City of Goleta
Planning and Environmental Review

APPROVED

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Date: FEB 01 2022
Case Number(s): 22-0001-SCD
Planner: LISA PRASSE

REVISED RESTORATION PLAN

For Old San Jose Creek

June 16, 2017 (original)
Revised July 2, 2019
Revised April 16, 2020
Revised September 25, 2020
by Watershed Environmental, Inc.
Revised March 31, 2021
by Watershed Environmental, Inc.
Revised September 7, 2021
By Watershed Environmental, Inc.

Prepared by:

Rachel Tierney Consulting
P. O. Box 1113 Santa Barbara,
CA 93102
(805) 957-1100

Prepared for:

Security Paving, Inc.
3075 Townsgate Rd., Ste 200
Westlake Village, CA 91361

REVISED RESTORATION PLAN (RRP)
OLD SAN JOSE CREEK
June 16, 2017
Revised July 2, 2019
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FIGURES End of Report (pages 45-50)

1.0 INTRODUCTION

1.1 SUMMARY

This stand-alone revision to the original Buffer Restoration Plan, June 16, 2017 (ORP), includes adjustments gleaned from a number of memos and addendums, located throughout the report. This revision came about during the implementation stage of the original Buffer Restoration Plan, during the first stages of soil preparation, when discrepancies in the allotted restoration area and the actual area as seen in the field were noted. Most of the revisions center on the area and location of restoration. Some restoration components were changed, and others were kept the same. Further revisions were made to the report following City of Goleta's (Chris Noddings, Assistant Planner) comments on February 9, 2021. Further revisions were made to the report following City of Goleta's comments on July 2, 2021.

The project, previously owned by Highway Recycling and now owned by Security Paving Inc., consists of a concrete and asphalt aggregate recycling facility at 909 South Kellogg Avenue, Goleta, California. The 3-acre site is located within an industrial area close to the Santa Barbara Municipal Airport (Figure 1: Vicinity Map). An earlier rendition of the project was approved, with conditions, by the City of Goleta on October 14, 2011 (Final Mitigated Negative Declaration 11-MND-002, South Kellogg Recycling Facility Project, Case No. 09-133—DP). The current project is reduced in scale from the Highway Recycling first rendition, with other modifications in layout and drainage. Conditions 18 to 27 (City of Goleta, MND Exhibit 4: Conditions of Approval) pertain to protection of Biological Resources and are addressed *in this revision.*

Consistent with the requirements listed in Condition 21 of the MND, the *Revised Restoration Plan* (*RRP*) includes the following sections: author, date, project description, map of Environmentally Sensitive Habitat Area (ESHA), Streamside Protective Area (SPA) and restoration boundaries; existing resources; goals and objectives; site preparation and site protection; planting plan with plant procurement information; irrigation notes; weeding notes; maintenance; monitoring (schedule, performance criteria with alternate actions if criteria are not met), and reporting schedule. A check box of the required items for Condition 21 is found in the next section.

To provide a more comprehensive, project-specific reference useful to the landscape contractor, the monitoring biologist, the workmen, the owners, and the regulatory community concerned with this aspect of the overall project, this report contains a background library of information including historic perspectives of the drainage creation and demise, results of biological research, fieldwork, and a potential impact evaluation.

1.2 PROJECT DESCRIPTION

The project consists of operating a concrete asphalt aggregate and other material recycling facility producing building materials such as Class 2 road base. The site includes an approximate 12 ft. wide by 80 ft. long vehicle scale, two 19,000 sq. ft. stockpile areas limited to 23 feet above grade, material and equipment storage areas, crushing operation area, and screening plant. In addition, the project includes new fencing and gates and a stormwater pollution prevention plan.

The site will hold most stormwater originated from the property, either within the stormwater filtration and detention system or through percolation. Best Management Practice (BMP) components are varied and consist of a 'V' shaped ditch running between the Old San Jose Creek restoration area and the

CHECK BOX: Required Components **Biological Conditions: 18 - 28** City of Goleta, 2011; MND Declaration 11-MND-002 **Not Complete**	Location RRP = Revised Restoration Plan (3/31/2021)
Condition 18: Remove vehicles from west buffer (completed).	Section 4.4.3
Condition 19: No activities or mechanized equipment within buffer.	Section 4.4.3; 4.7
Condition 20: Unanticipated Damage to Buffer.	Section 3.2
Condition 21: Restoration Plan.	
a) Author, date, project description and project implementation.	Section 1.5
b) A description of existing biological resources.	Section 3.0
c) Goals and objectives for the restoration plan.	Section 4.1
d) Site preparation methods for protection of resources during construction.	Section 4.4; 4.7
e) Weeding requirements and a list of non-native species to be removed and methods of removal.	Section 5.0
f) A plantings plan for the riparian corridor and swale area with appropriate treatment of ESHA and SPA locations.	Table 3; Figure 5
g) Use of only local genetic stock for all seeds and plantings and seed collection schedule.	Section 4.3
h) Performance criteria by which restoration success is measured.	Table 5
i) Methods to protect plantings until established, including short- and long-term maintenance.	Section 4.4.3; 4.5.3; 5.0; 6.0; Table 4
j) Actions necessary in the event performance criteria are not met.	Table 5
k) Irrigation requirements.	Section 4.6 ; 5.2; 5.3
l) Detailed mapping of ESHA and SPA boundaries and illustration of restoration areas.	Figure 5
m) Cost estimate to implement the restoration plan, including installation as well as maintenance and monitoring requirements.	Section 6.4
Condition: 22: Restoration Bond.	Submitted by Security Paving
Condition: 23: Pre-Project Bird Survey (*completed*).	Section 3.2.3
Condition: 24: No construction materials within Buffer/SPA.	Section 4.3, 4.4.3
Condition: 25: Restrict washing and concrete to designated areas. See Sheets	GR, G1, G2
Condition: 26: CDFW: Waiver (*completed*).	Section 3.2.1
Condition: 27: USCOE: Waiver (*completed*)	Section 3.2.1
Condition: 28: Grading Plan with BMPs. See Sheets	GR, G1, G2

stockpiles to collect and direct runoff towards a sediment filtration system (See Figure 2: Site Plan, end of report).

The site will hold most stormwater originated from the property, either within the stormwater filtration and detention system or through percolation. Best Management Practice (BMP) components are varied and consist of a 'V' shaped ditch running between the Old San Jose Creek restoration area and the stockpiles to collect and direct runoff towards a sediment filtration system (See Figure 2: Site Plan, end of report). The filtration system is designed to remove sediment, heavy metals and oil and grease before discharging runoff into a detention basin, which would hold a significant portion of runoff with an underground "galley" during high storm events. The system, which also includes a detention basin, is built to hold a 25-year storm event.

Access to the site is from South Kellogg Avenue. Additional emergency access is along the narrow portion of the southernmost section of property (Southern Extension), which leads to a Santa Barbara County Flood Control District Road, located south of the subject property. Additional details regarding perimeter fencing and facility operations are contained in the project description submitted with a recent project submittal package.

1.3 REVISED LOCATION OF RESTORATION AREAS

For a variety of reasons described below, the size of the available planting space in the main habitat restoration planting area identified in the original 2017 Buffer Restoration Plan, has decreased. Consistent with Conditions of Approval described in Section 1.2 above, the total required restoration is a 21,262 sq. ft. Streamside Protective Area (SPA) as measured 50-ft. from the 2010 Biological Study ESHA boundary, consisting of 4,562 sq. ft. of ESHA canopy growth (measured between 2010 and a 2019 survey) and the remaining 16,700 sq. ft. portion of the 50-ft.-wide SPA. The required restoration is proposed to be met as follows:

- 27,993 sq. ft. of ESHA restoration (i.e., trash and weed removal) within canopy of Old San Jose Creek prior to 2010 (23,431 sq. ft.) and within extended canopy credit since 2010 (4,562 sq. ft.).
- 5,497 sq. ft. of restoration (i.e., trash and weed removal, as well as planting of *Carex pansa* plugs) located under existing (2019) riparian canopy dripline (700 sq. ft. – not double-counted) and located outside of riparian canopy dripline (5,497 sq. ft.).
- 2,630 sq. ft. of coastal sage scrub in the "Southern Extension".
- 8,735 sq. ft. of restoration (various types) in the "Northern Restoration Area".

Total proposed restoration area is 44,855 sq. ft.

The overflow swale (745 sq. ft.) is also proposed to be vegetated and is discussed within this Revised Restoration Plan, consistent with Condition of Approval #21. However, this area is not included as "restoration area" as it is development that is associated with the project.

Causative factors include the outward growth of the canopy over the main restoration area between 2010 (year project was approved) and 2019, resulting in a "loss" of usable restoration area under the extended canopy. Other factors include a misrepresented top of the bank resulting in a reduction of restoration area thought to be available, and ambiguity within the 2017 approved site plan, making the location of the as-built stormwater feature (wall, v-ditch and fence) problematic under the extended canopy.

Figure 3: Aerial Photos with Buffers and Canopies illustrates the variation between the 2010 top of bank (TOB), adopted in the original 2017 Buffer Restoration Plan, and the 2019 surveyed TOB. Also shown are the 2010 ESHA (extent of canopy or TOB, whichever is furthest from the creek) applied in the 2017 original Buffer Restoration Plan, the ESHA extracted from a 2010 aerial, and finally, a 2019, surveyed ESHA (which only consists of canopy). This figure identifies the 50 ft setbacks from the three ESHA and the new restoration areas. Canopy credit is also shown, measured from the 2010 ESHA used in the original plan to the edge of the 2019 canopy.

1.4 PROJECT LOCATION AND VICINITY DESCRIPTION

The project site is situated in a nexus of small commercial and industrial businesses. East of the project site there are several 60+-year-old buildings occupying about one acre of the same parcel (903, 905 and 907 S. Kellogg Avenue) used for commercial and industrial purposes (Figures 1: Site Vicinity and Location Map). To the north of the project are a public right of way easement, commercial and industrial businesses, and an undeveloped parcel. To the west lies a one-acre flood control easement encompassing the degraded abandoned former diversion of San Jose Creek (Old San Jose Creek). Further west of the drainage lies the Santa Barbara Municipal Airport. The West Wind All Digital Drive-In and the "Swap Meet" (formerly Goleta Twin Screen Drive-In) site, followed by Highway 217 (Ward Memorial Highway), lies to the east.

1.5 AUTHORS

This report was written by Rachel Tierney of Rachel Tierney Consulting, 805-722-8478, racheltierneyconsulting@gmail.com. Ms. Tierney has a B.A. in Biology (1978) and an M.A. in Botany (1981) from the University of California at Santa Barbara and has over 30 years' experience in this field. Figures were developed in Adobe Illustrator by Thomas Tarleton of Tarleton Design, 805-886-4767, tarletondesign@gmail.com.

This report was revised on September 25, 2020, and again on March 31, 2021 and September 7, 2021, by Mark de la Garza of Watershed Environmental, Inc., 805-729-1070, mdelagarza@watershedenvironmental.com. Mr. de la Garza has a B.A. in Environmental Studies and a Masters degree in Environmental Science and Management (1998) from the University of California at Santa Barbara and has over 20 years' experience in this field.

1.6 RESPONSIBLE PARTIES

Property Owner:
Kellogg Avenue, LLC
Mike Pollard
4915 Carpinteria Avenue, Suite H, Carpinteria, CA 93013-1957
Phone: 805-684-6653

Project Owner:
Security Paving, Inc.
John Gasparo
3075 Townsgate Rd., Ste 200
Westlake Village, CA 91361
Phone: 818-362-9200

2.0 HISTORY OF OLD SAN JOSE CREEK AND SURROUNDINGS

San Jose Creek extends from the Santa Ynez Mountains (at about 2,760 feet in elevation) to the Pacific Ocean and travels approximately 8 miles before emptying into the Goleta Slough. The watershed drains 9.5 square miles, including undeveloped mountainous, rural, agricultural, suburban, and urban land.

Goleta Slough. Historically, what is now the Slough was a navigable bay ("Goleta" is the Spanish word for "schooner"), and the lower segments of various creeks flowed directly into this large open water. Catastrophic flooding occurred in 1861-62, filling much of this bay and creating a shallow lagoon with extensive bordering intertidal wetlands. The natural alignment—or original alignment—of San Jose Creek flowed from the northeast to the southwest into the Slough and the ocean. Figure 1: Site Vicinity and Location Map, shows the terminus of the creek in its natural location well north of the subject site.

Due to increased development during this century, over 60 percent of the original area of estuarine wetlands has been eliminated or isolated from tidal actions. Construction of the Marine Corps Air Station at Goleta in 1941 resulted in significant filling of the Slough. This area eventually became the Santa Barbara City Municipal Airport and portions of UC Santa Barbara (Goleta Slough Management Plan, 1997).

First Diversion of San Jose Creek. Sometime during the 1920s, the natural creek channel was diverted upstream (north) of the subject site, and a new, straight channel was created, sending flows at a sharp angle to the south. This was likely re-routed to irrigate agricultural fields on the subject site and other fields to the north. Other aerial photographs show that the region, including the subject site, was farmed up through the late 1950s. Very little, if any, vegetation grew along the drainage channel during at least some of that time. After the first diversion, the subject drainage still retained normal flows, albeit within an artificial channel.

Second Diversion of San Jose Creek. The second San Jose Creek diversion was completed in 1965 in an effort to alleviate flooding through Old Town Goleta. At that time, a concrete channel was constructed to convey *all* stream-flow of San Jose Creek south of Hollister Avenue. The channel runs along Hwy 217 (Ward Memorial) before combining with San Pedro Creek, which then converges with Atascadero Creek shortly thereafter, and feeds into the Pacific Ocean at the Goleta Slough. San Jose Creek flows its natural path upstream of the diversion north of Hollister Avenue. Figure 1: Site Vicinity and Location Map (1995 Topo) shows the two diversion systems.

Recent improvements to the concrete channel along Ward Memorial, completed in 2015, increased channel capacity in San Jose Creek from a 25- to a 100-year event storm. These improvements reduce the amount of water entering the abandoned former diversion of San Jose Creek, known as Old San Jose drainage, which in the past had received overflows from San Jose Creek via Old Town Goleta during very heavy storms. At this time, flows that enter the subject drainage are limited to only localized street runoff via culverts and openings along the banks.

3.0 EXISTING CONDITIONS OF THE SITE

3.1 EXISTING FLORA AND FAUNA

Old San Jose Creek: The project site is almost devoid of vegetation, except for that associated with Old San Jose Creek, which runs for a total of 460 feet along the western property boundary. As stated before, this abandoned leg of San Jose Creek has received only storm-water runoff from adjacent properties for the past 50 years. As a result, the limited hydrology coming into the channel is present for a very brief time before evaporating or infiltrating into the soils.

The drainage runs in an artificially constructed but natural mud-based channel, consisting of a 5- to 6-foot-wide bed and 5- to 6-foot-high banks. Banks are regular (smooth) and fairly steep (approximately 30% to 45%). The invert is somewhat filled in south of the proposed "Corta Street" (off-site). Vegetation is limited to a narrow ribbon flanking both sides of the drainage, with a thinner layer established on the subject site. Vegetation is also constrained on this site overall, when compared to the north. In 2010, the tree canopy did not extend past the top-of-bank along most of the stretch. By 2019, the canopy had expanded 4,562 sq. ft. beyond the 2010 ESHA, over the 50 ft buffer and available planting area.

Vegetation within this riparian area remains consistent with what may be found along most highly disturbed urban creeks, but the aquatic element, except what occurs from limited short-term street runoff, is lacking. It's important to note that the bed at the southern (downstream) point of the drainage ditch has little evidence of flows (no flow lines). The bed is filled with sediment and vegetative debris, and limbs and branches obscure the downstream passage of the bed. The lack of flow line, vegetative debris, and overgrowth of scrub are strong evidence of detention (ponding) of flows, rather than of moving stream flow. During light events, it is likely that flows coming from upstream pond all along the drainage, from Hollister Avenue south, rather than flowing downstream along the length of the drainage.

