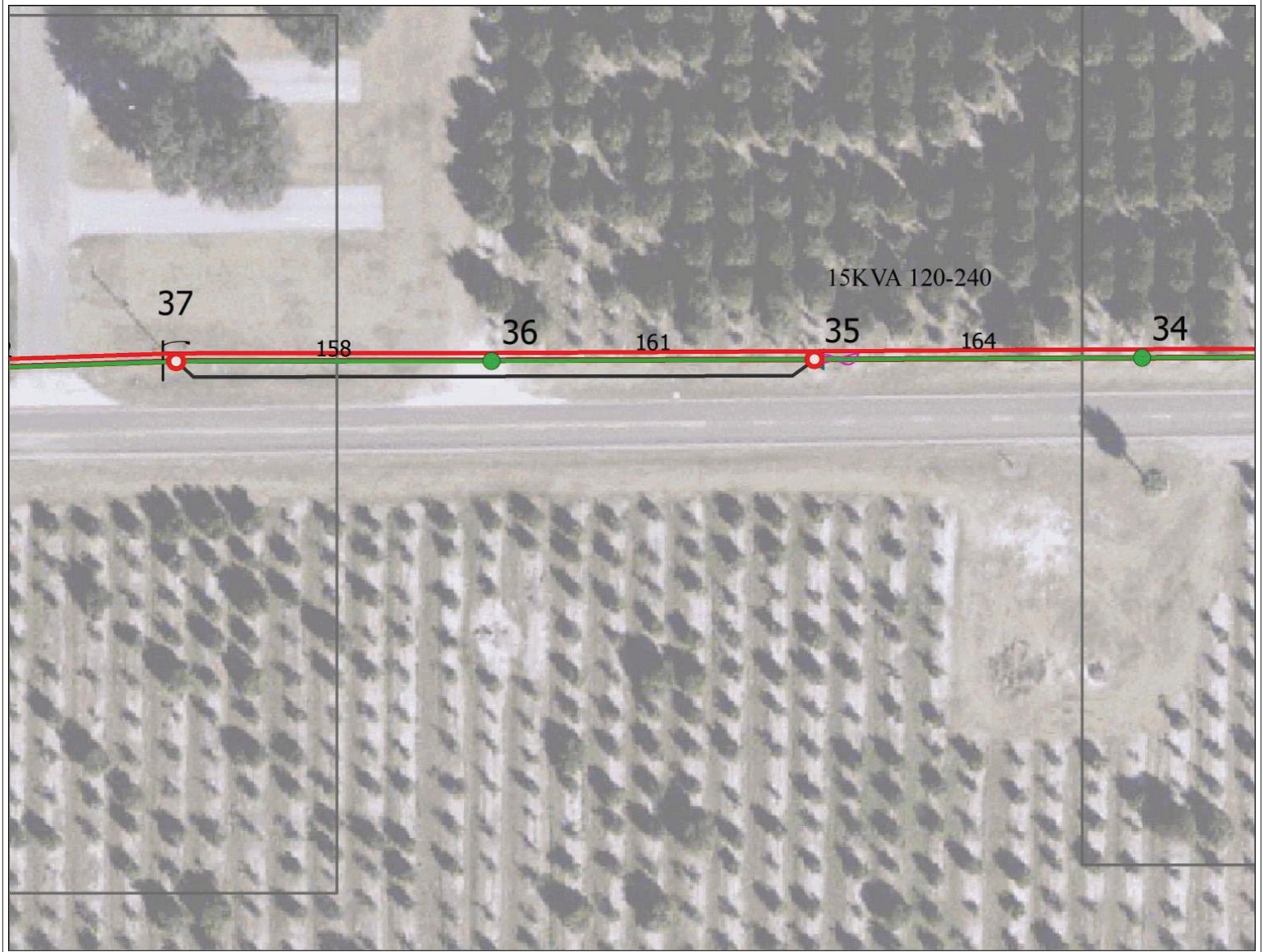
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Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

Notes:

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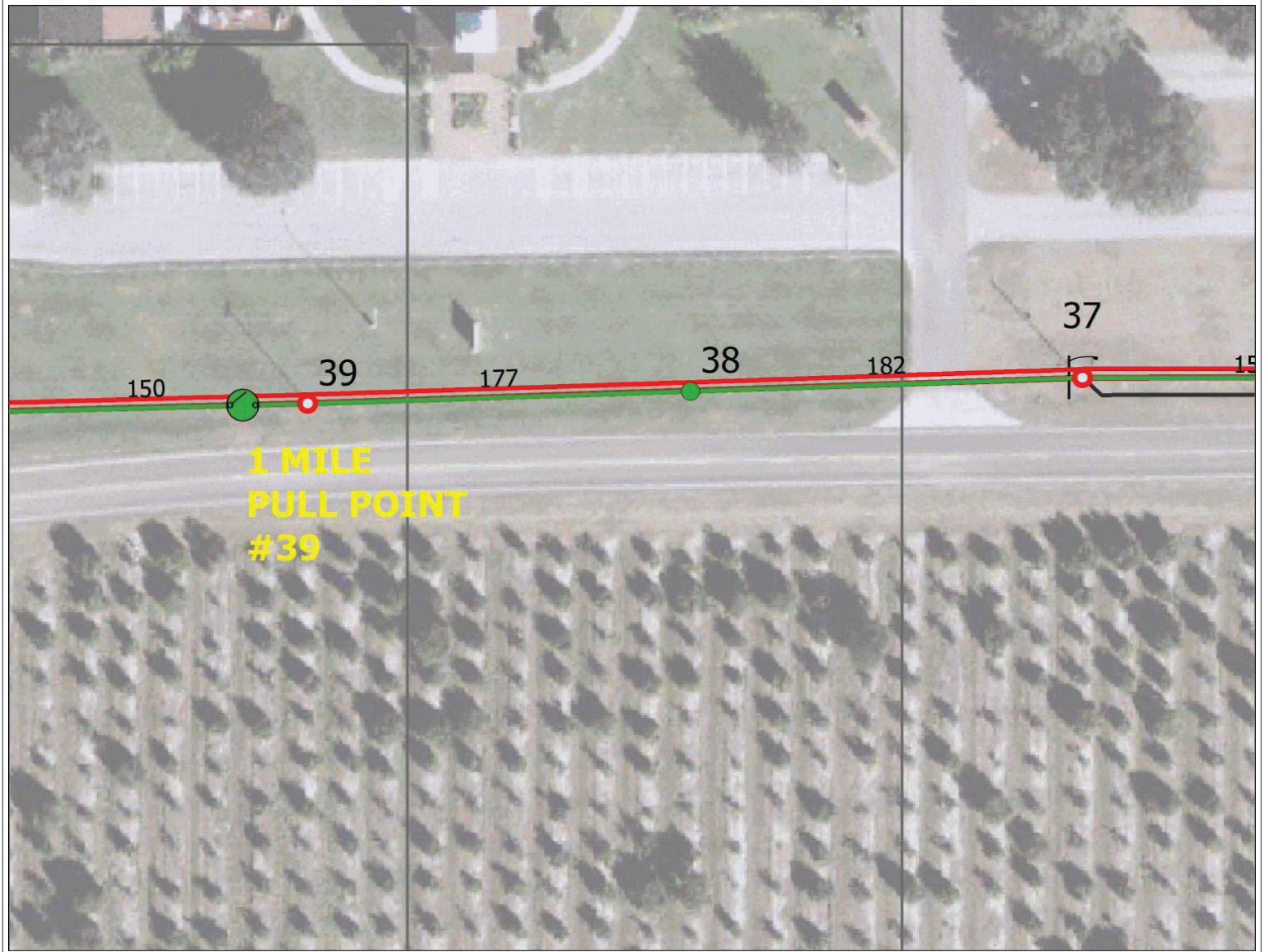
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Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
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Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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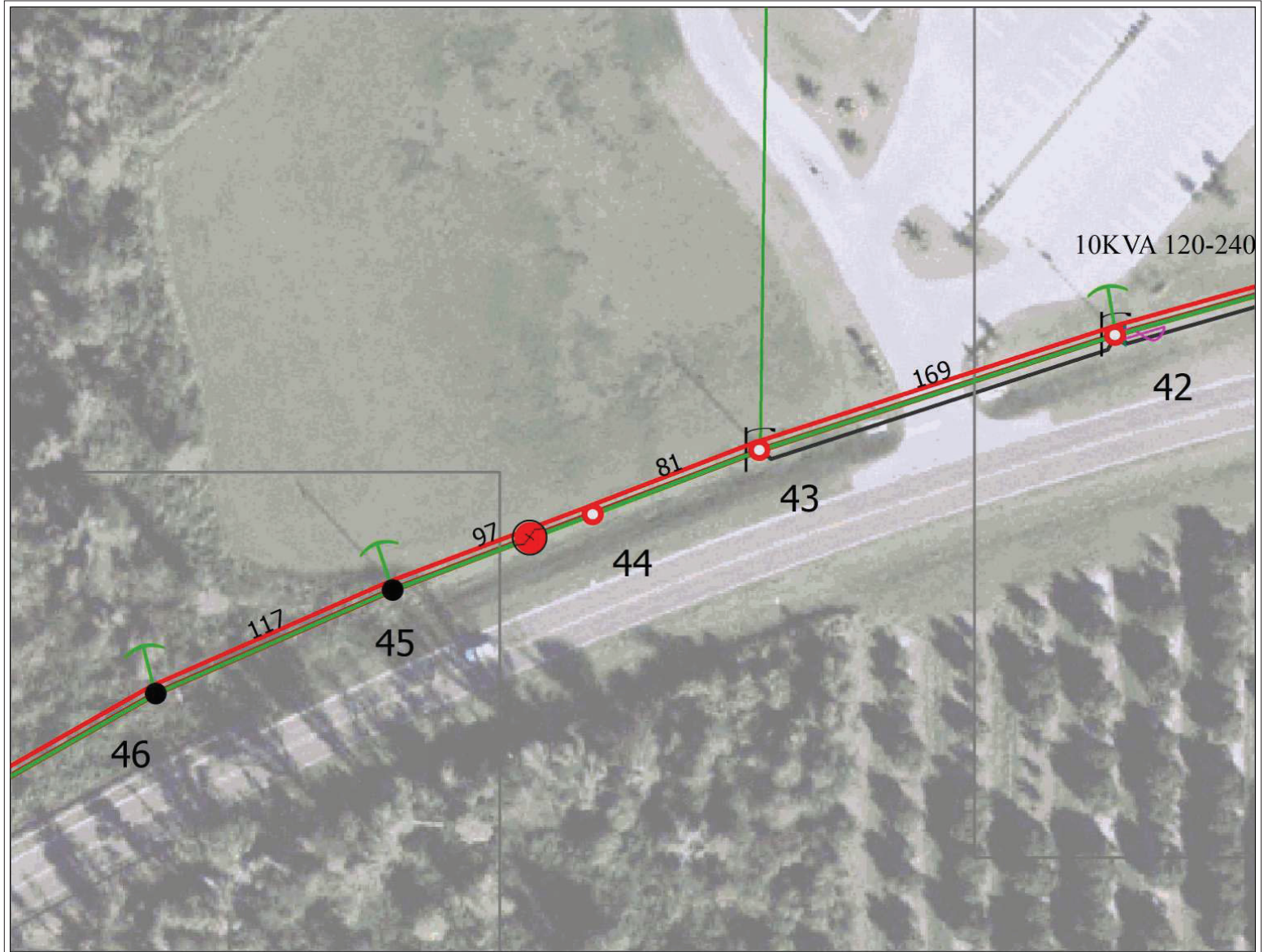
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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

Notes:

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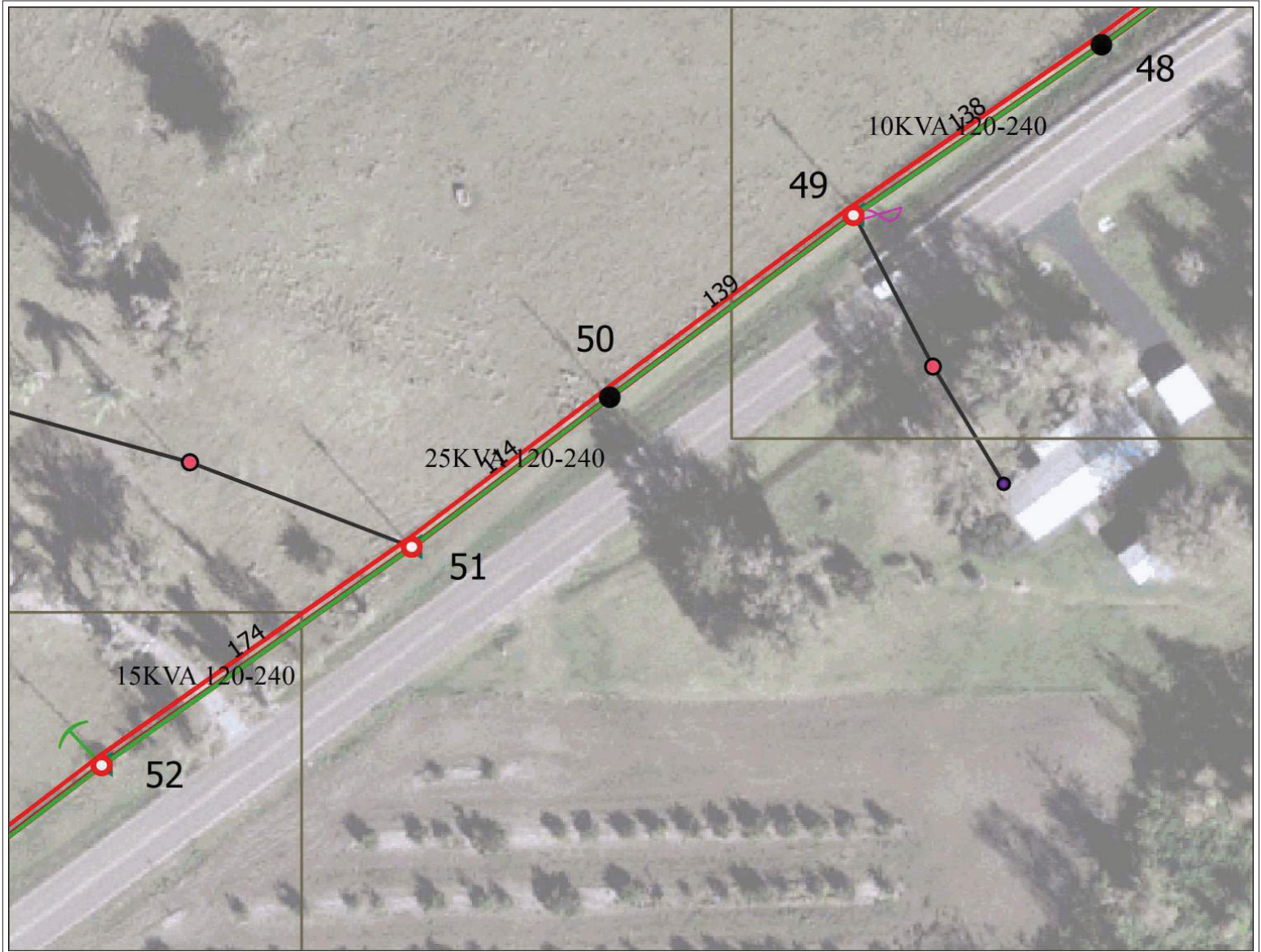
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Job Name: **WAUCHULA RECONDUCTOR**
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Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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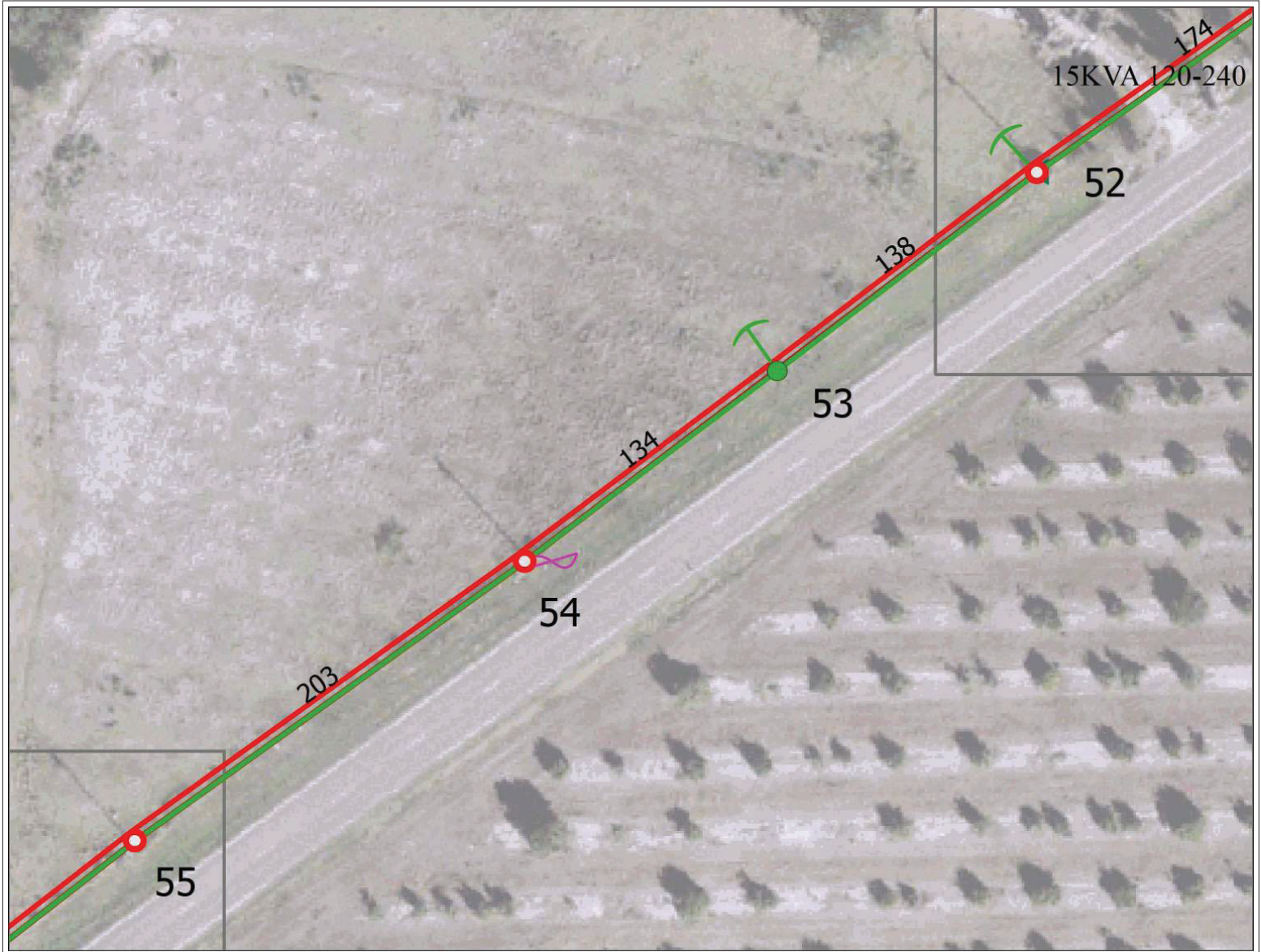




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Job Name: **WAUCHULA RECONDUCTOR**
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Job ID: **STK10001**
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Address:
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Date: **08/06/2022**

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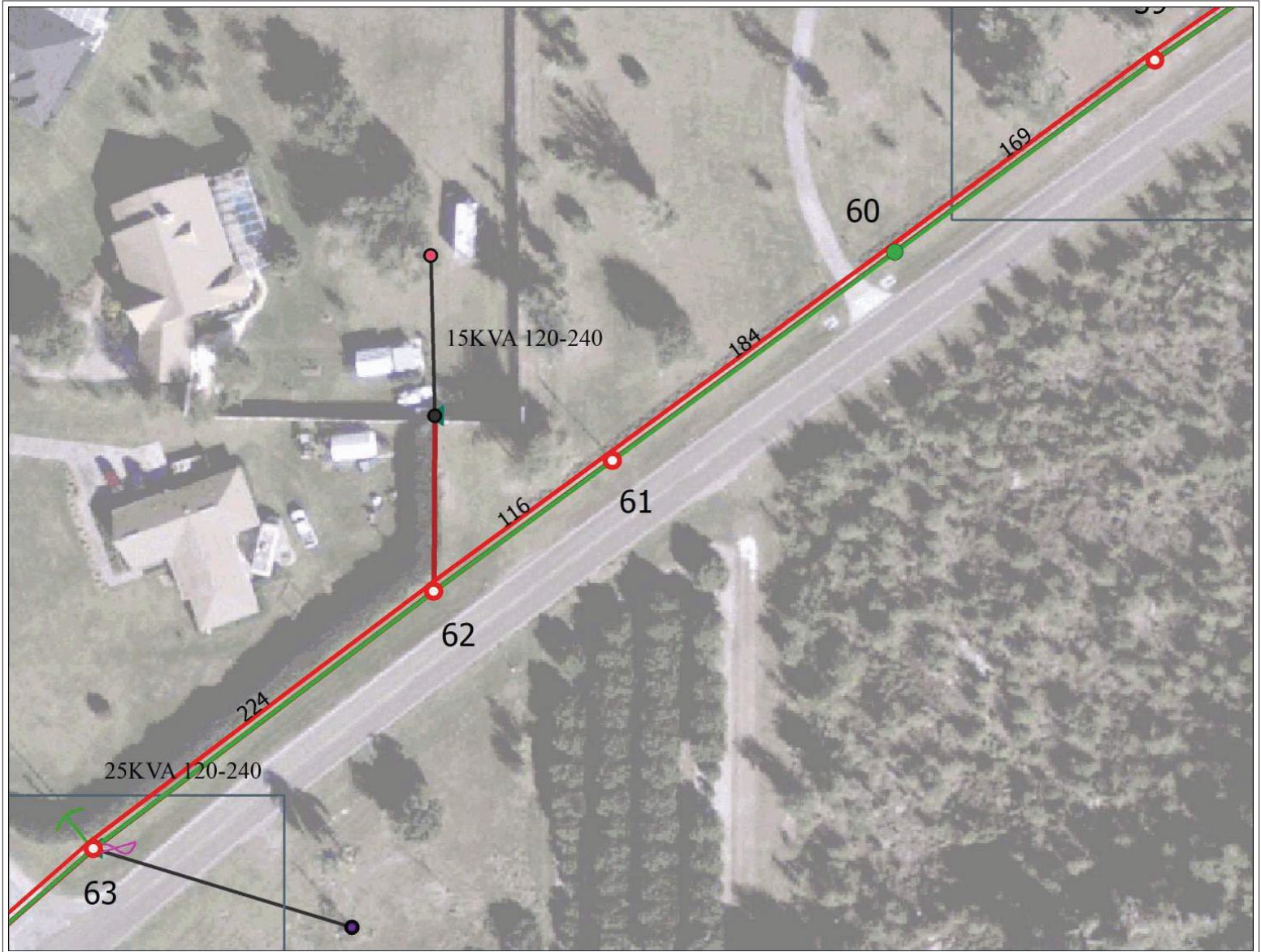
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Job Name: **WAUCHULA RECONDUCTOR**
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Job ID: **STK10001**
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Address:
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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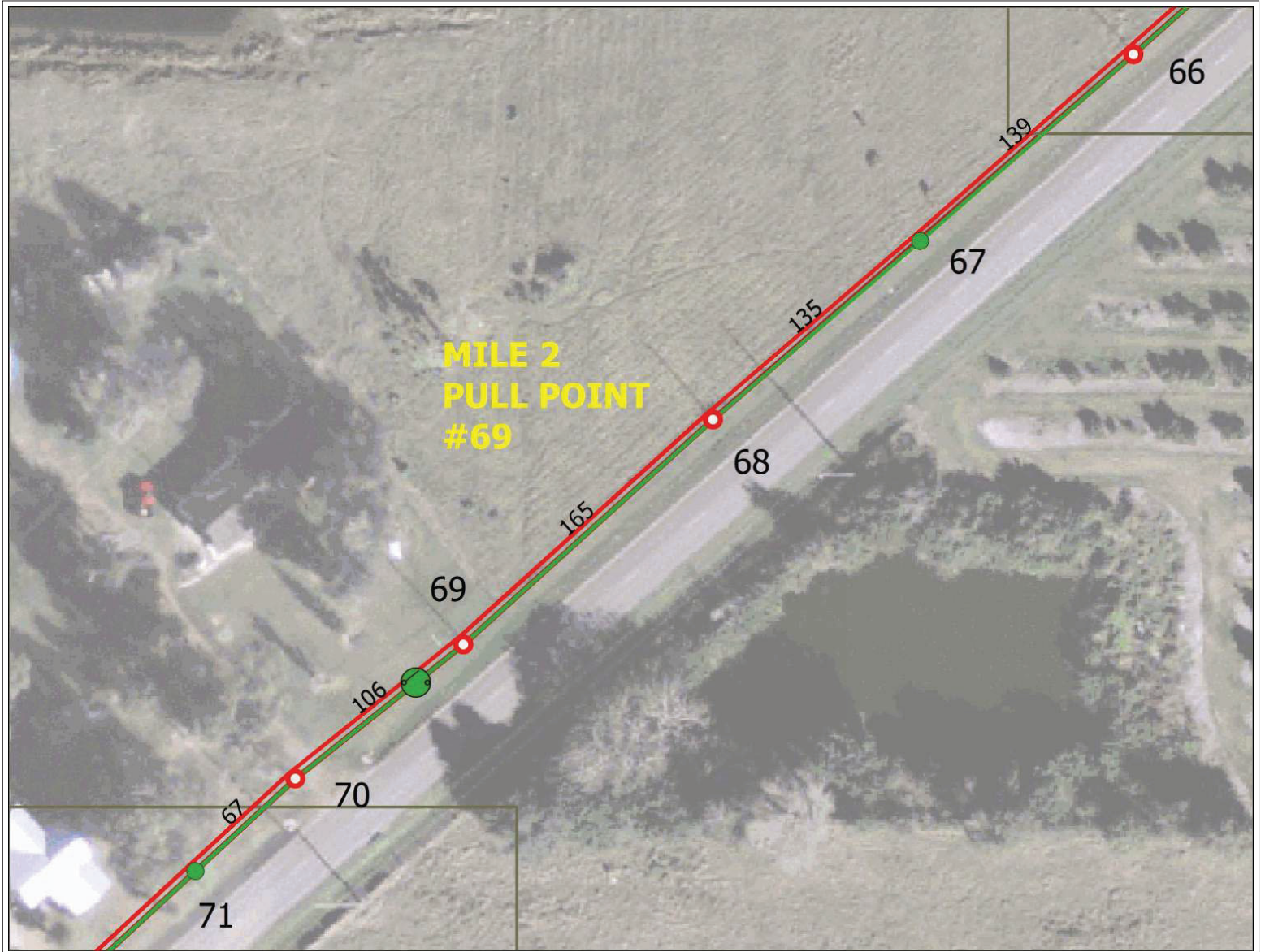
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Service Order:
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Date: **08/06/2022**

Notes:

