NAPA HIDDEN GLEN REMEDIATION PROJECT

Draft Initial Study/Mitigated Negative Declaration

July 2025

Prepared for:

City of Napa
Utilities Department
P.O. Box 660
Napa, CA 94559

Prepared by:

RCH Group, Inc.
PO Box 516
Rancho Murieta, CA 95683
916.782.4427

ATTACHMENT 4

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ADMINISTRATIVE DRAFT INITIAL STUDY

1.	**Project Title:**	Napa Hidden Glen Remediation Project
2.	**Lead Agency Name and Address:**	City of Napa Utilities Department P.O. Box 660 Napa, CA 94559
3.	**Contact Person and Phone Number:**	Chris Jones Senior Engineer (707) 257-9460
4.	**Project Location:**	APN #045-411-022-000 2.18-acre area Pascale Place Napa, CA 94558
5.	**Project Sponsor:**	Chris Jones Senior Engineer (707) 257-9460
6.	**General Plan Designation:**	Open Space & Parks
7.	**Zoning:**	RS 10 – Single Family Residential (Minimum Lot Size 10,000 Square Feet)

8. Description of Project:

Project Overview

The City of Napa (the Project Sponsor and Lead Agency) is proposing to conduct remedial action activities on City-owned property (the "Project") to meet State Minimum Standards and comply with Title 27 of the California Code of Regulations (CCR). The City-owned property is 2.18-acres which includes the former Hidden Glen Dump (approximately 1.06 acres) listed in the CalRecycle Solid Waste Information System (SWIS) database and assigned SWIS NO. 28-AA-0028 (the "Project site"). The Project site (APN #045-411-022-000) is near the intersection of Pascale Place and Glory Court in Napa, CA. The parcel is zoned RS 10 (Single Family Residential – Minimum Lot Size 10,000 Square Feet [Sq Ft]) and is designated Open Space & Parks in the City of Napa 2040 General Plan.

The Project site contains waste-impacted soil and debris in shallow soils from when it was operating as the former Hidden Glen Dump and requires remedial action. On November 26, 2019, the County of Napa Environmental Health, Solid Waste Local Enforcement Agency (LEA) issued a letter to the City of Napa requiring submittal of a workplan to ensure that State Minimum

Standards are addressed at the City-owned parcel and in compliance with Title 27 of the CCR. To comply with State Minimum Standards, the letter requires the City to remove and/or cover waste-impacted soil along the flag section and the buffer zone.

A Remedial Action Plan (RAP) was prepared by Ninyo & Moore in October 2024 (Appendix B) and approved by the LEA on December 20, 2024. Under the RAP (and the Project), waste-impacted soil around the perimeter of the landfill cap (buffer zone and flag section – See **Figure 2** – Site Plan) would be excavated to bedrock where feasible, to depths of approximately 10 to 20 inches (See **Figure 3** – Waste Excavation Plan). The "buffer zone" is the area between the capped area and the adjacent properties and was created as part of a 2001 project to install a landfill cap over the former dump site. The depth of excavation would be reduced if bedrock is encountered at shallower depths. Conversely, the depth of excavation may extend beyond 20 inches if wastes are deeper to reach bedrock or the excavation may terminate in wastes in which case the wastes would be covered with 2 feet of clean imported soil. The waste-impacted soil to be removed would be reconsolidated onsite and covered with a minimum of two feet of clean fill essentially capping it. Alternatively, the waste-impacted soil may be hauled offsite to an appropriate landfill for disposal.

The planned remedial action activities would be conducted on City-owned property. However, the City is in negotiations to accept waste-impacted soil from the adjacent residential properties and the RAP (and the Project) includes the possibility of accepting waste-impacted soil from adjacent properties. The adjacent include Lots 6 through 10, as shown on **Figure 2** – see *Construction Phasing and Schedule*, below).

Project Site and Objectives

The Project site was initially an excavated quarry that operated into the 1940's. After quarry operations were abandoned, the Project site was used as a general garbage dump by a private operator until it was abandoned in the 1960's. In 2001, a landfill cap was installed at the dump site. In 2020, three (3) methane monitoring wells were installed by the City to monitor landfill gases (LFG) based on directive from the LEA (See **Appendix B** for more details). These wells would remain in place under the Project.

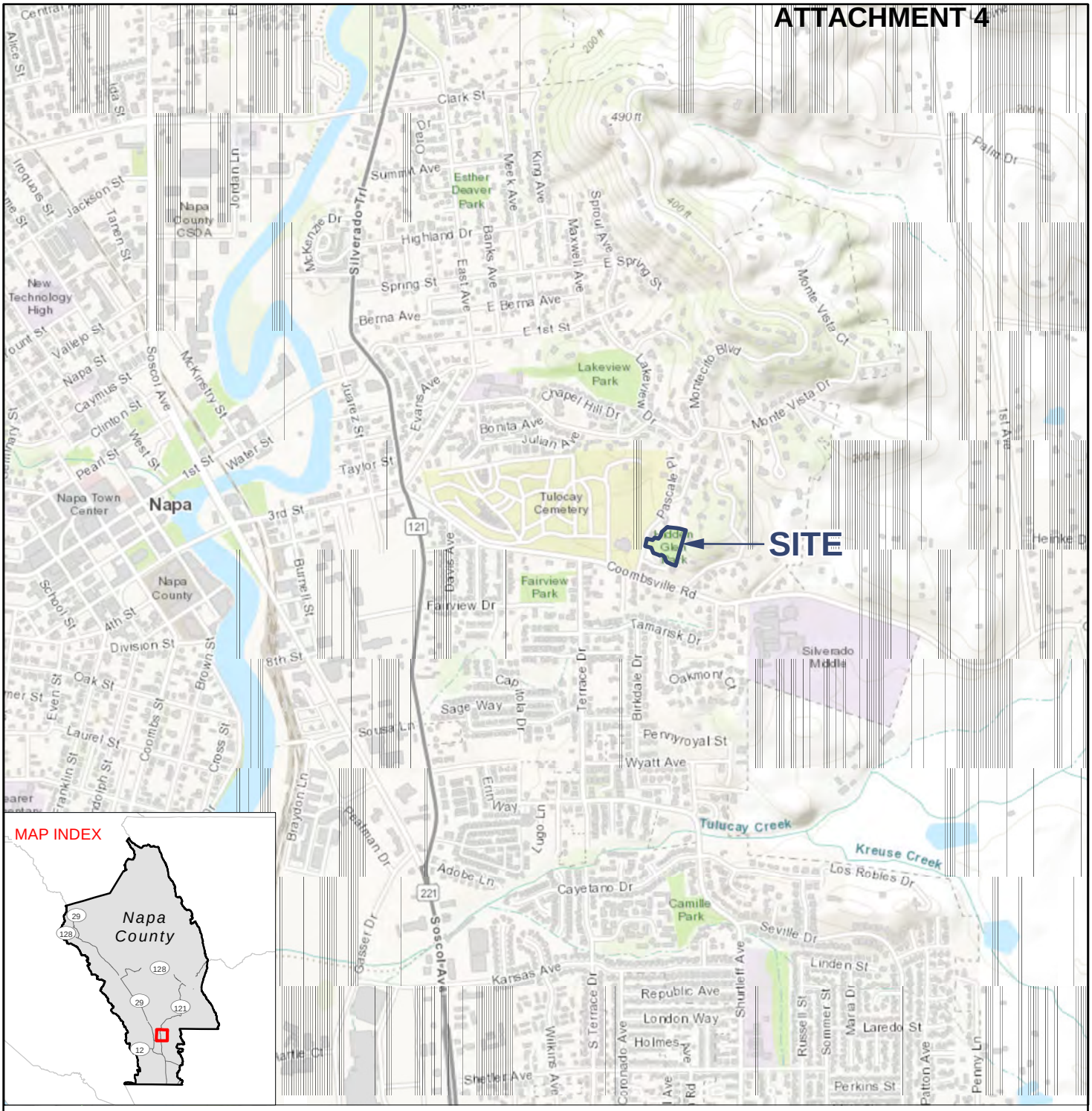
The Project site is a vacant City-owned property and consists of a capped portion of the Hidden Glen Dump and the area between the capped area and the adjacent properties that extends beyond the area that was capped, referred to as the "buffer zone" (see **Figure 2**). Waste-impacted soils were identified in the buffer zone and flag section that contain elevated lead concentrations and require remediation by the LEA (See **Appendix B**). Hand digging tools and methods would be used for remediation in the buffer zone, when necessary, to minimize heavy equipment use nearby trees and residences. Remediation of the Project site would be protective to human health and the environment and would aim to meet the applicable State Minimum Standards with respect to waste disposal sites by removing or covering waste-impacted soil exceeding Class I non-RCRA State of California Hazardous Waste Criteria and Residential Environmental Screening Limits for Lead.

Figure 1 shows the Site Location and **Figure 2** shows the Site Plan. **Appendix A** contains several photographs of the Project site (i.e., aerials and views of surrounding properties). **Figure 3** shows the Waste Excavation Plan, **Figure 4** shows the Grading Plan, and **Figure 5** shows the Grading Sections.

Surrounding Land Uses and Setting

The 2.18-acre Project site is in a residential setting with adjacent residential properties to the north, east, and south (See **Figure 2**). The adjacent residential properties are not separated by a road or other features (other than fencing on Lot 5 and portions of fencing on Lots 6, 7, 8 and 9). There are 8 residential structures abutting the City-owned property and the distances between them and the City-owned property line is shown below:

1. 22 Glory Court (Lot 5) – 15 feet (backyard patio is at property line)
2. 18 Glory Court (Lot 6) – 9 feet (deck is at property line)
3. 12 Pascale Place (Lot 9) – 11 feet (backyard patio is essentially at property line)
4. 20 Pascale Place (Lot 11) – 31 feet
5. 10 Pascale Court (Lot 13) – 17 feet (pool and patio is essentially at property line)
6. 29 El Monte Way – 132 feet
7. 33 El Monte Way – 37 feet.
8. 57 El Monte Way – 127 feet (detached garage is 15 feet from property line)



NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCE: ESRI WORLD TOPO, 2024

N

FEET

0 1,500 3,000

1_109558001_SL.mxd 9/3/2024 JDL

FIGURE 1

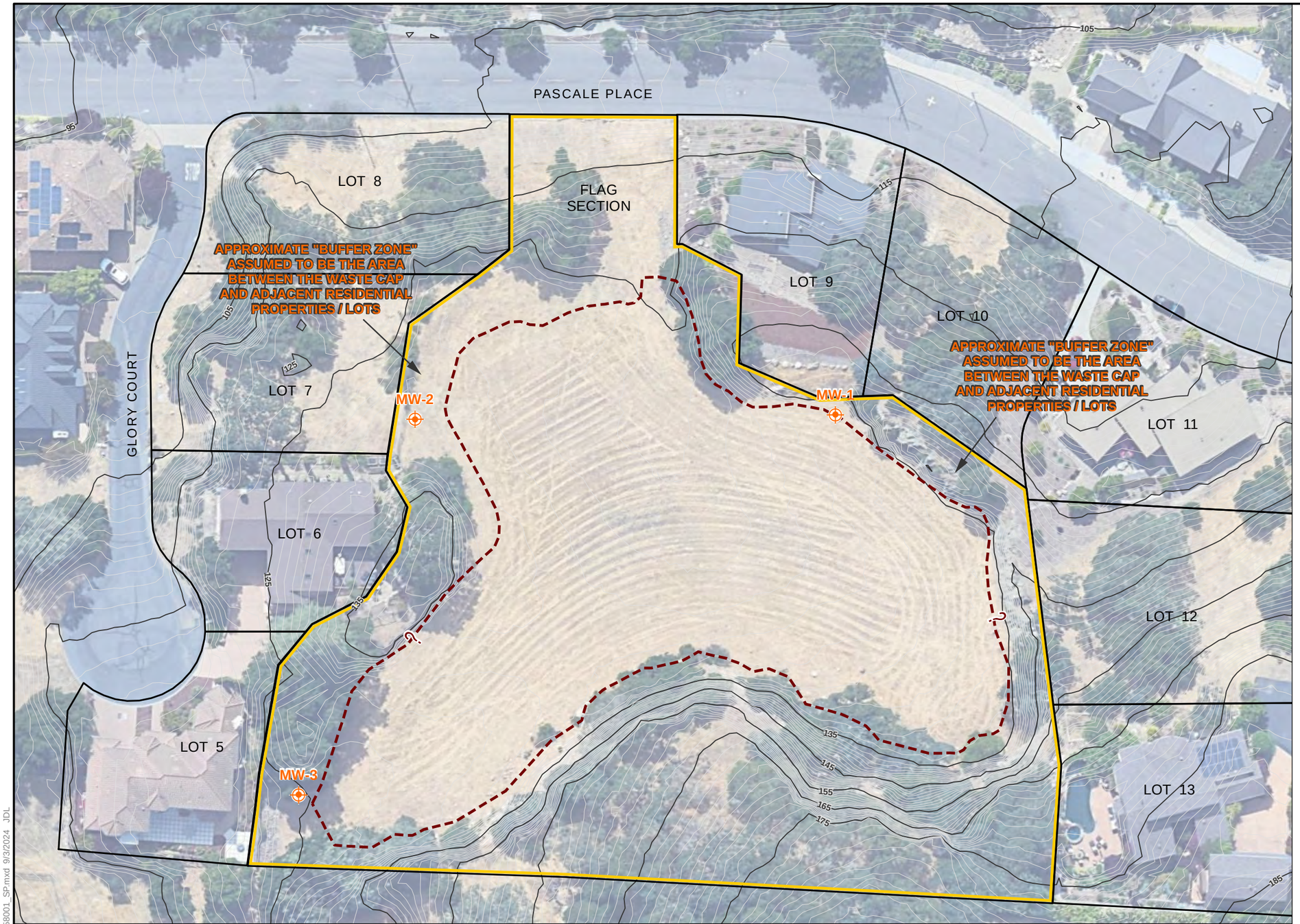
SITE LOCATION

HIDDEN GLEN DUMP
COOMBSVILLE ROAD, NAPA, CALIFORNIA

109558001 | 10/24

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

ATTACHMENT 4



LEGEND

MW-3 — LANDFILL GAS WELL (SCS ENGINEERS, 2020)

PARCEL A BOUNDARY APN: 045-411-022-000 (SCS ENGINEERS, 2020)

PARCEL BOUNDARY

ADAPTED FROM LANGAN (2018)

APPROXIMATE LIMIT OF CAP

N

FEET
0 50 100

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCES: SITE PLAN - SCS ENGINEERS, DATED: 2-26-20; TOPO - NOAA/USGS LIDARNOAA LIDAR, 2018-2019, NORTHERN CALIFORNIA WILDFIRE-QL2; GOOGLE EARTH, 2024

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FIGURE 2

SITE PLAN

HIDDEN GLEN DUMP
COOMBSVILLE ROAD, NAPA, CALIFORNIA

109558001 | 10/24

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

PASCALE PLACE

CONTROL POINT #1
HORIZONTAL AND VERTICAL CONTROL: MAG NAIL SET IN CURB ON PASCALE PLACE AT NORTHING 1870374.71 AND EASTING 6484988.00 AT ELEVATION 104.76

BVC 105.65
FL MATCH (E) 105.25
TC 105.70
TC MATCH (E) 107.98
LIMIT OF WORK

REMOVAL 1126 SF, 13 CY
REMOVAL 79 SF, 1 CY
REMOVAL 458 SF, 32 CY
REMOVAL 87 SF, 1.1 CY
REMOVAL 4122 SF, 153 CY
REMOVAL 2316 SF, 57 CY
REMOVAL 982 SF, 37 CY
REMOVAL 1,090 SF, 33.7 CY
REMOVAL 137 SF 1.7 CY
REMOVAL 2,923 SF 108 CY
REMOVAL 213 SF 2.8 CY
REMOVAL 327 SF 11.2 CY
REMOVAL 563 SF 17.4 CY
REMOVAL 154 SF 2 CY
REMOVAL 746 SF 26 CY
REMOVAL 549 SF 20.3 CY
REMOVAL 1190 SF 7.3 CY
REMOVAL 2,236 SF 14 CY
REMOVAL 1,360 SF 42 CY
REMOVAL 101 SF, 1.25 CY

EXISTING 4" PVC DRAIN LINE ENCASED IN CONCRETE, PROTECT IN PLACE.
EXISTING 4" PVC PERFORATED DRAIN LINE IN POLYETHYLENE LINED GRAVEL TRENCH AT EDGE OF LANDFILL CAP, PROTECT IN PLACE

CONTROL POINT #2
HORIZONTAL AND VERTICAL CONTROL: 3/4" IRON PIPE WITH RED CONTROL CAP AT NORTHING 1870491.19 AND EASTING 6485175.66 AT ELEVATION 136.65

CONTROL POINT #3
HORIZONTAL AND VERTICAL CONTROL: MAG NAIL SET IN ROCK AT NORTHING 1870304.73 AND EASTING 6485232.28 AT ELEVATION 138.89

PROTECT IN PLACE
PROTECT IN PLACE, ENCASE MONITOR WELL PER DETAIL 8/6.0
APPROXIMATE LIMIT OF LANDFILL CAP
REMOVE EXISTING RIP RAP AND STOCKPILE ONSITE FOR REUSE

LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13

LAND AREA

WASTE EXCAVATION LEGEND

- SOIL WITH WASTE REMOVAL (<10")
- SOIL WITH WASTE REMOVAL (10"-20")
- SOIL WITH WASTE REMOVAL (21"-30")
- RELOCATED SOIL WITH WASTE:
- X / XX — SECTION CUT
- 22 — EXISTING CONTOUR: 1'-0" INTERVAL TYP.
- 22 — PROPOSED CONTOUR FOR SOIL WITH WASTE MOUND: 1'-0" INTERVAL TYP.
- 21.25 — PROPOSED SPOT ELEVATION (EXISTING SPOT ELEVATIONS ARE SCREENED ON PLAN)
- X% — DIRECTION AND PERCENT SLOPE OF SHEET DRAINAGE
- GB — GRADE BREAK
- FLUSH CONDITION
- CONTROL POINT

HP	HIGH POINT
TC	TOP OF CURB
BC	BOTTOM OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
TR	TOP OF RAMP
BR	BOTTOM OF RAMP
RIM	RIM ELEVATION OF DRAIN INLET, SEE WALL AND DRAINAGE PLAN
VC	VERTICAL CURVE PER CHP HIGHWAY DESIGN MANUAL SECTION 200-24
BVC	BEGINNING OF VERTICAL CURVE
EVC	END OF VERTICAL CURVE
GB	GRADE BREAK

NORTH
1" = 20'
0 20 40 feet

LICENSED LANDSCAPE ARCHITECT — MELISSA RUTH RAE — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 4/11/25
DESIGNED BY: BS DATE 4/11/25
CHECKED BY: MR DATE 4/11/25

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
WASTE EXCAVATION PLAN: ALL WASTE

SCALE
HORIZ. _____
VERT. _____

DATE: APRIL 11, 2025
CAD FILE: A17058_WE.dwg
DRAWING NO. 4.0

FIGURE 3

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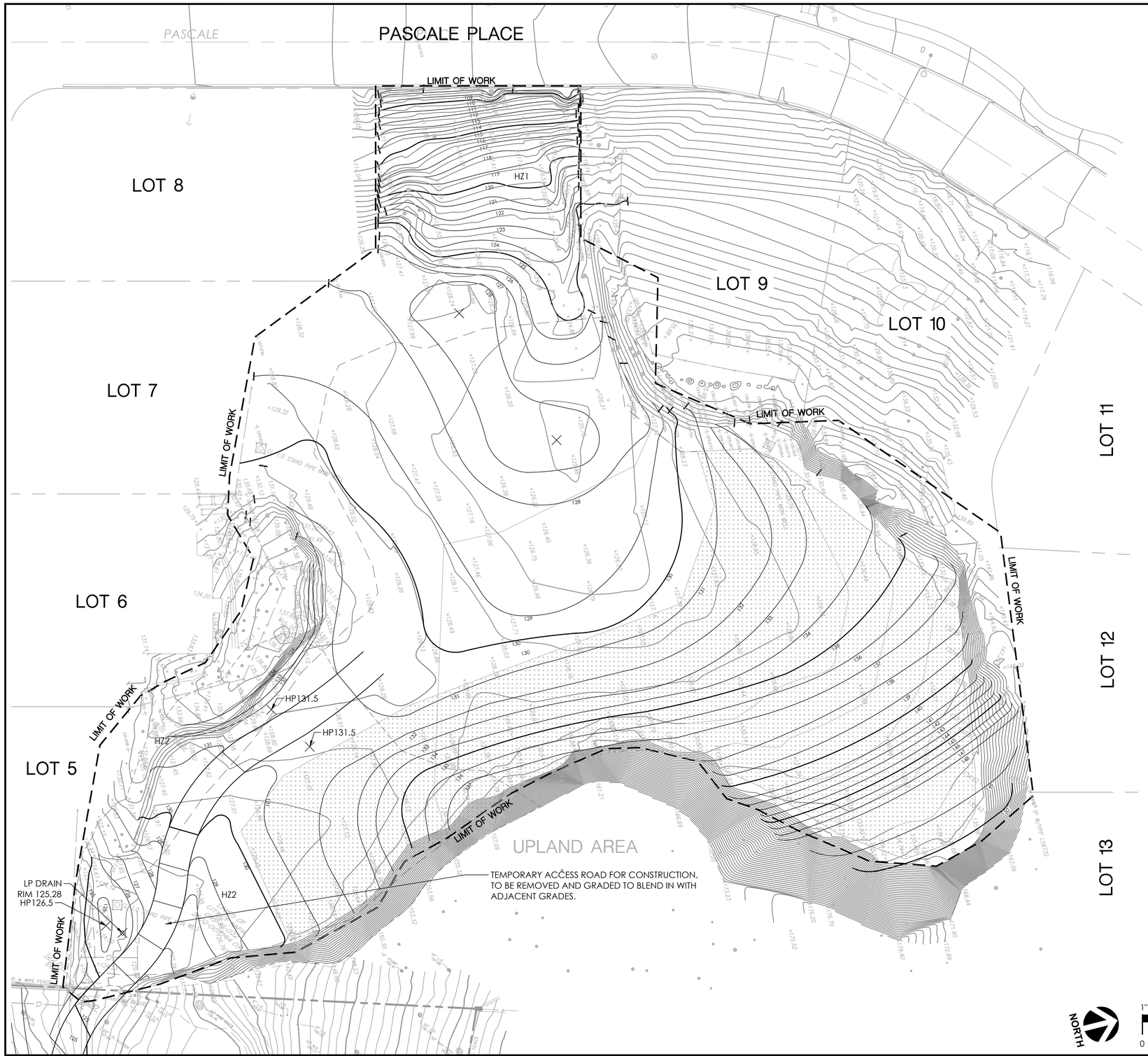


GRADING LEGEND

- RELOCATED SOIL WITH WASTE
- X / XX — SECTION CUT
- EXISTING CONTOUR: 1'-0" INTERVAL TYP.
- xx — PROPOSED CONTOUR: 1'-0" INTERVAL TYP.

NORTH

1" = 20'

0 20 40 feet

LICENSED LANDSCAPE ARCHITECT — MELISSA RUTH MORAN — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

CALA
Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS

NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 4/11/25
DESIGNED BY: BS DATE 4/11/25
CHECKED BY: MR DATE 4/11/25

CITY OF NAPA

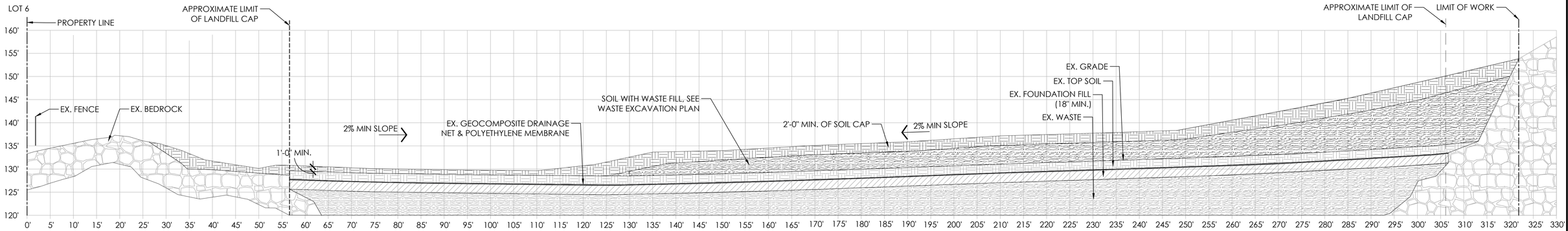
UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
GRADING PLAN: ALL WASTE

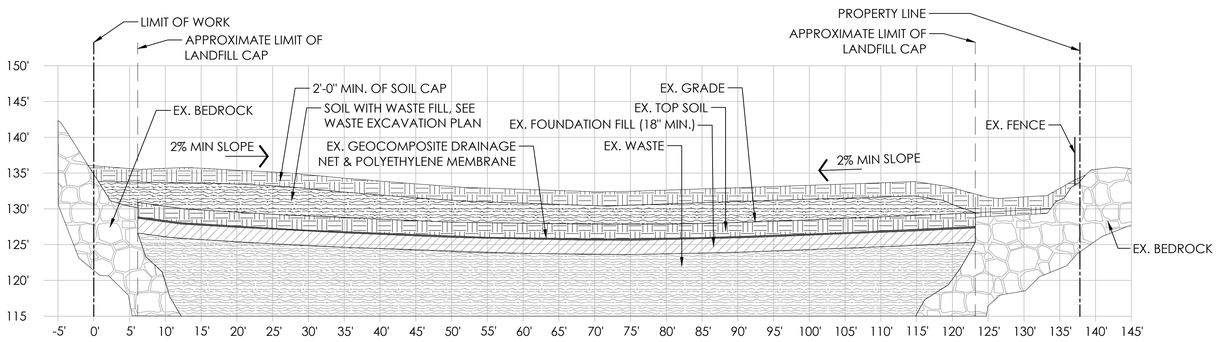
SCALE
HORIZ. _____
VERT. _____

DATE: APRIL 11, 2025
CAD FILE: A17058_GD_Accept all Debris_250404.dwg
DRAWING NO. 5.0

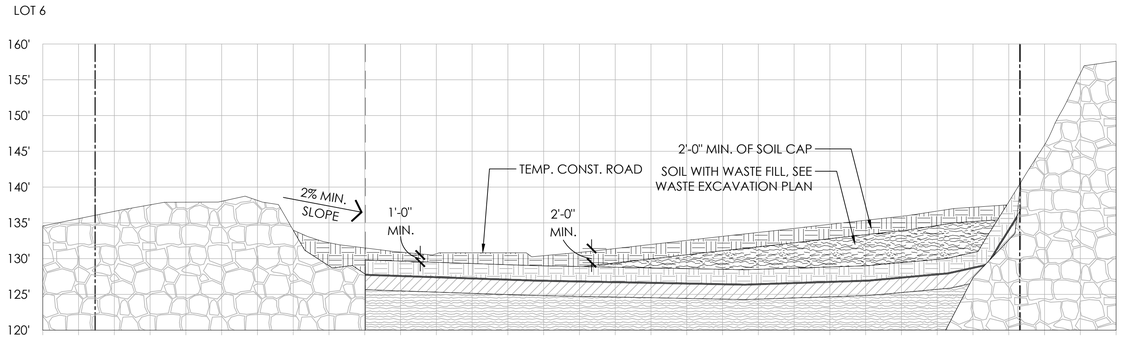
FIGURE 4



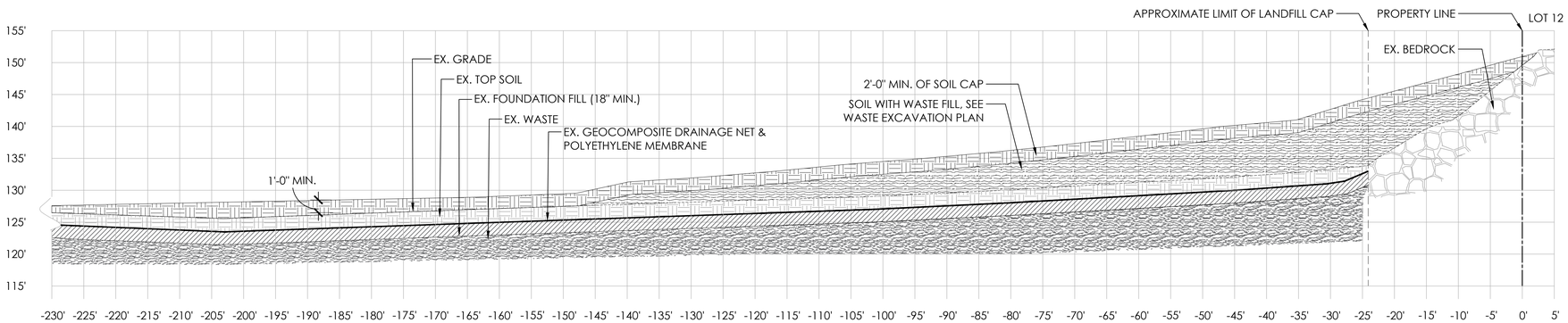
1 **SECTION 1 - GRADING**
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'



2 **SECTION 2 - GRADING**
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'



3 **SECTION 1 - GRADING**
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'



4 **SECTION 3 - GRADING**
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'

LICENSED LANDSCAPE ARCHITECT — MELISSA RUTH MORRIS — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

CALA
Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 4/11/25
DESIGNED BY: BS DATE 4/11/25
CHECKED BY: MR DATE 4/11/25

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
GRADING SECTIONS: ALL WASTE

SCALE
HORIZ. _____
VERT. _____

DATE: APRIL 11, 2025
CAD FILE: A17058_GD_Accept all Debris_250404.dwg
DRAWING NO. 5.1

FIGURE 5

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Site Access

Access to the site is limited due to the absence of access roads, presence of private properties generally surrounding the site and presence of steep slopes/near vertical quarry walls. The Project site would be accessed through three potential options:

Private Driveway off El Monte Way

An alternative access road would be constructed between the project site and El Monte Way on a private property. This is the City's preferred option and is shown in **Figure 6**.

Pascale Place

The site is only accessible via Pascale Place by traversing the western portion of the City of Napa owned Lot A. A temporary road would be constructed up the hillside from Pascale Place to allow access for construction equipment. Portions of the temporary road may be constructed on the adjacent parcel (Lot 8). This is the City's second option and has not been designed.

No Access Road

In the event the City is unable to secure easements for a temporary access road or if it is infeasible to construct one, the City would need to transfer soil on and off the property at Pascale Place (the only location the City-owned property abuts a public road). This transfer operation would use a portion of the Pascale Place street right of way (traffic access would be maintained with at least one lane with flagger controls) and the flag section of the City-owned property. Soil (clean fill or waste-impacted soil [in the event it is hauled offsite]) would be transferred up and down the slope with an excavator, conveyor belt, or other mechanical equipment.

LOT 5

LIMIT OF WORK

HP131.5

HP131.5

LIMIT OF WORK

3
5.1

LAN

LANDS OF LEROY C. & ZIMBELI JOINT LIVING TRUST 2011-0022971 O.R.

LANDS OF SMITH FAMILY TRUST 2016-0045417-00 2016-0009862 O.R.

LP DRAIN
RIM 125.28
HP126.5

LIMIT OF WORK

TEMPORARY ACCESS ROAD FOR CONSTRUCTION. TO BE REMOVED AND GRADED TO BLEND IN WITH ADJACENT GRADES.

TEMPORARY CONSTRUCTION FENCE WITH WIND SCREEN

6' WOOD & WIRE FENCE

5' WOOD & WIRE FENCE

10'-0"

TREE REMOVAL

PRUNE TREE AS NEEDED FOR ACCESS

STABILIZED CONSTRUCTION ENTRANCE

CAUTION, OVERHEAD UTILITY LINE

4' METAL LIVESTOCK FENCE

CAUTION, OVERHEAD UTILITY LINE

COOMBSVILLE ROAD

EL MONTE WAY

12 HOUSE TO REMAIN

ROCK BOULDER EDGE

ROCK WALL

STEP-UP

WATER HEATER CLOSET

EX CB

LEGEND

- TEMPORARY CONSTRUCTION ACCESS
- EXISTING CONTOUR: 1'-0" INTERVAL TYP.
- PROPOSED CONTOUR: 1'-0" INTERVAL TYP.
- FIBER ROLL
- TEMPORARY FENCE
- TREE REMOVAL

NOTES

1. GRADING: ALL PROPOSED PAVING, CURBS, WALLS, AND PLANTING AREAS SHALL SMOOTHLY CONFORM TO EXISTING ADJACENT FEATURES TO REMAIN.
2. GRADING: CONTRACTOR SHALL PERFORM ALL EARTHWORK AND GRADING PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
3. LANDFILL CAP PROTECTION: REFER TO SPECIAL PROVISIONS SECTION 00 72 00 GENERAL REQUIREMENTS, SECTION 1.3.C FOR LANDFILL CAP PROTECTION REQUIREMENTS.

CONSTRUCTION ROUTE

NORTH

1" = 20'

0 20 40 feet

LICENSED LANDSCAPE ARCHITECT
MELISSA RUTH MCNEES
Signature
May 31, 2025
Renewal Date
Date
STATE OF CALIFORNIA

CALA

Callander Associates
Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 4/11/25
DESIGNED BY: BS DATE 4/11/25
CHECKED BY: MR DATE 4/11/25

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
FIGURE 6 - Site Access Location

SCALE
HORIZ. _____
VERT. _____

DATE: APRIL 11, 2025
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DRAWING NO. 5.2
SHEET NO. X OF 24

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Construction Phasing and Schedule

Construction of the Project is planned over approximately three months from August 2025 through October 2025 but may be delayed to 2026. Construction activities would typically take place Monday through Friday, 8 a.m. to 5 p.m. Approximately 10 workers would be onsite each day during remediation activities.

The Project may also be phased wherein waste-impacted soil from adjacent residential properties is stockpiled on the City-owned property and covered onsite in August 2025 through October 2025 and then site excavation, grading, and capping activities completed in 2026. The RAP (Appendix B) includes provisions and requirements for stockpiling of waste-impacted soil prior to reconsolidation or offsite disposal.

Site grading and excavation equipment would be used during all phases and include a large excavator, mini excavator, backhoe, loader, dozer, compactor, and dump trucks. Hand digging tools and methods would be used for remediation in the buffer zone, when necessary, to minimize heavy equipment use nearby residences.

A maximum of 3,500 cubic yards of waste-impacted soil could be excavated from the City-owned property and accepted from adjacent residential properties under the Project, which would be consolidated onsite and capped with clean fill or hauled offsite. If hauled offsite, waste-impacted soil would be transported to Kettleman Hills Class I non-RCRA hazardous waste landfill and Altamont Class II non-hazardous waste landfill. A maximum of 6,050 cubic yards of clean soil fill would be imported to the site under the Project.

Health and Safety Plans

Site Health and Safety Plan

The Project includes a Site Health and Safety Plan (SHSP) that provides policies, information, requirements, and guidelines regarding procedures to be followed by field personnel, subcontractors, and other staff during implementation of the Project. The SHSP is prepared in general accordance with the Federal Occupational Safety and Health (OSHA) Administration Hazardous Waste Operations and Emergency Response Plans, as well as applicable California CCR requirements. See **Appendix B** (Appendix D of the RAP) for the Project SHSP.

Community Health and Safety Plan

The Project includes a Community Health and Safety Plan (CHSP) that provides measures to protect the public and surrounding land uses from the potential health hazards during future on-site construction activities. See **Appendix B** (Appendix E of the RAP) for the Project CHSP.

9. Required Agency Approvals:

The Project requires City of Napa's discretionary approval of the award of a contract to complete the construction of the Project.

10. Tribal Consultation:

The City of Napa notified the following tribes requesting Assembly Bill (AB) 52 notification for projects subject to CEQA:

1. Confederated Villages of Lisjan Nation
2. Yocha Dehe Wintun Nation

The City sent project notification letters via certified mail to both tribes and neither tribe requested formal consultation within 30 days of receipt of the notification letter.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use /Planning	☐ Mineral Resources
☐ Noise	☐ Population /Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Signature _____ July 8, 2025
Date

Chris Jones
Printed Name

AESTHETICS

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
1.	**AESTHETICS —** Except as provided in Public Resources Code Section 21099, **would the proposed project:**				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point. If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☒

Discussion

a, c) **Less-than-Significant Impact.** Visual resources can be valued both objectively and subjectively based on their uniqueness, prominence, quality, relationship to community identity, and economic contributions, such as to land values and tourism. Visual resources are important from an aesthetic perspective when, based on the characteristics listed above, they are identified as containing significant scenic value. Within this understanding, a scenic vista can be defined as the public view of an area that is visually or aesthetically unique, such as a valley or a mountain range.

The Project site is private City-owned property that is currently vacant and covered with perennial grasses that are periodically mowed down. Surrounding views at the Project site include views of the adjacent residential properties and quarry walls/cliffs (see **Appendix A** for photographs of the surrounding views). The existing views of the Project site do not constitute an identifiable scenic vista or scenic viewshed.

Once operational, the waste-impacted soil would be reconsolidated onsite and covered with 2 feet of clean fill essentially capping it or hauled offsite to an appropriate landfill for disposal. If the waste-impacted soil is kept onsite, the grade of the vacant lot would be raised by several feet. Furthermore, waste-impacted soil from adjacent properties could be stockpiled on the Project site and covered with plastic sheeting (pursuant to RAP requirements) for up to one year. However, since there are no identifiable scenic vistas at the Project site, the increase in grade and/or temporary covered waste-impacted soil stockpile would not block any views of nearby scenic vistas. Thus, development of the Project would not result in substantial adverse effects to scenic vistas. Furthermore, raising the grade of the lot by several feet would not degrade the existing visual character

of the site or quality of views of the quarry walls, and the temporary covered waste-impacted soil stockpile (if necessary) would not result in permanent changes to the visual character or quality of views of the site. The Project would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, the Project would result in a less-than-significant impact.

b) **No Impact.** The Project site is not within or near a designated state scenic highway. There are no identifiable scenic resources within the Project site, such as historic buildings or rock outcroppings. The Project would not substantially damage scenic resources within a state scenic highway. Therefore, the Project would result in no impact.

d) **No Impact.** There is currently no lighting at the Project site. The Project would not introduce new lighting that would affect daytime or nighttime views of the area. Therefore, the Project would result in no impact.

AGRICULTURAL AND FOREST RESOURCES

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
2. AGRICULTURAL AND FOREST RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the proposed project:**				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Introduction

The Project site is zoned Open Space & Parks in the City's 2040 General Plan. The Project site includes no forest land, timberland, or agricultural use, and is not under a Williamson Act contract.

Discussion

a) **No Impact.** The Project site does not contain any areas of Farmland of Statewide Importance. The Project site would not convert any farmland or agricultural uses to non-agricultural uses. Therefore, the Project would result in no impact.

b) **No Impact.** The Project site has not been used for agriculture and is not under a Williamson Act contract. Therefore, the Project would result in no impact.

c, d) **No Impact.** There are no areas classified as forest land, timberland, or farmland within the vicinity of the Project that may be affected by the development of the Project. Therefore, the Project would result in no impact.

e) **No Impact.** The Project would not result in loss of farmland or forest land. Therefore, the Project would result in no impact.

AIR QUALITY

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
3. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. **Would the proposed project:**				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Introduction

This section describes construction air quality impacts associated with the Project and is consistent with the methods described in the Bay Area Air Quality Management District

(BAAQMD) *CEQA Air Quality Guidelines* (BAAQMD, 2023). Detailed modeling assumptions and results are provided in **Appendix C**.

Setting

The Project site is located within the San Francisco Bay Area Air Basin (Air Basin), which encompasses Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Marin, and Napa Counties, and the southern portions of Solano and Sonoma Counties.

Climate, Meteorology, and Topography

Air quality is affected by the rate, amount, and location of pollutant emissions and the associated meteorological conditions that influence pollutant movement and dispersal. Atmospheric conditions, including wind speed, wind direction, stability, and air temperature, in combination with local surface topography (i.e., geographic features such as mountains, valleys, and San Francisco Bay), determine the effect of air pollutant emissions on local air quality.

The climate of the Air Basin, including Napa, is a Mediterranean-type climate characterized by warm, dry summers and mild, wet winters. During summer and fall, conditions are favorable to the formation of photochemical pollutants, such as ozone and secondary particulates, such as sulfates and nitrates.

Criteria Air Pollutants

Concentrations of "criteria" air pollutants ("criteria" air pollutants are state and/or federally regulated) are used to indicate the quality of the air. These include ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 micrometers (coarse or PM10), particulate matter less than 2.5 micrometers (fine or PM2.5), and lead. Regulation of air pollutants is achieved through both national and state ambient air quality standards (AAQS), and emissions limits for individual sources. Regulations implementing the federal Clean Air Act established national ambient air quality standards (NAAQS) for the six criteria pollutants. California has adopted more stringent California ambient air quality standards (CAAQS) for most of the criteria air pollutants. In addition, California has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. There are considerable differences between state and federal standards in California.

The AAQS are intended to protect the public health and welfare, with an adequate margin of safety. They are designed to protect those segments of the public most susceptible to respiratory distress, known as sensitive receptors, including asthmatics, the very young, elderly, people weak from other illness or disease, or persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollution levels somewhat above the ambient air quality standards before adverse health effects are observed.

Under amendments to the federal Clean Air Act, United States Environmental Protection Agency (U.S. EPA) has classified air basins or portions thereof, as either in "attainment" or "non-attainment" for each criteria air pollutant, based on whether or not the NAAQS have been achieved. The California Clean Air Act, which is patterned after the federal Clean Air Act, also

requires areas to be designated as in "attainment" or "non-attainment" for the CAAQS. Thus, areas in California have one set of attainment / non-attainment designation with respect to the NAAQS and another set with respect to the CAAQS.

The Bay Area is currently designated "non-attainment" for 1-hour and 8-hour ozone CAAQS, the 8-hour ozone NAAQS, the PM10 CAAQS (annual and 24-hour), and the PM2.5 CAAQS (annual) and NAAQS (24-hour). The Bay Area is "attainment" or "unclassified" with respect to the other ambient air quality standards. Based upon the Bay Area's attainment status, pollutants of greatest concern include criteria pollutant emissions such as nitrogen oxides (NO_x)[1], volatile organic compounds (VOC) as reactive organic gases (ROG)[2], PM10, and PM2.5.[3]

Toxic Air Contaminants

Toxic air contaminants (TACs) are regulated under both state and federal laws. Federal laws use the term "Hazardous Air Pollutants" (HAPs) to refer to the same types of compounds that are referred to as TACs under state law. Both terms encompass essentially the same contaminants. Under the 1990 Federal Clean Air Act Amendments, 189 substances are regulated as HAPs.

With respect to state law, in 1983 the California legislature adopted Assembly Bill 1807 (AB 1807), which establishes a process for identifying TACs and provides the authority for developing retrofit air toxics control measures on a statewide basis. Air toxics in California may also be regulated by the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (Assembly Bill [AB] 2588). Under AB 2588, TACs from individual facilities must be quantified and reported to the local air pollution control agency. The facilities are then prioritized by the local agencies based on the quantity and toxicity of these emissions, and on their proximity to areas where the public may be exposed. In establishing priorities, the air districts are required to consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors that the air district determines may indicate that the facility may pose a significant risk. High-priority facilities are required to perform a Health Risk Screening Assessment (HRSA), and if specific risk thresholds are exceeded, they are required to communicate the results to the public in the form of notices and public meetings. Depending on the health risk levels, emitting facilities can be required to implement varying levels of risk reduction measures. California Air Resources Board (CARB) identified approximately 200 TACs, including the 189 federal HAPs, under AB 2588.

1 When combustion temperatures are extremely high, as in aircraft, truck and automobile engines, atmospheric nitrogen combines with oxygen to form various oxides of nitrogen (NO_X). Nitric oxide (NO) and NO_2 are the most significant air pollutants generally referred to as NOX. Nitric oxide is a colorless and odorless gas that is relatively harmless to humans, quickly converts to NO_2 and can be measured. Nitrogen dioxide has been found to be a lung irritant capable of producing pulmonary edema.

2 VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation. ROG are any reactive compounds of carbon, excluding methane, CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. The terms VOC and ROG are often used interchangeably.

3 PM10 and PM2.5 consists of airborne particles that measure 10 micrometers or less in diameter and 2.5 micrometers or less in diameter, respectively. PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs, causing adverse health effects.

Local Air Quality

The BAAQMD maintains a network of monitoring stations within the Air Basin that monitor air quality and compliance with applicable ambient standards. The monitoring station closest to the Project site is the Vallejo-Fairfield Monitoring Station at 304 Tuolumne Street, approximately eight miles south of the Project site. The Vallejo-Fairfield Monitoring Station measures levels of CO, ozone, PM2.5, SO_2, and NO_2. The Vacaville Monitoring Station measures levels of PM10 at Merchant Street, approximately 17 miles to the northeast of the Project site.

Table 1 summarizes the most recent three years of data (2022 through 2024) from BAAQMD's Vallejo-Fairfield and Vacaville Monitoring Stations. The ozone and PM_{10} standards were not exceeded. The PM2.5 standard was exceeded in 2022, 2023, and 2024. No other standards were exceeded during the three-year period.

TABLE 1 SUMMARY OF ANNUAL AMBIENT AIR QUALITY MONITORING DATA

Pollutant	Standard[a]	2022	2023	2024
Carbon Monoxide				
Highest 1-Hour Average (ppm)[b]	20	11.5	2.1	4.9
Highest 8-Hour Average (ppm)[b]	9	1.8	1.6	4.9
Ozone				
Highest 1-Hour Average (ppm)[b]	0.090	0.058	0.053	0.043
Highest 8-Hour Average (ppm)[b]	0.070	0.066	0.071	0.046
Coarse Particulate Matter (PM10)[c]				
Highest 24-Hour Average ($\mu g/m^3$)[b]	50	31	37	14.2
State Annual Average ($\mu g/m^3$)[b]	20	8.12	6.46	4.99
Fine Particulate Matter (PM2.5**)**				
Highest 24-Hour Average ($\mu g/m^3$)[b]	35	**35**	**38**	26
State Annual Average ($\mu g/m^3$)[b]	12/9	**12.0**	**12.3**	**11.2**
Nitrogen Dioxide (NO_2)				
Highest 1-Hour Average (ppm)[b]	0.180/0.100	0.044	0.044	0.069
Annual Average (ppm) [b]	0.030/0.053	0.007	0.006	0.010

NOTES: Values in **bold** are in excess of at least one applicable standard.

a. Generally, state standards and national standards are not to be exceeded more than once per year.

b. ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter.

c. PM_{10} is not measured every day of the year. Number of estimated days over the standard is based on 365 days per year.

Source: United States Environmental Protection Agency, AirData, *https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors*

Regional Air Quality Plans

The 1977 Clean Air Act amendments require that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of pollutants can be controlled in order to achieve all standards specified in the Clean Air Act. The 1988 California Clean Air Act also requires development of air quality plans and strategies to meet state air quality standards in areas designated as non-attainment (with the exception of areas designated as non-attainment for the state PM standards). Maintenance plans are required for attainment areas that had previously been designated non-attainment in order to

ensure continued attainment of the standards. Air quality plans developed to meet federal requirements are referred to as State Implementation Plans.

