Appendix B

Biological Resources Assessment
&
Coachella Valley Multiple Species Habitat Conservation Plan Compliance Report

DRAFT CONNECT COACHELLA PROJECT
GRAPEFRUIT BOULEVARD AND AVENUE 54 BIKE PATH DEVELOPMENT

Biological Resources Assessment & Coachella Valley Multiple Species Habitat Conservation Plan Compliance Report

CITY OF COACHELLA, RIVERSIDE COUNTY, CALIFORNIA

Prepared for:
Terra Nova Planning and Research, Inc.
42635 Melanie Place, Suite 101
Palm Desert, CA 92211
Tel: (760) 341-4800
FAX: (760) 341-4455
Contact: Nicole Criste
E-mail: ncriste@terranovaplanning.com

Prepared by:
WSP USA Environment & Infrastructure, Inc.
11870 Pierce Street, Suite D
Riverside, CA 92505
(951) 369-8060
WSP Job #322520144

Principal Field Investigator:
Nathan Moorhatch

Report Author:
Nathan Moorhatch
Survey: 4 October 2023

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

1.0 INTRODUCTION

At the request of Terra Nova Planning & Research (Terra Nova), this biological resource assessment report (BRAR) was prepared by WSP USA Environment & Infrastructure Inc. (WSP USA) for the proposed Connect Coachella Project Bike Paths located along both Grapefruit Avenue/Highway 111 and Avenue 54 in the city of Coachella, Riverside County, California. Information contained herein is intended to be used for compliance with the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), California Environmental Quality Act (CEQA), as well as federal and California Endangered Species Acts.

2.0 PROJECT LOCATION / DESCRIPTION

Terra Nova is preparing California Environmental Quality Act (CEQA) documentation for the proposed Connect Coachella Project. The focus of the work will include installing 3.8 miles of Class I Bike Path along Highway 111/Grapefruit Boulevard between Avenue 48 and Avenue 54 (with a gap between Leoco Lane and 9th Street where there is an existing segment of bike path); and 3.2 miles of Class II Bike lanes on Avenue 54 between Polk Street and Van Buren Street. The project route is located in paved roads on Avenue 54, and in an approximately 25-foot wide ROW that traverses both cleared and developed areas on the east side of Hwy. 111/Grapefruit Blvd. (please see Photographs 1 – 4 in Appendix C). The segments of proposed bike path along Hwy. 111/Grapefruit Blvd. are located on cleared and/or developed ground between the Union Pacific Railroad line and the eastern shoulder of Hwy. 111/Grapefruit Blvd. Surrounding land uses over the entire proposed route include commercial and residential development, and agricultural lands (both active and inactive). Specifically, the project route traverses portions of Sections 31, 32, 5, 8, and 9, Townships 5 and 6 South; Range 8 East as shown on the United States Geological Survey (USGS) *Indio*, California, 7.5-minute topographic quadrangle (Appendix A – Figure 2). The elevation of the project route ranges from approximately -42 to -106 feet below mean sea level.

3.0 REGULATORY FRAMEWORK

3.1 Federal

Endangered Species Act (ESA) – The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service are the designated federal agencies accountable for administering the ESA. The ESA defines species as “endangered” or “threatened” and provides regulatory protection at the federal level.

- Section 9 of the ESA prohibits the “take” of listed (i.e., endangered or threatened) species. The ESA’s definition of take is “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct.” Recognizing that take cannot always be avoided, Section 10(a) includes provisions for take that is incidental to, but not the purpose of, otherwise lawful activities. Specifically, Section 10(a) (1) (A) permits (authorized take permits) are issued for scientific purposes. Section 10(a) (1) (B) permits (incidental take permits) are issued for the incidental take of listed species that does not jeopardize the species.
- Section 7 (a) (2) requires federal agencies to evaluate the proposed project with respect to listed or proposed listed, species and their respective critical habitat (if applicable). Federal agencies must employ programs for the conservation of listed species and are prohibited from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or modify its “critical habitat.”

As defined by the ESA, “individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding.

Section 10(a) of the ESA authorizes the issuance of incidental take permits and establishes standards for the content of habitat conservation plans (see Section 3.3 below).

Migratory Bird Treaty Act (MBTA) – Treaties signed by the U.S., Great Britain, Mexico, Japan, and the countries of the former Soviet Union make it unlawful to pursue, capture, kill, and/or possess, or attempt to engage in any such conduct to any migratory bird, nest, egg or parts thereof listed in the document. As with the ESA, the MBTA also allows the Secretary of the Interior to grant permits for the incidental take of these protected migratory bird species.

National Environmental Policy Act (NEPA) – If portions of a proposed project could fall under the jurisdiction of a federal agency (i.e., U.S. Bureau of Reclamation, U.S. Army Corps of Engineers) they are subject to environmental review pursuant to NEPA. NEPA establishes certain criteria that must be adhered to for any project that is “financed, assisted, conducted or approved” by a federal agency. The federal lead agency is required to “determine whether the proposed action will significantly affect the quality of the human environment.”

Section 404 of the Clean Water Act – This section of the Clean Water Act, administered by the U.S. Army Corps of Engineers (USACE), regulates the discharge of dredged and fill material into “waters of the United States.” The USACE has created a series of nationwide permits that authorize certain activities within waters of the U.S. provided that the proposed activity does not exceed the impact threshold of 0.5 acre for nationwide permits, takes steps to avoid impacts to wetlands and other designated U.S. waters where practicable, minimizes potential impacts to wetlands, and provides compensation for any remaining, unavoidable impacts through activities to restore or create wetlands. For projects that exceed the threshold for nationwide permits, individual permits under Section 404 can be issued. An inspection of the project site to determine presence or absence of potential jurisdictional wetlands and waters was conducted during the assessment for this project.

3.2 State

California Endangered Species Act (CESA) – This legislation is similar to the federal ESA, but it is administered by the California Department of Fish and Wildlife (CDFW – formerly Department of Fish and Game). The CDFW is authorized to enter into “memoranda of understanding” with individuals, public agencies, and other institutions to import, export, take, or possess state-listed species for scientific, educational, or management purposes. CESA prohibits the take of state-listed species except as otherwise provided in state law. Unlike the federal ESA, the CESA applies the take prohibitions to species currently petitioned for state-listing status (candidate species). State lead agencies are required to consult with CDFW to ensure that actions are not likely to jeopardize the continued existence of any state-listed species or result in the destruction or degradation of occupied habitat.

California Environmental Quality Act (CEQA) – The basic goal of CEQA is to maintain a high-quality environment now and in the future. The specific goals are for California's public agencies to:

1) identify the significant environmental effects of their actions; and, either
2) avoid those significant environmental effects, where feasible; or
3) mitigate those significant environmental effects, where feasible.

CEQA applies to "projects" proposed to be undertaken or requiring approval by state and local government agencies. Projects are activities that have the potential to have a physical impact

on the environment and may include the enactment of zoning ordinances, the issuance of conditional use permits and the approval of tentative subdivision maps. Where a project requires approvals from more than one public agency, CEQA requires one of these public agencies to serve as the "lead agency."

A "lead agency" must complete the environmental review process required by CEQA. The most basic steps of the environmental review process are to:

4) Determine if the activity is a "project" subject to CEQA.
5) Determine if the "project" is exempt from CEQA.
6) Perform an Initial Study to identify the environmental impacts of the project and determine whether the identified impacts are "significant". Based on its findings of "significance", the lead agency prepares one of the following environmental review documents:
    a) Negative Declaration if it finds no "significant" impacts.
    b) Mitigated Negative Declaration if it finds "significant" impacts but revises the project to avoid or mitigate those significant impacts.
    c) Environmental Impact Report (EIR) if it finds "significant" impacts.

While there is no ironclad definition of "significance", Article 5 of the State CEQA Guidelines (California Natural Resources Agency 2014) provides criteria to lead agencies in determining whether a project may have significant effects.

The Native Plant Protection Act (NPPA) – The NPPA includes measures to preserve, protect, and enhance rare and endangered native plant species. Definitions for “rare and endangered” are different from those contained in CESA. However, the list of species afforded protection in accordance with the NPPA includes those listed as rare and endangered under CESA. NPPA provides limitations on take as follows: “no person will import into this state, or take, possess, or sell within this state” any rare or endangered native plants, except in accordance with the provisions outlined in the act. If a landowner is notified by CDFW, pursuant to section 1903.5 that a rare or endangered plant is growing on their property, the landowner shall notify CDFW at least 10 days prior to the changing of land uses to allow CDFW to salvage the plants.

Natural Community Conservation Planning (NCCP) Program – A NCCP, which is managed by the CDFW, is intended to conserve multiple species and their associated habitats, while also providing for compatible use of private lands. Through local planning, the NCCP planning process is designed to provide protection for wildlife and natural habitats before the environment becomes so fragmented or degraded by development that species listing are required under CESA. Instead of conserving small, often isolated “islands” of habitat for just one listed species, agencies, local jurisdictions, and/or other interested parties have an opportunity through the NCCP to work cooperatively to develop plans that consider broad areas of land for conservation that would provide habitat for many species. Partners enroll in the programs, and by mutual consent, areas considered to have high conservation priorities or values are set aside and protected from development. Partners may also agree to study, monitor, and develop management plans for these high value “reserve” areas. The NCCP provides an avenue for fostering economic growth by allowing approved development in areas with lower conservation value. The project site is in a combined Habitat Conservation Plan (HCP) / NCCP, see Section 3.3.

Sections 1600-1603 of the State Fish and Game Code – The California Fish and Game (Wildlife) Code, pursuant to Sections 1600 through 1603, regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that

supports fish or wildlife resources. Under state code, CDFW jurisdiction is assessed in the field based on one, or a combination, of the following criteria:

7) At minimum, intermittent, and seasonal flow through a bed or channel with banks and that also supports fish or other aquatic life.
8) A watercourse having a surface or subsurface flow regime that supports or that has supported riparian vegetation.
9) Hydrogeomorphically distinct top-of-embankment to top-of-embankment limits.
10) Outer ground cover and canopy extents of, typically, riparian associated vegetation species that would be sustained by surface and/or subsurface waters of the watercourse.

The CDFW requires that public and private interests apply for a "Streambed Alteration Agreement" for any project that may impact a streambed or wetland. The CDFW has maintained a "no net loss" policy regarding impacts to streams and waterways and requires replacement of lost habitats on at least a 1:1 ratio.

Section 2081 of the State Fish and Game Code – Under Section 2081 of the California Fish and Game Code, the CDFW authorizes individuals or public agencies to import, export, take, or possess state endangered, threatened, or candidate species in California through permits or memoranda of understanding. These acts, which are otherwise prohibited, may be authorized through permits or "memoranda of understanding" if (1) the take is incidental to otherwise lawful activities, (2) impacts of the take are minimized and fully mitigated, (3) the permit is consistent with regulations adopted in accordance with any recovery plan for the species in question, and (4) the applicant ensures suitable funding to implement the measures required by the CDFW. The CDFW shall make this determination based on the best scientific information reasonably available and shall include consideration of the species' capability to survive and reproduce.

Section 3505.5 of the State Fish and Game Code – This section makes it unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey, e.g.: owls, hawks, eagles, etc.) or to take, possess, or destroy the nest or eggs of any bird-of-prey.

Clean Water Act – The Regional Water Quality Control Board (RWQCB) regulates activities pursuant to Section 401(a)(1) of the Clean Water Act (CWA). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters. Through the Porter Cologne Water Quality Control Act, the RWQCB asserts jurisdiction over Waters of the State of California (WSC) which is generally the same as WUS but may also include isolated waterbodies. The Porter Cologne Act defines WSC as "surface water or ground water, including saline waters, within the boundaries of the state".

3.3 Coachella Valley Multiple Species Habitat Conservation Plan

Finalized in October 2008, and amended in 2016, the CVMSHCP is a comprehensive regional plan that addresses the conservation needs of 27 species of native flora and fauna and 24 natural vegetation communities occurring throughout the Coachella Valley region of western Riverside County, California. Permits for the CVMSHCP were issued by the CDFW on September 9, 2008 and the United States Fish and Wildlife Service (USFWS) on October 1, 2008 (TE104604-0). Managed by the Coachella Valley Conservation Commission (CVCC), CVMSHCP participants include Riverside County, the Cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, Rancho Mirage, as well as the Coachella Valley Association of Governments (CVAG), Coachella Valley Water

District, Imperial Irrigation District, Mission Springs Water District and the California Department of Transportation (CVAG 2008, 2016).

The CVMSHCP serves two primary purposes: Balancing environmental protection and economic development objectives in the CVMSHCP planning area and simplifying compliance with endangered species related laws. The CVMSHCP accomplishes this by conserving unfragmented habitat to permanently protect and secure viable populations of the covered 27 species within the planning area. The covered species include those plants and animals that are either currently listed as threatened or endangered, are proposed for listing, or are believed by an appointed Scientific Advisory Committee, USFWS and CDFW, to have a high probability of being proposed for listing in the future if not conserved by the CVMSHCP. The goal of the CVMSHCP is to meet the requirements of the ESA and CESA, while at the same time allowing for the economic growth (land development) within the plan area without significant delay or hidden costs. Under the CVMSHCP, land development/mitigation fees are collected from all new development projects occurring in the plan area. The purpose of this fee is to support the assembly of a preserve system for the covered species and natural vegetation communities within areas identified as having high conservation value (CVAG 2008).

4.0 METHODS

4.1 Literature Review

In preparation for the field surveys, a literature search was conducted to identify special status biological resources known from the vicinity of the project site. In the context of this report, and for the purpose of this assessment, vicinity is defined as areas within a 5-mile radius of the project site.

The literature search included a review of the following documents:

- California Natural Diversity Data Base (CNDDB) RareFind 5 (CDFW 2023a)
- Special Animals List (CDFW 20223)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2023a)
- CVMSHCP (CVAG 2008)
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey
- USGS 7.5' *Indio, West Berdoo Canyon, Myoma,* and *La Quinta Calif.* quadrangles (USGS 1972 and 1988)

Scientific nomenclature for this document follows standard reference sources: For plant communities, CVMSHCP (CVAG 2008), Sawyer et. al (2009), and/or Holland (1986); for flora, Jepson eFlora (2022) and the USDA NRCS PLANTS Database (2022); for amphibians, reptiles, and mammals, CDFW (2016); and for birds, California Bird Records Committee (2022).

4.2 Field Assessment

The field assessment was conducted on 17 August 2023 by WSP USA Senior Wildlife Biologist Nathan Moorhatch. On-site suitable habitat was assessed based on the presence of constituent habitat elements (e.g., soils, vegetation, and topography) characteristic of the potentially occurring special status biological resources determined by the literature review. The project ROW and adjacent properties (where accessible) were assessed on foot and by vehicle (in those areas where there was nowhere safe to park and/or were completely paved over) to record pertinent field data and current site conditions. Adjacent undeveloped areas within an approximate 150-meter (~500-foot) buffer zone that were unfenced and unsigned (i.e., not

posted with “No Trespassing” and/or “Private Property”) were also assessed for burrowing owl (*Athene cunicularia*). Inaccessible areas were scanned for burrowing owl habitat and sign (i.e., burrows & perches with whitewash) with binoculars. The project ROW on Grapefruit Blvd./Highway 111 is bordered along its entire east side by a Union Pacific Railroad line. Mr. Moorhatch did not cross this rail line for safety/legal reasons, and any buffer beyond this area was not included in the survey. All on-site flora and fauna observed or otherwise detected (e.g., vocalizations, presence of scat, tracks, and/or bones) during the assessment were recorded in field notes and are included in Appendix B. General weather and site conditions were also recorded at the beginning and end of the survey. Temperatures and wind speeds were recorded with a handheld Kestrel 2000 anemometer. Percent cloud cover was visually estimated.

5.0 RESULTS

The proposed bike path route is surrounded by development, primarily commercial, residential, and infrastructure development along the Grapefruit Boulevard segments. The project ROW segments that run along or on Avenue 54 are bordered by a mixture of residential and agricultural development. The entire project ROW has been routinely disturbed or in some areas completely developed and consists of largely barren ground with a scant cover of weedy plant species along the margins. No drainage features occur within the project site. Representative site photos are included in Appendix C.

5.1 Coachella Valley Multiple Species Habitat Conservation Plan

The entire project is located within the CVMSHCP fee area but is not within a conservation area. The northern edge of the project site is located approximately 2.30 miles southwest of the East Indio Hills Conservation Area (Figure 6, Appendix A). The development of the project site will have no effect on the East Indio Hills Conservation Area.

5.2 Weather Conditions

Weather conditions during the field assessment were mostly clear and extremely hot. There was 35-40% cloud cover with temperatures that ranged from 111 to 113 degrees Fahrenheit. Winds were calm to low with wind speeds measured between 0 to 6 miles per hour.

5.3 Topography and Soils

The proposed project alignment is relatively flat. Elevation ranges from 42 feet below sea level at the northern end of the proposed bike path on 48th Street just east of Highway 111 to 106 feet below sea level at the southeast corner of the path at Avenue 54 and the Coachella Sanitary District facility. Eight soil types represented by three soil series occur on the project site. These include: 1) Coachella fine sand, wet, 0 to 2 percent slopes (CrA), 2) Gilman fine sandy loam, wet 0 to 2 percents (GcA), 3) Gilman fine sandy loam, moderately fine substratum, 0 to 2 percent slopes (GDA), 4) Gilman silt loam, 0 to 2 percent slopes (GeA); 5) Gilman silt loam, wet, 0 to 2 percent slopes (GfA), 6) Indio fine sandy loam, wet (Ir), 7) Indio very fine sandy loam, wet (It), and 8) Indio very fine sandy loam (Is); (USDA, NRCS. 2019) (Appendix A - Figure 4).

The Coachella series consists of moderately well drained soils that formed in alluvium derived from igneous rock. This soil series typically occurs on alluvial fans. This soil is considered prime farm land if irrigated and drained. This soil is also known to be non-saline to slightly saline.

Gilman series consists of very deep, well drained soils that formed in stratified stream alluvium that typically occur on flood plains and alluvial fans. Gilman soils are on flood plains and alluvial fans. Gilman soils were historically, and still are used for irrigated cropland and livestock grazing (USDA, NRCS. 2019).

