

June 7, 2024

Ms. Shelby Weyment
California Coastal Commission
455 Market Street Suite 300
San Francisco, CA 94105

Dear Ms. Weyment:

Subject: Updated Restoration Plan for California Coastal Commission
Consent Cease and Desist Order CCC-20-CD-03 and Consent Restoration
Order CCC-20-RO-02

Enclosed, please find the combined Restoration Plan and Remedial Grading Plan for the Temescal Ridge Pole Replacement Project. The plan has been modified, based on comment provided by the California Coastal Commission on June 6, 2024, to describe the straw wattles being used as sterile instead of weed-free and to remove all references of berm restoration. Portions of the plan that referenced berm restoration were updated to reflect the current plan of berm removal and straw wattle placement as needed.

If you have any questions or need any additional information, please contact Ms. Kathryn Laudeman at (213) 367-6376 or via email at kathryn.laudeman@ladwp.com regarding the Restoration Plan or Mr. Michael Hanson at (213) 367-6376 or via email at michael.hanson@ladwp.com regarding the Remedial Grading Plan.

Sincerely,

Katherine
Rubin

Digitally signed by
Katherine Rubin
Date: 2024.06.10
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Katherine Rubin
Director of Corporate Environmental Affairs

KL:mh

Enclosure

c: Ms. Kathryn Laudeman
Mr. Michael Hanson

Updated Temescal Ridge Pole Replacement Project Resource Management Plan

Prepared For:



Los Angeles Department of Water and Power
PO Box 51111
Los Angeles, CA 90051

Prepared by:



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June 2024

Agreement No. 47732A, Task Order No. 08

Contents

1. Introduction.....	1
1.1 Plan Goals and Objectives.....	1
1.2 Characterization of the Desired Habitat	2
1.2.1 Vegetation Types and Conditions	2
1.3 Project and Property Description.....	2
1.3.1 Project Description	2
1.3.2 Project Location.....	3
1.4 Responsible Parties/Project Contact.....	3
1.5 Acronyms and Definitions.....	3
2. Regional Setting, Physical Conditions, and Vegetation.....	4
2.1 Climate.....	4
2.2 Geology.....	4
2.3 Existing Vegetation	4
2.4 Special Status Species and Habitats	6
2.5 Jurisdictional Habitats	16
2.6 Non-Native Vegetation	16
2.7 Other Natural or Anthropogenic Disturbances	17
3. Impacts to Vegetation or Cover Types	18
3.1 Existing Habitat Quality.....	18
4. Planting Plan.....	19
4.1 Types of Habitats to be Restored.....	19
4.2 Active and Passive Restoration Guidelines	19
4.2.1 Active Restoration Methods	19
4.2.2 Passive Restoration Methods	20
4.3 Seed Mix and Planting Methods	20
4.3.1 Restoration Seed Mixes	20
4.3.2 Hydroseeding	21
4.3.3 Broadcast Seeding	22
4.3.4 Seeding Schedule.....	22
4.3.5 Seed Supplier.....	22
4.3.6 Seeding Quality Control Requirements	23
4.4 Container Stock and Planting Methods.....	23
4.4.1 Container Stock Size	24
4.4.2 Container Stock Quality Control	24
4.4.3 Container Planting Methods.....	24
5. Success Criteria	25
5.1 Vegetation Structure and Composition	26
5.2 Basis for the Selection of the Success Criteria	26
6. Plan Compliance	27
7. Implementation Plan	27
7.1 Pre-Activity Meeting	27
7.2 Site Preparation	27

7.2.1	Pre-Activity Biological Clearance Surveys	27
7.2.2	Delineation of Work Areas, Fencing, and Signage	27
7.2.3	Pre-Restoration Weed Treatment	28
7.2.4	Topsoil and Earth Movement	28
7.2.5	Ripping/Decompaction.....	28
7.2.6	Fertilizers	28
7.2.7	Irrigation	28
7.2.8	Mulching of Dead Biomass	29
7.2.9	Erosion Control	29
7.2.10	Planting.....	29
7.2.11	Initial Installation (Initial Seeding/Spraying Activities)	29
7.3	Weed Control.....	30
7.3.1	Weed Removal Schedule	31
7.3.2	Foliar Herbicide Application	31
7.3.3	Cut-Stump or Cut-and-Spray Method.....	32
7.3.4	Mechanical Removal	32
8.	Maintenance and Monitoring.....	33
8.1	Maintenance Program	34
8.1.1	Maintenance and Monitoring Measures	34
8.2	Monitoring	36
8.2.1	Monitoring Long-Term Maintenance Activities	37
8.2.2	Monitoring Long-Term Site Performance	37
8.2.3	Monitoring Schedule	40
9.	Reporting.....	40
10.	Final Restoration Project Approval	42
11.	Contingency Plan	42
12.	References	44

Tables

Table 1.	Special-status Species of Topanga Canyon State Park and Vicinity	6
Table 2.	Non-Native Species Observed Within the Restoration Area.	16
Table 3.	Acreage of Vegetation and Land Cover Impacts Within the CZ and TSP.....	18
Table 4.	Restoration Seed Mix	21
Table 5.	Container Plant Palette	23
Table 6.	Minimum Coverage and Success Criteria	26
Table 7.	Non-Native Species Observed Within the Restoration Area.	30
Table 8.	Maintenance Program Schedule (Years 1-2)	34
Table 9.	Maintenance Program Schedule (Years 3–5).....	34
Table 10.	Average Percent Cover Within Reference Sites.....	38
Table 11.	Mean Percent Cover by Species Within Reference Sites	39
Table 12.	Long-Term Site Monitoring Schedule for Year 1.....	40
Table 13.	Long-Term Site Monitoring Schedule for Mitigation and Monitoring Plan (Years 2–5).....	40

Figures

Figure 1. Project Overview

Figure 2. Vegetation and Cover Types

Figure 3. Sensitive Biological Resources in the Project Area

Figure 4. Braunton's Milk-vetch Occurrences

Figure 5. Proposed Restoration Areas

Figure 6. Control Site Transect Locations

Appendices

Appendix A Earth Movement and Erosion Control Plan

1. Introduction

This draft Resource Management Plan (RMP or Plan) has been prepared by Aspen for the Los Angeles Department of Water and Power (LADWP) to mitigate and restore impacts to coastal sage scrub and chaparral communities that were disturbed during the Temescal Ridge Pole Replacement Project (project). These communities are designated as Environmentally Sensitive Habitat Areas (ESHA) by the California Coastal Commission (CCC). The project was intended to replace aging poles and reduce the risk of wildfires on an approximately eight-mile section of distribution line from the Pacific Palisades to Mulholland Drive and the Encino Reservoir (Figure 1). The project is located on lands owned and managed by LADWP in the vicinity of Encino Reservoir and lands managed by Topanga State Park (TSP). The southern end of the project is located within the coastal zone (CZ), which is subject to regulation by the CCC.

This Plan describes the biological setting, restoration goals, planting methods, success criteria, and reporting standards that will be utilized within the CZ and TSP and incorporates the information described by the CCC in “Suggestions for the Development of Mitigation and Monitoring Plans for the California Coastal Commission”. Habitat disturbed from project activities will be restored to conditions that meet or exceed vegetative conditions in CCC approved reference areas.

1.1 Plan Goals and Objectives

The goal of the Plan is to initiate the pathway of community succession from early pioneering plants to later seral stages of vegetation. Based on this approach, the following objectives have been defined. Specific objectives and quantitative success criteria described below were developed from these goals.

- GOAL 1: Comply with restoration requirements and performance criteria identified by the CCC and TSP.
- GOAL 2: Mitigate construction related impacts to native habitats.
- GOAL 3: Replace functional values of the disturbed habitat and maximize habitat value within the project area by replicating natural recruitment of native vegetation and habitat with the intent to increase structural diversity over time.

OBJECTIVE 3.1 Establish native upland trees and shrubs to create a habitat mosaic similar to that found in comparable native coastal ecosystems and provide native upland habitat in contiguous patches throughout the project area.

OBJECTIVE 3.2: Provide screening or buffer areas between revegetated areas to minimize human disturbance to Braunton’s milk-vetch (*Astragalus brauntonii*) occurrences and to facilitate wildlife usage. Screening methods will be determined in consultation with the CCC and TSP based on safety requirements and may include fencing, signage, or other suitable barriers.

- GOAL 4: Establish vegetation suitable to site conditions that will become self-sustaining over the long term, in the absence of manipulation, irrigation, or maintenance at the close of the monitoring period.

OBJECTIVE 4.1: Plant species suited to long-term future site conditions.

OBJECTIVE 4.2: Maintain the restoration sites over a 5-year minimum monitoring period to ensure that vegetation becomes established as planned and trends toward natural regional vegetation. Maintenance strategies will include irrigation, weeding, and replanting as needed.

OBJECTIVE 4.3: Monitor each restored area over a minimum 5-year period to document (1) completion of restoration plan elements (site prep, seeding, maintenance, etc.); (2) the progress

of vegetation establishment in restored areas; (3) need for weeding or other maintenance or remediation; and (4) to ensure the achievement of quantitative success criteria.

OBJECTIVE 4.4: Native vegetation to be planted and established through this plan should become self-sustaining over the course of the monitoring period.

1.2 Characterization of the Desired Habitat

1.2.1 Vegetation Types and Conditions

Habitat disturbed from project activities will be restored to conditions that meet or exceed vegetative conditions in CCC approved reference areas. Desired habitat conditions will include the establishment of small shrubs and woody vegetation with a minimal percentage of non-native species. Most project impacts occurred in mid to late seral stages of chaparral vegetation and areas designated as early seral undifferentiated vegetation associated with road edges and previous firebreaks.

Based on the proposed container and seed mixes, desired conditions would mimic early seral coastal sage scrub and chaparral vegetation. By placing chaparral associated container plants such as greenbark ceanothus (*Ceanothus spinosus*), toyon (*Heteromeles arbutifolia*), and laurel sumac (*Malosma laurina*) within the restoration sites we expect to “head start” the successional process. Over time, the desired outcome would be for the larger chaparral species to dominate the restoration sites.

Succession is a key ecological process that will be used to set the restoration sites on the pathway toward mid and late successional communities. Although a variety of subshrubs and larger woody vegetation will be used it is unlikely the area will fully match adjacent late-stage chaparral communities in the area during the five-year monitoring period.

1.3 Project and Property Description

1.3.1 Project Description

The project includes replacing approximately 220 wooden power poles with new non-wood poles. Of these 30 are located within the CZ. The existing wooden poles were installed between 1935 and 1955 and are past their useful service life. The new poles range from 50 to 65 feet tall and are more resistant to high wind and fire threats. The new poles are rated to last approximately 100 years and will increase power system reliability and reduce the risk of wildfires. Some portions of the project area are currently not accessible to vehicles.

Status of Work. The status of work on the project differs by land jurisdiction. The project has been completed along Mulholland Drive from the eastern end near San Vicente Mountain Park to the last tower heading west before the start of TSP (approximately 1.3 miles). For most of the poles within TSP, new holes have been excavated next to the existing poles. These excavations have been covered pending the resumption of work anticipated in 2024. The access road has also been improved and spur roads have been cleared to access the poles. Native and non-native vegetation including Branton’s milk-vetch has recruited in some of these areas. Work was suspended on the segment of the project that runs north from Mulholland Dr. towards Encino Reservoir (approximately 0.7 miles). Work on this segment includes access road maintenance, spur road clearing, and hole excavations.

Important Definitions. Throughout this Plan “access road” is used to describe the road that runs throughout the project area and provides vehicle access to the wooden poles. Clearing of the access road included blading the road, clearing vegetation, and in some locations pushing soil off the road into adjacent

vegetation. “Access path” or spur roads refer to the location where equipment left the access road and cleared footpaths or spur roads to select poles. Most of the access paths had very little soil disturbance and impacts were from the removal of above ground vegetation.

1.3.2 Project Location

The project is in Los Angeles County within the eastern portion of the Santa Monica Mountains. Specifically, the project is located north of Pacific Coast Highway (State Route 1), south of U.S. Highway 101, east of Topanga Canyon Road (State Route 27), and west of Interstate 405 (see Figure 1). The topography of the project area is gently sloped and occurs along a series of ridgelines with steeper slopes immediately adjacent to the access road. The distribution line alignment crosses over several steep canyons but generally follows the route of the access road. The project area ranges in elevation from 1,000 feet above mean sea level (AMSL) near Encino Reservoir to approximately 2,060 feet AMSL near Temescal Peak. The project area can be found on the Topanga and Canoga Park, California United States Geological Survey (USGS) 7.5' Quadrangles (quad).

1.4 Responsible Parties/Project Contact

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213-367-6376
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1.5 Acronyms and Definitions

The following terms are used throughout this Plan. For better clarification and readability, the following acronyms and terms are defined.

Annual: plant that completes its life cycle in one growing season.

Biological Monitor: a qualified biologist with a minimum of 5 years restoration experience in Southern California.

CCC: California Coastal Commission.

CZ: Coastal Zone.

Germination: sprouting of a seed.

Herb: a non-woody, seed-producing plant.

Herbicide: an agent used to destroy or inhibit the growth of a plant.

Herbivore: plant-eating animal.

Herbivory: feeding on plants.

Native soil: soil salvaged from natural areas that contained native plant species and native species seed bank.

Perennial: a plant that completes its life cycle in more than one growing season and is present throughout the year.

Restoration Contractor: the company responsible for providing plants and seeds for the project, installing plants, weeding, and watering.

Riparian: natural habitat or vegetation growing on or near the banks of a watercourse.

Ruderal: a weed or weedy habitat where natural vegetation cover has been interrupted (i.e., disturbed).

Seed bank: ungerminated seeds found within soil.

TSP: Topanga State Park.

Upland: habitat elevated above lowlands along upper slopes of watercourses or between hills.

Weed: non-native introduced species of plant.

2. Regional Setting, Physical Conditions, and Vegetation

2.1 Climate

The climate in the region is characterized by long, hot, dry summers with frequent coastal fog on the ocean side; and short, mild, relatively wet winters. Weather in the area is influenced by the Santa Monica Mountains which results in warm valley interiors and cool coastal areas. Precipitation of the Santa Monica Mountains varies due to topography. Coastal areas range between 12 to 16 inches annually, while some peaks may receive up to 30 inches in the same year. For example, the average annual precipitation recorded at the Topanga Canyon weather station, located approximately 3.0 miles west of the study area, is 23.59 inches (59.92 cm: Los Angeles County 2021). Annual precipitation from the 2019-2020 rainfall year (July 1 through June 30) at the Topanga Canyon weather station was 22.47-inches (57.07 cm), approximately 95 percent of average (Los Angeles County 2020). Annual precipitation from the 2020-2021 rainfall year at the Topanga Canyon weather station was 5.66 inches (14.38 cm), approximately 24 percent of average (Los Angeles County 2021). Annual precipitation to-date for the 2021-2022 rainfall year at the Topanga Canyon weather station was 16.80 inches (42.67 cm), approximately 71 percent of average (Los Angeles County 2022). Annual precipitation to-date for the 2022-2023 rainfall year at the Topanga Canyon weather station was 28.64 inches (72.75 cm), which is well above seasonal averages for the region (Los Angeles County 2023).

2.2 Geology

The Santa Monica Mountains are part of the Transverse Mountain Ranges in Southern California. Running east-west, these Mountains have formed because of interactions between the Pacific Plate and the North American Plate. The project is in the eastern portion of the Santa Monica Mountains and has exposed granitic rocks and slate that tend to be overlain in the western portions of the range.

2.3 Existing Vegetation

Vegetation within the project area is dominated by a mosaic of chaparral vegetation with smaller patches of woodland and coastal sage scrub (see Figure 2). Each of the vegetation communities present in the project area are described below.

California walnut groves (*Juglans californica* Forest & Woodland Alliance). This woodland vegetation is characterized by the presence of southern California black walnut (*Juglans californica*). Coast live oak (*Quercus agrifolia*) are also present in the canopy of the California walnut groves but in much lower numbers. Understory shrub species include California sagebrush (*Artemisia californica*), purple sage (*Salvia leucophylla*), and western poison oak (*Toxicodendron diversilobum*). Some portions of the California walnut groves also have an understory of herbaceous forbs and grasses. Within the project area the California walnut groves are growing on north-facing slopes and ridgelines. It is mapped at one location at the northern end of the project area and at a second location on a north-facing slope near the southern end of the project area. California walnut groves have a state rank of S3 which is recognized as sensitive by CDFW (CDFW, 2019).

Chamise chaparral (*Adenostoma fasciculatum* Shrubland Alliance). This chaparral vegetation is dominated by chamise (*Adenostoma fasciculatum*). Additional chaparral shrubs such as California lilacs (*Ceanothus* spp.), Eastwood manzanita (*Arctostaphylos glandulosa*), and toyon also occur. Chamise chaparral forms dense stands of vegetation with very little understory vegetation. Chamise chaparral is present at several locations along Mulholland Drive.

Bigpod ceanothus chaparral (*Ceanothus megacarpus* Shrubland Alliance). This chaparral vegetation is dominated by bigpod ceanothus chaparral (*Ceanothus megacarpus*). Other species such as coast live oak, greenbark ceanothus, laurel sumac, toyon, and California bay (*Umbellularia californica*) are also present but in lower numbers. The understory is comprised of shrubs and herbs such as canyon sunflower (*Venegasia carpesioides*), California sagebrush, western poison oak, and wood fern (*Dryopteris arguta*). Bigpod ceanothus was the most abundant vegetation type impacted by the project.

Holly leaf cherry – toyon – greenbark ceanothus chaparral (*Prunus ilicifolia* - *Heteromeles arbutifolia* - *Ceanothus spinosus* Shrubland Alliance). This chaparral vegetation is dominated by toyon and greenbark ceanothus within the project area. Other shrubs such as bigpod ceanothus, laurel sumac, Eastwood manzanita, chamise, California bay are also present but in lower abundance. The understory is composed of species such as wood fern, canyon sunflower, and heart leaved keckiella (*Keckiella cordifolia*). Holly leaf cherry – toyon – greenbark ceanothus chaparral is most common on north-facing slopes within the project area. The portions of the project area that were previously mapped as Greenbark Ceanothus Shrubland Alliance and Toyon Shrubland Alliance have been merged into this new vegetation type based on updates in *A Manual of California Vegetation* (CNPS, 2020).

Laurel sumac scrub (*Malosma laurina* Shrubland Alliance). This scrub vegetation is dominated by laurel sumac. Other shrubs such as California lilacs, sages (*Salvia* spp.), and chamise are also present in low numbers. This vegetation is more open than other chaparral types and tends to form stands that may be best classified as coastal sage scrub. Laurel sumac scrub is present along the southern end of the Temescal Canyon Fire Road and along the northern spur road towards Encino Reservoir.

Scrub oak chaparral (*Quercus berberidifolia* Shrubland Alliance). This chaparral vegetation is dominated by scrub oak (*Quercus berberidifolia*). Other species such as chamise, coast live oak, and California lilacs are also present in lower abundance. Scrub oak chaparral forms dense stands on ridgelines and north-facing slopes. It is most common on the north-facing slopes within the project area along Mulholland Drive.

Scrub oak – chamise chaparral (*Quercus berberidifolia* – *Adenostoma fasciculatum* Shrubland Alliance). This chaparral vegetation is co-dominated by scrub oak and chamise. It is similar in form and function to scrub oak chaparral described above and is differentiated by the co-dominance of chamise. It is also most common on the north-facing slopes within the project area along Mulholland Drive.

California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance). This coastal sage scrub vegetation is dominated by California buckwheat. Other shrubs and bunchgrasses such as sages, deerweed (*Acmispon glaber*), saw toothed goldenbush (*Hazardia squarrosa*), and needlegrasses (*Stipa* spp.). It is a dense vegetation type that is made up of lower stature shrubs than those in chaparral vegetation types discussed above. California buckwheat scrub is present at several scattered locations throughout the project area.

Bush mallow scrub (*Malacothamnus fasciculatus* - *Malacothamnus* spp. Shrubland Alliance). This scrub vegetation is dominated by chaparral bush mallow (*Malacothamnus fasciculatus*). Other trees and shrubs such as southern California walnut, laurel sumac, California sagebrush, and sages are also present in lower abundance. This vegetation is more open than other chaparral types and tends to form stands that may be best classified as coastal sage scrub. Bush mallow scrub is present along the northwestern-most portion of the project area near the staging area.

Black sage scrub (*Salvia mellifera* Shrubland Alliance). This coastal sage scrub vegetation is dominated by black sage (*Salvia mellifera*). Other species such as purple sage (*Salvia leucophylla*), California buckwheat, and chaparral bush mallow are also present in lower numbers. It is a dense vegetation type

that is made up of lower stature shrubs than those in chaparral vegetation types discussed above. Black sage scrub is present along the northwestern-most portion of the project area near the staging area.

Firebreak Early Seral Undifferentiated Vegetation Mapping Unit. Firebreak early seral undifferentiated vegetation was used as a broad vegetation type to map areas that were previously impacted by the creation and maintenance of firebreaks. This is a diverse vegetation type that varies from heavily disturbed non-native grasslands to relatively intact coastal sage scrub vegetation. These various vegetation types were not differentiated because of the small sizes of the vegetation polygons. Some portions of this vegetation type match the following vegetation types:

- Wild oats and annual brome grasslands (*Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance);
- Sawtooth golden bush scrub (*Hazardia squarrosa* Shrubland Alliance);
- California sagebrush scrub;
- California buckwheat scrub;
- Black sage scrub; and
- Laurel sumac scrub.

2.4 Special Status Species and Habitats

The project area supports a variety of sensitive plants and wildlife. Plant and wildlife species classified as one or more of the following are considered special-status species in this report:

- Listed, proposed for listing, or candidates for listing as threatened or endangered under the federal Endangered Species Act (ESA);
- Listed as threatened or endangered, or candidates for listing under the California Endangered Species Act (CESA);
- Plants listed as rare under the California Native Plant Protection Act;
- Meet the definition of rare or endangered under CEQA § 15380 (b) and (d);
- Considered special-status species in local or regional plans, policies, or regulations.

Table 1 lists all special-status plants and animals known from comparable habitats within the region. This table summarizes their habitat, distribution, conservation status, and probability of occurrence on the site. This information was based on a review of relevant literature, databases, and field surveys that were conducted in 2020, a year with average rainfall in the region.

Table 1. Special-status Species of Topanga Canyon State Park and Vicinity

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
PLANTS				
<i>Astragalus brauntonii</i> Braunton's milk-vetch	Short-lived perennial herb; carbonate soils in chaparral, about 0-2000 ft. elev.; Santa Monica Mtns, foothills of the San Gabriel Mtns., and northern Santa Ana Mountains; Orange and Los Angeles Cos.	Jan-Aug	Fed ESA: END CA: S2, CRPR 1B.1	Present: Approximately 2,000 plants within project area and in the immediate vicinity.

Table 1. Special-status Species of Topanga Canyon State Park and Vicinity

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Calandrinia breweri</i> Brewer's calandrinia	Annual (post-fire); sandy or loamy soil in chaparral and coastal scrub, about 30-4000 ft. elev.; widespread distribution in coastal Calif. from Lake Co. south to San Diego Co.	Mar-Jun	Fed ESA: none CA: S4, CRPR 4.2	Moderate: One record from 0.25 miles of the project area in 1972, suitable habitat present throughout.
<i>Calochortus catalinae</i> Catalina mariposa lily	Perennial herb (bulb); grasslands and shrublands in heavy soils; San Luis Obispo to San Diego Cos., inland to Riverside and San Bernardino Cos.; from sea level to about 2500 ft. elev.	Mar-Jun	Fed ESA: none CA: S3.2, CRPR 4.2	Moderate: Marginally suitable grassland habitat is present, several observations within about 1.0 mile of the project area.
<i>Calochortus clavatus</i> var. <i>clavatus</i> Club haired mariposa lily	Perennial herb (bulb); chaparral, cismontane woodland, coastal scrub, and grasslands between about 250 to 4300 ft. elev.; Coast Ranges and Transverse Ranges from Los Angeles Co. north to San Benito Co.	May-Jun	Fed ESA: none CA: S3, CRPR 4.3	Present: Two plants observed, suitable habitat is present along Mulholland Dr.
<i>Calochortus clavatus</i> var. <i>gracilis</i> Slender mariposa-lily	Perennial herb (bulb); chaparral on slopes or in canyons below 3900 ft. elev., south base of San Gabriel and Sierra Pelona mountains.	Mar-Jun	Fed ESA: none CA: S2S3, CRPR 1B.2	Moderate: Suitable habitat is present, known from within about 3 miles of the project area.
<i>Calochortus plummerae</i> Plummer's mariposa-lily	Perennial herb (bulb); chaparral, alluvial fans, pine forest, below about 5600 ft. elev.; widespread but uncommon throughout S. Calif. mts., foothills & valleys.	May-Jul	Fed ESA: none CA: S4, CRPR 4.2	Present: A patch of plants observed within the project area, suitable habitat is present along Temescal Fire Rd.
<i>Deinandra minthornii</i> Santa Susana tarplant	Perennial shrub; rocky habitats in chaparral and coastal scrub from about 900 to 2500 ft. elev.; endemic to the Simi Hills and Santa Monica Mtns in Los Angeles and Ventura Cos.	Jul-Nov	Fed ESA: none CA: Rare, S2, CRPR 1B.2	Minimal: Suitable habitat is limited in the project area, nearest occurrence 3.6 miles to the west.
<i>Dudleya cymosa</i> ssp. <i>marcescens</i> Marcescent dudleya	Perennial herb; rocky volcanic soils in chaparral from about 500 to 1700 ft. elev.; known from Topanga Canyon in Los Angeles Co. west to Sycamore Canyon in Ventura Co.	Apr-Jul	Fed ESA: THR CA: Rare , S2, CRPR 1B.2	Minimal: Suitable volcanic soils are absent from the project area, known from within about 2.4 miles.
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> Santa Monica dudleya	Perennial herb; rocky volcanic and sedimentary rock in coastal scrub and chaparral from about 500 to 5500 ft. elev.; known from the Santa Monica Mtns in Los Angeles and Ventura Cos. and a disjunct population in the Santa Ana Mtns. In Orange Co.	Mar-Jun	Fed ESA: THR CA: S1, CRPR 1B.1	Low: Suitable habitat is limited in the project area, nearest known occurrence 2.4 miles to the west.

Table 1. Special-status Species of Topanga Canyon State Park and Vicinity

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Horkelia cuneata</i> var. <i>puberula</i> Mesa horkelia	Perennial herb; shrublands, woodlands; sandy soils, away from immediate coast; San Luis Obispo to San Diego Co., rarely inland to San Bernardino Co.; about 200-2700 ft. elev.	Apr-Sep	Fed ESA: none CA: S1, CRPR 1B.1	Minimal: Marginally suitable habitat present, more than 5 miles from nearest known occurrence.
<i>Juglans californica</i> Southern California black walnut	Perennial deciduous tree; Alluvial zones in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats from 164-2900ft. elev.; Santa Barbara Co. south to San Diego Co.	Year-around	Fed ESA: none CA: S4, CRPR 4.2	Present: Numerous southern California black walnuts present throughout the project area.
<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i> White-veined monardella	Perennial herb; chaparral and cismontane woodlands from about 150 to 4900 ft. elev.; Santa Monica Mtns. in Los Angeles Co. west to Point Conception in Santa Barbara Co.	May-Aug	Fed ESA: none CA: S3, CRPR 1B.3	Moderate: Suitable habitat is present, nearest known occurrence about 1 mile to the west.
<i>Quercus dumosa</i> Nuttall's scrub oak	Evergreen shrub; sandy or clay loam soils in closed cone coniferous forest, chaparral, and coastal scrub from about 50 to 1300 ft. elev.; coastal Santa Barbara Co. south into San Diego Co. and Baja CA.	Year-around	Fed ESA: none CA: S3, CRPR 1B.1	Moderate: Suitable habitat is present, known from within about 5 miles to the east and west of the project area.
<i>Phacelia hubbii</i> Hubby's phacelia	Annual herb; rocky soils in chaparral, coastal sage scrub, and grasslands from sea level to about 3300 ft. elev.; Santa Barbara Co. east to Los Angeles Co.	Apr-Jul	Fed ESA: none CA: S4, CRPR 4.2	Present: Numerous plants observed within the project area, suitable habitat is present throughout.
INVERTEBRATES				
<i>Aglaothorax longipennis</i> Santa Monica shieldback katydid	Solitary insect; canyon stream bottoms in riparian vegetation. Nocturnally utilized chaparral in adjacent hillsides. Known from a single location near Big Rock in the Santa Monica Mountains of Los Angeles Co.	Unknown	Fed ESA: none CA: S1S2	Minimal: Suitable chaparral habitat only, known from a single location 4.5 miles to the southwest.
<i>Bombus crotchii</i> Crotch bumble bee	Colonial insect; open grassland and scrub; underground colonies, often in old rodent burrows. Many food plants including <i>Chaenactis</i> , <i>Lupinus</i> , <i>Phacelia</i> , <i>Salvia</i> , and <i>Eriogonum</i> . Much of southern and central CA, SW Nevada, and Baja.	Spring - summer	Fed ESA: none CA: S1S2 State Candidate for listing	High: Suitable habitat and food plants present; historical records from within about 2 miles.

Table 1. Special-status Species of Topanga Canyon State Park and Vicinity

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Danaus plexippus</i> pop. 1 Monarch - California overwintering population	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress) with nectar and water sources nearby.	Winter	Fed ESA: Candidate CA: S2S3	Minimal: No overwintering trees present, however, known to forage and fly through the project area.
<i>Socalchemmis gertschi</i> Gertsch's socalchemmis spider	Very little is known about the habitat requirements of this spider. Collections indicate that it occurs in coastal sage scrub.	Unknown	Fed ESA: none CA: S1	Low: Suitable coastal sage scrub habitat is present in the project area, known from within about 2.5 miles of the project area.
REPTILES				
<i>Anniella stebbinsi</i> Southern California legless lizard	Generally, south of the Transverse Range, south to NW Baja Calif. Sandy or loose loamy soils under sparse vegetation; soils typically have high moisture content.	Year-around	Fed ESA: none CA: S3, SC	Low: Marginally suitable habitat present, nearest known occurrence about 5 miles to the west and east.
<i>Aspidoscelis tigris stejnegeri</i> Coastal whiptail	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Coastal Calif., Transverse, and Peninsular ranges, south to Baja Calif.	Year-around	Fed ESA: none CA: S3, SC	Present: Two adults observed near the southern end of the project area, likely to be present throughout.
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	Found in rocky areas within chaparral and woodlands in and near intermittent streams and other mesic microhabitats.	Spring-Summer	Fed ESA: none CA: S2?	Present: One individual was observed by a user of iNaturalist (2020). Suitable habitat is present throughout the project area.
<i>Phrynosoma blainvillii</i> Coast horned lizard	Forest, shrubland or grassland; sandy soils; W Calif. from LA Co S through N Baja Calif., below about 6000 ft. elev.	Spring-Summer	Fed ESA: none CA: S3S4, SC	Present: Suitable habitat throughout the project area, 2 individuals observed during surveys.
BIRDS				
<i>Accipiter striatus</i> Sharp-shinned hawk	Nests in forest and woodland, hunts in woods and open areas; breeds in Sierra Nevada and N, winters through US & Cent. Amer.	Winter	Fed ESA: none CA: S4 (nesting)	Nesting: Minimal, out of range. Winter/Migration: High, regularly observed within TSP.

Table 1. Special-status Species of Topanga Canyon State Park and Vicinity

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Accipiter cooperii</i> Cooper's hawk	Nests in forest and woodland, hunts in woods and open areas; breeds through most of US, winters south through Mexico.	Year-round	Fed ESA: none CA: S4 (nesting)	Nesting: Moderate, limited nesting habitat. Winter/Migration: Present, several individuals observed within the project area during surveys.
<i>Agelaius tricolor</i> Tricolored blackbird	Highly colonial species: requires open water, protected nesting substrate, and foraging areas with insect prey within a few kilometers of colony.	Year-round	Fed ESA: none CA: THR , S1S2	Nesting: Minimal; suitable nesting habitat limited. Foraging/Migration: Low.
<i>Aimophila ruficeps canescens</i> Southern California rufous-crowned sparrow	Coastal sage scrub, open chaparral; S Calif. and NW Baja Calif.; not migratory.	Year-round	Fed ESA: none CA: S3	Present: Heard calling within the chaparral at several locations in the project area.
<i>Aquila chrysaetos</i> Golden eagle	Nests in remote trees and cliffs; forages over shrublands and grasslands; breeds throughout W N America, winters to E coast.	Year-round	Fed: Eagle Protection Act CA: S3, FP	Nesting: Minimal. Year-around foraging or flyover: Moderate.
<i>Athene cunicularia</i> Burrowing owl	Nests mainly in rodent burrows, usually in open grassland or shrubland; forages in open habitat; increasingly uncommon in S Calif.; through W US and Mexico.	Year-round	Fed ESA: none CA: S3, SC (burrow sites)	High: Suitable habitat is limited within the project area; one burrowing owl was incidentally observed in the vicinity by construction crews.
<i>Buteo swainsonii</i> Swainson's hawk	Breeds in open habitats (e.g., grassland), Central Valley and W Mojave Desert (Calif.) and east to cent. US, S. Canada, New Mexico; winters in S America.	Spring–Summer	Fed ESA: none CA: THR, S3	Nesting: Minimal Migration: High, known to migrate through the region and reported in TSP.
<i>Circus hudsonius</i> Northern harrier	Breeds colonially in marshlands, San Diego and northward; winters to south through Central Amer.; forages over open terrain; N America and Eurasia.	Winter; rare in summer	Fed ESA: none CA: SC, S3 (nesting)	Nesting: Minimal Winter/Migration: Present, observed in the project area and reported numerous times from TSP.
<i>Setophaga petechia</i> Yellow warbler	Breeds in willow and cottonwood riparian habitat, near sea level to 9000 ft. elev.; much of N Amer.; sensitive in S Calif. due to habitat loss & cowbird parasitism; winters Mexico to S Amer.	Spring–summer	Fed ESA: none CA: SC S3S4 (nesting)	Nesting: Low Winter/Migration: High, likely to forage in the project area and nest in nearby canyon bottoms and drainages.

Table 1. Special-status Species of Topanga Canyon State Park and Vicinity

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Falco columbarius</i> Merlin	Uncommon wintering species in S Calif. desert and valleys (breeds in northern N America and Eurasia).	Winter	Fed ESA: none CA: S3S4 (winter)	Nesting: Minimal, out of range. Winter/Migration: High, regularly observed within TSP.
<i>Falco mexicanus</i> Prairie falcon	Nests on high cliffs, forages primarily over open lands; throughout arid western US and Mexico.	Year-round	Fed ESA: none CA: S4 (nesting)	Nesting: Minimal. Year-around foraging and flyover: Moderate.
<i>Falco peregrinus</i> American peregrine falcon	Nests on high cliffs, generally near water bodies; feed on birds (esp. shorebirds & waterfowl); widespread but rare worldwide.	Spring–Summer	Fed ESA: delisted CA: FP, S3S4 (nesting)	Nesting: Minimal. Year-around foraging and flyover: High, observed numerous times in TSP.
<i>Haliaeetus leucocephalus</i> Bald eagle	Breed in large trees, usually near major rivers or lakes; winters more widely; scattered distribution in N America; esp. coastal regions.	Year-round	Fed: Eagle Protection Act CA: END , S3, FP (nesting and wintering)	Nesting: Minimal Year-around foraging or flyover: Moderate
<i>Lanius ludovicianus</i> Loggerhead shrike	Woodlands, shrublands, open areas with scattered perch sites; not dense forest; widespread in N America; valley floors to about 7000 ft. elev.	Year-round	Fed ESA: none CA: S4, SC (nesting)	High: Suitable habitat is present throughout project area, numerous records in TSP.
<i>Poliioptila californica californica</i> Coastal California gnatcatcher	Primarily coastal sage scrub below about 2,000 feet elev.; southwestern California, Ventura County to northern Baja California; inland to San Geronio Pass area (e.g., Banning).	Year-round	Fed ESA: THR CA: SC, S2	Low: Suitable habitat is present but limited along the southern portion of the project area, nearest record about 6.5 miles to the northwest.
<i>Vireo bellii pusillus</i> Least Bell's vireo	Summer resident of southern California in low riparian habitats in vicinity of water or dry river bottoms; found below 2000 ft; nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mesquite, and mulefat.	Spring–Fall	Fed ESA: END CA: END , S2	Minimal: Marginally suitable habitat is present in the drainages adjacent to the project area.
MAMMALS				
<i>Antrozous pallidus</i> Pallid bat	Rock outcrops of shrublands, mostly below about 6000 ft. elev.; Calif, SW N Amer through interior Oregon and Washington; hibernates in winter.	Warm season	Fed ESA: none CA: S3, SC	Minimal: Suitable foraging habitat only, nearest known occurrence more than 8 miles to the southeast.

Table 1. Special-status Species of Topanga Canyon State Park and Vicinity

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Bassariscus astutus</i> Ringtail	Many habitats throughout CA with access to water and denning areas; primarily nocturnal and highly secretive.	Year-round	Fed ESA: none CA: FP	Moderate: Suitable habitat present in canyon bottoms. Could occur as a transient.
<i>Euderma maculatum</i> Spotted bat	Desert (cool seasons) to pine forest (summer), much of SW N Amer. but very rare; roosts in deep crevices in cliffs, feeds on moths captured over open water.	Unknown	Fed ESA: none CA: S3, SC	Minimal: Suitable foraging habitat present only, nearest known occurrence more than 8 miles to the west.
<i>Eumops perotis californicus</i> Western mastiff bat	Lowlands (with rare exceptions); cent. and S Calif., S Ariz., NM, SW Tex., N Mexico; roost in deep rock crevices, forage over wide area; recorded in 2016 at nearby wind site.	Year-round	Fed ESA: none CA: S3S4, SC	High: Suitable foraging habitat only, known within 2 miles of the project area.
<i>Lasionycteris noctivagans</i> Silver-haired bat	Coastal and montane forests; feeds on insects over streams, ponds, and open brushy areas; roosts in hollow trees, beneath bark, abandoned woodpecker holes, and rarely under rocks.	Wintering	Fed ESA: none CA: S3S4	Minimal: Marginally suitable foraging habitat present only, nearest known occurrence more than 8 miles to the southeast.
<i>Lasiurus blossevillei</i> Western red bat	Shasta Co. to the Mexican border, W of the Sierra Nevada. Winters in lowlands and coastal regions south of SF Bay. Roosts in forests and woodlands. Feeds over grasslands, shrublands, open woodlands and forests, and croplands.	Spring/Fall migration	Fed ESA: none CA: S3, SC	High: Suitable foraging habitat only, known within 2 miles of the project area.
<i>Lasiurus cinereus</i> Hoary bat	Prefers deciduous and coniferous woodlands; primarily roosts in tree foliage.	Year-round	Fed ESA: none CA: S4	Minimal: Marginally suitable foraging habitat only, nearest known occurrence more than 8 miles to the southeast.
<i>Macrotus californicus</i> California leaf-nosed bat	Arid lowlands, S Calif., S and W Ariz., Baja Calif. and Sonora, Mexico; roost in mineshafts, forage over open shrublands.	Year-round	Fed ESA: none CA: S3, SC	Minimal: Marginally suitable foraging habitat only, nearest known occurrence more than 8 miles to the northwest.

Table 1. Special-status Species of Topanga Canyon State Park and Vicinity

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Myotis ciliolabrum</i> Western small-footed myotis	Wide range of habitats but mostly arid wooded and brushy uplands near water; roosts in caves, buildings, mines, and crevices; widespread distribution throughout Calif.; feeds on a wide variety of small flying insects.	Spring-Summer	Fed ESA: none CA: S3	Minimal: Suitable foraging habitat present only, nearest known occurrence more than 8 miles to the west.
<i>Myotis yumanensis</i> Yuma myotis	Widespread in CA, uncommon in deserts, many habitats, sea level to 3300 m (11,000 ft), but uncommon above 2560 m (8000 ft); feeds over open water.	Year-round	Fed ESA: none CA: S4	Minimal: Minimally suitable foraging habitat present, nearest known occurrence more than 8 miles to the west.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	Coastal scrub with moderate to dense canopies preferred. Particularly abundant in rock outcrops, rocky cliffs, and slopes. So. California from San Diego to San Luis Obispo Cos.	Year-round	Fed ESA: none CA: S3S4, SC	High: Suitable habitat is present, nearest known occurrence more than 8 miles west but widespread and underreported.
<i>Puma concolor</i> Mountain lion	Mountain lions are known from virtually all ecosystems including desert scrub, riparian, scrub, chaparral, grassland, and woodland habitats. Known also from the urban wilderness interface.	Year-round	Fed ESA: none CA: CAN	High: Suitable habitat is present. This species is well documented from the Santa Monica Mountains.
<i>Taxidea taxus</i> American badger	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils; require sufficient food source, friable soils, and open, uncultivated ground; prey on burrowing rodents.	Year-round	Fed ESA: none CA: SC	Moderate: Suitable habitat is present in some areas. Historically known from the Santa Monica Mountains.

General references (botany): Baldwin et al. 2012; CDFW 2020; CNPS 2020; CCH 2020

General references (wildlife): Barbour and Davis 1969; CDFW 2020; Feldhammer et al. 2003; Gannon 2003; Garrett and Dunn 1981; Grinnell and Miller 1944; Hall 1981; Hatfield et al. 2019; Jennings and Hayes 1994; Pierson and Rainey 1988; Sibley 2000; Stebbins 2003.

Conservation Status

Federal designations: (federal ESA, USFWS).

END: Federally listed, endangered.

THR: Federally listed, threatened.

Candidate: Sufficient data are available to support federal listing, but not yet listed.

Proposed: Formally proposed for federal status shown.

Federal designations: (federal Bald and Golden Eagle Protection Act, US Fish and Wildlife Service).

Eagle Protection Act: Bald and Golden Eagle Protection Act.

State designations: (CESA, CDFW)

END: State listed, endangered.

THR: State listed, threatened.

RARE: State listed as rare (applied only to certain plants).

SC: California species of special concern. Considered vulnerable to extinction due to declining numbers, limited geographic ranges, or ongoing threats.

Table 1. Special-status Species of Topanga Canyon State Park and Vicinity

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
FP: Fully protected. May not be taken or possessed without permit from CDFG. CAN: Candidate for listing. <i>CDFW Natural Diversity Data Base Designations:</i> Applied to special-status plants and sensitive plant communities; where correct category is uncertain, CDFG uses two categories or question marks. S1: Fewer than 6 occurrences or fewer than 1000 individuals or less than 2000 acres. S1.1: Very threatened S1.2: Threatened S1.3: No current threats known S2: 6-20 occurrences or 1000-3000 individuals or 2000-10,000 acres (decimal suffixes same as above). S3: 21-100 occurrences or 3000-10,000 individuals or 10,000-50,000 acres (decimal suffixes same as above). S4: Apparently secure in California; this rank is clearly lower than S3, but factors exist to cause some concern, i.e., there is some threat or somewhat narrow habitat. No threat rank. S5: Demonstrably secure or ineradicable in California. No threat rank. SH: All California occurrences historical (i.e., no records in > 20 years). SX: Presumed extirpated in California. <i>California Native Plant Society (CNPS) Rare Plant Rank designations.</i> Note: According to CNPS (http://www.cnps.org/cnps/rareplants/ranking.php), plants ranked as CRPR 1A, 1B, and 2 meet definitions as threatened or endangered and are eligible for state listing. That interpretation of the state Endangered Species Act is not in general use. 1A: Plants presumed extinct in California. 1B: Plants rare and endangered in California and throughout their range. 2: Plants rare, threatened or endangered in California but more common elsewhere in their range. 3: Plants about which we need more information; a review list. 4: Plants of limited distribution; a watch list. <i>California Rare Plant Rank Threat designations:</i> 1. Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) 2. Fairly endangered in California (20-80% occurrences threatened) 3. Not very endangered in California (<20% of occurrences threatened, or no current threats known) Definitions of occurrence probability: Estimated occurrence probabilities are based literature sources cited earlier and field surveys and habitat analyses reported here. <i>Present:</i> Observed on the site by qualified biologists. <i>High:</i> Habitat is a type often utilized by the species and the site is within the known range of the species. <i>Moderate:</i> Site is within the known range of the species and habitat on the site is a type occasionally used. <i>Low:</i> Site is within the species' known range, but habitat is rarely used, or the species was not found during focused surveys covering less than 100% of potential habitat or completed in marginal seasons. <i>Minimal:</i> No suitable habitat on the site; or well outside the species' known elevational or geographic ranges; or a focused study covering 100% of all suitable habitat, completed during the appropriate season and during a year of appropriate rainfall, did not detect the species.				

Plants Documented to Occur

Braunton's milk-vetch. Braunton's milkvetch was listed as endangered by the U.S. Fish and Wildlife Service in 1997 (USFWS, 1997). It has a California Rare Plant Rank (CRPR) of 1B.1 but is not formally listed by the California Department of Fish and Wildlife (CDFW, 2020).

Braunton's milkvetch is a short-lived perennial plant in the pea family (Fabaceae). Individual plants have a lifespan of two to three years, although some individuals may live five years or more if conditions are favorable, and then plants are not visible again until the next disturbance (Fotheringham and Keeley, 1998). It is typically an erect plant that can grow up to 1.5 meters and is covered in dense white hairs (Baldwin et al. 2012). It typically has purple flowers and un-inflated seed pods. It typically occurs in dry, open chaparral vegetation, and grows on carbonate soils derived from scattered limestone lenses (Skinner, 1991). These limestone soils are best described as marine-derived, calcium rich sediments which occur in scattered locations in the hills surrounding the Los Angeles basin (Bowman-Prideaux, 2011). It

occasionally occurs on non-carbonate soils at down-wash sites near other known occurrences, although survivorship of plants may be reduced on non-carbonate soils (Mistretta, 1992; Fotheringham and Keeley, 1998; Landis, 2005).

Braunton's milkvetch is a disturbance-adapted species (Fotheringham and Keeley, 1998). The most well-studied occurrence of Braunton's milkvetch is in the vicinity of the project area, along Temescal Ridge in TSP. This occurrence in particular seems to be maintained by on-going erosion, trail maintenance, and vegetation clearance (Landis, 2007). This is similar to what has been observed at other occurrences such as those in Coal Canyon of the Santa Ana Mountains and in the foothills of Monrovia where plants occur primarily along maintained dirt roads and other areas that have been disturbed.

Braunton's milkvetch is a fire adapted species that typically requires heat or scarification to trigger germination. It establishes quickly after disturbances that remove other plant competitors and stimulates germination of dormant seeds (Fotheringham and Keeley, 1998). In a previous study it was shown that all seed from the population near Monrovia required scarification or heating to initiate any germination (Bowman-Prideaux, 2011). The same study showed that approximately 20 percent of the seeds from the Temescal Ridge population did not require any special treatment and germinated using only water (Bowman-Prideaux, 2011). This suggests that the Temescal Ridge population may have diverged from other populations as a result of on-going routine impacts from vegetation management (e.g., fuel break management). Very little data has been collected on Braunton's milkvetch population dynamics following wildfires. In general, populations are largest following fires (USFWS, 1997; Fotheringham and Keeley, 1998). Following the Topanga Fire in 2005 and the Corral Fire in 2007, numerous previously unidentified populations of Braunton's milkvetch were found which demonstrated that known populations may cover more area than previously thought with seeds hidden in the soil seed bank (Landis, 2007).

Critical habitat for Braunton's milkvetch was finalized in 2006 (USFWS 2006). The final rule designated 6 units of critical habitat covering approximately 3,300 acres. Project impacts to Braunton's milkvetch are located within the Pacific Palisades critical habitat unit (USFWS, 2006). Critical habitat is defined as any areas within the designated critical habitat units that provide the Primary Constituent Elements (PCEs) for the species which include the following for Braunton's milkvetch:

1. Carbonate limestone soils derived from marine sediment;
2. Low proportion (<10%) of shrub cover directly around the plant;
3. Periodic disturbances that stimulate seed germination (e.g., fire, flooding) and reduce vegetative cover.

Based on the 2020 inventory of Braunton's milkvetch conducted by Aspen an estimated 2,038 plants were detected in the immediate vicinity of the project area (see Figure 4). Based on the ecology of this species and observations at other locations following wildfires or disturbance, it is assumed that many more seeds remain dormant in the seed bank where suitable soils are present. It is likely that if the site were to burn or be subject to other vegetation thinning activities many more plants would be present. To this point, follow up surveys conducted to verify vegetation mapping detected another 749 emerging Braunton's milkvetch in the disturbance area (550 in the road and 199 within the access path).

An estimated 198 Braunton's milkvetch were likely present in the project area prior to construction and were impacted by project activities. This estimate is based on the number of Braunton's milkvetch present in the adjacent unimpacted habitat and the area of impacts in occupied habitat. The project impacted approximately 0.90 acres of suitable carbonate soils within the project area. This included approximately 0.84 acres within CNDDDB occurrence #15 (CDFW 2020). The project impacted approximately 1.61 acres of designated critical habitat. The project is expected to impact additional plants that have germinated in the project area since being initially impacted in 2018 and will be impacted when the wooden poles are

replaced. The exact anticipated impact is unknown at this time but will be quantified when work takes place.

2.5 Jurisdictional Habitats

A jurisdictional delineation was performed by Psomas on August 22, 23, and 27, 2019. Based on the results of the jurisdictional delineation, it was determined that the following State and federal jurisdictional features are present in the project area.

- 0.784 acres of federally jurisdictional non-wetland “waters of the United States” (U.S.) as identified under the previous ruling on Waters of the United States. These may no longer be considered federal waters under the most recent ruling.
- 0.784 acres of State waters under the jurisdiction of the Regional Water Quality Control Board (RWQCB).
- 1.784 acres of California Department of Fish and Wildlife (CDFW) jurisdictional habitat or streambeds.

Only a small portion of these features are located within the CZ and no adverse impacts to these areas would occur from restoration. Riparian habitat does not occur in the restoration sites in the CZ.

2.6 Non-Native Vegetation

An inventory for noxious and other invasive plant species was performed concurrently with the rare plant surveys and floristic inventories in all project areas (see Table 2). Several weeds were recorded and mapped throughout the project areas. Weeds were primarily associated with roads, spur roads, and trails. The most common species detected in these areas included non-native grasses such as red brome (*Bromus rubens*), ripgut brome (*B. diandrus*), slender wild oat (*Avena barbata*), and wild oat (*A. fatua*). Short pod mustard (*Hirschfeldia incana*) was very common and was the dominant weed on most access roads. Other weeds included, red stem stork’s bill (*Erodium cicutarium*), English plantain (*Plantago lanceolata*), Russian thistle (*Salsola tragus*), tocalote (*Centaria melitensis*), and horehound (*Marrubium vulgare*). Tree tobacco (*Nicotiana glauca*) is also common along the disturbed access and spur roads. A small local infestation of Geraldton carnation weed (*Euphorbia terracina*), a particularly invasive weed rated Moderate by the California Invasive Plant Council (Cal-IPC) was detected near the Braunton’s milk-vetch area at the margin of an access path. This weed has the potential to spread to other disturbed areas if left untreated and can also invade undisturbed native habitat.

Table 2. Non-Native Species Observed Within the Restoration Area.

Scientific Name	Common Name	Cal-IPC Ratings	Abundance and Location Within Restoration Area
<i>Anthriscus caucalis</i>	Bur chevril	Not Rated	Scarce, throughout
<i>Avena barbata</i>	Slender wild oat	Moderate	Common, throughout
<i>Avena fatua</i>	Wild oat	Moderate	Common, throughout
<i>Brassica nigra</i>	Black mustard	Moderate	Scarce, throughout
<i>Bromus diandrus</i>	Ripgut brome	Moderate	Abundant, throughout
<i>Bromus hordeaceus</i>	Soft chess	Limited	Scarce, throughout
<i>Bromus rubens</i>	Red brome	High	Abundant, throughout
<i>Centaurea melitensis</i>	Tocalote	Moderate	Moderate, throughout
<i>Erodium cicutarium</i>	Red stemmed filaree	Limited	Moderate, along roadsides
<i>Euphorbia terracina</i>	Geraldton carnation weed	Limited	Moderate, localized

Table 2. Non-Native Species Observed Within the Restoration Area.

Scientific Name	Common Name	Cal-IPC Ratings	Abundance and Location Within Restoration Area
<i>Festuca myuros</i>	Rattail sixweeks grass	Moderate	Moderate, throughout
<i>Festuca perennis</i>	Italian rye grass	Moderate	Scarce, localized
<i>Foeniculum vulgare</i>	Fennel	Moderate	Scarce, localized
<i>Hirschfeldia incana</i>	Shortpod mustard	Moderate	Abundant throughout
<i>Hordeum murinum</i>	Foxtail barley	Moderate	Moderate, throughout
<i>Lactuca seriola</i>	Wire lettuce	Not Rated	Scarce, throughout
<i>Lamarckia aurea</i>	Goldentop	Not Rated	Scarce, throughout
<i>Marrubium vulgare</i>	Horehound	Limited	Scarce, throughout
<i>Medicago polymorpha</i>	California burclover	Limited	Scarce, throughout
<i>Melilotus indicus</i>	Annual yellow sweetclover	Not Rated	Scarce, throughout
<i>Nicotiana glauca</i>	Tree tobacco	Moderate	Moderate, throughout
<i>Pyracantha sp.</i>	Ornamental pyracantha	Limited	Scarce, localized
<i>Salsola tragus</i>	Russian thistle	Limited	Moderate, throughout
<i>Sonchus asper</i> ssp. <i>asper</i>	Prickly sow thistle	Not Rated	Scarce, throughout
<i>Sonchus oleraceus</i>	Common sow thistle	Not Rated	Scarce, throughout
<i>Spergula arvensis</i>	Corn spurry	Not Ranked	Scarce, throughout
<i>Stipa miliacea</i>	Smilo grass	Limited	Moderate, throughout
<i>Trifolium hirtum</i>	Rose clover	Limited	Moderate, along roadsides

Cal-IPC Rating Definitions based on Cal-IPC (2020).

High – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate – These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited – These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

2.7 Other Natural or Anthropogenic Disturbances

Wildfires are common in this region and periodically burn large tracts of Santa Monica Mountains. Coastal sage scrub and chaparral communities are tolerant of a moderate frequency of wildfire and will regenerate on a burned site within several years after a fire (except when over-frequent re-burning converts these shrublands to non-native grasslands). Early successional plant species, including native and non-native grasses and herbs, will often appear shortly after the fire and may be common for several years. Heavy rainfall can impair access to the sites or result in erosion to restoration sites. This may occur on the access roads or in areas where the cut slopes erode or fail. In some cases, it may be necessary to repair flood damage to the restoration sites.

The project area is subject to ongoing use by the public. Hikers, mountain bikers, and other recreationists routinely use the existing trail and road system in the project area. Periodic utility inspection also occurs.

3. Impacts to Vegetation or Cover Types

An assessment of impacts to vegetation was conducted for the proposed project. Aspen reviewed the impact GIS data and maps created for the project in early 2020 and separated impacts by location (access road vs. spur road) within TSP and outside of the CZ. The acreage impacts by jurisdiction are summarized below in Table 3.

Table 3. Acreage of Vegetation and Land Cover Impacts Within the CZ and TSP

Vegetation or Cover Types	Coastal Zone ¹		Topanga State Park (Beyond Coastal Zone) ¹	
	Impact Area (acres)	Impact Area Buffer (acres)	Impact Area (acres)	Impact Area Buffer (acres)
California walnut groves	0.00	0.00	0.06	0.07
Chamise chaparral	0.00	0.00	0.04	0.04
Bigpod ceanothus chaparral	2.91	1.75	2.91	2.30
Holly leaf cherry – toyon – greenbark ceanothus chaparral	0.27	0.17	0.03	0.10
Laurel sumac scrub	0.24	0.19	0.26	0.10
California buckwheat scrub	0.26	0.12	0.37	0.17
Bush mallow scrub	0.07	0.05	0.00	0.00
Firebreak early seral undifferentiated vegetation mapping unit	2.01	1.06	2.06	1.48
Total by Category¹	5.76	3.34	5.73	4.26

1– Some communities are not present in the CZ or TSP and are represented by 0.00 acres.

3.1 Existing Habitat Quality

Existing habitat is dominated by mid to late seral stages of chaparral communities and areas designated as early seral undifferentiated vegetation associated with road edges and previous firebreaks. Chaparral consists of evergreen, broad-leaved or needle-leaved, sclerophyllous (hard-leaved), medium height to tall shrubs that form a dense cover on steep slopes below 5,000 feet in Southern California. Dominant species found within this community include various species of ceanothus, toyon, scrub oak, sugar bush, holly-leaved cherry, chamise, laurel sumac. This plant community occurs throughout the North Area and occupies most of the higher elevations and steep slopes.

Patches of mature coastal sage scrub and ruderal communities are also present. Coastal sage scrub consists of drought-deciduous, low, soft-leaved shrubs and herbs on gentle to steep slopes under 1,500 feet in elevation. This community is dominated by California sagebrush, California buckwheat, black sage, and purple sage.

Generally, habitat quality would be considered good in undisturbed areas with low weed intrusion in most places. Plant diversity varies by successional stage with mature chaparral communities supporting fewer plant species compared to areas with pioneering or mid seral communities. Weeds are more common along road edges, trails, and in a few areas where weeds have become established over time from previous disturbances.

4. Planting Plan

4.1 Types of Habitats to be Restored

As identified in Table 3, construction activities resulted in the disturbance to approximately 5.76 acres of habitat in the CZ. In addition, approximately 3.34 acres of habitat were subject to indirect impacts where soil was pushed into the understory. In these areas the canopy primarily remains, and, in some areas, natural recruitment is occurring. A total of 9.10 acres of restoration are proposed within the CZ.

Construction activities resulted in disturbance to approximately 5.73 acres of habitat in TSP (see Table 3). In addition, approximately 4.26 acres of habitat were subject to indirect impacts where soil was pushed into the understory. In these areas the canopy primarily remains, and, in some areas, natural recruitment is occurring. A total of 9.99 acres of restoration are proposed within TSP.

Prior to restoration activities, an initial effort to remove weeds will occur. Restoration will consist of active seeding and container planting in the CZ and TSP depending on the type and location of disturbance. Passive restoration within the CZ and TSP will only occur in areas adjacent to the existing access roads and in the areas surrounding each tower which is required to be maintained free of vegetation to reduce the potential for the initiation of wildfires. Active restoration will occur on all spur roads and where trails were expanded to gain access to towers. Total impacts within the CZ and TSP will be mitigated at a 1:1 ratio within the impact areas and in adjacent disturbance buffers.

