



Kirstie Reynolds
Team Lead – Environmental Project Management
San Diego Gas & Electric Company
1010 Tavern Road, SD 1116
Alpine, CA 91901
(T) XXX-XXX-XXXX
(C) XXX-XXX-XXXX
(F) XXX-XXX-XXXX

September 13, 2017

Lisa Orsaba
Project Manager
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: Notice to Proceed (NTP) Request #8 to Reconstruct the Circuit (C) 442 Component of the Cleveland National Forest Power Line Replacement Projects (Project)

Dear Ms. Orsaba:

On May 26, 2016, the California Public Utilities Commission (CPUC) granted San Diego Gas & Electric Company (SDG&E) a Permit to Construct the Project (Decision 16-05-038). The decision conditionally authorizes construction of the Project with the implementation of pre-construction mitigation measures (MMs) identified in the Mitigation Monitoring, Compliance, and Reporting Program (MMCRP). A Notice of Determination was submitted to the State Clearinghouse on May 31, 2016, indicating the CPUC's approval of the Project. In addition, the following agencies issued permits or Records of Decision (RODs) to indicate their approval of the Project:

- The United States Forest Service (USFS) issued a Final ROD on March 11, 2016 and a Master Special Use Permit on September 19, 2016.
- The Bureau of Land Management issued a Final ROD on September 28, 2016.
- The Bureau of Indian Affairs issued a Final ROD on March 30, 2016.

Activity Summary

SDG&E is formally requesting authorization from the CPUC to begin reconstruction of C442, which will include the following:

- the replacement of 114 existing wood distribution poles with weathered steel poles and other appurtenant equipment;
- the installation of 13 new weathered steel poles and other appurtenant equipment;
- the addition of two new stub poles;

- the removal of 4 existing poles;
- the replacement of one existing tap pole;
- pole top work at 31 structures;
- conditional approval of Pole P177014, pending issuance of applicable jurisdictional water permits;
- reconductoring of the existing 12 kilovolt conductors;
- tree trimming activities required to maintain CPUC General Order (G.O.) 95 vegetation clearances from energized wire;
- use of the C442 Staging Yard 1, as identified in the 2015 baseline data¹; and
- use of the refinements identified in Attachment A: Minor Project Refinement Request, including the Corte Madera Staging and Fly Yard.

Reconstruction of C442 will also include existing access road maintenance, establishment of temporary work areas associated with pole replacement activities, and use of identified navigation and construction-only roads for various construction activities (e.g., pole staging and stringing). Some construction-only access roads may require vegetation trimming and/or minor grading, but they will be returned to pre-construction conditions upon completion of the reconstruction of C442. SDG&E will utilize public and established private roads, as well as existing access roads, for travel to and from the Project and other construction activities, such as stringing and temporary material laydown. During the work, SDG&E will minimize impacts to natural areas to the fullest extent feasible by utilizing existing bare ground areas for parking and other construction-related activities along the Project alignment. All activities required for the reconstruction of C442 will be consistent with Section B: Project Description in the Project's Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS).

SDG&E may also need to conduct additional tree trimming within the power line corridor to maintain the energized wire-to-vegetation clearances that are required for compliance with CPUC G.O. 95. There will be no ground disturbance during the trimming activities. Vegetation crews will walk to each tree, climb the tree, and trim the necessary branches with hand tools. Depending on the size and the amount of the vegetation cut, it will be either left on site in the right-of-way or carried out to the closest workspace with a chipper. If individual trees are found to be dead or dying, the full tree may be removed.

Activities at the Corte Madera Staging and Fly Yard will include helicopter staging, take-off, and landing, as well as parking, fueling, and storage of construction materials and equipment.

¹ In April 2015, SDG&E submitted responses to the CPUC's Data Request #10, which included route maps for each segment of the Project. Attachment B.10: C442 Route Map depicts the approved baseline components for C442, including staging and fly yards.

Activities at the C442 Staging Yard 1 will include parking, fueling, and storage of construction materials and equipment. The Corte Madera Staging and Fly Yard will be active for approximately 18 months, and the C442 Staging Yard 1 will be active for approximately five months. Use of the Corte Madera Staging and Fly Yard and the C442 Staging Yard 1 will be consistent with Section B: Project Description in the Project's Final EIR/EIS.

Attachment A: Minor Project Refinement Request of this NTP request describes and analyzes the changes between the 2015 baseline data and the final engineering for C442, and also includes a comparison mapbook of the changes. All of the refinements included in the Minor Project Refinement (MPR) request are incorporated into Attachment B: NTP #8 Components Map and Attachment C: Pre-Construction Status Report.

Attachment B: NTP #8 Components Map depicts the pole removal/replacement sites, new steel pole and stub pole sites, pole top-only work, stringing sites, staging yards, and access roads required to reconstruct C442, as described by the Project's EIR/EIS and Attachment A: Minor Project Refinement Request.² However, Pole P177014 is listed as "pending" in Attachment B: NTP #8 Components Map until the applicable jurisdictional water permits have been received.

Upon completion of construction activities on this component, all areas of temporary disturbance will be recontoured and restored to pre-construction conditions to the extent practicable. Cleanup work will include removal of any temporary facilities not required for other approved Project activities, as well as collection and proper disposal of any waste, trash, and debris. Reconstruction of C442 is anticipated to take approximately five months from initial mobilization through construction completion, beginning in October/November 2017 and ending in March/April 2018.

Table 1: Temporary Impact Acreage provides the temporary impacts associated with all work areas for C442.

Pre-Construction Mitigation Measures

A list of all pre-construction MMs identified in the MMCRP and relevant to C442 is provided in Attachment C: Pre-Construction Status Report of this NTP request. To facilitate tracking and implementation, each MM has been organized into tasks so that the various elements of each MM can be tracked separately. Attachment C: Pre-Construction Status Report provides the full text of each MM for C442, as well as the corresponding completion status and details on the status. No construction work will occur until all of the applicable pre-construction mitigation measures are fulfilled.

² Public and established private roads that will be used for construction are not specifically identified in Attachment B: NTP #8 Components Map, but approved access roads are.

Table 1: Temporary Impact Acreage

Temporary Impact Location	Approximate Impacts (acres)		
	Native Vegetation	Non-Native Grassland	Agricultural/Disturbed/ Developed/Bare Ground
Access Roads ³	6.16	--	1.25
Anchor Work Areas	0.07	--	<0.01
Pole Work Areas	1.03	--	0.96
Stringing Sites	0.88	--	0.05
Temporary Access/Entry/Turnaround	0.17	--	0.03
C442 Staging Yard 1	--	--	0.28
Corte Madera Staging and Fly Yard	--	4.04	--
C442 Total	8.31	4.04	2.57
Project Total to Date⁴	23.86	20.19	51.59

SDG&E respectfully requests authorization of this NTP request by October 13, 2017 in order to begin construction activities along C442 and meet the overall Project schedule. Should you have any questions or need additional information, please do not hesitate to contact me at XXX-XXX-XXXX.

Sincerely,



Kirstie Reynolds
 Team Lead – Environmental Project Management
 SDG&E

Attachment A: Minor Project Refinement Request
 Attachment B: NTP #8 Components Map
 Attachment C: Pre-Construction Status Report

³ SDG&E uses three types of access roads—maintained, navigation, and construction only. Construction-only access roads can sometimes require improvements and maintenance, which create temporary impacts to vegetation. However, no construction-only roads occur along this component.

⁴ The total temporary impact acreage for the Project includes C442, as well as Revised NTP #1; MPR #1; NTP #2; MPR #2; MPR #4; NTP #4; MPR #5; NTP #6; MPR #6; NTP #7; pending MPR #7; and MPR #8. Temporary impacts due to outrigger adjustments and workspace adjustments will be totaled following the completion of construction on each component. Currently, construction is not complete for any Project components.

cc: Allison Rice, Dudek
Anna Bischoff, Dudek
Brad Aughinbaugh, USFS
KD Tyree, USFS
Tim Knowd, SDG&E
Edith Moreno, SDG&E
Jennifer Kaminsky, SDG&E
Heidi Waitley, SDG&E
Jim Vanlandingham, SDG&E
Rachel Ruston, SDG&E
Anne Marie McGraw, Insignia Environmental (Insignia)
Fred Bauermeister, Insignia
Jeff Coward, Insignia
Erin Tomaras, Insignia

ATTACHMENT A: MINOR PROJECT REFINEMENT REQUEST



CLEVELAND NATIONAL FOREST POWER LINE REPLACEMENT PROJECTS



MINOR PROJECT REFINEMENT REQUEST FORM

Date Submitted:	09-13-17	Request #:	C442
Date Approval Required:	10-13-17	Landowner:	Various
APN:	XXX-XXX-XX, XXX-XXX-XX, XXX-XXX-XX, XXX-XXX-XX, XXX-XXX-XX, XXX-XXX-XX, XXX-XXX-XX, XXX-XXX-XX, XXX-XXX-XX, XXX-XXX-XX		
Refinement from (check all that apply):			
<input type="checkbox"/> Mitigation Measure	<input type="checkbox"/> APM	<input checked="" type="checkbox"/> Project Description	<input type="checkbox"/> Drawing <input type="checkbox"/> Other
Identify source (mitigation measure, project description, etc.):			
In April 2015, San Diego Gas & Electric Company’s (SDG&E’s) responses to Data Request #10 were submitted to the California Public Utilities Commission (CPUC). The responses included Attachment B.10 C442 Route Map for the Cleveland National Forest Power Line Replacement Projects (Project), which depicted approved facilities, anchors, staging and fly yards, stringing sites, and access roads. Page B-44 through Page B-47 of the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) describes the Project’s temporary workspace requirements for access, stringing sites, pole work areas, and staging and fly yards, as well as construction methodology for pole removal and installation. The information in this Minor Project Refinement (MPR) request form discusses SDG&E’s requested refinements to the project description along Circuit (C) 442.			
A brief description and justification of the refinements are provided on pages 2 and 3 of this MPR request.			
Attachments (check all that apply):			
<input checked="" type="checkbox"/> Refinement Request Screening Form (see Attachment A: Minor Project Refinement Request Screening Form)	<input type="checkbox"/> Photos	<input checked="" type="checkbox"/> Maps (See Attachment B: Comparison Map)	<input checked="" type="checkbox"/> Other (See Attachment C: Impacts Table)
Under Order 2 of the Decision Granting SDG&E Permit to Construct the Cleveland National Forest Power Line Replacement Projects (D.16-05-038), the CPUC may approve minor project refinements under certain circumstances. In accordance with Order 2 of the Decision, respond “yes” or “no” to the following questions (a) through (d).			
(a) Is the proposed refinement outside the geographic boundary of the EIR/EIS study area? The requested refinements are located within the geographic boundary of the Final EIR/EIS study area, which is depicted in Figure ES-1 Regional Overview Map in the Final EIR/EIS. However, some of the refinement areas occur outside of the baseline survey area. As a result, supplemental hydrology, biological, and cultural resources surveys were conducted in 2017. Additional details regarding the specific surveys conducted are provided in each applicable resource section in Attachment A: Minor Project Refinement Request Screening Form.		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

(b) Will the proposed refinement result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the EIR/EIS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
(c) Does the proposed refinement conflict with any mitigation measure or applicable law or policy?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
(d) Does the proposed refinement trigger an additional permit requirement?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Describe refinement being requested (attach drawings and photos as needed):		
<p>SDG&E requests the following refinements for C442:</p> <ul style="list-style-type: none"> • addition of 50 anchors, replacement of two anchors, removal of 24 anchors, and work on two existing anchors; • enlargement of nine approved stringing sites, reconfiguration of one approved stringing site into two separate smaller sites, reconfiguration of two approved stringing sites into one larger site, and the addition of seven stringing sites for a total of 20 stringing sites; • addition of 15 temporary access/entry/turnaround work areas to provide safe access, vehicle turnaround, and parking; • addition of 0.48 mile of construction-only access roads (vegetation clearing and minor grading may occur) and 7.37 miles of navigation access roads (no vegetation clearing or ground disturbance is required); • replacement of one tap pole; • switching of two wood-to-steel replacement poles to pole-top work only; • addition of 29 pole-top work only poles; • addition of one new stub pole; • shifting of 12 wood-to-steel replacement 12 kV poles and seven new steel poles by approximately 10 feet or more¹; • shifting of one wood-to-steel replacement 12 kV pole and three new steel poles by approximately 20 feet or more²; • addition of one wood-to steel replacement 12 kV pole and one new steel pole; and • addition of the Corte Madera Staging and Fly Yard. <p>Attachment B: Comparison Map depicts the baseline components of C442 in comparison to the final design of C442, as described in this MPR request. The activities associated with the construction and utilization of the refinement areas will occur in the same manner as described in the Final EIR/EIS for construction, operation, and maintenance of the Project. The temporary and permanent impacts associated with these refinements are summarized in Attachment C: Impacts Table.</p>		

¹ Because the shifts were so minor and due to the scale of Attachment B: Comparison Map, the shifts are only represented by a single point in Attachment B: Comparison Map.

² Because these poles were shifted a larger distance, they are represented by two points (a removal point for the existing pole, and either a wood-to-steel replacement or new steel point for the new pole location) in Attachment B: Comparison Map.

Provide need for refinement (attach drawings and photos as needed):

The minor refinements described in this MPR request are a result of the final distribution line design that was developed based on the preliminary alignment presented in the Final EIR/EIS and Data Request #10. SDG&E submitted responses to Data Request #10 in April 2015 once the preliminary design contained sufficient detail to address the requested information. However, SDG&E conducted constructability reviews in 2016 and 2017 and continued to refine the engineering design to better position stringing sites; update the required number of permanent anchors; make needed overhead adjustments (i.e., pole-top work); finalize pole installation, replacement, and removal work locations; and include specific input regarding construction methodology from SDG&E's contractors (Crux Subsurface, Inc. and PAR Electrical Contractors, Inc.). Additionally, SDG&E identified the need for more temporary workspace for pole and anchor work, access, construction material staging, and helicopter work. As a result, minor refinements to the preliminary alignment (as identified in the Final EIR/EIS) were deemed necessary.

Date refinement is expected to be implemented: 10-14-17

Resource Agency Coordination

Resource Agency	Name	Action Required	Date	Documentation (see attached if yes)	
Not Applicable (N/A)	N/A	N/A	N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No

ATTACHMENT A: MINOR PROJECT REFINEMENT REQUEST SCREENING FORM

MINOR PROJECT REFINEMENT REQUEST SCREENING FORM

RESOURCE EVALUATION

The requested refinements were evaluated to verify that they will not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the San Diego Gas & Electric Company (SDG&E) Cleveland National Forest Power Line Replacement Projects (Project). The following Final EIR/EIS Consistency Checklist answers the consistency questions for each resource category and includes a description and justification below each resource category, as necessary. The consistency questions were developed using the California Environmental Quality Act (CEQA) Checklist provided in the Final EIR/EIS. Refer to the Final EIR/EIS for details on the Project's impact evaluation.

Final EIR/EIS Consistency Checklist			
Would the proposed action(s) result in a new impact, or increase the severity of a previously analyzed impact to:	No Change	Potentially Significant Change	N/A
<p>Visual Resources (e.g., adversely affect scenic vistas, damage scenic resources within a state scenic highway, degrade the existing visual character of the site and its surroundings, create sources of light or glare, or result in an inconsistency with applicable scenic integrity objectives)?</p> <p><i>Final EIR/EIS evaluation³: Less than significant with mitigation (Class II)/Adverse</i></p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Summary of Proposed Minor Project Refinement Impacts on Visual Resources:</p> <p>The requested refinements could potentially result in up to approximately 6.3 acres of vegetation clearing and/or minor grading depending on the site conditions. However, the use of the refinements will be consistent with the analysis in the Final EIR/EIS, and any temporary impacts to the visual character of the area will be reduced with implementation of Applicant-Proposed Measure (APM) VIS-01 and APM VIS-02. In addition, the refinements (including new and shifted poles) will not affect additional sensitive viewers or significantly impact existing views from Interstate (I-) 8, because the refinements involve minor additions and shifts to workspaces and Project components that occur within or adjacent to the existing alignment and approved Project components. Although the Corte Madera Staging and Fly Yard will be located farther from the approved alignment than the other refinements, it will not affect additional sensitive viewers and will not impact existing views from I-8, which is located more than 1,400 feet north and behind vegetation and topography. Therefore, the refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified impact to visual resources as identified in the Final EIR/EIS.</p>			

³ The Final EIR/EIS evaluations of impact significance are provided for each resource; this table notes the most significant determination within each resource section identified in the Final EIR/EIS.

Final EIR/EIS Consistency Checklist

Would the proposed action(s) result in a new impact, or increase the severity of a previously analyzed impact to:	No Change	Potentially Significant Change	N/A
<p>Air Quality (e.g. produce additional emissions, conflict with applicable local air quality plans, or expose sensitive receptors to additional pollutants)?</p> <p><i>Final EIR/EIS evaluation: Significant and unavoidable (Class I)/Adverse and unavoidable</i></p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Summary of Proposed Minor Project Refinement Impacts on Air Quality:

Use of the requested refinement areas is integrated into the uses and activities occurring along Circuit (C) 442. Therefore, activities associated with construction and utilization of the refinement areas (e.g., the type of equipment used and the number of truck trips) are consistent with those discussed in the Final EIR/EIS and will not increase air emissions beyond what was analyzed. Based on the specific site conditions, 6.3 acres of minor grading and vegetation removal may be required to use the refinement areas. This may result in a minor increase in air quality impacts in localized areas. However, these activities will be short term and temporary in nature. As a result, use of the refinement areas will not expose sensitive receptors located adjacent to C442 and the refinement areas to substantial pollutant concentrations, which is consistent with the analysis in the Final EIR/EIS. The Corte Madera Staging and Fly Yard is not located within 1,000 feet of any sensitive receptors; thus, air quality impacts will be less than significant. The pole-top work (i.e., service drop work) on the northern portion of the alignment will occur slightly closer to the sensitive receptors along C442 than previously approved work. However, with the implementation of APM AIR-01 through APM AIR-05, the requested refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified impact to air quality as identified in the Final EIR/EIS.

Final EIR/EIS Consistency Checklist

Would the proposed action(s) result in a new impact, or increase the severity of a previously analyzed impact to:	No Change	Potentially Significant Change	N/A
<p>Biological Resources (e.g., result in temporary or permanent loss of native vegetation, preserve areas, native wildlife and/or their habitats; cause an adverse effect to jurisdictional waters or sensitive or special-status species; result in the introduction of invasive, non-native, or noxious plant species; conflict with local, regional, or state habitat conservation plan; or interfere with the movement of any resident or migratory wildlife)?</p> <p><i>Final EIR/EIS evaluation: Less than significant with mitigation (Class II)/Adverse</i></p>	☒	☐	☐
<p>Summary of Proposed Minor Project Refinement Impacts on Biological Resources:</p> <p>The majority of the requested refinement areas were previously surveyed for sensitive vegetation communities and special-status plant and wildlife species during initial surveys that were conducted for the Project. In addition, all requested refinement areas were surveyed in 2017 during the Pre-activity Study Report (PSR) process in accordance with SDG&E’s Subregional Natural Community Conservation Plan. Other supplemental surveys were conducted in 2017 along the C442 alignment, including a bat roost assessment and focused surveys for Townsend’s big-eared bat (<i>Corynorhinus townsendii</i>) and other potential bat roosts, as well as focused surveys for rare plants.</p> <p>The requested refinements will result in an increase in temporary and permanent impacts (including vegetation communities and developed/disturbed areas) of approximately 6.3 acres and 0.01 acre, respectively. This includes temporary and permanent impacts to the following vegetation communities:</p> <ul style="list-style-type: none"> • approximately 0.07 acre of Diegan coastal sage scrub, • approximately 0.03 acre of freshwater seep/open water, • approximately 0.38 acre of mixed oak woodland, • approximately 0.61 acre of montane forest, • approximately 4.04 acres of non-native grassland, and • approximately 0.77 acre of southern mixed chaparral. <p>Special-status plants—including golden-rayed pentachaeta (<i>Pentachaeta aurea</i> ssp. <i>aurea</i>), stiffbranch bird’s beak (<i>Cordylanthus rigidus</i>), and long-spined spineflower (<i>Chorizanthe polygonoides</i> var. <i>longispina</i>)—are located within or adjacent to the requested refinement areas. Impacts to the plants will be avoided to the maximum extent possible by installing fencing or flagging. Approximately one acre of temporary impacts and less than 0.01 acre of permanent impacts are located within United States (U.S.) Fish and Wildlife Service-designated critical habitat for arroyo toad (<i>Anaxyrus californicus</i>) and USFS occupied habitat for arroyo toad. However, all mitigation measures (MMs) in the Project’s Mitigation Monitoring, Compliance, and Reporting Program—as well as other permit and plan conditions—will be implemented as applicable to minimize or mitigate for these additional temporary and permanent impacts. Therefore, the requested refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified impact to biological resources.</p>			

Final EIR/EIS Consistency Checklist			
Would the proposed action(s) result in a new impact, or increase the severity of a previously analyzed impact to:	No Change	Potentially Significant Change	N/A
<p>Cultural and Paleontological Resources (e.g., cause an adverse change to Traditional Cultural Properties or historical, archeological, or paleontological resources; or disturb any human remains)?</p> <p><i>Final EIR/EIS evaluation: Less than significant with mitigation (Class II)/Adverse</i></p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Summary of Proposed Minor Project Refinement Impacts on Cultural and Paleontological Resources:</p> <p>Some of the requested refinement areas were previously surveyed for cultural resources during pre-construction and cultural resources inventory work, as described in the <i>Inventory, Evaluation and Treatment of Cultural Resources in the Cleveland National Forest Transmission and Distribution Line Increased Fire Safety Project in support of the Proponent's Environmental Assessment</i>. Supplemental intensive pedestrian surveys were conducted by ASM Affiliates, Inc. in 2017 for the refinement areas that were identified as being outside the previous survey coverage. Three new cultural resource sites were recorded and two previously recorded cultural resource sites are present in the refinement areas. In accordance with the Appendix A update for the Historic Properties Management Plan, significant impacts to these sites will be avoided through implementing the recommended avoidance measures, such as environmentally sensitive area fencing and archaeological and Native American monitoring. In addition, there are a number of historic era cabins that are connected to C442 and will require pole top work (i.e., service drop work). In accordance with MM CUL-2, archaeological monitoring will occur during this work to minimize modifications to the cabin exteriors. Further details on these cultural resources and the recommended avoidance measures are included in a supplemental confidential cultural resources letter report, which will be submitted to the USFS in support of this MPR request. All of the refinements are located within the Project's area of potential effect, as defined in the Project's Programmatic Agreement. Therefore, the refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified potential impact to cultural resources.</p> <p>The requested refinements are underlain by the same geological formations along C442 as analyzed in the Final EIR/EIS, which includes geologic rock units/formations assigned a rank of Potential Fossil Yield Classification (PFYC) Class 1 (very low sensitivity), Class 2 (low sensitivity), and Class 3 (moderate or unknown sensitivity). Although there are a number of refinements underlain by rock units with a PFYC Class 3 ranking, the direct-bury poles within that class are already included in the Paleontological Monitoring & Treatment Plan, and a paleontological monitor will be present for excavation activities in accordance with APM CUL-08. In addition, the disturbance from minor vegetation clearing and grading associated with the other types of refinements will not be deep enough to affect any paleontological resources. Therefore, the refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified potential impact to paleontological resources.</p>			
<p>Greenhouse Gases (e.g., result in a net increase of greenhouse gas emissions, or conflict with an applicable plan, policy, or regulation that reduces greenhouse gas emissions)?</p> <p><i>Final EIR/EIS evaluation: Less than significant (Class III)/Not adverse</i></p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Summary of Proposed Minor Project Refinement Impacts on Greenhouses Gases:</p> <p>Activities associated with construction and utilization of the requested refinement areas are consistent with the greenhouse gas (GHG) analysis in the Final EIR/EIS. The amount of heavy equipment utilized or the number of trips needed to complete construction will not change from what was contemplated in the Final EIR/EIS. Further, the approximately 6.3 acres of minor grading and vegetation clearing associated with the requested refinements will not trigger an exceedance of the GHG threshold of 10,000 metric tons of carbon dioxide equivalent per year</p>			

Final EIR/EIS Consistency Checklist			
Would the proposed action(s) result in a new impact, or increase the severity of a previously analyzed impact to:	No Change	Potentially Significant Change	N/A
or the County of San Diego Climate Action Plan criteria for annual grading and land clearing. Therefore, the requested refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified impact to GHG emissions.			
Public Health and Safety (e.g., result in a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials; emit hazardous waste within one-quarter mile of a school; be located on a hazardous materials site; result in a safety hazard for people residing or working in the Project area; interfere with an adopted emergency plan; or create safety hazards due to structural failure)? <i>Final EIR/EIS evaluation: Less than significant with mitigation (Class II)/Adverse</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Summary of Proposed Minor Project Refinement Impacts on Public Health and Safety: The requested refinements are consistent with the Public Health and Safety analysis in the Final EIR/EIS. There are no known hazardous materials sites located in the refinement areas according to the <i>Report on ASTM Phase I Environmental Site Assessment Cleveland National Forest Electric Safety and Reliability Project San Diego County, California</i> . Additionally, there are no airports within five miles of the Corte Madera Staging and Fly Yard; therefore, temporary helicopter operations are not expected to interfere with air traffic patterns and are consistent with the analysis in the Final EIR/EIS. Thus, the requested refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified impact to public health and safety.			
Fire and Fuels Management (e.g., increase the probability of a wildfire, reduce the effectiveness of firefighting, or introduce non-native plants that would contribute to ignition potential)? <i>Final EIR/EIS evaluation: Less than significant with mitigation (Class II)/Adverse</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Summary of Proposed Minor Project Refinement Impacts on Fire and Fuels Management: The requested refinements will be located within High and Very High Fire Hazard Severity Zones, and are consistent with the Fire and Fuels Management analysis in the Final EIR/EIS. The potential risk of wildfire ignition and spread associated with the refinement areas will be managed in compliance with the Project's Construction Fire Prevention/Protection Plan. Therefore, the requested refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified impact to fire and fuels management.			
Hydrology and Water Quality (e.g., result in increased levels of turbidity, introduce contaminants, deplete groundwater supplies, or degrade water quality)? <i>Final EIR/EIS evaluation: Less than significant with mitigation (Class II)/Adverse</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Summary of Proposed Minor Project Refinement Impacts on Hydrology and Water Quality: C442 was surveyed for the presence of waters of the state and/or the United States (jurisdictional wetlands or non-wetland waters) in support of the Final EIR/EIS. In addition, supplemental water resource surveys of the refinement areas were conducted in 2017 during the PSR process. Wetland and non-wetland waters under the jurisdiction of the California Department of Fish and Wildlife, Regional Water Quality Control Board, and the United States Army Corps of Engineers are located near Pole P177015. Impacts to jurisdictional waters are not			

Final EIR/EIS Consistency Checklist			
Would the proposed action(s) result in a new impact, or increase the severity of a previously analyzed impact to:	No Change	Potentially Significant Change	N/A
<p>anticipated from the pole-top work associated with Pole P177015 or from the use of the construction-only access road to access the site. To minimize off-site sedimentation and potential impacts to surface water, the refinement areas are being incorporated into the Storm Water Pollution Prevention Plan for C442, which will be submitted to the State Water Resources Control Board's Storm Water Multiple Applications and Report Tracking System. In conclusion, the requested refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact to hydrology and water quality.</p>			
<p>Land Use (e.g., disturb land uses at or near the Project components, divide an established community, or conflict with a land use plan, policy, or regulation of an agency with jurisdiction over the Project)?</p> <p><i>Final EIR/EIS evaluation: Less than significant with mitigation (Class II)/Adverse ⁴</i></p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Summary of Proposed Minor Project Refinement Impacts on Land Use:</p> <p>In accordance with the Construction Notification Plan and MM LU-1, property owners within 1,000 feet of C442 will be notified of construction activities in association with Notice to Proceed request #8, and the property owners within 1,000 feet of the requested refinements will be included in that notification process. The requested refinements will not introduce a new land use, establish a permanent barrier or obstacle between uses, or create a physical division or separation of use. In addition, the requested refinements will not conflict with the applicable land use plans, policies, or regulations of an agency with jurisdiction over the Project, as they are located in the same County of San Diego land use and zoning designations and Cleveland National Forest Land Management Plan land use zones that were analyzed in the Final EIR/EIS. Therefore, the requested refinements will not result in new significant impacts or a substantial increase in the severity of a previously identified significant impact to land use.</p>			
<p>Noise (e.g., disturb sensitive receptors and violate local rules, standards, and/or ordinances; or cause ground borne vibration)?</p> <p><i>Final EIR/EIS evaluation: Less than significant with mitigation (Class II)/Adverse</i></p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Summary of Proposed Minor Project Refinement Impacts on Noise:</p> <p>Additional construction-related noise will be generated within the refinement areas due to anchor and pole-top work, vegetation removal, minor grading, stringing conductor, and large equipment operation. However, noise impacts from construction activities associated with the refinement areas will be the same as those analyzed in the Final EIR/EIS. The requested refinements are located adjacent to sensitive receptors, and the pole-top work (i.e., service drop work) on the northern portion of the alignment will occur slightly closer to these sensitive receptors than previously approved work, which will result in temporary increases in noise levels. However, the work will be short term and temporary at any given location. In addition, the Corte Madera Staging and Fly Yard is not located within 1,000 feet of any sensitive receptors; therefore, noise impacts will be less than significant. With the implementation of noise-related MMs and APMs, the requested refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact to noise.</p>			

⁴ SDG&E's proposed work on C157 is considered adverse and unavoidable under the National Environmental Policy Act and significant and unmitigable under CEQA (Class I).

Final EIR/EIS Consistency Checklist			
Would the proposed action(s) result in a new impact, or increase the severity of a previously analyzed impact to:	No Change	Potentially Significant Change	N/A
<p>Public Services and Utilities (e.g., result in construction of new, or expansion of existing, facilities for fire protection, municipal water supplies, telecommunications, and solid waste; or disrupt electric service)?</p> <p><i>Final EIR/EIS evaluation: Less than significant with mitigation (Class II)/Adverse</i></p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Summary of Proposed Minor Project Refinement Impacts on Public Services and Utilities:</p> <p>The requested refinements are consistent with the public services and utilities analysis in the Final EIR/EIS, and will not require new or expanded facilities or services. In addition, any applicable refinements will be included in ongoing coordination with AT&T in accordance with MM PSU-1. Therefore, the requested refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact to public services and utilities.</p>			
<p>Recreation (e.g., reduce access and visitation to recreation areas, preclude recreational activities, or result in increased, unauthorized access to specially designated or restricted areas)?</p> <p><i>Final EIR/EIS evaluation: Less than significant with mitigation (Class II)/Adverse</i></p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Summary of Proposed Minor Project Refinement Impacts on Recreation:</p> <p>The requested refinement areas will be located adjacent to or within close proximity to the approved C442 alignment; thus, the refinement areas will also be near the Noble Canyon Trailhead, Bear Valley Off-Highway Vehicle Trailhead, and Pine Creek Road Pathway and Phantom Trails. Although construction vehicles will use Pine Valley Road, Pine Creek Road, and other smaller roads to access the refinement areas and the alignment, direct access and parking at the trailheads will be maintained during construction. In addition, use of the Corte Madera Staging and Fly Yard will not affect access to these recreational areas. Therefore, use of the refinement areas will not substantially reduce or preclude access or visitation to these recreational areas or increase the possibility of unauthorized access to specially designated or restricted areas, consistent with the Final EIR/EIS. In conclusion, the requested refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact to recreation.</p>			

Final EIR/EIS Consistency Checklist			
Would the proposed action(s) result in a new impact, or increase the severity of a previously analyzed impact to:	No Change	Potentially Significant Change	N/A
<p>Transportation and Traffic (e.g., conflict with an applicable congestion management program or a plan, ordinance, or policy associated with the circulation system or alternative transportation; increase hazards due to a design feature; or result in inadequate emergency access)?</p> <p><i>Final EIR/EIS evaluation: Less than significant (Class III)/Not adverse</i></p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Summary of Proposed Minor Project Refinement Impacts on Transportation and Traffic:</p> <p>The requested refinements will not require additional or different types of construction vehicles and equipment than those discussed in the Final EIR/EIS for construction of the approved Project. In addition, the total number of truck trips associated with construction of the Project will not change, and the refinements will affect the same roadways analyzed in the Final EIR/EIS, such as I-8, Pine Creek Road, Corte Madera Road, Pine Valley Road, and Los Pinos Road, as well as several smaller public and private roads along the alignment. Because the use of the refinement areas will be integrated into the uses and activities already proposed to occur along C442, the existing levels of service (LOS)⁵ will not be adversely impacted due to the implementation of APM TRANS-01 through APM TRANS-05. Therefore, the requested refinements will not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact to transportation and traffic.</p>			

⁵ I-8, Pine Creek Road, Corte Madera Road, and Pine Valley Road have a LOS of A through C, and a LOS does not exist for the smaller public and private roads.

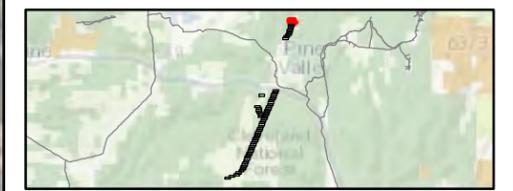
ATTACHMENT B: COMPARISON MAP

**Attachment B:
Comparison Map
C442 Map 1 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Anchor
-  Wood-to-Steel Replacement
-  U.S. Forest Service



Final Design

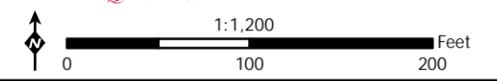
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  New Anchor
-  Construction Only Access
-  Navigation Access Road

MPR

-  New Anchor
-  Stringing Site
-  Construction Only Access

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



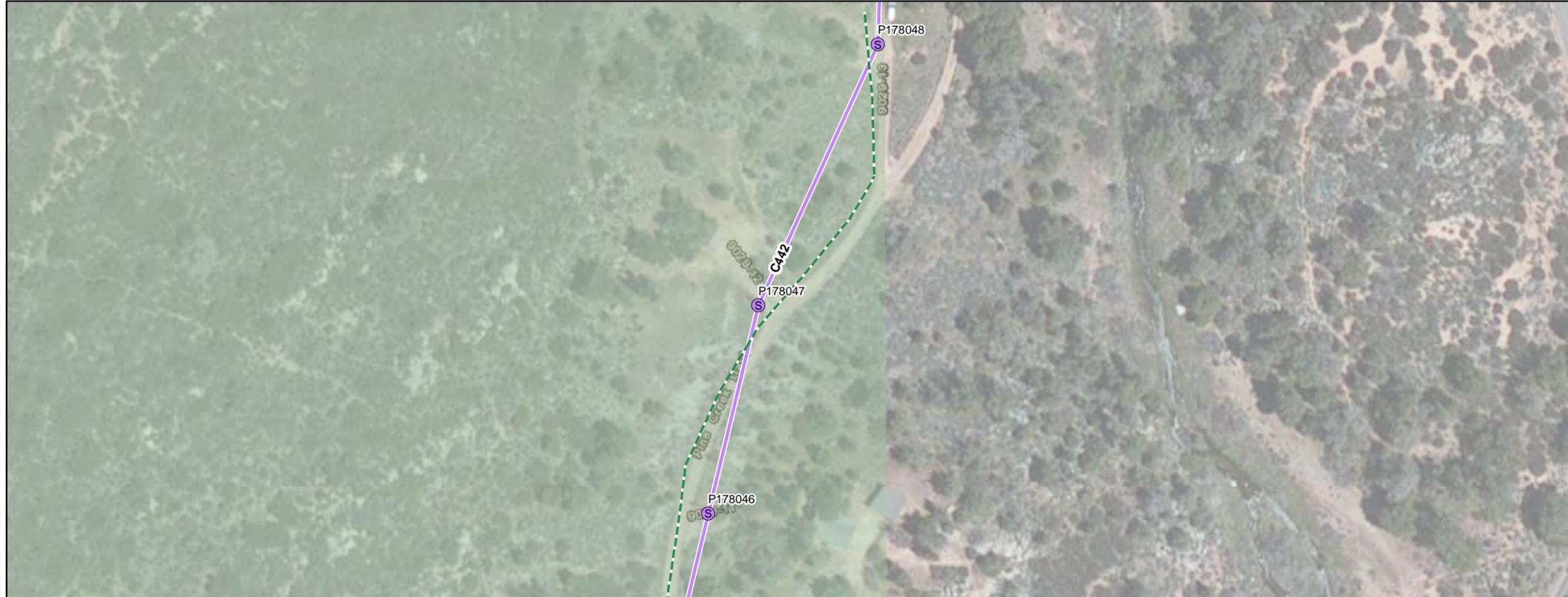
Z:\Projects\SDGE_CNF_ESRP\MXDs\MPRs\C442\C442_MPR_Compare.mxd

**Attachment B:
Comparison Map
C442 Map 2 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Navigation Access Road
-  U.S. Forest Service



Final Design

NTP #8

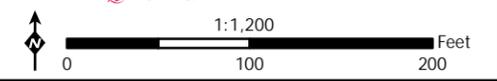
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access
-  Navigation Access Road

MPR

-  Pole Top Work Only
-  New Anchor
-  Remove from Service Anchor
-  Replace Anchor
-  Stringing Site
-  Navigation Access Road



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

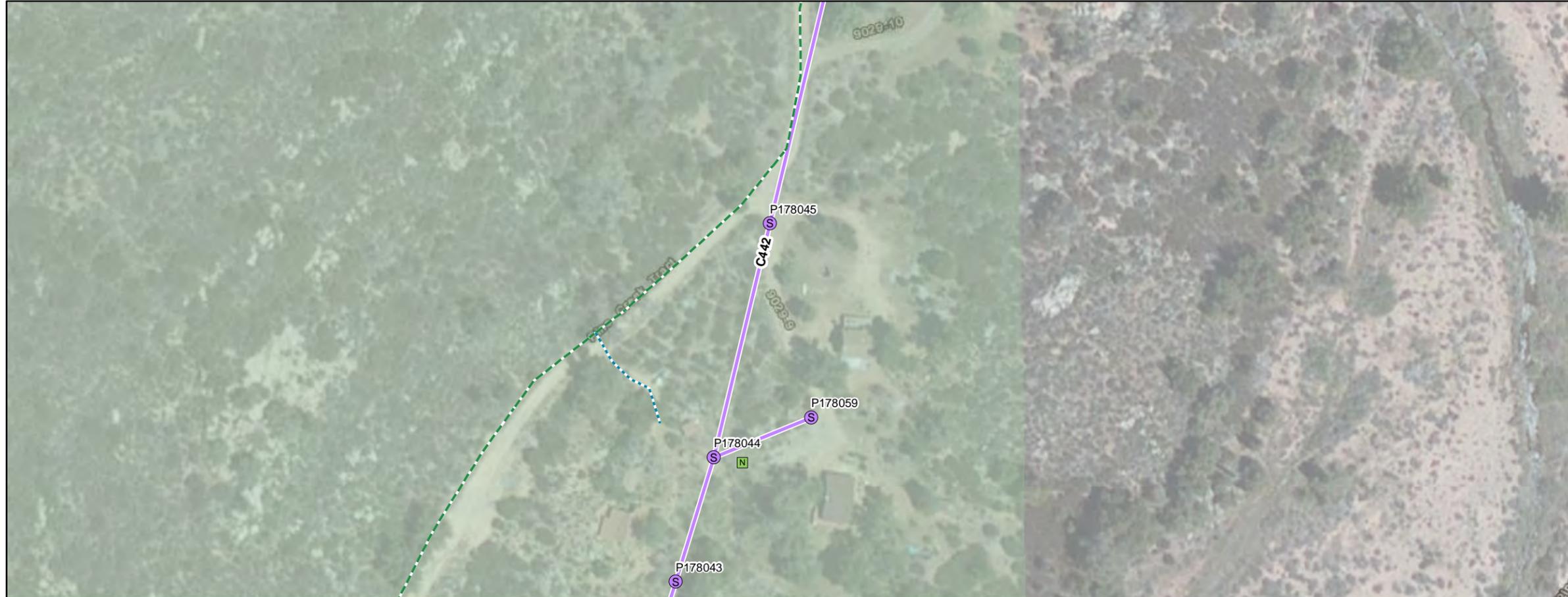
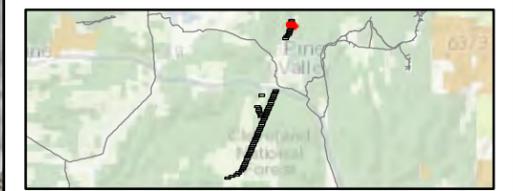