Vegetation: Dominant trees along the upper banks of the Old San Jose Creek drainage include arroyo willow (primarily) (*Salix lasiolepis*), black cottonwood (*Populous balsamifera ssp. trichocarpa*), and non-native Italian stone pine (*Pinus pinea*). Understory is comprised mostly of non-native vegetation including: bristly ox-tongue (*Picris echioides*), smilo grass (*Piptatherum miliaceum*), periwinkle (*Vinca major*), cape ivy (*Senecio mikanioides*), garden nasturtium (*Tropaeolum majus*), castor bean (*Ricinus communis*), and cheeseweed (*Malva parviflora*). Other natives found along the drainage include: mugwort (*Artemisia douglasiana*), creek clematis (*Clematis ligusticifolia*), poison oak (*Toxicodendron diversilobum*), and California blackberry (*Rubus ursinus*), these more common towards the south. The lower banks and active stream channel are typically devoid of vegetation. Typical wetland plants (*Eleocharis, Equisetum*) are seen in two small areas within the limited stretch south of the stockpile area, where a widened and shallow bed has formed, apparently from ponded or backed-up flows.

Again, the remainder of the site is thoroughly disturbed as a result of past use as a vehicle salvage lot, where cars were stacked four high. The ground was strongly compacted during the vehicle storage but tilling and incorporation of organic matter has and added some structure to the soil. Weeds were kept cleared.

3.2 SENSITIVE SPECIES AND HABITATS

3.2.1 Regulatory Jurisdiction

All construction work will occur outside of Old San Jose Creek and a 50-foot buffer. The following paragraphs explain the interplay of government policies and overseeing agencies that may have jurisdiction or exercise authority over development near Old San Jose Creek. [1] Unanticipated disturbance to sensitive habitat was not expected during restoration. However, minor intrusion during site prep into the canopy and 1-foot buffer has necessitated a second consultation with the California Department of Fish and Wildlife (CDFW), the Army Corps of Engineers (ACOE), the Santa Barbara Flood Control District, and the California Coastal Commission (CCC). The ACOE and the CCC are not requiring any additional mitigation. CDFW determined May 22, 2020 that no Streambed Alteration Agreement was needed for minor intrusion into canopy and 1-ft. buffer area.

This September 7, 2021 Revised Restoration Plan incorporates restoration of Old San Jose Creek via weed and trash removal, which will occur in the creek bed, creek banks, and riparian understory of Old San Jose Creek. Removal of weeds/trash will not require any dredging or placement of fill within ACOE jurisdiction. Removal of weeds/trash will occur within CDFW jurisdiction. Additionally, planting of 700 sq. ft. of Carex pansa is proposed underneath riparian canopy (above the top of bank of Old San Jose Creek) to provide emergency vehicular access to a Santa Barbara Flood Control District Emergency Access Road Easement. Pursuant to the District's requirements, the only vegetation allowed in the easement is a monoculture of *Carex pansa*. (See Figure 5: Planting Plan for OSJC Buffer and Southern Extension). A copy of this revised plan will be sent to the ACOE and CDFW for comment, and we do not expect them to require a 404 permit or Streambed Alteration Agreement, respectively, for the proposed weed/trash removal or 700 sq. ft. of *Carex* planting within their jurisdiction areas.

PROTECTION OF LAKES, STREAM, OCEANS AND WETLANDS

Clean Water Act (Federal)

The purpose of the Clean Water Act (CWA) of 1977 is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of fill material into waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE).

The definition of "waters of the U.S." includes traditional navigable waters, interstate waters, territorial seas, tributaries of waters of the U.S., and waters adjacent to waters of the U.S. including ponds, lakes, wetlands, and similar water features. U.S. waters typically fall below the top of bank. Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

[1] Disturbance to the Old San Jose Creek buffer occurred when, inadvertently and at the start of site preparation, soil was tilled to about 12 inches deep under the black cottonwood canopy in the main Restoration Area. This brought a halt to the restoration effort until required permits, (or communication saying no permit needed) could be acquired. Contacted agencies include the ACOE, CDFW, SBFCD, and the CCC.

Porter-Cologne Water Quality Control Act (State)

The intent of the Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.) is to protect water quality and the beneficial uses of water, and it applies to both surface and groundwater. Waters regulated under the Porter-Cologne Water Quality Control Act, referred to as "Waters of the State," include isolated waters that are no longer regulated by the USACE and Waters of the U.S. Groundwater is also Waters of the State.

Any person discharging or proposing to discharge waste into waters of the State must file a Report of Waste Discharge before beginning the discharge. In addition to the Porter-Cologne Act, the State Water Resources Control Board has authority over wetlands through the Clean Water Act, California Code of Regulations Section 3831(k)1, and the California Wetlands Conservation Policy.

CDFG Code Sections 1600 to 1606 -- Lake or Streambed Alteration Agreement (State)

Sections 1600 through 1606 of the California Fish and Game (Wildlife) Code require that a Notification of Lake or Streambed Alteration Agreement Application must be submitted to the California Department of Fish and Wildlife (CDFW) for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal that includes measures to protect affected riparian vegetation, fish, and wildlife resources. The Lake or Streambed Alteration Agreement is the final proposal that is mutually agreed upon by the CDFW and the applicant. The area of jurisdiction typically spans the streambed or lake, from edge of riparian vegetation to the opposite edge of riparian vegetation or top of bank, whichever is greatest.

An initial submittal to determine whether or not a formal 'Agreement" would be necessary following unintentional disturbance within the 1-foot canopy buffer was submitted to the CDFW in February 2020. An application for a Negotiated Agreement was submitted later that year. CDFW responded on May 22, 2020 with a decision that the project "will not substantially adversely affect an existing fish or wildlife resource" and that an agreement for the project will not be required.

City of Goleta, General Plan/Coastal Land Use Plan, 2009 – Conservation Element [2]

The City of Goleta General Plan contains several terms describing creeks and adjoining areas.

ESHA (Environmentally Sensitive Habitat Area)

The Conservation Element of the Goleta City Plan/Local Coastal Plan (2006, amended 2009), Chapter 4 (Conservation Element) (CE 1.1), defines Environmentally Sensitive Habitat Areas (ESHA) as including, but not limited to, any areas that meet the following criteria:

1. Plant or animal life or their habitats that are either rare or especially valuable because of their special nature or role in an ecosystem, and that could be easily disturbed or degraded by human activities and developments.

2. Habitat for species and plant communities recognized as threatened or endangered by the

[2] This discussion covers two terms important to this Restoration Plan. It is not intended to be a comprehensive review of the City's policies regarding creeks and buffers.

state or federal governments; plant communities recognized by the State of California (in the Terrestrial Natural Communities Inventory) as restricted in distribution and very threatened; and those habitat types of limited distribution recognized to be of particular habitat value, including wetlands, riparian vegetation, eucalyptus groves associated with monarch butterfly roosts, oak woodlands, and savannas.

3. Any area previously designated an ESHA by the California Coastal Commission, the California Department of Fish and Wildlife, the City of Goleta, or other agency with jurisdiction over the designated area. (Amended by Reso. 09-59, 11/17/09.)

The outer edge of a (creek-associated) ESHA is delineated by the outer edge of the riparian canopy or the top of bank, whichever is furthest away from the centerline of the drainage. The width of the subject ESHA ranges from 25 to 35 feet.

SPA Streamside Protective Area

CE 2.2 of the Conservation Element defines a Streamside Protection Area (SPA) as the creek channel, wetlands, and/or riparian vegetation related to the creek hydrology, and an adjacent *upland buffer area* on both sides of the drainage.

The SPA is equivalent to the ESHA plus any buffer. When initially planned, the width of the buffer was 50 feet: SPA = ESHA (25-35 feet wide) + Buffer (50 feet wide) = 75-85 feet wide.

As described in Section 1.3, the original buffer planting area calculated in the ORP is now greatly reduced, for various reasons. This deficit is made up in the new restoration areas.

Allowable uses within SPA, as defined in CE 2.3 (GP/CP), include the following compatible land uses and activities, subject to all other policies of the General Plan. (Only those applicable to this project are listed.):

a. Fencing and other access barriers along property boundaries and along SPA boundaries.

b. Maintenance of existing roads, driveways, utilities, structures, and drainage improvements.

c. Construction and maintenance of foot trails, bicycle paths, and similar low-impact facilities for public access.

d. Resource restoration or enhancement projects. (Amended by Reso. 09-59, 11/17/09.)

3.2.2 Potentially Occurring Sensitive Plants

Sensitive Flora: A list of Potentially Occurring Sensitive Plants can be found in Table 1. No sensitive plant species are known from the site, although several sensitive plants now, or in the past, are known from nearby locations within the City of Goleta and within the County of Santa Barbara.

3.2.3 Potentially Occurring Sensitive Animals

Sensitive Wildlife: No ***sensitive wildlife*** species were observed at the project site during the field reconnaissance survey, and there were no known *records* for any sensitive wildlife from the project site. However, there are several sensitive bird species that are *expected* to occasionally use riparian woodland and open non-native grasslands on the adjacent property for foraging and perching. These birds may also venture onto the subject property. A list of all sensitive wildlife reviewed for this project appears in Table 2, below.

These birds include sensitive raptors like **Cooper's hawk** (California Species of Special Concern), **sharp-shinned hawk (**California Species of Special Concern), and **white-tailed kite** (California State-listed "fully protected"), as well as perching birds like **yellow warbler** (California species of Special Concern). None are expected to nest onsite or nearby.

The **Cooper's hawk (*Accipiter cooperi*)** is a California Species of Special Concern. This wide-ranging raptor is typically associated with oak woodlands and riparian woodlands. It is an uncommon to common transient and winter visitor. Formerly more abundant as a breeding species, it is now a very uncommon to rare breeder in the Santa Barbara area due to habitat loss (Lehman, 1994; 2016). Cooper's hawks may frequent the project site and use mature trees nearby as a temporary roost. However, it is unlikely that they would breed here.

The **sharp-shinned hawk (*Accipiter striatus*)** is a California Species of Special Concern. This raptor is discontinuously distributed as a resident species over most of the United States. It more commonly occurs as a winter visitor to semi-open and wooded habitats. Locally, it is considered an uncommon to fairly common transient and winter visitor, where it is typically associated with riparian and oak woodland habitats (Lehman, 1994; 2016). There has been only one probable nesting record for this species in Santa Barbara County. This species has not been observed in the project area and is more likely to forage and roost in the well-developed riparian corridor of San Jose Creek to the north.

The **yellow warbler (*Dendroica petechia*)** is a California Species of Special Concern and a spring and summer breeder over much of the United States. Countywide, it is a common spring and fall transient visitor and common summer visitor in some inland locations. Yellow warbler is rare throughout in winter.

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TABLE 1: SENSITIVE PLANT SPECIES KNOWN FROM THE AREA [3]

SENSITIVE SPECIES	RANKING	STATE/FED	LOCATION
Atriplex coulteri Coulter's saltbush	CNPS 1B.2	None	(Presumed extant)
Atriplex serenana var. davidsonii Davidson's saltscale	CNPS 1B.2	None	(Presumed extant)
Centromadia parryi ssp. australis Southern tarplant	CNPS 1B.1	None	Growing along the bike path near Ward Memorial Drive
Scrophularia atrata Black-flowered figwort	CNPS 1B.2	None	Known from Coal Oil Point
Suaeda esteroa Estuary seablite	CNPS 1B.2	None	Known from the Goleta Slough in salt or brackish water

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[3] Nomenclature for plants follows Hickman, J., 1993: *The Jepson Manual; Higher Plants of California*. University of California Press, Berkeley and Los Angeles. Potentially occurring sensitive plant species from these sources: California Native Plant Society; California Natural Diversity Data Base RareFind 5.

TABLE 2: Special-Status Wildlife Species Reviewed for This Document [(a)]

Common Name	Scientific Name	Regulatory Status [(b)]	Habitat Associations	Known or Potential Occurrence in Region and Project Site [(c)]
INSECTS				
Monarch butterfly	*Danaus plexippus*	CSC	Eucalyptus windrows (roost sites); grassland and scrub (foraging habitat)	Nearest wintering site is located at Maria Ygnacio Creek (Meade 1999). Individuals present in the project vicinity are unlikely to be affected.
FISHES				
Southern steelhead	*Oncorhynchos mykiss*	FE/CSC	Anadromous—adults live in the ocean, but return to natal water-course to spawn	Historically migrated through tributaries to Goleta Slough. No potential for occurring in Old San Jose Creek, because watercourse is ephemeral. Critical habitat not present in the project area.
Tidewater goby	*Eucyclogobius newberry*	FE/CSC	Low salinity terminal lagoons and lower watercourses of coastal drainages	Occurs in nearby coastal lagoons, such as Arroyo Burro and Bell Canyon Creek. Critical habitat is not present in this ephemeral drainage.
AMPHIBIANS				
California red-legged frog	*Rana aurora draytonii*	FT/CSC	Riverine (eggs and larvae); riparian, riparian scrub, grassland, and coastal scrub	Nearest occurrence is Bell Canyon Creek to north. Old San Jose Creek does not contain suitable habitat.
REPTILES				
Silvery legless lizard	*Anniella pulchra pulchra*	CSC	Oak woodland, coastal scrub, dune scrub, chaparral on sandy soils	Known from Hope Ranch, More Mesa and La Mesa in association with old beach sand deposits (Hunt, pers. obser.). No potential for occurring on subject parcel because of unsuitable soil conditions.

REPTILES				
Southwestern pond turtle	*Clemmys marmorata pallid*	CSC	Riverine, freshwater marsh, lakes, reservoirs, riparian scrub	Known from Laguna Creek channel, two miles east of subject parcel; may also occur in Arroyo Burro Creek. No potential to occur in Old San Jose Creek because of lack of suitable aquatic habitat.
Two-striped garter snake	*Thamnophis hammondii*	CSC	Riverine and adjacent scrub habitats, freshwater marsh, lakes, reservoirs, riparian	Known from lower and middle portions of Mission Creek and Sycamore Canyon Creek watersheds. No potential to occur in Old San Jose Creek because of lack of suitable aquatic habitat.
BIRDS				
Allen's hummingbird	*Selasphorus sasin*	MNBMC	Riparian and eucalyptus woodland and riparian scrub (nesting)	Observed in eucalyptus grove in La Mesa Park (Hunt, pers. observ.). Probably occasionally frequents project site and San Jose Creek area while foraging.
Black swift	*Cypseloides niger*	CSC	Grasslands, riparian corridors, scrub	Rare and irregular spring transient along coast. Not expected on project site.
California brown pelican	*Pelecanus occidentalis californicus*	FE/SE	Beach and nearshore waters	Commonly observed foraging in nearshore waters and occasionally roosting on beaches south of project site.
Cooper's hawk	*Accipiter cooperi*	CSC	Oak woodland, riparian woodland, riparian scrub	May roost in larger trees on project site.
California thrasher	*Toxostoma redivivum*	MNBMC	Coastal scrub, chaparral, riparian scrub	Observed in coastal sage scrub in Elings Park, approx. 5 miles east of project site. No suitable habitat on project site.
Least Bell's vireo	*Vireo bellii pusillus*	FE/SE	Riparian woodland	No potential. Undeveloped riparian corridor in Old San Jose Creek would not support this species.
Loggerhead shrike	*Lanius ludovicianus*	CSC	Coastal scrub, open chaparral, oak savannah	Known from riparian scrub in lower Arroyo Burro Creek area and Elings Park. May occasionally forage in Old San Jose Creek.
Northern harrier	*Circus cyaneus*	CSC	Grasslands, open coastal scrub, chaparral	Uncommon transient and winter visitor along south coast. There are two summer records for the last 20 years. Nests (uncommon) in northern coastal SB county. No suitable habitat (grassland, scrub, marsh, ag. land) at project site.

BIRDS	**(Continued)**			
Olive-sided flycatcher	*Contopus cooperi*	MNBMC	Riparian woodland	Moderate potential of occurring in San Jose Creek riparian corridor adjacent to project site.
Pacific-slope flycatcher	*Empidonax difficilis*	MNBMC	Riparian woodland, riparian scrub	Moderate potential of foraging along the San Jose Creek riparian corridor. Low potential in Old San Jose Creek riparian corridor due to lack of habitat.
Purple martin	*Progne subis*	CSC	Riparian woodland, riparian scrub, grasslands	Very rare spring and fall transient to area. Low potential of foraging in Old San Jose Creek riparian corridor.
Red-breasted sapsucker	*Sphyrapicus ruber*	MNBMC	Riparian woodland, conifers, exotic trees	Uncommon transient and winter visitor to woodlands along coast. Moderate potential in trees around project site.
Sharp-shinned hawk	*Accipiter striatus*	CSC	Riparian and oak woodland	Winter visitor to woodlands; moderate potential of roosting and foraging along Old San Jose Creek.
Short-eared owl	*Asio flammeus*	CSC	Freshwater marsh, grasslands	Historical record from lower portions of Arroyo Burro Creek watershed. No suitable habitat at project site.
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE/SE	Riparian woodland	Uncommon fall transient to riparian woodlands along coast (especially willow woodlands); nearest breeding records are from Santa Ynez River watershed. Very low potential for occurring in Old San Jose Creek due to lack of habitat.
Swainson's thrush	*Catharus ustulatus*	SLC	Riparian woodland	Uncommon spring transient and summer breeder; moderate potential of foraging in Old San Jose Creek woodland habitats.
Vaux's swift	*Chaetura vauxi*	FSS/CSC	Riparian woodland, riparian scrub, grasslands	Uncommon and irregular transient; high probability of occurring along coast in vicinity of project site.
Warbling vireo	*Vireo gilvus*	SLC	Riparian woodland	Low potential for occurring in Old San Jose Creek due to lack of suitable habitat.