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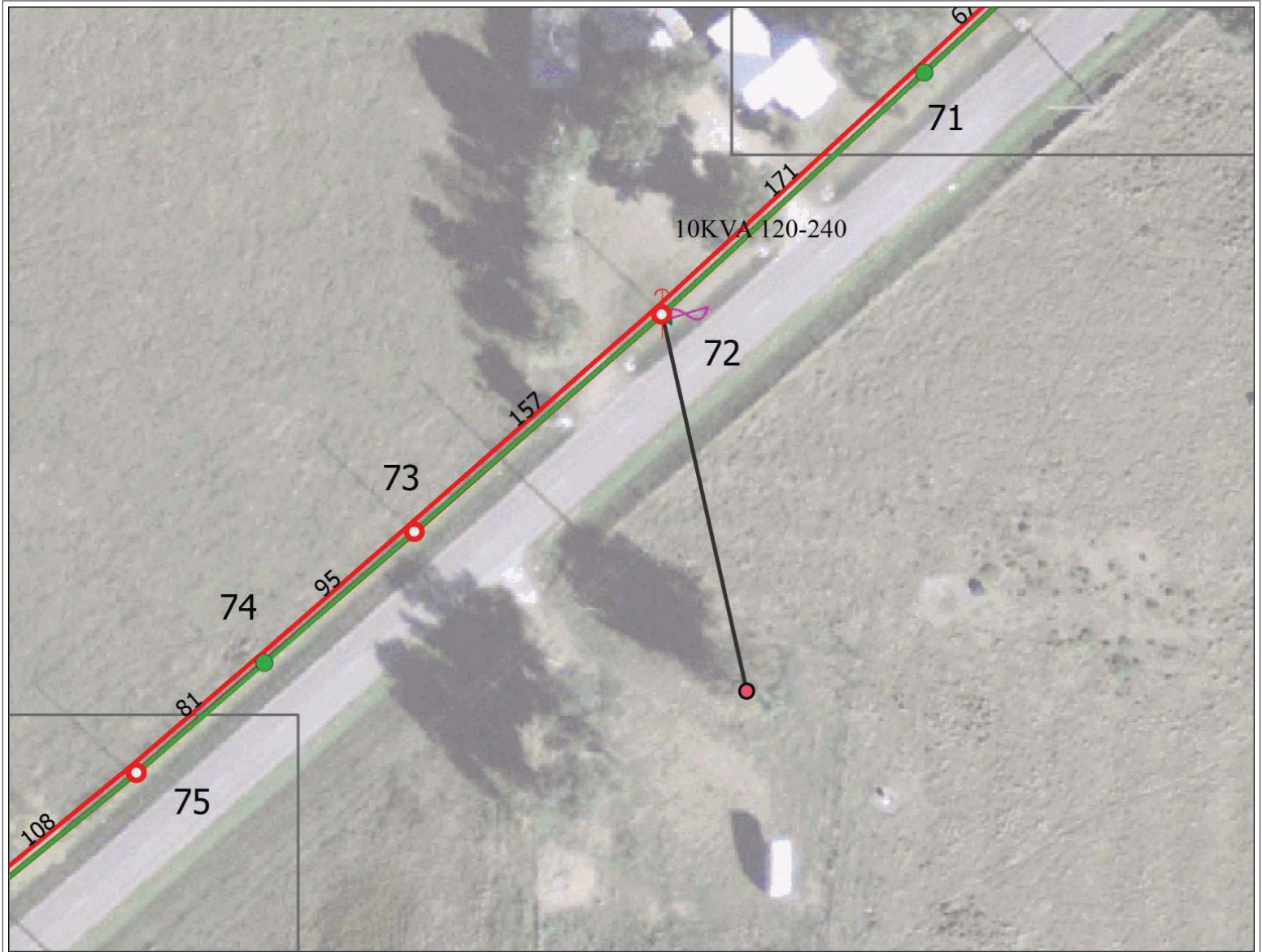
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Date: **08/06/2022**

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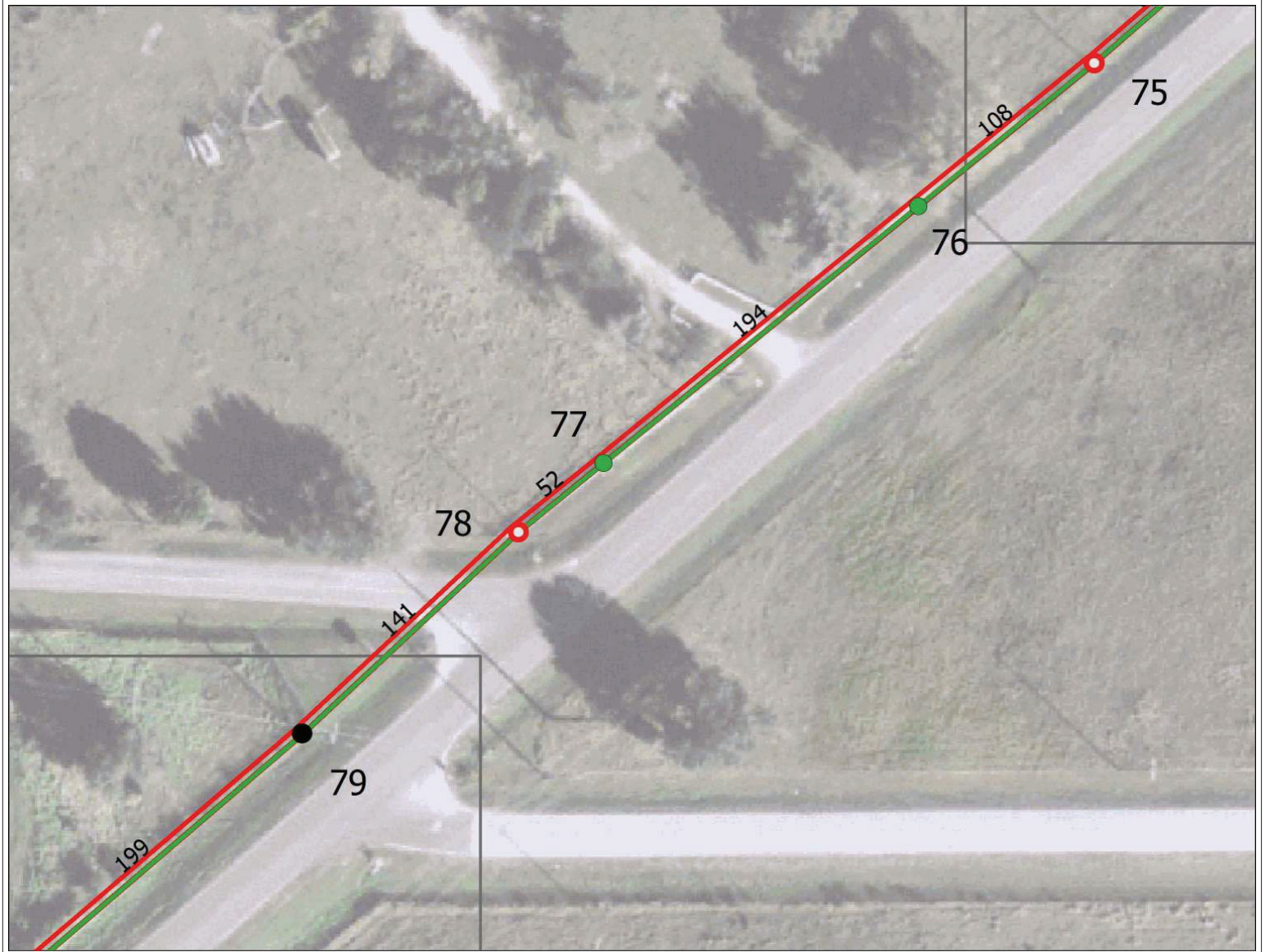
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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

Notes:

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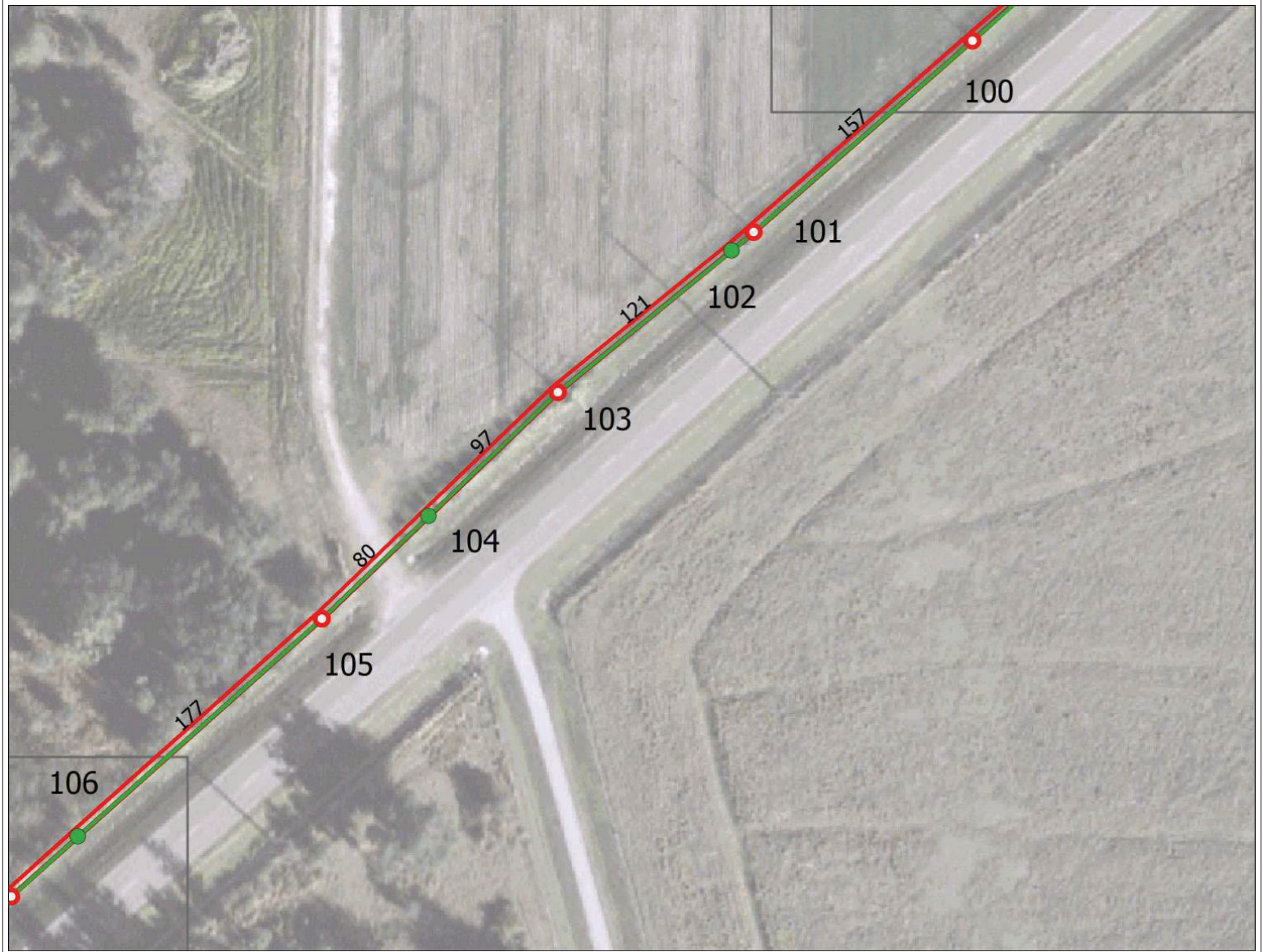
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Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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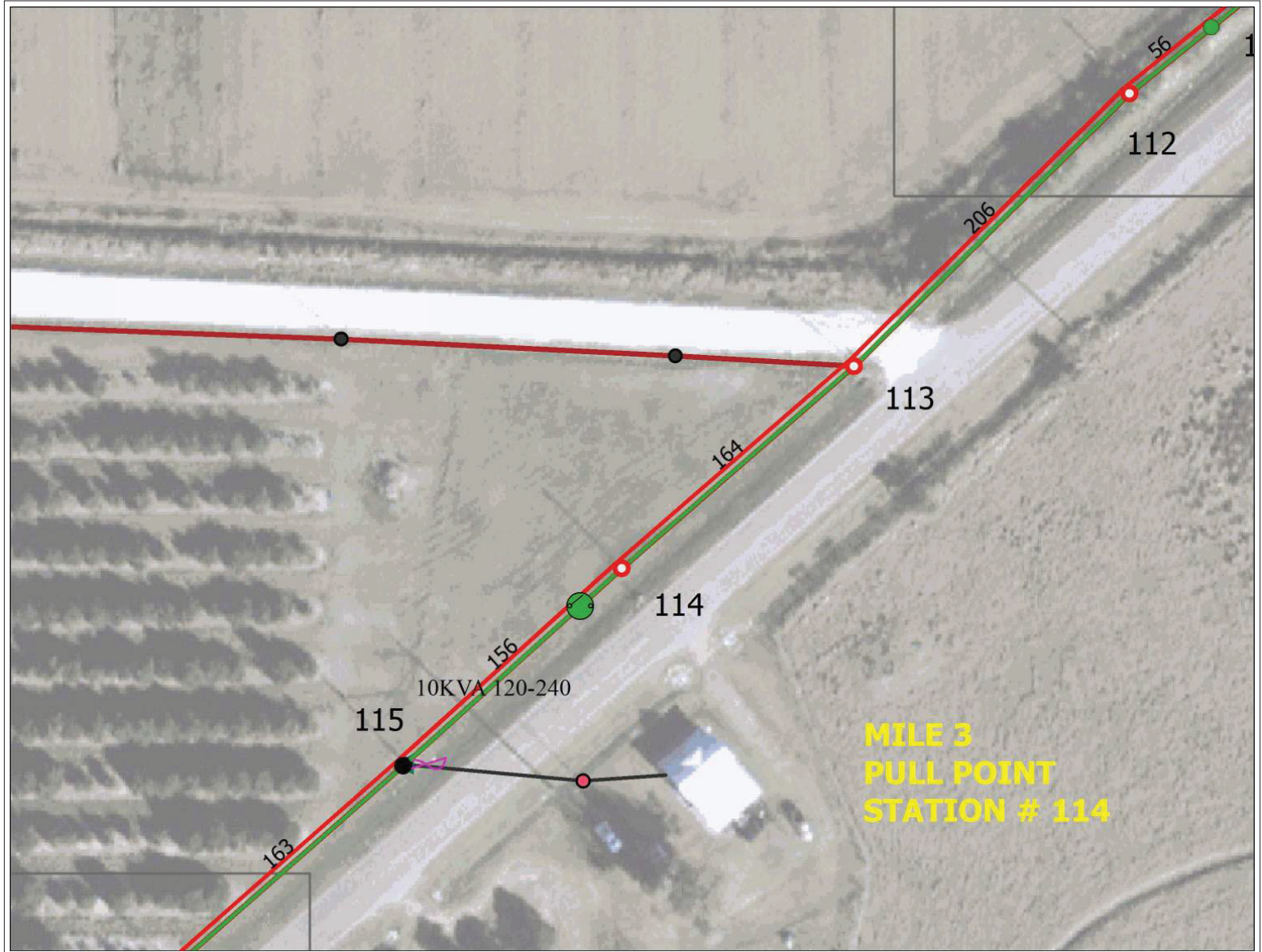
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Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: STK10001
Job Name: WAUCHULA RECONDUCTOR
Address:
Service Order:
Staked By: SHAY HOBBS
Date: 08/06/2022

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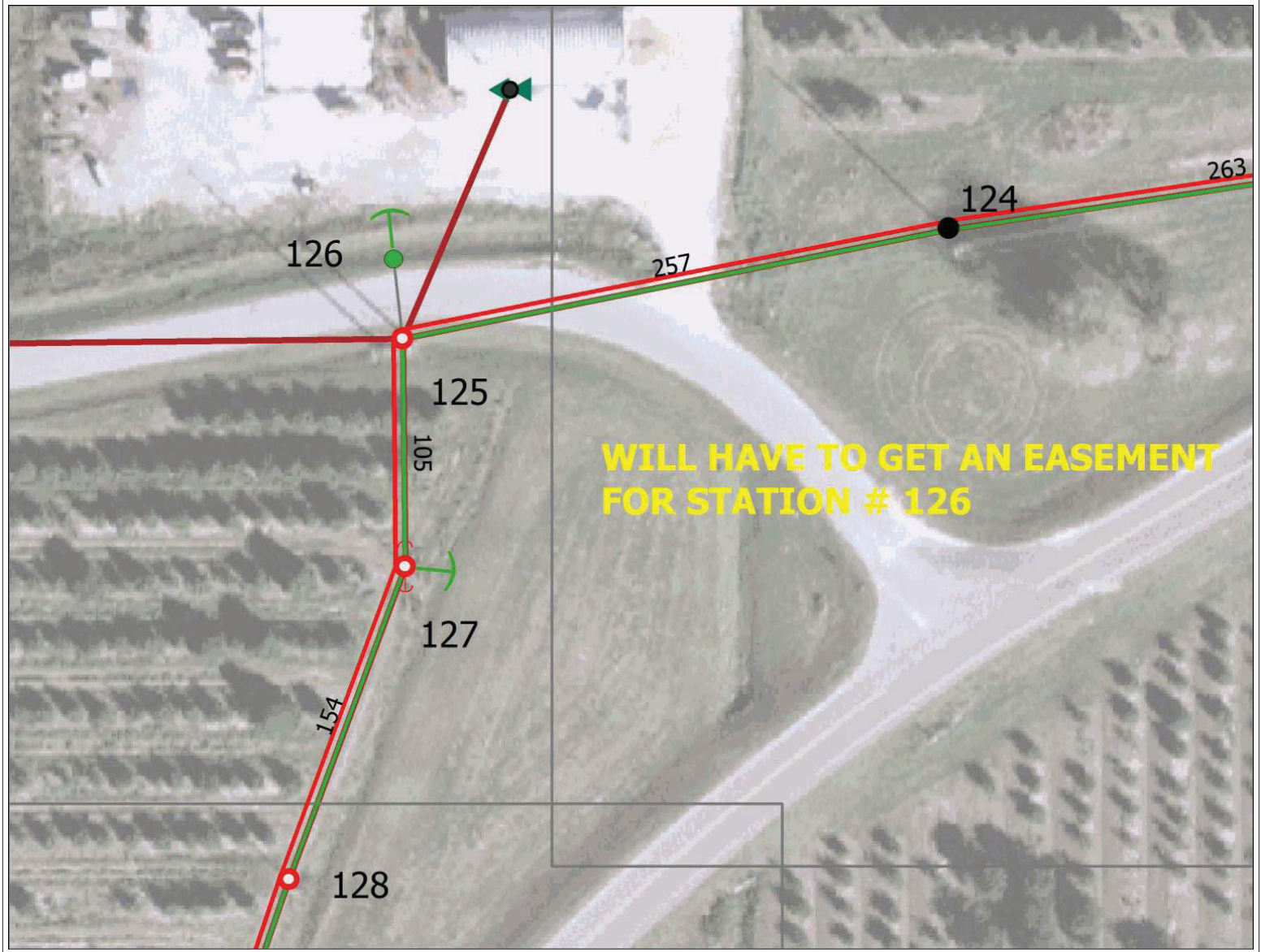
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Date: 08/06/2022

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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Staked By: **SHAY HOBBS**
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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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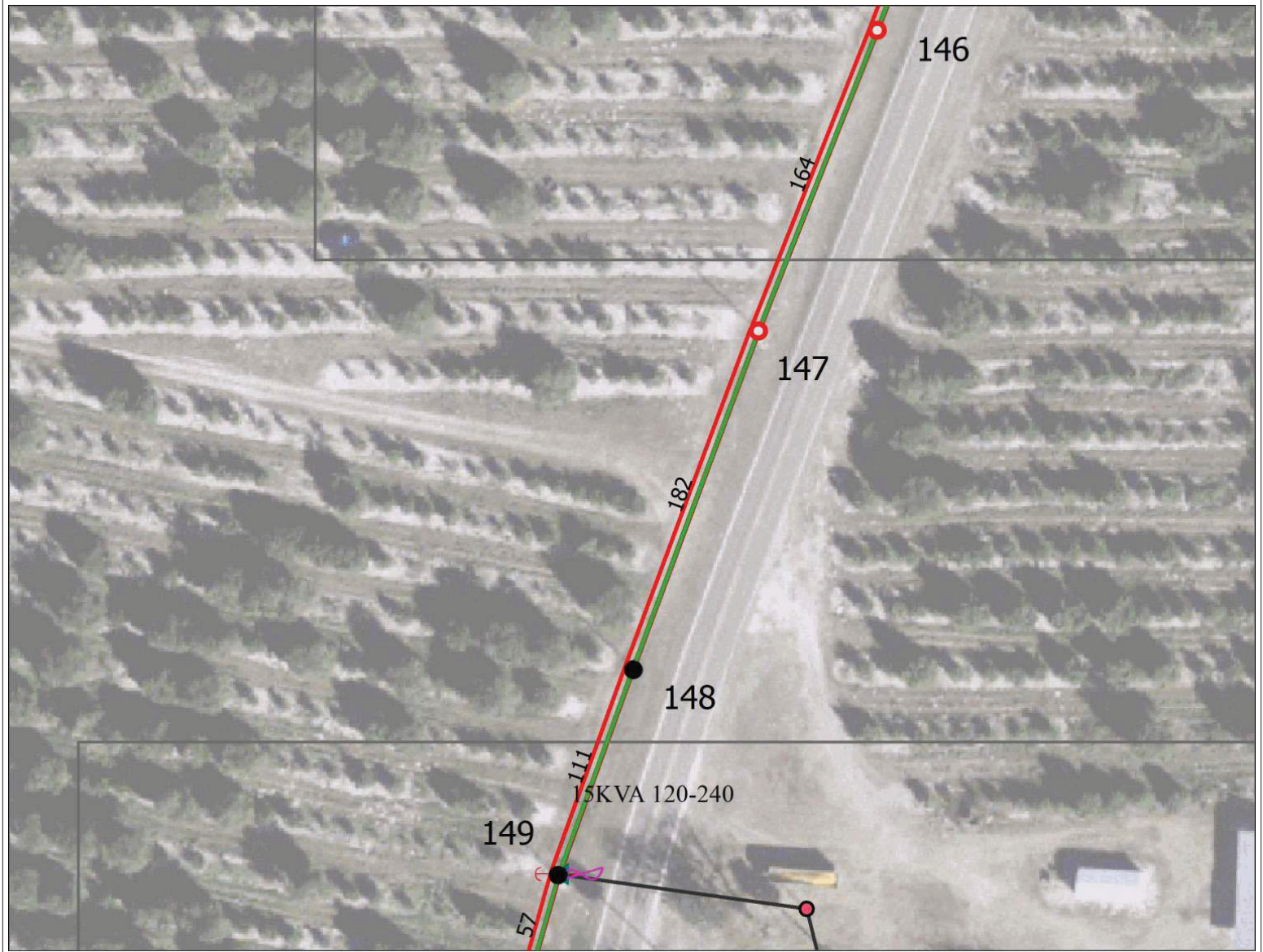




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Address:	
Service Order:	
Staked By:	SHAY HOBBS
Date:	08/06/2022

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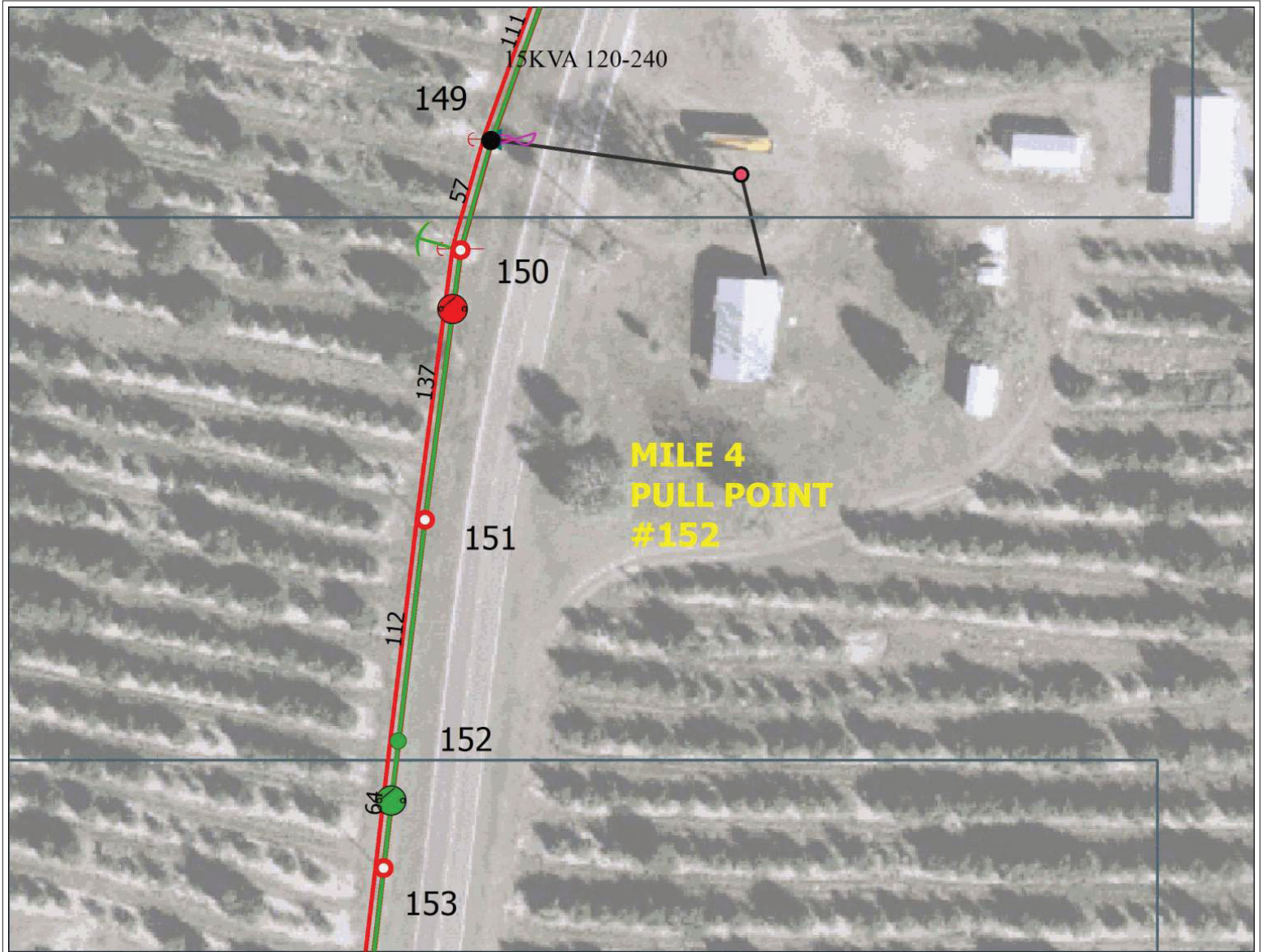
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Date: 08/06/2022