Bay Area ozone levels have been greatly reduced in recent years, but the region still does not fully attain the CAAQS and NAAQS. The California Clean Air Act, as codified in the California Health and Safety Code, requires air districts that do not attain state ozone standards to prepare ozone plans. To that end, BAAQMD's 2017 Clean Air Plan serves to update the most recent Bay Area ozone plan, the 2010 Clean Air Plan. The Health and Safety Code requires that ozone plans propose a control strategy to reduce emissions of ozone precursors—ROG and NOx—and reduce transport of ozone and its precursors to neighboring air basins. The control strategy must either reduce emissions five percent or more per year or include "all feasible control measures." Because reducing emissions of ozone precursors by five percent per year is not achievable, the control strategy for the 2017 Clean Air Plan is based on the "all feasible measures" approach.

Sensitive Receptors

Land uses such as schools, children's daycare centers, hospitals, and convalescent homes are considered to be more sensitive than the general public to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. The CARB has identified children less than 14 years of age, the elderly over 65 years of age, athletes, and those with cardiovascular and chronic respiratory diseases as most likely to be affected by air pollution. These groups are classified as sensitive population groups.

Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational uses are also considered sensitive, due to the greater exposure to ambient air quality conditions and because the presence of pollution detracts from the recreational experience. According to the BAAQMD, workers are not considered sensitive receptors because all employers must follow regulations set forth by the Occupation Safety and Health Administration to ensure the health and well-being of their employees.

BAAQMD considers the relevant zone of influence for an assessment of air quality health impacts to be within 1,000 feet of a project site. There are eight adjacent residential receptors[4] on properties that share a property line with the Project site and many more within 1,000 feet as you move away from the site to the north, east, south, and southwest. Silverado Middle School is approximately ¼ mile east of the Project site.

Significance Criteria

As stated in Appendix G of the CEQA *Guidelines*, the significance criteria established by the applicable air quality district may be relied upon to make the determinations. Thus, according to

4 See Project Description for the distances of the nearest residential structures to the Project property line.

BAAQMD's *CEQA Guidelines*, the Project would result in a significant impact to air quality if it would result in the following:

- Average daily construction exhaust emissions of 54 pounds per day of ROG, NO_x, or PM2.5 or 82 pounds per day of PM10;
- Average daily operation emissions of 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10; or result in maximum annual emissions of 10 tons per year of ROG, NOx, or PM2.5 or 15 tons per year of PM10;
- Exposure of sensitive receptors to substantial levels of TAC resulting in (a) a cancer risk level greater than 10 in one million, (b) a noncancerous risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average $PM_{2.5}$ of greater than 0.3 micrograms per cubic meter ($\mu g/m^3$).
- Frequently and for a substantial duration, create or expose sensitive receptors to substantial objectionable odors affecting a substantial number of people.

Discussion

a) **Less-than-Significant Impact.** BAAQMD's 2017 Clean Air Plan provides a roadmap for BAAQMD's efforts to reduce air pollution and protect public health and the global climate. Determination of whether a project supports the goals in the 2017 Clean Air Plan is achieved by a comparison of project-estimated emissions with BAAQMD thresholds of significance. If project emissions would not exceed the thresholds of significance after the application of all feasible mitigation measures, the project is consistent with the goals of the 2017 Clean Air Plan. As presented in the subsequent impact discussions, the Project would not exceed the BAAQMD significance thresholds; therefore, it would not conflict with the goals of the 2017 Clean Air Plan and would not hinder implementation of any of the control measures. Therefore, the Project would result in a less-than-significant impact.

b) **Less-than-Significant Impact with Mitigation.** The Project would generate air pollutant emissions during temporary construction activities. Construction-related activities would generate air pollutant emissions from off-road equipment, on-road trucks, and worker automobiles. Fugitive dust emissions would also be generated by ground disturbance and would vary as a function of soil silt content, soil moisture, wind speed, and acreage of disturbance. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.29 (CAPCOA, 2022) and are summarized in **Table 2**. Detailed modeling assumptions and results are provided in **Appendix C**.

TABLE 2 ESTIMATED PROJECT AVERAGE DAILY CONSTRUCTION EMISSIONS

Condition	ROG lbs/day	NOx lbs/day	PM10 [1] lbs/day	PM2.5 [1] lbs/day
Construction	1.59	16.3	0.65	0.59
BAAQMD Thresholds of Significance	54	54	82	54
Potentially Significant?	No	No	No	No

NOTES:

[1] PM10 and PM2.5 construction thresholds of significance apply to exhaust emission only. Fugitive PM10 and PM2.5 (fugitive dust) are less than significant assuming required best management practices are implemented.

SOURCE: CAPCOA, 2022.

BAAQMD's *CEQA Air Quality Guidelines* require that projects implement all the BAAQMD's basic best management practices (BMPs) for a project to have a less than significant construction-related fugitive dust emissions impact. Therefore, the Project would implement the required BMPs through **Mitigation Measure AQ-1** and construction would result in a less-than-significant impact with mitigation.

Mitigation Measure AQ-1: The applicant shall implement the following during construction of the Project:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.

- A publicly visible sign shall be posted with the telephone number and the person to contact the City regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

The BAAQMD *CEQA Air Quality Guidelines* recommend that cumulative air quality effects from criteria air pollutants also be addressed by comparison to the mass daily and annual thresholds. These thresholds were developed to identify a cumulatively considerable contribution to a significant regional air quality impact. As described, the Project-related construction emissions would be below the significance thresholds. Therefore, the Project would not be cumulatively considerable, and cumulative impacts would be less-than-significant.

c) **Less-than-Significant Impact.** Health effects are generally evaluated based on a long-term (30 years) of exposure. According to the BAAQMD, the project type is not one that would require a health risk assessment for CEQA purposes because it is short-term (approximately two to three months) and would not generate substantial TAC pollutant concentrations. As shown, in **Table 2**, PM2.5 emissions from exhaust (diesel particulate matter), would be roughly one percent of the threshold and any TACs in waste-impacted soils disturbed by the Project would be controlled through BMPs in **Mitigation Measure AQ-1** and the CHSP (see **Appendix B**). The CHSP provides measures to protect the public and surrounding land uses from the potential health hazards during future on-site construction activities. Furthermore, remediation of the Project site would be protective to human health and the environment through the removal or covering of waste-impacted soil, exceeding Class I non-RCRA State of California Hazardous Waste Criteria and Residential Environmental Screening Limits for Lead. Thus, impacts during construction would not expose sensitive receptors to substantial pollutant concentrations. Therefore, the Project would have a less-than-significant impact.

d) **Less-than-Significant Impact.** With respect to the Project, diesel-fueled construction equipment and haul truck exhaust would generate some odors. However, these emissions typically dissipate quickly and would be unlikely to affect a substantial number of people. Therefore, the Project would result in a less-than-significant impact.

References

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Bay Area Air Quality Management District, *Air District, About the Air District, In Your Community, Napa County*. April 21, 2017, https://www.baaqmd.gov/en/about-the-air-district/in-your-community/napa-county

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California Air Pollution Officers Association, California Emissions Estimator Model User Guide Version 2022.1, April 2022, http://www.caleemod.com/

United States Environmental Protection Agency, AirData, https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors

BIOLOGICAL RESOURCES

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4. BIOLOGICAL RESOURCES — Would the proposed project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Introduction

This section is based on a Biological Resources Assessment (BRA) conducted by Swift Biological Consulting, LLC (Swift Biological) in April 2025. The BRA is provided in **Appendix D**. The BRA includes a literature review as well as field surveys conducted on March 19, 2025, and April 8, 2025. The field surveys were conducted to document existing site conditions and the potential presence of special-status biological resources (i.e., federal- and state-listed plant and wildlife species, sensitive natural communities, jurisdictional waters and wetlands, habitat for nesting birds, and wildlife migration areas). The findings of the BRA are utilized in this section to evaluate the Project's potential impacts to biological resources.

Discussion

a) **Less than Significant Impact with Mitigation.** Based on background review, a list of special-status plants and animals with the potential to occur within the Project site was generated. Only the special-status species that are present onsite or have the potential to occur onsite are discussed in this analysis.

Plant and animal species with no potential to occur onsite or that are not expected to occur onsite are not addressed further in this analysis. For a full list of plant and animal species that are not expected to occur onsite, see the BRA provided in **Appendix D.**

No special-status plants were observed during the field surveys. Native soils and intact native plant communities are absent from the Project site due to the long history of disturbance from when the Project site operated as a rock quarry and then as a dump site. The Project area is highly disturbed, making it unsuitable for special-status plants to occur. In addition, the Project site lacks the hydrological and topographical conditions to support special-status plant species. Thus, the Project would not impact special-status plants (**Appendix D**).

During the field surveys, two special-status animal species were observed onsite. These include the Oak titmouse (*Baeolophus inornatus*) and Nuttall's woodpecker (*Dryobates nuttallii).* Both are United State Fish and Wildlife Service (USFWS) Birds of Conservation Concern (BCC) and common birds of oak woodlands and wooded suburban areas in Napa County (**Appendix D**). The Project site includes areas that support habitat for these protected nesting birds. Due to the Project's native trees and understory vegetation, roosting bats have a moderate potential to occur onsite. See **Table 3** for special-status animals that occur or have the potential to occur within the Project site.

TABLE 3 SPECIAL-STATUS ANIMALS WITH POTENTIAL TO OCCUR WITHIN THE PROJECT SITE

Common Name *Scientific Name*	**Listing Status**[1]	**Habitat Requirements**	**Local Observations and Potential for Occurrence within the Project Site**
Oak Titmouse *Baeolophus inornatus*	BCC	Small, brown-tinged gray bird with small crest. Occurs in oak woodlands and open pine or mixed oak-pine forests. Feeds among the branches and larger twigs of trees for insects among the foliage and bark. Feeds primarily on insects, nuts, and seeds. Pairs mate for life and defend territories year-round. Nest in cavities of trees or nest boxes. A year-round resident in Napa County.	Present. Species observed within the Project site. Suitable foraging and nesting habitat is present in the oak trees onsite.
Nuttall's Woodpecker *Dryobates nuttallii*	BCC	Small woodpecker of oak woodland habitats. Feeds primarily on insect larvae by tapping and probing into the crevices of oak trees. This species is found year-round in oak woodlands, wooded suburban areas, and near streams. This species is non-migratory. It occurs throughout California's oak woodland communities but extends into Baja, Mexico. A cavity nesting species. Males excavate out a cavity in a dead tree. They form monogamous pairs and will defend their territories year-round. A permanent resident in Napa County oak woodlands.	Present. Species observed within the Project site. Suitable foraging and nesting habitat is present in the oak trees onsite.
Pallid Bat *Antrozous pallidus*	SSC	Grassland, shrubland, forest, and woodland habitats from sea level up through mixed coniferous forests. Found from south-central British Colombia to central Mexico and Cuba. Most common in open, dry habitats with rocky areas for roosting. A social species forming small colonies. Roosting sites include caves, mines, crevices, buildings, and hollow trees during the day, and more open sites are used at night. Feed on a variety of insects and arachnids; most prey are taken on the ground. The mating season ranges from October to February. One to three (typically twins) pups are born from April to July. A yearlong resident throughout most of its range.	Moderate potential. The Pallid Bat is reported from multiple sightings within 5 miles of the Project site. Bats may forage over the Project site. Some of the larger trees may provide limited roosting habitat.

NOTES:

[1] Animal Listing Status Codes: BCC-USFWS Bird of Conservation Concern; SSC-California Department of Fish and Wildlife (CDFW) Species of Special Concern.

SOURCE: Swift Biological, 2025. (**Appendix D)**

As shown in **Table 3,** two special-status animal species were observed onsite, and another special-status species has moderate potential to occur onsite. Due to the construction needed for remediation activities (i.e., daytime construction, vegetation removal, grading, and other ground-disturbing activities), the Project could directly impact special-status nesting birds and bats. **Mitigation Measures BIO-1 and BIO-2** would reduce this potentially significant impact to a less than significant level.

Mitigation Measure BIO-1: To avoid potential impacts on nesting birds, the following protection measures shall be implemented:

- Preconstruction nesting bird surveys shall be completed from February 1- August 31. A survey shall be completed within 7 days before the beginning of Project-related activities. The survey area shall include the Project site and an appropriate buffer around the site to identify any nesting that could be impacted directly or indirectly by the Project-related activities. The survey shall follow established nesting search protocols described in Martin and Geupel (1993) and CDFW and USFWS protocols, where appropriate. If the qualified biologist finds no active nests or breeding activity indicating nests are present, then work can proceed without restrictions. If there is a lapse in Project-related activities for 7 days or more, then a follow-up survey may be required per the recommendations of the qualified biologist.
- If active nests are identified during the survey and the nests are within the Project site or the buffer area and nesting would be adversely affected, a "No Work Zone" buffer area shall be demarcated around each nest site by the qualified biologist. Buffer distances for each bird nest shall be site-specific and established to protect the bird's normal behavior to prevent nesting failure or abandonment. The buffer distance shall vary by species, nest location, existing visual and topographical buffers, and intensity and extent of the construction-related disturbance. The buffer area may be as small as 25-50 feet for common, disturbance-adapted species or much larger (e.g., 100-250 feet) for sensitive species like raptors and owls. The "No Work Zone" shall be established in the field with flagging, fencing, or other appropriate material and shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive due to predation or other natural causes as determined by the qualified biologist. The qualified biologist shall continue to monitor the behavior of the birds at the nest site during construction activities to ensure that they are not disturbed by the project work. Nest monitoring shall continue until the nesting attempt is complete. If state and/or federally-listed birds are found breeding within the area, consultation with the CDFW and USFWS may be required.
- If initial ground-disturbing activities occur outside of the nesting season (September 1 through January 31), then a preconstruction survey would not be required, and construction could begin unimpeded.

Mitigation Measure BIO-2: To avoid potential impacts on roosting bats, the following protection measures shall be implemented:

- Before tree removal/trimming (branches over 12" Diameter at Breast Height [DBH]), a qualified biologist shall survey for potential bat roosts and occupied habitats. If active bat roosts are identified within the trees to be removed, the disturbance shall not be allowed until the roost is abandoned or unoccupied.
- If tree trimming/removal is postponed or interrupted for more than two weeks from the date of the initial bat survey, the biologist shall repeat the pre-construction survey.
- Tree removal or trimming is recommended from September 1 to October 15 or March 1 to April 15 to avoid the bat maternity roost and winter hibernation season.

- To the extent feasible, tree work should be avoided between April 15 and September 1 during the maternity roost season [bats are especially vulnerable during this period when females are nursing pups, and the pups are non-volant (not capable of true flight)].

b) **No Impact.** The Project site does not contain riparian habitat and thus would have no impact on any riparian habitat (**Appendix D**). Therefore, the Project would result in no impact.

c) **No Impact.** The Project site does not contain any wetlands or other natural aquatic habitat features, such as stream channels or drainages. No evidence of hydrophytic vegetation, hydric soils, and stream or wetland hydrology was observed during biological surveys of the site (**Appendix D**). All the plant communities present onsite are dominated by upland grasses, forbs, and woody vegetation. Thus, the Project would not impact any federal protected wetlands. Therefore, the Project would result in no impact.

d) **No Impact.** There is no habitat for candidate, sensitive, or special-status species of fish. The Project site does not contain any wetlands or other natural aquatic habitat. The Project would not interfere with the movement of migratory wildlife species or use of nursery site. Therefore, the Project would result in no impact.

e) **Less than Significant Impact with Mitigation.** The Project would require the removal of several native coast live oak trees along Pascale Place and/or near the proposed access road. Along Pascale Place, there are two smaller oaks, 3- and 4-inch DBH on the lower slope, and a cluster of three trees on the upper slope measuring 15-, 17-, and 20-inch DBH. Near the proposed access road at the southwest corner, there is a multi-trunk coast live oak tree that would need to be removed along with some trimming of larger branches of nearby trees. The remaining trees onsite would be protected.

The trees proposed for removal are considered protective native trees by the City of Napa and would require tree replacement mitigation in accordance with City policies. **Mitigation Measures BIO-3** would reduce this potentially significant impact associated with a potential conflict with local tree preservation policies to a less than significant level.

Mitigation Measure BIO-3: To avoid the potential impact associated with a potential conflict with City tree preservation policies, the following shall be implemented:

- Prior to tree removal, the DBH of protected trees proposed for removal shall be confirmed and documented. For every 6 inches of DBH or fraction thereof removed, two trees of the same species shall be planted on or offsite within the City. Tree planting shall be completed by the City within one year of tree removal in a location to be determined and at the City's discretion.

f) **Less than Significant Impact.** There are no habitat conservation plans or natural community conservation plans in effect that apply to the Project area, therefore, the Project would not conflict with any habitat conservation plans, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Project would result in a less-than-significant impact.

References

Swift Biological Consulting, LLC, 2025. *Biological Resources Assessment for the Hidden Glen Remediation Project, City of Napa.* April 2025.

CULTURAL RESOURCES

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
5. CULTURAL RESOURCES — Would the proposed project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Introduction

This section is based on a Cultural Resources Investigation conducted by Natural Investigations Company (NIC) in March 2025. NIC completed a cultural and paleontological resources investigation of the Project site. The investigation included a records search with the Northwestern Information Center (NWIC) of the California Historical Resources Information System (CHRIS), Sacred Lands File (SLF) search with the Native American Heritage Commission (NAHC), a paleontological records search from the University of California Museum of Paleontology (UCMP), additional archival research focused on historical mapping and land transfer records, and field survey on March 3, 2025. The Cultural Resources Investigation is on file with the City and is confidential due to the potential for releasing potentially sensitive cultural information.

The records search results indicated that no cultural resources have been previously recorded within the Project site. However, four previous surveys were conducted within .25-mile of the site. None of these surveys identified any cultural or ethnographic resources (NIC, 2025). The SLF search identified sacred sites associated with the Mishewal-Wappo Tribe of Alexander. NIC submitted consultation letters to the Guidiville Rancheria of California, Mishewal-Wappo Tribe of Alexander Valley, Pinoleville Pomo Nation, and the Yocha Dehe Wintun Nation. No Tribal concerns were identified (NIC, 2025). UCMP records indicate that 143 fossils are known within Napa County. Most of the reported specimens are invertebrates and were found in contexts related to the Chico, Tehama, Knoxville, Markley, and Paskenta formations, which do not occur in the Project area (NIC, 2025).

No new precontact sites, historic sites, features, cultural materials, or ethnographic sites were observed or recorded during the pedestrian survey (NIC, 2025). No paleontological resources and no unique geologic features or outcrops were identified during the pedestrian survey (NIC, 2025).

Discussion

a) **No Impact.** Archival research and an intensive field survey did not identify any prehistoric cultural resources within the Project area (NIC, 2025). No buildings or structures appear to have been built within the Project area. Consequently, there is very little chance that any intact and potentially significant historic-era resources pre-dating

the early 20th century could be present within the Project area. The survey noted that the Project would not significantly impact any resource that would qualify for listing as eligible on the California Register of Historic Resources (CRHR). Therefore, the Project would result in no impact.

b,c) **Less-than-Significant Impact with Mitigation.** Archival research and an intensive field survey did not identify any significant archaeological or cultural resources within the Project area (NIC, 2025). The survey noted that due to the burning of waste products, earth moving, introduction of outside soils, use of heavy machinery, and contamination of the Project area, the likelihood of finding buried cultural resources, archaeological resources, or human remains is low. However, there always exists a potential to encounter previously unreported subsurface archaeological resources (including human remains). In the unlikely event that cultural resources, archaeological resources, or human remains are inadvertently discovered, **Mitigation Measures CUL-1 through CUL-2** would reduce this potentially significant impact to a less than significant level.

Mitigation Measure CUL-1: In the event that cultural resources are discovered, regardless of significance, all work shall be halted within a 50-foot radius of the discovery and a qualified archaeologist shall be immediately notified. Any soil or cultural or tribal cultural resources that have been removed shall be retained in as close to the original context as possible until reviewed by a qualified archaeologist and applicable tribal representative. Work shall continue outside of the 50-foot buffer around the discovery. If the find is deemed not significant by the qualified archaeologist and applicable tribal representative, work shall resume within the 50-foot buffer. If the find is deemed significant by the qualified archaeologist, additional work, such as shovel testing or data recovery, shall be required and shall be determined through consultation with the City, State Historic Preservation Office, regulatory agencies, affiliated Tribal governments, or other stakeholders, as appropriate.

Mitigation Measure CUL-2: In the event of discovery or recognition of any human remains, the stipulations of State of California Health and Safety Code Section 7050.5 shall be followed to treat the discovery. The Napa County Coroner shall be notified immediately of the discovery of human remains and no further disturbance shall occur in the area of the discovery until the Napa County Coroner has made a determination of origin and disposition of the remains pursuant to PRC Section 5097.98. If the human remains are determined to be of Native American origin, the Coroner shall notify the NAHC, who will determine and notify a Most Likely Descendent (MLD). Treatment of the remains should be determined in consultation with the MLD and appropriate regulatory agencies.

References

Natural Investigations Company (NIC), 2025. *Cultural Resources Investigation for the Napa Hidden Glen Dump Remediation, Napa County.* March 2025.

ENERGY

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
6. ENERGY — Would the proposed project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Introduction

Energy resources required for the Project would include diesel and gasoline. These energy resources would be required for offroad equipment, haul trucks, and vehicles supporting the Project.

Setting

The following presents setting information applicable to the Project. Since no buildings would be constructed with the Project, the California Building Energy Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (Title 24, Part 11) are not discussed.

Petroleum Fuels

The Project would consume petroleum-based fuels during construction for onsite heavy equipment and vehicles (worker automobiles and haul trucks). In 2023, at fueling stations within the state, California gasoline sales were approximately 11,685 million gallons, diesel fuel sales were approximately 2,016 million gallons, and natural gas sales were approximately 85.65 million gallons (CEC, 2024).

Discussion

a) **Less-than-Significant Impact.** The Project would consume energy resources during construction activities. Construction activities are a temporary and one-time direct source of energy consumption. Construction activities would consume petroleum fuels (primarily diesel and gasoline) through the operation of heavy off-road equipment, haul trucks, and worker automobiles.

Based on California Air Pollution Officers Association (CAPCOA) CalEEMod (California Emissions Estimator Model Version 2022.1) results (**Appendix C**) for Project construction and standard fuel consumption conversion factors, construction would require approximately 13,888 gallons of diesel and 516 gallons of gasoline. The CalEEMod model inputs are provided in **Appendix C** along with the detailed emissions results. The CalEEMod modeling assumed a three-month construction period, with three to five pieces of heavy construction equipment operating onsite each day depending on

the given phase, heavy trucks exporting waste-impacted soil and importing clean fill, and worker automobiles traveling to and from the site each day.

Construction of the Project would occur intermittently over approximately two to three months. Project construction would utilize fuel efficient equipment and trucks consistent with state regulations and would be consistent with state regulations intended to reduce the inefficient, wasteful, or unnecessary consumption of energy, such as anti-idling and emissions regulations. Furthermore, construction contractors are economically incentivized to employ energy efficient techniques and practices to reduce fuel use to lower overall construction costs.

In light of these statutory and regulatory requirements, the consumption of energy resources during Project construction would not result in a wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, Project construction would result in a less-than-significant impact.

b) **No Impact.** The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. Because the Project does not propose development or a change in activities on the Project site, there are no renewable energy or energy efficiency plans applicable to the Project. Therefore, the Project would result in no impact.

References

California Energy Commission, *Final 2019 Integrated Energy Policy Report,* November 08, 2019, https://www.energy.ca.gov/publications/2019/2019-integrated-energy-policy-report

California Energy Commission, California Retail Fuel Outlet Annual Reporting Results, 2024, https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting

California Air Resources Board, *Final 2022 Scoping Plan Update*, November 16, 2022, https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan#:~:text=The%20Draft%202022%20Scoping%20Plan,neutrality%20no%20later%20than%202045

U.S. Energy Information Administration, *Carbon Dioxide Emissions Coefficients*, September 18, 2024, https://www.eia.gov/environment/emissions/co2_vol_mass.php

GEOLOGY AND SOILS

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
7. GEOLOGY AND SOILS — Would the proposed project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Introduction

Geologic Setting

The eastern side of the city of Napa and the Project site are underlain by Pliocene age[5] Sonoma Volcanics. The Sonoma Volcanics are a complex collection of rocks originating from volcanic activity. The composition of these rocks is highly variable and represents an accumulation of material erupted from numerous volcanic source vents. These types of volcanic rocks, namely

5 The Pliocene Epoch spanned from about 11 to 3 million years ago.

rhyolite [6], ashflow tuff [7], and breccia[8] were observed at the surface of the Project site or during exploration drilling. The original quarry was excavated through these volcanic rocks to a depth of about 80 feet and then over its years as a municipal dump, it was backfilled with waste materials. These waste materials are currently covered under an engineered cap consisting of topsoils, a geo-composite drainage net, and polyethylene membrane and foundation fills. The buffer areas surrounding the capped portion contain soil-waste mixtures up to 20-inches thick (Ninyo and Moore, 2024).

The depth of groundwater beneath the Project site appears variable due to the presence of complex native bedrock and the soil-waste materials beneath the cap. Groundwater flow through bedrock has a low hydraulic conductivity [9] because it is controlled by a combination of the dense bedrock matrix, non-interconnected fractures, and/or by the variability of contact zones between different volcanic units (Ninyo and Moore, 2024). Reportedly, the quarry was abandoned due to the presence of groundwater at a depth of about 80 feet below ground surface, which suggests a deeper, and possibly more connected, water bearing zone. However, groundwater was encountered in the three existing landfill gas (LFG) wells (MW-1, 2, and 3; see section 9, *Hazards and Hazardous Materials*) at depths ranging between 8 and 22 feet. The variability of groundwater levels measured in these wells suggests the intrusion of locally present subsurface water into the screened intervals of the wells, rather than the presence of a stable, shallow groundwater table in a continuous water bearing zone.

Napa County is within the seismically active San Francisco Bay Area and will therefore experience the effects of future earthquakes.[10] There are numerous active faults in the San Francisco Bay area region and many earthquakes have occurred here throughout history. The Project site is situated between the active West Napa Fault Zone, located about 2.5 miles to the west and the active Green Valley fault located 5 miles to east (CGS, 2023a). The West Napa fault was the source for the magnitude 6.0 South Napa earthquake that occurred in Napa County on August 24, 2014 and the magnitude 5.2 Yountville earthquake, which occurred on September 3, 2000.

The intensity of earthquake ground shaking will be dependent on several factors including distance from the site to the earthquake epicenter, depth of the earthquake, earthquake magnitude, and the response of the underlying soils. The city of Napa could experience strong to violent ground shaking in the event of a local or regional earthquake from any one of the active faults in northern California. The Project site is underlain by native bedrock but also about 80 feet of waste material under the capped portion of the former landfill. Bedrock attenuates groundshaking

6 Rhyolite is a pale fine-grained volcanic rock of granitic composition,
7 Tuff is a type of igneous rock formed from consolidated or welded deposits of volcanic ash, tephra, and other volcanic debris, typically resulting from explosive volcanic eruptions.
8 Breccia is a clastic sedimentary rock composed of angular, broken fragments of rocks or minerals cemented together by a fine-grained matrix.
9 Hydraulic conductivity is a measure of the capacity of a soil or rock to transmit water.
10 The 2014 Working Group on California Earthquake Probabilities concluded from its updated 30-year earthquake forecast for California that there is a 72-percent probability of at least one earthquake of magnitude 6.7 or greater occurring somewhere in the San Francisco Bay region before 2043 (USGS, 2016).

but the presence of waste materials could amplify seismic waves, increasing ground shaking on the Project site.

The Project site is not within an area zoned under California's Seismic Hazards Mapping Act (SHMA), which identifies areas susceptible to strong ground shaking, liquefaction, landslides, and other ground failures caused by seismic events. As the closest active fault is over 2 miles away, the Project site is not within an earthquake faults zone delineated under the Alquist-Priolo Earthquake Fault Zoning Act (CGS, 2023a).

Discussion

ai) **No Impact.** The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and is approximately 2.5 miles from the nearest fault (the West Napa fault) capable of causing surface rupture (CGS, 2023a). There are no mapped traces of older faults extending through the Project site (CGS, 2023b). Therefore, there is no potential for the Project site to experience surface fault rupture from a known mapped earthquake fault. Therefore, the Project would result in no impact.

aii) **Less-than-Significant Impact.** Major factors that affect the severity (intensity) of ground shaking include the size (magnitude) of the earthquake, the distance to the fault that generated the earthquake, and the underlying geologic materials. Seismic ground shaking from regional fault zones, including those along the Green Valley, Concord, or Clayton faults, as well as other major faults in the San Francisco Bay Area (namely, the San Andreas fault and the Hayward-Rodgers Creek fault) could affect the Project site. The Project involves excavating waste-impacted soil and reconsolidating elsewhere on the parcel or hauling it offsite. No structures are proposed. Final grading and site restoration would improve soils stability through reconsolidation of fills, contouring, and vegetation. Compared to current site conditions, the proposed remedial actions would not increase the potential for, or exacerbate, the ground shaking hazards during a moderate or major earthquake at the Project site. Therefore, the Project would result in a less-than-significant impact.

aiii) **Less-than-Significant Impact.** Liquefaction occurs when saturated sandy or gravelly materials become liquified due to earthquake ground shaking. Liquefaction causes a material to lose bearing strength and can result in differential settlement and consolidation, which, in turn, can damage structures and utilities. Lateral spreading occurs when liquified soil materials move downslope during an earthquake. Under current conditions, the Project site is underlain by bedrock under a shallow cover of soil-waste mixtures (buffer areas and adjacent properties) and a zone beneath an engineered cap consisting of heterogenous fill and landfill waste materials. The engineered cap materials are not prone to liquefaction. Subsurface water underlying the Project site appears variable and is not representative of a shallow groundwater table. However, a water bearing zone within the bedrock that may constitute a deep-water table is present approximately 80 feet beneath the site. Given the heterogeneous nature of the soil-waste mixtures beneath the cap and the apparent lack of a shallow groundwater bearing zone, the potential for these materials to liquefy during an earthquake is low. The Project would

relocate waste-impacted soils, reconsolidate them on the existing cap, and cover them with imported clean fills or haul them offsite. As required in the RAP, clean imported fills would be required to meet acceptability criteria as determined by a professional geotechnical engineer who would ensure that they do not have characteristics of liquefiable soils. This would be verified through soil sampling and analysis as noted in the RAP (**Appendix B**). Site restoration includes recontouring for positive drainage and a vegetative surface, which would avoid ponding water, localized infiltration, and soil saturation. The potential for liquefaction and lateral spreading under existing site conditions is low and the proposed remedial actions would not increase that potential. Therefore, the Project would result in a less-than-significant impact.

aiv) **Less than significant**. The current topography of the Project site is characterized by low relief and a gradual slope, resulting in a low potential for landslides under static or pseudo-static [11] conditions. Remedial actions proposed on the Project site are not expected to increase this potential. The excavation of waste-impacted soil from the buffer areas would remove waste mixtures down to bedrock in most locations and backfill with imported fill. These fills would be placed at gradual slopes to minimize areas with locally over-steepened fill slopes. The reconsolidation of waste-impacted soil on the existing cap would be graded and covered to match existing contours without creating an over steepened slope (See **Figure 4** – Grading Plan and **Figure 5** – Grading Sections). As shown on **Figure 4** and **Figure 5**, the steeper slopes are placed against the near vertical walls of the old quarry on the north and east side of the Project site where surrounding residential properties are at a higher elevation and not susceptible to landslides. Furthermore, final site restoration and grading to achieve positive drainage and vegetation (native grasses) on the final cover would minimize ponding and soil saturation that could lead weak soil susceptible to movement. The Project would not increase the potential for landsliding compared to existing conditions because the placement, reconsolidation, compaction, and grading would be overseen by licensed geologists, engineers, and/or landscape architects and the construction plans would be reviewed and stamped by such individuals prior commencement of the Project. Considering the overall gradual slope of the Project site and the proposed fill placement and grading plan, the Project would not increase the potential for landsliding compared to existing conditions. Therefore, the Project would result in a less-than-significant impact.

b) **Less-than-Significant Impact.** Short-term erosion of surface soils or temporary soil stockpiles is possible during the excavation phase of the Project when soils are disturbed and exposed to precipitation. However, under the Construction General Permit (CGP) (discussed in further detail in the Hydrology and Water Quality section), the permit applicant or their contractor(s) would implement stormwater controls [(aka Best Management Practices (BMPs)], as set forth in a detailed Stormwater Pollution Prevention Plan (SWPPP). SWPPPs must describe the specific erosion control and stormwater quality BMPs needed to reduce erosion and minimize pollutants in stormwater runoff with adequate details of their placement and proper installation. Under

11 Static refers to non-earthquake conditions and pseudo-static refers to applied forces during an earthquake.

the CGP, there is a low potential that the Project site would be impacted by a substantial degree of erosion during construction. Additionally, consistent with CGP SWPPP requirements, an Erosion Control Plan (See Appendix B of the RAP [**Appendix B** of this Initial Study) has been prepared for the Project that details BMPs to be implemented as part of the Project, including protecting temporary stockpiles from erosion and stormwater run-on and runoff, erosion control type and placement, stormwater drainage control, secondary containment, fugitive emission control of dust, and spill prevention.

After the Project is complete and the site is restored, positive drainage to minimize ponding and planted vegetation to stabilize the surface soils would substantially reduce the potential for concentrated runoff to erode the landfill cap or remove topsoil. Additionally, the Project's stormwater entering the City's municipal stormwater system would be subject to compliance with the City's MS4 General Permit. Adherence to the requirements of the MS4 General Permit, in combination with Project design features (such as site grading, clean soil cover, rehabilitated drainage structures, riprap placement in swales, soil revegetation, and pollutant source controls) would ensure erosion, siltation, and polluted runoff are avoided and/or minimized as compared to existing conditions. Considering the short-term runoff controls employed during construction and the final site grading and site restoration, the potential for excessive erosion is low. Therefore, the Project would result in a less-than-significant impact.

c) **Less-than-Significant Impact.** The Project site is a capped landfill containing about 80 feet of waste material and surrounded by shallow bedrock. Under current conditions, the landfill material and the engineered cap overlying the landfill is stable. The Project would remove waste-impacted soil from the edges of the landfill and adjacent properties and place them on the existing cap. These waste-impacted soils would then be spread, re-consolidated and covered with clean imported fill. The final site restoration would grade and vegetate the landfill area to achieve positive drainage and slope stability. The placement and reconsolidation of waste-impacted soil and importation, placement, and compaction of clean fills would be completed under the direction and recommendations of California registered geologists and engineers who would ensure the final competency and stability of soils placed during the remediation operation. As explained previously, the remedial actions proposed by the Project would not cause landsliding (see Impact aiv discussion) or liquefaction and lateral spreading (see Impact aiii discussion).

Subsidence can occur when underground cavities cause the surface soils to subside or when groundwater is extracted causing a depression response at the surface; these conditions do not exist at the Project site. Soil collapse can occur when the soil is weak or unsupported. The importation, placement, and reconsolidation of the fill soils would be monitored onsite during remediation activities by California certified engineers and geologists consistent with recommendations of the project geotechnical engineer and thus, the potential for conditions promoting soil collapse would be low. As explained previously, the Project site is currently stable (see Impact aiii and aiv discussions), and the proposed remedial actions would not reduce the stability of the landfill cap, buffer

areas or adjacent properties. Therefore, the Project would result in a less-than-significant impact.

d) **Less-than-Significant Impact.** The Project would excavate waste-impacted soil from the buffer area and adjacent properties, relocate them onto the landfill cap, and then reconsolidate and cover them with clean imported fill or haul them offsite. Replacing waste-impacted soil with clean imported fill would substantially reduce the potential for soils with expansive characteristics to be exposed as final cover, because the placement, reconsolidation, compaction, and grading would be overseen by licensed geologists, engineers, and/or landscape architects and clean imported fill characteristics would be verified through soil sampling and analysis as noted in the RAP (**Appendix B**). All imported fill soils placed over the reconsolidated waste material would meet acceptability criteria as prescribed by a certified geotechnical engineer, and soils with high expansivity potential could require conditioning prior to placement, if deemed necessary. Expansive soils typically cause most damage to structural foundations and because there are no structures proposed as part of the Project, there is a low potential that expansive soils would create substantial direct or indirect risks to life or property. Therefore, the Project would result in a less-than-significant impact.

e) **No Impact.** An Onsite Wastewater Treatment System (OWTS) does not currently exist on the site and the Project does not propose installing an OWTS. Therefore, the Project would result in no impact.

f) **Less-than-Significant Impact.** The Project site is underlain by Pliocene-age Sonoma Volcanics and soil-waste mixtures. The lavas of the Sonoma Volcanics are not paleontologically sensitive, but the sedimentary strata within this formation are highly sensitive due to recorded plant and animal fossils (PaleoResource Consultants, 2015). The soil overlying the buffer areas and adjacent properties are heterogeneous mixtures of reworked topsoil and waste and are not considered paleontologically sensitive due to their young age and disturbed condition. Proposed excavations to remove and relocate the soil-waste mixtures would extend to the surface of the Sonoma Volcanics (a maximum depth of 20 inches) but would not excavate into the bedrock. However, additional shallow excavation into the bedrock may be necessary for the construction of the proposed access road from Pascale Place. These excavations would contact rhyolite, tuff, and breccias, which are not considered paleontologically sensitive strata of the Sonoma Volcanics. The proposed excavation would not disturb paleontologically sensitive geologic materials, so the potential of encountering fossil remains is low. Therefore, the Project would result in a less-than-significant impact.

References

California Geological Survey (CGS), 2023a. *EQZapp – California Earthquake Hazard Zone Application* https://maps.conservation.ca.gov/cgs/EQZApp/app/ Accessed March-April 2025.

California Geological Survey (CGS) 2023b. *Fault Activity Map of California*. ArcGIS Web Application. https://maps.conservation.ca.gov/cgs/fam/app/ Accessed July 2024.

Ninyo and Moore, 2024. *Remedial Action Plan*, *Hidden Glen Dump, Coombsville Road, Napa, California*. SWIS No. 28-AA-0028. Prepared for the Napa County Local Enforcement Agency. Ninyo and Moore Project No. 09558001, October 16, 2024.

PaleoResource Consultants and F&F GeoResource Associates, Inc. 2015. *"Paleontological Evaluation Report for the Fulton-Fitch Mountain Reconductoring Project in Sonoma County, California."* September 24.

USGS, 2016. *Earthquake Outlook for the San Francisco Bay Region 2014-2041. Fact Sheet 2016-3020, Revised August 2016 (version 1.1).* Accessible at: https://pubs.er.usgs.gov/publication/fs20163020 Accessed July, 2023.

GREENHOUSE GAS EMISSIONS

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
8. GREENHOUSE GAS EMISSIONS — Would the proposed project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Introduction

Greenhouse gas emissions (GHG) emissions would be temporarily generated by onsite equipment, haul trucks, and vehicles required for construction of the Project.

Setting

Global Climate Change and GHG Emissions

Over the last 10,000 years, the rate of temperature change has typically been incremental, with warming and cooling occurring over the course of thousands of years. However, scientists have observed an unprecedented increase in the rate of warming over the past 150 years, roughly coinciding with the global industrial revolution, which has resulted in substantial increases in GHG emissions into the atmosphere. The anticipated impacts of climate change in California range from water shortages to inundation from sea level rise. Transportation systems contribute to climate change primarily through the emissions of certain GHGs (CO_2, methane (CH_4), and nitrous oxide (N_2O)) from nonrenewable energy (primarily gasoline and diesel fuels) used to operate passenger, commercial and transit vehicles. Land use changes contribute to climate change through construction and operational use of electricity and natural gas, and waste production.

The Intergovernmental Panel on Climate Change (IPCC) has reached consensus that human-caused emissions of GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increases in global average surface temperature from 1951 to 2010 were caused by the anthropogenic increase in GHG concentrations and other anthropogenic forces together. The IPCC predicts that the global mean surface temperature increase by the end of the 21st century (2081– 2100) relative to 1986–2005, could range from 0.5 to 8.7 degrees Fahrenheit. Additionally, the IPCC projects that global mean sea level rise will continue during the 21st century, very likely at a faster rate than observed from 1971 to 2010. For the period 2081–2100 relative to 1986–2005, the rise will likely range from 10 to 32 inches (IPCC, 2013).

Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as GHGs because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHGs has been implicated as the driving force for global climate change. The six primary GHGs are:

- carbon dioxide (CO_2), emitted when solid waste, fossil fuels (oil, natural gas, and coal), and wood and wood products are burned;
- methane (CH_4), produced through the anaerobic decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, incomplete fossil fuel combustion, and water and wastewater treatment;
- nitrous oxide (N_2O), typically generated as a result of soil cultivation practices, particularly the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production, and biomass burning;
- hydrofluorocarbons (HFCs), primarily used as refrigerants;
- perfluorocarbons (PFCs), originally introduced as alternatives to ozone depleting substances and typically emitted as by-products of industrial and manufacturing processes; and
- sulfur hexafluoride (SF_6), primarily used in electrical transmission and distribution.

Although there are other contributors to global climate change, these six GHGs are identified by the U.S. EPA as threatening the public health and welfare of current and future generations. GHGs have varying potential to trap heat in the atmosphere, known as global warming potential (GWP), and atmospheric lifetimes. GWP reflects how long GHGs remain in the atmosphere, on average, and how intensely they absorb energy. Gases with a higher GWP absorb more energy per pound than gases with a lower GWP and thus contribute more to warming Earth. For example, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 28 tons of CO_2; hence, CH_4 has a 100-year GWP of 28 while CO_2 has a GWP of 1. GWP ranges from 1 (for CO_2) to 23,500 (for SF_6).

In emissions inventories, GHG emissions are typically reported in terms metric tons of CO_2 equivalents (CO_2e). CO_2e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWP than CO_2, CO_2 is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO_2e.

Regional GHG Emissions Estimates

In 2022, the United States emitted about 6,343 million metric tons of CO_2e or 5,489 million metric tons of CO_2e after accounting for sequestration from the land sector. Emissions increased in 2022 by 1 percent. The increase in total GHG emissions was driven largely by an increase in CO_2 emissions from fossil fuel combustion. This increase in fossil fuel consumption emissions

was due in part to the continued rebound in economic activity after the height of the COVID-19 pandemic (U.S. EPA, 2024).

According to U.S. EPA, net emissions were 17 percent below 2005 levels. The recent decline is mostly due to a shift to less CO_2-intensive natural gas for generating electricity and a rapid increase in the use of renewable energy in the electric power sector. Transportation activities accounted for 28 percent of total GHGs emissions in 2022. Emissions from electric power accounted for the second largest portion (25 percent), while emissions from industry accounted for the third largest portion (23 percent) of total GHG in 2022 (U.S. EPA, 2024).

In 2022, California emitted approximately 371 million metric tons of CO_2e, 9.3 million metric tons of CO_2e lower than 2021 levels and 60 million metric tons of CO_2e below the 2020 GHG limit of 431 million metric tons of CO_2e. The transportation sector represents 39 percent of the total GHG emissions. The industrial sector represents 23 percent of the total GHG emissions, followed by electricity (11 percent), and residential, agricultural, and commercial (8, 8, and 6 percent, respectively) (CARB, 2024).

Executive Order S-3-05

Governor Schwarzenegger established Executive Order S-3-05 in 2005, in recognition of California's vulnerability to the effects of climate change. Executive Order S-3-05 set forth a series of target dates by which statewide emissions of GHG would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The executive order directed the Secretary of CalEPA to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary will also submit biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of CalEPA created the California Climate Action Team, made up of members from various state agencies and commissions. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through state incentive and regulatory programs.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 established regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was to be accomplished by enforcing a statewide

cap on GHG emissions that were to be phased in starting in 2012. To effectively implement the cap, AB 32 directed CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specified that regulations adopted in response to AB 1493 were used to address GHG emissions from vehicles. However, AB 32 also included language stating that if the AB 1493 regulations cannot be implemented, then CARB was to develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 required CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. Pursuant to AB 32, CARB identified 427 million MT CO_2e as the total Statewide aggregated 1990 GHG emissions level, which serves as the 2020 emissions limit. Using these criteria to reduce statewide GHG emissions to 1990 levels by 2020 represented an approximate 25 to 30 percent reduction in current emissions levels. However, CARB also had discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions. The goals of AB 32 were achieved within the 2002 timeline.

Climate Change Scoping Plan

AB 32 also required CARB to develop a Scoping Plan that describes the approach California will take to reduce GHG to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by CARB in 2008 and must be updated every five years. The initial AB 32 Scoping Plan contains the main strategies California will use to reduce the GHG that cause climate change. The initial Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation fee regulation to fund the program. In August 2011, the initial Scoping Plan was approved by CARB.

In 2022, CARB approved the Third Update to the Climate Change Scoping Plan (2022 Scoping Plan), which lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279 (CARB, 2022). The 2022 Scoping Plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.

- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.

- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.

- Incorporates the contribution of natural and working lands to the state's GHG emissions, as well as their role in achieving carbon neutrality.

- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.

- Evaluates the substantial health and economic benefits of taking action.

- Identifies key implementation actions to ensure success.

The recommended measures in the 2022 Scoping Plan and previous Scoping Plans are broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of individual projects.

Low Carbon Fuel Standard

Under the Climate Change Scoping Plan, the CARB identified the low carbon fuel standard (LCFS) as one of the nine discrete early action measures to reduce California's GHG emissions. The LCFS is designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits.

In 2018, the CARB approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

The LCFS standards are expressed in terms of the "carbon intensity" (CI) of gasoline and diesel fuel and their respective substitutes. The program is based on the principle that each fuel has "life cycle" GHG emissions and the life cycle assessment examines the GHG emissions associated with the production, transportation, and use of a given fuel. The life cycle assessment includes direct emissions associated with producing, transporting, and using the fuels, as well as significant indirect effects on GHG emissions, such as changes in land use for some biofuels. The carbon intensity scores assessed for each fuel are compared to a declining CI benchmark for each year. Low carbon fuels below the benchmark generate credits, while fuels above the CI benchmark generate deficits. Credits and deficits are denominated in metric tons of GHG emissions. Providers of transportation fuels must demonstrate that the mix of fuels they supply for use in California

meets the LCFS carbon intensity standards, or benchmarks, for each annual compliance period. A deficit generator meets its compliance obligation by ensuring that the credits it earns or otherwise acquires from another party is equal to, or greater than, the deficits it has incurred.

Executive Order No. B-30-15

On April 29, 2015, Executive Order No. B-30-15 was issued to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. Executive Order No. B-30-15 sets a new, interim, 2030 reduction goal intended to provide a smooth transition to the existing ultimate 2050 reduction goal set by Executive Order No. S-3-05 (signed by Governor Schwarzenegger in June 2005). It is designed so State agencies do not fall behind the pace of reductions necessary to reach the existing 2050 reduction goal. Executive Order No. B-30-15 orders "All State agencies with jurisdiction over sources of GHG emissions shall implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 targets." The Executive Order also states that "CARB shall update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent." The CARB is currently moving forward with a second update to the Climate Change Scoping Plan to reflect the 2030 reduction target. The updated Scoping Plan will provide a framework for achieving the 2030 target. In September of 2016, the AB 32 was extended to achieve reductions in GHG of 40 percent below 1990 levels by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

Executive Order No. B-55-18/Assembly Bill 1279

Executive Order B-55-18 was signed by Governor Brown on September 10, 2018. The order establishes an additional statewide policy to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. As per Executive Order B-55-18, CARB is directed to work with relevant state agencies to develop a framework for implementation and accounting that tracks progress toward this goal and to ensure future Climate Change Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Executive Order B-55-18 establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB intends to work with relevant State agencies to ensure that future scoping plan updates identify and recommend measures to achieve the carbon neutrality goal. On September 16, 2022, AB 1279, also known as the California Climate Crisis Act, codified the carbon neutrality goal established by EO B-55-18.