Indio soil series consist of “very deep, well or moderately well drained soils formed in young calcareous, silty mixed alluvium derived from mixed rock sources. They are intermittently moist soils typically found on alluvial fans, lacustrine basins and flood plains that were historically, and still are used for irrigated cropland and livestock grazing (USDA, NRCS. 2019).

The field assessment confirmed that much of the on-site topsoils have been removed during past grading and clearing activities over most of the project ROW. Much of the area on and adjacent to the project ROW has been heavily altered for commercial, residential, and agricultural development, and portions of the proposed bike path are located on the paved Avenue 54.

The site does not contain active sand dunes, drifts, rock outcrops, significant rocky areas, clay lenses, springs, or seeps.

5.4 Vegetation

Much of the proposed bike path route appears to have been cleared of vegetation prior to 1985 (historic aerial imagery Google Earth Pro 2023). The entire project route has been either cleared, completely developed (proposed bike lanes in the paved Avenue 54), or significantly altered (such as through landscaping). The native topsoil has been removed and/or replaced with fill, or in some areas asphalt or concrete. There are no native vegetation communities present on the project footprint, or on the areas immediately adjacent to the project ROW (see Appendix C Site Photographs).

A total of 23 plant species were identified across the project route during the assessment (Appendix B). These included of a mixture of disturbance-tolerant native and non-native and/or weedy species, of which 48% (11) were nonnative species. Representative plant species identified within the project site include big saltbush (*Atriplex lentiformis*), Jimsonweed (*Datura wrightii*), Athel (*Tamarix aphylla*), puncture vine (*Tribulus terrestris*), Bermuda grass (*Cynodon dactylon*), common purslane (*Portulaca oleracea*), alkali heliotrope (*Heliotropium curassavicum* var. *oculatum*), and bush seepweed *(Suaeda nigra).*

5.5 Wildlife

Vertebrate wildlife directly observed and/or detected otherwise (e.g., scat, bones, tracks, feathers, burrows, etc.) during the assessment was not notably diverse or abundant, limited to just two (2) species, both of which are common to the region. This included two bird species tolerant of agricultural, residential, and commercial development and natural areas adjacent to disturbed sites: Eurasian collared-dove (*Streptopelia decaocto)* and turkey vulture (*Cathartes aura*). The number of species detected certainly does not represent the total number of species that may occur on the project site. The low number of wildlife species observed during the field visit is unsurprising considering the intense heat (111°F to 113°F). Brief, one visit assessments are inherently limited by the seasonal timing and short duration of the survey period as well as the nocturnal, fossorial and/or migratory habits of many animals. The disturbed and/or developed condition of the project ROW greatly reduces and/or eliminates the potential for use by most special status species, as many of these require higher quality and/or more extensive areas of natural habitats. Some are habitat specialists requiring aeolian deposits or riparian vegetation, which are not present on the project site. No actively nesting birds were detected on or adjacent to the site during the assessment.

5.6 Special Status Biological Resources

Some plant and/or animal taxa are designated as having special status due to declining populations, limited geographic distributions and/or vulnerability to climate change, habitat loss and/or fragmentation. Some have been listed as threatened or endangered by the USFWS or by

the CDFW and are protected by the federal and state ESAs. Others have been identified, and are managed as sensitive by the USFWS, CDFW, or by private conservation organizations, including the CNPS, but have not been formally listed as threatened or endangered. Impacts to such species can still be considered significant under the CEQA, if not avoided, minimized and/or mitigated by specific project design and implementation.

The literature review and field visit resulted in a list of 48 special status biological resources which could potentially occur on the project site and/or vicinity (5-mile radius) of the project site. Tables 1-3 provide a summary of these resources, their current conservation status, habitat associations and potential to occur on the project site. No special status species were observed on-site during the assessment (Appendix B). No species listed as threatened or endangered, or designated as California Species of Special Concern (CSC) by the CDFW were observed on the project ROW.

Table 1. Special Status Plants

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Abronia villosa var. aurita Chaparral sand-verbena	F: ND C: ND CNPS List: 1B.1 State Rank: S2 CVMSHCP: No	Chaparral, coastal scrub, desert dunes; found in sandy areas. 245 to 5,250 feet amsl.	(January) March - September	**Absent** Habitat lacking, site below known elevational range of species.
Astragalus lentiginosus var. coachellae Coachella Valley milk-vetch	F: END C: ND CNPS List: 1B.2 State Rank: S1 CVMSHCP: Yes	Annual/Perennial herb found in sandy flats, washes, alluvial fans, sand field, dunes and dune edges, at 130 to 2,150 feet, a CA endemic.	February - May	**Absent** Habitat absent and site is below known elevational range of species.
Astragalus preussii var.laxiflorus Lancaster milk-vetch	F: ND C: ND CNPS List: 1B.1 State Rank: S1 CVMSHCP: No	Alkaline clay flats, sandy/gravelly washes, Chenopod scrub. 2,295 – 2,410 feet in elevation. Known in CA only from near Lancaster and Edwards AFB, where extremely rare.	March - May	**Absent** Habitat not present, site is well below known elevational range of species. Site is also not within known range of species.
Astragalus sabulonum Gravel milk-vetch	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Desert dunes, Mojavean Desert scrub, Sonoran Desert scrub; usually found on sandy flats and washes, sometimes found on gravelly roadsides. -195 to 3,050 feet.	February - June	**Absent** No native habitat or plant community on site, no Astragalus sp. observed during survey.
Bursera microphylla little-leaf elephant tree	F: ND C: ND CNPS List: 2B.3 State Rank: S2 CVMSHCP: No	Rocky Sonoran desert scrub (including washes), between 655 and 2,295 feet amsl (above mean sea level).	June - July	**Absent** Habitat not present, project is below elevation range of species. A distinctive species that would not have been missed if present.

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Ditaxis claryana Glandular ditaxis	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Mojavean Desert scrub, Sonoran Desert scrub; found in sandy areas. 0 to 1,395 feet.	October - March	**Absent**, site below known elevational range of species (below sea level), no native habitat or plant community on ROW.
Ditaxis serrata var. *californica* California ditaxis	F: ND C: ND CNPS List: 3.2 State Rank: S2? CVMSHCP: No	Usually associated with washes and canyons in desert areas, between 100 and 3,280 feet elevation.	March - December	**Absent** Site is highly disturbed, no *Ditaxis* present and site is below known elevational range of species
Leptosiphon floribundus ssp. *hallii* Santa Rosa Mountains leptosiphon	F: ND C: ND CNPS List: 1B.3 State Rank: S1S2 CVMSHCP: No	Associated with desert canyons in Sonoran desert scrub, Pinyon and juniper woodlands between 3,280 and 6,560 feet amsl.	May – July (November)	**Absent**, site far below known elevational range of species (below sea level), no habitat on or adjacent to the project.
Marina orcuttii var. *orcuttii* California marina	F: ND C: ND CNPS List: 1B.3 State Rank: S2? CVMSHCP: No	Gravelly/rocky hillsides in pinyon-juniper woodland, chaparral, and Sonoran desert scrub between 3,445 and 3,805 feet in elevation.	May - October	**Absent** No habitat on or adjacent to site. Site is far below elevational range of species.
Matelea parvifolia spear-leaf matelea	F: ND C: ND CNPS List: 2B.3 State Rank: S3 CVMSHCP: No	Dry, rocky slopes; desert scrub; mountains, mesas and canyons between 2,000 and 3,000 feet in California. Not common.	Mar – May (July)	**Absent** No habitat on-site, site also below elevational range of species.
Nemacaulis denudata var. *gracilis* slender cottonheads	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Sandy areas in coastal and desert areas, saltbush scrub, creosote bush scrub, and coastal grasslands between 165 and 1,310 feet elevation.	(March) - May	**Absent** No habitat on-site, site below elevation range of species.
Phaseolus filiformis slender-stem bean	F: ND C: ND CNPS List: 2B.1 State Rank: S1 CVMSHCP: No	Associated with gravelly washes bordered by creosote-dominated rocky slopes at around 400 feet elevation.	April	**Absent** No habitat on-site. ROW is below elevation range of species. CNDDB record is from over 10 miles south of the project.
Pseudorontium cyathiferum Deep Canyon snapdragon	F: ND C: ND CNPS List: 2B.3 State Rank: S1 CVMSHCP: No	Rocky habitats in Sonoran desert scrub (washes, rocky slopes) between 0-2,625 feet elevation.	February - April	**Absent** Not known from Coachella valley floor, no habitat on site.

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Selaginella eremophila desert spike-moss	F: ND C: ND CNPS List: 2B.2 State Rank: S2S3 CVMSHCP: No	Often found growing in rock crevices or on rocks (also the ground) on rocky slopes between 655 and 4,250 feet in elevation in desert and desert edge areas.	(May) June – (July) doesn't truly "bloom", but produces antheridia	**Absent** No habitat on-site, site also below elevational range of species.
Senna covesii Cove's cassia	F: ND C: ND CNPS List: 2B.2 State Rank: S3 CVMSHCP: No	Dry sandy desert washes and slopes between 740 and 4,250 feet amsl.	March – June (August)	**Absent** No habitat on-site, site also below elevational range of species.
Stemodia durantifolia purple stemodia	F: ND C: ND CNPS List: 2B.1 State Rank: S2 CVMSHCP: No	Wet or moist sandy areas in riparian habitats (within surrounding Sonoran desert scrub) between 590 and 1,000 feet elevation.	(Jan)April - December	**Absent** No habitat on-site. Project is below known elevation range of species.
Wislizenia refracta ssp. *refracta* jackass-clover	F: ND C: ND CNPS List: 2B.2 State Rank: S1 CVMSHCP: No	Grows on playas, sandy washes, desert dunes, both Mojavean and Sonoran scrubs, alkaline flats, sometimes roadside. Between 1,970 and 2,625 feet amsl.	April - November	**Absent** No habitat on-site. Site is below known elevation range of species.
Xylorhiza cognata Mecca-aster	F: ND, BLM sensitive C: ND CNPS List: 1B.2 State Rank: S2 CVMSHCP: Yes	Grows on sandstone and clay substrates on steep canyon slopes between 65 and 1,000 feet elevation.	Jan - June	**Absent** No habitat on-site, site also below elevational range of species (entire ROW is below sea level). Outside species' range.

Table 2. Special Status Vegetation Communities

Community	Protective Status (F=Federal, C=California)	Occurrence Probability
Desert Fan Palm Oasis Woodland	F: ND C: ND State rank: S3.2 CVMSHCP: No	**Absent** Vegetation community not present.

Table 3. Special Status Wildlife

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Invertebrates			
Danaus plexippus Monarch Butterfly	F: C C: CSC State Rank: S2S3 CVMSHCP: No	Can be found in a variety of areas where milkweed and flowering plants are present; milkweeds are necessary for breeding	**Absent** No milkweed present on-site. Very little remaining vegetation for nectar sources.
Dinacoma caseyi Casey's June beetle	F: END C: ND State rank: S1 CVMSHCP: No	Sandy soils; flightless females live below ground and come to surface only for mating. Known only from two populations in a small area of southern Palm Springs	**Absent** Site outside currently known geographic distribution. No habitat onsite.
Euparagia unidentata Algodones euparagia	F: ND C: ND State Rank: S1S2 CVMSHCP: No	Almost all known records of this species are from desert dune/sand field areas.	**Absent** Habitat lacking, site isolated from sand dune areas.
Macrobaenetes valgum Coachella giant sand treader cricket	F: ND C: ND State Rank: S1S2 CVMSHCP: Yes	Found in the sandy areas of the specialized sand dune ecosystem of Coachella Valley (aka "blow sand" habitat)	**Absent** No habitat onsite or adjacent, site isolated from sand dune areas.
Oliarces clara cheeseweed owlfly	F: ND C: ND State Rank: S2 CVMSHCP: No	Occur on or near bajadas, attracted to elevated topographic features when mating	**Absent** Habitat lacking, also no elevated features for males to congregate at during mating. No native habitat remaining.
Fish			
Cyprinodon macularius Desert pupfish	F: END C: END State rank: S1 CVMSHCP: Yes	Desert ponds, springs, marshes, and streams. Able to adapt to a variety of aquatic habitats, including those having high temperatures and salinities	**Absent** No habitat on or adjacent to site.
Reptiles			
Gopherus agassizii Desert tortoise	F: THR C: THR State Rank: S2S3 CVMSHCP: Yes	Found in desert environments with high plant diversity, digging burrows in soils friable enough for digging.	**Absent** Habitat lacking, site isolated from any adjacent habitat and located in developed areas (residential, commercial, and agricultural).
Phrynosoma mcallii Flat-tailed horned lizard	F: ND C: CSC State rank: S2 CVMSHCP: Yes	Fine sand in desert washes and flats with vegetative cover and ants, generally below 600 feet elevation in Riverside, San Diego, and Imperial Counties.	**Absent** Habitat lacking, site isolated from sand sources.

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Uma inornata Coachella Valley fringe-toed lizard	F: THR C: END State rank: S1 CVMSHCP: Yes	Sandy areas of the Coachella Valley (dunes and sand field habitats)	**Absent** Habitat not present, site isolated from sand sources and any previous sandy topsoils have been removed and/or altered.
Crotalus ruber red-diamond rattlesnake	F: ND C: CSC State rank: S3 CVMSHCP: No	Inhabits a variety of habitats including chaparral, woodland, grassland, and desert edge areas from Coastal San Diego County to eastern slopes of mountains bordering the Colorado Desert.	**Absent** More common in desert edge areas [rocky], no habitat onsite, not expected this far east on the valley floor.
Birds *birds covered by the CVMSHCP still cannot be directly impacted while nesting or in burrows			
Athene cunicularia Burrowing Owl	F: MBTA, BCC C: SSC State: S3 CVMSHCP: Yes	Occupies open, dry grasslands, scrub habitats, agricultural, railroad rights-of-way, and margins of highways, golf courses, and airports. Utilizes ground squirrel burrows and man-made structures, such as earthen berms, cement culverts, cement, asphalt, and debris piles for nesting and shelter.	**Nesting: Absent** No owls or suitable burrows/surrogates present. Closest CNDDB record (2007) is ~0.83 mi. E of Grapefruit Blvd., N of Ave. 50 and S of Ave. 49 **Foraging: Absent** Much of the ROW has been cleared and graded, surrounding open areas also degraded/disturbed
Buteo regalis Ferruginous Hawk	F: ND C: ND State Rank: S3S4 CVMSHCP: No	Prefers arid and semiarid grassland and prairie regions; can also be found at foothills, mid-elevation plateaus, riparian corridors and at desert edges; rock outcrops, solitary trees, and shallow canyons may characterize potential habitat	**Nesting: Absent** No suitable nesting habitat species does not nest in our area (winter visitor only) **Foraging: Absent** The project ROW is roadside in an urban/disturbed setting, does not support prey base to attract this raptor. At best would be a "flyover" along Ave. 54.
Empidonax traillii extimus Southwestern willow flycatcher	F: END C: END State: S1 CVMSHCP: Yes	Nests in large areas of riparian forests and woodlands	**Nesting: Absent** No suitable nesting habitat **Foraging: Absent** No suitable foraging habitat on or adjacent to site.
Falco mexicanus Prairie falcon	F: ND C: WL State: S4 CVMSHCP: No	Another raptor that favors dry, open terrain for foraging, although smaller open areas adjacent to human development are not as commonly used. Usually nests on cliff ledges.	**Nesting: Absent** No suitable nesting habitat **Foraging: Low** Low quality foraging habitat along Ave. 54.

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Lanius ludovicianus loggerhead shrike	F: MBTA C: SSC State Rank: S4 CVMSHCP: No	A variety of open habitats with perches for scanning, and fairly dense shrubs/brush for nesting. Woodlands, pinyon-juniper, Joshua trees, desert oases, scrub and washes.	**Nesting: Absent** No suitable nesting habitat **Foraging: Low** Low potential along Avenue 54.
Polioptila melanura Black-tailed gnatcatcher	F: ND C: WL State rank: S3S4 CVMSHCP: No	Nests in wooded desert wash habitat containing mesquite, palo verde, ironwood, and acacia. May also occur in areas with salt cedar, especially when adjacent to native wooded desert wash habitat. Also occurs in desert scrub habitat in winter.	**Nesting: Absent** Suitable habitat not present. 1928 CNDDB record from adjacent to ROW is now fully developed as First St. in Coachella. **Foraging: Absent** ROW is highly disturbed, no habitat on or adjacent to site.
Pyrocephalus rubinus Vermilion flycatcher	F: ND C: SSC State Rank: S2S3 CVMSHCP: No	Usually found near water in habitats including arid scrub, farmlands, golf courses, desert or savanna, and riparian woodlands	**Nesting: Absent** Marginally suitable habitat present on ROW, but location next to Hwy 111 and development would make occupation very unlikely. **Foraging: Low** Low potential in agricultural areas along Ave. 54.
Toxostoma crissale Crissal thrasher	F: ND C: SSC State rank: S3 CVMSHCP: Yes*	Dense thickets of shrubs or low trees in desert riparian and desert wash habitats. Southeastern California to Texas and northern Mexico.	**Nesting: Absent** Habitat nor present **Foraging: Absent** No habitat present.
Toxostoma lecontei LeConte's thrasher	F: BCC C: ND) State rank: S3 CVMSHCP: Yes	Resident of open desert wash, scrub, alkali scrub, succulent scrub habitats, nests in dense spiny shrubs and cacti in washes, usually within 2-8 feet of the ground.	**Nesting: Absent** Nesting habitat not present. **Foraging: Absent** Same as above
Vireo bellii pusillus Least Bell's vireo	F: END C: END State rank: S2 CVMSHCP: Yes*	Riparian woodland habitats along the riverine systems of Southern California	**Nesting: Absent** No suitable nesting habitat **Foraging: Absent** No suitable foraging habitat.