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job Name: **WAUCHULA RECONDUCTOR**
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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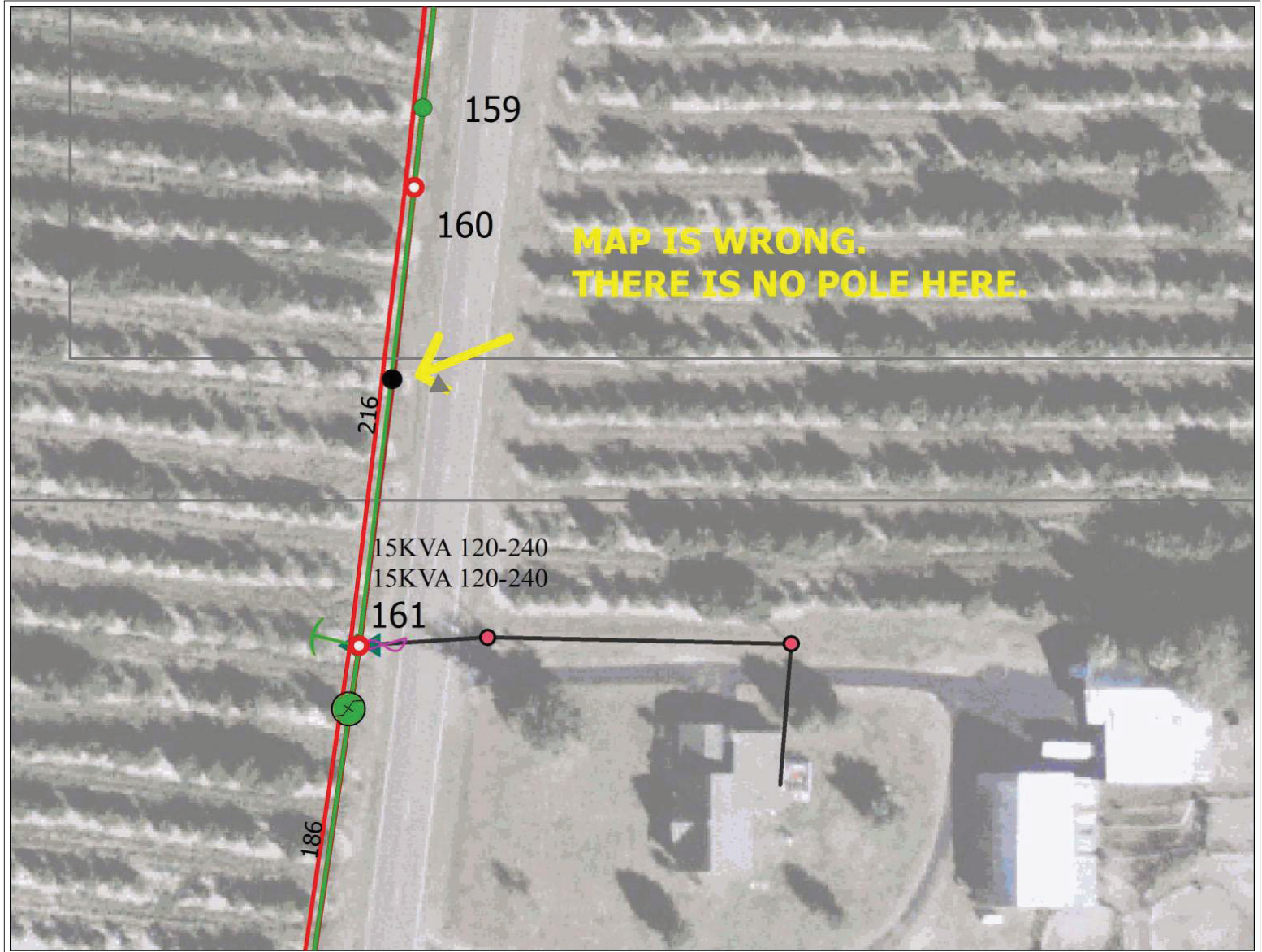
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Date: 08/06/2022

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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
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Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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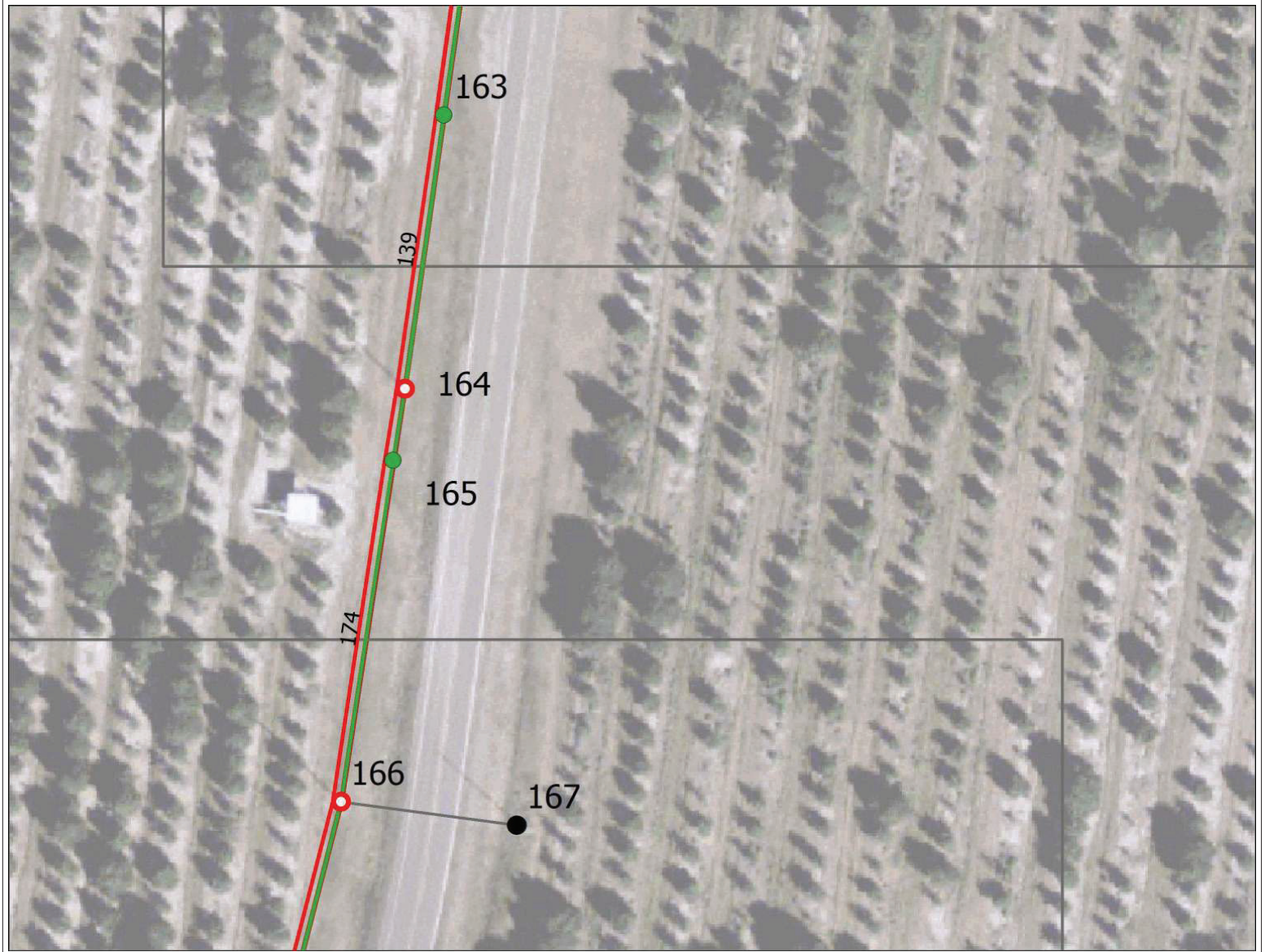
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: STK10001
Job Name: WAUCHULA RECONDUCTOR
Address:
Service Order:
Staked By: SHAY HOBBS
Date: 08/06/2022

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Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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Job ID: STK10001
Job Name: WAUCHULA RECONDUCTOR
Address:
Service Order:
Staked By: SHAY HOBBS
Date: 08/06/2022

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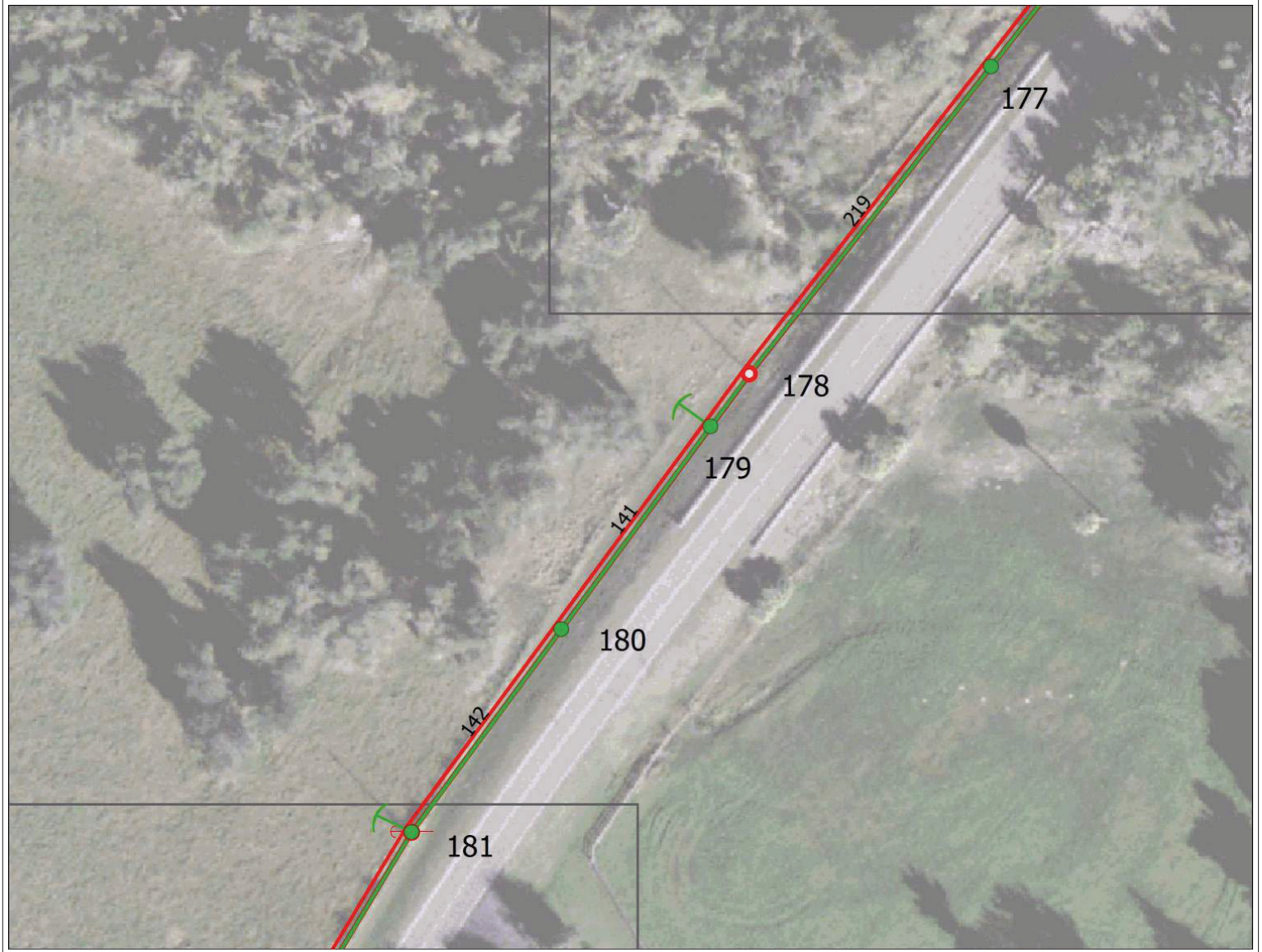
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Date: **08/06/2022**

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Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Address:	
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Staked By:	SHAY HOBBS
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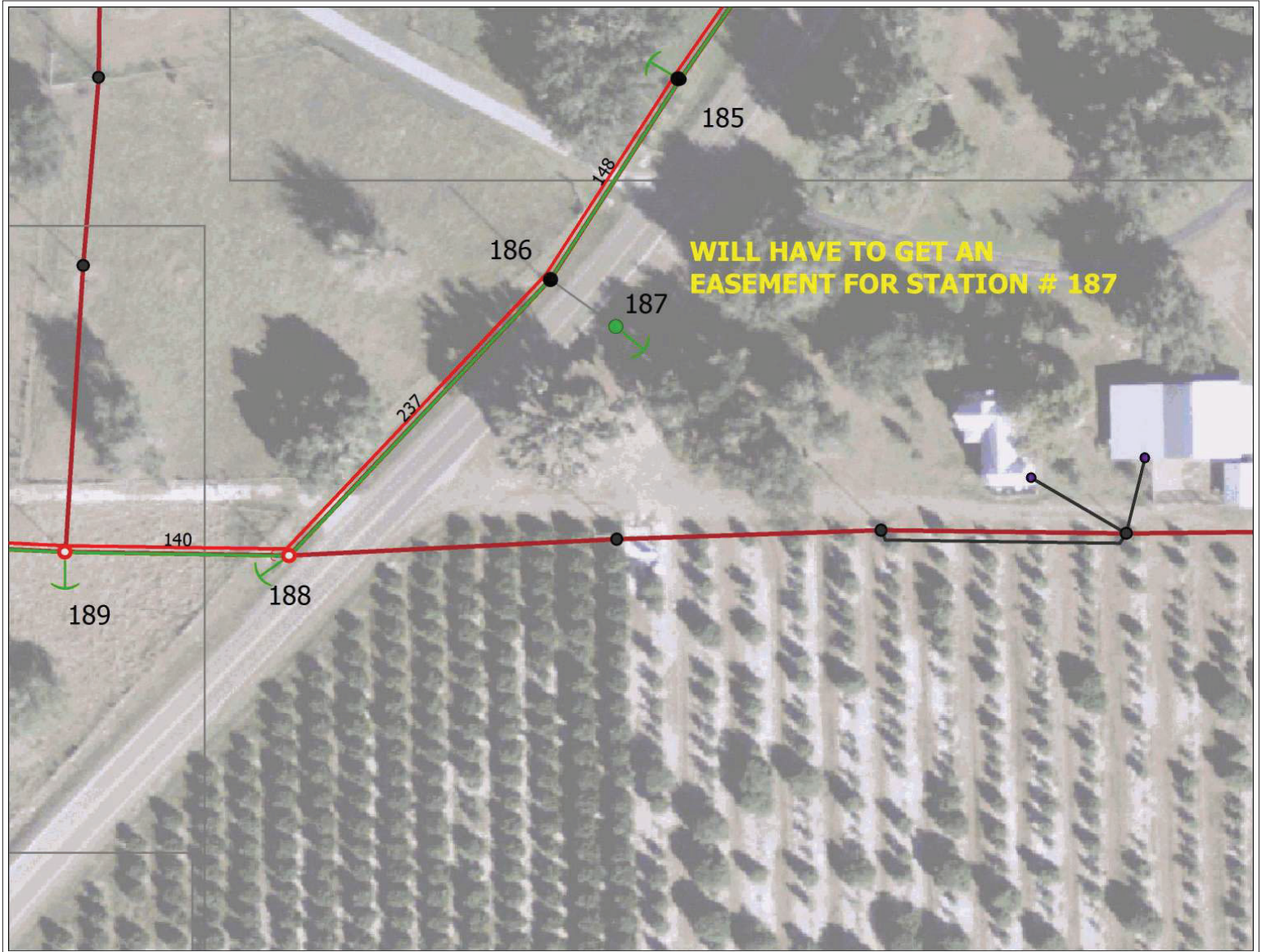
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Date: 08/06/2022

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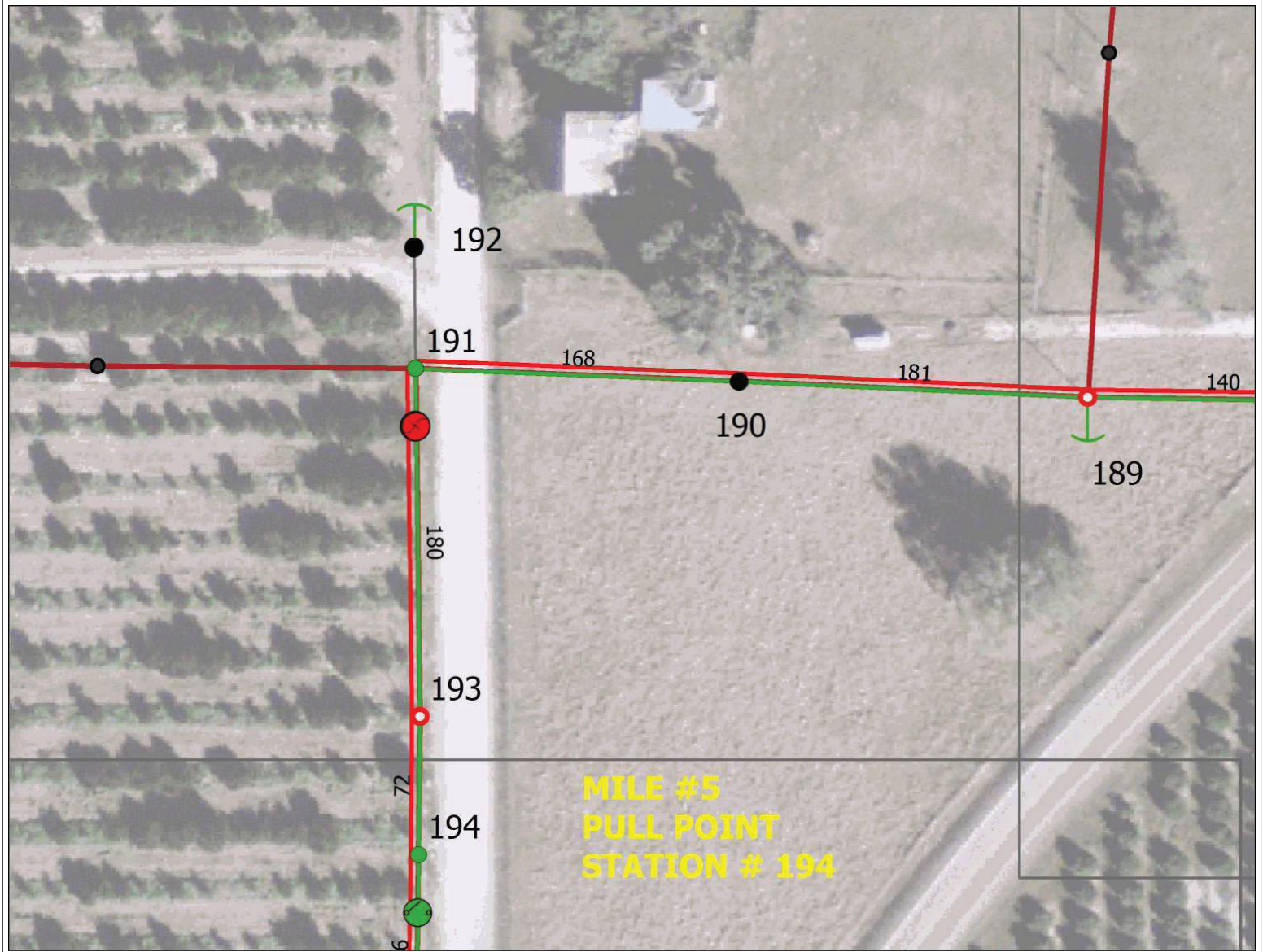




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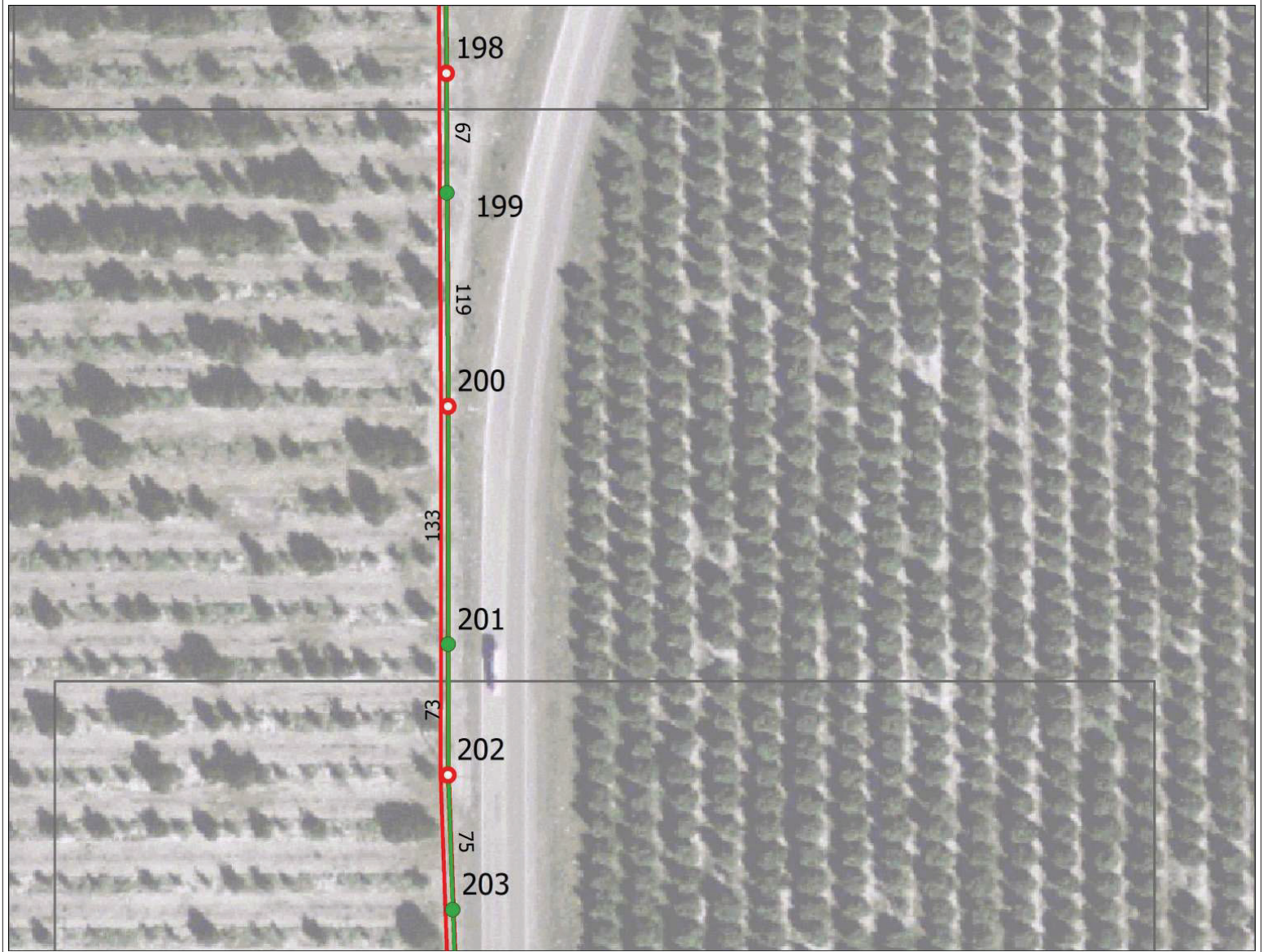
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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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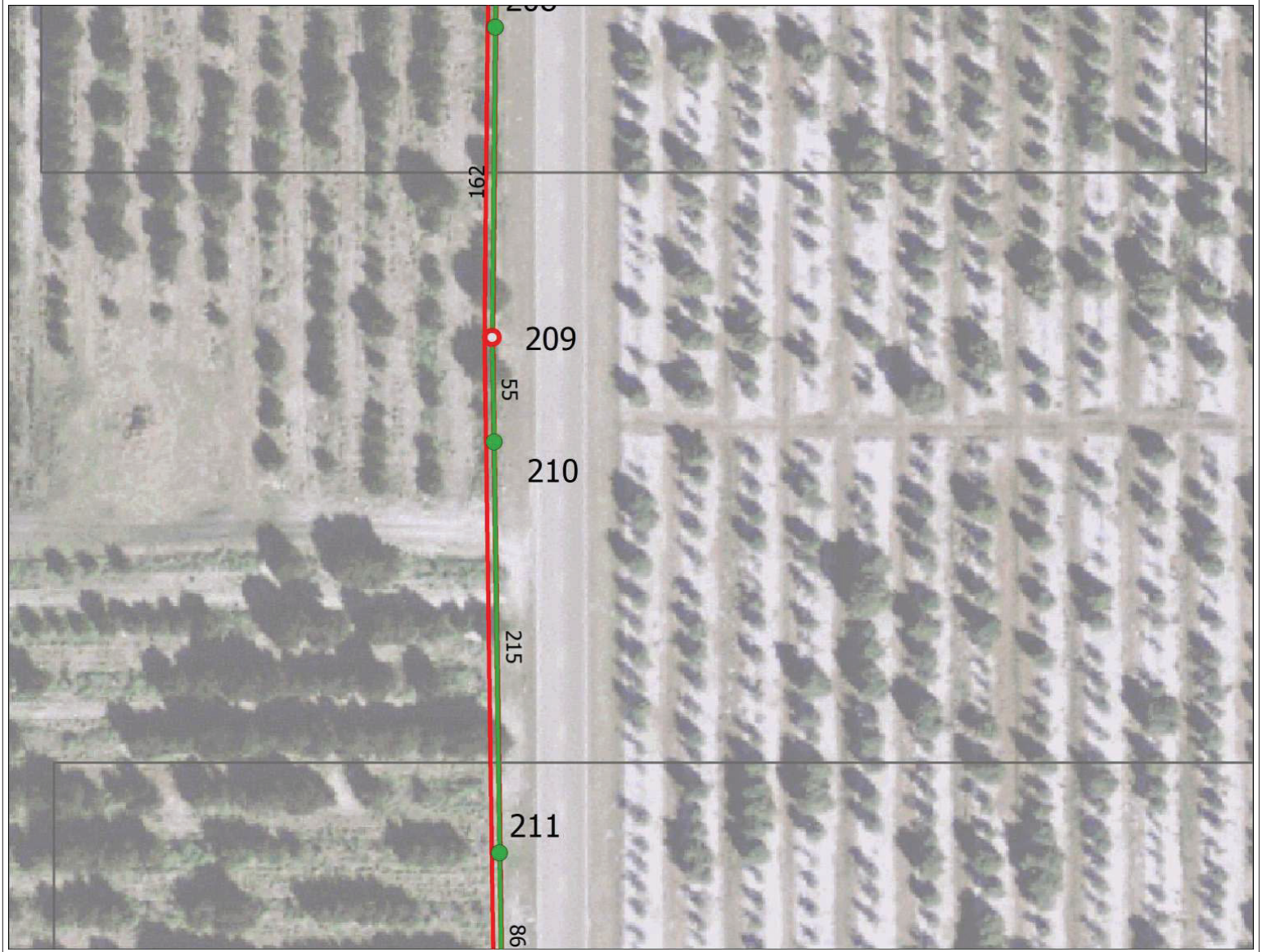
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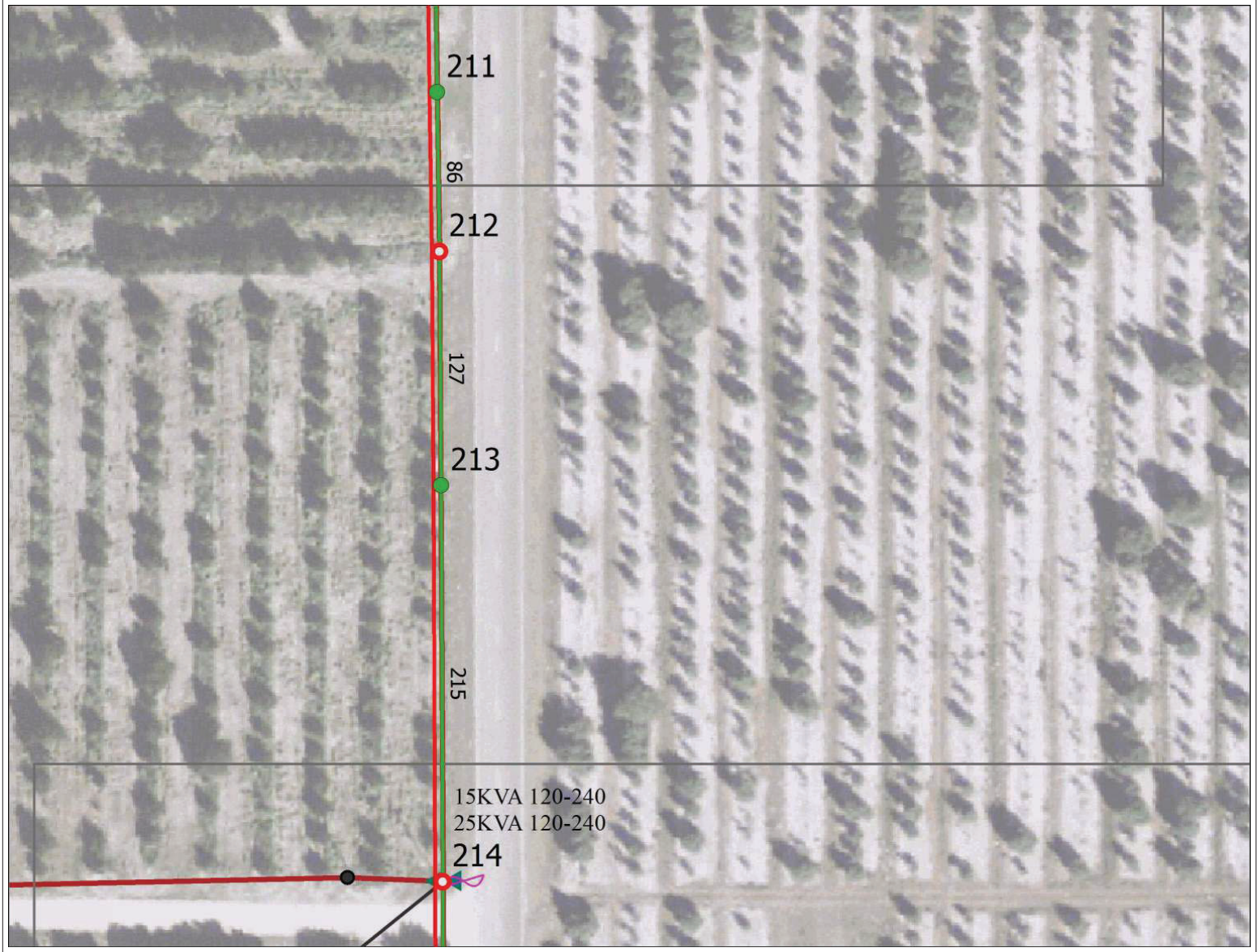