4.2 Active and Passive Restoration Guidelines

Planting techniques are described below and define the type of restoration method that would be implemented based on the nature of the impact (e.g., direct or buffer area), site location (e.g., spur or access road), and land manager (e.g., CCC or the TSP). In some locations multiple techniques will be applied to account for the different circumstances that occurred and varying habitat requirements. These techniques will be tailored to mimic the existing habitat and provide an array of vegetation able to survive the conditions in the coastal Santa Monica Mountains.

- Active restoration is defined as any area that receives seed or container plants, irrigation, weeding, and monitoring.
- Passive restoration is defined as any area that is subject to weeding and monitoring. In some areas these areas may benefit from broadcast seeding prior to the onset of winter rains. They would not be irrigated or watered to prevent the growth of non-target plant species.

4.2.1 Active Restoration Methods

Active restoration techniques will be applied in all disturbed areas within the CZ and all spur roads within the TSP. A total of 10.61 acres of active restoration are proposed and include all access and spur roads, trails, and buffer areas (see Figure 5).

Active restoration techniques involve the following:

- Initial site preparation (earth moving or re-contouring).
- Pre-installation weeding.
- Hydroseeding, broadcast seeding, and container planting.
- Plant protective measures such as signage, individual cages, and fencing.

- Placement of fine and coarse woody debris.
- Irrigation, weeding, and routine maintenance and monitoring.

4.2.2 Passive Restoration Methods

Passive restoration techniques will be applied in target areas on lands managed by the TSP outside of the CZ. This includes 8.53 acres of areas expanded along the primary access road, , trails, and buffer areas (see Figure 5).

Passive restoration techniques are a form of restoration based on giving natives initial help by controlling invasive weeds in their immediate vicinity. The premise is that the natural vigor and adaptation to local conditions will enable the natives to sustain and eventually dominate, if they can be helped past the superior pioneering capabilities of some of the more invasive non-native weeds which use soil and other nutrients more efficiently.

Passive restoration techniques include:

- Pre-restoration weeding.
- Weeding, routine maintenance and monitoring.
- Possible broadcast seeding to initiate recovery.

4.3 Seed Mix and Planting Methods

4.3.1 Restoration Seed Mixes

The seed mix listed in Table 4 will be used in the restoration sites as prescribed in this plan. This seed mix was developed to best replicate the native species diversity and plant structure in the vegetation types within the project area. Many of the vegetation types within the project area are mature vegetation types that take more than twenty years to become established (i.e., holly leaf cherry – toyon – greenbark ceanothus chaparral). Other vegetation types require wildfire to trigger germination of dominate species (i.e., bigpod ceanothus chaparral). For this reason, we have developed a single seed mix that represents typical coastal sage scrub vegetation and immature chaparral vegetation within the Santa Monica Mountains. This seed mix will be augmented with vegetation-specific container plants (see Section 4.4.1) that will increase species diversity and structural composition. Annual species such as small fescue (*Festuca microstachys*) and dotseed plantain (*Plantago erecta*) have been added to increase erosion protection and act as a fast-growing cover crop. Nitrogen-fixing species such as deerweed (*Acmispon glaber*) and arroyo lupine (*Lupinus succulentus*) have been added to increase available soil nitrogen for other species. Shrubs such as California sagebrush and California buckwheat have been added to provide long-lived species that will provide wildlife habitat and replicate adjacent vegetation. The intent of this seed mix is to establish an early transitional vegetation that will be on a successful pathway towards mature stands of vegetation. The specific seed mix may be adjusted slightly to accommodate for species or quantities of seed that may be unavailable. In general, seeds should come from similar vegetation types within the Santa Monica Mountains. In addition, changes in the seed mix will be documented by the Biological Monitor and provided to the CCC.

Table 4. Restoration Seed Mix

Scientific Name	Common Name	Percent Purity	Percent Germination	Application Rate (lbs./acre)	Total Quantity Required for 9.15 Acres of Active Restoration
<i>Acmispon glaber</i>	Deerweed	90	60	3.0	27.45
<i>Artemisia californica</i>	California sagebrush	30	70	1.0	9.15
<i>Eriogonum fasciculatum</i>	California buckwheat	50	10	3.0	27.45
<i>Eriophyllum confertiflorum</i>	Golden yarrow	40	60	1.0	9.15
<i>Festuca microstachys</i>	Small fescue	98	80	7.0	64.05
<i>Hazardia squarrosa</i>	Saw toothed goldenbush	10	30	3.0	27.45
<i>Lupinus succulentus</i>	Arroyo lupine	98	85	1.0	9.15
<i>Melica imperfecta</i>	Coast range melic	90	60	1.0	9.15
<i>Plantago erecta</i>	Dotseed Plantain	90	70	3.0	27.45
<i>Salvia mellifera</i>	Black sage	80	40	3.0	27.45
<i>Stipa lepida</i>	Foothill needlegrass	90	60	1.0	9.15
Total:				27.0	247.05

4.3.2 Hydroseeding

Hydroseeding involves hydraulic application of a homogeneous slurry mixture consisting of seed, water, organic soil stabilizer, and cellulose wood fiber (such as shredded newspaper). Hydroseeding shall generally be employed along the levee/side slopes and on occasion selected upper and lower terrace areas.

Areas to be treated by Hydroseeding will be treated in a two-step process, as follows:

Step One:

- 1,000 lbs./acre of virgin cellulose wood fiber compost (generally cellulose)
- 160 lbs./acre organic soil stabilizer (Ecology Controls or equivalent product)
- 60 lbs./acre mycorrhizal fungi (AM 120 Mycorrhizal Inoculum or equivalent product)
- 27 lbs./acre of seed specified in Table 4

Step Two:

- 500 to 1,000 lbs./acre of specified compost (generally cellulose)
- 1,000 lbs./acre of virgin cellulose wood fiber
- 160 lbs./acre organic soil stabilizer (Ecology Controls or equivalent product)
- Appropriate amounts of dye to clearly delineate where hydroseed has been applied.

The seeding equipment must be cleaned completely before use to ensure that no contaminant seed from prior use is applied on the project site. Once the seed and soil amendments are added to the mixing tank, the application must be made within one hour. If temperatures exceed 90 degrees Fahrenheit (32 degrees

Celsius), the second step must be applied within three hours of the first step. Hydroseed should not be applied within 48 hours of any predicted rainfall. The seeding equipment must also be cleaned between applications for each seed mix area. Hydroseeding will only be applied when winds are calm to minimize accidental drift (less than five mph). Post hydroseeding, the area will be monitored and left un-watered prior to the commencement of the rainy season.

Within thirty (30) days prior to the initiation of seeding the Restoration Contractor/LADWP shall submit to the CCC a complete list and manufacturer's material specifications for hydroseeding for approval. The submission shall include the seed mix, the seed source, amendments, wood fiber mulch, organic binder, and seeding equipment. Upon rejection of any material, new material submission shall be made until the proposed materials are acceptable. LADWP retains the right to reject any materials that are deemed unacceptable on or after delivery.

4.3.3 Broadcast Seeding

Broadcast seeding will generally be used in small, flat areas. It would be applicable for re-seeding in limited areas needing improvements following erosion damage or weed eradication. Broadcast seeding distributes the seed on the soil surface and should be followed by a seed covering operation (raking or other method). Application rates for hand broadcast seeding must be increased to 150 percent to 200 percent of the rates listed in Table 4. For broadcast seeded areas, the seed mix shall be pre-mixed in the proportions specified. Five cubic feet per acre of damp fine grade plaster sand shall be added to the total seed mix. The seed and sand shall be thoroughly mixed (preferably in a cement mixer) for ten minutes to provide a thorough integration of seed and sand prior to broadcasting unless the area to be seeded is less than 50 square feet. If it is less than 50 square feet, the seed shall be mixed by hand in a five-gallon bucket. The seed and sand mix shall be broadcast over designated areas, following appropriate soil preparation methods listed above, using a hand-held whirly-bird broadcaster or other feasible method so that 0.9 pound of seed and sand mix covers 1,000 square feet.

For even distribution, the seed mix will be applied in a two-step application. Step one consists of the landscaping crew walking a slow and even pace while hand-broadcasting half the seed mix across the planting areas while moving in a north-to-south direction. In step two, the remaining half of the seed mix is broadcast over the same area while moving in a west-to-east direction. This ensures even coverage. After seeding, the seeded area will be thoroughly hand raked to cover the seed with soil (to increase germination and reduce seed loss to small mammals and foraging birds).

Broadcast seeding should be performed only when winds are calm to minimize accidental drift (i.e., less than 5 mph). After seeding and raking are completed, the planting areas will be lightly watered to settle the soil and form a surface crust. Watering aids in the movement of the seeds into surface depressions and cracks and the movement of small soil particles downward, resulting in a thin soil covering the seeds.

4.3.4 Seeding Schedule

Seeding should be performed between October 1 and January 31 of any year and during periods when weather and soil conditions are suitable. This schedule allows for seasonal rains to facilitate appropriate germination and coverage. Timing will be approved in advance by the Biological Monitor.

4.3.5 Seed Supplier

Seed will be obtained from a local seed supplier familiar with native species (such as S&S Seeds of Carpinteria, CA.). Seed will be limited to the species and quantity specified in the seed mix palette (see Table 4). All seed will originate from the Santa Monica Mountains, within +/- 1000 feet elevation of the

Project site. The seed supplier chosen will provide a list of three references with the bid proposal. The references will include year, contact names, and telephone numbers.

4.3.6 Seeding Quality Control Requirements

Seeds will be tested for percent purity, percent germination, number of pure live seeds per pound, and weed seed content. Seed testing will be the responsibility of the seed supplier. Results of the seed tests will be made available to the restoration monitor prior to planting. The modified coastal sage scrub and chaparral seed mix was prepared to achieve slope cover with a combination of shrub, perennial, and annual species commonly found in local, native coastal sage scrub/chaparral habitats. The annual species and perennial herbs are intended to provide interim soil stabilization and protection until the slower growing shrubs develop significant cover. All species proposed for inclusion in the seed mix (see Table 4) occur in the project area or in the region, are elements of native vegetation types, and are commercially available. Salvaged topsoil (if available) will also contain a seed bank that will increase species diversity. It is also likely that the existing topsoil will support additional seeds of Branton's milk-vetch.

4.4 Container Stock and Planting Methods

Container-grown plant materials will be planted in revegetation areas to ensure representation of dominant species, to accelerate habitat development, and to increase structural diversity in the developing habitat as early as possible. This will also be used to ensure the presence of woody species that do not readily germinate from seed. Container stock must be ordered from a supplier well in advance to allow collection and production from appropriate source material. The seed used to propagate the container plants must follow the same requirements as the seed collected for the seeding (e.g., same region). Table 5 lists the species of container stock that shall be used in the restoration sites. The container plants selected will be added to certain vegetation types that have larger woody shrubs and require greater time to mature. Coastal sage scrub vegetation is expected to establish well from seed alone. The specific container plants may be adjusted slightly to accommodate for species or quantities of plants that may be unavailable.

Table 5. Container Plant Palette

Scientific Name	Common Name	Container Size	Spacing (plants/100 sq. ft.) ¹	Vegetation Type(s) ²	Quantity Required ³
<i>Ceanothus megacarpus</i>	Bigpod ceanothus	1-gallon	2	Bigpod ceanothus chaparral	2,535
<i>Ceanothus spinosus</i>	Greenbark ceanothus	1-gallon	1	Holly leaf cherry – toyon – greenbark ceanothus chaparral	117
<i>Heteromeles arbutifolia</i>	Toyon	1-gallon	1	Holly leaf cherry – toyon – greenbark ceanothus chaparral	117
<i>Malosma laurina</i>	Laurel sumac	1-gallon	1	Laurel sumac scrub	105
<i>Rhamnus ilicifolia</i>	Evergreen buckthorn	1-gallon	1	Holly leaf cherry – toyon – greenbark ceanothus chaparral	117
<i>Venegasia carpesioides</i>	Canyon sunflower	1-gallon	1	Holly leaf cherry – toyon – greenbark ceanothus chaparral	117

1 - Total spacing for bigpod ceanothus chaparral is 2 plants/100 sq.ft., total spacing for holly leaf cherry – toyon – greenbark ceanothus chaparral is 4 plants/100 sq.ft, and total spacing for laurel sumac scrub is 1 plant/100 sq.ft.

2 - Walnut groves, bush mallow scrub, and chamise chaparral are sparse within the restoration sites so vegetation-specific container plant lists are not proposed for these vegetation types.

3 – Total quantities are based on direct impact acreages within the CZ (bigpod ceanothus chaparral = 2.91 acres, holly leaf cherry – toyon – greenbark ceanothus chaparral = 0.27 acres, Laurel sumac scrub = 0.24 acres).

4.4.1 Container Stock Size

The container stock will be in relatively small sizes (one gallon or less). This strategy allows for purchasing and planting larger numbers of plants. Overall, the numbers of surviving plants should be greater because more will be planted. Larger container plants will be reserved for visual screening and buffer areas. Generally, larger container plants require increased maintenance and lead to higher cost of replacement of failed plantings.

4.4.2 Container Stock Quality Control

The Biological Monitor will inspect the container stock monthly following germination. The container stock shall be labeled with source, species, and germination date. The nursery shall keep detailed records and provide them monthly to the Biological Monitor. At the time of delivery, all container stock will be inspected by both the Restoration Contractor and the Biological Monitor prior to acceptance. Should any container plants show sign of disease (rusts, fungi, severe insect damage, etc.), they will be deemed unfit, and the supplier will replace them at the supplier's cost. All container-grown plants will be well-rooted in containers, but not root-bound. Container stock shall not be trimmed at the nursery unless needed and approved by the Biological Monitor. Any container stock root-bound, old, or abnormal (e.g., sprawling, decumbent, or rangy) will be rejected and replaced by the supplier. Because mycorrhizal fungi will be included in the seed mix, container stock will be inoculated with mycorrhizal fungi only if deemed necessary by the Restoration Contractor and the supplier. Container stock may be in bud or early flower stage but not in seed or past seed set.

Container plants will be handled or moved no more than necessary. Once they are delivered to the site they will be kept at a central, shaded, and protected site in the existing Temescal Canyon construction yard and planted as soon as possible. If plants must be stored on site for more than several days, they must be monitored by the Biological Monitor or Restoration Contractor and irrigated regularly.

4.4.3 Container Planting Methods

Container-grown plant materials will be planted in upland revegetation areas to ensure representation of dominant species, to accelerate habitat development. The following are general container planting methods for all restoration sites:

- Prior to planting, the Revegetation Contractor or Biological Monitor will mark and label locations and planting palettes for each revegetation area in the field, using colored pin flags, using the planting schematics in the Site-Specific Revegetation Plan for guidance. Each species will have a different pin flag color.
- Planting will occur between November and February.
- Prior to planting all container stock will be stored in a cool shaded area and kept watered.
- Prior to planting all container stock will be inspected by the Biological Monitor.
- All planting activities will be inspected by the Biological Monitor to ensure that adequate planting densities are obtained.
- Holes will be dug with a hand or with a hand-held auger. The holes will be twice the width of the container and one and a half times the depth of the container.

- Prior to planting, holes will be filled with water, backfilled with native soil, and refilled with water to create a moisture reserve in the soil. This will provide beneficial soil conditions for plant roots to develop deep root systems. The water will be allowed to percolate into the soil at least once but preferably twice prior to planting.
- Plants shall be removed from the containers by tapping the sides and bottom of the container while holding the plant by the stem at the soil surface. The plant may also be loosened from the container by gently rolling the container on its side. Some plants may require carefully cutting the container away with clippers or shears, avoiding any root damage.
- During planting the soil will be tamped down around the plants and a small earthen berm will be constructed around the plant to collect water. Following planting each plant will then be watered at least twice filling the earthen basin.
- All container stock will be gently scraped by hand to loosen roots on the sides and bottom of the root ball.
- Empty containers, pony packs, plant tags, and any other debris will be removed for off-site disposal at the completion of planting.
- Leaf litter, sticks, and branches from dead vegetation salvaged from the project area will be scattered across the planting area to increase shade and provide micro-climates.
- For this area it is recommended that wire or other approved cages be placed around the newly planted vegetation for a period of one year or more to reduce the risks of herbivory. The Biological Monitor will visit the sites regularly following planting and will recommend additional protection if needed. Based on that recommendation, the Revegetation Contractor will install additional plant protection devices as soon as practicable.
- The container plantings will not be fertilized or receive any type of nitrolized mulch. Only native mulch (duff) will be used in the basins as determined by the Biological Monitor.

5. Success Criteria

Success Criteria for the specified plant species will provide cover and structural/age diversity required for foraging, nesting, and shelter purposes for wildlife species typical of the region. Descriptive data of natural vegetation will be collected within or near the project area to determine the structure and species composition of local upland habitats. Specific data to be collected and analyzed are described in the Monitoring section of this Plan. Success criteria are stated in terms of baseline vegetation structure and composition data. The success criteria are intended to document and ensure that restored sites achieve an acceptable level of structure and species composition during the monitoring phase of this Plan to so that further growth and development will follow a trend toward native, undisturbed vegetation.

During the 5-year monitoring period, upland shrubland vegetation should reach structure and composition comparable to undisturbed vegetation in the general area. Habitat structure and stratification will not reach natural conditions of the upland habitat during the 5-year monitoring period, but upland habitat should show a trend toward developing those conditions.

Performance standards have been developed such that they form both the basis on which the outcome of the rehabilitation project is judged and set the thresholds that determine whether remedial measures are needed. Thus, a project may have a set of performance standards, projected to five or more years in the future, which represents the goal of the project, and it may also have a set of interim standards which, if not met according to schedule, will trigger remedial measures. For each parameter included in the

performance standards, the minimum area (acreage, square feet, hectares) to which that standard will be applied is stated.

Project goals and objectives are described in Section 4. The following success criteria were developed as objective measures to track and verify restoration success in terms of these goals. Restoration sites will be considered “complete” upon meeting all the success criteria. The Implementation Plan (Section 6, below) is designed to achieve these success criteria, and the Monitoring Plan (see Section 8) is designed to determine objectively whether each restoration site meets the criteria. Success for the seeding and container plants is defined below in Table 6.

5.1 Vegetation Structure and Composition

Regardless of the date of initial planting, any given site must be without active manipulation by irrigation, planting, or seeding for a minimum of two years prior to evaluation for successful completion. Vegetation cover and weed percentages must be consistent with Table 6. Several of these are based on the control site which is discussed in Section 8.2.

Table 6. Minimum Coverage and Success Criteria

Type of Vegetation	Criteria	Alternative Actions
Container Plants	Year 1: ≥90% survival of all container plants. Year 2: ≥85% survival of all container plants. Year 3-5: It will be difficult to distinguish container plants from seedlings so monitoring of container plants will end in year 2.	Determine cause of failure and replant.
Seed Mix	Year 1: ≥20% of control site vegetation cover and ≥40% of control site species diversity. Year 2: ≥30% of control site vegetation cover and ≥50% of control site species diversity. Year 3: ≥40% of control site vegetation cover and ≥60% of control site species diversity. Year 4: ≥50% of control site vegetation cover and ≥70% of control site species diversity. Year 5: ≥60% of control site vegetation cover and ≥80% of control site species diversity.	Retreat with hydroseeding or broadcast seeding as needed.
Non-native Species	All Years: ≤20% total non-native plant cover and ≤5% total cover of any California Invasive Plant Council highly and moderately listed/categorized invasive species.	Identify and remove target weeds.

5.2 Basis for the Selection of the Success Criteria

The success criteria were based on previous successful restoration efforts in similar habitats and the ability to meet coverage requirements within a five-year monitoring period. In addition, reference transects were conducted as described below to refine the success criteria. This included an assessment of habitat in adjacent areas. Due to a variety of factors including habitat type, slope aspect, fire frequency, soils, and precipitation, the pre-disturbance or surrounding native habitat percent cover naturally varies. As such, a percentage of the surrounding native plant or pre-disturbance cover was used to determine the success.

6. Plan Compliance

The Restoration Contractor will implement restoration as shown on the site-specific plan, and as described in this Plan. Compliance will be documented in writing, in a monitoring report to be prepared by a qualified Biological Monitor and maintained in duplicate by the Restoration Contractor and the qualified Biological Monitor. Deviations (if any) from the site-specific plan, and as described in this Plan, will be approved in writing, and maintained in those files. Initial restoration implementation will be judged successful if (1) there is no deviation from the site-specific plan, as documented in the monitoring report; (2) any deviation has been corrected and documented in addenda to the monitoring report; or (3) any deviation has been approved by LADWP, TSP, and CCC and documented in an attachment to the monitoring report.

7. Implementation Plan

7.1 Pre-Activity Meeting

Prior to the initiation of any restoration activity the LADWP, Restoration Contractor, and Biological Monitor will conduct a meeting to establish clear lines of communication and to define the roles and responsibilities of each entity. At the meeting LADWP will define the project boundaries, identify sensitive biological resources and the methods that will be utilized for their protection, and identify all permit conditions that would be implemented during restoration activities. Worker environmental training will be required for all restoration crews and contractors and provided by the Biological Monitor.

7.2 Site Preparation

7.2.1 Pre-Activity Biological Clearance Surveys

Prior to commencing any restoration activities, the restoration site will be surveyed by a qualified biologist knowledgeable with the local flora/fauna and experienced in the implementation and monitoring of restoration projects. The biologist will identify and flag all areas of native vegetation and sensitive species. During site preparation the Restoration Contractor shall not disturb existing coastal sage scrub, chaparral, or rare plant or wildlife species.

7.2.2 Delineation of Work Areas, Fencing, and Signage

Prior to commencing any restoration activities, the restoration site will be staked with lathe and other material to delineate the limits of the restoration sites. Established native plants within restoration sites can provide seed sources, bird perches, and other natural functions to accelerate restoration. Wherever remnant patches of native vegetation occur within areas to be restored, or if native shrubs have volunteered onto restoration sites, these plants will be protected as feasible. Any rare or listed plant species (such as Branton's milk vetch) will be flagged for avoidance.

Signage will be placed on the primary access roads and trails to identify the site as an active restoration site. The Restoration Contractor will install fencing or other barriers to reduce human intrusion into the restoration sites. This may include fencing, additional lathe, or other material agreed upon by the CCC and State Parks so long as the material does not pose an entrapment risk or barrier to movement for wildlife or a safety risk to recreationists.

7.2.3 Pre-Restoration Weed Treatment

Prior to commencing restoration activities, the Restoration Contractor shall treat and remove weeds from the restoration sites. Treatment will include hand pulling and herbicide treatment. The Restoration Contractor will implement a grow and kill operation during the spring and summer before planting. This method allows for the germination of weed seeds and removal of target plants prior to hydroseeding or container planting. Herbicide use will be limited to restoration sites and prevented from entering adjacent habitat. Weed treatment methods are described below. During weed treatments a qualified biologist will be present in any areas supporting Braunton's milk vetch, ESHA habitat, or if work is conducted during the nesting season for birds.

7.2.4 Topsoil and Earth Movement

Prior to commencing restoration activities, the Restoration Contractor shall smooth roadbeds to pre-disturbance conditions. No fill material from offsite sources is planned for inclusion in the Plan. To the extent feasible, any suitable topsoil will be salvaged and used for restoration. Where no topsoil is available, final surface contours will be formed of soil and subsoil from the project area. If fill material is required, LADWP will certify that it is free of contaminants that could affect restoration or habitat. Due to the likelihood that fill material will contain weed seed, it should be deposited at depth in the restoration site and covered by at least 10 inches of native soil or subsoil so that any seed is buried deeply enough to inhibit germination. If project logistics do not permit deep burial of off-site fill, then it should be treated by repeated watering and weed control to minimize abundance of invasive species. Detailed information on earth moving is included in Appendix A (Earth Movement and Erosion Control Plan). During earth movement activities a qualified biologist will be present in any areas supporting Braunton's milk vetch, ESHA habitat or if work is conducted during the nesting season for birds.

7.2.5 Ripping/Decompaction

Some of the restoration sites may have become compacted, especially in areas used for equipment access or staging, or from repeated use by the public. Where this occurs, deep ripping (i.e., using a tractor to pull tines through the compacted soil to a minimum of 4-12 inches depth) shall be conducted prior to seeding to allow good soil and seed contact. This will not occur in areas with Braunton's milk-vetch. A supplemental memo that will be provided to the CCC and TSP shall identify all areas within each restoration phase where soil ripping or decompaction is necessary. During any ripping or decompaction activities a qualified biologist will be present in any areas supporting Braunton's milk vetch, ESHA habitat or if work is conducted during the nesting season for birds.

7.2.6 Fertilizers

No fertilizers will be used in the restoration sites. In general, native plants have low nutrient requirements and fertilizer application in restoration projects can encourage invasive weeds at the expense of native plant establishment. Moreover, fertilizers can increase chemical runoff from the area into adjacent habitat.

7.2.7 Irrigation

Temporary irrigation systems will not be installed in the restoration sites. Coastal sage scrub habitat is drought adapted and can be established provided there is ample annual rainfall. If the restoration area is impacted by drought, period watering with a water truck may be required. Seeded areas will be installed in the fall prior to winter rains and monitoring for germination. However, container plants will require

routine watering to become established. LADWP proposes to hand water all container plantings within the restoration sites. In general, water will be provided as needed for plant establishment. It is expected that supplemental water will only be provided during the first two years of the restoration and water will be given twice per month during the wet season and once per month during the dry season. Over-irrigated container plants develop more surface roots and fewer of the deeper roots needed to reach natural soil moisture during dry seasons. Over-irrigation also favors invasive weeds to the detriment of native species. As part of the success criteria the plan requires that each restored site will not be irrigated for a minimum two-year period prior to its completion.

A pipe feed irrigation system is not recommended in this location. A pipe feed irrigation system would be subject to vandalism and damage from wildlife. The system would require the placement of above or below ground piping which could have additional impacts to Braunton's milkvetch habitat. In addition, above ground piping could be struck by vehicles, inadvertently damaged by mountain bikers, or vandalized. Drip heads are often chewed off by coyotes and other wildlife seeking water.

7.2.8 Mulching of Dead Biomass

Dead biomass (e.g., previously cleared vegetation) will be pulled from adjacent areas and placed on the restoration sites to reduce human trampling and provide micro-climates for vegetation and wildlife. remains in the restoration sites at the completion of project activities, the material should be removed with minimal soil disturbance. For the best results, hand raking and disposal of this material at an appropriate off-site location should be completed prior to seeding. Where possible this material will be salvaged and returned to the Project Site.

7.2.9 Erosion Control

During the establishment phase, vegetative cover is usually not adequate to prevent erosion. If erosion occurs, that failure may propagate across the site causing additional failures. Prior to planting or seeding, the Restoration Contractor shall ensure all access and spur roads, slopes, or disturbed areas are stabilized to prevent the offsite transport of sediment and prevent erosion. This will include the placement of Best Management Practices (BMPs) such as sterile wattles in bio/photodegradable burlap. Hydroseeding with the approved seed mix and a cellulose stabilizer will likely be considered one method of site stabilization. Detailed information on the use of fiber roles (sterile wattles), seeding, and other measures is included in Appendix A (Earth Movement and Erosion Control Plan).

7.2.10 Planting

Seeding should be performed between October 1 and January 31 of any year and during those periods when weather and soil conditions are suitable. Container planting will take place in the fall, preferably from late October and no later than February. This will maximize the opportunity for plant establishment before soil moisture is depleted by warmer weather. Planting methods will vary depending on the condition of the planting sites, and the presence of Braunton's milk vetch.

7.2.11 Initial Installation (Initial Seeding/Spraying Activities)

Meetings between the Restoration Contractor, LADWP, the qualified Biological Monitor, and any other appropriate entities will be held as necessary prior to and during initial restoration site preparation (surveys, flagging, re-contouring, etc.) and restoration implementation (seeding and planting) to identify and clarify specified planting methods or resolve any questions or issues that may arise during the restoration. The qualified Biological Monitor will confirm that the work is completed per specifications.

Any deviations from specifications will be noted. The qualified Biological Monitor will prepare a short memo to document restoration work performed by the Restoration Contractor and submit it to LADWP and the CCC.

7.3 Weed Control

The control of weeds is required by the CCC and the TSP and is essential to meet the proposed success criteria for the restoration site. A wide variety of invasive weeds are problematic in native vegetation and restoration projects throughout southern California. Weeds are common in the project area along existing access roads and trails where human disturbance has occurred. They are also present in some areas of intact native habitat. Weeds are more abundant in the recently disturbed areas and have colonized the edges of access and spur roads. A list of all the weeds detected in the project area is included in Table 7. Weeds will be controlled on the restoration site by several measures. Generally, larger non-natives are removed manually by hand pulling during the first two years following seeding and planting efforts because herbicides can damage newly volunteering natives and seeded species both before and after germination. However, careful spot herbicide application is the most successful at eradicating several herbaceous species such as white sweet clover, Russian thistle, short pod mustard, and others due to their (usually) extensive infestations and large seed banks. When near native species, tall invasive plants or large infestations of herbaceous weeds will be prepped before spraying by bending the plants inward on themselves and trimming or tying back adjacent native vegetation to avoid herbicide contact. All weeds removed shall be collected and disposed of off-site in an appropriate landfill. Weeds shall be collected and piled on burlap to be bundled to avoid any seed dispersal during weeding. During weeding a qualified biologist will be present in any areas supporting Braunton's milk vetch, ESHA habitat, or during the nesting season for birds.

Table 7. Non-Native Species Observed Within the Restoration Area.

Scientific Name	Common Name	Cal-IPC Ratings	Abundance and Location Within Restoration Area
<i>Anthriscus caucalis</i>	Bur chervil	Not Rated	Scarce, throughout
<i>Avena barbata</i>	Slender wild oat	Moderate	Common, throughout
<i>Avena fatua</i>	Wild oat	Moderate	Common, throughout
<i>Brassica nigra</i>	Black mustard	Moderate	Scarce, throughout
<i>Bromus diandrus</i>	Ripgut brome	Moderate	Abundant, throughout
<i>Bromus hordeaceus</i>	Soft chess	Limited	Scarce, throughout
<i>Bromus rubens</i>	Red brome	High	Abundant, throughout
<i>Centaurea melitensis</i>	Tocalote	Moderate	Moderate, throughout
<i>Erodium cicutarium</i>	Red stemmed filaree	Limited	Moderate, along roadsides
<i>Euphorbia terracina</i>	Geraldton carnation weed	Limited	Moderate, localized
<i>Festuca myuros</i>	Rattail sixweeks grass	Moderate	Moderate, throughout
<i>Festuca perennis</i>	Italian rye grass	Moderate	Scarce, localized
<i>Foeniculum vulgare</i>	Fennel	Moderate	Scarce, localized
<i>Hirschfeldia incana</i>	Shortpod mustard	Moderate	Abundant throughout
<i>Hordeum murinum</i>	Foxtail barley	Moderate	Moderate, throughout
<i>Lactuca seriola</i>	Wire lettuce	Not Rated	Scarce, throughout
<i>Lamarckia aurea</i>	Goldentop	Not Rated	Scarce, throughout
<i>Marrubium vulgare</i>	Horehound	Limited	Scarce, throughout
<i>Medicago polymorpha</i>	California burclover	Limited	Scarce, throughout
<i>Melilotus indicus</i>	Annual yellow sweetclover	Not Rated	Scarce, throughout

Table 7. Non-Native Species Observed Within the Restoration Area.

Scientific Name	Common Name	Cal-IPC Ratings	Abundance and Location Within Restoration Area
<i>Nicotiana glauca</i>	Tree tobacco	Moderate	Moderate, throughout
<i>Pyracantha</i> sp.	Ornamental pyracantha	Limited	Scarce, localized
<i>Salsola tragus</i>	Russian thistle	Limited	Moderate, throughout
<i>Sonchus asper</i> ssp. <i>asper</i>	Prickly sow thistle	Not Rated	Scarce, throughout
<i>Sonchus oleraceus</i>	Common sow thistle	Not Rated	Scarce, throughout
<i>Spergula arvensis</i>	Corn spurry	Not Ranked	Scarce, throughout
<i>Stipa miliacea</i>	Smilo grass	Limited	Moderate, throughout
<i>Trifolium hirtum</i>	Rose clover	Limited	Moderate, along roadsides

Cal-IPC Rating Definitions based on Cal-IPC (2020).

High – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate – These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited – These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Maintenance crews must be able to distinguish native plant materials from non-native plants. Before non-native species are removed, the qualified Biological Monitor will educate the Restoration Contractor/maintenance personnel and crew regarding differences in desirable and undesirable plant materials. Photographs of target non-native species will be provided to the Restoration Contractor/maintenance personnel as necessary. In addition, spraying should not be completed beyond the number of days recommended by the manufacturer for areas where restoration is planned (e.g., for glyphosate the half-life is 3 to 130 days in soil and 35 to 63 days in water). This means that spraying should be discontinued in areas slated for fall planting and only manual or mechanical methods should be used if possible. Non-native species removal throughout the maintenance period will employ the techniques and target the invasive species identified.

7.3.1 Weed Removal Schedule

Following an initial weed removal prior to placement of container plants and seeds, routine weed removal will occur following planting. For all non-native species removal will occur as needed on a monthly, quarterly, or annual basis for no more than 5 years following seeding and planting in winter, while the container plants and seeded plants are becoming established (refer to Section 8 for a complete maintenance schedule) or until an agreed upon success criteria is met. LADWP will not be held responsible for any damage caused or inflicted by other entities during this period and after close out.

7.3.2 Foliar Herbicide Application

Many sections of the restoration site support Branton's milk-vetch, either as expressing plants or within the seedbank. The use of herbicides has the potential to adversely affect this species and must be avoided. Herbicide may be applied to target invasive non-native species including castor bean, tree tobacco, short-pod mustard and any other weed species that become established within the restoration sites. This will not be utilized in areas where Branton's milk-vetch has been identified. Herbicide treatments will be applied by a licensed pesticide applicator under the direction of the qualified Biological Monitor, and as

authorized under federal and state laws. In addition, the following specifications will be met by the Restoration Contractor for invasive species removal within the restoration sites:

- The Restoration Contractor shall coordinate any applications of herbicide with the qualified Biological Monitor and notify the CCC and TSP prior to use.
- Herbicide application prior to planting shall not occur beyond the manufacturer specifications regarding the length of time that must pass following herbicide application prior to planting cuttings or seeding. Note that the half-life of glyphosate in the soil and water can range from 3 to 130 days and 35 to 63 days, respectively.
- Prior to 15 August, the qualified Biological Monitor shall verify that no spraying occurs within 50 nesting birds or other special status species where such areas may be affected by herbicide or herbicide drift.
- Herbicide shall be applied to exotic plant species only during weather conditions that will not cause significant drift to adjacent native plant species.
- Herbicide contact with native species should be avoided as much as possible. Native shrubs or trees may be trimmed to avoid contact with herbicide since they will readily grow back. Also, target species may be prepped by bending away from native vegetation.
- In the event of gusty winds or winds more than five miles per hour, all work should be temporarily discontinued to protect applicators and adjacent natural resources. Treatments should also be temporarily discontinued during rainfall or if weather reports predict measurable rain within 24 hours or heavy fog (rainfall reduces the effectiveness of the herbicide).
- For broad-leaved plants, vegetation shall be left undisturbed for at least seven days after spraying to allow the herbicide to be distributed throughout the entire plant. Visible effects of herbicide application consist of wilted and brown foliage and disintegration of root material.
- Once desiccated, all treated plant materials shall be cut and left in place as long as this does not interfere with plant installation in which case the material shall be stockpiled or disposed of offsite.

7.3.3 Cut-Stump or Cut-and-Spray Method

An alternate herbicide application method is to cut the aboveground portion of the plants and immediately spray herbicide onto the cut stems (cut-stump or cut-and-spray method). The plants should be treated in spring when actively growing. A phased treatment is recommended.

- **Phase 1:** The plants should be cleanly cut, horizontally, close to the ground (using a saw, rotary brush cutter, or similar tool). All the cut vegetation shall be removed from the restoration site the same day it is cut and disposed of legally off-site.
- **Phase 2:** The stumps or stems are re-cut, cleared of sawdust, and immediately painted with 100 percent glyphosate within two minutes of cutting, (before the cut surface begins to congeal), to ensure penetration of the herbicide.

Plants should be checked a month after application to determine the success of the herbicide treatment. Any re-growth from the treated stumps should be treated with the foliar herbicide application in the same season or as re-growth appears in the next growing season.

7.3.4 Mechanical Removal

Minor infestations of non-native species can be eradicated by manual methods, especially where sensitive native plants, wildlife, or habitat may be damaged by other methods. Hand pulling works with new plants

less than six feet in height. Removal of dense belowground roots and rhizomes shall also be necessary when it may interfere with planting. This may be most effective in loose soils and after rains have made the substrate workable. Plants can be dug using hand tools (pickax, mattock, and shovel), especially in combination with cutting of stems near the base with pruning shears, machete, or chainsaw. Stems and roots should be removed to avoid re-rooting, or a chipper can be used to reduce the size of the material. Removal of non-native species with large heavy machinery is prohibited.

Herbaceous Annual and Perennial Weeds

Annual weeds including short-pod mustard, tocalote, and oat/brome grasses should be controlled by hand pulling and weed whipping when close to native plants. However, it is likely that for the first two years, herbicide treatments may be the most effective for large infestations. Care must be taken to trim or tie-back natives and to limit overspray. Weed control during the first two years after planting should allow native shrubs enough time to establish. After that, mechanical methods would be more appropriate.

Herbaceous perennials including summer mustard will be controlled by similar methods. Maintenance for herbaceous weeds is not limited to the above-mentioned species but will include any invasive and/or non-native plant species present that would threaten the establishment of the scrub communities. In general, the most appropriate time to spray these herbs is from late winter to early spring (March to June) before or during the flowering period and before seed set. To target all the flowering periods of the annual species of primary concern within the restoration sites, two treatments should be applied when using herbicide. The first treatment should be applied in March and the second in June.

These herbaceous species tend to produce copious annual seed crops, and many of their seeds remain dormant in the soil over one to several years. Thus, even when a standing crop of weed species is removed, dormant seed remains in the soil (termed a “seed bank”). A proportion of the seed bank germinates each year or each time germination conditions reoccur (e.g., soil temperature and moisture, light availability). Seed banks can be reduced over time by continually inducing germination and then killing the plants (e.g., by herbicide or weed whipping) before they produce new seed. In parts of the project area where weed seed banks are present, pre-planting treatment will include efforts to reduce seed banks by repeatedly inducing germination and then destroying the above-ground plants. This cycle will be repeated as necessary and practical before seeding the sites with native seeds.

8. Maintenance and Monitoring

Each restoration site will be monitored and maintained over a minimum 5-year monitoring period. During this period, herbaceous and shrubland vegetation should approach structure and function comparable to similar undisturbed habitats in the area that are in same general stage of succession.

Invasive plants will be removed by various treatments. Eradication efforts will continue throughout the monitoring period (five years or longer). Weed abundance will be greatest during the first two to three years following the project activities and should decrease thereafter due to control efforts and increasing cover of native plants. Weed abundance should approach levels comparable to undisturbed local native vegetation by the fifth year following the project. The simultaneous establishment and increasing coverage of native plant species during the establishment period should facilitate a decrease in weed establishment and coverage without further maintenance.

In any restored area where irrigation is used (by an installed system or by other hand watering), success criteria will require that restoration sites must be without irrigation for a minimum of two years prior to sign-off.

8.1 Maintenance Program

Maintenance operations will begin immediately after the completion of planting. The maintenance tasks will be performed by the Restoration Contractor under the direction of a qualified Biological Monitor. The qualified Biological Monitor along with the LADWP will approve any needed revisions to the specified maintenance schedule and methodologies. Monitoring will be conducted by the qualified Biological Monitor to assess the effectiveness of the maintenance program.

A schedule of the maintenance work tasks is provided in Tables 8 and 9. Maintenance task schedule and frequency will be adjusted as appropriate depending on site conditions and in coordination with the qualified Biological Monitor. Monitoring will be performed by the qualified Biological Monitor throughout the restoration and monitoring period to assess conditions and to make recommendations for successful habitat establishment. This section describes the monitoring methods used to evaluate site progress and compliance with performance criteria, guidelines for developing mitigation documentation, and a summary of the anticipated monitoring schedule.

Table 8. Maintenance Program Schedule (Years 1-2)												
Work Tasks	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plant Protection												
Erosion Control												
Weeding – Herbicide Treatment		X								X	X	
Weeding – Hand Removal			X	X	X	X	X	X	X	X		
Supplemental seeding (if needed)												
Supplemental Planting (if needed)												
Trash Removal	X	X	X	X	X	X	X	X	X	X	X	X
Pest Control												

Shaded = ongoing task, heavy shaded cells requiring the most intense activity; X = Task performed one or more times per month.

Table 9. Maintenance Program Schedule (Years 3-5)												
Work Tasks	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plant Protection												
Erosion Control												
Weeding – Herbicide Treatment		X								X	X	
Weeding – Hand Removal				X		X		X		X		
Supplemental seeding (if needed)	X	X	X							X	X	X
Supplemental Planting (if needed)												
Trash Removal	X	X	X	X	X	X	X	X	X	X	X	X
Pest Control												

Shaded = ongoing task, heavy shaded cells requiring the most intense activity; X = Task performed one or more times per month.

8.1.1 Maintenance and Monitoring Measures

Maintenance will include site protection, erosion control, weed removal, trash removal, and pest control. Maintenance activities will occur for a period of five years or until the success criteria have been met.

However, any part of the five-year maintenance program will be extended, if necessary, to provide compliance with required performance standards.

Plant Protection

Maintenance. The Restoration Contractor/maintenance personnel will be responsible for providing, as feasible, adequate protection of all seeded and planted areas against herbivores, human trampling, vandalism, or other intrusions by erecting fencing, caging, or other acceptable structures as needed.

Herbivory (especially by deer, rabbits, and ground squirrels) on newly planted container stock can greatly affect the success of the restoration efforts during the first 90 days of establishment. Young plants and grasses are particularly attractive to herbivores and are easily accessible in newly planted restoration sites due to the lack of dense cover.

Monitoring. In the event of herbivore damage, pedestrian damage, vandalism, or other types of site damage, the qualified Biological Monitor will make appropriate recommendations to minimize future damage to the restoration site. Recommended protection measures may include additional fencing, caging, live traps, or signage.

Irrigation

Maintenance. Container plants will be hand watered from a water truck or water buffalo. A temporary irrigation system will not be installed. The intent of irrigation is strictly to enhance plant establishment and early growth and not to permanently sustain the restoration sites. Irrigation rates will be managed to provide total coverage, particularly during periods of low rainfall. Depending on rainfall, restoration sites will be watered for the first 90 days of the vegetation establishment period. Watering will occur for a period of not less than three years to ensure the success of the restoration sites. Watering will be no more than once every three days. If drought conditions persist, additional watering may be required.

Monitoring. The watering schedule will be adjusted by agreement of the Restoration Contractor and the qualified Biological Monitor, based on natural rainfall and condition of plants on the site.

Erosion Control

Maintenance. The Restoration Contractor/maintenance personnel will be responsible for identifying and repairing excessively eroded areas within the restoration sites that are due to the removal of vegetation, soil compaction, or other project-related activities. All slopes within the restoration sites will be monitored for erosion and other significant topographic changes throughout the rainy season (i.e., between October and May) each year. Implementation of restorative actions will be determined on a case-by-case basis.

Monitoring. The Biological Monitor or LADWP will inspect the BMPs and report on any concerns that are identified in the field. LADWP will coordinate with the contractor to ensure BMPs comply with the Erosion Control Plan.

Supplemental Planting

Maintenance. During the maintenance period widespread plant mortality, non-compliance with coverage and survival rate standards, mechanical damage to plant species, and poor health will be compensated for by reseeding and replanting using species and quantities specified by the Restoration Contractor and the qualified Biological Monitor. Supplemental planting may occur at any time during the maintenance period. However, if replacement of more than 50 percent of the restoration sites is required in years four or five, the planting and seeding approach should be reevaluated and the maintenance period will be

extended until the success criteria are met (see Extended Maintenance below). Replacement will occur during appropriate planting periods from October 1 to March 1 but may be extended to avoid losses during a heavy rainfall year.

The plan for replacement will be based on the cause of any loss or damage. For example, widespread mortality in years three to five of the maintenance period may have different causes than mortality experienced in the first year or two. The qualified Biological Monitor will make regular inspections of the sites to assess the condition of restored areas and determine remedial measures necessary to provide adequate coverage. Losses or damage due to fire or other events that occur after the site has achieved the success criteria will not be the responsibility of the Restoration Contractor/LADWP.

Monitoring. The qualified Biological Monitor will coordinate with the restoration contractor regarding appropriate replacement seeding and planting measures in the event of widespread plant failure and non-compliance with specified performance criteria. Recommended replacement cuttings or seed mixes will include plant species and application quantities as needed to remediate specific problems or failures.

Trash Removal

Maintenance. The restoration site will be kept clear of all trash and debris throughout the maintenance program.

Monitoring. The Biological Monitor will report to the Restoration Contractor the presence of any trash or debris that occur on the restoration sites.

Pest Control

Maintenance. Damage to the restoration sites caused by insects, plant disease, herbivores, or other pests will be monitored during the maintenance period. Diseased or infected plants will be immediately removed.

Monitoring. The qualified Biological Monitor, in coordination with the LADWP, will coordinate the Restoration Contractor/maintenance personnel regarding the control of insects, ground squirrels, and other herbivores, and fungi, rust, and other plant diseases and infestations. Recommended control measures will include, but will not be limited to, biological control methods and herbicides.

Extended Maintenance

When, in the opinion of the LADWP and a qualified Biological Monitor, the restoration sites are not on schedule to meet performance criteria due to an unhealthy condition of plant materials, inadequate control of weed species, or other issues, then maintenance may be extended to facilitate successful habitat establishment and compliance with performance standards.

8.2 Monitoring

Monitoring will be performed by the qualified Biological Monitor throughout the restoration and monitoring period to assess conditions and to make recommendations for successful habitat establishment. A qualified biologist will be present in any area supporting Branton's milk vetch or ESHA habitat (see Appendix A Mitigation Measure BIO-8). During the nesting season a qualified biologist will conduct preconstruction surveys and full-time monitoring for nesting birds (see Appendix A Mitigation Measure BIO-9). This section describes the monitoring methods used to evaluate site progress and compliance with performance criteria, guidelines for developing mitigation documentation, and a summary of the anticipated monitoring schedule.

8.2.1 Monitoring Long-Term Maintenance Activities

The qualified Biological Monitor will monitor the long-term maintenance activities performed by the Restoration Contractor/maintenance personnel to facilitate successful restoration in compliance with restoration site success criteria. Potential remedial maintenance measures to be recommended to the Restoration Contractor/maintenance personnel will include, but not be limited to, the measures listed below.

8.2.2 Monitoring Long-Term Site Performance

The qualified Biological Monitor will qualitatively and quantitatively monitor restoration site performance throughout the restoration period to evaluate progress towards achieving yearly and final success criteria. The qualified Biological Monitor will coordinate as necessary with the Restoration Contractor/maintenance personnel regarding overall site performance. Monitoring will consist of the following tasks performed at each restoration site throughout the program.

Develop Baseline. The qualified Biological Monitor shall review the restoration site to note the presence of suitable vegetative structure. This may include (depending on specific community types) the re-establishment of two vegetation layers: (1) a midstory (or midstories) composed of coastal sage scrub shrubs; and (2) larger emergent chaparral species.

Qualitative Monitoring

Qualitative monitoring surveys will be performed monthly within all restoration sites for the first year following planting. Qualitative monitoring will be on a quarterly schedule thereafter, until final completion approval of each restoration site. Qualitative surveys will assess native plant species performance, including growth and survival, nursery stock mortality, germination success, reproduction, plant fitness and health, or pest problems.

During the first few years after initial planting, quantitative measures of vegetation cover will not be useful. Cuttings may not exhibit signs of substantial growth and typical success criteria regarding height and cover are difficult to evaluate. At this early stage the critical questions are:

1. Whether the density is sufficient to meet cover/survival requirements once the plants mature: That is, are there enough established cuttings to reach the desired total cover/survival percentages?
2. Whether the survival rate will be high enough to sustain the needed density. Assuming that density is great enough to meet success criteria, what survivorship rate will be acceptable over the coming few years, and is this a reasonable expectation?
3. Whether the growth rates will be high enough to reach successful cover/survival values. If enough plants survive over the specified monitoring period, will they be large enough by then to achieve the success criteria?

Beginning one year after initial planting at each restoration site and continuing annually for at least three years, the qualified Biological Monitor will walk “meandering transects” (Nelson, 1987) over each site to qualitatively evaluate native and non-native plant density. The qualified Biological Monitor will decide whether plant density is roughly homogeneous throughout the restoration site, or whether the restoration site should be subdivided into smaller units for the purpose of evaluating seedling densities. If so, the qualified Biological Monitor will delineate these subareas on aerial images or topographic maps, as available. These maps will be used as a basis for quantitative monitoring (below). In addition, the qualified Biological Monitor will make qualitative judgments about restoration progress, including

establishment, weed density, irrigation needs, erosion or other hydrology problems and observations, and other observations as appropriate.

In addition, qualitative surveys will note and record evidence of hydrologic functions, topographic conditions, and use of the site by wildlife. A wildlife biologist will assist in monitoring surveys and will actively search for reptiles by lifting, overturning, and carefully replacing rocks and debris. Birds will be identified using standard visual and auditory recognition. The presence of nests or other evidence of breeding activity will be noted. Searches for mammals will include searching for and identifying diagnostic signs including scat, footprints, scratch-outs, dusting bowls, burrows, and trails of various mammal species.

Monitoring at this stage will indicate the need for remediation or maintenance work well in advance of final success/failure determination. The likelihood of sufficient survival and growth to eventually meet success criteria is subjective and would be estimated by the qualified Biological Monitor using best professional judgment. Monitoring results cannot formally conclude “success” or “failure” at this stage. Instead, the monitoring reports will describe restoration site progress and conditions and list all observations pertinent to eventual success, and make recommendations as appropriate reg. remedial work, maintenance, etc.

Quantitative Monitoring

- A. **Baseline Vegetation Data.** On September 16, 2021, Aspen Biologist Justin Wood established sixteen locations to serve as reference sites along Temescal fire road. Reference sites were selected to be representative of habitat present within the project’s impact areas prior to disturbance from project activities. The vegetation community present in the reference sites are best characterized by the firebreak early seral undifferentiated vegetation mapping unit (see Section 2.3) and contain elements of healthy coastal sage scrub and chaparral. All reference sites were within the project area or within 50 meters of a project boundary. At each reference site, Aspen quantified species diversity and percent coverage of all woody plant species along a 50-meter toe point transect (Evans and Love 1957).

The reference sites were characterized by a high percent cover of native species on average (80.9 percent) and with an average species richness of around 7 species. Across the reference sites, Aspen observed a total of 26 native perennial, shrub, and tree species. At a confidence level of 80 percent, mean native species richness and percent cover were calculated to be within 5.13 percent and 0.5 percent of the actual means respectively, indicating an adequate number of transects were sampled (Bonham 1989). These data points will be used as baseline for quantitative comparison of restoration sites, based on the success criteria (see Section 5).

Table 10. Average Percent Cover Within Reference Sites

Cover type	Percent cover (%)
Bare ground	12.0
Native	80.9
Non-native	7.1
Total	100.0

Table 11. Mean Percent Cover by Species Within Reference Sites

Scientific Name	Common Name	Mean percent cover (%)
<i>Acmispon glaber</i>	Deerweed	12.8
<i>Artemisia californica</i>	California sagebrush	0.8
<i>Brickellia californica</i>	California brickellia	0.3
<i>Ceanothus megacarpus</i> ¹	Bigpod ceanothus	--
<i>Cercocarpus betuloides</i> ¹	Birch-leaf mountain-mahogany	--
<i>Diplacus aurantiacus</i>	Sticky monkeyflower	6.9
<i>Eriophyllum confertiflorum</i>	Golden yarrow	1.6
<i>Eriogonum fasciculatum</i>	California buckwheat	43.4
<i>Galium angustifolium</i>	Narrow leaved bedstraw	0.3
<i>Hazardia squarrosa</i>	Saw toothed goldenbush	8.9
<i>Hesperoyucca whipplei</i>	Chaparral yucca	0.4
<i>Heteromeles arbutifolia</i>	Toyon	0.4
<i>Keckiella cordifolia</i> ¹	Heart leaved keckiella	--
<i>Lonicera subspicata</i>	Southern honeysuckle	0.6
<i>Lupinus longifolius</i> ¹	Long leaf bush lupine	--
<i>Malacothrix saxatilis</i> ¹	Cliff aster	--
<i>Malosma laurina</i>	Laurel sumac	0.3
<i>Pseudognaphalium biolettii</i>	Bicolored cudweed	0.5
<i>Pseudognaphalium californicum</i>	California everlasting	0.3
<i>Quercus berberidifolia</i> ¹	Scrub oak	--
<i>Rhamnus ilicifolia</i>	Hollyleaf cherry	0.1
<i>Rhus integrifolia</i> ¹	Lemonade berry	--
<i>Rhus ovata</i> ¹	Sugar bush	--
<i>Salvia mellifera</i>	Black sage	3.1
<i>Sambucus nigra</i> ssp. <i>caerulea</i>	Mexican elderberry	0.1
<i>Stipa pulchra</i>	Purple needle grass	0.1
Total		80.9

¹Species detected adjacent to transects but not captured during sampling.

- B. **Restoration Monitoring.** Annual data will be collected at a series of toe point transects (Evans and Love 1957) to provide cover data by species. Associated with each toe point transect, density of native plant species in a series of 1 square meter (m²) quadrats will be censused and projected to estimate average densities per acre. This data will be used to evaluate restoration success in terms of the success criteria (i.e., plant cover and species richness) by stratum. Transect lines will be sampled so that mean native species richness and cover values can be calculated with 80 percent confidence and that sample means are within 20 percent of actual means (Bonham 1989).

Photo Documentation. Photo points will be established to document changing vegetative structure in all restoration and mitigation areas.

8.2.3 Monitoring Schedule

A schedule of site monitoring tasks is provided in Tables 10 and 11.

Table 12. Long-Term Site Monitoring Schedule for Year 1													
Work Tasks	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Site Monitoring													
Qualitative Surveys	X	X	X	X	X	X	X	X	X	X	X	X	X
Quantitative Surveys					X				X				
Photo-documentation	X	X	X	X	X	X	X	X	X	X	X	X	X
Onsite Meetings ¹			X				X			X			
Site Status Documentation													
Progress Reports	X	X	X	X	X	X	X	X	X	X	X		
Annual Status Reports													X

1 - Onsite meetings will include, as needed, the qualified Biological Monitor, the LADWP, the restoration contractor/maintenance personnel, resource agencies, and any other appropriate parties and will occur as necessary during regularly scheduled site monitoring visits.

Table 13. Long-Term Site Monitoring Schedule for Mitigation and Monitoring Plan (Years 2–5)													
Work Tasks	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Site Monitoring													
Qualitative Surveys			X			X			X		X		
Quantitative Surveys					X				X				
Photo-documentation	X	X	X	X	X	X	X	X	X	X	X	X	X
Onsite Meetings ¹			X				X			X			
Site Status Documentation													
Progress Reports			X			X			X				
Annual Status Reports													X

1 - Onsite meetings will include, as needed, the qualified Biological Monitor, the LADWP, the restoration contractor/maintenance personnel, resource agencies, and any other appropriate parties and will occur as necessary during regularly scheduled site monitoring visits.

9. Reporting

Pre-project supply schedule

The LADWP, the Restoration Contractor, and the qualified Biological Monitor will review the planned restoration sites and confirm the estimated acreages of areas to be restored. They will prepare a schedule

(items and quantities) of supplies and other materials needed for the expected restoration implementation. The materials schedule will be maintained in duplicate project files. The restoration contractor will be responsible for ordering materials and arranging with suppliers to ensure that all needed materials will be available when needed. The restoration contractor will notify the LADWP and the qualified Biological Monitor when needed arrangements are in place or whether substitutions may be necessary due to unavailability. No substitutions will be made except with written agreement by the LADWP and the qualified Biological Monitor.

As-built Restoration Map

The LADWP shall identify on a plan view drawing the intended restoration sites throughout the project area. For each restoration site, it shall identify all applicable specifications as needed, to include soil treatment, seeding or planting methods, seed mixes, and usage.

The qualified Biological Monitor will document initial and ongoing restoration site conditions and performance throughout the program. This will include the development of an installation completion letter report, regular progress reports, and five annual monitoring reports as described below.

Initial Installation Summary

A letter report that summarizes initial installation (weed control and seeding) activities and final as-built conditions (including an as-built map) will be submitted by the LADWP within four weeks of completion of initial restoration site installation. The report will include any revisions to restoration site locations, restoration site boundaries, plant materials, etc. listed in the approved Plan. The report will include a summary of all seed species broadcast and staked, and photographs of installation activities and restoration site conditions immediately following installation.

Progress Reports

Weeding. Progress reports summarizing the initial weeding efforts and any recommended remedial measures will be prepared by the qualified Biological Monitor in coordination with the Restoration Contractor/maintenance personnel monthly prior to the initiation of planting and restoration activities. Each progress report will identify the areas where work was conducted and the type and species of vegetation that was removed. The report will also note the establishment of volunteer native species, topographical/soils conditions, problem weed species, the use of the site by wildlife species, significant drought stress, and any recommended remedial measures deemed necessary to ensure the control of weeds in compliance with specified performance criteria. The progress reports will be submitted to LADWP and the Commission's Executive Director.

Construction. Progress reports summarizing construction activities and the avoidance of sensitive habitat (i.e., ESHA's) will be prepared by the qualified Biological Monitor in coordination with LADWP personnel monthly. Each progress report will summarize what construction activities have occurred and document if any additional habitat is disturbed in the CZ or TSP. The progress reports will be submitted to LADWP and the Commission's Executive Director.

Restoration. Progress reports summarizing restoration site status and recommended remedial measures will be prepared by the qualified Biological Monitor in coordination with the Restoration Contractor/maintenance personnel monthly for year one and quarterly thereafter, apart from the restoration site visits immediately preceding the development of each annual status report (see Annual Status Reports below). Each progress report will list estimated native species coverage and diversity, native species health and overall vigor, the establishment of volunteer native species, topographical/soils

conditions, problem weed species, the use of the site by wildlife species, significant drought stress, and any recommended remedial measures deemed necessary to ensure compliance with specified performance criteria. The progress reports will be submitted to LADWP.