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Mammals			
Chaetodipus fallax pallidus Pallid San Diego pocket mouse	F: ND C: SSC State rank: S3S4 CVMSHCP: No	Desert border areas in desert wash, desert scrub, desert succulent scrub, pinon-juniper, etc. Associated with sandy herbaceous areas usually in association with rocks or coarse gravel from sea level to 1350 m (4500 ft).	**Absent** Site largely outside preferred range of species and lacking rocky and/or sandy herbaceous areas.
Eumops perotis californicus Western mastiff bat	F: ND C: SSC State rank: S3S4 CVMSHCP: No WBWG: H	Many open, semi-arid to arid areas including conifer and deciduous forests, grasslands, chaparral, and coastal scrubs. Roosts in crevices in cliff faces, buildings, trees and tunnels.	**Absent** Suitable roosting habitat lacking, unlikely to forage due to general lack of vegetation to support a substantial insect population.
Lasiurus xanthinus Western yellow bat	F: ND C: SSC State rank: S3 CVMSHCP: Yes WBWG: H	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis. Roosts in trees, particularly palms. Forages over water and among trees.	**Very Low** Landscaped *Washingtonia* palms (both species) present along parts of ROW, but proximity to development as well as disturbance from traffic/human activities would make a very low probability of occurrence.
Neotoma lepida intermedia San Diego desert woodrat	F: ND C: SSC State rank: S3S4 CVMSHCP: No	Most often in Coastal scrub in southern California (San Diego to San Luis Obispo Counties) but does range into desert areas. Most common in areas with rock outcrops, cliffs, and slopes.	**Absent** Site lacks rocky habitat, cacti and succulent plants absent. Native habitat and topsoils have been removed.
Nyctinomops femorosaccus pocketed free-tailed bat	F: ND C: SSC State rank: S3 CVMSHCP: No WBWG: M	Colonial and roosts primarily in crevices of rugged cliffs, high rocky outcrops and slopes. It has been found in a variety of plant associations, including desert shrub and pine-oak forests. The species may also roost in buildings, caves, and (rarely) under roof tiles.	**Absent** Most of the ROW does not have roosting habitat, proximity to development and human disturbance likely to preclude presence. Not expected to forage in vicinity either.

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Ovis canadensis nelsoni pop 2 Peninsular bighorn sheep DPS	F: END C: THR, FP State rank: S2 CVMSHCP: Yes	Eastern slopes of the Peninsular Ranges generally below 4,600 ft. elev., range of this DPS is from the San Jacinto Mtns. south to the international border. Optimal habitat includes steep-walled canyons and ridges bisected by rocky/sandy washes w available water.	**Absent** No suitable habitat on site, site is not within the known range of this subspecies (too far east on the valley floor).
Perognathus longimembris bangsi Palm Springs pocket mouse	F: BLM Sensitive C: SSC State Rank: S2 CVMSHCP: Yes	Sonoran Desert habitats with level to gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils.	**Absent** Suitable habitat lacking, no native plant community. Most of the ROW is highly disturbed/developed.
Taxidea taxus American Badger	F: ND C: SSC State Rank: S3 CVMSHCP: No	Can be found in brushy areas and hot desert habitats, occasionally found in open chaparral and riparian zones; typically have numerous burrows in areas with substantial rodent populations	**Absent** Suitable habitat lacking and project site does not support a substantial rodent population due to disturbance, lack of vegetation, and immediate proximity to development.
Xerospermophilus tereticaudus chlorus Coachella Valley (Palm Springs) round-tailed ground squirrel	F: ND C: SSC State Rank: S2 CVMSHCP: Yes	Prefers open, flat, grassy areas in fine-textured, sandy soil in desert succulent scrub, desert wash, desert scrub, alkali scrub, & levees.	**Absent** Suitable habitat lacking, project ROW is mainly roadside (paved) and surrounded by commercial and residential development. 1938 CNDDB record is now also developed as First St. in Coachella.

Definitions of occurrence probability:

Occurs: Observed on the site by AMEC personnel or recorded on-site by other qualified biologists.

High: Observed in similar habitat in region by qualified biologists, or habitat on the site is a type often utilized by the species and the site is within the known range of the species.

Moderate: Reported sightings in surrounding region, or site is within the known range of the species and habitat on the site is a type occasionally used by the species.

Low: Site is within the known range of the species but habitat on the site is rarely used by the species.

Absent: A focused study failed to detect the species, or no suitable habitat is present.

Definitions of status designations and occurrence probabilities.

Federal designations: (federal Endangered Species Act, US Fish and Wildlife Service):

END: Federally listed, Endangered.
THR: Federally listed, Threatened.
BCC: Bird of Conservation Concern
C: Candidate for Federal listing
ND: Not designated.

State designations: (California Endangered Species Act, California Dept. of Fish and Game)

END: State listed, Endangered.
THR: State listed, Threatened.

RARE: State listed as Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
CSC: California Special Concern Species.
WL: Watch List Species.
ND: Not designated.

CDFW CNDDB rankings: Animals
S1 = Extremely endangered: <6 viable occurrences or <1,000 individuals, or < 2,000 acres of occupied habitat
S2 = Endangered: about 6-20 viable occurrences or 1,000 - 3,000 individuals, or 2,000 to 10,000 acres of occupied habitat
S3 = Restricted range, rare: about 21-100 viable occurrences, or 3,000 – 10,000 individuals, or 10,000 – 50,000 acres of occupied habitat
S4 = Apparently secure; some factors exist to cause some concern such as narrow habitat or continuing threats
S5 = Demonstrably secure; commonly found throughout its historic range
SH = all sites are historical, this species may be extinct, further field work is needed

CDFW CNDDB rankings: Plants and Vegetation Communities
S1 = Less than 6 viable occurrences OR less than 1,000 individuals OR less than 2,000 acres
S1.1 = very threatened
S1.2 = threatened
S1.3 = no current threats known
S2 = 6-20 viable occurrences OR 1,000-3,000 individuals OR 2,000-10,000 acres
S2.1 = very threatened
S2.2 = threatened
S2.3 = no current threats known
S3 = 21-80 viable occurrences or 3,000-10,000 individuals OR 10,000-50,000 acres
S3.1 = very threatened
S3.2 = threatened
S3.3 = no current threats known
S4 = Apparently secure within 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.
S5 = Demonstrably secure to ineradicable in California.

California Native Plant Society (CNPS) designations:
California Rare Plant Ranks (CRPR) Note: According to the CNPS (http://www.cnps.org/programs/Rare_Plant/inventory/names.htm), ALL plants on Lists 1A, 1B, 2A, and 2B meet definitions for state listing as threatened or endangered under Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code. Certain plants on Lists 3 and 4 do as well.
The CDFW (http://www.dfg.ca.gov/hcpb/species/t_e_spp/nat_plnt_consv.shtml) states that plants on Lists 1A, 1B, 2A, and 2B of the CNPS Inventory consist of plants that may qualify for listing, and recommends they be addressed in CEQA projects (CEQA Guidelines Section 15380). However, a plant need not be in the Inventory to be considered a rare, threatened, or endangered species under CEQA. In addition, CDFW recommends, and local governments may require, protection of plants which are regionally significant, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 and 4.
List 1A: Plants presumed extinct in California.
List 1B: Plants rare and endangered in California and throughout their range.
List 2A: Plants presumed extirpated in California, but more common elsewhere.
List 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
List 3: Plants for which more information is needed.
List 4: Plants of limited distribution; a "watch list."
CA Endemic: Taxa that occur only in California
CNPS Threat Code:
.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)
Note: All List 1A (presumed extinct in California) and some List 3 (need more information- a review list) plants lacking any threat information receive no threat code extension. Also, these Threat Code guidelines represent a starting point in the assessment of threat level. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are also considered in setting the Threat Code.

Western Bat Working Group (WBWG) designations:
The Western Bat Working Group is comprised of agencies, organizations and individuals interested in bat research, management and conservation from the 13 western states and provinces. Its goals are (1) to facilitate communication among interested parties and reduce risks of species decline or extinction; (2) to provide a mechanism by which current information on bat ecology, distribution and research techniques can be readily accessed; and (3) to develop a forum to discuss conservation strategies, provide technical assistance and encourage education programs.
H: High: Species which are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.
M: Medium: Species which warrant a medium level of concern and need closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.
L: Low: Species for which most of the existing data support stable populations, and for which the potential for major changes in status in the near future is considered unlikely. There may be localized concerns, but the overall status of the species is believed to be secure. Conservation actions would still apply for these bats, but limited resources are best used on High and Medium status species.
P: Periphery: This designation indicates a species on the edge of its range, for which no other designation has been determined.

CVMSHCP designations
Yes: Conserved by the CVMSHCP
No: Not Specifically Conserved by the CVMSHCP
C: Considered, but not included in the CVMSHCP

5.7 Discussion of the Special-status Species Tables

Much of the proposed bike path route appears to have been cleared of vegetation prior to 1985 (historic aerial imagery Google Earth Pro 2023). The entire project route has been either cleared, completely developed (proposed bike lanes in the paved Avenue 54), or significantly altered (such as through landscaping). The proposed bike path route is surrounded by development, primarily commercial, residential, and infrastructure development along the Grapefruit Boulevard/Hwy 111 segments. The project ROW segments that run along or on Avenue 54 are bordered by a mixture of residential and agricultural development. The entire project ROW has been routinely disturbed or in some areas completely developed and consists of largely barren ground with a scant cover of weedy plant species along the margins. The Union Pacific Railroad alignment borders the entire stretch of the proposed bike path that runs along the east side of Grapefruit Boulevard/Hwy 111. All of this serves to illustrate that this project is located in an almost completely developed area devoid of natural habitat and plant communities. Unsurprisingly, of the 48 special status biological resources listed in Tables 1-3, 44 have no potential for occurrence. They will not be discussed further. Three bird species: Prairie falcon (*Falco mexicanus*), vermilion flycatcher (*Pyrocephalus rubinus*), and loggerhead shrike (*Lanius ludovicianus*) are expected to have a low probability to forage over the site (although this would be rare given the extensively disturbed nature of the site and area) and are not expected to nest on the proposed project area. Only one sensitive mammal: western yellow bat (*Lasiurus xanthinus*) is expected to have any potential to occur along the project route. There is a very low potential for this species to roost in the skirts of some of the landscaped palms present adjacent to a few areas of the proposed bike path route along Grapefruit Boulevard/Hwy. 111 and Avenue 54. Please refer to Appendix C Site Photographs to observe the current site conditions and level of disturbance.

5.7.1 CVMSHCP Covered Species

Sixteen of the species listed in Tables 1 – 3 are conserved under the CVMSHCP: Coachella Valley milk-vetch, Mecca aster, Coachella giant sand treader cricket, desert pupfish, desert tortoise, flat-tailed horned lizard, Coachella Valley fringe-toed lizard, burrowing owl, Southwestern willow flycatcher, crissal thrasher Le Contes' thrasher, Least Bell's vireo, western yellow bat, Palm Springs pocket mouse, Coachella Valley (Palm Springs) round-tailed ground squirrel, and Peninsular bighorn sheep. Only one of these species is expected to have any potential to occur on the project site, and that is a very low probability (see discussion in Section 5.7 above). Furthermore, participation in the CVMSHCP, payment of the CVMSHCP development/mitigation fee and participation in the plan will fully mitigate project related impacts (although none are anticipated) to any of these CVMSHCP covered species.

No burrows suitable for burrowing owl use were observed on or adjacent to the project site. Where accessible, adjacent vacant lands were surveyed within 500 feet of the site. No burrowing owls, their sign, or burrows capable of supporting owls were observed in this buffer area. The burrowing owl is not listed as threatened or endangered by the USFWS or CDFW. It is, however, managed as a Bird of Conservation Concern (BCC) by the USFWS and designated as a SSC by the CDFW. It is also protected from take by the MBTA and California Fish and Game Code. The burrowing owl is a covered species under the CVMSHCP, however the federal permit for the CVMSHCP does not allow take of this species under the MBTA. For these reasons, all burrowing owls must be avoided or relocated prior to any ground disturbing activities. A preconstruction survey for burrowing owl can be performed prior to construction to ensure that no owls have moved onto the site in the interim time between this survey and project implementation.

5.7.2 Potentially Occurring Species Not Covered Under the CVMSHCP and USFWS IPAC Species

Only three special status species that are not covered by the CVMSHCP are considered to have at least some potential to forage on or over the project site. Prairie falcon, loggerhead shrike, and vermilion flycatcher are expected to have a low probability to forage over the site (although this would be rare given the extensively disturbed nature of the site and surrounding area). None of these birds are listed as threatened or endangered by either State or Federal agencies but vermilion flycatcher and loggerhead shrike are considered "Species of Special Concern" by the California Department of Fish and Wildlife (CDFW), prairie falcon is considered a "Watchlist" species by CDFW.

The USFWS IPAC report generated for this project lists five sensitive wildlife species and one plant as having potential to be affected by development of this project. As discussed in Tables 1 – 3 in Section 5.6, none of these species would be expected to occur on this site. Monarch butterflies require milkweeds for larval development and other flowering plants for adult nectar sources. No milkweed were observed on the site, and flowering plants were limited to a sparse growth of mainly weedy species along some of the street edges. This species is not expected to utilize this site (apart from the occasional transient individual passing through). There is no habitat present for desert tortoise, Coachella Valley fringe-toed lizard, least Bell's vireo, southwestern willow flycatcher, or Coachella Valley milk-vetch on or adjacent to the project site.

Should project-related disturbance be conducted during the nesting season (1 February through 31 August), a nesting bird clearance survey is recommended to ensure that implementation of the proposed project does not impact nesting birds.

6.0 DISCUSSION

The proposed project consists of installing 3.8 miles of Class I Bike Path along Highway 111/Grapefruit Boulevard between Avenue 48 and Avenue 54 (with a gap between Leoco Lane and 9th Street where there is an existing segment of bike path); and 3.2 miles of Class II Bike lanes on Avenue 54 between Polk Street and Van Buren Street. As discussed in Section 5.7 the project site has been cleared of vegetation for at least the past 14 years, with some portions of the project site having been cleared for almost 20 years. The site has been graded, compacted, and soil binders have been applied in the past (as seen in historic aerial photographs and visual evidence at the time of the field survey). The "native" or natural topsoil has been removed quite some time ago. The project site is also located in an area that consists of commercial development with a few vacant lots that have also been cleared and graded. There is no native habitat on the project site or in the immediate vicinity. It provides no connectivity to any adjacent native habitat or conservation areas. The project site does not contain any United States Army Corps of Engineers, Regional Water Quality Control Board, or CDFW jurisdictional waters. The project site is not within and/or adjacent to any CVMSHCP Conservation Areas, so will not be subject to CVMSHCP land use adjacency guidelines. Nevertheless, implementation of the proposed project is expected to permanently disturb all areas within the project site, which in turn may potentially result in direct or indirect disturbance to biological resources, sensitive and otherwise, occurring (not anticipated), or potentially occurring on- and/or adjacent to the site. We have made recommendations above for the protection of these species. Additionally, to prevent impacts to all native birds protected by the MBTA and state fish and game code, the following measures should be taken:

6.1 Protection of Nesting Birds

All native bird species that are excluded from coverage under the CVMSHCP are still protected by the MBTA and the state Fish and Game Code. This includes virtually all native migratory and

resident bird species. Avoidance of impacts to these birds is a requirement of the federal permit issued for the CVMSHCP. To avoid impacting nesting birds either avoidance of project-related disturbance during the nesting season (1 February through 31 August) or nesting bird surveys conducted by a qualified ornithologist or biologist immediately prior to on-site disturbance during the nesting season would be required. If nesting birds are found, no work would be permitted near the nest until young have fledged. There is no established protocol for nest avoidance, however, when consulted the CDFW generally recommends avoidance buffers of about 500 feet for birds-of-prey and species listed as threatened or endangered, and 100–300 feet for unlisted songbirds.

6.2 Burrowing Owl

As noted above, no burrowing owls or their sign were observed on the project ROW. Also, no burrows or burrow surrogates that could be used by burrowing owls were present on or adjacent to the proposed bike path routes at the time of this survey. This species nests and roosts underground so is uniquely vulnerable to ground disturbing activities. A pre-construction survey following CDFG (2012) guidelines must be conducted prior to initiating construction to ensure that no owls have moved onto the site in the interim between this survey and project startup. Unless avoidable, all burrowing owls present must be relocated prior to any ground disturbing activities. If burrowing owls remain on-site, a Burrowing Owl Relocation and Management Plan will be prepared to describe and outline how the burrowing owl will be actively or passively relocated per CDFW guidelines. Prior to construction, any owls occurring on-site will be relocated prior to vegetation removal or grading activities. Relocation will require prior permission from the CDFW, at a minimum. Since the burrowing owl is a covered species under the CVMSHCP, additional mitigation/conservation measures will not be required.

7.0 CONCLUSION

With the implementation of the recommendations above, impacts to special status biological resources are anticipated to be avoided, minimized, and/or mitigated in accordance with the CVMSHCP and other resource agency requirements.

8.0 LITERATURE CITED AND REFERENCES

California Bird Records Committee. 2022. Official California Checklist. Accessed online at: http://californiabirds.org/ca_list.asp.

California Department of Fish and Game (CDFG). 2012. Staff report on Burrowing Owl Mitigation. CDFG, Sacramento, CA.

California Department of Fish and Wildlife (CDFW). 2023a. California Natural Diversity Data Base, Rarefind 5. Report for the *Indio and West Berdoo Calif.* quadrangles. Accessed at: dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp

CDFW. 2023b. Special Animals List. April. Periodic publication. Sacramento, CA. Accessed online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline=1

CDFW. 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Accessed online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline

California Legislative Information. 2021. Fish and Game Code of California. https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FGC&tocTitle=+Fish+and+Game+Code+-+FGC

CDFW. 2015a. California Wildlife Habitat Relationships, Life History Accounts and Range Maps. Accessed online at: http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx

CDFW. 2015b. Threatened and Endangered Species, Species Lists and Accounts, Species Accounts-Fish. Accessed online at: https://www.dfg.ca.gov/wildlife/nongame/t_e_spp/

CDFW. 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Accessed online at: nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline=1

California Native Plant Society (CNPS). 2023a. Inventory of Rare, Threatened, and Endangered Plants of California. Report for the *Indio and West Berdoo, Calif.* quadrangles. Accessed online at: http://www.rareplants.cnps.org

CNPS. 2023b. The California Rare Plant Ranking System. Accessed online at: https://www.cnps.org/cnps/rareplants/ranking.php

California Natural Resources Agency. 2014. CEQA Guidelines. Accessed online at: http://resources.ca.gov/ceqa/guidelines/

CVAG. 2016. Final Major Amendment to the Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan. Accessed online at: https://www.cvmshcp.org/Plan%20Documents/10.%20CVAG%20MSHCP%20Plan%20Section%203.0.pdf

CVAG. 2008. Coachella Valley Multiple Species Habitat Conservation Plan. Accessed online at: cvmshcp.org

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Prepared for the California Department of Fish and Game.