BIRDS	**(Continued)**			
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	PE/SE	Riparian woodland	Very rare migrant along coast; recorded at Carpinteria in the 1990s in winter. Riparian habitat in Old San Jose Creek is not sufficiently developed to support this species.
White-tailed kite	*Elanus leucurus*	FP	Grasslands, eucalyptus woodland, orchards	Large communal roosts in oaks on More Mesa, 2 miles east of project site. Occasionally observed foraging in grasslands in Elings Park, approx. 5 miles east of project site. Also known from San Antonio Creek, approx. one mile southeast of project site.
Wilson's warbler	*Catharus ustulatus*	SLC	Riparian woodland, riparian scrub	Fairly common transient in riparian woodlands along coast in spring. Moderate potential of occurring in Old San Jose Creek habitats in spring.
Yellow warbler	*Dendroica petechia brewsteri*	CSC	Riparian woodland	Common spring and fall transient and breeder in inland riparian woodlands. Rare in winter throughout the County. Moderate probability of foraging in Old San Jose Creek in spring. Uncommon breeder along the south coast.
Yellow-breasted chat	*Icteria virens*	CSC	Riparian woodland	Spring and fall transient and local breeder in riparian woodlands along Arroyo Burro Creek and Mission Creek; may forage along Old San Jose Creek, but does not breed there.

MAMMALS

American badger	*Taxidea taxus*	CSC	Grasslands, riparian scrub, open chaparral and coastal scrub	Likely formerly occurred in coastal grasslands and open coastal sage scrub throughout Mesa area east of site. No suitable habitat in vicinity of project site.
Big free-tailed bat	*Nyctinomops macrotis*	CSC	Riparian woodland	May occasionally forage along Old San Jose Creek, but project site and adjacent areas do not support suitable roosting habitat.
Red bat	*Lasiurus blossevillii*	CSC	Riparian woodland, oak woodland	May occasionally forage along Old San Jose Creek, but project site does not support suitable roosting habitat.
Townsend's big-eared bat	*Corynorhinus townsendii townsendii* and *C.t. pallescens*	CSC	Riparian woodland, grasslands	Known from middle and upper portions of Arroyo Burro Creek watershed. May occasionally forage along Old San Jose Creek, but project site does not support suitable roosting habitat.
Pallid bat	*Antrozous pallidus*	CSC	Widely distributed	Known from disturbed sites and may occur in non-native or native vegetation along Old San Jose Creek.
Yuma myotis	*Myotis yumanensis*	CSC	Riparian woodland, aquatic habitats, freshwater marsh; roosting habitat north of project.	Relatively common along riparian corridors in area. Low potential of using Old San Jose Creek as foraging habitat.

Status Key:

FE = Listed as Endangered by the U.S. Fish and Wildlife Service under the Federal Endangered Species Act.
PE = Proposed for listing as Endangered under the Federal Endangered Species Act.
FT = Listed as Threatened by the U.S. Fish and Wildlife Service under the Federal Endangered Species Act.
SE = Listed as Endangered by the California Department of Fish and Game under the California Endangered Species Act.
ST = Listed as Threatened by the California Department of Fish and Game under the California Endangered Species Act.
FSS = Federal Sensitive Species (i.e., on "watch list" maintained by U.S. Fish and Wildlife Service, Bureau of Land Management, and U.S. Forest Service).
MNBMC = Migratory Non-Game Bird Species of Management Concern; species of migratory non-game birds that are considered by the U.S. Fish and Wildlife Service to be of concern because of small population size, specialized habitat requirements, and/or population declines.
FP = Listed as Fully Protected by the California Department of Fish and Game; CDFW cannot issue a take permit; project must avoid all impacts.
CSC = California Species of Special Concern (CDFW, 2005).
SLC = Species of Local Concern; protected by one or more City and County resource management policies.

Potential for a particular species' occurrence in the vicinity of the project site is based on known occurrence in the region and the presence of suitable habitat in and around the project site.
Referring to the coastal habitat of Santa Barbara County:
"South Coast" = Point Conception, then to the south and east. "North Coast" = Point Conception, then to the north

In Santa Barbara County, yellow warbler is an uncommon breeder primarily in interior riparian woodlands (Santa Ynez River, Quiota Creek, Cuyama River, Sisquoc River, Manzana and Santa Cruz Creeks for example). Breeding is rare on the South Coast although several nesting pairs have been heard about Goleta in the past 10 years (none within 1.5 miles of project site). The decline in the breeding population has been linked to the degradation of riparian habitats and to intense brood-parasitism by Brown-headed Cowbirds. This species has not been observed in the project area and is more likely to forage and roost in the well-developed riparian corridor of San Jose Creek to the north.

Pre-Project Bird Survey: The following is required under Condition 23, City of Goleta MND, 2011. Commencement of project grading and construction shall be limited to the period between September 1 - February 1 to avoid the nesting season of birds, including raptors. Construction may begin during this time only if the absence of nesting activity within 500 feet of the area of work (for raptors) and within 300 feet (for other birds) can be documented by a City approved biologist.

Update (*completed*): A pre-construction bird survey, prepared by the project biologist, was conducted two weeks prior to commencement of construction activities to identify any active nests. No active nests were discovered.

The **white-tailed kite (*Elanus leucurus*)** is a California Species of Special Concern and a Santa Barbara Species of Local Concern (according to Biological Protection Measures in the Santa Barbara County General Plan). Although widely distributed along the Pacific Coast in grasslands, marshlands, and agricultural areas, this species experiences dramatic population fluctuations that are attributable to similar year-to-year variations in population densities of its preferred prey, the California vole (*Microtus californicus*). Both are known to frequent the Santa Barbara Airport vicinity. White-tailed kites are considered an uncommon resident and local summer breeder along coastal southern Santa Barbara County. Population persistence is strongly associated with the presence of suitable communal roost and nest sites, which are used year after year. Locally, they nest in eucalyptus, oak, and riparian woodlands. Kites prefer open grassland and scrub foraging grounds similar to those found on More Mesa. Consequently, this species is not expected to use the project area, where it occurs in riparian woodlands and willow thickets. It still nests along some foothill creeks in southern Santa Barbara County.

The **pallid bat (*Antrozous pallidus*)** is a California species of Special Concern that is widely distributed over mesic lowlands and canyons throughout much of western North America (Ingles, 1965; Hall, 1981). It regularly forages over grassland and open scrub habitats where it feeds on Jerusalem crickets, scorpions, and other large, nocturnal arthropods. Several of the Channel Islands have resident colonies of this species, but there appears to be little or no dispersal between mainland and island populations. This species has been found regularly along the south coast [4] of Santa Barbara County (Montecito for example) and Ventura County including the lower Ventura River floodplain. Based on its wide foraging habits, its regional distribution, and the presence of suitable foraging habitat, pallid bats may be expected to occasionally forage over the project site.

[4] "South Coast," for Santa Barbara county *coastal* bird occurrence purposes, is defined as south and east of Point Conception. "North Coast," is defined are the coastal area located north of Point Conception.

3.2.4 Functions and Values of Old San Jose Creek

As stated earlier, flows from the upstream portion of the creek were diverted at Hollister Avenue into a concrete-lined culvert in 1965 (Figure 1). The former location of the drainage was also artificially created, as evidenced by aerial records (1928 and 1965, UCSB archival aerial records) and by the lack of sinuosity in its current route. This segment of the OSJC has not carried normal flows since that time. Water entering the drainage now originates via localized runoff from adjacent properties. This limited amount of water carries pollutants from the parking lots of small industrial operations that line the OSJC drainage. Santa Barbara Flood Control District controls the outflow at the terminus of OSJC into San Jose Creek, where, a short distance off-site, double overflow caps are located on the headwall shared with San Jose Creek. When closed (which is the typical arrangement), the caps severely limit any flows between the two drainages, leaving OSJC little hydrologic connection to the functioning creek. Although rare, the closed terminus can also cause backups (ponding and slower flow rates). Over time, sediment falling out as flows back up against the closed caps can change the elevation of the lower portion of the on-site stretch, which again increases the propensity of retention at the lower reach of OSJC.

BMPs proposed by the applicant's engineers will direct site-derived runoff away from OSJC and the buffer (See Section 4.8 and LaChaine, 2015). Since the abandoned former diversion of the San Jose Creek drainage channel does not convey water other than local street run-off, many of the normal functions of a creek do not apply; or if they do, the effect or value, such as surface water storage, subsurface water storage, nutrient cycling, water cleansing, and retention of particles is on a very small and extremely localized scale. [5] For example, the drainage currently functions as a small retention basin for all material

[5] For the purpose of this report, the term "value" is synonymous with "benefit." "Function" refers to the natural process of the creek. Wetland functions are defined as a process, or series of natural processes, that take place within a wetland. These include the storage of water, transformation of nutrients, growth of living matter, and diversity of wetland plants. The creation of recreation opportunities would constitute a "value," as would flood control and other actions that we perceive as beneficial to our species. Typical functions and values appreciated in the local coastal creeks are: surface water storage, subsurface water storage, nutrient cycling, retention of particles, and the maintenance of plant and animal communities. Omitted are discussions regarding recreation use, shoreline protection, and other potential values that are irrelevant in this situation.

Surface water storage
Creeks temporarily store water, allowing it to soak into the ground or evaporate. This temporary storage can help reduce peak water flows after a storm by slowing the movement of water into tributary streams, allowing potential floodwaters to reach mainstream rivers over a longer period of time. Water quality is also improved by removing nutrients, pesticides, and bacteria from surface waters as they are absorbed or broken down by plants, animals, and chemical processes within the wetland.

Subsurface water storage
Wetlands, including creeks, are reservoirs for rainwater and runoff. As this water is released into the ground, it recharges water tables and aquifers, extending the period of stream flows in some parts of the country.

Nutrient cycling
Wetlands enhance the decomposition of organic matter, incorporating nutrients back into the aquatic environment or into the soil.

Retention of particles
By filtering out sediments and particles suspended in runoff water, wetlands help prevent downstream aquatic resources from being affected by sediment loading. This improves water quality and extends the life of water bodies by reducing sedimentation rates.

Maintenance of plant and animal communities
Both coastal and inland wetlands provide breeding, nesting, and feeding habitat for birds, fish, and other wildlife.

washed into it from flanking properties and thus functions to eliminate pollutants from entering Goleta Slough. However, water only enters the drainage from runoff during moderate to heavy rains. There are no natural flows into OSJC.

Due to the lower than normal flows, possibly the greatest function of Old San Jose Creek is to serve as a *refugia* for small mammals and birds. The open channel bottom may serve as a localized transit corridor for urbanized mammals such as raccoons, Virginia opossums, and introduced red foxes. Though not so evident on the subject property, where the drainage narrows, large downed logs and brush are present along the drainage upstream, and these provide important habitat. Possibly the greatest value of this reach is its capacity to act as a sink for particulates and other types of pollutants washing off the adjacent streets. Ponding of runoff within OSJC retains these materials, compared to conditions within a normal creek, where flows would carry particulates and liquid pollutants downstream and on towards Goleta Slough.

4.0 *REVISED* RESTORATION PLAN

A 50-foot wide Buffer was established along Old San Jose Creek, as described in the original Buffer Restoration Plan (June 16, 2017). The restoration area is framed in the north by the property line between the City of Santa Barbara and the City of Goleta. From this point, the boundary runs about 334 feet south along the east side of the drainage, stopping at the juncture of the access road and the gate. The western edge of the area is delineated by the outer riparian canopy dripline or the top of bank, whichever is furthest away from the creekbed, as depicted on the 2010 aerial. The eastern edge of the Buffer would be measured 50 feet from this dripline/top of bank demarcation, creating a 21,262 sq. ft. restoration area. The original Buffer Restoration Plan footprint is shown on Figure 3.

For various reasons, available planting in the main restoration area, as identified in the original 2017 Buffer Restoration Plan, decreased. Causative factors include the outward growth of the canopy over the main restoration area between 2010 (year project was approved) and 2019, resulting in a "loss" of usable restoration area under the extended canopy. Other factors include a misrepresented top of the bank, resulting in an approximate loss of 5,445 sq. ft. of restoration area, and ambiguity within the 2017 approved site plan, making locating the stormwater feature (wall, v-ditch and fence) problematic. To resolve this, and stay consistent with the project's Conditions of Approval, this Revised Restoration Plan identifies the total required restoration area and the total proposed restoration area.

The total required restoration is a 21,262 sq. ft. Streamside Protective Area (SPA) as measured 50-ft. from the 2010 Biological Study ESHA boundary, consisting of 4,562 sq. ft. of ESHA canopy growth (measured between 2010 and a 2019 survey) and the remaining 16,700 sq. ft. portion of the 50-ft.-wide SPA. The required restoration is proposed to be met as follows:

- 27,993 sq. ft. of ESHA restoration (i.e., trash and weed removal) within canopy of Old San Jose Creek prior to 2010 (23,431 sq. ft.) and within extended canopy credit since 2010 (4,562 sq. ft.).
- 5,497 sq. ft. of restoration (i.e., trash and weed removal, as well as planting of *Carex pansa* plugs) located under existing (2019) riparian canopy dripline (700 sq. ft. – not double counted) and located outside of riparian canopy dripline (5,497 sq. ft.).
- 2,630 sq. ft. of coastal sage scrub in the "Southern Extension".
- 8,735 sq. ft. of restoration (various types) in the "Northern Restoration Area".

Total proposed restoration area is 44,855 sq. ft.

This Plan may be altered with City approval. Items that may require adjustment include, but are not limited to, restoration plants and seed if species are not available or no longer appropriate, minor changes in the layout of planting material, methods of weeding or irrigation placement or timing if a more compatible alternative to changing environment is found.

4.1 GOALS, OBJECTIVES, OVERVIEW AND TIMING

Goals and Objectives: One **goal** of the Revised–Restoration Plan along Old San Jose Creek is to improve soil permeability and overall soil condition, enabling native plant growth (now impossible due to compaction). This will increase habitat and habitat value along this reach of the drainage by providing hiding, nesting, perching, and feeding sites.

A second **goal** is to provide a means other than the storm water treatment system to inhibit runoff from entering the drainage. Better-drained soil, with a higher organic matter or humus component, will aid water infiltration.

The OSJC currently functions as a small retention basin for all material washed into it from flanking properties. It is a sink for particulates and other types of pollutants washing off the adjacent streets. The ponding nature within the drainage retains these materials, rather than conveying them downstream and on towards Goleta Slough. However, water only enters the drainage from runoff during moderate to heavy rains. There are no natural flows into OSJC.

- Disturbance associated with this restoration plan (soil preparation, planting, irrigation, fertilization, etc.) shall occur outside the outer edge of the riparian canopy, however, weed/trash removal activities will occur under the riparian canopy. Additionally, planting of 700 sq. ft. of *Carex pansa* is proposed underneath riparian canopy (above the top of bank of Old San Jose Creek) to provide emergency vehicular access to the Santa Barbara Flood Control District Emergency Access Road Easement.
- Sediment protection for the 50-foot setback includes a 4-foot retaining wall, a v-ditch swale, and fiber wattle running the entire length (north to south) between the restoration and operational areas (See Figure 2, Site Plan). Additional sediment containment shall be provided by a line of straw waddle (weed and plastic free) installed one foot outside of the riparian canopy (between the planted area and the riparian canopy), following manufacturer's instructions.
- Herbicide use will not be allowed.

The ***objectives*** of bringing about a successful conclusion to both goals are identical, as both tie to native vegetation establishment and growth. Objectives are: condition the currently super-compacted soil to a depth of 1 to 2 feet in order to increase percolation ability; source genetically appropriate (locally collected) plant material; source, physically check, and plant container material; irrigate fully; weed; adhere to the monitoring schedule; and make sure the maintenance crew is informed.