Significance Criteria

CEQA Guidelines Section 15064 and Appendix G recommend that a lead agency consider a project's consistency with relevant, adopted plans, and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. Consistent with Appendix G of the *CEQA Guidelines*, GHG emissions generated by the Project could have a cumulatively considerable contribution to global climate change if the Project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG.

CEQA Guidelines Section 15064.4 provides guidance to lead agencies for determining the significance of environmental impacts pertaining to GHG emissions. Section 15064.4(a) states that a lead agency should make a good-faith effort that is based, to the extent possible, on scientific and factual data to describe, calculate, or estimate the amount of GHG emissions that would result from implementation of a project. CEQA Guidelines Section 15064.4(b) also states that, when assessing the significance of impacts from GHG emissions, a lead agency should consider (1) the extent to which the project may increase or reduce GHG emissions compared with existing conditions, (2) whether the project's GHG emissions would exceed a threshold of significance that the lead agency has determined to be applicable to the project, and (3) the extent to which the project would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

BAAQMD's thresholds of significance consist of three options for project-level impacts:

a. Land use project design elements that must be included in a project,

b. Consistency with a local GHG reduction strategy, or

c. A stationary source threshold of 10,000 metric tons of CO_2e per year.

BAAQMD's *CEQA Air Quality Guidelines*, *Appendix B: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*, state the following in reference to the newly adopted land use project design elements significance thresholds:

> *"The Air District has developed these thresholds of significance based on typical residential and commercial land use projects and typical long-term communitywide planning documents such as general plans and similar long-range development plans. As such, these thresholds may not be appropriate for other types of projects that do not fit into the mold of a typical residential or commercial project or general plan update. Lead agencies should keep this point in mind when evaluating other types of projects. A lead agency does not necessarily need to use a threshold of significance if the analysis and justifications that were used to develop the threshold do not reflect the particular circumstances of the project under review. Accordingly, a lead agency should not use these thresholds if it is faced with a unique or unusual project for which the analyses supporting the thresholds as described in this report do not squarely apply. In such cases, the lead agency should develop an alternative approach that would be more appropriate for the particular project before it, considering all of the facts and circumstances of the project on a case-by-case basis."*

The Project is not a typical land residential or commercial land use project, as it is a temporary construction activity.

Discussion

a) **Less-than-Significant Impact.** The Project would generate GHG emissions during construction activities. Construction activities are a temporary and one-time direct source of GHG emissions. Construction activities would generate GHG emissions through the operation of heavy off-road equipment, haul trucks, and worker automobiles. Construction of the Project would utilize fuel efficient equipment and trucks consistent with state regulations and would be consistent with state regulations intended to reduce the inefficient, wasteful, or unnecessary consumption of energy, such as anti-idling and emissions regulations.

Construction GHG emissions were estimated using CalEEMod (CAPCOA, 2022). Detailed modeling assumptions and results are provided in **Appendix C**. The CalEEMod model inputs are provided in **Appendix C** along with the detailed emissions results. The CalEEMod modeling assumed a three-month construction period, with three to five pieces of heavy construction equipment operating onsite each day depending on the given phase, heavy trucks exporting waste-impacted soil and importing clean fill, and worker automobiles traveling to and from the site each day. Project construction was estimated to generate approximately 146 metric tons of CO_2e. This is lower than any commonly used numerical throughout the State for CEQA purposes and is much lower than BAAQMD's only numerical threshold of 10,000 metric tons of CO_2e per year.

BAAQMD has not adopted GHG emissions thresholds of significance for construction. As noted in BAAQMD's *CEQA Air Quality Guidelines*, *Appendix B,* GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions and operational emissions represent the vast majority of project GHG emissions. The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. Because the Project does not propose development or a change in activities on the Project site, the Project would not generate long-term emissions and the construction emissions would not result in a significant impact on the environment. Therefore, Project construction would result in a less-than-significant impact.

b) **Less-than-Significant Impact.** As noted in impact a), the Project would be below BAAQMD's adopted GHG significance thresholds. The Project would not conflict with applicable plans, policies or regulations adopted for the purpose of reducing GHG emissions. Therefore, the Project would result in a less-than-significant impact.

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HAZARDS AND HAZARDOUS MATERIALS

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
9.	**HAZARDS AND HAZARDOUS MATERIALS — Would the proposed project:**				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Introduction

Previous investigation at the Project site encountered waste materials within the closed landfill including old automobiles, general garbage, vegetation material, brush, asphalt, concrete wastes, metal slag, rusted metal, wood fragments, brick or pottery fragments, glass (including melted glass), gravel debris, and small fragments of charcoal (Ninyo and Moore, 2024).

The former dump is now listed as an unpermitted, closed solid waste disposal site in the CalRecycle Solid Waste Information System (SWIS) database (SWIS No. 28-AA-0028) (CalRecycle, 2025). The SWIS database contains up-to-date information pertaining to the Project site including inspections reports, regulatory correspondence, and the current RAP (**Appendix B** of this Initial Study), which describes the proposed actions under the Project. The County of Napa Environmental Health, Solid Waste Local Enforcement Agency (LEA) inspects the landfill quarterly. The latest inspection was in April 2024 and reported no violations or concerns, except for illegal soil and debris disposal from a neighboring property (Ninyo and Moore, 2024).

The Project site has three landfill gas (LFG) monitoring wells, identified as MW-1 through MW-3. The wells were constructed in December 2020. MW-1 and MW-2 have three screened intake intervals to a depth of 35 feet and MW-3 has two intervals to depth of 20 feet. Methane gas has been monitored on a quarterly basis since December 2020 and will continue to be monitored. Methane monitoring results have been below regulatory limits during all monitoring events. Methane is odorless and non-toxic but can present an explosive hazard in high concentrations. It can also act as a simple asphyxiant (displaces oxygen) in low-lying areas or confined spaces and may be an indicator of other potentially hazardous landfill gases.

Elevated lead and total petroleum hydrocarbons (TPH) have been detected in the shallow surface soils within the buffer area surrounding the landfill cap and on adjacent properties. These constituents are contained in shallow (up to 20-inches), heterogeneous soil-waste mixtures. Other constituents of potential concern include landfill gas, metals, polychlorinated biphenyls (PCBs), organochlorine pesticides (OCPs), and volatile and semi-volatile organic compounds (VOCs and SVOCs, respectively). PCBs, OCPs, VOCs and SVOCs were found on the Project site in samples from the soil-waste mixtures at concentrations below their respective State Water Resources Control Board (Water Board) Environmental Screening Levels. Laboratory results from the methane gas wells have been below regulatory limits during all monitoring events.

The Project consists of remedial actions intended to reduce the risk of public exposure to metals and other contaminants in the existing buffer areas surrounding the existing landfill cap and from adjacent properties. The LEA would be the lead oversight agency for the Project and would be responsible for overseeing compliance with State and county regulations regarding hazardous materials and other hazards. California Code of Regulations (CCR) Title 27, Division 2 contain the principal State regulations pertaining to waste disposal on land. In California, agencies involved with the regulation and enforcement involving worker exposure to hazards, hazardous materials, and contaminated waste materials include the CalRecycle[12], the California Department of Toxic Substance Control (DTSC)[13], California Division of Occupational Safety and Health (DOSH or Cal/OSHA)[14], and the Water Board)[15].

The RAP outlines the grading plans, phasing, and procedures required for the remediation of the onsite soil-waste mixtures. The RAP includes a project-specific worker Site Health and Safety Plan (SHSP) and a Community Health and Safety Plan (CHSP) (Ninyo and Moore, 2024). The SHSP was prepared under the direction of and approved by a certified industrial hygienist (CIH) and covers demolition, excavation, and grading during the onsite remediation activities. In compliance with OSHA requirements, the plan outlines the specific training and monitoring needed to protect workers and identifies potential chemical and physical hazards during field activities. The SHSP covers field procedures, personal protective equipment, expected

12 CalRecycle and local enforcement agencies regulate the operation of solid waste facilities. CalRecycle manages and mitigates impacts of solid waste on public health and safety and the environment by enforcing compliance with regulations under CCR Title 27, Division 2 and State minimum standards through integrated and consistent permitting, inspection, and enforcement efforts.
13 The DTSC regulates toxic substances by overseeing contaminated water and soil cleanup, enforcing hazardous waste laws, reducing hazardous waste generation, and promoting safer, non-hazardous products.
14 CalOSHA is responsible for enforcing worker safety regulations, developing workplace safety standards, and providing public outreach, education and assistance.
15 The SWRCB and the nine Regional Water Quality Control Boards (Regional Water Boards), referred to collectively as the Water Board, have regulatory responsibility to protect surface and groundwater quality under the federal Clean Water Act (CWA) and the State Porter-Cologne Water Quality Control Act.

contaminants, exposure action levels, and emergency contingency plans. The SHSP comprehensively addresses potential chemical and explosive hazard exposure associated with unknown types of wastes and contaminant transmission from dust, methane gas, or through waterborne sources during construction actions. Additionally, the SHSP considers and provides guidance regarding physical hazards (e.g. slip and fall, noise, vehicle and heavy equipment operation), waste disposal site excavation hazards (e.g., buried objects, trenching hazards, oxygen deficiency), biological hazards (e.g., spiders, snakes) and radiological hazards. The CHSP is comparable to the SHSP and outlines procedures to ensure public safety and health by minimizing exposure to hazards during site closure activities. It aims to protect the community and surrounding properties from health and environmental risks. The plan covers field procedures, potential contaminants, exposure action levels, hazard monitoring and equipment, site control methods, emergency planning, and emergency contingency plans.

Discussion

a) **Less-than-Significant Impact.** The Project involves the remediation of waste-impacted soil that contain lead and other contaminants by way of onsite excavation, burial, and capping. The remediation actions would excavate waste-impacted soils and place them over the existing cap under clean imported soils. The operation would be temporary and once completed, the potential for public exposure to lead and other contaminants would be substantially reduced or eliminated. Waste-impacted soil may be temporarily stockpiled but as required by the project RAP, the stockpiles would be covered to avoid dust generation and best management practices (BMPs) would be employed to prevent soil erosion and runoff. BMPs would include fiber roll barriers, silt fences, straw mulch, erosion control blankets, and other controls that are standard practice for ensuring soil erosion and runoff (these are detailed further in the RAP – **Appendix B**). The remedial actions are proposed to occur within the boundaries of the Project site. Waste-impacted soil that requires offsite disposal would be removed by truck in compliance with state and federal hazardous waste transportation regulations enforced by the DTSC and California State Highway Patrol under supervision of the LEA. The origin, classification, and analysis of imported clean soil for final cover material must be submitted to the LEA for approval before use onsite. Import fill soil sampling methodology and analysis would follow the guidelines published in the DTSC's 2001 Information Advisory regarding clean imported fill guidelines (DTSC, 2001). Following the completion of operations, the clean imported fill soil covering the disturbed area would be graded for positive drainage and seeded with native grasses.

The Project would temporarily expose soils containing varying concentrations of lead and possibly other chemicals. However, strict controls required in the SHSP (see **Appendix B**)[16], which include hazard monitoring, worker training, personal protective equipment, and oversight by a CIH, would protect workers and reduce their exposure to chemical and physical hazards. The comparable CHSP[17] considers potential hazard exposure beyond

16 SHSP is in Appendix D of the RAP which is found in Appendix B of this Initial Study.
17 CHSP is in Appendix E of the RAP which is found in Appendix B of this Initial Study.

the Project site and provides guidance to reduce public exposure to hazards associated with the remediation activities.

Considering that the Project involves the remediation of waste-impacted soil from areas surrounding the existing capped landfill and adjacent properties, and that comprehensive hazard minimization controls would be employed through the RAP, SHSP and CHSP (see **Appendix B**), the potential for the Project to create a significant hazard to the public or the environment is low. Therefore, the Project would result in a less-than-significant impact.

b) **Less-than-Significant Impact.** Remediation activities, as outlined in the RAP, would be completed under strict controls to reduce hazards to site workers and the community. The controls, which are outlined in the SHSP and CHSP and approved by a CIH, comply with state and federal regulations for handling hazardous waste. In addition, the remedial actions would be managed by qualified site supervisors with regulatory oversight by the LEA. Given that the Project is a remediation operation conducted under regulatory oversight with the intended purpose to minimize worker and community exposure to contaminated soils, the potential for the Project to create a significant hazard to the public or the environment involving the release of hazardous materials is low. Therefore, the Project would result in a less-than-significant impact.

c) **Less than Significant.** The closest school to the Project site is the Silverado Middle School, located about one-quarter of a mile to the southeast. The Project involves onsite remediation of soil-waste mixtures containing lead and other contaminants. The onsite construction activities are temporary and there would be strict and comprehensive controls in place to minimize worker and community exposure, as prescribed in the SHSP and CHSP. These controls include air monitoring and soil sampling to ensure vapors and gases emanating from the Project site are managed and contained. Waste-impacted soil that requires offsite disposal would be removed by truck in compliance with state and federal hazardous waste transportation regulations enforced by the DTSC and California State Highway Patrol under supervision of the LEA. Therefore, the potential for the Project to generate hazardous emissions that extend beyond the Project site boundary is very low. Therefore, the Project would result in a less-than-significant impact.

d) **Less than Significant Impact.** The "Cortese List" refers to a collection of databases maintained by select California agencies and Boards that include properties involved in hazardous materials use, hazardous waste, or sites with confirmed soil and groundwater contamination. These databases include the Water Board's Geotracker data management system, the DTSC's Envirostor database, and the Water Board's list of select solid waste disposal sites.[18] The Project site is currently included on the Water Board's Geotracker database (SWRCB, 2025). As discussed above in the setting, it is also included on CalRecycle's SWIS database. The SWIS database includes the most recent information on the Project site while the Geotracker database indicates that information has not been

18 The Water Board's list of select solid waste disposal sites are those that contain waste constituents above hazardous waste levels that are outside the waste management unit.

updated since 2016. The Project site is included on the Cortese List, but as described in the items above, it has a very low potential to create a significant hazard to the public or the environment. Therefore, the Project would result in a less-than-significant impact.

e) **No Impact.** The Project site is not located within an Airport Land Use Compatibility Plan and is not within two miles of a public airport. The nearest airport to the Project site is the Napa County Airport located 5.8 miles to the south. Therefore, the Project would result in no impact.

f) **Less than Significant.** The Project involves temporary remediation activities that would result in waste-impacted soils being relocated and buried onsite or hauled offsite. Excavation and grading operations would be contained on the Project site and, other than using public streets for occasional equipment onloading/offloading and delivery of imported soil or offsite transport of waste-impacted soil, the Project would not result in reduced public access or require road closures within the adjacent neighborhood streets or on Coombsville Road. In addition, the Project would be conducted under a strict SHSP and CHSP, which provide site worker and community emergency planning and notification procedures. The Project would not impede or require diversion of rescue vehicles or evacuation traffic in the event of a life-threatening emergency. Therefore, the Project would result in a less-than-significant impact.

g) **Less-than-Significant Impact.** The Project site is mapped in a moderate Fire Hazard Severity Zone in a Local Responsibility Area (LRA) (CalFire, 2025). Following the proposed remediation activities, the Project site would be restored as open space. While there are trees on adjacent parcels, the capped former landfill does not contain trees and would be vegetated with native grasses. The Project would not exacerbate regional wildland fire risk. Therefore, the Project would result in a less-than-significant impact.

References

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HYDROLOGY AND WATER QUALITY

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
10. HYDROLOGY AND WATER QUALITY – Would the proposed project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) result in substantial erosion of siltation on- or off- site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Introduction

The Project site is in the lower 426-square-mile Napa River watershed. The Napa River, which drains much of the City, extends 55 miles from the Mayacamas Mountains before discharging into San Pablo Bay near the mouth of the Sacramento-San Joaquin estuary. The Project site is approximately 0.7-miles east of the tidally influenced lower portion of the of the Napa River. Tulucay Creek is located approximately 0.5 miles south of the Project site and Sarco Creek is 2 miles to the north. The Project area receives 24.6 inches of rain annually with the majority occurring from November to March. The Project site is not located within a 100-year or 500-year flood hazard area (FEMA, 2025). Groundwater at the Project site has been documented to occur at depths greater than 8 feet below the ground surface (bgs) (Ninyo and Moore, 2024).

There are no surface water features on the Project site. The capped waste disposal area and buffer zone is relatively flat, with surface elevations ranging from approximately 120 to 130 feet mean sea-level (MSL) (Ninyo and Moore, 2024). The northwest, north, and east sides of the Project site are near vertical quarry walls. In general, the surface between the capped waste disposal area and Pascale Place to the west and Glory Court to the south slope downward to approximately 105 feet MSL. Under existing conditions, stormwater runoff that does not infiltrate into the onsite soils flows from the northeastern corner towards a drainage structure comprised of a riprap armored swale and storm drain inlet located on the hillside adjacent to Pascale Place (Ninyo and Moore, 2024). A portion of the Project site's stormwater also drains southeast toward Lot 5 and into a similar drainage structure in the southeastern corner of the site. Stormwater from the site is conveyed via the onsite drainage structures to the City's municipal stormwater system.

All stormwater discharged from the Project site is ultimately discharged to the Napa River in accordance with the City's National Pollutant Discharge Elimination System (NPDES) Phase II Small MS4 General Permit (MS4 General Permit), adopted in 2013 (Water Quality Order 2013-0001-DWQ). The tidal lower portion of the Napa River is listed on the 2020/2022 303(d) list of impaired waters for nutrients and pathogens (RWQCB, 2025). A Total Maximum Daily Load[19] (TMDL) has been approved for pathogens and was adopted in 2007; the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) was amended to incorporate the TMDL (RWQCB, 2019).

Discussion

a) **Less-than-Significant Impact.** Project construction would mainly involve grading for topographic contouring related to the proposed cover and shallow (up to approximately 2-foot bgs) subsurface excavation to remove and reconsolidate waste-impacted soils onsite. The waste-impacted soil around the perimeter of the landfill cap would be excavated up to a depth of two feet and replaced with clean fill. The waste-impacted soil to be removed would be reconsolidated onsite at the northern portion of the capped dump and covered with a minimum of two feet of clean fill, essentially capping it, or hauled offsite to an appropriate landfill for disposal. Waste-impacted soil would be excavated to bedrock where feasible (to depths of approximately 10 to 20 inches). The depth of excavation would be reduced if bedrock is encountered at shallower depths. Conversely, the depth of excavation may extend beyond 20 inches if wastes are deeper in order to reach bedrock or, alternatively, the excavation may terminate in wastes in which case the wastes would be covered with 2 feet of clean imported soil. Where waste removal may not be possible due to access, stability and/or other restrictions, wastes remaining in place would be covered with two 2 feet of clean imported soil to meet state minimum standards. Soil/waste from the frontage along Pascale Place would be removed down to bedrock. In addition, one foot of clean imported soil would be placed on top of the existing cap area. Following the completion of waste removal and backfilling with clean import soil, final grading would be completed to provide positive drainage towards the existing stormwater drainage facilities on site, consistent with existing conditions. The grading and drainage

19 TMDLs are action plans to ensure that beneficial uses are restored and that water quality objectives are achieved by defining how much of a pollutant a water body can tolerate and meet water quality standards.

plan has been designed such that ponding of stormwater runoff would not occur on site. Following the completion of grading work, the Project site would be restored as open space and seeded with native grasses to facilitate revegetation and soil stabilization (**Appendix B**, RAP).

During construction activities, stormwater runoff from disturbed soils is a common source of pollutants (mainly sediment) to receiving waters. Earthwork activities can render soils and sediments more susceptible to erosion from stormwater runoff and result in the migration of soil and sediment in stormwater runoff to storm drains and downgradient water bodies. Further, the onsite soil within the buffer zone proposed for excavation and reconsolidation in the northern part of the Project site is documented as having high lead concentrations. Excessive and improperly managed grading can lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In addition, construction would likely involve the use of various materials typically associated with construction activities such as oil, grease, and petroleum hydrocarbons. If improperly handled, these materials could be transported offsite by stormwater runoff (nonpoint source pollution) and degrade receiving water quality.

The Clean Water Act effectively prohibits discharges of stormwater from construction projects unless the discharge complies with National Pollutant Discharge Elimination System (NPDES) regulations. Because the Project site exceeds one acre in size, construction activities would be required to obtain coverage under the State Construction General Permit (CGP)[20]. Under the requirements of the CGP, the permit applicant or their contractor(s) would implement stormwater controls, referred to as construction Best Management Practices (BMPs), as set forth in a detailed Stormwater Pollution Prevention Plan (SWPPP). SWPPPs are a required component of the CGP and must be prepared by a California-certified Qualified SWPPP Developer (QSD) and implemented by a California-certified Qualified SWPPP Practitioner (QSP). The SWPPP and BMPs within are a regulatory requirement.

SWPPPs must describe the specific erosion control and stormwater quality BMPs that would be implemented to minimize pollutants in stormwater runoff and detail their placement and proper installation. The BMPs are designed to prevent pollutants from contacting stormwater and to keep all products of erosion (i.e., sediment) and stormwater pollutants from migrating offsite into storm drains and receiving waters. Typical BMPs implemented at construction sites include placement of sediment barriers around storm drains, the use of fiber rolls or gravel barriers to detain sediment from disturbed areas, and temporary or permanent stockpile covers to prevent rainfall from contacting the stockpiled material. In addition to erosion control BMPs, SWPPPs also include BMPs for preventing the discharge of other pollutants such as petroleum products to downstream waters. BMPs for these pollutants also include routine leak inspections of equipment, maintaining labelling and inspecting integrity of containers, and ensuring that

20 NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities – Order no. WQ 2022-0057-DWQ which becomes effective on September 1, 2023 and which supersedes Order 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-0006-DWQ.

construction materials are disposed of in accordance with manufacture's recommended disposal practices and applicable hazardous waste regulations. Consistent with CGP SWPPP requirements, an Erosion Control Plan (Callander Associates Landscape Architects, 2024)[21] has been prepared for the Project which details BMPs to be implemented as part of the Project, including protecting temporary stockpiles from erosion and stormwater run-on and runoff, erosion control type and placement, stormwater drainage control, secondary containment, fugitive emission control of dust, and spill prevention.

Under the provisions of the CGP, the QSD is responsible for assessing the risk level of a site based on both sediment transport and receiving water risk and developing and implementing the SWPPP. Projects can be characterized as Risk Level 1, 2, or 3, and these risk levels determine the minimum BMPs and monitoring that must be implemented during construction. Under the direction of the QSD, the QSP is required to conduct routine inspections of all BMPs, conduct surface water sampling, when necessary, and report site conditions to the State Water Resources Control Board (SWRCB) using the Stormwater Multi-Application Reporting and Tracking System (SMARTS). Compliance with the CGP is required by law and has proven effective in protecting water quality at construction sites.

Following the completion of construction (post-construction), the Project's stormwater entering the municipal stormwater conveyance and discharge system would be subject to compliance with the City's MS4 General Permit, which is administered locally under the Napa Countywide Stormwater Pollution Prevention Program (NCSPPP), a joint effort of Napa's cities, towns and unincorporated areas[22] to comply with State and Federal regulations, preserve beneficial uses of local waterways, prevent stormwater pollution, and protect and enhance water quality in creeks and wetlands (City of Napa Website, Stormwater Quality page, 2025). The City's MS4 General Permit is designed to protect water quality by controlling stormwater discharges and implementing pollution-reducing practices throughout the City. Specifically, the MS4 General Permit establishes stormwater quality requirements aimed at reducing the discharge of pollutants into the city's stormwater system and, ultimately, local water bodies, such as the Napa River. These requirements focus on managing the quantity and quality of stormwater runoff to prevent water pollution. Key provisions of the permit include:

Stormwater Management Plans (SWMPs): The City is required to develop and implement SWMPs that outline best management practices (BMPs) to control pollutants in stormwater runoff from both new and existing developments. As noted above, the City's MS4 General Permit is administered locally by the NCSPPP, and the City requires all future developments to comply with the requirements of the NCSPPP.

21 Erosion Control Plan is in Appendix B of the RAP which is found in Appendix B of this Initial Study.

22 Though the County and each of the five cities and towns carry out their own individual stormwater pollution prevention programs, NCSPPP provides for the coordination and consistency of approaches between the individual participants and documents their efforts in annual reports. NCSPPP is funded by the member agencies and is administered by the Napa County Flood Control and Water Conservation District.

Pollutant Reduction: The permit mandates the reduction of pollutants such as sediment, nutrients, heavy metals, and pathogens, which may be carried by stormwater.

Monitoring and Reporting: The City must monitor stormwater discharges and assess the effectiveness of its stormwater management practices. This includes reporting on water quality improvements and any identified impairments in receiving water bodies.

Best Management Practices (BMPs): The City must implement BMPs for controlling runoff during construction, development, and operation of projects. This includes erosion control, sediment management, and post-construction stormwater treatment to minimize pollution.

Required compliance with the prescriptions set forth by the CGP, including implementation of a SWPPP for construction activities, and the City's MS4 General Permit, in combination with the Projects design features (such as the drainage structures, riprap armoring of swales, and soil revegetation), pollutant source controls, and implementation of the Project's Erosion Control Plan would prevent the discharge of pollutants to surface waters or groundwater and minimize or eliminate the potential for degradation of surface water or groundwater quality that could result from implementation of the Project. Further, implementation of the Project would reduce the potential for stormwater to contact onsite legacy wastes and lead contaminated soil, reducing the potential for pollutants and contaminants to be transported offsite by stormwater as compared to existing conditions. Therefore, the Project would result in a less-than-significant impact.

b) **Less-Than-Significant Impact.** No groundwater wells are proposed as part of the Project and the Project would not involve groundwater extraction. Under the Project, the addition of impervious surfaces is not proposed and there would not be a substantial increase in impervious surfaces such that groundwater recharge is impeded as compared to baseline. Project construction would involve only shallow subsurface excavation and would not intersect groundwater such that construction dewatering is required. Subsurface water underlying the Project site appears variable and is not representative of a shallow groundwater table. However, a water bearing zone within the bedrock that may constitute a deep-water table is present approximately 80 feet beneath the site. If implemented, the Project would not lower the groundwater table due to groundwater extraction or a reduction in groundwater recharge. Thus, the Project would not interfere with groundwater recharge or substantially decrease groundwater supplies. Therefore, the Project would result in a less-than-significant impact.

c) **Less-Than-Significant Impact.** Implementation of the Project would not involve the direct alteration of a stream or river and would not substantially alter the existing drainage pattern of the Project site or substantially increase impervious surface area as compared to existing conditions. Stormwater runoff during construction and following completion of the Project would not be increased in volume or in regard to peak runoff rates. Stormwater would continue to be collected and conveyed via the existing

stormwater drainage structures adjacent to Pascale Place and in the southeastern corner of the site to the City's municipal stormwater system, as occurs under existing conditions.

As described under a), above, during construction of the Project, the applicant would be required to comply with the NPDES regulations and apply for coverage under the CGP because ground disturbance at the Project site would exceed one acre. Under the CGP, the Project applicant or their contractor(s) would be required to prepare and implement a SWPPP. The SWPPP must include site-specific erosion and sedimentation control practices and would limit the amount of runoff that may be directed offsite during construction. Additionally, consistent with CGP SWPPP requirements, an Erosion Control Plan (Callander Associates Landscape Architects, 2024)[23] has been prepared for the Project that details BMPs to be implemented as part of the Project, including protecting temporary stockpiles from erosion and stormwater run-on and runoff, erosion control type and placement, stormwater drainage control, secondary containment, fugitive emission control of dust, and spill prevention.

Following the completion of construction (post-construction), the Project's stormwater entering the City's municipal stormwater system would be subject to compliance with the City's MS4 General Permit. Adherence to the requirements of the MS4 General Permit, in combination with Project design features (such as site grading, clean soil cover, rehabilitated drainage structures, riprap placement in swales, and soil revegetation, and pollutant source controls) would ensure erosion, siltation, and polluted runoff are avoided and/or minimized as compared to existing conditions. Further, as described under a), above, implementation of the proposed Project would reduce the potential for stormwater to contact onsite legacy wastes and lead contaminated soil, reducing the potential for pollutants and contaminants to be transported off-site by stormwater as compared to existing conditions.

Compliance with NPDES requirements and the implementation of required BMPs would prevent erosion and sediment transport both on- and off-site during construction and the Project design would ensure post-construction stormwater discharges would not be increased and that pollutants, including sediment, would not be transported offsite in a manner that would degrade the water quality of receiving waters (i.e., the Napa River). Therefore, impacts related to erosion, siltation, or creating additional sources of polluted runoff would be less than significant.

The Project site is not located within a 100-year[24] flood hazard zone designated by the Federal Emergency Management Agency (FEMA). Implementation of the Project would not result in the installation of any facilities within a 100-year or 500-year flood zone; implementation of the Project would not impede or redirect floodwaters on- or offsite. The Project would not result in substantially altered on-site drainage patterns of the site or area or increased peak stormwater discharge rates or volumes, including through the addition of impervious surfaces, as compared to existing conditions. Therefore, peak

23 Erosion Control Plan is in Appendix B of the RAP which is found in Appendix B of this Initial Study.
24 Areas subject to inundation by the 1-percent-annual-chance flood event

stormwater discharge rates and volumes from the Project site would not be substantially altered as compared to those occurring under existing conditions. The stormwater collected from the site would continue to be conveyed to the City's municipal stormwater system via the drainage structures comprised of riprap armored swales and storm drain inlets located adjacent to Pascale Place and in the southeastern corner of the site. Further, the stormwater drainage structures that are proposed to be improved as part of the Project have been designed with sizing, stability, and capacity to safely convey storm flows consistent with those currently installed under existing conditions. Additionally, implementing the Project would reduce, minimize, and avoid stormwater contacting legacy waste-impacted soils (such as those with elevated lead concentrations), reducing the potential for stormwater runoff to transport contaminants off-site to downgradient receiving waters as compared to existing conditions. Therefore, the Project would result in a less-than-significant impact.

d) **Less-Than-Significant Impact.** A seiche is caused by oscillation of the surface of a large enclosed or semi-enclosed body of water due to an earthquake or large wind event. The Project site is not located near a large enclosed or semi-enclosed body of water. The Project site is not in a tsunami hazard inundation zone (CGS, 2025). As described under c), above, the Project site is not located within a 100-year flood hazard zone designated by FEMA. Therefore, the Project would result in a less-than-significant impact.

e) **Less-Than-Significant Impact.** The RWQCB's Basin Plan (RWQCB, 2019) is the principal water quality planning document for the region. The Basin Plan water quality objectives are designed to preserve and enhance water quality and protect the beneficial uses of all regional terrestrial surface water bodies (e.g., creeks, rivers, streams, and lakes) and groundwaters within the RWQCB's jurisdictional area. As discussed above under a), c), and d), the Project would not cause any significant impact related to surface or groundwater quality degradation. The Basin Plan water quality objectives are designed to preserve and enhance water quality and protect the beneficial uses[25] of all regional terrestrial surface water bodies (e.g., creeks, rivers, streams, and lakes) and groundwaters within the RWQCB's jurisdictional area. The Project would comply with the requirements of the NPDES Permit program during and following completion of construction, including implementation of BMPs and other requirements of a SWPPP, which are designed to ensure stormwater discharges associated with construction and long-term use of the Project site comply with the Basin Plan water quality standards. The Project would not require substantial groundwater withdrawals or reduce groundwater recharge, as discussed under b), and therefore would not conflict with or obstruct implementation of a sustainable groundwater management plan. Therefore, the Project would result in a less-than-significant impact.

25 Aquatic resources provide many different benefits. Beneficial uses are those resources, services, and/or qualities of aquatic systems that are to be maintained and are the ultimate goals for protecting and achieving high water quality.

References

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RWQCB, 2025. *Final California 2020 Integrated Report (303(d) List/305(b) Report).* Accessed online on March 28, 2025 at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2023_2024state_ir_reports/apx-b-factsheets/03334.shtml

LAND USE AND LAND USE PLANNING

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
11. LAND USE AND LAND USE PLANNING — Would the proposed project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Discussion

a, b) **No Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. The Project would not divide an established community as the site would remain vacant and would not be developed. Because the Project does not propose development or a change in activities on the Project site, the Project would not conflict with any land use plans, policies, or regulations. Therefore, the Project would result in no impact.

MINERAL RESOURCES

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
12. MINERAL RESOURCES — Would the proposed project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion

a, b) **No Impact.** The California Department of Conservation Mines Online tool does not identify any documented mines on or nearby the Project site (California Department of Conservation, 2025). Thus, the Project would not affect any known mineral deposits or active mining operations in the City. In addition, the Project site does not contain a locally important mineral resource. Therefore, the Project would result in no impact.

References

Department of Conservation, *Division of Mine Reclamation, Mines Online.* https://maps.conservation.ca.gov/mol/index.html. Accessed March 4, 2025.

NOISE

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
13. NOISE — Would the proposed project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Introduction

RCH conducted several short-term noise measurements at the Project site on February 26, 2025. The results and locations of the short-term noise measurements are provided in the discussion below.

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise is defined as unwanted sound. Sound pressure level has become the most common descriptor used to characterize the "loudness" of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain. Decibels are measured using different scales, and it has been found that A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. All references to decibels (dB) in this report will be A-weighted unless noted otherwise.

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are the equivalent A–weighted sound level over a given time period (Leq)[26]; average day–night 24-hour average sound level (Ldn)[27] with a nighttime increase of 10 dB to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL)[28], also a 24-hour average that includes both an evening and a nighttime sensitivity weighting. **Table 4** identifies decibel levels for common sounds heard

26 The Equivalent Sound Level (Leq) is a single value of a constant sound level for the same measurement period duration, which has sound energy equal to the time–varying sound energy in the measurement period.
27 Ldn is the day–night average sound level that is equal to the 24-hour A-weighted equivalent sound level with a 10-decibel penalty applied to night between 10:00 p.m. and 7:00 a.m.
28 CNEL is the average A-weighted noise level during a 24-hour day, obtained by addition of 5 decibels in the evening from 7:00 to 10:00 p.m., and an addition of a 10–decibel penalty in the night between 10:00 p.m. and 7:00 a.m.

in the environment. With regard to increases in A-weighted noise level, the following relationships occur (Caltrans, 1998a):

- Under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dB;
- Outside of such controlled conditions, the trained ear can detect changes of 2 dB in normal environmental noise;
- It is widely accepted that the average healthy ear, however, can barely perceive noise levels changes of 3 dB;
- A change in level of 5 dB is a readily perceptible increase in noise level; and
- A 10-dB change is recognized as twice as loud as the original source.

TABLE 4 TYPICAL NOISE LEVELS

Noise Level (dB)	Outdoor Activity	Indoor Activity
90+	Gas lawn mower at 3 feet, jet flyover at 1,000 feet	Rock Band
80-90	Diesel truck at 50 feet	Loud television at 3 feet
70-80	Gas lawn mower at 100 feet, noisy urban area	Garbage disposal at 3 feet, vacuum cleaner at 10 feet
60-70	Commercial area	
40-60	Quiet urban daytime, traffic at 300 feet	Large business office, dishwasher next room
20-40	Quiet rural, suburban nighttime	Concert hall (background), library, bedroom at night
10-20		Broadcast / recording studio
0	Lowest threshold of human hearing	Lowest threshold of human hearing

SOURCE: (modified from Caltrans Technical Noise Supplement, 1998)

Noise Attenuation

Stationary point sources of noise, including construction equipment, attenuate (lessen) at a rate of 6 to 7.5 dB per doubling of distance from the source, depending on ground absorption. Soft sites attenuate at 7.5 dB per doubling because they have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. Hard sites have reflective surfaces (e.g., parking lots or smooth bodies of water) and therefore have less attenuation (6.0 dB per doubling). A street or roadway with moving vehicles (known as a “line” source), would typically attenuate at a lower rate, approximately 3 to 4.5 dB each time the distance doubles from the source, that also depends on ground absorption (Caltrans, 1998b). Physical barriers located between a noise source and the noise receptor, such as berms or sound walls, would increase the attenuation that occurs by distance alone.

Sensitive Receptors

Some land uses are considered more sensitive to ambient noise levels than others due to the amount of noise exposure, in terms of both duration and insulation from noise, and the types of activities typically involved. Residences, hospitals, schools, and nursing homes are generally more sensitive to noise than commercial and industrial land uses. The City of Napa General Plan identifies noise-sensitive land uses as residences, religious facilities, schools, childcare centers, hospitals, long-term health care facilities, convalescent centers, and retirement homes (City of Napa, 2022). The Project site is in a residential setting with adjacent residential properties to the north, east, and south (See the Project Description for the distances between the nearest residential structures and the Project property line). Silverado Middle School is approximately ¼ mile east of the Project site.

Existing Noise Sources

To quantify existing ambient noise levels, RCH Group conducted four short-term (10-minute) noise measurements on and nearby the Project site. Short-term measurements were made using a Larson Davis SoundTrack LxT Sound Level Meter calibrated before and after measurements. **Table 5** summarizes the locations and results of the noise measurements. **Figure 7** shows the locations of the noise measurements. The main source of noise in and around the Project vicinity is traffic noise on Coombsville Road and Pascale Place. Other minor noise sources included birds, dogs barking, and wind.

TABLE 5 EXISTING NOISE LEVELS

Location	Time Period	Noise Levels (dB)	Noise Sources
Site 1: Northwest area of the Project site, nearby private residence (Lot 9).	Tuesday February 26, 2025 2:06 p.m. to 2:16 p.m.	5-minute Leq's: 47, 43	Birds were 45-56 dB. Distant traffic on Coombsville Road was 40-45 dB. Wind was 37-39 dB.
Site 2: Southern area of the Project site, nearby private residence (Lot 6).	Tuesday February 26, 2025 2:17 p.m. to 2:27 p.m.	5-minute Leq's: 40, 38	Distant traffic on Coombsville Road was 40-42 dB. Dog barking in the distance was 40 dB.
Site 3: East of the Project site, along Pascale Place.	Tuesday February 26, 2025 2:30 p.m. to 2:40 p.m.	5-minute Leq's: 47, 49	Cars passing on Pascale Place was 60-65 dB. Distant traffic on Coombsville Road was 40-43 dB.
Site 4: 100 feet north of intersection of Coombsville Road and El Monte Way.	Tuesday February 26, 2025 2:44 p.m. to 2:54 p.m.	5-minute Leq's: 59, 63	Constant traffic on Coombsville Road was 60-70 dB.

SOURCE: RCH GROUP, 2025

Figure 7 Noise Measurement Locations

RCH GROUP planning & environmental consulting

Base Map Source: Google Earth, 2025.

Regulatory Context

Federal and State

There are no federal or state noise standards that regulate noise issues related to the Project.

Local

City of Napa

City of Napa 2040 General Plan

The City of Napa 2040 General Plan Safety and Noise Element provides a framework to minimizing risks posed by excessive noise. The City of Napa General Plan identifies vehicle traffic on highways and streets, trains, aircraft, car washes, construction, agricultural activities, landscaping, and HVAC equipment as the major sources of noise in the City (City of Napa, 2022).

City of Napa Municipal Code

The City of Napa Municipal Code provides allowable construction hours. The following regulation is relevant to the Project.

> Per Section 8.08.025, Any person engaged in construction activity, other than construction activity on an existing residential unit which such a person owns or rents, pursuant to any provision of this code, shall limit said construction activity as follows: (A) Construction activities throughout the entire duration of the project shall be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday. There will be no start up of machines nor equipment prior to 8:00 a.m., Monday through Friday; no delivery of materials nor equipment prior to 7:30 a.m. nor past 5:00 p.m., Monday through Friday; no cleaning of machines nor equipment past 6:00 p.m., Monday through Friday; no servicing of equipment past 6:45 p.m., Monday through Friday; and construction on weekends or legal holidays shall be limited to the hours of 8:00 a.m. to 4:00 p.m., unless a permit shall first have been secured from the City Manager, or designee, pursuant to Section 8.08.050 of this code. The City Manager, or designee, shall grant such permit: (1) For emergency work; (2) Other work, if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance; or (3) If necessary to protect public health, safety, and welfare. (B) All muffler systems on construction equipment shall be properly maintained. (C) All construction equipment shall not be placed adjacent to developed areas unless said equipment is provided with acoustical shielding. (D) All construction and grading equipment shall be shut down when not actively in use. (E) Construction activity by or on behalf of a public agency, which is necessary to avoid a disruption of a public project or to protect the public health, safety, and welfare, shall be exempt from the time limitations of this section.

Discussion

a) **Less-than-Significant Impact.** Construction would result in a temporary increase in ambient noise levels in the vicinity of the Project. Construction activities would require the use of numerous pieces of noise-generating equipment, such as excavating machinery. The noise levels generated by construction equipment would vary greatly

depending upon factors such as the type and specific model of the equipment, the operation being performed, the condition of the equipment, and the prevailing wind direction. Construction equipment would not all operate at the same time or location. Furthermore, construction equipment would not be in constant use during the 8-hour operating day. **Table 6** provides the noise levels at 25 and 50 feet from expected construction equipment.

TABLE 6 TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS (LMAX)

Construction Equipment	Noise Level (dB, Lmax at 50 feet)	Noise Level (dB, Lmax at 25 feet)
Backhoe	78	84
Compactor	83	89
Dump Truck	76	82
Dozer	82	88
Excavator	81	87

SOURCE: FHWA Roadway Construction Noise Model User's Guide, 2006

As discussed above, the Project site is in a residential setting with adjacent residential properties to the north, east, and south (with structures as close as 9 feet to the Project boundary). Due to the proximity of nearby noise sensitive receptors, construction noise would temporarily elevate the existing ambient noise levels (See **Table 5,** for existing noise levels at Sites 1-2 [i.e., the ambient noise levels nearby the private residences are quiet]). These noise levels would not exceed the noise ordinance as it does not contain sound level limitations and only restricts construction hours of operation and requires muffler systems to be maintained, acoustic shielding, and idling restrictions. Construction activities would be short-term (approximately three months), intermittent, and limited to the allowable hours (daytime) outlined in City of Napa Municipal Code Section 8.08.025, described above. Aside from the allowable hours in the City of Napa Municipal Code, no other standards have been established in the General Plan, Municipal Code, or by other agencies that are applicable to the Project construction activities. Therefore, Project construction would result in a less-than-significant impact.

b) **Less-than-Significant Impact.** Construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. In most cases, vibration induced by typical construction equipment does not result in adverse effects on people or structures (Caltrans, 2013). At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely results in structural damage. Vibratory motion is commonly described by identifying the peak particle velocity (PPV).

For vibration, a PPV threshold of 0.5 inches per second or greater can cause architectural damage and minor structural damage. The FTA recommends a threshold of 0.5 PPV for residential and commercial structures (FTA, 2006). Vibrational effects from typical

construction activities are only a concern within 25 feet of existing structures (Caltrans, 2002b). Although nearby off-site structures would be as close as 25 feet of the Project site, heavy vibration-inducing equipment would not be used in close proximities to off-site structures. Instead, smaller equipment (such as skid-steers) and hand-digging tools would be used along the Project boundaries and adjacent to nearby residences. These methods would not generate significant vibration that could exceed 0.5 PPV. Therefore, the Project would result in a less-than-significant impact.

c) **No Impact.** The Project site is not within the vicinity of a private airstrip or an airport land use plan, or within two miles of a public use airport. The nearest airport is the Napa County Airport (the nearest runway of which is approximately 5 miles south of the Project site). Therefore, the Project would result in no impact.

References

California Department of Transportation (Caltrans). 1998a. *Technical Noise Supplement*. https://rosap.ntl.bts.gov/view/dot/27590

California Department of Transportation (Caltrans). 1998b. *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects.* https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/f0008617-traffic-noise-protocol-oct1998-a11y.pdf

City of Napa. 2022. *City of Napa 2040 General Plan. https://www.cityofnapa.org/259/General-Plan*

Federal Highway Administration (FHWA). 2006. *Roadway Construction Noise Model User's Guide.* https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/

POPULATION AND HOUSING

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
14. POPULATION AND HOUSING — Would the proposed project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a) **No Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. Because the Project does not propose development or a change in activities on the Project site, the Project would not directly or indirectly induce substantial unplanned population growth in the area. Therefore, the Project would result in no impact.

b) **No Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. Because the Project does not propose development or a change in activities on the Project site, the Project would not displace existing people or housing units and would not require the construction of replacement housing. Therefore, the Project would result in no impact.

PUBLIC SERVICES

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
15. PUBLIC SERVICES — Would the proposed project:				
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Introduction

Fire Protection

The City of Napa Fire Department provides fire protection services to the City of Napa. The City of Napa Fire Department operates five stations throughout the City (City of Napa, 2022). The nearest fire station to the site is the Napa Fire Department Station 1, located approximately 1.3 miles west of the Project site.

Police Protection

The City of Napa Police Department provides law enforcement services to the City. The City of Napa Police Department has 76 sworn personnel and 71 professional staff.[29] The City of Napa Police Department is located approximately 1.3 miles west of the Project site.

Discussion

a.i) **Less-than-Significant Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. Because the Project does not propose development or a change in activities on the Project site, the Project would not result in an increase in calls for fire and emergency protection services that would warrant changes to fire protection service ratios and/or response times. Therefore, the Project would result in a less-than-significant impact.

a.ii) **Less-than-Significant Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. Because the Project does not propose development or a change in activities on the Project site, the Project would not result in an increase in calls for police protection or

29 https://www.cityofnapa.org/323/Police-Department

result in any changes in crime that would warrant changes to police protection service ratios and/or response times. Therefore, the Project would result in a less-than-significant impact.

a.iii-v) **No Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. Because the Project does not propose development or a change in activities on the Project site, the Project would not result in an increase in employment. Therefore, the Project would not warrant a need for new schools, parks, or other public facilities, and would result in no impact.

RECREATION

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
16. RECREATION — Would the proposed project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a, b) **No Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. Because the Project does not propose development or a change in activities on the Project site, the Project would not increase the use of existing recreational facilities such that physical deterioration of existing facilities would occur or be accelerated, and would not warrant new or expanded recreational facilities. Therefore, the Project would result in no impact.

TRANSPORTATION

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
17. TRANSPORTATION — Would the proposed project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Introduction

Senate Bill 743

Senate Bill 743 (SB 743; Steinberg, 2013) governs the application of new State CEQA *Guidelines* for addressing transportation impacts based on Vehicle Miles Traveled (VMT). It was codified in Public Resources Code §21099, required changes to the guidelines implementing CEQA (State CEQA *Guidelines*) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.) regarding the analysis of transportation impacts. The Governor's Office of Planning and Research (OPR) has proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the State CEQA *Guidelines* that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the Agency's certification and adoption of the changes to the State CEQA *Guidelines*, automobile delay, as measured by "level of service" and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3).)"

The OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR, 2018) provides general direction regarding the methods to be employed and significance criteria to evaluate VMT impacts, absent policies adopted by local agencies.

Project Trip Generation

As noted in the Project Description, the Project site would be accessed via Pascale Place where construction crews would park, and equipment can be staged and transported to the Project site or by an alternative access road that would be constructed between the Project site and El Monte Way. Project operations would not result in any new vehicle trips.

Discussion

a) **Less-than-Significant Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. Typical of any construction project, the Project could result intermittent

stoppages of vehicles, bicycles, or pedestrians for heavy equipment and haul trucks to safely enter and exit the site. The Project would not substantially change the pedestrian or bicycle traffic in the area and would not significantly impact or require changes to the design of any existing or planned bicycle or pedestrian facilities. Because the Project does not propose development or a change in activities on the Project site, the Project would not generate new trips during operations and therefore would not conflict with any program, plan, or policy addressing the circulation system in the City. Therefore, the Project would result in a less-than-significant impact.

b) **Less-than-Significant Impact.** VMT refers to the amount and distance of vehicle travel attributable to a project. VMT generally represents the number of vehicle trips generated by a project multiplied by the average trip length for those trips. For CEQA transportation impact assessment, VMT is calculated using the origin-destination VMT method, which accounts for the full distance of vehicle trips to and from the Project site.

The OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* provides general direction regarding the methods to be employed and significance criteria to evaluate VMT impacts, absent policies adopted by local agencies. The directive addresses several aspects of VMT impact analysis, and is organized as follows:

- **Screening Criteria:** Screening criteria are intended to quickly identify when a project should be expected to cause a less-than-significant VMT impact without conducting a detailed study.
- **Significance Thresholds:** Significance thresholds define what constitutes an acceptable level of VMT and what could be considered a significant level of VMT requiring mitigation.
- **Analysis Methodology:** These are the potential procedures and tools for producing VMT forecasts to use in the VMT impact assessment.
- **Mitigation:** Projects that are found to have a significant VMT impact based on the County's significance thresholds are required to implement mitigation measures to reduce impacts to a less-than-significant level (or to the extent feasible).

Screening Criteria

Screening criteria can be used to quickly identify whether sufficient evidence exists to presume a project would have a less-than-significant VMT impact without conducting a detailed study. However, each project should be evaluated against the evidence supporting that screening criteria to determine if it applies. Projects meeting at least one of the criteria below can be presumed to have a less than significant VMT impact, absent substantial evidence that the project will lead to a significant impact.

The extent to which the Project qualifies under each criterion is noted below.

- **Regional Truck Traffic:** The OPR directive specially focuses on the need to evaluate residential and employment-based travel, either from the standpoint of

home-based trips or through evaluation of commute trips associated with employment centers. Consistent with Section 15064.3 of the State CEQA *Guidelines*, impacts from regional truck traffic are not included in the VMT estimates, but are considered from an operational standpoint as they relate to safety.

- **Small Projects:** Defined as a project that generates 110 or fewer average daily vehicle trips.

- **Affordable Housing:** Defined as a project consisting of deed-restricted affordable housing.

- **Local-Serving Non-Residential Development:** The directive notes that local serving retail uses can reduce travel by offering customers more choices in closer proximity. Local serving retail uses of 50,000 square feet or less can be presumed to have a less-than-significant impact.

- **Projects in Low VMT-Generating Area:** Defined as a residential or office project that is in a VMT efficient area based on an available VMT Estimation Tool. The project must be consistent in size and land use type (i.e., density, mix of uses, transit accessibility) as the surrounding built environment.

- **Proximity to High Quality Transit**: The directive notes that employment and residential development located within a half mile of a high-quality transit corridor can be presumed to have a less-than-significant impact.

Impact Conclusion

The extent to which the Project's VMT impacts can be presumed to be less than significant has been determined based on review of the OPR's screening criteria and general guidance. The OPR's Small Project criteria is applicable to the Project. The Project would not generate long term automobile trips. Project construction would require an average of 10 workers per day resulting in approximately 20 automobile trips per day. The Project would also generate between approximately 14 to 24 haul truck trips per day depending upon the given phase (for waste-impacted soil export or clean fill import). Consistent with Section 15604.3 of the State CEQA Guidelines, impacts from regional truck traffic are not included in the VMT estimates. As the 110 average daily trips threshold would not be exceeded, the Project's VMT impacts can be presumed to be less than significant. Therefore, the Project would result in a less-than-significant impact.

c) **Less-than-Significant Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. The temporary access road for the Project would not be accessible to the public and the Project would not result in permanent changes to the existing roadways. The Project would not involve any new hazardous design or feature. The Project would not result in permanent changes to roadways and would not create any significant impacts to pedestrians, bicyclists, or traffic operations. Therefore, the Project would result in a less-than-significant impact.

d) **Less-than-Significant Impact.** The Project would not substantially increase hazards to vehicle safety due to increased traffic, which could result in inadequate emergency access. The Project site is vacant, and no emergency vehicle access is required. In addition, the addition of traffic from Project construction traffic would not result in any significant changes to emergency vehicle response times in the area. Therefore, the Project would result in a less-than-significant impact.

References

California Governor's Office of Planning and Research (OPR). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*, April 2018.

TRIBAL CULTURAL RESOURCES

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
18. TRIBAL CULTURAL RESOURCES — **Would the proposed project** cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☒	☐	☐

Introduction

Tribal Cultural Resources (TCR's) include sites, features, places, cultural landscapes, and sacred places or objects that have cultural value or significance to a Tribe. To qualify as a TCR, the resource must either: 1) be listed on, or be eligible for, listing on the California Register of Historical Resources (CRHR) or other local historic register; or 2) constitute a resource that the lead agency, at its discretion and supported by substantial evidence, determines should be treated as a TCR (PRC §21074). Under Assembly Bill 52 (AB 52) tribal representatives are considered experts appropriate for providing substantial evidence regarding the locations, types, and significance of TCRs within their traditional and cultural affiliated geographic area, and therefore, the identification and analysis of TCRs should involve government-to-government tribal consultation between the CEQA lead agency and interested tribal groups and/or tribal persons. (PRC §21080.3.1(a)).

The City of Napa notified the following tribes requesting Assembly Bill (AB) 52 notification for projects subject to CEQA.

1. Confederated Villages of Lisjan Nation

2. Yocha Dehe Wintun Nation

The City sent project notification letters via certified mail to both tribes and neither tribe requested formal consultation within 30 days of receipt of the notification letter. No TCRs were discovered during the cultural resources investigation of the Project site (NIC, 2025).

Discussion

a) **Less-than-Significant Impact.** No cultural resources either listed or eligible for listing by the State or local listing were identified on the Project site as a result of the records search and AB 52 consultation. Therefore, the Project would result in a less-than-significant impact.

b) **Less-than-Significant Impact with Mitigation.** Archival research and an intensive field survey did not identify any significant archaeological or cultural resources within the Project area (NIC, 2025). The survey noted that due to the burning of waste products, earth moving, introduction of outside soils, use of heavy machinery, and contamination of the Project area, the likelihood of finding buried cultural resources, archaeological resources, or human remains is low. Furthermore, **Mitigation Measures CUL-1 through CUL-2** require procedures for the inadvertent discovery of cultural resources and tribal cultural resources and human remains. Therefore, the Project would result in a less-than-significant impact.

References

Natural Investigations Company (NIC), 2025. *Cultural Resources Investigation for the Napa Hidden Glen Dump Remediation, Napa County.* March 2025.

UTILITIES AND SERVICE SYSTEMS

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
19. UTILITIES AND SERVICE SYSTEMS — Would the proposed project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

a) **No Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. The Project site would not require new utilities related to water and wastewater treatment, stormwater, telecommunication, natural gas or electric power services. Therefore, the Project would result in no impact.

b) **No Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. The Project would have no long-term water demand and would not adversely affect the water supply. Therefore, the Project would result in no impact.

c) **No Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. The Project would not generate any wastewater and would not require additional capacity beyond the wastewater treatment. Therefore, the Project would result in no impact.

d, e) **Less-than-Significant Impact.** The Project consists of short-term remediation activities and would not result in development or a change from existing operations at the vacant property. Construction of the Project would not generate a significant amount of solid

waste as only soil would be removed from the site. Waste-impacted soil that is hauled offsite would be hauled to an appropriate landfill for disposal and would not exceed the capacity of local landfills. The Project would comply with all federal, state, and local statutes and regulations related to solid waste. Therefore, the Project would result in a less-than-significant impact.

WILDFIRE

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
20. WILDFIRE — If located in or near state responsibility areas or lands classified as very high hazard severity zones, **would the proposed project:**				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Introduction

Areas where the state has financial responsibility for wildland fire protection are known as state responsibility areas (SRA). The Department of Forestry and Fire Protection (CALFIRE) is responsible for fire prevention and suppression in SRA. Areas where local governments have financial responsibility for wildland fire protection are known as local responsibility areas (LRA). The Project site is not located in a SRA or a very high fire hazard severity zone (VHFHSZ). The Project is located in an LRA and is within a Moderate severity zone. The City of Napa Fire Department provides fire protection services to the City of Napa. The City of Napa Fire Department operates five stations throughout the City (City of Napa, 2022). The nearest fire station to the site is the Napa Fire Department Station 1, located approximately 1.3 miles west of the Project site.

Discussion

a) **No Impact.** The Project would not involve the closure or alteration of any existing evacuation route that would be important in the event of a wildfire. The Project would not

impede or require diversion of rescue vehicles or evacuation traffic in the event of a wildfire. Therefore, the Project would result in no impact.

b) **No Impact.** There are no elements of the Project that would exacerbate wildland fire risk in the Project area due to slope, prevailing winds, and other factors. Therefore, the Project would result in no impact.

c) **No Impact.** There are no elements of the Project that would exacerbate wildland fire risk in the Project area, which is a regularly mowed vacant lot. Therefore, the Project would result in no impact.

d) **No Impact.** There are no elements of the Project that would expose people or structures to flooding or landslides by runoff flow, post-fire instability, or drainage changes. Therefore, the Project would result in no impact.

References

CALFIRE. 2025. *Fire Hazard Severity Zones in State Responsibility Area,* https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones, accessed April 9, 2025

MANDATORY FINDINGS OF SIGNIFICANCE

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
21. MANDATORY FINDINGS OF SIGNIFICANCE — Would the proposed project:				
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

a) **Less-than-Significant Impact with Mitigation.** The Project would not substantially degrade the quality of the environment, reduce fish or wildlife populations, or eliminate important examples of major periods of California history or pre-history. As noted in the Cultural Resources section, there are no features onsite of prehistoric or historic significance. Thus, the Project would not eliminate important examples of the major periods of California history or prehistory and would not significantly impact any resource that would qualify for listing as eligible on the CRHR. As noted in the Biological Resources section, implementation of **Mitigation Measures BIO-1** and **BIO-2** would reduce impacts to special status animal species. Therefore, the Project would result in a less-than-significant impact with mitigation.

b) **Less-than-Significant Impact with Mitigation.** According to the City of Napa, there is one proposed roadwork project within one mile of the project site. This includes the Coombsville Road Roadway Rehabilitation Project (Pascale Place to City Limits, located approximately 0.4 miles to the east of the Project site). The Project is proposed to include pavement and striping work, and possible concrete and storm drain improvements.

As described in the preceding sections of this Initial Study, the Project would result in no impacts to agricultural and forest resources, land use and land use planning, mineral resources, population and housing, recreation, or wildfire. Because the Project would have no impact for these topic areas, there is no potential for the Project to have cumulatively considerable impacts.

As described in the preceding sections of this Initial Study, the Project would result in less than significant impacts to aesthetics, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, noise, public services, transportation, and utility and service systems. The Project is consistent with the land use and zoning designations for the parcel and would not conflict with applicable land use policies or regulations.

As noted in the Air Quality section, the BAAQMD *CEQA Air Quality Guidelines* recommend that cumulative air quality effects from criteria air pollutants also be addressed by comparison to project-level significance thresholds. These thresholds were developed to identify a cumulatively considerable contribution to a significant regional air quality impact. As disclosed in the Air Quality section, the Project-related construction emissions would be below BAAQMD's average daily significance thresholds. The incorporation of mitigation measures for fugitive dust during construction of the Project would ensure air quality impacts would be less than significant with mitigation. Therefore, the Project would not result in a cumulatively considerable net increase of emissions of criteria air pollutants and precursors and there is no potential for the Project to have cumulatively considerable air quality impacts.

As noted in the Biological Resources section, the Project site is highly disturbed, making it unsuitable for special-status plants to occur. In addition, the Project site lacks the hydrological and topographical conditions to support special-status plant species. The Project site does not contain any wetlands or other natural aquatic habitat features, such as stream channels or drainages. Mitigation measures for special status animal species (preconstruction surveys for nesting birds and bats) would reduce impacts to a less than significant level. Therefore, there is no potential for the Project to have cumulatively considerable biological resource impacts.

As noted in the Cultural Resources and Tribal Cultural Resources sections, no historical resources exist on the Project site and the Project area exhibits a low level of sensitivity for cultural resources, paleontological resources, or traces of early Native American activity. Due to a lack of identified cultural resources, the Project would result in a less-than-significant impact with mitigation. Therefore, there is no potential for the Project to have cumulatively considerable cultural or tribal cultural resource impacts.

Considering the factors addressed above, the Project would not have a cumulatively considerable impact on any of the environmental factors evaluated in this Initial Study with mitigation incorporated. Therefore, cumulative impacts would be less than significant with mitigation incorporated and the Project would not result in cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

c) **Less-than-Significant Impact.** As described in the preceding sections of this Initial Study, the Project would not result in impacts that would result in substantial adverse

effects on human beings, either directly or indirectly. Therefore, the Project would result in a less-than-significant impact with mitigation.

APPENDIX A

SITE PHOTOS

City of Napa
Hidden Glen Remediation

Site Photos

Prepared by:

City of Napa Utilities Department

for

CalRecycle Legacy Disposal Abatement
Partial Grant Program Application

October 16, 2024

Photo 1 – Aerial View of Project Site (north is top of photo)

Photo 2 – Project Site (looking north towards house on Lot 13)

Photo 3 – Project Site (looking east towards quarry cliffs)

Photo 4 – Project Site (looking south towards house on Lot 6)

Photo 5 – Project Site (looking south-west towards Lots 7 & 8)

Photo 6 – Project Site (looking west with house on Lot 6 to the left)

Photo 7 – Project Site (looking west with house on Lot 9 to the right)

Photo 8 – Project Site (looking north-west towards Lots 9 & 10)

Photo 9 – Methane Gas Monitoring Well #2 Along Fence with Lot 7 (looking south-west)

Photo 10 – Project Site (looking south-west towards Lot 8 w/ Pascal Place in upper right)

Photo 11 – Project Site Along Pascal Place (looking south)

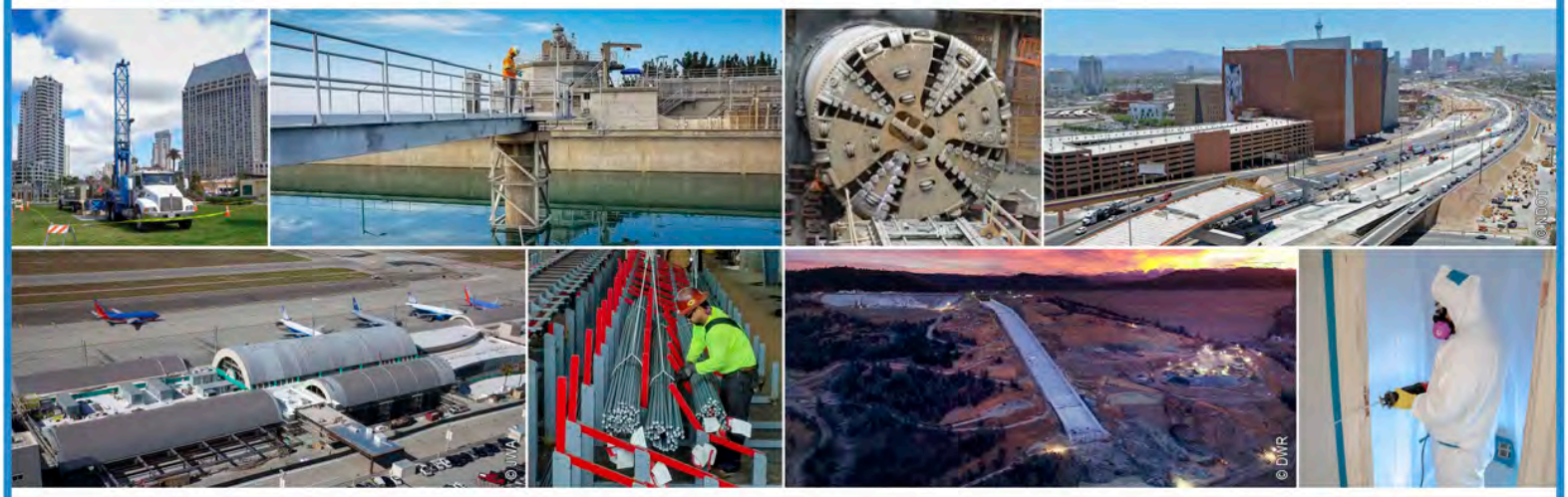
APPENDIX B

REMEDIAL ACTION PLAN (RAP)

Remedial Action Plan
Hidden Glen Dump
Coombsville Road
Napa, California
SWIS No. 28-AA-0028

Napa County Local Enforcement Agency
1195 Third Street, Suite 210 I Napa, California 94559

October 16, 2024 | Project No. 109558001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

35+ YEARS

Remedial Action Plan
Hidden Glen Dump
Coombsville Road
Napa, California
SWIS No. 28-AA-0028

Mr. Peter Ex, REHS
Napa County Local Enforcement Agency
1195 Third Street, Suite 210 I Napa, California 94559

October 16, 2024 | Project No. 109558001

PROFESSIONAL GEOLOGIST
BETH S. ABRAMSON-BECK
No. 4580
STATE OF CALIFORNIA

Nathan Diem
Senior Geologist

Beth Abramson-Beck, PG
Project Engineer

NDD/BAB/mp

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FIGURES

APPENDICES

1 INTRODUCTION

Ninyo & Moore is pleased to submit this Remedial Action Plan (RAP) for a portion of the Hidden Glen Dump, (dump) located near the intersection of Pascale Place and Glory Court in Napa, California (Figure 1). The waste disposal site (WDS) is listed as "Hidden Glen Dump" in the CalRecycle Solid Waste Information System (SWIS) database and assigned SWIS No. 28-AA-0028. According to the database, the dump is listed as an unpermitted, closed, solid waste disposal site (WDS). The City-owned property referred to as "Parcel A" corresponds to a 2.18-acre area and is assigned Napa County Assessor Parcel Number (APN) 045-411-022-000 (Figure 2).

According to the SWIS database, the waste type is indicated as *"There are no Waste Types"* (likely undocumented/unknown). Information pertaining to "closure type, volume Unit Type, Remaining Capacity, Total Acreage, Disposal Acreage, permitted depth and elevation and depth are not available. The WDS is inspected quarterly by the County of Napa Environmental Health, Solid Waste Local Enforcement Agency (LEA). The latest inspection report, dated April 23, 2024, states "There are no Violations and No Areas of Concern (Appendix A). The April inspection report noted soil and debris was illegally disposed of on the west side of the property from an adjacent property, Lot 9.

On November 26, 2019 the LEA issued a Notice of Comply to the City which required submittal of a Work Plan to ensure that State Minimum Standards are addressed at the City owned property and in compliance with Title 27 of the --- Code of regulations. This RAP is being submitted to comply with the notice.

This RAP pertains to the portion of the dump that is owned by the City of Napa (City) and includes conducting the proposed remedial action activities on City-owned property. The planned remedial action for the City-owned property consists of waste excavation at locations and to depths to meet state minimal standards for waste disposal sites and be protective of human health, and on-site reconsolidation of the removed wastes as generally shown on Figure 3. Detailed remediation plans are included in Appendix B. The planned remedial activities will be conducted on City-owned property; however, the City may additionally remove some wastes in the areas of adjacent residential properties to provide a sloped transition of the soil cover across property lines referred to as "feathering". This RAP also includes the possibility of accepting waste soil from adjacent properties and reconsolidating and covering on City property as shown in Appendix F.

2 BACKGROUND

The background information contained in this section focuses on the previous Closure Plans for the dump, reports documenting closure activities and related regulatory agency correspondence, and subsurface investigations at adjacent residences. The background information was obtained from publicly available documents in the CalRecycle SWIS database and pertains to wastes located outlying the capped portion of the dump that are specifically relevant to this RAP.

Initially the dump was an excavated quarry that operated into the 1940s. Reportedly, groundwater was encountered when the quarrying operations were at a depth of about 70 to 80 feet (below ground surface (bgs). Reportedly, the quarry was abandoned due to the presence of groundwater. Sometime after quarry operations ended, the excavation was used as a general garbage dump by a private operator. Reportedly, *"garbage"* was dumped and then burned *"and spread as a landfill."* It was stated that it was possible that *"old"* automobiles from a local demolition derby were also abandoned at the dump. In the early l960's, the dump reportedly was abandoned when the South County landfill became operational. The City reportedly began using the Hidden Glen Dump to dispose tree prunings and brush, along with asphalt and concrete wastes. The brush and prunings were reportedly burned *"and spread."*

Several closure plans (aka remedial action plans) were previously prepared for the dump and remedial action activities were conducted to close the site. ENGEO (1988) prepared a closure plan consisting of capping the waste disposal site *"in place."* In 1990, Harding Lawson Associates (HLA) (1990) prepared an addendum to the closure plan that maintained the planned *"in-place capping"* of the dump. In April 2000 McClaren-Hart prepared a Closure Plan for the Hidden Glen Dump (McClaren-Hart, Inc, 2000) that was generally consistent with the previous 1988 ENGEO and 1990 HLA closure plans and similarly proposing capping the waste disposal site *"…in place and dedicating the site as open space as part of a planned residential development of the surrounding site."* The closure plan proposed to cap in place the dump and reportedly *"…gain agency concurrence for closure, which is sought by the land owner to allow him to proceed with planned residential development of the overall 14-acre site."* Reportedly the 1990 McClaren-Hart Closure Plan report was prepared as an addendum to the 1988 Closure Plan.

In general, the McClarren-Hart Closure Plan described methods proposed to cap in place the dump and obtain regulatory agency concurrence for closure which was being sought by the land owner to allow them to proceed with the planned residential development of the overall 14-acre site, a portion of which included the dump. Post closure activities were indicated as consisting of a 5-year cap and methane monitoring program even though methane was not expected to be encountered at levels of environmental concern.

In January 2002, Geotrans submitted a documentation report of the waste cap construction on behalf of the Napa Garbage Service that included as-built drawings, liner test results, compaction test results, site photographs, and a description of the work performed. It was stated that the "landfill" cap was constructed in accordance with the design specifications and closure plan requirements. Geotrans stated that the closure was performed with oversight and direction from the Water Board, CIWMB and the LEA and in general accordance with the April 6, 2000 closure plan prepared by McLaren/Hart, Inc. titled, "*Closure Plan, Hidden Glen Landfill, Napa, California"* as amended by the December 6, 2000 letter prepared by Geotrans titled, *"Addendum to April 6, 2000 Hidden Glenn Landfill Closure Plan, Napa, California."* GeoTrans stated that the construction documentation report indicated that *"landfill closure"* included importing and stockpiling clean fill material for use as foundation fill and protective soil cover; clearing and grubbing the waste area surface; placing and grading foundation fill soils over the waste materials; installing a cap system consisting of a geosynthetic clay liner (GCL), 80-mil high density polyethylene (HDPE) layer, and geocomposite drainage layer; placing protective soils and top soil over the cap; placing a hydroseed mixture on the topsoil; and installing surface water drainage and erosion control features.

Beginning in September 2018, Langan conducted subsurface site investigations (drilling and sampling) of residential properties at Lots 6, 7, 8, 9 and 10, outlying the capped portion of the Hidden Glen Dump and on the flag section of the City owned property. Langan indicated that the purpose of their investigations was to collect "subsurface information" to develop a plan for remedial action "to address debris impacts in shallow soil on the five lots and, if needed, on adjacent areas between the lots and the landfill footprint." The results of their investigations indicate that the lateral extent of the waste disposal site extends beyond the area that was capped and relatively shallow wastes extended within the buffer zone onto the residential properties. In addition, waste was observed within the flag ship area (frontage along Pascale Place, Figure 2). These wastes contain elevated lead concentrations at some locations. Soil sample results and figures are included in Appendix C (Langan, 2019a,b,c,d,e).

The Langan reports were provided to the LEA and in response the LEA issued a Notice to Comply letter to the City on November 26, 2019. The Notice to Comply letter required submittal of a Work Plan to ensure that State Minimum Standards are addressed at the City owned property and in compliance with Title 27 of the --- Code of regulations. This RAP is being submitted to comply with the notice.

On June 29, 2020, the LEA issued a letter to the City of Napa requiring submittal of a workplan to ensure that State Minimum Standards are addressed at the City-owned parcel and in compliance with Title 27 of the California Code of Regulations. To comply with State Minimal Standards, the

letter requires the City to remove and/or cover spillover waste along the flag section and the buffer zone (Figure 2). The LEA describes two options to address waste in the flag section and the buffer zone; option 1 full waste removal and option 2 leaving the waste in-place and capping. This RAP proposes to excavate, reconsolidate waste on site, and cap waste with a minimum of two feet of clean soil.

3 SITE DESCRIPTION

The site as it pertains to the RAP is the City-owned Parcel A consisting of the capped portion of the dump and the area between the capped area and the adjacent properties referred to as the buffer zone (Figure 2). The dump is located in a residential setting with wastes occurring at the previously capped portion of the dump, buffer zone and at adjacent residential properties downslope to the north, west, and south. Nearly vertical quarry walls along the east perimeter of the cap section contain the waste to the east. Adjacent residential properties are not separated by a road or other features. A cemetery is located across Pascale Place to the west.

The dump has three relatively recently constructed Landfill Gas (LFG) monitoring wells referred to as MW-1 through MW-3 (Figure 2). The wells were constructed in December 2020 and are monitored quarterly. The wells are dual and triple completions; MW-1 and MW-2 are constructed with screened intervals at 5 to 10 feet, 15 to 20 feet and 25 to 35 feet and MW-3 is constructed with two screened intervals at 5 to 10 feet and 15 to 20 feet.

4 OWNERSHIP

The following information for the **Hidden Glen Dump** was obtained from the SWIS database:

Site:	Hidden Glen Dump Coombsville Road Napa, California (SWIS No. 28-AA-0028)
GIS Coordinates	Latitude: 38.2977 Longitude: -122.2679
Land Owner(s)	City of Napa 955 School Street Napa, California 94559

5 PHYSICAL SETTING

The following summarizes topographic, geologic, and hydrogeologic information for the site and/or vicinity, based upon documents reviewed, as referenced and/or our visual reconnaissance of the site.

5.1 Topography

The capped waste disposal area and buffer zone was observed to be relatively flat, with surface elevations reportedly ranging from approximately 120 to 130 feet MSL). On the northwest, north, and east sides are near vertical quarry walls (SCS Engineers, 2020). In general, the surface between the capped waste disposal area and Pascale Place to the west and Glory Court to the south slope downward to approximately 105 feet MSL.

5.2 Regional and Site Geology

The following is a description of the regional geology and site geology, based on early investigations, from the Closure Plan Addendum prepared by HLA.

The hills bordering the east side of Napa Valley are underlain, as is the site, by Pliocene age Sonoma Volcanics. The Sonoma Volcanics are a complex assemblage of volcanic, pyroclastic, and volcaniclastic rocks. The composition of these volcanics is highly variable and represents an accumulation of material erupted from numerous source vents. In addition, these deposits were typically deposited on irregular topographic surfaces and locally-on moderately steep slopes. As a result, the Sonoma Volcanics are commonly composed of highly lenticular or interfingered volcanic rocks of variable composition.

As observed at the site during previous investigations, several different lithologic rock types crop out on the surface, or were encountered during drilling, including: l) flow banded and brecciated rhyolite, 2) vitric tuff with lenses of perlitic rhyolite, a pyroclastic breccia and pumaceous ash flow tuff, and 3) poorly sorted lithic tuff breccia. These rocks exhibit rapid lateral variation and are gradational, such that they should be considered texturally and lithologically distinct zones within a single mappable unit.

Red-brown rhyolite crops out in the north portion of the site and occurs as blocks and small lenses (less than 10 feet thick) within dense vitric tuff in the southern portion of the site. The rhyolite is typically flow banded, although massive, flow breccia and explosion breccia textures were also observed. The matrix of the breccia consists of dense rhyolite. Overall, these rhyolite rocks are very hard, strong, and little weathered, with very little fracturing. Fractures that occur are related to cooling and are therefore random and discontinuous. The rhyolite is associated with some moderately consolidated tuff beds that typically occur near the base of the flow sequence.

A vitric tuff /pyroclastic breccia also crops out at the site and is light gray to green and generally hard and strong. This material is exposed on the west and south sides of the main quarry pit, and underlies the central portion of the pit as indicated from core samples during previous drilling

(Engeo, 1988). Texturally, it ranges from dense vitric tuff to coarse pyroclastic breccia containing pumice and volcanic blocks and bombs accumulated near vents. In the quarry pit wall, this rock contains occasional hairline fractures (less than 1/16-inch) that are locally iron stained. Fractures observed in outcrop appear to be random. In addition, fractures are very infrequent in outcrops examined outside the quarry site, suggesting that some of the fractures observed in the pit wall may be due to prior quarry activities.

Brown, poorly sorted, lithic tuff breccia is exposed on the east wall of the main quarry area. This tuff contains abundant, angular, 2 to 3 foot blocks of rhyolite and less common, non-volcanic lithic fragments set in a dense brown ash matrix. Overall, the rock is hard, strong and infrequently fractured.

Most of the rocks observed in the cores or cuttings from the borings were similar to rocks observed in outcrop. However, in one boring (MW-F) (Figure 2), a dark red-brown silty clay mudstone-like material was encountered from 31 to 37 feet and is interpreted as a possible paleosol that formed between silicic eruptions. At 179 feet, a gray, fine- grained (aphanitic) basalt was penetrated. Immediately below the basalt, at 188 feet, ground water associated with cuttings of rounded volcanic gravels, sand, silt, and clay was found. The rounded gravels suggest that the cuttings were derived from a conglomerate or partially lithified river channel deposit that disaggregated during drilling. Lenses of volcaniclastic sediments and river deposits are not uncommon in the Sonoma Volcanics (Kunkel and Upson. 1960).

5.3 Groundwater

The following is a description of hydrogeologic and groundwater conditions at the site and surrounding area based on the compilation of assessment data by HLA for the Solid Waste Assessment Test (SWAT) (HLA, 1990). Groundwater data is from the groundwater and leachate monitoring wells installed to evaluate the site conditions to prepare a site closure plan in 1988

Based on the evaluation by HLA, "…*ground-water flow through these volcanic rocks could be controlled by one or a combination of hydraulic conductivity of the bedrock matrix; hydraulic conductivity of through going discrete, or interconnected fracture sets; or hydraulic conductivity of contact zones between different volcanic units."*

Flow through the matrix of rocks is controlled by the abundance and interconnection of primary pores. The rocks examined on site are generally very hard and dense, and pores that exist, such as vesicles, are not interconnected. Thus, the hydraulic conductivity of the rock matrix of these rocks is very low.

Groundwater flow through hard rock could be controlled by either discrete throughgoing fractures or a network of interconnected fractures. Most fractures observed on site appear to be related to shrinkage during cooling of the volcanic rock. This type of fracture is random and restricted to individual cooling units. For example, a rhyolite flow may contain random cooling fractures that are either discontinuous within the flow or terminate at the adjacent unit that may or may not have its own set of cooling fractures. Considering the geologic setting and the field observations, the potential for either discrete, throughgoing fractures or a network of interconnected fractures appears to be low. Thus, the potential for groundwater flowing from the landfill into the bedrock and traveling into groundwater aquifers is considered low (HLA, 1990).

The volcanic rock beneath the site is extremely complex and highly variable. The irregular contact zones between different volcanic materials in the complex could conceivably be pathways for groundwater flow, particularly the top and bottom of a lava flow, which are often rubble zones developed by progressive movement during emplacement, a process referred to as auto brecciation. If the voids in the rubble are not filled during emplacement or by secondary alteration products, these zones can be permeable. In addition, some thin (less than 5 feet) interbedded lenses or beds of moderately consolidated pumaceous tuff occur locally in the pyroclastic sequence. These tuff beds appear moderately permeable and depending on the location, could behave as pathways for groundwater movement. Once groundwater gets into these zones, movement is controlled by the bedrock structure or the general strike and dip of the volcanic rocks. Some bedding plane contacts are essentially impermeable and behave as groundwater barriers. Fractures could conceivably be important locally in transmitting water from a flow or tuff unit to a permeable zone, if present (HLA, 1990).

Based on the HLA evaluation, *water levels in bedrock monitoring wells associated with the site are highly variable. At the time, MW-C and MW-D are both dry (Figure 2). The water level in MW-A is at 76 feet above msl, whereas the water level in MW-F, located 400 feet northeast of MW-A, is at approximately 19 feet above msl. This variability in water levels suggests that the water-bearing zones encountered are not hydraulically connected. If these zones were in hydraulic connection, the wells on site would respond to a consistent and predictable gradient. The erratic water levels in adjacent wells further substantiates that ground-water flow beneath the site is not controlled by porous media type flow or by interconnected sets of fractures.*

More recent monitoring of the three landfill gas wells at the site (MW-1 through MW-3, Figure 3) indicates that when last monitored in May 2024, groundwater was present in the shallow probe in MW-1 (total depth 10 feet bgs) at an approximate depth of 8 feet bgs. Groundwater was measured

in the 30-foot LFG probe in MW-2 at a depth of 22 feet bgs and in the 20-foot LFG probe at a depth of 16 feet bgs.

Water was reportedly encountered in boring B-2 located within wastes (Figure 2). Water reportedly was not encountered in boring of B-1; however, this boring appears to be located on a high spot on the quarry floor. The core material of Boring B-1 was moist (HLA, 1990).

More recent monitoring of the three landfill gas wells at the site (MW-1 through MW-3, Figure 2 and Figure 3) indicates that when last monitored in May of 2024, groundwater was present in the shallow probe in MW-1 (total depth 10 feet bgs) at an approximate depth of 8 feet bgs. Groundwater was measured in the 30-foot LFG probe in MW-2 at a depth of 22 feet bgs and in the 20-foot LFG probe at a depth of 16 feet bgs.

6 REMEDIAL ACTION

The planned remedial actions for the city-owned portion of the dump are consistent with restoration as an open-space (e.g., absence of buildings, playing fields, parking areas, equipment, etc.). The execution of the remedial action activities will be conducted in accordance with this LEA approved RAP. The remedial action will be performed by California-licensed contractors and a California licensed professional geologist, certified engineering geologist, or registered engineer or equivalent or under their direction. The following sections present the planned remedial action implementation. Remedial activities will be conducted in accordance with applicable rules and regulations imposed by the LEA, CalRecycle and the City of Napa.

6.1 Remedial Action Objectives

Remedial action objectives (RAOs) have been established for the dump to ensure the planned remedial actions:

1) are protective to human health and the environment,
2) meet applicable state minimum standards with respect to waste disposal sites (e.g., no exposed wastes, wastes where present will be adequately covered, etc.),
3) takes into account the types and locations of disposed wastes and future use of the site as open space,
4) is satisfactory to the LEA, CalRecycle and the City of Napa.

6.2 Pre-Remedial Action Site Preparation and Notifications

Site preparation prior to implementing remedial action will include but not be limited to the following:

- Notify the LEA and CalRecycle of the proposed remedial action once a schedule has been established.
- The City will notify the adjacent property owners and their representatives of the planned remedial action.
- Delineate the work area boundaries including the "buffer zone" boundaries and the adjacent property lines.
- Install erosion control and Best Management Practices (BMPs) in accordance with the project Stormwater Pollution Prevention Plan (SWPPP).
- Identify and prepare site ingress and egress.

6.3 Site Health and Safety Plan (SHSP)

A site-specific worker health and safety plan (SHSP) was prepared by Ninyo & Moore under the direction of, and approved by a Certified Industrial Hygienist (CIH) (Appendix D). The SHSP will be used during the RAP implementation. The plan describes the required specific training and monitoring requirements to ensure workers are adequately protected, identified the potential chemical and physical hazards that may be encountered during the field activities and will be prepared in general compliance with Occupational Safety and Health Administration (OSHA) requirements. The plan addresses field procedures, personal protective equipment, anticipated contaminants, and established action levels for exposure to contaminants and contingency plans for emergencies that may arise during the fieldwork.

6.4 Community Health and Safety Plan

Due to the presence of an adjacent residential community, a CHSP was prepared for the remedial action under the direction of, and signed by a CIH (Appendix E). The primary purpose of the CHSP is to promote a safe and healthy environment for the public by reducing community exposures to potential hazards and nuisances from site/clean closure activities, and promoting community awareness of the planned site closure activities. The plan is intended to protect the public and surrounding properties from potential health and environmental hazards during the planned remedial activities. The CHSP addresses field procedures, anticipated contaminants, established action levels for exposure to contaminants, and contingency plans for emergencies that may arise during the fieldwork.

6.5 Utility Clearance

Subsurface utilities are not expected to be present in the remedial excavation areas based on the current open space use of the site. However, prior to commencing excavation activities, public utility locator Underground Service Alert (USA) will be notified of the planned project a minimum of 48 hours before field activities start so that they can contact representatives of utility companies in the area. The planned project area will be clearly marked with white paint or surveyors flagging as required by USA.

6.6 Site Access

Access to the site is limited due to the absence of access roads, presence of private properties generally surrounding the site and presence of steep slopes/near vertical quarry walls. The site is only accessible via Pascale Place by traversing the western portion of the City of Napa-owned Lot A (Figure 3). Temporary construction fencing will be placed at the site entrance along Pascale Place (Appendix B) and access to the site will be arranged in advance by the City of Napa.

6.7 Waste Excavation

The remedial action for the site generally consists of excavating and removing wastes in the buffer zone (Figures 2 and 3) (e.g., areas between the capped portion of the dump and the adjacent residential properties/lots) and reconsolidating these wastes onsite at the northern portion of the capped dump (Figure 3). As shown in the grading plans in Appendix B, and on Figure 3, wastes will be excavated to bedrock where feasible, to depths of approximately 10 to 20 inches. The depth of excavation will be reduced if bedrock is encountered at shallower depths. Conversely, the depth of excavation may extend beyond 20 inches if wastes are deeper to reach bedrock or the excavation may terminate in wastes in which case the wastes will be covered with 2 feet of clean imported soil. Where waste removal may not be possible due to access, stability and/or other restrictions, wastes remaining in place will be covered with two 2 feet of clean imported soil to meet state minimum standards. Soil/waste from the flag section of Parcel A (frontage along Pascale Place, Figure 3) will be removed down to bedrock.

The lateral extent of the waste removal will be based on agreements with the adjacent property owners. At a minimum, waste will be removed within the buffer zone and extend to the adjacent property boundaries. Under this option, no waste will be removed from the adjacent properties and a small amount of waste may remain at the property line due to soil sloughing. However, if an adjacent property owner agrees, waste removal will “feather” from the buffer zone across the property line. In accordance with the grading plans, (Appendix B), wastes will be removed and “feathered” across the property lines of Lots 6, 7, 8, 9, and 10 a distance of approximately 1 to

5 feet beyond the property lines. In addition, soil and waste that was illegally dumped adjacent to Lot 9 will be removed to bedrock, as possible (Appendix B, Section Cut 6/4.2). Following the completion of waste removal, final grading will consist of backfilling with clean import soil to provide positive drainage. In addition, one foot of clean imported soil will be placed on top of the existing cap area (Figure 3, Appendix B). Final grading plans and drainage details are provided in Appendix B.

6.8 Waste Disposition – Reconsolidation

Based on the grading plans in Appendix B, approximately 670 cubic yards (cy) of waste including soil, waste, and grass and roots from grading operations will be excavated and reconsolidated on site. The proposed reconsolidation area on Parcel A is shown on Figure 3 and reconsolidation grading and cover plans are provided on the plans in Appendix B. The excavated waste will be moved to the approved reconsolidation location by the excavation contractor and will be transported in such a manner as to minimize the potential of spillage and creation of dust during transportation. Excavated waste may be first placed in temporary stockpiles near the excavation areas prior to being placed in the reconsolidation area. Temporary stockpiles will be managed in accordance with Section 6.11. Reconsolidated waste will be placed directly on top of the existing waste cap in the reconsolidation area, thereby not intruding into, or disturbing the existing cap, and covered daily with Visqueen plastic or equivalent. The final cover of the reconsolidated waste will consist of at least 2 feet of imported clean soils. Previous dump closure plans and State Regulations do not preclude onsite reconsolidation on top of the current cap.

6.9 Waste Disposition – Neighboring Property Waste Reconsolidation Option

The City is in discussions with the neighboring property owners regarding waste removal from their properties and reconsolidation of the waste on the City property. If this remedial action is agreed upon by the city and property owner(s), waste from the neighboring properties will be placed in temporary stockpiles in designated areas on the City property by the neighboring property owner's contractor. The property owner contractor(s) will need to meet the requirements specified in this plan including, but not limited to appropriate licensing to handle wastes, adhering to the site and community health and safety plans, etc. Temporary stockpiles will be managed in accordance with Section 6.11 of this plan. The stockpiles will be moved to the site reconsolidation area shown in Figure 4 by the City's contractor and graded in accordance with the grading plans in Appendix F. Based on the grading plans, if property owners of Lots 6 through 8 and Lot 10 were to select this option, then as estimated by others, approximately 2,753 cy of waste may be

reconsolidated from the neighboring residences and from the City owned property. Similar to waste reconsolidation from the City's property described in Section 6.8, reconsolidated waste from the neighboring properties will be placed directly on top of the existing waste cap in the reconsolidation area and covered with a minimum of two feet of clean imported soil.

6.10 Waste Disposition – Offsite Disposal

As an alternative and at the discretion of the City, excavated waste may be temporally stockpiled, sampled for waste characterization, and transported to an offsite waste facility as described in sections below. The grading plan for this alternative is shown on drawing 5.3 in Appendix B.

6.11 Temporary Stockpiling and Management

Waste may be temporarily stockpiled prior placing waste in the reconsolidation area and/or for offsite waste disposal. As applicable, a staging area and temporary stockpiles will be managed by the Contractor in accordance with this document, construction specifications, and the project SWPPP. Temporary stockpiled waste at the site be managed as follows:

- Place the excavated/stockpiled waste onto 10-millimeter (mil) or thicker visqueen plastic sheeting.
- Temporary stockpiles will be sprayed or misted with water to minimize dust emissions during stockpiling, if necessary.
- Temporary stockpiles will be securely covered daily with a 6-mil or thicker visqueen plastic sheeting to minimize runoff from rain.
- Temporary stockpiles will be configured in such a manner that surface water runoff, if present, from the stockpile does not carry stockpiled materials beyond the stockpile area.

6.11.1 Stockpile Sampling and Characterization for Offsite Disposal

Stockpiles intended for offsite disposal will be sampled by running a random number generator to obtain sample locations and depths. If the sampling depth is relatively shallow, the sample will be collected by coring the laboratory-supplied container directly into the material to be sampled. If the sample depth is greater, and depending on the actual volume of the stockpile, excavation equipment and/or hand auger equipment will be used to obtain samples. If excavation equipment is used, the sample will be similarly collected by coring the sample jar directly into the material to be sampled. If hand auger equipment is used then the sample in the auger will be transferred to a laboratory-supplied jar. Analytical testing for wastes to be disposed of offsite will be based on the accepting disposal facility(s)

requirements. The contractor should assume the wastes may be tested for chemicals of concern including the following:

- California Title 22 metals; samples containing one or more metal concentrations less than the California Total Threshold Limit Concentrations (TTLCs) but greater than 10-times the California Soluble Threshold Limit Concentrations (STLCs) will be additionally analyzed for soluble metal concentrations by the California Waste Extraction Test (WET) method to profile the waste as either California Class I hazardous or California Class II non-hazardous. Samples containing one or more metal concentrations exceeding 20-times the Federal Toxicity Characteristics Leaching Procedure (TCLP) will be additionally analyzed for soluble metal concentrations by the Federal TCLP to classify the waste as either RCRA or non-RCRA hazardous waste.

- Total Petroleum Hydrocarbon compounds (e.g. TPHgas, TPHdiesesl and TPHmotor oil).

Additional analysis may be required by the disposal facility. In general, the number of discrete samples required is listed below. The actual number of samples to be collected and analyzed will depend on the receiving facilities requirements.

- Stockpiles 100 cy or less -a minimum of four discrete samples will be collected, one from each quarter of the stockpile.

- Stockpile from 101-500 cy - a minimum of one sample from each 25 cy, or portion thereof, will be collected (e.g., a 130-cy stockpile would require six samples).

- Stockpile over 500 cy - sample as per a 500 cy stockpile and collect an additional sample for each additional 500 cy, or portion thereof.

6.12 Imported Fill Soil

Clean imported fill soil to be used to cover/cap waste will be sampled and the analytical data, soil classification, and the origin/location of the import soil will be provided to the LEA for approval prior to use onsite. Import fill soil sampling methodology and analysis will follow the California Department of Toxic Substance Control (DTSC) 2001 *Information Advisory (for) Clean Imported Fill* guidelines (Appendix E). According to DTSC's guidelines, the number of soil samples is based on the volume of imported fill and summarized below.

- One sample per every 250 cy for up to 1,000 cy.

- Four samples for the first 1,000 cy plus one extra sample per each additional 500 cy.

- For a volume of soil greater than 5,000 cy, 12 samples collected for the first 5,000 cy, and one extra sample for every additional 1,000 cy.

The City of Napa estimated that approximately 4,400 cy of soil will be imported which would require approximately nine discrete soil samples for analysis prior to importing to the site. Only

discrete samples will be collected because of the potential dilution of contaminants. The samples will be analyzed for Constituents of Potential Concern (COPC) based on the source of the import soil in accordance with the DTSC's guidelines. The sample results will be compared to DTSC Screening Levels and United States Environmental Protection Agency (EPA) Regional Screening Levels for comparison to human health protection evaluation.

6.13 Best Management Practices

The Contractor shall implement BMPs associated with the site SWPPP to protect the temporary stockpiles from erosion and storm water run-on and runoff. The BMPs include, but are not limited to, the following:

- Erosion control
- Storm water drainage control
- Secondary containment (as applicable)
- Fugitive emission control of dust and/or vapors
- Spill prevention
- Additional BMPs specified in the project SWPPP

6.14 Excavation Sampling

Excavation confirmation sampling is not included in this RAP. The purpose of the excavation is to remove waste within the buffer zone to bedrock and/or cap waste with two feet of clean imported soil so that no waste is exposed at the site. The City of Napa is not proposing clean closure of the dump; therefore, excavation confirmation sampling is not required.

6.15 Field Documentation

Field logs will be kept to document the field activities. Photographs will be taken to document the remedial action activities at active waste removal locations, to verify adequacy of reconsolidated material, placement of cap, temporary "waste" stockpiles and disposed waste removal (as applicable), and to generally document the remedial activities. The photographs will serve to complement information entered in the field activity logs.

6.16 Dust Control and Air Monitoring Plan

Air monitoring and dust control onsite will comply with the SHSP and CHSP (Appendix D and E). Dust control will include dust suppression activities, such as lightly spraying or misting at active

backhoe/track hoe excavation areas and reducing vehicle speed onsite. If waste is temporarily stockpiled for offsite disposal, dust suppression activities will include light spraying or misting the stockpiled materials, covering stockpiles, and minimizing the waste drop height from the excavator's bucket onto the stockpile or into the transport trucks. Prior to conducting the removal activities, the prevailing wind direction will be determined by obtaining prevailing wind direction information prior to and during field activities.

Per the CHSP, perimeter dust monitoring will be conducted using Thermo DataRAM particulate monitors (pDRs) (or equivalent) to monitor the upwind and downwind particulate levels of the site. The particulate monitors continuously monitor and record the real-time concentration and median particle size of airborne dust, smoke, mist, and fumes. Personnel will monitor dust during excavation activities. Air monitoring details and action levels are provided in Section 8 of the SHSP (Appendix D) and Section 6 in the CHSP (Appendix E).

6.17 Site Restoration

Site restoration as an open space area will be consistent with the grading plans included in Appendix B. The disturbed soil within capped area with be covered with an additional one foot of clean imported soil and seeded with native grasses. Final restoration will provide positive drainage for the site.