Jepson Flora Project (2nd ed.). 2022. Jepson eFlora. Accessed online at: http://ucjeps.berkeley.edu/IJM.html

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A manual of California vegetation (2nd ed.). California Native Plant Society, Sacramento, CA.

Shuford, W. D., and Gardali, T. (Ed.). 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of

immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

United States Department of Agriculture (USDA), Soil Conservation Service. 1980. A Soil Survey of Riverside County, California, Coachella Valley Area. https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/riversideCA1980/riversideCA1980.pdf

USDA, Natural Resources Conservation Service (NRCS). 2023. The PLANTS Database. National Plant Data Team. Accessed online at: plants.usda.gov

USDA, NRCS. 2019. Web Soil Survey. Accessed online at: http://websoilsurvey.nrcs.usda.gov/app/

USFWS. 2016. Bird Laws and Treaties. Accessed online at: http://www.fws.gov/migratorybirds/RegulationsandPolicies.html

USGS 7.5' *Indio, La Quinta, Myoma, and West Berdoo Canyon, Calif.* 7.5-minute topographic quadrangles (USGS 1972 and 1988)

APPENDIX A

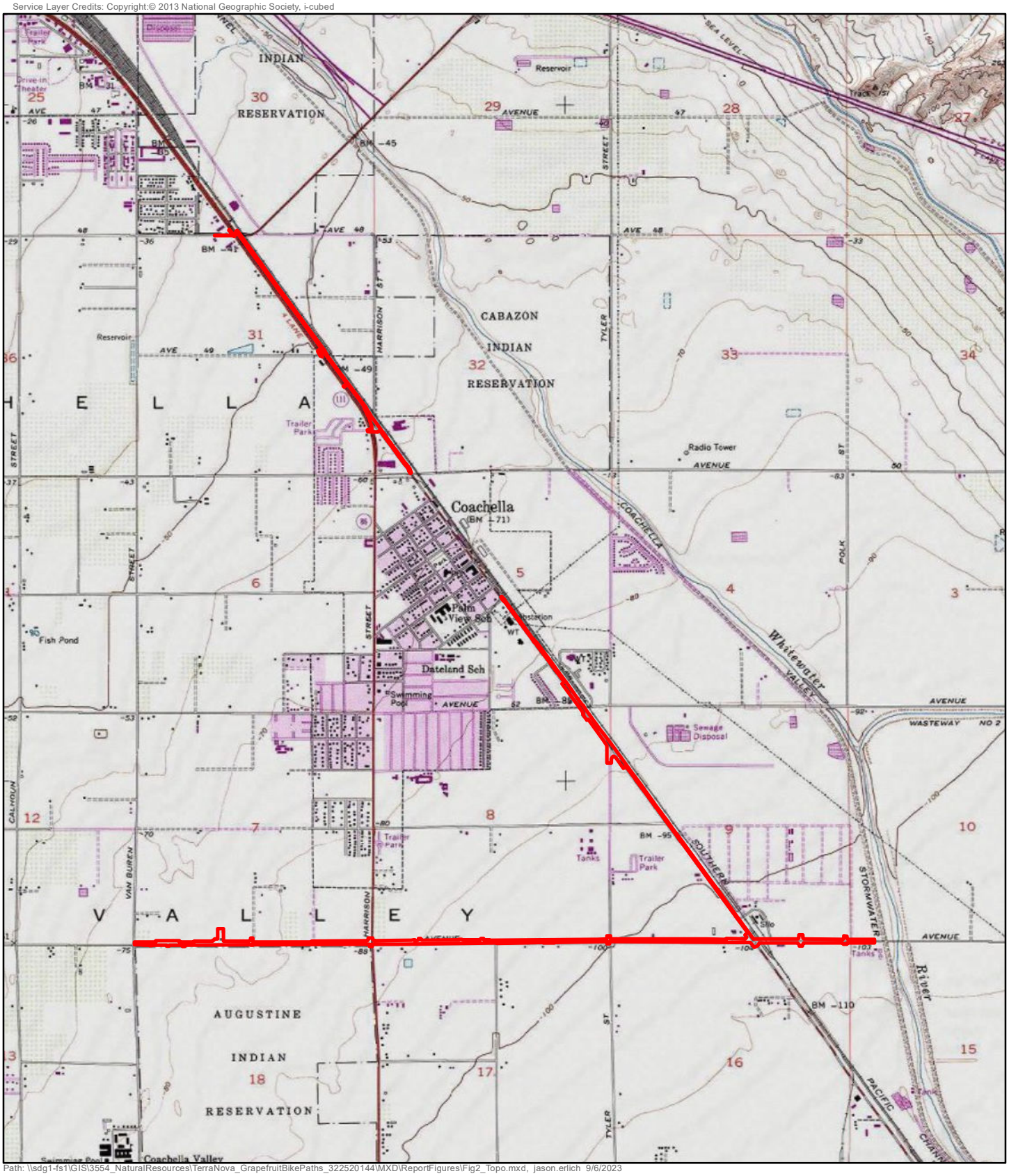
FIGURES

1 inch = 1 miles
0 0.5 1 Miles

Project Area

FIGURE 1

Regional Setting
Grapefruit Avenue Bike Paths Project
Riverside County, California



Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig2_Topo.mxd, jason.erlich 9/6/2023

1 inch = 3,000 feet
0 1,500 3,000 Feet

FIGURE 2

USGS 7.5' Topo Quad: Indio
Grapefruit Avenue Bike Paths Project
Riverside County, California

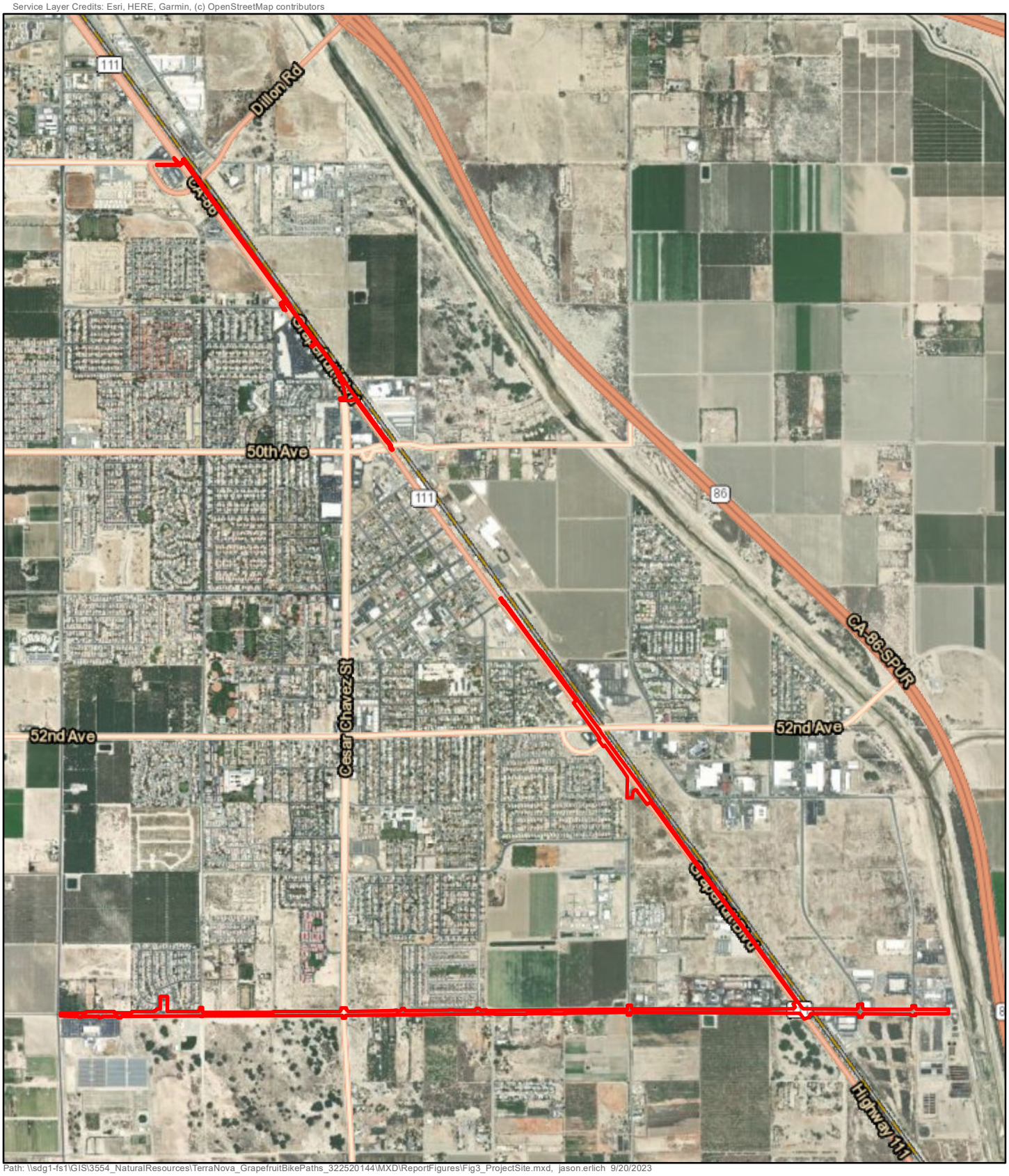
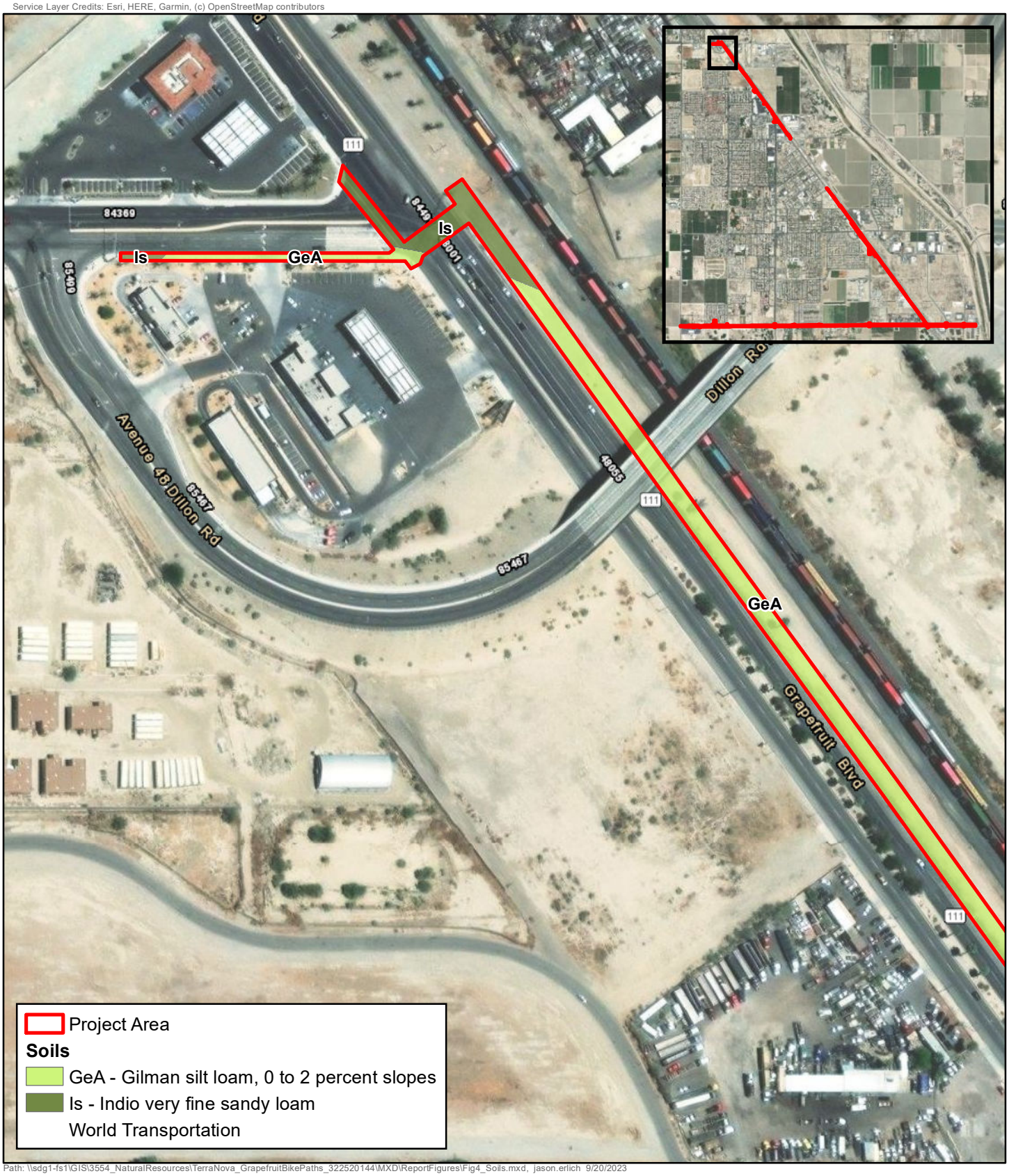


FIGURE 3

Project Site
Grapefruit Avenue Bike Paths Project
Riverside County, California

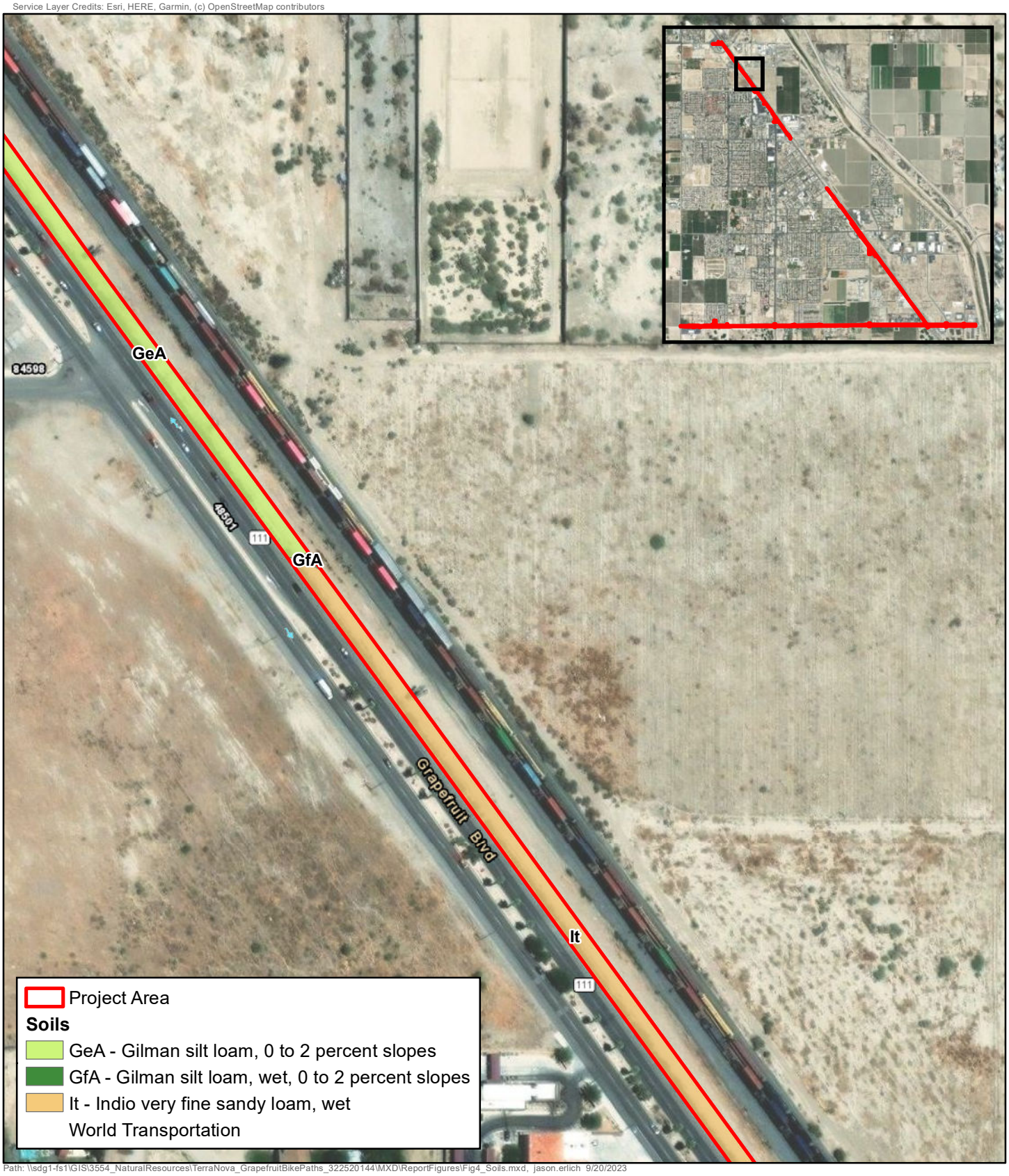


Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4a

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California



Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4b

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4c

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4d

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4e

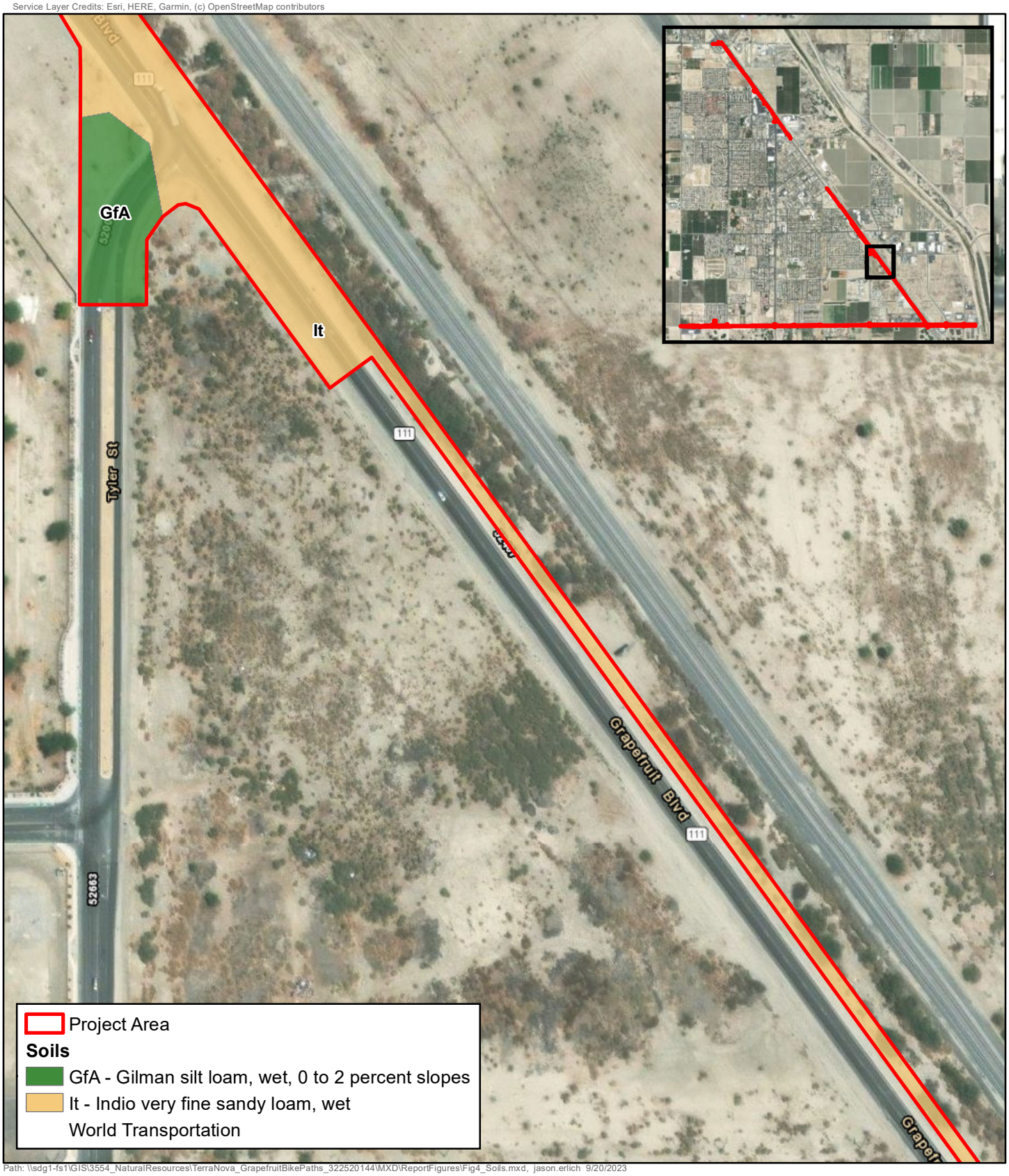
Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4f