Annual Status Reports

One annual restoration site status report that summarizes site conditions will be prepared by the qualified Biological Monitor and sent to the restoration contractor/maintenance personnel, LADWP, CCC, and the TSP at the end of each year following implementation of this Plan. Each annual report will list native species coverage and diversity measured during yearly quantitative surveys, estimated vegetation heights, compliance/non-compliance with required performance standards, native species health and overall vigor, the establishment of volunteer native species, hydrological and topographical conditions, the use of the restoration site by wildlife species, and the presence of invasive weed species. In the event of substantial non-compliance with the required performance criteria, the reports will include remedial measures deemed necessary to ensure future compliance with specified performance criteria. Each annual report will include:

- The name, title, and company of all persons involved in mitigation monitoring and report preparation.
- Maps or aerials showing restoration sites location, transect locations, and photo documentation locations.
- One or more photographs or reproductions of photographs that show the following:
 - The mitigation area before the start of work for that year.
 - The work in progress.
 - The mitigation area after the completion of work for that year.
- An explanation of the methods used to perform the work, including the number of acres treated for removal of non-native plants.
- A summary of all monitoring activities.
- An assessment of the treatment success.

10. Final Restoration Project Approval

When this maintenance and monitoring program (Plan) has been completed, or when all specified final success criteria have been met, the LADWP and the qualified Biological Monitor will prepare a final annual status report and forward it to the CCC and TSP.

11. Contingency Plan

Inadvertent Loss of BMV During Restoration or Construction

If BMV plants are damaged or suffer mortality from restoration or construction activities LADWP will conduct remedial actions to replace the lost plants. For each BMV, regardless of age class, LADWP will remove non-native vegetation at a ratio of one m² per plant. This may include removing non-native annual grasses, shrubs, or other species in areas supporting suitable soils to create habitat conditions favorable to the recruitment or expression of BMV. The areas will be monitored and maintained weed free for a period of five years to allow for seed deposition and plant expression. Plant protection, watering, and weeding would be completed in accordance with Section 8.1.1 (Maintenance and Monitoring Measures). If BMV are not detected after two years LADWP will inoculate the area with BMV seed. If after three years BMV are not detected the LADWP will clear additional areas at the same ratio and reinitiate the

monitoring and reporting protocols described for lost plants. The recommended remedial measures will be submitted in the annual status reports that are submitted to CCC and TPS.

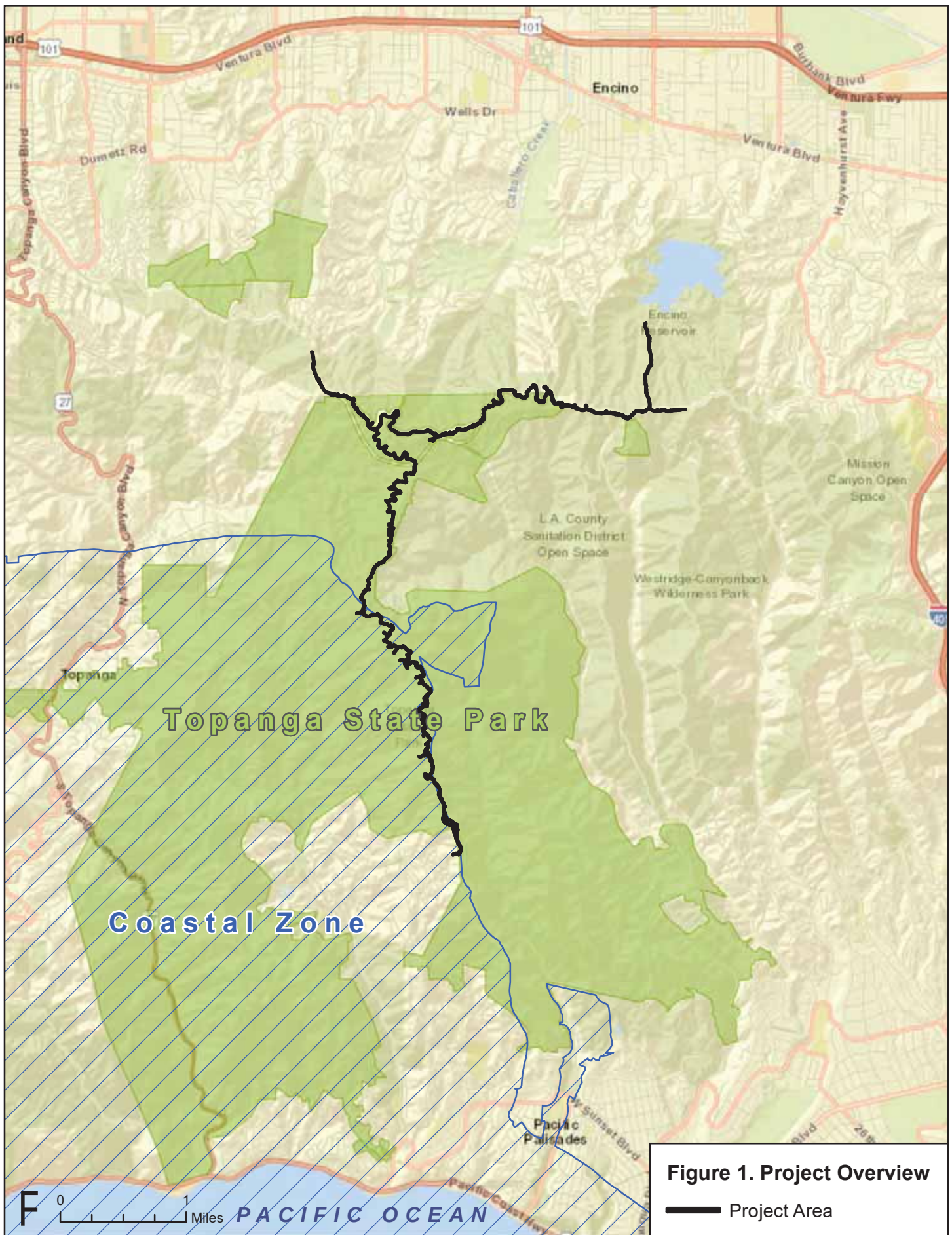
Failure to Meet Restoration and or Success Criteria

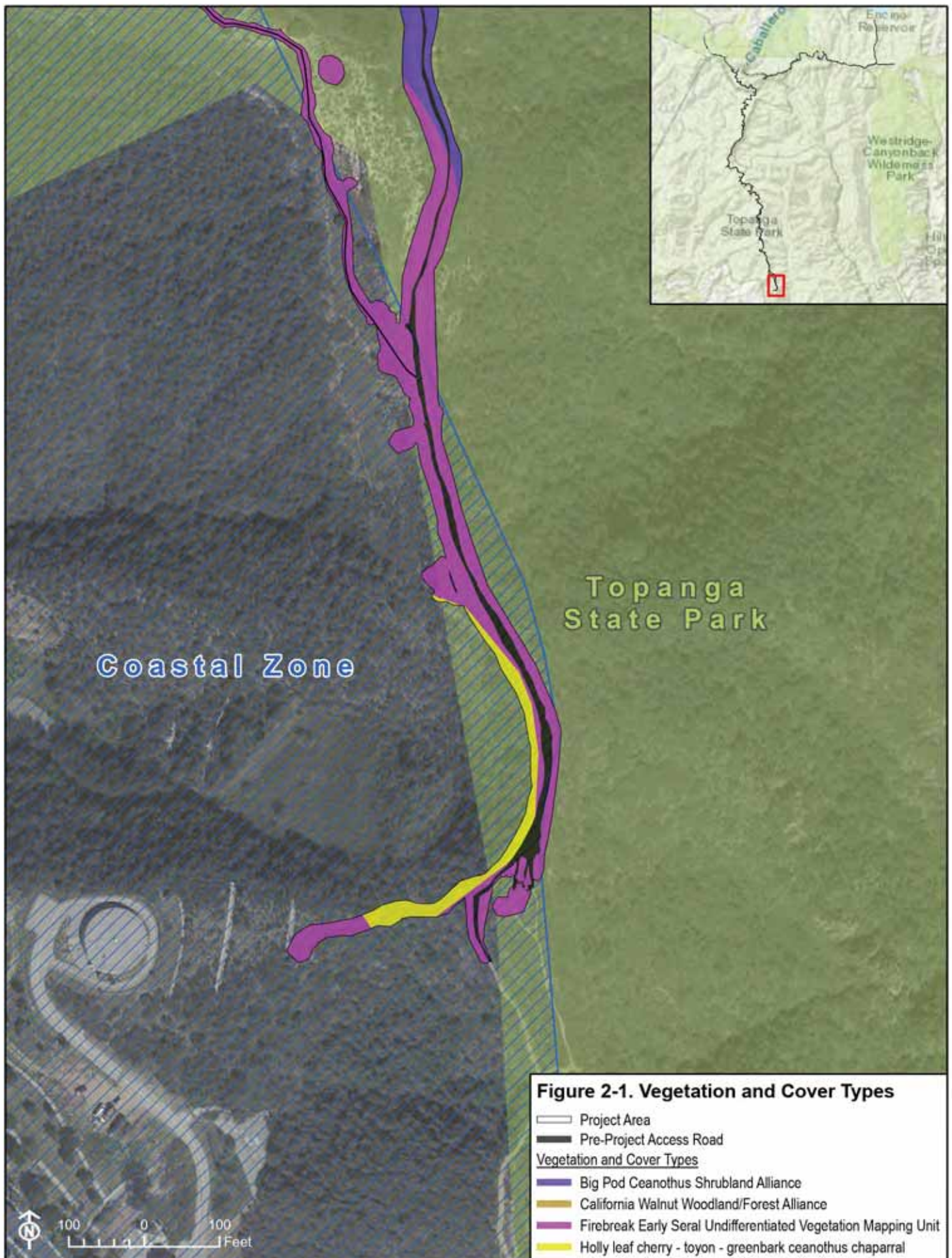
If at the end of restoration years three or four, there is little or no indication that success criteria will be met; the qualified Biological Monitor will analyze non-compliance and poor performance and recommend appropriate remedial measures. These will include supplemental planting or seeding, additional weeding, supplemental watering, and additional fencing or signage. The recommended remedial measures will be submitted in the annual status reports that are submitted to CCC and TPS.

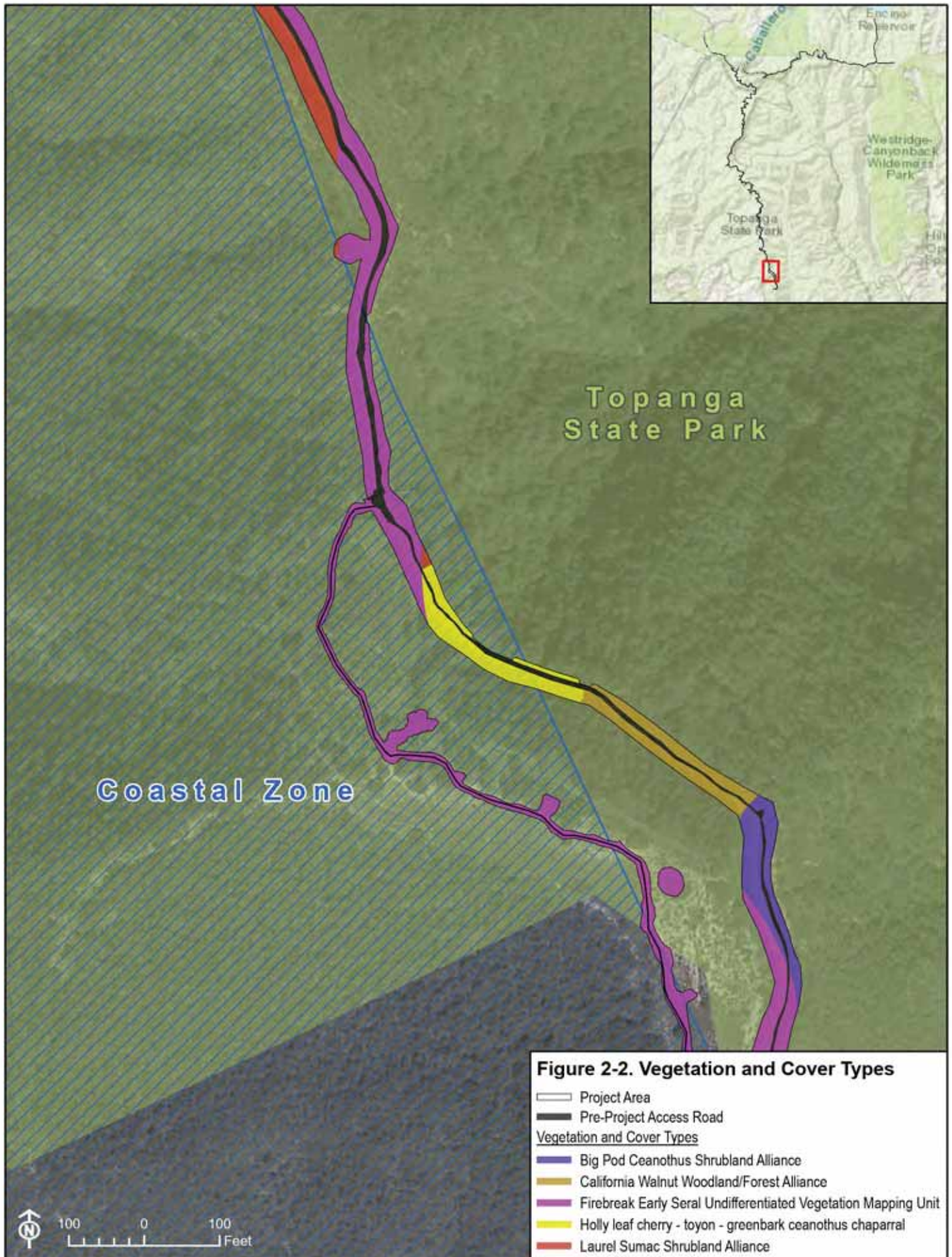
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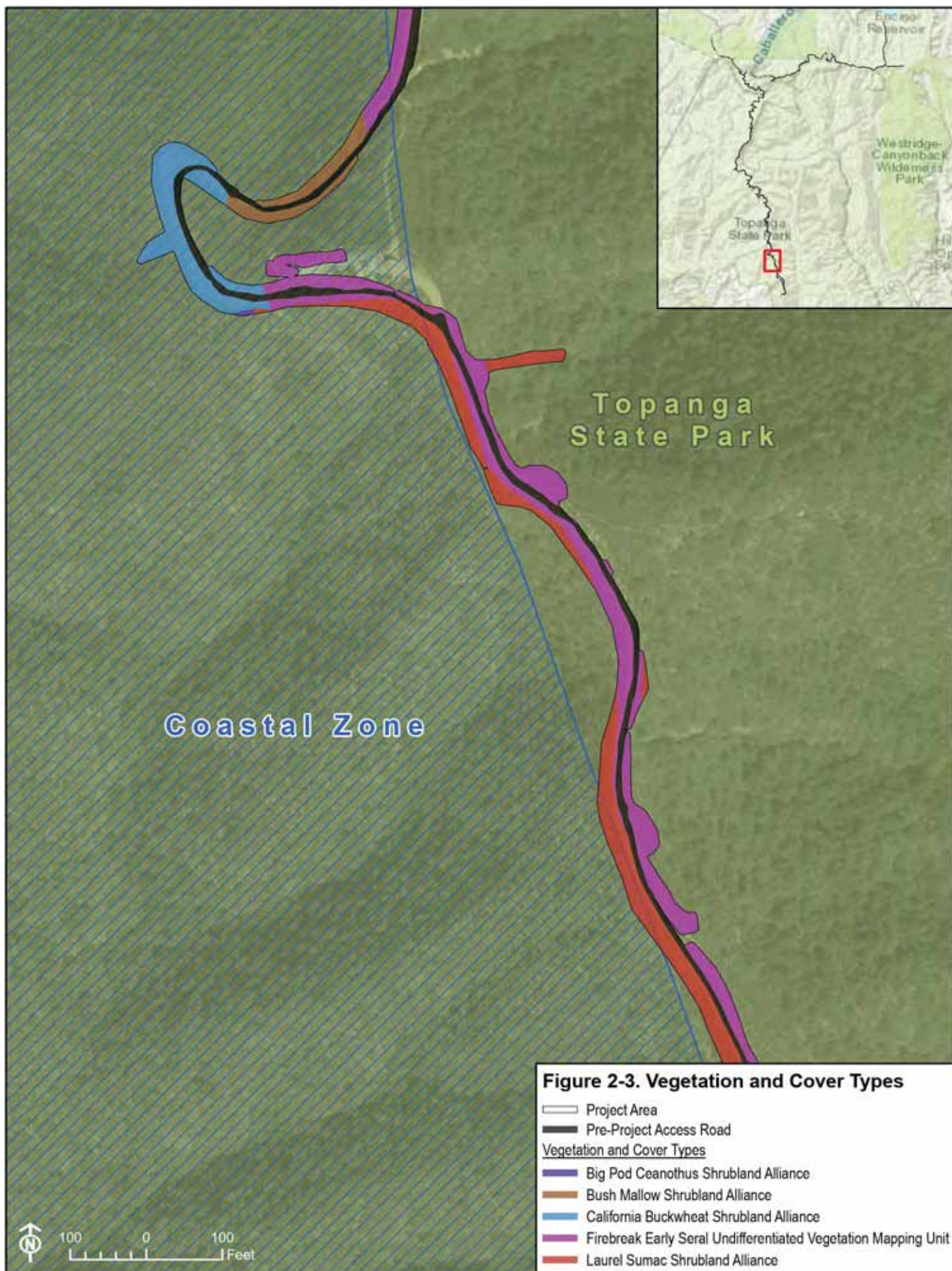
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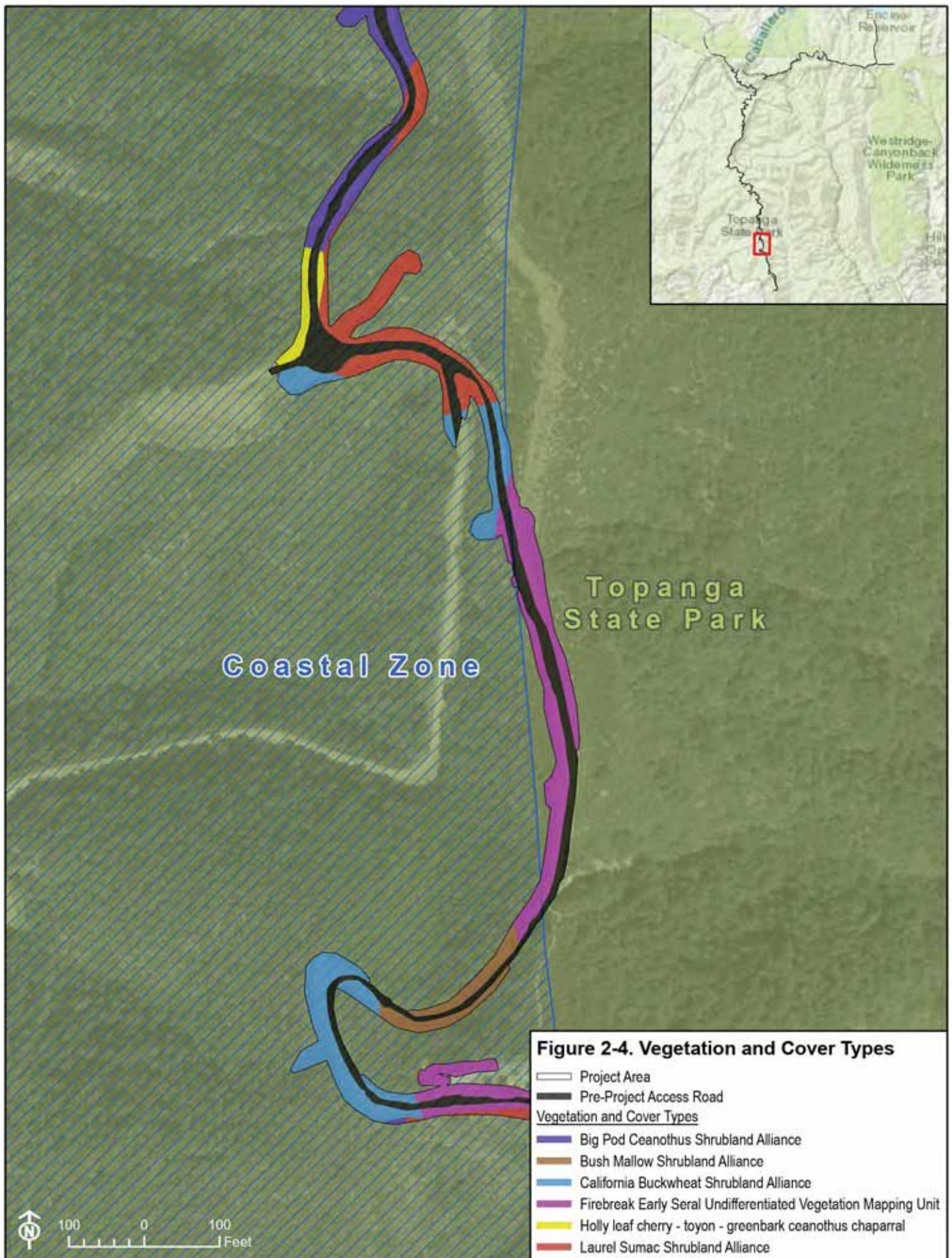
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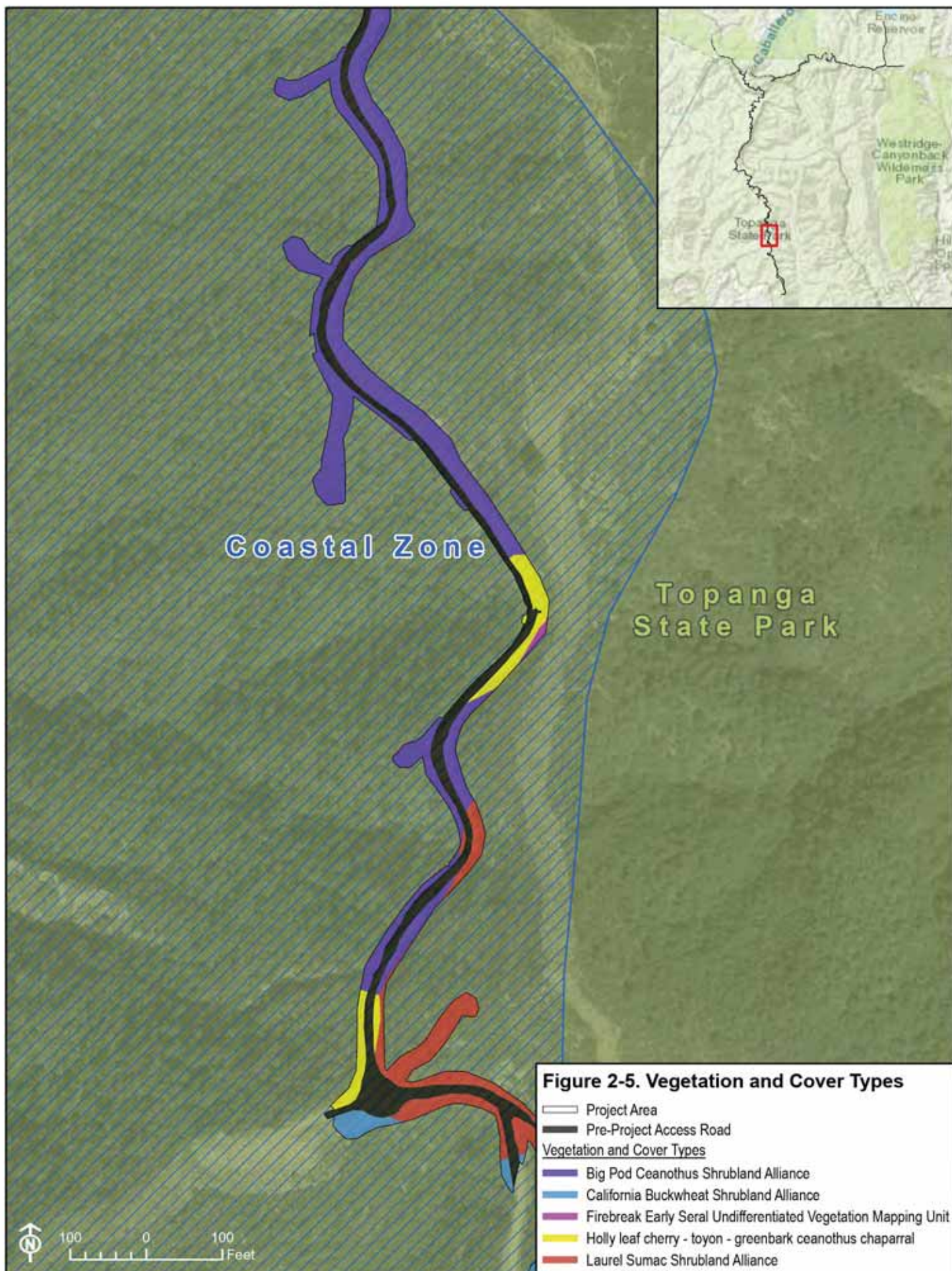