**Attachment B:
Comparison Map
C442 Map 3 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Anchor
-  Wood-to-Steel Replacement
-  Construction Only Access
-  Navigation Access Road
-  U.S. Forest Service



Final Design

NTP #8

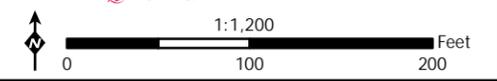
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access
-  Navigation Access Road

MPR

-  Pole Top Work Only
-  Wood-to-Steel Replacement 12 kV Only
-  Remove from Service Anchor
-  Temporary Access/Entry/Turnaround
-  Navigation Access Road



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

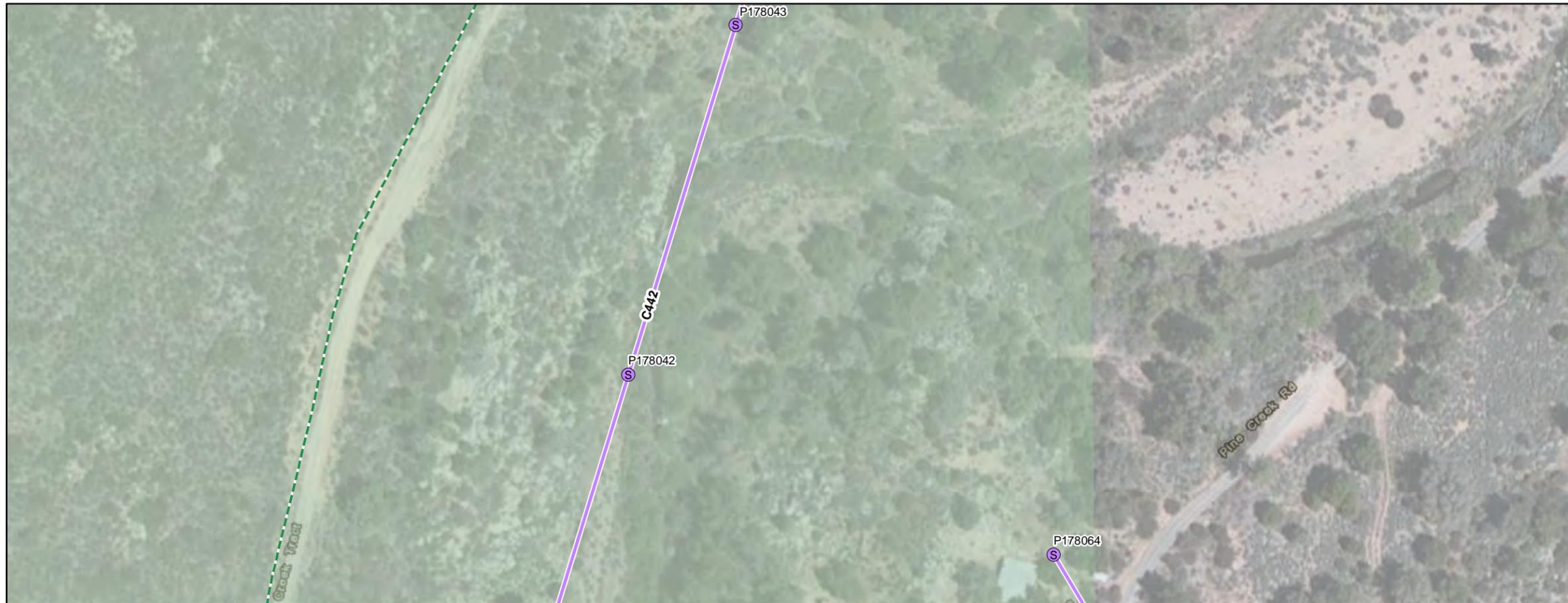
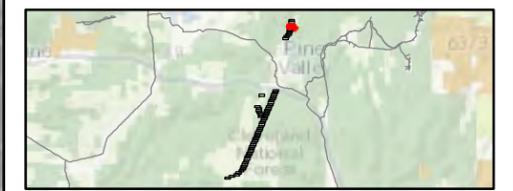


**Attachment B:
Comparison Map
C442 Map 4 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Anchor
-  Wood-to-Steel Replacement
-  Navigation Access Road
-  U.S. Forest Service



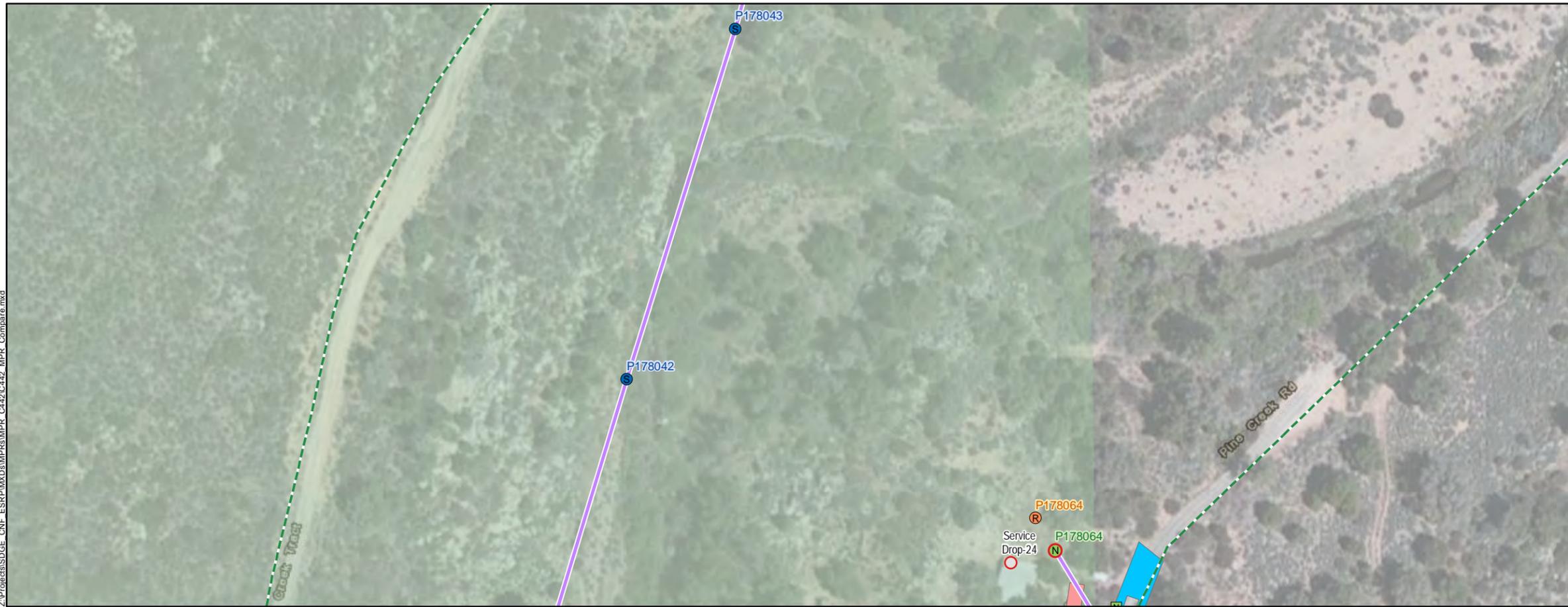
Final Design

NTP #8

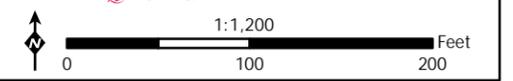
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  New Anchor
-  Navigation Access Road

MPR

-  New Steel Pole
-  Pole Top Work Only
-  Removal
-  Stringing Site
-  Temporary Access/Entry/Turnaround



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

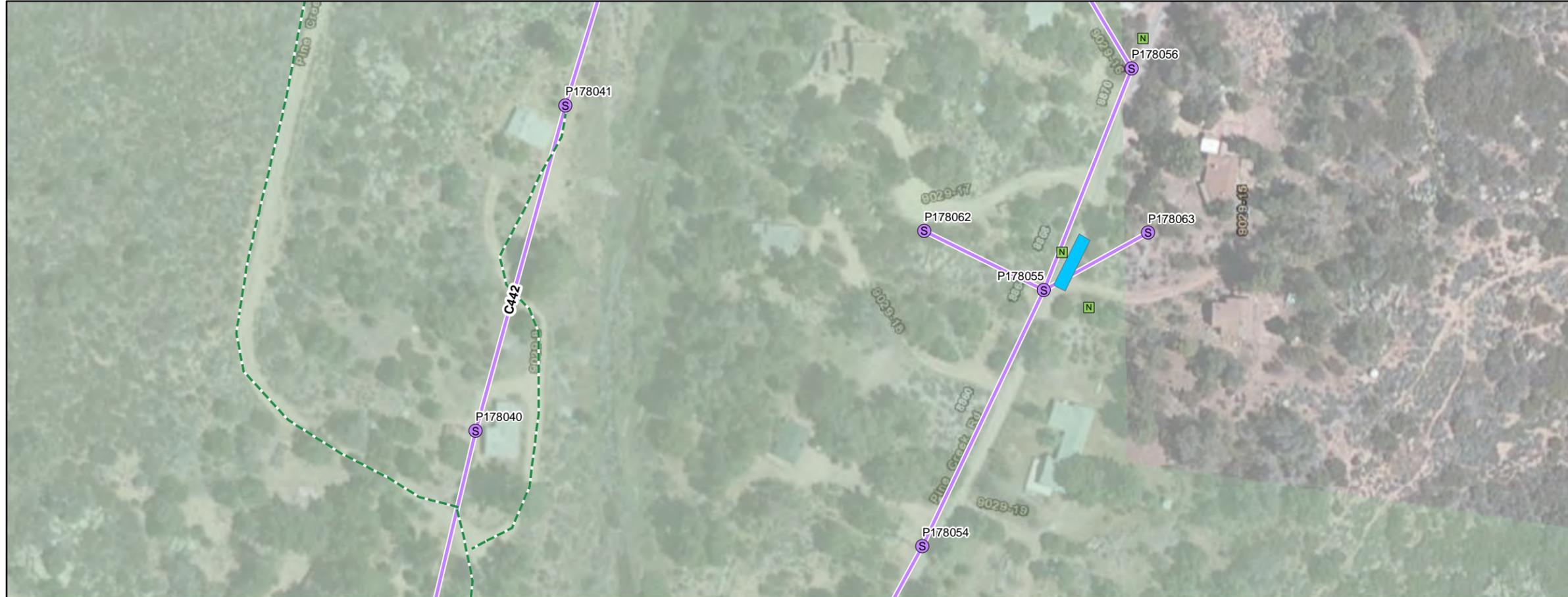
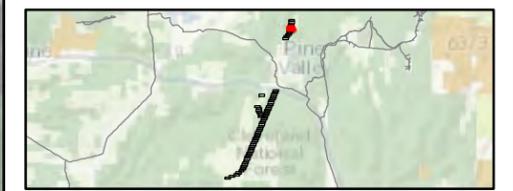


**Attachment B:
Comparison Map
C442 Map 5 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Anchor
-  Stringing Site
-  Wood-to-Steel Replacement
-  Navigation Access Road
-  U.S. Forest Service



Final Design

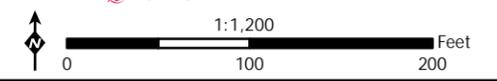
NTP #8

-  Wood-to-Steel Replacement
-  Removal
-  Wood-to-Steel Replacement 12kV Only
-  New Anchor
-  Navigation Access Road

MPR

-  New Steel Pole
-  Pole Top Work Only
-  Wood-to-Steel Replacement 12 kV Only
-  New Anchor
-  Remove from Service Anchor
-  Stringing Site
-  Temporary Access/Entry/Turnaround
-  Construction Only Access
-  Navigation Access Road

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



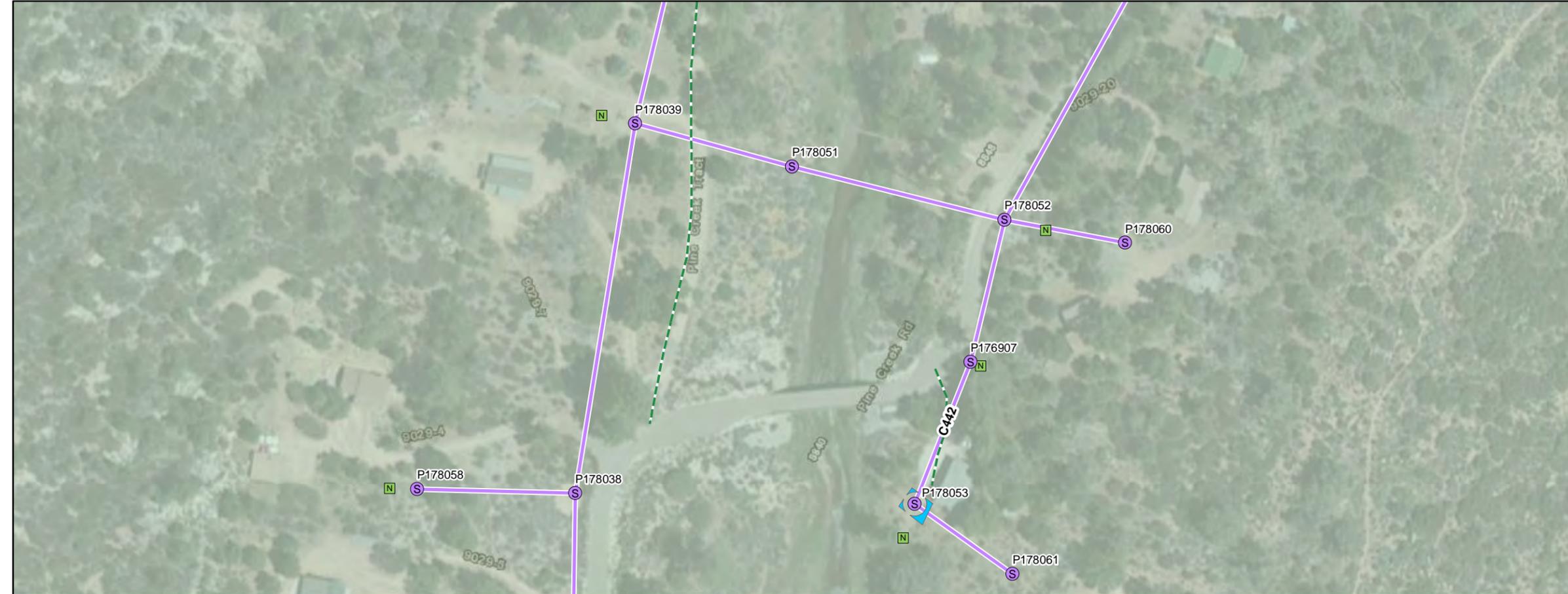
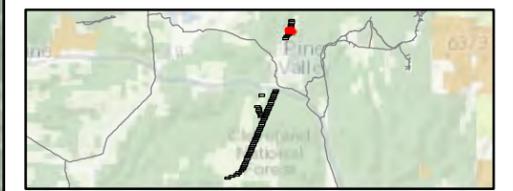
Z:\Projects\SDGE_CNF_ESRP\MXDs\MPRs\MPR_C442\C442_MPR_Compare.mxd

**Attachment B:
Comparison Map
C442 Map 6 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

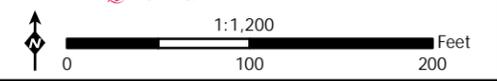
-  Wood-to-Steel Replacement Pole
-  New Anchor
-  Stringing Site
-  Wood-to-Steel Replacement
-  Navigation Access Road
-  U.S. Forest Service



Final Design

- NTP #8**
-  Existing Overhead
 -  Wood-to-Steel Replacement
 -  Wood-to-Steel Replacement 12kV Only
 -  Remove from Service Anchor
 -  New Anchor
 -  Construction Only Access
 -  Navigation Access Road
- MPR**
-  New Steel Pole
 -  Pole Top Work Only
 -  Removal
 -  New Anchor
 -  Remove from Service Anchor
 -  Stringing Site
 -  Construction Only Access
 -  Navigation Access Road

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



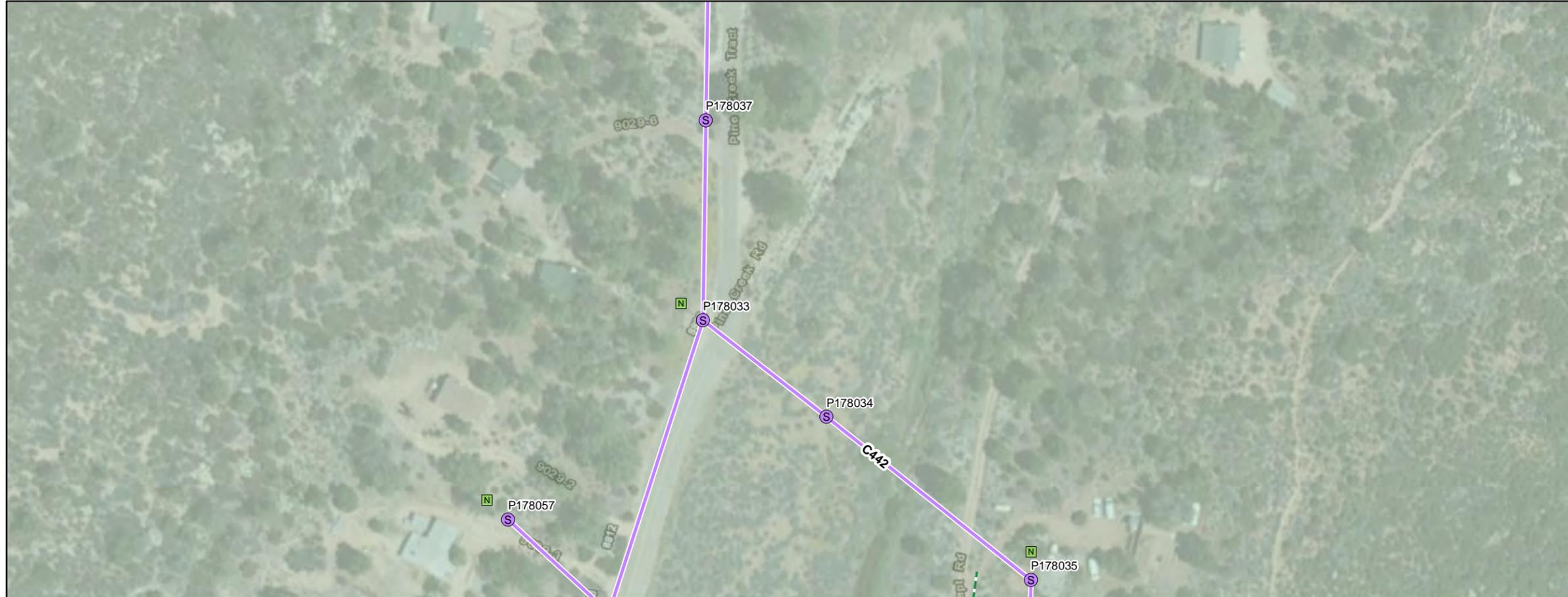
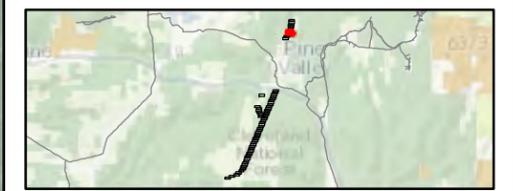
Z:\Projects\SDGE_CNF_ESR\MPR\SDGE\MPR_C442\C442_MPR_Compare.mxd

**Attachment B:
Comparison Map
C442 Map 7 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Anchor
-  Wood-to-Steel Replacement
-  Navigation Access Road
-  U.S. Forest Service



Final Design

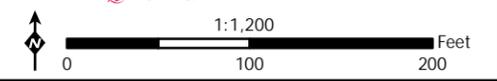
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Remove from Service Anchor
-  New Anchor
-  Navigation Access Road

MPR

-  Pole Top Work Only
-  Removal
-  New Anchor
-  Remove from Service Anchor
-  Temporary Access/Entry/Turnaround
-  Construction Only Access
-  Navigation Access Road

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



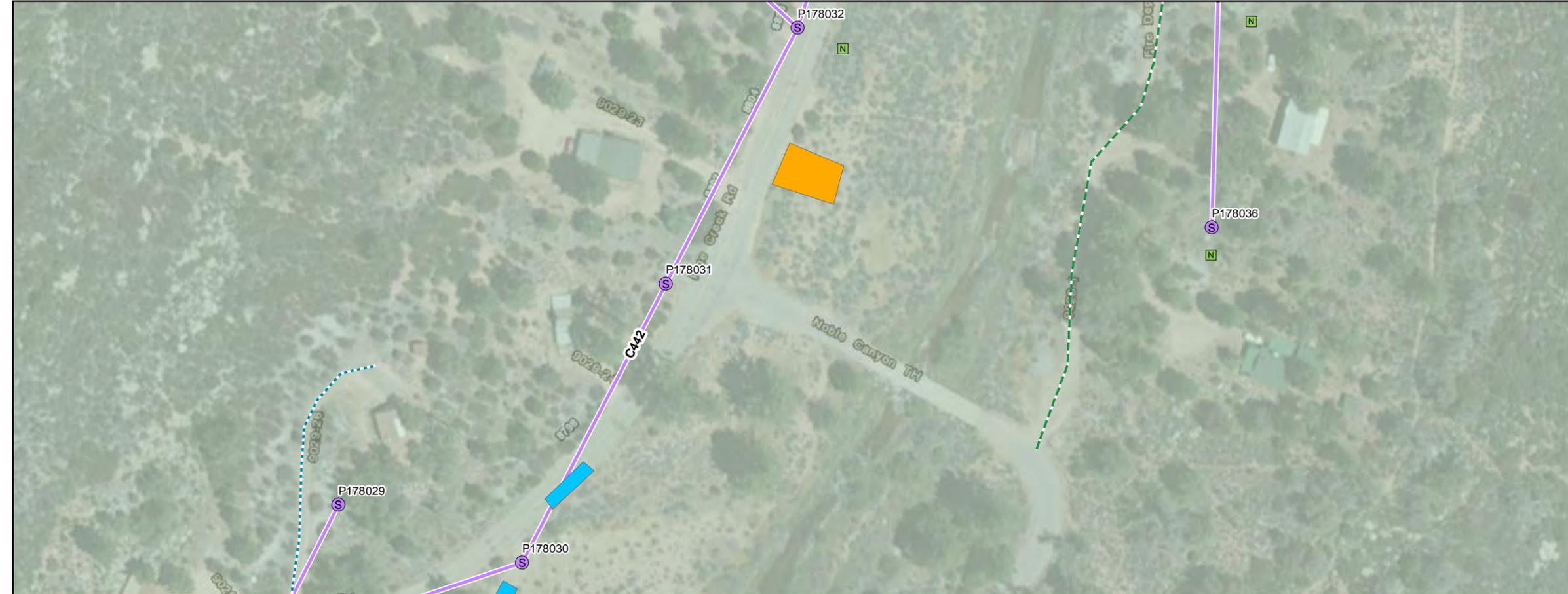
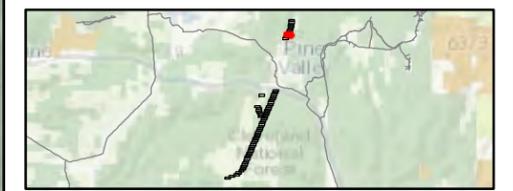
Z:\Projects\SDGE_CNF_ESR\PMX\MPRs\MPR_C442\C442_MPR_Compare.mxd

**Attachment B:
Comparison Map
C442 Map 8 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Anchor
-  Staging Area
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access
-  Navigation Access Road
-  U.S. Forest Service



Final Design

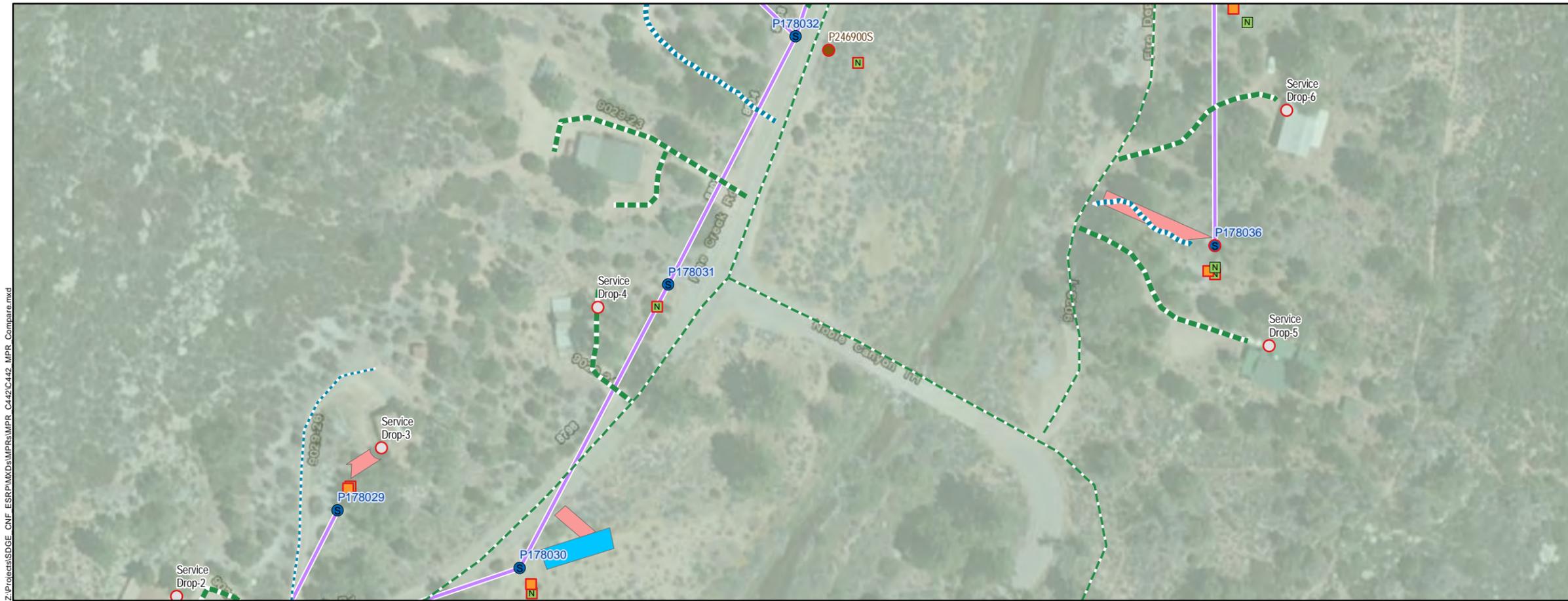
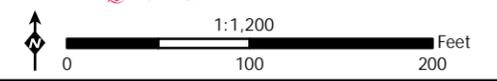
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  New Anchor
-  Construction Only Access
-  Navigation Access Road

MPR

-  Pole Top Work Only
-  Stub
-  Wood-to-Steel Replacement 12 kV Only
-  New Anchor
-  Remove from Service Anchor
-  Stringing Site
-  Temporary Access/Entry/Turnaround
-  Construction Only Access
-  Navigation Access Road

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



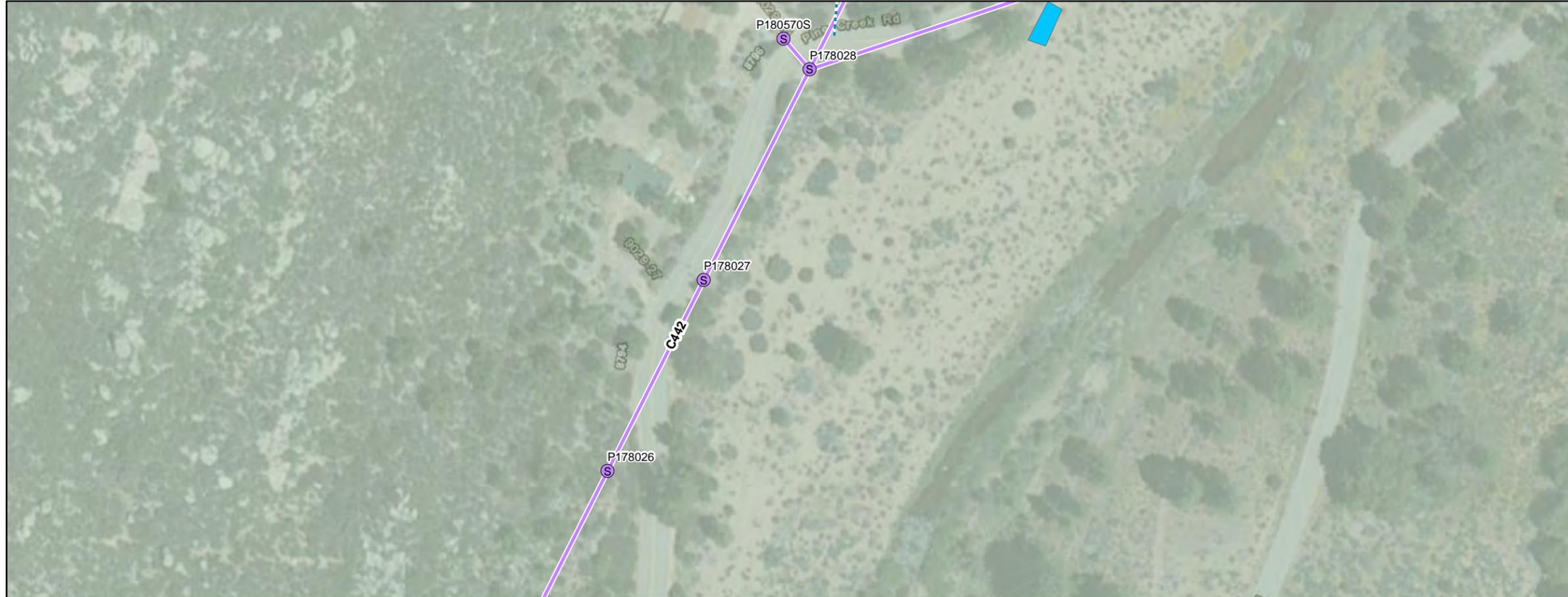
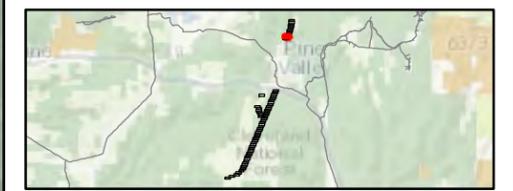
Z:\Projects\SDGE_CNF_ESR\PMX\MPRs\MPR_C442\C442_MPR_Compare.mxd

**Attachment B:
Comparison Map
C442 Map 9 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



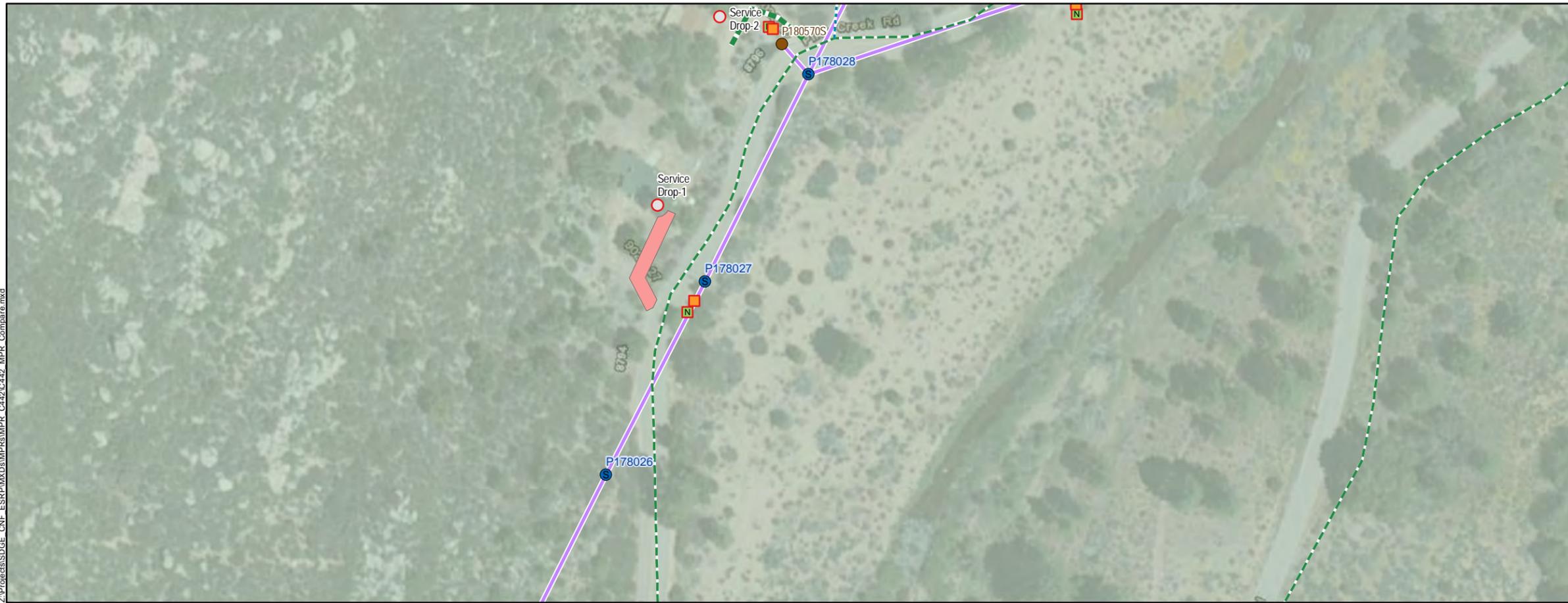
Final Design

NTP #8

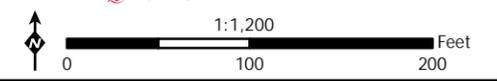
-  Wood-to-Steel Replacement
-  Stub
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access
-  Navigation Access Road

MPR

-  Pole Top Work Only
-  New Anchor
-  Remove from Service Anchor
-  Temporary Access/Entry/Turnaround
-  Navigation Access Road



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

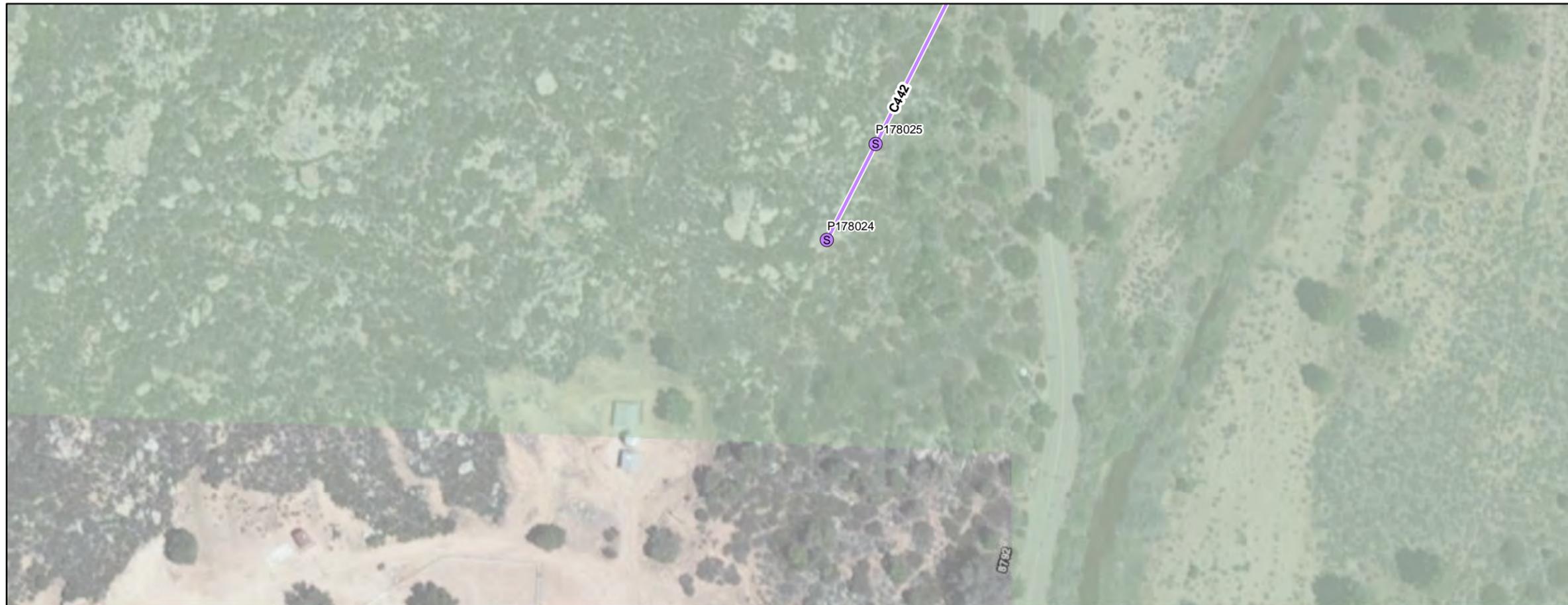


**Attachment B:
Comparison Map
C442 Map 10 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

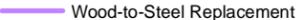
2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  U.S. Forest Service



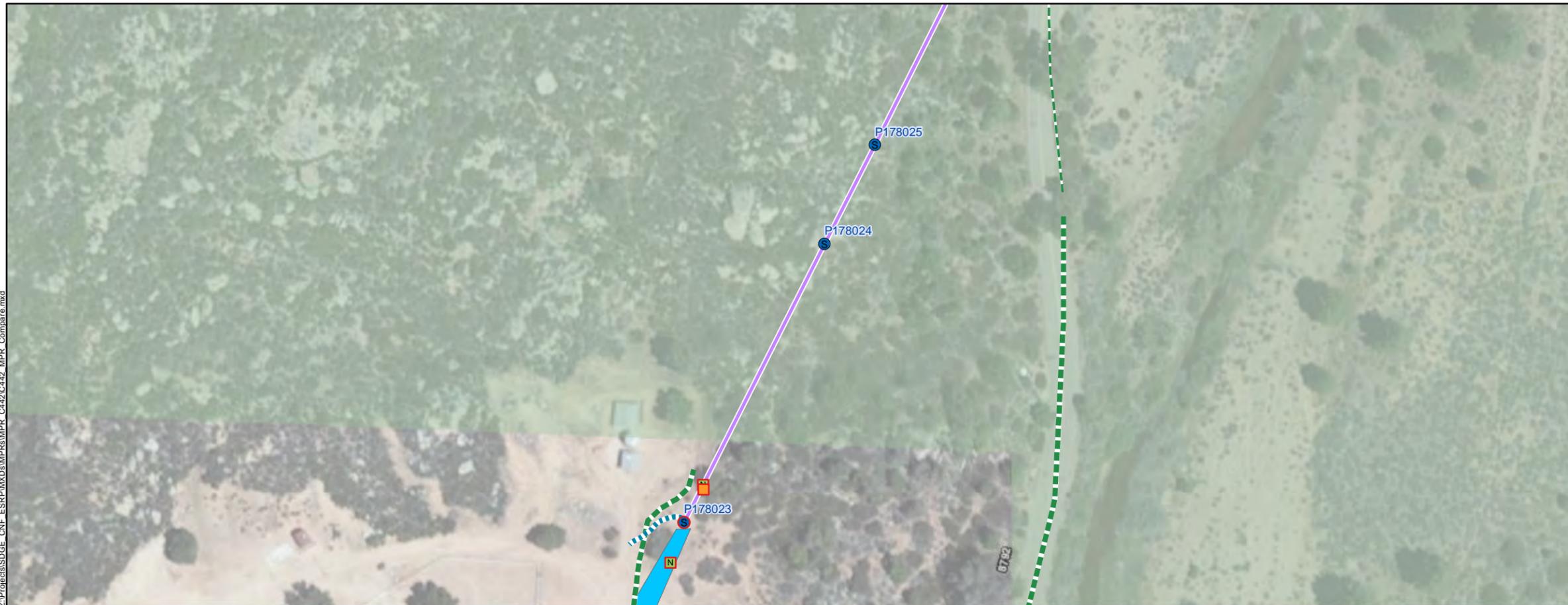
Final Design

NTP #8

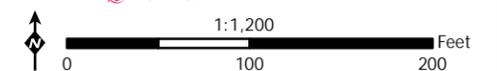
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Navigation Access Road