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California



Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4g

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

wsp

FIGURE 4h

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4i

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

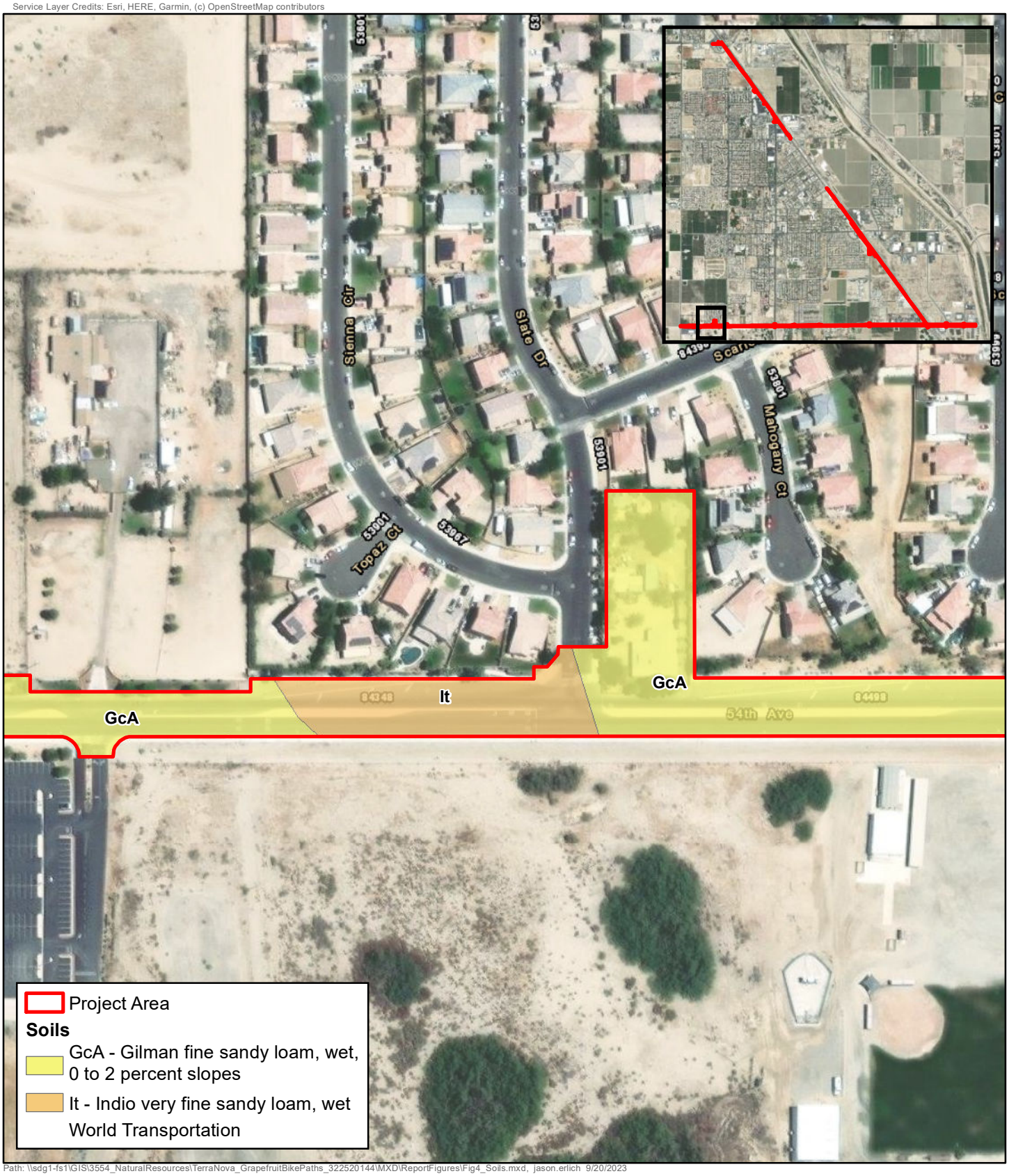
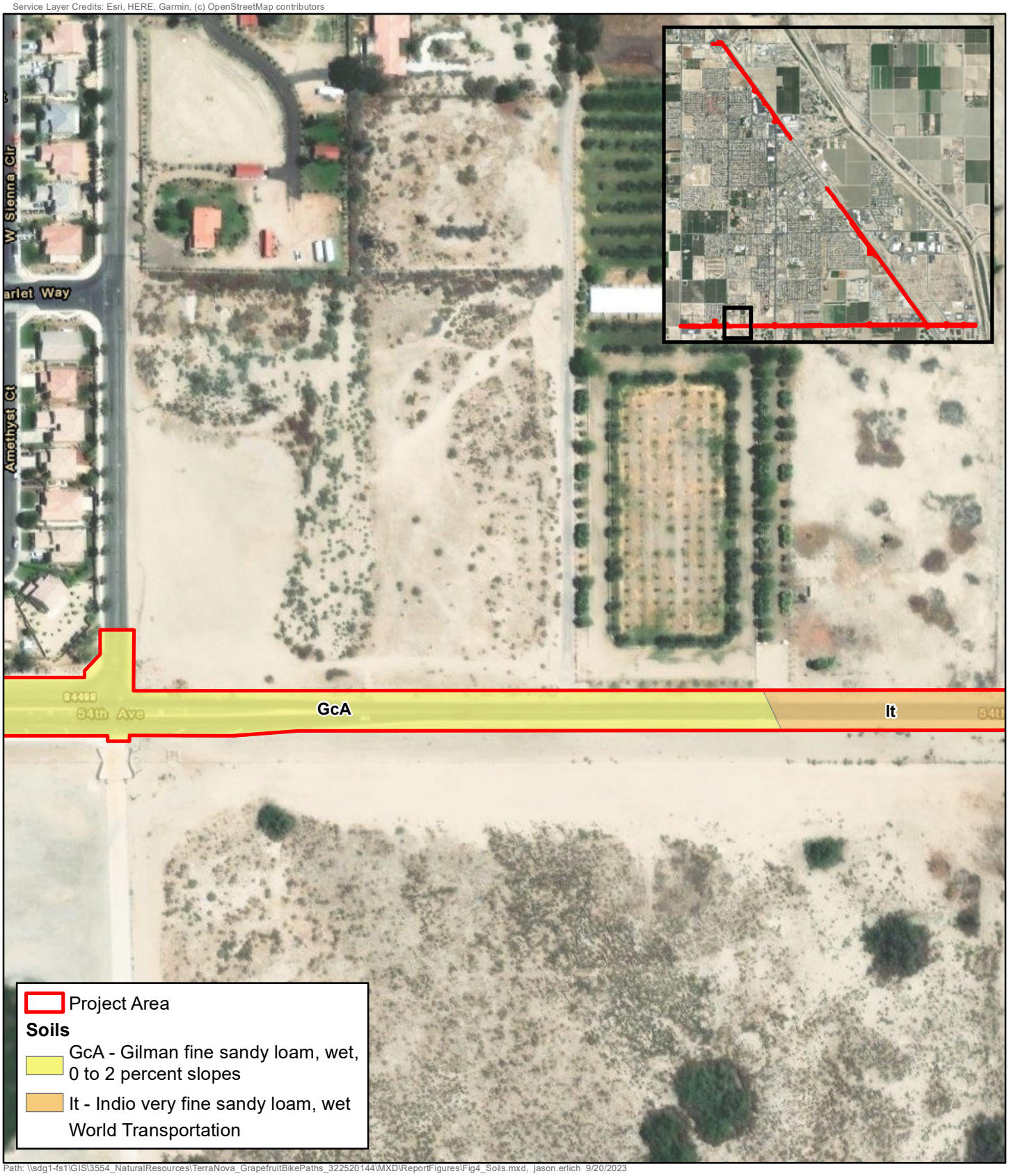