4.2 RESTORATION AREAS

Old San Jose Creek Weed and Trash Clean-out

Restoration activities within the 27,993 sq. ft. riparian canopy cover of Old San Jose Creek will consist of weed and trash removal. Removal of weeds will be performed manually, without the use of herbicides, and will focus on the following species: pampas grass (*Cortaderia selloana*), garden nasturtium (*Tropaeolum majus*), daffodil flower (*Narcissus sp.*), daisy flower (*Gazania sp.*), spring vetch (*Vicia sativa*), tree tobacco (*Nicotiana glauca*), and castor bean (*Ricinus communis*).

No trees will be removed, unless they are considered invasive, of which none have been observed on the property. An existing pine tree located within the riparian canopy is not considered invasive and shall remain. This tree is often used by neighboring residents/workers as a lunch spot– a sign shall be installed on the tree to alert people of the nearby restoration effort. Downed trees and limbs will not be removed. No new trees will be planted; openings in the canopy shall be filled by existing trees (including re-growth from downed trees). (See Figure 5: Planting Plan for OSJC Buffer and Southern Extension).

Note: The 4,562 sq. ft. extended canopy credit is made up of the growth of Black Cottonwood canopy over the available restoration area, measured from the dripline/top of canopy or bank in 2010 (time of approval) to where the dripline was located in 2019 (See Figure 3). The 2010 dripline was ascertained from a 2010 aerial photograph. The 2019 dripline was surveyed by Waters Cardenas Land Surveying, LLC.

Carex Planting Under Existing Riparian Canopy

A small (700 sq. ft.) wedge of *Carex pansa* will be located under the existing riparian canopy, adjacent the entrance gate to the Santa Barbara Flood Control District Emergency Access Road Easement. This planting will help vehicle access into the Easement if the need arises, and will reduce the potential for non-native weeds to establish. (See Figure 5: Planting Plan for OSJC Buffer and Southern Extension).

Carex Planting Adjacent to Existing Riparian Canopy [Original Restoration Area and Southern Extension]

A total of 5,497 sq. ft. of *Carex pansa* will be planted outside of the existing riparian canopy: 3,393 sq. ft. in the original restoration area and 2,104 sq. ft. in the Southern Extension along the Easement for the Santa Barbara Flood Control District Emergency Access Road. The Original Restoration Area (area of planting) ends about 180 feet above the southern property line. At its southern limit the site narrows into a strip of high ground running along the top of bank. The Southern Extension, identified in the original Buffer Restoration Plan and in an interim addendum, and was not considered as a restoration area per "Corrections an Advisories Attachment 1, City of Goleta, August 15, 2019", is now once again a restoration area, with coastal sage scrub plantings along the edges and the planting of *Carex pansa* plants (2,104 sq. ft.) along the access road. Pursuant to the District's requirements, the only vegetation allowed in the easement is a monoculture of *Carex pansa*. (See Figure 5: Planting Plan for OSJC Buffer and Southern Extension).

Coastal Sage Scrub Plantings Adjacent to Old San Jose Creek [Southern Extension]

2,630 sq. ft. of coastal sage scrub plants will be installed in the "Southern Extension", outside of the riparian canopy of Old San Jose Creek. The Santa Barbara Flood Control District Emergency Access Road Easement passes through the center of the Southern Extension; 740 sq. ft. of coastal sage scrub will be installed along the western edge and 1,890 sq. ft. of coastal sage scrub will be installed along the eastern edge of the Emergency Access Road.

Fourteen (14) Myoporum (*Myoporum laetum*) shrubs along the Santa Barbara Flood Control District Emergency Access Road were removed in summer 2018, as part of a vegetation removal process performed by Security Paving Co. to maintain access to the Emergency Access Road. The 14 Myoporum shrubs will be replaced with 14 large native shrubs (toyon and coffeeberry) along the eastern edge of the Southern Extension. The canopy of the 14 non-native Myoporum shrubs originally connected to the canopy of the native cottonwood (*Populus fremontii*) trees located along Old San Jose Creek. The installation of native shrubs in the "Southern Extension" will maintain access to the Emergency Access Road, while extending ESHA and ensuring the canopy cover remains native.

Table 3 lists the five native shrubs selected for western edge of the easement. Species are small, fitting into the narrow linear portion of the Southern Extension along the riparian canopy edge. Small shrubs should be planted in clusters of at least 3 or 4. See Container Plant Specification, below, for the species suggested for the Restoration Area outside of the SBFCD Easement. The SBFCD access easement lies within this strip, and both the applicant and the District wish to retain the road. Maintenance of existing roads and driveways are an allowable use within SPA.

Northern Restoration Area

Approval of the Coastal Development Permit (August 17, 2015, 4-15-0692) proposed a second 50-foot wide protective buffer, set back from a willow windrow removed without permitting in 2009. This 50-foot buffer is measured from images of the edge of canopy from aerial photographs taken prior to removal and overlays a large portion of the northern boundary of the site. The buffer is off limits to any development including stormwater treatment. This buffer and a 17-foot setback along the northern property line, imposed initially by the City of Goleta as a construction setback for the Fowler Road extension, is now available for restoration as the extension will not be built. Much of the area previously situated within a setback now forms the Northern Restoration Area.

The site is located immediately south of the Fowler Road Drainage Ditch. Restoration for this drainage ditch and flanking upland to the north is illustrated on Figure 6a-1, 6a-2, and 6a-3 of the Biological Mitigation and Monitoring Plan for the Ekwill-Fowler project (City of Goleta, 2019) and is also shown on Figure 6: Northern Restoration Area, at the back of this report.

This 8,735 sq. ft. planting area is a new restoration zone, created to meet the area deficit within the original Restoration Area. It is positioned along the northern property line, literally meeting the City's restoration zone for the Ekwill-Fowler project mitigation planting area. Species for the Northern Restoration are selected, in part, to blend in with the low stature, perennial herbs and native grasses selected for the Ekwill-Fowler planting list.

There are four zones within the Northern Restoration Area: Grass Zone (seed only); Shrub Zone (containers and seed); Barrier Shrubs; and Vines (containers only). See Figure 6: Northern Restoration Area for location of the four sections and treatments.

Overflow Swale

A concrete V-ditch was built to re-direct runoff from the property (and project activities occurring on the property) away from Old San Jose Creek and into a detention basin near the northern property line. An overflow swale has been constructed to direct any excess flow further north to the northern property line and onto the adjacent property. The overflow swale, which is narrow and runs 150 linear ft. in a northwest direction, is approximately 745 sq. ft. in size and will be vegetated with saltgrass (*Distichlis spicata*). Saltgrass, a dense low growing native perennial grass that is naturally occurring in the coastal parts of the South Coast region, will be planted to stabilize the banks of the overflow swale and bio-filtrate stormwater runoff. Saltgrass is highly tolerant of disturbance and can be mowed and managed like turfgrass.

The overflow swale, as currently designed, is located adjacent the Elkwill-Fowler road expansion easement. This earthen swale can be relocated and replanted in the event that the Elkwill-Fowler road expansion is ever built. Planting of this swale does not count toward the "restoration credit", as it is outside of ESHA and SPA. Refer to Figure 6.

4.3 PLANT PROCUREMENT (COLLECTION, PURCHASE, TIMING)

Table 3 lists the container plants and seed called out for this project. Species may change due to availability.

Contracting liners and container plants. A professional company experienced in native plant propagation will grow all plug and one-gallon sized plants. Adequate lead-time (minimum of 6 months) will be required to grow both. This will vary from species to species. Large-scale nurseries may have local native shrubs available, but impromptu shopping is not suggested.

Planting Restrictions. All restoration plant material used within the SBFCD Easement is restricted to a monoculture of *Carex pansa* (California meadow sedge) (3,393 sq. ft.). The Southern Extension will be restricted to a monoculture of *Carex pansa* along the easement, but include 2,630 sq. ft. of coastal sage scrub species along the eastern and western edges.

The Northern Restoration Area adjacent to the Ekwill-Fowler restoration site will contain zones that are seeded and planted solely with container material. Material was selected to blend into the Restoration Plan for the Ekwill-Fowler mitigation.

- Large stature shrubs will be planted along the eastern edge of the Southern Extension.

- The species called out in this Plan are common to this area. With the exception of *Carex pansa*, they are chosen because they are known from the Goleta coastal region and are also known to grow well from container material and seed.

- Propagation material must be collected from the coastal Goleta/Santa Barbara region. *Carex pansa*, although found in this area, is never found in large quantities. It is not grown commercially in coastal Santa Barbara. *Carex pansa* plugs are generated from northern California stock.

- Evidence of purchase of local stock shall be furnished to the City in the form of a purchase order and partial payment receipt from a reputable native plant grower soon after plants are ordered.

- Santa Barbara Natives, 805-698-4994, is one of several collectors and growers in the area that supplies true natives, versus landscape varietals, for the restoration industry. They have successfully propagated all plant material for this restoration effort (besides *Carex pansa*) .

- GreenLee & Associates, 415-468-1961, is located in northern California and has successfully grown the *Carex pansa* plugs for this restoration effort.

- Storage of construction material or vehicles is not allowed, unless required to bring mulch, plants or irrigation material into the site for delivery only.

The habitat designed into this Plan is a native, upland community, appropriate to the distance from the creek and the hydrology of the area. The plant communities are not intended to be "riparian" or "wetland" and thus when mature would not be categorized as ESHA. Species used (with the exception of *Carex pansa*) are common to the area and found in upland communities. Their growth will add to the habitat value of the creek buffer.

4.4 SITE PREPARATION

4.4.1 Soil Testing

Soil chemical testing has not been performed and is not proposed as part of the restoration effort. Soil pH may be a valuable test and can be done in the field without the need for a lab sample.

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TABLE 3: PRELIMINARY LIST OF CONTAINER MATERIAL AND SEED PALETTE

ORIGINAL BUFFER RESTORATION AREA – 3,393 sq. ft.
See Figure 5 for Location

Inside SBFCD Easement--approx. 3,393 sq. ft.
Carex pansa (plugs) 4,350 at 1 foot centers

NORTHERN RESTORATION AREA – 8,735 sq. ft.
See Figure 6 for Location

Grass Zone (seed only), Shrub Zone (containers and seed), Barrier Hedge (Containers), and Vines (Containers).

Grass Zone (Seed Only) for Northern Restoration Area (3,440 sq. ft.)

Scientific Name	Common Name	Minimum % PLS	lbs./acre
Agrostis pallens	California native bentgrass	85	4
Artemisia douglasiana	Mugwort	n/a	2
Bromus carinatus	California brome	n/a	4
Elymus triticoides	Alkali ryegrass	75	4
Hordeum brachyantherum	California barley	n/a	3
Melica imperfecta	Melic grass	70	2
Stipa lepida	Foothill needlegrass	65	2
Stipa pulchra	Purple needlegrass	75	5
			26 lbs./acre (need 2.5 lbs.)

Shrub Zone (3,890 sq. ft.); Containers and seed

One-Gallon Containers:

Scientific Name	Common Name	Stature	Spacing	**Number**
Acmispon glaber	Deerweed	small shrub	2 ft	70
Artemisia californica	Sagebrush	medium shrub	3 ft	70
Artemisia douglasiana	Mugwort	herbaceous perennial	1.5 to 2 ft	50
Encelia californica	Ca. sunflower	medium shrub	2-3 ft	70
Eriophyllum confertiflorum *	Golden yarrow	subshrub	1.5 ft to 2 ft.	100
Mimulus aurantiacus *	Monkeyflower	medium shrub	3 ft	70
Salvia leucophylla	Purple sage	medium shrub	3 ft	70
Salvia mellifera	Black sage	medium shrub	3 ft	60
Solidago velutina * sub sp. *californica*	Velvety goldenrod	perennial subshrub	2 ft	40
				600 1-gal. containers

* *Attracts Butterflies.*

TABLE 3: PRELIMINARY LIST OF CONTAINER MATERIAL AND SEED PALETTE (Continued)

NORTHERN RESTORATION AREA (Continued)

Seed:

Scientific Name	Common Name	Minimum % PLS	lbs./acre
Agrostis pallens	California native bentgrass	85	2
Bromus carinatus	California brome	n/a	4
Elymus triticoides	Alkali ryegrass	75	4
Eriophyllum confertiflorum	Golden Yarrow	25	3
Eriogonum fasciculatum	California Buckwheat	10	2
Eschscholzia californica	California Poppy	85	2
Hordeum brachyantherum	California barley	n/a	3
Melica imperfecta	Melic grass	70	3
Stipa pulchra	Purple needlegrass	75	5
Vulpia microstachys	Small Fescue	85	6
Lasthenia glabrata	Goldfields	85	2
			36 lbs./acre (need 3.25lbs)

Tall Shrub Barrier 700 sq. ft.; All one gallon containers

Scientific Name	Common Name	Stature	Spacing	**Number**
Sambucus nigra	Blue elderberry	large shrub	6-8 ft	30 containers

Vines 705 sq. ft.; All one gallon containers

Scientific Name	Common Name	Stature	Spacing	**Number**
Rosa californica	Wild rose	lanky shrub/vine	2.5 ft	60
Rubus californica	Ca. blackberry	perennial woody vine	2.5 ft	60
				120 containers

OVERFLOW SWALE – 745 sq. ft.
See Figure 6 for Location

150-ft.-long Overflow Swale--approx. 745 sq. ft.
335 Saltgrass (Distichlis spicata) container plants

TABLE 3: PRELIMINARY LIST OF CONTAINER MATERIAL AND SEED PALETTE (Continued)

SOUTHERN EXTENSION
See Figure 5 for Location.

Coastal Sage Scrub along Riparian Canopy Edge--approx. 740 sq. ft.

No.	Species All one-gallon, container planted at 3 ft. triangular centers.
16	Black sage (*Salvia mellifera*)
20	California sagebrush (*Artemisia californica*)
20	California sunflower (*Encelia californica*)
10	Monkeyflower (*Mimulus aurantiacus*)
16	Purple Sage (*Salvia leucophylla*)
82	Total number of containers

Carex pansa in center of SBFCD Easement--approx. 2,104 sq. ft.
Carex pansa (plugs) 2,700 at 1 foot centers

Tall Shrubs along Emergency Access Road -- approx.. 1,890 sq. ft.

No.	Species	All one-gallon containers
7	Coffeeberry (*Rhamnus californica*)	
7	Toyon (*Heteromeles arbutifolia*)	
14	Total number of containers	

4.4.2 Improve Soil Compaction

Healthy soil usually consists of about 40 percent pore space, with large pores promoting drainage and small pores storing water. This combination enables air and water to penetrate to the living roots and soil organisms and it promotes good drainage. The soil within the restoration area is extremely compacted -- so much so that a pin flag, with the diameter of a metal pin less than 1/16 of an inch thick, could not penetrate the surface. [6]

Ideally, the soil should be moist enough that digging doesn't create dust, but dry enough to drive equipment on without creating ruts. Remove any gravel, concrete, or other large particles. *Stay completely outside of the riparian drip line plus 12 inches.* The following directive may change based on new information from soil tests or recommendations from local soil scientists and the results.

Note: These steps have been completed in all restoration areas besides the eastern 5,000 sq. ft. of the "Northern Restoration Area" and 2,844 sq. ft. of the "Southern Extension". The soil surface in the

[6] Soil within the original Buffer Restoration Area is already treated (soil loosened with mulch added). A similar treatment is required within the Northern Restoration Area. Compaction may not be an issue in the soil along the Emergency Access Road (Southern Extension). Likewise, soil texture and structure may be more conducive to planting without the addition of mulch due to incremental addition of organic matter from falling leaves and branches.

"Original Buffer Restoration Area" along San Jose Creek and in the western portion of the "Northern Restoration Area" has already been treated. Soil treatment in the "Original Buffer Restoration Area" extended underneath the riparian canopy – CDFW has been notified of this accidental soil disturbance and has decided that no Streambed Alteration Agreement was needed as this disturbance did not substantially adversely affect any existing fish and wildlife resources.

1) De-compact the soil by scarifying the soil surface with a backhoe, bobcat, or tractor with ripping teeth, or a cultivator, disk harrow, or other piece of agricultural machinery. Rip to a depth that will result in soil that is easy to dig in for at least the top 12 inches, preferably 24 inches.

2) If machinery cannot enter the area, manual methods must be employed. This can be accomplished with a pickaxe, rototiller and/or spading fork.

3) Rocks larger than 3 inches in diameter, boulders, and concrete shall also be removed from planting area.

4) After the soil is broken up, apply organic mulch. Spread about 4-6 inches of fine particle organic matter (mulch) over the top of the entire planting area and incorporate it throughout the top foot of the soil profile. <u>This step is essential</u>.