MPR

-  Wood-to-Steel Replacement 12 kV Only
-  New Anchor
-  Remove from Service Anchor
-  Stringing Site
-  Construction Only Access
-  Navigation Access Road



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

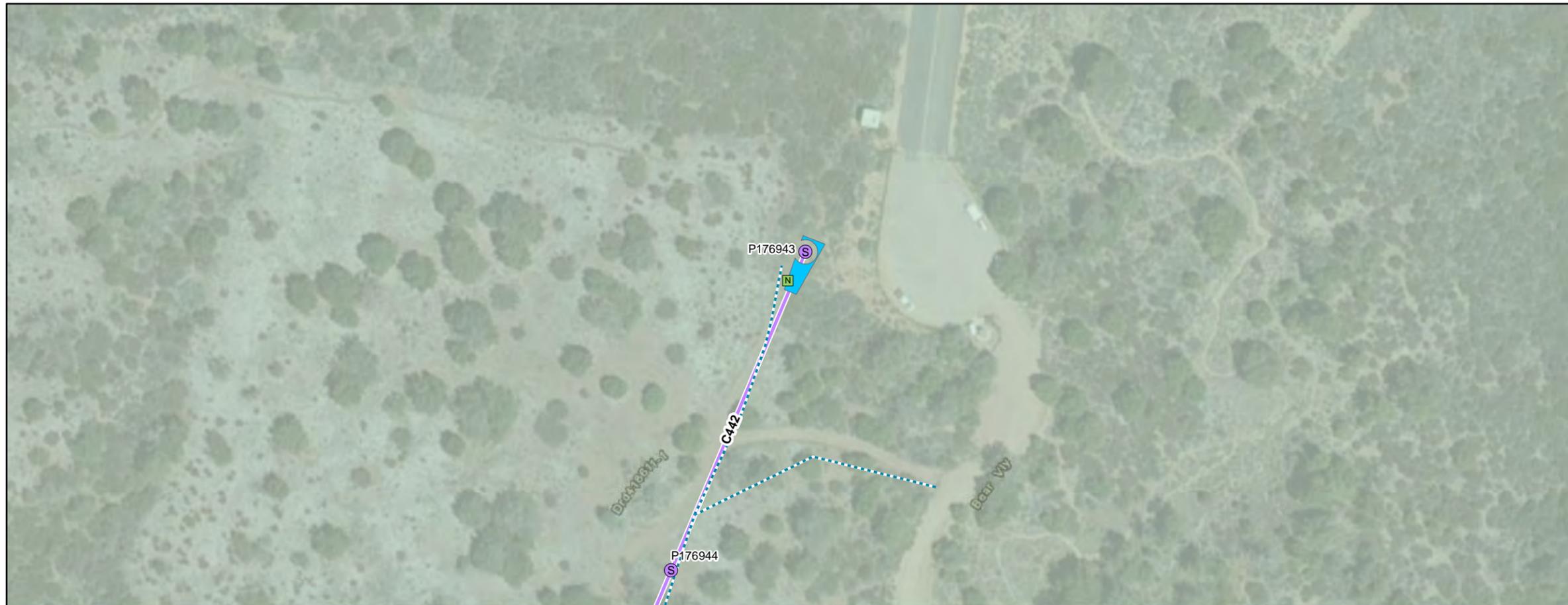


**Attachment B:
Comparison Map
C442 Map 11 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Anchor
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



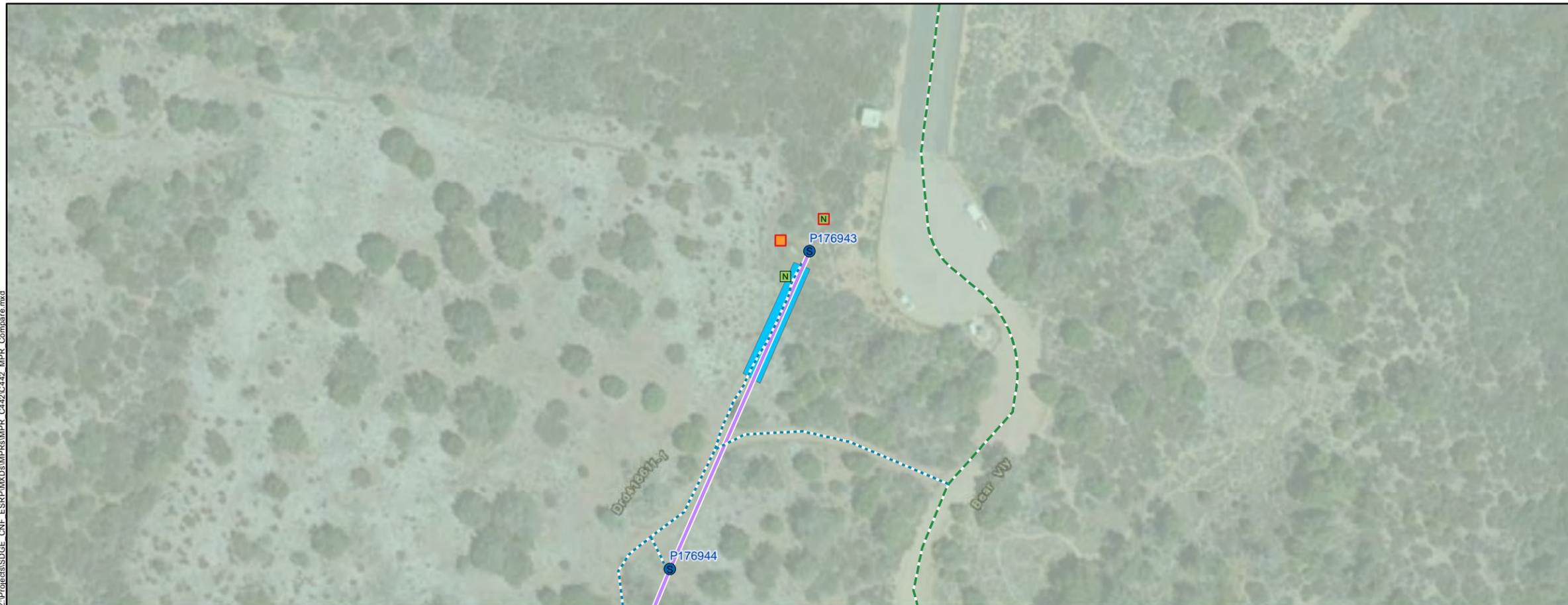
Final Design

NTP #8

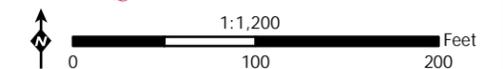
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  New Anchor
-  Construction Only Access
-  Navigation Access Road

MPR

-  New Anchor
-  Remove from Service Anchor
-  Stringing Site



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 12 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

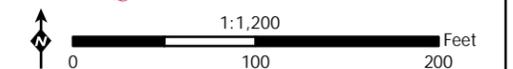
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access
-  Navigation Access Road

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

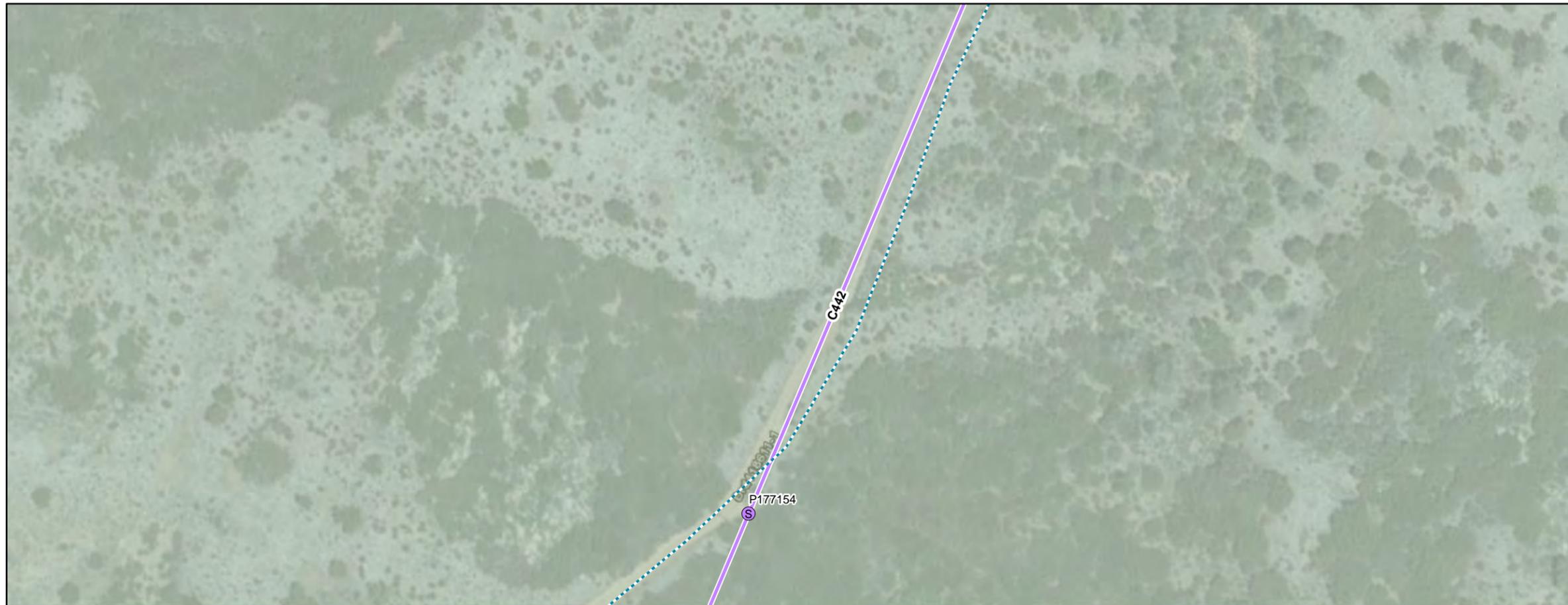


**Attachment B:
Comparison Map
C442 Map 13 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service

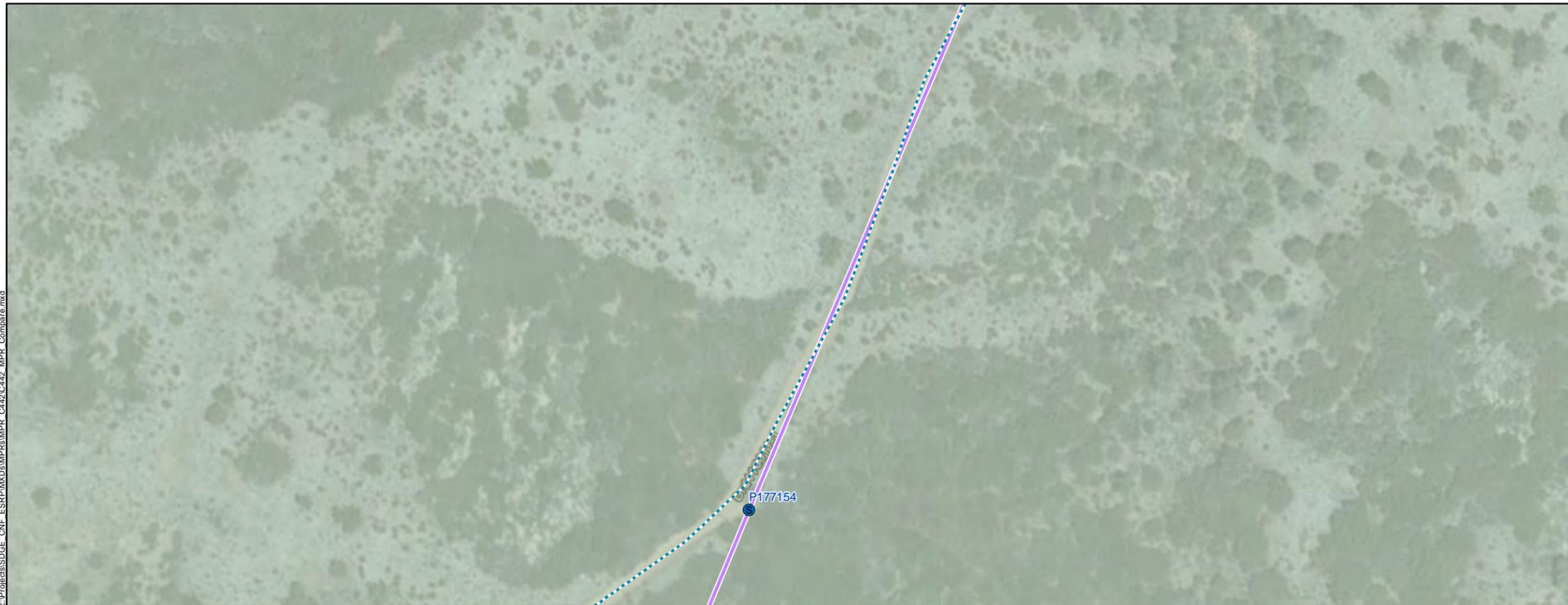


Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

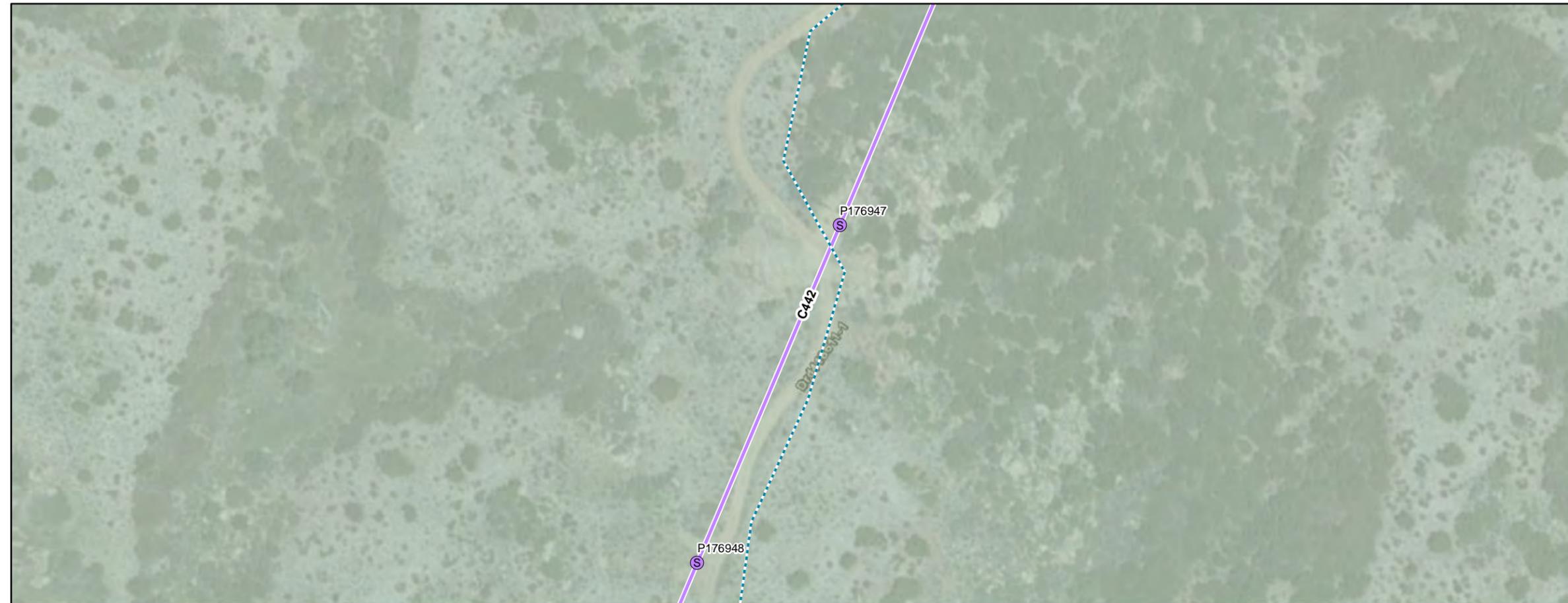


**Attachment B:
Comparison Map
C442 Map 14 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service

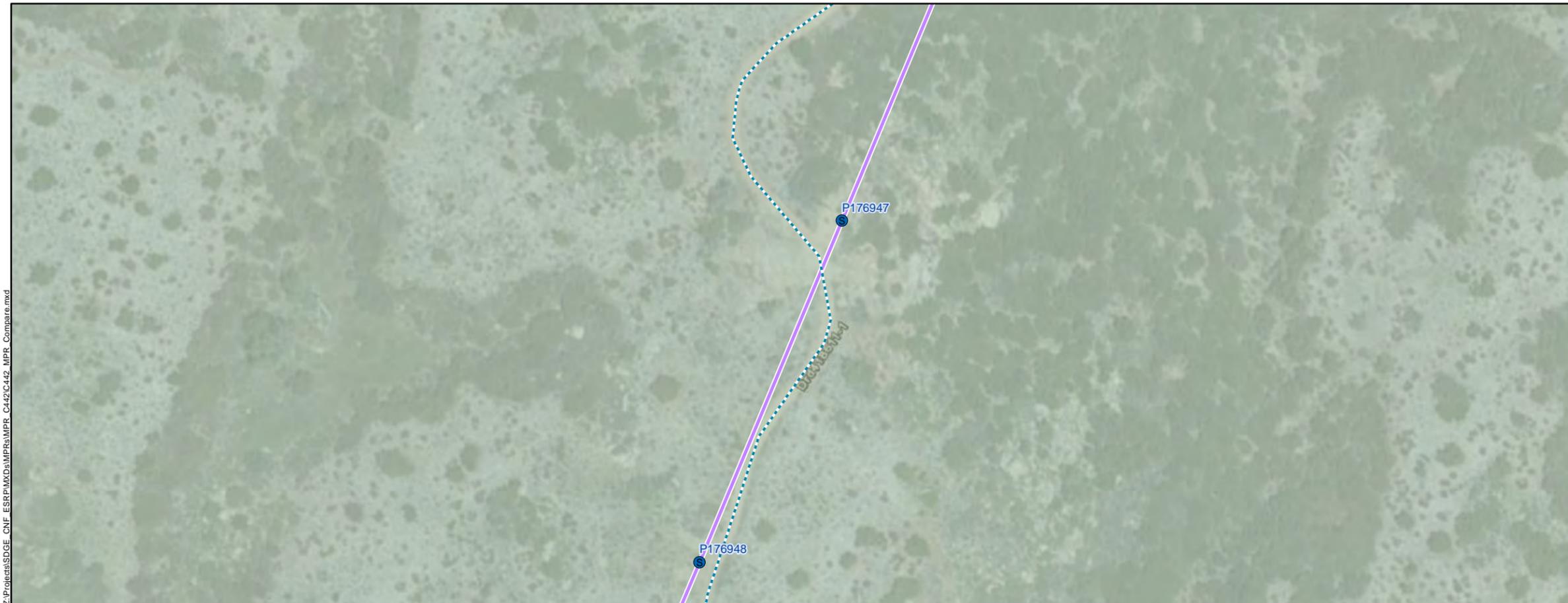


Final Design

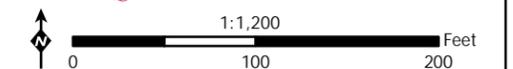
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 15 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  New Steel Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

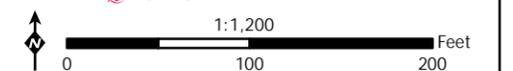
NTP #8

-  Wood-to-Steel Replacement
-  New Steel Pole
-  Construction Only Access

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

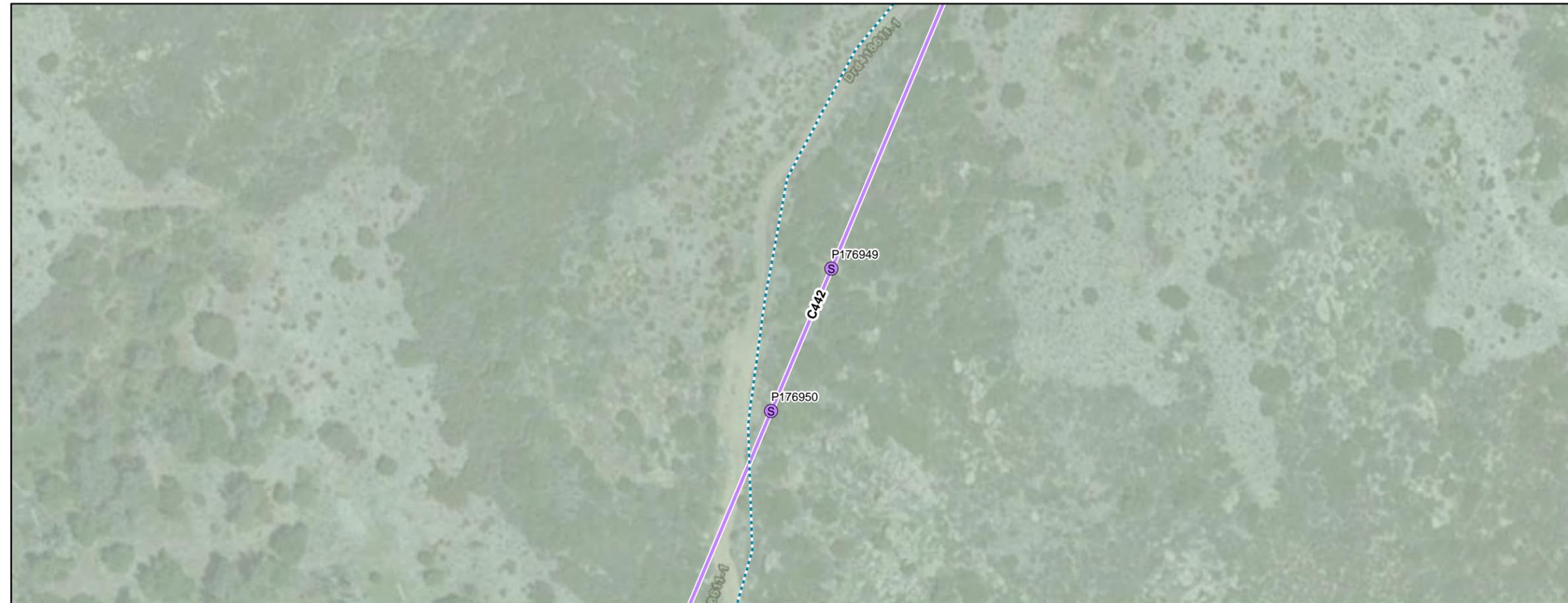


**Attachment B:
Comparison Map
C442 Map 16 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service

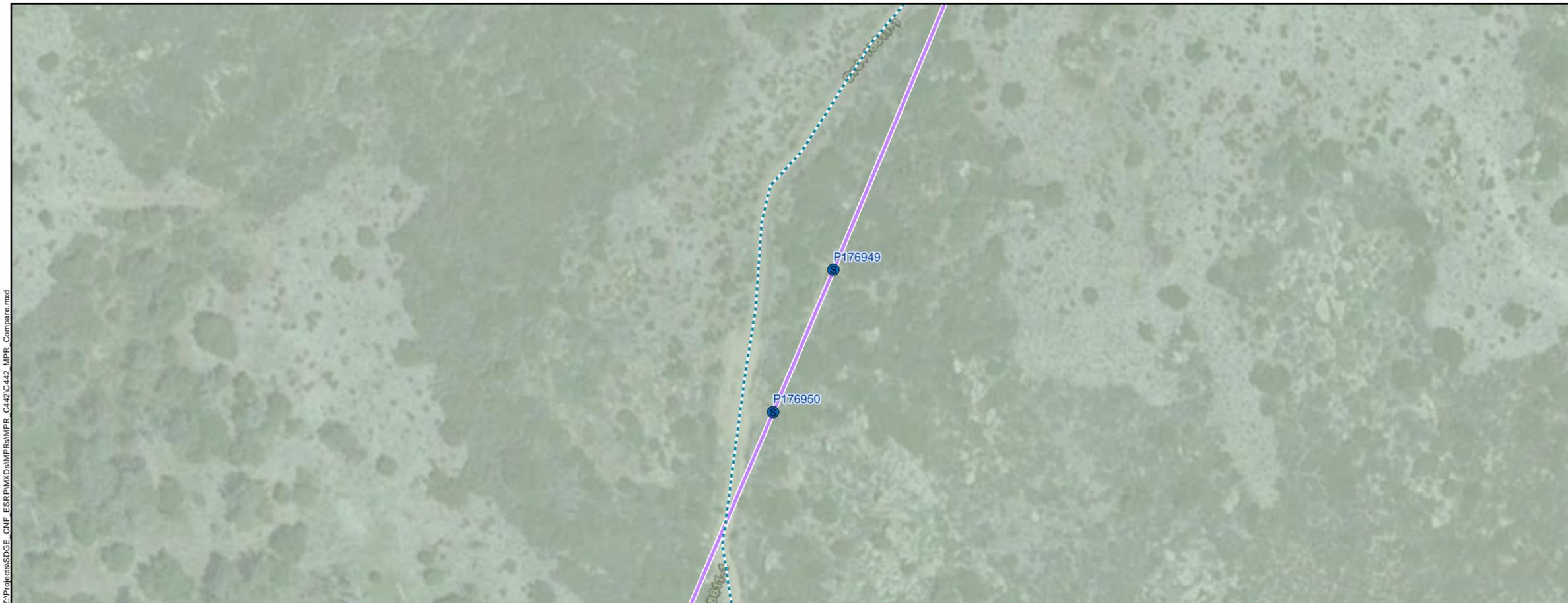


Final Design

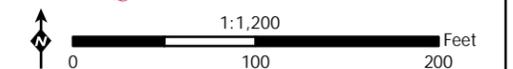
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 17 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

NTP #8

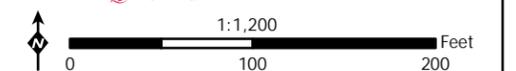
-  Wood-to-Steel Replacement
-  Construction Only Access

MPR

-  New Steel Pole



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 18 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 19 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Steel Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

NTP #8

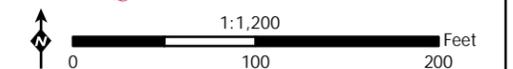
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Steel Pole
-  New Anchor



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

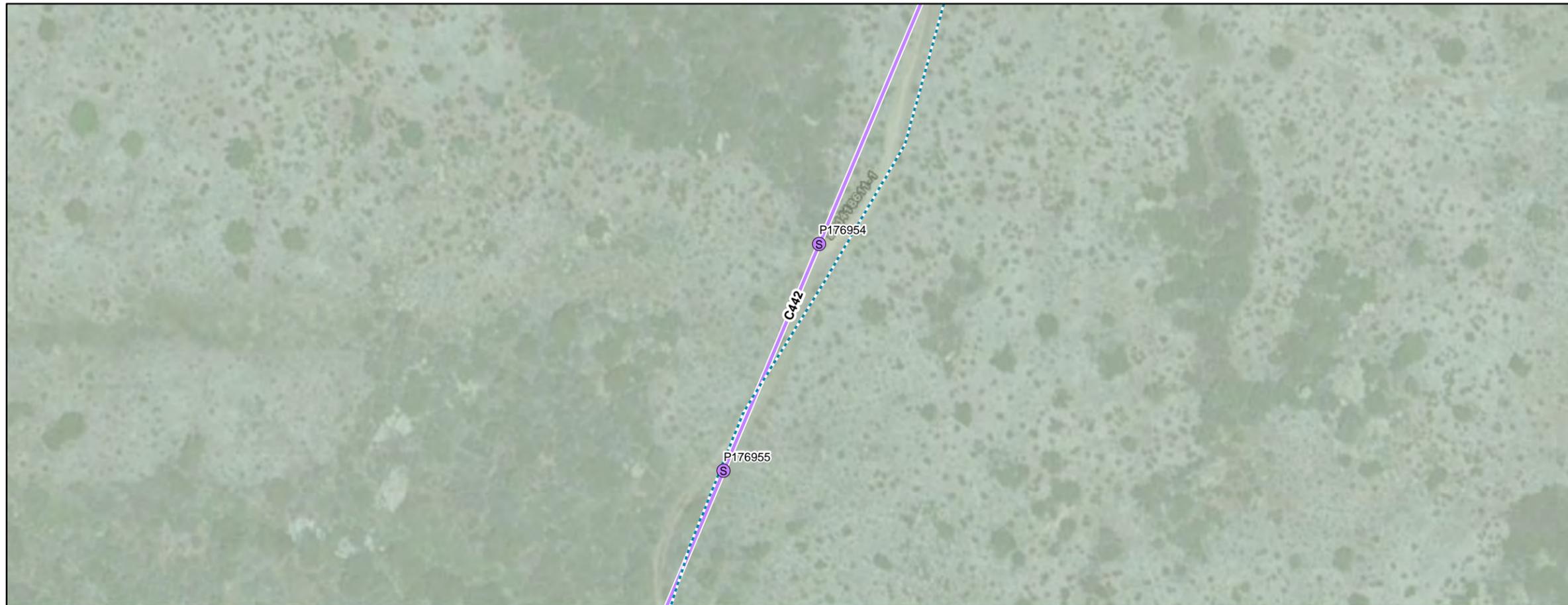


**Attachment B:
Comparison Map
C442 Map 20 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service

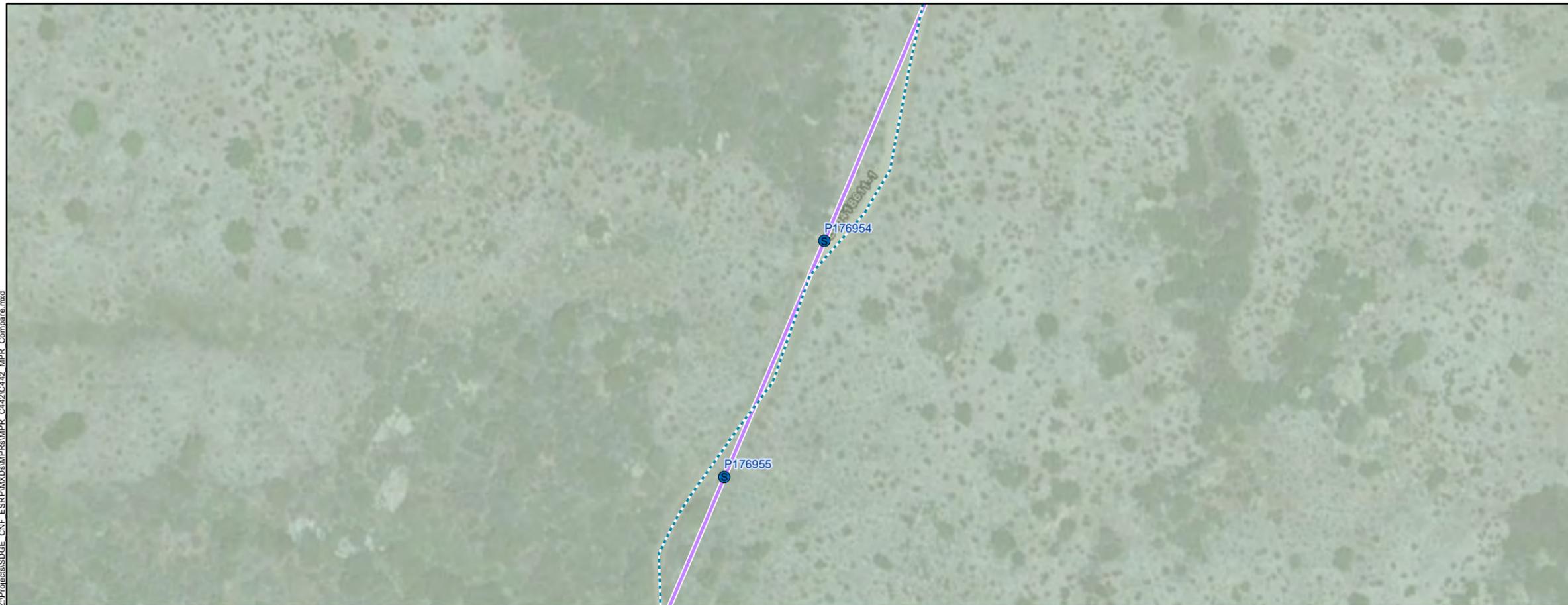


Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 21 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR



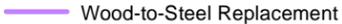
Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

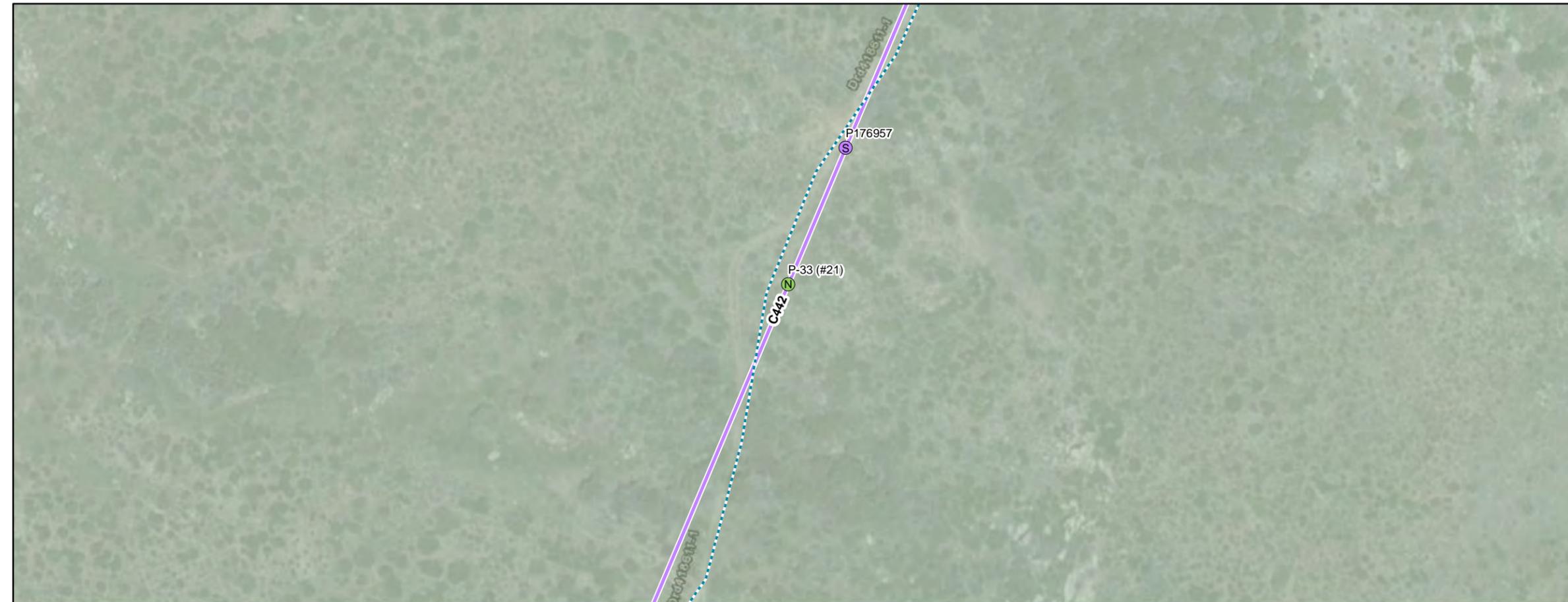


**Attachment B:
Comparison Map
C442 Map 22 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

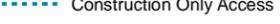
2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Steel Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



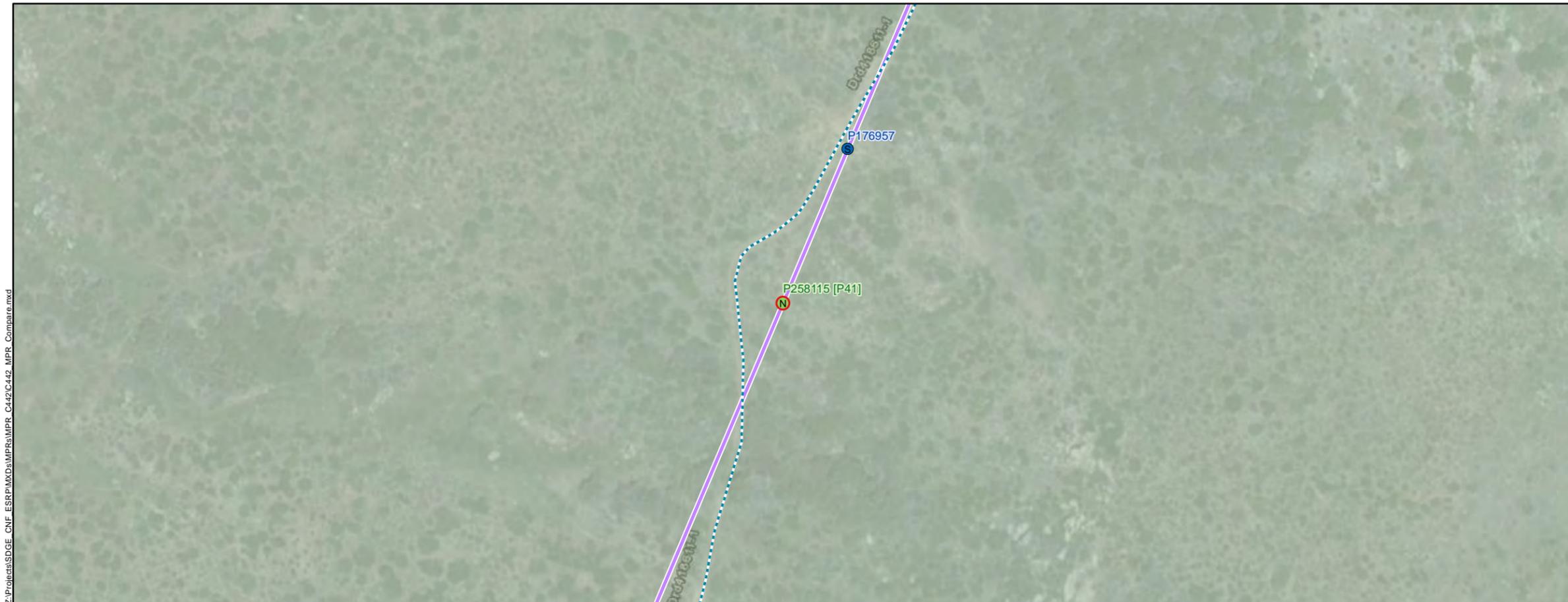
Final Design

NTP #8

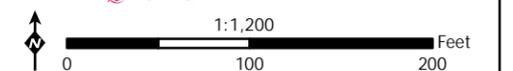
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Steel Pole



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

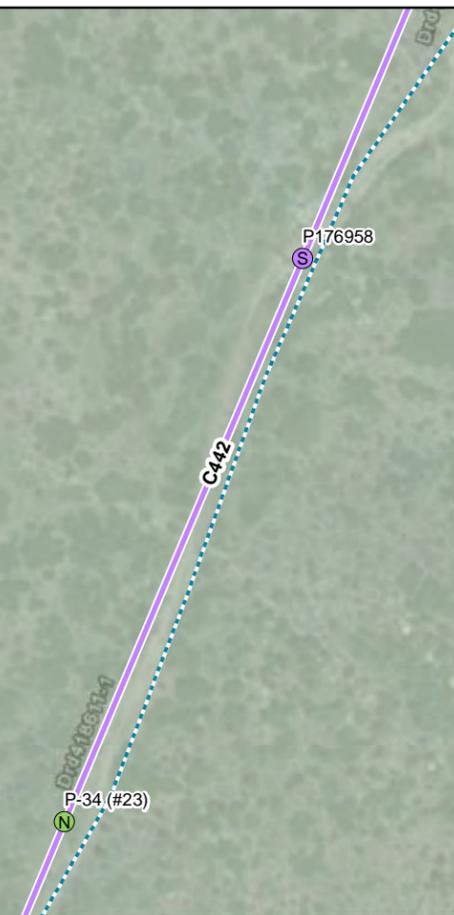


**Attachment B:
Comparison Map
C442 Map 23 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Steel Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