FIGURE 4j

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

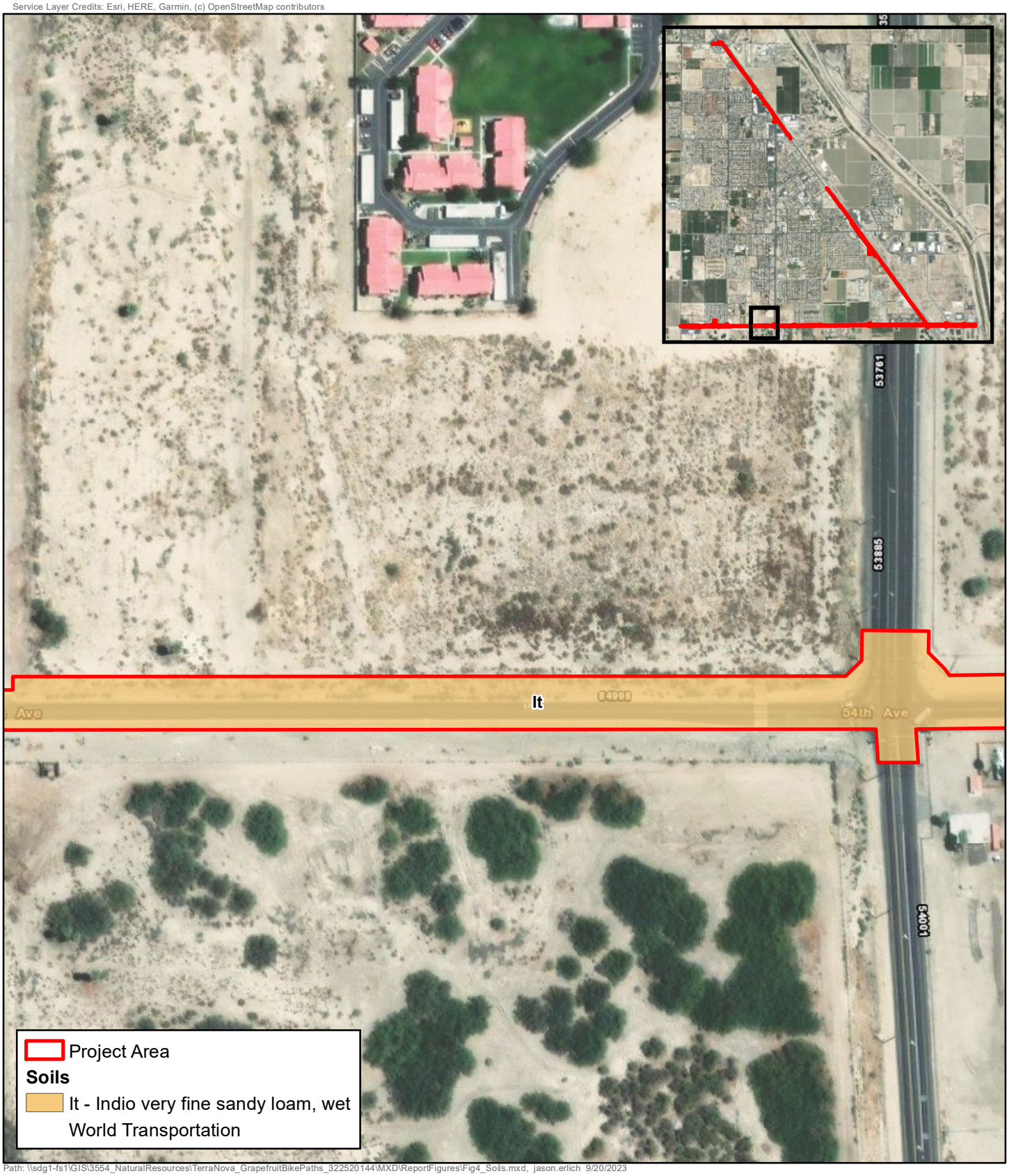


Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4k

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California



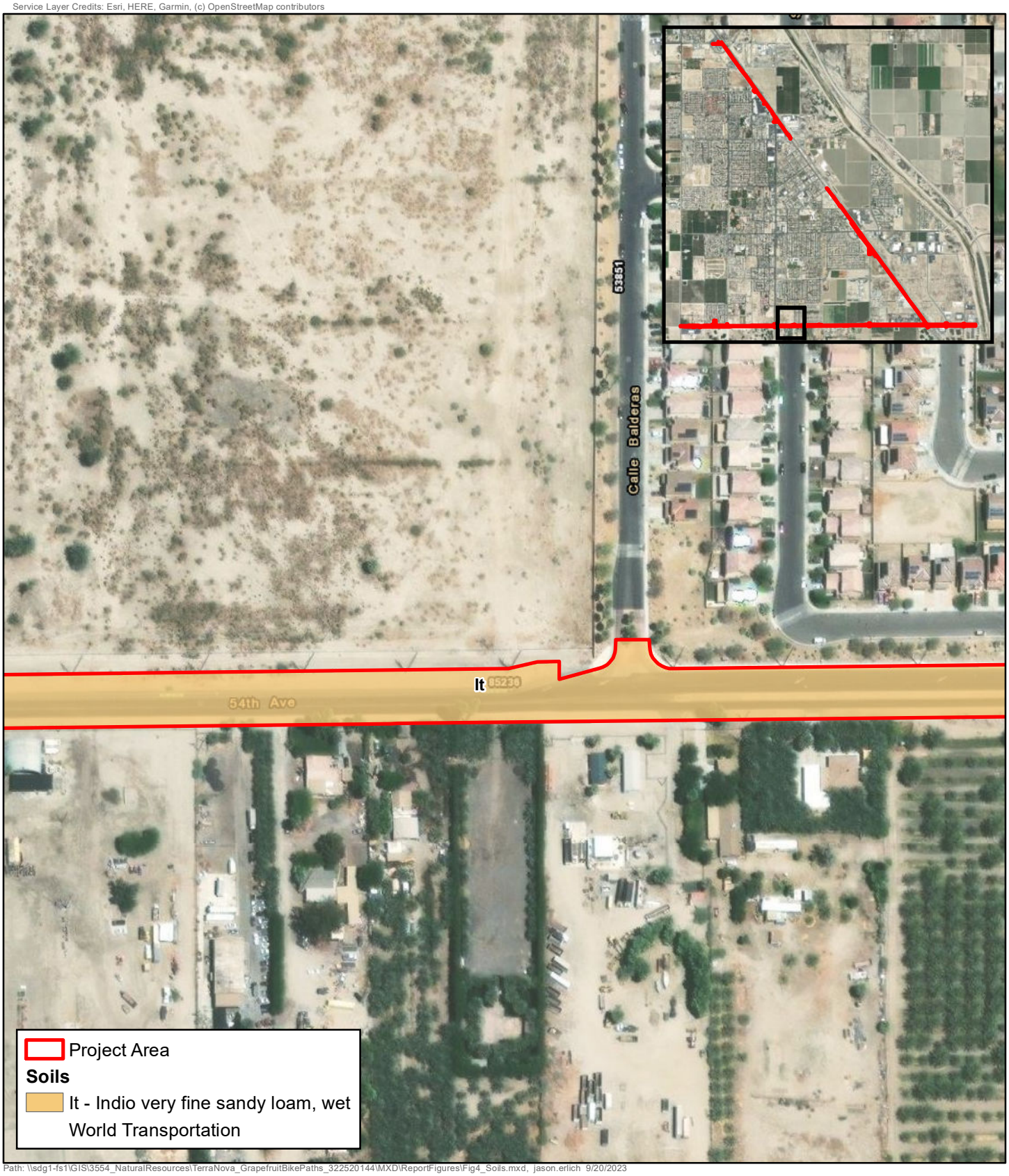
1 inch = 200 feet
0 100 200 Feet

wsp

FIGURE 4l

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors



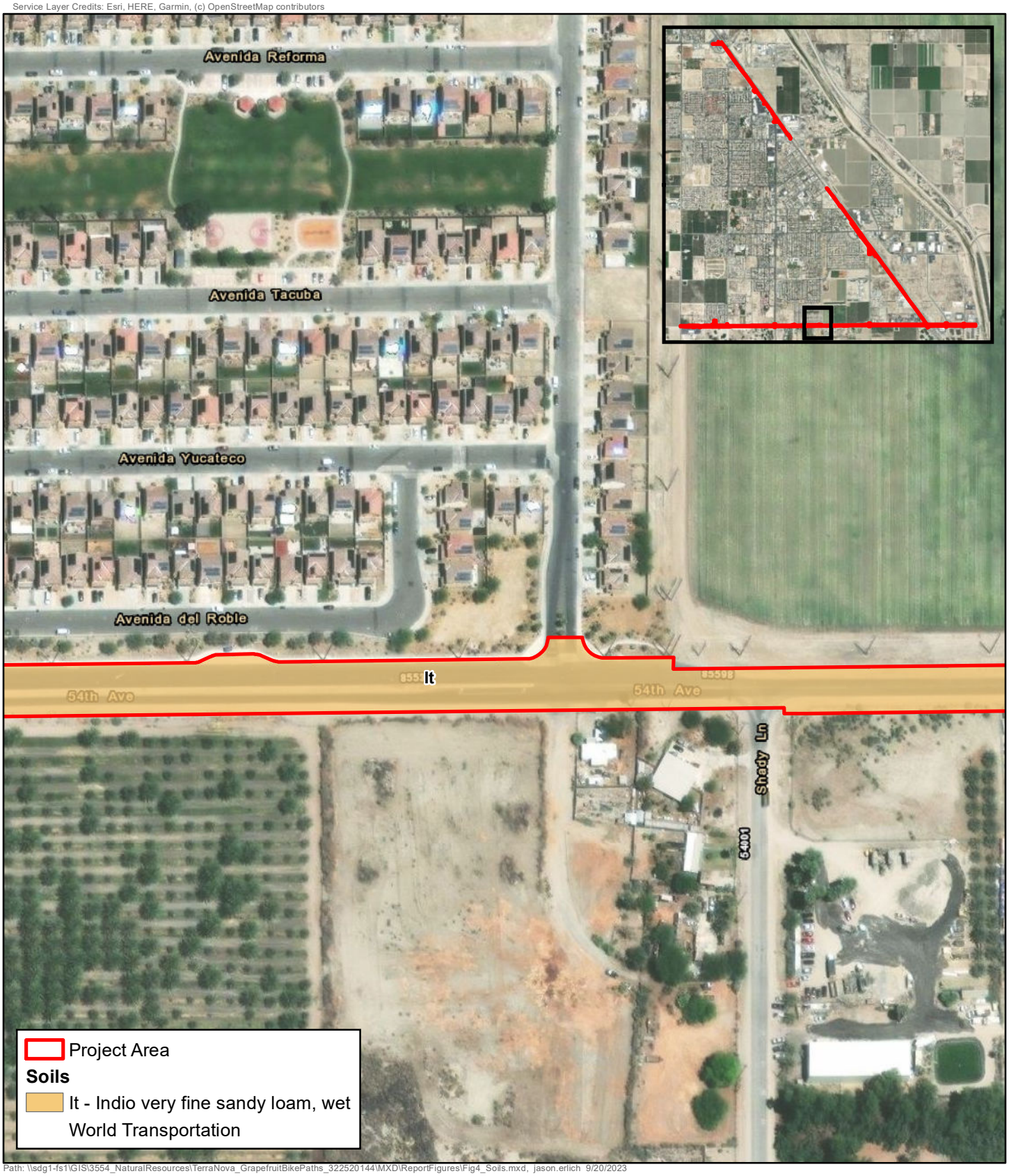
Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

wsp

FIGURE 4m

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

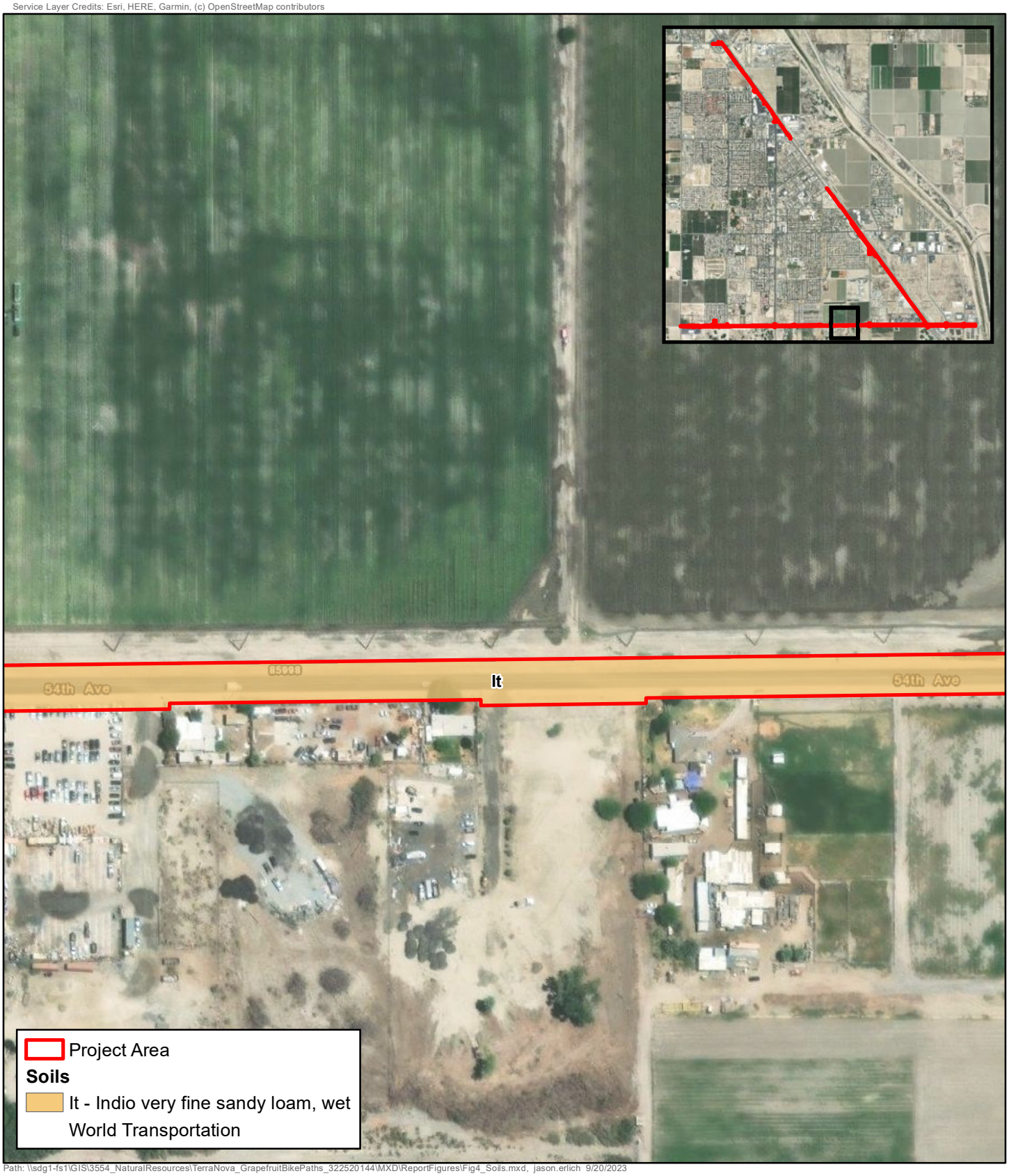


Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4n

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California



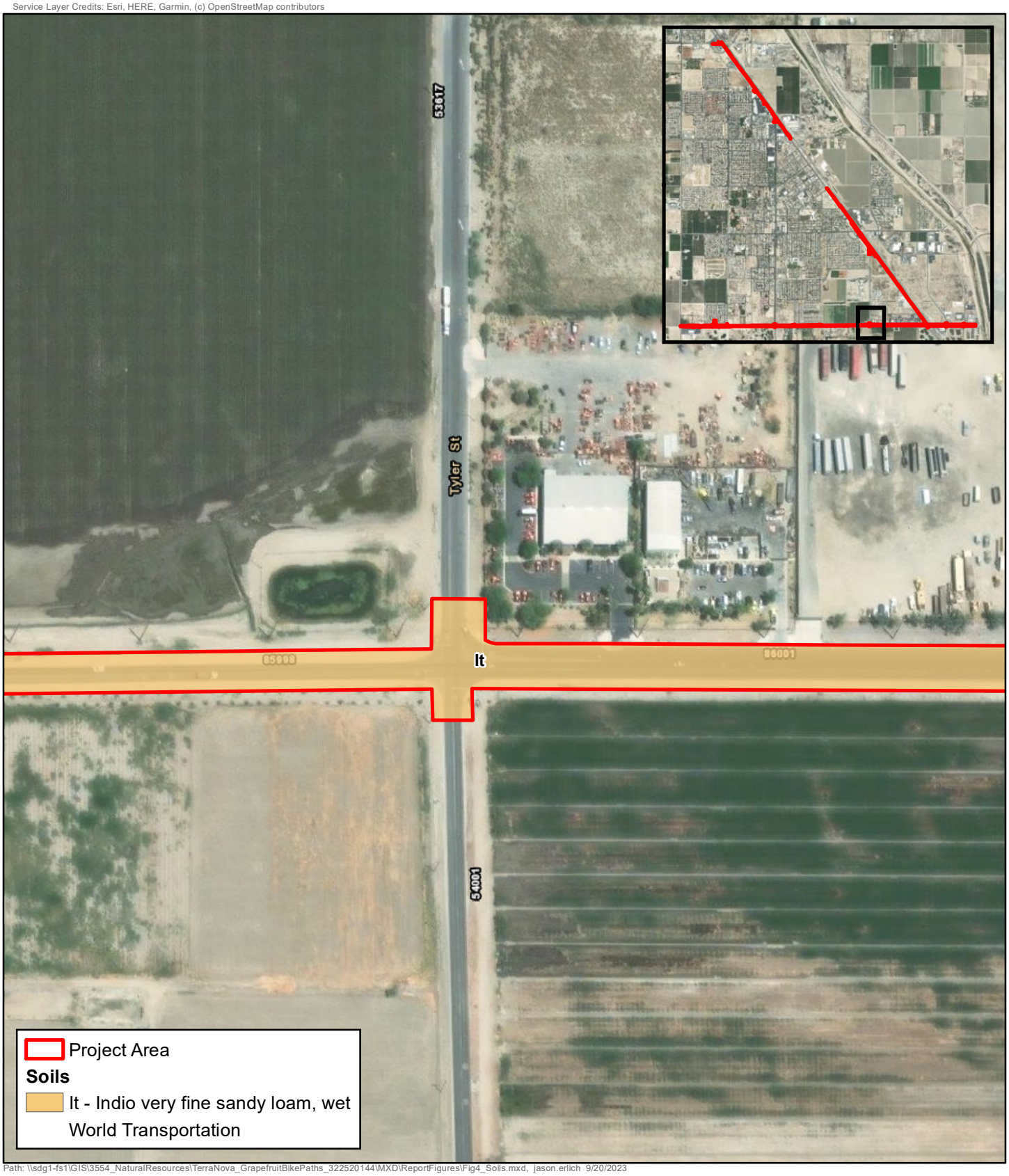
Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

wsp

FIGURE 4o

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California



Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

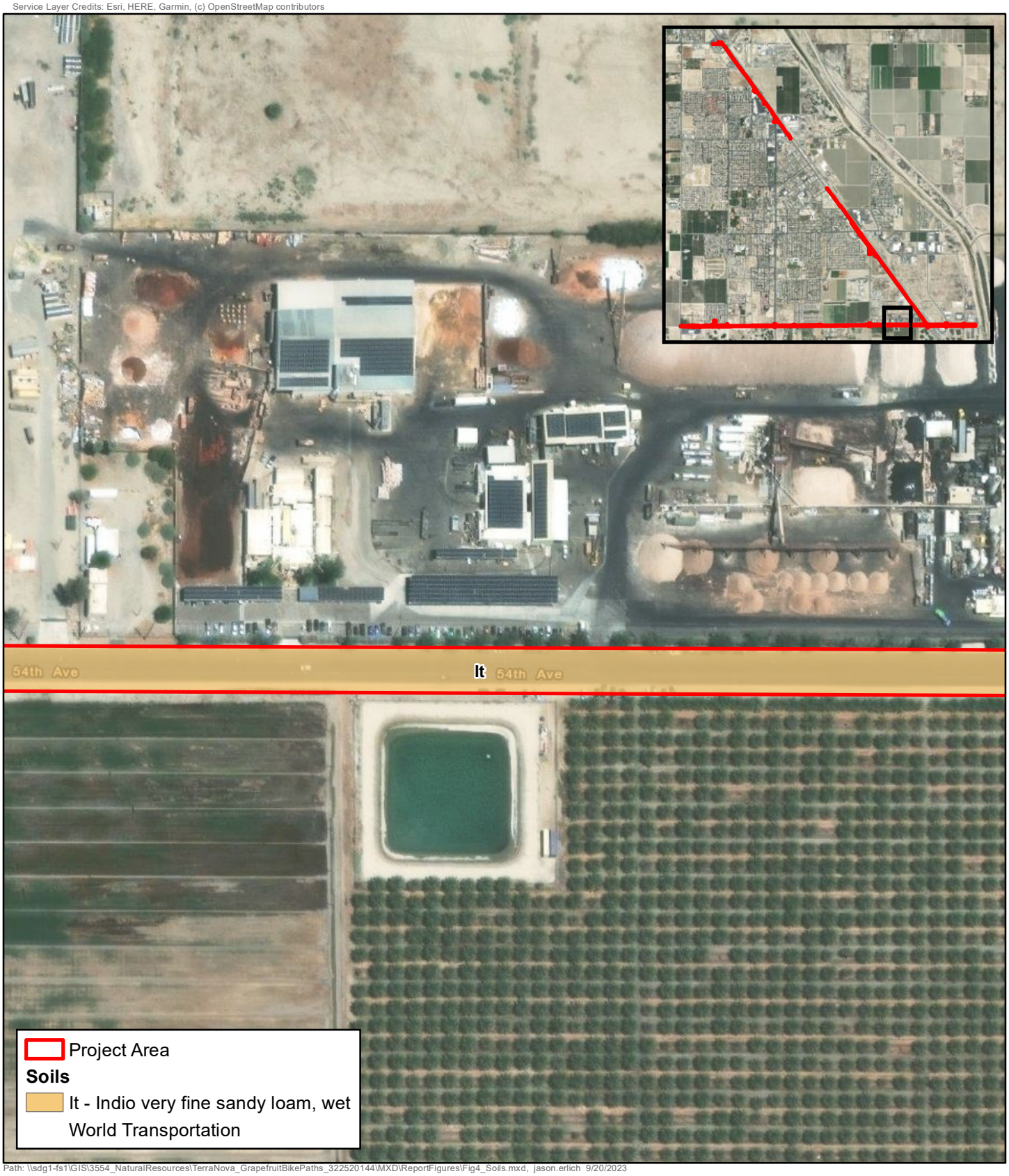
1 inch = 200 feet
0 100 200 Feet

wsp

FIGURE 4p

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors



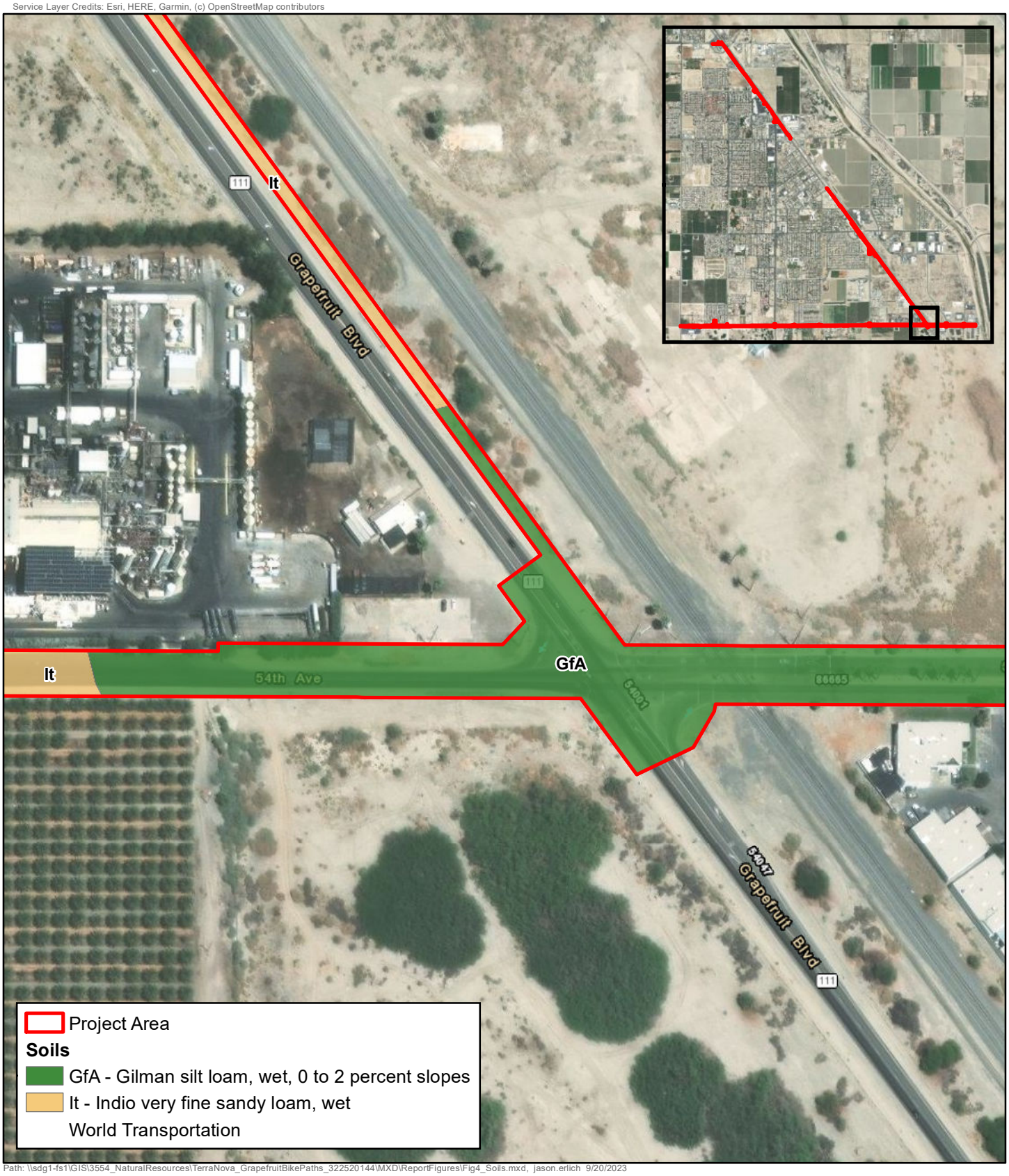
Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