5) After organic material is mixed with existing soil, the ground should sit for at a month or more, while the organic material begins to draw worms, insects, and fungi, which will improve soil porosity and prevent re-compaction. If the eastern 5,000 sq. ft. of the "Northern Restoration Area" does not indicate decreased soil compaction after steps 1-5, repeat steps 4-5.

4.4.3 Restoration in Riparian Corridor - REMOVED

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4.4.4 Set Up Temporary Circumference Fencing and Runoff Containment

Temporary Fencing: After soil improvement, a semi-permanent fence shall be installed around the perimeter of the restoration areas, where needed. The need for circumference fencing will be small, since much of the restoration areas are already fenced, either by natural formations (creek) or constructed barriers (wall, V-ditch, detention basin). Delineation of smaller sections within the restoration areas shall be completed just before planting. See Section 4.5.1.

The entire Restoration Area is protected from the active portion of the site by the creek along the western border, the v-ditch, and the wall that runs along the eastern border and a fenced property line to the north. An existing gate on the eastern border will allow maintenance personnel, equipment, irrigation material, and possibly vehicles to enter the area for restoration purposes only. A temporary or permanent sign, advising unauthorized personnel to keep out, shall be installed on both sides of the gate. This will also deter vehicle entry into the Southern Extension.

Another entrance point to the original Buffer Restoration Area, presently for foot traffic only, is the existing Santa Barbara Flood Control District's access to their easement from the south. At this time, the access road is not a through-road and vehicle entry to the site is not possible.

Fencing in the Southern Extension is no longer necessary.

Presently, a deep v-ditch, block wall, and detention basin (stormwater conveyance features) encircle the Northern Restoration Area and limits vehicular entry into the planting zone. Although the stormwater conveyance features surround the area and preclude entry, they do not delineate the exact perimeter of the Northern Restoration Area. The planting area will require staked, orange plastic temporary fencing or another sturdy, temporary fence alternative to outline the exact restoration area.

The intention of setting up temporary fencing is to keep unauthorized vehicles from running over the plants. However, from time to time, work within the restoration area may require trucks to bring in soil amendments, large numbers of plants, etc. At those times, temporary fencing, if used, can be removed as necessary and reinstalled after work is completed. Most likely this will only occur at the Northern Restoration Area.

- Under no circumstances shall vehicles and/or large equipment be brought into the restoration sites without the monitor present.

- No material storage or earth disturbance, other than actions related to soil improvements, are allowed within the restoration areas.

Erosion containment. A line of straw wattle shall be installed, following manufacturer's instructions and where needed, to control storm water from leaving the site. Note: Wattles are already installed along the perimeter of the property and thus may not be necessary in the Northern Restoration Basin. Similarly, wattles are already installed close to the canopy edge within the Original Buffer Restoration Area. The latter may require relocation, depending upon the growth of the trees.

4.5 PLANTING PROCEDURES

4.5.1 Delineate SBFCD Easement and Sections within the Northern Restoration

Low stature materials (orange fencing, pin-flags, or even drizzled flour for small areas) may be used to temporarily delineate sections within planting areas. Temporary fences must be easy to remove and replace to allow for vehicles or materials solely used for restoration purposes.

Within the Original Buffer Restoration Area. The western edge of the Original Buffer Restoration Area, which abuts the riparian canopy edge, shall be carefully marked in the field with semi-permanent materials. Orange staked fencing would work well across the Restoration Area. This line will delineate the area receiving low-growing, grass-like *Carex pansa* plugs (covering 3,393 sq. ft.) (See Figure 5).

Northern Restoration Area The limits of the entire Northern Restoration Area shall be identified, where needed only, in the field with semi-permanent materials, described in Section 4.4.2. Pin flags and drizzled flour could be used to outline the four sections within the Northern Restoration Area, as long as planting comes soon after the markup (See Figure 6).

Southern Extension The limits of the coastal sage scrub mix (740 sq. ft.), which abuts the Carex pansa strip along the center of the SBFCD Easement, shall be carefully marked in the field with semi-permanent materials. Orange staked fencing would work well across the Southern Extension. Additionally, the eastern edge of the Southern Extension, which will be planted with 14 tall native shrubs, shall be delineated.

Overflow Swale The limits of the overflow swale do not need to be delineated.

4.5.2 Planting Plugs: *Carex pansa* in the SBFCD Easement

A single species, *Carex pansa*, shall be planted within the Santa Barbara Flood Control District Easement in the Original Buffer Restoration Area beginning at the edge of the riparian canopy and ending at the eastern limit of the District's Easement. *Carex pansa* shall also be planted within the Santa Barbara Flood Control District Easement in the Southern Extension along the center of the easement, abutting a patch of coastal sage scrub and row of 14 tall native shrubs. *Carex pansa*, a perennial herb, is never found in high numbers and is difficult to start from seed. There are no local growers at this time. Plugs (young, typically highly fertilized plants grown in small containers) shall be contract grown from a northern California grower.

Soil requirements:

Carex pansa, though found in sandy soils in nature, is adapted to a wide variety of soils. It will grow in sand, clay, and even granite soils as long as moisture is sufficient. Plants establish more slowly in heavy soils but are not recommended for boggy or constantly wet conditions.

Water Requirements (New plantings):

Newly established *Carex pansa* should be watered as needed to prevent drying out. Especially in sandy soils, *Carex pansa* should be kept sufficiently moist until rooted into the native soil, usually in 7-14 days depending on the time of year. Daily irrigation is usually sufficient for most new plantings. It is critical that roots not dry out. In high heat, plants might need water more than once a day. Plugs, due to their small size, will dry out quickly in warm weather if not watered (See Section 4.6: Irrigation).

(Established plantings) California meadow sedge, once established, is dependably drought-tolerant. In most settings, *Carex pansa* is kept "lush" with watering every 7-10 days throughout summer. It can be kept "evergreen" with very little water, often with watering once or twice a month. With no summer water, established plantings of *Carex pansa*, especially in hot inland climates, are crispy, brown, and drought dormant by August or September, and green again with fall and winter rains and cooler temperatures. *Carex pansa* needs additional watering during consecutive days above 90-100 degrees F.

Planting:

Plugs (7,000) will be planted throughout the available Restoration Area, the Easement planting area, and within a 700 sq. ft. section outside the Easement (See Figure 5). Plugs are set out in 12" offset (triangular) centers, which means the center of one plug remains *about* 12" from any other plug around it.

Carex pansa plugs come in trays with 50 plugs. Trays should be kept in the shade, and moist, while planting. They will likely require daily watering. To plant, create a hole just larger than the plug and make sure the bottom of the plug has good contact with the bottom of the hole. Backfill soil gently and set plugs very slightly (1/4 to 1/2 inches) lower that the surrounding ground. Tools for planting plugs include a 12" ruler and, depending on the size of the plugs, a mini hand pick or adz and/or a Lesche digging tool or other digging knife.

Fertilization:

New plantings of *Carex pansa* should be fertilized with a formulation of 16-6-8 or equivalent about a week after planting. Once established, *Carex pansa* needs very little or no fertilizer. Highly trafficked plantings, not expected at this site, benefit from additional feedings and supplemental water.

Mowing:

Mowing promotes tillering (the production of side shoots) and helps promote a thick healthy sod. Most *Carex pansa* lawns are mowed anywhere from 4-8 times per year. Mowing once or twice a year is sufficient, usually in the late spring or early summer after flowering. *Carex pansa* can be mowed any time of year but regrows slowly in cool winter temperatures. Highly trafficked plantings benefit from regular watering and fertilizing as well. Newly planted *Carex pansa* plantings, after rooting, should be mowed every 4-6 weeks to encourage tillering and help the lawn thicken and fill in.

4.5.3 Planting Container Plants: Shrubs and Saltgrass

(In the Southern Extension, Northern Restoration Area, and Overflow Swale)

Species. See Table 3: Preliminary List of Container Material and Seed Palette, for shrub species, numbers, spacing and planting locations. Each shrub species will arrive in one-gallon containers.

Location. See Figures 5 and 6 for planting locations.

Planting Procedures for all **Container** Plant:.

Check roots upon arrival of containers. Turn the container over and carefully lift out the plant with soil and observe roots for: encircling of container bottom (root bound), poor development (possibly potted up recently) or disease.

Do not let material dry out. Keep containers (and especially plugs) in the shade at all times until planted.

Timing: Native plants should ideally be planted from fall to winter, to take advantage of natural growth cycles and rainfall. Material can be successfully set out at other times of the year as long as irrigation is immediately provided and increased if needed (see below).

Setting Out Containers.

Pick a day that isn't windy or hot to plant. Keep plants in the shade while waiting.

Irrigation must be installed and be functioning. Do not set out the last leg of the irrigation lines until the plants are in the ground as changes in planting locations occur. See Section 4.6 for irrigation information.

Mark the location of plants, by species, in the field either by using colored pin flags (one color or color and mark per species) or by placing the actual container in place. Pin flags make it easier to distinguish each species location.

Group large clusters of small shrubs made up of smaller groups of the same species.

Planting

1. Planting sites shall be cleared of naturalized grasses and exotic broadleaf vegetation (if present) within a 2-foot-diameter circle.

2. Planting holes shall be twice the diameter and at least 6 inches deeper than the container (reduced for plugs).

3. Fill hole with water twice before planting. Let drain completely. (This could take a while.)

4. Container shrubs shall be set so the crown of the root ball is set slightly above the level of the soil. The crown shall never be placed below the level of the soil. If an increase in gopher/squirrel

presence is observed during site preparation, the container shrub plants shall be installed in gopher cages to reduce plant mortality.

5. Holes shall be backfilled with native soil and slow-release fertilizer tablets. Fertilizer shall not come in contact with seedlings.

6. A watering basin from 18-24 inches in diameter shall be provided around each plant (not for plugs). Watering basins shall be filled with water after planting at least two times.

7. Mulch (weed-free straw, small wood chips or other organic material) shall be applied around the planting areas to help retain soil moisture. Mulch should be 3-4 inches deep when first applied and extend in a 2-foot diameter around the plant. (Not for plugs.)

4.5.4 SEEDING: Two Zones in the Northern Restoration Area

Location. The Northern Restoration Area contains 4 planting zones. Seed is used exclusively for only one, the Grass Zone, which is adjacent to the City's Ekwill-Fowler restoration area on the property to the north. Both seed and container material are used in the Shrub Zone (See Figure 6 for zone locations).

Procurement. Table 3 and Figure 6 list the seed mix for the Grass Zone (2.50 lbs.) and the Shrub Zone (3.25 lbs.). Seed will be purchased from a native seed supplier such as S&S Seed in Carpinteria, CA. (805-684-0436).

Planting Procedures. Seed will be sown *after* container plants are in the ground and both drip and above-ground sprinkler irrigation lines are installed to the last leg. [7] For container plants, this will be just before the last tube reaches the plant. A hand held seeding machine will be used to spread the seed more or less evenly. Seed will be mixed with 2-4 times by volume of vermiculite or fine mulch. Follow manufacturer's directions regarding adjusting the seeder for the area.

In Grass Zone (Seed Only). *3,440 sq. .ft.* (No containers): Install irrigation system to the last leg (sprinkler head). Rake improved soil slightly, ultimately keeping soil even. Disperse seed as evenly as possible in two passes over the softened soil surface, one north-south and one east-west (or any 90 degree direction). After seeding, pass a water-filled roller over the entire Seed Zone to improve contact between seed and soil. *Lightly* scatter "weed free" hay (*not regular grass or alfalfa hay*) over seeded area. The straw must not keep the weak sprouts from moving out of the mulch to the sun. There should be about 25% to 30% bare ground after spreading the straw mulch. Install the last leg of the overhead sprinkler system in this area. Water immediately so soil is wetted consistently down to about 1 inch.

In Shrub Zone (containers and grass). *3,890 sq. ft.* (Seed and containers): Once containers are planted, follow the same procedures listed above in the Seed Zone. Rake soil. Sow seed in the openings between container plants. If a small roller is not available, use a flattened cardboard box to tamp seed into soil between the planted shrubs. Apply mulch lightly as described above. Immediately install the last leg to container plants and overhead sprinklers. Water immediately until soil is wetted consistently down to about 1 inch.

[7] Seed can alternatively be sown after containers are planted.

4.6 IRRIGATION

4.6.1 Irrigation Notes for Plugs

The *Carex* plugs must have a dedicated, shady holding area, large enough to hold all (about 70) flats and be ready before the plugs arrive. Plugs must be kept moist before being planted and therefore a source of water and a hose must be available, also before the flats arrive.

The temporary overhead (sprinkler) irrigation system shall be operational before plugs are brought out to the field for planting. The system shall be tested before plugs are put in the ground, and spray emitters must deliver water evenly to the entire area.

Once planted, plugs must not dry out until new roots are firmly established in the surrounding native soil. Depending on the temperature and wind conditions, the overhead irrigation system must be on at least once a day (and up to three times a day) for about 10-20 minutes during the initial 2 weeks to one month. Irrigation should wet the soil, but not flood the soil, to a depth of about 3 to 4 inches, and deeper as the plants grow, to encourage deep roots.

4.6.2 Irrigation Notes for Containers

The majority of the *drip* irrigation system shall be installed and operational at the time of planting, with the exception of the final tubing to individual containers. The last line should be positioned after material is planted, with each container plant receiving two 1-gallon emitters, one on either side of the plant. [8]

Set out (position) container plants, but do not plant. Rearrange containers as needed. Once adjusted, dig holes with shallow basins. Fill the planting holes with water twice, letting the water percolate into the ground. Plant so that the top of the container soil is just slightly above the surrounding ground.

Irrigation shall continue for at least two to three years and be tapered off slowly. Initially, plants should be watered as much as 3 times a week for 20-40 minutes or as needed, depending on temperature and wind. After 1-2 months, or as weather permits, transition slowly to about once a week to twice a month and irrigate for as long as it takes to wet the soil down to 8-12 inches for at least one year. Stop irrigation after a significant rain (enough to wet soil down to 8 inches).

Taper off irrigation slowly (over several months' time) to once a month, depending on weather conditions, and then wean entirely by the end of the second or third year. Do not follow a calendar schedule but base all decisions on the current condition of the plants, weather, soil, etc. Plants will not be released from monitoring until they have survived at least two years without supplemental irrigation, after which time the irrigation system shall be removed.

4.6.3 Irrigation Notes for Seeding

The temporary overhead **(sprinkler) irrigation system** shall be installed and operational before plugs are installed. The system shall deliver a spray evenly to the entire seeded areas, including the zones where seed and containers are planted. Immediately after seeding, irrigate to a depth of 1-2 inches.

The soil should not dry out while the seeds are germinating. The overhead irrigation system must be on at least once a day for about 15 minutes (and maybe three times a day) during the initial two weeks to one month, to wet the soil to a depth of about 4 inches. These frequencies and durations are estimates and the site and weather will dictate what is needed. Soil must not become saturated with too much water. When grass is a few inches tall, water enough to wet the soil past the root depth, every 3-5 days. Start to wean seeded material off of irrigation in year two.

4.7 PERMANENT FENCING AND SIGNAGE

The need for permanent fencing will be ascertained during the last year of monitoring. At this time, almost all of the planting areas are already contained within stormwater features that preclude vehicular entrance. The one exception is the southern end of the original Buffer Restoration Area, which is fitted with a gate allowing traffic to enter the Emergency Access Road. This gate will be fitted with a caution sign (see below) that should protect this planting area from traffic. Temporary fencing will protect the tall "Southern Extension" shrubs along the access road throughout the monitoring period. The need for permanent fencing shall be determined during the last year of monitoring.

Signage: The City of Goleta's Condition of Approval 19 requires signs placed every 50 feet along the chain link fence on the eastern edge of the original Buffer Restoration Area, advising employees and customers that facility-disturbing activities within the riparian buffer are prohibited, with the exception of habitat-enhancement and maintenance activities. There will be no overnight storage of any construction material or vehicles of any kind within the buffer/SPA area, unless they are used for the restoration effort. Signs shall read as (or something similar to) the one at the right. Signs shall be installed on both sides of the fence and oriented to face toward the west and the east. The gate that provides access to the Emergency Access Road will have signs that face toward the west and the east as well.

> KEEP OUT OF THIS AREA.
>
> ENTRY INTO THE BUFFER IS NOT ALLOWED, EXCEPT FOR BUFFER AND FLOOD CONTROL MAINTENANCE ACTIVITIES.