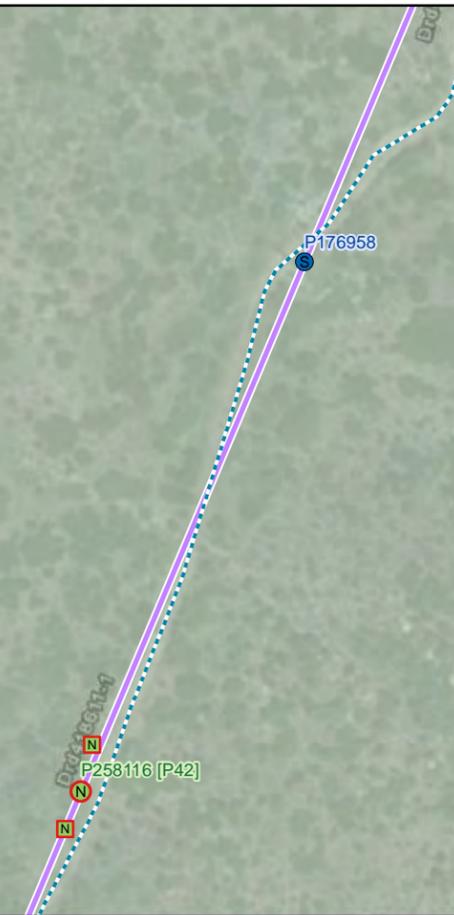
Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Steel Pole
-  New Anchor



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

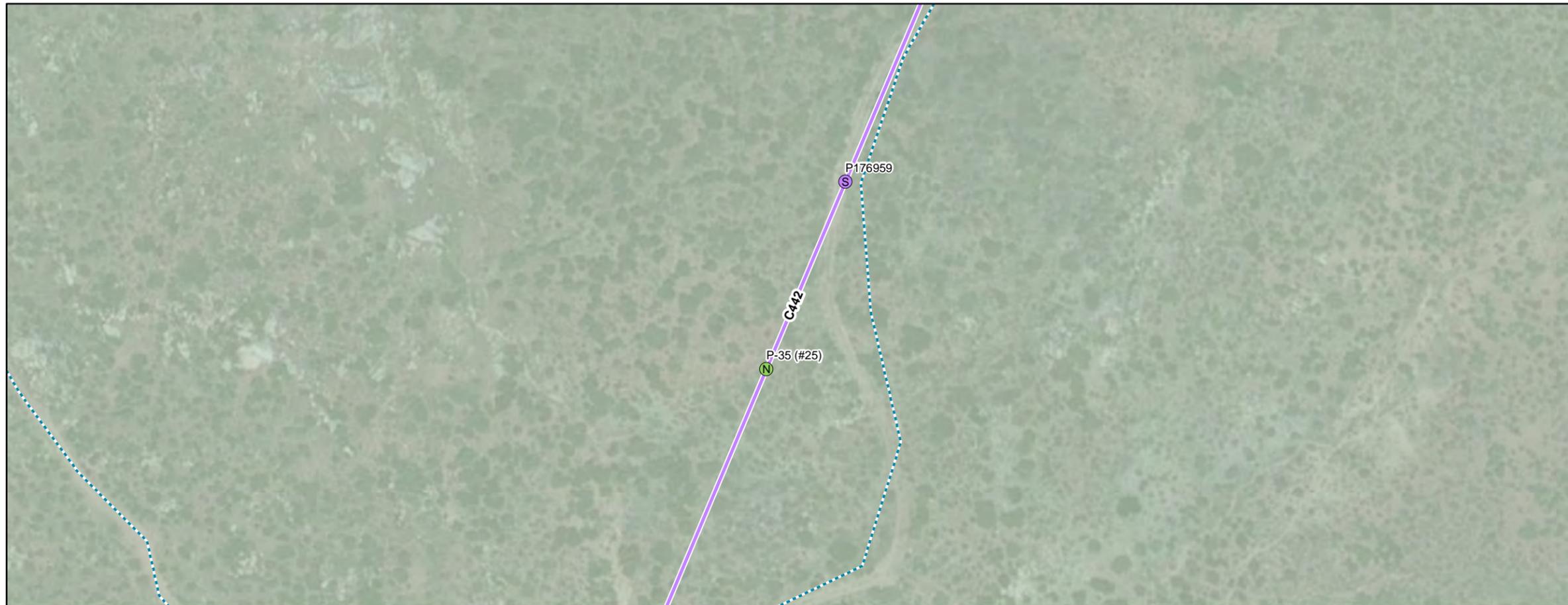


**Attachment B:
Comparison Map
C442 Map 24 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Steel Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

NTP #8

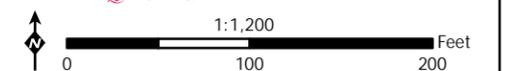
-  Wood-to-Steel Replacement
-  New Steel Pole
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Anchor



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

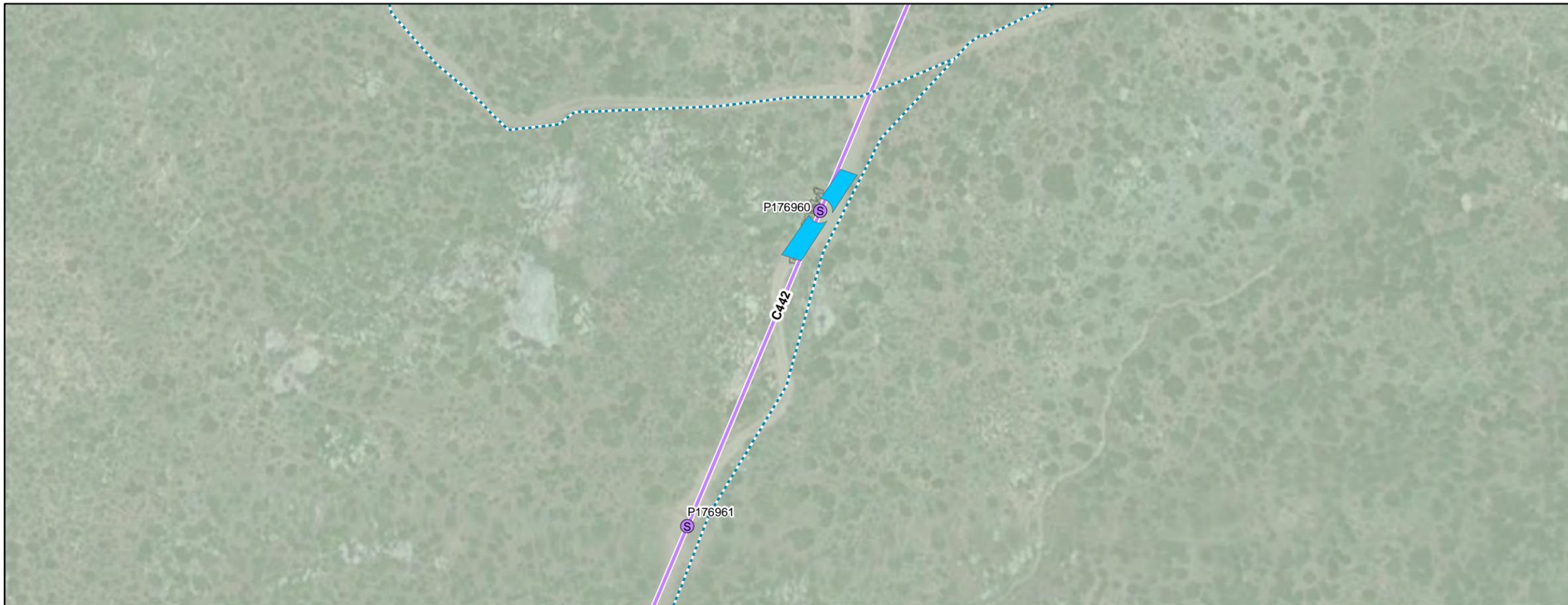


**Attachment B:
Comparison Map
C442 Map 25 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



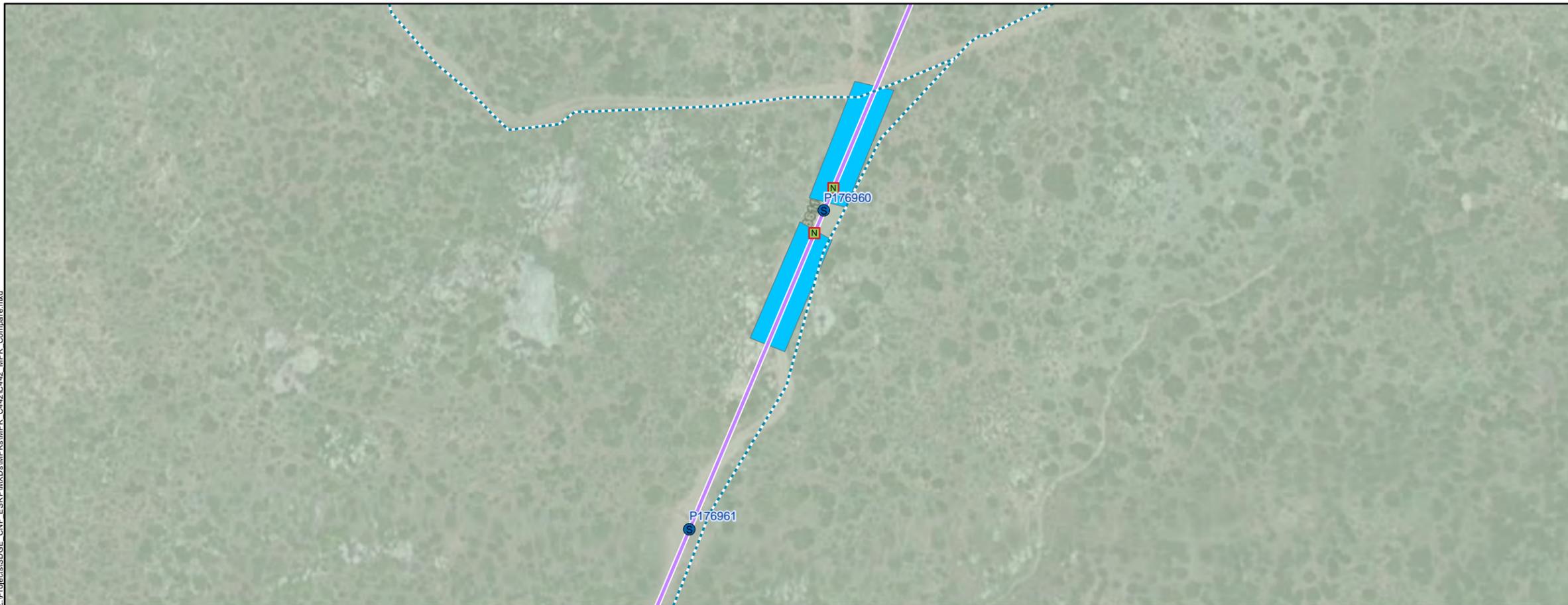
Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Anchor
-  Stringing Site



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

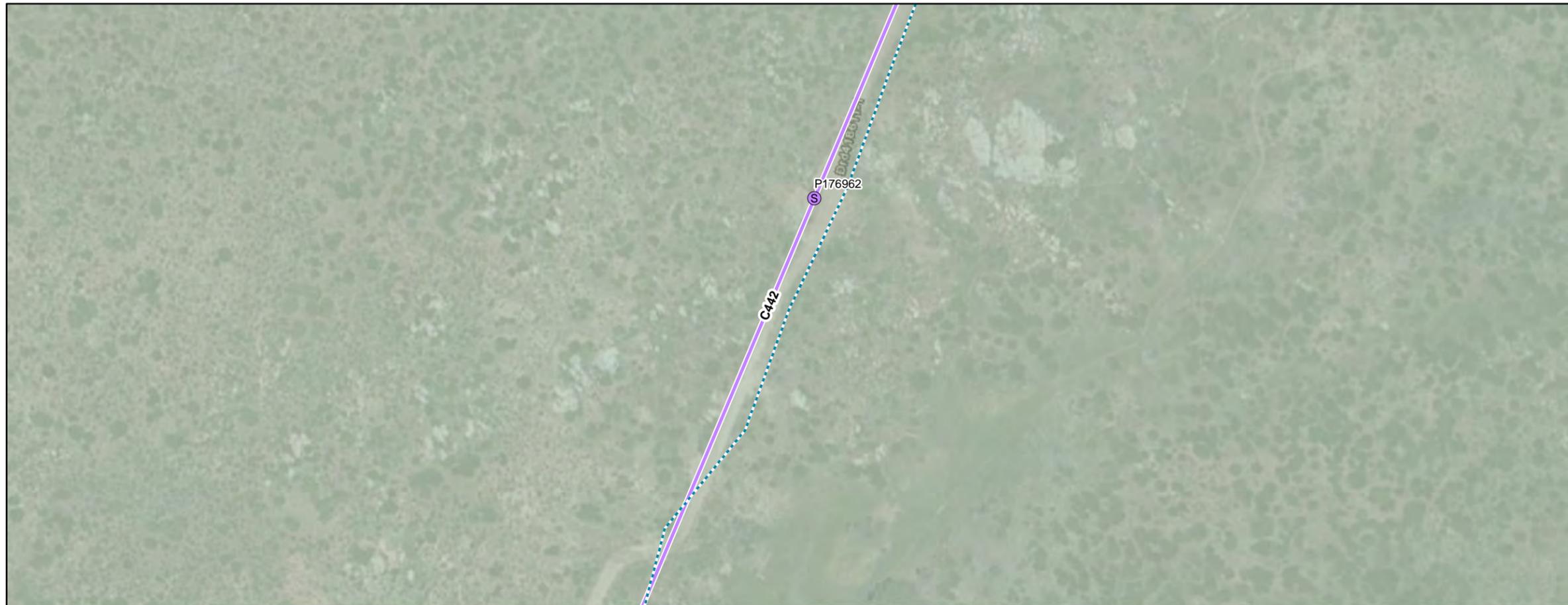


**Attachment B:
Comparison Map
C442 Map 26 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

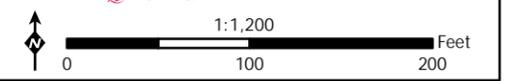
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

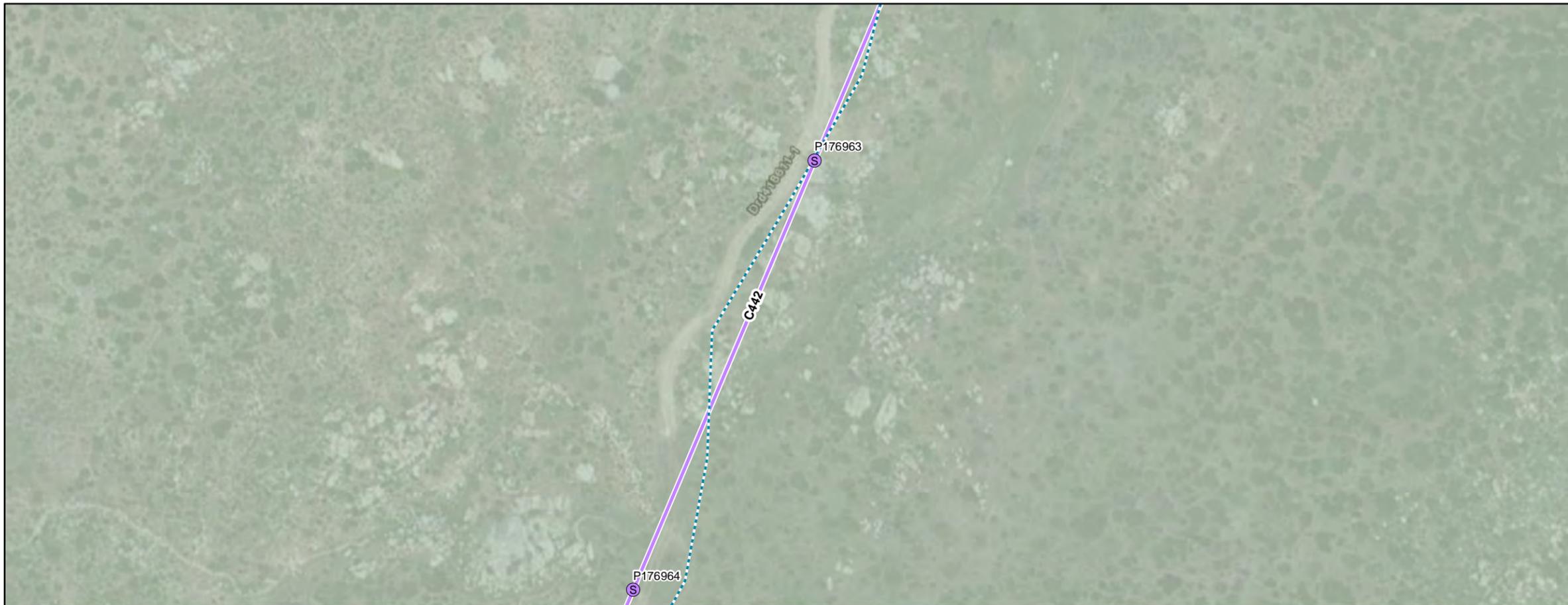


**Attachment B:
Comparison Map
C442 Map 27 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



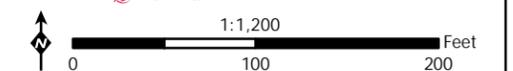
Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

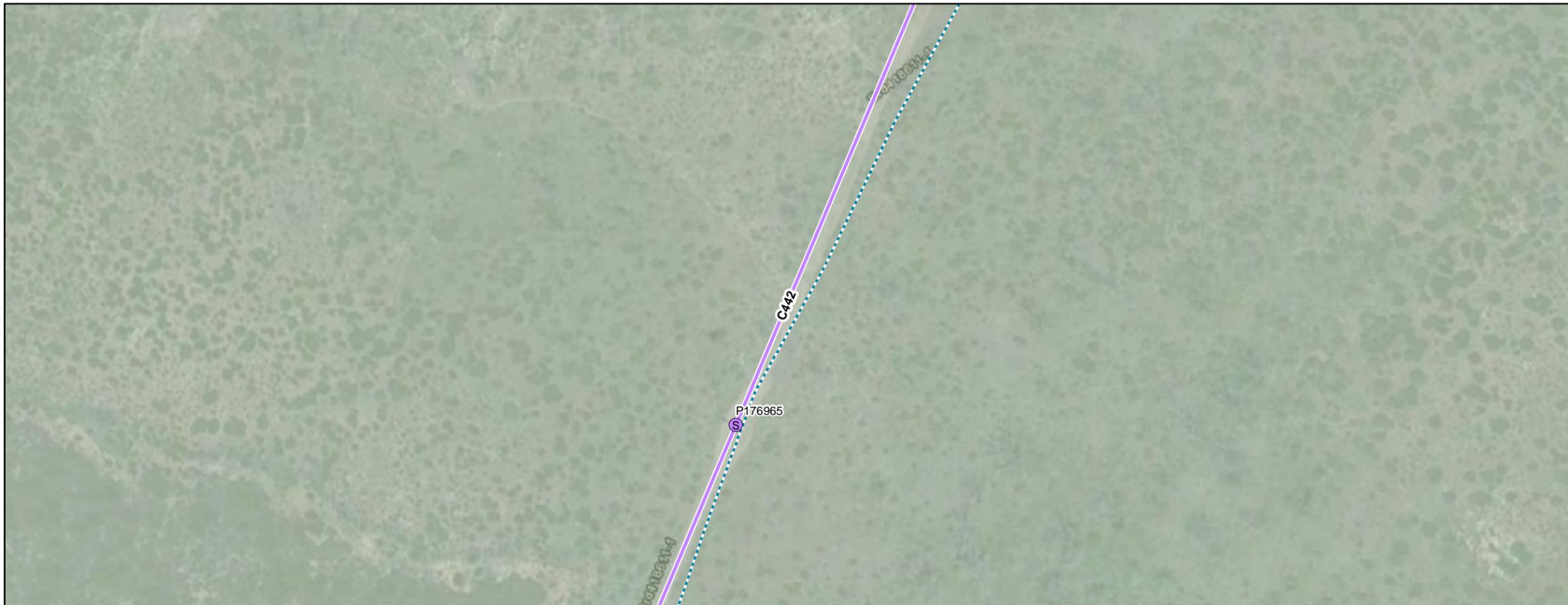


**Attachment B:
Comparison Map
C442 Map 28 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service

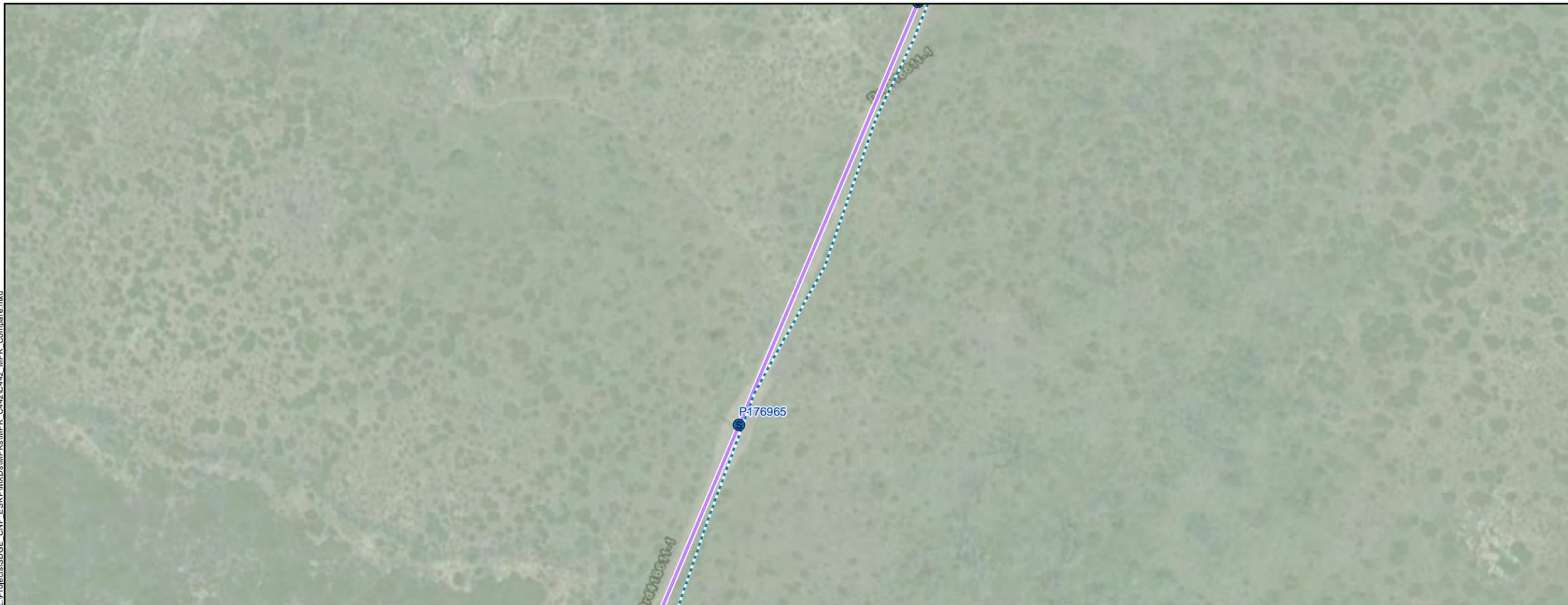


Final Design

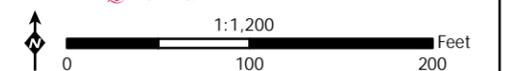
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

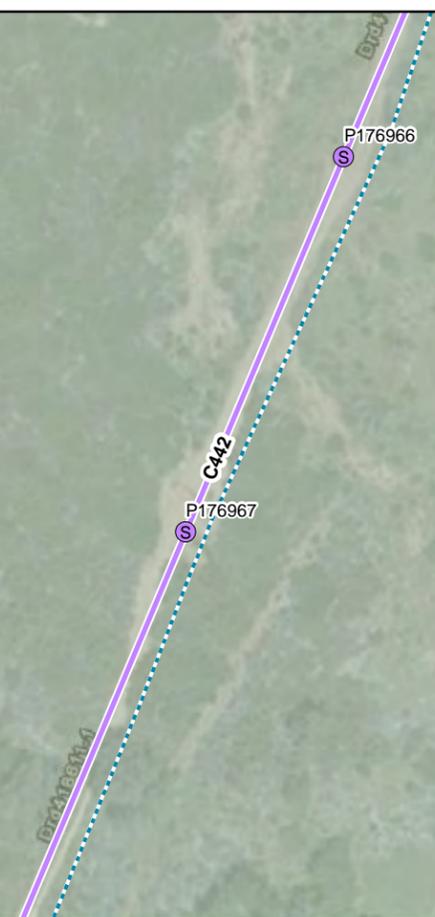


**Attachment B:
Comparison Map
C442 Map 29 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



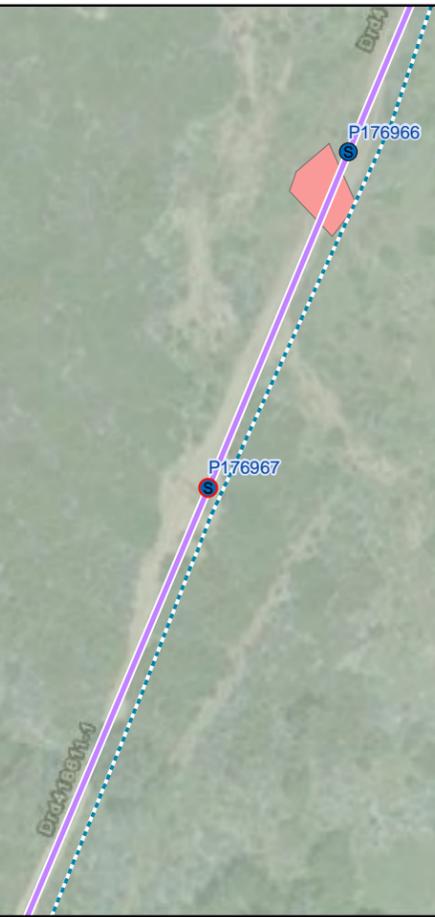
Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  Wood-to-Steel Replacement 12 kV Only
-  Temporary Access/Entry/Turnaround



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

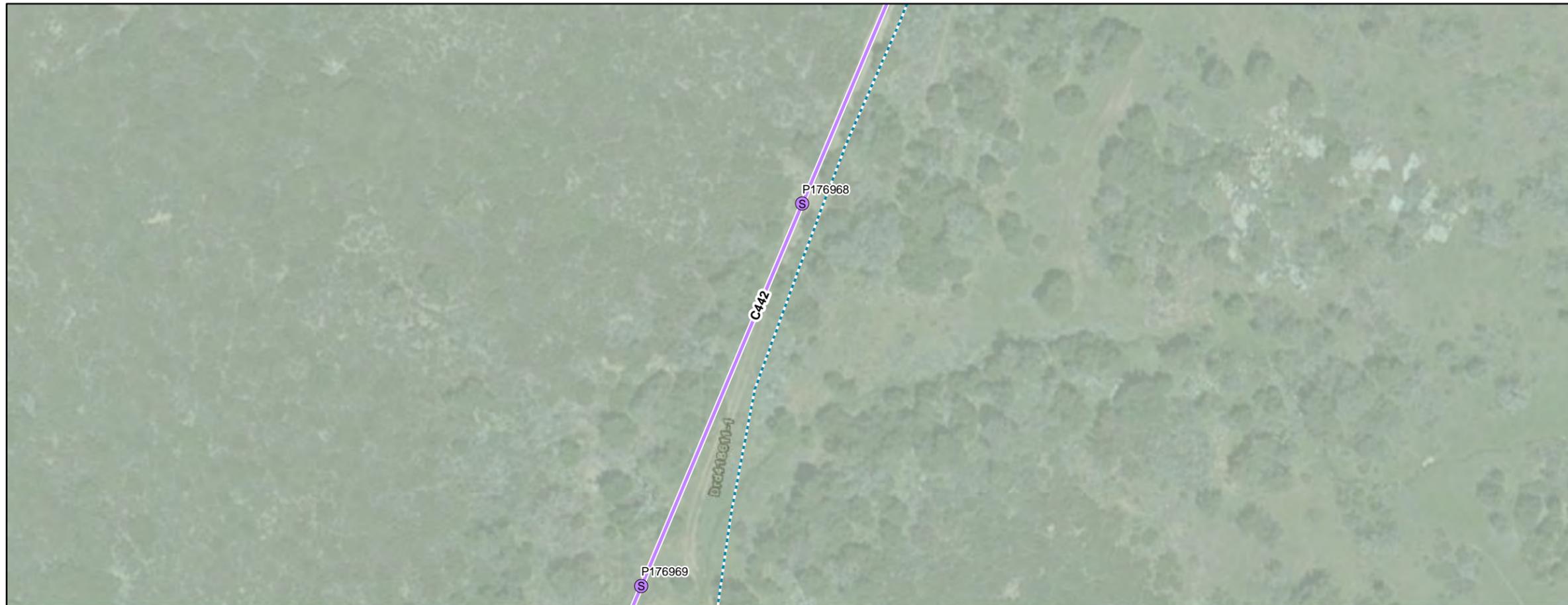
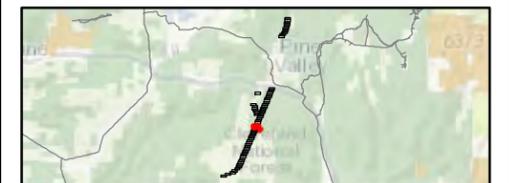


**Attachment B:
Comparison Map
C442 Map 30 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



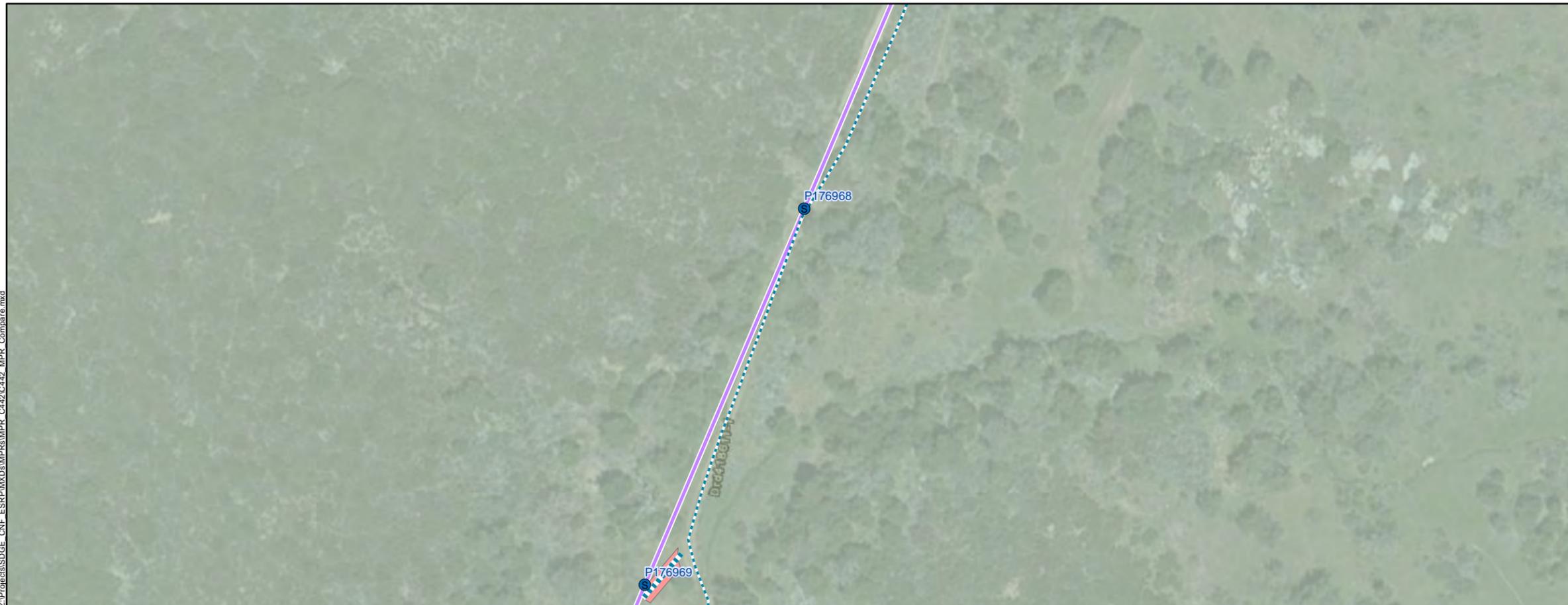
Final Design

NTP #8

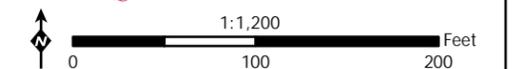
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  Temporary Access/Entry/Turnaround
-  Construction Only Access



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

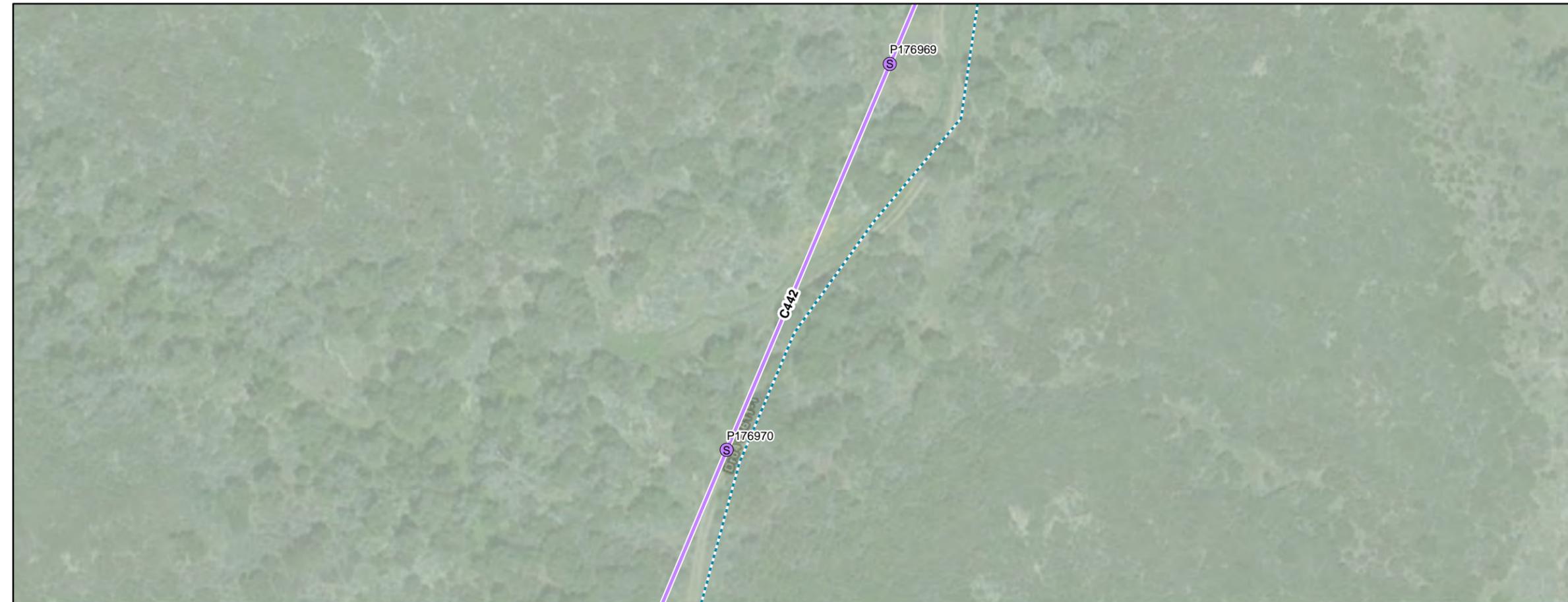


**Attachment B:
Comparison Map
C442 Map 31 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

NTP #8

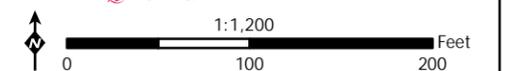
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  Temporary Access/Entry/Turnaround
-  Construction Only Access



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

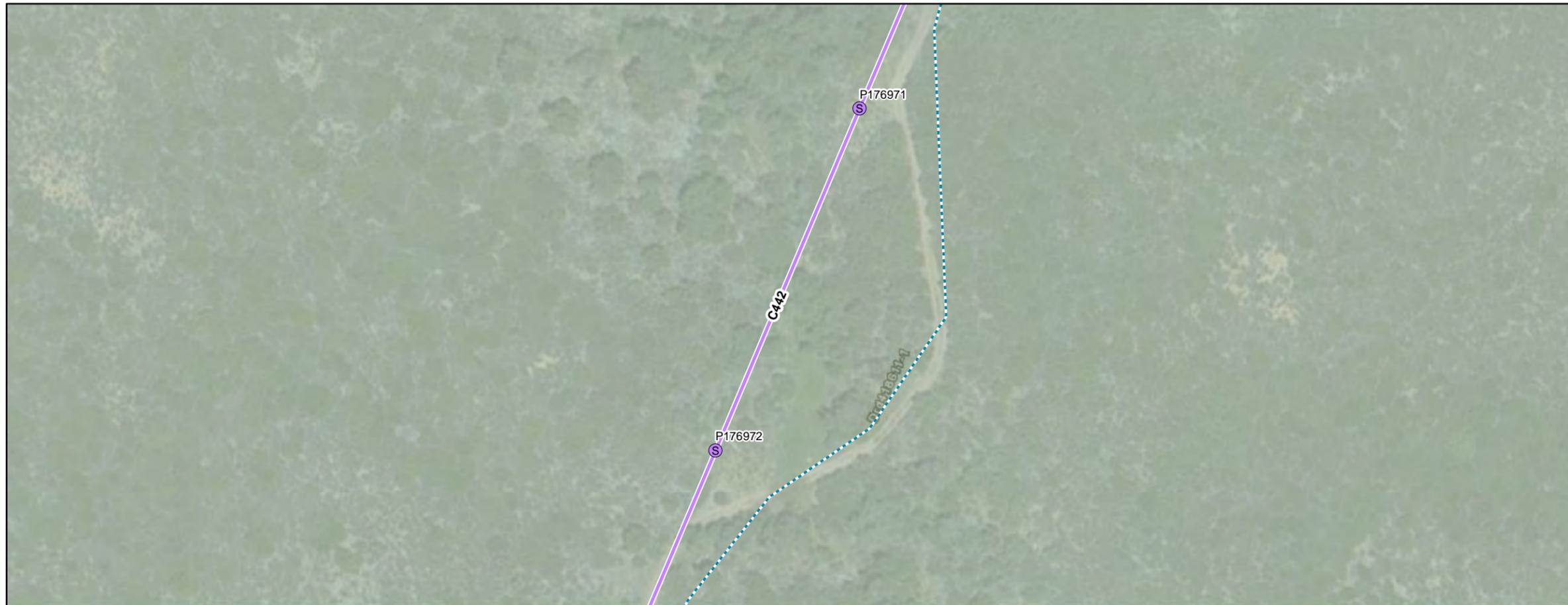


**Attachment B:
Comparison Map
C442 Map 32 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

NTP #8

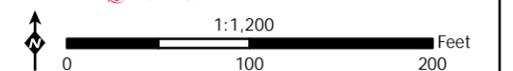
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  Temporary Access/Entry/Turnaround
-  Construction Only Access



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 33 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