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Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
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Job Name: **WAUCHULA RECONDUCTOR**
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Staked By: **SHAY HOBBS**
Date: **08/06/2022**

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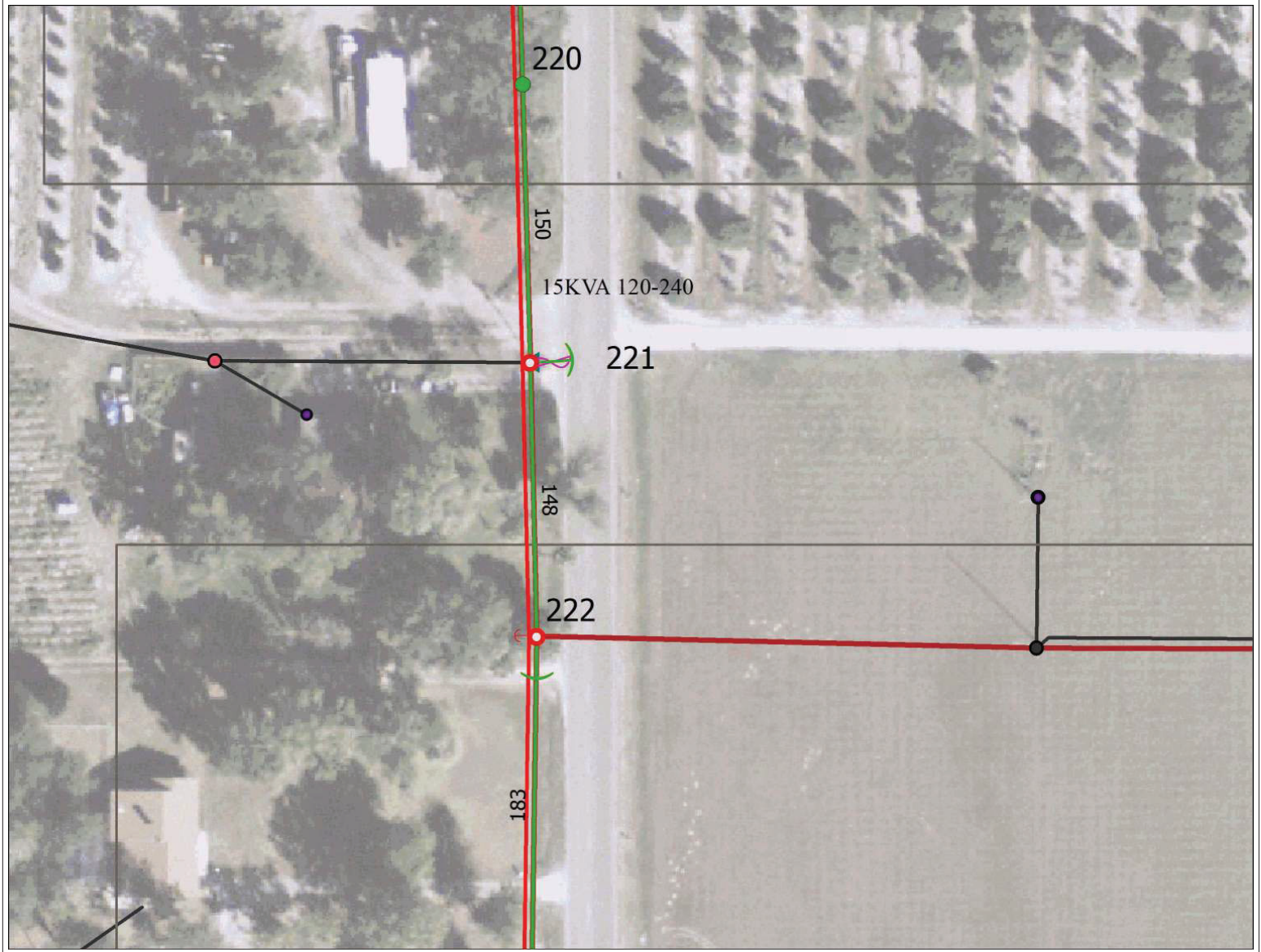




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Job Name: WAUCHULA RECONDUCTOR
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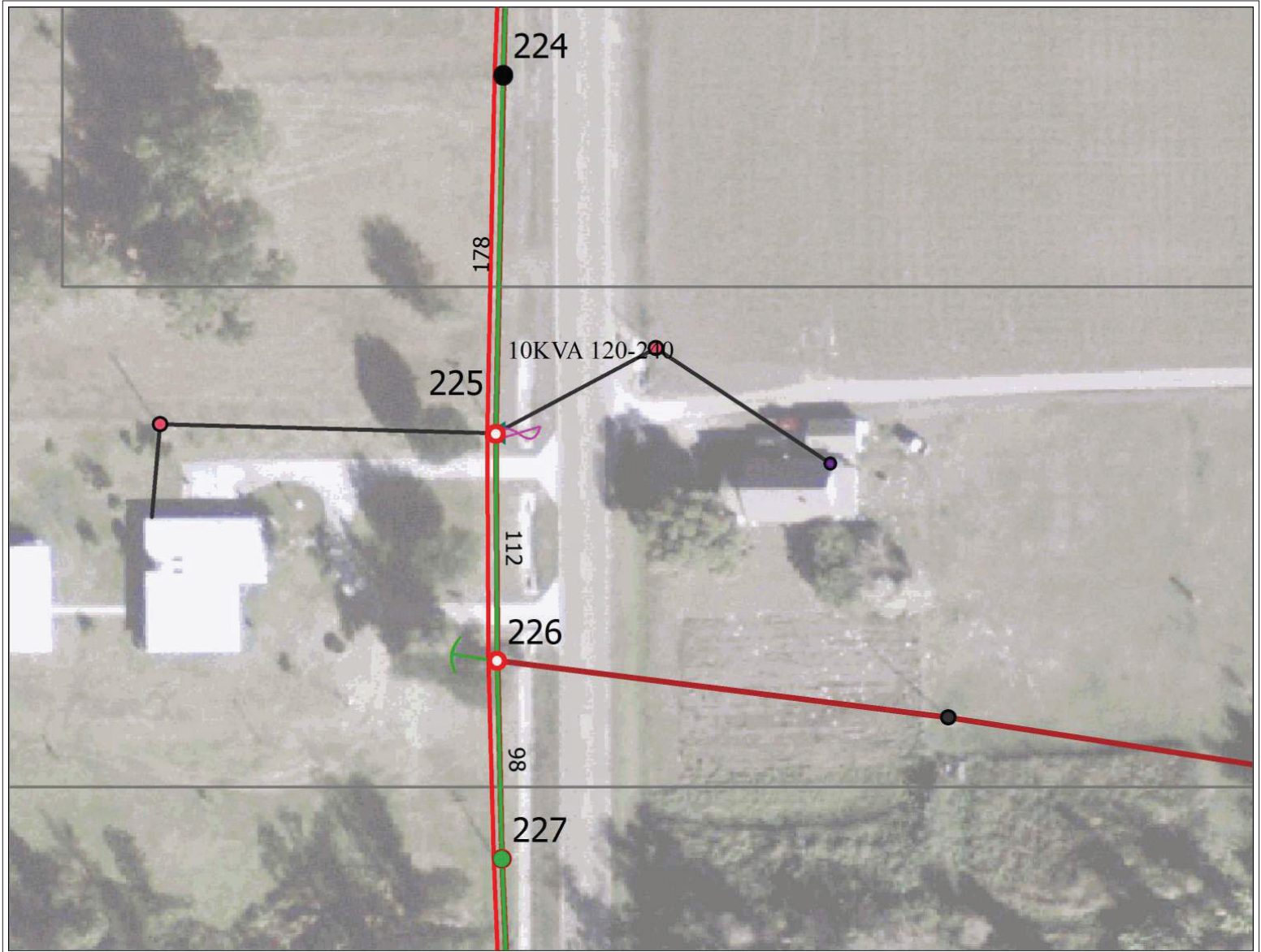
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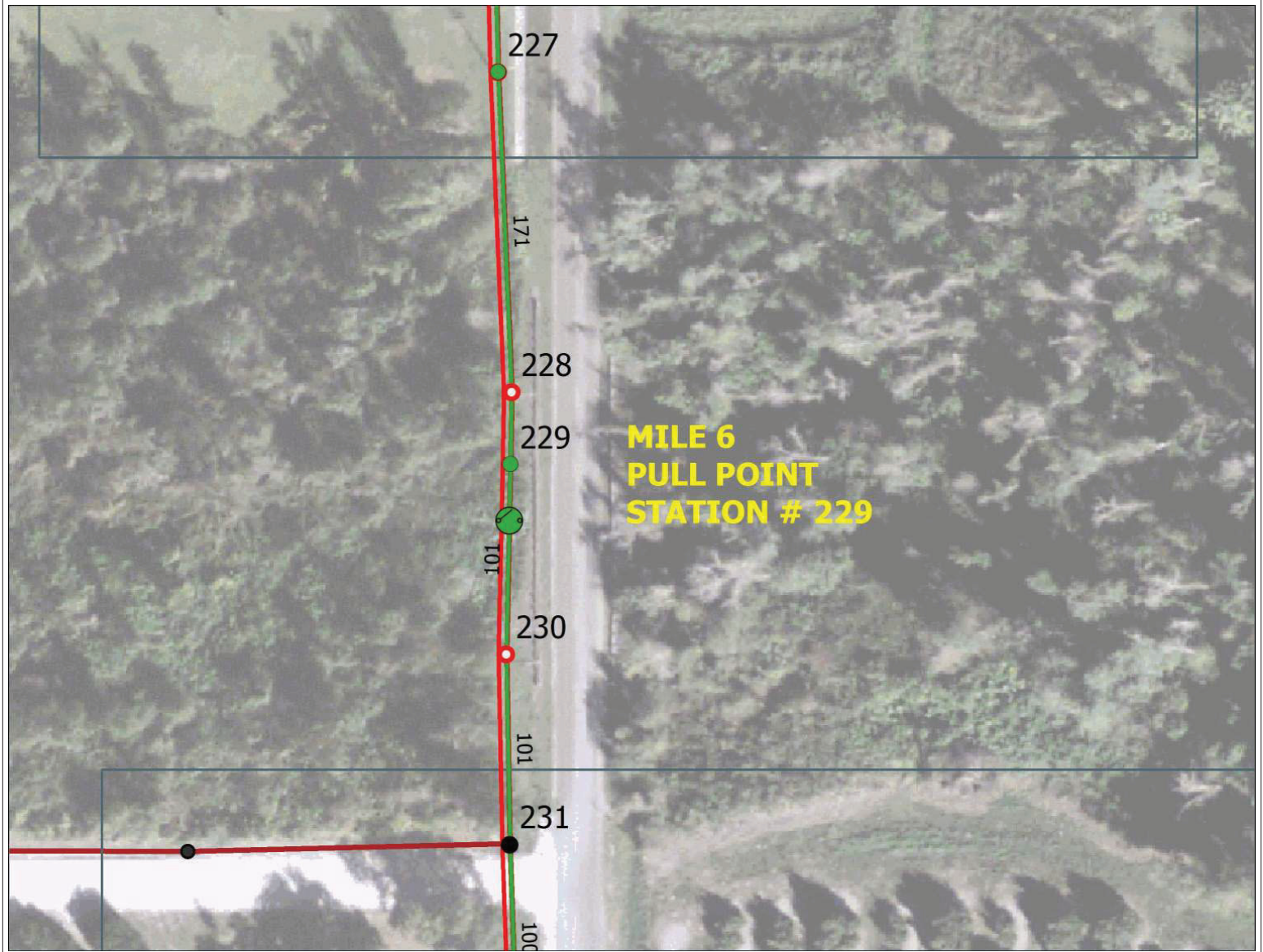




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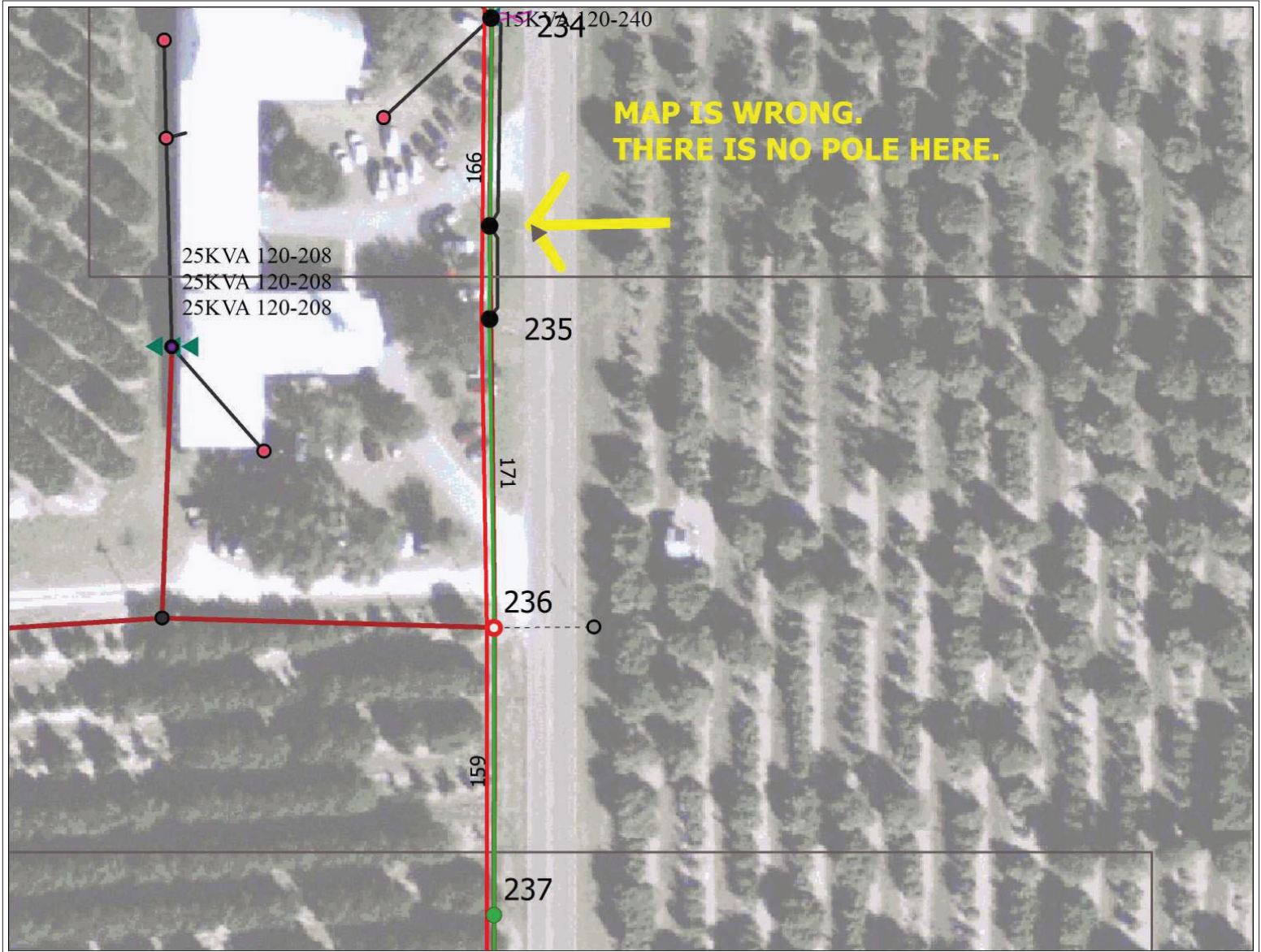
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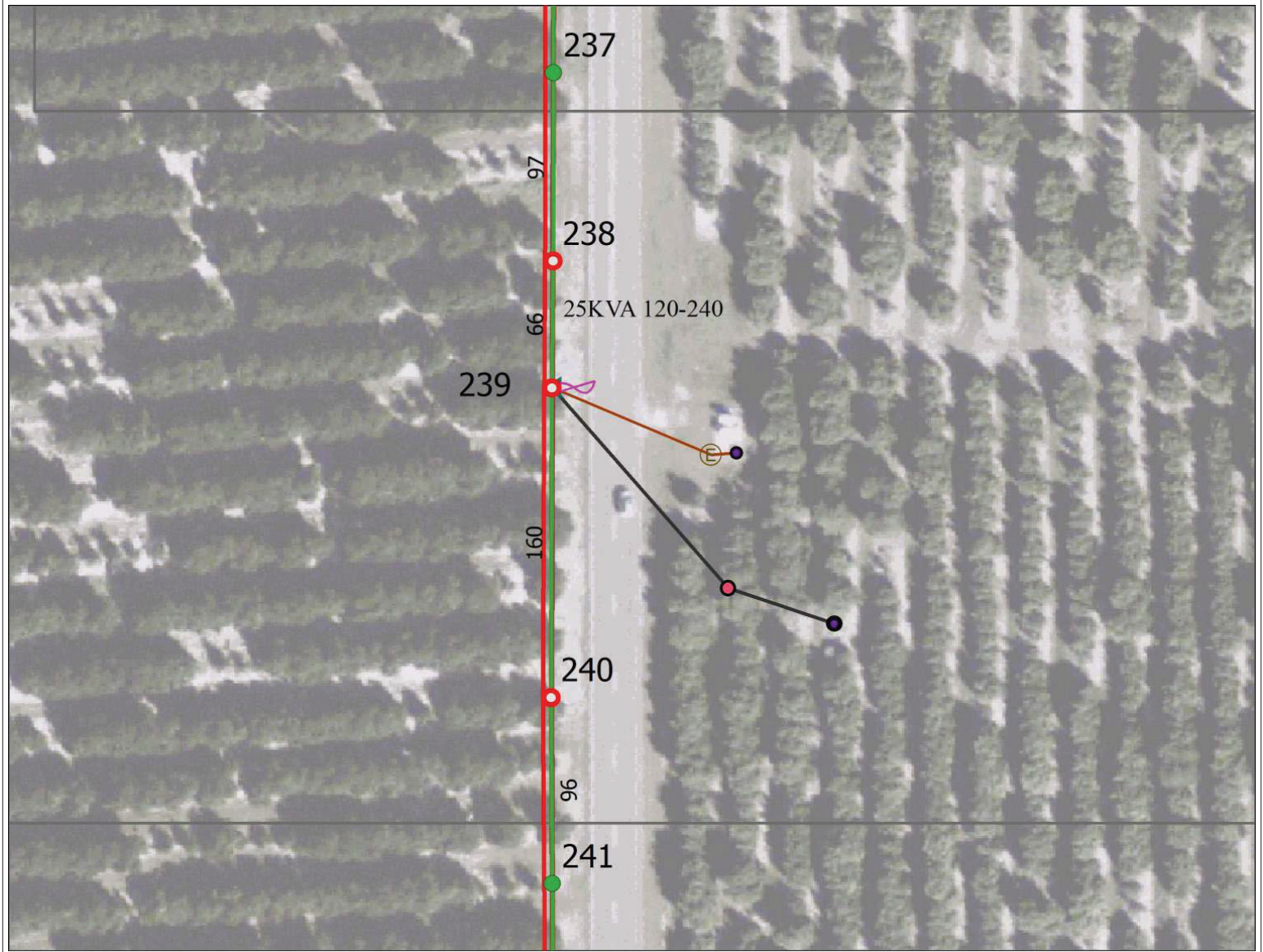
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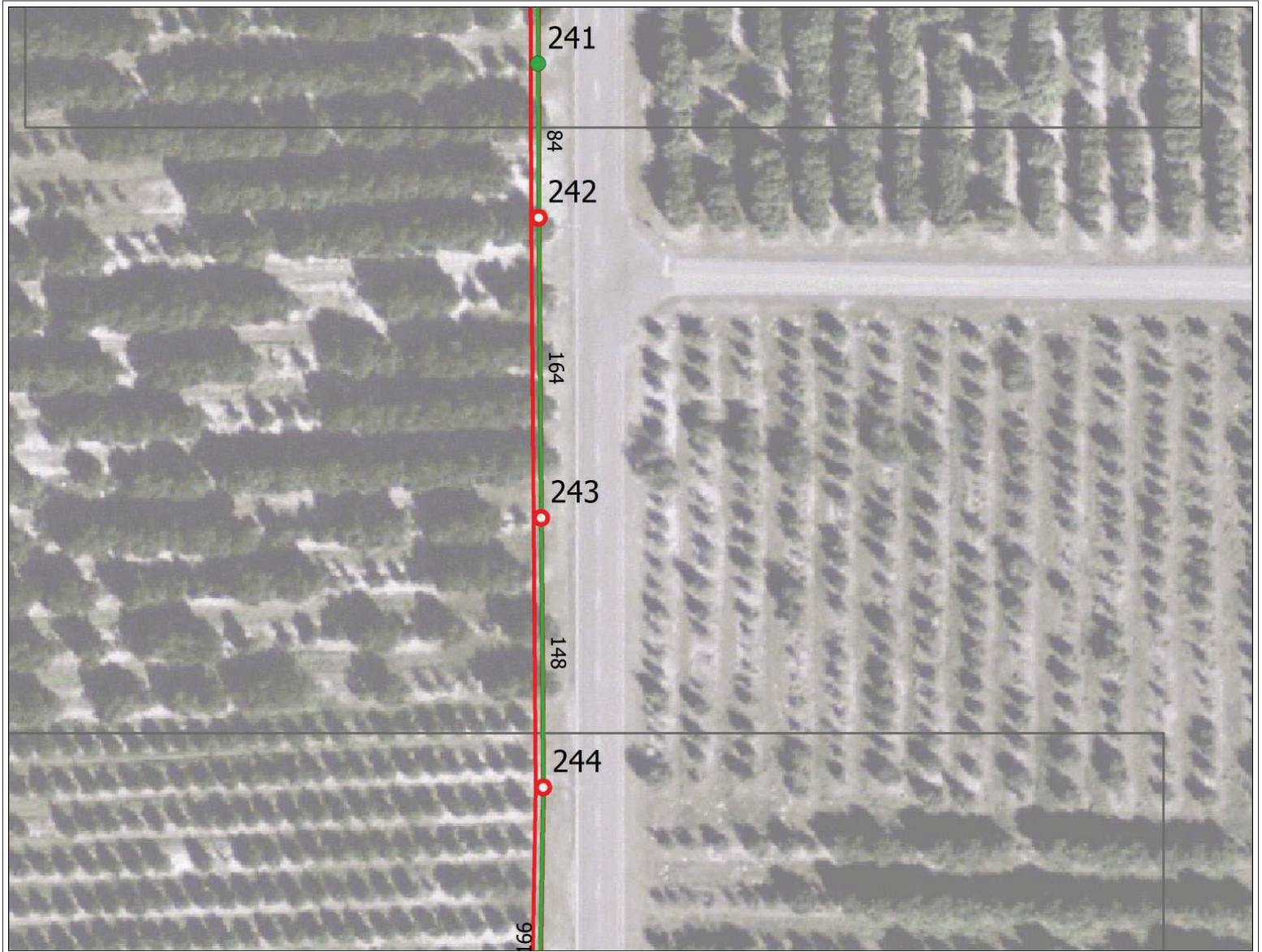
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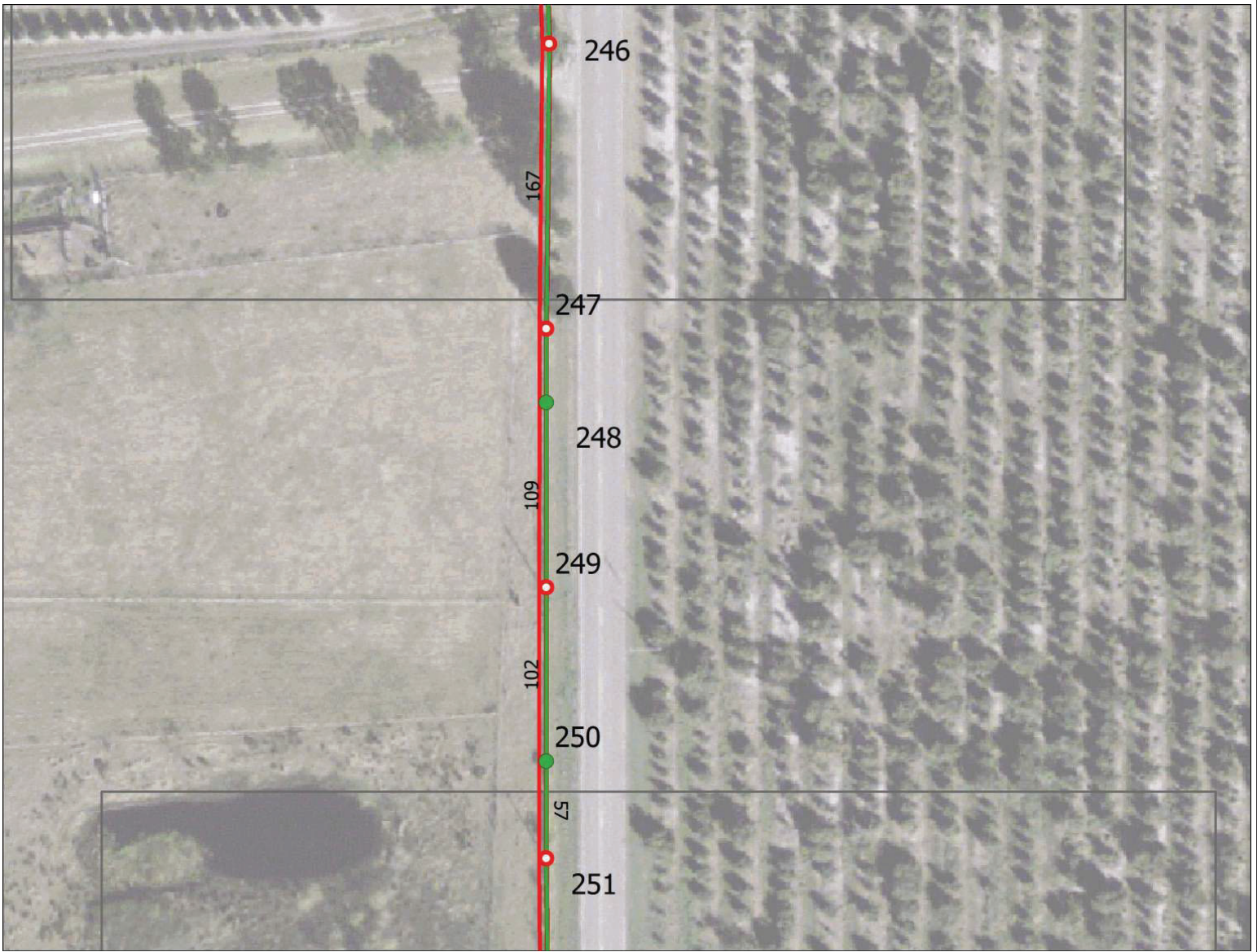




Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Address:	
Service Order:	
Staked By:	SHAY HOBBS
Date:	08/06/2022

Notes:

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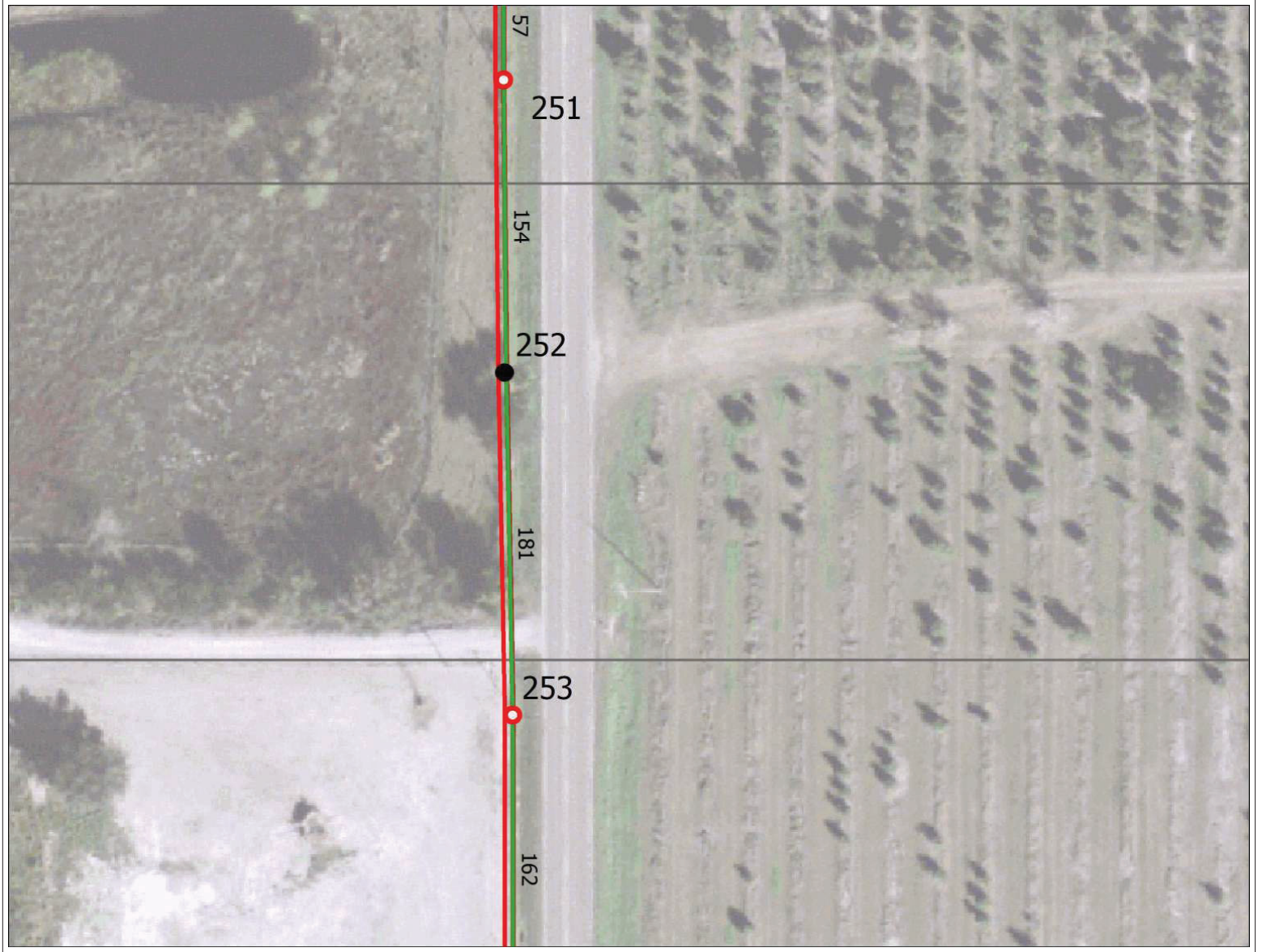




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Job Name: **WAUCHULA RECONDUCTOR**
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Service Order:
Staked By: **SHAY HOBBS**
Date: **08/06/2022**

Notes:

Notes:





Job ID: **STK10001**

Job Name: **WAUCHULA RECONDUCTOR**

Address:

Service Order:

Staked By: **SHAY HOBBS**

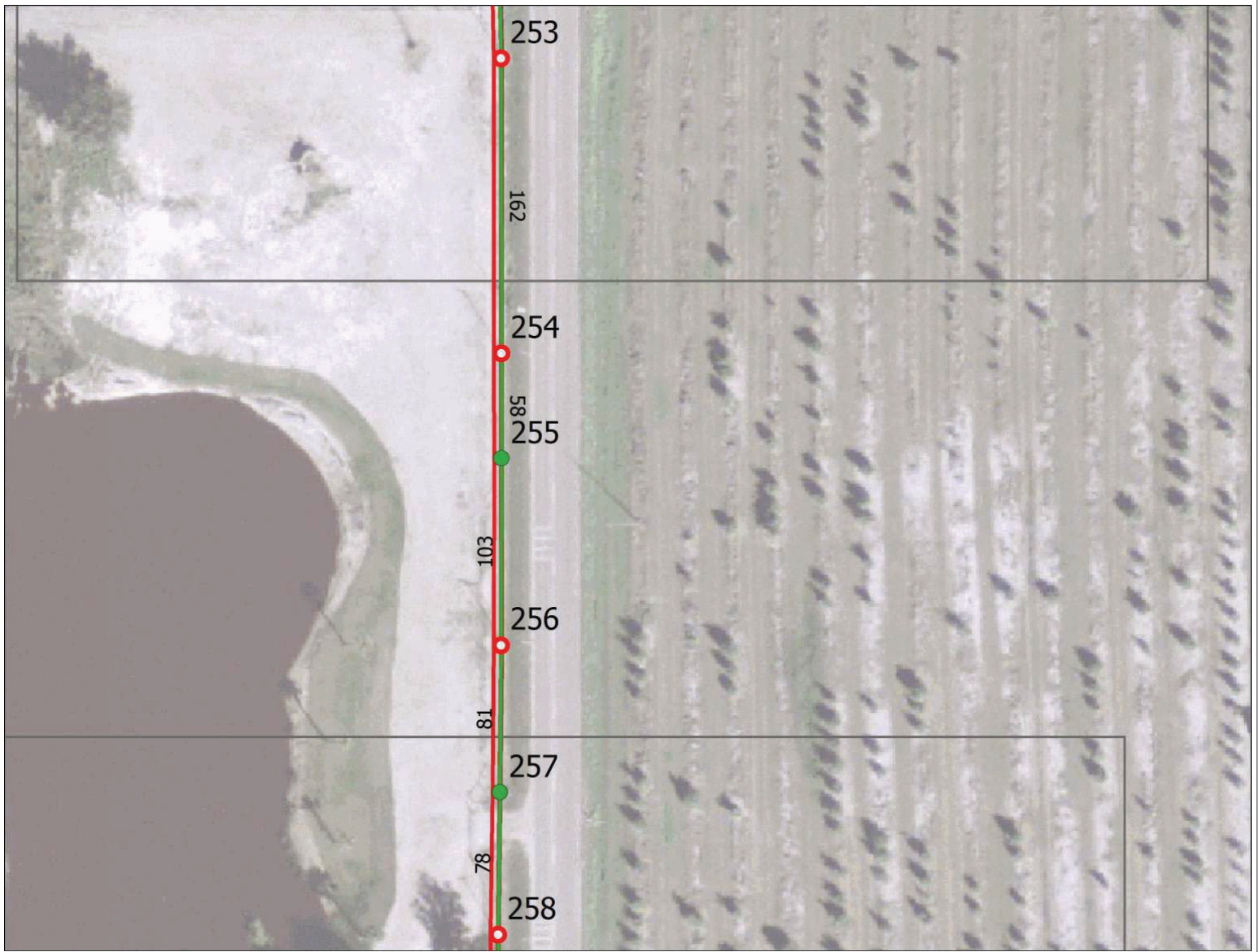
Date: **08/06/2022**

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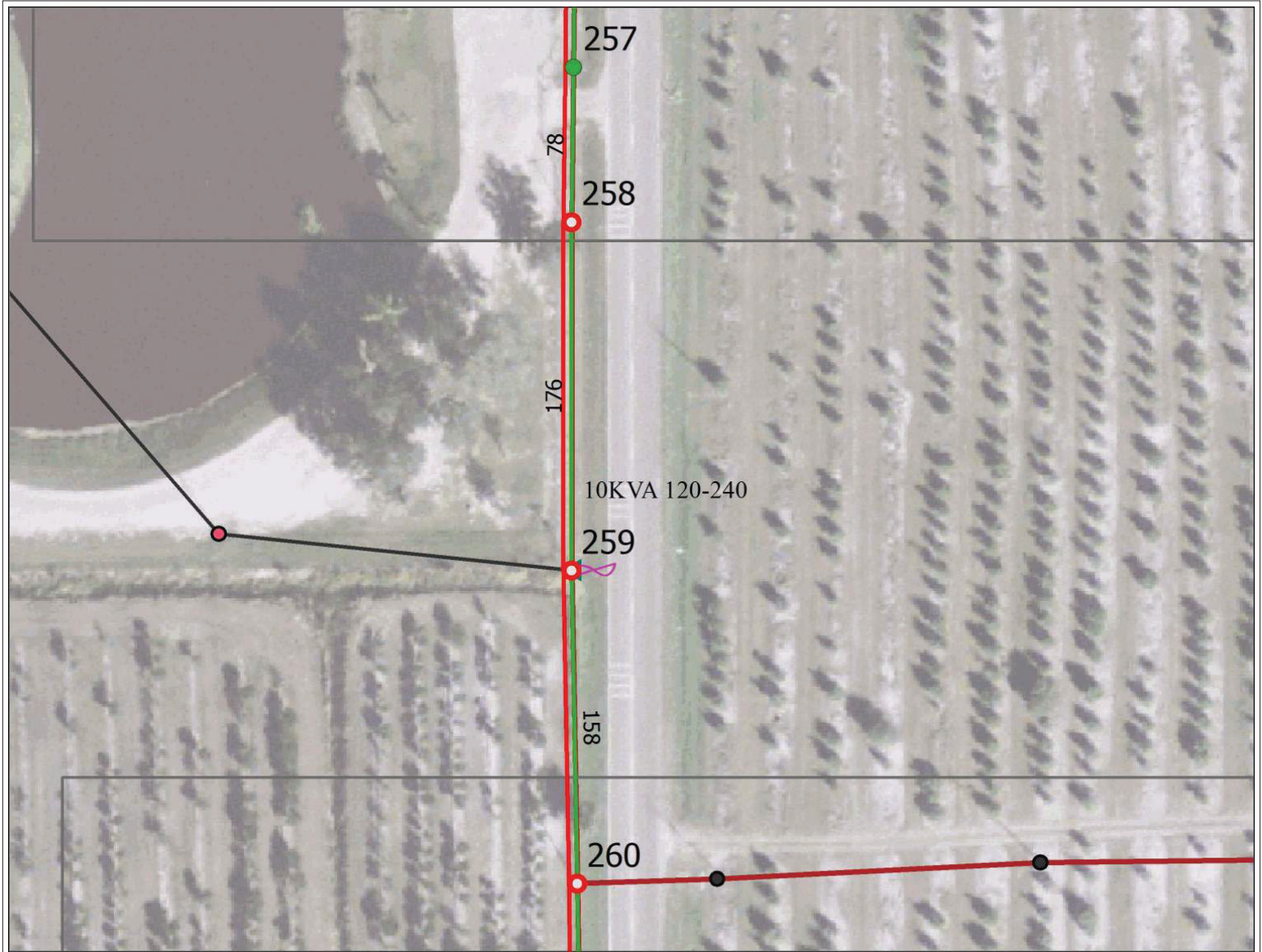
Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
Service Order:
Staked By: **SHAY HOBBS**
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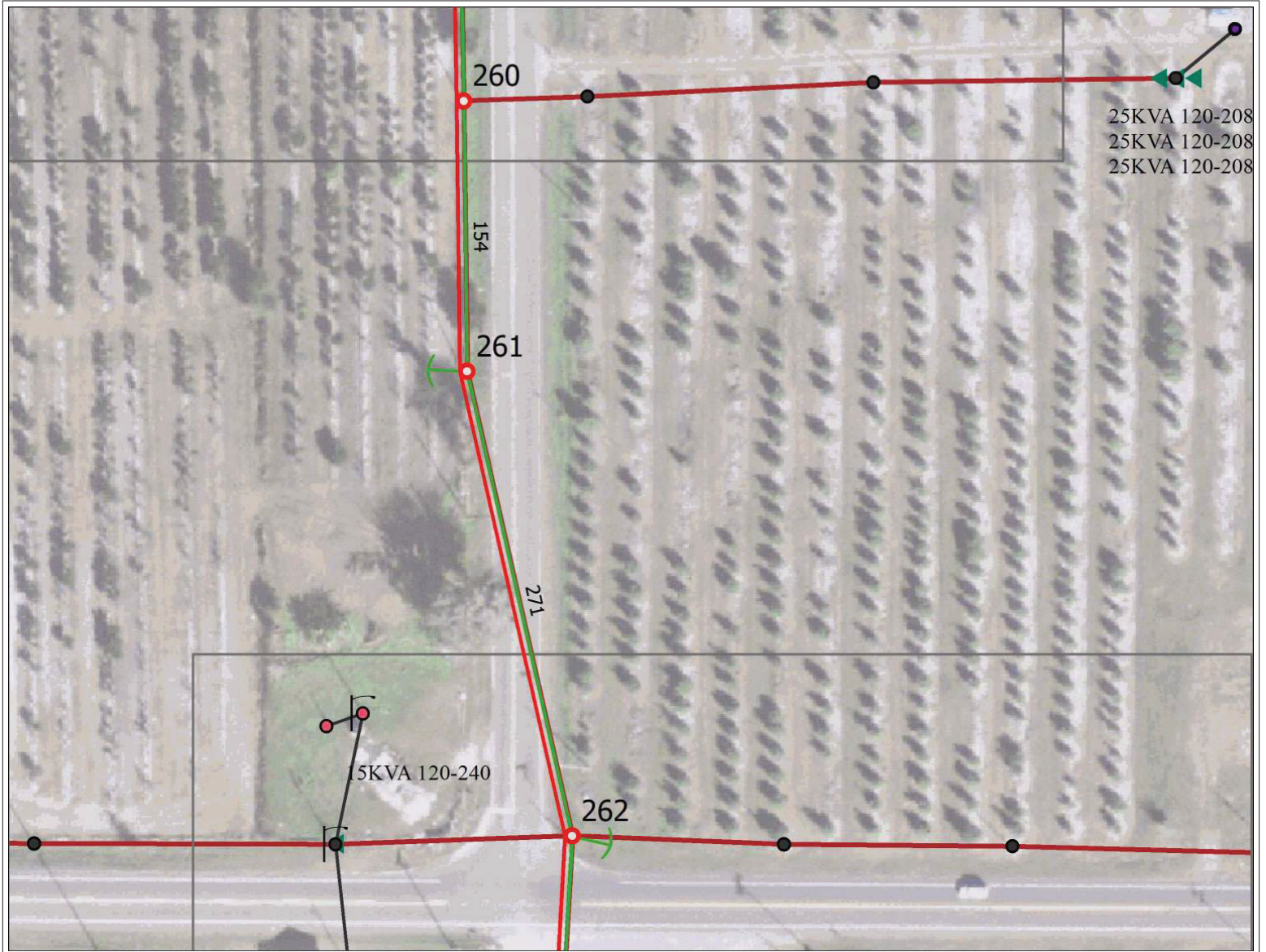
Job ID: **STK10001**
Job Name: **WAUCHULA RECONDUCTOR**
Address:
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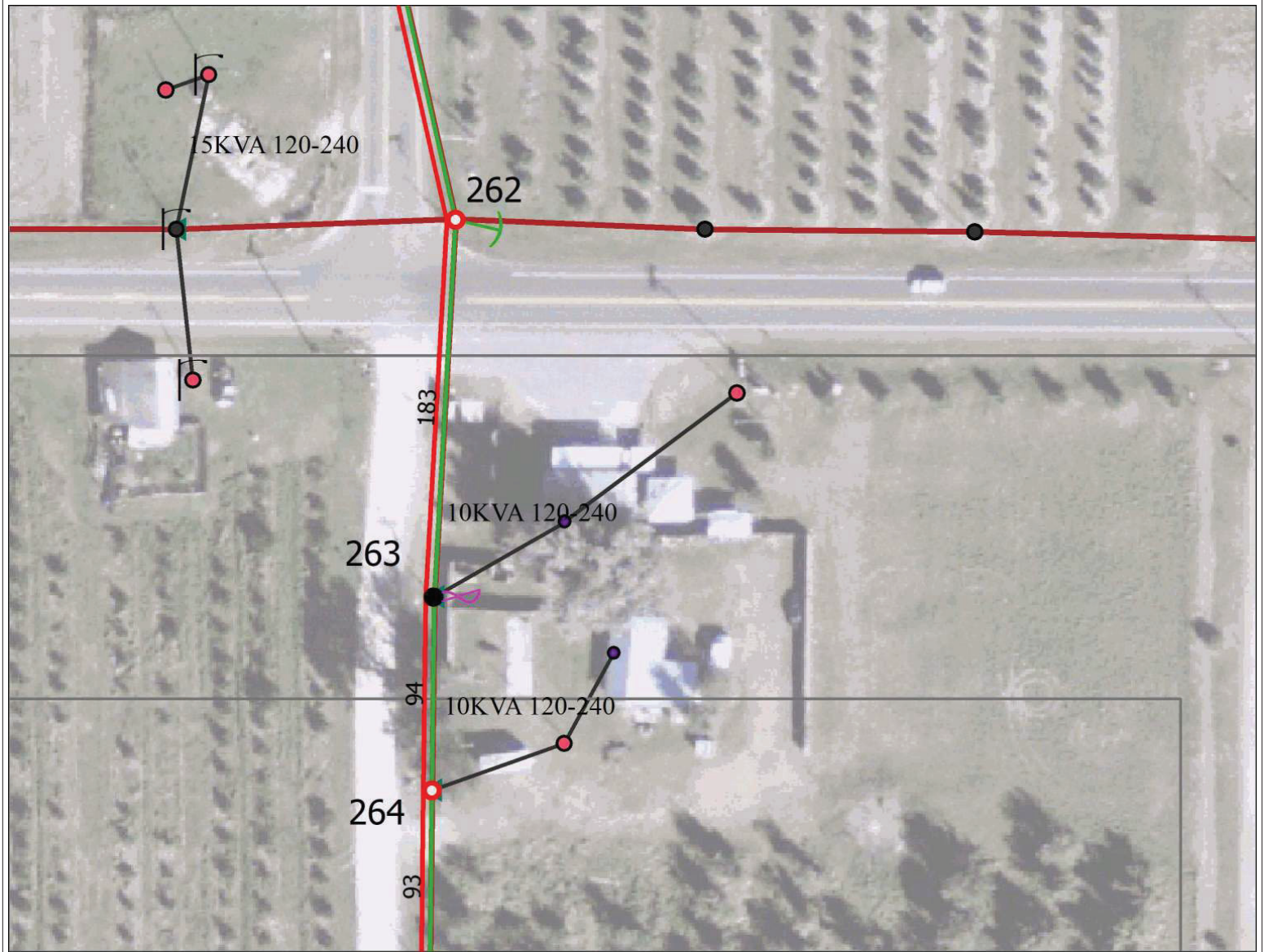
Job ID: **STK10001**
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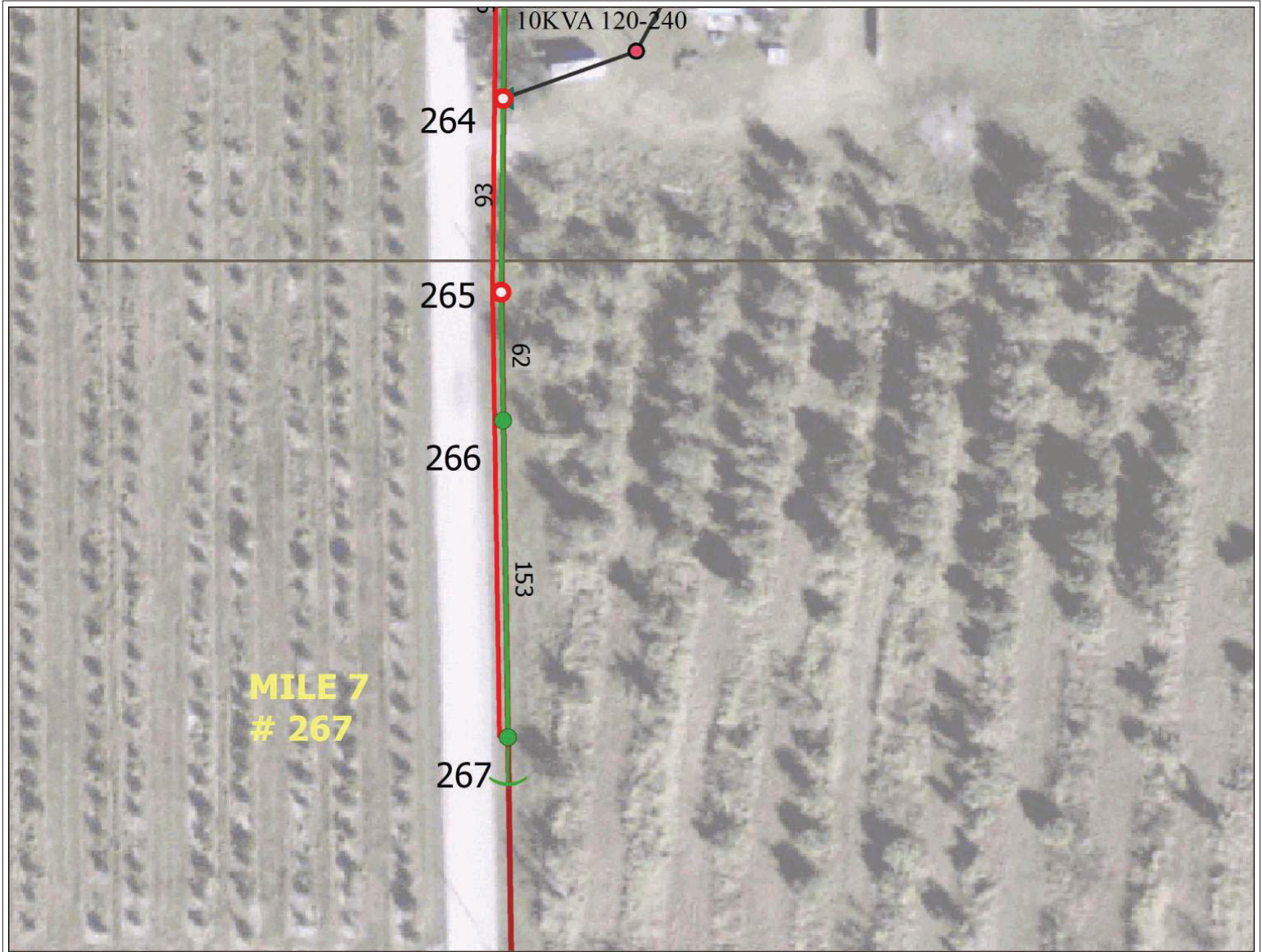




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Job Name: **WAUCHULA RECONDUCTOR**
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Staked By: **SHAY HOBBS**
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Notes:

Notes:





13kV Distribution Line Reconductor & Rebuild
City of Wauchula, FL
W. Main Street

ITB No. _____ 2023-02
Date: August 13, 2023
Rev.: _____ 00

EXHIBIT B

Units by Location



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Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

Location	Assembly	Quantity	Status	Comments
1	C7	2	EXISTING	
	E9	1	EXISTING	
	J2.1	3	EXISTING	
	M2	1	EXISTING	
	M5-23	1	EXISTING	
	SL	2	EXISTING	COBRA LIGHTS
	C8S	1	INSTALL	
	E6	2	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHORS. 8 FT GUY LEAD.
	M2	1	INSTALL	25 OHMS OR LESS
	C8	1	RETIRE	
2	M5-9	3	EXISTING	
	SL	1	EXISTING	COBRA LIGHT
	336.4ACSR	424	INSTALL	
	50-3	1	INSTALL	
	C7S	1	INSTALL	
	DC-C1	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR. 20 FT GUY LEAD.
	J2.1	2	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	25 OHMS OR LESS
	1/0ACSR	424	RETIRE	
	40-3	1	RETIRE	
	C1	1	RETIRE	
	C7	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
J2.1	2	RETIRE	SERVICE CATCH OFF	
	M2	1	RETIRE	
3	50-3	1	EXISTING	
	DC-C1	1	EXISTING	
	G110	1	EXISTING	
	J2.1	3	EXISTING	
	M2	1	EXISTING	



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Location	Assembly	Quantity	Status	Comments
3	SL	1	EXISTING	COBRA LIGHT
	336.4ACSR	376	INSTALL	
	1/0ACSR	376	RETIRE	
4	SL	1	EXISTING	COBRA LIGHT
	336.4ACSR	648	INSTALL	
	55-3	1	INSTALL	
	C7S	1	INSTALL	REDUCE TENTION SPAN
	DC-C1	1	INSTALL	
	E1-S	2	INSTALL	
	F1-S	1	INSTALL	INSTALL 10 " DOUBLE HELIX ANCHOR. **FLAR THE GUYS.
	F1-S	1	INSTALL	INSTALL 10 " DOUBLE HELIX ANCHOR. **FLAR THE GUYS.
	J2.1	2	INSTALL	
	M2	1	INSTALL	25 OHMS OR LESS
	1/0ACSR	648	RETIRE	
	40-3	1	RETIRE	
	C1	1	RETIRE	
	C7	1	RETIRE	
	J2.1	2	RETIRE	
M2	1	RETIRE		
5	50-3	1	EXISTING	*5A - ALTERNATE OPTION - 45-3
	C1	1	EXISTING	
	G110	1	EXISTING	
	J2.1	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	512	INSTALL	
	C8S	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHORS. 30 AND 35 FT LEAD.
	S2.01	3	INSTALL	
	1/0ACSR	512	RETIRE	
	C8	1	RETIRE	
6	336.4ACSR	480	INSTALL	
	55-2	1	INSTALL	
	C8S	1	INSTALL	REDUCE TENTION SPAN



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Location	Assembly	Quantity	Status	Comments
6	E6	1	INSTALL	
	F1-S	2	INSTALL	INSTALL (2) 10" DOUBLE HELIX
	M2	1	INSTALL	
	S2.01	3	INSTALL	INSTALL (3) SOLID BLADE SWITCHES
	1/OACSR	480	RETIRE	
	40-3	1	RETIRE	
	C8	1	RETIRE	
	M2	1	RETIRE	
	R3.2	1	RETIRE	
7	G210	1	EXISTING	
	SL	1	EXISTING	COBRA LIGHT
	336.4ACSR	312	INSTALL	
	50-2	1	INSTALL	
	C2	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHORS 25 AND 18 FT GUY LEAD
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHORS 25 AND 18 FT GUY LEAD
	J2.1	3	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	UM5-1	1	INSTALL	
	1/OACSR	312	RETIRE	
	40-3	1	RETIRE	
	C2	1	RETIRE	
	E6	1	RETIRE	
	F1-S	1	RETIRE	
	J2.1	3	RETIRE	
M2	1	RETIRE		
UM5-1	1	RETIRE		
8	40-3	1	EXISTING	
	B5	1	EXISTING	REDUCE TENTION SPAN.
	M2	1	EXISTING	
	336.4ACSR	544	INSTALL	
	C1	1	INSTALL	
	1/OACSR	544	RETIRE	