4.8 MANHOLE ACCESS FOR GOLETA SANITARY DISTRICT

The Goleta Sanitary District requires access to 4 manholes that are located along the northern property line. These manholes are located adjacent to the Northern Restoration Area and the Overflow Swale which will be revegetated. GSD will generally be able to service the manholes via a hose, but may need vehicular access to the manholes. To access the manholes via vehicle, the GSD will need to drive over the overflow swale and along the northern edge of the Northern Restoration Area, specifically in the "Grass Zone". A platform (plywood or steel plate) can be installed over the overflow swale to prevent damage to the ~~restoration~~ plants. Damage to the "Grass Zone" from infrequent vehicle passage is expected to be minimal, however, if damage occurs, Security Paving Co. will fund the replacement plantings. GSD will have vehicular access via the 20 ft. long sliding gate that is located near the center of the northern property fencing, 231 ft. from the fence post to the east.

5.0 MAINTENANCE PROGRAM FOR ALL AREAS

Maintenance for the 50-Foot Buffer Restoration Area, Southern Extension, Northern Restoration Area, and Overflow Swale, shall consist of weeding, trash removal, checking the irrigation line for leaks and breaks, and replanting as necessary, based on performance criteria (See Table 4, below). Weeding will also occur outside of planting areas, to remove large infestations of nasturtium and other non-native species.

5.1 INITIAL AND ONGOING WEEDING

The site currently has a low cover of weed in the Northern Restoration Area and Overflow Swale, but a complete cover of weeds along the Original Buffer Restoration Area and Southern Extension. The monitor shall demonstrate to the crew the correct way to remove annual and perennial weeds, the importance of removing the entire plant, and the importance of doing this before seed has maturated. There should be no weeds present within the site after each treatment (zero tolerance).

Herbicide shall not be used within the restoration area.

TABLE 4: Overview of Maintenance and Monitoring Timetable

Site Visits	First three months	Rest of First Year	Year 2	Year 3	Year 4	Year 5
Timing	Every week.	Every month (extra visit in spring each year).	Every two months (extra visit in spring each year).	Every three months (extra visit in spring).	Every three months (extra visit in spring).	Every three months (extra visit in spring).
Weeding	Crew hand pulls all non-natives before seed is set. **Monitor present.**	Crew continues to weed as scheduled. Monitor present during some weeding. Communicate with maintenance crew as necessary.	Monitor checks site after crew weeds, intervenes as necessary.	Monitor to report to crew supervisor if problems are not solved. May need to work with crew.	Same	Same
Irrigation	Monitor determines when to reduce irrigation. Crew and monitor to check irrigation monthly.	Monitor to check individual problems during scheduled visits. Communicate.	Monitor determines when to reduce irrigation. Monitor checks for malfunctions during scheduled visits.	Continue to check for malfunctions, when to lower irrigation. Begin to wean from irrigation. Wean slowly and completely by year 5.	Wean from irrigation slowly and completely by year 5.	Wean from irrigation slowly and completely by year 5.

The entire site should be checked for weeds (weeded) once a week during the first three months and then once a month during the first year, once every two months during the second year, and one every three months for the remainder of the project, with an extra site visit in spring to intercept the seasons' high growth. Weeds shall be removed (pulled) *before* seed is set. If fruit is present, weedy plants shall be bagged and removed from the site. Preventing seed production is most important with both annuals and perennials. Hand pull or cut annuals when in flower (before seed appears). Dig up perennials at any time. Never leave fruit in the field. Bag even immature fruit and remove it from the site. Disturb the soils as little as possible. Weed removed will include those species listed below and any other aggressive non-native interfering with native plant growth:

- Annuals: milk thistle (*Silybum marianum*), hoary mustard (*Hirschfeldia incana*), bristly ox tongue (*Picris echioides*), sow thistle (*Sonchus oleraceus*), prickly lettuce (*Lactuca serriola*), yellow sweet clover (*Melilotus officinalis*), poison hemlock (*Conium maculatum*), and cocklebur (*Xanthium strumarium*).

- Annual vines: Garden nasturtium (*Tropaeolum majus*).

- Herbaceous Perennials: German ivy (*Senecio mikanioides*), periwinkle (*Vinca major*), sweet fennel (*Foeniculum vulgare*), wild radish (*Raphanus sativus*), and castor bean (*Ricinus communis*).

- Woody Plants (Trees): tobacco tree (*Nicotiana glauca*), and Myoporum (*Myoporum laetum*).

- Any other exotic that is interfering with the establishment of native vegetation.

The following methods for eradication have been useful:

Castor Bean - *Ricinus communis*
Species Characteristics: Perennial, erect shrub to 15' tall. Heavy seed producer.

Eradication Methods and Schedule: Dig up larger plants. Check area in early spring for seedlings and hand pull as soon as recognizable.

Fennel - *Foeniculum vulgare*
Species Characteristics: Perennial, erect herb with large belowground structure. Dies back to ground annually. Abundant seed producer -- seed persists at least two years.

Eradication Methods and Schedule: Manually remove (dig up plants and roots). May require multiple treatments. Hand pull seedlings as soon as recognizable.

German Ivy and Periwinkle- *Senecio mikanioides* and *Vinca major*
Species Characteristics: German ivy: Perennial or climbing vine. Ivy-shaped leaf with yellow daisy-like flower. Aggressive grower -- can smother trees. Abundant seed producer -- seed persists at least two years.

Periwinkle: Perennial, prostrate vine with dark green leaves and blue flowers. Quickly covers riparian floors and forms a monoculture.

Eradication Methods and Schedule: Treat when plants are flowering, typically from February into spring. Hand pull German ivy vines from native trees or completely cut vines growing up native trees from rooted portions. Manually remove small infestations. Roots are purple. Seedlings -- hand pull as soon as recognizable.

Giant Reed - *Arundo donax*
Giant reed (*Arundo donax*) has not yet infiltrated this site. However, it has made headway into nearby banks following the removal of riparian vegetation. Vigilant monitoring for young shoots of this noxious weed must follow any disturbance of the banks. This bamboo-like grass forms an impenetrable, dense cover that lacks habitat value for most species. It spreads readily from pieces of stems or roots and it is a fire hazard. This species does not produce seed in this region of the world, and the only way it can spread is by viable pieces, usually carried in storms or some other kind of disruption to the area where it is established.

Species Characteristics: Perennial giant grass forming clonal clumps to 20' in height. Limited seed production. Primary means of spread in this area is by uprooted rhizomes taking root in new locations.

Eradication Methods and Schedule: No Arundo infestation within the project site. Remove manually as soon as identified. No herbicide of any kind allowed within the ESHA and SPA restoration area.

Mustard, Radish, and other ANNUAL Weeds
Species Characteristics: Annual, erect plants with abundant seed production. Mustard-yellow flowers, radish-white or purple flowers.

Eradication Methods and Schedule: Remove before seed is set either by weed whipping or by manually pulling plants just following flowering.

Garden Nasturtium - *Tropaeolum majus*
This *annual* vine must be pulled by hand, before seed is set, throughout the year.

Pampas Grass - *Cortaderia spp.*
Species Characteristics: Large, perennial bunchgrass imported from South America. Abundant seed producer and aggressive invader of disturbed ground. Seed persists at least three years. This species was not noted on-site. However, it is abundant in the area and may enter the site at any time.

Eradication Methods and Schedule: Do not allow plant to produce seed. If seeds are present (matures in August), cut and bag seed heads immediately for removal. Manually remove plant and all roots (root system is shallow). Hand pull seedlings (less than one year old) as soon as recognizable.

Tree Tobacco - *Nicotiana glauca.*
Species Characteristics: Perennial erect shrub to 15' tall, abundant seed producer.

Eradication Methods and Schedule: Mature plants -- bag seed heads for removal. Manually remove.

Myoporum- *Myoporum laetum*
Species Characteristics: Perennial hedge or erect shrub/tree to 20' tall,

Eradication Methods and Schedule: Mature plants -- bag seed heads for removal. Manually remove.

5.2 IRRIGATION SCHEDULE AND IRRIGATION LINE MAINTENANCE

Drip. This last leg of the irrigation system shall be connected after plants are in the ground, with preferably 2 one-gallon emitters at each container plant, placed on an automatic timer. The irrigation system shall be checked initially when the plants are installed and again during the end of the next watering. Any defect shall be immediately repaired. The irrigation system shall then be checked once a month to assure that there are no leaks or breaks, and that all emitters are functioning. All lines should be turned on and the area walked to check for breaks and clogs monthly.

Soil must be wetted deeply (at least 8-12 inches) during each watering, Timing depends on the season plants are put in the ground, temperature, wind, and soil. Changes in water regimes cannot be predetermined.

Sprinkler. Above-ground sprinklers are necessary for the Northern Restoration seeded "grassy" area as well as the shrub zone within the Northern Restoration Area, which has both seed and container plants. Sprinklers must be set up to assure all areas are wetted at least 3-6 inches in depth. Typically, overhead sprinklers do not work for container plants because the sprinkler does not wet far enough down to reach the roots of a one-gallon plant. The areas with both seed and containers will need both forms of irrigation.

5.3 IRRIGATION TERMINATION

Irrigation shall continue for at least two to three years following initial planting and then tapered off slowly. Plants will not be released from monitoring until they have survived at least two years without supplemental irrigation. Irrigation shall not be permanent and shall be removed just before monitoring is completed.

6.0 MONITORING

6.1 PURPOSE AND TIMING

The Monitoring Program includes two parts: Installation supervision and a five-year monitoring program. Performance criteria are an integral part of the monitoring program, as these milestones provide the framework that determines the success of the project and also provides alternative actions in the case of failures. Performance criteria are set up before a project begins and may be altered during the program as necessary, with consultation with the City's Planning and Environmental Review Department.

6.2 ELEMENTS OF A MONITORING SITE REVIEW

Following initial planting, the site shall be checked by an independent monitor. This person cannot be an employee of the business. The contact person, either the landscape company or the managing personnel at the recycling plant, shall be determined as soon as possible by the City.

The site shall be visited weekly for the first three months to ensure the crew is on track, then monthly for the remainder of the first year, then once every two months during the second year and every three months following, for a total of five years (or until all performance criteria have been met). The restoration area shall be walked for obvious signs of irrigation malfunction, severe herbivory, and any other issues that may need immediate attention. Photo-stations, located during the first annual survey and repeated during each survey, will visually record progress from several viewpoints. Additional photos will be used to document abnormalities.

6.3 ANNUAL REPORTING AND PERFORMANCE CRITERIA

An annual report, submitted to the City of Goleta, shall document the survival percentage of planted species and percent cover. Monitoring shall be conducted by a professional with experience in native plant revegetation. Data gathered to determine vegetation establishment will be collected annually in the spring, when flowering is evident and the maximum number of weed species are likely to be present. Photo-points shall be established after installation and revisited during each annual survey. The report should contain a short description of the project, any unusual conditions from the previous year affecting the plants, and recommendations for future replanting or treatments. For example, if the seeding in the "Northern Restoration" fails, the project biologist will decide if plugs should rather be used for the replacement planting effort.

Performance Criteria are outlined in the Table 5. Any changes to the Performance Criteria will be made by the designated Monitor in consultation with City Planning and Environmental Review Department. The first three bullets below describe Performance Criteria. The remainder are elements of the annual report:

- Minimum **survival rate of 80%** of the original number of plants after five years (80% survival after the first year and 100% survival during the remainder of the program.) Any plant that dies beyond the state survival rate will be replaced by the same species, or if the same species is not available, by an appropriate replacement species. Individuals that remain in poor health for more than a year will also be replaced.

- The site must show a **minimum cover value of 70%,** measured by point intersect method. Because cover can change dramatically over the course of a growing season, sampling must be done at the same stage of the growing season during each measurement event. Methods of laying out random transect will be explained in the first annual report. At least 50 points is desirable in both the *Carex* and the scrub habitat.

- A visual determination of weed cover shall be made in the three different restoration areas of the project (*Carex*, scrub, and tall shrubs). This data should be collected during the point intercept measurement for percent cover of plants material. The site must have no more than 10% cover of invasive weeds during the first year and **no more than 5% cover of invasive weeds** during the next 4 years. Non-native European grasses are not counted as weeds.

- **Measurable faunal components of a healthy habitat** will be presented in the first Annual Monitoring Report, and subsequently yearly. These might be "number of bird species seen within the restoration area during the year; number of birds, faunal sign seen per monitoring visit that year."

- **Photo-documentation** shall be established at repeatable stations. These shall be identified in the first Annual Monitoring Report.

- Plants will not be released from monitoring until they have survived at least **two years without supplemental irrigation,** after which time the irrigation system shall be removed.
- Thorough weeding (non-native grasses tolerated) during the monitoring period is required with zero weeds within the main restoration area following each removal.

- Success rates falling under the stated minimums may signal the need for additional years of monitoring until criteria are met.

6.4 Cost Estimate for Planting and 5-Year Maintenance/Monitoring/Reporting

The following is an *estimate of cost* for implementing the Restoration Plan. Execution of the Restoration Plan entails soil reclamation, plant material purchase and installation, irrigation installation, and continual maintenance and monitoring for a minimum of five years.

Buffer Restoration

Soil reclamation in restoration areas	$3,000.
Purchase *Carex pansa* plugs for SBFCD Easement 7000 plugs @ $1.50/plant + tax and Transportation	$10,940.
Install plugs and irrigation in Buffer and Southern Extension 7000 plugs @ $20/50 tray	$6,960.
Purchase shrubs for Southern Extension and Saltgrass for Overflow 846 + 336 plants@ $6.00/1- gallon container	$7,092
Install plants and irrigation in Buffer and Southern Extension 846 + 336 plants @ $15/1- gallon container	$17,730
	$45,722

Maintenance and Monitoring

Maintenance (5 years) $24,000
Periodic Maintenance (2 men x 8 hours/man x $25/hr. x 12 times/yr. x 5 years)

Monitoring (5 years) $6,080
During planting (8 hrs.); 1st yr. (2 hrs x12x/yr.); 2-5yr:(2hr x 4x/yr.) @ $95/hr.

Annual Survey (5 years)	$26,600
Annual survey (24 hrs) and report (32 hrs). x $95/hr. x 5 years	$56,680

Total Estimated Cost for Five Years:

Restore Buffer (soil, plants, irrigation)	$45,722
Maintenance and Monitoring/Reporting	$56,680
	$102,402

These amounts are only estimates and are based on previous projects with similar aspects.

TABLE 5: PERFORMANCE CRITERIA AND MONITORING SCHEDULE

FEATURE	**SURVIVAL**
Goals	• 80% of the number planted survives after 5 years and plants are weaned off irrigation for two years. This will be measured in the spring and recorded in the annual report.
Criteria	• End of 1st growing season: survival is at least 80% of original planting. • 100% survival rate following year 1. • Plants are weaned off irrigation for at least 2 years (year 4 and 5).
Contingency Action	• Replant if values fall below expected numbers. • Check irrigation lines for herbivory. • Improve health to increase category levels, or replant. • Plants must be off irrigation for two years.
FEATURE	**PERCENT NATIVE PLANT COVER**
Goals	• Increase native cover to provide habitat.
Criteria	• No less than **70% native cover after 5 years** measured by point intercept or other method. Non-native naturalized grasses counted.
Contingency Action	• Determine problem, which is likely to be poor soils. Start as soon as problem is noted.
FEATURE	**WEED CONTROL**
Goals	*Short-Term:* Boost establishment of native species by reducing competition. *Long-Term:* Reduce the abundance of undesirable plant species within the site. Weed growth will ultimately not interfere with native plant establishment or reproduction.
Criteria	• **No more than 5% weed cover in year 2-5.** Zero tolerance of broad-leaved weeds after each eradication treatment. Maintenance crew pulls up all broad-leaf weeds. • Weeding is to occur once a week for first three months; once a month for rest of the first year; once every two months in year two; once every three months for the remainder of the project. Double visits during spring. Cover value assessed by point intercept. • **Naturalized grasses are tolerated and not counted as "weeds,"** unless preventing

	growth of natives. • Scheduled visits are only estimates. More visits may be necessary. • No trash in restoration areas.
Contingency Action	• Continue to monitor and weed with little or no ground disturbance as necessary. • Review weeding techniques with crew for potential flaws.
FEATURE	**5-YEAR MAINTENANCE BOND**
	Three bonds – Installation, Maintenance, and Damage to Native Trees - are submitted prior to LUP. The Installation Bond is released 6 months following a successful installation. The Maintenance bond is released after the 5th Annual Report with successful completion of all performance criteria. If criteria are not met after five years, a second effort may be attempted. The City has the option to pull the bond and use the funds to redo the restoration work if, after the second effort survival, cover or other performance measurements remain below that expected.