7 LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in Site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities. Please also note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analysis. Further assessment of potential adverse environmental impacts from past on-site and/or nearby use of hazardous materials may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between

sampling locations. Variations in soil and/or groundwater conditions will exist beyond the points explored in this evaluation.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory which is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our conclusions, recommendations, and opinions are based on an analysis of the observed Site conditions. It should be understood that the conditions of a site could change with time as a result of natural processes or human activities at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

8 REFERENCES

Engeo, 1988, Geotechnical Exploration, Hidden Glenn – Fennell Property, Napa, California: dated March 2.

Kunkel, F., and Upson, 1960, Geology and Groundwater in the Napa and Sonoma Valley areas. U.S.G.S. Water Supply Paper 1495.

Langan, 2019a, Field Investigation – Former Hidden Glen Landfill, Lot-6 Glory Court, Napa, California: dated April 29.

Langan, 2019b, Field Investigation – Former Hidden Glen Landfill, Lot-9-Pascal Place, Napa, California: dated April 29.

Langan, 2019c, Field Investigation – Former Hidden Glen Landfill, Lot 7 and 8- Glory Court and Pascal Place, Napa, California: dated April 29.

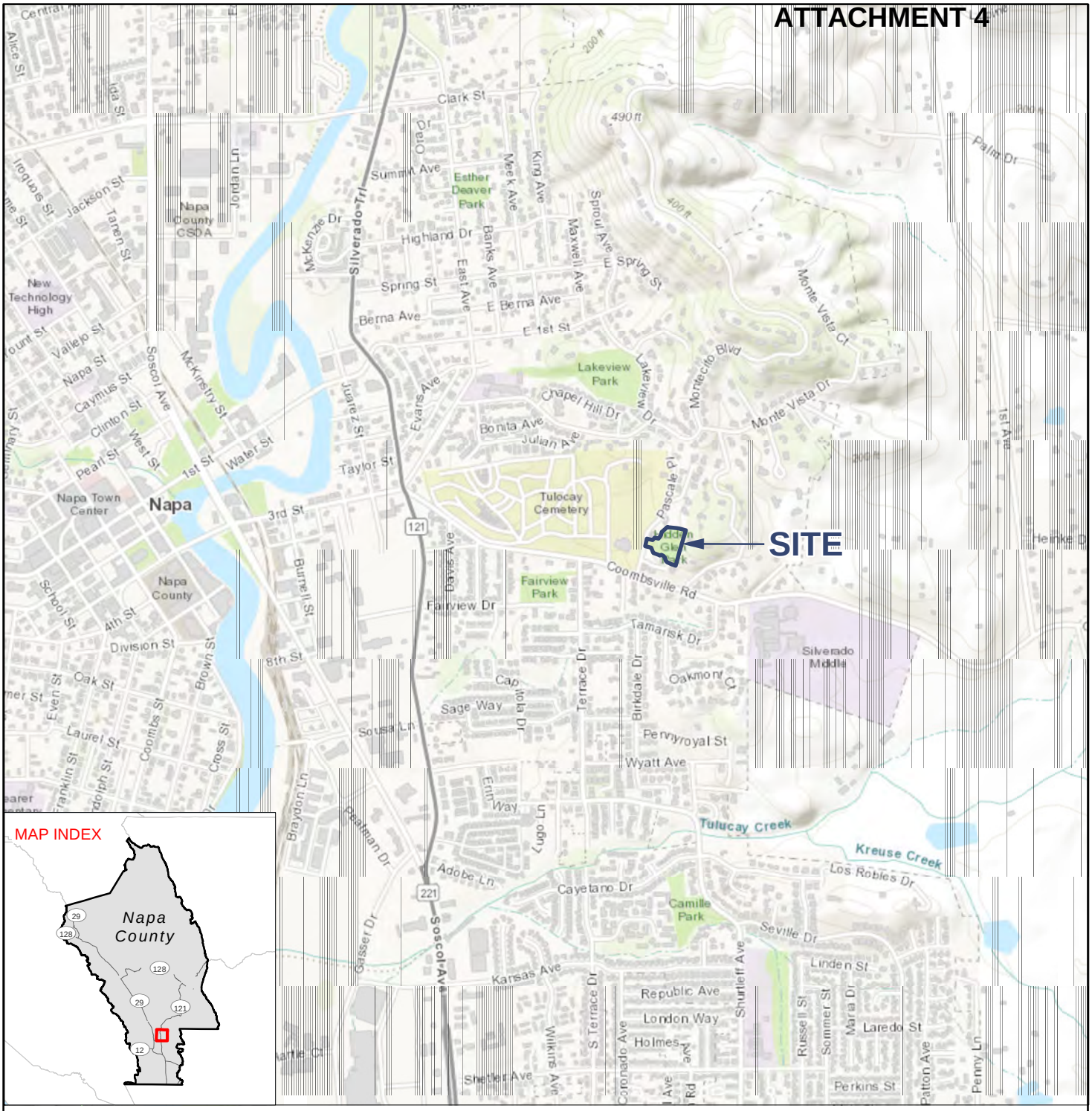
Langan, 2019d, Field Investigation – Former Hidden Glen Landfill, Lot 10-Pascal Place, Napa, California: dated April 29.

Langan, 2019e, Field Investigation – Former Hidden Glen Landfill, Lot A-Pascal Place, Napa, California: dated April 29.

McClaren-Hart, Inc, 2000, Closure Plan Hidden Glen Landfill, Napa, California: dated April 6.

SCS Engineers, 2020, Property Management Plan for City-Owned Parcel (APN 045-411-022-000), Investigation and Clean-Up of Closed Hidden Glen Landfill, Napa, California: dated March 2.

FIGURES



NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCE: ESRI WORLD TOPO, 2024

N

FEET

0 1,500 3,000

1_109558001_SL.mxd 9/3/2024 JDL

FIGURE 1

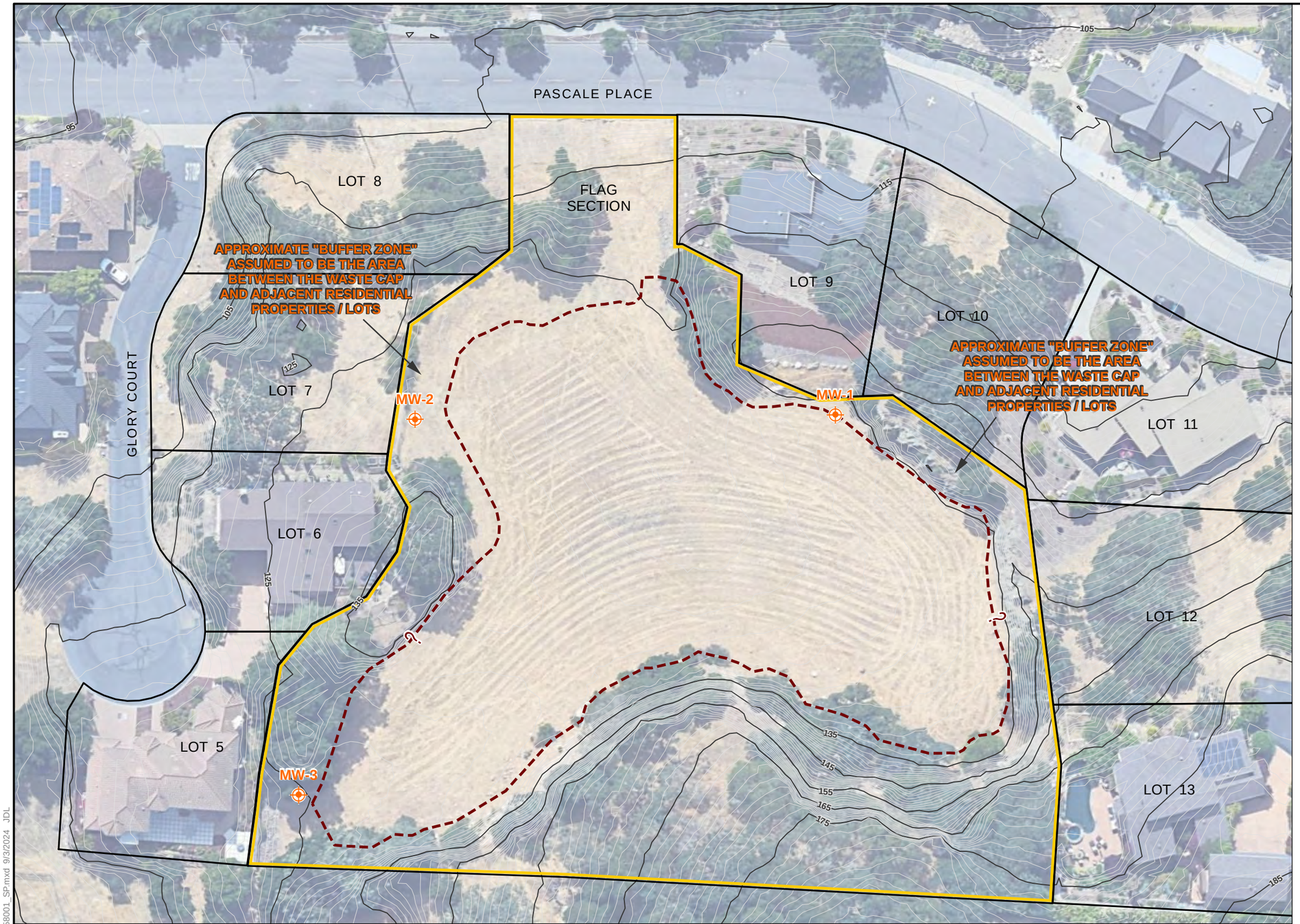
SITE LOCATION

HIDDEN GLEN DUMP
COOMBSVILLE ROAD, NAPA, CALIFORNIA

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

109558001 | 10/24

ATTACHMENT 4



LEGEND

MW-3 — LANDFILL GAS WELL (SCS ENGINEERS, 2020)

PARCEL A BOUNDARY APN: 045-411-022-000 (SCS ENGINEERS, 2020)

PARCEL BOUNDARY

ADAPTED FROM LANGAN (2018)

APPROXIMATE LIMIT OF CAP

N

FEET

0 50 100

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCES: SITE PLAN - SCS ENGINEERS, DATED: 2-26-20; TOPO - NOAA/USGS LIDARNOAA LIDAR, 2018-2019, NORTHERN CALIFORNIA WILDFIRE-QL2; GOOGLE EARTH, 2024

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FIGURE 2

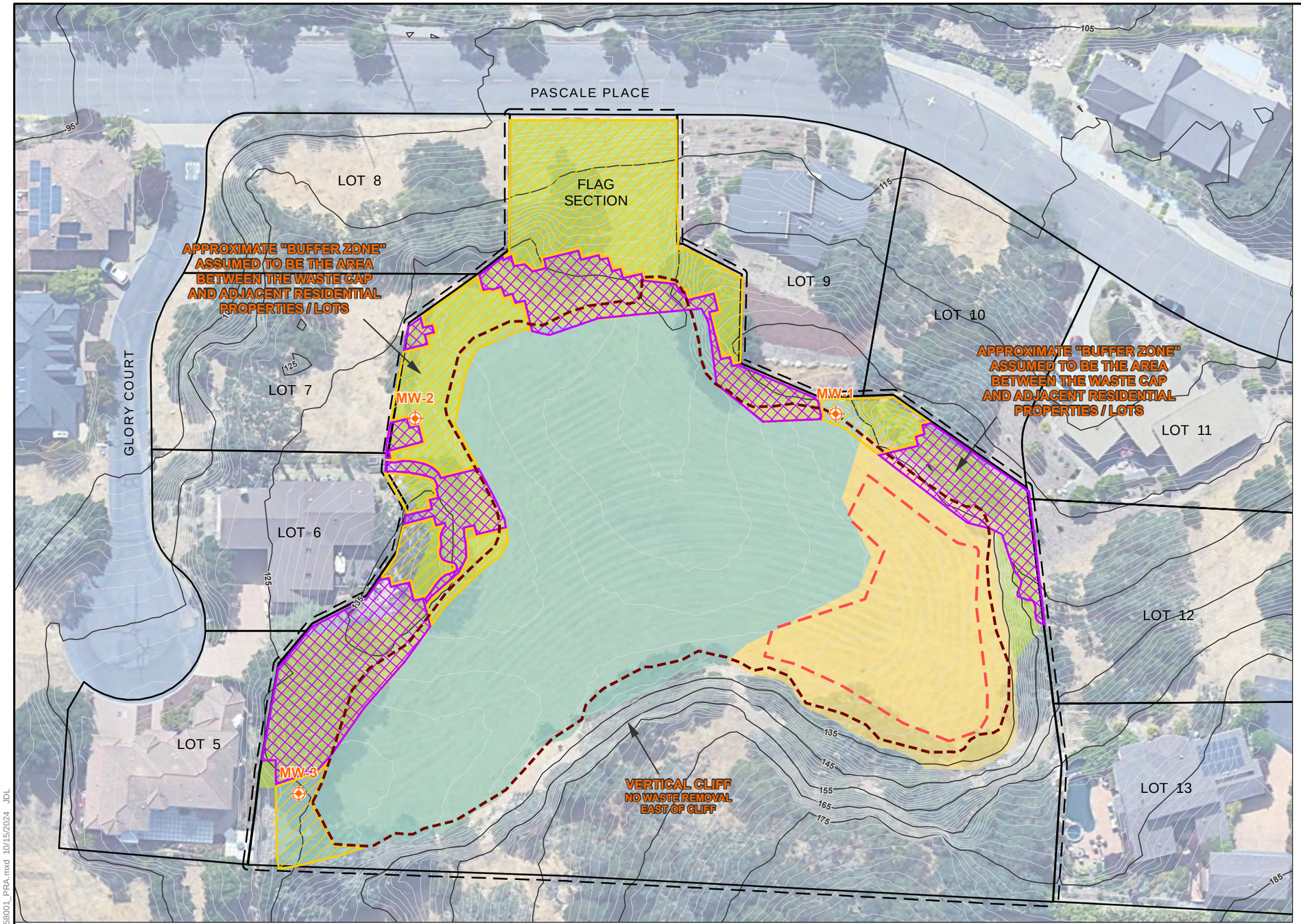
SITE PLAN

HIDDEN GLEN DUMP
COOMBSVILLE ROAD, NAPA, CALIFORNIA

109558001 | 10/24

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

ATTACHMENT 4



LEGEND

MW-3 — LANDFILL GAS WELL (SCS ENGINEERS, 2020)

PARCEL A BOUNDARY APN: 045-411-022-000

PARCEL BOUNDARY

CALLANDER ASSOCIATES LANDSCAPE ARCHITECTURE, (OCTOBER, 2024)

RELOCATED WASTE
(APPROXIMATE WASTE STOCKPILE = 495 CY)

WASTE REMOVAL (<10")

WASTE REMOVAL (10" - 20")

2 FOOT SOIL CAP OVER RECONSOLIDATED WASTE

1'-0" SOIL COVER OVER EXISTING CAP

SOIL FILL FOR DRAINAGE

ADAPTED FROM LANGAN (2018)

APPROXIMATE LIMIT OF CAP

N

FEET
0 50 100

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCES: GRADING PLAN - CITY OF NAPA, DATED: MARCH 21, 2024; TOPO - NOAA/USGS LIDARNOAA LIDAR, 2018-2019, NORTHERN CALIFORNIA WILDFIRE-QL2; GOOGLE EARTH, 2024

3_109558001_PRA.mxd 10/15/2024 JDL

FIGURE 3

PLANNED REMEDIAL ACTION

HIDDEN GLEN DUMP
COOMBSVILLE ROAD, NAPA, CALIFORNIA

109558001 | 10/24

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

ATTACHMENT 4

PASCALE PLACE

LOT 8

FLAG SECTION

LOT 9

LOT 10

LOT 11

LOT 12

LOT 13

LOT 7

LOT 6

LOT 5

GLORY COURT

APPROXIMATE "BUFFER ZONE" ASSUMED TO BE THE AREA BETWEEN THE WASTE CAP AND ADJACENT RESIDENTIAL PROPERTIES / LOTS

APPROXIMATE "BUFFER ZONE" ASSUMED TO BE THE AREA BETWEEN THE WASTE CAP AND ADJACENT RESIDENTIAL PROPERTIES / LOTS

MW-1

MW-2

MW-3

VERTICAL CLIFF
NO WASTE REMOVAL EAST OF CLIFF

105 115 125 135 145 155 165 175 185

LEGEND

MW-3 — LANDFILL GAS WELL (SCS ENGINEERS, 2020)

PARCEL A BOUNDARY APN: 045-411-022-000

PARCEL BOUNDARY

CALLANDER ASSOCIATES LANDSCAPE ARCHITECTURE, (OCTOBER, 2024)

RELOCATED WASTE (APPROXIMATE WASTE STOCKPILE = 2,700 CY)

SOIL TOP COVER < 4'

SOIL TOP COVER 4-5'

SOIL TOP COVER 5-6'

WASTE REMOVAL (<10")

WASTE REMOVAL (10" - 20")

ADAPTED FROM LANGAN (2018)

APPROXIMATE LIMIT OF CAP

N

FEET
0 50 100

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCES: GRADING PLAN - CITY OF NAPA, DATED: MARCH 21, 2024; TOPO - NOAA/USGS LIDARNOAA LIDAR, 2018-2019, NORTHERN CALIFORNIA WILDFIRE-QL2; GOOGLE EARTH, 2024

4 109558001_OSWAlt.mxd 10/14/2024 JDL

FIGURE 4

PLANNED REMEDIAL ACTION - OFFSITE WASTE GRADING OPTION

HIDDEN GLEN DUMP
COOMBSVILLE ROAD, NAPA, CALIFORNIA

109558001 | 10/24

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

APPENDIX A

Closed Disposal Site Inspection Report Hidden Glen Dump 4/23/24

ATTACHMENT 4

Closed Disposal Site Inspection Report (188)

Hidden Glen Dump (28-AA-0028)

4/23/2024

Inspection Information

Inspected By: Napa County
Local Inspection ID:
Inspection Date: 4/23/2024
Time In: 8:30 AM
Inspection Type: Periodic
Time Out: 9:30 AM
Inspector: Peter Ex
Inspection Duration: 1.0
Operator:
Received By:
Also Present (Name):

Facility/Activity Information

Enforcement Agency: County of Napa
SWIS Number: 28-AA-0028
Facility: **Hidden Glen Dump**
Coombsville Rd.
Napa, CA 99999
Activity: Solid Waste Disposal Site
Operational Status: Closed
Regulatory Status: Unpermitted
Land Owners(s):

The above facility was inspected for compliance with applicable sections of Division 30 of the Public Resources Code (PRC) and Title 14 and Title 27, California Code of Regulations (CCR).

No Violations

No Areas of Concern

Inspection Report Comments

City of Napa Property - No changes observed, however, soil and debris has been illegally disposed on the west side of the property from the Dayan property. See notes below.

Dayan Property - Ms. Dayan has proceeded with further grading and landscaping development of her property despite an agreement in principle via submittal of a Work Plan. New plants and soil/mulch was observed in the front yard. Ms. Dayan has additionally illegally disposed of the soil previously stockpiled on her property onto the adjacent City of Napa property. Access of machinery was observed to have gone through the adjacent Anderson property as evidenced by recent vegetation disturbance by equipment tracks.

Closed Disposal Site Inspection Report (188)

Hidden Glen Dump (28-AA-0028)

4/23/2024

LEA had intended to provide comments to the Work Plan submitted by Ms. Dayan with the understanding that no further work would continue until the Work Plan was approved by LEA.

City of Napa staff was notified of the illegally dumped material on their property.

Numerous photos were taken with a few attached to this report.

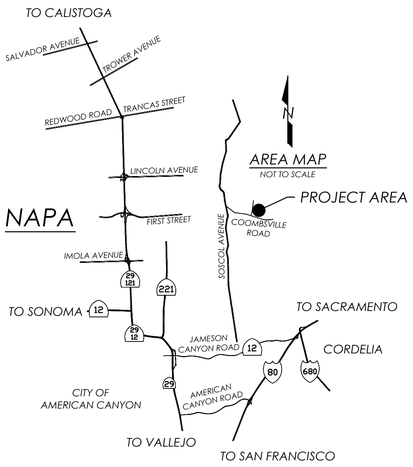
Attachments

Dayan - Back Yard Illegal Dumping 4-23-24
Dayan - Back Yard w Art Turf Install 4-23-24
Dayan - Front Yard 4-23-24

APPENDIX B

Architect Grading Plans

CITY OF NAPA
UTILITIES DEPARTMENT
HIDDEN GLEN DUMP REMEDIATION
CITY PROJECT NO. C2023-083



SITE MAP
NOT TO SCALE

SHEET INDEX

NO.	DESCRIPTION
1.0	COVER SHEET
1.1	COVER SHEET - NOTES
2.0	DEMOLITION PLAN
3.0 - 3.2	EROSION CONTROL PLAN
4.0 - 4.2	WASTE EXCAVATION PLAN AND SECTIONS
5.0 - 5.3	GRADING PLAN AND SECTIONS
6.0	CONSTRUCTION DETAILS
7.0	TOPOGRAPHIC SURVEY

EXISTING CONDITIONS LEGEND

- FENCE
- PROPERTY LINE
- APPROXIMATE LIMITS OF LANDFILL CAP
- FLOWLINE OF ROCK SWALE
- W — WATER LINE
- SS — SANITARY SEWER LINE
- ELECTRICAL LINE
- AT&T COMMUNICATION LIINE
- DRAIN INLET
- WATER VALVE
- M — WATER METER
- TREE
- SEWER CLEANOUT
- 120 — CONTOUR, 1'-0" INTERVALS

TOTAL PROJECT AREA: 1.66 ACRES
TOTAL SITE DISTURBANCE: 1.60 ACRES

PERMIT REQUIREMENTS:

- CONSTRUCTION GENERAL PERMIT (SWPPP)

PREPARED FOR

CITY OF NAPA
Utilities Department
1700 Second Street, Suite 100
Napa, CA 94559

PREPARED BY

LANDSCAPE ARCHITECT
Callander Associates Landscape Architecture, Inc.
12150 Tributary Point Drive, Suite 140
Gold River, CA 95670
Phone: (916) 985-4366

CALA
Callander Associates Landscape Architecture
12150 Tributary Point Drive, Suite 140
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

PLANS PREPARED UNDER THE DIRECTION OF
Melissa Ruth, No. 5425 — 5/22/24 DATE

Know what's below. Call before you dig.

LICENSED LANDSCAPE ARCHITECT — MELISSA RUTH RAE HAAS — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

APPROVED

APPROVAL RECOMMENDED

REVISIONS

NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
TITLE SHEET

SCALE
HORIZ. NONE
VERT. NONE

DATE: OCTOBER 14, 2024
CAD FILE: A17058_CV.dwg
DRAWING NO. 1.0
SHEET NO. 1 OF 15

T:\Projects\2017 Projects\17058_HiddenGlen\Mark's\3_Construction\Documents\A17058_CV.dwg

GENERAL NOTES

1. DESIGN INTENT: THESE DRAWINGS REPRESENT THE GENERAL DESIGN INTENT TO BE IMPLEMENTED ON THE SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING OWNER'S REPRESENTATIVE FOR ANY ADDITIONAL CLARIFICATION OR DETAILS NECESSARY TO ACCOMMODATE SITE CONDITIONS.

2. CONTRACTOR COORDINATION: EACH CONTRACTOR SHALL COORDINATE AND OTHERWISE INTEGRATE WORK WITH THAT OF OTHERS IN AN EFFICIENT AND TIMELY MANNER SO AS TO PROVIDE THE OWNER WITH A WELL-CONSTRUCTED, EASILY MAINTAINABLE PROJECT. EACH CONTRACTOR SHALL NOTIFY OTHERS AT LEAST TWO WORKING DAYS IN ADVANCE OF COVERING, COMPLETING, OR EXPOSING WORK TO BE INSTALLED BY OTHERS.

3. CONTRACTORS' JOB SITE CONDITIONS: CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR SITE CONDITIONS DURING CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE LANDSCAPE ARCHITECT.

4. COMPOSITE BASE SHEET: THE PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS ARE SUPERIMPOSED ON A BASE SHEET. THIS BASE SHEET IS COMPILED FROM THE TOPOGRAPHIC SURVEY, OTHER ARCHITECTURAL AND/OR ENGINEERING DOCUMENTS, AND OTHER DATA AS MADE AVAILABLE TO THE LANDSCAPE ARCHITECT. THIS BASE SHEET INFORMATION IS SHOWN IN HALF TONE ON THE PLANS. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR OTHER ERRORS ON THESE DOCUMENTS. THE COMPOSITE BASE SHEET IS PROVIDED AS AN AID ONLY AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS AND INCORPORATING/INTEGRATING ALL CONSTRUCTION AS REQUIRED TO ACCOMMODATE SAME.
THE BASE SHEET SOURCE FOR THESE DRAWINGS IS:

   TOPOGRAPHIC MAP OF HIDDEN GLEN PARK, SUBDIVISION PARCEL "A", SHEET 1, APN: 045-411-022-000, PREPARED BY CHAUDHARY & ASSOCIATES, INC., AUGUST 1ST 2023, (707)255-2729

5. UTILITIES: PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES INVOLVED AND REQUESTING A VISUAL VERIFICATION OF THE LOCATIONS OF THEIR UNDERGROUND FACILITIES. THE UTILITY COMPANIES ARE MEMBERS OF THE UNDERGROUND SERVICE ALERT (U.S.A.) ON-CALL PROGRAM. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL NOTIFY MEMBERS OF THE U.S.A. 48 HOURS IN ADVANCE OF PERFORMING EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER 811. EXCAVATION IS DEFINED AS BEING 18 OR MORE INCHES IN DEPTH BELOW THE EXISTING SURFACE.
THE CONTRACTOR IS CAUTIONED THAT ONLY EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATION, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. HOWEVER, THE LANDSCAPE ARCHITECT CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES, NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH ARE NOT SHOWN ON THESE DRAWINGS.

6. TREE PROTECTION AND MAINTENANCE REQUIREMENTS: ALL TRENCHING WITHIN THE DRIPLINE OF EXISTING TREES TO REMAIN SHALL BE BY HAND, WITH CARE TAKEN NOT TO CUT OR DAMAGE ROOTS OVER 1-INCH DIAMETER. TREES TO REMAIN SHALL BE FENCED WITH TEMPORARY FENCING, SUCH AS STEEL STAKES (MAX. 5 FEET O.C.) WITH WIRE MESH FABRIC (6X6 OPEN), CHAINLINK, OR SIMILAR, HEIGHT TO BE 5 FEET MINIMUM.

CITY OF NAPA GENERAL CONSTRUCTION NOTES

1. ALL WORKMANSHIP AND MATERIALS FOR BOTH ON-SITE AND OFF-SITE IMPROVEMENTS SHALL CONFORM TO THE MOST RECENT EDITION OF THE CITY OF NAPA STANDARD SPECIFICATIONS AND ADDENDUMS, AND/OR THE 2015 EDITION OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS, STANDARD PLANS, AND THE GEOTECHNICAL REPORT AND ALL THE NOTES SHOWN. THE CONTRACTOR SHALL HAVE A COPY OF ALL DOCUMENTS AVAILABLE AT THE JOB SITE AT ALL TIMES. ALL ON SITE IMPROVEMENTS SHALL BE INSPECTED AND CERTIFIED BY THE ENGINEER OF RECORD. IMPROVEMENTS IN THE PUBLIC RIGHT OF WAY SHALL BE INSPECTED BY THE CITY OF NAPA.

2. THE CONTRACTOR SHALL CONTACT THE UTILITIES DEPARTMENT AT 707-257-9521 TO SCHEDULE A PRECONSTRUCTION MEETING PRIOR TO THE COMMENCEMENT OF ANY AND ALL WORK. DURING THE DURATION OF THE PROJECT, ROLLING 3-WEEK LOOK AHEAD SCHEDULES WILL BE REQUIRED TO BE SUBMITTED WEEKLY.

3. THE CONTRACTOR AND ALL SUBCONTRACTORS MUST CALL UNDERGROUND SERVICE ALERT (USA NORTH 811 OR 1-800-227-2600) PRIOR TO THE START OF ANY WORK ON THE PROJECT SITE. EACH CONTRACTOR SHALL SUBMIT A COPY OF THEIR USA TAG TO THE CITY FOR VERIFICATION. THE CONTRACTOR SHALL ALSO CALL ANY COMPANY OR AGENCY FOR SERVICE LOCATIONS WHO ARE NOT A MEMBER OF UNDERGROUND SERVICE ALERT. CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF ALL EXISTING UTILITIES IN THE FIELD. LOCATIONS OF UTILITIES AND UNDERGROUND FACILITIES SHOWN ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING U.S.A. MARKINGS AFTER THE COMPLETION OF CONSTRUCTION FROM THE PUBLIC RIGHT OF WAY.

4. THE CONTRACTOR SHALL COORDINATE ALL NECESSARY UTILITY INSPECTIONS, SCHEDULING AND RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANIES.

5. ALL WORK SHALL BE IN ACCORDANCE WITH THE PREVAILING GOVERNING AGENCY. FOR DISCREPANCIES BETWEEN THESE PLANS AND THOSE AGENCIES' REGULATIONS AND STANDARD PLANS, AGENCY REQUIREMENTS SHALL PREVAIL.

6. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO - 24 HOUR A DAY EMERGENCY TELEPHONE NUMBERS OF THE PERSON(S) WHO CAN RESPOND TO THE PROJECT.

7. ALL MATERIALS SHALL BE FURNISHED AND INSTALLED BY THE DEVELOPER/CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIFICATIONS.

8. CONTRACTOR SHALL CONFORM TO EXISTING STREETS, SURROUNDING LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALKS, GRADING, ETC., AND TO AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.

9. FOR ALL CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO: GRADING, FENCING, RETAINING WALLS, TREE TRIMMING, STORM DRAINAGE, OR ANY OTHER TYPE OF WORK, THE DEVELOPER/CONTRACTOR SHALL PROVIDE THE CITY A RIGHT-OF-ENTRY/TEMPORARY CONSTRUCTION EASEMENT SIGNED BY THE OWNER OF RECORD OF THE AFFECTED/ADJACENT PROPERTY PRIOR TO START OF CONSTRUCTION.

10. THE CONTRACTOR SHALL NOTIFY ALL CUSTOMERS OF SERVICE INTERRUPTIONS 48 HOURS IN ADVANCE WITH DOOR HUNG NOTICES. INTERRUPTION SCHEDULING SHALL BE AUTHORIZED IN WRITING BY WATER DIVISION ENGINEER.

11. CONSTRUCTION ACTIVITIES THROUGHOUT THE ENTIRE DURATION OF THE PROJECT SHALL BE LIMITED TO THE HOURS OF 7:00 A.M. TO 7:00 P.M., MONDAY THROUGH FRIDAY. THERE SHALL BE NO STARTUP OF MACHINES NOR EQUIPMENT PRIOR TO 8:00 A.M., MONDAY THROUGH FRIDAY; NO DELIVERY OF MATERIALS NOR EQUIPMENT PRIOR TO 7:30A.M. NOR PAST 5:00P.M., MONDAY THROUGH FRIDAY; NO CLEANING OF MACHINES NOR EQUIPMENT PAST 6:00 P.M., MONDAY THROUGH FRIDAY; NO SERVICING OF EQUIPMENT PAST 6:45 P.M., MONDAY THROUGH FRIDAY; AND CONSTRUCTION ON WEEKENDS OR LEGAL HOLIDAYS SHALL BE LIMITED TO THE HOURS OF 8:00 A.M. TO 4:00 P.M., UNLESS THE CONTRACTOR SUBMITS A WRITTEN REQUEST AND THAT REQUEST IS APPROVED BY THE CITY MANAGER, OR THEIR DESIGNEE, PURSUANT TO SECTION 8.08.025 & 8.08.050 OF THE CITY MUNICIPAL CODE. IF THE REQUEST TO WORK OUTSIDE OF THE DESIGNATED HOURS IS APPROVED, THE CONTRACTOR MAY BE REQUIRED TO PAY THE COST OF PROVIDING INSPECTION SERVICES FOR THE WORK BEING PERFORMED. IF INSPECTION SERVICES ARE NOT AVAILABLE FOR THE REQUESTED CHANGE, THE CITY ENGINEER MAY DENY THE REQUEST. THE CITY MANAGER, OR DESIGNEE, SHALL GRANT SUCH PERMIT:
   A. FOR EMERGENCY WORK;
   B. OTHER WORK, IF WORK AND EQUIPMENT WILL NOT CREATE NOISE THAT MAY BE UNREASONABLY OFFENSIVE TO NEIGHBORS AS TO CONSTITUTE A NUISANCE; OR
   C. IF NECESSARY TO PROTECT THE PUBLIC HEALTH, SAFETY, AND WELFARE.
   ALL MUFFLER SYSTEMS ON CONSTRUCTION EQUIPMENT SHALL BE PROPERLY MAINTAINED. ALL CONSTRUCTION EQUIPMENT SHALL NOT BE PLACED ADJACENT TO DEVELOPED AREAS UNLESS SAID EQUIPMENT IS PROVIDED WITH ACOUSTICAL SHIELDING. ALL CONSTRUCTION AND GRADING EQUIPMENT SHALL BE SHUT DOWN WHEN NOT ACTIVELY IN USE.
   IF AN INSPECTOR IS REQUIRED TO BE ONSITE FOR WORK OUTSIDE OF THE MONDAY THROUGH FRIDAY WORK HOURS, THE CONTRACTOR SHALL REQUEST FROM THE CITY, IN WRITING, 72 HOURS PRIOR TO THE WORK, FOR APPROVAL. IF PRIOR WRITTEN NOTICE IS NOT PROVIDED, THE REQUEST WILL BE DENIED, AND CONSTRUCTION WORK MAY NOT BE PERFORMED. ADDITIONAL FEES MAY BE CHARGED FOR WORK OUTSIDE OF THE MONDAY THROUGH FRIDAY WORK HOURS. THE CITY RESERVES THE RIGHT TO DENY ALL WORK OUTSIDE OF THE MONDAY THROUGH FRIDAY WORK HOURS.
   DEVELOPER/CONTRACTORS WILL BE GIVEN ONE (1) WARNING FOR WORK STARTING PRIOR TO OR AFTER THE WORK HOURS STATED ABOVE. AFTER THE FIRST WARNING IS GIVEN, ANY VIOLATIONS OF TIME WILL RESULT IN AN AUTOMATIC FIVE (5) WORKING DAY SHUTDOWN OF THE ENTIRE PROJECT.
   NO STAGING OR DELIVERIES IN THE PUBLIC RIGHT OF WAY UNLESS APPROVED PER WRITTEN REQUEST.
   THE CITY ENGINEER, PLANNING COMMISSION OR CITY COUNCIL MAY IMPOSE ADDITIONAL LIMITATIONS ON WORKING HOURS AND NOISE BASED ON THE SPECIAL CIRCUMSTANCES THAT MAY BE ASSOCIATED WITH A PARTICULAR PROJECT. IN WHICH CASE, THE MORE STRINGENT LIMITATIONS SHALL APPLY.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND CONTROL POINTS. ALL MONUMENTS DESTROYED DURING CONSTRUCTION SHALL BE RESURVEYED AND REPLACED BY THE CONTRACTOR AND AT THE CONTRACTOR'S EXPENSE AS OUTLINED IN THE BUSINESS AND PROFESSIONS CODE, SECTION 8771.

13. THE CONTRACTOR SHALL PROVIDE THE CITY SUBMITTAL(S) FOR ALL MATERIAL TO BE INSTALLED WITHIN THE PUBLIC RIGHT OF WAY ON THE PROJECT. CONSTRUCTION SHALL NOT START PRIOR TO SUBMITTALS BEING APPROVED, PRIOR TO BEING SUBMITTED TO THE CITY, THE DESIGNER OF RECORD SHALL REVIEW AND APPROVE SUCH RIGHT OF WAY SUBMITTAL.

14. SITE SECURITY, PERIMETER CONTROLS, AND SITE SAFETY ARE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR AND SHALL BE INSTALLED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION. TEMPORARY 6FT CHAINLINK FENCING WITH OPAQUE SCREENING SHALL BE USED FOR SITE SECURITY UNLESS ANOTHER METHOD IS SUBMITTED AND APPROVED FOR USE BY THE CITY.

PROJECT ACCEPTANCE NOTES

1. PRIOR TO PROJECT ACCEPTANCE, THE ENGINEER OF RECORD, THE SURVEYOR OF RECORD, AND THE GEOTECH OF RECORD SHALL SUBMIT AN ENGINEER'S STAMPED CERTIFICATION LETTER TO THE CITY.

2. PRIOR TO PROJECT ACCEPTANCE ALL ITEMS ON THE DEFICIENCY LIST SHALL BE CORRECTED AND SIGNED OFF BY ALL DIVISIONS.

3. GEOTECH OF RECORD SHALL SUBMIT A FINAL REPORT AND SUMMARY OF ALL TESTING AND DESIGN CHANGES PRIOR TO ACCEPTANCE.

4. PRIOR TO PROJECT ACCEPTANCE, ACCURATE "RECORD DRAWINGS" SHALL BE SUBMITTED TO THE CITY, STAMPED AND SIGNED WITH THE FOLLOWING:

RECORD DRAWING

DATE OF COMPLETION: _____

CONTRACTOR: _____

ENGINEER: _____

SURVEYOR: _____

GEOTECHNICAL: _____

ENGINEER OF RECORD: _____

STAMPED AND SIGNED BY: _____

TRAFFIC CONTROL NOTES

1. ALL TRAFFIC CONTROL REQUIRED FOR CONSTRUCTION ACTIVITIES SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF CA MUTCD. FOR ALL LANE CLOSURES AND DETOURS, A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY OF NAPA FOR REVIEW AND APPROVAL AT LEAST TEN WORKING DAYS BEFORE THE SCHEDULED CLOSURE. THE CITY WILL REVIEW ALL TRAFFIC CONTROL PLANS. CONSTRUCTION WILL NOT BE ALLOWED TO START PRIOR TO THE APPROVAL OF THE TRAFFIC CONTROL PLAN.

2. ALL TRAFFIC CONTROL PLANS SHALL BE A CAD DRAWING FORMAT PLAN WITH COMPLETE DETAILS AND TABLES. AERIAL PHOTOS, HAND DRAWN PLANS AND NOTES ARE NOT ACCEPTABLE.

3. NO PARKING SIGNS SHALL BE PLACED 48 HOURS PRIOR TO THE WORK TO BE COMPLETED WITHIN AN AREA OF DESIGNATED PUBLIC PARKING. NO PARKING SIGNS SHALL BE FILLED IN WITH ALL PERTINENT INFORMATION OF THE EXACT TIME THE WORK IS TO TAKE PLACE. SIGNS SHALL BE CLEAR AS TO WHEN THE PUBLIC MAY PARK IN THE AREA OUTSIDE OF THE CONSTRUCTION TIME. IF WORK IS STAGED OR DELAYED, THEN ALL NO PARKING SIGNS SHALL BE REMOVED AND NEW NO PARKING SIGNS SHALL BE PLACED 48 HOURS PRIOR TO WHEN WORK IS READY TO RESUME.

4. PEDESTRIAN AND BIKE ACCESS THROUGH AND/OR ADJACENT TO THE PROJECT SITE SHALL REMAIN UNOBSTRUCTED DURING THE PROJECT CONSTRUCTION OR A DETOUR ROUTE SHALL BE ESTABLISHED AS APPROVED BY THE CITY.

5. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL TRAFFIC CONTROL EQUIPMENT IN-PLACE DURING WORK ACTIVITIES AND SHALL REMOVE ALL TRAFFIC CONTROL THAT IS NOT NEEDED AND RETURN ACCESSIBLE TRAVEL FOR THE PUBLIC DURING NON-WORK HOURS OR DAYS.

6. THE CITY RESERVES THE RIGHT TO STOP ALL WORK BEING PERFORMED FOR LACK OF TRAFFIC CONTROL OR TRAFFIC CONTROL THAT IS NOT PER THE APPROVED TRAFFIC CONTROL PLAN.

7. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL TEMPORARY PAVEMENT DELINEATION UNTIL THE PERMANENT PAVEMENT DELINEATION IS PLACED. ALL PERMANENT TRAFFIC STRIPING SHALL BE LAID OUT AND CAT-TRACKED. THE CITY SHALL HAVE A MINIMUM OF TEN WORKING DAYS TO APPROVE THE STRIPING LAYOUT AND CAT-TRACKING.

CALA
Callander Associates
Landscape Architecture
12150 Tributary Point Drive, Suite 140
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

PLANS PREPARED UNDER THE DIRECTION OF _____ Melissa Ruth, No. 5425 — 5/22/24 DATE

Know what's below. Call before you dig.

LICENSED LANDSCAPE ARCHITECT — MELISSA RUTH No. 5425 — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

REVISIONS

NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION: _____

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
TITLE SHEET - NOTES

SCALE
HORIZ. NONE
VERT. NONE

DATE: OCTOBER 14, 2024
CAD FILE: A17058_CV.dwg
DRAWING NO. 1.1
SHEET NO. 2 OF 14

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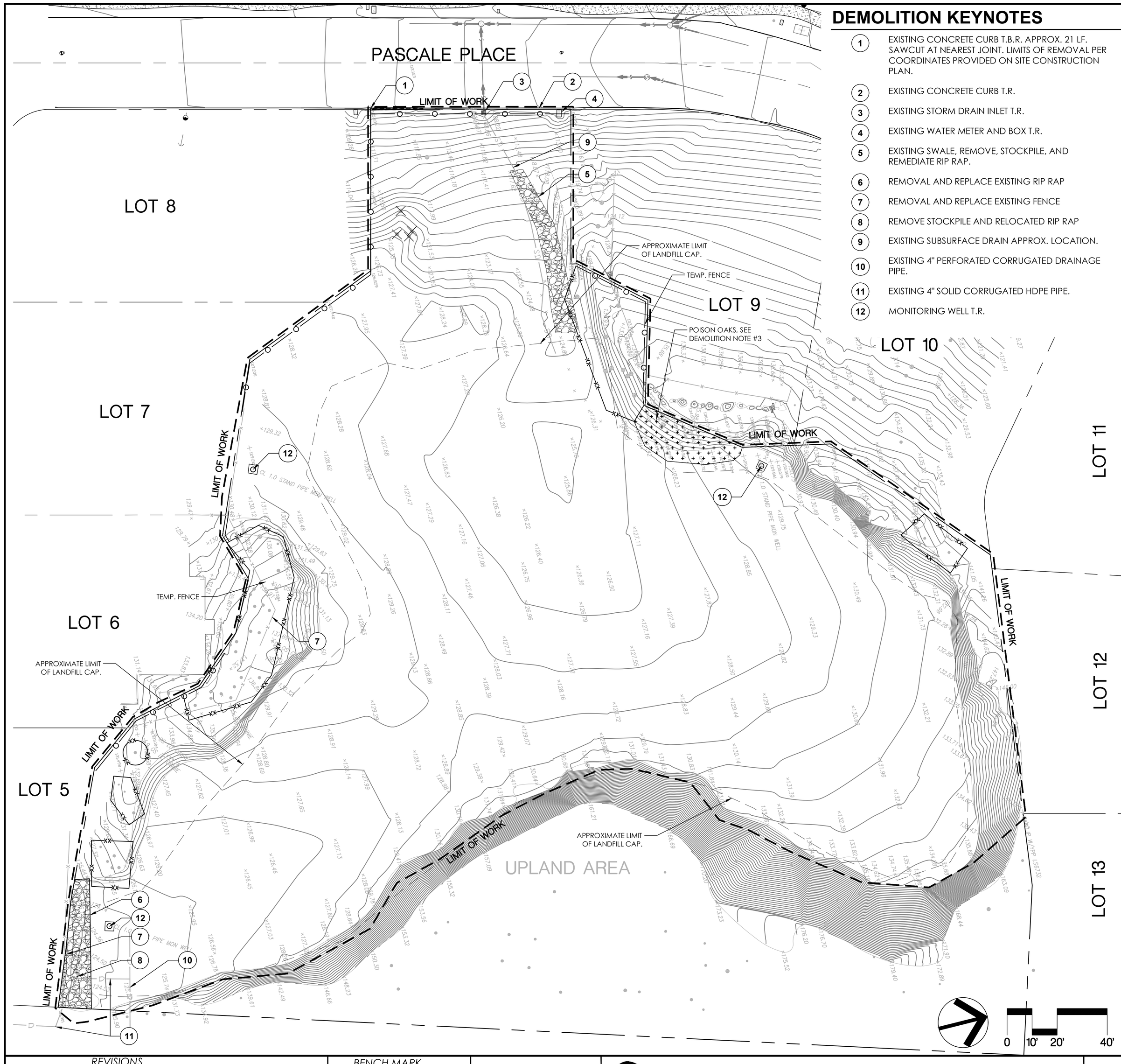

DEMOLITION KEYNOTES

1. EXISTING CONCRETE CURB T.B.R. APPROX. 21 LF. SAWCUT AT NEAREST JOINT. LIMITS OF REMOVAL PER COORDINATES PROVIDED ON SITE CONSTRUCTION PLAN.
2. EXISTING CONCRETE CURB T.R.
3. EXISTING STORM DRAIN INLET T.R.
4. EXISTING WATER METER AND BOX T.R.
5. EXISTING SWALE, REMOVE, STOCKPILE, AND REMEDIATE RIP RAP.
6. REMOVAL AND REPLACE EXISTING RIP RAP
7. REMOVAL AND REPLACE EXISTING FENCE
8. REMOVE STOCKPILE AND RELOCATED RIP RAP
9. EXISTING SUBSURFACE DRAIN APPROX. LOCATION.
10. EXISTING 4" PERFORATED CORRUGATED DRAINAGE PIPE.
11. EXISTING 4" SOLID CORRUGATED HDPE PIPE.
12. MONITORING WELL T.R.

DEMOLITION LEGEND

6" HO — EXISTING TREE TO REMAIN, PROTECT IN PLACE	RIP RAP DRAINAGE AREA
EXISTING TREE TO BE REMOVED	POISON OAK REMOVAL, SEE NOTE 3
TEMPORARY CONSTRUCTION FENCING, PER SPECS	T.B.R. — TO BE REMOVED
TREE PROTECTION FENCING, PER SPECS. REFER TO TREE PROTECTION NOTES FOR ADDITIONAL REQUIREMENTS.	T.R. — TO REMAIN, PROTECT IN PLACE

DEMOLITION NOTES

1. CLEAR AND GRUB: CONTRACTOR SHALL CLEAR AND GRUB ALL EXISTING VEGETATION, UNLESS OTHERWISE INDICATED, AS REQUIRED FOR THE GRADING, SITE CONSTRUCTION, AND PLANTING OPERATIONS. LIMITS OF CLEARING SHALL BE REVIEWED WITH OWNER PRIOR TO COMMENCEMENT OF WORK. SEE SPECIFICATIONS FOR MORE INFORMATION.

   CONTRACTOR SHALL REVIEW DEMOLITION, AND CLEARING AND GRUBBING REQUIREMENTS ON SITE WITH LANDSCAPE ARCHITECT PRIOR TO COMMENCING DEMOLITION OPERATIONS.

   ALL DEMOLITION OPERATIONS WITHIN THE DRIP LINE OF TREES SHALL CONFORM TO TREE PROTECTION NOTES AND SPECIFICATIONS.

2. LANDFILL CAP PROTECTION: REFER TO SPECIAL PROVISIONS SECTION 00 72 00 GENERAL REQUIREMENTS, SECTION 1.3.C FOR LANDFILL CAP PROTECTION REQUIREMENTS.