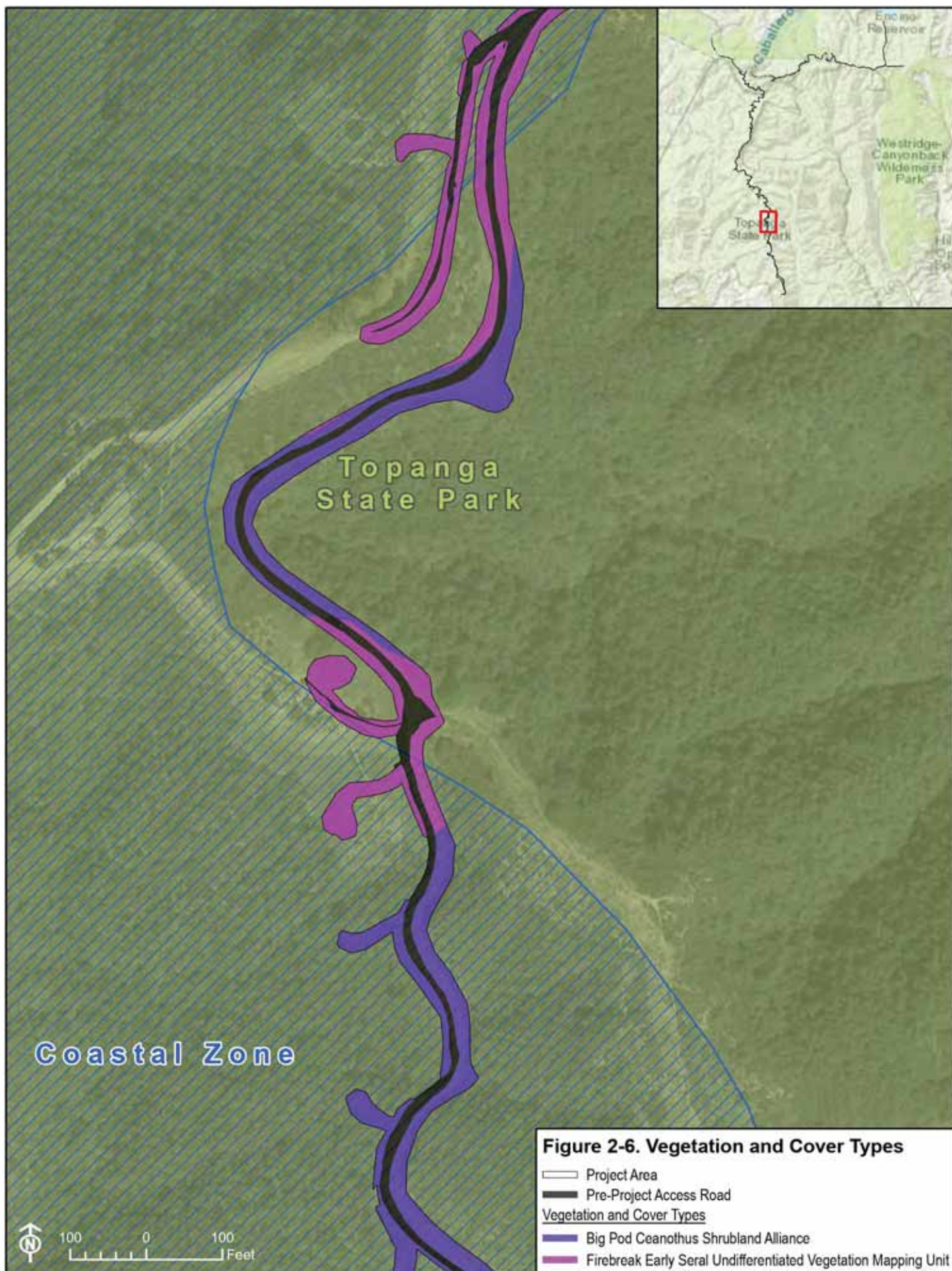


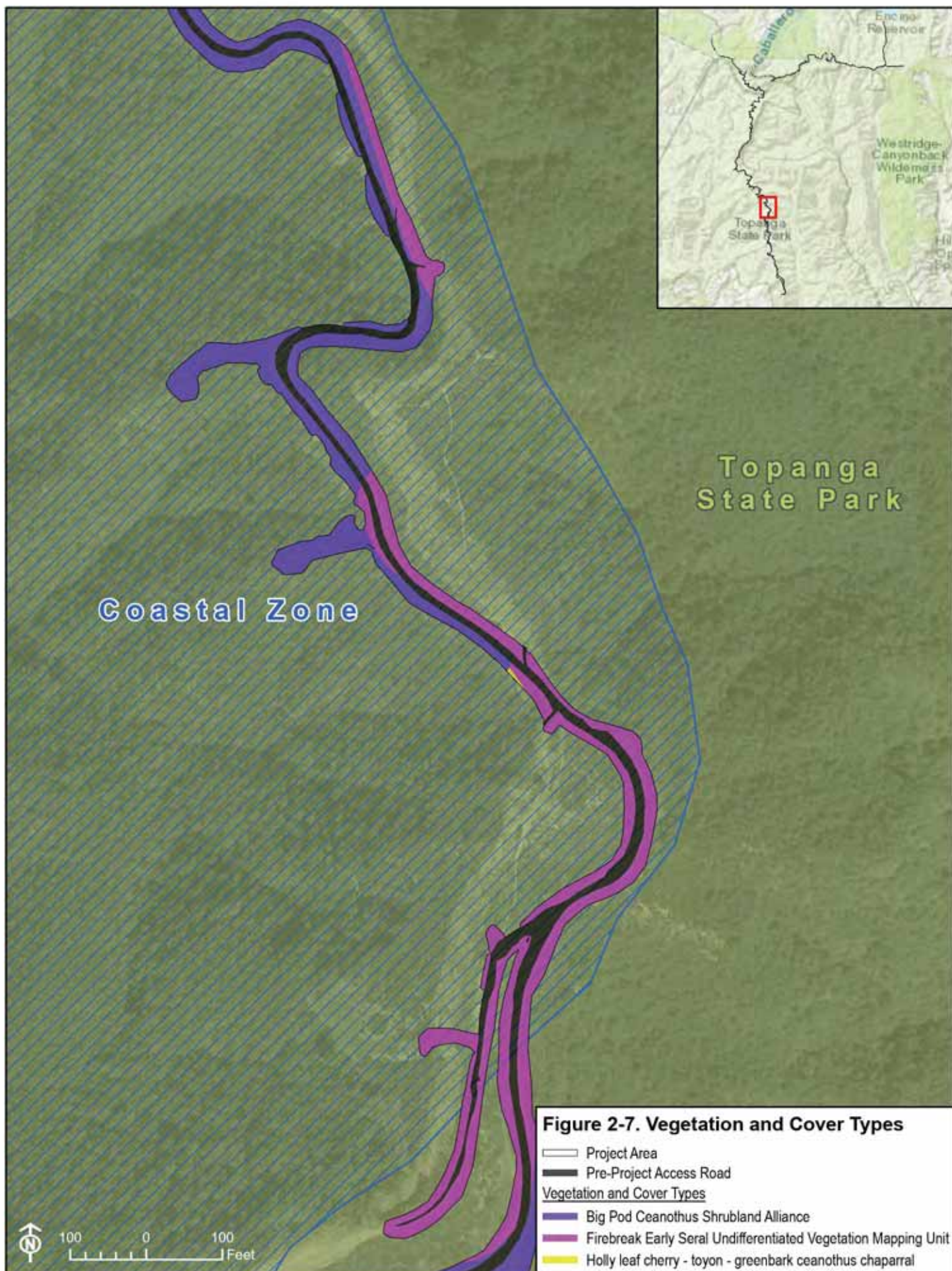


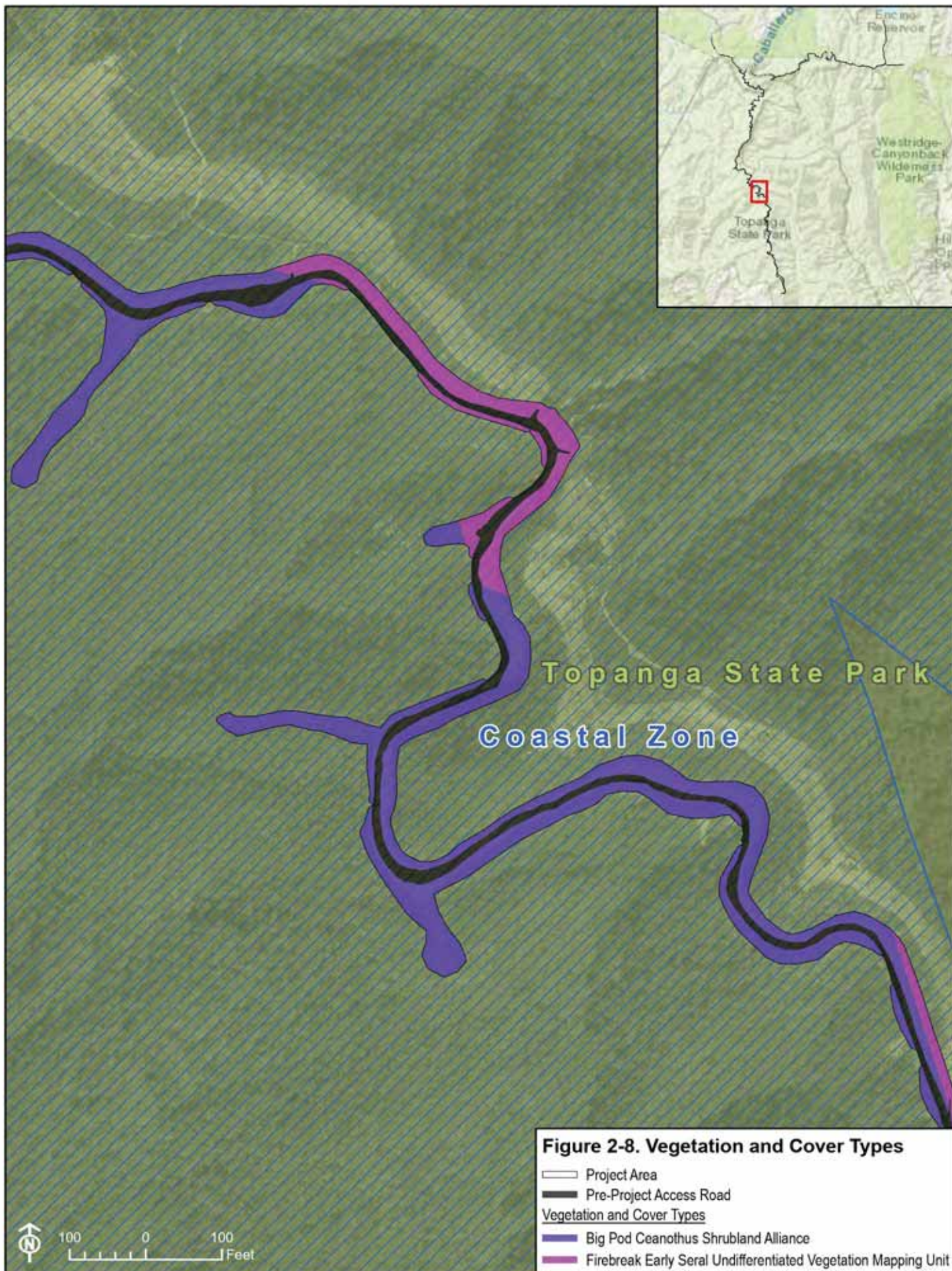


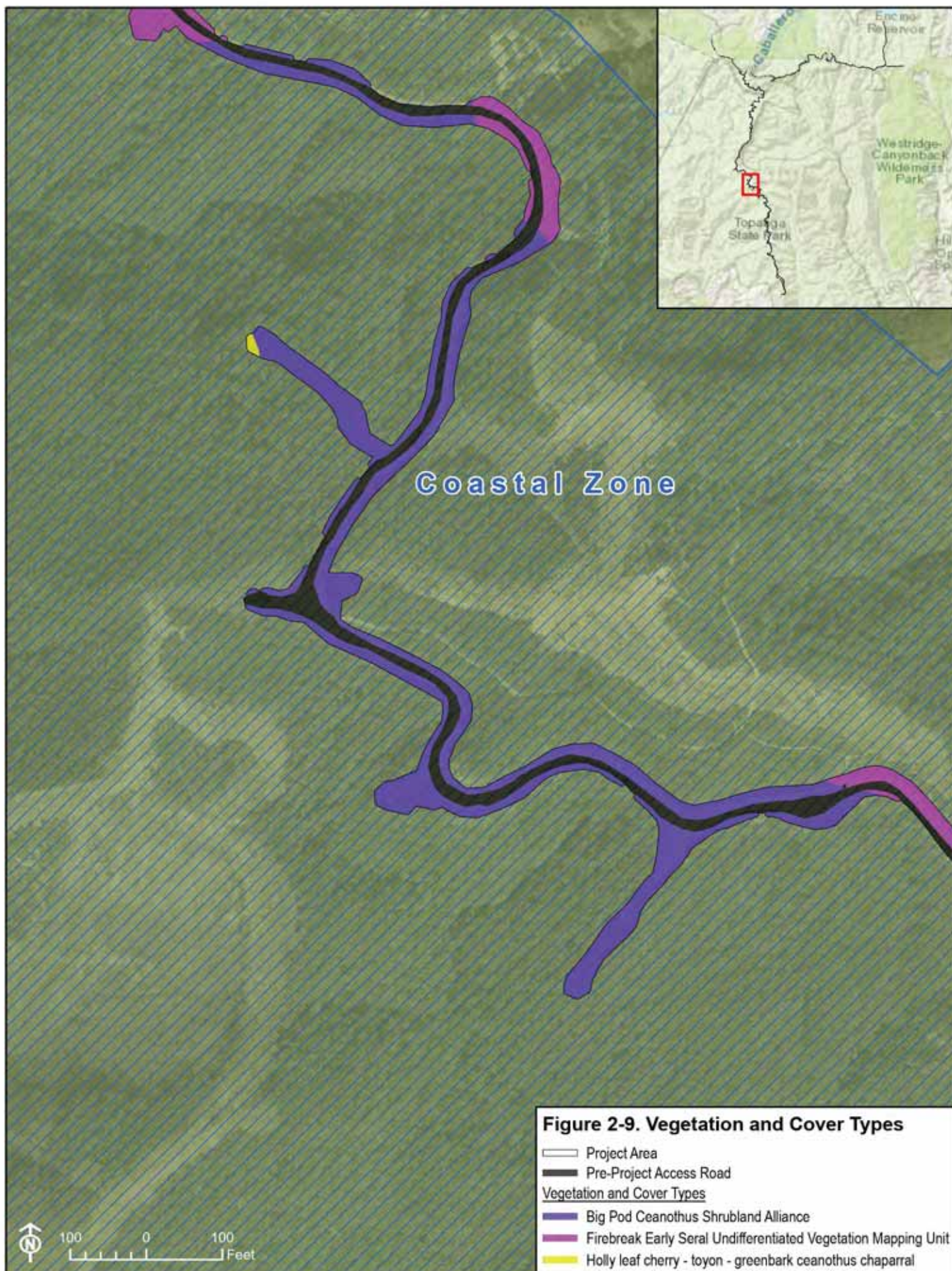


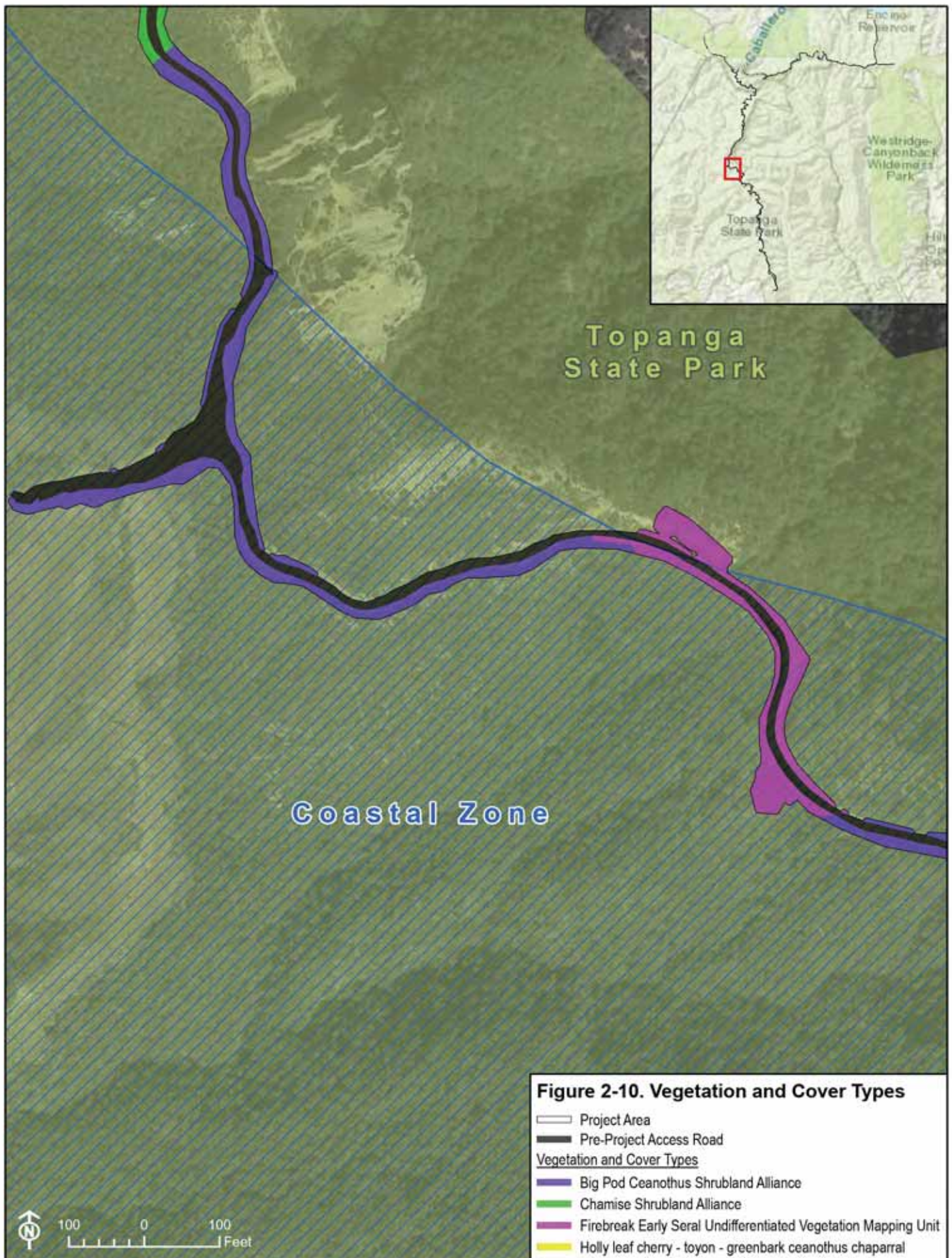


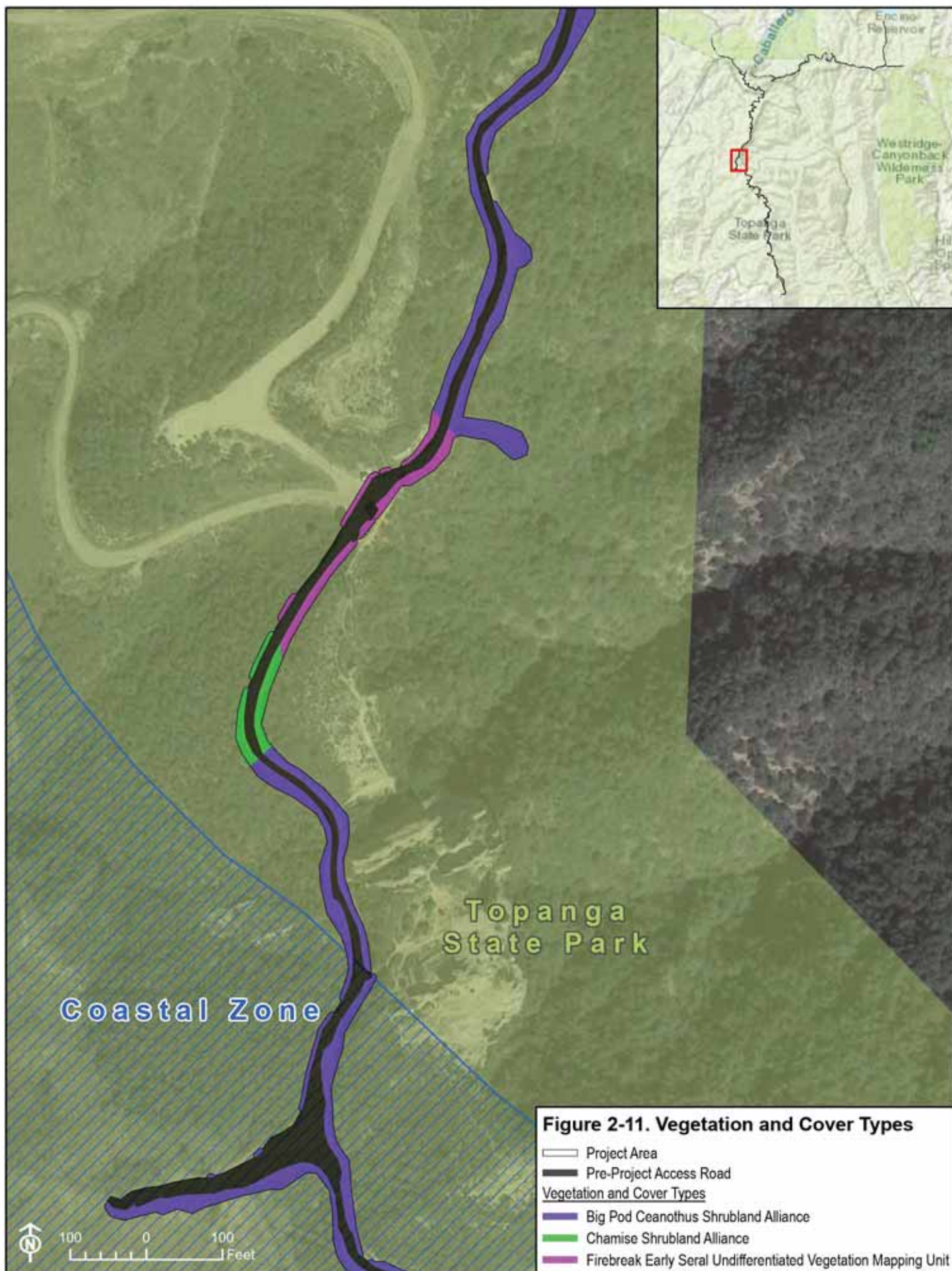




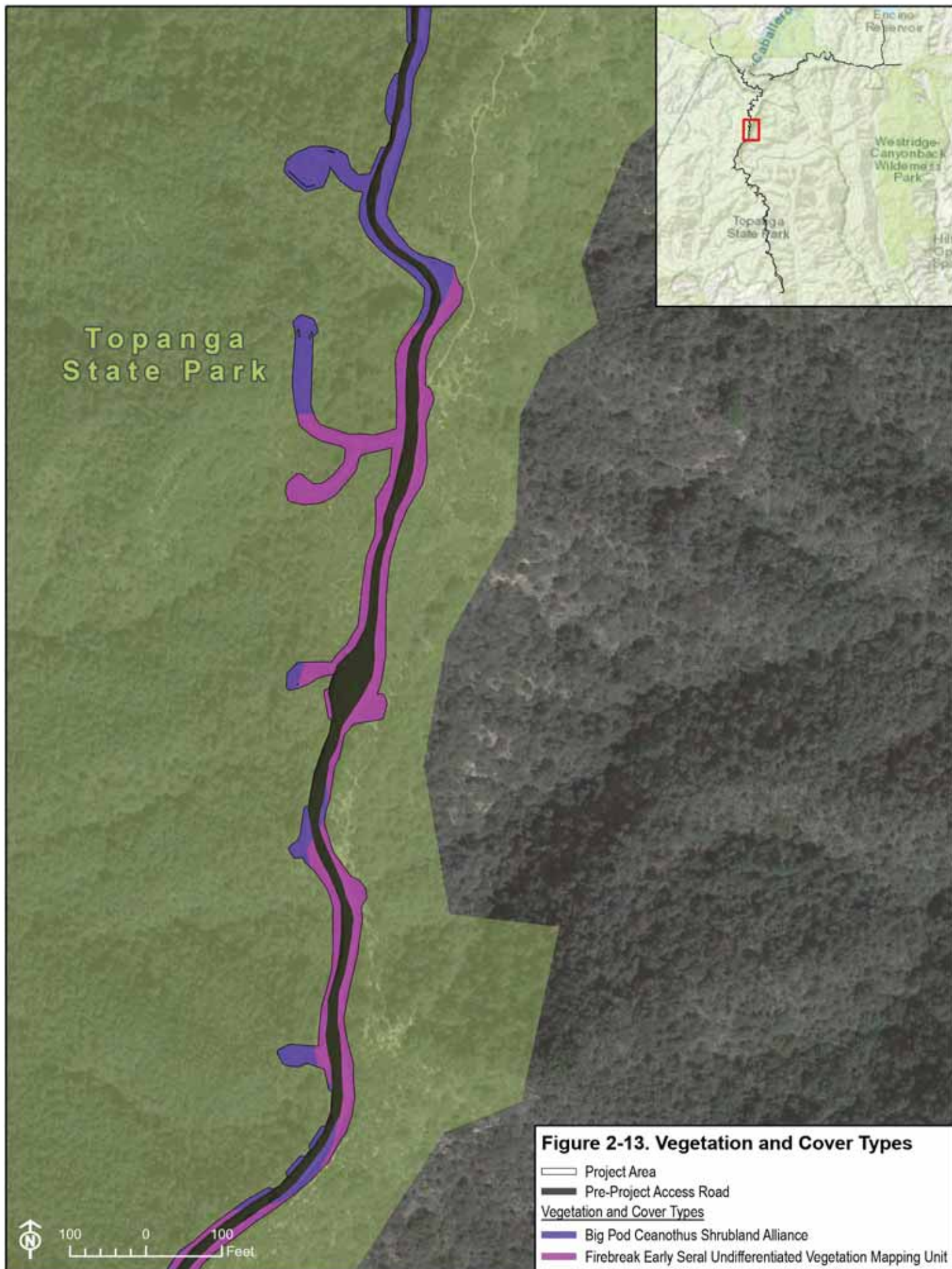


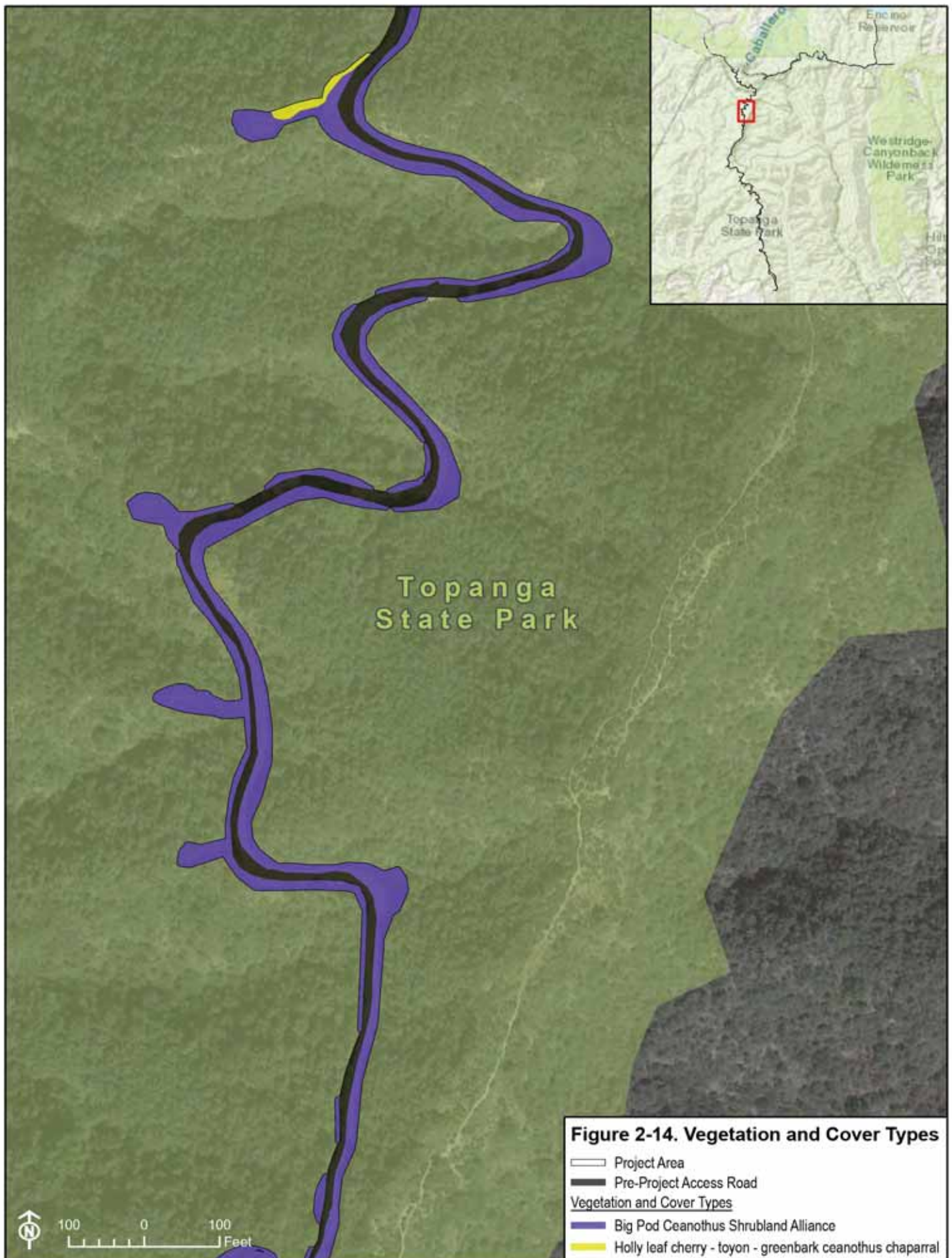


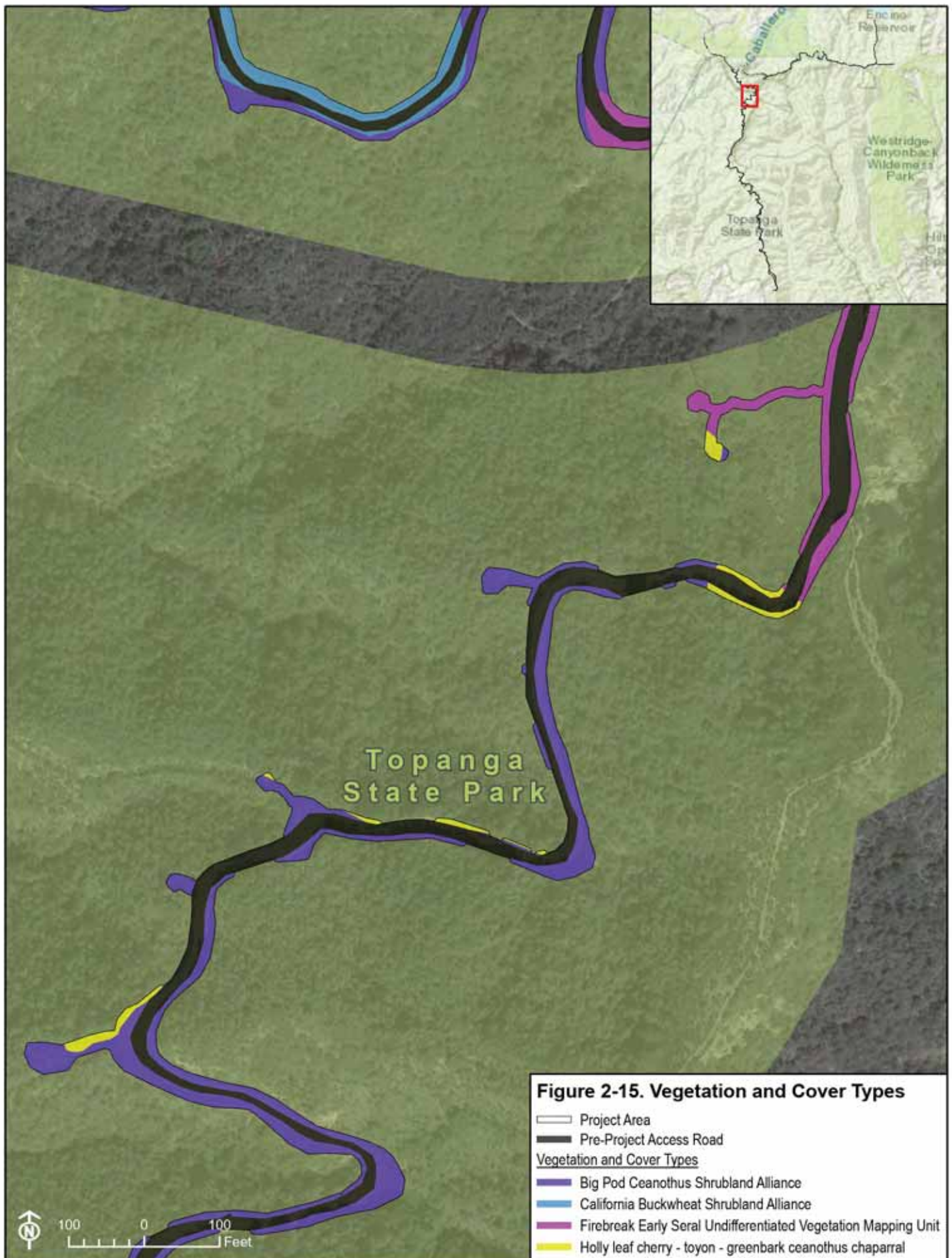


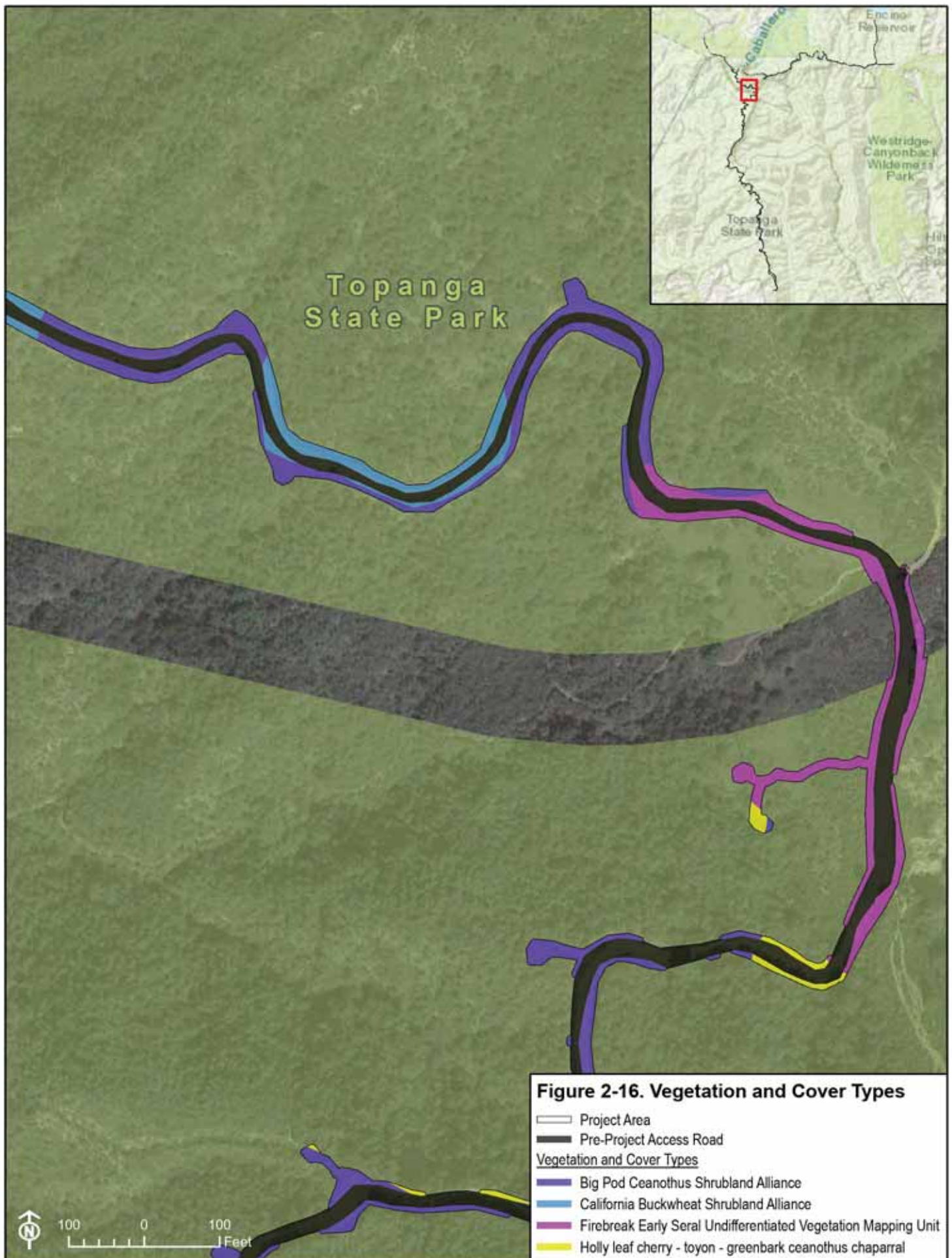


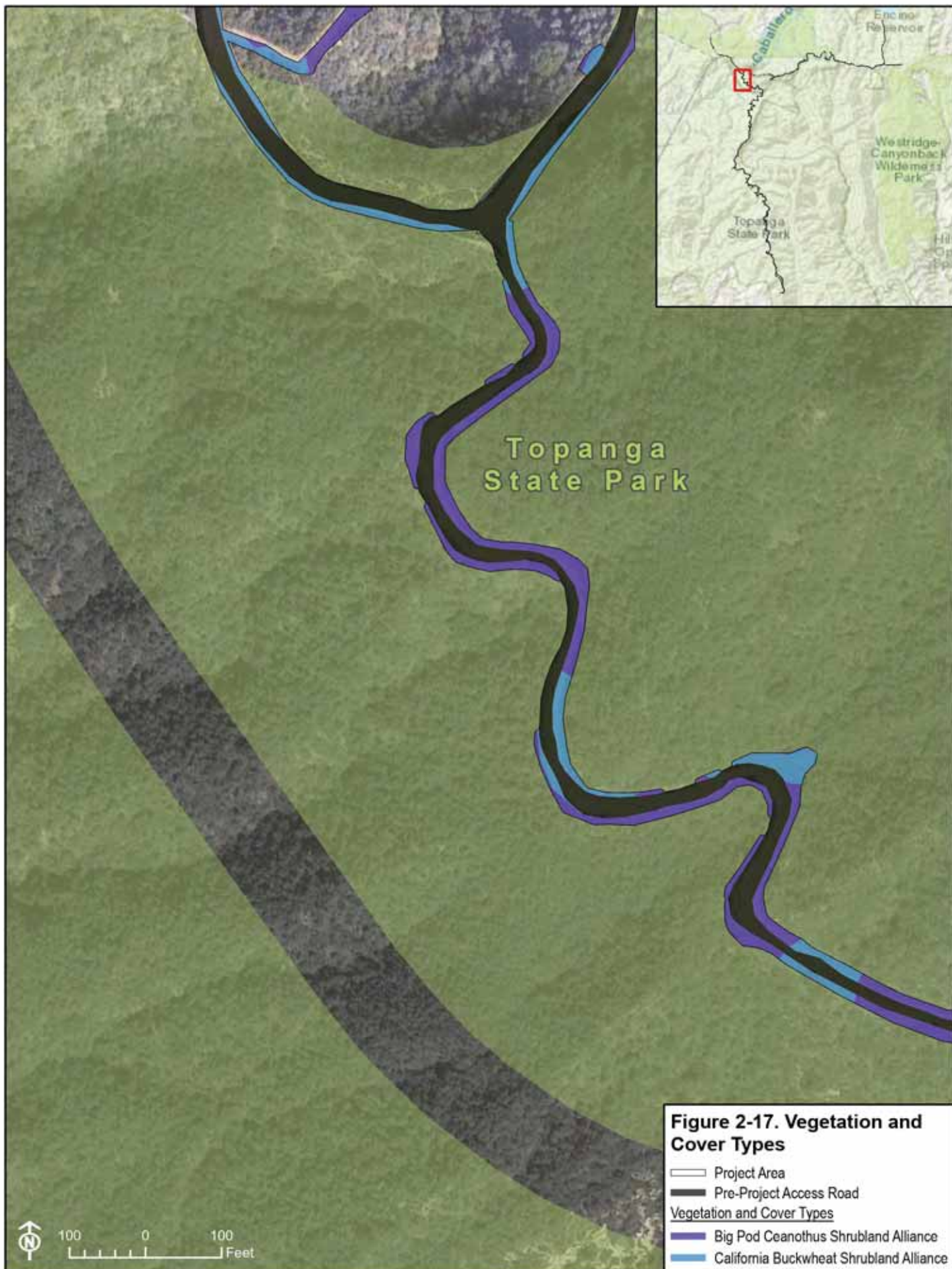


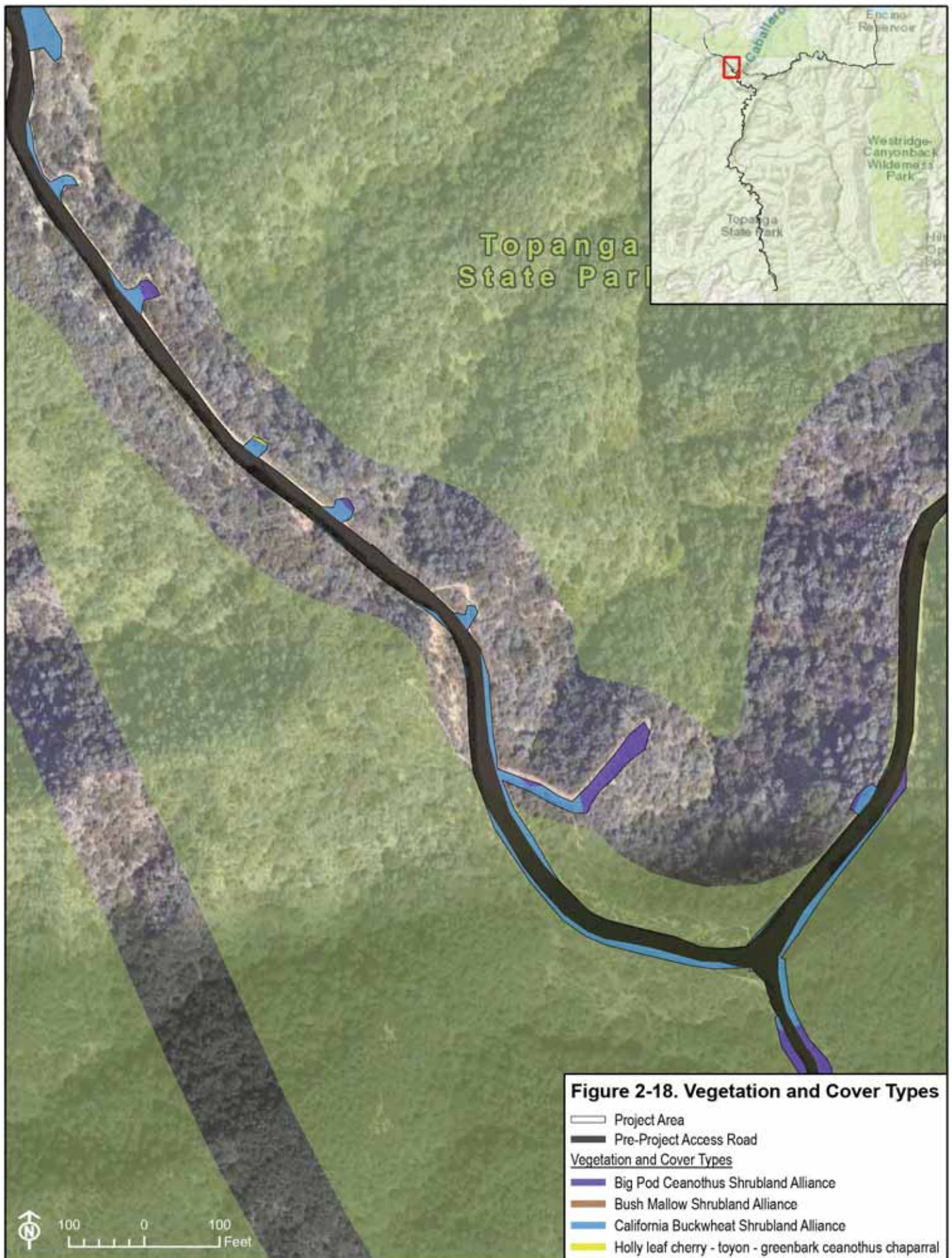


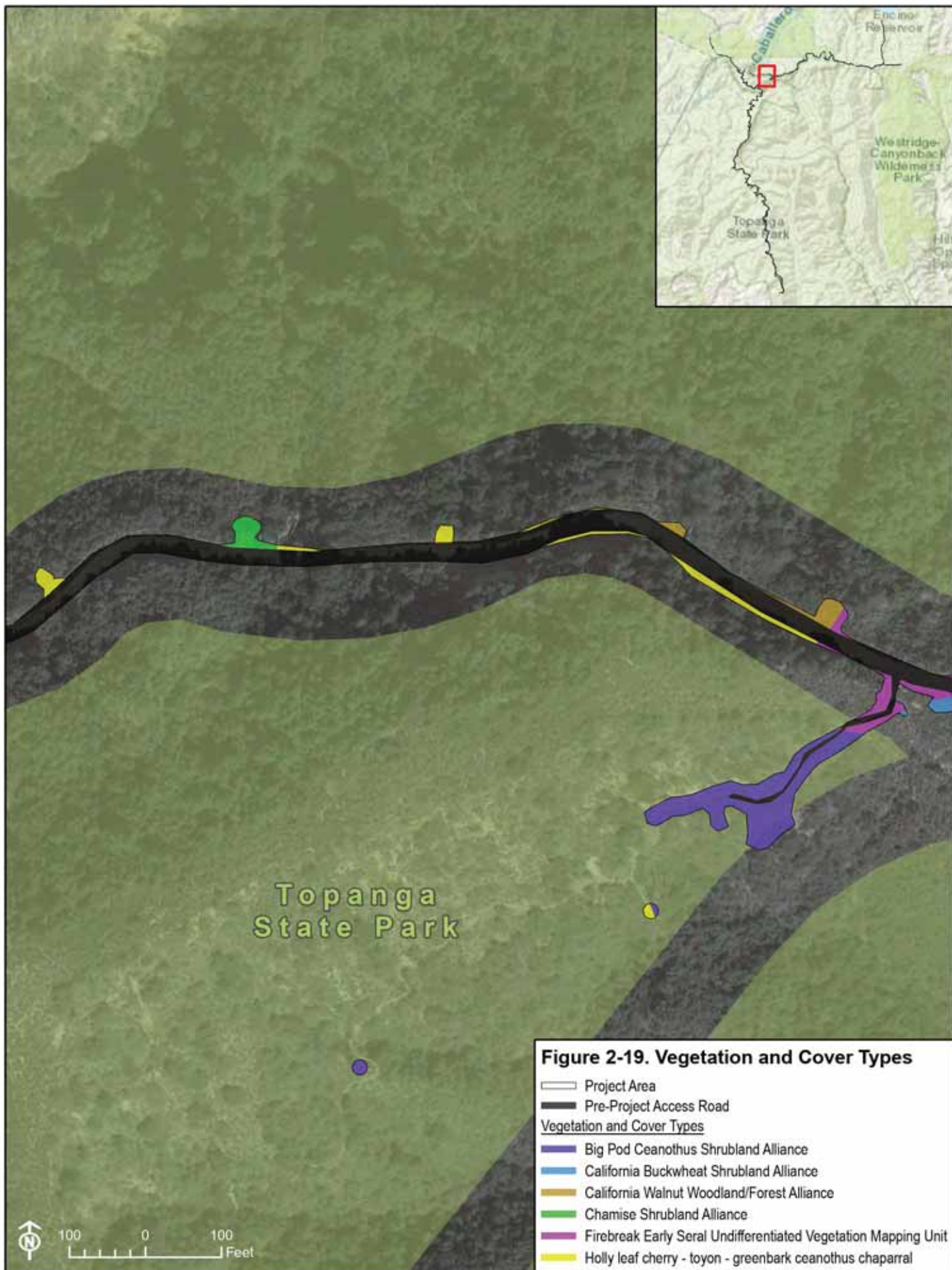




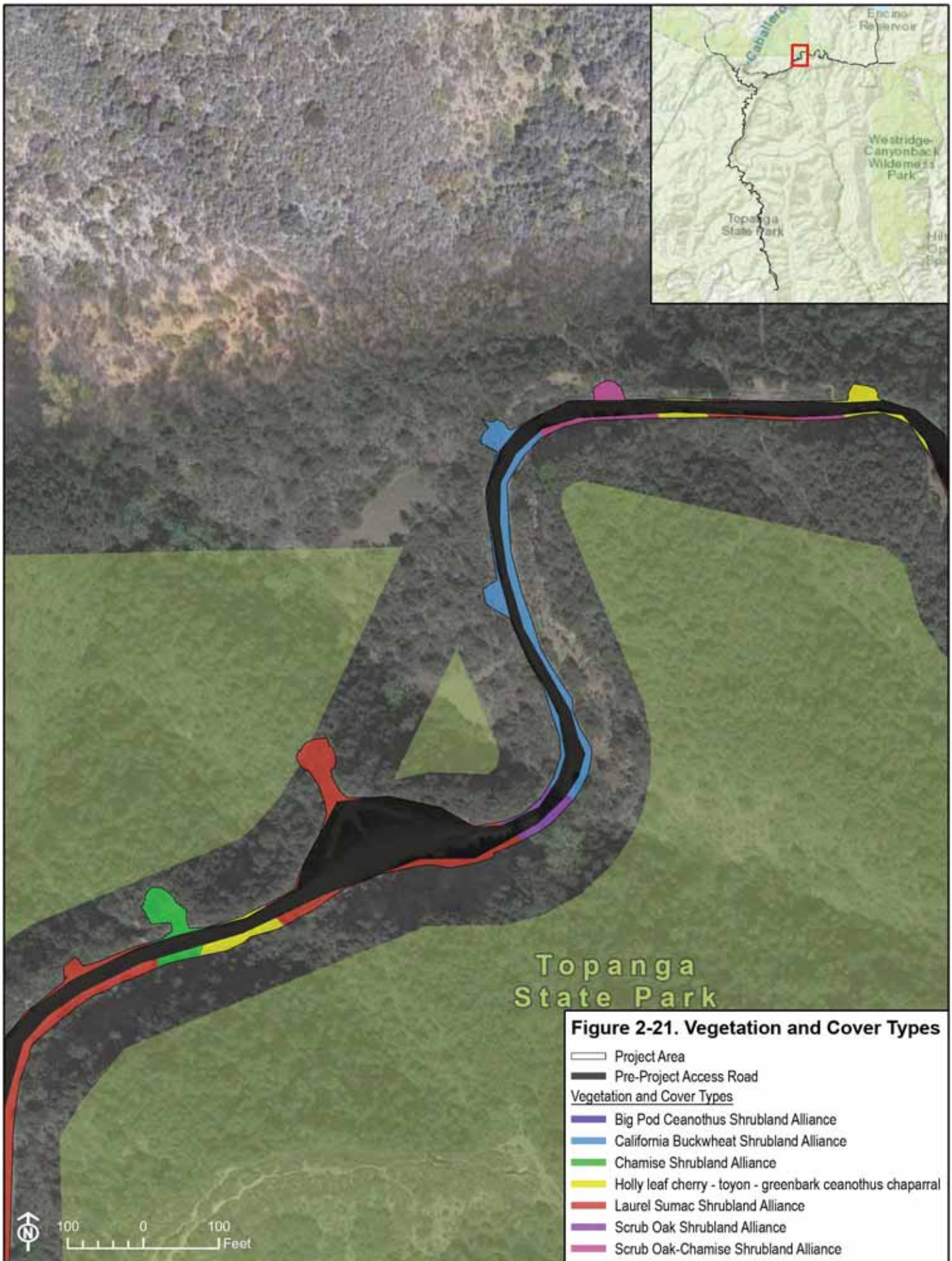


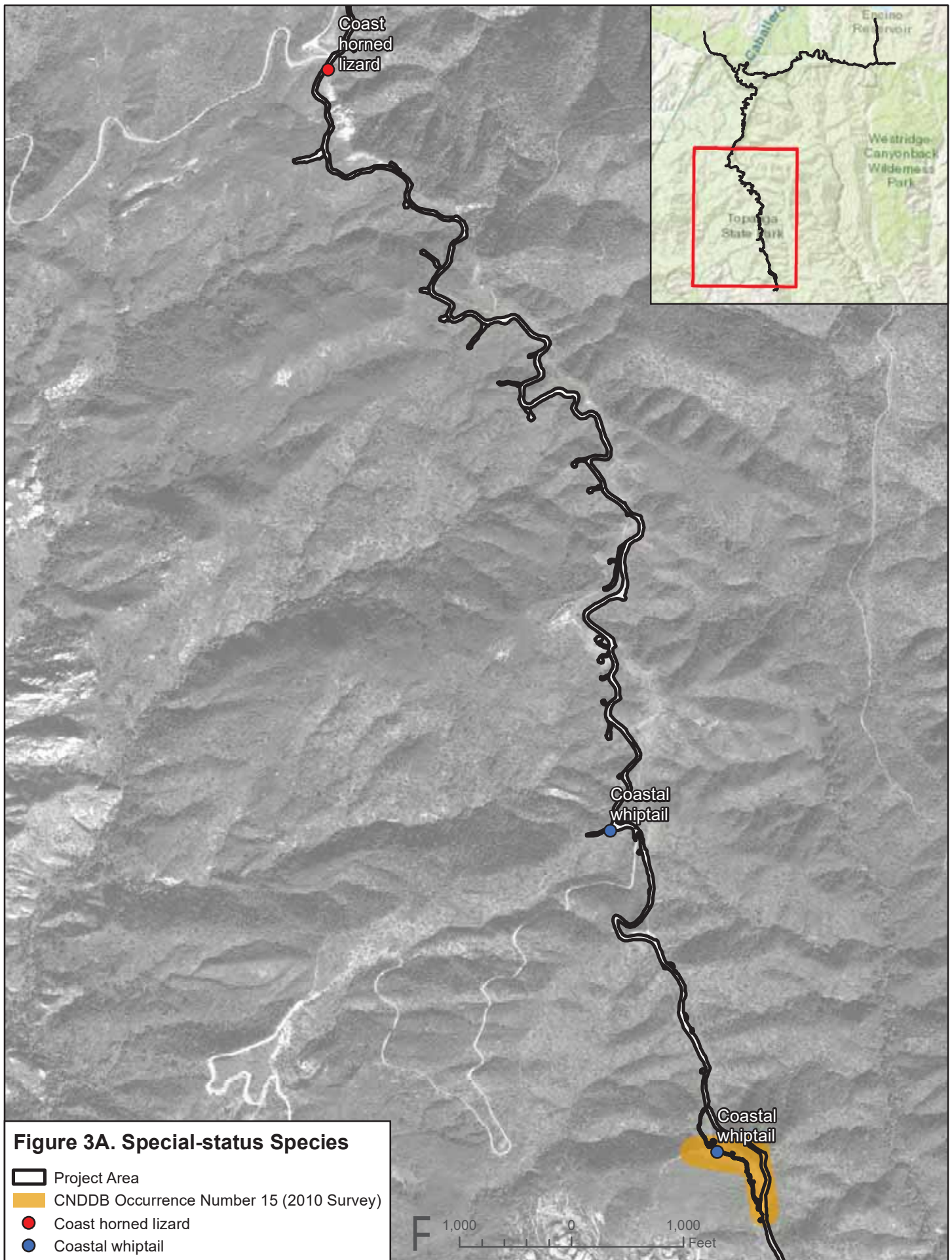














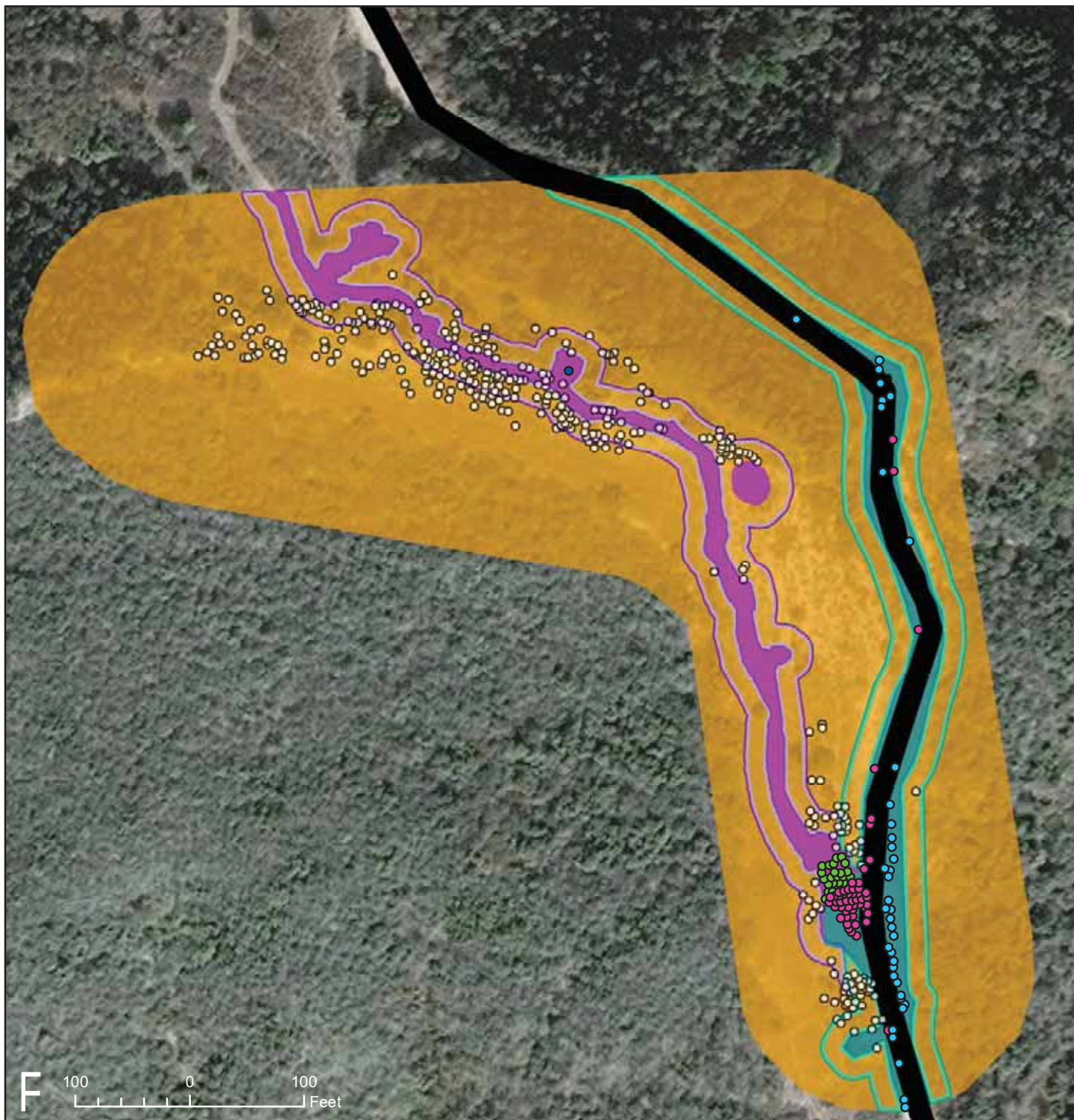


Figure 4. Impacts to Branton's Milkvetch

- Access Road Impacts (0.51 ac)
- Access Path Impacts (0.35 ac)
- Access Road 6-meter Buffer (0.86 ac)
- Access Path 6-meter Buffer (1.00 ac)
- Proposed Maintained Access Road and Existing Connecting Roads and Trails
- Occurrence Number 15 (2010 Survey)

Milkvetch Observations on May 13, 2020

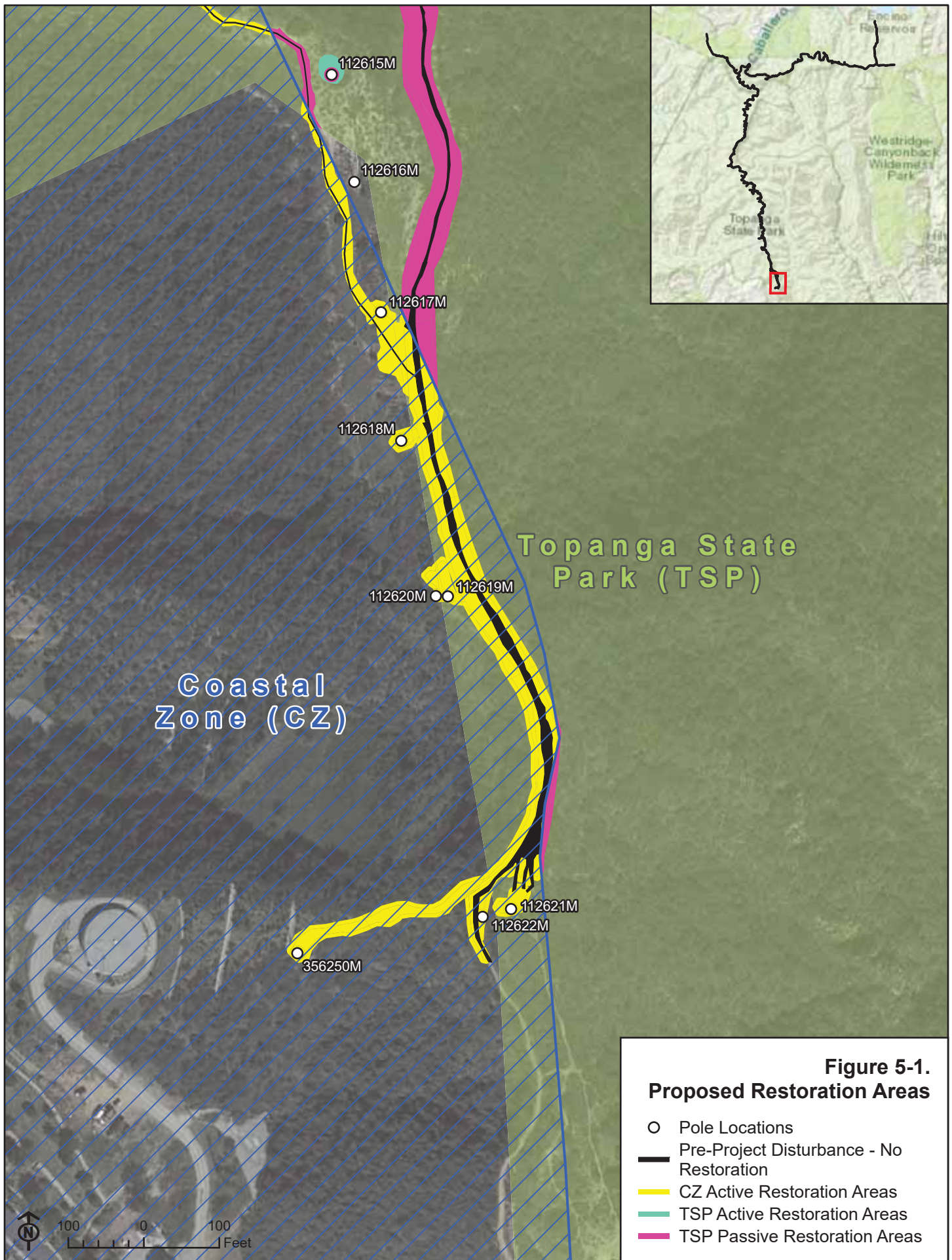
- Plants within Access Road (175)
- Plants within Access Path (152)

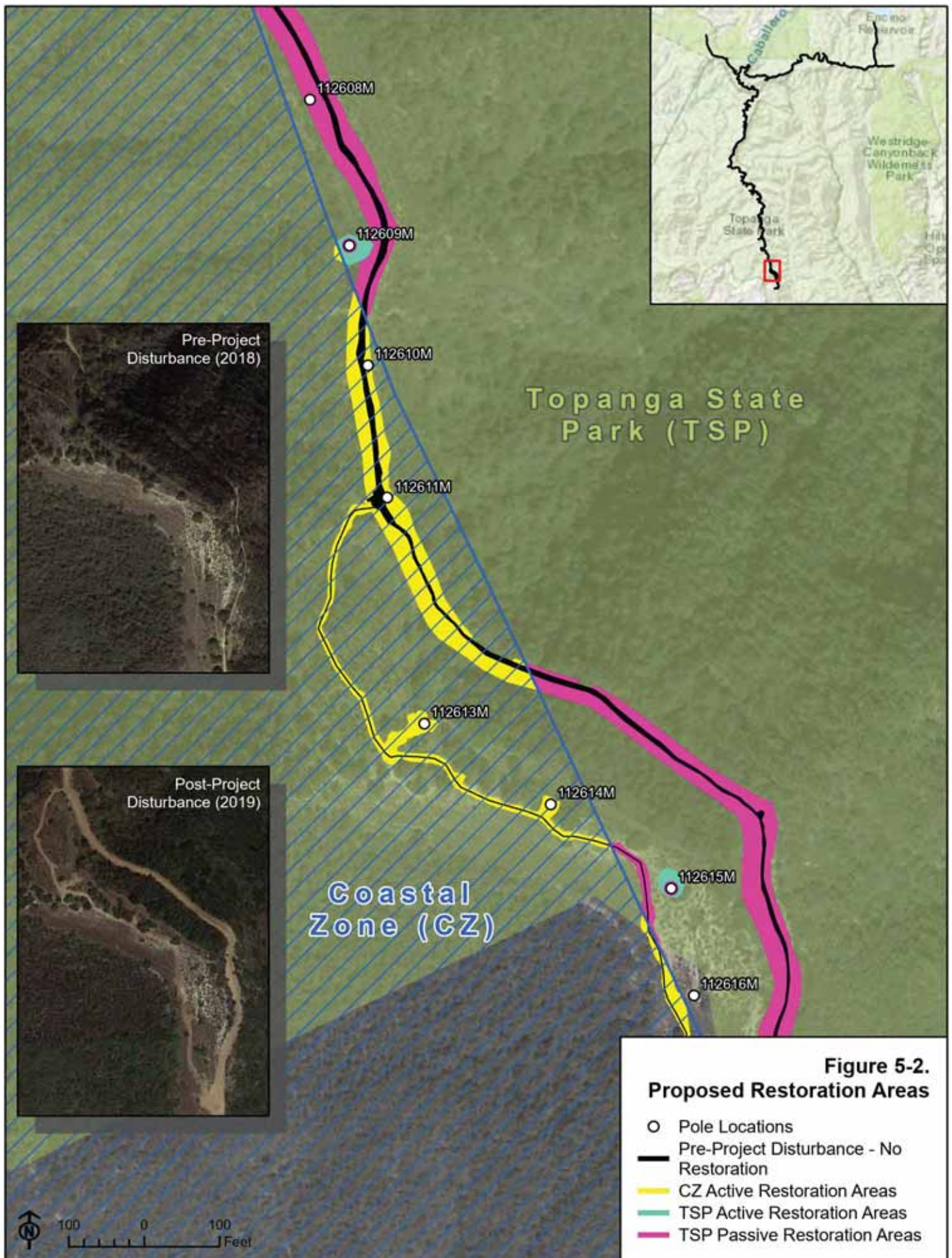
Milkvetch Observations on March 31, 2020

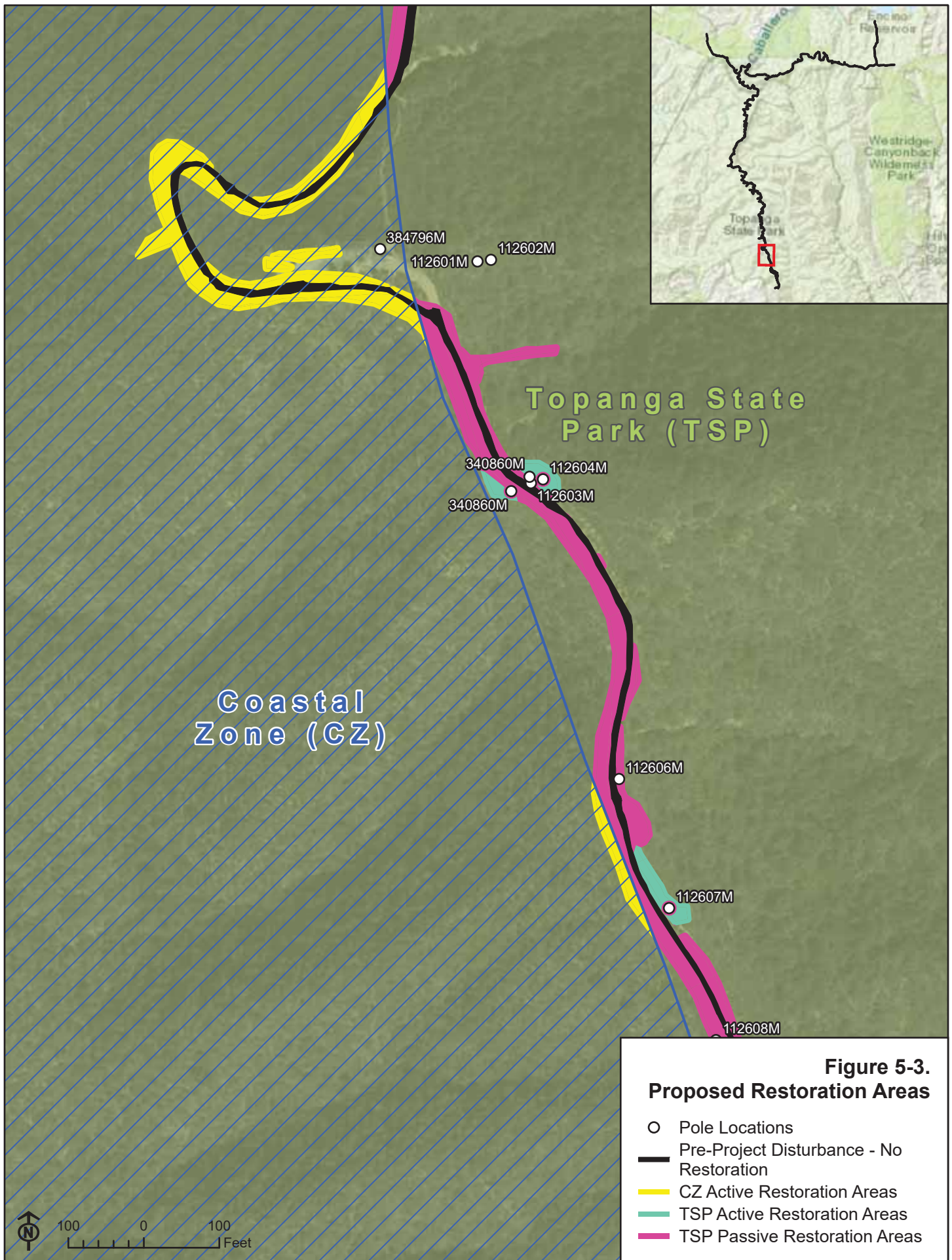
- Plants within Access Road (550)
- Plants within Access Path (199)

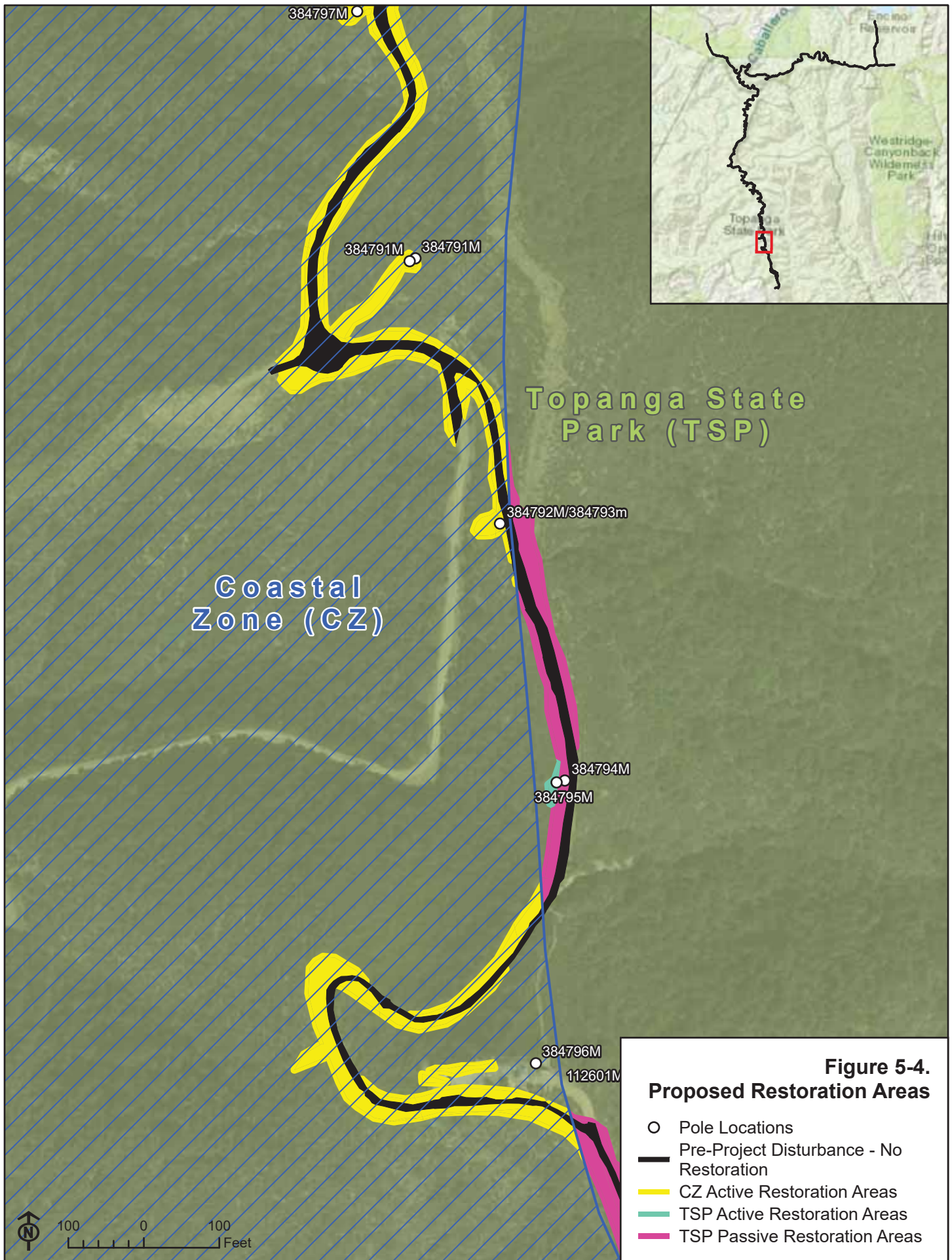
Milkvetch Observations on or Prior to February 12, 2020

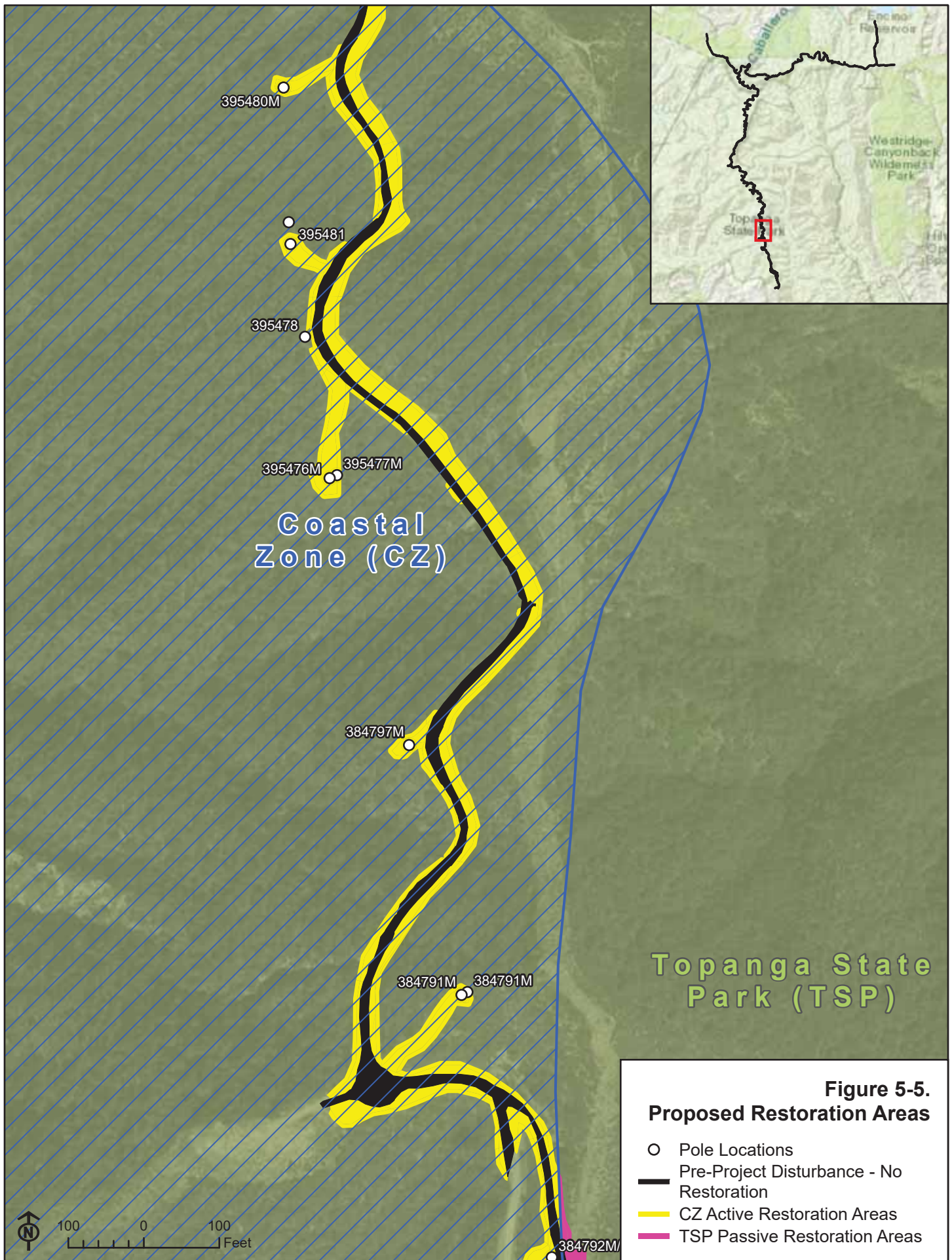
- Plants Observed (1,002)