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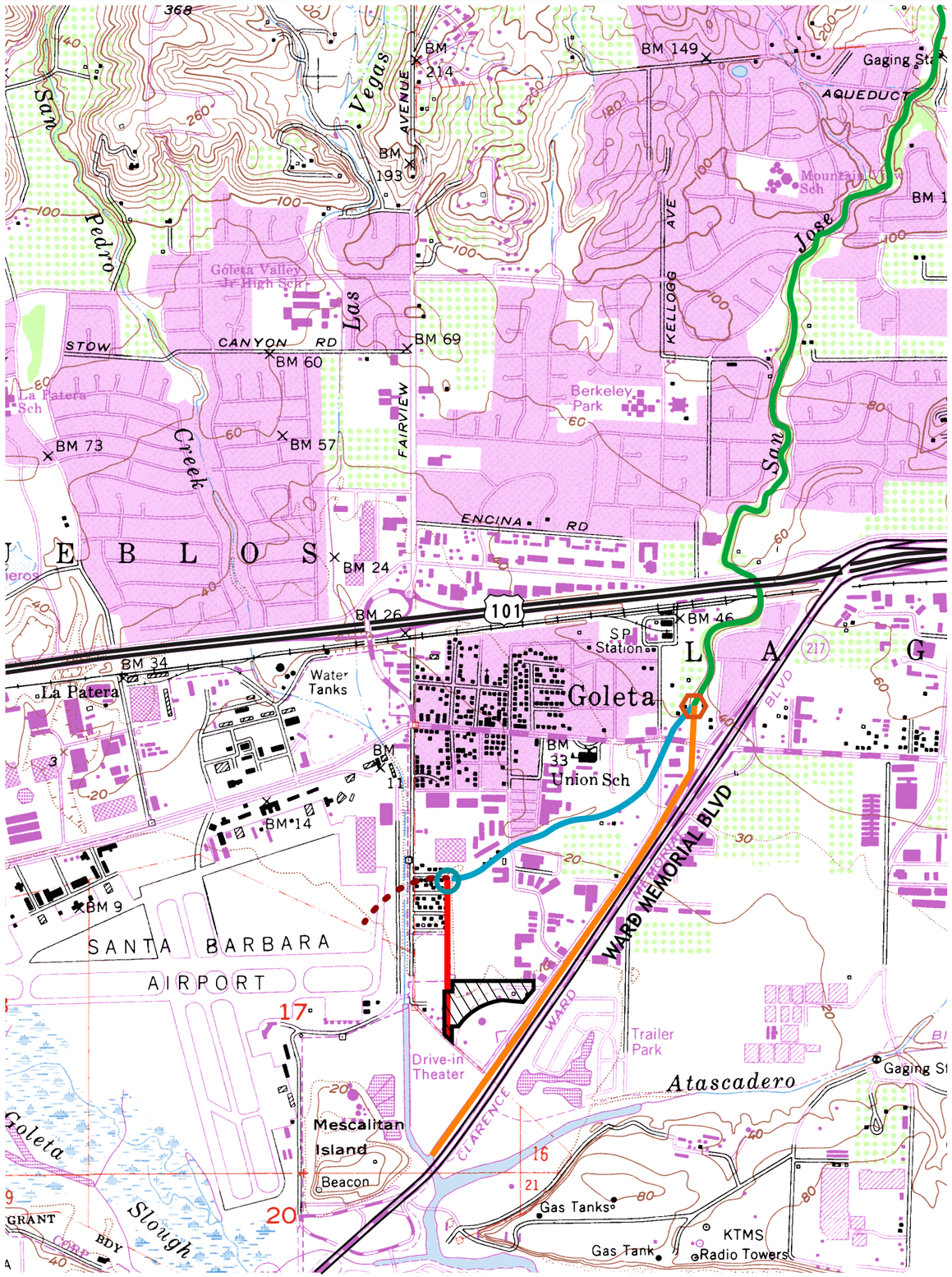
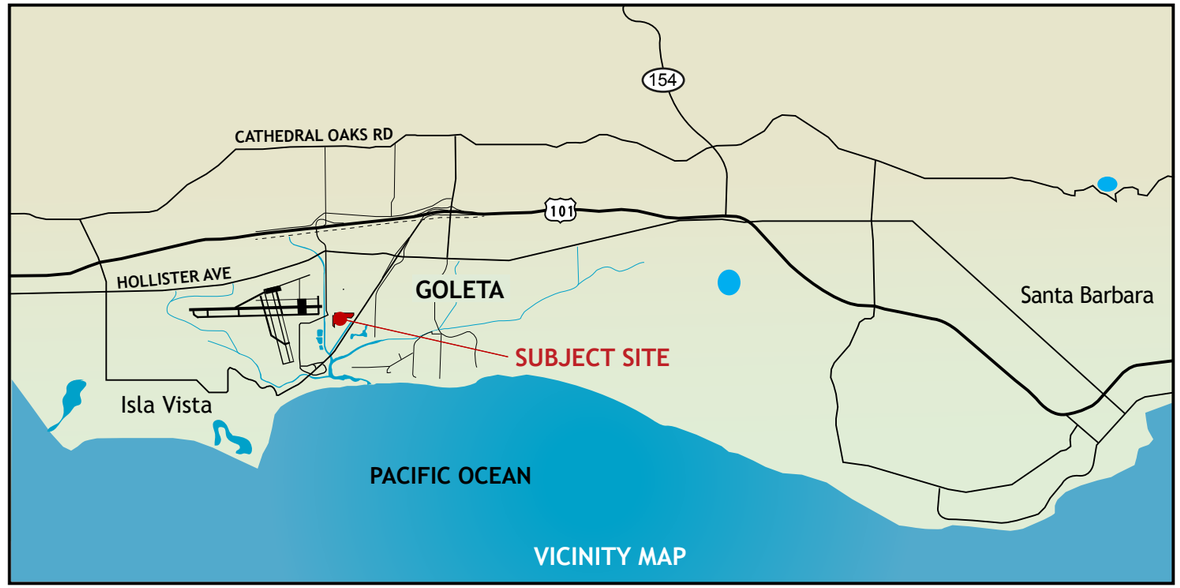




LEGEND

- Subject Site
- Diversion Point; Early 1920's
- San Jose Creek Diversion Point; 1965

San Jose Creek - (Currently carries natural creek flows)

- Natural Channel
- Artificial Concrete Channel

Old San Jose Creek (Historic Drainage of San Jose Creek)
(Receives only local stormwater run-off; contains no natural flows)

- Natural Channel
- Current Artificial Drainage
- Location of Pre-Diversion Natural Channel

N

0 500' 1000' 2000'

SCALE

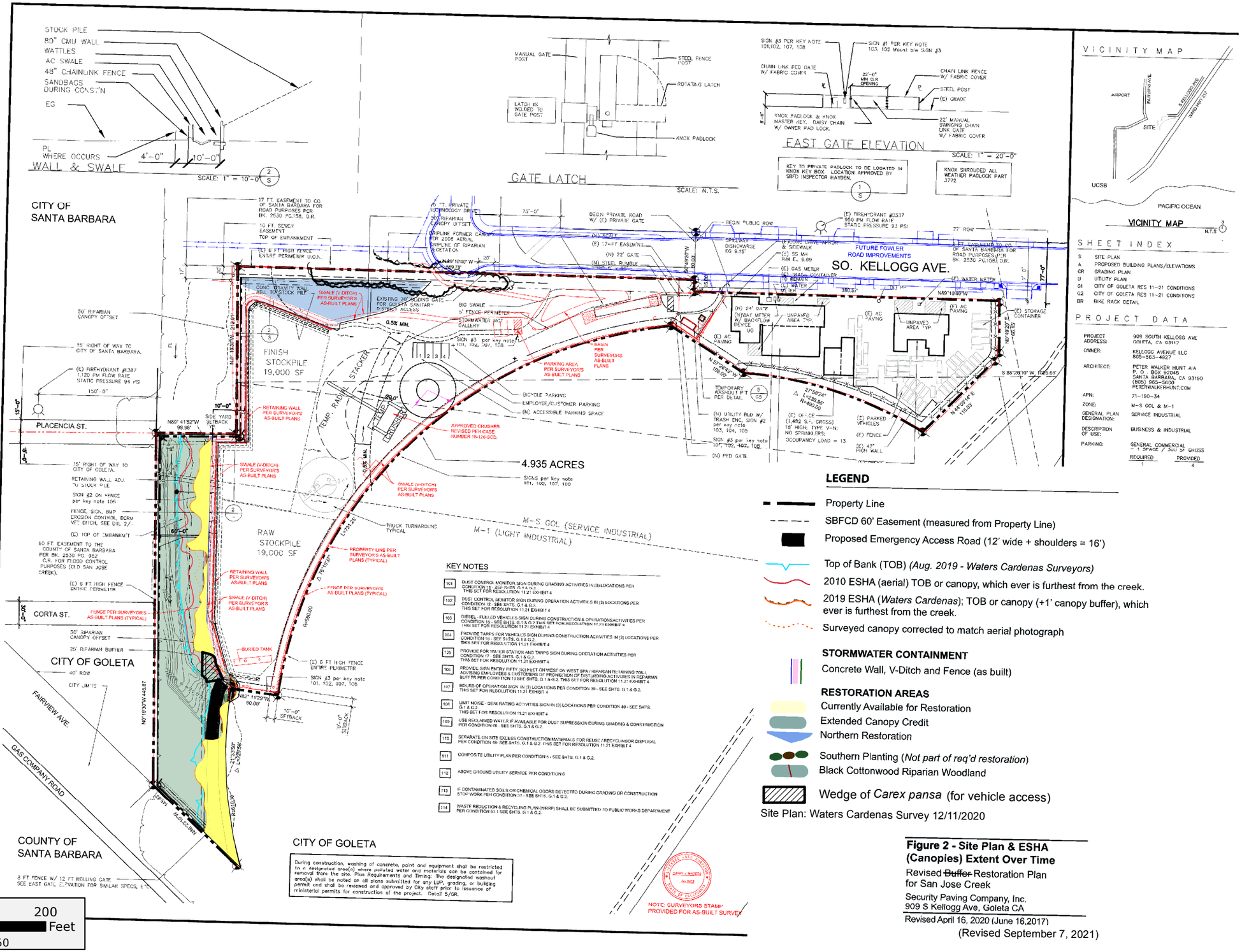
Figure 1 - Site Vicinity & Location Map

Revised Buffer Restoration Plan
for San Jose Creek

Security Paving Company, Inc.
909 S Kellogg Ave, Goleta CA

Revised April 16, 2020 (June 16, 2017)

RACHEL• TIERNEY CONSULTING



SHEET INDEX

PROJECT DATA

PROJECT ADDRESS:	909 SOUTH KELLOGG AVE GOLETA, CA 93117
OWNER:	KELLOGG AVENUE LLC 805-563-4927
ARCHITECT:	PETER WALKER HUNT AIA P. O. BOX 92045 SANTA BARBARA, CA 93190 (805) 965-5600 PETERWALKERHUNT.COM
APN:	71-190-34
ZONE:	M-S GOL & M-1
GENERAL PLAN DESIGNATION:	SERVICE INDUSTRIAL
DESCRIPTION OF USE:	BUSINESS & INDUSTRIAL
PARKING:	GENERAL COMMERCIAL – 1 SPACE / 300 SF GROSS

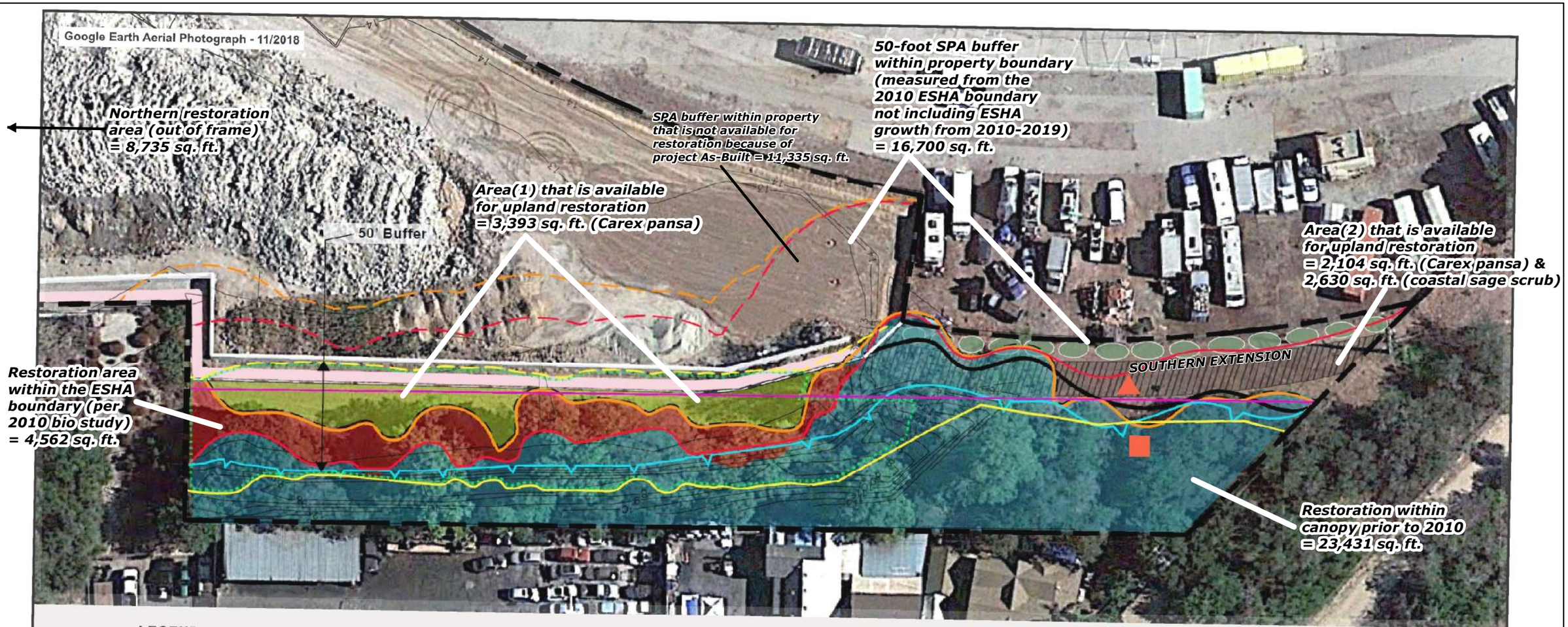
REQUIRED	PROVIDED
1	4

Figure 2 - Site Plan & ESHA (Canopies) Extent Over Time

Revised ~~Buffer~~ Restoration Plan for San Jose Creek

Security Paving Company, Inc.
909 S Kellogg Ave, Goleta CA

Revised April 16, 2020 (June 16,2017)
(Revised September 7, 2021)



LEGEND

- Property Line
- SBFCD 60' Easement (measured from Property Line)
- Proposed Emergency Access Road (12' wide + shoulders = 16') and gate (High Canopy Black Cottonwood extends over portion of road)
- 2019 Top of Bank (TOB) (Waters Cardenas Land Surveying, LLC)
- 2010 ESHA *(Dudek)*; TOB or canopy, which ever is furthest from the creek.
- 2010 ESHA (aerial); TOB or canopy, which ever is furthest from the creek.
- 2019 ESHA (Waters Cardenas); TOB or canopy (+1' canopy buffer), which ever is furthest from the creek.
- 50' Setback from 2010 EHSA (Dudek)
- 50' Setback from 2010 ESHA (aerial)
- 50' Setback from 2019 ESHA (Waters Cardenas)
- 2017 Original Buffer Restoration Plan Footprint

STORMWATER CONTAINMENT

Concrete Wall, V-Ditch and Fence (as built)

Other Map Items

- 14 Myoporum shrubs removed and to be replaced with 14 native shrubs
- Black Cottonwood Riparian Woodland (Restoration via weed/trash removal)
- Original vegetation primarily native species (Black Cottonwood)
- Primarily non-native species (Myoporum and others)

N

0 25' 50' 100'