3. REMOVAL OF POISON OAK: CONTRACTOR SHALL NOTIFY ALL WORKERS TO WEAR SPECIFIC PPE GEAR AND USE THE APPROPRIATE TOOLS NEEDED TO REMOVE & DISPOSE OF POISON OAK. MORE INFORMATION ABOUT THE REMOVAL PROCESS IS ON SECTION 22.1.4.2. OF WWW.PARKS.CA.GOV/PAGES/1324/FILES/CHAPTER%2022%20-%20WORK%20SITE%20SAFETY.FINAL.12.27.18.PDF

TREE PROTECTION NOTES

1. DAMAGES: THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE TO EXISTING TREES, I.E. TRUNK WOUNDS, BROKEN LIMBS, POURING OF ANY DELETERIOUS MATERIALS, OR CONCRETE WASHOUT UNDER THE DRIPLINE OF THE TREES. DAMAGES WILL BE ASSESSED USING THE "GUIDE TO PLANT APPRAISAL" 9TH EDITION, PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE. AN APPRAISAL REPORT PREPARED BY THE CONTRACTOR'S CERTIFIED ARBORIST SHALL BE SUBMITTED TO THE CITY ARBORIST FOR REVIEW AND APPROVAL.
2. PRIOR TO THE START OF DEMOLITION TREE PROTECTION FENCING PER SPECS SHALL BE INSTALLED A MINIMUM OF ONE FOOT BEYOND THE CANOPY DRIP LINE OF ANY TREE TO REMAIN WHICH WILL BE AFFECTED BY THE PROPOSED WORK. DIMENSIONS WILL BE CONTINGENT UPON THE TREE SIZE AND SPECIES. THE FENCING SHALL REMAIN IN PLACE FOR THE DURATION OF THE PROJECT EXCEPT FOR THE TEMPORARY REMOVAL REQUIRED FOR GRADING OR DEMOLITION OPERATIONS. THIS TREE PROTECTION ZONE (TPZ) SHALL BE POSTED WITH WARNING SIGNS IN ENGLISH AND SPANISH TO ALERT EQUIPMENT OPERATORS AND CONTRACTORS ABOUT THE PROTECTED STATUS OF THE TPZ. SIGNS SHOULD CONTAIN CONTACT INFORMATION FOR THE CONTRACTOR.
3. THE CONTRACTOR SHALL HIRE AN INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) CERTIFIED ARBORIST (PROJECT ARBORIST) AND ALL ARBORICULTRAL AND RELATED SOIL WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF PROJECT ARBORIST OR CITY ENGINEER OR DESIGNATED REPRESENTATIVE. PROJECT ARBORIST SHALL MAKE INSPECTIONS DURING EXCAVATION FOR TEMPORARY CONSTRUCTION ENTRANCE AND AGGREGATE BASE SURFACING. CONTINUED DISCUSSION AND COORDINATION BETWEEN PROJECT ARBORIST, OWNERS, CONTRACTORS, AND CITY ENGINEER SHALL OCCUR TO FURTHER DEFINE THESE GUIDELINES BASED ON THE ACTUAL WORK PLANNED IN THE VICINITY OF TREES TO REMAIN. ALL SPECIFIED ARBORICULTURAL WORK SHALL BE COMPLETED PRIOR TO SITE GRADING (HAND TRENCHING, PRUNING, FENCING, ETC.)
4. NO EXCAVATION, GRADE CHANGES, STORAGE OF MATERIALS, OR PARKING OF VEHICLES SHALL BE ALLOWED WITHIN THE TREE PROTECTION FENCE. BORING OR HAND EXCAVATION FOR AGGREGATE BASE, UTILITIES SHALL BE DONE BY THE CONTRACTOR WITHIN THE TREE DRIPLINE AND SHALL BE UNDER THE SUPERVISION OF THE PROJECT ARBORIST. SEE SPECIFICATIONS FOR ADDITIONAL ROOTZONE PROTECTION REQUIREMENTS.
5. IF DURING EXCAVATION A TREE ROOT GREATER THAN 2 INCHES IN DIAMETER IS ENCOUNTERED, THEN ALL WORK SHALL STOP IMMEDIATELY UNTIL PROJECT ARBORIST CAN PERFORM AN ON-SITE INSPECTION. ALL ROOTS SHALL BE CUT CLEAN AND THE TREE AFFECTED MAY REQUIRE SUPPLEMENTAL IRRIGATION/FERTILIZATION AND PRUNING AS A RESULT OF ROOT PRUNING.
6. TREE REMOVAL: REMOVAL OR PRUNING OF ANY PROTECTED NATIVE TREE, SIGNIFICANT TREE OR TREE WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF NAPA PARKS AND RECREATION SERVICES DEPARTMENT UNLESS IT IS APPROVED VIA AUTHORIZED SIGNATURE ON THE DEVELOPMENT PLANS. TREES REMOVED SHALL COMPLETELY REMOVED AND CUT TO GRADE. TREES TO BE REMOVED SHALL BE POSTED 3 DAYS PRIOR INDICATING THAT IT WILL BE REMOVED AND THE REMOVAL HAS BEEN APPROVED AS PART OF AN APPROVED DEVELOPMENT PROJECT.
7. EXPOSED ROOTS: EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE WORK DAY BY USING TECHNIQUES SUCH AS COVERING THE ROOTS WITH SOIL, MULCH, OR WET BURLAP.
8. HAND DIG AROUND EXISTING TREES.

LICENSED LANDSCAPE ARCHITECT — WILLIAM RUTH NO. 3638 — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

CALA
Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS

NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION: _____

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
DEMOLITION PLAN

SCALE
HORIZ. NONE
VERT. NONE

DATE: OCTOBER 14, 2024
CAD FILE: A17058_DM.dwg
DRAWING NO. 2.0
SHEET NO. 3 OF 15

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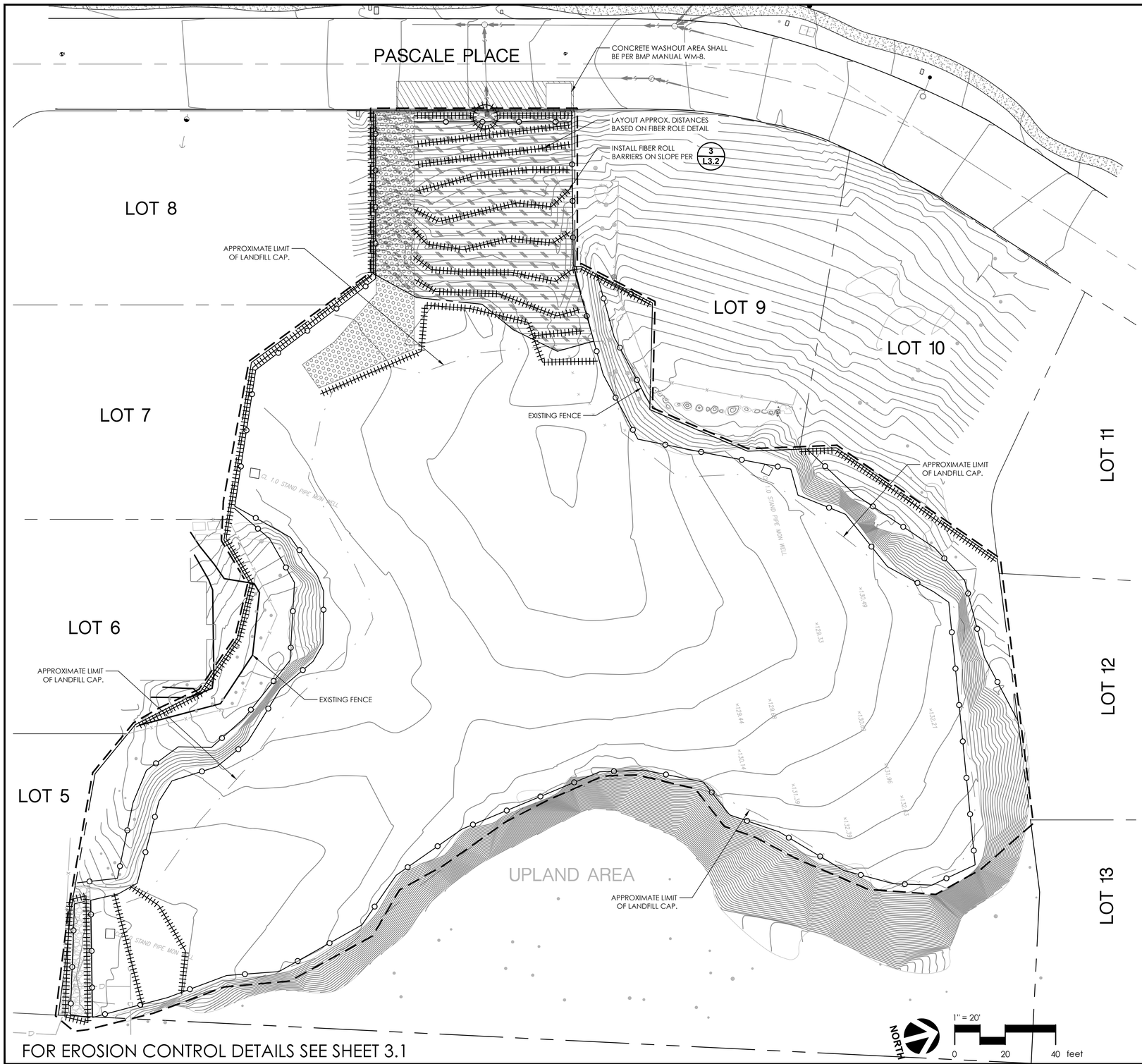
ATTACHMENT 4



FOR EROSION CONTROL DETAILS SEE SHEET 3.1

EROSION CONTROL LEGEND

- STABILIZED CONSTRUCTION ENTRANCE (1 / L3.2)
- CONSTRUCTION STAGING AND MATERIAL STORAGE AREA
- FIBER ROLL BARRIER (2 / L3.2) (3 / L3.2)
- STORM DRAIN INLET PROTECTION (4 / L3.2)
- METAL FENCING PER SITE CONSTRUCTION PLANS
- SILT FENCE
- EROSION CONTROL BLANKET PER EC-7 OF CASQA CONSTRUCTION BMP HANDBOOK

EROSION AND SEDIMENT CONTROL NOTES

1. LANDFILL CAP PROTECTION: REFER TO SPECIAL PROVISIONS SECTION 00 72 00 GENERAL REQUIREMENTS, SECTION 1.3.C FOR LANDFILL CAP PROTECTION REQUIREMENTS.

PROJECT INFORMATION

PROJECT DESCRIPTION AND PURPOSE:
TOTAL DISTURBED AREA: 1.60 ACRES
TOTAL PROJECT SIZE: 1.66 ACRES
NEAREST RECEIVING WATER:
PLANNED PROJECT START DATE:
PLANNED GRADING COMPLETION DATE:
PLANNED PROJECT COMPLETION DATE:

APPLICANT CERTIFICATION

I CERTIFY THAT THE INFORMATION PROVIDED IN THE EROSION AND SEDIMENT CONTROL PLAN IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE AND THAT IT WILL IMPLEMENT THROUGHOUT THE PROJECT. I FURTHER CERTIFY THAT I WILL NOTIFY THE CITY OF NAPA CA AND SUBMIT REVISED INFORMATION IF ANY IF THE INFORMATION OR CONDITION DOCUMENTED IN THIS EROSION AND SEDIMENT CONTROL PLAN CHANGE. I UNDERSTAND THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION OR FOR NOT IMPLEMENTING THE EROSION AND SEDIMENT CONTROL; PLAN PER NMC 8.36.00 STORMWATER RUNOFF POLLUTION CONTROL. I WILL RETAIN A COPY IF THE EROSION AND SEDIMENT CONTROL PLAN AT THE PROJECT SITE.

SIGNATURE: _____

PRINT/TYPE NAME: _____

TITLE: _____

DATE: _____

LICENSED LANDSCAPE ARCHITECT MELISSA RUTH MR 3470 Signature May 31, 2025 Renewal Date Date STATE OF CALIFORNIA

CALA
Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS

NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

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CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
EROSION CONTROL PLAN

SCALE
HORIZ. NONE
VERT. NONE

DATE: OCTOBER 14, 2024
CAD FILE: A17058_EC.dwg
DRAWING NO. 3.0
SHEET NO. 4 OF 15

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EROSION AND SEDIMENT CONTROL/SWPPP PLAN NOTES

THE FOLLOWING NOTES REPRESENT MINIMUM ENFORCEMENT NOTES. THE CONTRACTOR IS RESPONSIBLE TO ENFORCE THE BEST MANAGEMENT PRACTICES AT THE SITE ALONG WITH OTHER SOURCES.

1. IN CASE OF EMERGENCY, CALL RESPONSIBLE PERSON AT (24 –HOUR TELEPHONE. PLEASE FILL IN NAME & NUMBER)
2. A STAND-BY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES. NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.
3. EROSION CONTROL DEVICES SHOWN ON THIS PLAN MAY BE REMOVED WHEN APPPROVED BY THE BUILDING OFFICIAL IF THE GRADING OPERATION HAS PROGRESSED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.
4. GRADED AREAS ADJACENT TO FILL SLOPES LOCATED AT THE SITE PERIMETER MUST DRAIN AWAY FROM THE TOP OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY. ALL LOOSE SOILS AND DEBRIS THAT MAY CREATE A POTENTIAL HAZARD TO OFF-SITE PROPERTY SHALL BE STABILIZED OR REMOVED FROM THE SITE ON A DAILY BASIS.
5. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.
6. A GUARD SHALL BE POSTED ON THE SITE WHENEVER THE DEPTH OF WATER IN ANY DEVICES EXCEEDS TWO FEET. THE DEVICE SHALL BE DRAINED OR PUMPED WITHIN 24 HOURS AFTER EACH RAINSTORM. PUMPING AND DRAINING OF ALL BASINS AND DRAINAGE DEVICES MUST COMPLY WITH THE APPROPRIATE BMP FOR DEWATERING OPERATIONS.
7. THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION DAMAGE AND CONTAIN POLLUTANTS WITHIN THE SITE IS LEFT TO THE DISCRETION OF THE FIELD ENGINEER. ADDITIONAL DEVICES AS NEEDED SHALL BE INSTALLED TO RETAIN SEDIMENTS AND OTHER POLLUTANTS ON SITE.
8. DESILTING BASINS MAY NOT BE REMOVED OR MADE INOPERABLE BETWEEN NOVEMBER 1 AND APRIL 15 OF THE FOLLOWING YEAR WITHOUT THE APPROVAL OF THE CITY.
9. STORMWATER POLLUTION AND EROSION CONTROL DEVICES ARE TO BE MODIFIED, AS NEEDED, AS THE PROJECT PROGRESSES, THE DESIGN AND PLACEMENT OF THESE DEVICES IS THE RESPONSIBILTY OF THE QUALIFIED SWPPP DEVELOPER/FIELD ENGINEER. PLANS REPRESENTING CHANGES MUST BE SUBMITTED FOR APPROVAL.
10. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NONSTORMWATER FROM THE PROJECT SITE AT ALL TIMES.
11. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET-FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
12. STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
13. CONTRACTOR TO FOLLOW CITY OF NAPA STANDARDS AND SPECIFICATIONS 1.10.02 WATER POLLUTION CONTROL.
14. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
15. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC RIGHT-OF- WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
16. DEVELOPERS/CONTRACTORS/ QUALIFIED SWPPP DEVELOPERS (QSD)/ QUALIFIED SWPPP PRACTITIONER (QSP), ARE RESONSIBLE TO INSPECT ALL EROSION CONTROL DEVICES AND BMPS ARE INSTALLED AND FUNCTIONING PROPERLY, IF THERE IS A 50% CHANCE OF 0.25 INCHES OR GREATER OF PREDICTED PRECIPITATION, AND AFTER ACTUAL PRECIPITATION. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND AVAILABLE FOR REVIEW BY THE BUILDING OFFICIAL (SELF-INSPECTION CHECK LIST AND INSPECTION LOGS PER STATE SWPPP REQUIREMENTS). INCIDENTS OF NON- COMPLIANCE MUST BE REPORTED TO THE FIELD ENGINEER.
17. TRASH AND CONSTRUCTION-RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
18. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT-OF- WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
19. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
20. PROVIDE STORMWATER CONVEYANCE SYSTEM STENCILING AND SIGNAGE FOR BOTH PRIVATE DEVELOPMENT AND PUBLIC RIGHT OR WAY.

20.1. PROVIDE CONCRETE STAMPING, OR EQUIVALENT, OF ALL STORMWATER CONVEYANCE SYSTEM INLETS AND CATCH BASINS WITHIN THE PROJECT AREA WITH PROHIBITIVE LANGAUAGE (E.G., "NO DUMPING DRAINS TO NAPA RIVER").

20.2. POST SIGNS AND PROHIBITIVE LANGUAGE AND/OR GRAPHICAL ICONS, WHICH PROHIBIT ILLEGAL DUMPING AT PUBLIC ACCESS POINTS ALONG CHANNELS AND CREEKS WITHIN THE PROJECT AREA, TRAILHEADS, PARKS, BUILDING ENTRANCES AND BIORTENTION FACILITIES. THE FOLLOWING BMPS FROM THE "CALIFORNIA STORM WATER BMP CONSTRUCTION HANDBOOK" – NOVEMBER 2009, OR LATEST EDITION, OR EQUAL, MUST BE IMPLEMENTED FOR ALL CONSTRUCTION ACTIVITIES AS APPLICABLE. ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY CITY INSPECTORS. ONLY INCLUDE BMP'S REFERENCED PROJECT ON THE SITE MAP.

PROJECT BEST MANAGEMENT PRACTICES (BMP)		BMP MAINTENANCE SCHEDULE		BMP INSTALLATION SCHEDULE				
WET/DRY SEASONS	BMP	INSPECTION FREQUENCY	MAINTENANCE	CLEARING	GRADING	UTILITIES	PAVING	POST-CONSTRUCTION
BOTH	STABILIZED CONSTRUCTION ENTRNACE	DAILY	REPLACE GRAVEL AS NECESSARY, REMOVE EXCESSIVE SOIL ACCUMULATION, SWEEP ADJACENT STREETS DAILY.	X	X	X	X	
BOTH	FIBER ROLL	PRIOR TO AND AFTER RAIN EVENT, AND DURING EXTENDED RAIN EVENTS	REPAIR OR REPLACE SPLIT, TORN, UNRAVELING OR SLUMPING ROLLS. IN ACTIVE CONSTRUCTION, RETURN ROLLS THAT HAVE BEEN MOVED TO PROPER PLACES AT THE END OF EACH WORKDAY DURING THE WET SEASON.	X	X	X		
BOTH	STRAW MULCH	AFTER EACH RAIN EVENT	REAPPLY MULCH AND TACKIFIER AS NECESSARY, SLOPES MAINTAINED AND REPAIRED IMMEDIATELY AFTER RAIN EVENT.	X	X	X	X	X
BOTH	INLET SEDIMENT CONTROL	WEEKLY, AND PRIOR TO AND AFTER RAIN EVENTS	MATERIAL SPILLING FROM SEDIMENT CONTROL DEVICES SHALL BE CLEANED UP AND REPAIRED OR REPLACE IMMEDIATELY. DISPOSE OF SEDIMENT PROPERLY.	X	X	X	X	
BOTH	CONCRETE WASHOUTS	DAILY	MINIMUM OF 4' OF FREEBOARD, HARDENED CONCRTE SHALL BE REMOVED AND DISPOSED OF PROPERLY. WASHOUT SHALL BE CLEANED WHEN THE WASTE VOLUME REACHES 75% CAPACTY.				X	
BOTH	STREET SWEEPING AND VACCUMING	WEEKLY AND PRIOR TO AND AFTER RAIN EVENTS. WHEN IN USE DAILY	REMOVE SEDIMENT AT LEAST DAILY. ADJUST BROOMS FREQUENTLY. DISPOSE OF SWEEPER WASTES AT APPROVED DUMP SITES.	X	X	X	X	
WET	SEDIMENT TRAP	WEEKLY AND PRIOR TO AND AFTER RAIN EVENTS	SEDIMENT SHALL BE REMOVED FROM THE BOTTOM OF THE TRAP WHEN 300MM (1 FOOT) DEEP OR LESS.	X	X	X		

FOR EROSION CONTROL DETAILS SEE SHEET 3.2

LANDSCAPE ARCHITECT — LICENSED IN CALIFORNIA WITH NO. 3458 — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

CALA
Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS

NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
EROSION CONTROL PLAN

SCALE
HORIZ. NONE
VERT. NONE

DATE: OCTOBER 14, 2024
CAD FILE: A17058_EC.dwg
DRAWING NO. 3.1
SHEET NO. 5 OF 15

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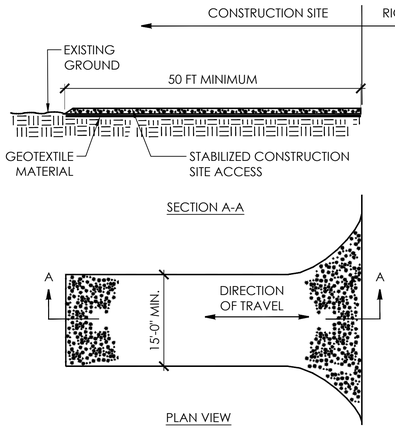
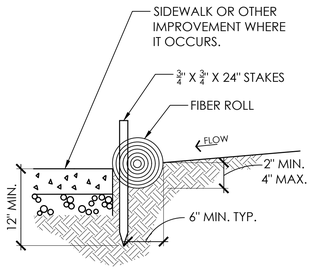


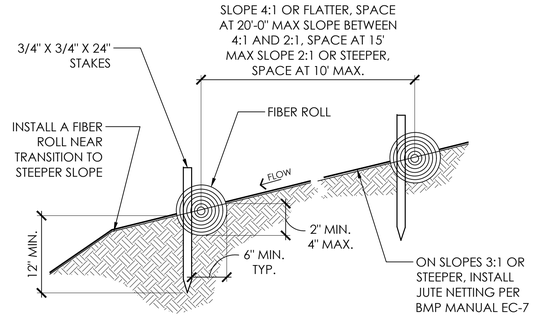
NOTE:
1. STABILIZED CONSTRUCTION SITE ACCESS SHALL BE CONSTRUCTED OF 3" TO 6" WASHED, WELL-GRADED GRAVEL OR CRUSHED ROCK. MATERIAL SHALL BE PLACED TO A MINIMUM THICKNESS OF 6 INCHES.
2. LENGTH OF ENTRANCE SHALL BE A MINIMUM OF 50 FT. WIDTH SHALL BE A MIN. OF 15 FT OR GREATER IF NECESSARY TO COVER ALL VEHICULAR INGRESS AND EGRESS. PROVIDE AMPLE TURNING RADII.
3. THE ENTRANCE SHALL BE KEPT IN GOOD CONDITION BY OCCASIONAL TOP DRESSING WITH MATERIAL AS SPECIFIED IN NOTE 1.
4. ACCESS SHALL BE INSPECTED WEEKLY DURING PERIODS OF HEAVY USAGE, MONTHLY DURING NORMAL USAGE, AND AFTER EACH RAINFALL, WITH MAINTENANCE PROVIDED AS NECESSARY. PERIODIC TOP DRESSING SHALL BE DONE AS NEEDED.

1 / 3.2 STABILIZED CONSTRUCTION ENTRANCE — **N.T.S.**
PLAN/SECTION



NOTES:
1. FIBER ROLL BARRIER SHALL BE CONSTRUCTED LONG ENOUGH TO EXTEND ACROSS THE EXPECTED FLOW PATH AND AS APPROVED BY THE CITY REPRESENTATIVE.
2. FIBER ROLL (8" TO 12" DIAMETER) SHALL BE PLACED INTO THE KEY TRENCH AND STAKES ON BOTH SIDES OF THE ROLL WITHIN 5 FEET OF EACH END AND THEN EVERY 3' TO 4'. STAKES OF SHALL BE DRIVEN IN ON ALTERNATING SIDES OF THE ROLL. ADJACENT ROLLS SHALL TIGHTLY ABUT.
3. CLEAR SUBGRADE TO REMOVE ALL LOCAL DEVIATIONS AND LARGE STONES OR DEBRIS THAT WILL INHIBIT CONTACT OF THE FIBER ROLL WITH THE SUBGRADE.
4. PRIOR TO ROLL INSTALLATION, CONSTRUCT A CONCAVE TRENCH 2 INCHES DEEP ALONG THE PROPOSED INSTALLATION ROUTE. FIBER ROLL SHALL BE INSTALLED WHERE INDICATED ON PLANS. THE BOTTOM EDGE OF THE FIBER ROLL SHALL EXTEND TO AND ACROSS THE BOTTOM OF THE TRENCH. THE TRENCH SHALL BE BACKFILLED TO 4 INCHES ABOVE GROUND AND COMPACTED TO BURY AND SECURE THE BOTTOM OF THE FIBER ROLL.

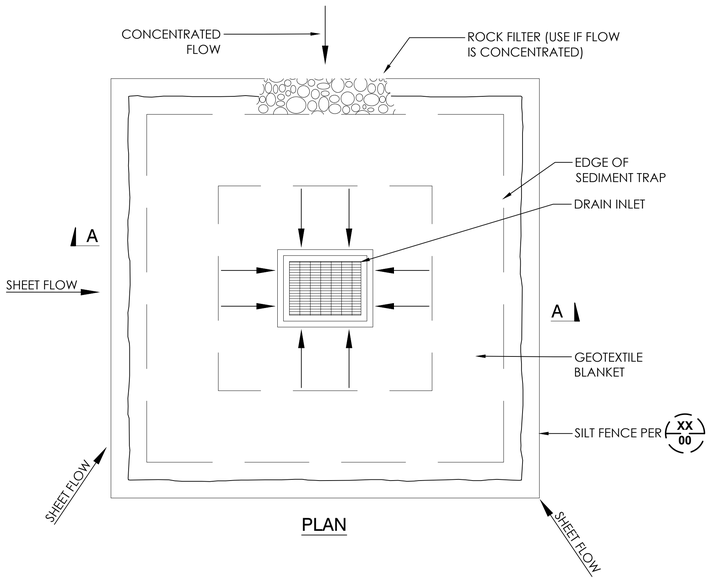
2 / 3.2 FIBER ROLL BARRIER — **N.T.S.**
SECTION

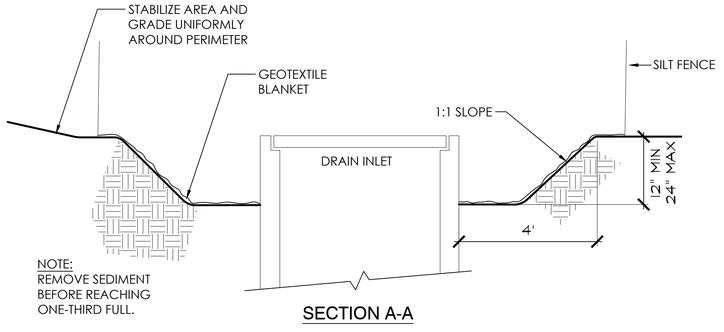


NOTES:
1. REFER TO NOTES ON DETAIL 2 OF THIS SHEET FOR ADDITIONAL REQUIREMENTS.
2. INSTALL FIBER ROLL ALONG LEVEL CONTOUR.
3. TURN ENDS OF FIBER ROLL UP SLOPE 4'-0" MIN. TO PREVENT RUNOFF FROM GOING AROUND ROLL.

3 / 3.2 FIBER ROLL BARRIER — **N.T.S.**
SECTION

17058_FilterRollBarrier.dwg





4 / 3.2 STORM DRAIN INLET PROTECTION
PLAN/SECTION

FOR EROSION CONTROL PLAN SEE SHEET 3.0

LICENSED LANDSCAPE ARCHITECT MELISSA RUTH NO. 5458 Signature May 31, 2025 Renewal Date Date STATE OF CALIFORNIA

CALA

Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION: _____

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

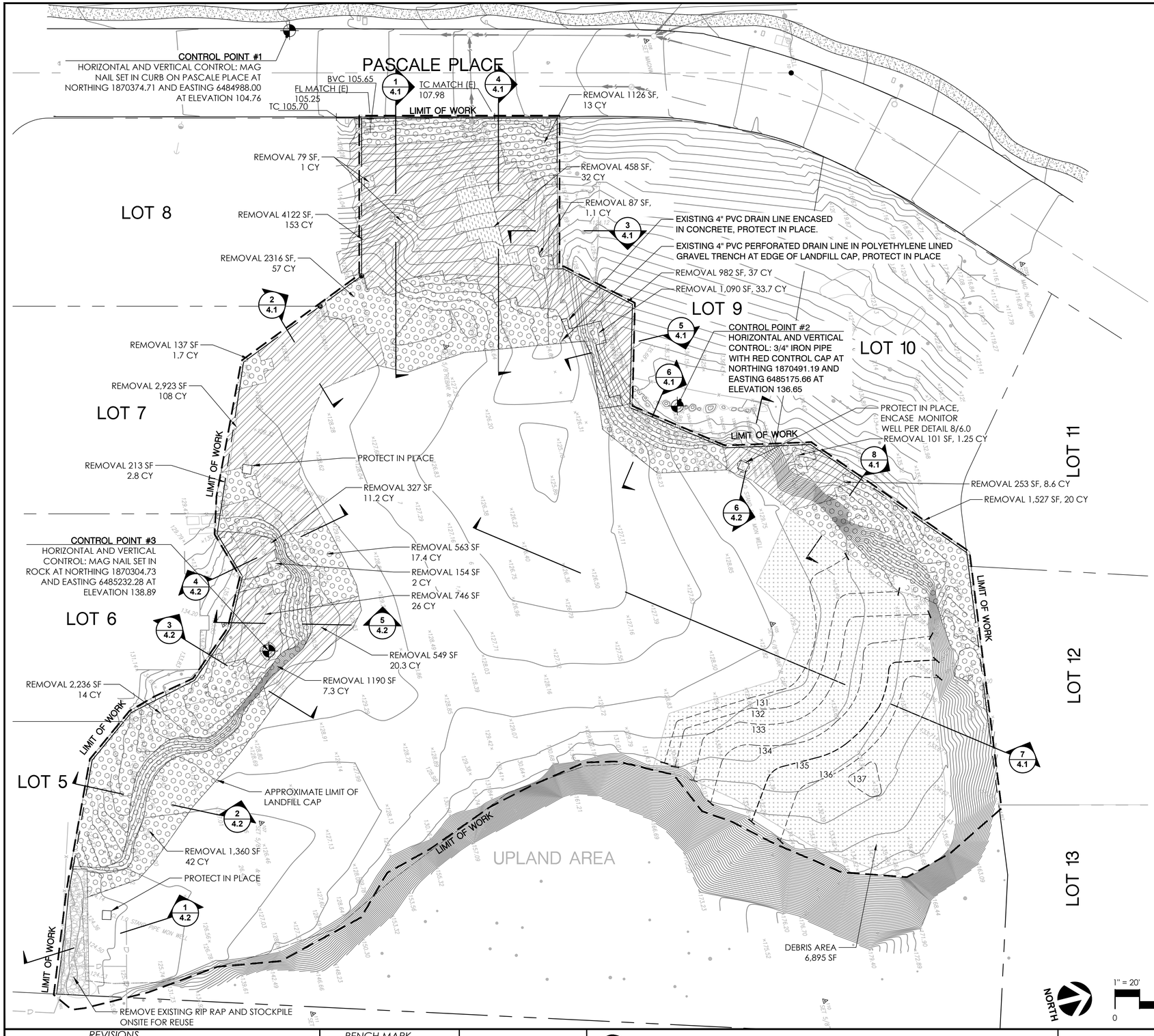
UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
EROSION CONTROL DETAILS

SCALE
HORIZ. NONE
VERT. NONE

DATE: OCTOBER 14, 2024
CAD FILE: A17058_EC.dwg
DRAWING NO. 3.2
SHEET NO. 6 OF 15

T:\Projects\2017 Projects\17058_HiddenGlen\Plans\3_Construction\Documents\A17058_EC.dwg



WASTE EXCAVATION LEGEND

- SOIL WITH WASTE REMOVAL (<10")
- SOIL WITH WASTE REMOVAL (10"-20")
- SOIL WITH WASTE REMOVAL (21"-30")
- RELOCATED SOIL WITH WASTE (TOTAL STOCKPILE DEBRIS = 495 CY)
- X / XX — SECTION CUT
- 22 — EXISTING CONTOUR: 1'-0" INTERVAL TYP.
- 22 — PROPOSED CONTOUR FOR SOIL WITH WASTE MOUND: 1'-0" INTERVAL TYP.
- 21.25 — PROPOSED SPOT ELEVATION (EXISTING SPOT ELEVATIONS ARE SCREENED ON PLAN)
- X% — DIRECTION AND PERCENT SLOPE OF SHEET DRAINAGE
- GB — GRADE BREAK
- FLUSH CONDITION
- CONTROL POINT

HP	HIGH POINT
TC	TOP OF CURB
BC	BOTTOM OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
TR	TOP OF RAMP
BR	BOTTOM OF RAMP
RIM	RIM ELEVATION OF DRAIN INLET, SEE WALL AND DRAINAGE PLAN
VC	VERTICAL CURVE PER CHP HIGHWAY DESIGN MANUAL SECTION 200-24
BVC	BEGINNING OF VERTICAL CURVE
EVC	END OF VERTICAL CURVE
GB	GRADE BREAK

WASTE EXCAVATION NOTES

1. GRADING: CONTRACTOR SHALL PERFORM ALL EARTHWORK AND GRADING PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
2. LANDFILL CAP PROTECTION: REFER TO SPECIAL PROVISIONS SECTION 00 72 00 GENERAL REQUIREMENTS, SECTION 1.3.C FOR LANDFILL CAP PROTECTION REQUIREMENTS.
3. MAXIMUM EXCAVATION REQUIRED. AMOUNT OF EXCAVATION MAY BE REDUCED IF BEDROCK IS ENCOUNTERED AT SHALLOW DEPTHS.

NORTH

1" = 20'

0 20 40 feet

LICENSED LANDSCAPE ARCHITECT MELISSA RUTH NO. 5455 Signature May 31, 2025 Renewal Date Date STATE OF CALIFORNIA

CALA
Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS

NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV.:
DESCRIPTION:

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
WASTE EXCAVATION PLAN

SCALE
HORIZ.
VERT.

DATE: OCTOBER 14, 2024
CAD FILE: A17058_WE.dwg
DRAWING NO. 4.0
SHEET NO. 7 OF 15

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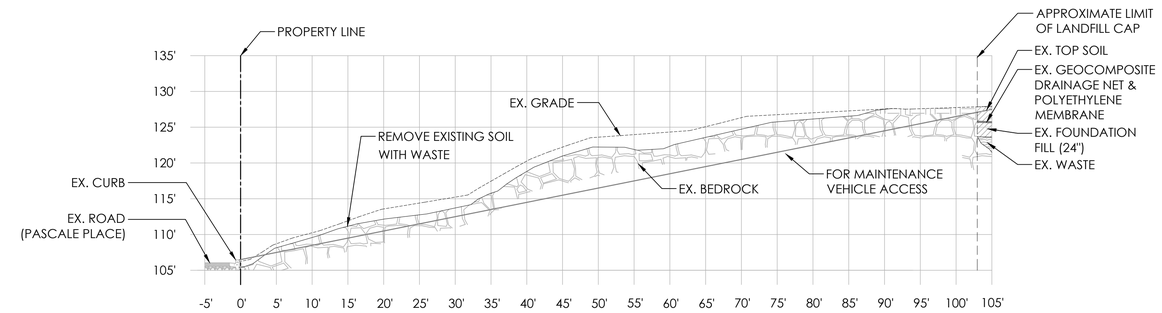

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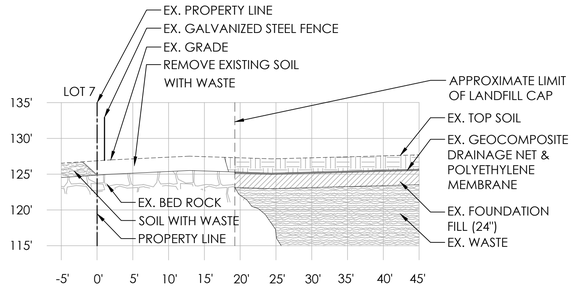
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'



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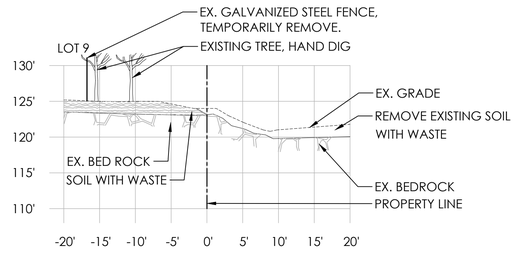

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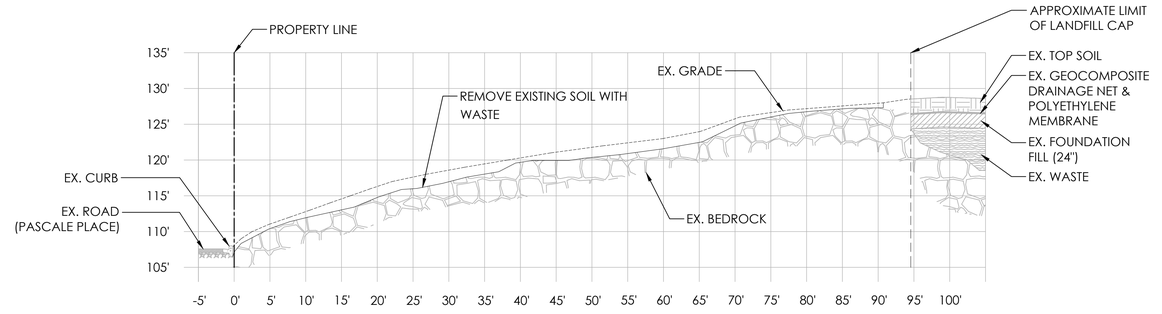

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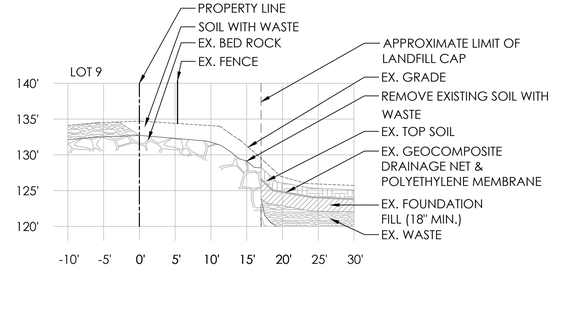

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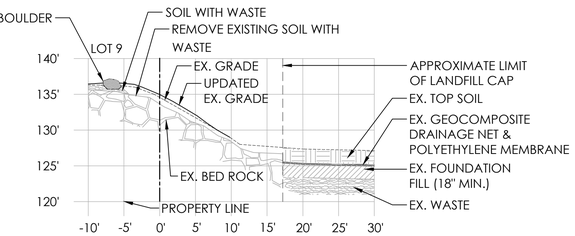

6 L4.1 SECTION 6
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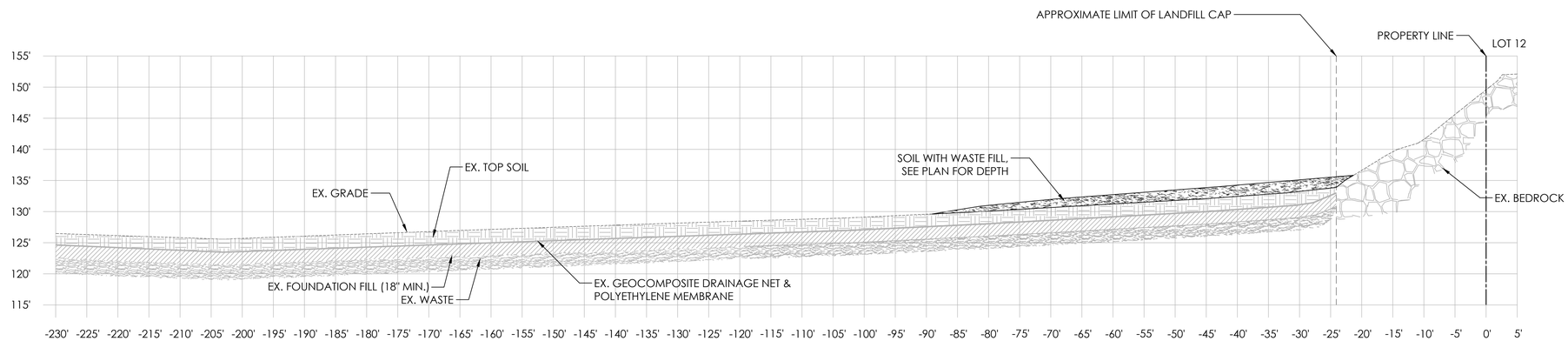

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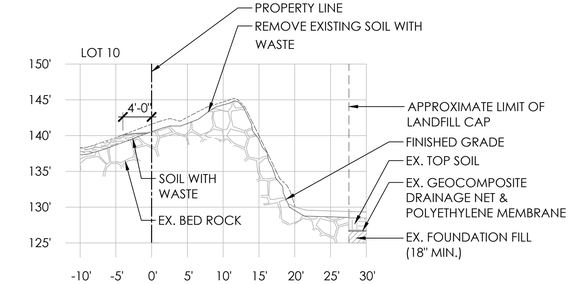

8 L4.1 SECTION 8
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'

LICENSED LANDSCAPE ARCHITECT RENEWAL WITH BOARD
Signature
May 31, 2025
Renewal Date
Date
STATE OF CALIFORNIA

CALA

Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
WASTE EXCAVATION SECTIONS

SCALE
HORIZ. _____
VERT. _____

DATE: OCTOBER 14, 2024
CAD FILE: A17058_WE.dwg
DRAWING NO. 4.1
SHEET NO. 8 OF 15

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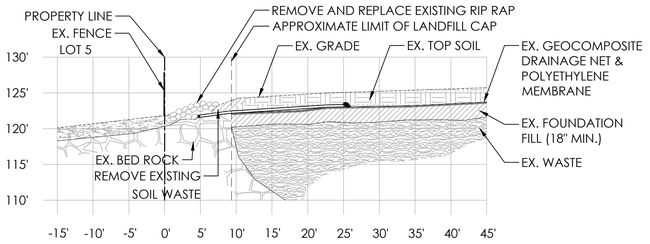

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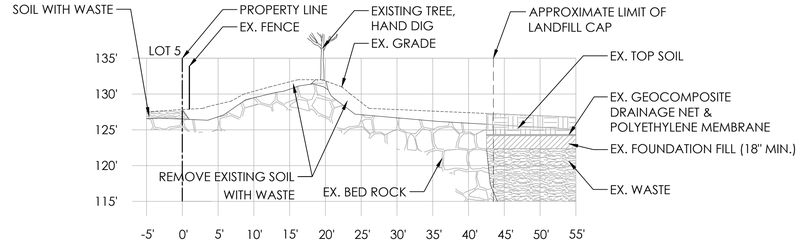

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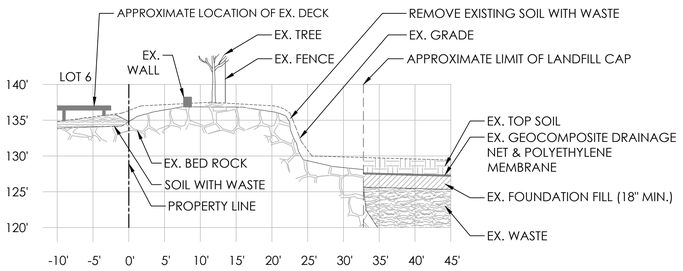

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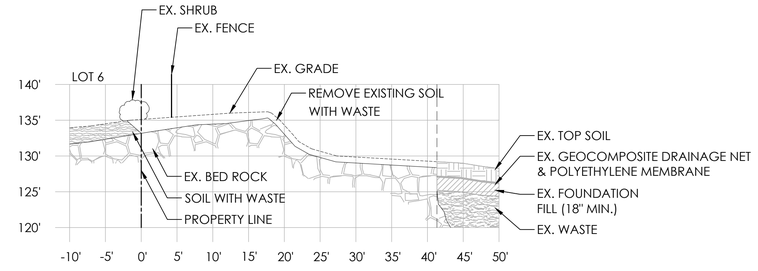

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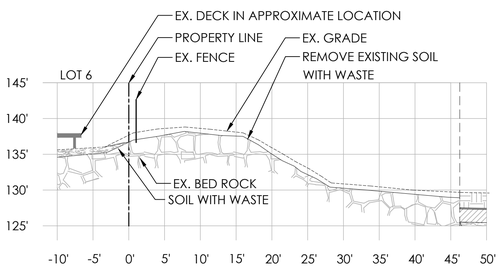

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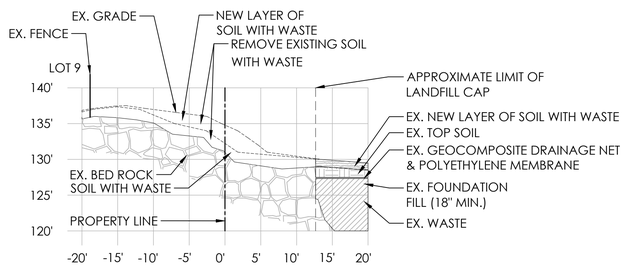

6 L4.2 SECTION 6
SECTION VERTICAL SCALE: 1"=5' HORIZONTAL SCALE: 1"=5'

LICENSED LANDSCAPE ARCHITECT — MELISSA RUTH NG 5495 — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

CALA

Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
WASTE EXCAVATION SECTIONS

SCALE
HORIZ. _____
VERT. _____

DATE: OCTOBER 14, 2024
CAD FILE: A17058_WE.dwg
DRAWING NO. 4.2
SHEET NO. 9 OF 15

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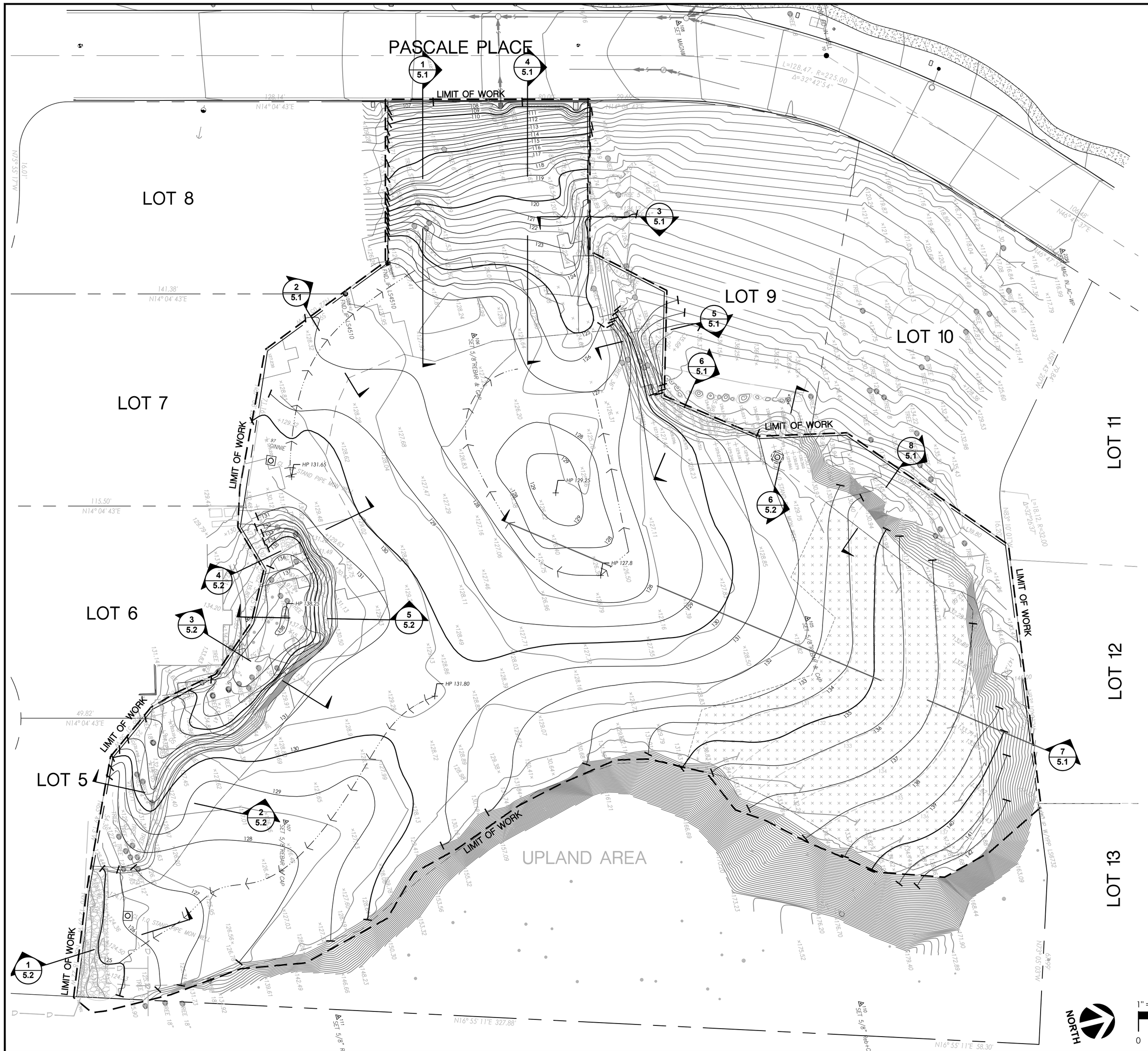

GRADING AND DRAINAGE LEGEND

	SOIL COVER MATERIAL
X / XX	SECTION CUT
XXX	SOIL REMEDIATION PILE CONTOUR
	EXISTING CONTOUR: 1'-0" INTERVAL TYP.
XX	PROPOSED CONTOUR: 1'-0" INTERVAL TYP.
XX.XX	PROPOSED SPOT ELEVATION (EXISTING SPOT ELEVATIONS ARE SCREENED ON PLAN)
X%	DIRECTION AND PERCENT SLOPE OF SHEET DRAINAGE
	SWALE WITH MIN. 2% SLOPE
GB	GRADE BREAK
	FLUSH CONDITION
	CONTROL POINT

HP	HIGH POINT
TC	TOP OF CURB
BC	BOTTOM OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
TR	TOP OF RAMP
BR	BOTTOM OF RAMP
RIM	RIM ELEVATION OF DRAIN INLET, SEE WALL AND DRAINAGE PLAN
VC	VERTICAL CURVE PER CHP HIGHWAY DESIGN MANUAL SECTION 200-24
BVC	BEGINNING OF VERTICAL CURVE
EVC	END OF VERTICAL CURVE
GB	GRADE BREAK

GRADING AND DRAINAGE NOTES

1. GRADING AND DRAINAGE: ALL PROPOSED PAVING, CURBS, WALLS, AND PLANTING AREAS SHALL SMOOTHLY CONFORM TO EXISTING ADJACENT FEATURES TO REMAIN. PROVIDE POSITIVE DRAINAGE ON ALL PAVING AND THROUGHOUT ALL PLANTING AREAS.
2. SOIL STOCKPILE: STRIP AND STOCKPILE EXISTING 6" LAYER OF SOIL FROM AREAS DISTURBED DURING GRADING OR EXCAVATION.
3. GRADING: CONTRACTOR SHALL PERFORM ALL EARTHWORK AND GRADING PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
4. LANDFILL CAP PROTECTION: REFER TO SPECIAL PROVISIONS SECTION 00 72 00 GENERAL REQUIREMENTS, SECTION 1.3.C FOR LANDFILL CAP PROTECTION REQUIREMENTS.