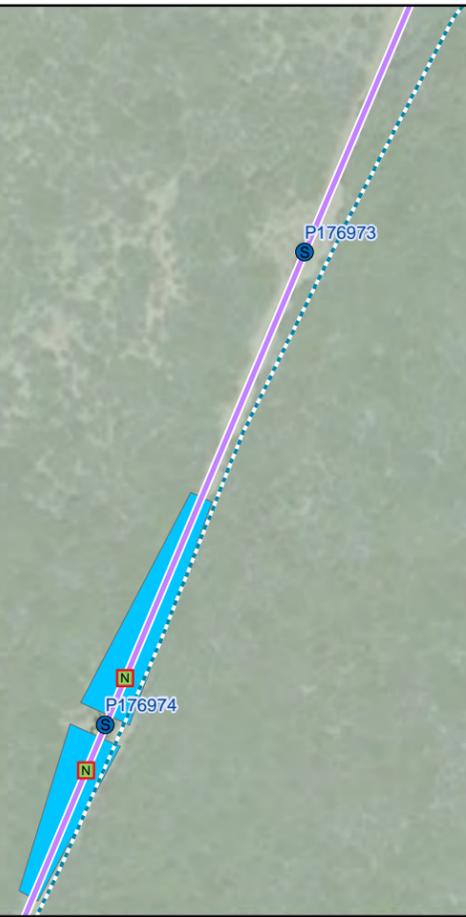
Final Design

NTP #8

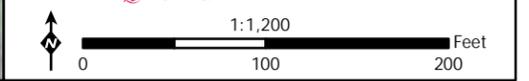
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Anchor
-  Stringing Site



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 34 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service



Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  Wood-to-Steel Replacement 12 kV Only



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 35 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access

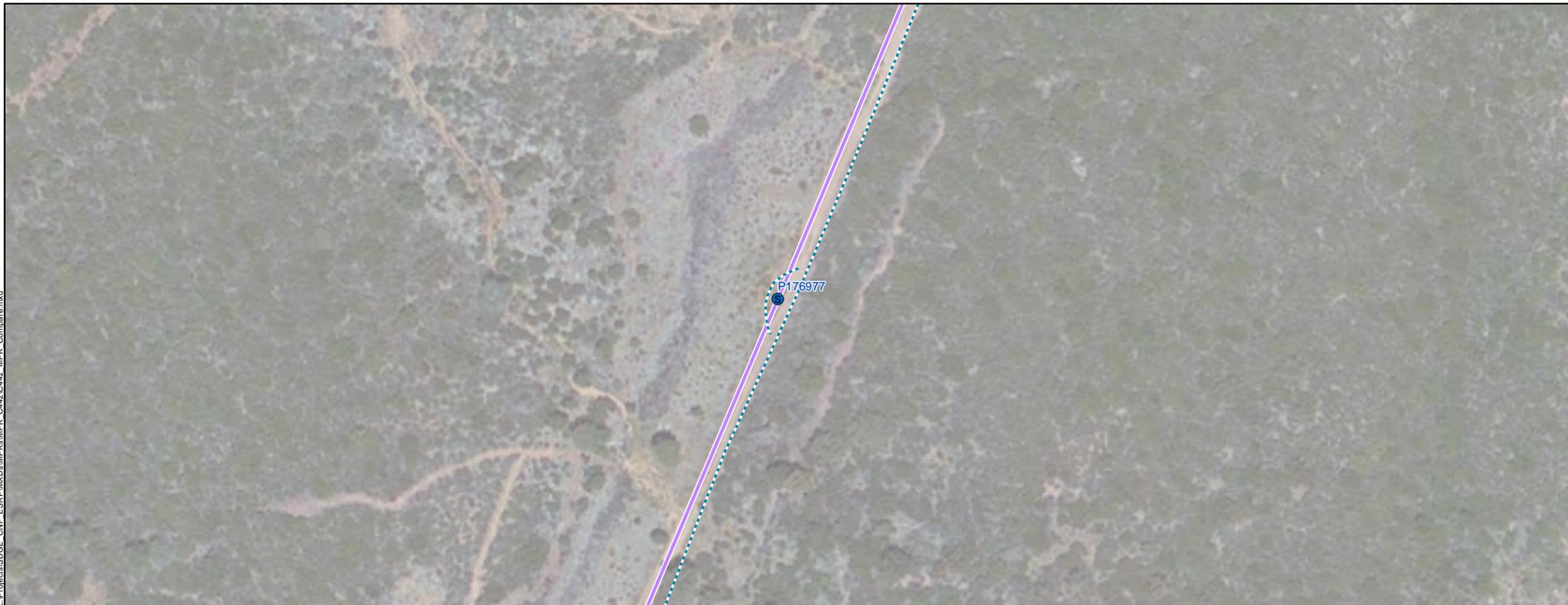


Final Design

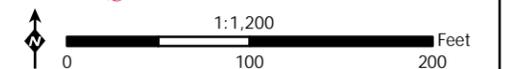
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

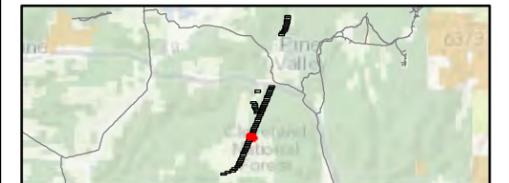


**Attachment B:
Comparison Map
C442 Map 36 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access



Final Design

NTP #8

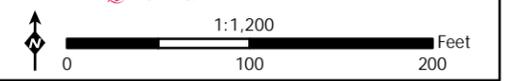
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  Wood-to-Steel Replacement 12 kV Only



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 37 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access



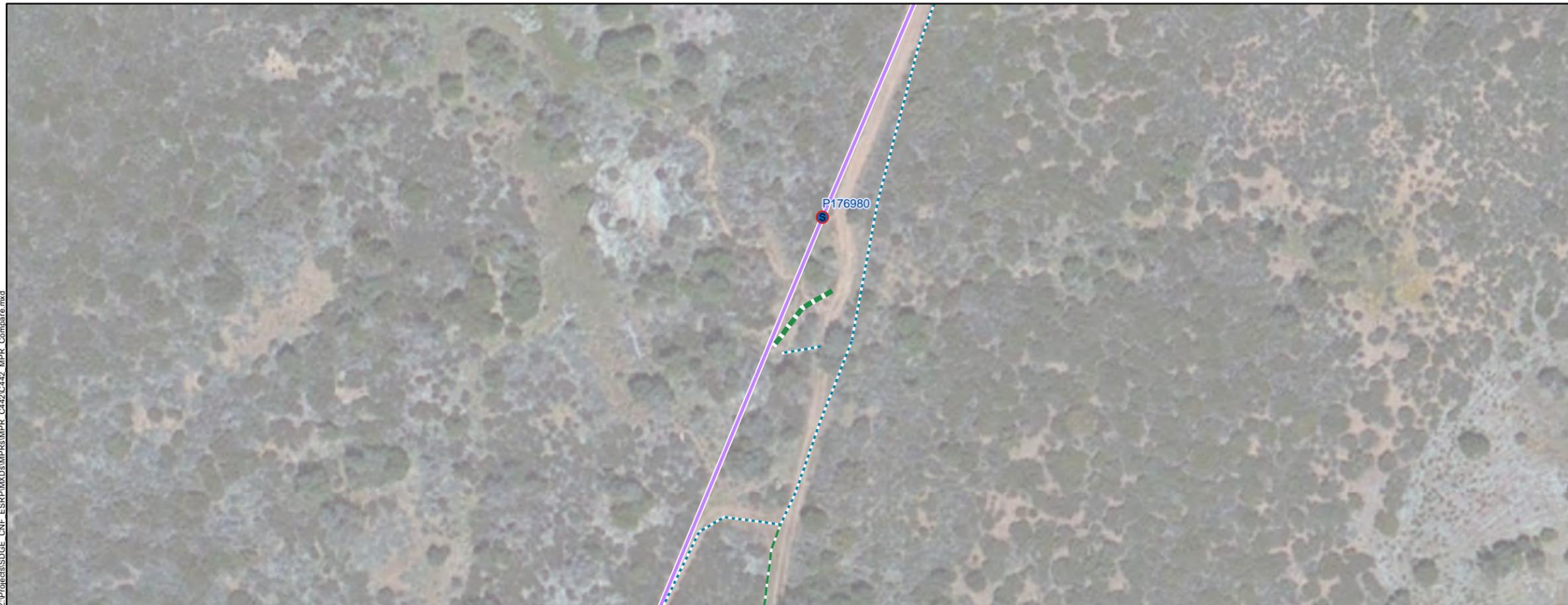
Final Design

NTP #8

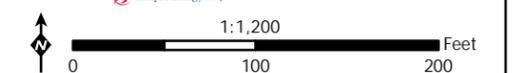
-  Wood-to-Steel Replacement
-  Construction Only Access
-  Navigation Access Road

MPR

-  Wood-to-Steel Replacement 12 kV Only
-  Navigation Access Road



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

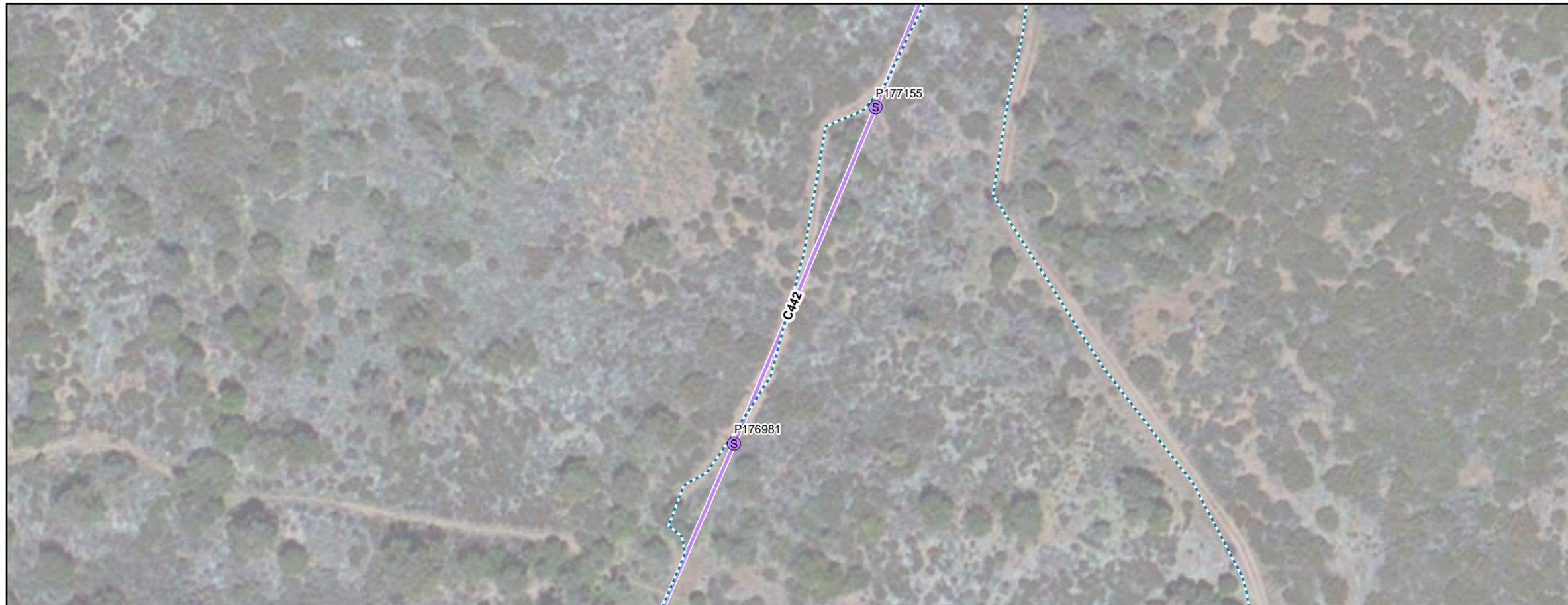


**Attachment B:
Comparison Map
C442 Map 38 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access



Final Design

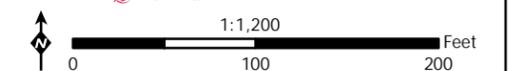
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access
-  Navigation Access Road

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 39 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

- Wood-to-Steel Replacement Pole
- New Steel Pole
- New Anchor
- Wood-to-Steel Replacement
- Construction Only Access



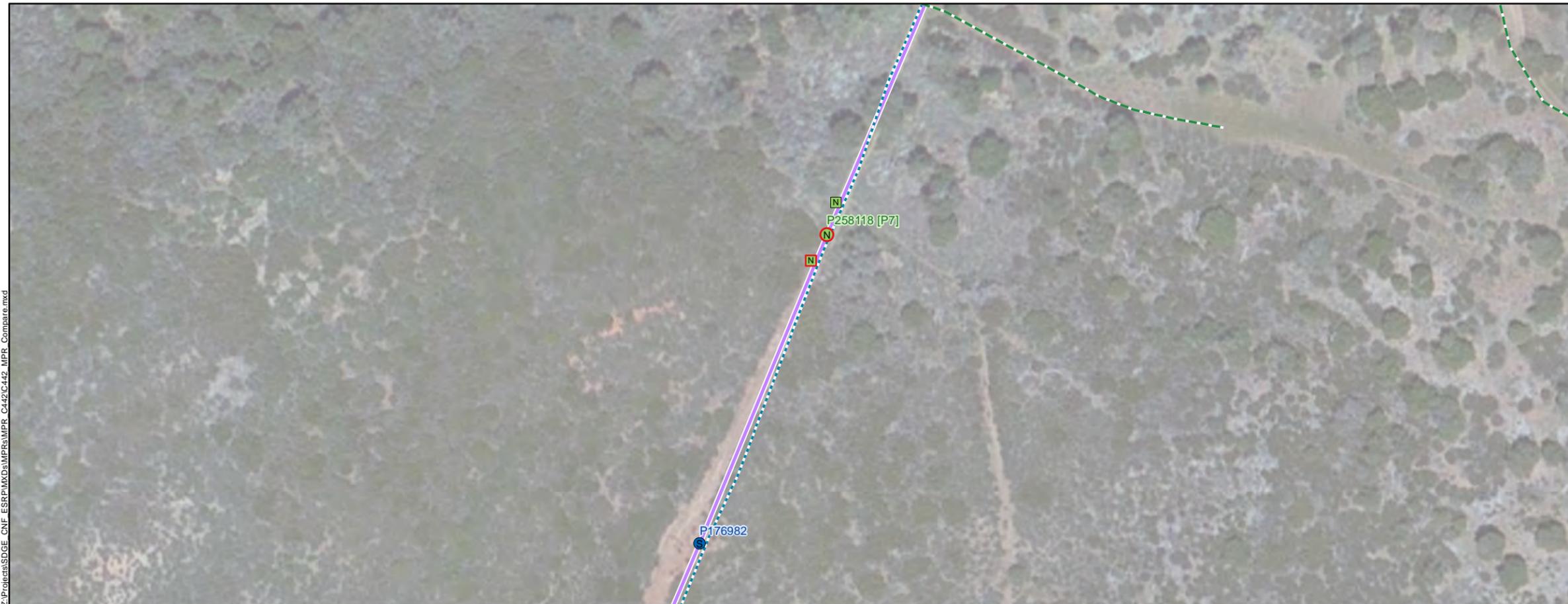
Final Design

NTP #8

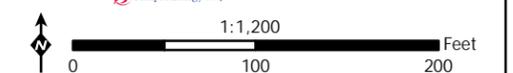
- Wood-to-Steel Replacement
- Wood-to-Steel Replacement 12kV Only
- New Anchor
- Construction Only Access
- Navigation Access Road

MPR

- New Steel Pole
- New Anchor



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 40 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  Navigation Access Road



Final Design

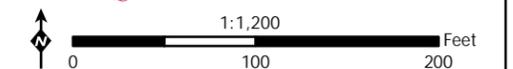
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access
-  Navigation Access Road

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 41 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access
-  Navigation Access Road



Final Design

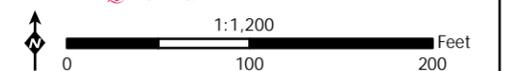
NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access
-  Navigation Access Road

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

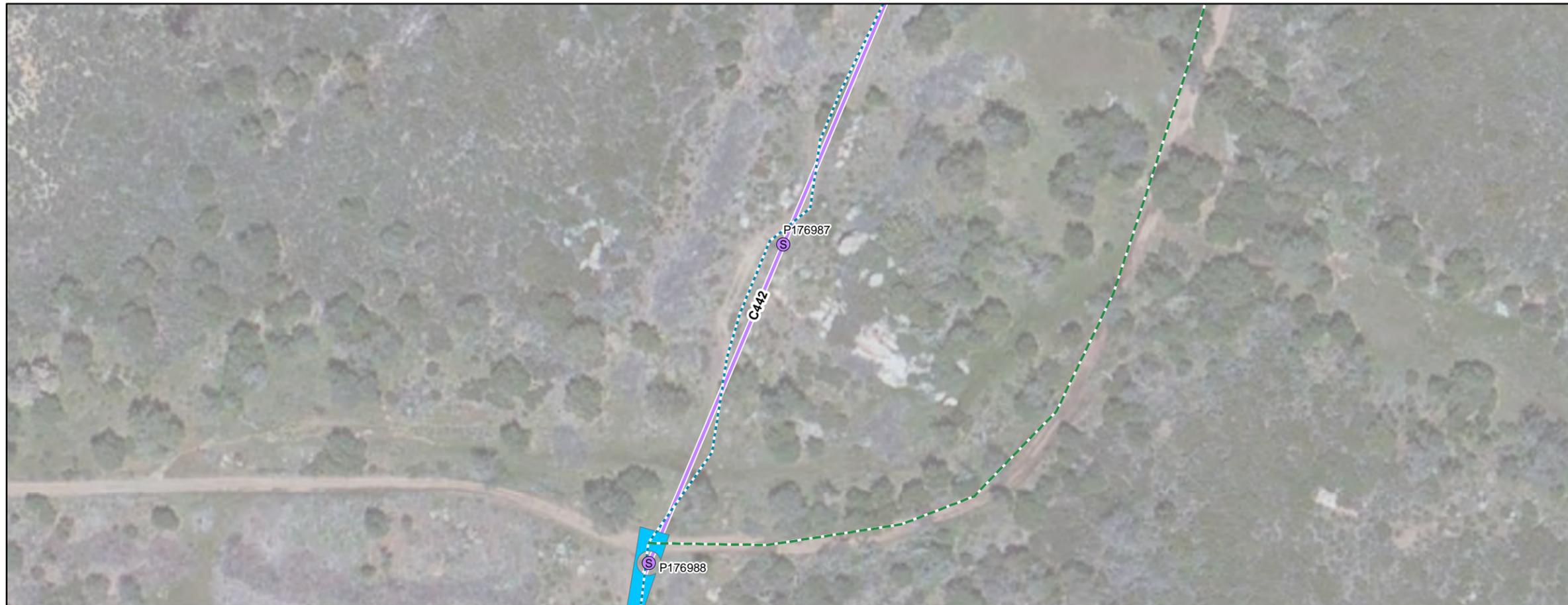


**Attachment B:
Comparison Map
C442 Map 42 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access
-  Navigation Access Road



Final Design

NTP #8

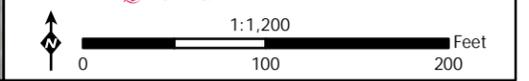
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access
-  Navigation Access Road

MPR

-  Stringing Site



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 43 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access



Final Design

NTP #8

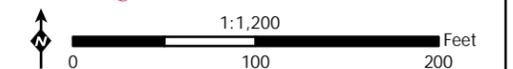
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Anchor
-  Stringing Site



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 44 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access



Final Design

NTP #8

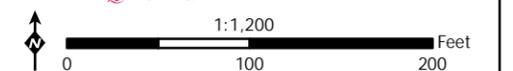
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Anchor



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 45 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access



Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR



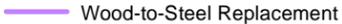
Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 46 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

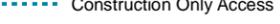
2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Steel Pole
-  Wood-to-Steel Replacement
-  Construction Only Access



Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Steel Pole
-  New Anchor



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

1:1,200 Feet
0 100 200

**Attachment B:
Comparison Map
C442 Map 47 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access



Final Design

NTP #8

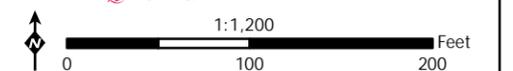
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  Wood-to-Steel Replacement 12 kV Only



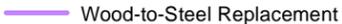
Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

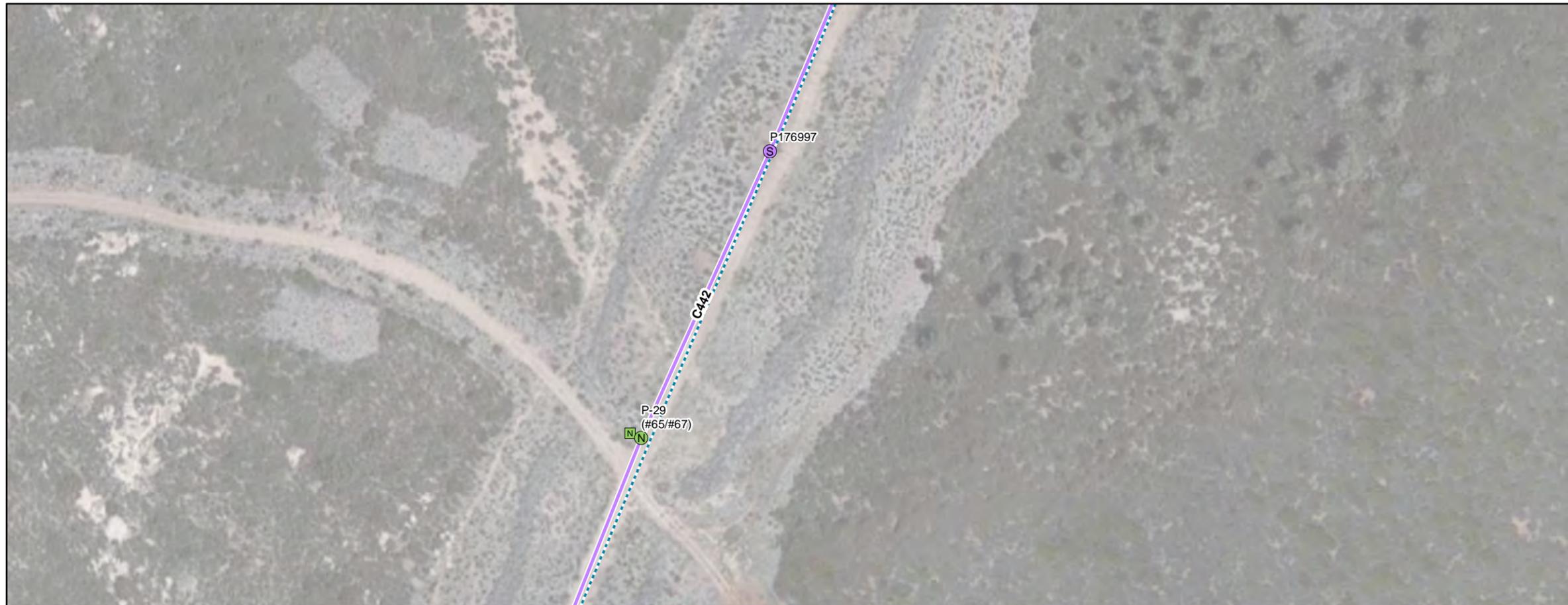
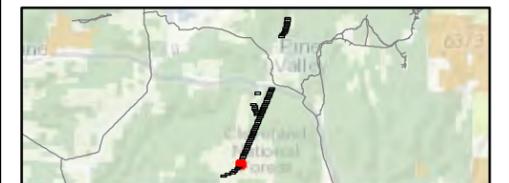


**Attachment B:
Comparison Map
C442 Map 48 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

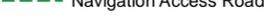
2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Steel Pole
-  New Anchor
-  Wood-to-Steel Replacement
-  Construction Only Access



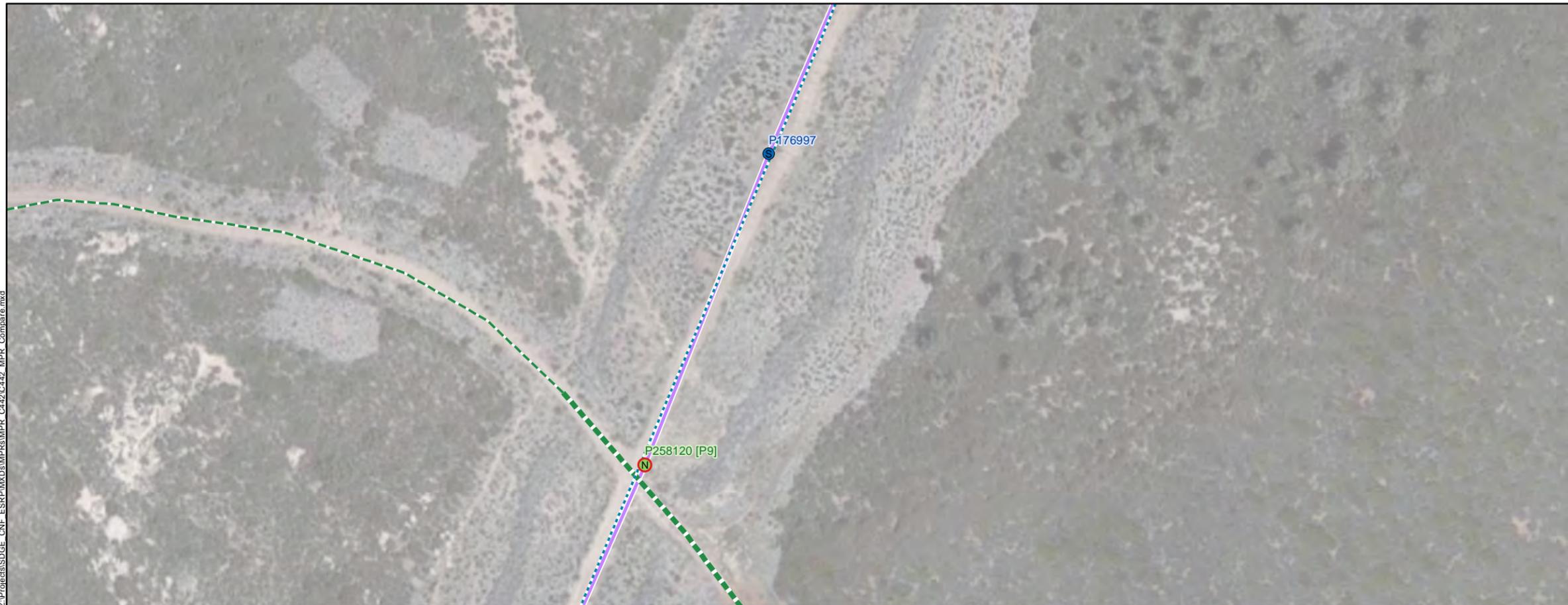
Final Design

NTP #8

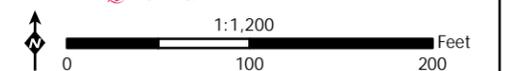
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access
-  Navigation Access Road

MPR

-  New Steel Pole
-  Stringing Site
-  Navigation Access Road



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 49 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access



Final Design

NTP #8

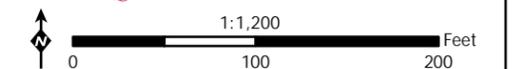
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  Wood-to-Steel Replacement 12 kV Only
-  Stringing Site
-  Navigation Access Road



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

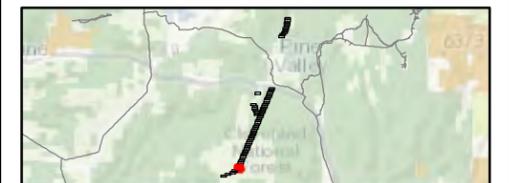


**Attachment B:
Comparison Map
C442 Map 50 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement
-  Construction Only Access



Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Anchor



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

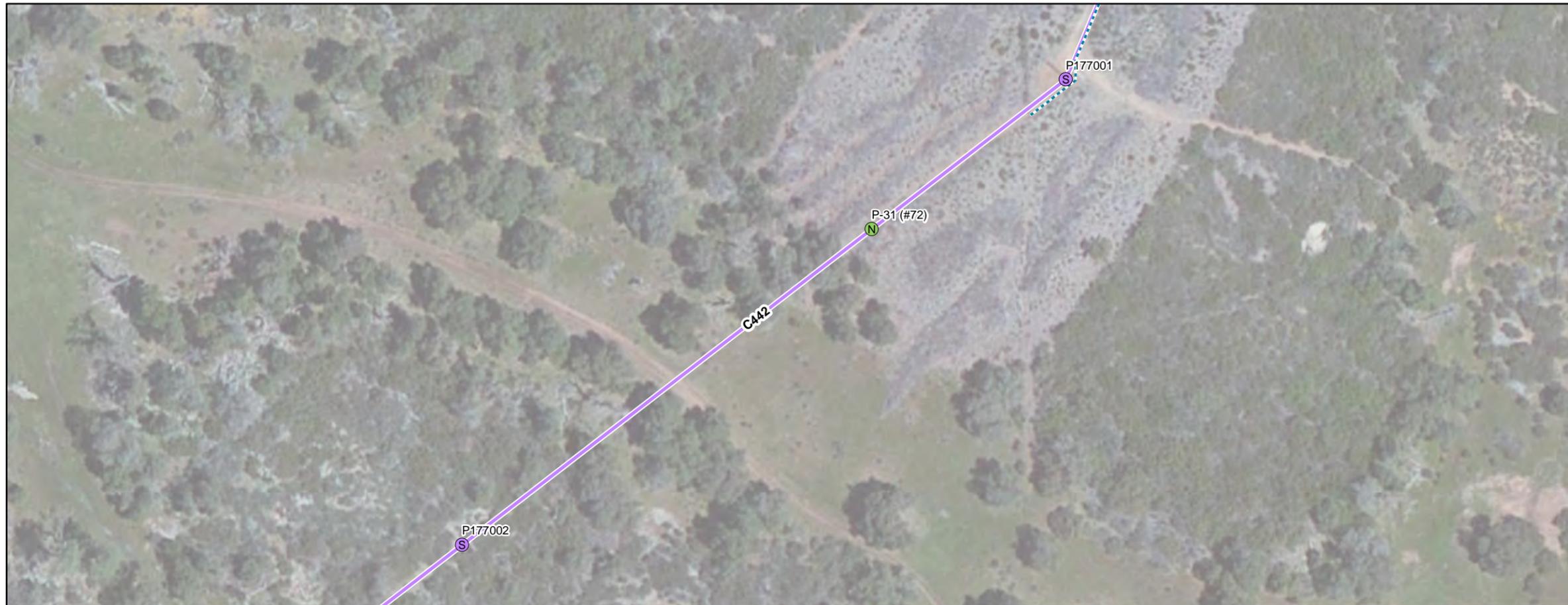


**Attachment B:
Comparison Map
C442 Map 51 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Steel Pole
-  Wood-to-Steel Replacement
-  Construction Only Access



Final Design

NTP #8

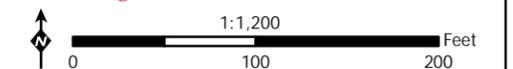
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Construction Only Access

MPR

-  New Steel Pole
-  New Anchor
-  Remove from Service Anchor
-  Construction Only Access
-  Navigation Access Road



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

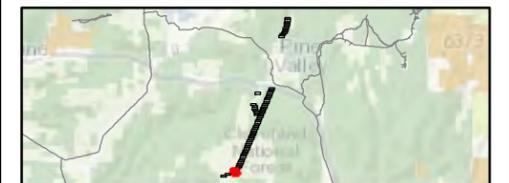


**Attachment B:
Comparison Map
C442 Map 52 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

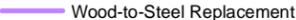
2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement



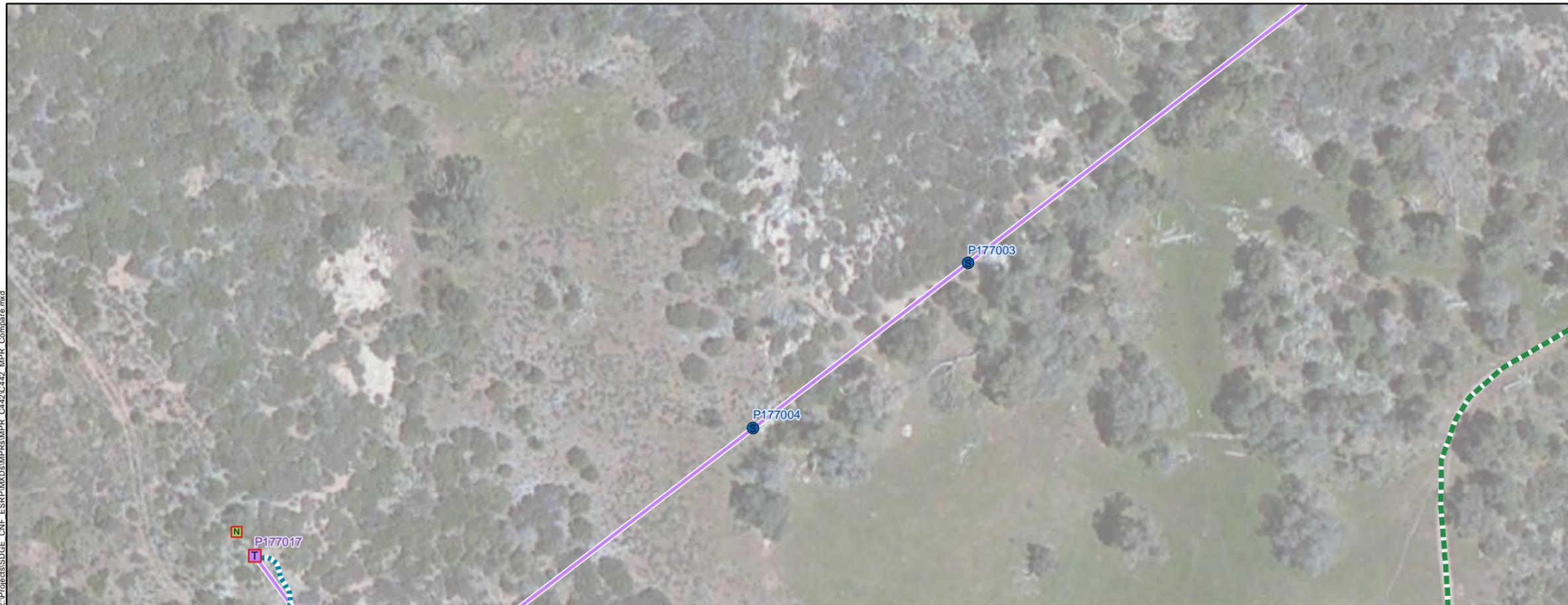
Final Design

NTP #8

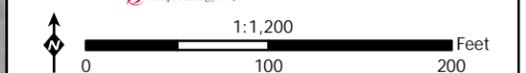
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only

MPR

-  Replace Tap Pole
-  New Anchor
-  Construction Only Access
-  Navigation Access Road



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.

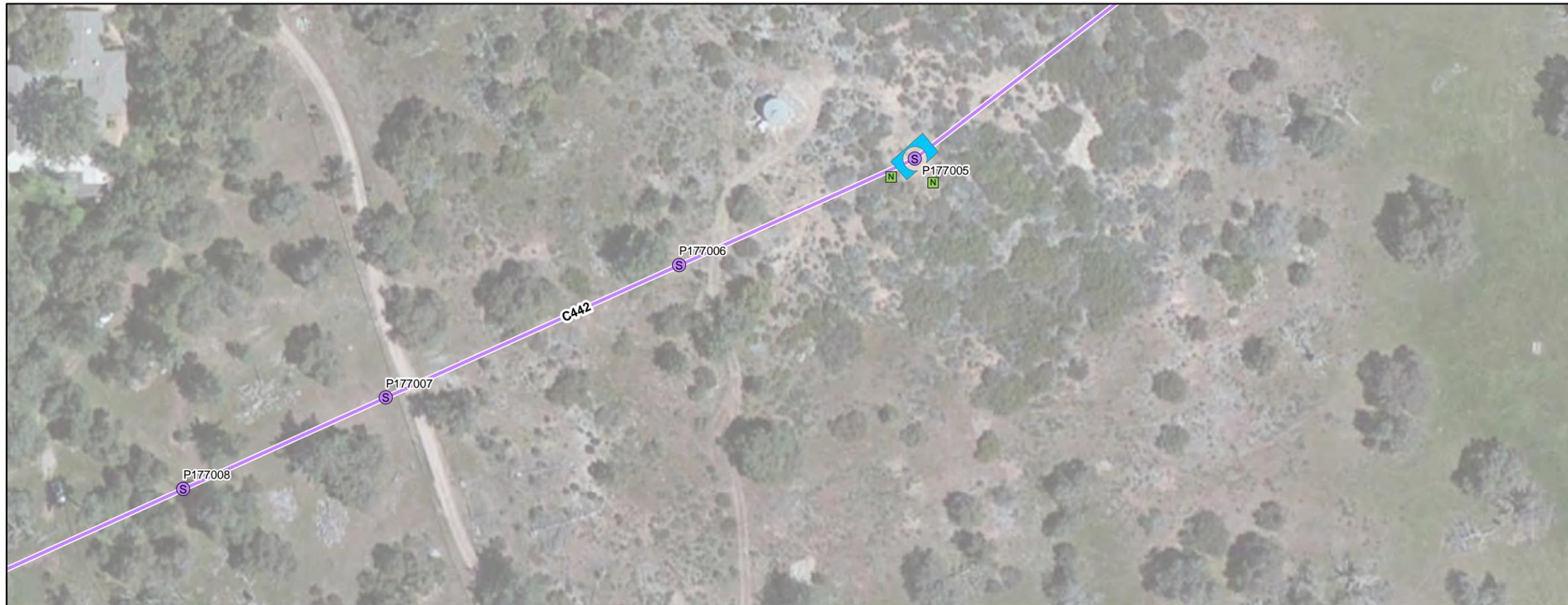
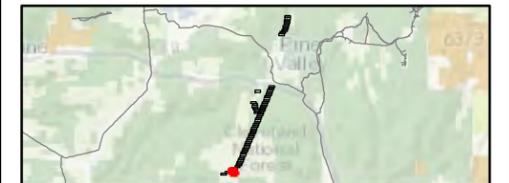


**Attachment B:
Comparison Map
C442 Map 53 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Anchor
-  Stringing Site
-  Wood-to-Steel Replacement



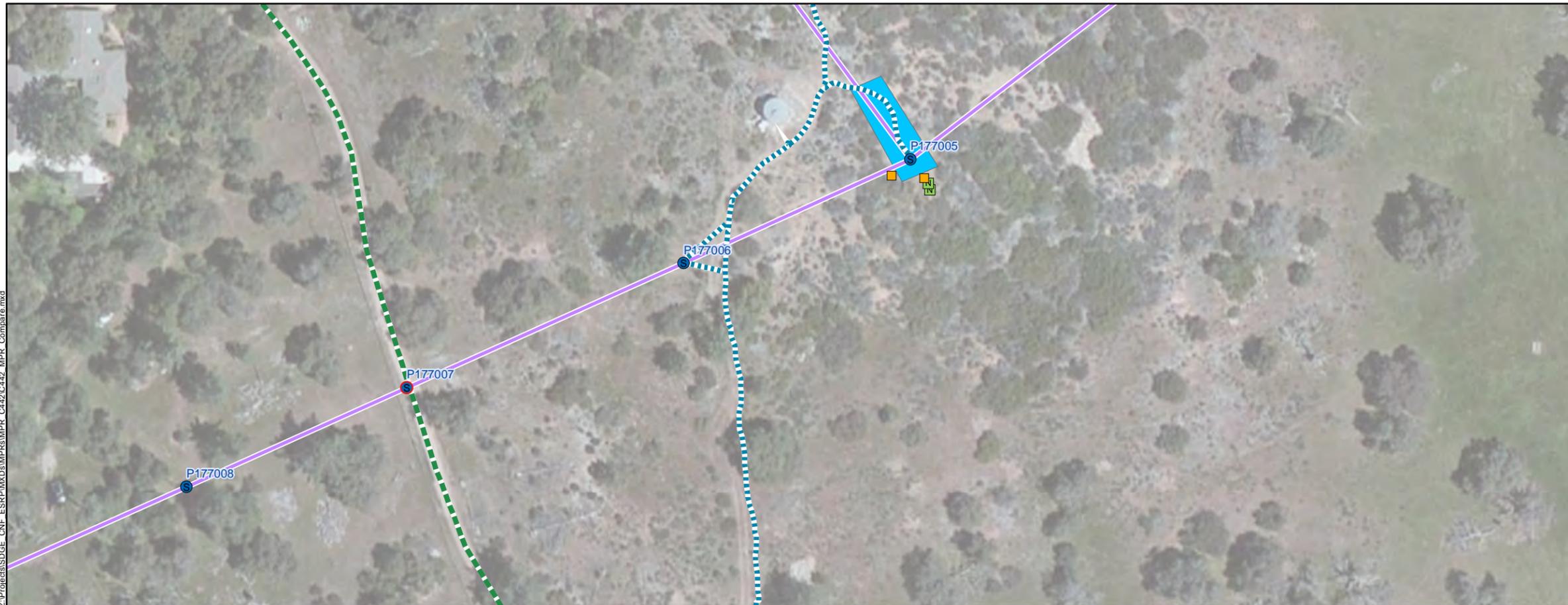
Final Design

NTP #8

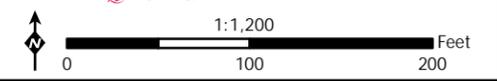
-  Wood-to-Steel Replacement
-  Wood-to-Steel Replacement 12kV Only
-  Remove from Service Anchor
-  New Anchor

MPR

-  Wood-to-Steel Replacement 12 kV Only
-  Stringing Site
-  Construction Only Access
-  Navigation Access Road



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 54 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  Wood-to-Steel Replacement



Final Design

NTP #8

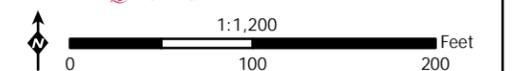
-  Wood-to-Steel Replacement
-  Removal
-  Wood-to-Steel Replacement 12kV Only

MPR

-  Wood-to-Steel Replacement 12 kV Only



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 55 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Wood-to-Steel Replacement Pole
-  New Anchor
-  Stringing Site
-  Wood-to-Steel Replacement
-  Navigation Access Road



Final Design

NTP #8

-  Wood-to-Steel Replacement
-  Pending
-  Wood-to-Steel Replacement 12kV Only
-  Navigation Access Road

MPR

-  Pole Top Work Only
-  Wood-to-Steel Replacement 12 kV Only
-  Existing Anchor
-  New Anchor
-  Remove from Service Anchor
-  Stringing Site
-  Temporary Access/Entry/Turnaround
-  Construction Only Access
-  Navigation Access Road

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 56 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

Construction Only Access

U.S. Forest Service



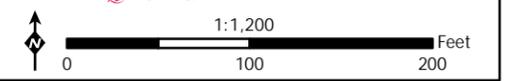
Final Design

NTP #8

Construction Only Access

MPR

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 57 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

Construction Only Access

U.S. Forest Service



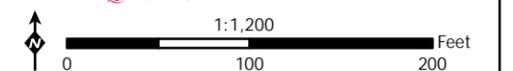
Final Design

NTP #8

Construction Only Access

MPR

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 58 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

Construction Only Access

U.S. Forest Service



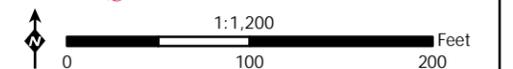
Final Design

NTP #8

Construction Only Access

MPR

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 59 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

Construction Only Access

U.S. Forest Service



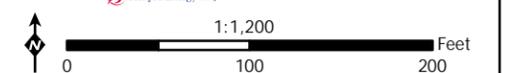
Final Design

NTP #8

Construction Only Access

MPR

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.