SCALE

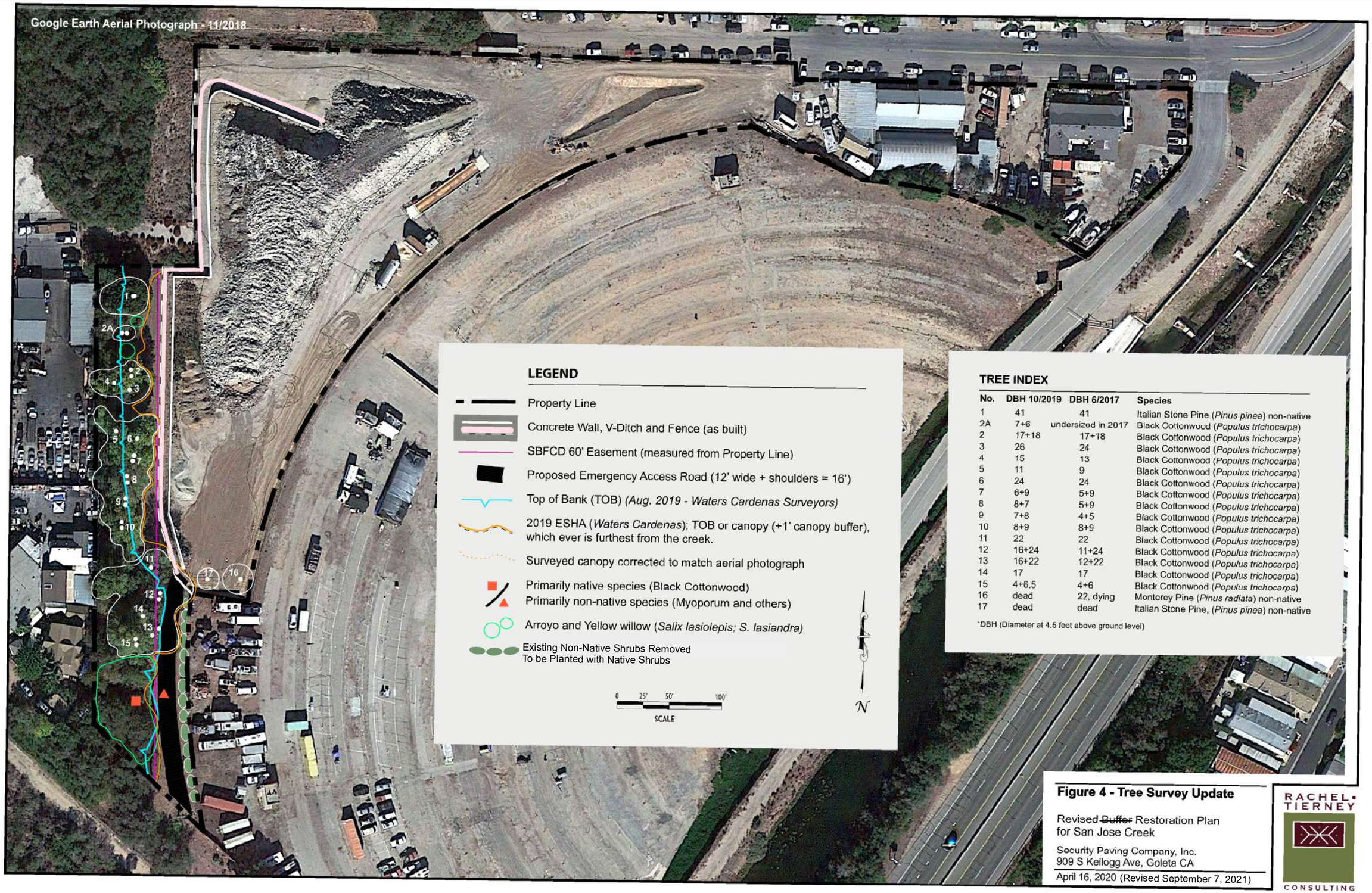
Figure 3: Aerial Photograph of Buffer with Canopies and Setbacks (2010 & 2019)

Revised ~~Buffer~~ Restoration Plan for San Jose Creek

Security Paving Company, Inc.
909 S Kellogg Ave, Goleta CA

April 16, 2020 (Revised September 7, 2021)

RACHEL TIERNEY CONSULTING



LEGEND

- Property Line
- Concrete Wall, V-Ditch and Fence (as built)
- SBFCD 60' Easement (measured from Property Line)
- Proposed Emergency Access Road (12' wide + shoulders = 16')
- Top of Bank (TOB) *(Aug. 2019 - Waters Cardenas Surveyors)*
- 2019 ESHA (*Waters Cardenas*); TOB or canopy (+1' canopy buffer), which ever is furthest from the creek.
- Surveyed canopy corrected to match aerial photograph
- Primarily native species (Black Cottonwood)
- Primarily non-native species (Myoporum and others)
- Arroyo and Yellow willow (*Salix lasiolepis; S. lasiandra*)
- Existing Non-Native Shrubs Removed
  To be Planted with Native Shrubs

0 25' 50' 100'
SCALE

N

TREE INDEX

No.	DBH 10/2019	DBH 6/2017	Species
1	41	41	Italian Stone Pine (*Pinus pinea*) non-native
2A	7+6	undersized in 2017	Black Cottonwood (*Populus trichocarpa*)
2	17+18	17+18	Black Cottonwood (*Populus trichocarpa*)
3	26	24	Black Cottonwood (*Populus trichocarpa*)
4	15	13	Black Cottonwood (*Populus trichocarpa*)
5	11	9	Black Cottonwood (*Populus trichocarpa*)
6	24	24	Black Cottonwood (*Populus trichocarpa*)
7	6+9	5+9	Black Cottonwood (*Populus trichocarpa*)
8	8+7	5+9	Black Cottonwood (*Populus trichocarpa*)
9	7+8	4+5	Black Cottonwood (*Populus trichocarpa*)
10	8+9	8+9	Black Cottonwood (*Populus trichocarpa*)
11	22	22	Black Cottonwood (*Populus trichocarpa*)
12	16+24	11+24	Black Cottonwood (*Populus trichocarpa*)
13	16+22	12+22	Black Cottonwood (*Populus trichocarpa*)
14	17	17	Black Cottonwood (*Populus trichocarpa*)
15	4+6.5	4+6	Black Cottonwood (*Populus trichocarpa*)
16	dead	22, dying	Monterey Pine (*Pinus radiata*) non-native
17	dead	dead	Italian Stone Pine, (*Pinus pinea*) non-native

*DBH (Diameter at 4.5 feet above ground level)

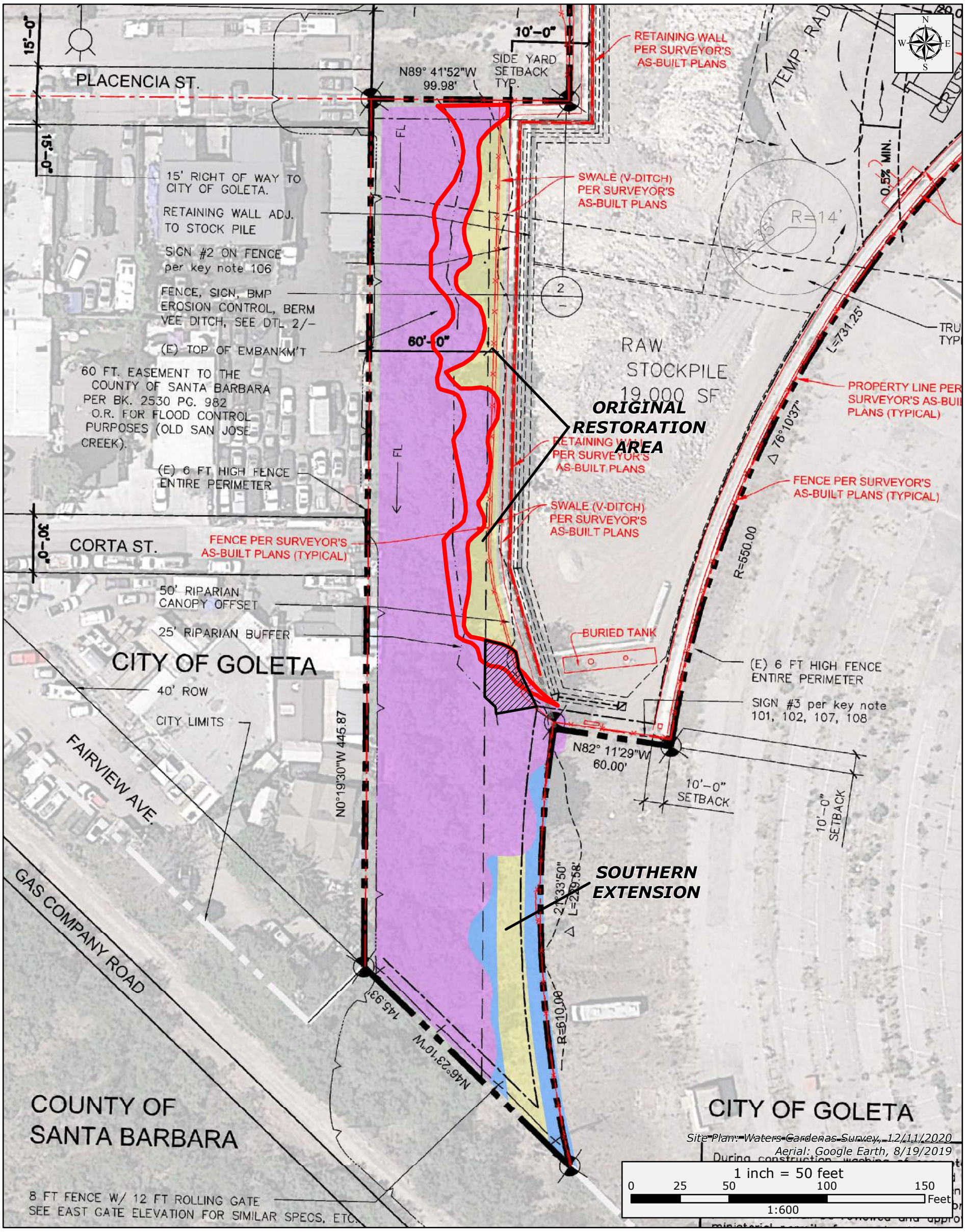
Figure 4 - Tree Survey Update

Revised ~~Buffer~~ Restoration Plan
for San Jose Creek

Security Paving Company, Inc.
909 S Kellogg Ave, Goleta CA

April 16, 2020 (Revised September 7, 2021)

RACHEL TIERNEY CONSULTING



RESTORATION AREAS

Restoration within canopy of OSJC - 27,993 sq. ft.

- Canopy Prior to 2010 - 23,431 sq. ft.
- Extended Canopy Credit since 2010 - 4,562 sq. ft.

***Carex pansa* - 5,497 sq. ft.**

- Original Buffer Restoration Area - 3,393 sq. ft.
- SBFCD Easement in Southern Extension - 2,104 sq. ft.
- Underneath Riparian Canopy - 700 sq. ft. (not double counted)

Coastal Sage Scrub in Southern Extension - 2,630 sq. ft.

- Along western edge of SBFCD Easement - 740 sq. ft.
- Along eastern edge of SBFCD Easement - 1,890 sq. ft.

Northern Restoration Area - 8,735 sq. ft.

NOT IN FRAME *(see Figure 6)*

TOTAL RESTORATION AREA = 44,855 sq. ft. (1.03 acres)

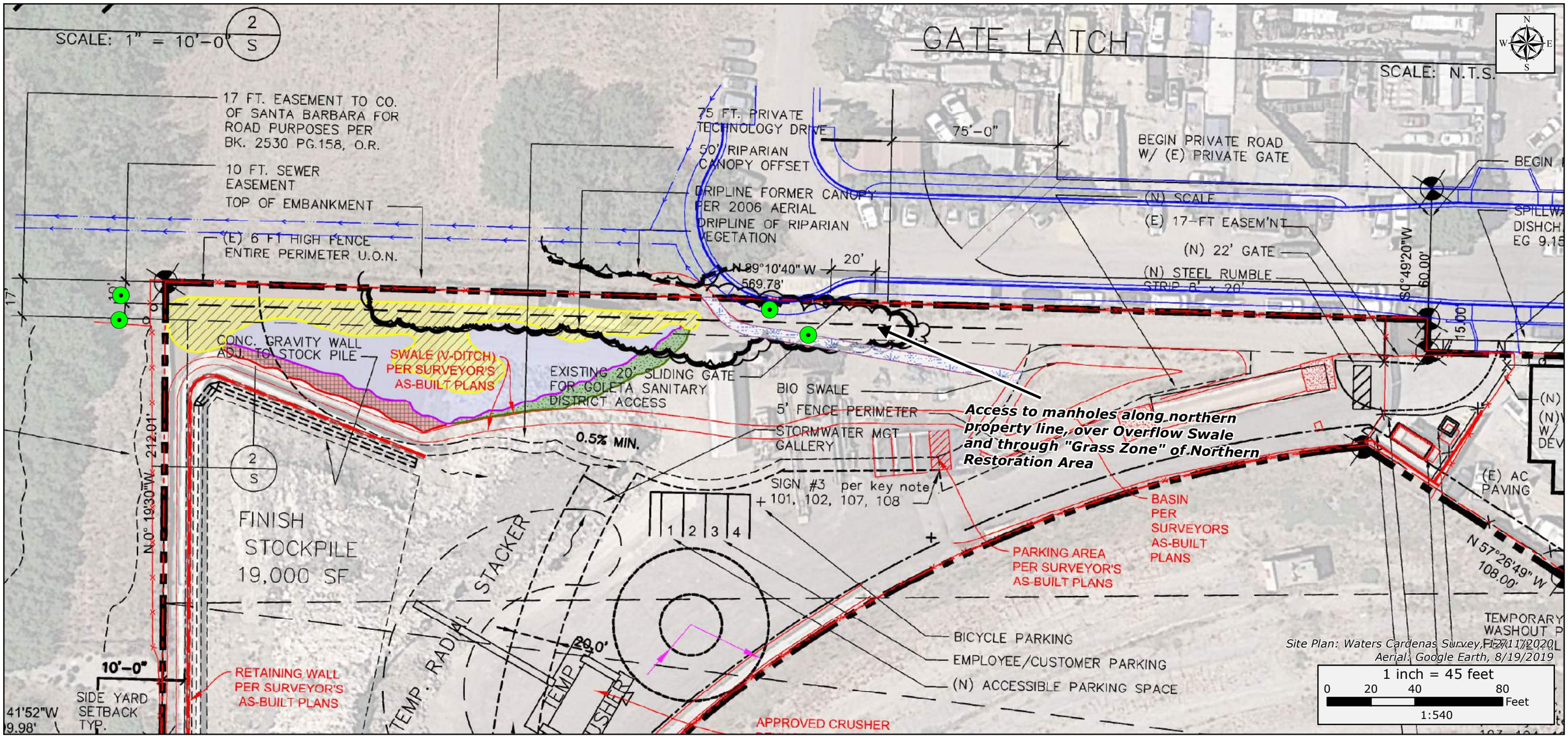
Additional Plantings (Not Counted as Restoration Credit)

- Overflow Swale - 745 sq. ft.

Figure 5: Planting Plan for OSJC Buffer and Southern Extension

Revised Restoration Plan for San Jose Creek
Security Paving Company, Inc. 909 S. Kellogg Ave., Goleta, CA

Watershed Environmental, Inc. 9/7/2021



NORTHERN RESTORATION AREA

- Grass Zone - 3,440 sq. ft.
- Shrub Zone - 3,890 sq. ft.
- Tall Shrub Barrier - 700 sq. ft.
- Vines - 705 sq. ft.

TOTAL NORTHERN RESTORATION AREA = 8,735 sq. ft. (0.20 acres)

ALL RESTORATION AREAS

NOT IN FRAME — Restoration within canopy of OSJC - 27,993 sq. ft.
(prior to 2010 [23,431 sq. ft.] and within extended canopy credit since 2010 [4,562 sq. ft.])

NOT IN FRAME — *Carex pansa* - 5,497 sq. ft.
(Original Buffer Restoration Area & Southern Extension SBFCD Easement)
(700 sq. ft. under riparian canopy - not double counted)

NOT IN FRAME — Coastal Sage Scrub in Southern Extension - 2,630 sq. ft.

Northern Restoration Area - 8,735 sq. ft.

TOTAL RESTORATION AREA = 44,855 sq. ft. (1.03 acres)

Additional Plantings (Not Counted as Restoration Credit)

Overflow Swale - 745 sq. ft.

Map Items

Goleta Sanitary District (GSD) Manhole Locations

Figure 6: Northern Restoration Area Planting Plan

Revised Restoration Plan for San Jose Creek
Security Paving Company, Inc., 909 S. Kellogg Ave., Goleta, CA

Watershed Environmental, Inc. 9/7/2021