NORTH

1" = 20'

0 20 40 feet

LANDSCAPE ARCHITECT — MELISSA RUTH MCEVER — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

CALA

Callander Associates
Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION: _____

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
FINAL GRADING PLAN

SCALE
HORIZ. _____
VERT. _____

DATE: OCTOBER 14, 2024
CAD FILE: A17058_GD.dwg
DRAWING NO. 5.0
SHEET NO. 10 OF 15

ATTACHMENT 4

Page 139 of 307

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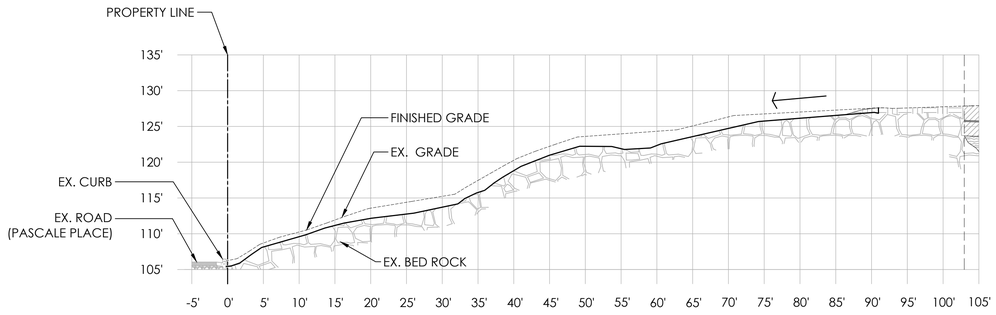
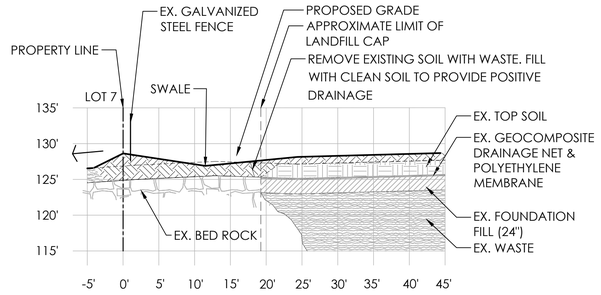


1 / 5.1 SECTION 1
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'



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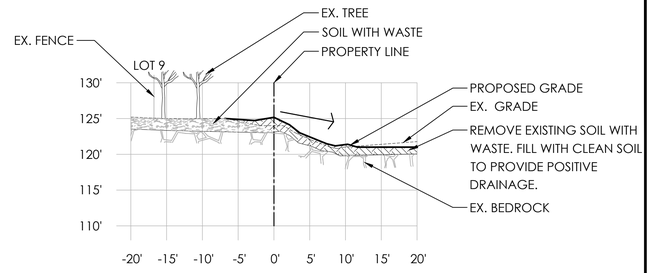

3 / 5.1 SECTION 3
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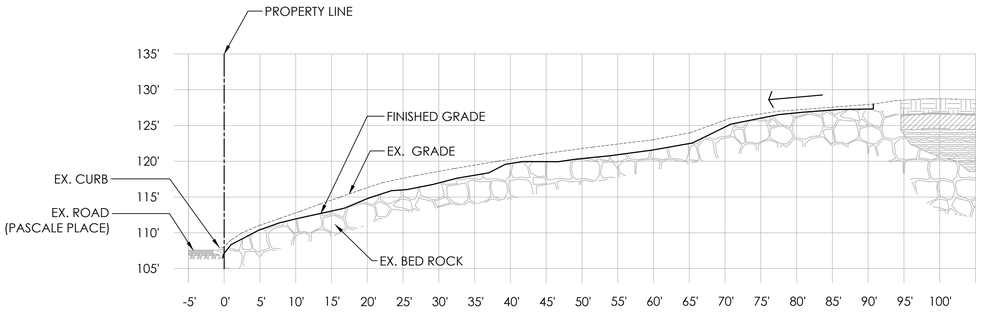

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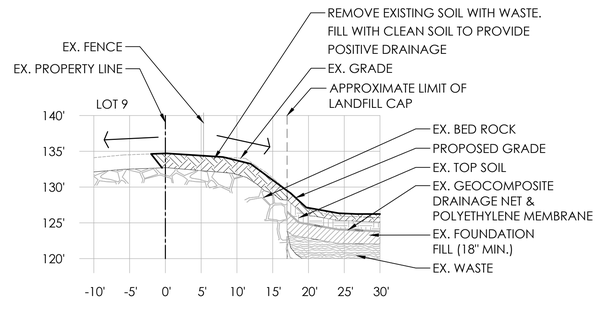
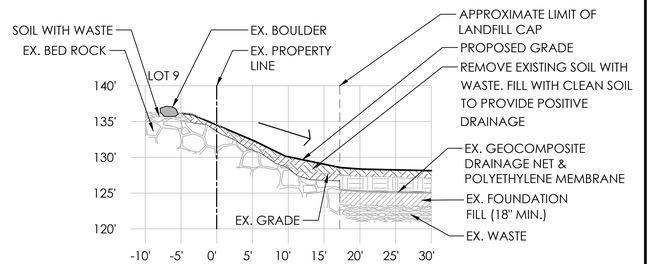
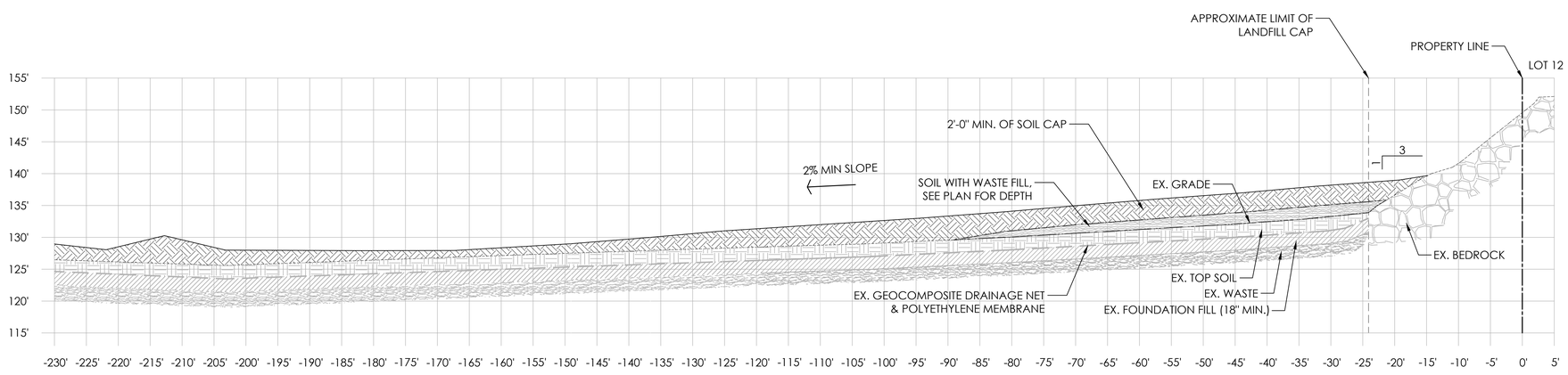


5 / L5.1 SECTION 5
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'



6 / 5.1 SECTION 6
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'



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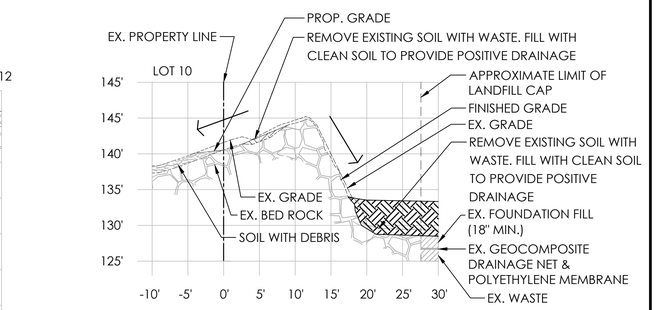

8 / 5.1 SECTION 8
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'

LICENSED LANDSCAPE ARCHITECT
MELISSA RUTH MORRIS
Signature
May 31, 2025
Renewal Date
Date
STATE OF CALIFORNIA

CALA
Callander Associates
Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
GRADING SECTIONS

SCALE
HORIZ. _____
VERT. _____

DATE: OCTOBER 14, 2024
CAD FILE: A17058_GD.dwg
DRAWING NO. 5.1
SHEET NO. 11 OF 15

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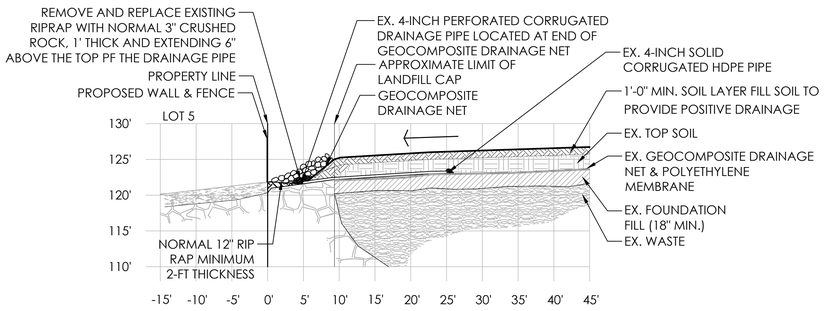

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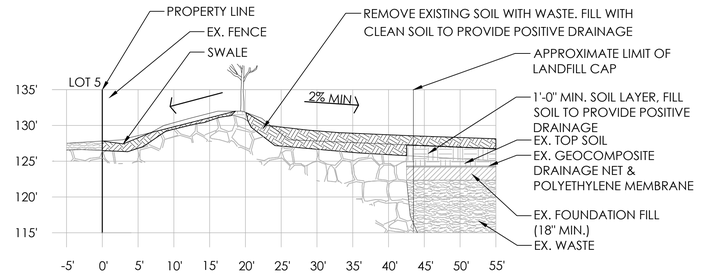

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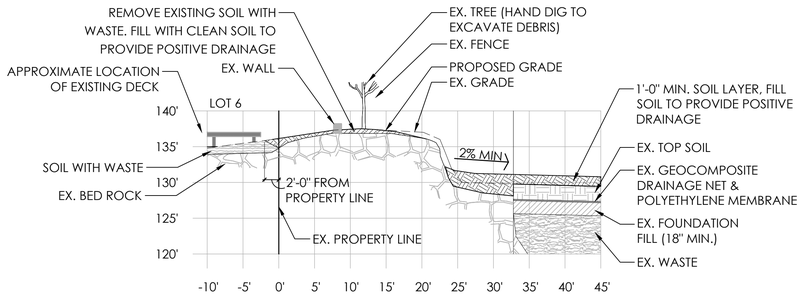

3 / 5.2 SECTION 3
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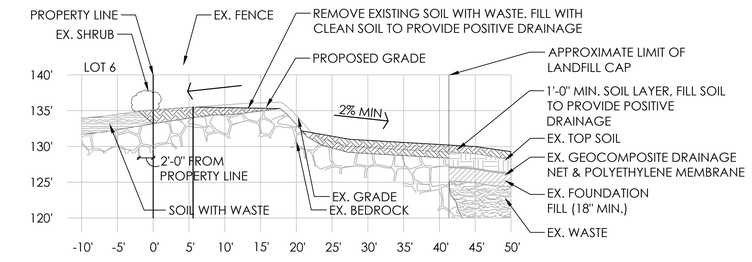
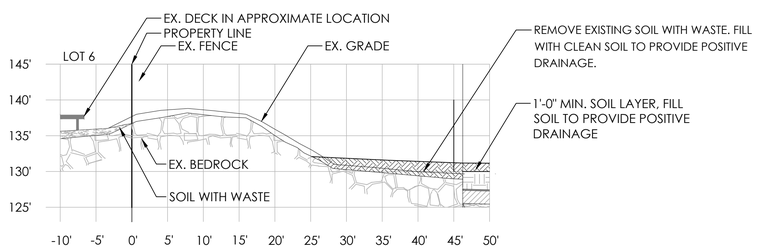


4 / 5.2 SECTION 4
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'



5 / 5.2 SECTION 5
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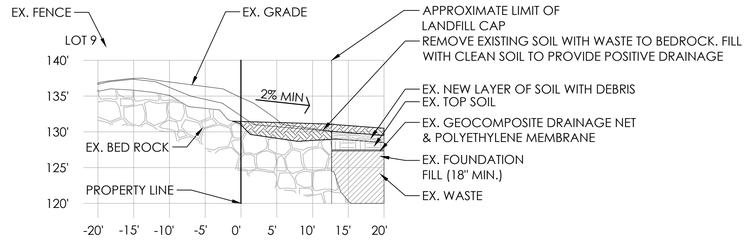

4 / 5.2 SECTION 4
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'

LICENSED LANDSCAPE ARCHITECT — MELISSA RUTH MORAN — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

CALA
Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
GRADING SECTIONS

SCALE
HORIZ. _____
VERT. _____

DATE: OCTOBER 14, 2024
CAD FILE: A17058_GD.dwg
DRAWING NO. 5.2
SHEET NO. 12 OF 15

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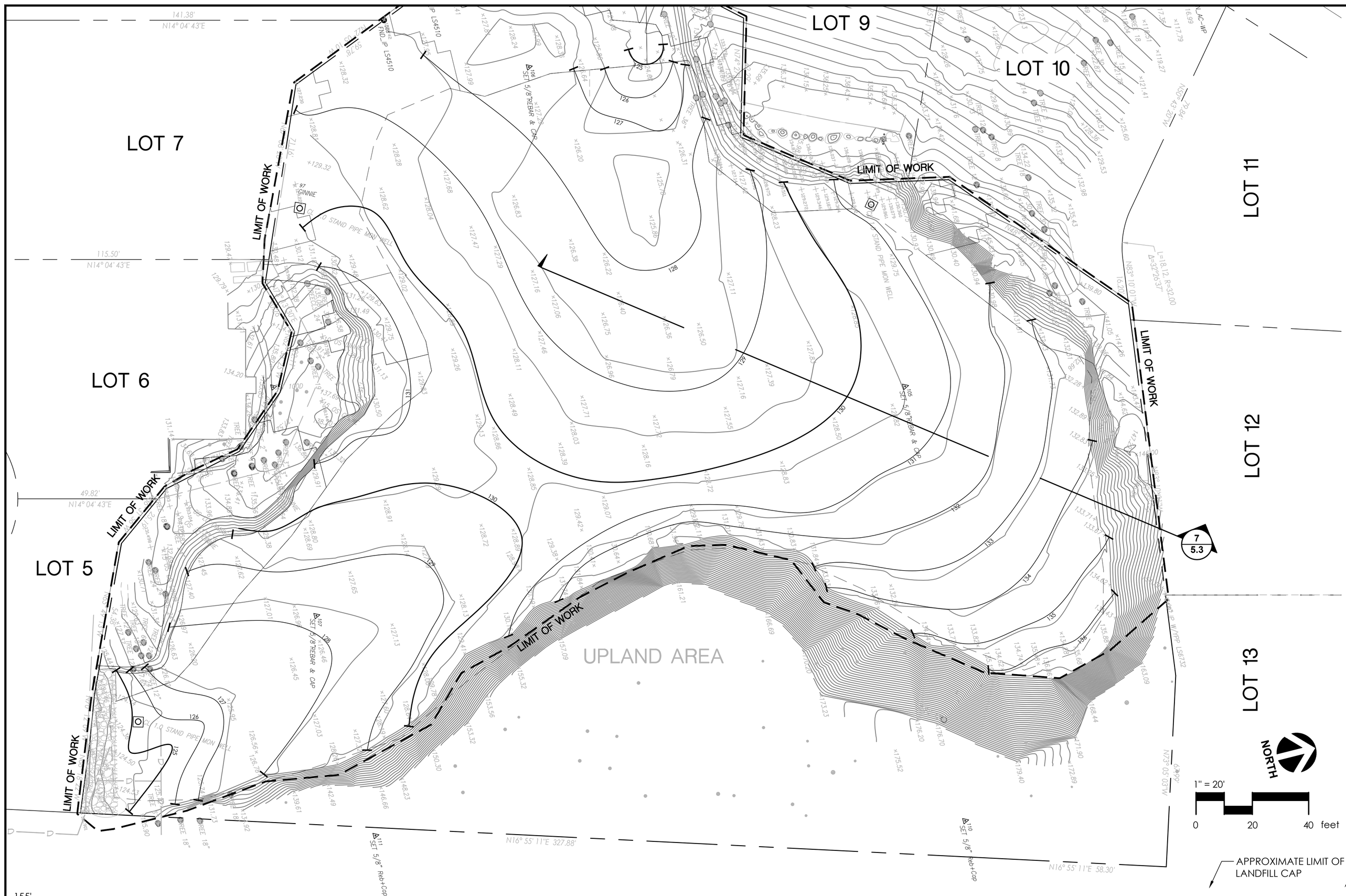


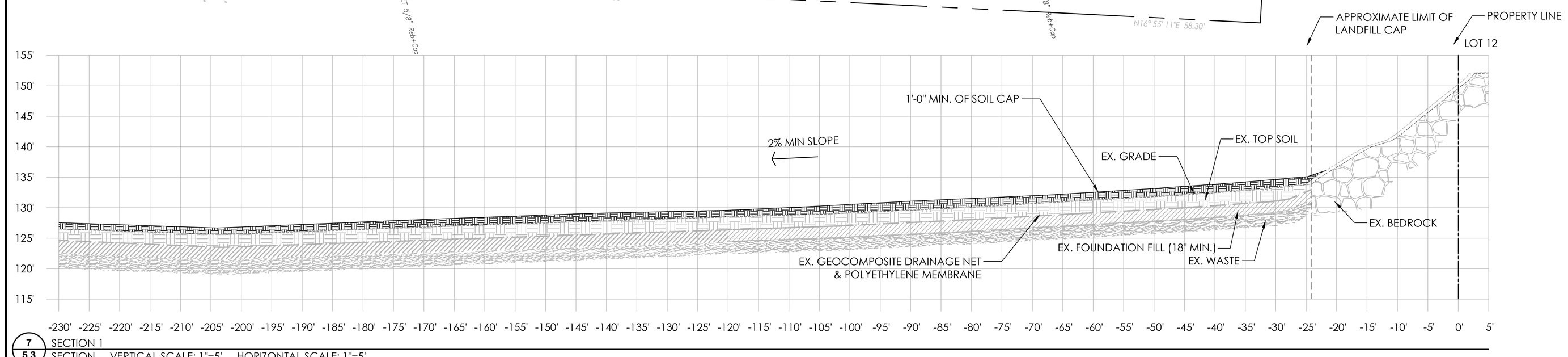
GRADING AND DRAINAGE LEGEND

- SOIL COVER MATERIAL
- SECTION CUT
- SOIL REMEDIATION PILE CONTOUR
- EXISTING CONTOUR: 1'-0" INTERVAL TYP.
- PROPOSED CONTOUR: 1'-0" INTERVAL TYP.
- PROPOSED SPOT ELEVATION (EXISTING SPOT ELEVATIONS ARE SCREENED ON PLAN)
- DIRECTION AND PERCENT SLOPE OF SHEET DRAINAGE
- SWALE WITH MIN. 2% SLOPE
- GRADE BREAK
- FLUSH CONDITION
- CONTROL POINT

HP	HIGH POINT
TC	TOP OF CURB
BC	BOTTOM OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
TR	TOP OF RAMP
BR	BOTTOM OF RAMP
RIM	RIM ELEVATION OF DRAIN INLET, SEE WALL AND DRAINAGE PLAN
VC	VERTICAL CURVE PER CHP HIGHWAY DESIGN MANUAL SECTION 200-24
BVC	BEGINNING OF VERTICAL CURVE
EVC	END OF VERTICAL CURVE
GB	GRADE BREAK

GRADING AND DRAINAGE NOTES

1. GRADING AND DRAINAGE: ALL PROPOSED PAVING, CURBS, WALLS, AND PLANTING AREAS SHALL SMOOTHLY CONFORM TO EXISTING ADJACENT FEATURES TO REMAIN. PROVIDE POSITIVE DRAINAGE ON ALL PAVING AND THROUGHOUT ALL PLANTING AREAS.
2. SOIL STOCKPILE: STRIP AND STOCKPILE EXISTING 6" LAYER OF SOIL FROM AREAS DISTURBED DURING GRADING OR EXCAVATION.
3. GRADING: CONTRACTOR SHALL PERFORM ALL EARTHWORK AND GRADING PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
4. LANDFILL CAP PROTECTION: REFER TO SPECIAL PROVISIONS SECTION 00 72 00 GENERAL REQUIREMENTS, SECTION 1.3.C FOR LANDFILL CAP PROTECTION REQUIREMENTS.



7 / 5.3 SECTION 1
SECTION VERTICAL SCALE: 1"=5' HORIZONTAL SCALE: 1"=5'

LICENSED LANDSCAPE ARCHITECT — MELISSA RUTH MORAVEK — Signature — May 31, 2025 Renewal Date — Date — STATE OF CALIFORNIA

CALA

Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV: _____
DESCRIPTION: _____

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
GRADING PLAN - ADD ALTERNATE

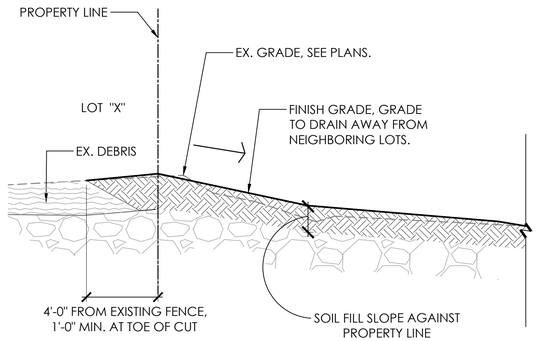
SCALE
HORIZ. _____
VERT. _____

DATE: OCTOBER 14, 2024
CAD FILE: A17058_GD.dwg
DRAWING NO. 5.3
SHEET NO. 13 OF 15

ATTACHMENT 4

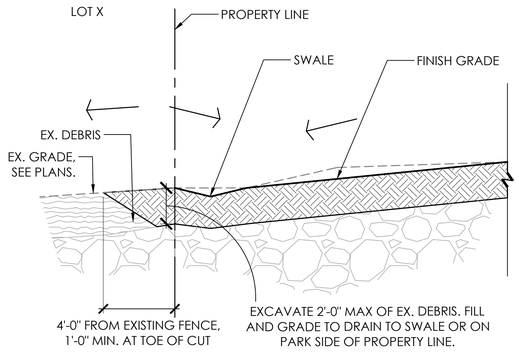
Page 142 of 307

T:\Projects\2017 Projects\17058_Hidden Glen Park\3_Construction Documents\A17058_GD.dwg



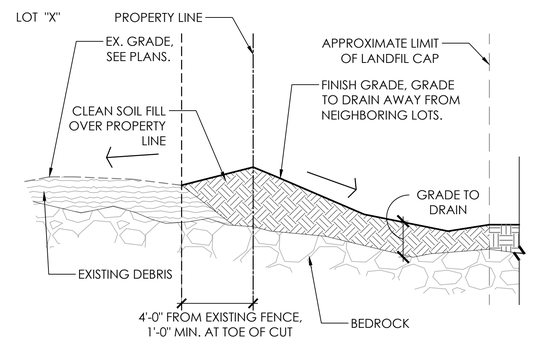
1 6.0 EDGE TREATMENT TYPE 1 - SOIL FILL GRADE TO DRAIN

1/4" = 1'-0" A17058_EdgeTreatmentType1_48.dwg



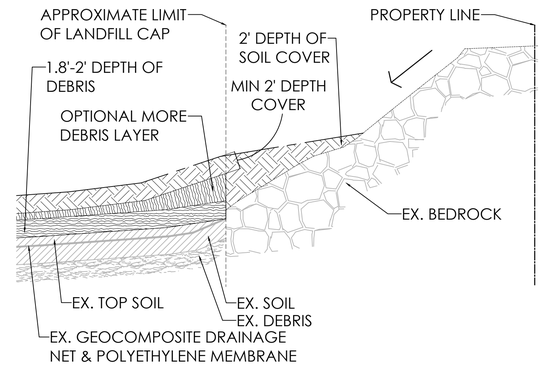
2 6.0 EDGE TREATMENT TYPE 3 - SOIL FILL SWALE

1/4" = 1'-0" A17058_EdgeTreatmentType2_48.dwg



3 6.0 EDGE TREATMENT TYPE 6 - SOIL FILL OVER PROP. LINE

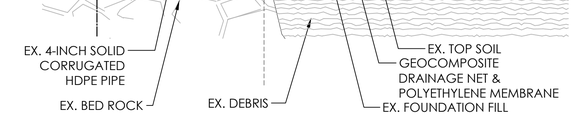
1/4" = 1'-0" A17058_EdgeTreatmentType6_48.dwg



NOTE:
1. SOIL COVER SHALL BE MIN 5% TO 33% MAX FOR SITE DRAINAGE

4 6.0 CLIFF TYP.

1/8" = 1'-0" CLIFF TYP.dwg



5 6.0 EDGE TREATMENT - RIP RAP

1/4" = 1'-0" A17058_EdgeTreatmentType8_48.dwg

6 6.0 RIP RAP

1 1/2" = 1'-0" 17058_RipRap.dwg

NOTES:

1. SALE TO HAVE MINIMUM 2% LONGITUDINAL SLOPE. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TOWARD OUTFALL DESIGNATED ON PLANS.

7 6.0 SWALE TYP.

1 1/2" = 1'-0" SWALE TYP.dwg

8 6.0 MONITOR WELL WITH PRECAST MANHOLE

1/2" = 1'-0" A17058_EdgeTreatmentType1_48.dwg

LA LICENSED LANDSCAPE ARCHITECT MELISSA RUTH NO. 5455 Signature May 31, 2025 Renewal Date Date STATE OF CALIFORNIA

CALA

Callander Associates Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION
CONSTRUCTION DETAILS

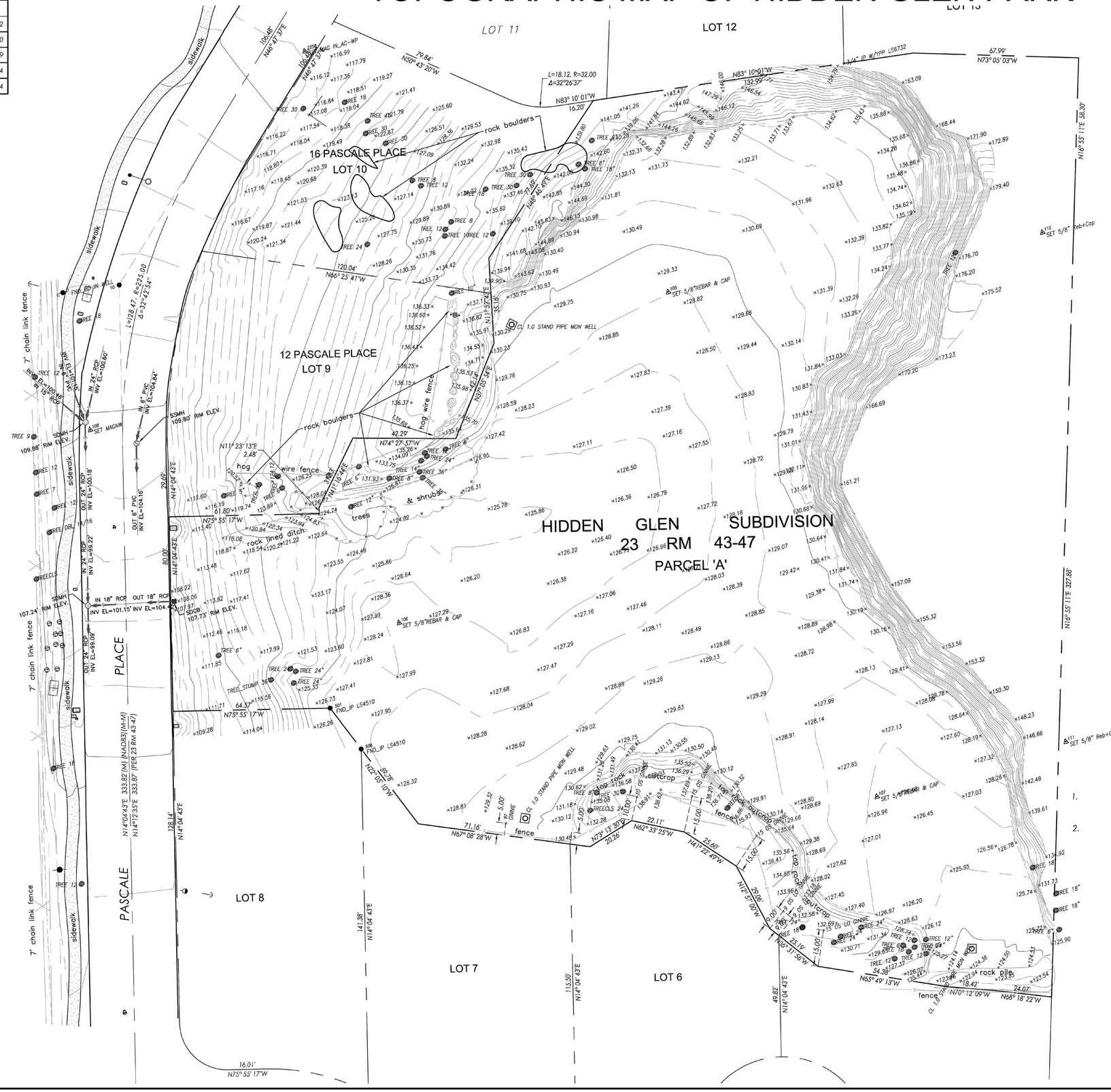
SCALE
HORIZ. _____
VERT. _____

DATE: OCTOBER 14, 2024
CAD FILE: 17058_Ph1_DT.dwg
DRAWING NO. 6.0
SHEET NO. 14 OF 15

T:\Projects\2017 Projects\17058_HiddenGlen\Work\3_Construction\Documents\A17058_DT.dwg

TOPOGRAPHIC MAP OF HIDDEN GLEN PARK

Control Point Table (NAD83 Coordinates)			
Point #	Raw Description	Northing	Easting
10	FND_BD IN WELL	1870569.56	6485054.72
11	FND_BD IN WELL	1870245.72	6484973.50
12	FND_BD IN WELL	1870157.47	6485225.09
501	FND_IP LS4510	1870378.90	6485092.54
508	FND_IP LS4510	1870359.39	6485100.44



LEGEND

MON	MONITORING WELL
OS	OFFSET
LO	LINE ONLY
IP	IRON PIPE

NOTES:

1. *Property lines shown here are based on Subdivision Map filed in Book 23 Page 82 in the offices of Napa County Recorder*
2. *Topographic mapping was prepared by photogrammetric methods, photo date 5-11-2023, and supplemented by field survey.*

BASIS OF BEARINGS

NAD83, ZONE III, EPOCH 2008.00 CALIBRATED ON CITY OF NAPA POINTS 43, 47, AND 51 AS SHOWN ON RECORD OF SURVEY BOOK 41 OF SURVEYS AT PAGES 44-47, N.C.R.

THE BEARINGS SHOWN ON THIS EXHIBIT HAVE BEEN ROTATED TO NAD '83. ROTATE NAD '83 BEARINGS 00° 07' 52" CLOCKWISE TO OBTAIN RECORD BEARINGS.

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION

SUDHIR K. CHAUDHARY, PLS 8993 *DATE*

PROGRESS PRINT

CHAUDHARY & ASSOCIATES, INC.
ENGINEERS SURVEYORS INSPECTORS
211 Gateway Road West, Suite 204
Napa, CA 94558
Tel: (707) 255-2729
WWW.CHAUDHARY.COM Napa - San Francisco - Fresno - Sacramento

TOPOGRAPHIC MAP OF
HIDDEN GLEN SUBDIVISION PARCEL "A"
LANDS OF CITY OF NAPA
(APN: 045-411-022-000)
PASCAL PLACE NAPA, CALIFORNIA

DRAWING ID	
DESIGN BY	–
DRAWN BY	MS
CHECKED BY	SC
DATE	AUGUST 1, 2023
SCALE	1" = 20'
SHEET	1
OF	1 SHEETS
COUNTY DRAWING FILE #	

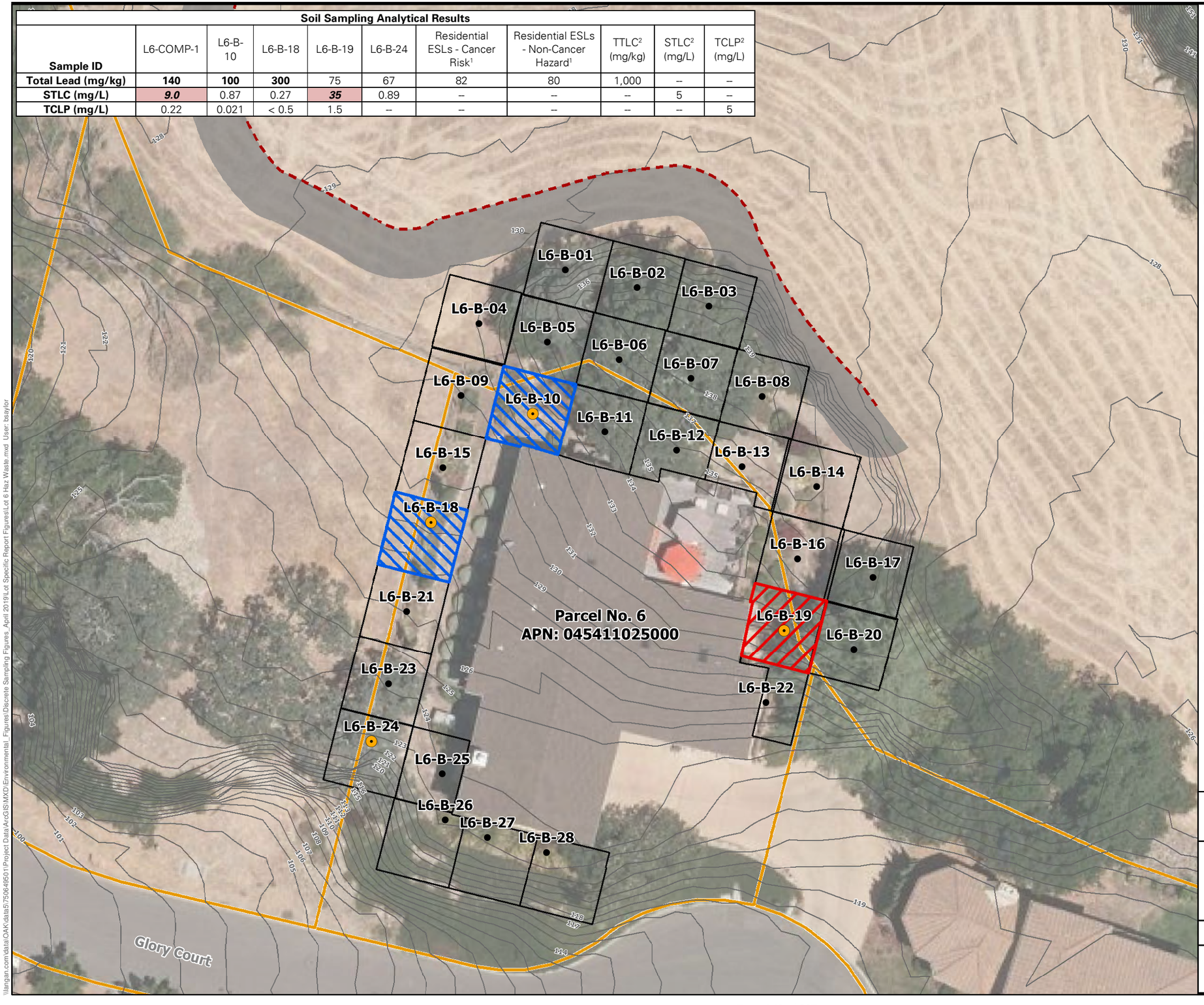
INIT. | MARK | REVISIONS

Q:\2021\21-01-005 Napa On-Call Survey\Phase-H - Hidden Glen Park - New notes\02TN2101-005-H Hidden Glen Park.dwg 8-01-23 08:12:44 AM

APPENDIX C

2018 Langan Soil Results

Soil Sampling Analytical Results										
Sample ID	L6-COMP-1	L6-B-10	L6-B-18	L6-B-19	L6-B-24	Residential ESLs - Cancer Risk[1]	Residential ESLs - Non-Cancer Hazard[1]	TTLC[2] (mg/kg)	STLC[2] (mg/L)	TCLP[2] (mg/L)
Total Lead (mg/kg)	**140**	**100**	**300**	75	67	82	80	1,000	--	--
STLC (mg/L)	***9.0***	0.87	0.27	***35***	0.89	--	--	--	5	--
TCLP (mg/L)	0.22	0.021	< 0.5	1.5	--	--	--	--	--	5



Legend

- Discrete Soil Sample Collected for Four-Point Composite Laboratory Analytical Sample (L6-COMP-1)
- Approximate Location of Soil Boring Advanced by Langan, December 2018
- Approximate Extent of Former Hidden Glenn Landfill
- Lidar Contour - 1ft. Interval
- Soil Borings on 15 ft. Centers
- Former Hidden Glenn Landfill Buffer - 10 ft.
- Approximate Location of Soil Sample Exceeding Class I non-RCRA State of California Hazardous Waste Criteria
- Approximate Location of Soil Sample Exceeding Residential ESL for Lead
- Assessor's Parcel Boundaries

Notes:

1. San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Levels (Table S-1), Soil Residential: Shallow Soil Exposure, Cancer Risk and Non-Cancer Hazard Environmental Screening Levels, dated January 2019.
2. Hazardous Waste Criteria
3. **Bold** concentration exceeds the lower of the Cancer Risk or Non-Cancer Risk ESLs.
4. ***Bold Italicized*** - concentration exceeds hazardous waste criteria.
5. TTLC - California Total Threshold Limit Concentration - State hazardous waste criterion
6. STLC - California Soluble Threshold Limit Concentration
7. TCLP - Federal Toxicity Characteristic Leaching Procedure
8. World aerial imagery basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online. Credits: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community.
9. All features shown are approximate.
10. Site boundary provided by the Napa County parcel dataset, 2016.
11. LiDAR survey data for the northern San Francisco Bay, CA provided by National Oceanic and Atmospheric Administration (NOAA) with accuracy of 1 meter, updated 2010.

0 10 20 40
Feet

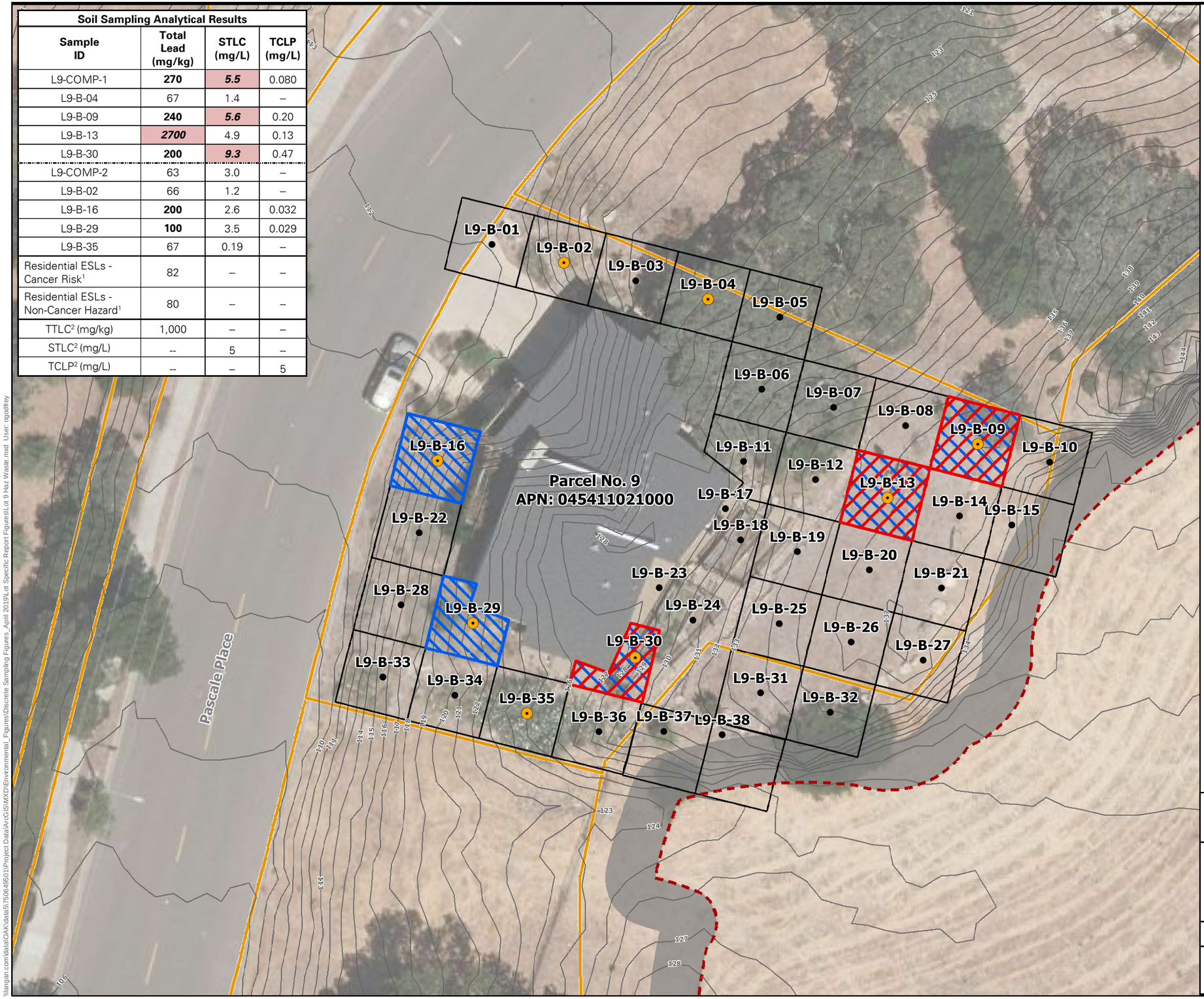
FORMER HIDDEN GLEN LANDFILL INVESTIGATION
Napa, California

LOT 6 - SITE PLAN WITH APPROXIMATE SOIL SAMPLE LOCATIONS EXCEEDING CLASS I NON-RCRA STATE OF CALIFORNIA HAZARDOUS WASTE CRITERIA AND RESIDENTIAL ESL FOR LEAD

Date 4/23/2019	Project 750649501	Figure 2

LANGAN

Soil Sampling Analytical Results			
Sample ID	**Total Lead (mg/kg)**	**STLC (mg/L)**	**TCLP (mg/L)**
L9-COMP-1	**270**	***5.5***	0.080
L9-B-04	67	1.4	–
L9-B-09	**240**	***5.6***	0.20
L9-B-13	***2700***	4.9	0.13
L9-B-30	**200**	***9.3***	0.47
L9-COMP-2	63	3.0	–
L9-B-02	66	1.2	–
L9-B-16	**200**	2.6	0.032
L9-B-29	**100**	3.5	0.029
L9-B-35	67	0.19	–
Residential ESLs - Cancer Risk[1]	82	–	–
Residential ESLs - Non-Cancer Hazard[1]	80	–	–
TTLC[2] (mg/kg)	1,000	–	–
STLC[2] (mg/L)	--	5	–
TCLP[2] (mg/L)	--	–	5



Legend

- Approximate Location of Soil Boring Advanced by Langan, December 2018
- Discrete Soil Sample Collected for Four-Point Composite Laboratory Analytical Sample (L9-COMP-1 & L9-COMP-2)
- Approximate Extent of Former Hidden Glenn Landfill
- Lidar Contour - 1ft. Interval
- Soil Borings on 15 ft. Centers
- Former Hidden Glenn Landfill Buffer - 10 ft.
- Approximate Location of Soil Sample Exceeding Class I non-RCRA State of California Hazardous Waste Criteria and Residential ESL for Lead
- Approximate Location of Soil Sample Exceeding Residential ESL for Lead
- Assessor's Parcel Boundaries

Notes:

1. San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Levels (Table S-1), Soil Residential: Shallow Soil Exposure, Cancer Risk and Non-Cancer Hazard Environmental Screening Levels, dated January 2019.
2. Hazardous Waste Criteria
3. **Bold** concentration exceeds the lower of the Cancer Risk or Non-Cancer Risk ESLs.
4. ***Bold Italicized*** - concentration exceeds hazardous waste criteria.
5. TTLC - California Total Threshold Limit Concentration - State hazardous waste criterion
6. STLC - California Soluble Threshold Limit Concentration
7. TCLP - Federal Toxicity Characteristic Leaching Procedure
8. World aerial imagery basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online. Credits: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community.
9. All features shown are approximate.
10. Site boundary provided by the Napa County parcel dataset, 2016.
11. LiDAR survey data for the northern San Francisco Bay, CA provided by National Oceanic and Atmospheric Administration (NOAA) with accuracy of 1 meter, updated 2010.