**Attachment B:
Comparison Map
C442 Map 60 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

Construction Only Access

U.S. Forest Service



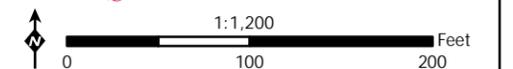
Final Design

NTP #8

Construction Only Access

MPR

Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 61 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

-  Staging Area
-  Construction Only Access
-  Navigation Access Road
-  U.S. Forest Service



Final Design

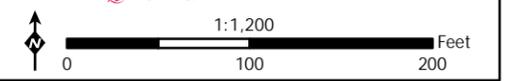
NTP #8

-  Construction Only Access
-  Navigation Access Road

MPR



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



**Attachment B:
Comparison Map
C442 Map 62 of 62**

**Cleveland National Forest
Power Line Replacement Projects**

2015 Preliminary Design

--- Navigation Access Road

■ U.S. Forest Service



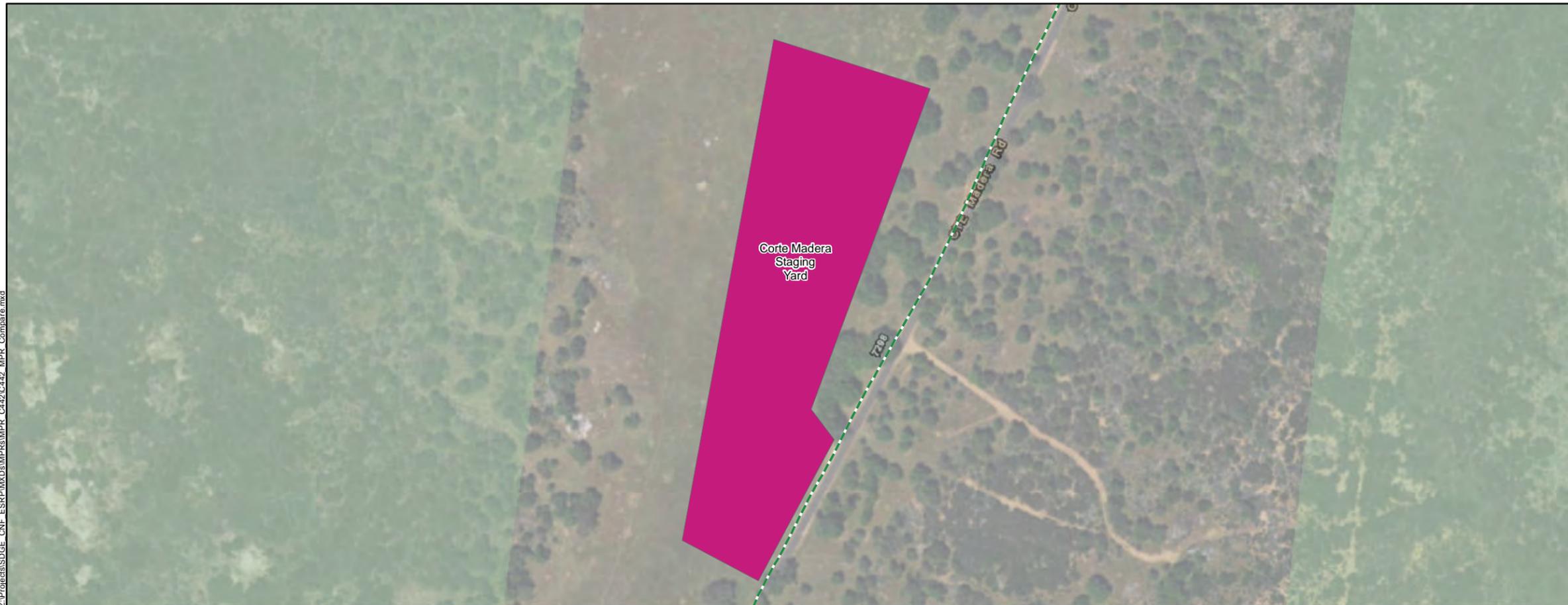
Final Design

NTP #8

--- Navigation Access Road

MPR

■ Fly Yard/Staging Area



Note: Temporary pole work areas associated with the MPR and NTP components are shown in the Workspace and Sensitive Resources Map.



ATTACHMENT C: IMPACTS TABLE

ATTACHMENT C: IMPACTS TABLE

Table 1: Impacts Table lists the temporary impacts of this Minor Project Refinement (MPR) request, as well as temporary impacts for the San Diego Gas & Electric Company (SDG&E) Cleveland National Forest Power Line Replacement Projects to date by vegetation type and workspace type.

Table 1: Impacts Table

Impact Location	Approximate Impacts (acres)		
	Native Vegetation	Non-Native Grassland	Agricultural/Disturbed/ Developed/Bare Ground
Permanent Impacts			
Anchors	<0.01	--	<0.01
Poles	<0.01	--	<0.01
Total	<0.01	--	<0.01
Temporary Impacts			
Access Roads ¹	0.49	--	0.16
Anchor Work Areas	0.05	--	<0.01
Pole Work Areas	0.35	--	0.14
Stringing Sites	0.79	--	0.06
Temporary Access/Entry/Turnaround	0.17	--	0.03
Corte Madera Staging and Fly Yard	--	4.04	--
Total	1.86	4.04	0.40
MPR Total	1.86	4.04	0.40

¹ SDG&E uses three types of access roads—maintained, navigation, and construction only. Construction-only access roads can sometimes require improvements and maintenance, which create temporary impacts to vegetation.

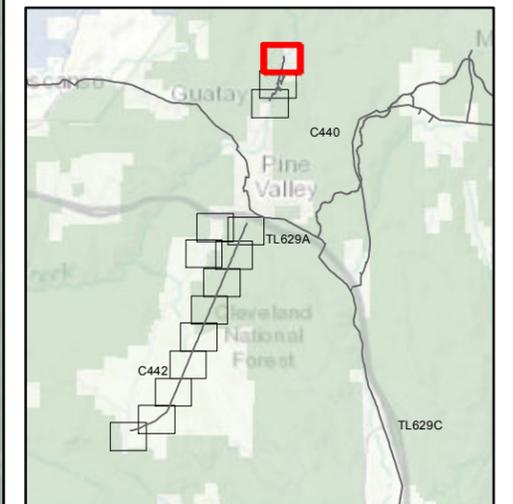
ATTACHMENT B: NTP #8 COMPONENTS MAP

**Attachment B:
NTP #8 Components Map
C442 Map 1 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

- Pole Top Work Only
- Wood-to-Steel Replacement 12 kV Only
- Stringing Site
- Wood-to-Steel Replacement
- ⋯ Construction Only Access
- - - Navigation Access Road
- U.S. Forest Service

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



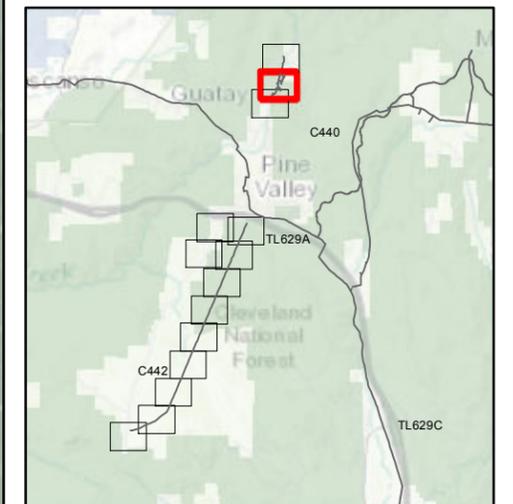
Z:\Projects\SDGE_CNF_ESR\IMXDs\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 2 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

- N New Steel Pole
- Pole Top Work Only
- Removal
- New Stub Pole
- Wood-to-Steel Replacement 12 kV Only
- Stringing Site
- Existing Overhead
- Wood-to-Steel Replacement
- Construction Only Access
- Navigation Access Road
- U.S. Forest Service

Notes:
 1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



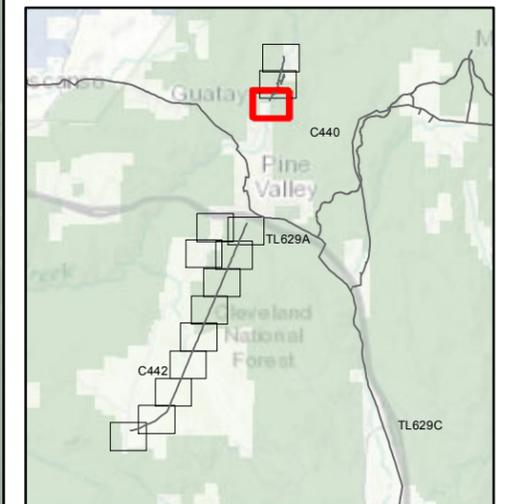
Z:\Projects\SDGE_CNF_ESR\IMKDs\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 3 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

-  Pole Top Work Only
-  New Stub Pole
-  Wood-to-Steel Replacement 12 kV Only
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access
-  Navigation Access Road
-  U.S. Forest Service

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



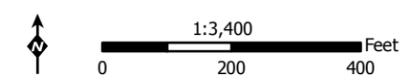
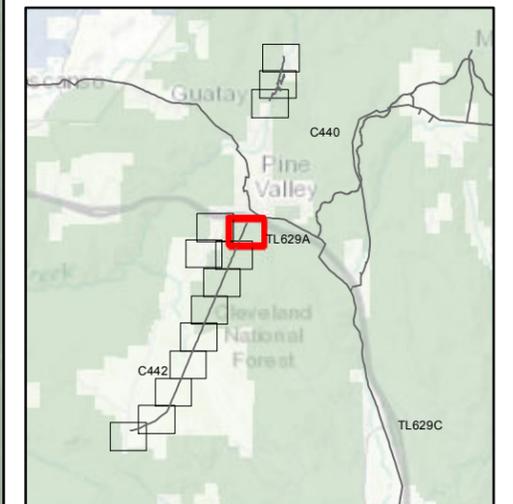
Z:\Projects\SDGE_CNF_ESR\WKS\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 4 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

-  New Steel Pole
-  Wood-to-Steel Replacement 12 kV Only
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access
-  Navigation Access Road
-  U.S. Forest Service

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



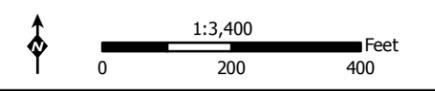
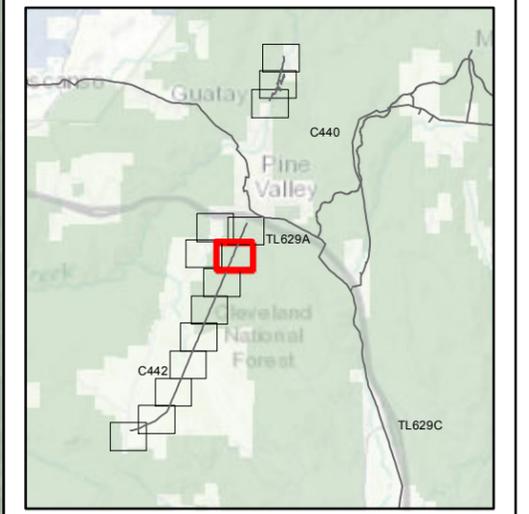
Z:\Projects\SDGE_CNF_ESRPI\KDs\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 5 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

- N New Steel Pole
- S Wood-to-Steel Replacement 12 kV Only
- Wood-to-Steel Replacement
- ⋯ Construction Only Access
- U.S. Forest Service

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



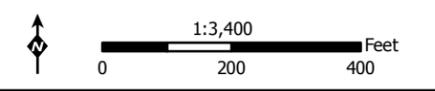
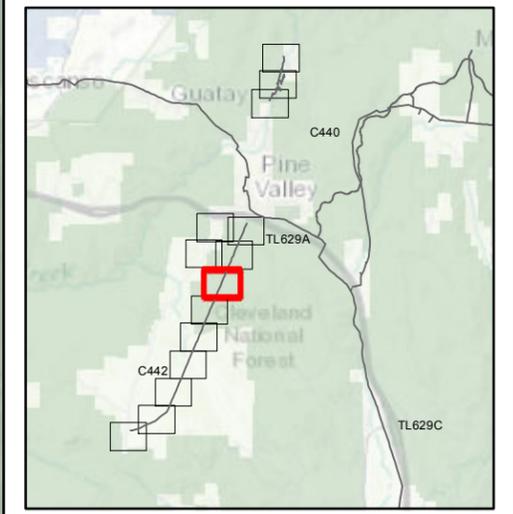
Z:\Projects\SDGE_CNF_ESR\IMXDs\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 6 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

- N New Steel Pole
- S Wood-to-Steel Replacement 12 kV Only
- Stringing Site
- Wood-to-Steel Replacement
- Construction Only Access
- U.S. Forest Service

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



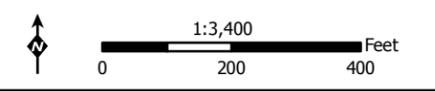
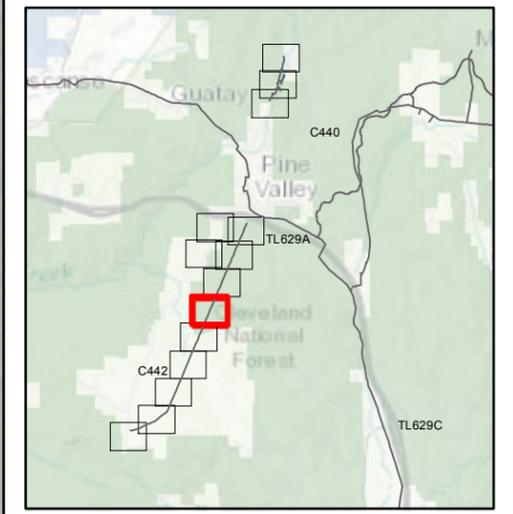
Z:\Projects\SDGE_CNF_ESR\IMX\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 7 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

-  Wood-to-Steel Replacement 12 kV Only
-  Wood-to-Steel Replacement
-  Construction Only Access
-  U.S. Forest Service

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



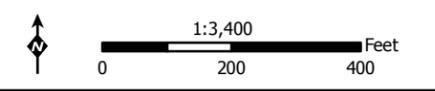
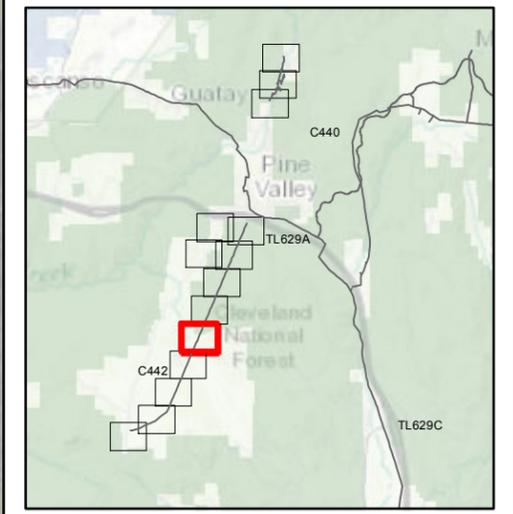
Z:\Projects\SDGE_CNF_ESR\WxDs\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 8 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

-  Wood-to-Steel Replacement 12 kV Only
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access
-  Navigation Access Road
-  U.S. Forest Service

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



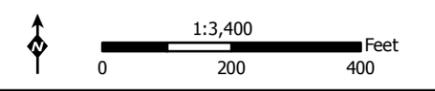
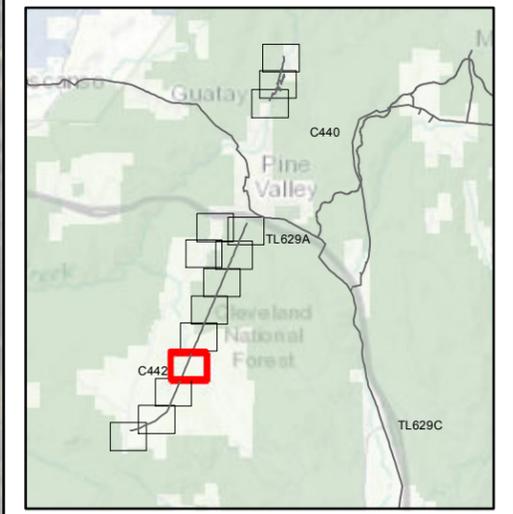
Z:\Projects\SDGE_CNF_ESRPI\KDs\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 9 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

- N New Steel Pole
- S Wood-to-Steel Replacement 12 kV Only
- Stringing Site
- Wood-to-Steel Replacement
- Construction Only Access
- Navigation Access Road

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



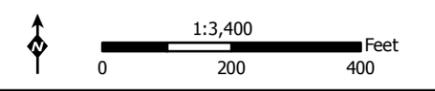
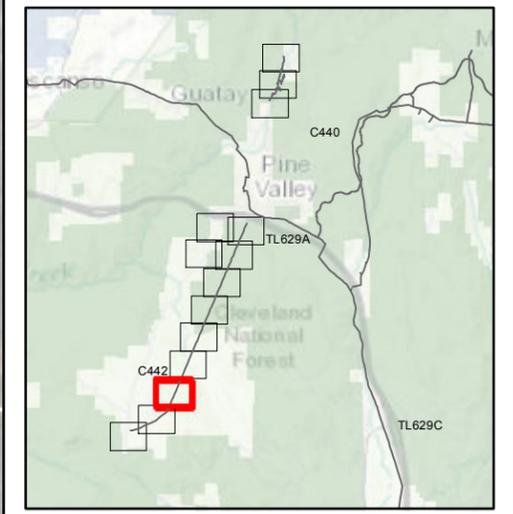
Z:\Projects\SDGE_CNF_ESRPI\KDs\NTP\NTP_C442\C442_NTP8_Component.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 10 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

-  New Steel Pole
-  Wood-to-Steel Replacement 12 kV Only
-  Stringing Site
-  Wood-to-Steel Replacement
-  Construction Only Access
-  Navigation Access Road

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



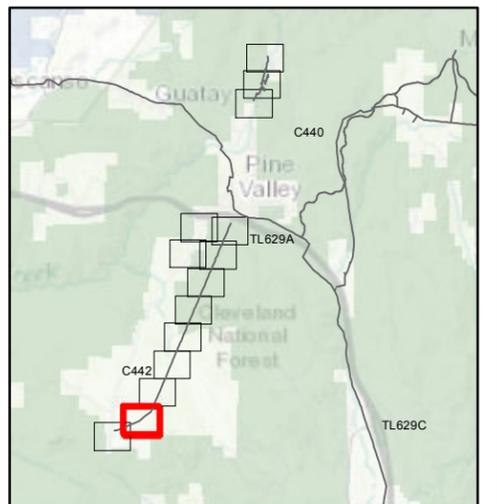
Z:\Projects\SDGE_CNF_ESR\W\Ds\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 11 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

- N New Steel Pole
- R Removal
- T Replace Tap Pole
- S Wood-to-Steel Replacement 12 kV Only
- Stringing Site
- Wood-to-Steel Replacement
- - - Construction Only Access
- - - Navigation Access Road

Notes:
 1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



Z:\Projects\SDGE_CNF_ESRPI\KDs\NTP\NTP_C442\C442_NTP8_Component1.mxd

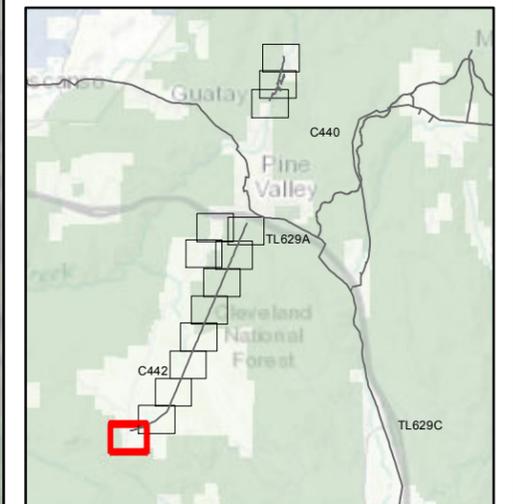
**Attachment B:
NTP #8 Components Map
C442 Map 12 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

- Pending
- Pole Top Work Only
- Ⓡ Removal
- Wood-to-Steel Replacement 12 kV Only
- Stringing Site
- Wood-to-Steel Replacement
- Construction Only Access
- Navigation Access Road
- U.S. Forest Service

Notes:

1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
2. New stub poles are needed for anchoring the replacement steel pole.
3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



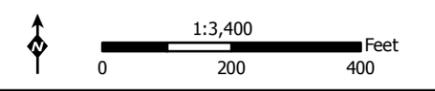
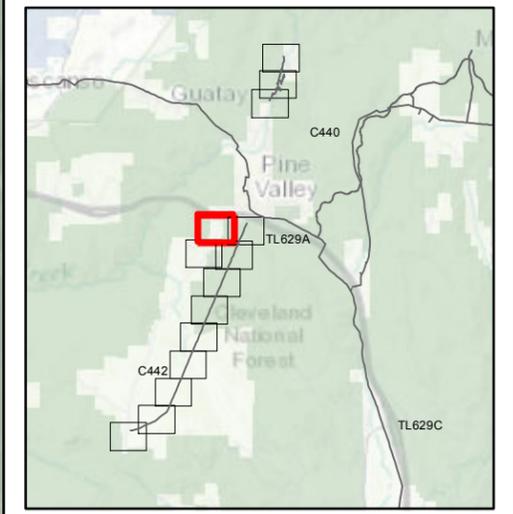
Z:\Projects\SDGE_CNF_ESRPI\KDs\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 13 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

-  Fly Yard/Staging Area
-  Navigation Access Road
-  U.S. Forest Service

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



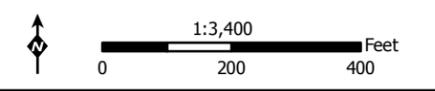
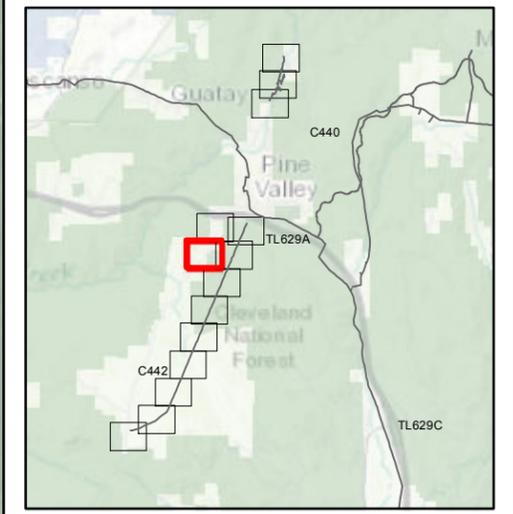
Z:\Projects\SDGE_CNF_ESR\W\Ds\NTP\NTP_C442\C442_NTP8_Component1.mxd

**Attachment B:
NTP #8 Components Map
C442 Map 14 of 14**

**Cleveland National Forest
Power Line Replacement Projects**

-  Staging Area
-  Construction Only Access
-  Navigation Access Road
-  U.S. Forest Service

- Notes:
1. A service drop is an unnumbered customer-owned pole that will require overhead reconfiguration work.
 2. New stub poles are needed for anchoring the replacement steel pole.
 3. [P#] denotes the 2015 engineering nomenclature, which has been updated.



Z:\Projects\SDGE_CNF_ESRPI\KDs\NTP\NTP_C442\C442_NTP8_Component1.mxd

ATTACHMENT C: PRE-CONSTRUCTION STATUS REPORT

Attachment C: Pre-Construction Status Report

- To Be Implemented During Construction
- Pending
- To Be Implemented Following Construction

- Complete
- Not Applicable OR To Be Implemented Immediately Prior to Construction

Report Criteria:

SOURCE: MMCRP

TIMING: Design; Design and During; Design and Post; Pre; Pre and During; Pre and Post; Pre, During, and Post

LOCATION: C442

Location: C442

Measure Category	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Visual	VIS-01	01	Scenery Conservation Plan	SDG&E shall file with the CPUC a Scenery Conservation Plan that is approved by the Forest Service and provided to other applicable jurisdictional agencies for review and comment. Each 69 kV power line or 12 kV distribution line segment will be covered under an individual section of the plan, and each section will be reviewed and approved by the appropriate agencies prior to any ground-disturbing activities for the specific segment. The purpose of this plan is to identify and implement specific actions that will minimize the project's visual disturbance to the naturally established scenery. Specific actions shall also be identified and implemented for individual poles to protect existing views from established scenic vistas and roadways located outside of the CNF. Power and distribution line support towers shall be designed to minimize their visual prominence and contrast to the natural landscape. Individual poles anticipated to create adverse effects to scenic vistas and/or particularly noticeable visual contrast in existing views shall be designed, located, shaped, textured, and/or screened as necessary to minimize their visual contrast, blend and complement the adjacent forest and community character. Methods such as limiting the number of climbing pegs and identifying less visually intrusive pole markings for high voltage lines, consistent with CPUC requirements, shall be considered. SDG&E shall also be required to provide photorealistic visual simulations of typical proposed designs that include design features that may be incorporated into poles identified for visual treatment to demonstrate the effectiveness of such features in reducing visual contrast and prominence as viewed from sensitive viewsheds.	No specific pole locations for C442 were identified as requiring treatment; therefore, this measure is not applicable.	Pre and During	N/A
Visual	VIS-02	01	CNF Land Management Plan Amendment	If the Forest Service selects to fire harden TL626, TL629, TL6923 or C157 or relocate TL626 (Options 1,2,3a,3b,4 and 5, it would have to approve a project-specific CNF Land Management Plan Amendment contemporaneously with the decision to authorize the MSUP and pole replacement project. The project-specific plan amendment would amend the Land Management Plan to allow project-specific exemptions for inconsistencies with the CNF Land Management Plan scenic integrity objectives.	C442 was not identified in the Final EIR/EIS or ROD as conflicting with the Scenic Integrity Objectives established in the 2005 CNF Land Management Plan or the 2014 CNF Land Management Plan Amendment; therefore, this measure is not applicable.	Pre	N/A
Visual	VIS-02	02	CNF Land Management Plan Amendment	SDG&E would be required to compensate the Forest Service for the loss in scenic quality associated with the negative scenery effects that are inconsistent with the LMP scenic integrity objectives. Compensation shall be accomplished through agency approved scenery restoration activities, fee-payment for scenery restoration projects, or preservation of comparable lands.	C442 was not identified in the Final EIR/EIS or ROD as conflicting with the Scenic Integrity Objectives established in the 2005 CNF Land Management Plan or the 2014 CNF Land Management Plan Amendment; therefore, compensatory mitigation is not required, and this measure is not applicable.	Pre	N/A
Biological Resources	APM-BIO-02	01	Plant and Wildlife Surveys	All work areas will be surveyed for special-status plant and wildlife species by a qualified biologist prior to the commencement of construction in accordance with SDG&E's pre-activity survey report requirements.	A qualified biologist conducted a pre-activity survey of this component in accordance with SDG&E's Subregional NCCP operational protocols. Documentation of the pre-activity survey report's submittal to the USFWS and CDFW will be provided to the CPUC and USFS prior to construction.	Pre	Pending

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	APM-BIO-05	01	Stringing Sites	Stringing site locations are designed with a preference toward placement within roadways, where possible, to minimize additional potential impacts from grading and vegetation removal that may otherwise be required if these stringing sites were required to be located in vegetated, off-road areas.	SDG&E placed stringing sites within existing roadways to the maximum extent feasible, which is shown in a Workspace and Sensitive Resources Map that was submitted to the USFS and CPUC on September 13, 2017.	Design	Complete
Biological Resources	APM-BIO-06	01	Implement NCCP in Laguna Mountains Skipper Habitat	Although Laguna Mountains Skipper is not covered under SDG&E's Natural Community Conservation Plan (NCCP), SDG&E will utilize NCCP protocols 1, 2, 3, 5, 7, 8, 10, 11, 13, 14, 17, 24, 25, 29, 34, 35, 41, 44, 48, 54, 55, and 57 in United States (U.S.) Forest Service- (Forest Service-) modeled critical habitat and occupied habitat to minimize any potential impacts to this species. In addition, SDG&E will have a qualified biologist survey any Laguna Mountains Skipper habitat prior to work.	No modeled critical habitat or occupied habitat for Laguna Mountains skipper occurs within this component; therefore, this measure is not applicable.	Pre and During	N/A
Biological Resources	APM-BIO-07	01	CA Spotted Owl Consultation	If California spotted owls are identified in the vicinity of proposed work areas during the pre-activity survey process, SDG&E will consult with the appropriate resource agencies to avoid impacts to nesting California spotted owl.	SDG&E will implement the Project's NBMP before and during construction activities in order to avoid impacts to nesting birds, including California spotted owls. If California spotted owl are detected, SDG&E will consult with the appropriate resource agencies.	Pre	To Be Implemented During Construction
Biological Resources	APM-BIO-08	01	Design New Poles with Avian Protection Practices	SDG&E will design and install all new poles to conform to the guidelines in the Suggested Practices for Avian Protection on Power Lines Manual developed by the Avian Power Line Interaction Committee.	The APP was prepared in accordance with MM BIO-28 and was approved by the CDFW on May 18, 2016; the USFWS on June 20, 2016; the CPUC on July 19, 2016; and the USFS on June 30, 2016. The APP includes specific APLIC measures that will be applied, as well as guidelines for specialized construction designs to meet APLIC standards. The APP will be implemented during construction.	Design and During	To Be Implemented During Construction
Biological Resources	APM-BIO-09	01	Bat Roost Coordination	If active bat roosts are identified during pre-activity surveys, SDG&E will coordinate with the U.S. Fish and Wildlife Service/California Department of Fish and Wildlife as appropriate.	Five active bat roosts were identified near C442 during focused surveys. Survey results will be included in the bat roost assessment and field survey report for C442 and submitted to the USFWS and CDFW prior to construction. During construction, SDG&E will continue to coordinate with the USFWS and/or CDFW about these roosts as appropriate.	Pre	To Be Implemented During Construction
Biological Resources	BIO-01	01	Work Limits	Confine all construction and construction-related activities to the minimum necessary area. All construction areas, access to construction areas, and construction-related activities shall be strictly limited to the areas identified in Section B, Project Description, Table B-7. The limits of approved work spaces (not including existing access roads) shall be delineated with stakes and/or flagging prior to beginning work in any area. In areas where SDG&E will not work within exclusive-use easements, SDG&E will post temporary signage along approved work limits, indicating that the area is an active construction/work zone and access is temporarily restricted. An environmental monitor shall complete weekly observations to ensure that all work is completed within the approved work limits, and in the event any work occurs beyond the approved limits, it shall be reported by SDG&E's compliance team in accordance with the Mitigation Monitoring, Compliance, and Reporting program (see Section H).	Final engineering plans with delineated workspaces were submitted as a Workspace and Sensitive Resources Map on September 13, 2017. The approved work limits will be delineated with stakes and/or flagging immediately prior to construction. Additional restricted access signage will be installed at work areas outside of SDG&E's exclusive-use easements immediately prior to construction.	Pre and During	To Be Implemented Immediately Prior to Construction

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-02	01	Contractor Training	Conduct contractor training for all construction staff. Prior to construction, all developer, contractor, and subcontractor personnel shall receive training regarding the appropriate work practices necessary to implement the mitigation measures and comply with environmental regulations, including plant and wildlife species avoidance, impact minimization, and best management practices. Sign-in sheets and hard hat decals shall be provided that document contractor training has been completed for construction personnel.	All construction personnel will attend the required Worker Environmental Awareness Program training immediately prior to working on the Project and will receive a hard-hat decal to indicate that they have attended the training. Training sign-in sheets will be submitted with the Weekly Environmental Compliance Report during construction.	Pre and During	To Be Implemented Immediately Prior to Construction
Biological Resources	BIO-03	01	Biological Monitoring	Conduct biological construction monitoring. An authorized biological monitor must be present at the construction sites during all initial ground-disturbing and vegetation-removal activities in undeveloped areas (i.e., not roads or existing developed areas). The monitor shall survey the construction project footprint and surrounding areas for compliance with all environmental specifications. Weekly biological construction monitoring reports shall be prepared and submitted to the appropriate permitting and responsible agencies through the duration of the ground-disturbing and vegetation-removal construction phase. Monthly biological construction monitoring reports shall be prepared and submitted through the duration of project construction to document compliance with environmental requirements.	Biological monitors approved by the CPUC and the USFS will conduct monitoring during initial ground disturbance and vegetation removal activities. Biologists that were identified as "trainees only" by the USFS will only conduct monitoring on private lands or under the supervision of a fully approved biologist on USFS-managed lands. Biological monitoring results will be submitted with the Weekly Environmental Compliance Reports.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-04	01	Habitat Restoration	Restore all temporary construction areas pursuant to a Habitat Restoration Plan (HRP). All previously undisturbed temporary work areas not subject to long-term use or ongoing vegetation maintenance shall be revegetated with native species characteristic of the adjacent native vegetation communities in accordance with a Habitat Restoration Plan as described in SDG&E NCCP 7.2 Habitat Enhancement Measures. Restoration techniques may include the following: hydroseeding, hand-seeding, imprinting, and soil and plant salvage. Any salvage and relocation of species considered desert native plants shall be conducted in compliance with the California Desert Native Plant Act. The HRP shall include success criteria and monitoring specifications and shall be approved by the permitting agencies prior to construction of the project. At the completion of project construction, all construction materials shall be completely removed from the site. Topsoil located in areas to be restored will be conserved and stockpiled during the excavation process for use in the restoration of sites requiring restoration. Wherever possible, vegetation will be left in place or mowed, and not grubbed, or the NCCP, to avoid excessive root damage and allow for natural regrowth following construction. Temporary impacts shall be restored sufficient to compensate for the impact to the satisfaction of the permitting agencies (depending on the location of the impact). If restoration of temporary impact areas does not meet success criteria per the HRP, the temporary impact shall be considered a permanent impact and compensated accordingly (see MM BIO-5). Specifically, the HRP will include the following sections: Introduction; Mitigation Measure Summary; Plan Objectives; Plan Implementation; Pre-Construction Documentation; Clearing and Grading; Cleanup; Seeding; Other Planting Methods- Schedule-Restoration; Seeding and Planting- Restoration Monitoring; Monitoring Success Criteria, and Remedial Measures; Reporting; Completion of Restoration Program- Reference. The HRP will be prepared by a habitat restoration specialist (approved by the CPUC and Forest Service) who will oversee implementation of the HRP. The HRP shall be submitted to the CPUC and the Forest Service for review and approval prior to implementation.	The Habitat Restoration Plan was approved by the CPUC and USFS on August 11, 2016. Jeffrey Coward was approved as a Habitat Restoration Specialist by the CPUC on September 14, 2015 and by the USFS on October 26, 2015. Cecilia Meyer-Lovell was approved as a Habitat Restoration Specialist by the CPUC on May 31, 2016 and by the USFS on May 23, 2016. The Habitat Restoration Plan will be implemented during construction.	Pre, During, and Post	To Be Implemented During Construction
Biological Resources	BIO-06	01	Fire Prevention	Implement fire prevention best management practices during construction and operation activities. Fire prevention best management practices shall be implemented during construction and operation of the project as specified by the Construction Fire Prevention/Protection Plan (to be developed as required under MM FF-1 and MM FF-2). The PALS system will be followed for any work on National Forest System lands.	The Construction Fire Prevention/Protection Plan was approved by the USFS on June 17, 2016 and the CPUC on July 29, 2016. An updated plan was submitted to the CPUC and USFS on September 30, 2016 and May 31, 2017, but no approval was required. Fire prevention BMPs will be implemented during construction in accordance with the plan.	Pre and During	To Be Implemented During Construction