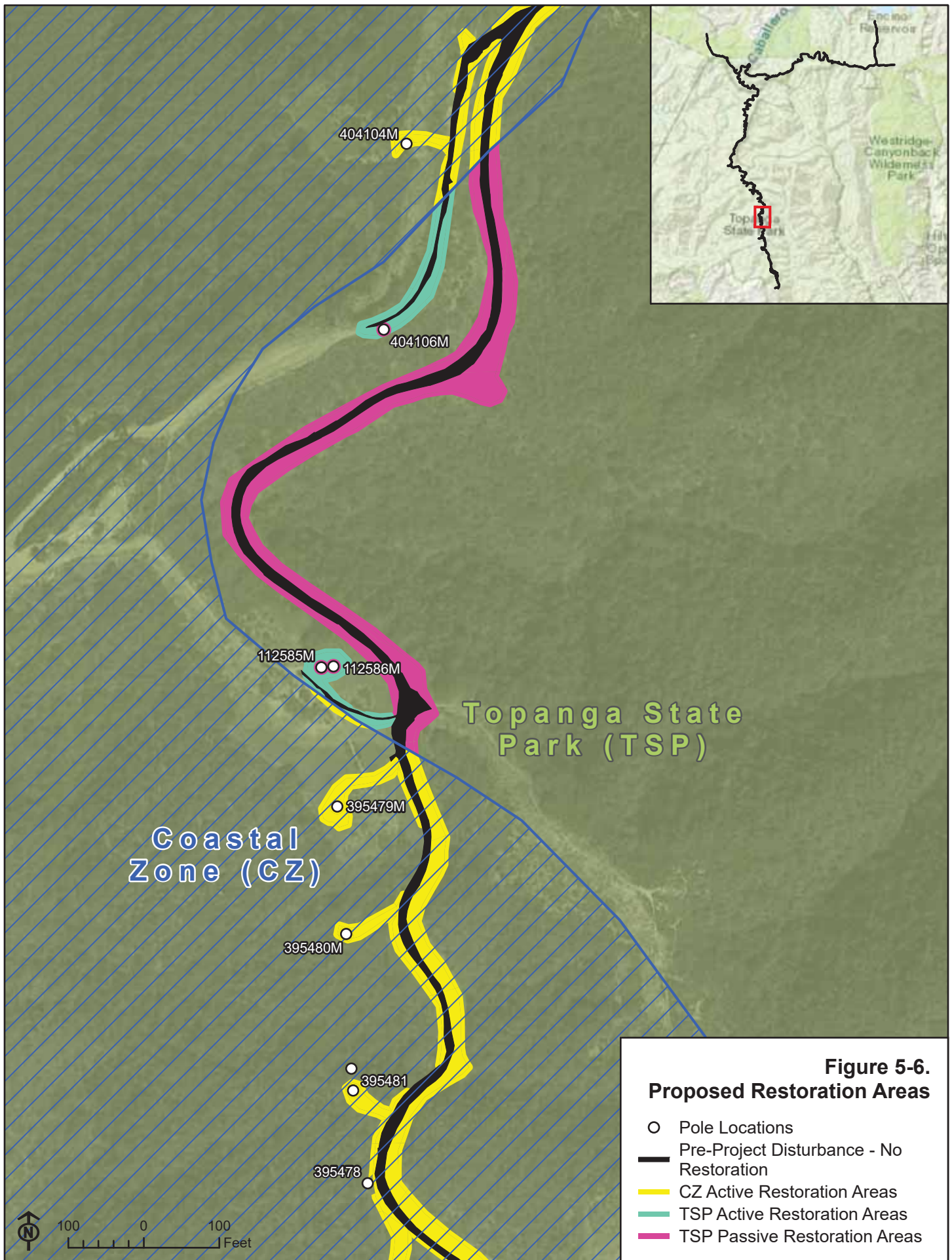


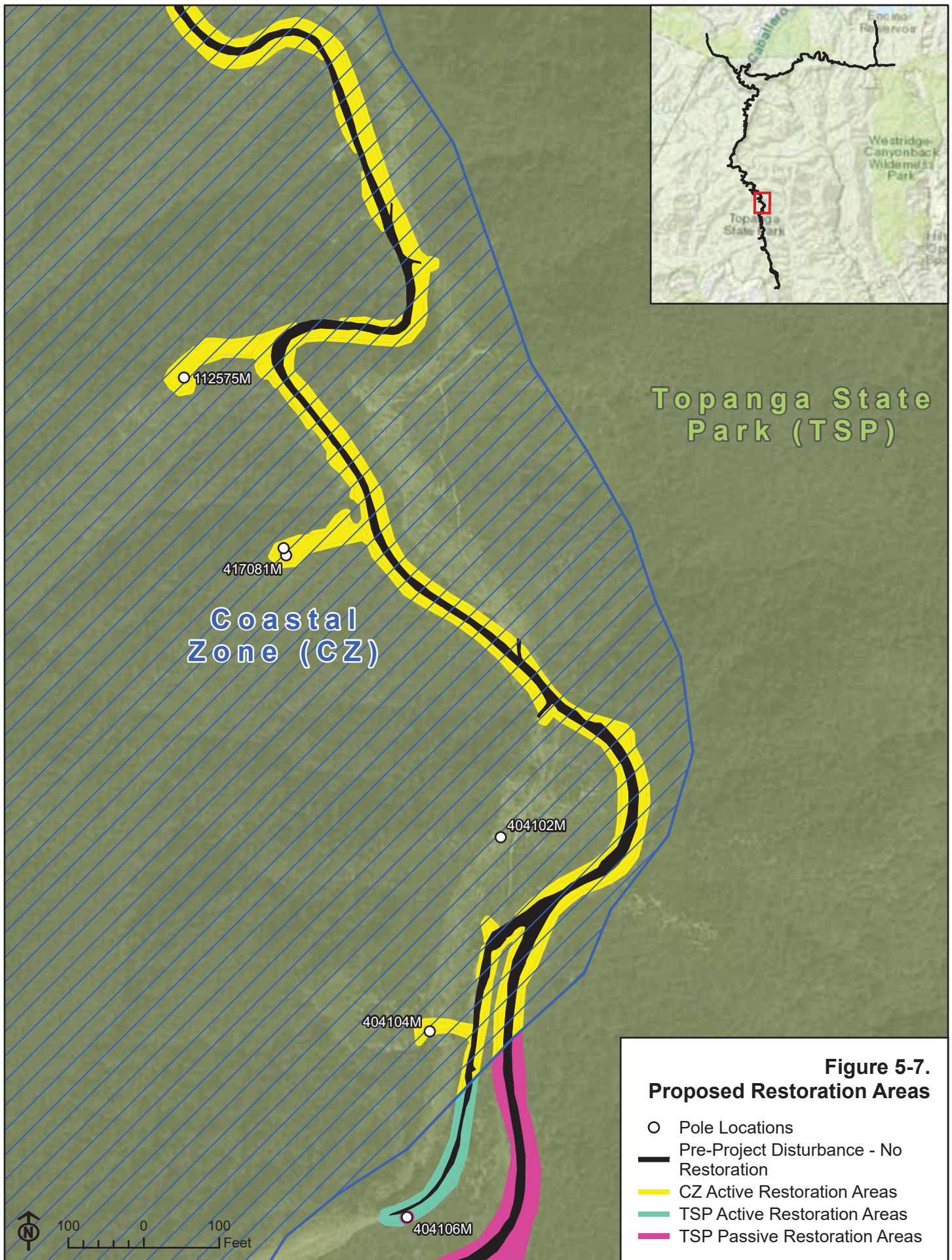


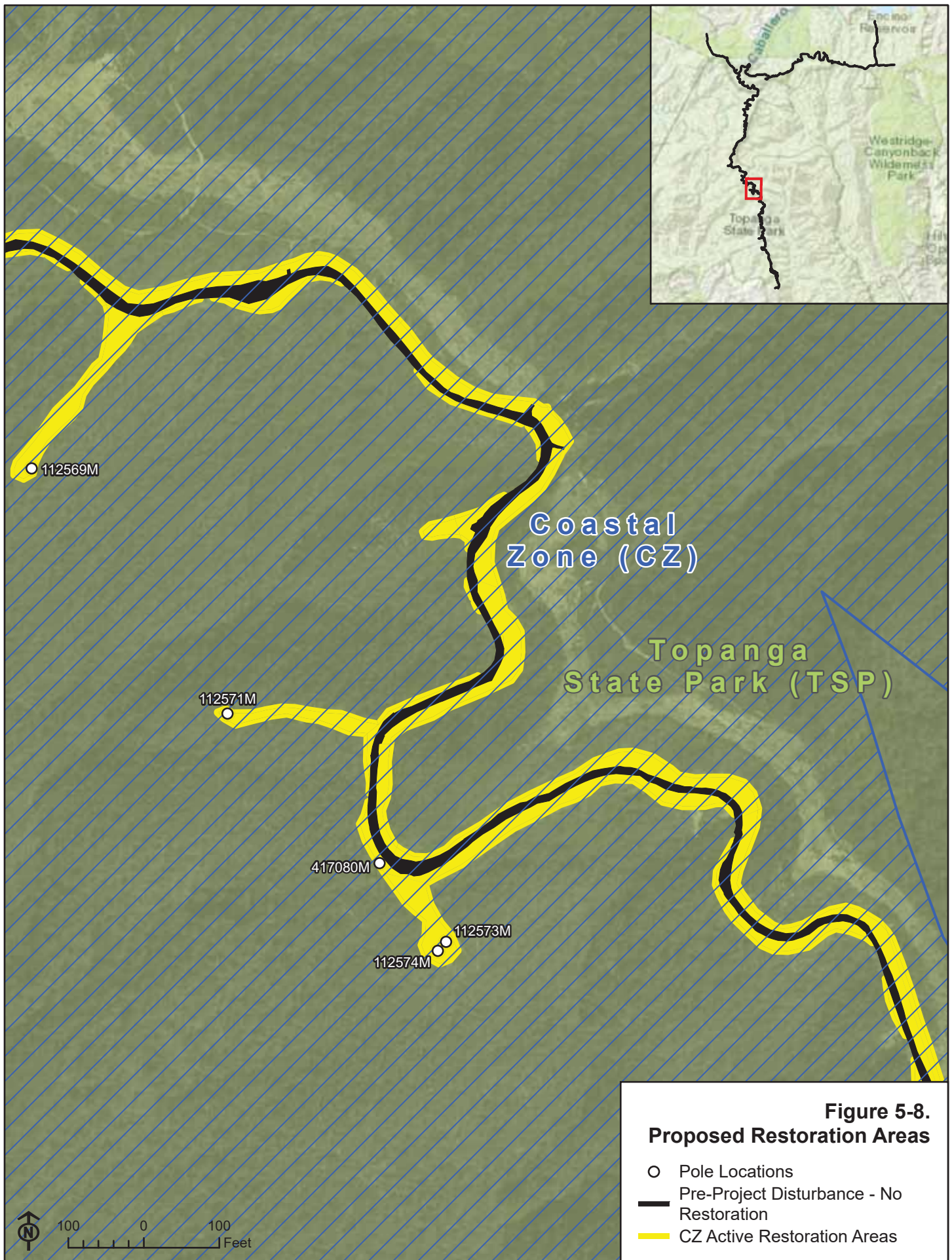


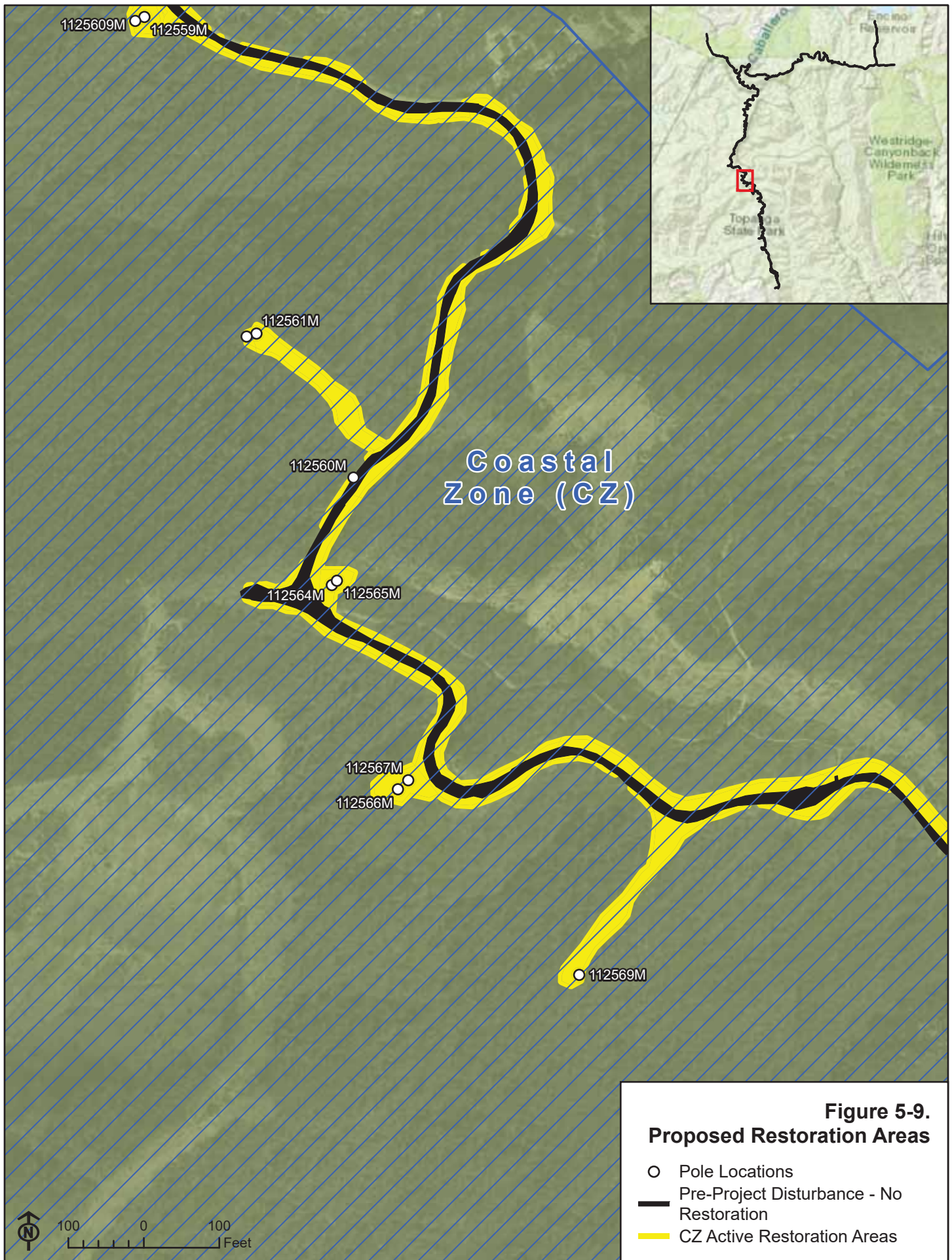


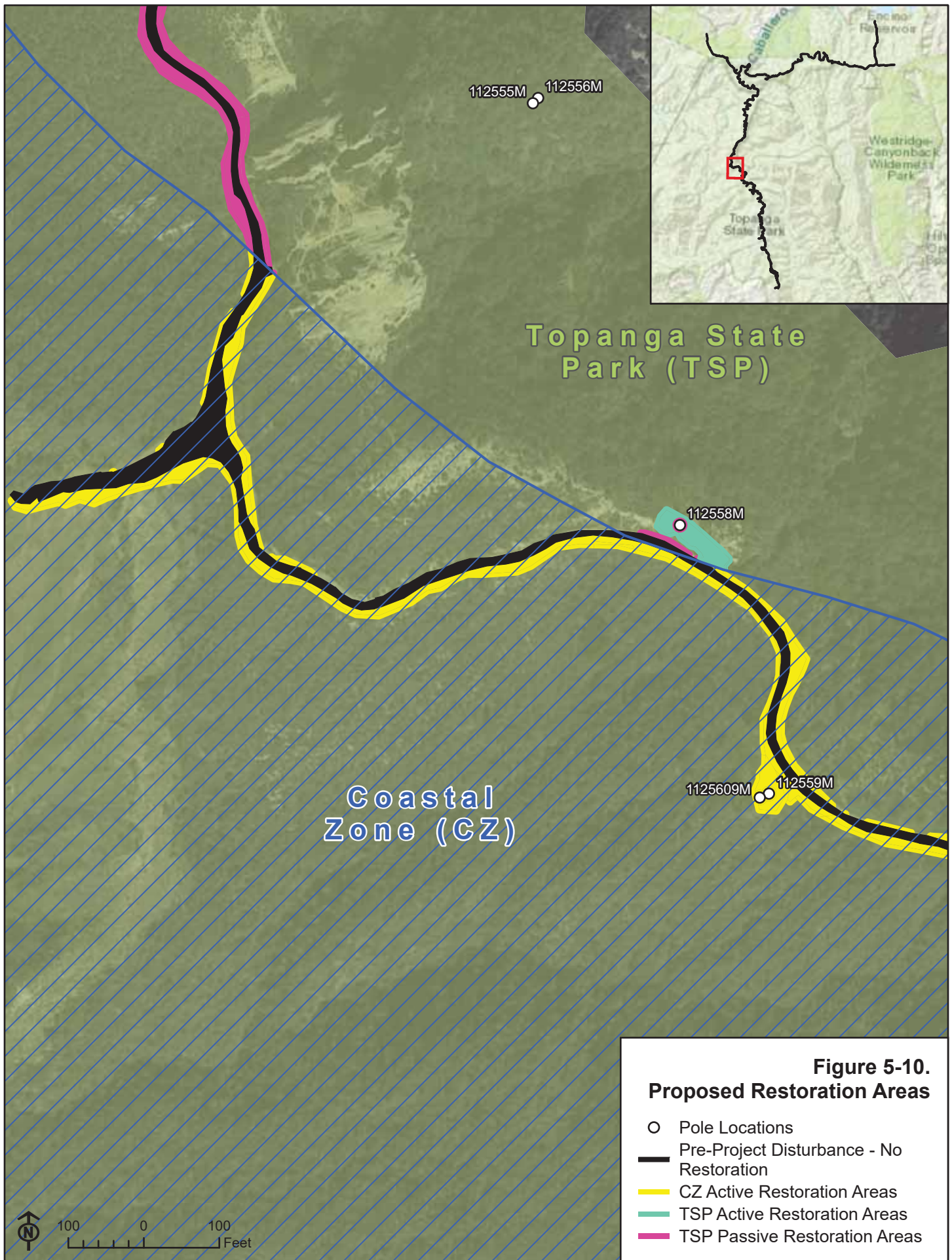


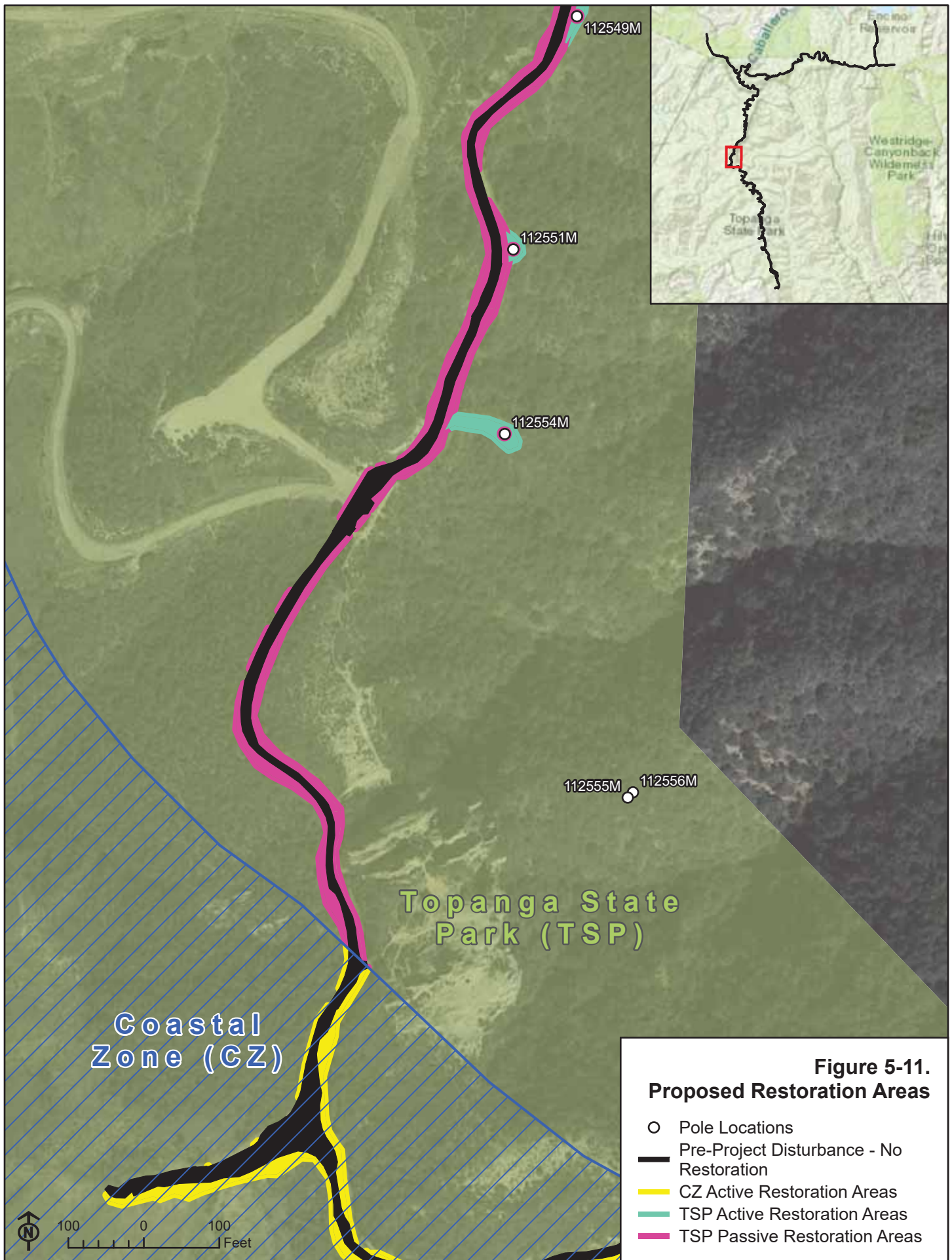


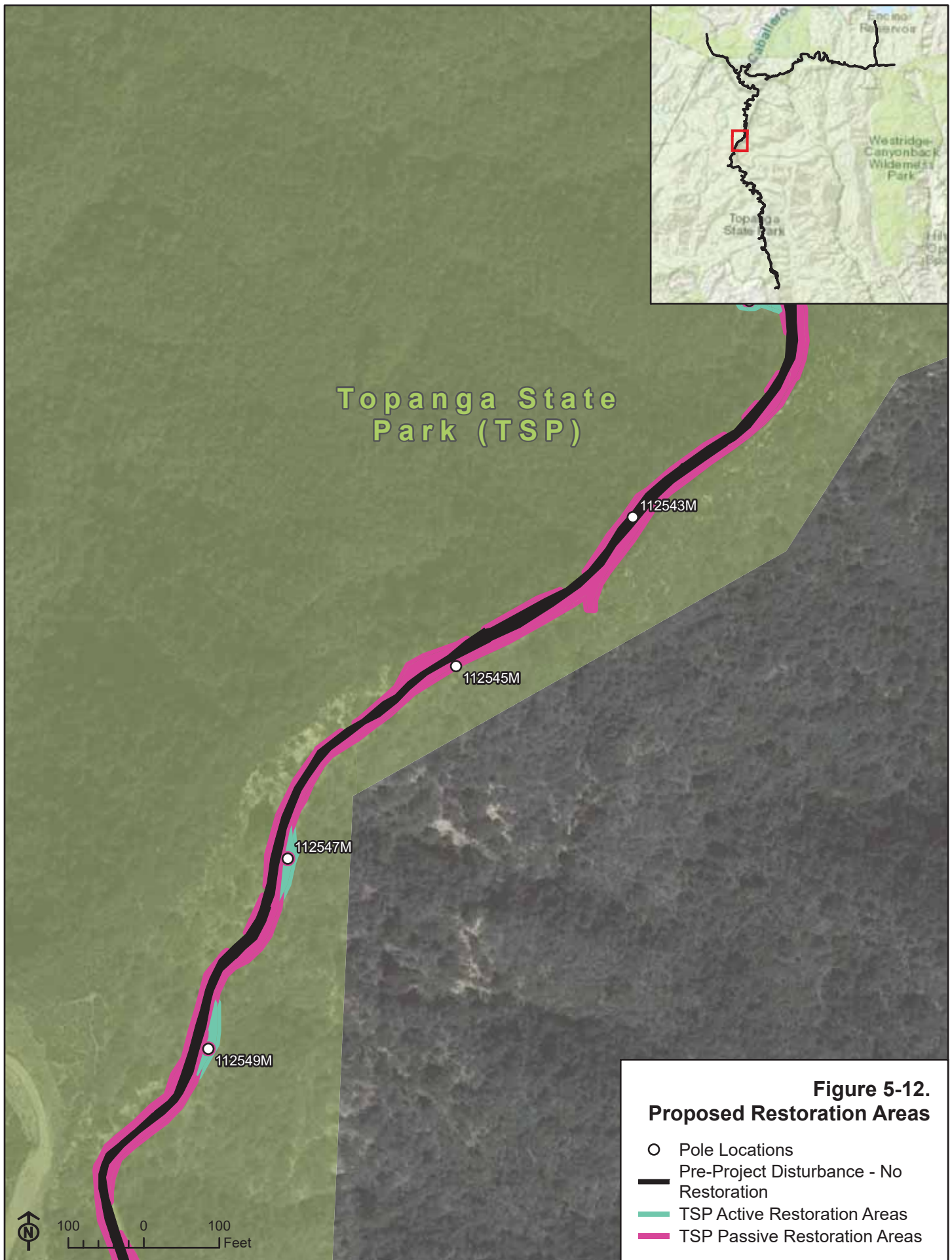


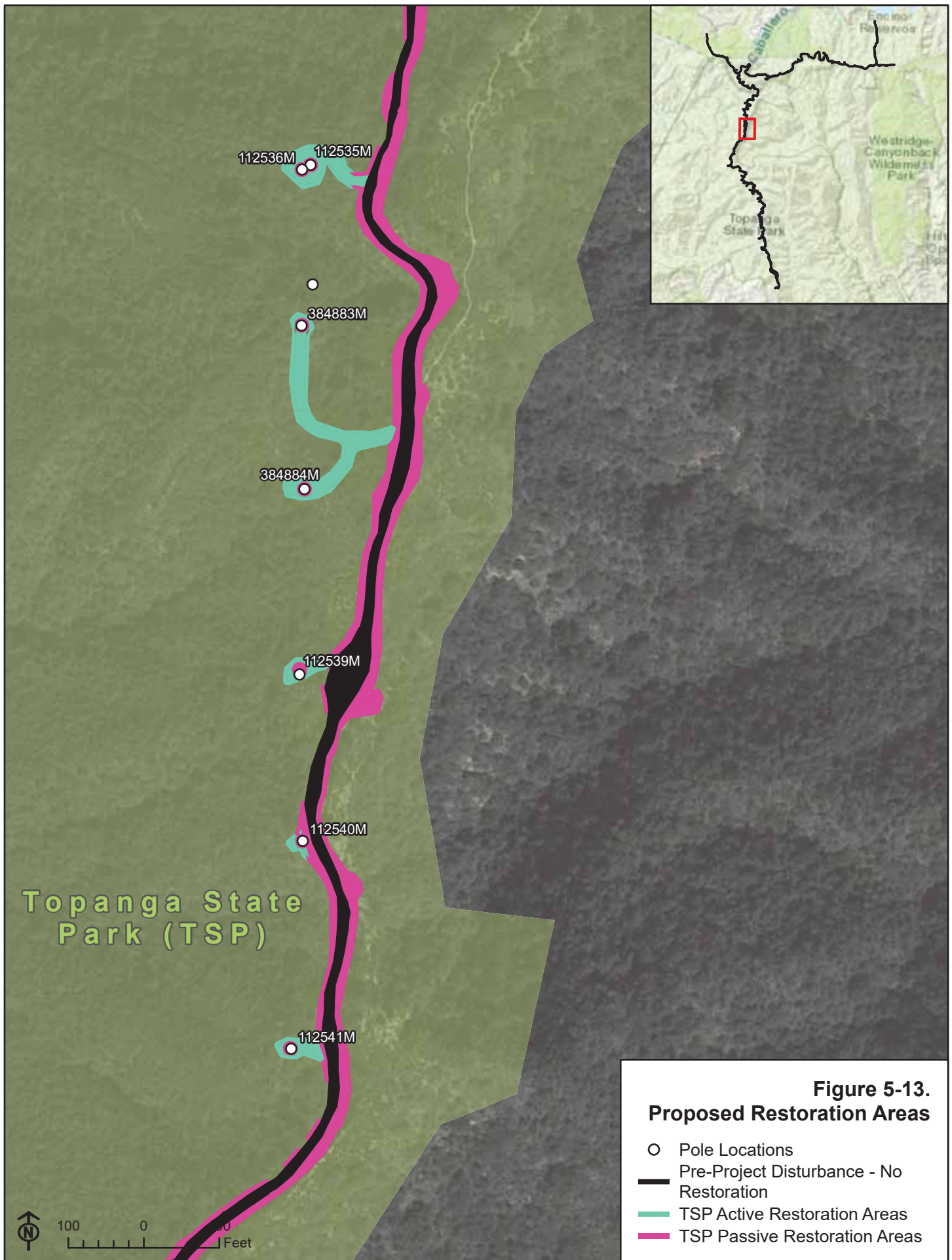


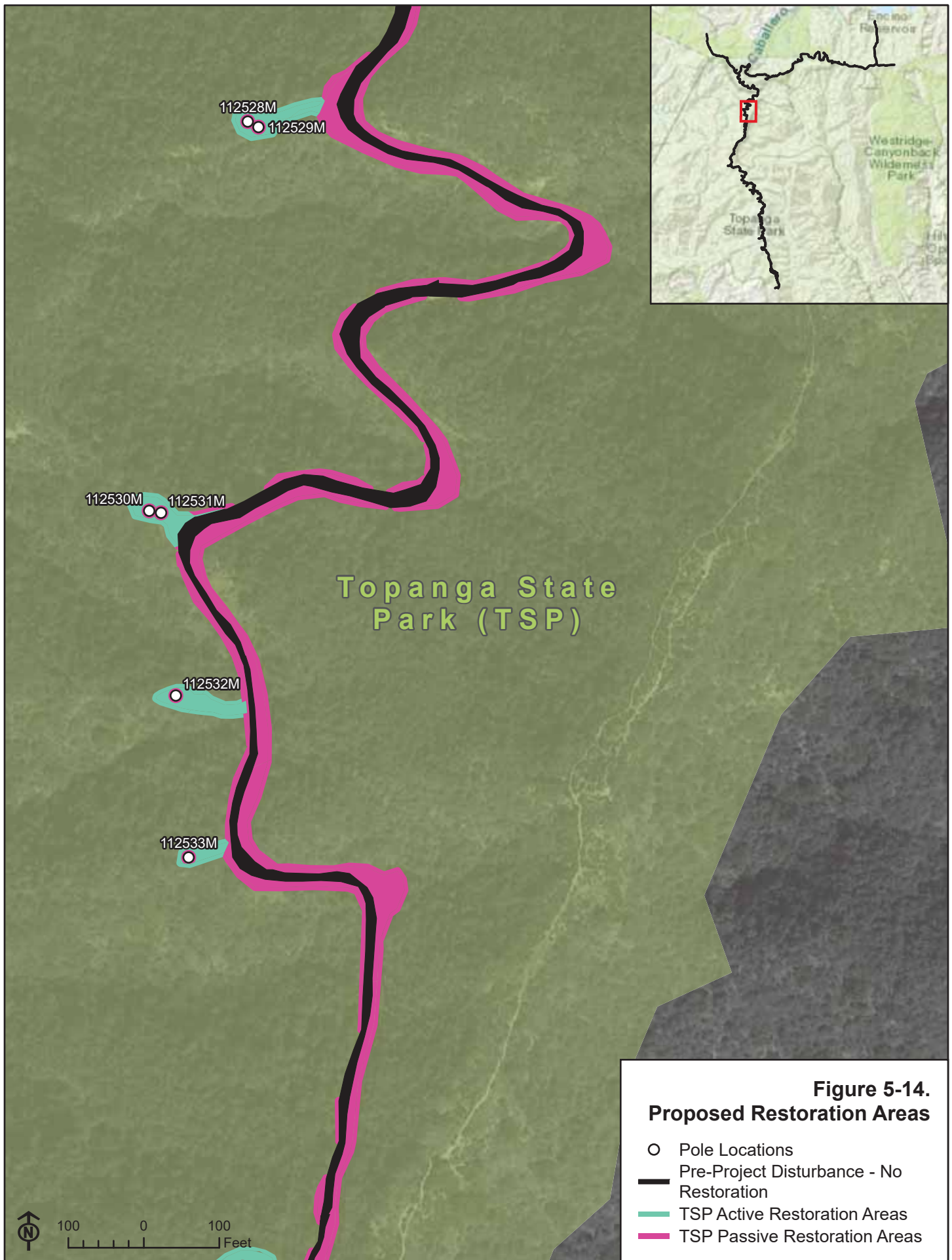


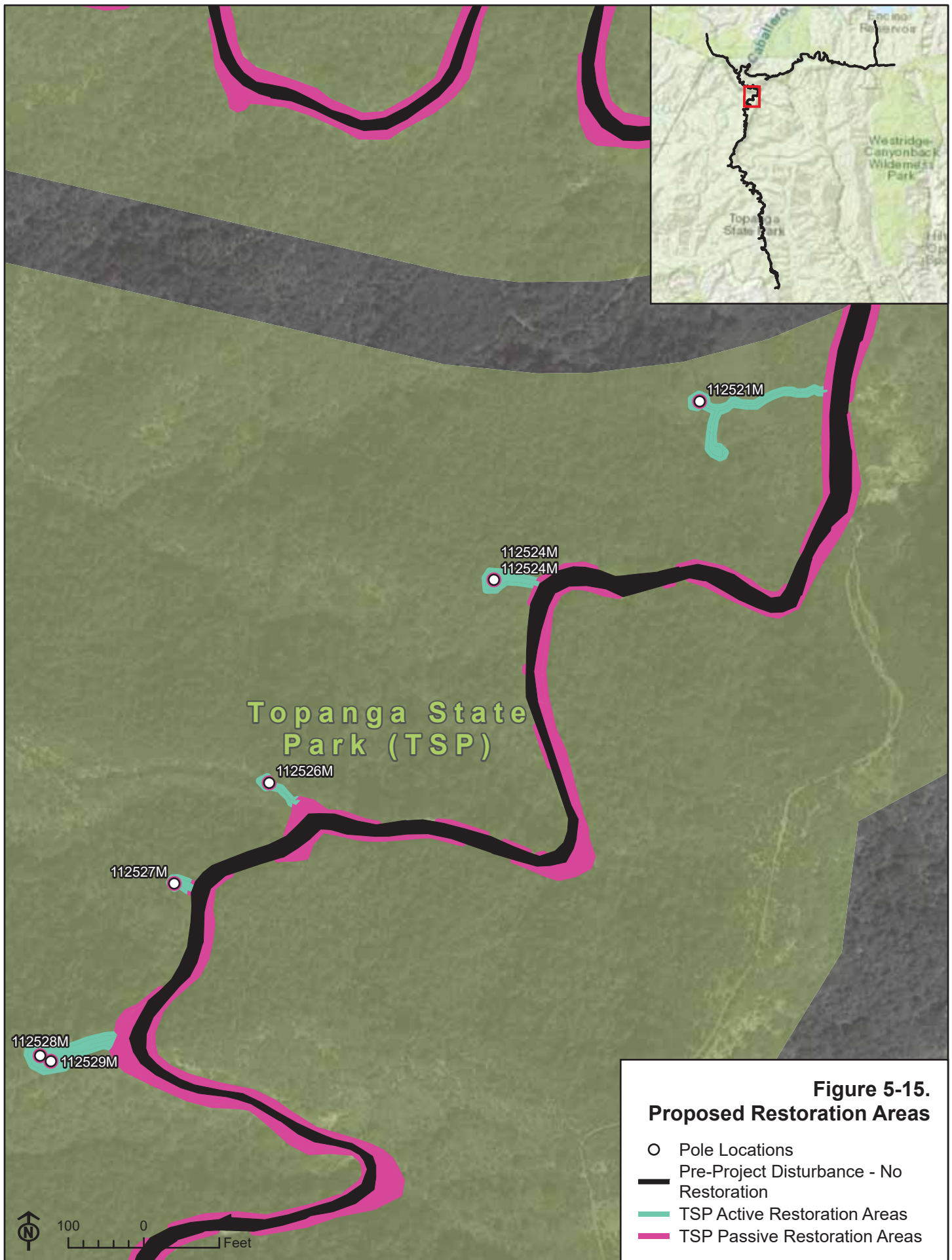


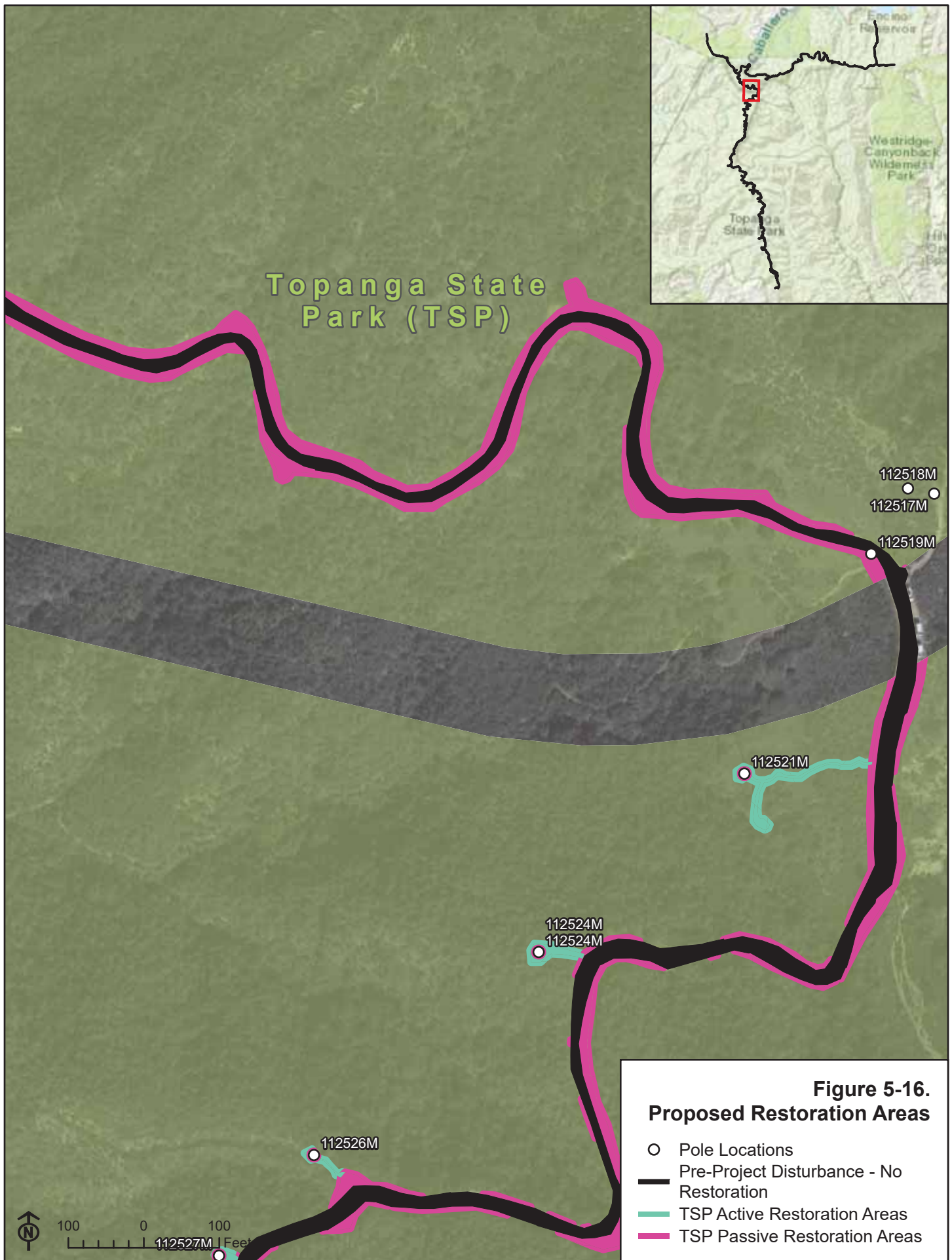


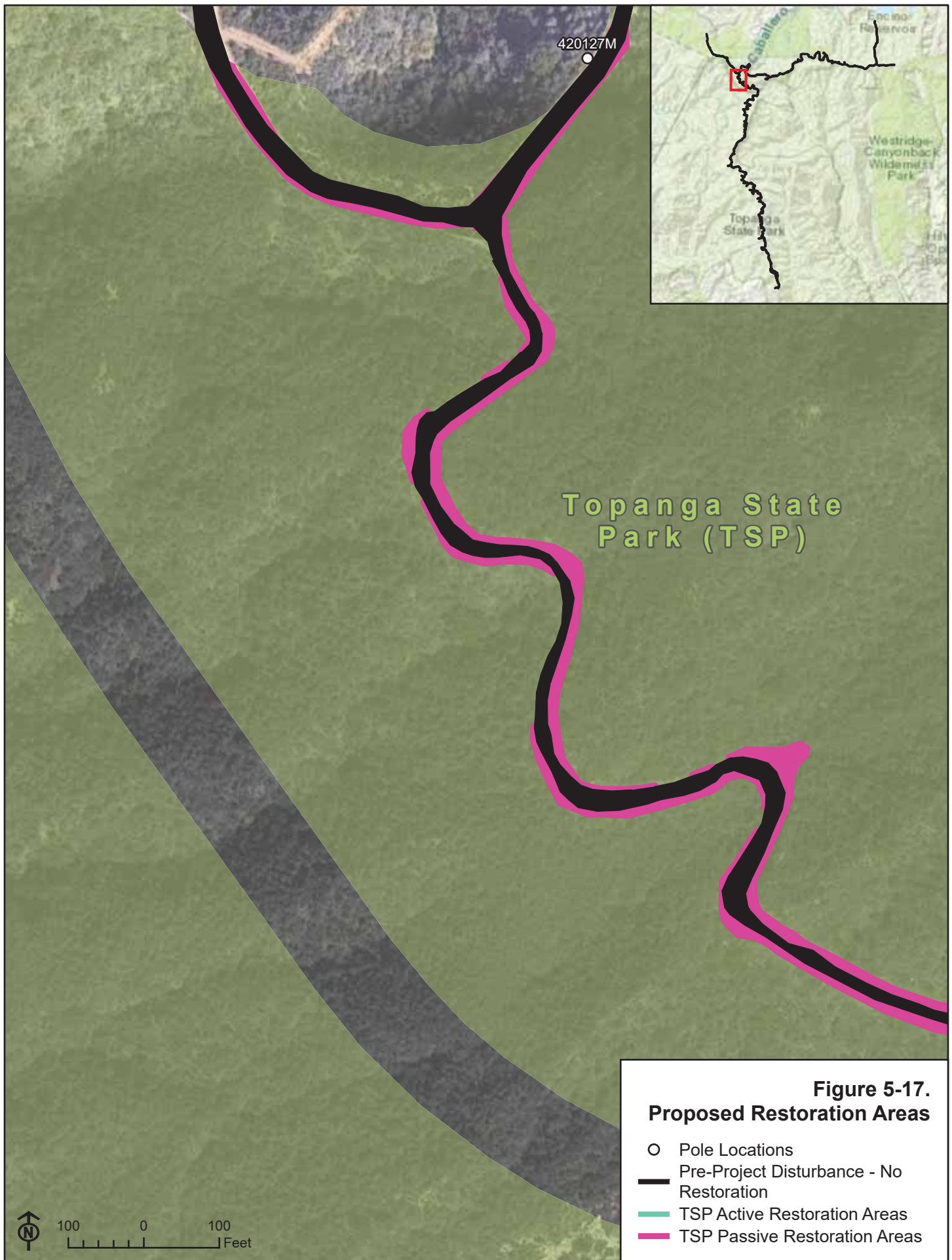


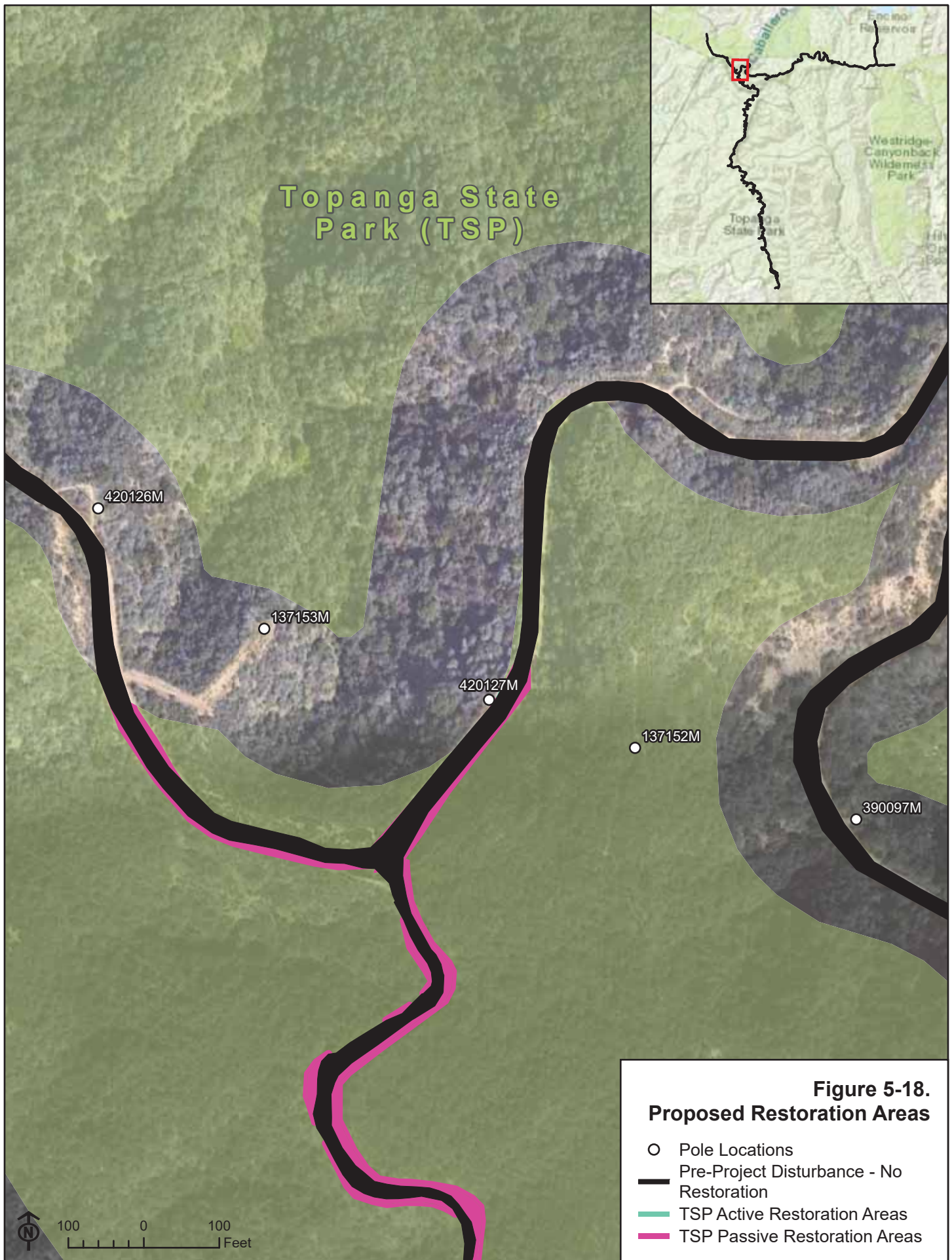




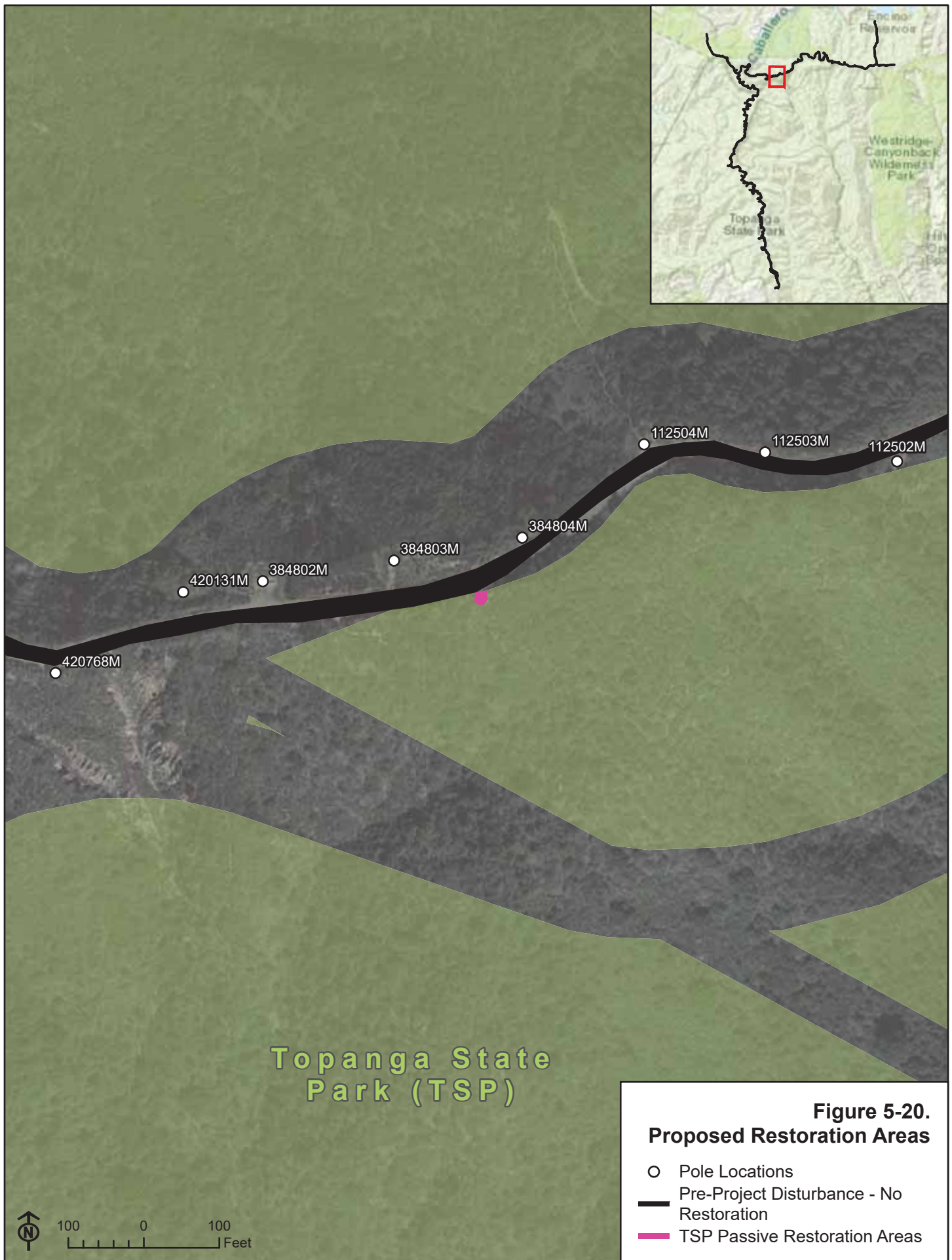


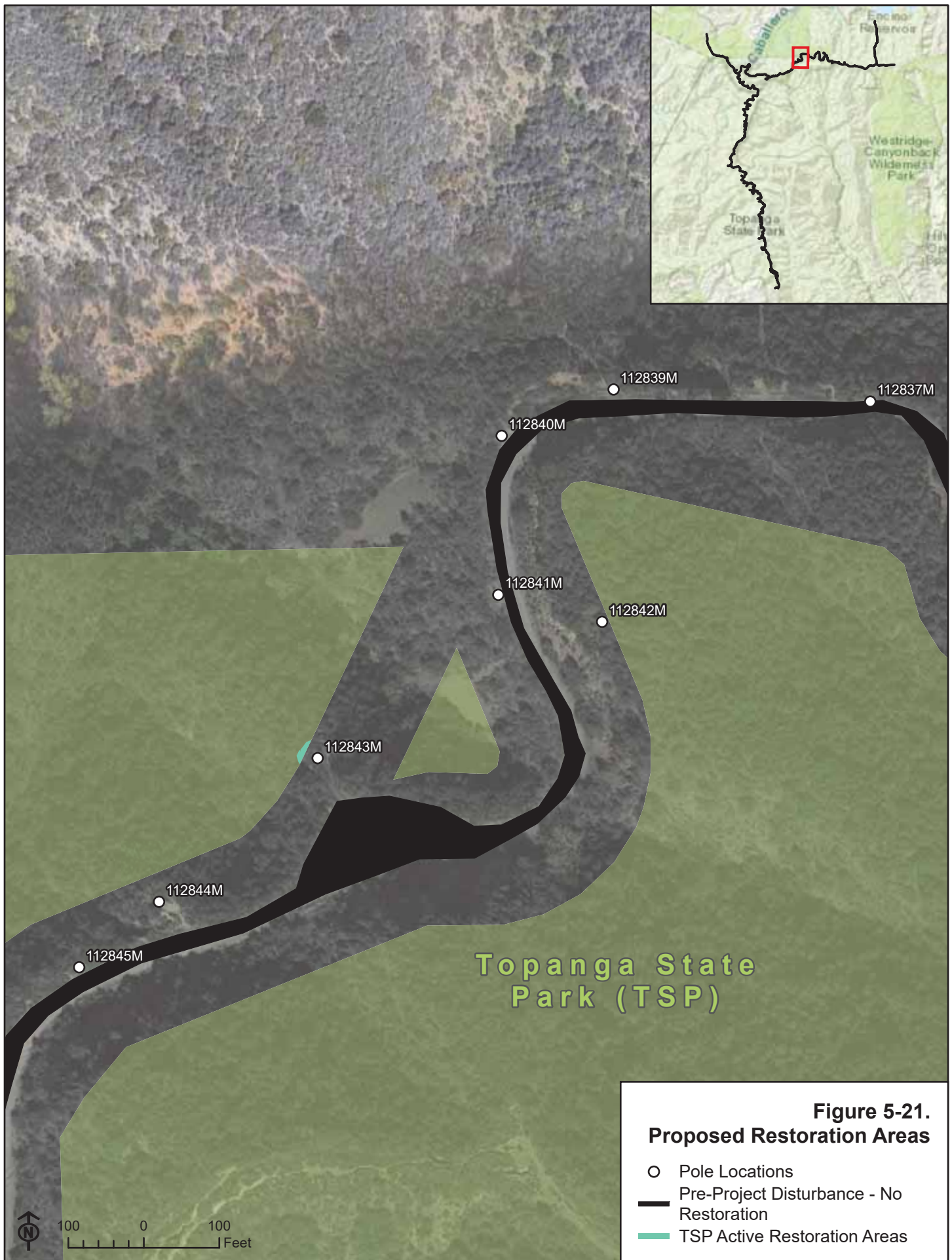












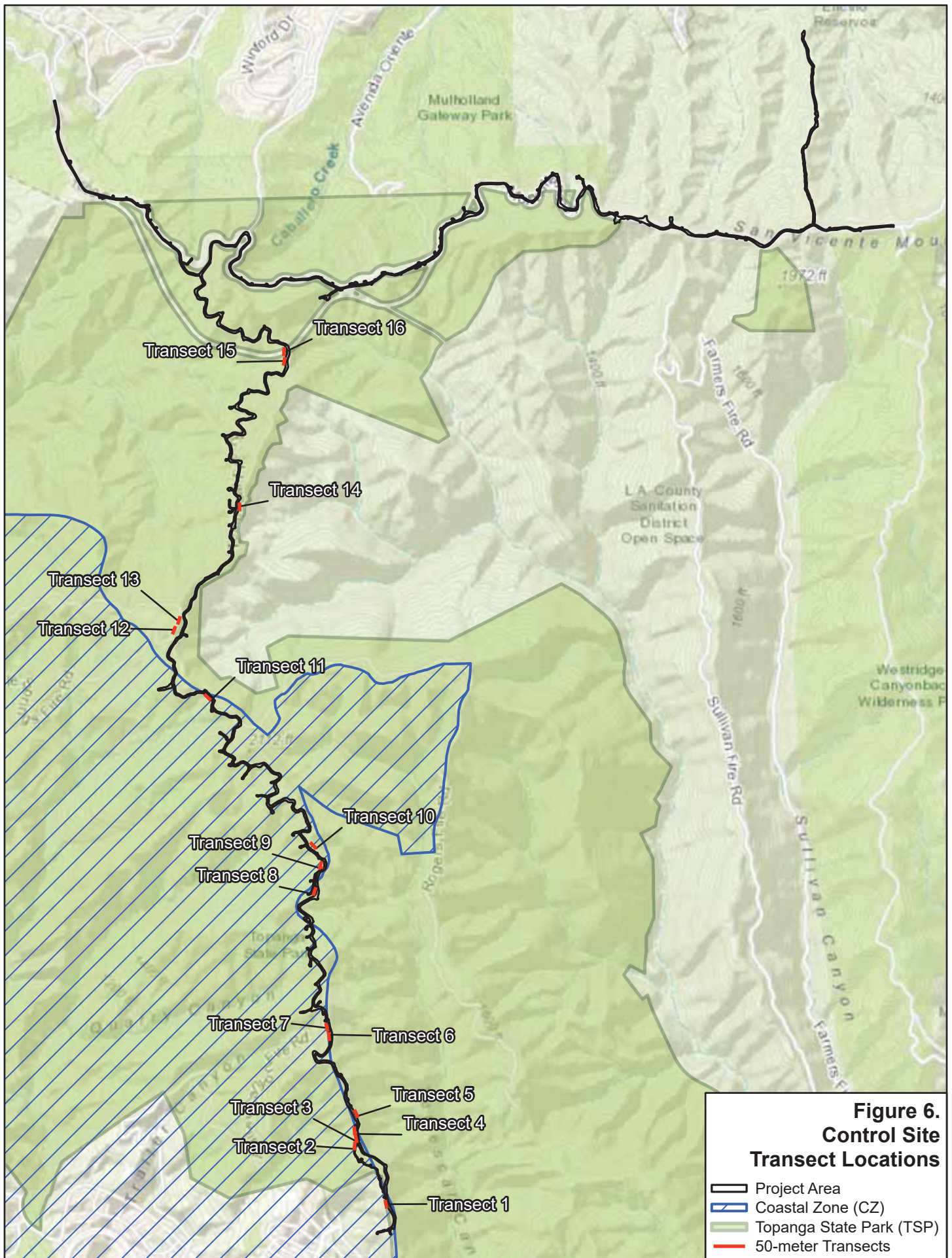


Figure 6.
Control Site
Transect Locations

Appendix A

Earth Movement and Erosion Control Plan



EARTH MOVEMENT PLAN

FOR

MAINTENANCE/CONSTRUCTION ACTIVITIES

California Coastal Commission

TEMESCAL RIDGE POWER POLE REPLACEMENT AND MAINTENANCE

Walter Rodriguez

Project Manager

Katherine Rubin

Environmental Manager

Michael Hanson

Environmental Specialist III

Table of Contents

	Acronyms	3
I.	Introduction	4
II.	Purpose.....	10
III.	Completed Earth Moving Work	11
IV.	Remaining Earth Moving Work.....	11
V.	Required Earth Moving Work for Future Pole Maintenance	13
VI.	List of BMPs.....	13
VII.	Bio Measures	17
VIII.	References.....	19
IX.	Appendices:	20
	Appendix A – BMP Maps, Pole Site Maps, and Pole Site Photos.....	21
	Appendix B – BMP Inspection Check List.....	58
	Appendix C – BMP Inspection/Maintenance Flowchart.....	61
	Appendix D – Training Records	63
	Appendix E – Remedial Grading Plans	65

List of Tables

Table 1 – Temescal Pole Replacement Project – Poles in the CCC Zone	7
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List of Figures

Figure 1 – Project Location.....	5
Figure 2 – Site Map	6

ACRONYMNS

Access Road – Temescal Canyon Fire Road
BIOs – Minimization and Avoidance Measures
BMP – Best Management Practice
CCC – California Coastal Commission
CPUC – California Public Utilities Commission
LADWP – Los Angeles Department of Water and Power
LAFD – Los Angeles City Fire Department
Plan – Earth Movement Plan
Project – Temescal Pole Replacement Project
QSP – Qualified Stormwater Practitioner
ROW – Right of Way
TSP – Topanga State Park

I. INTRODUCTION

The Los Angeles Department of Water and Power (LADWP) regularly inspects and assesses the health and status of its transmission and distribution systems to identify needed repairs and maintenance as well as compliance with State and Federal standards for electric safety. Specifically, existing structures are evaluated for structural integrity and potential damage or wear due to age, environmental factors, or vandalism. Age related wear and tear alone had identified the set of structures between the Pacific Palisades and Mulholland drive as needing replacement – the Temescal Pole Replacement Project (Project).

LADWP is also required to review its facilities and procedures for compliance with the California Public Utilities Commission (CPUC) fire-safety regulations. In light of recent devastating fires in California, including the Camp fire in Paradise and the Woolsey Fire in Malibu Canyon, the CPUC updated General Order 95, and Governor Jerry Brown signed SB 901 into law in 2018 to address the devastating consequences of the PG&E fire. The CPUC provided an updated fire threat map on January 19, 2018, which identified Topanga State Park (TSP) to be Tier 2 by the CPUC, as an elevated fire risk.

As a result of the new designation, the Project area became a priority area for pole replacement and deemed an emergency as the LADWP is required to replace the poles by January 1, 2020 (GO 95, Rule 18(A)(2)(ii)) to mitigate the very real threat of fire in the area. The current wooden poles within the Project area were installed between 1935 – 1955 and are past their useful service life. A number of poles are damaged, worn, and rotted. The Project intends to replace the aged and deteriorating wooden poles with new non-wood (i.e. steel) poles which are more resistant to high wind and fire threats. The new poles are rated to last approximately 100 years and will increase power system reliability. In addition, the new poles will be installed with raptor guards which are designed to eliminate the threat of bird execution and the resulting potential fire ignition threat. This Project will also improve existing fire breaks and increase fire safety.

The California Coastal Commission (CCC) jurisdiction lies within the TSP which is located within the Santa Monica Mountain Range. Figure 1 shows the Project location.

A portion of the Temescal Fire Road between Split Rock Trailhead and Hub Junction lies within the jurisdiction of the CCC. See Figure 2 for site map.

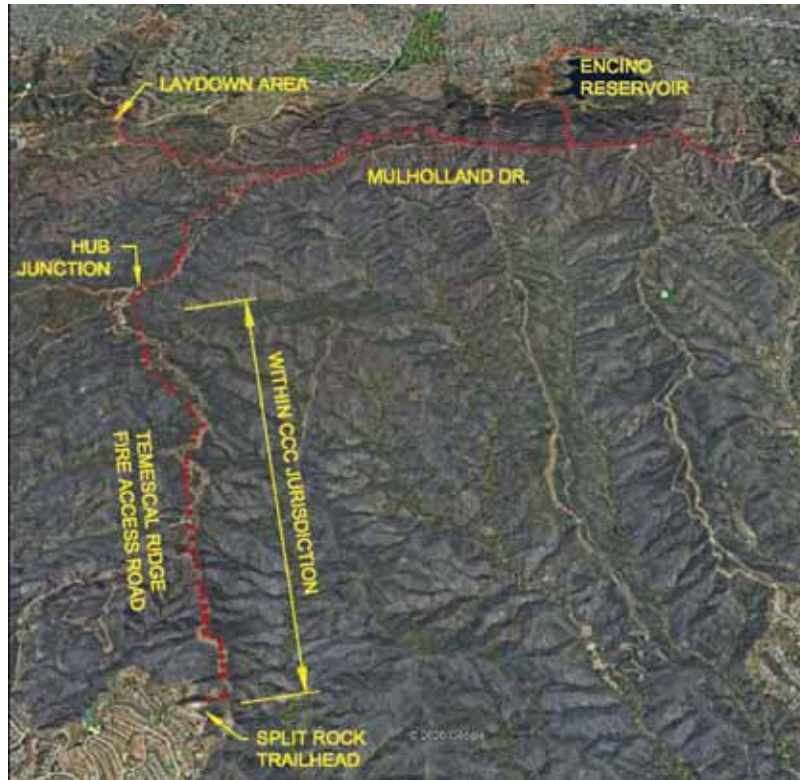


Figure 2 Site Map

The construction laydown area is located off the intersection of Mulholland Drive and Greenbriar Drive near the northwest limit of the project. The north-south access road through the project area is provided via various existing and maintained Temescal Canyon Fire Road (Access Road). The Project will be completed by LADWP and LADWP's contractor.

Table 1
Temescal Pole Replacement Project
Poles in the California Coast Commission Zone

Pole No.	Coordinates Lat and Long	Township and Range	Quad	Access
112559M	34.104211 -118.555959	T1S, R16W	Topanga	Truck or Helicopter
112560M		T1S, R16W	Topanga	Truck or Helicopter
112561M	34.103037 -118.555377	T1S, R16W	Topanga	Truck or Helicopter
112564M	34.105231 -118.556306	T1S, R16W	Topanga	Truck or Helicopter
112565M		T1S, R16W	Topanga	Truck or Helicopter
112566M	34.101404 -118.554862	T1S, R16W	Topanga	Truck or Helicopter
112567M		T1S, R16W	Topanga	Truck or Helicopter
112569M	34.100716 -118.554048	T1S, R16W	Topanga	Truck or Helicopter
112571M	34.099889 -118.553188	T1S, R16W	Topanga	Truck or Helicopter
417080M	34.099461 -118.552707	T1S, R16W	Topanga	Truck or Helicopter
112573M	34.099056 -118.552261	T1S, R16W	Topanga	Truck or Helicopter
112574M		T1S, R16W	Topanga	Truck or Helicopter
112575M	34.097834 -118.551084	T1S, R16W	Topanga	Truck or Helicopter
417081M	34.097208 -118.550585	T1S, R16W	Topanga	Truck or Helicopter
404102M	34.096201 -118.549869	T1S, R16W	Topanga	Truck or Helicopter

Table 1 -continued
Temescal Pole Replacement Project
Poles in the California Coast Commission Zone

404104M	34.095519 -118.54996	T1S, R16W	Topanga	Truck or Helicopter
395479M	34.092977 -118.55012	T1S, R16W	Topanga	Truck or Helicopter
395480M	34.092661 -118.550089	T1S, R16W	Topanga	Truck or Helicopter
395481M	34.092208 -118.550013	T1S, R16W	Topanga	Truck or Helicopter
395478M	34.091863 -118.549979	T1S, R16W	Topanga	Truck or Helicopter
395476M	34.091356 -118.54979	T1S, R16W	Topanga	Truck or Helicopter
395477M		T1S, R16W	Topanga	Truck or Helicopter
384797M	34.090339 -118.549517	T1S, R16W	Topanga	Truck or Helicopter
384791M	34.089434-118.549236	T1S, R16W	Topanga	Truck or Helicopter
384790M		T1S, R16W	Topanga	Truck or Helicopter
384792M	34.088453 -118.548943	T1S, R16W	Topanga	Truck or Helicopter
384793M		T1S, R16W	Topanga	Truck or Helicopter
112610M	34.082683 -118.546848	T1S, R16W	Topanga	Truck or Helicopter
112611M	34.082198 -118.546801	T1S, R16W	Topanga	Truck or Helicopter
112613M	34.081341 -118.546688	T1S, R16W	Topanga	Truck or Helicopter
112614M	34.081037 -118.546137	T1S, R16W	Topanga	Truck or Helicopter

Table 1 -continued
Temescal Pole Replacement Project
Poles in the California Coast Commission Zone

112617M	34.079784 -118.545368	T1S, R16W	Topanga	Truck or Helicopter
112618M	34.079336 -118.545103	T1S, R16W	Topanga	Truck or Helicopter
112619M	34.078806 -118.545103	T1S, R16W	Topanga	Truck or Helicopter
112620M		T1S, R16W	Topanga	Truck or Helicopter
112621M	34.077642 -118.54482	T1S, R16W	Topanga	Truck or Helicopter
112622M		T1S, R16W	Topanga	Truck or Helicopter
356250M	34.077595 -118.545842	T1S, R16W	Topanga	Truck or Helicopter
369211M	34.076795 -118.546125	T1S, R16W	Topanga	Truck or Helicopter

 Highlighted pairings represent dual pole locations that will be replaced by a single pole

All new poles will be set by helicopter. All other access to the pole site will be by foot traffic only. Trucks will be utilized to move personnel around the construction area but will not be used to access pole set locations or driven on access paths.

II. PURPOSE

The purpose of this Earth Movement Plan (Plan) is to identify and describe A) ground activities that have occurred as a result of the Project and B) any earth movement activities that will be needed to complete the Project including directives and Best Management Practices (BMPs) for these activities and C) any future anticipated activities including BMPs and erosion controls that will be required for inspection and maintenance of the poles.

As mentioned in the introduction, the Project is needed to replace worn out and damaged poles within the high fire risk area while minimizing the construction footprint and impact to the environment. The existing overhead power lines provide power to the Pacific Palisades located south within the TSP. Therefore, the pole replacement must be completed without de-powering the power lines. Replacement of the poles in the CCC will be facilitated mostly by helicopters in order to minimize vehicle access requirements. As mentioned previously, the proposed new poles are non-wood with features designed to reduce fire risk.

Specifically, the proposed Project includes replacing the existing wooden power poles with new tubular non-wood poles within an existing LADWP 34.5 kilovolt (kV) sub-transmission line right-of-way (ROW) located throughout the Santa Monica Mountains. The existing wooden poles are past their useful service life. Due to their age, material (wood), and location (fire prone area of the Santa Monica Mountains), replacing the existing poles with new non-wood poles would make the line more resistant to high wind and fire threats.

A. Earth Movement To-Date

Areas of disturbance that have occurred include smoothing the existing main access road prism, the opening of some existing roadside berms in order to access the pole locations and the minor movement of soil as vegetation was crushed and pushed out of the way to provide access on the short spur roads to the pole locations. These actions are discussed in Section III, Completed Earth Moving Work.

B. Activities needed to complete the Project

The existing berms will be removed and the spur road access areas will be allowed to revegetate and return to pre-project conditions. These actions are discussed in Section IV, Remaining Earth Moving Work.