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Location	Assembly	Quantity	Status	Comments
8	C1	1	RETIRE	
9	G110	1	EXISTING	
	SL	1	EXISTING	COBRA LIGHT
	336.4ACSR	908	INSTALL	
	40-3	1	INSTALL	
	A5-1	1	INSTALL	
	C2PS	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHORS 25 AND 20 FT GUY LEAD
	M2	1	INSTALL	
	M5-23	1	INSTALL	FIBER LINK FOR THE A5-1.
	UM5-1	2	INSTALL	
	1/0ACSR	908	RETIRE	
	40-3	1	RETIRE	
	A5	1	RETIRE	
	C2PS	1	RETIRE	
	E1	1	RETIRE	
	E1-S	1	RETIRE	
F1-S	2	RETIRE		
M2	1	RETIRE		
UM5-1	2	RETIRE		
10	G110	1	EXISTING	
	J2.1	1	EXISTING	SERVICE CATCH OFF
	SL	1	EXISTING	COBRA LIGHT
	336.4ACSR	620	INSTALL	
	40-3	1	INSTALL	
	C1PS	1	INSTALL	
	E9	1	INSTALL	
	M2	1	INSTALL	
	M5-23	1	INSTALL	FIBER LIN STICK FOR THE OH GUY.
	M5-23	1	INSTALL	INSTALL FIBER LINK STICK FOR THE OH GUY WIRE.
	1/0ACSR	620	RETIRE	
	40-3	1	RETIRE	
	C1	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
10	E9	1	RETIRE	
	M2	1	RETIRE	
11	3/8 GUY SPAN	34	INSTALL	
	35-4	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10 " DOUBLE HELIX ANCHOR 10 FT GUY LEAD.
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL FIBER LINK STICK FOR THE OH GUY WIRE.
	30-5	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
12	G110	1	EXISTING	
	336.4ACSR	744	INSTALL	
	40-3	1	INSTALL	
	C1PS	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	UM5-1	1	INSTALL	
	1/0ACSR	744	RETIRE	
	40-3	1	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
	UM5-1	1	RETIRE	
13	M5-9	3	EXISTING	
	SL	1	EXISTING	COBRA LIGHT
	336.4ACSR	588	INSTALL	
	45-3	1	INSTALL	
	C1PS	1	INSTALL	
	C7S	1	INSTALL	REDUCE TENTION SPAN
	M2	1	INSTALL	
	1/0ACSR	588	RETIRE	
	40-3	1	RETIRE	
	C1PS	1	RETIRE	
	C7	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
13	M2	1	RETIRE	
14	G110	1	EXISTING	
	SL	1	EXISTING	100 LED LIGHT
	336.4ACSR	788	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	
	E1-S	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR 6 FT GUY LEAD.
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	UM5-1	1	INSTALL	
	1/0ACSR	788	RETIRE	
	40-3	1	RETIRE	
	C2PS	1	RETIRE	
	E1-S	1	RETIRE	
	F1-S	1	RETIRE	
	J2.1	1	RETIRE	
	M2	1	RETIRE	
UM5-1	1	RETIRE		
15	SL	1	EXISTING	100 LED LIGHT
	336.4ACSR	652	INSTALL	
	45-3	1	INSTALL	
	C2	1	INSTALL	
	C7S	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10 " DOUBLE HELIX ANCHORS 22 AND 16 FT LEAD
	M2	1	INSTALL	
	M5-2	2	INSTALL	
	1/0ACSR	652	RETIRE	
	40-3	1	RETIRE	
	C7	1	RETIRE	
	C8	1	RETIRE	
	E1	1	RETIRE	
F1-S	1	RETIRE		



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Location	Assembly	Quantity	Status	Comments
15	M2	1	RETIRE	
	M5-2	2	RETIRE	
16	336.4ACSR	476	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	1/0ACSR	476	RETIRE	
	40-3	1	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
17	336.4ACSR	476	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR 9 FT GUY LEAD
	M2	1	INSTALL	
	UM2	1	INSTALL	
	40-3	1	RETIRE	
	4ACSR	357	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
	UM2	1	RETIRE	

STAKE IS BEHIND POLE.

18	336.4ACSR	444	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	
	4ACSR	444	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	

STAKE IS BEHIND POLE

19	336.4ACSR	452	INSTALL	
	40-3	1	INSTALL	



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Location	Assembly	Quantity	Status	Comments
19	C2	1	INSTALL	NO GUYS OR ANCHORS
	M2	1	INSTALL	
	40-3	1	RETIRE	
	4ACSR	452	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
20	G210	1	EXISTING	
	SL	1	EXISTING	STREET LIGHT
	336.4ACSR	732	INSTALL	
	45-3	1	INSTALL	
	C1	1	INSTALL	
	C7S	1	INSTALL	
	E9	1	INSTALL	
	G210	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	M5-23	1	INSTALL	FIBER LINK STICK FOR THE OH GUY.
	M5-5	2	INSTALL	
	40-3	1	RETIRE	
	4ACSR	732	RETIRE	
	C7	1	RETIRE	
	C9	1	RETIRE	
	E9	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
M2	1	RETIRE		
M5-5	2	RETIRE		
21	SL	1	EXISTING	COBRA LIGHT
	336.4ACSR	820	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS
40-3	1	RETIRE		



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Location	Assembly	Quantity	Status	Comments
21	4ACSR	820	RETIRE	
	C8	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
	M5-5	5	RETIRE	
	S1.01	1	RETIRE	(3) SWITCHES
22	G110	1	EXISTING	
	SL	1	EXISTING	STREET LIGHT
	336.4ACSR	224	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	UM5-1	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	224	RETIRE	
	C9	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
	UM5-1	1	RETIRE	
23	336.4ACSR	284	INSTALL	
	40-3	1	INSTALL	
	A5-1	1	INSTALL	
	C1	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR 18 FT GUY LEAD
	M5-10	1	INSTALL	
	M5-23	1	INSTALL	INSTALL FIBER LINK STICK FOR THE A5-1.
	40-3	1	RETIRE	
	6ACWC	284	RETIRE	
	A5	1	RETIRE	
	C9	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
23	E1	1	RETIRE	
	F1-S	1	RETIRE	
	S1.01	1	RETIRE	
24	336.4ACSR	648	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	648	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
25	336.4ACSR	556	INSTALL	
	45-3	1	INSTALL	
	A5-1	1	INSTALL	
	C1	1	INSTALL	
	C7S	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR 10 FT GUY LEAD
	M2	1	INSTALL	
	M5-23	4	INSTALL	INSTALL (4) FIBER LINK STICKS, FOR THE A5 AND C7.
	M5-5	4	INSTALL	
	S1.02	3	INSTALL	INSTALL (3) CUTOUT AND ARRESTOR COMBO
	40-3	1	RETIRE	
	6ACWC	556	RETIRE	
	A5-1	1	RETIRE	
	C7	1	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
	M5-5	2	RETIRE	
M5-9	3	RETIRE		
26	336.4ACSR	700	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	



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Location	Assembly	Quantity	Status	Comments
26	6ACWC	700	RETIRE	
27	336.4ACSR	588	INSTALL	
	45-3	1	INSTALL	
	A5-1	1	INSTALL	REDUCE TENTION SPAN ACROSS THE ROAD.
	C1	1	INSTALL	
	C7S	1	INSTALL	
	E1-S	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR 6 FT GUY LEAD.
	M2	1	INSTALL	
	M5-10	3	INSTALL	INSTALL (3) CUTOUT AND ARRESTOR COMBO FOR THE C7.
	M5-23	4	INSTALL	INSTALL (4) FIBER LINK STICKS FOR THE C7 AND A5.
	M5-5	4	INSTALL	
	40-3	1	RETIRE	
	6ACWC	588	RETIRE	
	A5	1	RETIRE	
	C7	1	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
	M5-5	2	RETIRE	
M5-9	3	RETIRE		
28	G210	1	EXISTING	
	336.4ACSR	820	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	820	RETIRE	
	C9	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
29	40-3	1	EXISTING	
	E1	1	EXISTING	
	F1-S	1	EXISTING	



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Location	Assembly	Quantity	Status	Comments
29	G110	1	EXISTING	
	J2.1	1	EXISTING	SERVICE CATCH OFF
	M2	1	EXISTING	
	UM5-1	1	EXISTING	
	336.4ACSR	624	INSTALL	
	C1	1	INSTALL	
	6ACWC	624	RETIRE	
	C9	1	RETIRE	
30	336.4ACSR	604	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS
	6ACWC	604	RETIRE	
	C9	1	RETIRE	
31	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	564	INSTALL	
	C1	1	INSTALL	
	6ACWC	564	RETIRE	
	C9	1	RETIRE	
32	336.4ACSR	700	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	700	RETIRE	
33	336.4ACSR	684	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	684	RETIRE	
	C1	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
33	M2	1	RETIRE	
	P1.01	3	RETIRE	
34	336.4ACSR	664	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	664	RETIRE	
35	G110	1	EXISTING	
	336.4ACSR	656	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	656	RETIRE	
	C1	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
36	336.4ACSR	644	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	6ACWC	644	RETIRE	
37	PF	1	EXISTING	FLOOD LIGHT
	336.4ACSR	632	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	632	RETIRE	
	C1	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
37	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
38	336.4ACSR	728	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	40-3	1	INSTALL	
	C2	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	
	6ACWC	728	RETIRE	
39	336.4ACSR	708	INSTALL	
	40-3	1	INSTALL	
	C8S	1	INSTALL	
	M2	1	INSTALL	
	S2.01	3	INSTALL	
	40-3	1	RETIRE	
	6ACWC	708	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
40	336.4ACSR	600	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	600	RETIRE	
41	M5-10	3	EXISTING	CUTOUT AND ARRESTOR COMBO
	336.4ACSR	596	INSTALL	
	40-3	1	INSTALL	
	A7	1	INSTALL	
	C1	1	INSTALL	
	C7S	1	INSTALL	
	E1	2	INSTALL	
	E9	1	INSTALL	
	F1-S	1	INSTALL	(2) 10" DOUBLE HELIX ANCHORS. 20 AND 25 FT LEAD
	F1-S	1	INSTALL	(2) 10" DOUBLE HELIX ANCHORS. 20 AND 25 FT LEAD
	J2.1	2	INSTALL	SERVICE CATCH OFF



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Location	Assembly	Quantity	Status	Comments
41	M2	1	INSTALL	
	M5-23	6	INSTALL	INSTALL (6) FIBER LINKS FOR THE C7, A7, AND OH GUY
	40-3	1	RETIRE	
	6ACWC	596	RETIRE	
	A7	1	RETIRE	
	C7	1	RETIRE	
	C9	1	RETIRE	
	E9	1	RETIRE	
	J2.1	2	RETIRE	
	M2	1	RETIRE	
42	G110	1	EXISTING	
	PF	1	EXISTING	FLOOD LIGHT
	336.4ACSR	884	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHORS. 18 AND 13 FT LEADS.
	J2.1	2	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	UM5-1	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	884	RETIRE	
	C1	1	RETIRE	
	J2.1	2	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
UM5-1	1	RETIRE		
43	PF	1	EXISTING	FLOOD LIGHT
	336.4ACSR	676	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	UM2	1	INSTALL	
40-3	1	RETIRE		



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Location	Assembly	Quantity	Status	Comments
43	6ACWC	676	RETIRE	
	C1	1	RETIRE	
	J2.1	1	RETIRE	
	M2	1	RETIRE	
	UM2	1	RETIRE	
44	336.4ACSR	324	INSTALL	
	40-3	1	RETIRE	
	6ACWC	324	RETIRE	
	C8	1	RETIRE	
	M2	1	RETIRE	
	S1.01	3	RETIRE	
45	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	388	INSTALL	
	C2	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) DOUBLE HELIX ANCHOR 23 FT GUY LEAD.
	6ACWC	388	RETIRE	
	C1	1	RETIRE	
	P1.01	1	RETIRE	(3) LIGHTNING ARRESTORS AND BRACKET
46	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	468	INSTALL	
	C2	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) DOUBLE HELIX ANCHOR. 25 FT GUY LEAD.
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	468	RETIRE	
	C1	1	RETIRE	
47	336.4ACSR	744	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	
	E1	1	INSTALL	



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Location	Assembly	Quantity	Status	Comments
47	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHORS. 25 FT GUY LEAD.
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	744	RETIRE	
	C9	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
	M2	1	RETIRE	
48	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	592	INSTALL	
	C1	1	INSTALL	
	6ACWC	592	RETIRE	
	C9	1	RETIRE	
49	G110	1	EXISTING	
	336.4ACSR	552	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	552	RETIRE	
	C9	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
M2	1	RETIRE		
50	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	556	INSTALL	
	C1	1	INSTALL	
	6ACWC	556	RETIRE	
	C9	1	RETIRE	
51	G110	1	EXISTING	
	336.4ACSR	456	INSTALL	



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Location	Assembly	Quantity	Status	Comments
51	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	45-3	1	RETIRE	
	6ACWC	456	RETIRE	
	C9	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
52	336.4ACSR	696	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) DOUBLE HELIX ANCHOR 23 FT GUY LEAD.
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	696	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
53	336.4ACSR	552	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) DOUBLE HELIX 20 FT GUY LEAD
	M2	1	INSTALL	
	6ACWC	552	RETIRE	
54	336.4ACSR	536	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	LIGHTNING ARRESTORS
	40-3	1	RETIRE	
	6ACWC	536	RETIRE	
	C8	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
54	M2	1	RETIRE	
	P1.01	3	RETIRE	LIGHTNING ARRESTORS
55	336.4ACSR	812	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	812	RETIRE	
	C8	1	RETIRE	
	M2	1	RETIRE	
56	336.4ACSR	716	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	716	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
57	336.4ACSR	652	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	UM2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	652	RETIRE	
	C1	1	RETIRE	*RETIRE 2 EXTRA ARMS AND BRACES.
	M2	1	RETIRE	
	UM2	1	RETIRE	
58	336.4ACSR	696	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
58	6ACWC	696	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
59	336.4ACSR	644	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	UM2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	644	RETIRE	
	C1	1	RETIRE	* RETIRE NARROW PROFILE C1.
	M2	1	RETIRE	
UM2	1	RETIRE		
60	336.4ACSR	676	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	676	RETIRE	
61	336.4ACSR	736	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	LIGHTNING ARRESTORS
	40-3	1	RETIRE	
	6ACWC	736	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
62	M5-10	1	EXISTING	
	336.4ACSR	464	INSTALL	
	40-3	1	INSTALL	
	A5-1	1	INSTALL	REDUCE TENSION SPAN
	C2	1	INSTALL	NO GUYS OR ANCHORS
	M2	1	INSTALL	



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Location	Assembly	Quantity	Status	Comments
62	M5-23	1	INSTALL	INSTALL FIBER LINK STICK FOR THE A5.
	40-3	1	RETIRE	
	6ACWC	464	RETIRE	
	A5-1	1	RETIRE	
	C1	1	RETIRE	* RETIRE NARROW PROFILE C1
	M2	1	RETIRE	
63	G110	1	EXISTING	
	336.4ACSR	896	INSTALL	
	40-3	1	INSTALL	
	C2.52P	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHORS 7 AND 13 FT LEAD.
	M2	1	INSTALL	
	M5-4	1	INSTALL	
	UM5-1	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	896	RETIRE	
	C8	1	RETIRE	
	E1	2	RETIRE	
	F1-S	2	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
M5-4	1	RETIRE		
UM5-1	1	RETIRE		
64	M5-10	1	EXISTING	
	336.4ACSR	736	INSTALL	
	40-3	1	INSTALL	
	A5-1	1	INSTALL	
	C2.52P	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR 10 FT GUY LEAD
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL FIBER LINK STICK FOR THE A5.
M5-4	1	INSTALL		



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Location	Assembly	Quantity	Status	Comments
64	M5-5	8	INSTALL	INSTALL FOR THE C9.
	40-3	1	RETIRE	
	6ACWC	736	RETIRE	
	A5-1	1	RETIRE	
	C1	1	RETIRE	*RETIRE BOTH WOOD ARMS
	E1	1	RETIRE	
	F1-S	1	RETIRE	
	M2	1	RETIRE	
	M5-4	1	RETIRE	
65	336.4ACSR	640	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	640	RETIRE	
	C1	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
M2	1	RETIRE		
66	336.4ACSR	984	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	984	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
	P1.01	3	RETIRE	RETIRE LIGHTNING ARRESTORS AND BRACKET
67	336.4ACSR	556	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	556	RETIRE	



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Location	Assembly	Quantity	Status	Comments
68	336.4ACSR	540	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTOS
	40-3	1	RETIRE	
	6ACWC	540	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
69	336.4ACSR	660	INSTALL	
	40-3	1	INSTALL	
	C8S	1	INSTALL	
	M2	1	INSTALL	
	S2.01	3	INSTALL	
	40-3	1	RETIRE	
	6ACWC	660	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
70	336.4ACSR	424	INSTALL	
	40-3	1	RETIRE	
	6ACWC	424	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
71	336.4ACSR	268	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	268	RETIRE	
72	336.4ACSR	684	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
72	6ACWC	684	RETIRE	
	C1	1	RETIRE	
	G110	1	RETIRE	RETIRE TRANSFORMER, NO LONGER IN SERVICE.
	M2	1	RETIRE	
73	336.4ACSR	628	INSTALL	
	40-3	1	RETIRE	
	6ACWC	628	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
74	336.4ACSR	380	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	380	RETIRE	
75	336.4ACSR	324	INSTALL	
	40-3	1	RETIRE	
	6ACWC	324	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
76	336.4ACSR	432	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	NO GUYS OR ANCHORS
	M2	1	INSTALL	
	6ACWC	432	RETIRE	
77	336.4ACSR	776	INSTALL	
	35-4	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	776	RETIRE	
78	336.4ACSR	208	INSTALL	
	40-3	1	RETIRE	
	6ACWC	208	RETIRE	



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Location	Assembly	Quantity	Status	Comments
78	C9	1	RETIRE	
	M2	1	RETIRE	
79	45-3	1	EXISTING	
	336.4ACSR	564	INSTALL	
	C2.52P	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	6ACWC	564	RETIRE	
	C1	1	RETIRE	
80	336.4ACSR	796	INSTALL	
	40-3	1	RETIRE	
	6ACWC	796	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
81	336.4ACSR	188	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	188	RETIRE	
82	336.4ACSR	524	INSTALL	
	40-3	1	RETIRE	
	6ACWC	524	RETIRE	
	C9	1	RETIRE	
	P1.01	3	RETIRE	RETIRE LIGHTNING ARRESTORS.
83	336.4ACSR	480	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	480	RETIRE	
84	336.4ACSR	204	INSTALL	
	40-3	1	RETIRE	
	6ACWC	204	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
85	45-3	1	EXISTING	



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Location	Assembly	Quantity	Status	Comments
85	M2	1	EXISTING	
	336.4ACSR	768	INSTALL	
	C1	1	INSTALL	
	6ACWC	768	RETIRE	
	C9	1	RETIRE	
86	336.4ACSR	604	INSTALL	
	45-3	1	RETIRE	
	6ACWC	604	RETIRE	
	C1	1	RETIRE	*RETIRE 2 XTRA ARMS AND BRACES.
	M2	1	RETIRE	
87	40-3	1	EXISTING	
	E1	2	EXISTING	
	E9	3	EXISTING	
	F1-S	2	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	200	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M5-23	3	INSTALL	INSTALL (3) FIBER LINK STICKS FOR THE OH GUYS.
	6ACWC	200	RETIRE	
	C9	1	RETIRE	
88	336.4ACSR	508	INSTALL	
	40-3	1	RETIRE	
	6ACWC	508	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
89	336.4ACSR	496	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	496	RETIRE	
90	336.4ACSR	228	INSTALL	
	40-3	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
90	6ACWC	228	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
91	336.4ACSR	684	INSTALL	
	40-3	1	RETIRE	
	6ACWC	684	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
92	336.4ACSR	100	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	100	RETIRE	
93	336.4ACSR	564	INSTALL	
	40-3	1	RETIRE	
	6ACWC	564	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
94	336.4ACSR	432	INSTALL	
	40-4	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	432	RETIRE	
95	336.4ACSR	260	INSTALL	
	40-3	1	RETIRE	
	6ACWC	260	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
96	336.4ACSR	688	INSTALL	
	40-3	1	RETIRE	
	6ACWC	688	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
96	P1.01	3	RETIRE	INSTALL (3) LIGHTNING ARRESTORS
97	336.4ACSR	60	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	60	RETIRE	
98	336.4ACSR	608	INSTALL	
	40-3	1	RETIRE	
	6ACWC	608	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
99	336.4ACSR	400	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	400	RETIRE	
100	336.4ACSR	328	INSTALL	
	40-3	1	RETIRE	
	6ACWC	328	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
101	336.4ACSR	628	INSTALL	
	40-3	1	RETIRE	
	6ACWC	628	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
102	336.4ACSR	64	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	64	RETIRE	
103	336.4ACSR	484	INSTALL	



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Location	Assembly	Quantity	Status	Comments
103	40-3	1	RETIRE	
	6ACWC	484	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
104	336.4ACSR	388	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	388	RETIRE	
105	336.4ACSR	320	INSTALL	
	40-3	1	RETIRE	
	6ACWC	320	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
106	336.4ACSR	708	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	708	RETIRE	
107	336.4ACSR	192	INSTALL	
	40-3	1	RETIRE	
	6ACWC	192	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
108	336.4ACSR	688	INSTALL	
	40-3	1	RETIRE	
	6ACWC	688	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
109	336.4ACSR	116	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	



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Location	Assembly	Quantity	Status	Comments
109	6ACWC	116	RETIRE	
110	336.4ACSR	596	INSTALL	
	40-3	1	RETIRE	
	6ACWC	596	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
111	336.4ACSR	408	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	408	RETIRE	
112	336.4ACSR	224	INSTALL	
	40-3	1	RETIRE	
	6ACWC	224	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
	P1.1	3	RETIRE	RETIRE LIGHTNING ARRESTORS.
113	336.4ACSR	824	INSTALL	
	45-3	1	INSTALL	
	A5-1	1	INSTALL	* REDUCE TENTION SPAN.
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL FIBER LINK STICK FOR THE A5-1.
	40-3	1	RETIRE	
	6ACWC	824	RETIRE	
	A5-1	1	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
114	336.4ACSR	656	INSTALL	
	40-3	1	INSTALL	
	C8S	1	INSTALL	
	M2	1	INSTALL	



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Location	Assembly	Quantity	Status	Comments
114	S2.01	3	INSTALL	
	40-3	1	RETIRE	
	6ACWC	656	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
115	40-3	1	EXISTING	
	G110	1	EXISTING	
	J2.1	1	EXISTING	SERVICE CATCH OFF
	M2	1	EXISTING	
	336.4ACSR	624	INSTALL	
	C1	1	INSTALL	
	6ACWC	624	RETIRE	
	C1	1	RETIRE	
116	336.4ACSR	652	INSTALL	
	40-3	1	RETIRE	
	6ACWC	652	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
117	336.4ACSR	396	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	396	RETIRE	
118	336.4ACSR	348	INSTALL	
	40-3	1	RETIRE	
	6ACWC	348	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
119	336.4ACSR	696	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS



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Location	Assembly	Quantity	Status	Comments
119	6ACWC	696	RETIRE	
120	336.4ACSR	156	INSTALL	
	40-3	1	RETIRE	
	6ACWC	156	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
121	336.4ACSR	864	INSTALL	
	45-3	1	INSTALL	
	C2	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10 " DOUBLE HELIX ANCHORS, 25 AND 20 FT LEADS
	40-3	1	RETIRE	
	6ACWC	864	RETIRE	
	C7	2	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
	M2	1	RETIRE	
122	336.4ACSR	1,140	INSTALL	
	A5-1	1	INSTALL	
	C7S	2	INSTALL	
	E1	4	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHORS 25 AND 25 FT LEADS
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHORS 25 AND 25 FT LEADS
	M5-23	1	INSTALL	INSTALL FIBER LINK STICK FOR THE A5.
	6ACWC	1,140	RETIRE	
	A5-1	1	RETIRE	
	C2-1	1	RETIRE	

*DUKE ENERGY POLE, NOTIFIED TO CHANGE POLE OUT

123	336.4ACSR	1,028	INSTALL	
	C2.52P	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	6ACWC	1,028	RETIRE	
	C1	1	RETIRE	RETIRE FG ARM
	P1.01	3	RETIRE	RETIRE (3) LIGHTNING ARRESTORS

*DUKE ENERGY POLE, NOTIFIED TO CHANGE POLE OUT



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Location	Assembly	Quantity	Status	Comments
124	336.4ACSR	1,052	INSTALL	
	C2.52P	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS
	6ACWC	1,052	RETIRE	
	C1	1	RETIRE	RETIRE FG ARM

*DUKE ENERGY POLE, NOTIFIED TO CHANGE POLE OUT

125	S1.01	2	EXISTING	
	336.4ACSR	1,028	INSTALL	
	45-3	1	INSTALL	
	A5-1	1	INSTALL	
	B7S	1	INSTALL	
	C7S	2	INSTALL	
	E9	2	INSTALL	
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL (3) FIBER LINK STICKS FOR THE B7 AND A5.
	M5-23	2	INSTALL	FIBER LINK STICK FOR THE OH GUY (E9).
	45-3	1	RETIRE	
	6ACWC	1,028	RETIRE	
	A5	1	RETIRE	
	B7	1	RETIRE	
	C7	2	RETIRE	
M2	1	RETIRE		
126	3/8 GUY SPAN	37	INSTALL	
	35-5	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHORS. 12 FT GUY LEAD.
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL FIBER LINK STICK FOR THE OH GUY WIRE.
	127	336.4ACSR	420	INSTALL
45-3		1	INSTALL	
C3		2	INSTALL	
E1		3	INSTALL	
F1-S		3	INSTALL	(3) 10" DOUBLE HELIX ANCHORS 30/25/20 FT LEADS



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Location	Assembly	Quantity	Status	Comments
127	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	420	RETIRE	
	C7	2	RETIRE	
	E1	2	RETIRE	
	F1-S	2	RETIRE	
	M2	1	RETIRE	
128	336.4ACSR	616	INSTALL	
	40-3	1	RETIRE	
	6ACWC	616	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
129	336.4ACSR	388	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	388	RETIRE	
130	336.4ACSR	324	INSTALL	
	40-3	1	RETIRE	
	6ACWC	324	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
131	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	680	INSTALL	
	C1	1	INSTALL	
	6ACWC	680	RETIRE	
	C1	1	RETIRE	
132	336.4ACSR	680	INSTALL	
	40-3	1	RETIRE	
	6ACWC	680	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
133	336.4ACSR	316	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	316	RETIRE	
134	336.4ACSR	332	INSTALL	
	40-3	1	RETIRE	
	6ACWC	332	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
	P1.01	3	RETIRE	RETIRE (3) LIGHTNING ARRESTORS
135	336.4ACSR	696	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	696	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
136	336.4ACSR	652	INSTALL	
	40-3	1	RETIRE	
	6ACWC	652	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
137	336.4ACSR	360	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS
	6ACWC	360	RETIRE	
138	336.4ACSR	364	INSTALL	
	40-3	1	RETIRE	
	6ACWC	364	RETIRE	



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Location	Assembly	Quantity	Status	Comments
138	C1	1	RETIRE	
	M2	1	RETIRE	
139	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	636	INSTALL	
	C1	1	INSTALL	
	6ACWC	636	RETIRE	
	C1	1	RETIRE	
140	336.4ACSR	660	INSTALL	
	40-3	1	RETIRE	
	6ACWC	660	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
141	336.4ACSR	348	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	348	RETIRE	
142	336.4ACSR	340	INSTALL	
	40-3	1	RETIRE	
	6ACWC	340	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
143	336.4ACSR	684	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	684	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
144	336.4ACSR	728	INSTALL	
	35-4	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
144	6ACWC	728	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
145	336.4ACSR	272	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	272	RETIRE	
146	336.4ACSR	372	INSTALL	
	40-3	1	RETIRE	
	6ACWC	372	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
147	336.4ACSR	656	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	40-3	1	RETIRE	
	6ACWC	656	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
	P1.01	3	RETIRE	RETIRE LIGHTNING ARRESTORS
148	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	728	INSTALL	
	C1	1	INSTALL	
	6ACWC	728	RETIRE	
	C1	1	RETIRE	
149	40-3	1	EXISTING	
	G110	1	EXISTING	
	J2.1	1	EXISTING	SERVICE CATCH OFF
	M2	1	EXISTING	



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Location	Assembly	Quantity	Status	Comments
149	336.4ACSR	444	INSTALL	
	C1	1	INSTALL	
	6ACWC	444	RETIRE	
	C1	1	RETIRE	
150	336.4ACSR	228	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10 " DOUBLE HELIX ANCHORS. 22 AND 16 FT LEADS
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	228	RETIRE	
	C8	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
	M2	1	RETIRE	
	S2.01	3	RETIRE	
151	336.4ACSR	548	INSTALL	
	45-3	1	RETIRE	
	6ACWC	548	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
152	336.4ACSR	448	INSTALL	
	40-3	1	INSTALL	
	C8S	1	INSTALL	
	M2	1	INSTALL	
	S2.01	3	INSTALL	
	6ACWC	448	RETIRE	
153	336.4ACSR	256	INSTALL	
	45-3	1	RETIRE	
	6ACWC	256	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
154	336.4ACSR	696	INSTALL	
	45-3	1	RETIRE	
	6ACWC	696	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
155	336.4ACSR	64	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	64	RETIRE	
156	336.4ACSR	580	INSTALL	
	45-3	1	RETIRE	
	6ACWC	580	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
157	336.4ACSR	416	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	416	RETIRE	
158	336.4ACSR	260	INSTALL	
	45-3	1	RETIRE	
	6ACWC	260	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
159	336.4ACSR	756	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL LIGHTNING ARRESTORS.
	6ACWC	756	RETIRE	
160	336.4ACSR	152	INSTALL	
	40-3	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
160	6ACWC	152	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
161	G210	1	EXISTING	
	336.4ACSR	864	INSTALL	
	45-3	1	INSTALL	
	C2	1	INSTALL	NO ANCHORS OR GUYS FOR THE C2.
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR 8 FT LEAD FOR OH SERV
	F1-S	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	S1.02	2	INSTALL	
	45-3	1	RETIRE	
	6ACWC	864	RETIRE	
	C9	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
J2.1	1	RETIRE	SERVICE CATCH OFF	
M2	1	RETIRE		

STAKE IS LOCATED BEHIND POLE.