wsp

FIGURE 4q

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California



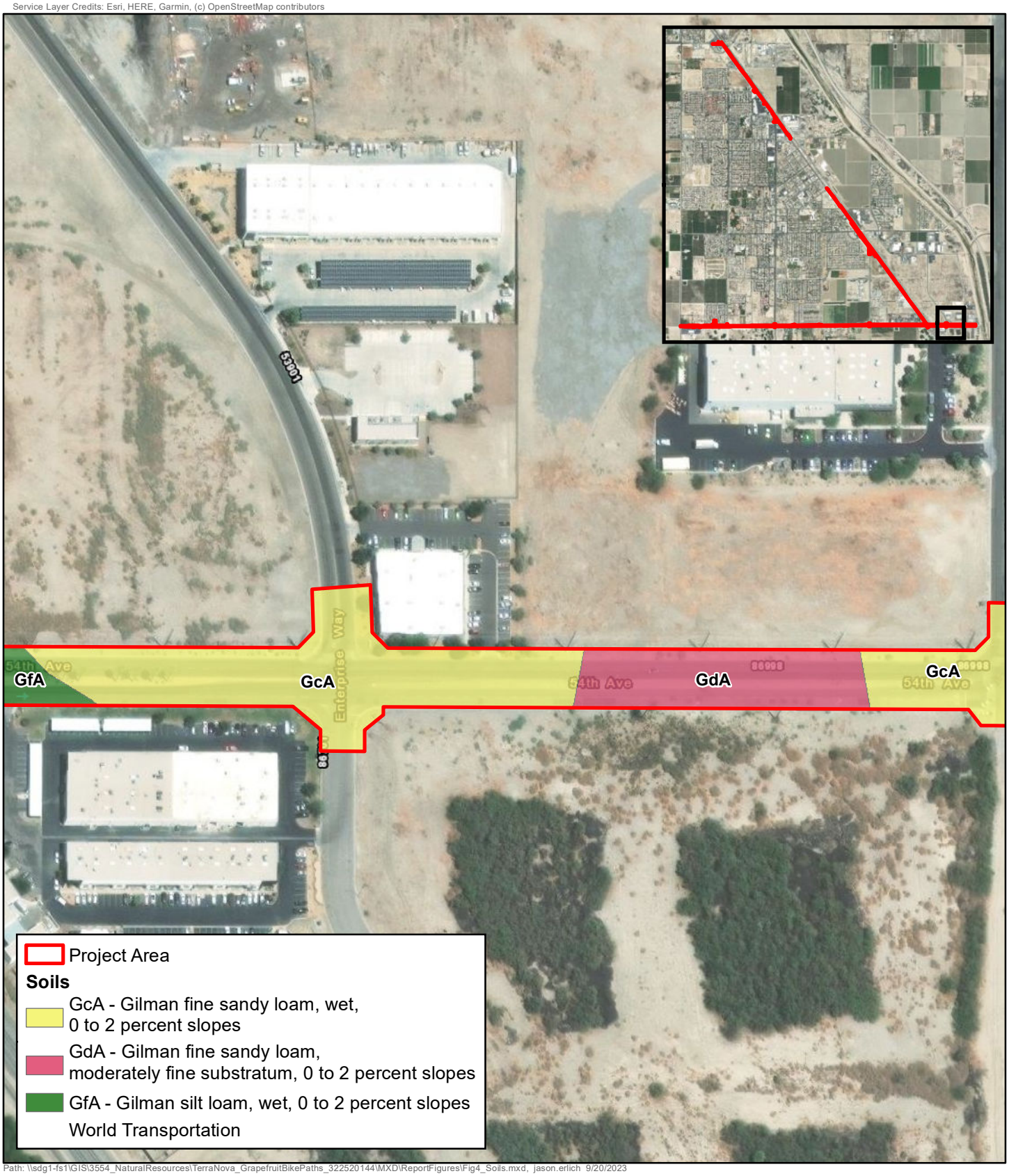
Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

wsp

FIGURE 4r

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California



Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4s

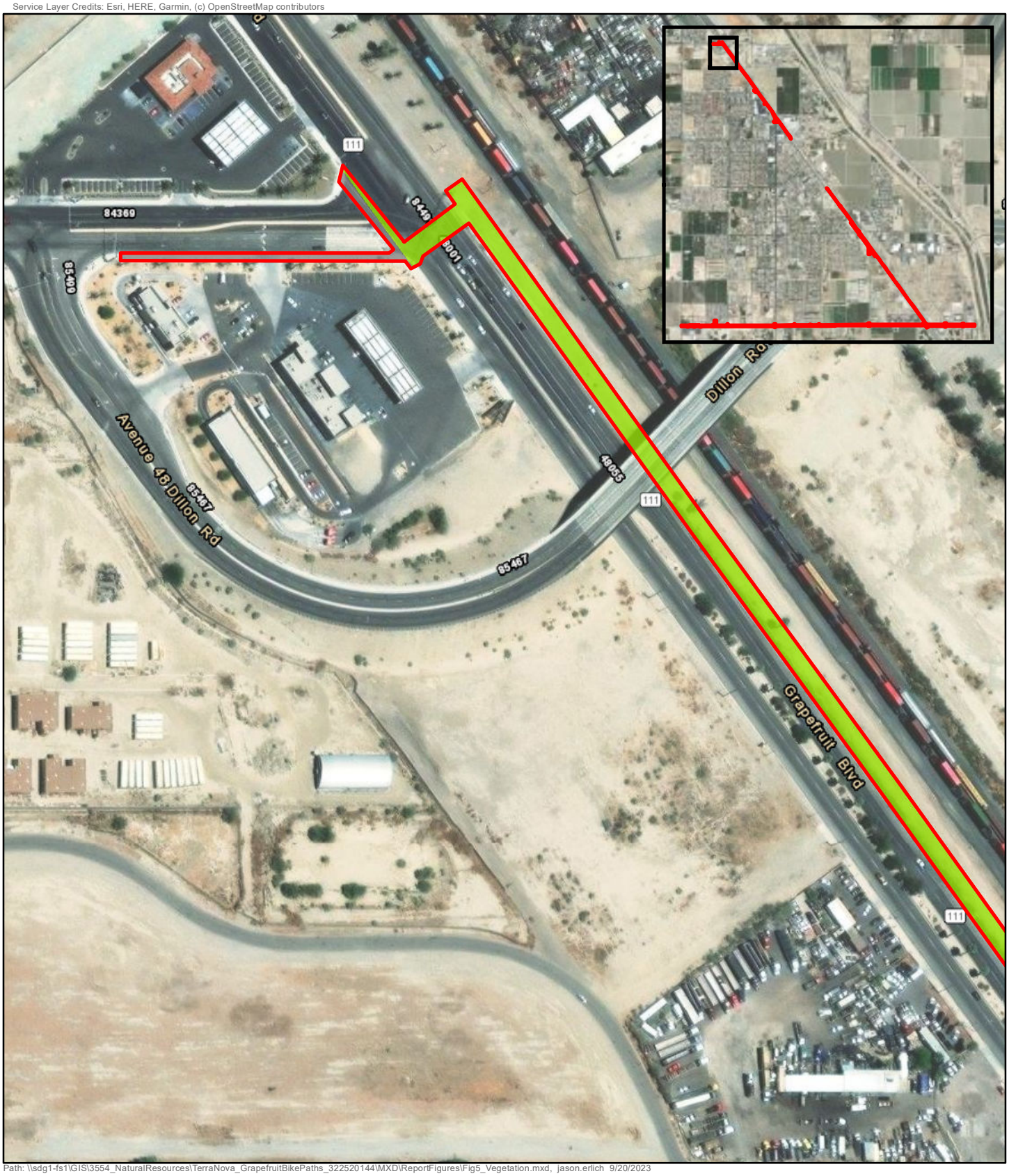
Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig4_Soils.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