C. Future Activities

For any soil disturbance that may be necessary in the future for pole access in the event of required maintenance, directives as outlined in Section V, Required Earth Movement for Future Pole Maintenance will be followed to prevent the loss of soil down slope when moving soil and to ensure that all material is conserved in order to be replaced. Maintenance activities will require prior authorization from the California Coastal Commission and all permit applications will be completed, submitted and approved prior to any maintenance work requiring earth movement activities.

III. COMPLETED EARTH MOVING WORK

The fire access road is typically maintained by the Los Angeles City Fire Department (LAFD) and the TSP. LADWP has not maintained the access road in the past. However, in preparation of this Project, on the ground activities that took place included clearing vegetation along the existing main fire access road prism (access road). The work began by creating a safe access to the poles. Starting with the access road, vegetation was cleared and erosional features were smoothed out by making shallow cuts into the erosional features and rolling over the soil in order to create an even surface on the road. In most cases, the displaced vegetation and any excess soil were placed to the side of the road. After the main access road was cleared allowing for safe access, the access path between the access road and the pole site was cleared of vegetation. If an existing berm along the edge of the access road obstructed the access path to the pole, a section of the berm was cut in order to make an opening for safe access. The removed portion of the berm was either placed adjacent to the opening or taken to an existing spoil pile located outside of the CCC and TSP area. The improvement to the access path included clearing existing vegetation. The action of clearing vegetation did lightly disturb the ground surface. The next step was to prepare the replacement hole for the new pole; in some cases, holes were dug near the existing poles in preparation for the new pole installation. These new holes were covered with plywood and warning tape was wrapped around the area for safety. A total of 30 pole locations are within the CCC jurisdiction.

The estimated amount of disturbance is 7.2 acres. See Figures 1 to 14 in Appendix F for locations of disturbance. In order to estimate the disturbance areas, aerial images recorded on November 19, 2018 and August 19, 2019 available from Google Earth were used to provide an estimate of the extent of disturbance within the CCC jurisdiction. Figures 1 to 14 illustrate the estimated limit of disturbance. Figures 25 to 28 show the same limit overlaid on top of an aerial image dated November 19, 2018 for comparison. The following calculation was performed to estimate the volumes of earthwork which included erosion feature maintenance, access path, and vegetation clearance. Assuming a 2" thick layer of access road was disturbed, the total volume of earth affected equals 1936 cubic yards. Assuming a 1" thick layer for access path disturbance, yields 193 cubic yards. Based on the assumptions, the total amount of disturbance for this project within the CCC area is estimated to be 2,219 cubic yards.

IV. REMAINING EARTH MOVING WORK

With the main access road prism improved and the access paths reestablished, no further access improvements are anticipated. Some pole locations still need holes to be dug for the new pole installation, this work will be completed using hand tools by field crews who will access the sites by foot. Some pole locations with holes already dug out will require repair if the hole has collapsed. The new pole location holes will be dug at 2.3 feet in diameter and 9 feet deep. Each hole will generate approximately 1.4 yd³ of material that will in turn be used to fill the new hole once the new pole is placed, and to fill the old hole when the old pole is removed.

Based on the Remedial Grading Plans (Appendix E), the main road will be returned to preconstruction conditions, including removal of berms, and reducing the road to a one lane road width of approximately 12 feet. Areas where the berms are removed will be graded with a 2% out slope to shed water from the roadway. Additionally, where the road width exceeds 12 feet in width, the area in excess of 12 feet will be revegetated according to the revegetation plan. Erosion and sediment control Best Management Practices (BMP) will be used during the road work. These BMPs will consist of sterile wattles to be placed as necessary on downslope areas to control runoff until the areas are stabilized. In addition, water bars will be used along the road as necessary to control runoff on steeper slope areas.

All road work will be conducted after a nesting bird survey is completed and all work will be conducted with bio monitors present during the work.

Site specific activities are identified in Appendix A for each of the poles in the CCC boundary. Many of these pole sites have completely revegetated from the original ground disturbance conducted and it is proposed that these sites will not undergo any further earth movement work as any new earth work would end up removing this regrowth and cause more harm than good. The sites will remain as is and all access for pole replacement will be by foot traffic only.

There are two locations where some erosion damage has occurred at areas where the berms were previously breached. These locations are Pole 384797M, and Pole 395480M. It is proposed that these locations will see earth work that will restore the erosional scar. In these cases it is estimated that 3 -5 cubic yards of material would be required to repair the erosional damage.

During the pole replacement activities, sediment and erosion BMPs will be implemented as necessary. to minimize soil erosion on the exposed surfaces around the pole locations, and the access paths. Figures in Appendix A show typical pole location areas with and without access paths and the proposed erosion control layout. Generally, sterile wattles will be installed around the access path boundaries and on downslopes away from the pole installations to protect against erosion as necessary. Table 1 identifies the pole locations within the CCC boundary. BMP's will remain in place for the duration of the project and after project completion until the 70% revegetation requirement of the storm water permit is met and the storm water permit is terminated. In most cases BMPs will not be necessary as no earthwork will take place and not result in sediment transport conditions. Existing vegetation will be relied upon during foot access to the sites.

In addition to the erosion control devices, a qualified stormwater practitioner (QSP) or a designated person will keep track of storms by obtaining weekly weather forecasts and performing weekly BMP inspections. The QSP or a designated person will also inspect the BMPs before, during, and after qualified storm events. The inspection checklist is in Appendix B.

At the end of the project any exposed area within the access paths will be stabilized and actively re-vegetated. Vegetation restoration is to be done following the guidelines and procedures outlined in the Temescal Ridge Pole Replacement Project Resource Management Plan.

V. REQUIRED EARTH MOVEMENT FOR FUTURE POLE MAINTENANCE

LADWP requires access to all the poles for inspection and maintenance. Required inspections include an annual visual inspection which can be accomplished as a drive by on the main access road. In addition, a detailed inspection will be required once every five years. If, during the course of periodic pole inspections, the need for unplanned maintenance or emergency pole replacement is identified, authorization from the CCC would be sought and obtained prior to any work on the poles.

Proposed actions for future maintenance work would include the following procedures for vegetation trimming and site access. Prior approval from the CCC would be obtained before any work would commence.

For vegetation that may be trimmed or removed, the material shall be collected and either mulched or cut into small sizes and then broadcast over the affected area to provide ground cover that would further protect natural vegetative cover and prevent erosion from occurring.

For any access that would require soil disturbance in order to safely access the pole site for maintenance, all soil material would be preserved and stored for replacement after the maintenance activities have been completed. Soil will be prevented from being downcast over the sides of the slope in order to not lose material necessary for restoration of the site and to protect down slope vegetation from becoming buried by the spoils.

VI. LIST OF BMPs

Selected sediment and erosion control BMPs for this Project include the following:

A. Erosion Control

EC-1 – Scheduling

Scheduling activities to coincide with low threat time periods of wet weather and biological impact will help to reduce overall impacts to the construction area. By reducing vehicle traffic during wet weather conditions, less erosion and sediment control activity will be needed and the roadways will be protected from wheels digging into wet and loose soil.

Work will not be conducted during heavy rains or storm events. Prior to finishing work before a storm event, the project site will be stabilized to reduce the potential for pollutants to leave the area (e.g., cover stockpiles, cover waste containers, secure any BMPs).

EC-2 – Preservation of Existing Vegetation

By preserving as much existing vegetation as possible, less erosion will occur due to stabilized soil not being exposed to direct stormwater impact. This will reduce

erosion concerns as stormwater will impact already established vegetation as opposed to bare soil.

B. Sediment Control

SE-5 – Fiber Rolls – (Sterile Wattles)

Fiber rolls will be used as perimeter control around construction activity areas to control the movement of sediment off of the construction areas and to act as a barrier to runoff flows. The fiber rolls will help to minimize runoff speed and collect sediments in the upstream side of the runoff flow preventing downstream movement of loose soils.

LADWP and Project contractors will implement measures to prevent sediment or materials deleterious to fish and wildlife resources from being deposited into or placed where they could be washed into the waterway. These measures may include, but are not limited to, the installation of sediment curtains, sterile straw wattles, and/or silt fences depending on what is needed and appropriate for site-specific conditions. Project construction activities will be avoided during rain events.

C. Wind Erosion Control

WE-1 – Wind Erosion Control

Any temporary stock piles of soil will be covered to prevent distribution by wind. Coverings will be in place whenever stock piles are not actively being added to or removed from.

D. Tracking Control

TC-1 – Stabilized Construction Entrance/Exit

Stabilized construction site entrance/exit features will be used to control the movement of mud and soil debris from the laydown yard to the public streets when vehicles are moving in and out of the facility. No additional stabilized areas will be utilized in the construction zone as all access points are along dirt fire roads.

E. Non-Storm Water Management & Material Management

NS-1 – Water Conservation Practices

Use of water throughout the construction area will be limited to dust control on the access roads as necessary. Water trucks will be utilized for dust control in areas of earthmoving and vehicle traffic. No other waste use is anticipated during construction.

NS-9 – Vehicle and Equipment Fueling

Fueling of vehicles will be limited to a designated location at the laydown yard and will not occur throughout the project area. The fueling location will be isolated to prevent leaks and spills from leaving the immediate vicinity and a spill kit will be available for emergency use.

NS-10 – Vehicle and Equipment Maintenance

LADWP and Project contractors will check and maintain on a daily basis any equipment or vehicles driven or operated within or adjacent to a waterway to prevent the leaking of oil or other materials that could be deleterious to fish or wildlife resources. LADWP and Project contractors will not perform any equipment maintenance within or near any waterway where oil or other materials deleterious to fish and wildlife resources could enter the waterway under any flow conditions. Drip pans or oil-absorbing mats will be placed under stored vehicles or equipment at the project site. Drip pans will be cleaned as necessary to maintain their effectiveness. All equipment and vehicles will be stored in the staging area fitted with appropriate perimeter controls (e.g., fiber rolls). No vehicle or equipment washing will be done onsite.

F. Waste Management and Material Pollution Control

WM-1 – Material Delivery and Storage

Material delivery and storage will only take place at the main laydown yard and only during working hours. This will ensure that all material is properly received and stored. Materials will be housed appropriately according to type and provided with the necessary protection from stormwater as needed. Chemicals will be stored in appropriate containers and under a roof when possible.

WM-2 – Material Use

All materials will be used in their proper and appropriate method to protect the environment from spills, misuse, or damage.

WM-3 – Stockpile Management

All stockpiles will be protected from storm water runoff by creating a perimeter using sandbags or fiber rolls. Stockpiles will be covered if there is a 50% chance of rain forecasted or windy conditions to prevent wind erosion. A perimeter of fiber rolls will be placed around the staging area.

WM-4 – Spill Prevention and Control

All LADWP operators and Project contractors will carry a suitable oil spill containment kit and be trained in its use. Personnel will follow existing procedures on the appropriate action to take when a spill occurs. Spills of any type will be cleaned immediately. If absorbent is used for spills, it will be removed promptly and in a proper manner. On-site supervisor will be notified of any spills, in case emergency response agencies or regulatory agencies need to be notified.

WM-5 – Solid Waste Management

All materials will be stored in the staging area when not in use to minimize the potential for any pollutants to leave the project site. Diesel fuel, oil, hydraulic fluids, and other petroleum products and chemicals will be stored in water-tight containers and covered to prevent containers from coming in contact with rainwater, or stored in secondary containment (e.g., spill berms, decks, spill containment pallets). Waste containers (e.g., dumpsters or trash receptacles) must be covered during storm events and windy conditions to prevent loose trash or debris from being transported offsite by water or wind. Hazardous waste (e.g., anti-freeze, hydraulic fluids, gasoline, diesel fuel, waste oil) will be stored in sealed containers, provided cover or secondary containment, and labeled. Hazardous waste will be disposed of in

accordance with the manufacturer's recommendations and applicable local, state, and federal requirements.

WM-9 – Sanitary / Septic Waste Management

Portable toilets will be located upwind and uphill, located away from any waterways. Portable toilets will be secured to prevent tipping during windy conditions, and contained to prevent any spills or leaks from discharging (e.g., containment tray placed under the portable toilet).

VII. Draft BIO MEASURES

Minimization and avoidance measures (BIOs) will be will be implemented to ensure environmental protection from the remaining Project activities.

BIO-1. All project personnel shall be informed regarding the biological constraints of the project by participating in a worker environmental awareness program. The program shall consist of a presentation that includes a discussion of the biology of the habitats and species present in the project area. The program would include information about the distribution and habitat needs of any special-status species that may be present, in particular Braunton's milk-vetch, legal protections for those species, penalties for violations, and project-specific measures to protect such species. Upon completion of the training program, personnel shall sign a form stating they have attended the training program and understand all protection measures. Copies of program materials would also be maintained at the staging yard for workers to reference as needed, and for personnel new to the project and requiring training.

BIO-2. The project limits shall be marked on project maps provided to the construction contractor(s), and areas outside of the project limits shall be designated as "no construction" zones. A construction manager shall be present during all construction activities to ensure that work is limited to designated project limits. During construction, construction workers shall strictly limit their activities, vehicles, equipment, and construction materials to the designated construction limits, staging areas, and routes between the construction limits and staging areas.

BIO-3. During construction, all equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur at the designated staging yard on level surfaces to avoid runoff into adjacent natural habitats. Contractor equipment shall be checked daily for leaks prior to operation and repaired as necessary. "No-fueling" zones shall be designated on construction plans.

BIO-4. During construction in areas that do not require excavation or grading, vegetation shall be trampled or trimmed instead of completely removed.

BIO-5. Disposal or temporary stockpile of brush, soils, or other debris will avoid native vegetation communities and shall be located in disturbed areas presently lacking native vegetation and delineated on grading plans.

BIO-6. Work areas along the pole alignment and within the staging yard shall be kept as clean of debris as possible to avoid attracting predators of sensitive wildlife. All food-related trash items shall be enclosed in sealed containers and removed daily.

BIO-7. In order to avoid unnecessary impacts, should any non-listed wildlife species be found within the property, a qualified biologist shall relocate them outside of the project areas or they shall be avoided and allowed to leave the project area on their own volition.

BIO-8. A qualified biologist shall monitor construction during project activities within the Braunton's milk-vetch area as needed. The biological monitor shall ensure that construction workers stay within the designated footprints of the construction work zones to avoid trespass on foot or in vehicles into adjacent areas.

BIO-9. If it is not possible to avoid the nesting bird season (generally February 1 through September 15), the following measures shall be employed to avoid impacts to special-status and common bird species:

- o A pre-construction nesting survey shall be conducted by a qualified biologist within 3 days prior to the start of project activities at specified locations to determine whether active nests are present within or directly adjacent to the work areas. All nests found shall be recorded.
- o If construction activities must occur within 300 feet of an active nest of any passerine bird or within 500 feet of an active nest of any raptor, with the exception of an emergency, a qualified biologist shall monitor the nest on a weekly basis, and the construction activity shall be postponed until the biologist determines that the nest is no longer active.
- o If the recommended nest avoidance zone is not feasible, the qualified biologist shall determine whether an exception is possible and obtain concurrence from the resource agencies before construction work can resume within the avoidance buffer zone. All work shall cease within the avoidance buffer zone until either agency concurrence is obtained or the biologist determines that the adults and young are no longer reliant on the nest site.

BIO-10. The project proponent would collect seeds from on-site Braunton's milk-vetch for purposes of reseeding the disturbance area to replace specimens impacted by the project. Alternatively, the proponent would coordinate with USFWS and CNPS to determine the most appropriate means of replacing the specimens already impacted.

VIII. References

California Stormwater BMP Handbook, Construction Projects

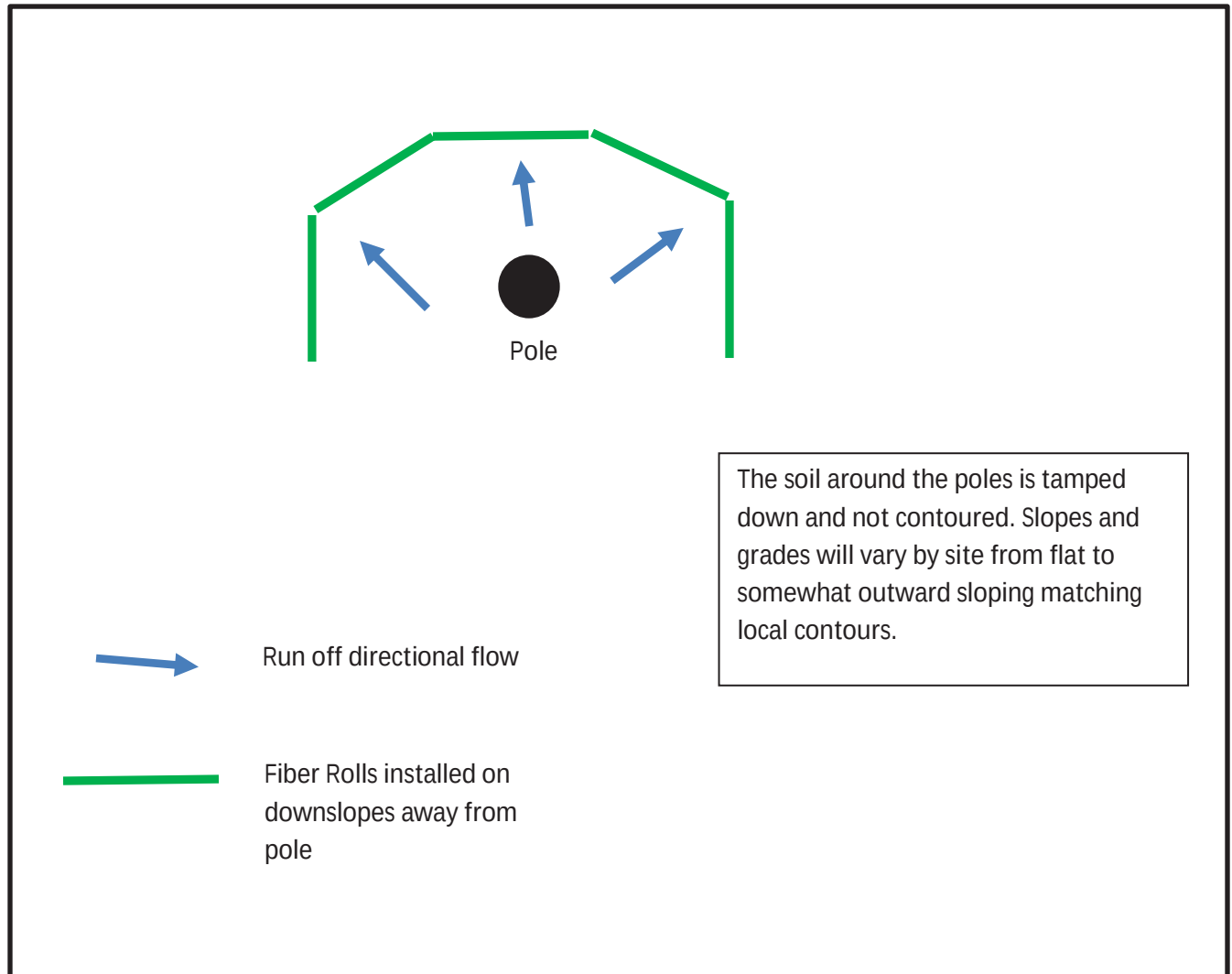
LADWP Mitigation Plan (Avoidance, Minimization and BMPs)

Temescal Ridge Pole Replacement Project Resource Management Plan

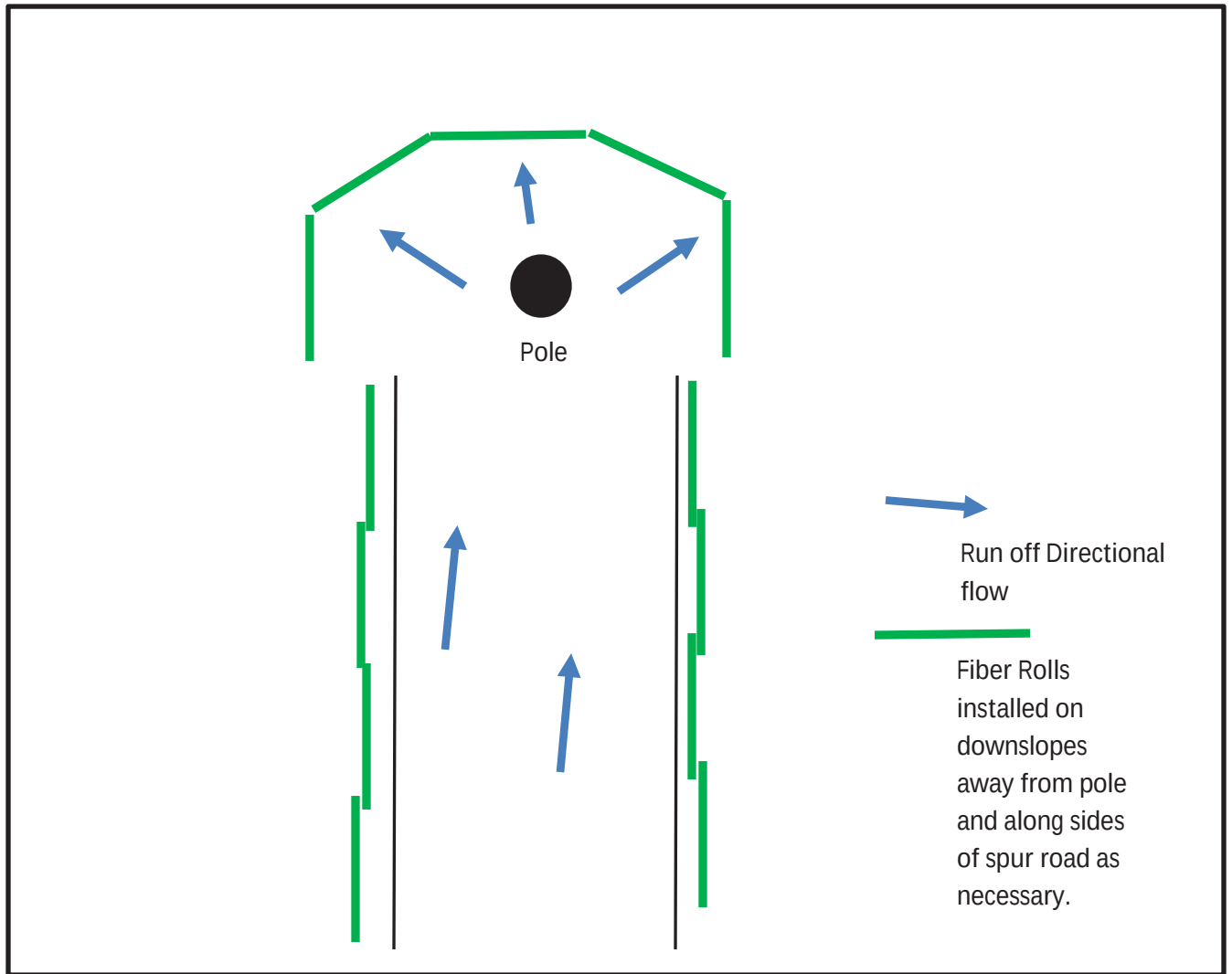
IX. Appendices

APPENDIX A: BMP MAPS, POLE SITE MAPS AND POLE SITE PHOTOS

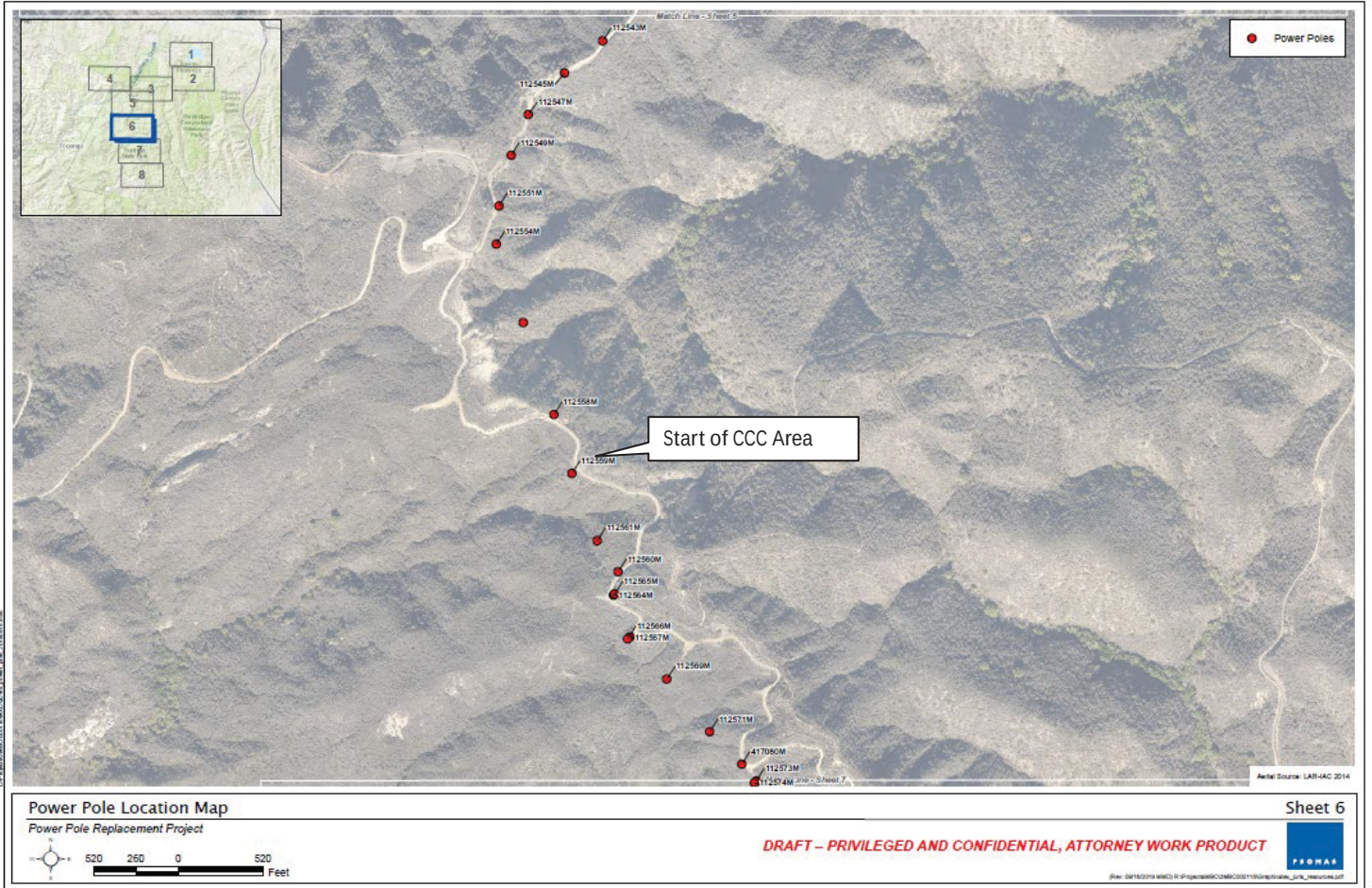
Typical BMP Installation for Pole Sites – No Spur Road

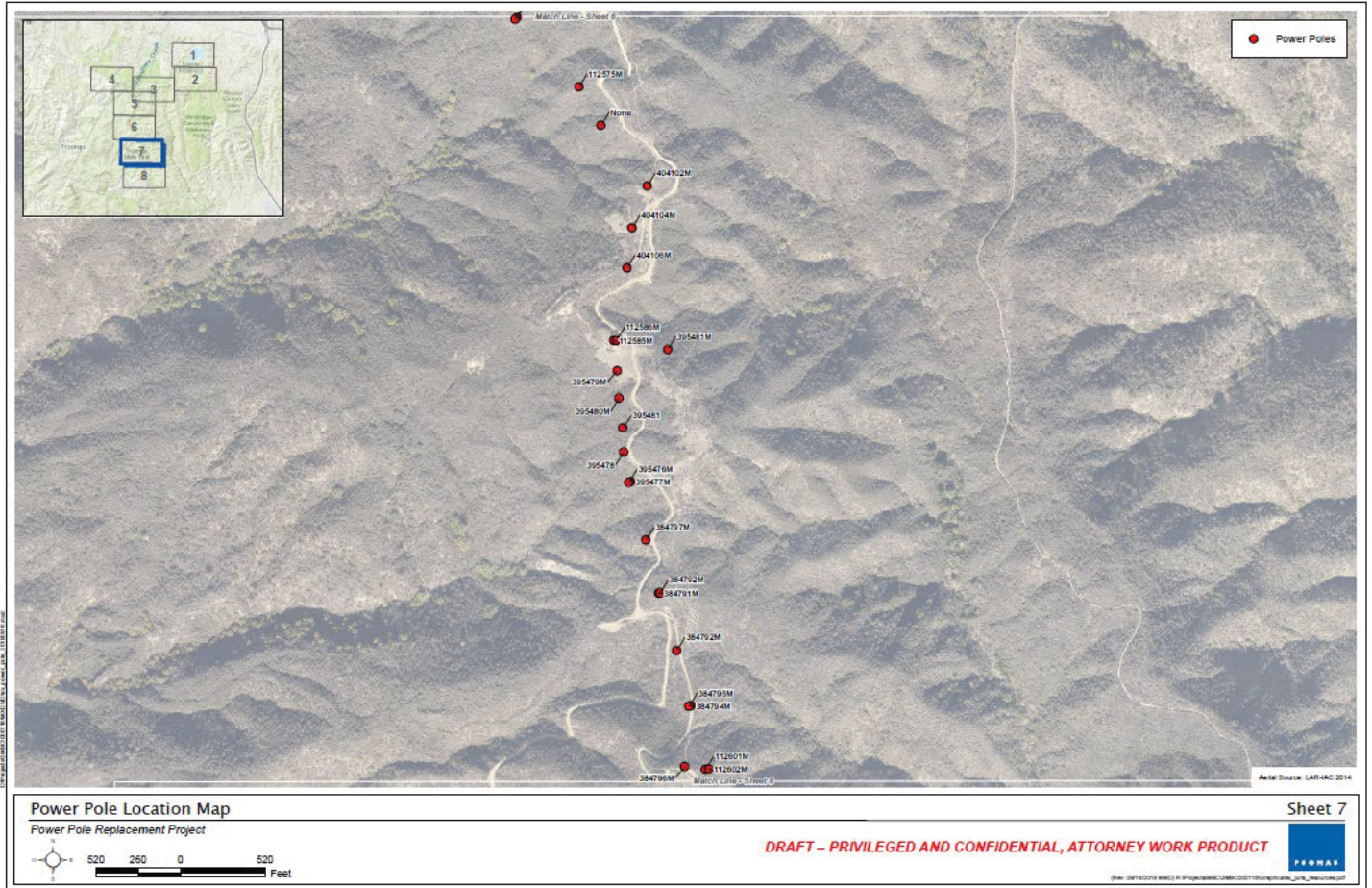


Typical BMP Installation for Pole Sites – With Spur Road



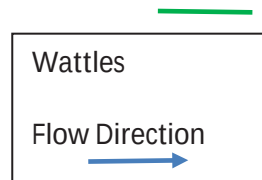
The following figures identify the pole locations throughout the CCC area. In all there are 16 locations that are accessed with a spur road and 14 locations that are accessed by foot.





Coastal Commission Zone Pole Site Photos

Photos are arranged from North to South along the alignment



Previous access disturbance is fully revegetated. No additional disturbance or earthwork to be performed. Access will be by foot only.



Pole 112561M



Previous access disturbance is fully revegetated. No additional disturbance or earthwork to be performed. Access will be by foot only.



Poles 112564M and 112565M

Jan 2024



Sept 2018



Previous access disturbance is fully revegetated. No additional disturbance or earthwork to be performed. Access will be by foot only.

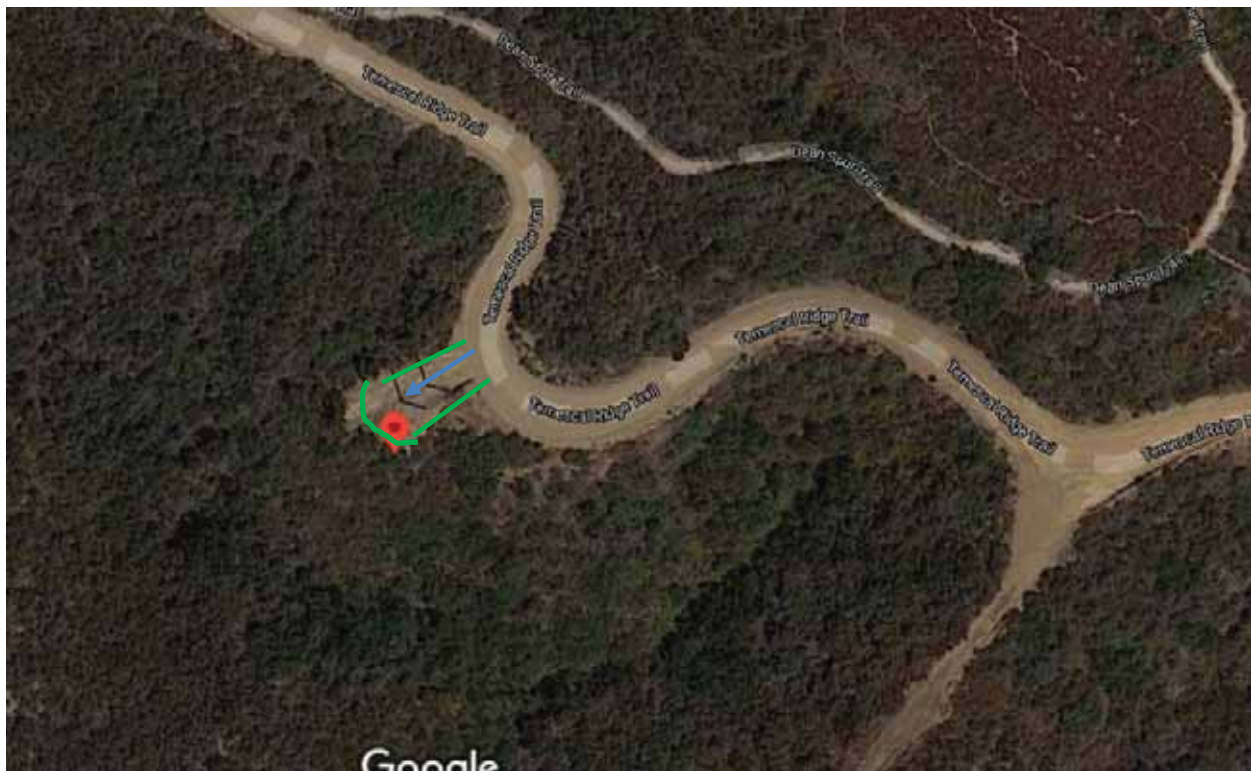


Poles 112566M and 112567M

Jan 2024



Sept 2018



Previous access disturbance is fully revegetated. No additional disturbance or earthwork to be performed. Access will be by foot only.



Pole 112569M

Jan 2024



Sept 2018



Previous access disturbance is fully revegetated. No additional disturbance or earthwork to be performed. Access will be by foot only.



Pole 112571M

Jan 2024



Sept 2018



Previous access disturbance is fully revegetated. No additional disturbance or earthwork to be performed. Access will be by foot only.

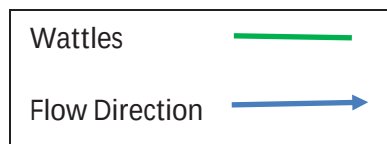


Pole 417080M

Jan 2024



Sept 2018



Access from main road. No earthwork performed previously, none anticipated.



Poles 112573M and 112574M



Access is from an existing turnout along the road. The area has fully regrown. No additional disturbance or earthwork will be necessary. Foot access only to replace the pole from the turnout.

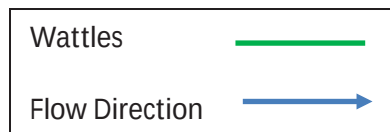


Pole 112575M

Jan 2024



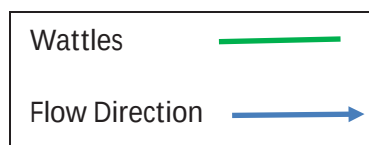
Sept 2018



This location the berm was breached and the path cleared to the pole. The access is fully revegetated and will not be disturbed further. Access will be by foot only. The berm will be removed. Area will continue to revegetate.



Pole 417081M



Access to pole has fully regrown. No additional clearance or earthwork to be performed. Access by foot traffic only to replace the pole.



404102M



Access is from an existing single track bike path. Area is fully vegetated. No additional clearance or disturbance necessary. Access will be by foot only.



Pole 404104M

Jan 2014



Sept 2018



Access from an existing side road. Any evidence of prior vegetation clearing or earthwork is not visible and not additional earthwork will be performed. Access by foot only.

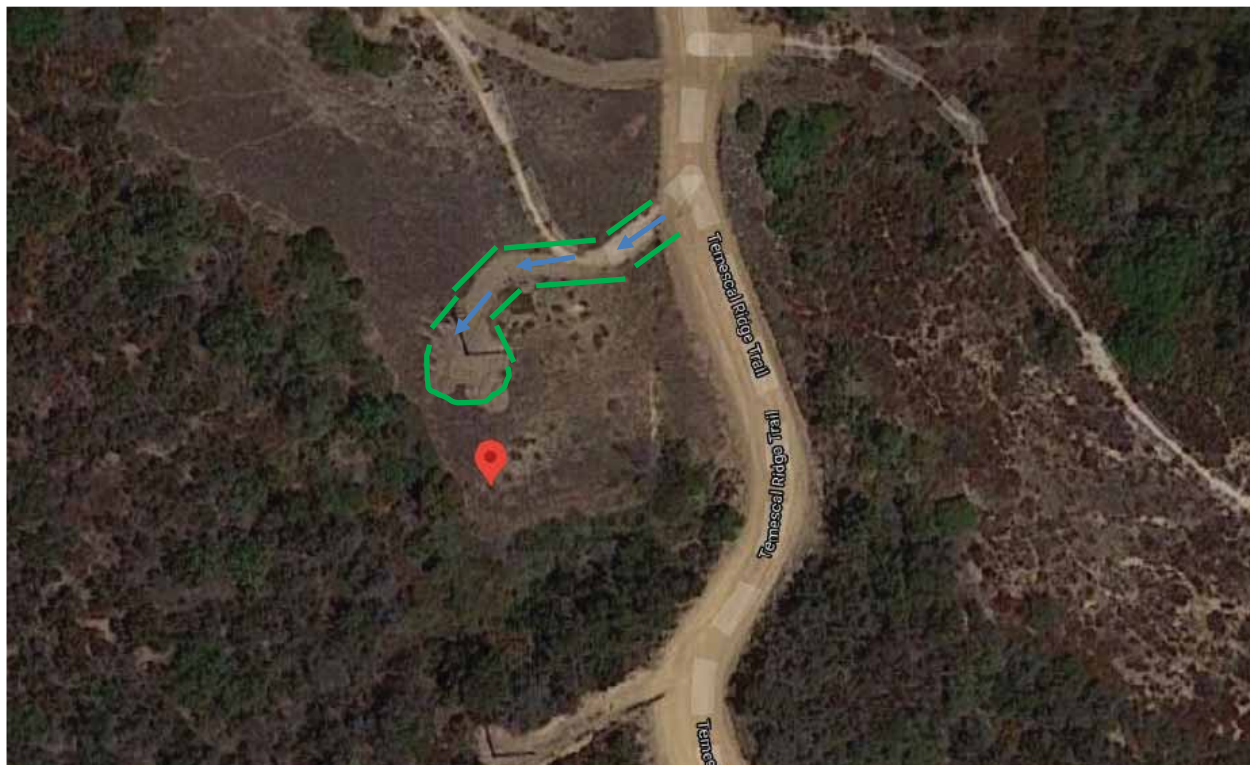


Pole 395479M

Jan 2024



Sept 2018



Access is off of an existing single track bike path. Any disturbance to the pole has regrown since the initial disturbance. No additional disturbance or earthwork will be performed. Access by foot only.



Pole 395480M

Jan 2024



Sept 2018



Access to this pole was achieved by breaching the exiting roadway berm. The area has regrown since the initial disturbance and is fully revegetated around the pole. This site does show some hillside erosion from flow coming off the roadway and will be repaired. 2-3 cubic yards to repair the erosional scar, the berm will be removed.



Pole 395481M

Jan 2024



Sept 2018



Access created to this tower has fully regrown and will not be further disturbed. Access will be accomplished by foot only. Area will be allowed to continue revegetation. No additional earthwork.



Pole 395478M

Jan 2024



Sept 2018



Access to this pole was achieved by breaching the exiting roadway berm. The area has regrown since the initial disturbance and is fully revegetated around the pole. This site does show some hillside erosion from flow coming off the roadway and will be repaired. 2-3 cubic yards to repair the erosional scar, and the berm will be removed.

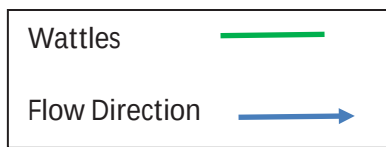


Poles 395476M and 395477M

Jan 2024



Sept 2018



Access created to this tower has fully regrown and will not be further disturbed. Access will be accomplished by foot only. Area will be allowed to continue revegetation. No additional earthwork.



Pole 384797M

Jan 2024



Sept 2018



Access to this pole was achieved by breaching the exiting roadway berm. The area has regrown since the initial disturbance and is fully revegetated around the pole. This site does show some hillside erosion from flow coming off the roadway and will be repaired. 2-3 cubic yards to repair the erosional scar, and the berm will be removed.



Poles 384790M and 384791M

Jan 2024

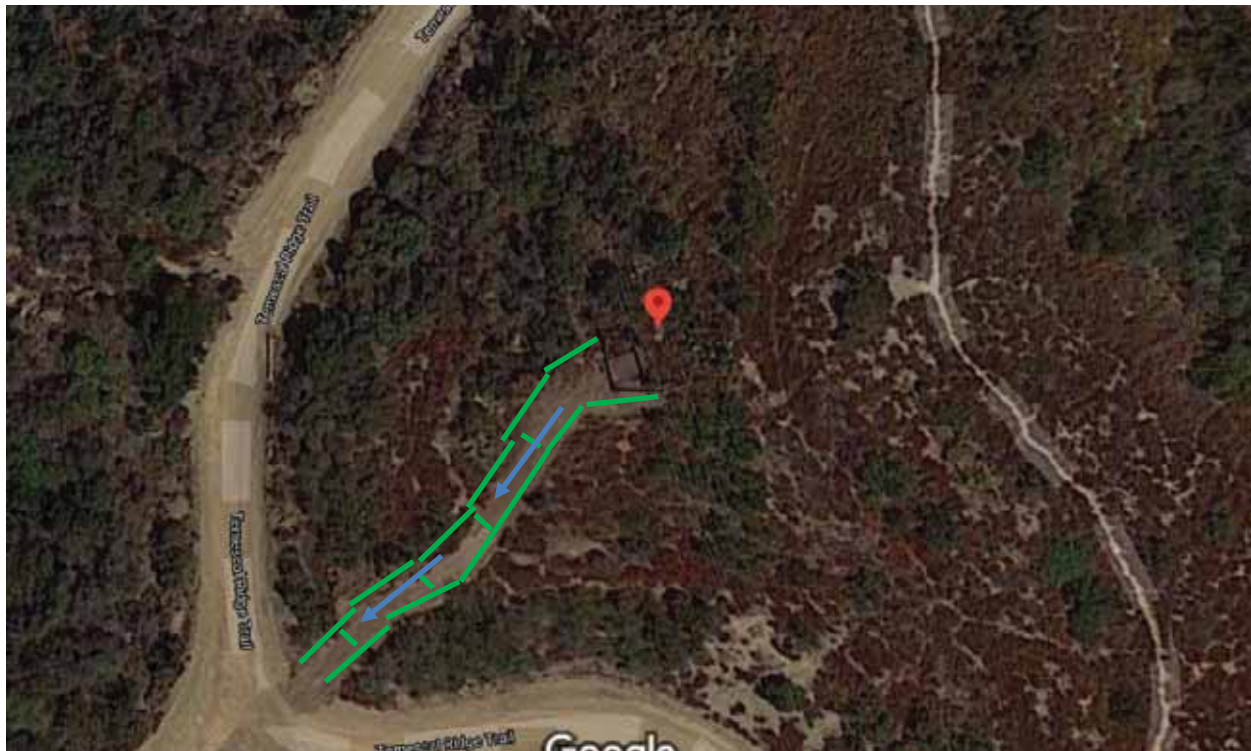


Sept 2018

Wattles



Flow Direction



Any previously cleared access has regrown. No new clearance will be performed and no additional earthwork as it would cause more damage. Access will be by foot to replace pole.

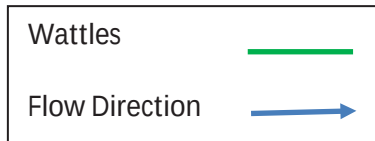


Poles 384792M and 384793M

Jan 2024



Sept 2018



Access from main road. Cleared area has regrown. No clearing or additional earthwork anticipated at this location.



Pole 112610M

Jan 2024

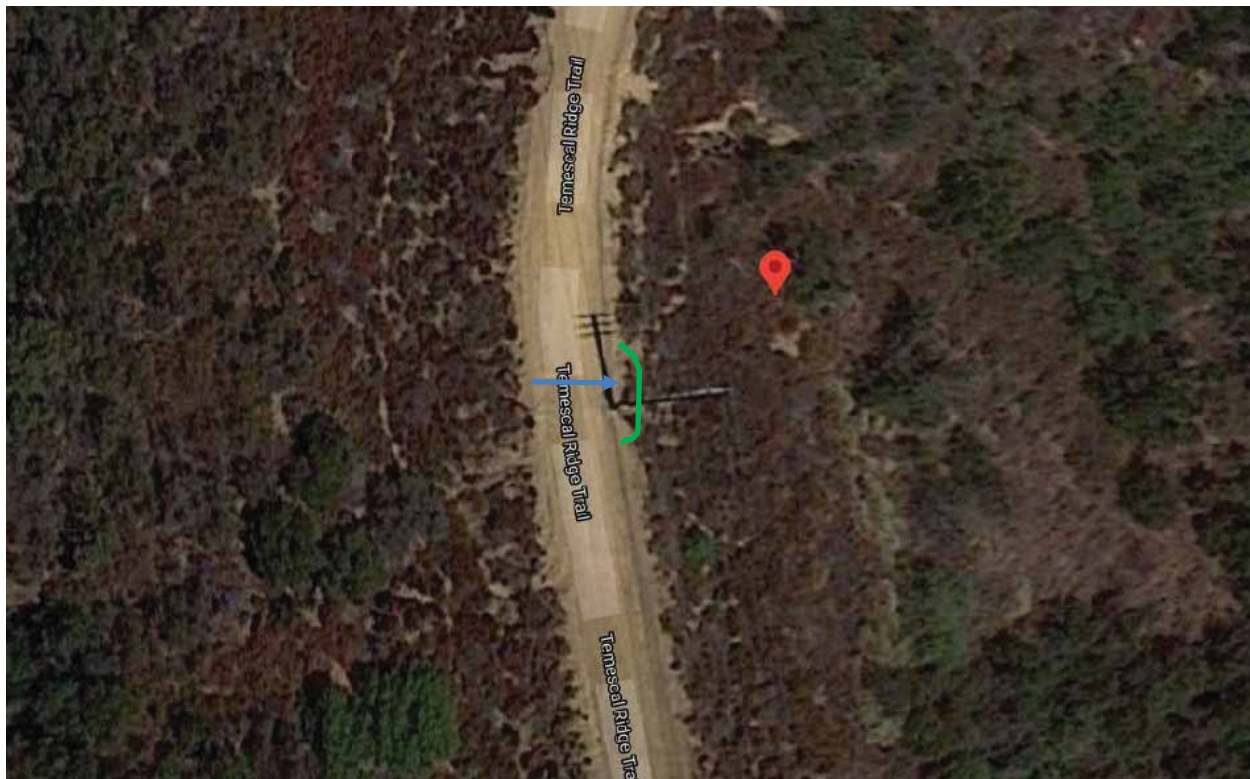


Sept 2018

Wattles



Flow Direction



Access to pole is from the main access road. No additional earthwork anticipated.

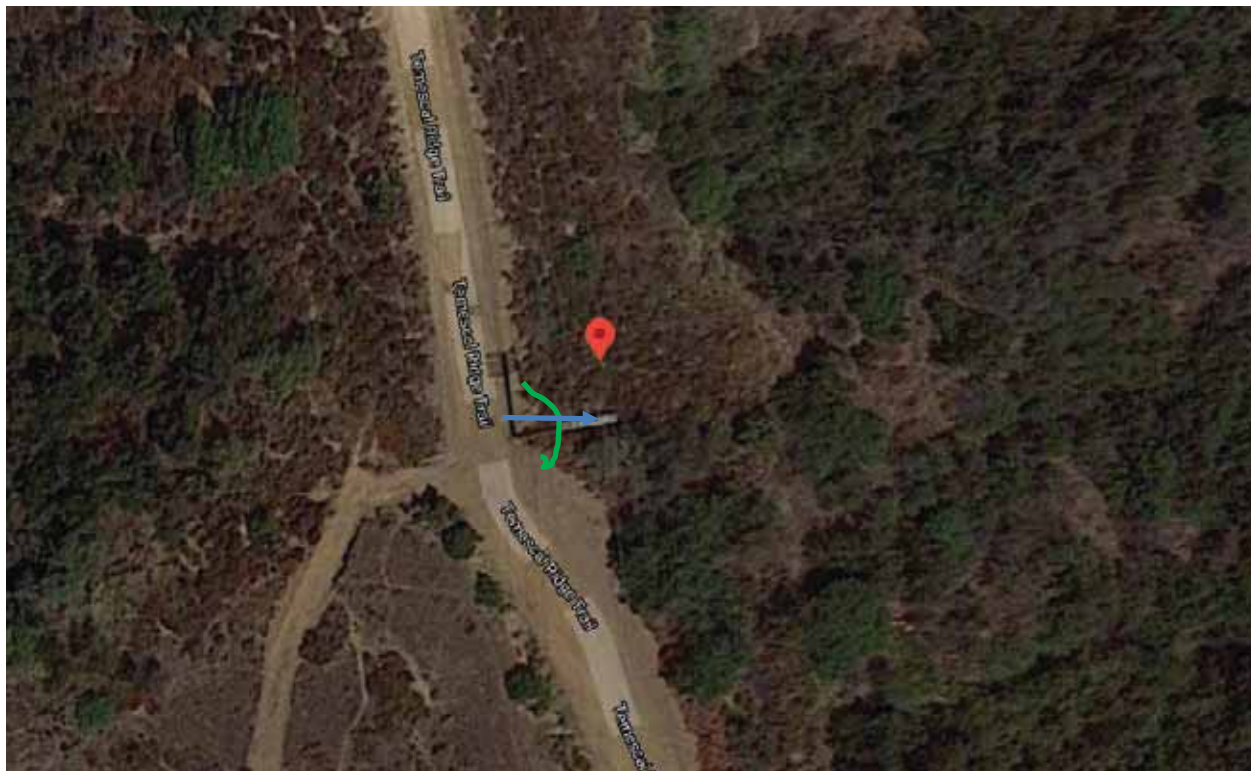


Pole 112611M

Jan 2024



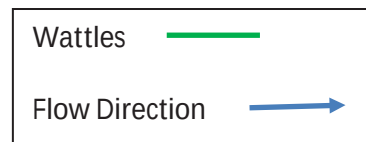
Sept 2018



Access is from the main access road. No additional earthwork anticipated at this location.



Pole 112613M



Small access path is currently visible at the site, area will be allowed to further regrow after pole replacement. No additional earthwork anticipated at this location.

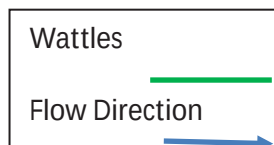


Pole 112614M

Jan 2024



Sept 2018



Pole sits along a single track bike path. Some brush clearance may have been done, no additional clearance or earthwork necessary. Area will be allowed to regrow after pole replacement.

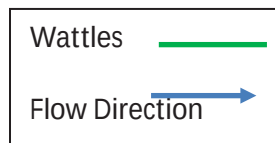


Pole 112617M

Jan 2024



Sept 2018



Pole is accessed from the main road and sits along an active single track bike path. No earthwork performed previously and no new earthwork anticipated. Area has regrown and will not be cleared.

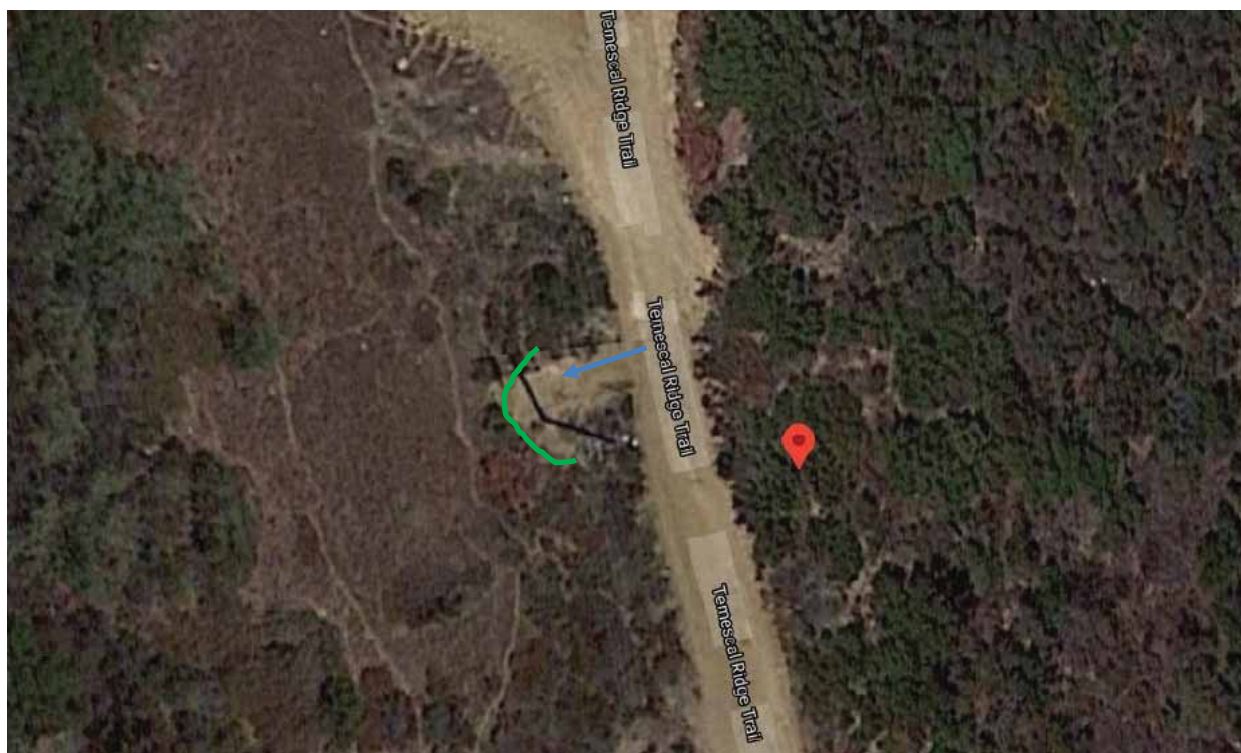
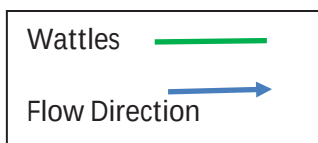


Pole 112618M

Jan 2024



Sept 2018



Slight footpath visible in current photo. Access from main road, no earth work performed, none anticipated. Area will be allowed to revegetate.