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-07	01	SWPPP	Prepare and implement a Stormwater Pollution Prevention Plan. Prepare a Stormwater Pollution Prevention Plan pursuant to the specifications described in APM HYD-05 and MM HYD-1.	C440 and C442 will be enrolled under the Construction General Permit (Order 2009-0009-DWQ [as amended by 2010-0014-DWQ and 2012-006-DWQ]). Permit Registration Documents, which include an NOI and a SWPPP, will be electronically filed to the State Water Resources Control Boards' Storm Water Multiple Applications and Report Tracking System prior to construction. The SWPPP and NOI approval (Waste Discharge Identification Number) will be submitted to the CPUC and USFS prior to construction. The SWPPP will be implemented during construction.	Pre and During	Pending
Biological Resources	BIO-09	01	Pole Replacement with RCAs	SDG&E shall identify all proposed replacement pole locations within the vicinity of Riparian Conservation Areas (RCAs) to identify those poles and associated access roads that can be reasonably relocated outside these areas and consult with the Forest Service for authorization of their relocation and proposed placement. These Forest Service requirements will only apply to National Forest System lands.	A map of pole and access road locations in the vicinity of Riparian Conservation Areas on USFS-managed lands was submitted to the CPUC and USFS on September 13, 2017. The map is pending approval from the USFS.	Pre and During	Pending
Biological Resources	BIO-10	01	Limit Impacts to Jurisdictional Features	Limit temporary and permanent impacts to jurisdictional features to the minimum necessary. Formal jurisdictional delineation and permits are required prior to construction for all work areas located within or adjacent to jurisdictional wetlands and waters. The applicant shall obtain and implement the terms and conditions of agency permit(s) for unavoidable impacts to jurisdictional wetlands and waters. All construction areas, access to construction areas, and construction-related activities shall be strictly limited to the areas within the approved work limits and delineated with stakes and/or flagging that shall be maintained throughout the construction period. The project applicant shall obtain applicable permits and provide evidence of permit approval, which may include but not be limited to a Clean Water Act Section 404 Permit from the ACOE, a Clean Water Act Section 401 water quality certification from the RWQCB, and a Section 1602 Streambed Alteration Agreement with the California Department of Fish and Wildlife for impacts to jurisdictional features prior to project construction. These permits are anticipated to be approved under the MSUP. The terms and conditions of these authorizations shall be implemented.	Surveys for jurisdictional waters and wetlands were completed in accordance with MM BIO-10. Impacts to non-wetland jurisdictional waters are anticipated at Pole P177014 along C442. A Clean Water Act Section 404 Nationwide Permit No. 12 authorization from the United States Army Corps of Engineers, a Clean Water Act Section 401 Pre-Certification of the 2017 Nationwide Permit authorization from the California Regional Water Quality Control Board, and an amendment to the existing California Fish and Game Code Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife will be obtained prior to impacts to the jurisdictional resources associated with this component. Documentation of permit condition implementation will be provided to the CPUC and USFS through the Weekly Environmental Compliance Reports. A Workspace and Sensitive Resources Map depicting delineated work areas and proposed flagging or fencing areas for jurisdictional waters and wetlands will be submitted to the CPUC and USFS prior to construction.	Pre and During	Pending

Measure Category Title	MMNo	TaskNo	Mitigation Measure Title	Task Text	Comments	Timing	Status
Biological Resources	BIO-10	02	Limit Impacts to Jurisdictional Features	In addition, prior to conducting work or establishing the final design of a selected transmission line alignment, a planning-level assessment of aquatic resources will be conducted to identify the environmentally preferred alternative. The assessment will include review of the National Hydrography Dataset, National Wetland Inventory, U.S. Geological Survey topographic maps, high-resolution digital photography, and necessary field checking. Once the environmentally preferred alternative is identified, a jurisdictional delineation will be conducted of the selected transmission line to ensure the final design is the Least Environmentally Damaging Practicable Alternative (LEDPA) and is in compliance with the Clean Water Act (CWA) Section 404(b)(1) Guidelines. The CWA Section 404 permit authorization will be obtained for any discharges into waters of the United States and the widths of access roads and construction of bridges over waters of the United States will be minimized to the extent feasible.	Prior to conducting work or establishing a final design for the Project, a planning-level assessment was conducted to identify an environmentally preferred alternative during the permitting process. Surveys for jurisdictional waters or wetlands were completed to ensure the final design of the selected distribution line is the Least Environmentally Damaging Practicable Alternative and is in compliance with the Clean Water Act Section 404(b) (1) Guidelines. A Clean Water Act Section 404 Nationwide Permit No. 12 authorization will be obtained prior to construction.	Pre	Pending
Biological Resources	BIO-11	01	Habitat Creation, Enhancement, Preservation, or Restoration	Implement habitat creation, enhancement, preservation, and/or restoration pursuant to a wetland mitigation plan to ensure no net loss of jurisdictional waters and wetlands. Temporary and permanent impacts to all jurisdictional resources shall be compensated through a combination of habitat creation (i.e., establishment), enhancement, preservation, and/or restoration at a minimum of a 1:1 ratio or as required by the permitting agencies. Any creation, enhancement, preservation, and/or restoration effort shall be implemented pursuant to a Habitat Restoration Plan, which shall include success criteria and monitoring specifications, and shall be approved by the permitting agencies prior to construction of the project. A habitat restoration specialist will be designated and approved by the permitting agencies and will determine the most appropriate method of restoration. Restoration techniques may include hydroseeding, hand-seeding, imprinting, and soil and plant salvage (as discussed in SDG&E NCCP 7.2 Habitat Enhancement Measures). Temporary impacts shall be restored sufficient to compensate for the impact to the satisfaction of the permitting agencies (depending on the location of the impact). If restoration of temporary impact areas is not possible to the satisfaction of the appropriate agency, the temporary impact shall be considered a permanent impact and compensated accordingly. All habitat creation and restoration used as mitigation for the proposed project on public lands shall be located in areas designated for resource protection and management. All habitat creation and restoration used as mitigation for the proposed project on private lands shall include long-term management and legal protection assurances.	Temporary impacts are anticipated to be restored per the Habitat Restoration Plan, which was approved by the CPUC and USFS on August 11, 2016. Temporary and permanent impacts will be compensated as applicable and as required by the conditions defined in the waters permit obtained for C442. Documentation of the Clean Water Act Section 404 Nationwide Permit No. 12 authorization, Clean Water Act Section 401 Pre-Certification of the 2017 Nationwide Permits authorization, and California Fish and Game Code Section 1602 Streambed Alteration Agreement amendment will be submitted to the CPUC and USFS prior to impacts to the jurisdictional waters associated with this component.	Pre and During	Pending
Biological Resources	BIO-12	01	Drainage Crossing Requirements	Where drainage crossings are unavoidable, construct access roads at right angles to drainages. Unless not possible due to existing landforms or site constraints, access roads shall be built perpendicular to drainages to minimize the impacts to these resources and prevent impacts along the length of jurisdictional features.	No new, permanent access roads will be constructed for C442; therefore, this measure is not applicable.	Pre and During	N/A

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-13	01	Special Status Plant Surveys	Conduct preconstruction surveys for special status plants in areas not accessible during previous rare plant surveys. Prior to construction, San Diego Gas & Electric (SDG&E) shall retain a qualified biologist approved by the California Public Utilities Commission (CPUC) and Forest Service to conduct a focused rare plant survey on site during the time period when the previously described special-status plant species are detectable. Table D.4-123 in EIR/EIS describes the 40 blooming plant species that shall be surveyed, months they shall be surveyed (i.e., blooming periods), and the TL/circuits on which they occur. Cuyamaca cypress and tecate cypress can be surveyed anytime of the year. Surveys shall be conducted in areas not included during rare plant surveys (see Chambers Group Inc. 2012b, Table 2). Of the 40 species described, there is some potential for 8 of these species to occur in vernal pools, including California Orcutt grass*, Cuyamaca larkspur, long-spined spineflower, Orcutt's brodiaea*, San Diego goldenstar*, San Diego thornmint*, Santa Lucia dwarf rush, and variegated dudleya*. These 8 species are also included in Table D.4-12. These species will also be protected through implementation of, the SDG&E Natural Community Conservation Plan (NCCP), and through avoidance of impacts to wetlands (MM BIO-10 through MM BIO-12). Locations of special-status plants shall be identified and inventoried. The qualified biologist shall supervise construction activities within the vicinity of areas identified as having special-status plant species. Impacts to special-status plant species shall be avoided to the maximum extent possible by installing fencing or flagging, marking areas to be avoided in construction areas, and limiting work in areas identified as having special-status plant species to periods of time when the plants have set seed and are no longer growing. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through off-site land preservation and/or plant salvage and relocation as determined by the qualified biologist and approved by the CPUC. Alternatively, if the special-status plant species in question is a Covered Species within the SDG&E NCCP, mitigation consistent with measures established in the NCCP shall be provided. The results of the focused plant surveys and measures outlined above that will be implemented by SDG&E in the event special-status plant species are identified within the biological survey area shall be provided to CPUC and Forest Service. CPUC and Forest Service will review and approve the rare plant survey report and recommended avoidance or mitigation approached prior to issuance of a notice to proceed.	In 2017, qualified biologists (who were approved by the CPUC and USFS) conducted special-status plant surveys in areas of C442 that were not accessible during the Chambers Group surveys in 2010. The 2017 Rare Plant Survey Report for C442 will be submitted to the CPUC and USFS prior to construction.	Pre and During	Pending
Biological Resources	BIO-14	01	Special Status Plant Fencing/Flagging	Install fencing or flagging around identified special-status plant species populations in the construction areas. Prior to the start of construction, a qualified biologist shall conduct focused surveys during the appropriate blooming period for special-status plant species for all construction areas. All of the special-status plant locations shall be recorded using a Global Positioning System (GPS), which will be used to site the avoidance fencing/flagging. Special-status plant species shall be avoided to the maximum extent possible by all construction activities. The boundaries of all special-status plant species to be avoided shall be delineated in the field with clearly visible fencing or flagging. The fencing/flagging shall be maintained for the duration of project construction activities.	Notification of planned special-status plant species surveys is provided during the weekly Construction Status meetings with the CPUC and USFS. In 2017, qualified biologists (who were approved by the USFS and CPUC) conducted special-status plant surveys of C442. Prior to construction, the 2017 Rare Plant Survey Report for C442 and GIS shapefiles reflecting the locations of special-status plant species will be submitted to the CPUC and USFS. Special-status plant species will be fenced or flagged immediately prior to construction along this component. A Workspace and Sensitive Resources Map depicting special-status plant occurrences and the locations of fencing/flagging was submitted to the CPUC and USFS on September 13, 2017.	Pre and During	Pending
Biological Resources	BIO-15	01	Special-Status Plant Compensation	Implement special-status plant species compensation. Impacts to special-status plant species shall be maximally avoided. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through off-site land preservation and/or plant salvage and relocation. Where off-site land preservation is biologically preferred, the land shall contain comparable special-status plant resources as the impacted lands and shall include long-term management and legal protection assurances to the satisfaction of the Forest Service. Land preservation must be completed within 36 months of initiation of construction. Where salvage and relocation is demonstrated to be feasible and biologically preferred, it shall be conducted pursuant to an agency-approved plan that details the methods for salvage, stockpiling, and replanting, as well as the characteristics of the receiver sites. Any salvage and relocation plans shall be approved by the permitting agencies prior to project construction. Any salvage and relocation of species considered desert native plants shall be conducted in compliance with the California Desert Native Plant Act. Success criteria and monitoring shall also be included in the plan. If salvage and relocation is not possible to the satisfaction of the Forest Service, off-site land preservation shall be required. Forest Service requirements will only apply to National Forest System lands.	The Special-Status Plant Species Salvage and Relocation Plan was approved by the CPUC on August 22, 2016 and by the USFS on August 24, 2016. SDG&E will implement the Special-Status Plant Species Salvage and Relocation Plan prior to initial ground-disturbing activities. The approved Habitat Restoration Plan will be implemented during and after construction for impacts to sensitive plant species.	Pre and During	To Be Implemented During Construction

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-16	01	Special-Status Butterfly Fencing and Surveys	Install fencing or flagging around identified special-status butterfly host species populations in the construction areas and road maintenance. Prior to the start of construction, a qualified biologist shall conduct focused surveys during the appropriate blooming period for larvae or adult (nectar sources or egg laying sources) plant for the following species: Hermes copper butterfly, Laguna Mountains skipper, or Quino checkerspot butterfly. These host plants include Cleveland's horkelia, western plantain, bird's beak, owl's clover, California buckwheat, and spiny redberry. Similar protective measures for special-status plants (identified in MM BIO-13 and MM BIO-14) shall be implemented. Occupied or suitable habitat for these species shall be avoided to the greatest extent feasible. In addition to the implementation of SDG&E NCCP Operational Protocols, site visits will be conducted prior to construction and road maintenance. Prior to site visits, a digital database of known host plant populations will be reviewed. Site visits will verify the known locations of host plant populations in the area and, if present, avoid those locations.	Notification of planned butterfly and host plant surveys is provided during the weekly Construction Status meetings with the CPUC and USFS. In 2017, qualified biologists (who were approved by the USFS and CPUC) conducted focused special-status plant surveys along C442 to identify locations of special-status butterfly host plant species. Although some special-status butterfly host plant species were observed, no suitable butterfly habitat was identified. Prior to construction, SDG&E will submit the GIS shapefiles of the locations where special-status butterfly host plant species were observed to the CPUC and USFS. All observed special-status butterfly host plant species will be flagged for avoidance to the greatest extent feasible prior to the start of construction. A Workspace and Sensitive Resources Map depicting areas to be fenced or flagged to protect special-status butterfly host plant species was submitted to the CPUC and USFS on September 13, 2017.	Pre	Pending
Biological Resources	BIO-17	01	Butterfly Protocol Surveys	Conduct protocol surveys for Quino checkerspot, Hermes copper, and Laguna Mountains skipper butterflies within 1 year prior to project construction activities in occupied habitat. The project proponent shall conduct preconstruction protocol surveys for Quino checkerspot butterfly, Laguna Mountains skipper, and Hermes copper butterfly within 1 year prior to construction activities (or unless coordination with the U.S. Fish and Wildlife Service determines that SDG&E's low-effect habitat conservation plan (HCP) for Quino (SDG&E 2007) adequately protects the species, historical surveys are adequate, or as superseded by consultation with the USFWS and Forest Service) in any project construction area known to support the species. Surveys shall be conducted by a qualified biologist in accordance with the most currently accepted protocol survey methods for Quino checkerspot and Laguna Mountains skipper. This includes current habitat assessment and reporting requirements. Results shall be reported to USFWS and the CDFW South Coast Regional Office within 45 days of the completion of the survey. Surveys for Hermes copper butterfly shall follow County of San Diego Guidelines. A qualified biologist shall survey all potential habitat for Hermes copper which includes any woody (mature) spiny redberry shrub with California buckwheat within 15 feet. California buckwheat without spiny redberry nearby is not considered suitable habitat. If California buckwheat is within 15 feet of a mature spiny redberry shrub, additional vegetation within 15 feet should also be considered potential habitat for Hermes copper. All butterfly protocol survey data shall be provided to the CDFW South Coast Regional Office.	There is no habitat along this component that supports Laguna Mountains skipper, QCB, or Hermes copper butterfly; therefore, this measure is not applicable.	Pre	N/A

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-18	01	Butterfly Habitat Compensation	Provide compensation for temporary and permanent impacts to Occupied or Critical Habitat for Quino checkerspot, Hermes copper, and Laguna Mountains skipper butterfly habitat through conservation and/or restoration. Temporary and permanent impacts to Quino checkerspot butterfly and Laguna Mountains skipper shall be compensated through a combination of habitat compensation and habitat restoration at a minimum of a 2:1 mitigation ratio for occupied non-critical habitat and a minimum of a 3:1 mitigation ratio for critical habitat, or as required by the permitting agencies. Forest-related impacts will be mitigated at the ratios provided above on Forest Service lands and in coordination with the Forest Service. Habitat compensation shall be accomplished through U.S. Fish and Wildlife Service-approved land preservation or mitigation fee payment for the purpose of habitat compensation of lands supporting Quino checkerspot butterfly or Laguna Mountains skipper as appropriate. Mitigation for Hermes copper butterfly shall consist of 1:1 replacement of temporary impacts to occupied habitat, where host plants are impacted, and at a 2:1 ratio where permanent impacts occur. Land preservation or mitigation fee payment for habitat compensation must be completed within 18 months of permit issuance. Habitat restoration may be appropriate as habitat compensation provided that the restoration effort is demonstrated to be feasible and implemented pursuant to a Habitat Restoration Plan, which shall include success criteria and monitoring specifications and shall be approved by the permitting agencies prior to project construction. All habitat compensation and restoration used as mitigation for the proposed project on public lands shall be located in areas designated for resource protection and management. All habitat compensation and restoration used as mitigation for the proposed project on private lands shall include long-term management and legal protection assurances.	No designated critical or occupied habitat for QCB, Hermes copper butterfly, or Laguna Mountains skipper occurs along this component; therefore, no temporary or permanent impacts to occupied or critical habitat are anticipated, and no compensation for impacts is required.	Pre and During	N/A
Biological Resources	BIO-19	01	Avoid Butterfly Host Plants	Final design of power and distribution line and access roads through Quino checkerspot and Laguna Mountains skipper critical habitat and Hermes copper occupied habitat shall maximally avoid host plants for these species. The final design of the proposed project through Quino checkerspot, Hermes copper, and Laguna Mountains skipper butterfly habitat shall maximally avoid and minimize habitat resources used by these species based on safety and other superseding regulatory requirements. The applicant shall explore alternate tower locations, reduced road widths, reduced vegetation maintenance, and other design modifications to minimize impacts to host plants in critical habitat for these species, and it shall obtain agency approval of the final design through this area. If impacts are not avoided, compensatory mitigation, as described per MM BIO-18, will be required. This measure shall apply to all locations that have been designated as critical or occupied habitat for these species.	This measure applies to QCB and Laguna Mountains skipper critical habitat and Hermes copper butterfly occupied habitat. QCB and Laguna Mountains skipper critical habitat and Hermes copper butterfly occupied habitat do not occur along this component; therefore, this measure is not applicable.	Pre	N/A
Biological Resources	BIO-20	01	Obtain Wildlife Permits	Obtain and implement the terms of agency permit(s) with jurisdiction federal or state-listed species. In addition to the obligation of the Forest Service consulting with the USFWS on the project, if federally listed wildlife species not already covered by SDG&E's NCCP (including any species that may be listed prior to issuance of the PTC and MSUP) may be impacted by the project, the Forest Service will initiate a Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS). If state-listed wildlife species not already covered by SDG&E's NCCP may be impacted by the project, SDG&E will seek a Section 2081 permit (or consistency determination) from the California Department of Fish and Wildlife (CDFW). In addition, take authorization for golden eagles will require coordination with the USFWS and CDFW. SDG&E shall implement and/or adhere to all USFWS recommendations stipulated by the Forest Service in the Special Use Permit; SDG&E shall implement and/or adhere to all requirements in CDFW permit. SDG&E will not need a Section 2081 permit if the potentially impacted species or action is covered by SDG&E's NCCP. The Forest Service is required to consult with the USFWS for their federal action (approving the MSUP) as identified in Section A, Table A-3.	The Project is covered by SDG&E's Subregional NCCP and QCB Low-Effect HCP. In addition, a Biological Opinion was issued for the Project on November 19, 2015. NCCP/HCP operational protocols and the conservation measures from the Biological Opinion will be implemented prior to and during construction.	Pre	To Be Implemented During Construction
Biological Resources	BIO-20	02	Obtain Wildlife Permits	When conducting work within designated critical habitat for the Quino checkerspot butterfly, SDG&E shall implement all applicable protocols to avoid and minimize impacts to this species defined in the SDG&E Low-Effect Habitat Conservation Plan for Quino.	This measure applies to areas within designated critical habitat for QCB. There is no critical habitat for QCB along this component; therefore, this measure is not applicable.	Pre and During	N/A

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-20	03	Obtain Wildlife Permits	Additionally, when working within designated critical habitat for Laguna Mountains skipper, SDG&E shall implement all impact minimization measures for Laguna Mountains skipper (USFS 2006c), consistent with USFWS direction (USFWS 2006, 2007), which includes:1. Prior to project work, a qualified biologist shall identify all LMS habitat (to include host plant and nectar sources) within 10 meters of the proposed project(s) ROW. SDG&E facilities that are within designated critical habitat for Laguna Mountains skipper are shown on USFWS Critical Habitat maps (71 FR 74592–74615). During any maintenance activities, a qualified biologist will be present to monitor work and ensure that Laguna Mountains skipper habitat is not affected.2. Chipping of vegetation shall not be allowed in known or potential Laguna Mountains skipper habitat. This includes the ROW within or adjacent to (within 10 meters) known or potential Laguna Mountains skipper habitat. Potential habitat shall be identified by the qualified biologist either during the host plant/nectar source survey or some time previous to the onset of ROW work. 3. Vehicles or tracked equipment shall only be allowed on existing roads or trails when operating within or adjacent to Laguna Mountains skipper habitat. Prior to operation of vehicles on existing roads or trails, a qualified biologist will ensure that the road or trail itself does not contain host plants or nectar sources. 4. Any project that may adversely affect the Laguna Mountains skipper shall require consultation with the U.S. Fish and Wildlife Service. If the NCCP is not used, then formal consultation with the USFWS and CDFW will need to occur to determine the need for take permits	This measure applies to areas within designated critical habitat for Laguna Mountains skipper. There is no critical habitat for Laguna Mountains skipper along TL682. Therefore, this measure is not applicable.	Pre and During	N/A
Biological Resources	BIO-21	01	Sensitive Butterfly Species Construction Measures	If construction occurs in occupied and/or suitable habitat for sensitive butterfly species, SDG&E will implement the following: Quino checkerspot: SDG&E will comply with the avoidance and minimization measures outlined in the existing Low-Effect Habitat Conservation Plan for Quino checkerspot butterfly.	No occupied or suitable habitat for QCB exists along this component; therefore, this measure is not applicable.	Pre and During	N/A
Biological Resources	BIO-21	02	Sensitive Butterfly Species Construction Measures	Hermes copper: Because this species is not state- or federally listed, the following will only be required for activities: While performing construction activities within the flight season, a qualified biological monitor will be on-site for all project activities to assure that both impacts to host plants and direct take of Hermes copper butterflies are avoided to the greatest extent feasible. The biological monitor may temporarily stop work in the event a Hermes copper butterfly is observed within the immediate construction area (i.e., the flagged work areas currently being used for construction activities.)	No occupied or suitable habitat for Hermes copper butterfly occurs along this component; therefore, this measure is not applicable.	Pre and During	N/A
Biological Resources	BIO-21	03	Sensitive Butterfly Species Construction Measures	Laguna Mountains skipper butterfly: Construction will occur outside of the flight season OR at least 10 meters (33 feet) away from all host plant locations. If there is a known or newly discovered occurrence during the flight season, construction shall be prohibited within 1 kilometer (0.6 mile) of the occurrence or unless coordination with the U.S. Fish and Wildlife Service determines construction activities may commence. The Laguna Mountains skipper flight season occurs from April to July.	No occupied or suitable habitat for Laguna Mountains skipper occurs along this component; therefore, this measure is not applicable.	Pre and During	N/A
Biological Resources	BIO-22	01	Biological Monitoring	Biologists will monitor construction activities. San Diego Gas & Electric (SDG&E) shall retain qualified biologists and other qualified resource specialists, as necessary, to monitor all project construction activities that could reasonably result in impacts to biological resources. All monitor qualifications shall be reviewed and approved by the California Public Utilities Commission (CPUC) prior to conducting monitoring activities along the right-of-way. Monitors shall be responsible for preconstruction surveys, work area delineations (i.e., staking, flagging, etc.) to comply with SDG&E’s Natural Community Conservation Plan, on-site monitoring, and documentation of violations and compliance. Monitors shall also delineate pre-determined access routes using markers or signs and ensure the maintenance of markers or signs on a regular basis.	CPUC- and USFS-approved biological monitors will conduct monitoring and delineate access routes during and immediately prior to construction activities. Biological monitors that were identified as “trainees only” by the USFS will only conduct monitoring on private lands or under the supervision of a fully approved biologist on USFS-managed lands. Biological monitoring results will be submitted within the Weekly Environmental Compliance Reports.	Pre and During	To Be Implemented Immediately Prior to Construction

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-24	01	Speed Limits	Enforce speed limits in and around all construction areas. Vehicles shall not exceed 15 miles per hour on unpaved roads (as stated in SDG&E NCCP 7.1 Operational Protocols) and the right-of-way accessing the construction site or 10 miles per hour during the night.	Documentation that the MMCRP was incorporated into the construction contracts was provided to the CPUC and USFS on July 20, 2016. Documentation that MM BIO-24 was included in the Worker Environmental Awareness Program was provided to the CPUC and USFS on July 20, 2016. The Project's biological monitors will enforce speed limits along this component during construction, and compliance with this measure will be documented in the Weekly Environmental Compliance Reports submitted to the CPUC and USFS.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-26	01	Prohibit Littering	Prohibit littering and remove trash from construction areas daily. Littering shall not be allowed by the project personnel. All food-related trash and garbage shall be removed from the construction sites on a daily basis.	Documentation that the MMCRP was incorporated into the construction compliance contract was provided to the CPUC and USFS on July 20, 2016. Documentation that MM BIO-26 was included in the Worker Environmental Awareness Program was provided to the CPUC and USFS on July 20, 2016. This measure will be implemented during construction along this component and documented in the Weekly Environmental Compliance Reports.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-27	01	Prohibit Harassment of Wildlife	Prohibit the harm, harassment, collection of, or feeding of wildlife. Project personnel shall not harm, harass, collect, or feed wildlife. No pets shall be allowed in the construction areas.	Documentation that the MMCRP was incorporated into the construction compliance contract was provided to the CPUC and USFS on July 20, 2016. Documentation that MM BIO-27 was included in the Worker Environmental Awareness Program was provided to the CPUC and USFS on July 20, 2016. This measure will be implemented during construction along this component and documented in the Weekly Environmental Compliance Reports.	Pre and During	To Be Implemented During Construction

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-28	02	Implement Bird Protection Measures	To avoid avian disturbance by construction activities, an Avian Protection Plan, including a Nesting Bird Management Plan, shall be developed in coordination with the Wildlife Agencies prior to project onset to develop measures based on site specific conditions to protect birds. This Avian Protection Plan shall be implemented by SDG&E and their biological monitors with oversight by the CPUC and the Forest Service. The Plan shall include procedures to allow the Wildlife Agencies open communication with the biological monitor(s) and access to scientific data collected that will be electronically stored in a database approved by the CPUC, the Forest Service, and the Wildlife Agencies. Between February and September during project construction, SDG&E shall provide a monthly summary of nesting bird monitoring activities and at the completion of each nesting season shall provide an evaluation of the data collected to date as specified in the Nesting Bird Management Plan. B. The Project's transmission pole and line design may have an impact on certain raptor species. Consequently, in addition to the construction activities, the Plan shall address avian mortality related to line strikes through the use of adaptive management (i.e., measures to make the lines more visible to the suite of species affected), in response to reported mortalities. C. The Avian Protection Plan shall include the following measures: a. Compliance with the Migratory Bird Treaty Act b. Compliance with Fish and Game Code Sections 3503, 3503.5, and 3511c. Activities shall be prohibited with i. Approximately 0.25 mile of California spotted owl active nest sites (or activity centers) during the breeding season (February 1through August 15) unless surveys confirm that California spotted owls are not nesting within the 0.25- mile radius; ii. 500 feet of raptor and owl active nests; iii. 500 feet of federally and/or state-listed birds active nests; iv. 250 feet of occupied burrowing owl burrows from February 1 to August 31 or within 160 feet from September 1 through January 31; and. 150 feet of non-listed birds and as specified in the avian protection plan for other bird species of concern.	The APP/NBMP was developed in coordination with the Wildlife Agencies. Approval of the APP/NBMP was received from the CDFW on May 18, 2016; from the USFWS on June 20, 2016; from the USFS on June 30, 2016; and from the CPUC on July 19, 2016. The APP/NBMP will be implemented during construction along this component.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-28	03	Implement Bird Protection Measures	If year-round burrowing owls are identified and there would only be temporary indirect impacts, then work may continue through coordination with the CDFW and monitoring. If it appears that the burrowing owls may be directly impacted, then a relocation plan will be developed for the specific burrowing owl(s). This plan would include the methods to relocate, location of the relocation, and post-relocation monitoring. Active relocation and banding of birds is not required. Similar buffers will be utilized for non-Forest Service lands as specified in the Avian Protection Plan and Nesting Bird Management Plan. "Nest" is defined as a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. "Active nest" is defined as once birds begin constructing, preparing, or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest.	Suitable habitat does not exist for burrowing owls along this component; therefore, this measure is not applicable.	Pre and During	N/A
Biological Resources	BIO-28	04	Implement Bird Protection Measures	d. Apply APLIC Measures. Specific APLIC measures to be applied must, at a minimum, must allow the circuits to meet National Electric Safety Code (NESC) requirements and should provide general information on specialized construction designs to meet APLIC standards. In particular, conductor separation between the energized and grounded hardware should meet the current state of the art requirements to protect species up to California condor. If appropriate separation is not feasible, then the energized parts and hardware should be covered. As appropriate, bird diverters should be deployed as well.	The APP includes specific APLIC measures that will be applied, as well as guidelines for specialized construction designs to meet APLIC standards. The APP will be implemented during construction.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-28	05	Implement Bird Protection Measures	D. The database shall include special features to accommodate additional variables (covariate) information requested by the Wildlife Agencies designed for this Project that will provide data which will contribute to the scientific standards of effective avian avoidance measures. In order to help evaluate buffer effectiveness, nests shall be monitored on a daily basis by a qualified biologist during disturbance and-related activities (i.e., brushing, tree trimming, ground-disturbing activities, mechanized or manual construction/removal/installation, and restoration activities) and every 4 days following disturbance until nest fates have been determined for entry into the database. Daily nest monitoring will be conducted by a qualified biologist, from as far away as possible while still being able to observe activity. The biologist need not observe the actual contents of the nest, but may extrapolate status based on adult behaviors. Actual surveys of the nest contents must not occur more than weekly (i.e., allow at least 7 days between nest visits) and visits should be very brief, paths should go by the nest without stopping if possible, the biologist should not touch leaves or branches, and should take a new route each time they pass by the nest. If brown-headed cowbirds or potential nest predators (e.g., scrub jays, crows, ravens) are in the area, then the visit should be postponed until they are gone.	CPUC- and USFS-approved avian biologists will conduct surveys and nest monitoring during construction activities in compliance with MM BIO-28. Avian biologists that were conditionally approved by the CPUC will only conduct monitoring on private lands under the supervision of a fully approved avian biologist. The Avian Reporting Database is described in Section 8 Avian Reporting Database of the approved NBMP. Nests will be monitored in accordance with the approved NBMP. SDG&E will continue to provide database access to the Wildlife Agencies, as stipulated in the measure.	Pre and During	To Be Implemented During Construction

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-28	06	Implement Bird Protection Measures	At a minimum, the plan(s) shall include the following sections: Plan Objectives; Applicable Mitigation Measures; Environmental Awareness Program; Existing Avian Resources; Construction Process and Timing (related to avian resource protection); Specific APLIC measures to be Applied; Nest Survey and Monitoring Method; Surveyor Experience and Training; Nesting Bird Survey Protocol; Standard Buffer Distances as determined in consultation with Wildlife Agencies; Protections of Listed Species, Raptors, and Eagles; Nest Monitoring Data Collection; Avian Reporting System; Nest Monitoring Log to include fates of all nests monitored; Reporting including update of database accessible to Wildlife Agencies; Nest Management; Nesting Habitat Reduction; Nesting Deterrent; Nest Removal; Risk Assessment and Mortality Reduction; Quality Control and Effectiveness; Avian Enhancement; Key Resources; Prior to the start of construction and implementation, SDG&E shall submit the plan to the U.S. Fish and Wildlife Service, CDFW, CPUC, and Forest Service for review and approval.	The APP/NBMP has been developed in coordination with the Wildlife Agencies. Approval of the APP/NBMP was received from the CDFW on May 18, 2016; from the USFWS on June 20, 2016; from the USFS on June 30, 2016; and from the CPUC on July 19, 2016. The APP/NBMP will be implemented during construction along this component.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-28	07	Implement Bird Protection Measures	E. In order to identify locations of current bald eagle (<i>Haliaeetus leucocephalus</i>), golden eagle (<i>Aquila chrysaetos</i>), California spotted owl (<i>Strix occidentalis</i>), American peregrine falcon (<i>Falco peregrinus anatum</i>), or federally and/or state-listed or fully protected bird nests, the monitoring biologists will coordinate with the U.S. Forest Service (Forest Service), U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife (CDFW) to ensure that the most up to date information is made available to monitoring biologists. If work will be conducted within a 1 mile buffer of historic and currently known nests during the bald or golden eagle breeding season (December 15 through July 31), SDG&E will survey the historic and currently known nests sites to determine if they are active. If nests are determined to be active, then work within 1 mile of active nests shall be rescheduled until after the completion of nesting activity at those nests. Alternatively, SDG&E may plan work activities to occur outside of the 1 mile buffers during the breeding season.	Coordination with the USFS, CDFW, and USFWS is ongoing, in accordance with this measure. These species are addressed in Section 7.2 Protections of Listed Species, Raptors, and Eagles of the approved NBMP. During construction, nest surveys and nest buffers will be implemented in accordance with the approved NBMP.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-30	01	Bat Protection	(A) Townsend's bat protection measures Prior to work being conducted, measures will be employed to protect (a) Townsend's bat and (b) bats in general. Prior to work being conducted, qualified biologists will conduct a literature search for potential roost sites and follow-up surveys for Townsend's big-eared bat maternity roosts within 500 feet of project lines during the breeding/pupping season (April–mid-September). Typical Townsend's big-eared bat roosts occur in mines, caves, buildings, long and dark culverts, and older bridges (pre-1960) (Pierson and Rainey 1994). If any potential structures or features for Townsend's big-eared bat are present within the project area they shall be surveyed.	A literature review and follow-up surveys for potential Townsend's big-eared bat roosts were conducted by CPUC- and USFS-approved bat biologists in 2017. The bat survey report was submitted to the CDFW, CPUC, and USFS on September 13, 2017.	Pre	Complete
Biological Resources	BIO-30	02	Bat Protection	Inspections of potential roosts shall be conducted using an appropriate combination of visual and acoustic survey techniques (including structure inspection, sampling, and/or exit counts) for areas that may be directly or indirectly impacted by the project. Where active roosts are located, reporting shall include: 1) the exact location of all roosting sites (location shall be adequately described and drawn on a map); 2) the number present at the time of visit (count or estimate); 3) the location, amount, distribution, and age of all droppings shall be described and pinpointed on a map; and 4) the type of roost (i.e., night roost – rest at night while out feeding vs. day roost – maternity colony) must also be clearly stated. All survey results, including field data sheets, shall be provided to the CDFW South Coast Regional Office. Locations of all roosts shall be kept confidential to protect them from disturbance. If non-maternity roosts are identified, the CDFW will be notified and consulted. If maternity roosts are present, the CDFW and CPUC will be notified and no work will occur within 500 feet of the roost location until the end of the pupping season or until the roost is determined to be unoccupied by Townsend's big-eared bat. For the protection of young (i.e., unable to fly) and hibernating adults all project-related activities shall be avoided where roosts are present during the winter and spring. No restrictions apply to project vehicle traffic on existing access roads, or to construction activity that occurs outside of the pupping season.	Based on data collected during the literature review, field assessment, and focused surveys, five active bat roosts were identified near C442. However, no Townsend's big-eared bat maternity roosts were identified within 500 feet of C442.	Pre and During	Complete
Biological Resources	BIO-30	03	Bat Protection	(B) General bat protection measures for other bat species Prior to work being conducted, qualified biologists will conduct a literature search for known general bat roost sites and follow-up surveys within 100 feet of project lines during the breeding/pupping season (April–mid-September). In general, bat species may roost in rock outcrop, dense tree canopies, flaking tree bark, snags, bridges, mine, caves, flumes, and buildings. If any known sites for bats in general are present within the project area they shall be surveyed.	A literature review and follow-up surveys were conducted for potential bat roosts by CPUC- and USFS-approved bat biologists in 2017. The bat survey report was submitted to the CDFW, CPUC, and USFS on September 13, 2017.	Pre	Complete

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-30	04	Bat Protection	Inspections of known roosts shall be conducted using an appropriate combination of visual and acoustic survey techniques (including structure inspection, sampling, and/or exit counts) for areas that may be directly or indirectly impacted by the project. Bats shall be identified to the most specific taxonomic level possible. Where active bat roosts are located, reporting shall include: 1) the exact location of all roosting sites (location shall be adequately described and drawn on a map); 2) the number of bats present at the time of visit (count or estimate); 3) each species of bat present shall be named (include how the specific was identified); 4) the location, amount, distribution, and age of all bat droppings shall be described and pinpointed on a map; and 5) the type of roost (i.e., night roost – rest at night while out feeding vs. day roost – maternity colony) must also be clearly stated. All survey results, including field data sheets, shall be provided to the CDFW South Coast Regional Office. Locations of all roosts shall be kept confidential to protect them from disturbance.	Based on data collected during the literature review, field assessment, and focused surveys, five active bat roosts were identified near C442. Follow-up surveys were conducted and included structure inspections and visual and acoustic exit counts. The bat survey report describing the location, survey methods, identification techniques, and all results (e.g., including types of roosts, taxonomy, numbers of bats, maps, and data sheets) was submitted to the CDFW, CPUC, and USFS on September 13, 2017.	Pre	Complete
Biological Resources	BIO-30	05	Bat Protection	If potential roosts are determined to be present then the roosts must be analyzed further to determine if Townsend's big-eared bats are present and if maternity roosts are present. If maternity roosts are present, the CDFW and CPUC will be notified and no work will occur within 100 feet of the roost location until the end of the pupping. For the protection of young (i.e., unable to fly) and hibernating adults, all project-related activities shall be avoided where roosts are present during the winter and spring. No restrictions apply to project vehicle traffic on existing access roads, or to construction activity that occurs outside of the pupping season.	Five active bat roosts were identified near C442; however, no Townsend's big-eared bat maternity roosts were identified within 500 feet of the Project work areas. One day roost/maternity colony of other bat species was identified near Pole P177016 and an associated stringing site. During the breeding/pupping season, an approximately 100-foot buffer around the roost will exclude construction activities from the pole and stringing work areas.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-31	01	Kangaroo Rat Survey	Biologists will conduct surveys for Stephens' kangaroo rat. In locations where Stephens' kangaroo rat habitat assessments were not accessible during the 2010 surveys (including the extensive parcels of land westward of Santa Ysabel owned by a single landowner – Map Pages MS-016-025 [Chambers Group Inc. and SJM Biological Consultants 2012; Appendix A] and the large parcel immediately south of Old Highway 80 and southward of southern end of Kitchen Creek Road [Map Page MS-069 [Chambers Group Inc. and SJM Biological Consultants 2012]; Appendix A]), a pedestrian preconstruction survey for potentially occupied suitable habitat (open habitat with suitable soils, slope, and kangaroo rat burrows) and follow-up trapping to confirm species, will be conducted by a California Public Utilities Commission (CPUC)-approved biologist to assess the potential areas for Stephens' kangaroo rat to occur within SDG&E's proposed project area.	No SKR habitat occurs along this Project component; therefore, this measure is not applicable.	Pre	N/A
Biological Resources	BIO-31	02	Kangaroo Rat Survey	Any burrows, utilized habitat, or signs of Stephens' kangaroo rat utilizing a habitat (e.g., track prints) will be flagged for avoidance during construction activities. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing Stephens' kangaroo rat occupied habitat. If Stephens' kangaroo rat occupied habitat cannot be avoided during construction, the monitoring biologist shall make recommendations to ensure minimal impacts to the existing Stephens' kangaroo rat habitat and burrows during construction. Recommendations may include, but are not limited to: (1) re-routing access to the project work area for complete avoidance of Stephens' kangaroo rat occupied habitat; or (2) placement of dirt piles or sediment to avoid occupied burrows. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the CPUC.	No SKR habitat occurs along this Project component; therefore, this measure is not applicable.	Pre and During	N/A
Biological Resources	BIO-33	01	Arroyo Toad Focused Surveys	Focused surveys for arroyo toad shall be conducted. Prior to initiating construction, all riverbed areas within 1,000 feet of construction sites and access roads shall be surveyed during the appropriate season (December 1 through July 31) for arroyo toad. The applicant shall contract with a qualified biologist to conduct focused surveys for arroyo toad. If arroyo toads are detected in or adjacent to the project site, no work will be authorized within 500 feet of occupied habitat until the project applicant receives concurrence from the U.S. Fish and Wildlife Service (USFWS) that work may proceed.	Per the MMCRP, this measure applies only to C157; therefore, this measure is not applicable.	Pre and During	N/A