FIGURE 4t

Soils
Grapefruit Avenue Bike Paths Project
Riverside County, California



Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

Project Area

Vegetation Communities

Agriculture

Urban

FIGURE 5a

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

Project Area

Vegetation Communities

Agriculture

FIGURE 5b

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

FIGURE 5c

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

wsp

Project Area

Vegetation Communities

Agriculture

Urban

FIGURE 5d

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200
Feet

wsp

Project Area

Vegetation Communities

Agriculture

FIGURE 5e

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

wsp

Project Area

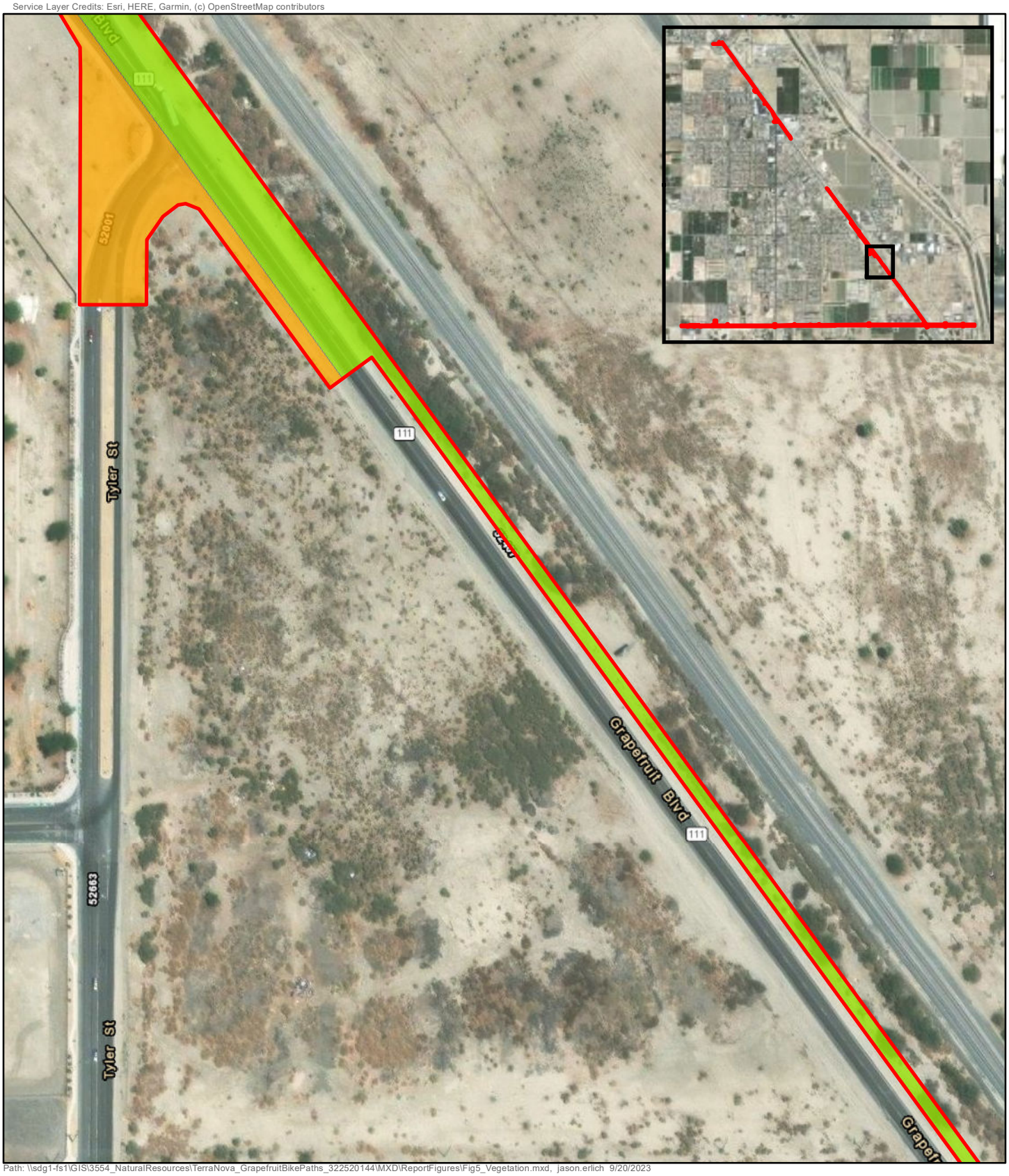
Vegetation Communities

Agriculture

Desert saltbush scrub

FIGURE 5f

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California



1 inch = 200 feet
0 100 200
Feet

Project Area

Vegetation Communities

Agriculture

Desert saltbush scrub

FIGURE 5g

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200
Feet

wsp

Project Area

Vegetation Communities

Agriculture

FIGURE 5h

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200
Feet

wsp

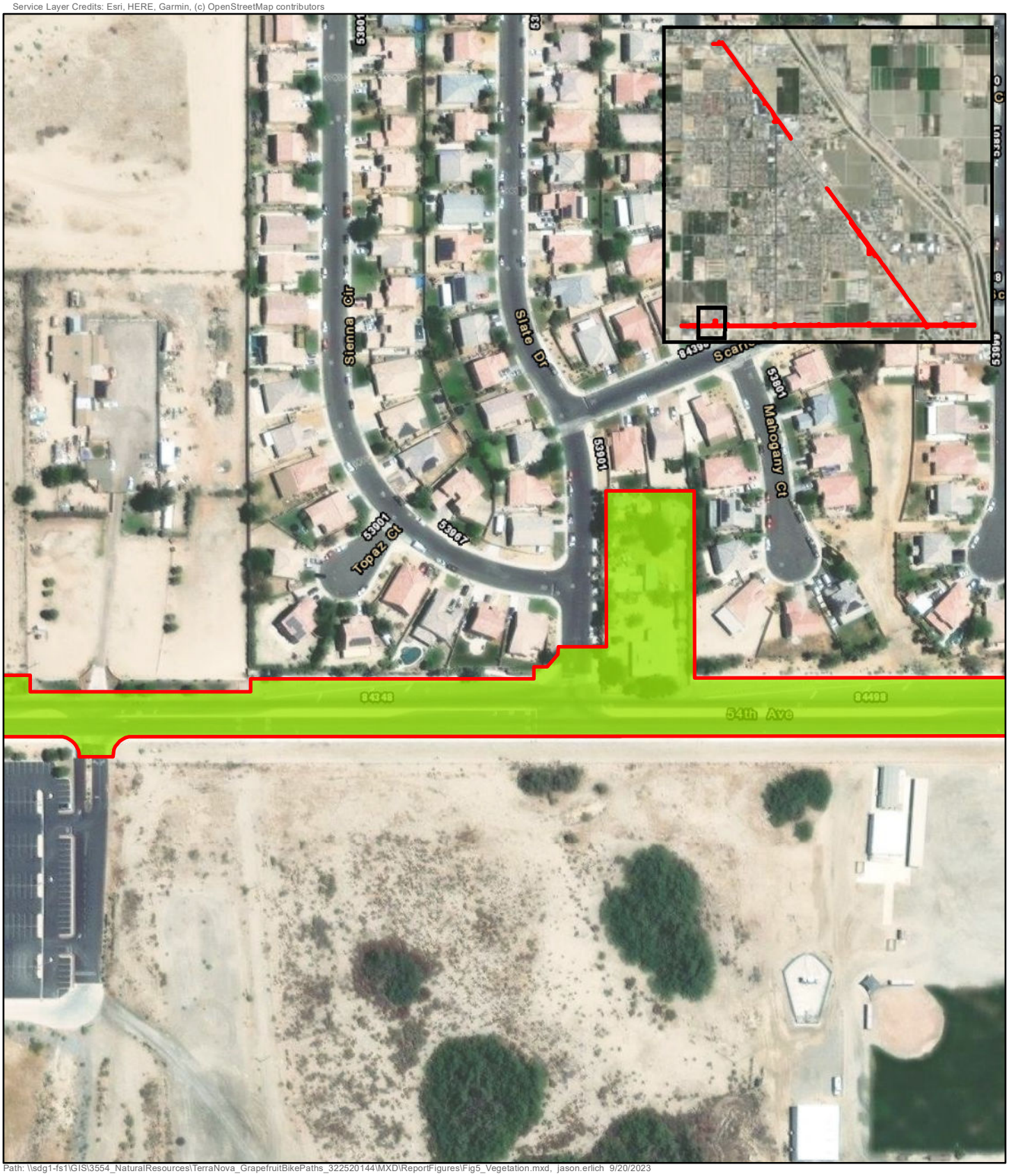
Project Area

Vegetation Communities

Agriculture

FIGURE 5i

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California



Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

Project Area

Vegetation Communities

Agriculture

FIGURE 5j

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

Project Area

Vegetation Communities

Agriculture

FIGURE 5k

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

Project Area

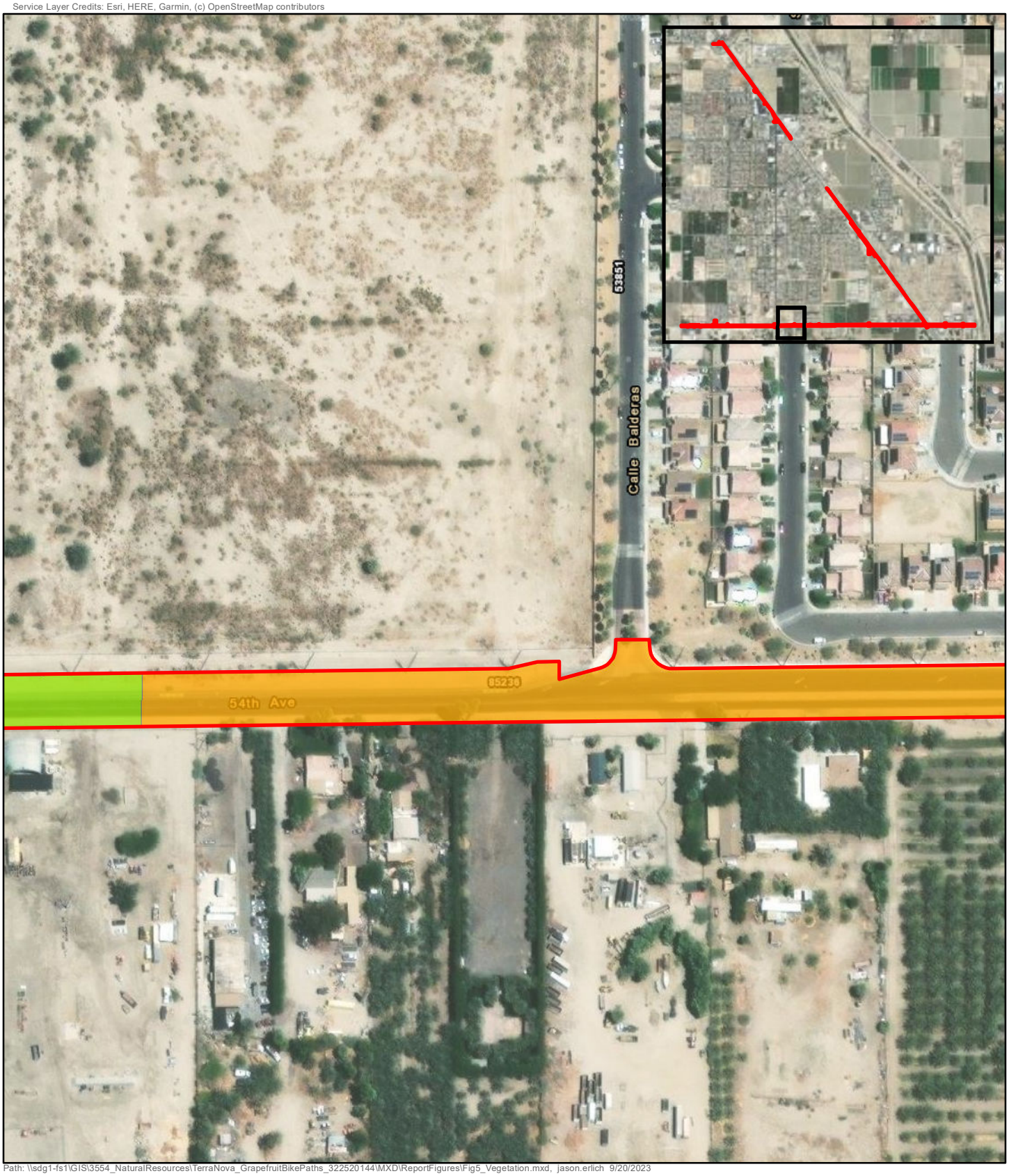
Vegetation Communities

Agriculture

FIGURE 5l

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors



Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

wsp

Project Area

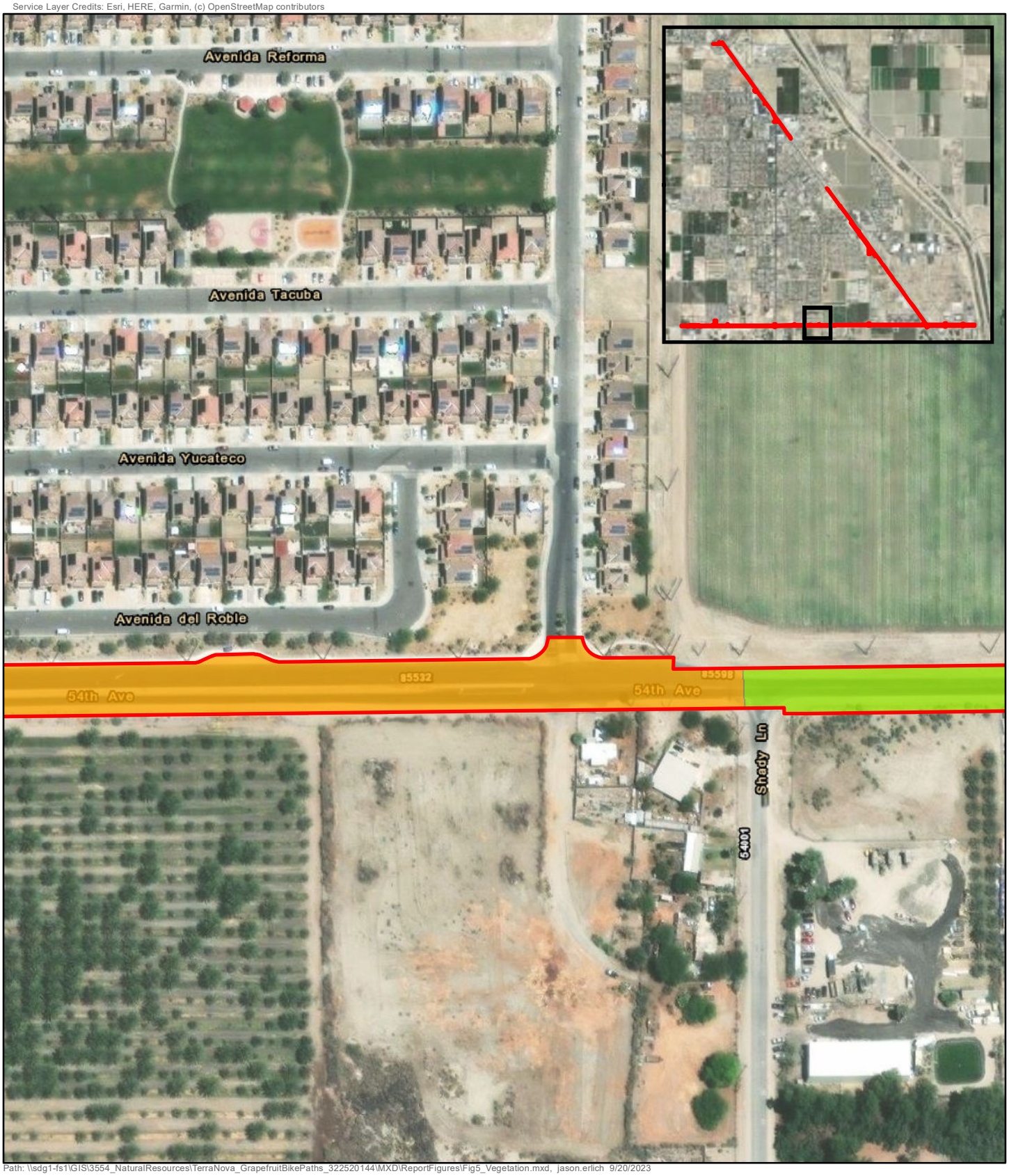
Vegetation Communities

Agriculture

Desert saltbush scrub

FIGURE 5m

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California



Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

Project Area

Vegetation Communities

Agriculture

Desert saltbush scrub

FIGURE 5n

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200
Feet

Project Area

Vegetation Communities

Agriculture

FIGURE 5o

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200
Feet

Project Area

Vegetation Communities

Agriculture

FIGURE 5p

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200
Feet

Project Area

Vegetation Communities

Agriculture

FIGURE 5q

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

Project Area

Vegetation Communities

Agriculture

Desert saltbush scrub

FIGURE 5r

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200 Feet

wsp

Project Area

Vegetation Communities

Agriculture

FIGURE 5s

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_GrapefruitBikePaths_322520144\MXD\ReportFigures\Fig5_Vegetation.mxd, jason.erlich 9/20/2023

1 inch = 200 feet
0 100 200
Feet

wsp

Project Area

Vegetation Communities

Agriculture

FIGURE 5t

Vegetation
Grapefruit Avenue Bike Paths Project
Riverside County, California

FIGURE 6

CVMSHCP Conservation Areas
Grapefruit Avenue Bike Paths Project
Riverside County, California

APPENDIX B

PLANTS AND VERTEBRATE WILDLIFE OBSERVED

Plants Observed or Detected
Grapefruit Boulevard and Avenue 54 Bike Path Project Site, Coachella, Riverside County, California

---

ANGIOSPERMAE **DICOTYLEDONEAE**	**DICOT FLOWERING PLANTS**
Aizoaceae	**Iceplant Family**
Sesuvium verrucosum	western sea-purslane
Apocynaceae	**Dogbane Family**
Funastrum hirtellum	trailing townula
**Nerium oleander*	Oleander (landscape hedge)
Asteraceae	**Sunflower Family**
Dicoria canescens	desert twinbugs
Helianthus annuus	common sunflower
Pluchea sericea	arrow weed
Brassicaceae	**Mustard Family**
**Brassica tournefortii*	Sahara mustard
**Sisymbrium irio*	London rocket
Chenopodiaceae	**Goosefoot Family**
Atriplex lentiformis	big saltbush
Suaeda nigra	bush seepweed
Fabaceae	**Legume Family**
**Medicago sativa*	Alfalfa (roadside waif)
**Parkinsonia aculeata*	Mexican palo verde (landscape)
Psorothamnus emoryi	Emory's indigobush
Prosopis glandulosa var. *torreyana*	honey mesquite (few individuals)
Heliotropiaceae	**Heliotrope Family**
Heliotropium curassavicum var. *oculatum*	alkali heliotrope
Myrtaceae	**Myrtle Family**
**Eucalyptus globulus*	blue gum
Portulacaceae	**Purslane Family**
**Portulaca oleracea*	common purslane
Solanaceae	**Nightshade Family**
Datura wrightii	Jimsonweed
Tamaricaceae	**Tamarisk Family**
**Tamarix aphylla*	Athel

Zygophyllaceae	**Caltrop Family**
**Tribulus terrestris*	puncture vine
MONOCOT ANGIOSPERMS	
Arecaceae	**Palm Family**
Washingtonia filifera	California fan palm (planted)
**Washingtonia robusta*	Mexican fan palm (planted)
Poaceae	**Grass Family**
**Cynodon dactylon*	Bermuda grass

* - denotes a non-native species

Wildlife Observed
Grapefruit Boulevard and Avenue 54 Bike Path Project Site, Coachella, Riverside County, California

CHORDATES	**CHORDATA**
BIRDS	**AVES**
Pigeons and Doves	**Columbidae**
Eurasian collared-dove	*Streptopelia decaocto*
New World Vultures	**Cathartidae**
turkey vulture	*Cathartes aura*

* - non-native species

APPENDIX C

SITE PHOTOS

Photo 1. Northern end of the proposed bike path route in Arco Gas station parking lot at 48th Street and Highway 111/Grapefruit Boulevard.

Photo 2..View of proposed bike path route on east side of Highway 111/Grapefruit Boulevard, just south of the intersection with 48th Street. Note Arco Gas station in upper right and Union Pacific Railroad line bordering the east side of the project ROW.

Photo 3. Looking north along the proposed bike path route north of 49th Street on the east side of Highway 111/Grapefruit Blvd. Highway 111 is on the other side of the oleander hedge. The Union Pacific Railroad line is visible on the upper right. This area appears to undergo regular vegetation clearing.

Photo 4. ROW looking north along Highway 111/Grapefruit Blvd. north of Avenue 54.

Photo 5. Eastern “end” of the proposed bike path on Avenue 54 near the Coachella Sanitary District facilities. The bike path will be a lane in the existing road.

Photo 6. Looking west from Polk Street along the north side of Avenue 54. Bike path should be in the road here.

Photo 7. View looking west from the intersection of Grapefruit/Hwy 111 and Avenue 54 showing lack of any native vegetation community (actually the case for almost the entire ROW).

Photo 8. .View of project route along Ave. 54 west of Highway 111/Grapefruit Blvd.

Photo 9. View along Ave. 54 west of Tyler Street, showing cleared road shoulder. Although the proposed bike path is supposed to be a lane in the existing road, if it were to include this area there would be no impact to any natural community..

Photo 10. Project route along Ave. 54 east of Shady Lane. Note residential development in background.

Photo 11. Project route along Ave. 54 west of Cesar Chavez Street.

Photo 12. "West end" of proposed project route on Avenue 54 at the intersection with Van Buren Street.

APPENDIX D

CVMSHCP Table 4-112:
Coachella Valley Native Plants Recommended for Landscaping

Coachella Valley Native Plants Recommended for Landscaping

BOTANICAL NAME	COMMON NAME
Trees	
Washingtonia filifera	California fan palm
Cercidium floridum	blue palo verde
Chilopsis linearis	desert willow
Olneya tesota	ironwood tree
Prosopis glandulosa var. *torreyana*	honey mesquite
Shrubs	
Acacia greggii	cat's claw acacia
Ambrosia dumosa	burro bush
Atriplex canescens	four wing saltbush
Atriplex lentiformis	quailbush
Atriplex polycarpa	cattle spinach
Baccharis sergiloides	squaw water-weed
Bebia juncea	sweet bush
Cassia (Senna) covesii	desert senna
Condalia parryi	crucilllo
Crossosoma bigelovii	crossosoma
Dalea emoryi	dye weed
Dalea (Psorothamnus) schottii	indigo bush
Datura meteloides	jimson weed
Encelia farinosa	brittle bush
Ephedra aspera	Mormon tea
Eriogonum fasciculatum	California buckwheat
Eriogonum wrightii membranaceum	Wright's buckwheat
Fagonia laevis	no common name
Gutierrezia sarothrae	matchweed
Haplopappus acradenius	goldenbush
Hibiscus denudatus	desert hibiscus
Hoffmannseggia microphylla	rush pea
Hymenoclea salsola	cheesebush
Hyptis emoryi	desert lavender
Isomeris arborea	bladder pod
Juniperus californica	California juniper
Krameria grayi	ratany
Krameria parvifolia	little-leaved ratany
Larrea tridentata	creosote bush
Lotus rigidus	desert rock pea
Lycium andersonii	box thorn
Petalonyx linearis	long-leaved sandpaper plant
Petalonyx thurberi	sandpaper plant
Peucephyllum schottii	pygmy cedar
Prunus fremontii	desert apricot
Rhus ovata	sugar-bush
Salazaria mexicana	paper-bag bush
Salvia apiana	white sage
Salvia eremostachya	Santa Rosa sage

Salvia vaseyi	wand sage
Simmondsia chinensis	jojoba
Sphaeralcia ambigua	globemallow (desert mallow)
Sphaeralcia ambigua rosacea	apricot mallow
Trixis californica	trixis
Zauschneria californica	California fuchsia

Groundcovers

Mirabilis bigelovii	wishbone bush (four o'clock)
Mirabilis tenuiloba	white four o'clock (thin-lobed)

Vines

Vitis girdiana	desert grape

Accent

Muhlenbergia rigens	deer grass

Herbaceous Perennials

Adiantum capillus-veneris	maiden-hair fern
Carex alma	sedge
Dalea parryi	Parry dalea
Eleocharis montevidensis	spike rush
Equisetum laevigatum	horsetail
Juncus bufonis	toad rush
Juncus effuses	juncus
Juncus macrophyllus	juncus
Juncus mexicanus	Mexican rush
Juncus xiphioides	juncus
Notholaena parryi	Parry cloak fern
Pallaea mucronata	bird-foot fern

Cacti and Succulents

Agave deserti	desert agave
Asclepias albicans	desert milkweed (buggy-whip)
Asclepias subulata	ajamete
Dudleya arizonica	live-forever
Dudleya saxosa	rock dudleya
Echinocereus engelmannii	calico hedgehog cactus
Ferocactus acanthodes	barrel cactus
Fouquieria splendens	ocotillo
Mamillaria dioica	nipple cactus
Mamillaria tetrancistra	corkseed cactus
Nolina parryi	Parry nolina
Opuntia acanthocarpa	stag-horn or deer-horn cholla
Opuntia bigelovii	teddy bear or jumping cholla
Opuntia basilaris	beavertail cactus
Opuntia echinocarpa	silver or golden cholla
Opuntia ramosissima	pencil cholla, darning needle cholla
Yucca schidigera	Mojave yucca, Spanish dagger
Yucca whipplei	Our Lord's candle

APPENDIX E

Prohibited Invasive Ornamental Plants

Prohibited Invasive Ornamental Plants

BOTANICAL NAME	COMMON NAME
Acacia spp. (all species except A. greggii)	(all species except native catclaw acacia)
Arundo donax	giant reed or arundo grass
Atriplex semibaccata	Australian saltbush
Avena barbata	slender wild oat
Avena fatua	wild oat
Brassica tournefortii	African or Saharan mustard
Bromus madritensis ssp. rubens	red brome
Bromus tectorum	cheat grass or downy brome
Cortaderia jubata [syn.C. atacamensis]	jubata grass or Andean pampas grass
Cortaderia dioica [syn. C. selloana]	pampas grass
Descurainia sophia	tansy mustard
Eichhornia crassipes	water hyacinth
Elaegnus angustifolia	Russian olive
Foeniculum vulgare	sweet fennel
Hirschfeldia incana	Mediterranean or short-pod mustard
Lepidium latifolium	perennial pepperweed
Lolium multiflorum	Italian ryegrass
Nerium oleander	oleander
Nicotiana glauca	tree tobacco
Oenothera berlandieri	Mexican evening primrose
Olea europea	European olive tree
Parkinsonia aculeata	Mexican palo verde
Pennisetum clandestinum	Kikuyu grass
Pennisetum setaceum	fountain grass
Phoenix canariensis	Canary Island date palm
Phoenix dactylifera	date palm
Ricinus communis	castorbean
Salsola tragus	Russian thistle
Schinus mole	Peruvian pepper tree
Schinus terebinthifolius	Brazilian pepper tree
Schismus arabicus	Mediterranean grass
Schismus barbatus	Saharan grass, Abu Mashi
Stipa capensis	no common name
Tamarix spp. (all species)	tamarisk or salt cedar
Taeniatherum caput-medusae	Medusa-head
Tribulus terrestris	puncturevine
Vinca major	periwinkle
Washingtonia robusta	Mexican fan palm
Yucca gloriosa	Spanish dagger

Sources: California Exotic Pest Plant Council, United States Department of Agriculture-Division of Plant Health and Pest Prevention Services, California Native Plant Society, Fremontia Vol. 26 No. 4, October 1998, The Jepson Manual; Higher Plants of California, and County of San Diego Department of Agriculture.

APPENDIX F

USFWS IPaC Report