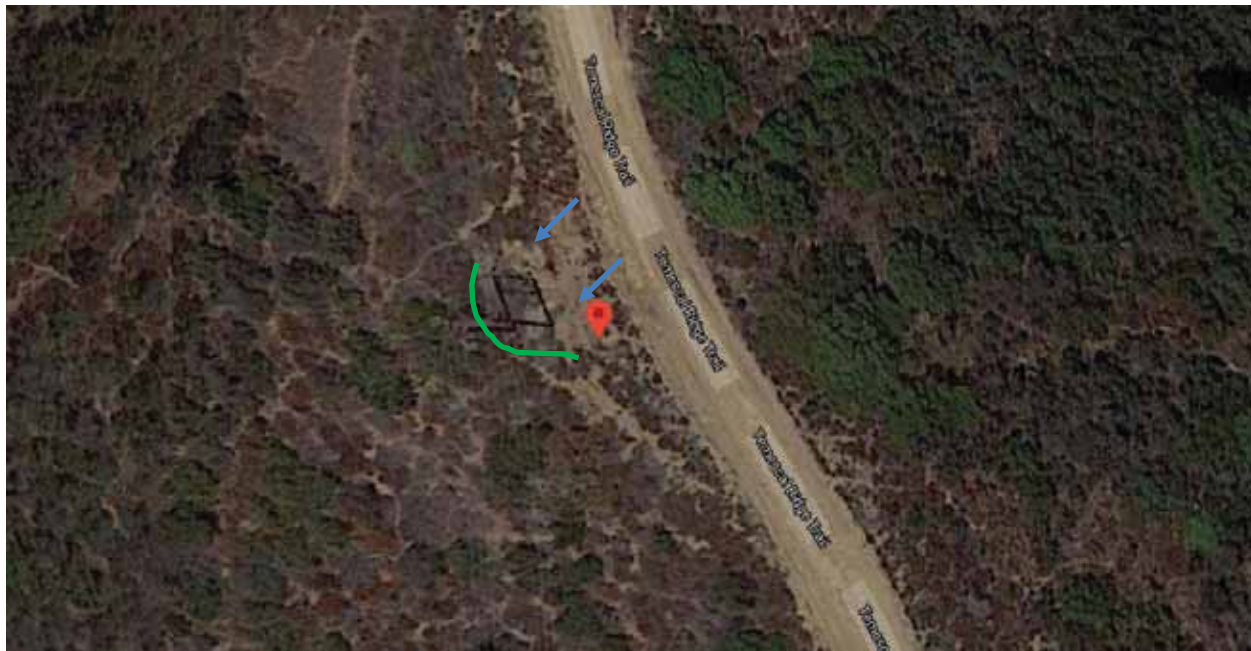
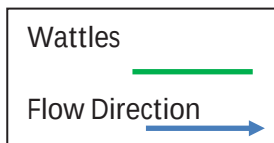


Poles 112619M and 112620M

Jan 2024



Sept 2018



Access is off of the main fire road. No earthwork performed prior and none expected. Area around pole will be allowed to revegetate

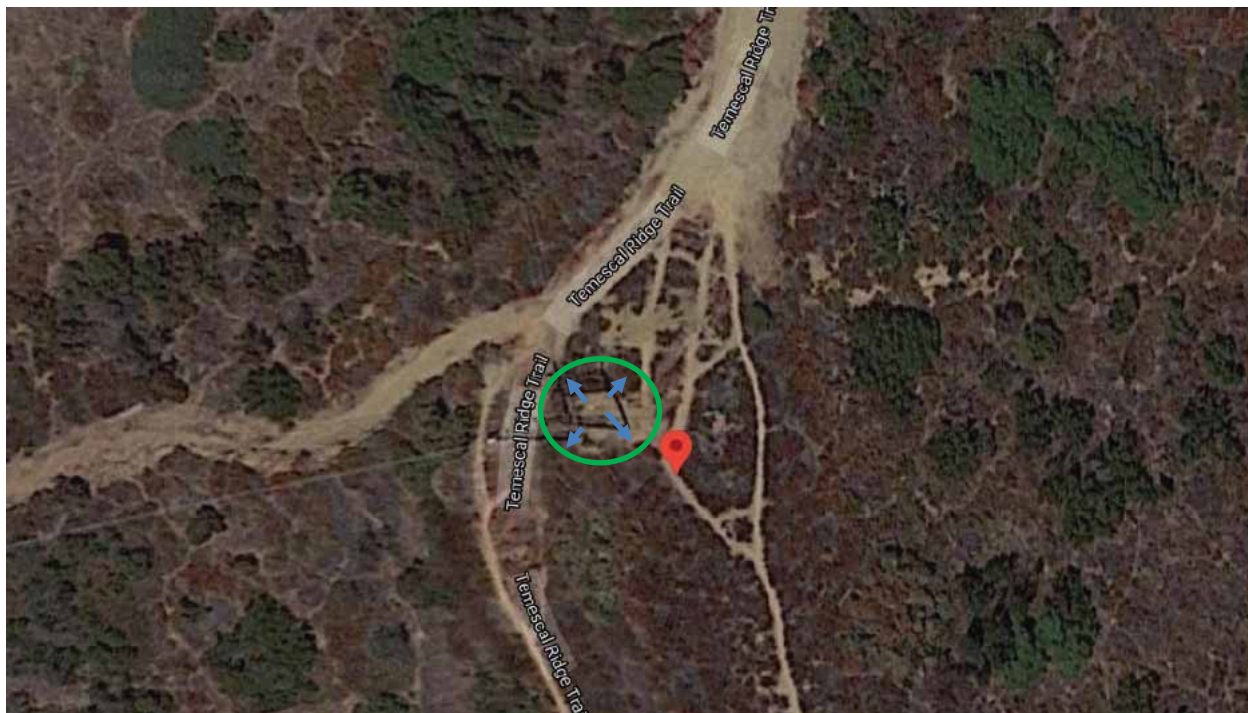
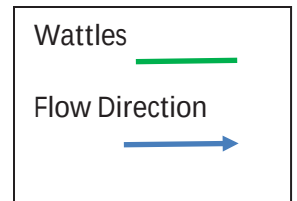


Poles 112621M and 112622M

Jan 2024



Sept 2018



This pole sits atop a small knoll and is located in an active bike path area. No earthwork was performed and no additional work is anticipated for the pole replacement.



Pole 356250M

Jan 2024



September 2018



Wattles
Flow Direction



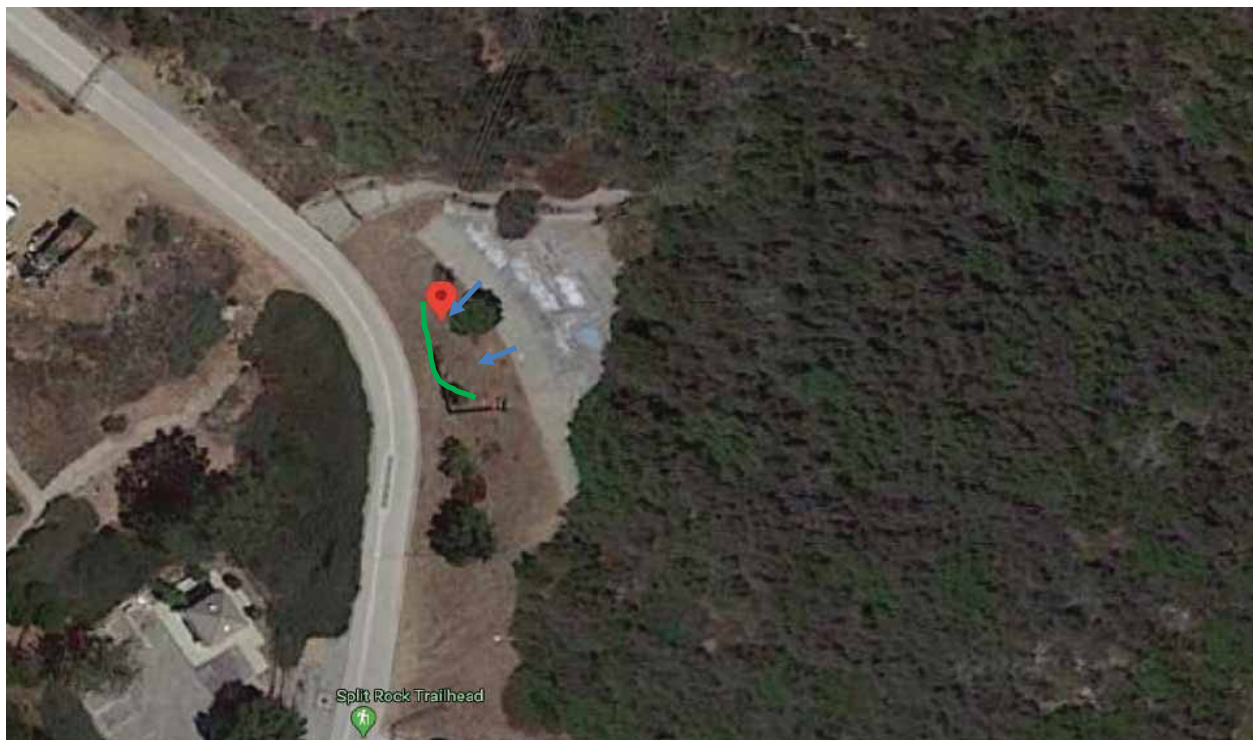
No trail access is visible in the January 2024 photo. Cleared area has regrown. No earthwork anticipated at this location, no earthwork restoration proposed.



Pole 369211M

Wattles

Flow Direction



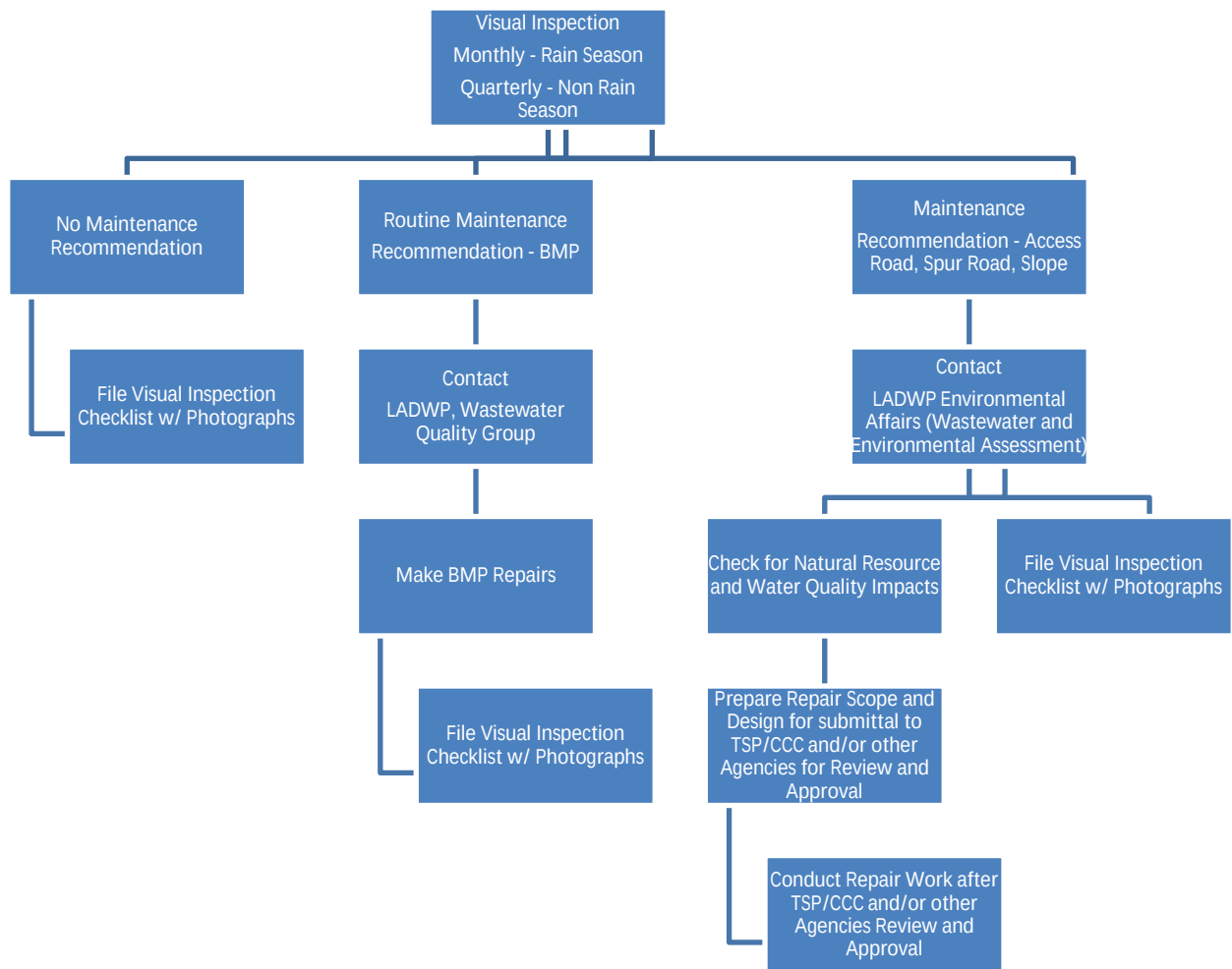
Access will be from Water Tank access road off of Via La Costa. No earthwork anticipated

APPENDIX B: BMP INSPECTION CHECKLIST

LADWP VISUAL INSPECTION REPORT CHECKLIST		
Pole ID #:	Weather: TEMP: _____ F Description: _____	
Date of Inspection: Time of Inspection:	Previous Storm Date(s):	
Inspector Name: Inspector Signature:	Duration of Storm:	
Title: Telephone No.:	Approximate Rainfall (in): ____ Rain Gauge ____ NOAA	
Type of Inspection (check one) ____ Rainy Season Monthly ____ Non-Rainy Season Quarterly ____ Corrective Action Re-Inspection ____ Jan ____ Feb ____ Mar ____ Apr ____ Apr-Jun ____ Jul-Sep ____ Oct-Dec ____ Dec <i>Monthly inspection required during rainy season October 1st – April 30th. Quarterly inspection required during non-rainy season. Inspections conducted in April and October will not count towards quarterly non-rainy season inspections or vice versa.</i>		
YES	NO	
		Are the BMPs installed in the proper location as identified in the SWPPP?
		Are pole base area and spur road drainages functioning normally?
		Do any structural BMPs require repair or clean out to maintain adequate function? If yes, indicate which ones below in the maintenance actions section below:
		Are there signs of erosion issues near the pole base area such as rills, channels, gullies, etc.? If yes, please note erosion issues and maintenance action recommended/taken below.
		Are there signs of erosion issues on the <u>spur road</u> such as rills, channels, gullies, etc.? If yes, please note erosion issues and maintenance action recommended/taken below.
		Do any seeded or hydromulched areas require maintenance such as re-seeding, re-hydromulching, or weeding? If yes, please note the maintenance action recommendation/taken below.

YES	NO	
		Is there any evidence that sediment is leaving the pole base area or spur roads? If yes, please note the maintenance action recommendation/taken below.
		Is there any evidence of floating and suspended material, sheen, discoloration, turbidity, or odor from site discharges, if any?
		Is there any evidence of sediment, debris, or mud on the pole base area or spur road? If yes, please note the maintenance action recommendation/taken below.
		Are the slopes adjacent to the pole and spur road stable? If no, please note the maintenance action recommendation/taken below?
		Are there any visible non-storm water discharges? Is there evidence that non-storm water discharges occurred in the past? If so, describe the non-storm water discharge below:
		Is there any evidence of incorrect waste disposal (paints, concrete, solid wastes)?
Describe Maintenance Actions Taken (if any):		
Describe notifications made (if any):		

APPENDIX C: BMP INSPECTION / MAINTENANCE FLOWCHART



APPENDIX D: TRAINING RECORDS

Training Records

Training Date: _____		
Trainer: _____		
Topics Covered: (Check applicable topics)		
SWPPP BMPs _____	BMP Maintenance: _____	Non-Storm Water Discharges: _____
Other: 		

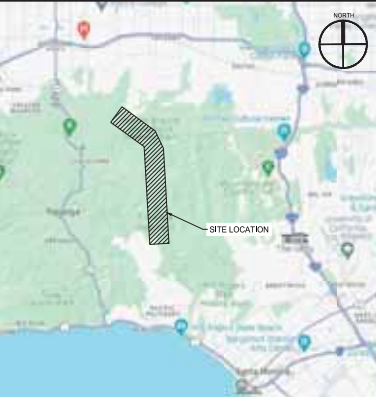
<i>Name</i>	<i>Company</i>	<i>Telephone</i>	<i>SWPPP Duties</i>

APPENDIX E: REMEDIAL GRADING PLANS

TEMESCAL POLE

REMEDIAL GRADING PLAN FOR ACCESS ROAD CIVIL PACKAGE- ISSUED FOR PERMIT PROJECT NO. 181165

VICINITY MAP



DRAWING INDEX

SHEET NUMBER	SHEET TITLE	CUT C.Y.	FILL C.Y.	NET CUT/FILL C.Y.
CS-01	COVER SHEET AND DRAWING INDEX			
CS-02	OVERALL PROJECT LAYOUT			
C-05-01_11-00	ROAD LAYOUT	120	250	130 FILL
C-11-00_22-00	ROAD LAYOUT	55	600	545 FILL
C-22-00_27-00	ROAD LAYOUT	20	480	460 FILL
C-27-00_34-00	ROAD LAYOUT	30	300	270 FILL
C-34-00_44-00	ROAD LAYOUT	45	350	305 FILL
C-44-00_58-00	ROAD LAYOUT	300	250	100 CUT
C-58-00_70-00	ROAD LAYOUT	485	75	410 CUT
C-70-00_80-00	ROAD LAYOUT	155	270	115 FILL
C-80-00_91-00	ROAD LAYOUT	280	185	95 CUT
C-91-00_103-00	ROAD LAYOUT	240	160	80 CUT
C-103-00_111-00	ROAD LAYOUT	160	295	135 FILL
G-111-00_120-00	ROAD LAYOUT	90	90	0
G-120-00_138-00	ROAD LAYOUT	180	360	200 FILL
G-138-00_147-00	ROAD LAYOUT	160	165	5 FILL
G-147-00_159-00	ROAD LAYOUT	60	155	95 FILL
G-159-00_169-00	ROAD LAYOUT	200	160	90 CUT
G-169-00_174-00	ROAD LAYOUT	60	400	340 FILL
G-174-00_180-00	ROAD LAYOUT	300	130	170 CUT
G-180-00_190-00	ROAD LAYOUT	90	90	0
G-190-00_205-00	ROAD LAYOUT	125	140	15 FILL
G-205-00_219-00	ROAD LAYOUT	80	90	10 FILL
G-219-00_225-00	ROAD LAYOUT	110	190	80 FILL
G-225-00_238-00	ROAD LAYOUT	205	115	90 CUT
G-238-00_247-00	ROAD LAYOUT	280	90	190 CUT
G-247-00_259-00	ROAD LAYOUT	100	95	5 CUT
G-259-00_264-00	ROAD LAYOUT	100	70	30 CUT
G-264-00_270-00	ROAD LAYOUT	90	125	35 FILL
	TOTAL	4,220	5,690	1,470 FILL

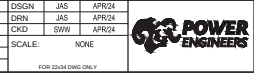
PROJECT DETAILS

ISSUED
FOR
PERMIT

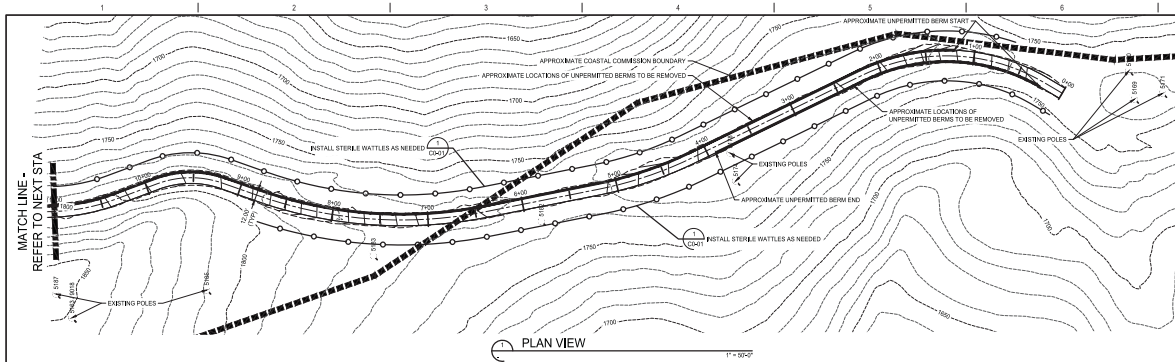
THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR THE PROJECT. IT IS THE PROPERTY OF POWER ENGINEERS, INC. AND IS NOT TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF POWER ENGINEERS, INC.

DESIGN	JAS	APR/24
DRN	JAS	APR/24
CKD	SWW	APR/24
SCALE:	NONE	
FOR 2D/3D DRWG ONLY		

DATE	05/26/2024	DRN	JAS	DESIGN	JAS	SWW	CKD	APPD	REFERENCE DRAWINGS
REV	A	ISSUED FOR PERMIT							
REV		REVISIONS							



TEMESCAL POLE	JOB NUMBER	181165	REV	
REMEDIAL GRADING PLAN FOR ACCESS ROAD	DRAWING NUMBER	C0-01		
COVER SHEET AND DRAWING INDEX				



NOTES

1. CONTOURS WERE DERIVED FROM USGS LEAD DATA COLLECTED IN 2016.
2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
5. IRREMOVABLE STERILE WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF RE-VEGETATION.

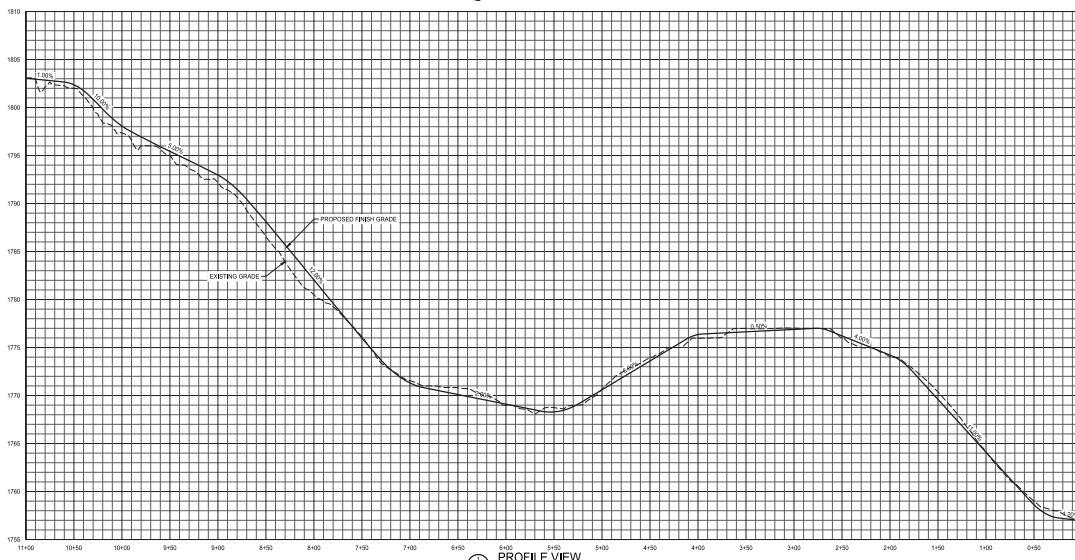
ESTIMATED QUANTITIES:

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS. WHEN NO ALLOWANCE FOR SHRINK OR SWELL, THE CONTRACTOR SHALL CALCULATE THEIR OWN ESTIMATED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	120 C.Y.
FILL MATERIAL	220 C.Y.
NET MATERIAL	100 C.Y. (FILL)

LEGEND:

APPROXIMATE COASTAL COMMISSION BOUNDARY	-----
POLE LOCATION	-----
APPROXIMATE ROAD CENTERLINE	-----
APPROXIMATE EDGE OF ROADWAY	-----
APPROXIMATE UNPERMITTED BERMS	-----
STERILE WATTLES	-----
EXISTING MAJOR CONTOURS	-----
EXISTING MINOR CONTOURS	-----
PROPOSED ROAD MAJOR CONTOURS	-----
PROPOSED ROAD MINOR CONTOURS	-----
PROPOSED ROAD SURFACE LIMITS	-----



ISSUED
FOR
PERMIT

0 25 50 100 150 FEET
1 inch = 50 feet

C:\Users\jacobr\OneDrive\Documents\181195\181195-00-11+00\181195-00-11+00.dwg

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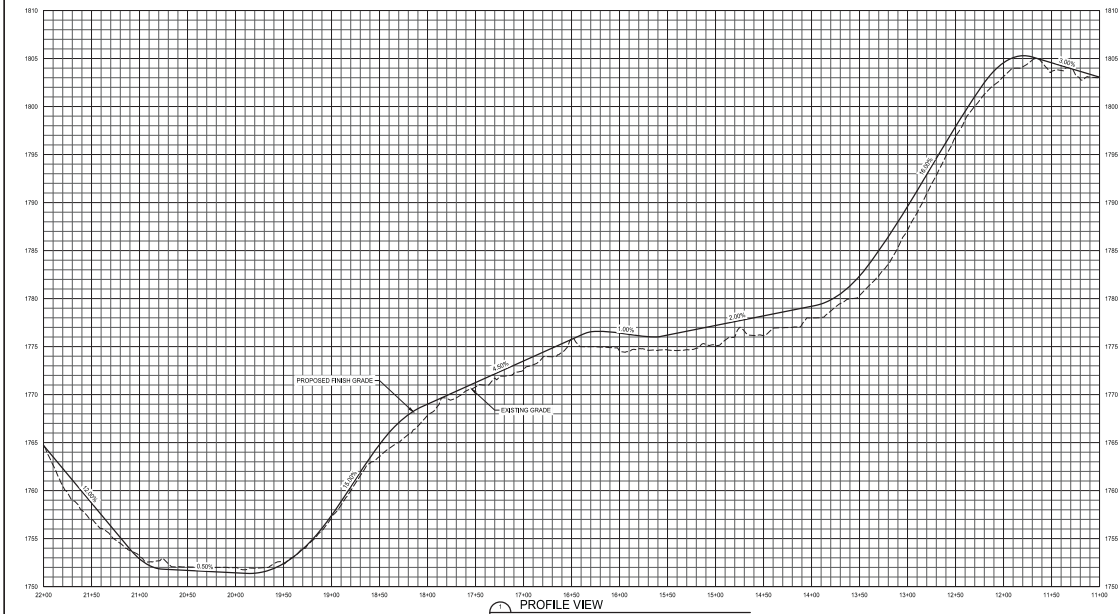
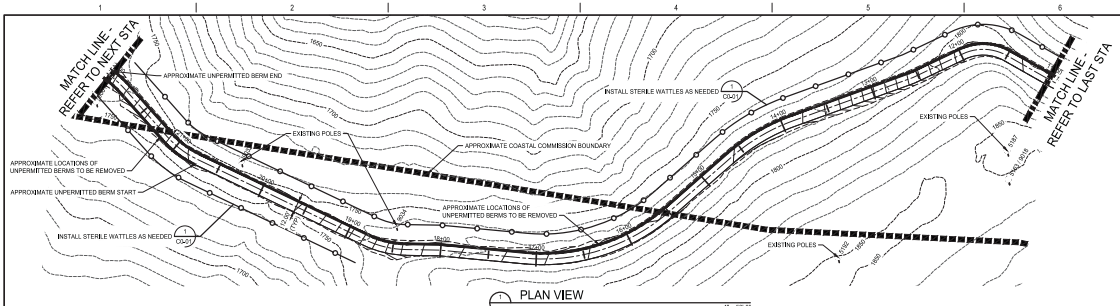
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
A	ISSUED FOR PERMIT	05/26/2024	JAS	JAS	SWW		

DSGN	JAS	APR/24
DRN	JAS	APR/24
CKD	SWW	APR/24
SCALE:	1" = 50'-0"	
FOR 2D/3D DRWG ONLY		

DSGN	JAS	APR/24
DRN	JAS	APR/24
CKD	SWW	APR/24



TEMESCAL POLE	JOB NUMBER	REV
REMEDIAL GRADING PLAN FOR ACCESS ROAD	181195	1
ROAD LAYOUT	DRAWING NUMBER	C-0+00_11+00



NOTES

1. CONTOURS WERE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2016.
2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
4. CONTRACTOR TO REMOVE ALL BERM ALONG THE EDGE OF ROAD.
5. BRIDGEGRADABLE STEEPLE WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF RE-VEGETATION.

ESTIMATED QUANTITIES:

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS WITH NO ALLOWANCE FOR SHRINK OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN ESTIMATED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	95 C.Y.
FILL MATERIAL	685 C.Y.
NET MATERIAL	590 C.Y. (FILL)

LEGEND:

- APPROXIMATE COASTAL COMMISSION BOUNDARY
- POLE LOCATION
- APPROXIMATE ROAD CENTERLINE
- APPROXIMATE EDGE OF ROADWAY
- APPROXIMATE UNPURPORTED BERM
- STEERABLE WATTLES
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED ROAD MAJOR CONTOURS
- PROPOSED ROAD MINOR CONTOURS
- PROPOSED ROAD SURFACE LIMITS

THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR THE PROJECT. POWER ENGINEERS, INC. IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION OR THE INFORMATION CONTAINED HEREIN. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

DESIGN	JAS	APR/24
DRN	JAS	APR/24
CKD	SWW	APR/24

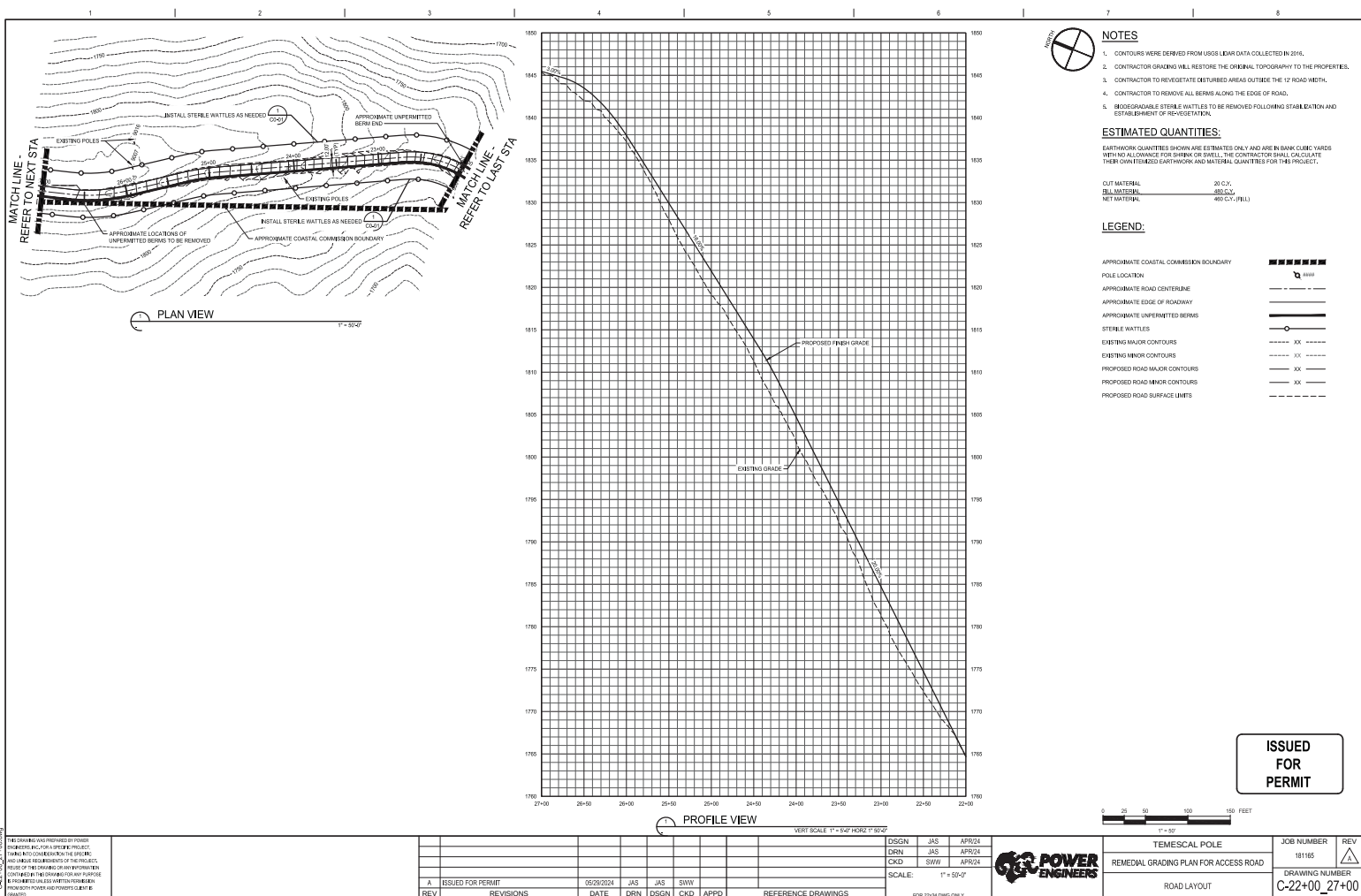
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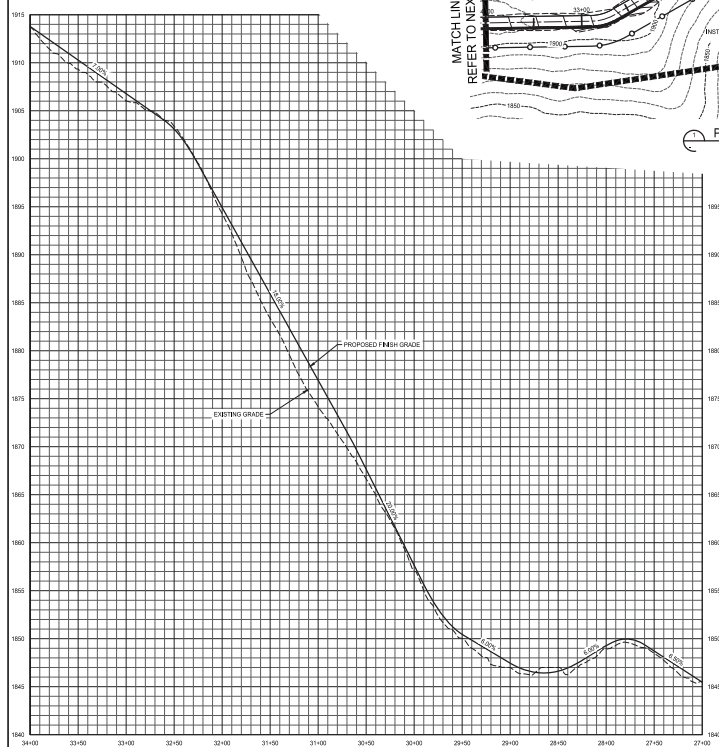
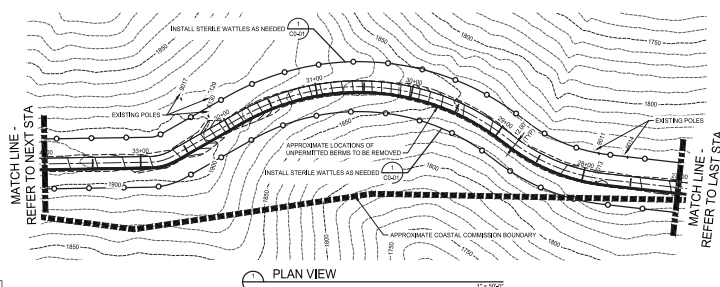
FOR 2D/3D DRWG ONLY

POWER ENGINEERS

TEMESCAL POLE
REMEDIAL GRADING PLAN FOR ACCESS ROAD
ROAD LAYOUT

JOB NUMBER	181165	REV	△
DRAWING NUMBER	C-11+00_22+00		





- ## NOTES
1. CONTOURS WERE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2016.
 2. CONTRACTOR GRACING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
 3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
 4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.

ESTIMATED QUANTITIES:

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS WITH NO ALLOWANCE FOR SHRINK OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN ESTIMATED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	30 C.Y.
FILL MATERIAL	300 C.Y.
NET MATERIAL	270 C.Y. (FILL)

LEGEND:

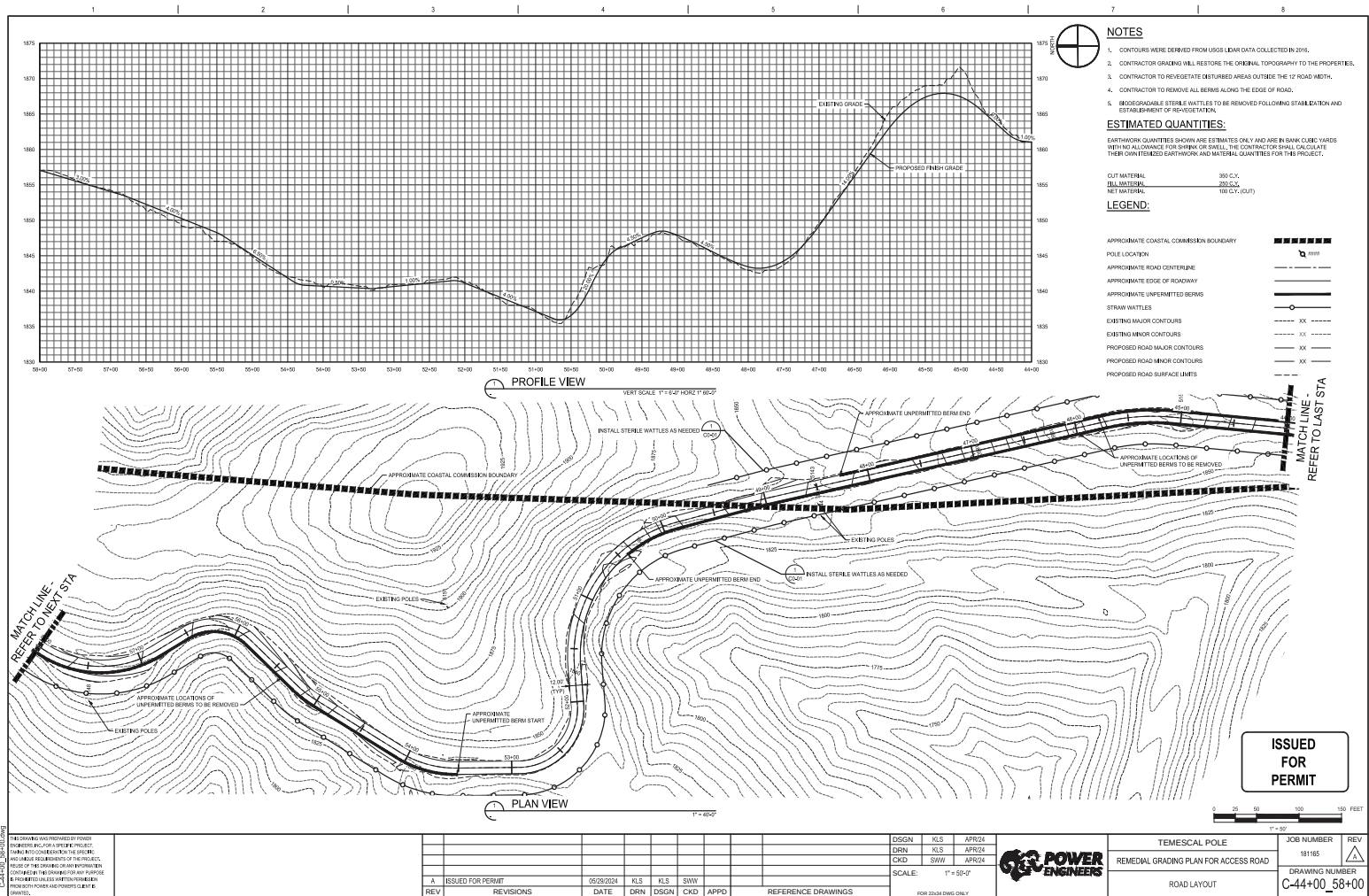
- APPROXIMATE COASTAL COMMISSION BOUNDARY
POLE LOCATION
APPROXIMATE ROAD CENTERLINE
APPROXIMATE EDGE OF ROADWAY
APPROXIMATE UNPERMITTED BERM
STERILE WATTLIES
EXISTING MAJOR CONTOURS
EXISTING MINOR CONTOURS
PROPOSED ROAD MAJOR CONTOURS
PROPOSED ROAD MINOR CONTOURS
PROPOSED ROAD SURFACE LIMITS

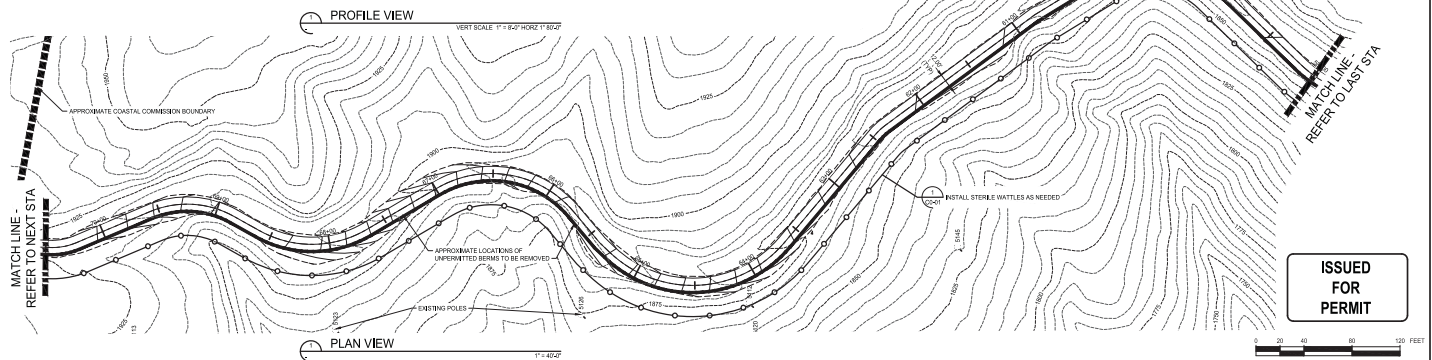
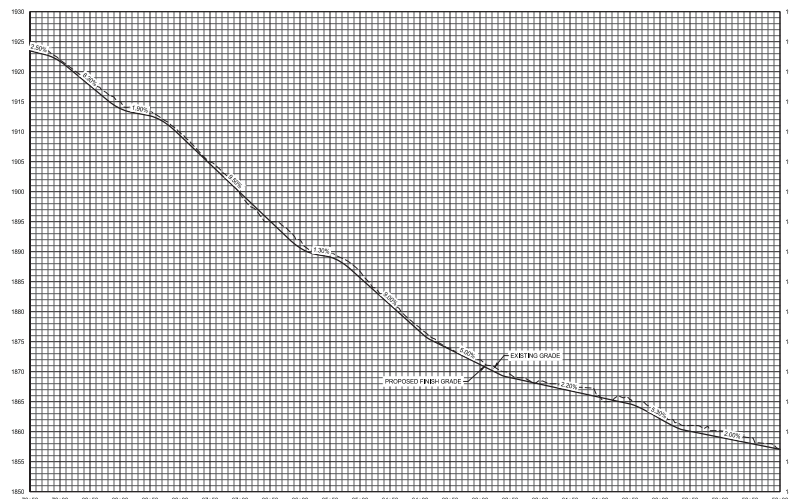
ISSUED
FOR
PERMIT



										DSGN JAS APR/24			1" = 30'		TEMESCAL POLE		JOB NUMBER		REV		
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										CKD SSW APR/24											
										SCALE: 1" = 50'-0"											
										8000 1/2" x 11" (Sheet Size)											
A ISSUED FOR PERMIT 05/29/2024 JAS JAS SSW																					
REVISIONS										DATE DRN DSGN CKD APPD											
										REFERENCE DRAWINGS											

										DSGN JAS APR/24			1" = 30'		TEMESCAL POLE		JOB NUMBER		REV		
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A ISSUED FOR PERMIT 05/29/2024 JAS JAS SSW																					
REVISIONS										DATE DRN DSGN CKD APPD											
										REFERENCE DRAWINGS											





NOTES

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2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
5. BIODEGRADABLE STEEL WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND REVEGETATION.

ESTIMATED QUANTITIES:

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS WITH NO ALLOWANCE FOR SHRINK OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN TENSORIZED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	485 C.Y.
<u>FILL MATERIAL</u>	<u>75 C.Y.</u>
NET MATERIAL	410 C.Y. (CUT)

LEGEND:

APPROXIMATE COASTAL COMMISSION BOUNDARY	
POLE LOCATION	
APPROXIMATE ROAD CENTERLINE	
APPROXIMATE EDGE OF ROADWAY	
APPROXIMATE UNPERMITTED BEARS	
STRAW WHITTLES	
EXISTING MAJOR CONTOURS	
EXISTING MINOR CONTOURS	
PROPOSED ROAD MAJOR CONTOURS	
PROPOSED ROAD MINOR CONTOURS	
PROPOSED ROAD SURFACE LIMITS	

C-58+00_70+50.dwg

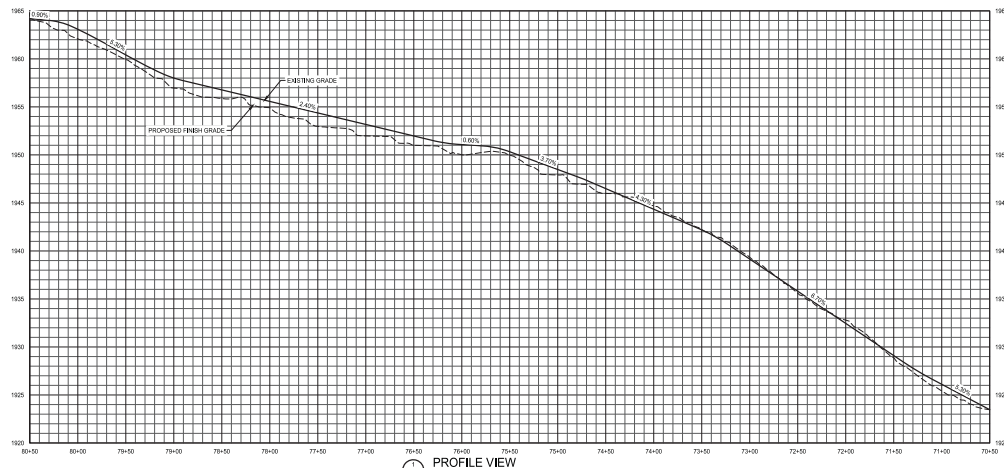
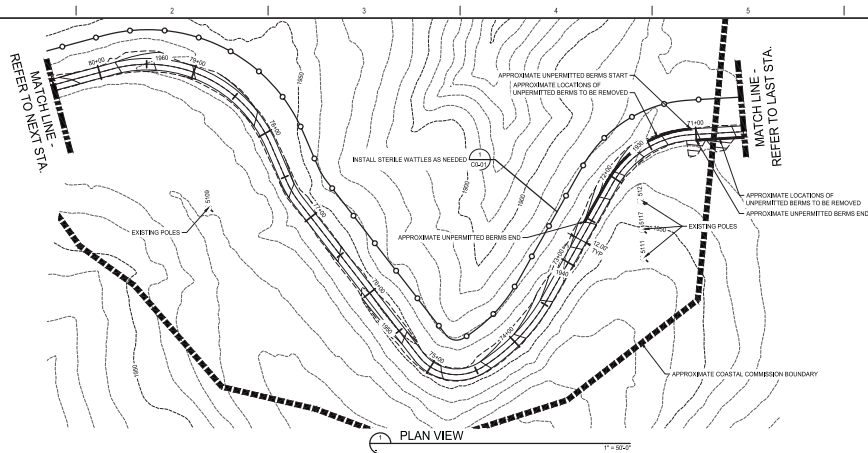
THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS GRANTED.

A	ISSUED FOR PERMIT	05/29/2024	KLS	KLS	SWW				
REV	REVISIONS	DATE	DRN	DGN	CKD	APPD			REFERENCE DRAWINGS

DSGN	KLS	APR/24
DRN	KLS	APR/24
CKD	SWH	APR/24
SCALE:		1" = 40'-0"
FOR 22x34 DWG ONLY		



TEMESCAL POLE	JOB NUMBER 181165	REV 
REMEDIAL GRADING PLAN FOR ACCESS ROAD	DRAWING NUMBER C-58+00_70+50	
ROAD LAYOUT		



NOTES

1. CONTOURS WERE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2006.
2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
5. BIODEGRADABLE STERILE WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND

ESTIMATED QUANTITIES:

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS WITH NO ALLOWANCE FOR SHRINK OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN ITEMIZED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	155 C.Y.
<u>FILL MATERIAL</u>	<u>279 C.Y.</u>
NET MATERIAL	115 C.Y. (FILL)

LEGEND:

APPROXIMATE COASTAL COMMISSION BOUNDARY

POLE LOCATION

APPROXIMATE ROAD CENTERLINE

APPROXIMATE EDGE OF ROADWAY

APPROXIMATE UNPERMITTED TERMS

STERILE WATTLES

EXISTING MAJOR CONTOURS

EXISTING MINOR CONTOURS

PROPOSED ROAD MAJOR CONTOURS

PROPOSED ROAD MINOR CONTOURS

PROPOSED ROAD SURFACE LIMITS

ISSUED
FOR
PERMIT

JOB NUMBER	REV
------------	-----

181165

DRAWING NUMBER	

C-70+50 80+50

C-70+50_80+50.dwg

THIS DRAWING WAS PREPARED BY POWER ENGINEERING, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS OBTAINED.

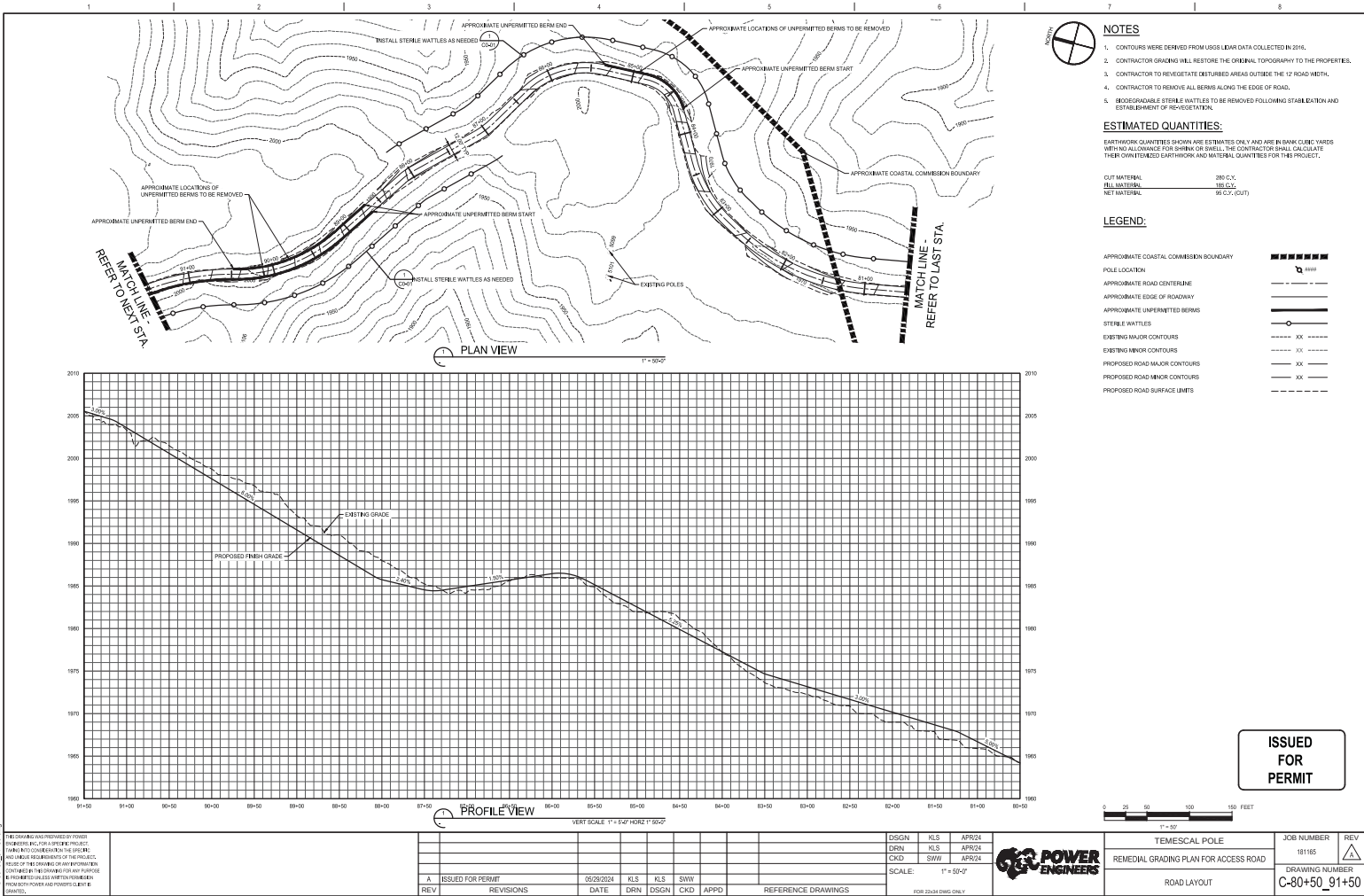
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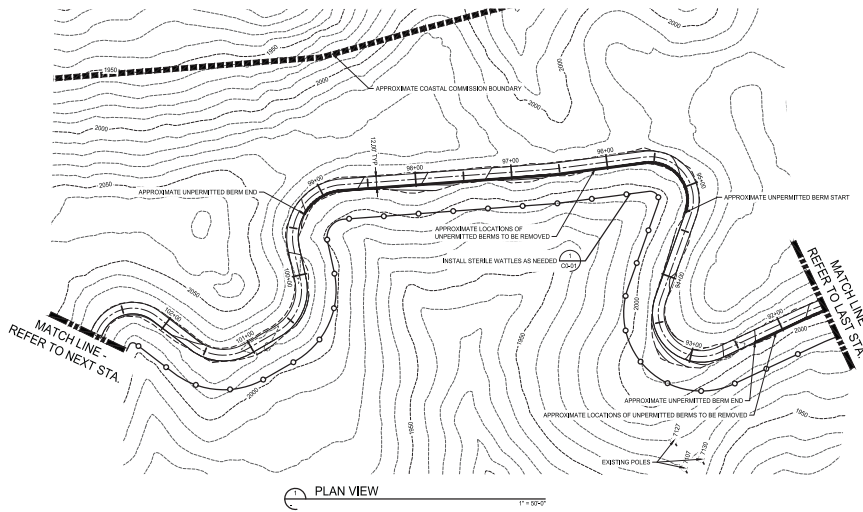
DSGN	KLS	APR/24
DRN	KLS	APR/24
CKD	SWH	APR/24
SCALE:		1" = 50'-0"



TEMESCAL POLE
REMEDIAL GRADING PLAN FOR ACCESS ROAD
ROAD LAYOUT

JOB NUMBER 181165	REV 
DRAWING NUMBER C-70+50 80+50	





NOTES

1. CONTOURS WERE DERIVED FROM USGS LEAD DATA COLLECTED IN 2016.
2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
5. IRREGRADABLE STERILE WATLES TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF RE-VEGETATION.

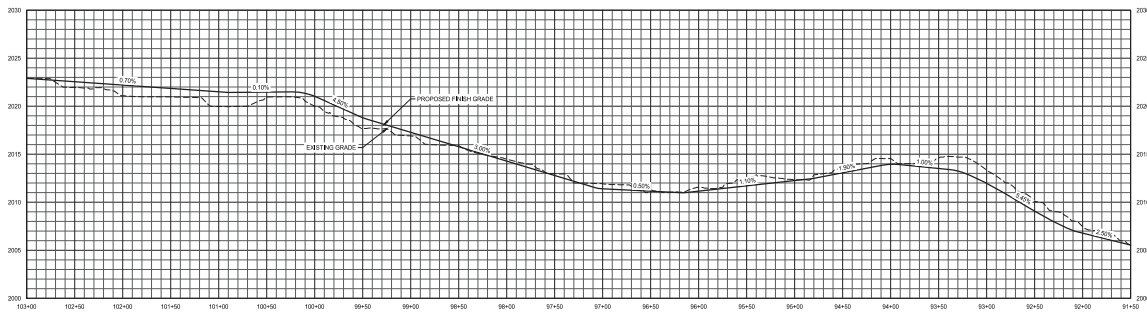
ESTIMATED QUANTITIES:

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS WITH NO ALLOWANCE FOR SHrink OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN ITEMIZED EARTHWORK AND MATERIAL QUANTITIES FOR THE PROJECT.

CUT MATERIAL	240 C.Y.
FILL MATERIAL	180 C.Y.
NET MATERIAL	60 C.Y. (FILL)

LEGEND:

APPROXIMATE COASTAL COMMISSION BOUNDARY	=====
POLE LOCATION	o
APPROXIMATE ROAD CENTERLINE	-----
APPROXIMATE EDGE OF ROADWAY	=====
APPROXIMATE UNPERMITTED BERMS	=====
STRAW WATLES	-----
EXISTING MAJOR CONTOURS	-----
EXISTING MINOR CONTOURS	-----
PROPOSED ROAD MAJOR CONTOURS	-----
PROPOSED ROAD MINOR CONTOURS	-----
PROPOSED ROAD SURFACE LIMITS	-----



ISSUED
FOR
PERMIT

PROFILE VIEW

VERT SCALE 1" = 5'-0" HORIZ 1" = 50'-0"

REV	ISSUED FOR PERMIT	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
A	ISSUED FOR PERMIT	05/26/2024	KLS	KLS	SWW		

DSGN	KLS	APR/24
DRN	KLS	APR/24
CKD	SWW	APR/24

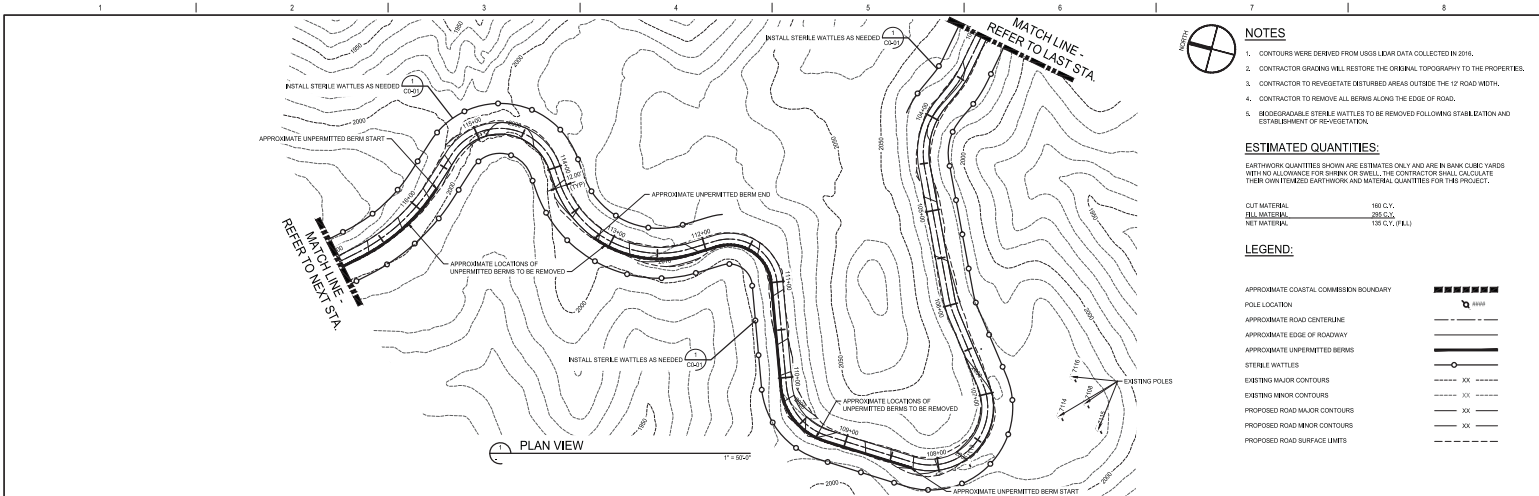
SCALE: 1" = 50'-0"

FOR 2D/3D DRWG ONLY



TEMESCAL POLE	JOB NUMBER	REV
REMEDIAL GRADING PLAN FOR ACCESS ROAD	181165	
ROAD LAYOUT	DRAWING NUMBER	
	C-91+50_103+00	

C:\p\c-91+50_103+00.dwg



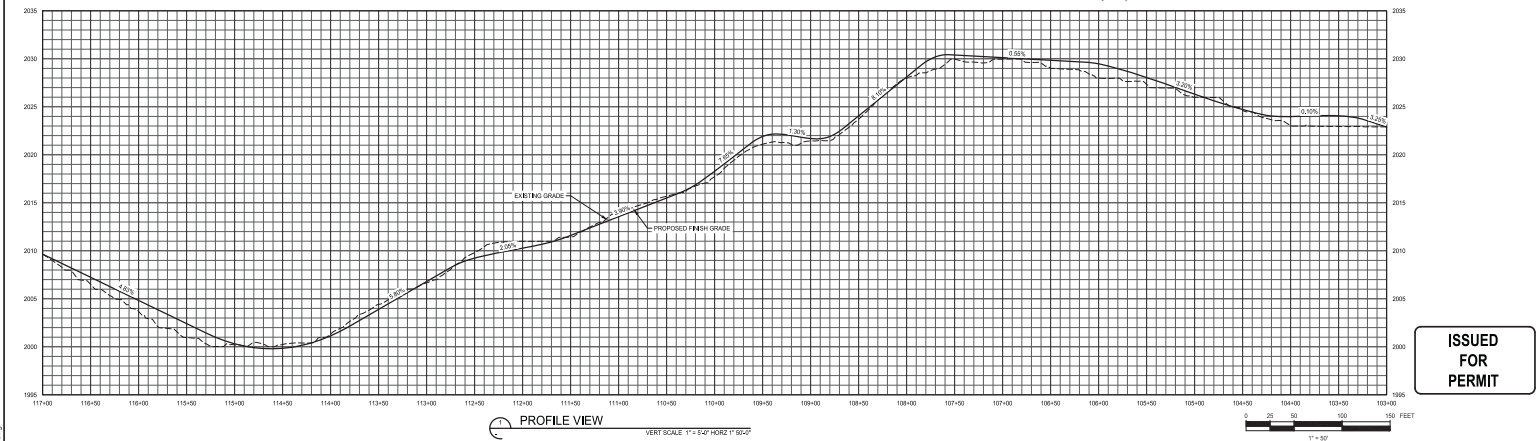
- NOTES**
1. CONTOURS WERE DERIVED FROM USGS LEAD DATA COLLECTED IN 2016.
 2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
 3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
 4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
 5. IRREGULARLY STERILE WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF RE-VEGETATION.