162	45-3	1	EXISTING	
	G110	1	EXISTING	
	J2.1	1	EXISTING	SERVICE CATCH OFF
	M2	1	EXISTING	
	336.4ACSR	744	INSTALL	
	C1	1	INSTALL	
	6ACWC	744	RETIRE	
	C1	1	RETIRE	
163	336.4ACSR	692	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	692	RETIRE	



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Location	Assembly	Quantity	Status	Comments
164	336.4ACSR	556	INSTALL	
	40-3	1	RETIRE	
	6ACWC	556	RETIRE	
	C1	1	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
	P1.01	3	RETIRE	RETIRE LIGHTNING ARRESTORS.
165	336.4ACSR	148	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	148	RETIRE	
166	336.4ACSR	696	INSTALL	
	45-3	1	INSTALL	
	C2	1	INSTALL	
	E9	2	INSTALL	
	M2	1	INSTALL	
	M5-23	2	INSTALL	
	45-3	1	RETIRE	
	6ACWC	696	RETIRE	
	C1	1	RETIRE	
	E9	1	RETIRE	
	M2	1	RETIRE	
	M5-23	1	RETIRE	
167	35-5	1	EXISTING	
	E1	1	EXISTING	
	F1-S	1	EXISTING	
	M5-23	1	EXISTING	
	3/8 GUY SPAN	89	INSTALL	
	M5-23	2	INSTALL	INSTALL FIBER LINK STICK FOR THE NEW OH GUY.
168	336.4ACSR	712	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.



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Location	Assembly	Quantity	Status	Comments
168	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	712	RETIRE	
169	G110	1	EXISTING	
	336.4ACSR	524	INSTALL	
	45-3	1	INSTALL	
	C2	1	INSTALL	
	E9	2	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	M5-23	2	INSTALL	INSTALL (2) FIBER LINK STICKS FOR OH GUY.
	40-3	1	RETIRE	
	6ACWC	524	RETIRE	
	C9	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
170	M2	1	RETIRE	
	3/8 GUY SPAN	54	INSTALL	
	3/8 GUY SPAN	54	INSTALL	
	35-5	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR 15 FT GUY LEAD
	M2	1	INSTALL	
M5-23	2	INSTALL	INSTALL FIBER LINK STICK FOR THE OH GUYS.	
171	G110	1	EXISTING	
	336.4ACSR	596	INSTALL	
	45-3	1	INSTALL	
	C2	1	INSTALL	
	E9	2	INSTALL	
	J2.1	2	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	M5-23	2	INSTALL	INSTALL (2) FIBER LINK STICKS FOR THE OH GUYS.
	40-3	1	RETIRE	
	6ACWC	596	RETIRE	
	C1	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
171	J2.1	2	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
172	3/8 GUY SPAN	78	INSTALL	
	3/8 GUY SPAN	78	INSTALL	
	35-5	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10 " DOUBLE HELIX ANCHOR. 15 FT GUY LEAD
	K1.1	1	INSTALL	SERVICE CATCH OFF
	M5-23	2	INSTALL	INSTALL (2) FIBER LINK STICKS FOR THE OH GUYS.
	UM5-1	1	INSTALL	
	35-5	1	RETIRE	
	K1.1	1	RETIRE	SERVICE CATCH OFF
	UM5-1	1	RETIRE	
173	336.4ACSR	772	INSTALL	
	40-4	1	RETIRE	
	6ACWC	772	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
174	336.4ACSR	72	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	72	RETIRE	
175	336.4ACSR	840	INSTALL	
	45-3	1	INSTALL	
	C1	1	INSTALL	
	C7S	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHORS 20 AND 15 FT LEAD
	M2	1	INSTALL	
	M5-23	3	INSTALL	INSTALL (3) FIBER LINK STICKS FOR THE C7.
	40-3	1	RETIRE	
	6ACWC	840	RETIRE	



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Location	Assembly	Quantity	Status	Comments
175	C7	1	RETIRE	
	C9	1	RETIRE	
	E1	2	RETIRE	
	F1-S	2	RETIRE	
	M2	1	RETIRE	
176	336.4ACSR	624	INSTALL	
	40-3	1	RETIRE	
	6ACWC	624	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
177	336.4ACSR	376	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	376	RETIRE	
178	336.4ACSR	876	INSTALL	
	40-3	1	RETIRE	
	6ACWC	876	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
179	336.4ACSR	148	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) DOUBLE HELIX ANCHOR 15 FT GUY LEAD.
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS
	6ACWC	148	RETIRE	
180	336.4ACSR	564	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	564	RETIRE	



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Location	Assembly	Quantity	Status	Comments
181	336.4ACSR	568	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR. 25 FT GUY LEAD
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	568	RETIRE	
	C9	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
	M2	1	RETIRE	
	182	336.4ACSR	768	INSTALL
40-3		1	INSTALL	
C1		1	INSTALL	
M2		1	INSTALL	
40-3		1	RETIRE	
6ACWC		768	RETIRE	
C9		1	RETIRE	
M2		1	RETIRE	
M9-13-M2		1	RETIRE	*RETIRE CAPACITOR BANK
183	336.4ACSR	668	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	668	RETIRE	
184	336.4ACSR	96	INSTALL	
	40-3	1	RETIRE	
	6ACWC	96	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
185	45-3	1	EXISTING	
	M2	1	EXISTING	



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Location	Assembly	Quantity	Status	Comments
185	336.4ACSR	576	INSTALL	
	C2	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) DOUBLE HELIX ANCHORS 25 FT GUY LEAD
	6ACWC	576	RETIRE	
	C1	1	RETIRE	
186	45-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	592	INSTALL	
	C2	1	INSTALL	
	E9	2	INSTALL	
	M5-23	2	INSTALL	INSTALL (2) FIBER LINK STICKS FOR BOTH OH GUYS.
	6ACWC	592	RETIRE	
	C2F	1	RETIRE	
187	3/8 GUY SPAN	51	INSTALL	
	3/8 GUY SPAN	51	INSTALL	
	35-5	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHORS. 15 FT GUY LEAD.
	M2	1	INSTALL	
	M5-23	2	INSTALL	INSTALL (2) FIBER LINK STICKS FOR THE OH GUYS.
188	336.4ACSR	948	INSTALL	
	45-3	1	INSTALL	
	C7S	1	INSTALL	
	C8S	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHORS. 30 AND 25 FT LEADS
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	948	RETIRE	
	C7	1	RETIRE	
	C8	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
188	M2	1	RETIRE	
189	336.4ACSR	560	INSTALL	
	45-3	1	INSTALL	
	A5-1	1	INSTALL	
	C1	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR. 15 FT GUY LEAD
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	40-3	1	RETIRE	
	6ACWC	560	RETIRE	
	A5-1	1	RETIRE	
	C1	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
	M2	1	RETIRE	
190	45-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	724	INSTALL	
	C1	1	INSTALL	
	6ACWC	724	RETIRE	
	C1	1	RETIRE	
191	E9	1	EXISTING	
	336.4ACSR	672	INSTALL	
	45-3	1	INSTALL	
	C7S	1	INSTALL	INSTALL C7 BELOW C8.
	C8S	1	INSTALL	
	E9	1	INSTALL	
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL (2) FIBER LINK STICK FOR THE NEW OH GUY.
	S2.01	3	INSTALL	
	6ACWC	672	RETIRE	
	C7	1	RETIRE	
	C8	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
191	E9	1	RETIRE	
	M2	1	RETIRE	
	M5-23	1	RETIRE	
	S1.01	3	RETIRE	*RETIRE (3) SWITCHES.
192	35-5	1	EXISTING	
	M5-23	1	EXISTING	
	3/8 GUY SPAN	63	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHOR. 25 AND 20 FT GUY LEAD
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHOR. 25 AND 20 FT GUY LEAD
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL (1) FIBER LINK FOR NEW OH GUYS.
	E1	1	RETIRE	
	F1-S	1	RETIRE	
193	336.4ACSR	720	INSTALL	
	40-3	1	RETIRE	
	6ACWC	720	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
194	336.4ACSR	288	INSTALL	
	40-3	1	INSTALL	
	C8S	1	INSTALL	
	M2	1	INSTALL	
	S2.01	3	INSTALL	
	6ACWC	288	RETIRE	
195	336.4ACSR	424	INSTALL	
	40-3	1	RETIRE	
	6ACWC	424	RETIRE	
	C8	1	RETIRE	
	M2	1	RETIRE	
	M3-25A	1	RETIRE	
196	336.4ACSR	588	INSTALL	
	40-3	1	INSTALL	



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Location	Assembly	Quantity	Status	Comments
196	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	588	RETIRE	
197	336.4ACSR	80	INSTALL	
	40-3	1	RETIRE	
	6ACWC	80	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
	P1.01	3	RETIRE	*RETIRE LIGHTNING ARRESTORS.
198	336.4ACSR	652	INSTALL	
	40-3	1	RETIRE	
	6ACWC	652	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
199	336.4ACSR	268	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	268	RETIRE	
200	336.4ACSR	476	INSTALL	
	40-3	1	RETIRE	
	6ACWC	476	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
201	336.4ACSR	532	INSTALL	
	40-4	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	532	RETIRE	
202	336.4ACSR	292	INSTALL	
	40-3	1	RETIRE	
	6ACWC	292	RETIRE	



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Location	Assembly	Quantity	Status	Comments
202	C1	1	RETIRE	
	M2	1	RETIRE	
203	336.4ACSR	300	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	300	RETIRE	
204	45-3	1	EXISTING	
	G110	1	EXISTING	
	J2.1	1	EXISTING	SERVICE CATCH OFF
	M2	1	EXISTING	
	336.4ACSR	588	INSTALL	
	A5-1	1	INSTALL	ANCHOR IS FOR THE A5-1.
	C2	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR. 15 FT GUY LEAD.
	M5-23	1	INSTALL	INSTALL (1) FIBER LINK STICK FOR THE A5-1.
	6ACWC	588	RETIRE	
	A5-1	1	RETIRE	
C1	1	RETIRE		
205	336.4ACSR	544	INSTALL	
	45-3	1	RETIRE	
	6ACWC	544	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
206	336.4ACSR	444	INSTALL	
	45-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	444	RETIRE	
207	336.4ACSR	132	INSTALL	
	40-3	1	RETIRE	
	6ACWC	132	RETIRE	



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Location	Assembly	Quantity	Status	Comments
207	C9	1	RETIRE	
	M2	1	RETIRE	
208	336.4ACSR	728	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	728	RETIRE	
209	336.4ACSR	648	INSTALL	
	40-3	1	RETIRE	
	6ACWC	648	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
210	336.4ACSR	220	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	220	RETIRE	
211	336.4ACSR	860	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	860	RETIRE	
212	336.4ACSR	344	INSTALL	
	40-3	1	RETIRE	
	6ACWC	344	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
213	336.4ACSR	508	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	508	RETIRE	



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Location	Assembly	Quantity	Status	Comments
214	G210	1	EXISTING	
	336.4ACSR	860	INSTALL	
	45-3	1	INSTALL	
	A5-1	1	INSTALL	*REDUCE TENTION SPAN
	C2	1	INSTALL	NO GUYS OR ANCHORS
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL (1) FIBER LINK STICK FOR THE A5-1.
	40-3	1	RETIRE	
	6ACWC	860	RETIRE	
	A5-1	1	RETIRE	
	C9	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
	215	336.4ACSR	964	INSTALL
40-3		1	INSTALL	
C1		1	INSTALL	
M2		1	INSTALL	
6ACWC		964	RETIRE	
216	336.4ACSR	492	INSTALL	
	40-3	1	RETIRE	
	6ACWC	492	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
	P1.01	3	RETIRE	RETIRE (3) LIGHTNING ARRETORS
217	336.4ACSR	464	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	464	RETIRE	
218	50-3	1	EXISTING	
	G110	1	EXISTING	
	M2	1	EXISTING	



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Location	Assembly	Quantity	Status	Comments
218	SL	1	EXISTING	* STREET LIGHT
	UM5-1	1	EXISTING	
	336.4ACSR	972	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	972	RETIRE	
	C9	1	RETIRE	
219	50-3	1	EXISTING	
	M2	1	EXISTING	
	M5-4	2	EXISTING	
	UM5-1	1	EXISTING	
	336.4ACSR	1,068	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	6ACWC	1,068	RETIRE	
C9	1	RETIRE		
220	336.4ACSR	868	INSTALL	
	45-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	868	RETIRE	
221	G110	1	EXISTING	
	336.4ACSR	600	INSTALL	
	45-3	1	INSTALL	
	C1	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) DOUBLE HELIX ANCHOR 9 FT GUY LEAD
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	600	RETIRE	
	C9	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
M2	1	RETIRE		



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Location	Assembly	Quantity	Status	Comments
222	336.4ACSR	592	INSTALL	
	45-3	1	INSTALL	
	A5-1	1	INSTALL	
	C1	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10' DOUBLE HELIX ANCHOR. 20 FT GUY LEAD
	M2	1	INSTALL	
	M5-10	1	INSTALL	
	M5-23	1	INSTALL	INSTALL (1) FIBER LINK STICK FOR THE A5.
	M5-6	1	INSTALL	
	M5-9	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	592	RETIRE	
	A7	1	RETIRE	
	C9	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
	M2	1	RETIRE	
	M5-6	1	RETIRE	
	M5-9	1	RETIRE	
223	M5-10	1	EXISTING	
	336.4ACSR	732	INSTALL	
	40-3	1	INSTALL	
	A5-1	1	INSTALL	
	C1	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR. 8 FT GUY LEAD
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL (1) FIBER LINK STICK FOR THE A5.
	40-3	1	RETIRE	
	6ACWC	732	RETIRE	
	A5-1	1	RETIRE	
	C1	1	RETIRE	
	E1	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
223	F1-S	1	RETIRE	
	M2	1	RETIRE	
224	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	648	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	648	RETIRE	
	C1	1	RETIRE	
225	G110	1	EXISTING	
	336.4ACSR	712	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	3	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	M5-6	1	INSTALL	
	M5-9	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	712	RETIRE	
	C9	1	RETIRE	
	J2.1	3	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
	M5-6	1	RETIRE	
	M5-9	1	RETIRE	
226	336.4ACSR	448	INSTALL	
	40-4	1	INSTALL	
	A5-1	1	INSTALL	
	C1	1	INSTALL	
	E1	1	INSTALL	
	F1-S	1	INSTALL	(1) 10" DOUBLE HELIX ANCHOR. 15 FT GUY LEAD
	J2.1	2	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL (1) FIBER LINK STICK FOR THE A5-1.
	40-4	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
226	6ACWC	448	RETIRE	
	A5-1	1	RETIRE	
	C9	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
	J2.1	2	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
227	336.4ACSR	392	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	2	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	392	RETIRE	
	C9	1	RETIRE	
	J2.1	2	RETIRE	SERVICE CATCH OFF
M2	1	RETIRE		
228	336.4ACSR	684	INSTALL	
	40-3	1	RETIRE	
	6ACWC	684	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
	P1.01	3	RETIRE	RETIRE (3) LIGHTNING ARRESTORS.
229	336.4ACSR	156	INSTALL	
	40-3	1	INSTALL	
	C8S	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	S2.01	3	INSTALL	
	6ACWC	156	RETIRE	
230	336.4ACSR	404	INSTALL	
	40-3	1	RETIRE	
	6ACWC	404	RETIRE	
	C9	1	RETIRE	



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Location	Assembly	Quantity	Status	Comments
230	M2	1	RETIRE	
231	40-3	1	EXISTING	
	E9	1	EXISTING	
	M2	1	EXISTING	
	M5-23	1	EXISTING	
	M5-9	2	EXISTING	
	336.4ACSR	404	INSTALL	
	B7S	1	INSTALL	
	C1	1	INSTALL	
	6ACWC	404	RETIRE	
	B7	1	RETIRE	B7 IS ON A FIBER GLASS ARM.
	C9	1	RETIRE	
232	336.4ACSR	400	INSTALL	
	40-3	1	RETIRE	
	6ACWC	400	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
233	336.4ACSR	248	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	248	RETIRE	
234	40-3	1	EXISTING	
	G110	1	EXISTING	
	J2.1	2	EXISTING	SERVICE CATCH OFF
	M2	1	EXISTING	
	M5-10	1	EXISTING	
	336.4ACSR	648	INSTALL	
	C1	1	INSTALL	
	6ACWC	648	RETIRE	
	C1	1	RETIRE	
235	40-3	1	EXISTING	
	M2	1	EXISTING	



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235	SL	1	EXISTING	* 50 LED STRET LIGHT
	336.4ACSR	664	INSTALL	
	C1	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	664	RETIRE	
	C1	1	RETIRE	
236	336.4ACSR	684	INSTALL	
	45-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	C7S	1	INSTALL	
	E9	1	INSTALL	
	M2	1	INSTALL	
	M5-23	1	INSTALL	INSTALL (1) FIBER LINK STICK FOR THE OH GUY.
	45-3	1	RETIRE	
	6ACWC	684	RETIRE	
	C7	1	RETIRE	
	C9	1	RETIRE	
	E9	1	RETIRE	
	M2	1	RETIRE	
237	336.4ACSR	636	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	636	RETIRE	
238	336.4ACSR	388	INSTALL	
	40-3	1	RETIRE	
	6ACWC	388	RETIRE	
	C1	1	RETIRE	
	G110	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
239	336.4ACSR	264	INSTALL	
	40-3	1	INSTALL	



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Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

Location	Assembly	Quantity	Status	Comments
239	C1	1	INSTALL	
	G110	1	INSTALL	INSTALL TRANSFORMER FROM #238 TO #239.
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	UM5-1	1	INSTALL	
	2TPX	66	RETIRE	
	40-3	1	RETIRE	
	6ACWC	264	RETIRE	
	C9	1	RETIRE	
	J2.1	2	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
	UM5-1	1	RETIRE	
	240	336.4ACSR	640	INSTALL
40-3		1	RETIRE	
6ACWC		640	RETIRE	
C1		1	RETIRE	
M2		1	RETIRE	
P1.01		3	RETIRE	RETIRE (3) LIGHTNING ARRESTORS.
241	336.4ACSR	384	INSTALL	
	40-3	1	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	6ACWC	384	RETIRE	
242	336.4ACSR	336	INSTALL	
	40-3	1	RETIRE	
	6ACWC	336	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
243	336.4ACSR	656	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	



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ENGINEERS

Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

Location	Assembly	Quantity	Status	Comments
243	6ACWC	656	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
244	336.4ACSR	592	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	592	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
245	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	664	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	664	RETIRE	
	C1	1	RETIRE	
246	336.4ACSR	604	INSTALL	
	35-4	1	INSTALL	
	C2.52P	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	35-5	1	RETIRE	
	6ACWC	604	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
247	336.4ACSR	668	INSTALL	
	40-3	1	RETIRE	
	6ACWC	668	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
248	336.4ACSR	172	INSTALL	
	40-3	1	INSTALL	



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ENGINEERS

Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

Location	Assembly	Quantity	Status	Comments
248	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	172	RETIRE	
249	336.4ACSR	436	INSTALL	
	40-3	1	RETIRE	
	6ACWC	436	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
250	336.4ACSR	408	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	408	RETIRE	
251	336.4ACSR	228	INSTALL	
	40-3	1	RETIRE	
	6ACWC	228	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
	P1.01	3	RETIRE	*RETIRE LIGHTNING ARRESTORS
252	40-3	1	EXISTING	
	M2	1	EXISTING	
	336.4ACSR	616	INSTALL	
	C2	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	6ACWC	616	RETIRE	
	C1	1	RETIRE	
253	336.4ACSR	724	INSTALL	
	35-4	1	INSTALL	
	C2.52P	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	M2	1	INSTALL	
	35-5	1	RETIRE	
	6ACWC	724	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	



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Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

Location	Assembly	Quantity	Status	Comments
254	336.4ACSR	648	INSTALL	
	40-3	1	RETIRE	
	6ACWC	648	RETIRE	
	C1	1	RETIRE	
	M2	1	RETIRE	
255	336.4ACSR	232	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	6ACWC	232	RETIRE	
256	336.4ACSR	412	INSTALL	
	40-3	1	RETIRE	
	6ACWC	412	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
257	336.4ACSR	324	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	324	RETIRE	
258	336.4ACSR	312	INSTALL	
	40-3	1	RETIRE	
	6ACWC	312	RETIRE	
	C9	1	RETIRE	
	M2	1	RETIRE	
259	G110	1	EXISTING	
	336.4ACSR	704	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	40-3	1	RETIRE	



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ENGINEERS

Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

Location	Assembly	Quantity	Status	Comments
259	6ACWC	704	RETIRE	
	C9	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	
260	S1.01	3	EXISTING	
	336.4ACSR	632	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	C7S	1	INSTALL	REDUCE TENTION SPAN
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	632	RETIRE	
	C7	1	RETIRE	RETIRE THE FIBER GLASS ARM
	C9	1	RETIRE	
	M2	1	RETIRE	
261	336.4ACSR	616	INSTALL	
	40-3	1	INSTALL	
	C2.52P	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHORS.30 AND 25 FT LEADS
	M2	1	INSTALL	
	M5-23	2	INSTALL	INSTALL (2) FIBER LINK STICKS FOR THE GUYS.
	40-3	1	RETIRE	
	6ACWC	616	RETIRE	
	C9	1	RETIRE	
	E1	1	RETIRE	
	F1-S	1	RETIRE	
	M2	1	RETIRE	
262	336.4ACSR	1,084	INSTALL	
	40-3	1	INSTALL	
	A5-1	2	INSTALL	
	C2.52P	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHORS. 30 AND 25 FT LEADS.



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Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

Location	Assembly	Quantity	Status	Comments
262	M2	1	INSTALL	
	M5-23	2	INSTALL	INSTALL (2) FIBER LINK STICKS FOR THE A5-1.
	40-3	1	RETIRE	
	6ACWC	1,084	RETIRE	
	A5-1	3	RETIRE	
	C7	1	RETIRE	RETIRE FG ARM
	M2	1	RETIRE	
263	40-4	1	EXISTING	
	G110	1	EXISTING	
	J2.1	1	EXISTING	SERVICE CATCH OFF
	M2	1	EXISTING	
	SL	1	EXISTING	STRET LIGHT. LIGHT IS DAMAGE.
	336.4ACSR	732	INSTALL	
	C2.52P	1	INSTALL	*ONLY INSTALL 2 WOOD ARMS, NO GUYS OR ANCHORS.
	6ACWC	732	RETIRE	
	A8	1	RETIRE	
264	G110	1	EXISTING	
	336.4ACSR	376	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	J2.1	1	INSTALL	SERVICE CATCH OFF
	M2	1	INSTALL	
	40-3	1	RETIRE	
	6ACWC	188	RETIRE	
	A1	1	RETIRE	
	J2.1	1	RETIRE	SERVICE CATCH OFF
	M2	1	RETIRE	

DO NOT PUT POLE WHERE STAKE IS AT. SET NEW POLE 3 FT BEHIND OLD POLE.