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological Resources	BIO-33	02	Arroyo Toad Focused Surveys	If arroyo toads are detected in or adjacent to the project site, the project applicant shall develop and implement a monitoring plan that includes the following measures, in consultation with the USFWS: [Refer to MM BIO-33 in the MMCRP for all 16 monitoring plan specifications]	Per the MMCRP, this measure applies only to C157; therefore, this measure is not applicable.	Pre and During	N/A
Biological Resources	BIO-33	03	Arroyo Toad Focused Surveys	On Forest Service lands, occupied arroyo toad breeding habitat will be mitigated at a 3:1 ratio; occupied arroyo toad upland burrowing habitat will be mitigated at 2:1; and unoccupied arroyo toad habitat (or designated critical habitat) will be mitigated at 2:1. In addition, a Forest Service consultation will be conducted to verify limited operating periods for arroyo toad are defined.	Per the MMCRP, this measure applies only to C157; therefore, this measure is not applicable.	Pre and Post	N/A
Cultural and Paleontological Resources	APM-CUL-01	01	Archaeological and Paleontological Trainings	Prior to construction, all SDG&E, contractor, and subcontractor personnel will receive training regarding the appropriate work practices necessary to effectively implement the APMs and to comply with the applicable environmental laws and regulations, including the potential for exposing subsurface cultural, archaeological, and paleontological resources and how to recognize possible buried resources. This training will include a presentation of the procedures to be followed upon discovery or suspected discovery of cultural and archaeological materials, including Native American remains and their treatment, as well as of paleontological resources.	The Worker Environmental Awareness Program training includes a presentation on the applicable environmental laws and regulations, including the potential for exposing subsurface cultural, archaeological, and paleontological resources and how to recognize possible buried resources. This training includes a presentation of the procedures to be followed upon discovery or suspected discovery of cultural and archaeological materials, including Native American remains and their treatment, as well as paleontological resources. All construction personnel will attend the Worker Environmental Awareness Program training immediately prior to beginning work on the Project.	Pre and During	To Be Implemented Immediately Prior to Construction
Cultural and Paleontological Resources	APM-CUL-02	01	Pre-Construction Cultural Surveys	Intensive pedestrian surveys will be conducted prior to construction in those areas within the ROWs for which initial survey access was not granted to determine the potential for impacts to cultural resources in these areas. Where possible, engineering design will be re-evaluated to determine whether facilities can be relocated to avoid any cultural resources identified from these additional surveys. If relocation is not feasible, APM CUL-03 will be implemented to minimize impacts to sensitive cultural resources.	Cultural resources surveys for C442 were completed during the initial survey (Schaefer and Williams 2011: The 2011 [Revised 2013] Inventory, Evaluation and Treatment of Cultural Resources in the Cleveland National Forest Transmission and Distribution Line Increased Fire Safety Project in support of the Proponent's Environmental Assessment). Subsequent pedestrian surveys were completed to account for Project additions and the final design.	Pre	Complete
Cultural and Paleontological Resources	APM-CUL-03	01	Designate ESAs	All potentially National Register-eligible or archaeologically sensitive sites, as defined in the Cultural Resources Technical Report, that will not be directly affected by construction but are within 50 feet of replacement pole locations will be designated as Environmentally Sensitive Areas (ESAs). Potentially eligible resources include those that are recommended eligible, as well as unevaluated sites. Protective fencing or other markers will be erected and maintained to protect these ESAs from inadvertent trespass for the duration of construction in the vicinity. ESAs will not be signed or marked as cultural, historical, or archaeological resources.	ESAs located within 50 feet of construction sites will be delineated with protective fencing prior to construction. Fencing will be regularly inspected for damage during construction and will be repaired as needed.	Pre and During	To Be Implemented Immediately Prior to Construction

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Cultural and Paleontological Resources	APM-CUL-06	01	Cultural Resources Treatment Plan	In consultation with the Forest Service HPM, BIA Archaeologist, the Tribes, and the SHPO, SDG&E will develop a Cultural Resources Treatment Plan that includes procedures for protection and avoidance, evaluation and treatment, and the curation of any potentially register-eligible cultural materials. Specific protective measures, including a monitoring program, will be defined in the Cultural Resources Treatment Plan to reduce potential adverse impacts on unknown cultural resources to less-than-significant levels.	The required components of the Cultural Resources Treatment Plan were incorporated in the Historic Properties Management Plan. The Historic Properties Management Plan was finalized on August 25, 2016; and it was approved by the USFS on August 25, 2016, and by the CPUC and SHPO on August 26, 2016. Completion of MM CUL-01c satisfies the requirements of this APM.	Pre	Complete
Cultural and Paleontological Resources	APM-CUL-08	04	Paleontological Monitoring	The paleontological monitor will follow the procedures outlined in the Paleontological Monitoring and Treatment Plan, which will be prepared and will include information regarding pre-construction field surveys, construction personnel training, necessary permits, research design, monitoring methodology, fossil discovery and recovery protocols, fossil preparation and curation procedures, and the preparation of a final monitoring report.	SDG&E has prepared a Paleontological Monitoring and Treatment Plan, which will be implemented during construction.	Pre and During	To Be Implemented During Construction
Cultural and Paleontological Resources	CUL-01	01	Cultural Resource Management	In order to avoid adverse effects to historic properties, SDG&E will implement a comprehensive approach to cultural resource management consistent with any project specific Programmatic Agreement developed between the federal agencies and the SHPO. The comprehensive approach will include, at a minimum, the following elements:	The Project's Programmatic Agreement was finalized in February 2016. The Historic Properties Management Plan was finalized on August 25, 2016; and it was approved by the USFS on August 25, 2016 and by the CPUC and SHPO on August 26, 2016. The Project's Historic Properties Management Plan outlines procedures for cultural resource management consistent with this measure, and it will be implemented during construction.	Pre and During	To Be Implemented During Construction
Cultural and Paleontological Resources	CUL-01	02	Cultural Resource Management	1a. – Inventory and evaluate cultural resources in the Final Area of Potential Effect (APE). Prior to any ground disturbing activities, SDG&E will complete inventories within the APE and submit the results of those inventories for approval by the CPUC and federal agencies. These surveys shall supplement surveys done for the EIR/EIS and will satisfy Section 106 requirements.	Cultural resources surveys were completed in 2011 and 2013 by ASM Affiliates, Inc. (Schaefer and Williams, 2011: The 2011 [Revised 2013] Inventory, Evaluation and Treatment of Cultural Resources in the Cleveland National Forest Transmission and Distribution Line Increased Fire Safety Project in support of the Proponent's Environmental Assessment), and subsequent pedestrian surveys were conducted in 2015, 2016, and 2017. The results of these subsequent surveys are included as part of an update to Appendix A of the Historic Properties Management Plan, which will be submitted to the USFS.	Pre	Pending
Cultural and Paleontological Resources	CUL-01	03	Cultural Resource Management	1b. – Avoid and protect potentially significant resources. Where feasible, complete avoidance of impacts shall be the preferred strategy. Where the federal agencies and CPUC decide that cultural resources cannot be avoided, they will be incorporated into a Historic Properties Management Plan (HPMP), as described below.	Impacts to cultural and historical resources will be avoided to the maximum extent possible during construction. A mapbook identifying all ESAs to be flagged and avoided will be provided to the CPUC and USFS prior to construction.	Pre and During	Pending
Cultural and Paleontological Resources	CUL-01	04	Cultural Resource Management	1c. – Develop and Implement Historic Properties Management Plan. After completing the inventory and avoidance phase of site design, SDG&E will prepare and submit for approval an HPMP to avoid or mitigate identified potential impacts.	The Historic Properties Management Plan was finalized on August 25, 2016; and it was approved by the USFS on August 25, 2016 and by the CPUC and SHPO on August 26, 2016.	Pre and During	Complete

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Cultural and Paleontological Resources	CUL-02	01	Reduce Impacts to Historic Cabins	In order to reduce adverse effects and significant impacts to historic resources along C79, C440, and C442 as identified in Table D.5-12 of the EIR/EIS, the original exterior materials on the cabins shall not be removed, modified, or covered. If equipment attached to the cabins must be replaced, the equipment shall retain its original appearance in terms of materials and size. If this cannot be met, then a cultural monitor is required to be present during the replacement of the lines to minimize modifications to the cabin exteriors.	The original materials on the exterior of the historic cabins will not be removed, modified, or covered to the extent feasible in order to safely construct the component. Cultural monitors will be present for all construction activities if modifications to the original exteriors are required.	Pre and During	To Be Implemented During Construction
Cultural and Paleontological Resources	CUL-03	01	Implement CRTR Recommendations	During construction of the proposed power line replacement projects, all measures as identified in Tables 3 and 6 for TL625, Tables 9 and 11 for TL626, Tables 14 and 17 for TL629, Table 20 for TL682, Table 23 for TL6923, Table 26 for C78, Table 29 for C79, Table 31 for C157, Table 34 for C440, Table 37 for C442, and Table 40 for C449 of the Cultural Resources Technical Report prepared by ASM (ASM 2011) shall be implemented. All measures shall be implemented by a qualified archaeologist who is approved by the California Public Utilities Commission and Forest Service. Further, when on City-owned land (portions of C157, T625, and C449), the City's Land Development Manual – Historical Resource Guidelines per the San Diego Municipal Code, Chapter 14, Article 3, Division 2, Section 14.0201, shall be followed (http://docs.sandiego.gov/municode/MuniCodeChapter14/Ch14Art03Division02.pdf).	All cultural monitoring requirements and recommendations included in the Cultural Resources Technical Report and Appendix A of the Historic Properties Management Plan will be implemented prior to and during construction. Documentation confirming the completion of all recommendations will be provided to the CPUC and USFS in the Weekly Environmental Compliance Reports. Resumes of the archaeologists that will be implementing the measures were submitted to the CPUC and the USFS on July 28, 2016. Approval of the archaeologists' qualifications was received from the CPUC on August 11, 2016 and from the USFS on August 12, 2016. A mapbook identifying all ESAs to be fenced and avoided during construction will be provided to the CPUC and USFS prior to construction.	Pre and During	Pending

Measure Category Title	MMNo	TaskNo	Mitigation Measure Title	Task Text	Comments	Timing	Status
Fire Protection	FF-01	01	Fire Prevention/Protection Plan	SDG&E shall develop a multiagency Construction Fire Prevention/Protection Plan in consultation with the U.S. Forest Service, Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), California Department of Forestry and Fire Protection (CAL FIRE), San Diego Rural Fire Protection District (SDRFPD), and San Diego County Fire Authority (SDCFA) to the satisfaction of lead agencies. SDG&E shall monitor construction activities to ensure implementation and effectiveness of the plan. The final plan will be approved by the commenting agencies prior to the initiation of construction activities and shall be implemented during all construction activities by SDG&E. At minimum, the plan will include the following:-Procedures for minimizing potential ignition, Vegetation clearing, Fuel treatment area establishment to Parking requirements, Smoking restrictions, Hot work restrictions- Red Flag Warning restrictions- Fire coordinator role and responsibility- Fire suppression equipment on site at all times work is occurring- Requirements of Title 14 of the California Code of Regulations, 918 "Fire Protection" for the private land portions- Applicable components of the SDG&E Wildland Fire Prevention and Fire Safety Electric Standard Practice 113-1 (July 2012)- Emergency response and reporting procedures- Emergency contact information- Worker education materials; kick-off and tailgate meeting schedules- Other information as provided by responsible and commenting agencies (as appropriate for each project). Additional restrictions will include the following: During the construction phase of the project, the applicant shall implement ongoing fire patrols. The applicant shall maintain fire patrols during construction hours and for 1 hour after end of daily construction and hotwork; Fire Suppression Resource Inventory – In addition to 14 CCR 918.1(a), (b), and (c), the applicant shall update in writing the 24-hour contact information and on-site fire suppression equipment, tools, and personnel list on a quarterly basis and provide it to the Forest Service, BLM, BIA, SDRFPD, SDCFA, and CAL FIRE; During Red Flag Warning events, as issued daily by the National Weather Service in State Responsibility Areas (SRAs) and Local Responsibility Areas (LRAs), and when the Forest Service Project Activity Level (PAL) is "E" on Cleveland National Forest (CNF) (as appropriate), all non-essential, non-emergency construction and maintenance activities shall cease or be required to operate under a Hot Work Procedure. The Hot Work Procedure will be in compliance with the applicable sections in NFPA 51-B "Fire prevention during welding, cutting, or other hot work" and CFC Chapter 26 "Welding and other Hot Work." The applicant and contractor personnel shall be informed of changes to the Red Flag event status and PAL as stipulated by CAL FIRE and CNF. All construction crews and inspectors shall be provided with radio and/or cellular telephone access that is operational throughout the project area to allow for immediate reporting of fires. Communication pathways and equipment shall be tested and confirmed operational each day prior to initiating construction activities at each construction site. All fires shall be reported to the fire agencies with jurisdiction in the project area as soon as the fire is identified/discovered immediately upon ignition. Each crew member shall be trained in fire prevention, initial attack firefighting, and fire reporting. Each member shall carry at all times a laminated card listing pertinent telephone numbers for reporting fires and defining immediate steps to take if a fire starts. Information on contact cards shall be updated and redistributed to all crew members as needed, and outdated cards destroyed, prior to the initiation of construction activities on the day the information change goes into effect. Each member of the construction crew shall be trained and equipped to extinguish small fires with hand-held fire extinguishers in order to prevent them from growing into more serious threats. Each crew member shall at all times be within 50 feet of fire suppression equipment, as outlined in ESP 113.1. SDG&E will provide a draft copy of the Construction Fire Prevention/Protection Plan to the responsible fire agencies for comment a minimum of 90 days prior to the start of any construction activities. The final plan will be approved by the responsible lead agencies with input from the fire and permitting agencies, as desired, prior to the initiation of construction activities and provided to SDG&E for implementation during all construction prior to the initiation of construction activities. All construction work on the proposed power line replacement projects shall follow the Construction Fire Prevention/Protection Plan guidelines and commitments.	The Construction Fire Prevention/Protection Plan was approved by the SDCFA on December 2, 2015; by SDRFPD, CAL FIRE, and the BLM on December 18, 2015; by the BIA on January 7, 2016; by the USFS on June 17, 2016; and by the CPUC on July 29, 2016. Updated plans were submitted to the CPUC and USFS on September 30, 2016 and May 31, 2017, but no approval was required. The plan will be implemented during construction.	Pre and During	To Be Implemented During Construction
General	APM-GEN-06	01	Conduct Notifications	Prior to initiating construction, SDG&E will make all the appropriate and necessary notifications, including landowner notifications.	This measure will be satisfied through the implementation of MM LU-01 and in accordance with the Construction Notification Plan.	Pre	Pending
General	APM-GEN-07	01	Excavation Notification	SDG&E will notify the Underground Service Alert a minimum of 48 hours in advance of excavating or conducting other ground-disturbing activities in order to identify buried utilities. Exploratory excavations (potholing) will also be conducted to verify the locations of existing facilities in the field, if necessary.	This measure will be implemented during construction and immediately prior to ground disturbance as applicable.	Pre and During	To Be Implemented Immediately Prior to Construction

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hydrology and Water Quality	APM-HYD-04	01	Conduct Wetlands and Waters Surveys	Any areas not surveyed for potentially jurisdictional wetlands or waters due to limited access will be surveyed prior to the start of construction activities and potential impacts will be assessed and the appropriate jurisdictional permits will be obtained as needed.	Surveys for jurisdictional waters and wetlands were completed in accordance with MM BIO-10. Impacts to non-wetland jurisdictional waters are anticipated at Pole 177014 along C442. A Clean Water Act Section 404 Nationwide Permit No. 12 authorization from the United States Army Corps of Engineers, a Clean Water Act Section 401 Pre-Certification of the 2017 Nationwide Permit authorization from the California Regional Water Quality Control Board, and an amendment to the existing California Fish and Game Code Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife will be obtained prior to impacts to the jurisdictional resources associated with this component. Documentation of the permits will be submitted to the CPUC and USFS prior to impacts to the jurisdictional waters associated with this component.	Pre	Pending
Hydrology and Water Quality	APM-HYD-05	01	SWPPP	SDG&E will prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will identify BMPs based on its Water Quality BMPs Manual for each activity that has the potential to degrade surrounding water quality through erosion, sediment run-off, and other pollutants. These BMPs will then be implemented and monitored by a Qualified SWPPP Practitioner.	C440 and C442 will be enrolled under the Construction General Permit (Order 2009-0009-DWQ [as amended by 2010-0014-DWQ and 2012-006-DWQ]). Permit Registration Documents, which include an NOI and a SWPPP, will be electronically filed to the State Water Resources Control Boards' Storm Water Multiple Applications and Report Tracking System prior to construction. The SWPPP and NOI approval (Waste Discharge Identification Number) will be submitted to the CPUC and USFS prior to construction. The SWPPP will be implemented during construction.	Pre and During	Pending
Hydrology and Water Quality	HYD-01	01	Erosion Control Plan/SWPPP	As required by the Construction General Permit, SDG&E shall develop a Storm Water Pollution Prevention Plan (SWPPP) for the project or for individual construction segments, as required, to reduce soil erosion during construction. The SWPPP(s) and verification of submittal to the RWQCB shall be submitted to the CPUC and Forest Service prior to Notice to Proceed issuance for the respective construction segment. SDG&E shall provide the CPUC and Forest Service with subsequent amendments to the SWPPP as part of SDG&E's weekly compliance reports. In weekly construction compliance reports, SDG&E shall note when Storm Water Construction Site Inspection Report Forms have been posted to the Storm Water Multiple Application and Report Tracking System (SMARTS) following storm events.	C440 and C442 will be enrolled under the Construction General Permit (Order 2009-0009-DWQ [as amended by 2010-0014-DWQ and 2012-006-DWQ]). Permit Registration Documents, which include an NOI and a SWPPP, will be electronically filed to the State Water Resources Control Boards' Storm Water Multiple Applications and Report Tracking System prior to construction. The SWPPP and NOI approval (Waste Discharge Identification Number) will be submitted to the CPUC and USFS prior to construction. The SWPPP will be implemented during construction.	Pre and During	Pending

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hydrology and Water Quality	HYD-01	02	Erosion Control Plan/SWPPP	SDG&E shall develop and implement an Erosion Control Plan (ECP) for construction, operations, and maintenance activities in order to prevent and control soil erosion and gulying. The ECP shall include Forest Service best management practices specific to re-vegetation requirements (scarifying the soil, and fertilizing, seeding and/or mulching, as required to achieve proper post-construction site stabilization) and incorporate Construction General Permit SWPPP requirements for each construction segment as the SWPPP(s) for that segment are completed. Additionally, the ECP shall complement restoration goals and objectives identified in the Habitat Restoration Plan, as required under MM BIO-4. The ECP shall be updated for each construction segment and provided to the (CPUC) and the federal agencies for review and approval prior to each agency's Notice to Proceed issuance for that construction segment.	The Erosion Control Plan was approved by the CPUC and USFS on August 11, 2016. Prior to construction, the plan will be submitted to the CPUC and USFS with an updated Attachment D: SWPPP BMP Site Maps for C442. The Erosion Control Plan will be implemented during construction.	Pre, During, and Post	Pending
Hydrology and Water Quality	HYD-02a	01	Water Supply Plan	For water that is to be purchased from one or more public or private water/utility district(s), private landowners, or from tribes, SDG&E shall provide to the CPUC written documentation from such district(s) and/or landowners indicating the total amount of water to be provided and the time frame that the water will be made available to the project. The documentation shall also indicate the type of water (potable or reclaimed) and the specific source of the water (groundwater well or surface diversions). The sources and amounts of water to be obtained by SDG&E shall be documented in a Water Supply Plan (WSP) to be submitted to the CPUC prior to notice to proceed for each project component.	The Water Supply Plan was approved by the USFS on June 28, 2016 and by the CPUC on August 11, 2016. An updated plan without references to specific transmission lines was submitted to the CPUC and USFS on March 8, 2017, and no approval was required. An updated plan with three additional water sources was submitted to the CPUC and USFS on April 7, 2017, and no approval was required.	Pre and During	Complete
Hydrology and Water Quality	HYD-02b	01	Groundwater Evaluation	For identified water sources that derive their water supply from groundwater, SDG&E shall commission a groundwater study by a registered/certified hydrogeologist, as reviewed and approved by CPUC, to assess the existing condition of the underlying groundwater/aquifer and all existing wells (with owner's permission) in the vicinity of proposed well location/water sources and to verify that the proposed source is capable of supplying the amount of water needed. The groundwater study shall evaluate whether the volume and duration of the proposed groundwater use would exceed County of San Diego thresholds for impacts with respect to groundwater supply and well interference. If the evaluation indicates the potential for significant impacts, the registered/certified hydrogeologist shall recommend feasible mitigation measures (e.g., a groundwater monitoring program) to avoid exceeding applicable thresholds. The groundwater evaluation shall be provided along with the documentation of purchased water sources, and the CPUC shall not authorize construction of the project unless such documentation have been provided by SDG&E and approved by CPUC. If the evaluation finds that impacts cannot be avoided given the volume and duration of the proposed groundwater use, the CPUC will not authorize use of the water source and shall require SDG&E to seek other viable sources of water.	SDG&E commissioned a groundwater study of the Live Oak Springs Water District. SDG&E submitted the resume for a registered/certified hydrogeologist on September 27, 2016. The CPUC approved the hydrogeologist on September 27, 2016. The final Live Oak Springs Water District Groundwater Evaluation was submitted to the CPUC for approval on March 22, 2017. The CPUC approved the evaluation on March 30, 2017. An updated Water Supply Plan that includes the Live Oak Springs Water District was submitted to the CPUC and USFS on April 7, 2017, and no approval was required.	Pre	Complete

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hydrology and Water Quality	HYD-04	01	Access Road Condition Evaluation and Repair Design Report	<p>Planned grading and repair activities along SDG&E exclusive-use access roads that a) exceed grades of 15% (over a minimum distance of 100 feet), b) are within RCAs, or c) are anywhere within a sediment-sensitive watershed (as defined by the SWRCB) shall be evaluated by a qualified professional (e.g., PG, PE, or CEG contracted by SDG&E and reviewed and approved by the CPUC and the Forest Service) prior to initiating construction on the associated segment, who will identify areas experiencing chronic erosion and drainage issues. At a minimum, segments shall include, but are not limited to, the following:</p> <ul style="list-style-type: none"> - TL626 south of Eagle Creek Road and north of Boulder Creek Road - TL625 in the Vicinity of Barber Mountain Road - TL625 north of Lyons Valley Road and south of Carveacre Road - C442 east of Oak Valley and south of I-8, on the western flanks of Long Peak - Short segments of TL629 on either side of Cameron Valley and east of Pine Valley. The qualified professional shall design an engineered solution(s) to be implemented within the existing access roadway disturbance area in accordance with Forest Service standards, as described in Forest Service Handbook 2509.22 (Section 12.2), for each area determined to experience chronic erosion and/or drainage issues prior to beginning work on those facilities associated with the problematic access road. The designed solution(s) shall be included into the approved project to ensure the avoidance or minimization of substantial damage or soil loss along the identified road segments. Examples of such solutions could include, but are not limited to the following: - Crowning road sections with gentle slopes to prevent standing water on the road - Outsloping roads at 3%-5% wherever possible - Where required for proper maneuvering and safety, insloping roads at 3-5% into properly designed ditches - Installing rolling dips, ditch relief culverts, and/or water bars at intervals appropriate for the road-grade and the soil erosivity - Minimizing the number of water crossings, and maintaining crossings as close to a 90-degree angle as possible to the streambed. - Constructing perennial and seasonal/ephemeral stream crossings so as not to change the cross-sectional area of the stream channel or impede fish migration. - Constructing perennial and seasonal/ephemeral stream crossings with materials that will not degrade water quality (e.g., concrete, coarse rock, riprap and/or gabions) - Surfacing roads with erosion-resistant materials such as rock or asphalt concrete. The Access Road Condition Evaluation and Repair Design Report shall identify locations, if any, where no feasible and/or effective solutions can be implemented to adequately handle runoff or comply with Forest Service soil and water quality management standards as contained in Forest Service Handbook 2509.22 (Section 12.2). The report will be updated for each construction segment according to SDG&E's final construction schedule. In these locations, the qualified professional shall recommend options for access road removal (i.e., requiring access by helicopter) or realignment (e.g., to achieve a lower slope) that would still achieve project objectives. Construction of each segment shall not proceed until the report section pertaining to that segment has been reviewed and approved by CPUC and Forest Service. In the event there are disputes regarding specific problem locations, CPUC and Forest Service will allow construction to proceed on those portions of the construction segment not impacted by access roads requiring evaluation under this measure; however, SDG&E shall not work in areas under dispute until resolution is achieved. 	The Access Road Condition Evaluation and Repair Design Report was approved by the CPUC on August 18, 2016 and by the USFS on August 19, 2016. There are no SDG&E exclusive-use access roads on private lands along this component; therefore, the report does not need to be updated for this component. However, an access road assessment for USFS-managed lands will be submitted to the USFS prior to construction.	Pre and During	Pending
Hydrology and Water Quality	HYD-06	02	Creek Crossing	<p>Where creek crossing cannot be completed during the dry season creek crossing shall use jack-and-bore procedures to avoid direct impacts and shall be conducted in a manner that does not result in sediment-laden discharge or hazardous materials release to the water body. SDG&E shall develop a Jack-and-Bore/Horizontal Directional Drill (HDD) Contingency Plan for this work in accordance with MM-HYD-8. Additionally, SDG&E shall implement the following measures during horizontal boring (jack-and-bore) operations and shall be included in the HDD Contingency Plan:</p> <ol style="list-style-type: none"> 1 Site preparation shall begin no more than 10 days prior to initiating horizontal bores to reduce the time soils are exposed adjacent to creeks and drainages. 2 Trench and/or bore pit spoil shall be stored a minimum of 25 feet from the top of the bank or wetland/riparian boundary. Spoils shall be stored behind a sediment barrier and covered with plastic or otherwise stabilized (i.e., tackifiers, mulch, or detention). 3 Portable pumps and stationary equipment located within 100 feet of a water resource (i.e., wetland/riparian boundary, creeks, and drainages) shall be placed within secondary containment with adequate capacity to contain a spill (i.e., a pump with 10-gallon fuel or oil capacity should be placed in secondary containment capable of holding 15 gallons). A spill kit shall be maintained on site at all times. 4 Within 24 hours following backfill of the bore pits, disturbed soils shall be seeded and stabilized to prevent erosion, and temporary sediment barriers shall be left in place until restoration is deemed successful. <p>SDG&E shall obtain the required permits prior to conducting creek crossing work. Required permits may include ACOE CWA Section 404, Regional Water Quality Control Board Clean Water Act 401, and CDFG Streambed Alteration Agreement 1602. SDG&E shall implement all pre and post-construction conditions identified in the permits issued.</p>	Per the MMCRP, this measure applies only to the alternative alignment (Option 3 Underground in Boulder Creek Road); therefore, it is not applicable to this component.	Pre and During	N/A

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hydrology and Water Quality	HYD-07	01	HDD Contingency Plan	If horizontal directional drilling is to be used during construction, SDG&E shall prepare a Horizontal Directional Drill (HDD) Contingency Plan to address procedures for containing an inadvertent release of drilling fluid (frac-out). The plan shall contain specific measures for monitoring frac-outs, for containing drilling mud, and for notifying agency personnel. The plan shall also discuss spoil stockpile management, hazardous materials storage and spill cleanup, site-specific erosion and sediment control, and housekeeping procedures, as described in the Stormwater Pollution Prevention Plan. The Jack-and-Bore HDD Contingency Plan shall be submitted to the CPUC, Forest Service, Bureau of Indian Affairs, and ACOE 60 days prior to construction.	Per the MMCRP, this measure applies only to the alternative alignment (Option 3 Underground in Boulder Creek Road); therefore, it is not applicable to this component.	Pre and During	N/A
Hydrology and Water Quality	HYD-07	02	HDD Contingency Plan	SDG&E shall obtain the required permits prior to conducting work associated with jack-and-bore/horizontal directional drilling activities. Required permits may include U.S. Army Corps of Engineers Clean Water Act Section 404, Regional Water Quality Control Board Clean Water Act 401, and CDFG Streambed Alteration Agreement Section 1602. The applicant shall implement all pre-and post-construction conditions identified in the permits issued for the jack-and-bore/horizontal directional drilling.	Per the MMCRP, this measure applies only to the alternative alignment (Option 3 Underground in Boulder Creek Road); therefore, it is not applicable to this component.	Pre and During	N/A
Land Use and Planning	LU-01	01	Construction Notification Plan	<p>Prepare Construction Notification Plan. Forty-five (45) days prior to construction of the first segment, the project applicant shall prepare and submit a Construction Notification Plan to the appropriate land use jurisdiction agency for approval. The plan will be updated with additional information 45 days before construction of each additional segment. The plan shall identify the procedures that will be used to inform private landowners, schools, and agencies with authority over recreational areas/facilities of the location and duration of construction; identify approvals that are needed prior to posting or publication of construction notices; and include text of proposed public notices and advertisements. The plan shall address at a minimum the following components:</p> <p>Public notice mailer. A public notice mailer shall be prepared and mailed no less than 15 days prior to construction. The notice shall identify construction activities that would restrict, block, remove parking, or require a detour to access existing residential properties and other sensitive land uses. The notice shall state the type of construction activities that will be conducted and the location and duration of construction, including all helicopter activities. The project applicant shall mail the notice to all residents or property owners within 1,000 feet of project components and to all land use agencies having jurisdiction over a recreation area/facility located within 1,000 feet of a project component. If construction delays of more than 30 days occur, an additional notice shall be prepared and distributed. To facilitate access to properties obstructed by construction activities, the project applicant shall notify property owners and tenants at least 24 hours in advance of construction activities and shall provide alternative access if required.</p> <p>Newspaper/website advertisements. Fifteen (15) days prior to construction of any project component, notices shall be placed in local newspapers and bulletins, including Spanish language newspapers and bulletins, and on the relevant websites of jurisdictional agencies. The Forest Supervisor, District Rangers, and Public Affairs Officer of the Cleveland National Forest shall also be notified. The notice shall state when and where construction will occur and provide information about the public liaison person and hotline. If construction is delayed for more than 7 days, an additional round of newspaper notices shall be placed to discuss the status and schedule of construction.</p> <p>Public venue notices. Thirty (30) days prior to construction, notice of construction shall be posted at public venues such as libraries, community notification boards, post offices, rest stops, community centers, trailheads, informational kiosks, and other public venues applicable to the electrical facility under construction to inform affected residents and recreationists of the purpose and schedule of construction activities.</p> <p>Public liaison person and toll-free information hotline. The project applicant shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring property owners about noise, dust, and other construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public. The project applicant shall also establish a toll-free telephone number for receiving questions or complaints during construction and shall develop procedures for responding to callers. Procedures for handling and responding to calls shall be addressed in the Construction Notification Plan.</p>	The Construction Notification Plan was approved by the USFS on June 16, 2016 and by the CPUC on June 17, 2016. An updated Construction Notification Plan with a list of adjacent landowners for C442 will be submitted to the CPUC prior to construction. The public venue notice, public mailer, and newspaper ads were submitted to the CPUC and USFS on August 24, 2017. The CPUC and USFS approved the notices on September 7, 2017. The public venue notice for C442 was posted at various locations adjacent to the alignment and documented in an email to the CPUC and the USFS on September 11, 2017. The public mailer will be sent out 15 days prior to construction. The certification of mailing will be submitted to the CPUC and the USFS prior to construction. The newspaper advertisement will run in various newspapers 15 days prior to construction.	Pre	Pending

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Land Use and Planning	LU-02	01	TL626 and C442 Land Management Plan	If the Forest Service selects to leave TL626 or C442 in place, it would have to approve a project-specific CNF Land Management Plan Amendment contemporaneously with the decision to authorize the MSUP and pole replacement project. The project-specific plan amendment would amend the Land Management Plan to allow project-specific exemptions for inconsistencies with the CNF Land Management Plan land use zones and standards.	The USFS Final ROD was signed on March 11, 2016, and provided three Project-specific amendments to the CNF Land Management Plan, including an amendment to allow for continued authorization of a distribution line and access road along C442 in a Back Country Non-motorized land use zone.	Pre	Complete
Land Use and Planning	LU-03	01	Reduce Land Use Conflicts	At least Ninety (90) days prior to completing final transmission line design for the approved route, the project applicant shall notify landowners of parcels through which the alignment would pass regarding the specific location of the ROW, individual towers, staging areas, access roads, or other facilities associated with the project that would occur on the subject property. The notified parties shall be provided 30 days in which to identify conflicts with any planned development on the subject property and to work with the project applicant to identify potential reroutes of the alignment that would be mutually acceptable to the project applicant and the landowner. Property owners whose land may be divided into potentially uneconomic parcels shall be afforded this same opportunity, even if development plans have not been established. The project applicant shall endeavor to accommodate these reroutes to the extent that they are feasible and do not create adverse impacts to resources or to other properties that would be greater in magnitude than impacts that would occur from construction and operation of the alignment as originally planned.	C442 is not listed in the measure; therefore, this measure is not applicable.	Pre	N/A
Land Use and Planning	LU-04	01	County Roadways	Prior to construction, for any structure or object that is placed in, under, or over any portion of a county roadway, SDG&E shall obtain, from the San Diego County Director, Department of Public Works (DPW), a written encroachment permit in accordance with Section 71 (Highway and Traffic) of the San Diego County code of Regulatory Ordinances.	C442 is not listed in the measure; therefore, this measure is not applicable.	Pre	N/A
Noise	APM-NOI-01	01	Construction Schedule Notification	SDG&E will provide notice of the construction schedule to all property owners within 300 feet of the Proposed Action by mail at least one week prior to the start of construction activities. The announcement will state the construction start date, anticipated completion date, and hours of operation, as well as a telephone number to call with questions or complaints during construction.	This measure will be satisfied through the implementation of MM LU-01 and in accordance with the Construction Notification Plan.	Pre and During	Pending
Public Health and Safety	PHS-01	01	Contractor Training	San Diego Gas & Electric (SDG&E) shall provide written documentation that all staff, including contractor, and subcontractor project personnel, have received training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures.	All construction personnel will receive the Worker Environmental Awareness Program training immediately prior to beginning work on the Project. The Worker Environmental Awareness Program training will include the appropriate work practices and hazardous materials protocol. Sign-in sheets will be submitted with the Weekly Environmental Compliance Report.	Pre and During	To Be Implemented Immediately Prior to Construction
Public Health and Safety	PHS-02	02	Hazardous Materials BMPs	SDG&E will be required to complete a Spill Response and Notification Plan for agency approval before commencing construction.	The Spill Response and Notification Plan was approved by the USFS on July 21, 2016 and by the CPUC on July 18, 2016.	Pre	Complete
Public Health and Safety	PHS-03	02	Blasting Procedures	In addition to any other requirements established by the appropriate regulatory agencies, the pre-blast survey and blasting plan shall meet the following conditions: -The pre-blast survey shall be conducted for structures within a minimum radius of 1,000 feet from the identified blast site to be specified by San Diego Gas & Electric (SDG&E) or SDG&E's contractor. Sensitive receptors that could reasonably be affected by blasting shall be surveyed as part of the pre-blast survey.	A pre-blast survey will be conducted if blasting is determined to be necessary.	Pre and During	To Be Implemented During Construction

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Public Health and Safety	PHS-03	04	Blasting Procedures	- The final blasting plan shall address air-blast limits, ground vibrations, and maximum peak particle velocity for ground movement, including provisions to monitor and assess compliance with the air-blast, ground vibration, and peak particle velocity requirements. The blasting plan shall meet criteria established in Chapter 3 (Control of Adverse Effects) in the Blasting Guidance Manual of the U.S. Department of Interior Office of Surface Mining Reclamation and Enforcement. - The blasting plan shall outline the anticipated blasting procedures for the removal of rock material at the proposed pole locations. The blasting procedures shall incorporate line control to full depth and controlled blasting techniques to create minimum breakage outside the line control and maximum rock fragmentation within the target area. Prior to blasting, all applicable regulatory measures shall be met. The applicant, general contractor, or its subcontractor (as appropriate) shall keep a record of each blast for at least 1 year from the date of the last blast.	If blasting is required, SDG&E will prepare a Blasting Plan in accordance with this measure.	Pre and During	To Be Implemented During Construction
Public Health and Safety	PHS-04	01	Soil and Groundwater Contamination Training	Prior to construction, all San Diego Gas & Electric (SDG&E), contractor, and subcontractor project personnel anticipated to work between poles Z173105 and Z173109 shall receive training regarding the location of suspected soil and groundwater contamination along TL629 between poles Z173105 and Z173109, and will be instructed to avoid any ground disturbance in the area.	Poles Z173105 through Z173109 are not located along C442; therefore, this measure does not apply to this component.	Pre and During	N/A
Public Health and Safety	PHS-07	01	Conduct Geotechnical Investigations	The applicant shall perform design-level geotechnical investigations to evaluate the potential for liquefaction, lateral spreading, seismic slope instability, and ground-cracking hazards to affect the approved project and all associated facilities. Where these hazards are found to exist, appropriate engineering design and construction measures that meet California Building Code (CBC), CPUC General Order 95, and Electric Power Research Institute (EPRI) Moment Foundation Analysis and Design parameters shall be incorporated into the project designs.	SDG&E performed design-level desktop geotechnical investigations for C442 in 2017. Results of the investigations were incorporated into the final design drawings.	Pre and During	Complete
Public Health and Safety	PSU-01	01	AT&T Commitments	Prior to receiving a Notice to Proceed with construction along each of the proposed power line replacement projects, SDG&E shall provide to the CPUC and Forest Service written commitment from AT&T confirming that AT&T facilities that are co-located on the proposed power line replacement projects will be relocated to SDG&E's new facilities. Facilities will be transferred in a manner that avoids interruptions of telecommunications services to the greatest degree possible. The timing of the relocation activities will be reviewed and approved by both the CPUC and Forest Service.	Documentation confirming that AT&T facilities will be transferred onto the power line replacement structures will be submitted to the CPUC and the USFS prior to transferring the AT&T facilities.	Pre	Pending
Recreation	REC-01	01	Gate Plan	To deter unauthorized access to specially designated or restricted areas via SDG&E access roads authorized by the MSUP, the project applicant shall submit a plan and schedule for gate (or other barriers, such as pipe rails, where appropriate) installation to the Forest Service for approval. Gates will meet Forest Service engineering standards, and designs will be approved by the Forest Service prior to installation. In addition, appropriate deterrence signage approved by the Forest Service shall be installed on gates to SDG&E access roads. Maintenance of gates and signage shall be the responsibility of the project applicant.	The Gate Plan was approved by the USFS on August 25, 2016. At this time, SDG&E does not know if it will continue to utilize access roads authorized by the MSUP on C442. If SDG&E decides to continue utilizing those access roads, then the appropriate gates or barriers will be included in the Access Road Decommissioning Plan and they will be agreed upon by SDG&E and the USFS.	Pre, During, and Post	Pending
Transportation and Traffic	APM-TRANS-06	01	Coordinate with Local Air Traffic and FAA	SDG&E will coordinate flight patterns with local air traffic control and the Federal Aviation Administration prior to construction to prevent any adverse impacts due to increased air traffic.	Per the APM and MM Superseded List (which was submitted to the CPUC on July 5, 2016), this APM was superseded in the Final Environmental Impact Report/Final Impact Statement by MM PHS-5.	Pre and During	N/A