ESTIMATED QUANTITIES:

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS. WEIR NO ALLOWANCE FOR SHIPRA OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN ESTIMATED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	180 CY.
FILL MATERIAL	285 CY.
NET MATERIAL	105 CY. (FILL)

- LEGEND:**
- APPROXIMATE COASTAL COMMISSION BOUNDARY
 - POLE LOCATION
 - APPROXIMATE ROAD CENTERLINE
 - APPROXIMATE EDGE OF ROADWAY
 - APPROXIMATE UNPERMITTED BERMS
 - STERILE WATTLES
 - EXISTING MAJOR CONTOURS
 - EXISTING MINOR CONTOURS
 - PROPOSED ROAD MAJOR CONTOURS
 - PROPOSED ROAD MINOR CONTOURS
 - PROPOSED ROAD SURFACE LIMITS



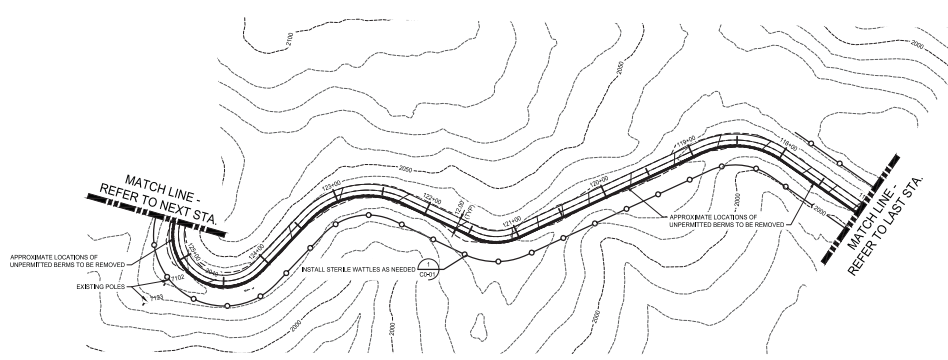
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FOR
PERMIT

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															181165		
															DRAWING NUMBER		
															C-103-00_117-00		
A	ISSUED FOR PERMIT		05/29/2024	KLS	KLS	SWW	REFERENCE DRAWINGS						ROAD LAYOUT				
REV	REVISIONS		DATE	DRN	DSGN	CKD	APPD	FOR 2024 DRWG ONLY									

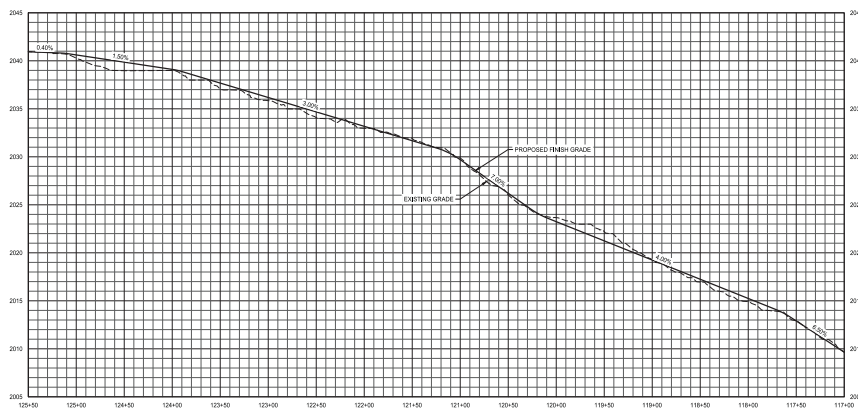


TEMESCAL POLE		JOB NUMBER	REV
REMEDIAL GRADING PLAN FOR ACCESS ROAD		181165	
ROAD LAYOUT		DRAWING NUMBER	
		C-103+00_117+00	

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8



PLAN VIEW
1" = 80'-0"



PROFILE VIEW
VERT SCALE: 1" = 5'-0" HORIZ: 1" = 80'-0"



NOTES

1. CONTOURS WERE DERIVED FROM USGS LEAD DATA COLLECTED IN 2016.
2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
5. IRREVERSIBLE STERILE WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF RE-VEGETATION.

ESTIMATED QUANTITIES:

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS (BICY) WITH NO ALLOWANCE FOR SHIM OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN TENSORIZED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	W C.Y.
FILL MATERIAL	SC C.Y.
NET MATERIAL	U C.Y.

LEGEND:

- APPROXIMATE COASTAL COMMISSION BOUNDARY
- POLE LOCATION
- APPROXIMATE ROAD CENTERLINE
- APPROXIMATE EDGE OF ROADWAY
- APPROXIMATE UNPERMITTED BERMS
- STERILE WATTLES
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED ROAD MAJOR CONTOURS
- PROPOSED ROAD MINOR CONTOURS
- PROPOSED ROAD SURFACE LIMITS

ISSUED
FOR
PERMIT

0 25 50 100 150 FEET
1" = 50'

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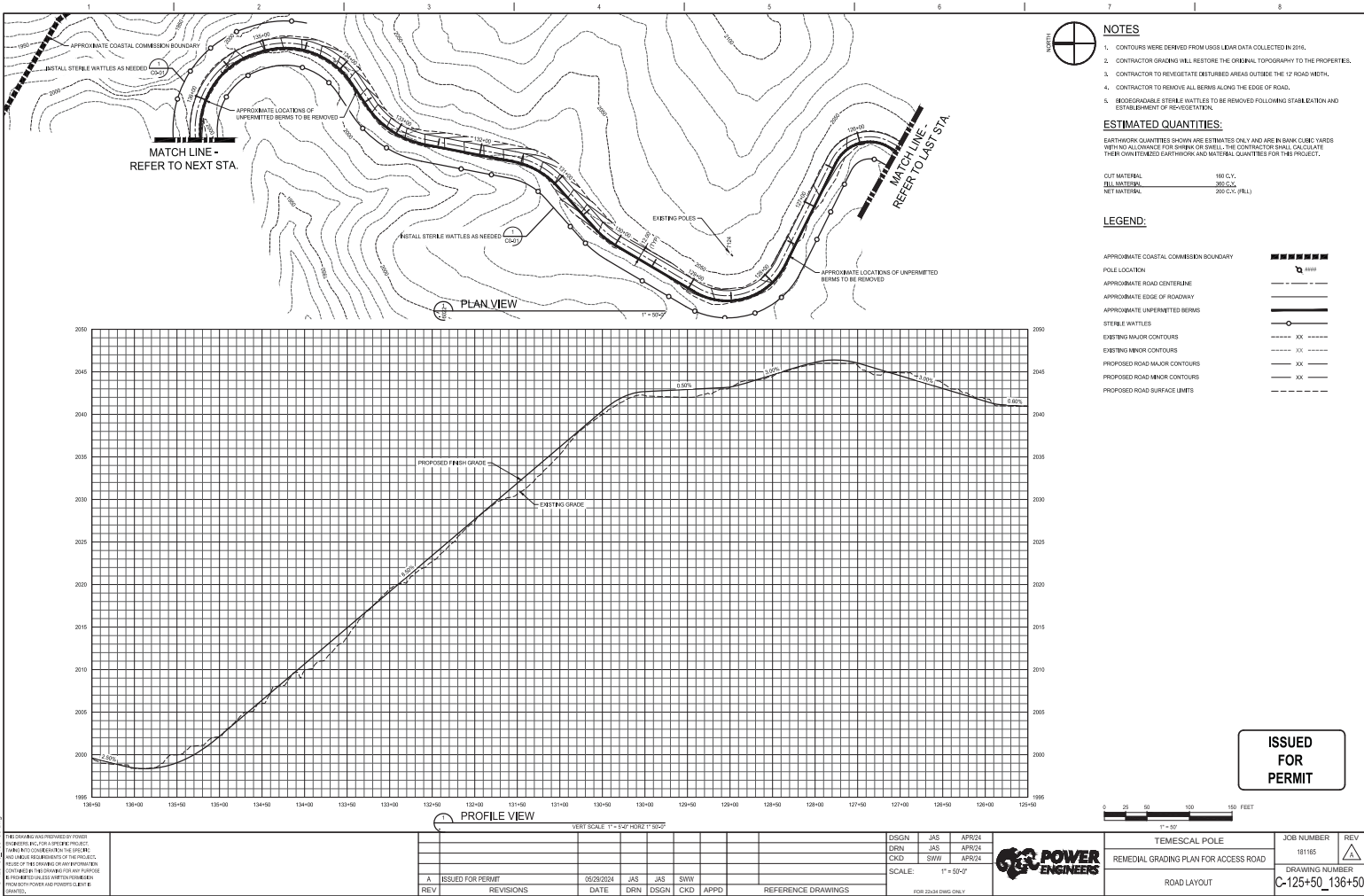
REV	ISSUED FOR PERMIT	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
A	ISSUED FOR PERMIT	05/26/2024	KLS	KLS	SWW		
REV	REVISIONS						

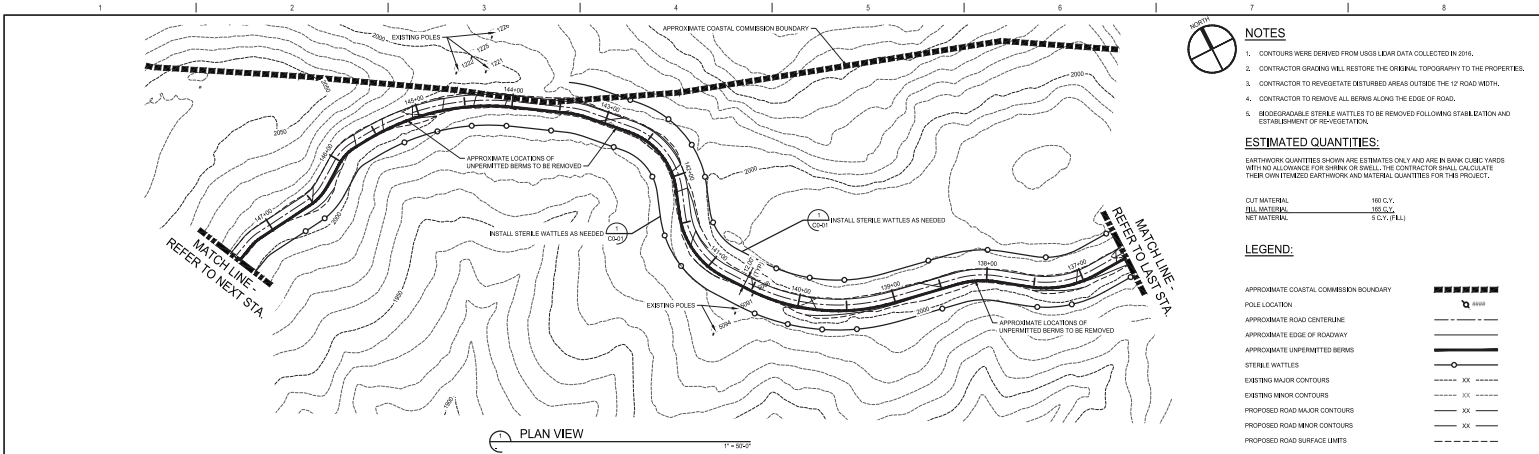
DSGN	KLS	APR24
DRN	KLS	APR24
CKD	SWW	APR24
SCALE:	1" = 50'-0"	



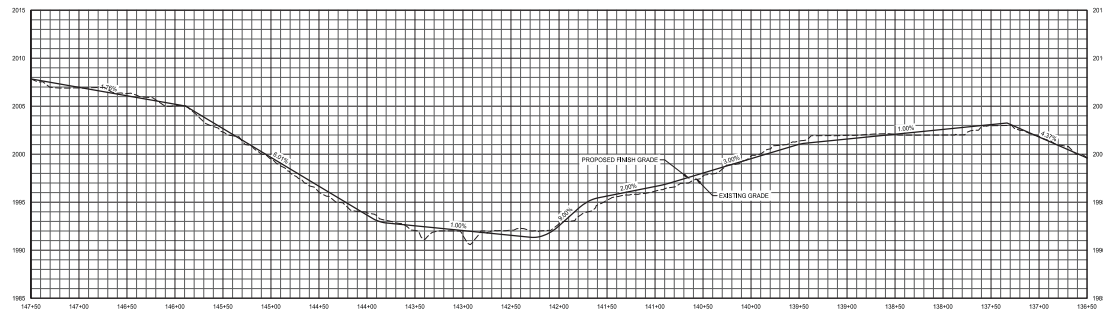
TEMESCAL POLE
REMEDIAL GRADING PLAN FOR ACCESS ROAD
ROAD LAYOUT

JOB NUMBER	REV
181165	
DRAWING NUMBER	
C-117+00_125+00	





- NOTES**
1. CONTOURS WERE DERIVED FROM USGS LEAD DATA COLLECTED IN 2016.
 2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
 3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
 4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
 5. BIOGRAVABLE STERILE WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF REGROWTH.
- ESTIMATED QUANTITIES:**
- EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS (BEN) NO ALLOWANCE FOR SHRINK OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN ITEMIZED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.
- LEGEND:**
- APPROXIMATE COASTAL COMMISSION BOUNDARY
 - POLE LOCATION
 - APPROXIMATE ROAD CENTERLINE
 - APPROXIMATE EDGE OF ROADWAY
 - APPROXIMATE UNPERMITTED BERMS
 - STERILE WATTLES
 - EXISTING MAJOR CONTOURS
 - EXISTING MINOR CONTOURS
 - PROPOSED ROAD MAJOR CONTOURS
 - PROPOSED ROAD MINOR CONTOURS
 - PROPOSED ROAD SURFACE LIMITS

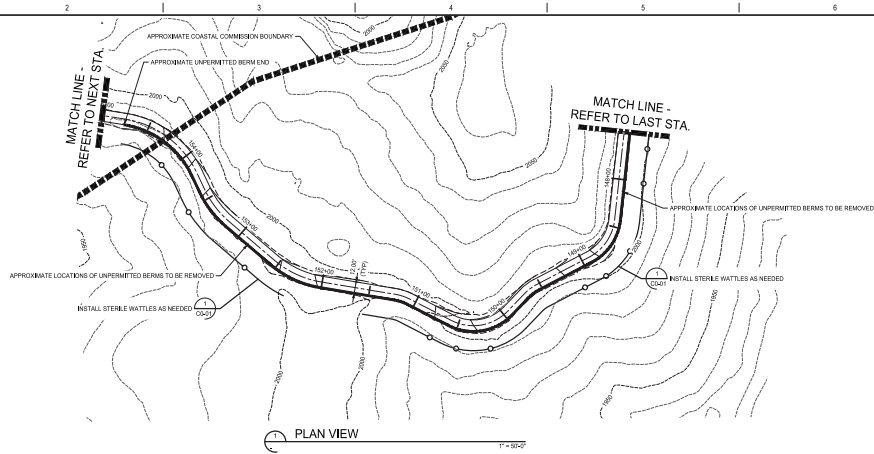


ISSUED FOR PERMIT

PROFILE VIEW
VERT SCALE: 1" = 5' HORIZ: 1" = 50'

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								DRN	JAS	APR/24		REMEDIAL GRADING PLAN FOR ACCESS ROAD		181165	
								CKD	SWW	APR/24					
								SCALE:		1" = 50'-0"		DRAWING NUMBER			
												C-136+50_147+50			
A	ISSUED FOR PERMIT		05/29/2024	JAS	JAS	SWW									
REV	REVISIONS		DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS							
								FOR 2D/3D DRWG ONLY							

ROAD LAYOUT	
-------------	--



-  **NOTES**

 1. CONTOURS WERE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2016.
 2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTY.
 3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
 4. CONTRACTOR TO REMOVE ALL BERRIS ALONG THE EDGE OF ROAD.
 5. **BIODEGRADABLE STEEL WATTLES** TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF REVEGETATION.

ESTIMATED QUANTITIES:

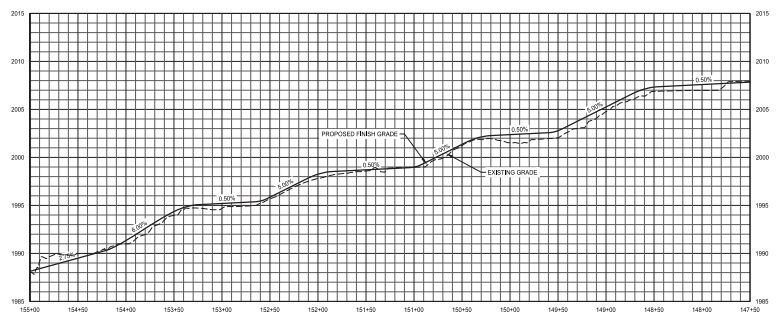
EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS WITH NO ALLOWANCE FOR SHRINK OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN ITEMIZED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	80 C.Y.
<u>FILL MATERIAL</u>	<u>155 C.Y.</u>
NET MATERIAL	95 C.Y. (FILL)

LEGEND:

LEGEND:

- | | |
|---|---|
| APPROXIMATE COASTAL COMMISSION BOUNDARY |  |
| POLE LOCATION |  |
| APPROXIMATE ROAD CENTERLINE |  |
| APPROXIMATE EDGE OF ROADWAY |  |
| APPROXIMATE UNPERMITTED BEARS |  |
| STABLE WATTLERS |  |
| EXISTING MAJOR CONTOURS |  |
| EXISTING MINOR CONTOURS |  |
| PROPOSED ROAD MAJOR CONTOURS |  |
| PROPOSED ROAD MINOR CONTOURS |  |
| PROPOSED ROAD SURFACE LIMITS |  |

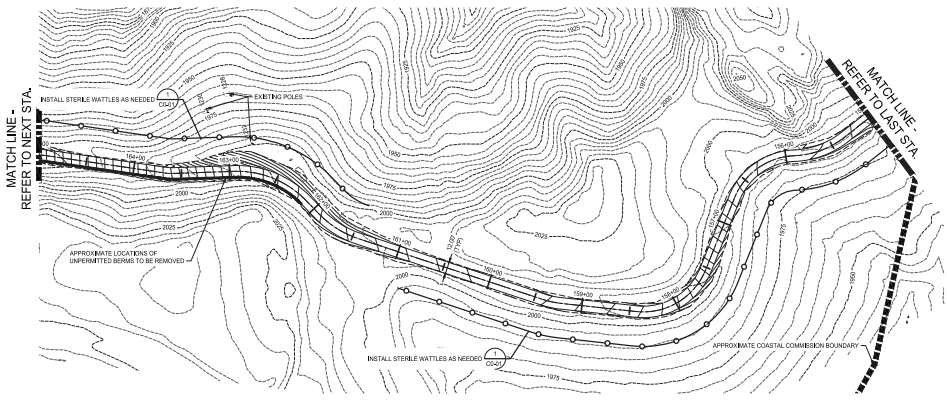


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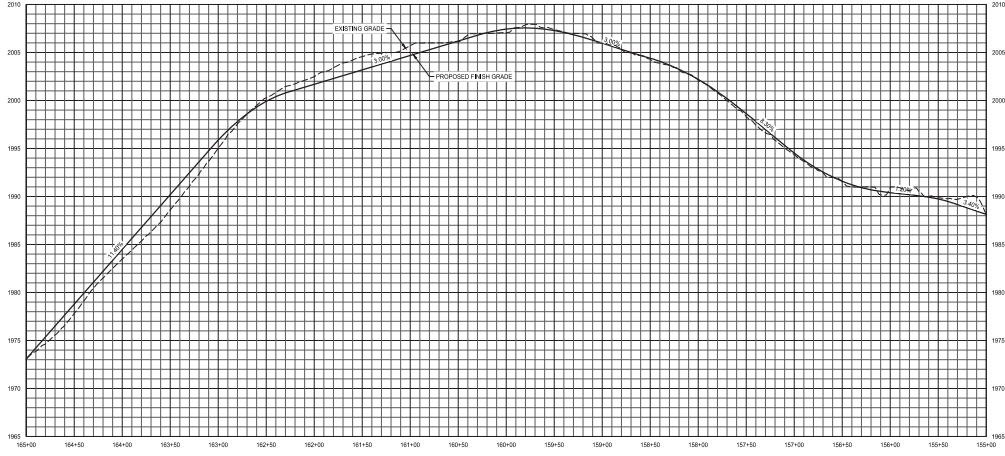


										DSGN JAS APR/24 DRN JAS APR/24 CKD SIWV APR/24		 POWER ENGINEERS	1" = 50' TEMESECAL POLE		JOB NUMBER 181165	REV 
										SCALE: 1" = 50'-0" FOR DRAIN ONLY			REMEDIAL GRADING PLAN FOR ACCESS ROAD		DRAWING NUMBER C-147-50_155-00	
A ISSUED FOR PERMIT REV REVISIONS										05/20/2024 JAS JAS SIWV DATE DRN DSGN CKD APPD			ROAD LAYOUT			

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8



PLAN VIEW
1" = 50'-0"



PROFILE VIEW
VERT SCALE 1" = 1'-0" (100:1) HORIZ 1" = 50'-0"



- NOTES**
1. CONTOURS WERE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2016.
 2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
 3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
 4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
 5. BIOGRAVABLE STERILE WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF RE-VEGETATION.

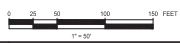
ESTIMATED QUANTITIES:

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS. WHEN NO ALLOWANCE FOR SHRINK OR SWELL, THE CONTRACTOR SHALL CALCULATE THEIR OWN ESTIMATED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	250 C.Y.
FILL MATERIAL	100 C.Y.
NET MATERIAL	80 C.Y. (CUT)

- LEGEND:**
- APPROXIMATE COASTAL COMMISSION BOUNDARY
 - POLE LOCATION
 - APPROXIMATE ROAD CENTERLINE
 - APPROXIMATE EDGE OF ROADWAY
 - APPROXIMATE UNPERMITTED BERMS
 - STERILE WATTLES
 - EXISTING MAJOR CONTOURS
 - EXISTING MINOR CONTOURS
 - PROPOSED ROAD MAJOR CONTOURS
 - PROPOSED ROAD MINOR CONTOURS
 - PROPOSED ROAD SURFACE LIMITS

ISSUED FOR PERMIT



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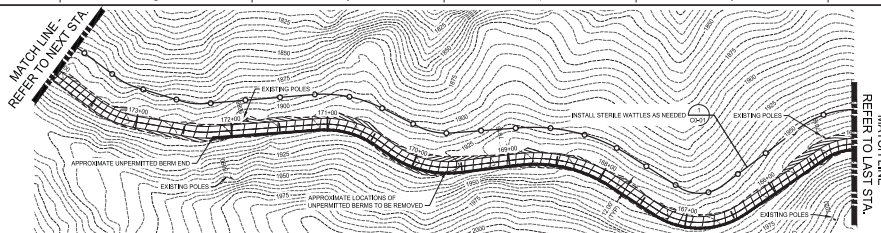
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
A	ISSUED FOR PERMIT	05/26/2024	JAS	JAS	SWW		

DSGN	JAS	APR/24
DRN	JAS	APR/24
CKD	SWW	APR/24

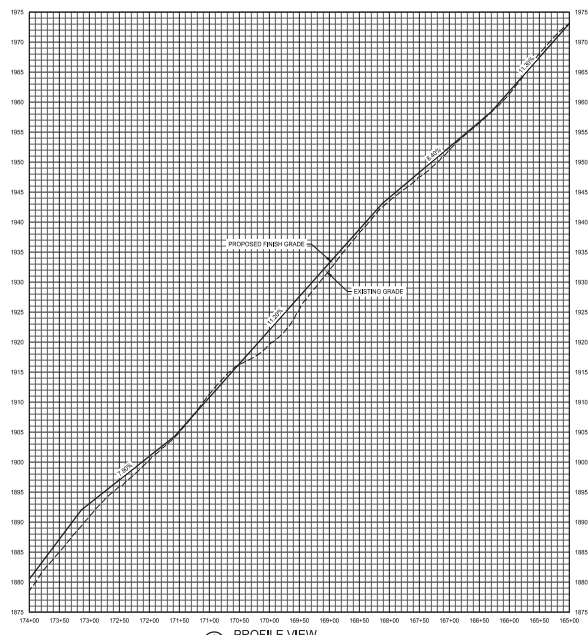


TEMESCAL POLE	JOB NUMBER	REV
REMEDIAL GRADING PLAN FOR ACCESS ROAD	181165	
ROAD LAYOUT	DRAWING NUMBER	

C-155+00_165+00



PLAN VIEW
1" = 50'-0"



PROFILE VIEW
VERT SCALE 1" = 8'-0" HORIZ 1" = 50'-0"



- NOTES**
1. CONTOURS WERE DERIVED FROM USGS LEAD DATA COLLECTED IN 2016.
 2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
 3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
 4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
 5. BIOGRAVABLE STERILE WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF RE-VEGETATION.

ESTIMATED QUANTITIES:

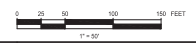
EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS WITH NO ALLOWANCE FOR SHRINK OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN ESTIMATED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL 80 C.Y.
FILL MATERIAL 400 C.Y.
NET MATERIAL 320 C.Y. (FILL)

LEGEND:

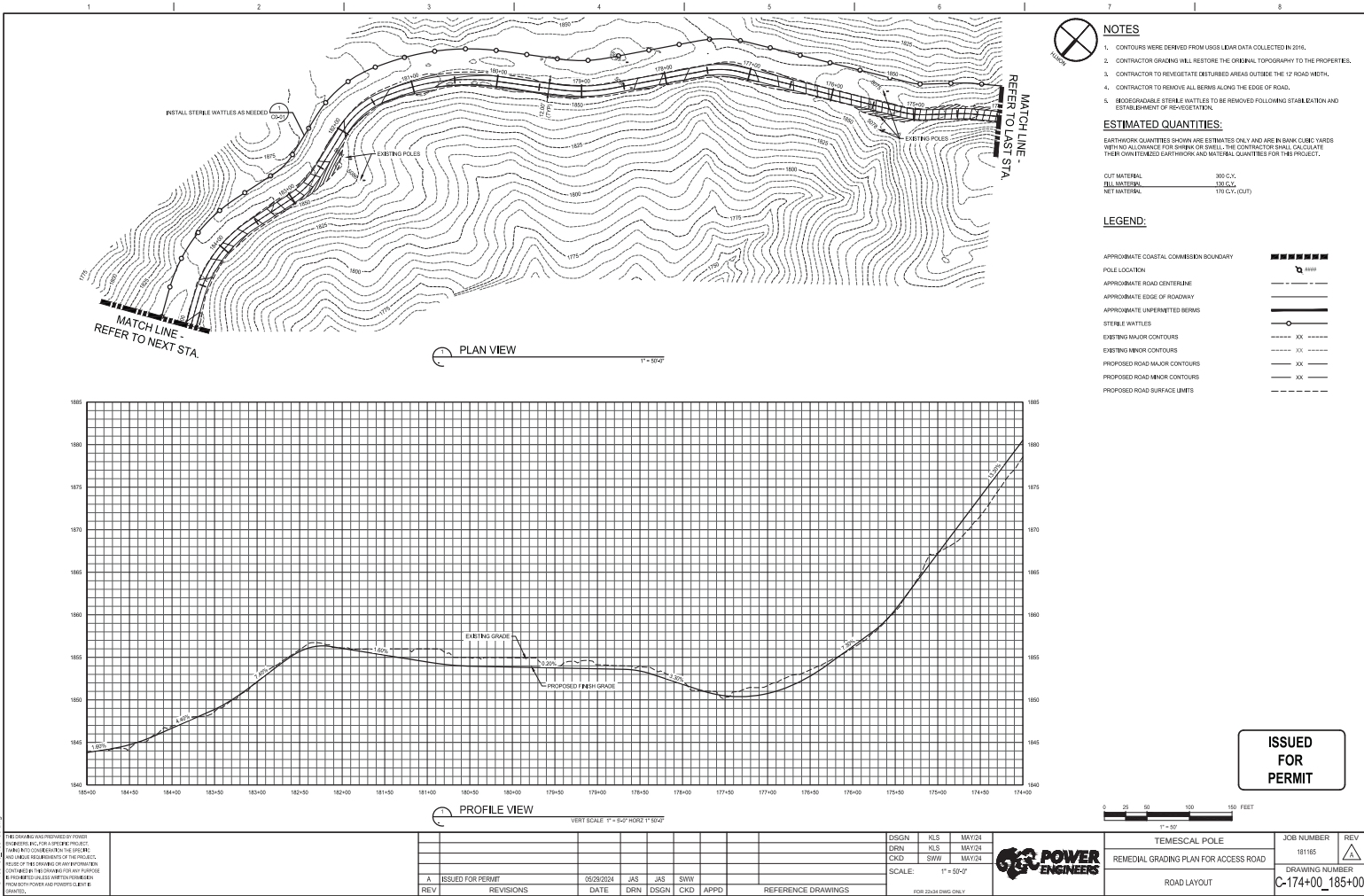
- APPROXIMATE COASTAL COMMISSION BOUNDARY
- POLE LOCATION
- APPROXIMATE ROAD CENTERLINE
- APPROXIMATE EDGE OF ROADWAY
- APPROXIMATE UNPERMITTED BERMS
- STERILE WATTLES
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED ROAD MAJOR CONTOURS
- PROPOSED ROAD MINOR CONTOURS
- PROPOSED ROAD SURFACE LIMITS

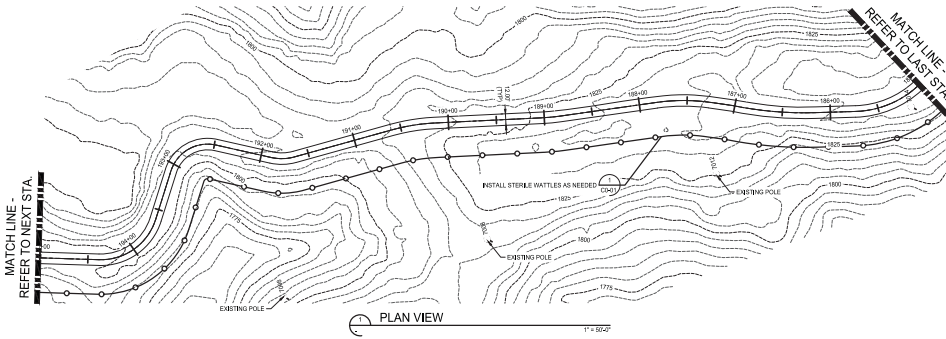
**ISSUED
FOR
PERMIT**



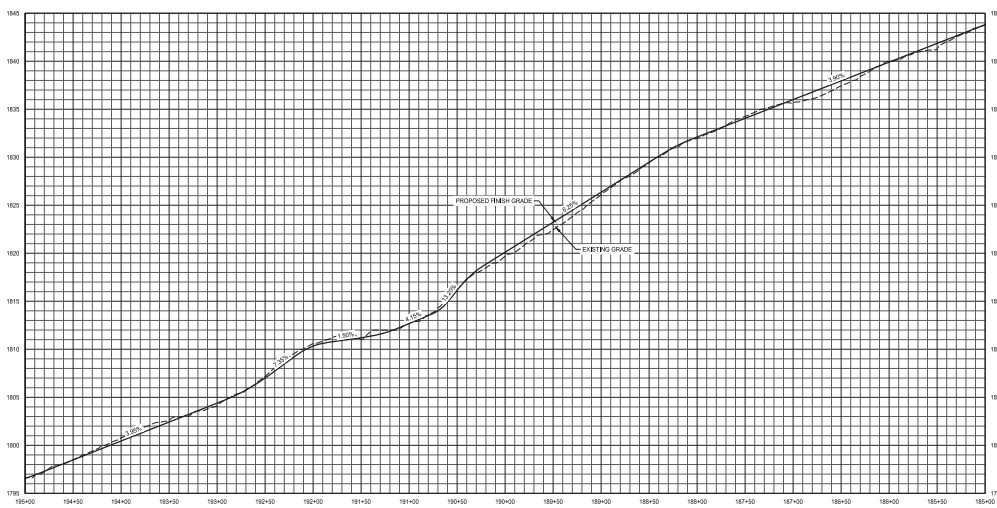
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										VERT SCALE 1" = 4' HORIZ 1" = 60'										1" = 50'																				
										DSGN			RLS			MAY24													TEMESCAL POLE			JOB NUMBER			REV					
										DRN			RLS			MAY24													REMEDIAL GRADING PLAN FOR ACCESS ROAD			181165								
										CKD			SWW			MAY24													ROAD LAYOUT			DRAWING NUMBER								
										SCALE:			1" = 50'-0"																											
A										ISSUED FOR PERMIT			05/26/2024			JAS			JAS			SWW													C-165+00_174+00					
REV										REVISIONS			DATE			DRN			DSGN			CKD			APPD			REFERENCE DRAWINGS												
																									FOR DESIGN ONLY															





PLAN VIEW
1" = 50'



PROFILE VIEW
VERT. SCALE 1" = 5' HORIZ. 1" = 50'



NOTES

1. CONTOURS WERE DERIVED FROM USGS LEVIR DATA COLLECTED IN 2016.
2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
5. BROSGRAVABLE STEEPLE WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF RE-VEGETATION.

ESTIMATED QUANTITIES:

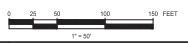
EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS WITH NO ALLOWANCE FOR SHRINK OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN ESTIMATED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	90' C.Y.
FILL MATERIAL	90' C.Y.
NET MATERIAL	0' C.Y. (FULL)

LEGEND:

- APPROXIMATE COASTAL COMMISSION BOUNDARY
- POLE LOCATION
- APPROXIMATE ROAD CENTERLINE
- APPROXIMATE EDGE OF ROADWAY
- APPROXIMATE UNPERMITTED BERMS
- STEEPLE WATTLES
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED ROAD MAJOR CONTOURS
- PROPOSED ROAD MINOR CONTOURS
- PROPOSED ROAD SURFACE LIMITS

ISSUED
FOR
PERMIT



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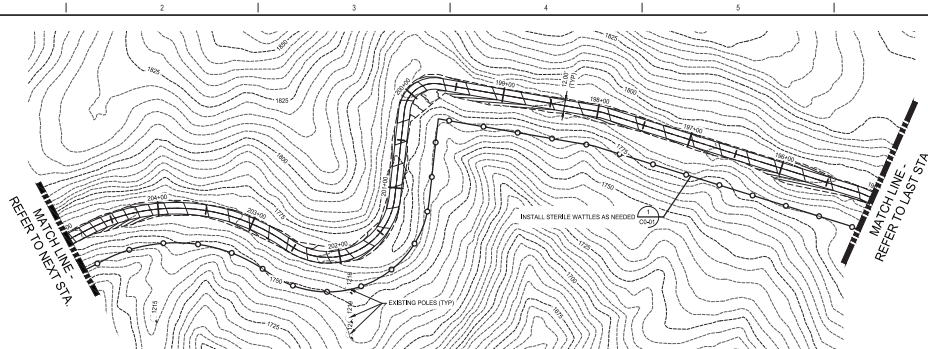
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
A	ISSUED FOR PERMIT	05/26/2024	KLS	KLS	SWW		

DSGN	KLS	MAY24
DRN	KLS	MAY24
CKD	SWW	

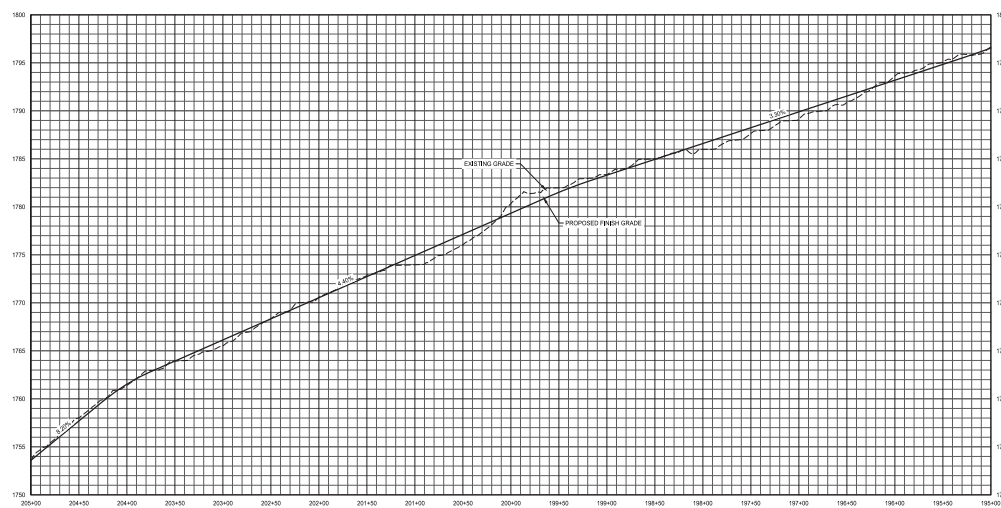


TEMESCAL POLE	JOB NUMBER	REV
REMEDIAL GRADING PLAN FOR ACCESS ROAD	181165	
ROAD LAYOUT	DRAWING NUMBER	

C-185+00_195+00



PLAN VIEW
1" = 50'-0"



PROFILE VIEW
VERT SCALE: 1" = 30'-0" HORIZ SCALE: 1" = 50'-0"



NOTES

1. CONTOURS WERE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2016.
2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
4. CONTRACTOR TO REMOVE ALL BERMES ALONG THE EDGE OF ROAD.
5. BRODEGRADABLE STERILE WATTLES TO BE REMOVED FOLLOWING STABILIZATION AND ESTABLISHMENT OF RE-VEGETATION.

ESTIMATED QUANTITIES:

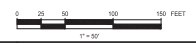
EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS. WHEN NO ALLOWANCE FOR SHRINK OR SWELL, THE CONTRACTOR SHALL CALCULATE THEIR OWN ESTIMATED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	125 C.Y.
FILL MATERIAL	180 C.Y.
NET MATERIAL	55 C.Y. (FILL)

LEGEND:

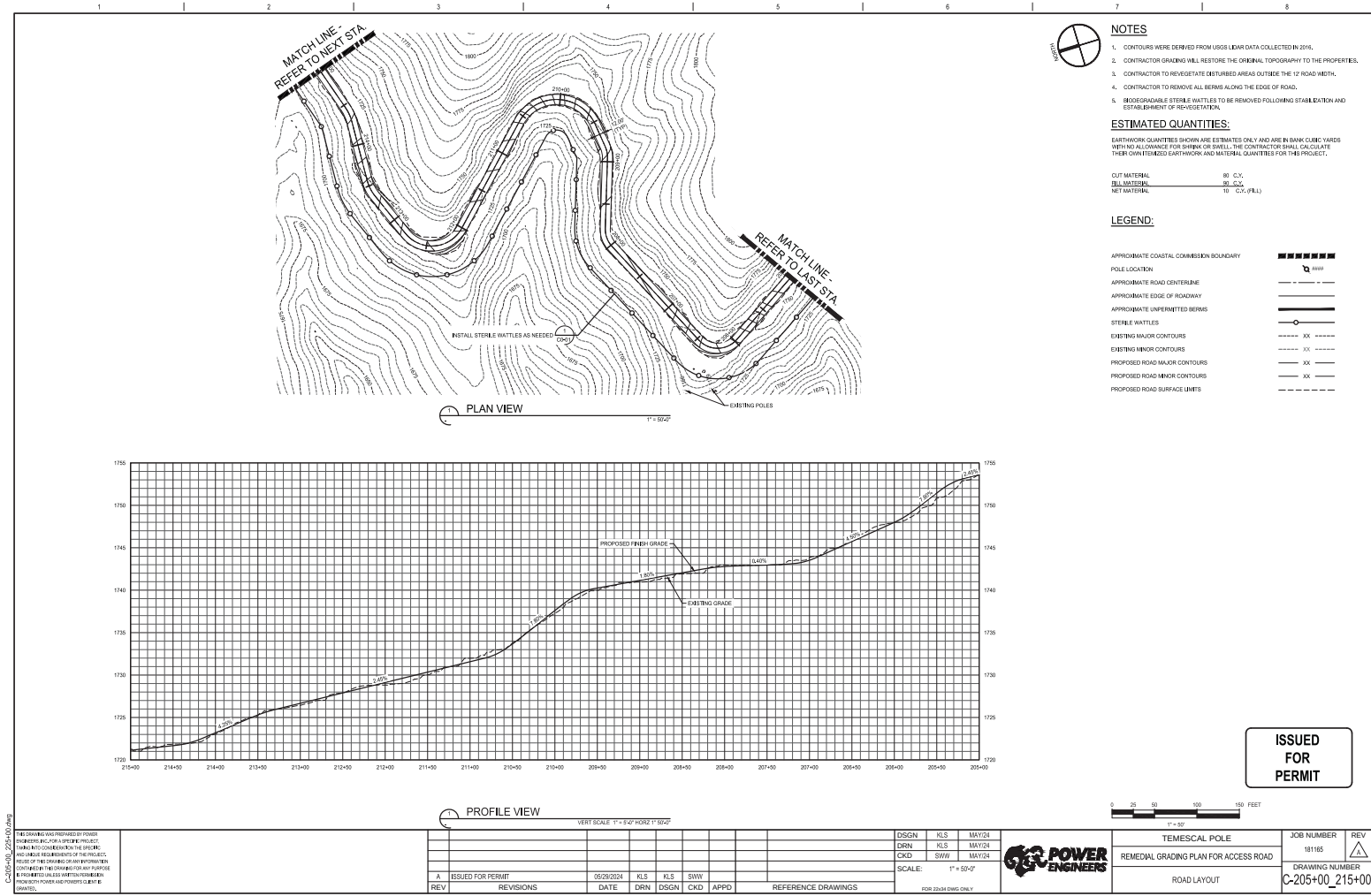
- APPROXIMATE COASTAL COMMISSION BOUNDARY
- POLE LOCATION
- APPROXIMATE ROAD CENTERLINE
- APPROXIMATE EDGE OF ROADWAY
- APPROXIMATE UNPERMITTED BERMES
- STERILE WATTLES
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED ROAD MAJOR CONTOURS
- PROPOSED ROAD MINOR CONTOURS
- PROPOSED ROAD SURFACE LIMITS

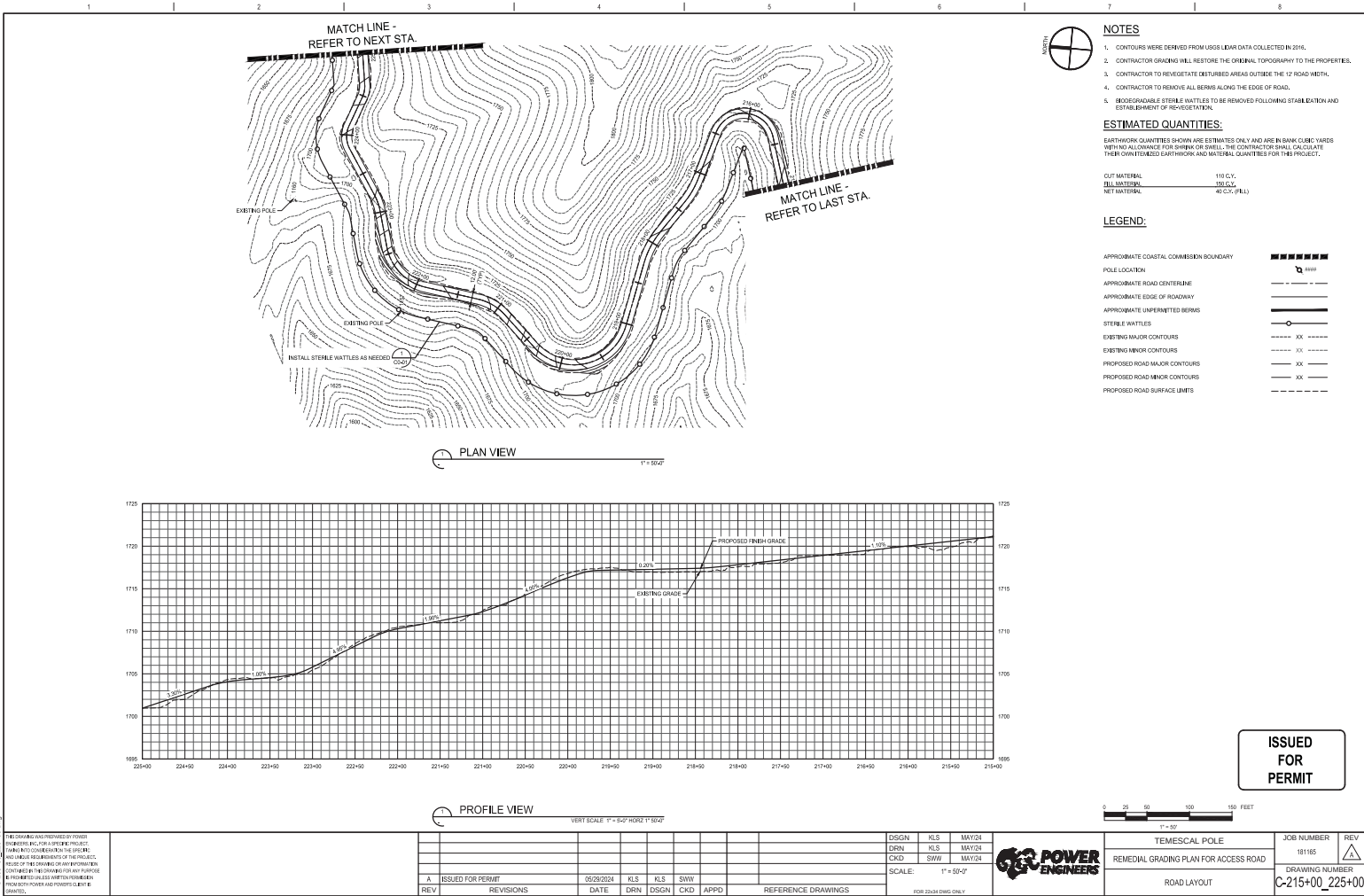
ISSUED
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PERMIT

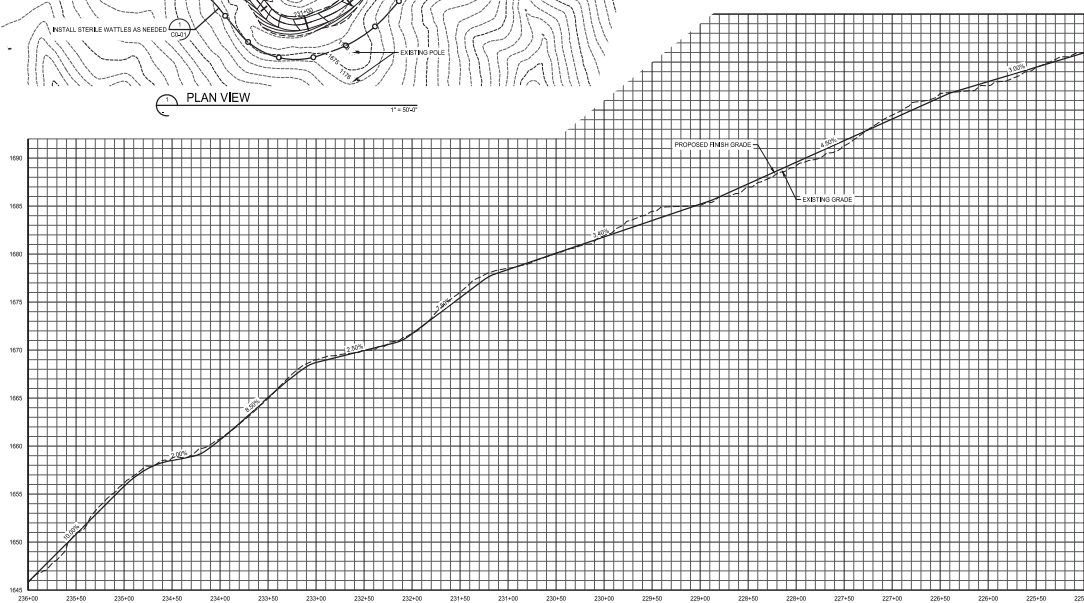
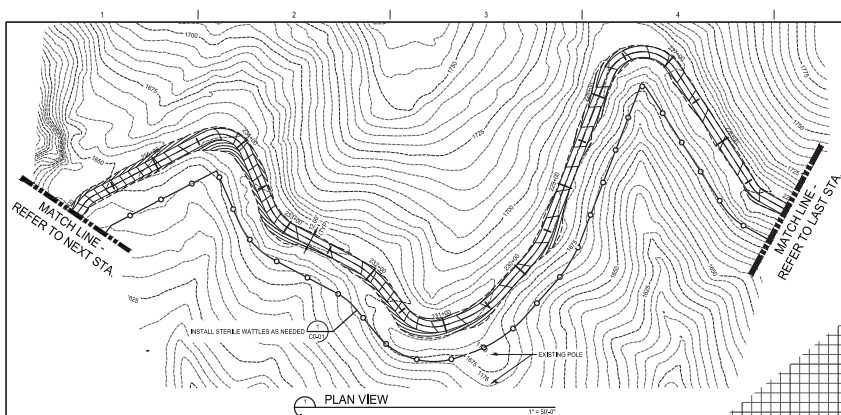


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										1" = 50'			TEMESCAL POLE		JOB NUMBER	REV	
										DSGN	KLS	MAY24		REMEDIAL GRADING PLAN FOR ACCESS ROAD		181165	△
										DRN	KLS	MAY24		ROAD LAYOUT		DRAWING NUMBER	C-195-00_205+00
										CKD	SWW	MAY24					
										SCALE: 1" = 50'-0"							
										FOR 22x24 DWG ONLY							
A		ISSUED FOR PERMIT		05/26/2024	KLS	KLS	SWW										
REV		REVISIONS		DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS								







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PROFILE VIEW

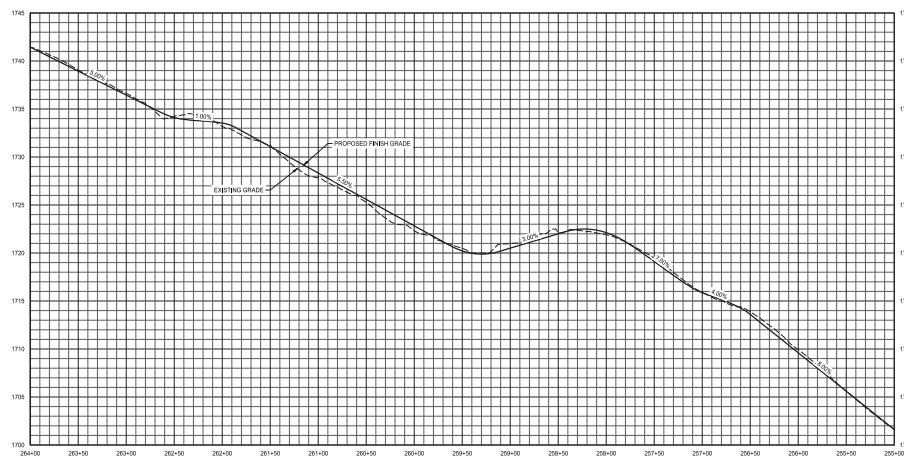
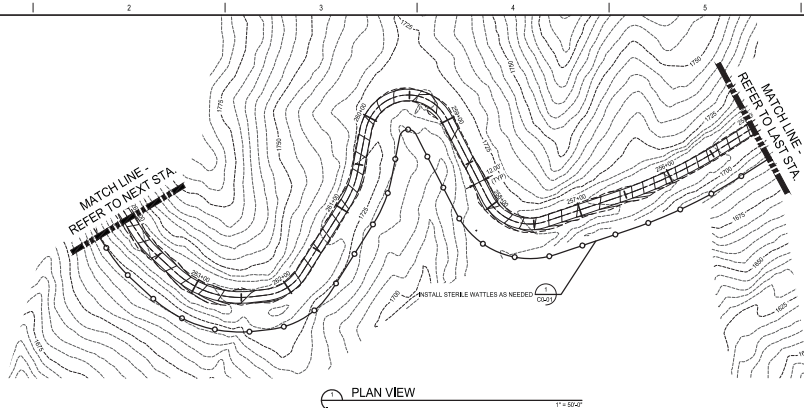
VERT SCALE: 1" = 4' HORIZ 1" = 40'

A	ISSUED FOR PERMIT	05/26/2024	KLS	KLS	SWW			
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD		REFERENCE DRAWINGS

DSGN	KLS	MAY/24
DRN	KLS	MAY/24
CKD	SWW	MAY/24
SCALE:		1" = 50'-0"
FOR 2D PLDWG ONLY		



TEMESCAL POLE	JOB NUMBER	REV
REMEDIAL GRADING PLAN FOR ACCESS ROAD	181165	A
ROAD LAYOUT	DRAWING NUMBER C-225+00_236+00	



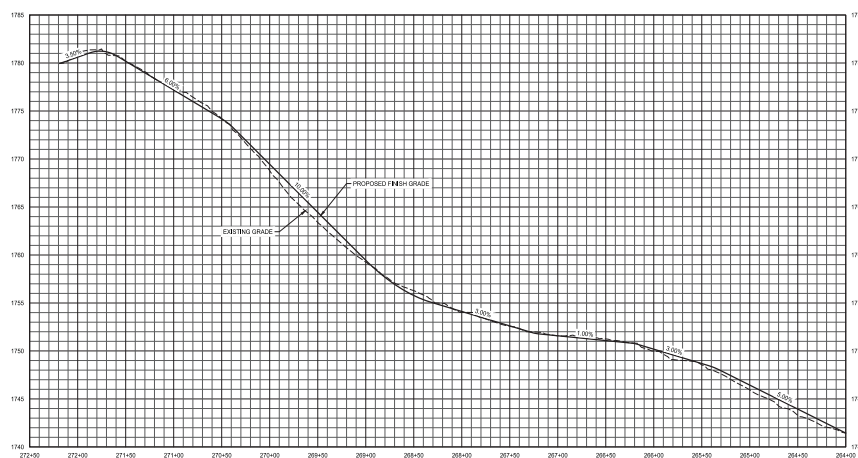
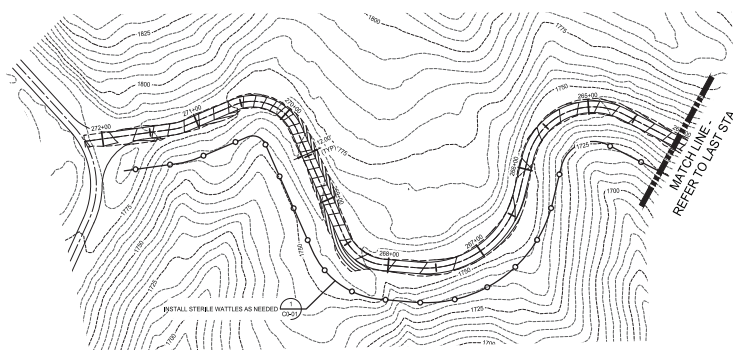
-

C-255+00_272+00.dwg

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[illegible]

TEMESCAL POLE	JOB NUMBER 181165	REV A
REMEDIAL GRADING PLAN FOR ACCESS ROAD	DRAWING NUMBER C-255+00_246+00	
ROAD LAYOUT		



NOTES

1. CONTOURS WERE DERIVED FROM USGS 10'AR DATA COLLECTED IN 2016.
2. CONTRACTOR GRADING WILL RESTORE THE ORIGINAL TOPOGRAPHY TO THE PROPERTIES.
3. CONTRACTOR TO REVEGETATE DISTURBED AREAS OUTSIDE THE 12' ROAD WIDTH.
4. CONTRACTOR TO REMOVE ALL BERMS ALONG THE EDGE OF ROAD.
5. GRADEWORK IS TO BE DERIVED FROM EXISTING STATION AND

ESTIMATED QUANTITIES:

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS WITH NO ALLOWANCE FOR SHRINK OR SWELL. THE CONTRACTOR SHALL CALCULATE THEIR OWN ITEMIZED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT.

CUT MATERIAL	90 C.Y.
FILL MATERIAL	125 C.Y.
NET WEIGHT	98 C.M. (1000)

LEGEND:

APPROXIMATE COASTAL COMMISSION BOUNDARY

POLE LOCATION

APPROXIMATE ROAD CENTERLINE

APPROXIMATE EDGE OF ROADWAY

APPROXIMATE EDGE OF ROADWAY

APPROXIMATE UN

STERILE WATTLES

EXISTING MAJOR CONTOURS

EXISTING MINOR CONTOURS

EXPLODED ROAD MAJOR CONTOURS

PROPOSED ROAD MAJOR CONTOUR

ISSUED
FOR
PERMIT

0 25 50 100 150 FEET



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A	ISSUED FOR PERMIT	05/29/2024	JAS	JAS	SWW				
REV	REVISIONS	DATE	DGN	DSGN	CMD	ADD			REFERENCE DRAWINGS



$\gamma = 90^\circ$ TEMESCAL POLE REMEDIAL GRADING PLAN FOR ACCESS ROAD ROAD LAYOUT

JOB NUMBER	REV
181165	
DRAWING NUMBER	
C-264+00 272+00	