265	336.4ACSR	372	INSTALL	
	40-4	1	RETIRE	
	6ACWC	186	RETIRE	
	A1	1	RETIRE	
	M2	1	RETIRE	



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Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

Location	Assembly	Quantity	Status	Comments
266	336.4ACSR	248	INSTALL	
	40-3	1	INSTALL	
	C1	1	INSTALL	
	M2	1	INSTALL	
	P1.01	3	INSTALL	INSTALL (3) LIGHTNING ARRESTORS.
	6ACWC	124	RETIRE	
267	336.4ACSR	612	INSTALL	
	40-3	1	INSTALL	
	C7S	1	INSTALL	
	E1	2	INSTALL	
	F1-S	2	INSTALL	(2) 10" DOUBLE HELIX ANCHORS. 30 AND 25 FT LEAD
	M2	1	INSTALL	
	M5-23	2	INSTALL	INSTALL (2) FIBER LINK STICKS FOR THE GUYS.
	6ACWC	306	RETIRE	



13kV Distribution Line Reconductor & Rebuild
City of Wauchula, FL
W. Main Street

ITB No. _____ 2023-02
Date: August 13, 2023
Rev.: _____ 00

EXHIBIT C

Summary Unit Sheets



Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

STATISTICAL SUMMARY

		PRIM	SECD	SERV	TRAN	CONS	SL	MET	TRA	POLES
INSTALL	OH:	35169	-	-	-	-	-	-	2	158
INSTALL	UG:	-	-	-	-	-				
RETIRE	OH:	35169	66	-	-	-	-	-	2	158
RETIRE	UG:	-	-	-	-	-				

ASSEMBLY SUMMARY

ASSEMBLY	DESCRIPTION	INST QTY	INSTALLED	RETURNED	RETIRE QTY	SALVAGED
1/0ACSR	WIRE, 1/0 ACSR RAVEN	-			8072	
2TPX	WIRE, 2 TRIPLEX CONCH SEC	-			66	
3/8 GUY SPAN		589			-	
30-5	POLE, 30' CLASS 5	-			1	
336.4ACSR	WIRE, 336.4 ACSR	140676			-	
35-4	POLE, 35' CLASS 4	4			1	
35-5	POLE, 35' CLASS 5	4			3	
40-3	POLE, 40' CLASS 3	120			138	
40-4	POLE, 40' CLASS 4	3			3	
45-3	POLE, 45' CLASS 3	23 *24			12	
4ACSR	WIRE, 4 ACSR SWANATE	-			2805	
50-2	POLE, 50' CLASS 2	1			-	
50-3	POLE, 50' CLASS 3	1			-	
55-2	POLE, 55' CLASS 2	1			-	
55-3	POLE, 55' CLASS 3	1			-	
6ACWC	WIRE, 6A CWC	-			128876	
A1	STANDARD CONFIGURATION, STRAIGHT LINE CONST	-			2	
A5	STANDARD CONFIGURATION, DEADEND	-			4	
A5-1	STANDARD CONFIGURATION, PRIMARY TAP TAKEOF	17			13	
A7	SINGLE PHASE DEAD, NEUTRAL DEADENDS ON CROS	1			2	

ADDITIONAL ITEMS



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Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

DESCRIPTION	MAT ITEM ID	INST. QTY	INSTALLED	RETURNED	RETIRE	SALVAGED
A8	SINGLE PHASE DOUBLE DEADEND ON CROSSARM	-			1	
B7	CROSSARM CONSTRUCTION, DEADEND, ON ARMS	-			2	
B7S	STANDARD CONFIGURATION, HORIZONTAL DEADEN	2			-	
C1	STANDARD CONFIGURATION, STRAIGHT LINE CONST	104			84	
C1PS	STANDARD CONFIGURATION, STRAIGHT LINE CONST	3			1	
C2	STANDARD CONFIGURATION, MEDIUM ANGLE, CRO:	52			1	
C2.52P	DOUBLE SUPPORT 10FT FIBERGLASS ARMS	10			-	
C2-1	ALTERNATE CONFIGURATION, MEDIUM ANGLE, CRO	-			1	
C2F	STANDARD CONFIGURATION, MEDIUM ANGLE CONS	-			1	
C2PS	STANDARD CONFIGURATION, MEDIUM ANGLE CONS	1			2	
C3	STANDARD CONFIGURATION, VERTICAL SUSPENSION	2			-	
C7	CROSSARM CONSTRUCTION, DEADEND, ON ARMS	-			20	
C7S	STANDARD CONFIGURATION, HORIZONTAL DEADEN	18			-	
C8	CROSSARM CONSTRUCTION, HORIZONTAL DOUBLE I	-			13	
C8S	STANDARD CONFIGURATION, HORIZONTAL DOUBLE	11			-	
C9	NEUTRAL ON CROSSARM CONSTRUCTION, STANDAR	-			83	
DC-C1	DOUBLE CIRCUIT, STRAIGHT LINE CONSTRUCTION	2			-	
E1	ANCHOR GUY DETAIL	61			26	
E1-S	SIDEWALK GUY	4			2	
E6	DOUBLE DOWN GUY	3			1	
E9	SPAN GUY DETAIL	15			6	
F1-S	ANCHOR, SCREW (HELIX)	70			29	
G110	SINGLE TRANSFORMER INSTALLATION, DEADEND PC	1			2	
G210	TWO TRANSFORMERS, CLUSTER MOUNTED OPEN W	1			-	
J2.1	SECONDARY SQUARE CLEVIS	38			40	
K1.1	SERVICE ASSEMBLY	1			1	
M2	TYPICAL GROUND ROD LOCATION FOR UTILITY POLE	157			155	
M3-25A	TWO OR THREE SECTIONALIZING OIL CIRCUIT RECLO	-			1	

ADDITIONAL ITEMS

DESCRIPTION	MAT ITEM ID	INST. QTY	INSTALLED	RETURNED	RETIRE	SALVAGED



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Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

DESCRIPTION	MAT ITEM ID	INST. QTY	INSTALLED	RETURNED	RETIRE	SALVAGED
M5-10	SECTIONALIZING - FUSED, SINGLE PHASE PRIMARY LI	5			-	
M5-2	M5,2 MISCELLANEOUS PRIMARY ASSEMBLIES	2			2	
M5-23	M5,3 MISCELLANEOUS PRIMARY ASSEMBLIES	64			2	
M5-4	M5,2 MISCELLANEOUS PRIMARY ASSEMBLIES	2			2	
M5-5	M5,2 MISCELLANEOUS PRIMARY ASSEMBLIES	18			11	
M5-6	M5,2 MISCELLANEOUS PRIMARY ASSEMBLIES	2			2	
M5-9	M5,2 MISCELLANEOUS PRIMARY ASSEMBLIES	2			8	
M9-13-M2	POLE MOUNTED FIXED SHUNT CAPACITOR INSTALLA	-			1	
P1.01	SURGE ARRESTER	84			43	
P1.1	SURGE ARRESTER ON STANDOFF	-			3	
R3.2	3PH RECLOSER BANK W / BYPASS	-			1	
S1.01	CUTOUT	-			8	
S1.02	CUTOUT ARRESTER COMBO	5			-	
S2.01	UNDERARM DISCONNECT SWITCH	27			3	
UM2	SINGLE PHASE OH TO UG TERMINATION	4			4	
UM5-1	TYPICAL UNDERGROUND SERVICE INSTALLATION FR	10			10	

RECORD UNIT SUMMARY

DESCRIPTION	CPR ITEM ID	INST QTY	RETURNED	USED	RETIRE QTY	SALVAGED
CROSSARMS	99364002	20			196	
POLES - 35 FT AND UNDER	99364003	8			5	
POLES 40 FT AND 45 FT	99364004	146			153	
POLES 50 FT AND OVER	99364005	4			-	
CLUSTER MOUNT BRACKET	99364007	-			1	
LIGHTENING ARRESTER OHD	99365001	30			19	
CUTOUT OHD	99365002	2			7	
SUSPENSION INSULATORS	99365005	3			82	
CONDUCTOR, #6A CWC	99365011	-			240	

ADDITIONAL ITEMS

DESCRIPTION	MAT ITEM ID	INST. QTY	INSTALLED	RETURNED	RETIRE	SALVAGED



Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

DESCRIPTION	MAT ITEM ID	INST. QTY	INSTALLED	RETURNED	RETIRE	SALVAGED
CONDUCTOR #336.4 MCM-ACSR	99365015	259			-	
CONDUCTOR #1/0 ACSR	99365019	-			14	
CONDUCTOR, #4 ACSR	99365021	-			5	
SECONDARY, #2 TPX	99365029	-			1	
KNIFE BLADE DISCONNECT SWITCH	99365036	9			1	
LINE POST INSULATOR	99365040	60			-	

MAJOR MATERIAL SUMMARY

DESCRIPTION	MAT ITEM ID	INST QTY	RETURNED	USED	RETIRE QTY	SALVAGED
CUTOUT, XS, 100 AMP	11100100	5			11	
ARRESTER, 10 KV DISTRIBUTION	11200200	89			49	
SWITCH, BYPASS UNDERARM	11300100	27			3	
CROSSARM, DOUGLAS FIR, 8'	12100800	-			30	
CROSSARM, DOUGLAS FIR, 10'	12101000	20			166	
BRACE, CROSSARM, 60" X 18" DROP	12120100	-			60	
BRACE, CROSSARM, 60" X 30" DROP	12120200	40			332	
INSULATOR, SUSPENSION, VERILITE	12200100	6			82	
INSULATOR, 15KV, LINE POST	12210100	60			-	
BRACKET, CLUSTER MOUNT OCR	12300225	-			1	
BRACKET, EQUIPMENT, 3-WAY 12" AL	12300300	-			3	
POLE, 30' CLASS 5	14003005	-			1	
POLE, 35' CLASS 4	14003504	4			1	
POLE, 35' CLASS 5	14003505	4			3	
POLE, 40' CLASS 3	14004003	120			138	
POLE, 40' CLASS 4	14004004	3			3	
POLE, 45' CLASS 3	14004503	23			12	
POLE, 50' CLASS 2	14005002	1			-	
POLE, 50' CLASS 3	14005003	1			-	

ADDITIONAL ITEMS

DESCRIPTION	MAT ITEM ID	INST QTY	RETURNED	USED	RETIRE QTY	SALVAGED



Job ID:	STK10001
Job Name:	WAUCHULA RECONDUCTOR
Project ID:	
Service Order:	
Staked By/Date:	SHAY HOBBS - 08/06/2022

DESCRIPTION	MAT ITEM ID	INST. QTY	INSTALLED	RETURNED	RETIRE	SALVAGED
POLE, 55' CLASS 2	14005502	1			-	
POLE, 55' CLASS 3	14005503	1			-	
WIRE, 4 ACSR SWANATE	17100300	-			2805	
WIRE, 1/0 ACSR RAVEN	17100500	-			8072	
WIRE, 336.4 ACSR MERLIN	17100900	140676			-	
WIRE, 6A CWC	17200200	-			128876	
WIRE, 2 TRIPLEX CONCH	18300400	-			66	

ADDITIONAL ITEMS

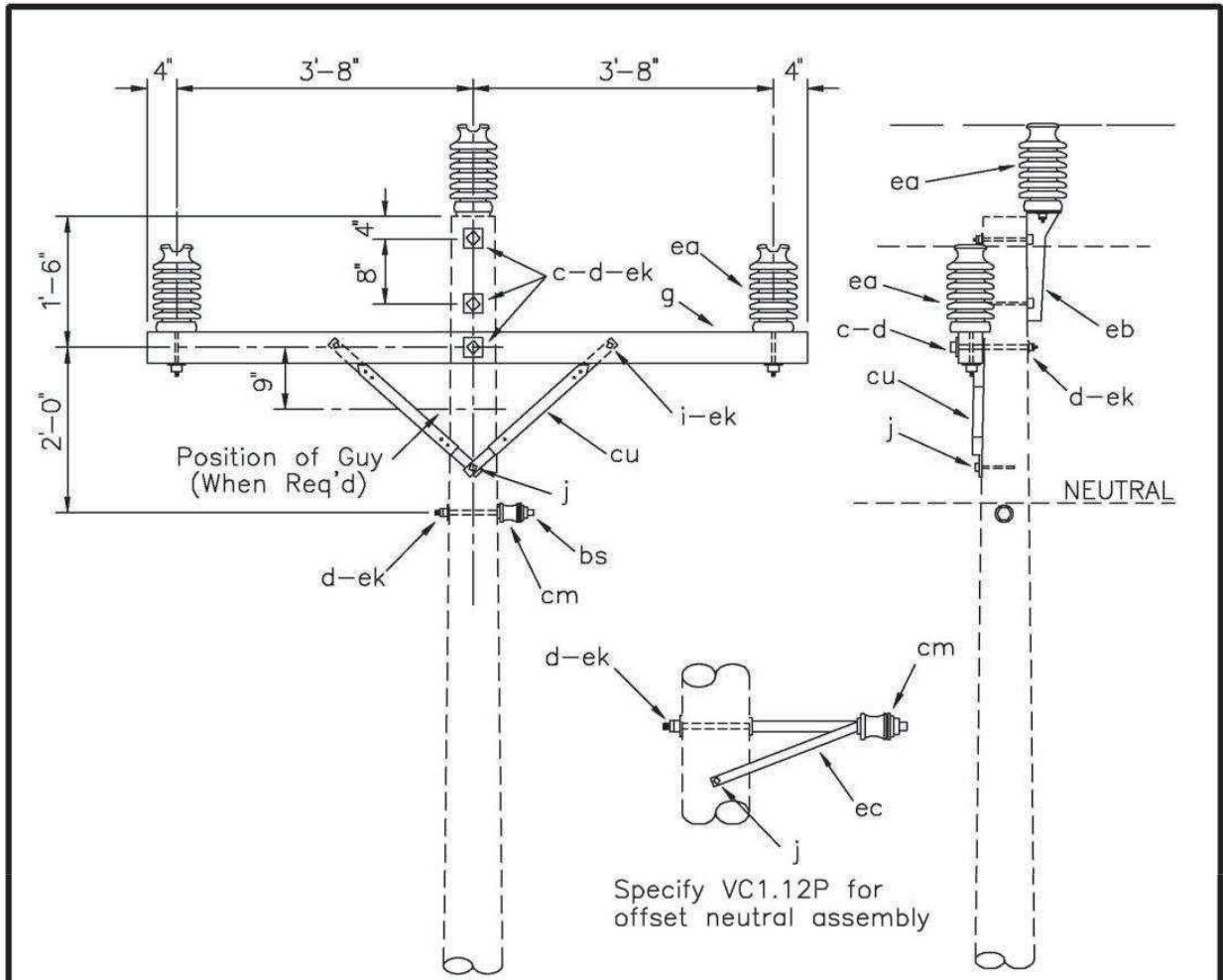


13kV Distribution Line Reconductor & Rebuild
City of Wauchula, FL
W. Main Street

ITB No. _____ 2023-02
Date: August 13, 2023
Rev.: _____ 00

EXHIBIT D

Standard Unit Modification



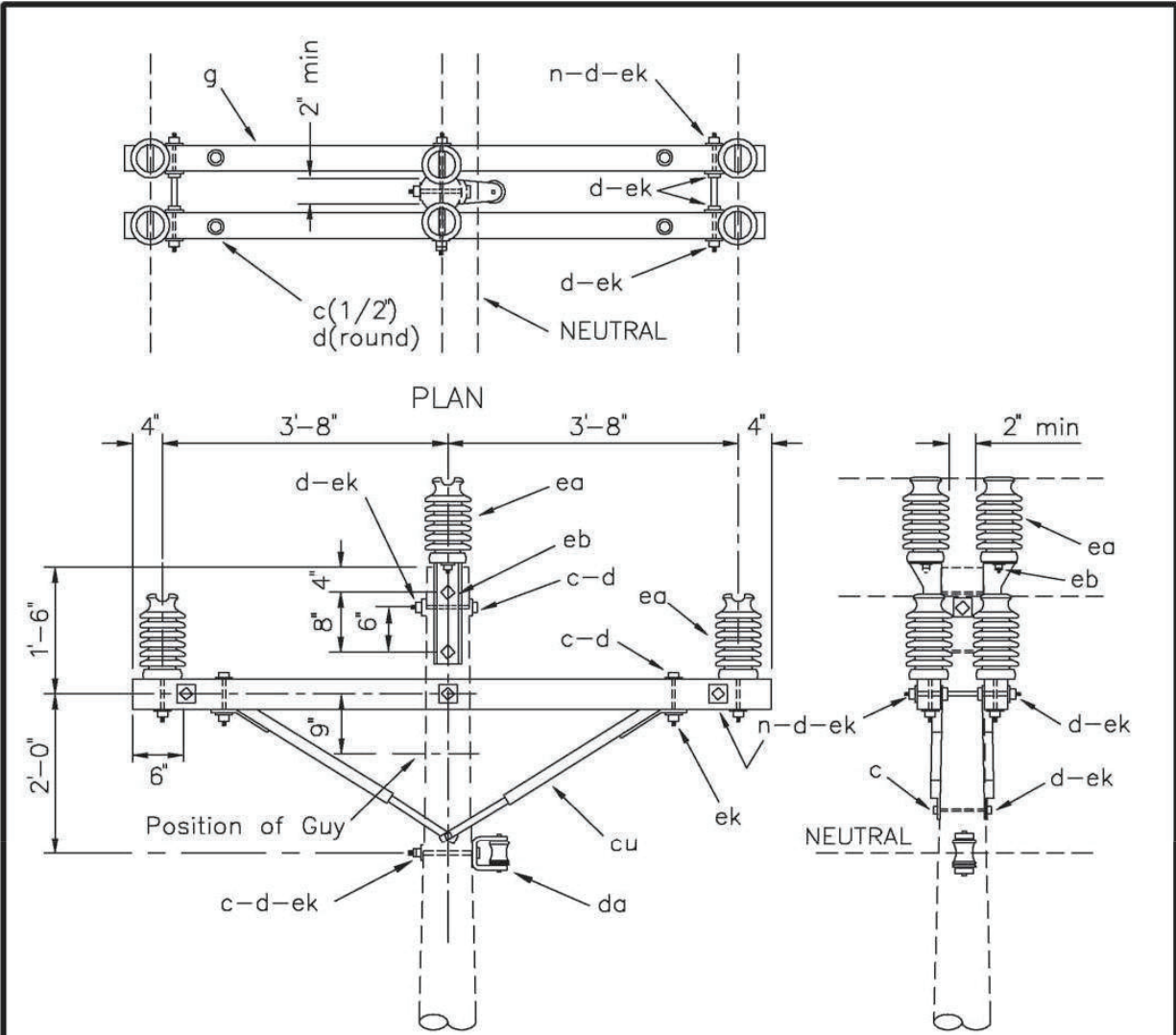
ASSEMBLY: VC1.		11P	12P
ITEM	MATERIAL	QTY	QTY
c	Bolt, machine, 5/8" x req'd length	3	3
d	Washer, square, 2 1/4"	5	5
g	Crossarm, 3 5/8" x 4 5/8" x 8'-0"	1	1
i	Bolt, carriage, 3/8" x 4"	2	2
j	Screw, lag, 1/2" x 4"	1	3
bs	Bolt, single, upset	1	
cm	Insulator, spool, 3"	1	1
cu	Brace, 28"	2	2
ea	Insulator, post type (24.9/14.4 kV)	3	3
eb	Bracket, pole top	1	1
ec	Bracket, offset neutral		1
ek	Locknuts	6	6

DESIGN PARAMETERS: MAXIMUM LINE ANGLES: 5° - Small Conductors 2° - Larger than #1/0	SINGLE SUPPORT ON CROSSARM (TANGENT) (POST INSULATORS)	
	DEC 1998 RUS	3 - PHASE PRIMARY 24.9/14.4 kV

PER CITY OF WAUCHULA

DESIGN PROJECT UNIT - C1

**To be constructed using 8' fiberglass crossarm drilled with 3/4" holes for pins to fit and post insulators.
C1 requires pole top pin.**



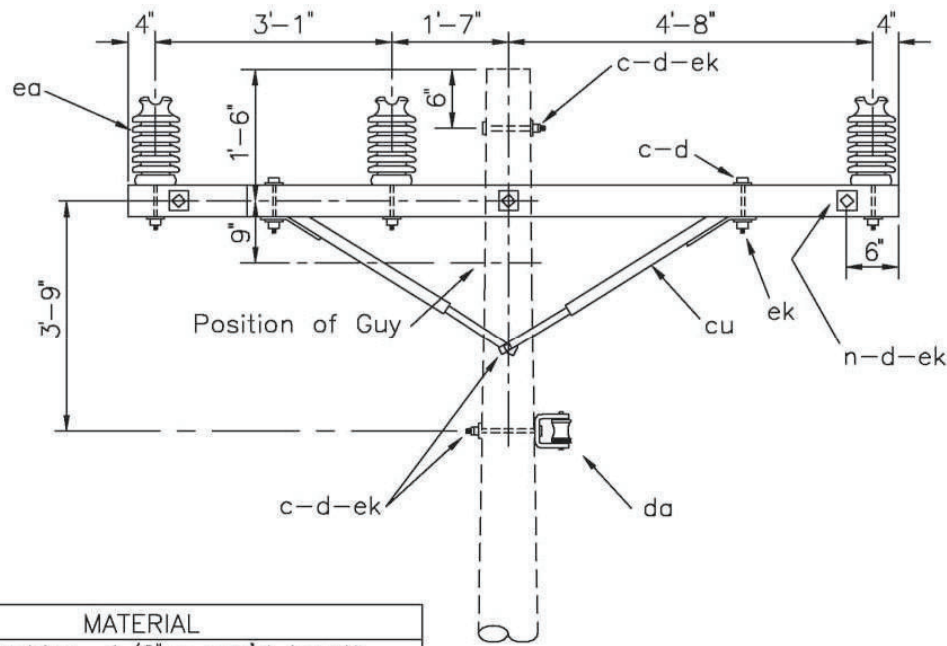
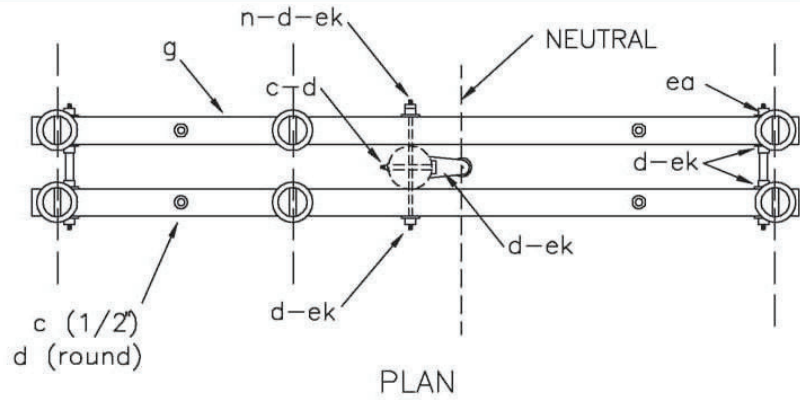
ITEM	QTY	MATERIAL
c	5	Bolt, machine, 5/8" x req'd length
c	4	Bolt, machine, 1/2" x req'd length
d	14	Washer, square, 2 1/4"
d	4	Washer, round, 1 3/8"
g	2	Crossarm, 3 5/8" x 4 5/8" x 8' 0"
n	3	Bolt, double arming, 5/8" x req'd length
eu	2	Brace, wood, 60" span
da	1	Bracket, insulated
ea	6	Insulator, post type (24.9/14.4 kV)
eb	2	Bracket, pole top
ek	19	Locknuts

DESIGN PARAMETERS: See TABLE IV		DOUBLE SUPPORT ON CROSSARMS (POST INSULATORS)	
DEC 1998	RUS	3 - PHASE PRIMARY 24.9/14.4 kV	VC2.21P

PER CITY OF WAUCHULA

DESIGN PROJECT UNIT - C2

To be constructed using 8' fiberglass crossarm drilled with 3/4" holes for pins to fit and post insulators.



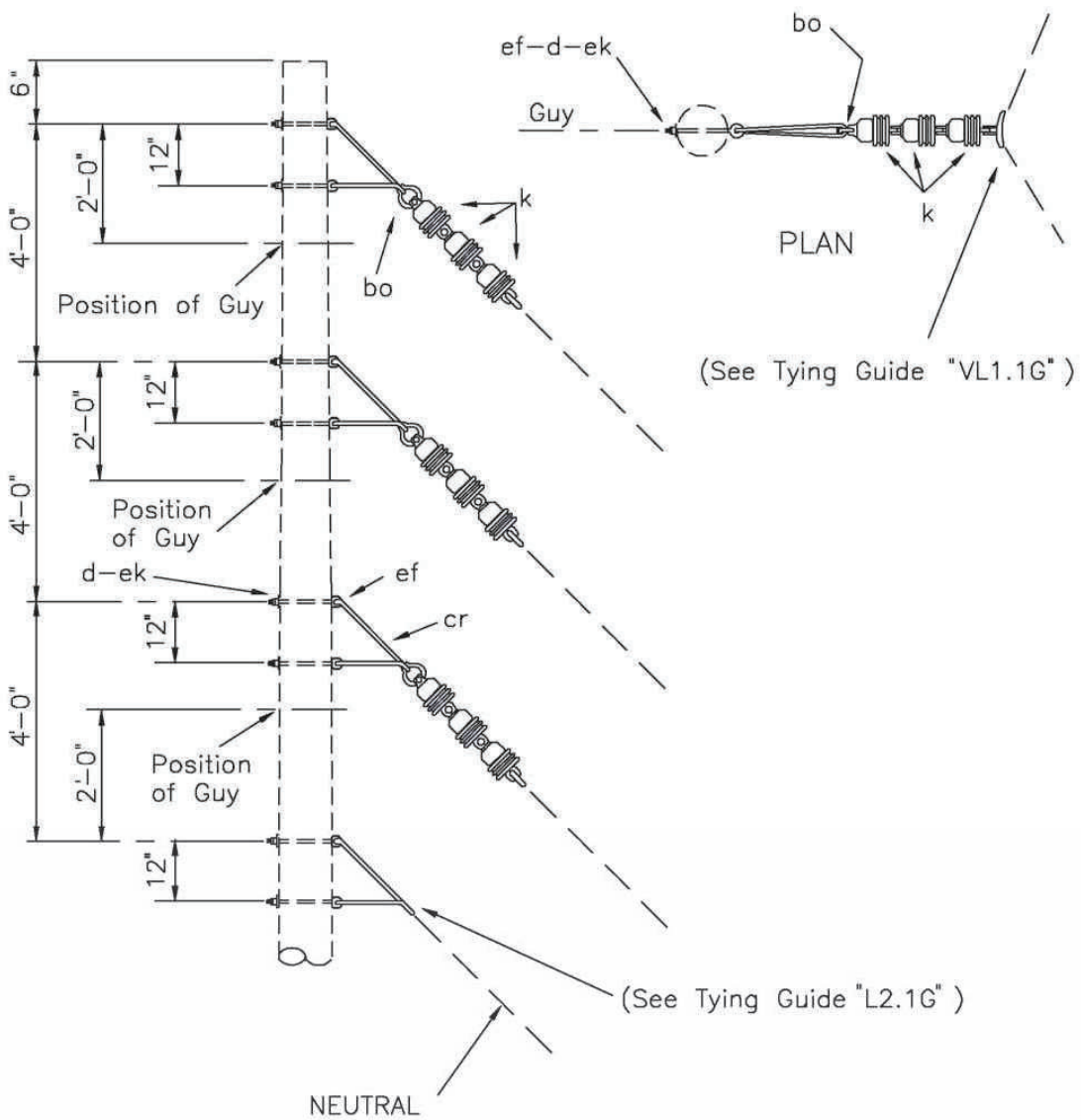
ITEM	QTY	MATERIAL
c	4	Bolt, machine, 1/2" x req'd length
c	3	Bolt, machine, 5/8" x req'd length
d	4	Washer, round, 1 3/8"
d	14	Washer, square, 2 1/4"
g	2	Crossarm, 3 5/8" x 4 5/8" x 10'-0"
n	3	Bolt, double arm, 5/8" x req'd length
eu	2	Brace, wood, 60" span
da	1	Bracket, Insulated
ea	6	Insulator, post type (24.9/14.4 kV)
ek	17	Locknuts

NOTE:
Neutral assembly may be installed on opposite side of pole when necessary to avoid midspan conductor clearance.

DESIGN PARAMETERS: See TABLE IV		DOUBLE SUPPORT ON 10 FOOT CROSSARMS (POST INSULATORS)	
DEC 1998	3 - PHASE PRIMARY	VC2.52P	
RUS	24.9/14.4 kV		

PER CITY OF WAUCHULA DESIGN PROJECT UNIT - C2.52P

To be constructed using 10' fiberglass crossarm drilled with 3/4" holes for pins to fit and post insulators.



ITEM	QTY	MATERIAL
d	8	Washer, square, 3", curved
k	9	Insulator, suspension, 4 1/4"
bo	3	Shackle, anchor
cr	4	Bracket, angle, 5/8"
ef	8	Bolt, clevis, 5/8" x req'd length
ek	8	Locknuts

DESIGN PARAMETERS: ALLOWABLE TRANSVERSE LOAD= 5000 lbs./Conductor 10° -30° Angles	SUSPENSION ANGLE (LARGE CONDUCTORS)	
	DEC 1998	3 - PHASE PRIMARY
	RUS	24.9/14.4 kV
		VC3.2L

PER CITY OF WAUCHULA

DESIGN PROJECT UNIT - C3