0 10 20 40
Feet

FORMER HIDDEN GLEN LANDFILL INVESTIGATION
Napa, California

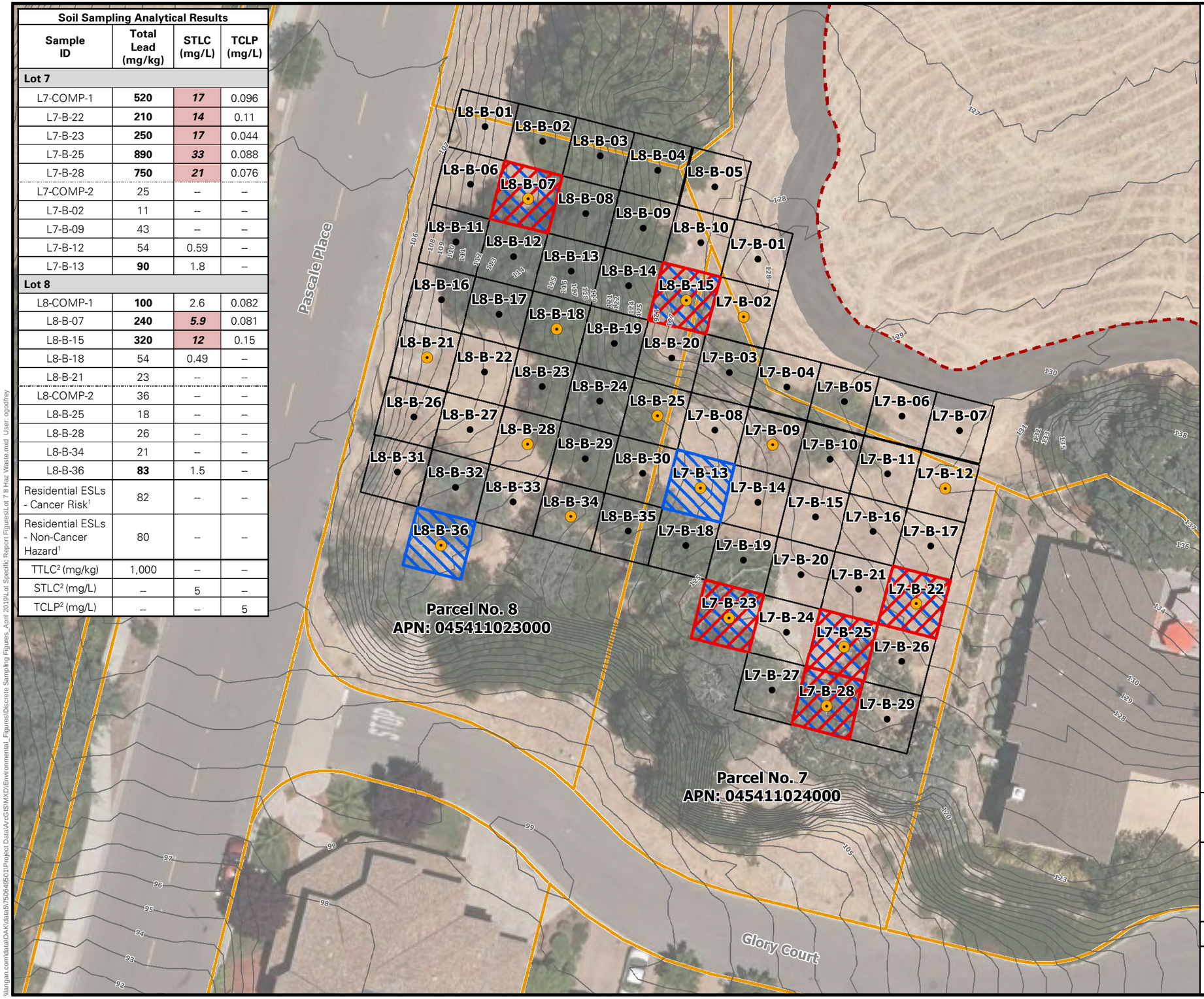
LOT 9 - SITE PLAN
WITH APPROXIMATE SOIL SAMPLE LOCATIONS EXCEEDING CLASS I NON-RCRA STATE OF CALIFORNIA HAZARDOUS WASTE CRITERIA AND RESIDENTIAL ESL FOR LEAD

Date 4/30/2019	Project 750649501	Figure 2

LANGAN

Soil Sampling Analytical Results

Sample ID	Total Lead (mg/kg)	STLC (mg/L)	TCLP (mg/L)
Lot 7			
L7-COMP-1	**520**	***17***	0.096
L7-B-22	**210**	***14***	0.11
L7-B-23	**250**	***17***	0.044
L7-B-25	**890**	***33***	0.088
L7-B-28	**750**	***21***	0.076
L7-COMP-2	25	–	–
L7-B-02	11	–	–
L7-B-09	43	–	–
L7-B-12	54	0.59	–
L7-B-13	**90**	1.8	–
Lot 8			
L8-COMP-1	**100**	2.6	0.082
L8-B-07	**240**	***5.9***	0.081
L8-B-15	**320**	***12***	0.15
L8-B-18	54	0.49	–
L8-B-21	23	–	–
L8-COMP-2	36	–	–
L8-B-25	18	–	–
L8-B-28	26	–	–
L8-B-34	21	–	–
L8-B-36	**83**	1.5	–
Residential ESLs - Cancer Risk[1]	82	–	–
Residential ESLs - Non-Cancer Hazard[1]	80	–	–
TTLC[2] (mg/kg)	1,000	–	–
STLC[2] (mg/L)	–	5	–
TCLP[2] (mg/L)	–	–	5



Legend

- Approximate Location of Soil Boring Advanced by Langan, November 2018
- Discrete Soil Sample Collected for Four-Point Composite Laboratory Analytical Samples (L7-COMP-1, L7-COMP-2, L8-COMP-1, & L8-COMP-2)
- Approximate Extent of Former Hidden Glenn Landfill
- Lidar Contour - 1ft. Interval
- Soil Borings on 15 ft. Centers
- Former Hidden Glenn Landfill Buffer - 10 ft.
- Approximate Location of Soil Sample Exceeding Class I non-RCRA State of California Hazardous Waste Criteria and Residential ESL for Lead
- Approximate Location of Soil Sample Exceeding Residential ESL for Lead
- Assessor's Parcel Boundaries

Notes:

1. San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Levels (Table S-1), Soil Residential: Shallow Soil Exposure, Cancer Risk and Non-Cancer Hazard Environmental Screening Levels, dated January 2019.
2. Hazardous Waste Criteria
3. **Bold** concentration exceeds the lower of the Cancer Risk or Non-Cancer Risk ESLs.
4. ***Bold Italicized*** - concentration exceeds hazardous waste criteria.
5. TTLC - California Total Threshold Limit Concentration - State hazardous waste criterion
6. STLC - California Soluble Threshold Limit Concentration
7. TCLP - Federal Toxicity Characteristic Leaching Procedure
8. World aerial imagery basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online. Credits: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community.
9. All features shown are approximate.
10. Site boundary provided by the Napa County parcel dataset, 2016.
11. LiDAR survey data for the northern San Francisco Bay, CA provided by National Oceanic and Atmospheric Administration (NOAA) with accuracy of 1 meter, updated 2010.

0 12.5 25 50
Feet

FORMER HIDDEN GLEN LANDFILL INVESTIGATION
Napa, California

LOT 7 AND 8 - SITE PLAN WITH APPROXIMATE SOIL SAMPLE LOCATIONS EXCEEDING CLASS I NON-RCRA STATE OF CALIFORNIA HAZARDOUS WASTE CRITERIA AND RESIDENTIAL ESL FOR LEAD

Date 4/30/2019	Project 750649501	Figure 2

LANGAN

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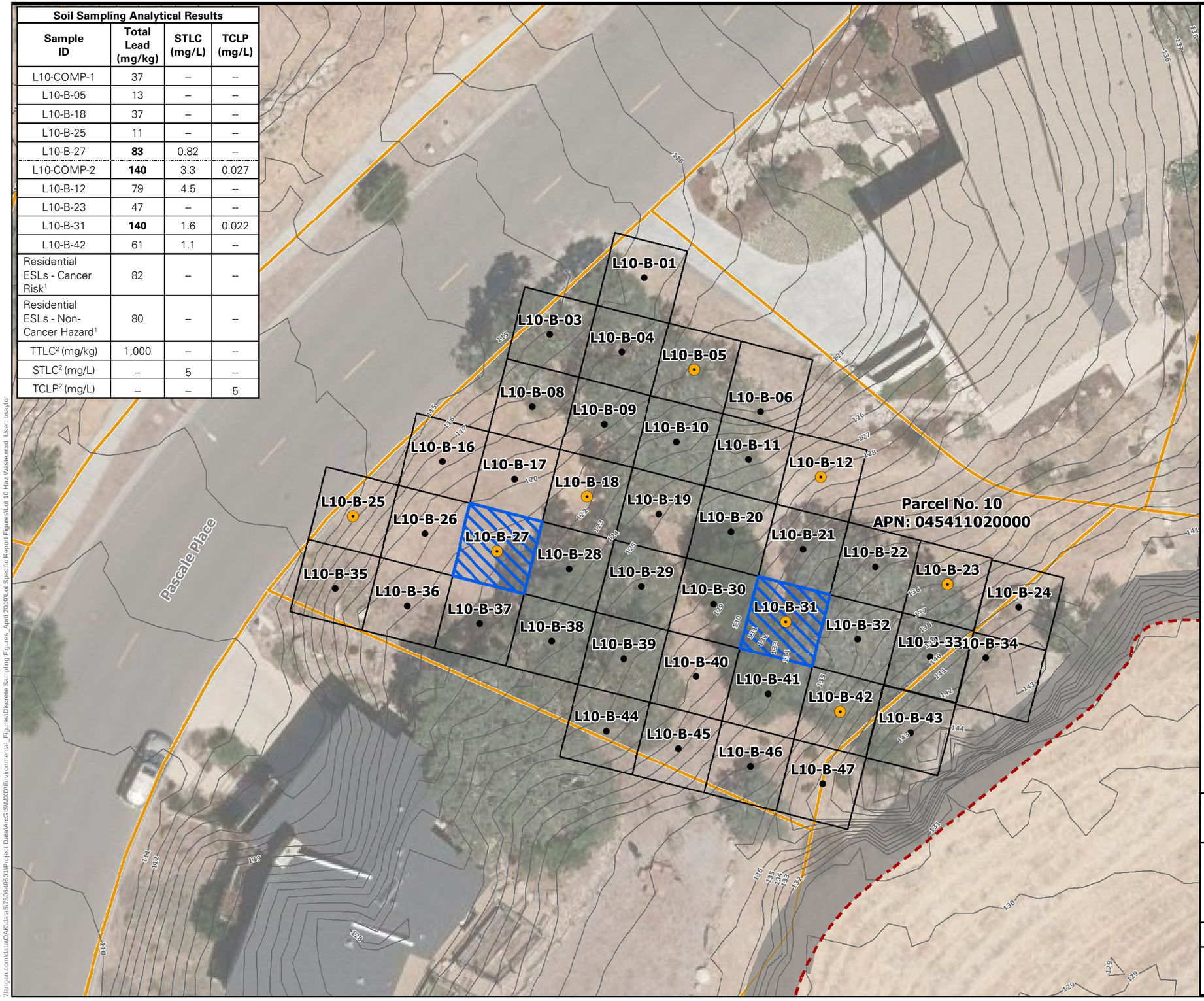
Soil Sampling Analytical Results			
Sample ID	**Total Lead (mg/kg)**	**STLC (mg/L)**	**TCLP (mg/L)**
L10-COMP-1	37	–	–
L10-B-05	13	–	–
L10-B-18	37	–	–
L10-B-25	11	–	–
L10-B-27	**83**	0.82	–
L10-COMP-2	**140**	3.3	0.027
L10-B-12	79	4.5	–
L10-B-23	47	–	–
L10-B-31	**140**	1.6	0.022
L10-B-42	61	1.1	–
Residential ESLs - Cancer Risk[1]	82	–	–
Residential ESLs - Non-Cancer Hazard[1]	80	–	–
TTLC[2] (mg/kg)	1,000	–	–
STLC[2] (mg/L)	–	5	–
TCLP[2] (mg/L)	–	–	5



Legend

- Approximate Location of Soil Boring Advanced by Langan, December 2018
- Discrete Soil Sample Collected for Four-Point Composite Laboratory Analytical Sample (L10-COMP-1 & L10-COMP-2)
- Approximate Extent of Former Hidden Glenn Landfill
- Lidar Contour - 1ft. Interval
- Soil Borings on 15 ft. Centers
- Former Hidden Glenn Landfill Buffer - 10 ft.
- Approximate Location of Soil Sample Exceeding Residential ESL for Lead
- Assessor's Parcel Boundaries

Notes:

1. San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Levels (Table S-1), Soil Residential: Shallow Soil Exposure, Cancer Risk and Non-Cancer Hazard Environmental Screening Levels, dated January 2019.
2. Hazardous Waste Criteria
3. **Bold** concentration exceeds the lower of the Cancer Risk or Non-Cancer Risk ESLs.
4. TTLC - California Total Threshold Limit Concentration - State hazardous waste criterion
5. STLC - California Soluble Threshold Limit Concentration
6. TCLP - Federal Toxicity Characteristic Leaching Procedure
7. World aerial imagery basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online. Credits: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community.
8. All features shown are approximate.
9. Site boundary provided by the Napa County parcel dataset, 2016.
10. LiDAR survey data for the northern San Francisco Bay, CA provided by National Oceanic and Atmospheric Administration (NOAA) with accuracy of 1 meter, updated 2010.

0 10 20 40
Feet

FORMER HIDDEN GLEN LANDFILL INVESTIGATION
Napa, California

LOT 10 - SITE PLAN
WITH APPROXIMATE SOIL SAMPLE LOCATIONS
EXCEEDING RESIDENTIAL ESL FOR LEAD

Date 4/23/2019	Project 750649501	Figure 2

LANGAN

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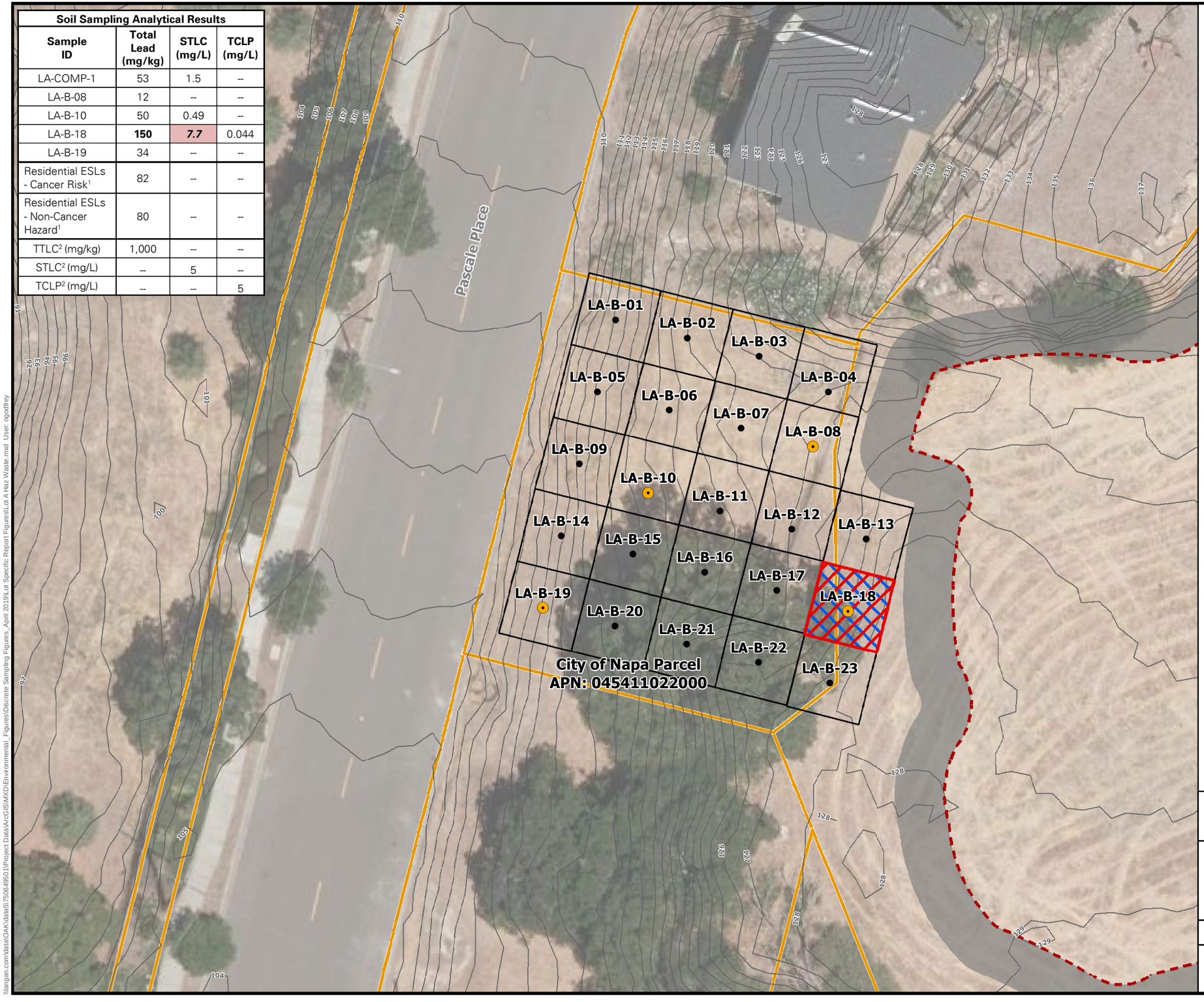
Soil Sampling Analytical Results			
Sample ID	**Total Lead (mg/kg)**	**STLC (mg/L)**	**TCLP (mg/L)**
LA-COMP-1	53	1.5	--
LA-B-08	12	--	--
LA-B-10	50	0.49	--
LA-B-18	**150**	***7.7***	0.044
LA-B-19	34	--	--
Residential ESLs - Cancer Risk[1]	82	--	--
Residential ESLs - Non-Cancer Hazard[1]	80	--	--
TTLC[2] (mg/kg)	1,000	--	--
STLC[2] (mg/L)	--	5	--
TCLP[2] (mg/L)	--	--	5



Legend

- Approximate Location of Soil Boring Advanced by Langan, December 2018
- Discrete Soil Sample Collected for Four-Point Composite Laboratory Analytical Sample (LA-COMP-1)
- Approximate Extent of Former Hidden Glenn Landfill
- Lidar Contour - 1ft. Interval
- Soil Borings on 15 ft. Centers
- Former Hidden Glenn Landfill Buffer - 10 ft.
- Approximate Location of Soil Sample Exceeding Class I non-RCRA State of California Hazardous Waste Criteria and Residential ESL for Lead
- Assessor's Parcel Boundaries

Notes:

1. San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Levels (Table S-1), Soil Residential: Shallow Soil Exposure, Cancer Risk and Non-Cancer Hazard Environmental Screening Levels, dated January 2019.
2. Hazardous Waste Criteria
3. **Bold** concentration exceeds the lower of the Cancer Risk or Non-Cancer Risk ESLs.
4. ***Bold Italicized*** - concentration exceeds hazardous waste criteria.
5. TTLC - California Total Threshold Limit Concentration - State hazardous waste criterion
6. STLC - California Soluble Threshold Limit Concentration
7. TCLP - Federal Toxicity Characteristic Leaching Procedure
8. World aerial imagery basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online. Credits: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community.
9. All features shown are approximate.
10. Site boundary provided by the Napa County parcel dataset, 2016.
11. LiDAR survey data for the northern San Francisco Bay, CA provided by National Oceanic and Atmospheric Administration (NOAA) with accuracy of 1 meter, updated 2010.

0 10 20 40
Feet

FORMER HIDDEN GLEN LANDFILL INVESTIGATION
Napa, California

LOT A - SITE PLAN
WITH APPROXIMATE SOIL SAMPLE LOCATIONS EXCEEDING CLASS I NON-RCRA STATE OF CALIFORNIA HAZARDOUS WASTE CRITERIA AND RESIDENTIAL ESL FOR LEAD

Date 4/30/2019	Project 750649501	Figure 2

LANGAN

APPENDIX D

Site Health and Safety Plan

Site Health and Safety Plan
Hidden Glen Dump

Coombsville Road
Napa, California
SWIS No. 28-AA-0028

Napa County Local Enforcement Agency
1195 Third Street, Suite 210 I Napa, California 94559

October 1, 2024 | Project No. 109558001

Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

35+ YEARS

Site Health and Safety Plan
Hidden Glen Dump

Coombsville Road
Napa, California
SWIS No. 28-AA-0028

Mr. Peter Ex, REHS
Napa County Local Enforcement Agency
1195 Third Street, Suite 210 I Napa, California 94559

October 1, 2024 | Project No. 109558001

Stephen J. Waide, CIH, CSP, CIEC, CMC
Principal Environmental Scientist

NDD/BAB/SW/mp

CONTENTS

TABLES

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APPENDIX

1 INTRODUCTION

This Site Health and Safety Plan (SHSP) provides policies, information, requirements, and guidelines regarding procedures to be followed by field personnel, subcontractors, and others during the implementation of the Remedial Action Plan for the Hidden Glen dump (site). The site is located near the intersection of Pascale Place and Glory Court in Napa, California (Figures 1 and 2 of the RAP).

An effective SHSP is one that is comprehensive enough to provide for contingencies, and also to provide a structure for handling a variety of situations as they arise, but concise enough so that site workers understand the potential hazards and are able to follow the procedures to reduce the level of risk. It should be noted that no SHSP can completely eliminate risk from a work site. Site personnel working within the work area will be trained and current in accordance with the standards provided by Hazardous Waste Operations and Emergency Response (HAZWOPER) (40-hour initial training with annual updates). Appropriate management personnel will also have 8-hour supervisor training. All personnel, including subcontractors, working in or near the Project will have current HAZWOPER certification. The requirement for current HAZWOPER certification of personnel (tradesmen) working onsite but not related to the Project will be at the discretion of the SHSO.

The Ninyo & Moore Certified Industrial Hygienist (CIH) assisted and oversaw preparation of this SHSP. The CIH will discuss the contents of this plan with the Site Health Safety Officers (SHSO) immediately prior to beginning fieldwork, and as necessary, during the course of the Project. The air monitoring/field screening will be conducted to comply with the SHSP.

This SHSP was prepared in general accordance with the Federal Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response Standard (29 Code of Federal Regulations 1910.120) and California Code of Regulations, Title 8 Section 5192. Work will be performed under the oversight of a California-licensed professional geologist (PG) and/or certified engineering geologist (CEG).

2 PROJECT OBJECTIVES AND SCOPE

Details of the remedial action is included in the Remedial Action Plan (RAP) prepared concurrent with this SHSP. The remedial action for the site generally consists of excavating and removing wastes in the buffer zone (Figure 2 and 3 of the RAP) (e.g., areas between the capped portion of the dump and the adjacent residential properties/lots) and reconsolidating these wastes onsite at the southeast portion of the capped dump. Excavated waste may be reconsolidated onsite or, at the City's discretion, disposed of at an offsite waste facility. Reconsolidated waste will be placed on the existing cap and covered with 2 feet of clean

imported soil. At a minimum, waste will be removed within the buffer zone and extend to the adjacent property boundaries. Under this option, no waste will be removed from the adjacent properties. However, if an adjacent property owner agrees, waste removal will “feather” from the buffer zone across the property line.

3 SITE LOCATION AND DESCRIPTION

3.1 General

The site as it pertains to the RAP is the City-owned Parcel A consisting of the capped portion of the dump and the area between the capped area and the adjacent properties referred to as the “buffer zone” (Figure 2). The dump is located in a residential setting with wastes occurring at the previously capped portion of the dump, “buffer zone” and at adjacent residential properties downslope to the north, west, and south and generally upslope to the east. Adjacent residential properties are not separated by a road or other features. A cemetery is located across Pascale Place to the west.

3.2 Known Contaminants

Based on historical records of the City owned parcel and adjacent properties, wastes generally consists of automobiles, general garbage burned and spread, tree prunings and brush, asphalt and concrete wastes, metal slag, rusted metal, wood fragments, brick and/or pottery fragments, glass including melted glass, gravel debris, and small fragments of charcoal.

Based on historical records elevated lead and total petroleum hydrocarbons (TPH) concentrations were detected at the dump site and on adjacent properties. Other constituents of potential concern (COPCs) include landfill gas, metals, total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), organochlorine pesticides (OCPs), and volatile and semi-volatile organic compounds (VOCs and SVOCs, respectively). PCBs, OCPs, VOCs and SVOCs were detected in soil samples at concentrations below their respective Region Water Quality Control Boards Environmental Screening Levels and may be present at the site.

4 KEY PERSONNEL AND RESPONSIBILITIES

This section describes key personnel and their responsibilities. Job titles and applicable contact information is provided in the following Table 1.

Table 1 – Key Personnel and Contact Information

Title	Name	Office	Cell Phone	E-mail
City of Napa Engineer and Project Manager	Chris Jones	707.257.9460	310.344.5676	chrisjones@cityofnapa.org
Ninyo & Moore Senior Staff, SHSO	Connor Escobar	408.435.9000	408.393.4233	cescobar@ninyoandmoore.com
Ninyo & Moore Project Manager	Nathan Diem	858.576.1000	510.584.7217	ndiem@ninyoandmoore.com
Ninyo & Moore Principal Geologist	Beth Abramson-Beck	858.576.1000	760.492.6249	babramsonbeck@ninyoandmoore.com
Ninyo & Moore Corporate Health and Safety Manager	Jason Shipe	858.576.1000	714.852.2160	jshipe@ninyoandmoore.com

5 EMPLOYEE TRAINING ASSIGNMENTS

5.1 General Training Requirements

A matrix summarizing training requirements for Ninyo & Moore personnel, excavation subcontractor personnel, visitors, and vendors is presented in the following table:

Table 2 – Training Assignment Matrix

Category	40-Hour HAZWOPER	8-Hour Refresher	24 Hours Supervised Experience	8-Hour Supervisor	Excavation Competent Person
Ninyo & Moore SHSO	X	X	X	X	X
RABC-ECC Construction Supervisor					X
Subcontractor Supervisor	X	X	X	X	X
Subcontractor Staff	X	X	X		
Visitor	X[1]	X[1]	X[1]		
Vendor	X[1]	X[1]	X[1]		

Note:
[1] = Not required if escorted

6 HAZARD IDENTIFICATION AND ANALYSIS

The potential hazards to personnel working at the site include, but are not limited to the following:

- Chemical exposure associated with unknown types of wastes.
- Explosive hazards related to landfill gases/elevated methane concentrations. This plan specifies safe working practices including monitoring and avoiding and/or dealing with management of potential explosive gas conditions.
- Physical hazards related to the site use of the property that uses heavy equipment (trucks and other machinery; presence of partially obscured uneven terrain and stockpiled soils and debris; noise; and excavation hazards including cave-ins and atmospheric hazards, and encountering unknown and/or unidentifiable buried objects and potentially hazardous materials associated with the wastes and heat stress and sunburn.

- Biological hazards (ticks, bees, wasps, snakes, spiders).

Each potential hazard is described below.

6.1 Chemical and Explosive Hazards

Health hazards associated with potential chemical exposures at this site include toxic and potentially explosive environments. The most likely route for exposure to *toxic* chemicals is through inhalation of chemical vapors or contaminated dust that could potentially be released from the subsurface during excavation or trenching. Secondary routes for chemical exposure include dermal absorption, injection, and ingestion. Exposure to *explosive* levels of contaminants, particularly landfill gases may be encountered during Project site activities. The overall risk to field personnel from these potential exposures will be controlled through the use of careful airborne monitoring, PPE and safe work practices as described in this plan under Hazard Monitoring, PPE and Site Control, respectively.

Based on background information, expected COPCs are discussed in Section 3.2. Conservative action levels for these contaminants have been identified in this plan. Refer to Section 9, Hazard Monitoring, for appropriate action levels regarding the potentially hazardous materials/COPCs.

6.2 Dust

Material removal, stockpiling of bulk soil and other materials, handling of potentially contaminated soil or other items, and general excavation and grading can generate airborne dust that can become a nuisance or a hazard to nearby sensitive receptors. In addition, certain contaminants can adhere or adsorb to various particles in dust, resulting in potential offsite impacts. Visible dust will be monitored and controlled at the site by the Contractor. The Project Environmental Consultant will monitor dust at the site perimeter during soil disturbance activities, if indications of possible contamination are encountered.

6.3 Odors

If landfill wastes are encountered, odors may be present as a result of degradation of buried organic wastes in the landfill. Odor monitoring by qualitative (olfactory) and semi-quantitative (photoionization detector [PID]) methods and by LFG monitoring will be performed to identify potential odor issues.

6.4 Landfill Gases

Because of the possibility of decomposition of organic materials buried at the site (e.g., municipal solid waste), a discussion of landfill gases is necessary. Decomposition of organic

material results in the production of several gases that may present a safety and health concern.

6.4.1 Methane Gas

Methane gas has been monitored at the site since December 2020 and is currently monitored on a quarterly basis. Methane monitoring results have been below regulatory limits during all monitoring events. Methane gas may be encountered during excavation activities. Methane is odorless and non-toxic, but can present an explosive hazard in high concentrations, can act as a simple asphyxiant (can displace oxygen) in low-lying areas or confined spaces, and may be an indicator of the presence of other potentially hazardous landfill gases. Methane will continue to be monitored as an explosive gas.

6.4.2 Hydrogen Sulfide

Hydrogen sulfide (H_2S) is a colorless, heavier-than-air gas with a characteristic odor. (Note that desensitization can occur, i.e., the inability to “smell” the odor, resulting in increased danger of overexposure.) H_2S is commonly found at landfills as a result of waste decomposition. It can be toxic or fatal if inhaled in high concentrations.

6.4.3 Vinyl Chloride

Vinyl chloride results from the decomposition of chlorinated materials such as plastics and solvents. Vinyl chloride is a recognized human carcinogen. The Occupational Safety and Health Administration (OSHA) standard for vinyl chloride (to occupational workers) established an exposure limit of 1 ppm as a time-weighted average (TWA) and 5 ppm as a short-term exposure limit (i.e., 15 minutes). The action levels established for this site are designed to adequately protect the public from fugitive emission of this toxic gas. In the unlikely event that site conditions indicate the need to monitor worker exposures to vinyl chloride, perimeter monitoring will be initiated. The CHSM will determine the type and frequency of monitoring based on site conditions.

6.5 Metals

Elevated concentrations of lead at the site have been documented during previous site assessments activities. Although metal and metal ions do not present volatility or flammability problems, they can present acute and chronic effects if the host material is inhaled in the form of dust or fumes. Metal ions can cause irritation of mucous membranes and lung tissues and some metals such as lead are suspected carcinogens. Public exposure to metals in the burned waste

and soil by dermal contact or ingestion is not likely. Therefore, this plan addresses potential exposure by inhalation of dust containing metals generated by site activities.

Lead is the primary metal of concern. It is a toxic heavy metal and a suspected carcinogen that may be encountered in inorganic or organic forms. The Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL)- time weighted average (TWA) for lead in air is 0.05 milligram per cubic meter (mg/m3). Visible dust will be monitored and controlled during construction activities as described in Section 7.

6.6 Petroleum Hydrocarbons

TPHmo and TPHd were detected in soil samples in adjacent properties (Langan, 2019). TPH is a term used to describe a large family of several hundred chemical compounds that originally come from crude oil. TPH is a mixture of chemicals, but they are all made mainly from hydrocarbons. Some chemicals that may be found in TPH are hexane, jet fuels, mineral oils, benzene, toluene, xylenes, naphthalene, and fluorene, as well as other petroleum products and gasoline components. Some of the TPH compounds can affect your central nervous system. One compound can cause headaches and dizziness at high levels in the air. Another compound can cause a nerve disorder called "peripheral neuropathy," consisting of numbness in the feet and legs. Other TPH compounds can cause effects on the blood, immune system, lungs, skin, and eyes.

Animal studies have shown effects on the lungs, central nervous system, liver, and kidney from exposure to TPH compounds. Some TPH compounds have also been shown to affect reproduction and the developing fetus in animals. The International Agency for Research on Cancer (IARC) has determined that one TPH compound (benzene) is carcinogenic to humans. IARC has determined that other TPH compounds (benzo[a]pyrene and gasoline) are probably and possibly carcinogenic to humans. Most of the other TPH compounds are considered not to be classifiable by IARC.

6.7 Semi-Volatile Organic Compounds

Semi-volatile organic compounds (SVOC) have been detected in soil samples below regulatory screening levels from adjacent properties and include bis (2-ethylhexyl), phthalate, and pyrene (Langan, 2019). Although SVOCs have not been detected at elevated concentrations, SVOCs may be encountered during excavation actives and for the purpose of this CHSP, hazards are explained below.

SVOCs area organic compound which have a boiling point higher than water and which may vaporize when exposed to conditions above room temperature. Significant airborne levels of

SVOCs are not typical during fieldwork however they can be present in airborne dust. SVOCs include phenols and PAHs. Short-term effects of phenol exposure include respiratory irritation, headaches, and burning eyes. Chronic effects of high exposures include weakness, muscle pain, anorexia, weight loss, and fatigue; effects of long-term low-level exposures include increases in respiratory cancer, heart disease, and effects on the immune system. PAHs are produced from coal tar and other sources and are used in a variety of industrial products. PAH is a recognized human carcinogen. Studies in animals have also shown that PAHs can cause harmful effects on skin, body fluids, and the body's system for fighting disease after both short- and long-term exposure; however, these effects have not been reported in people. The current OSHA PEL is 0.2 milligrams per cubic meter (mg/m^3); however, exposure by any route to PAH and other recognized human carcinogens will be maintained at the absolute practicable minimum level. Exposure to SVOCs are expected to be adequately controlled with the designated action levels for airborne vapor and dust.

6.8 Organochlorine Pesticides

OCPs were detected in soil samples below regulatory screening levels in adjacent properties and include endosulfan, p,p-DDD, p,p-DDE, and p,p-DDT, aldrin, alpha- BHC, and dieldrin (Langan, 2019). As with PAHs above, action levels for lead and total dust will serve to keep exposure to OCPs well below recognized exposure limits and should eliminate offsite impacts.

6.9 Polychlorinated Biphenyls

PCBs have been detected in soil samples below regulatory screening levels. Although PCBs are not expected at elevated concentrations, for the purposes of this CHSP, hazards are described below.

PCBs, also referred to as aroclors, are synthetic industrial products which have been commonly used as cooling fluid and for electrical insulation. PCBs are common contaminants of oily type waste and are found around railroad tracks and in industrial areas and dumps. PCBs are recognized environmental pollutants and suspected human carcinogens.

The United States Environmental Protection Agency (EPA) currently classifies PCBs as a Class B2, or probable, human carcinogen. Skin exposure may contribute significantly to uptake of these chemicals, and therefore all skin exposure should be strictly avoided. Work involving exposure to PCBs above the atmospheric action level or in contact materials exceeding 100 micrograms per gram may require special medical evaluation and approval of the SHSO. PCBs are not volatile and exposure will be controlled by limiting airborne dust.

6.10 Physical Hazards

Accidents involving physical hazards can directly injure field personnel and can create additional hazards such as increased exposure to chemicals due to damaged protective equipment. One of the most common potential hazards is improper bending and lifting which may result in back injuries. Field personnel should implement proper lifting techniques when handling equipment and material. Field personnel should maintain awareness of potential safety hazards at each specific activity location and should immediately inform other field personnel of any new hazards so that corrective measures can be taken.

6.10.1 General Physical Hazards

The site is currently an undeveloped open space. Portions of the property currently include uneven terrain and steep slopes around the perimeter. A careful pre-work walkover should be made of each work area and potential access or egress routes. Unsafe areas may be flagged or taped and will be identified to all field personnel.

6.10.2 Vehicle and Heavy Equipment Operation

Vehicles should only be operated in authorized areas. When moving equipment, caution should be exercised in order not to damage equipment or cause injury. When backing up heavy vehicles (larger than pickup trucks), passenger vehicles, or pickups with obscured rear vision, a guide should be used to direct the vehicle. Extra caution should be exercised during vehicle operation on dike roads, industrial areas, and other close spaces. Personnel directing traffic should wear orange vests. Each vehicle should be equipped with a minimum of one fire extinguisher rated 3A:40B:40C.

6.10.3 Slip, Trip and Fall

Possible slip, trip and fall hazards can occur at the site due to the uneven and potential obscured terrain during construction activities. The SHSO will remind field personnel at the daily tailgate meetings to maintain sure footing on all surfaces. In addition, although unlikely at this time of year, wet weather conditions may also pose such hazards when working outdoors. The work locations will be kept as tidy as possible and in order to minimize tripping hazards caused by job supplies and equipment, tools and materials should not be left randomly on surfaces when not in direct use. Foot traffic should avoid areas where materials are stored on the ground. Any hoses and cables should be grouped, routed to minimize hazards, and covered with a ramp or bridge or clearly marked with hazard tape or flags if such material will remain in place for more than one day. Personnel should wear appropriate footwear for site conditions and walk carefully.

6.10.4 Manual Lifting Techniques

During any manual material-handling tasks, personnel will be trained to lift with the force of the load suspended on their legs and not on their backs. An adequate number of personnel or an appropriate mechanical device must be used to safely lift or handle heavy equipment. When heavy objects must be lifted manually, workers should keep the load close to the body and avoid any twisting or turning motions to minimize stress on the lower back. A lifting orientation and specific back stretching and warm-up exercises will help minimize the potential for back injuries. Use of these exercises by all field personnel at the start of each shift should be encouraged.

6.10.5 Noise

Noise is a potential hazard in areas where heavy equipment is operated such as during the Project activities. Intermittent high noise levels are expected at the site associated with the use of mechanical excavation equipment. Ambient noise levels as well as equipment operation will likely result in noises that reach or exceed 85 decibels, the action level established by the OSHA. Exposure to elevated noise levels can lead to temporary or permanent hearing loss and can also cause muscle tension and irritability. The SHSO will ensure hearing protection is utilized when noise levels are elevated. Elevated noise levels will be evaluated by the SHSO when equipment is operated. Excess noise levels can be estimated using the following rule of thumb. When normal voice communication is not possible between field personnel who are no more than 3 feet apart, hearing protection will be utilized. Hearing protection typically involves the use of disposable ear plugs for the duration of the excessive noise condition and will be used during operations that present a noise hazard.

6.10.6 Sunburn

Working outdoors on sunny days for extended periods of time can cause sunburn. Excessive exposure to sunlight is associated with the development of skin cancer. Field staff should take precautions to prevent sunburn by using sun-screen lotion and/or wearing hats and long-sleeved garments.

6.10.7 Heat Stress

Heat stress is an important health consideration on worksites. High temperatures, in conjunction with wearing personal protective clothing, may aggravate heat-stress problems. Standard measures, including designating a shaded rest area, taking frequent rest breaks, and performing heat-stress monitoring of workers, will be used to minimize heat-stress-related problems. A readily available supply of liquids, such as water and fluids containing electrolytes, will be available at the work site to replenish body fluids. Visual observation of workers by the

SHSO for heat-stress-related signs and symptoms, and body core temperature monitoring will be performed when outside temperatures exceed 70 degrees Fahrenheit (°F) and impermeable clothing is being worn, when outside temperatures exceed 90°F in street clothes, or whenever other conditions warrant. Signs and symptoms of heat stress include profuse sweating, headache, skin flushing, dizziness, confusion, and rapid heart rate. Workers exhibiting a body core temperature of 100.4°F or greater (measured at the ear drum) will be removed to a cooler area or activity until body core temperature returns to below 99°F.

If persons exhibiting heat-stress symptoms are left untreated, the condition can elevate to heat stroke. Heat stroke is typically manifested by hot, dry skin with a body core temperature of 104°F or greater. Heat stroke can be fatal if treatment is delayed. Therefore, persons exhibiting heat-stroke symptoms need to have their core temperature reduced immediately by use of cold packs, cold water wipes, or immersion. Heat-stroke victims need to be transported to a professional medical facility immediately after the victim's core temperature has been reduced or while the victim's core temperature is being reduced.

6.11 Waste Disposal Site Excavation Hazards

Project activities at waste disposal sites may expose personnel to various health and safety hazards. The following sections present a summary of the common hazards expected and general methods that will be utilized by the SHSO to help assure worker safety. The SHSO or designee will observe all operations to oversee safety hazards.

Before the start of excavation activities, a "competent person" in accordance with 29 CFR 1926.650 (a person who has the knowledge and training to identify hazards and the authority to correct the hazards) will ensure that the following activities are completed:

- Remove or secure any surface obstacles, such as trees, rocks and sidewalks, that may create a hazard.
- Classify the type of soil and rock deposits at the site. One visual and at least one analytical classification should be made.

The following safety rules must be implemented during excavation activities when personnel are to enter the excavation:

- In excavations greater than four feet, and where hazardous atmospheres exist, or could reasonably be expected to exist, the competent person will test the air before entering the excavation. The competent person will use a photo-ionization detector (PID) to test for VOCs and a combustible gas indicator (CGI) to test for the presence of oxygen, carbon monoxide, hydrogen sulfide, and explosive concentrations of gases or vapors.

- Keep materials or equipment that might fall or roll into an excavation at least two feet from the edge.
- Adequate protection from falling rock, soil or other materials and equipment will be provided in the form of benching, sloping or shoring.
- Do not work in excavations where water has accumulated, or is accumulating, unless adequate precautions have been taken.
- Do not cross over an excavation unless walkways are provided. Guardrails must be provided if the walkway is six feet or more above the bottom of the excavation.

6.11.1 Buried Objects

Buried and partially buried objects such as metal objects, metal cans, lead pipes, glass bottles, broken and melted glass, concrete, asphalt, and brick debris may occur buried, partially buried, and/or near the surface at portions of the site. Workers must take care to prevent injury from handling previously buried objects, including, when necessary, the use of leather outer gloves.

Although not likely, buried underground cables may be present on portions of this site, therefore, an underground utility check should be performed before subsurface construction activities. These pipelines present a source of a potential fire and explosion hazard. All work areas should be cleared prior to trenching and drilling by notifying Underground Service Alert (USA), performing private geophysical clearance (if required), and potholing or other means, as appropriate. In addition, when locations of buried lines are uncertain, excavation should always be performed by hand until the utility is located or the area is cleared.

6.11.2 Wastes and Soil Excavation/Trenching

Excavation of wastes and potentially contaminated soil presents multiple hazards to workers including chemical exposure, fire and explosion hazards, confined space, and exposure to hazards of contacting unidentified energized utilities. A Competent Person will be on site during all excavation activities that will identify the numerous safety issues associated with trenching/excavation. Section 10, Confined Space Entry, provides additional information.

6.11.3 Overhead Hazards

Overhead cables are not expected at the site. If overhead cables are encountered near excavation areas, a hazard analysis should be reviewed prior to operating heavy equipment (excavators) underneath or within 10 feet of the maximum reach of the equipment. All field vehicles and equipment should be maintained at a minimum distance of 10 feet, vertically and

horizontally, from all electrical power lines (energized lines) and/or electrical equipment with a voltage less than or equal to 50 kilovolts (kv). If the voltage exceeds 50 kv, the clearance will be increased by 4 inches for every 10 kv over that voltage. The location and marking of such lines and equipment will be coordinated with USA prior to the start of construction/excavation activities.

6.11.4 Fire and Explosion Hazards

Care will be taken to assure that explosive mixture monitoring is performed where appropriate, in an adequate manner and that ignition sources are controlled or eliminated. Combustible gas indicators (CGIs) (aka 5-gasMiniRae) measure explosive mixtures of all landfill gases and will be used for health and safety monitoring onsite without regard to other instruments, which might be used for added information such as the specific components of the gases. The action levels in this plan are based on total LEL measurement and are found in Section 8, Table 4.

6.11.5 Oxygen Deficiency

Oxygen deficiency can occur in confined spaces, open trenches/test pits, or low-lying areas as a result of displacement by another gas (landfill gases, chemical decomposition, or leaking gas cylinders) or by the consumption of oxygen by chemical reaction (rust). Excavations/trenches will not be entered by field personnel once the excavation depth exceeds 3 feet bgs. The SHSO will monitor trenches/test pits and any suspected low-lying areas prior to initial entry.

6.12 Biological Hazards

The SHSO will inform field personnel of the biological hazards at the site. Multiple biological hazards may be present at the site. The most common hazards anticipated are discussed below.

6.12.1 Rattlesnakes

Personnel should be extremely careful when walking through tall grass, rocks, or debris. If a rattlesnake is encountered, slowly and quietly back away from the snake. Inform all personnel at the site of its location. Do not attempt to move or kill a snake because certain species of rattlesnake are protected under state and federal laws. In the event of a snake bite, immediately summon emergency medical services and notify the SHSO. Do not try to move the affected limb; instead, immobilize the injured area, keeping it lower than the heart if possible, and wait for transportation. Do not apply ice, do not cut the wound, and do not apply a tourniquet. The venom should be wiped off the skin since venom will attack intact skin. If you

know the victim cannot receive medical care within 30 minutes, consider suctioning the wound using a snakebite kit.

6.12.2 Insects and Arachnids

Bees, wasps, yellow jackets, black widow spiders, scorpions, and brown recluse spiders present a potential hazard on this project, especially so for those individuals sensitized to those bites or stings. Prior to initial assignment on this project, personnel with known allergic responses to insect stings will be identified and field supervisors made aware of this condition. These personnel will also carry an antidote kit if so advised by their physician. The SHSO will confirm that the antidote kit is accessible and notify the emergency medical service providers in the event of any incident.

In all cases, a victim suspected of being bitten by either a black widow or brown recluse spider, or stung by a scorpion will receive medical attention. The venom from the brown recluse spider is capable of causing coma and kidney failure in its victim.

Protection methods against insects may be employed, such as the use of protective clothing or insect repellents, as well as extermination measures, and training in recognition and identification of harmful insects.

6.12.3 Poisonous Plants

Poisonous plants likely are not, but may be present at the site. Poison ivy, poison oak, and poison sumac are identified by three leaves or five leaves emanating from a stem. The plants contain a resin that causes a delayed allergic hypersensitivity reaction on contact. The resin is active in live, dead, dry, and burned plant parts; and it may be carried through the air. Signs and symptoms are usually evident within 24 to 48 hours after exposure. These include burning, stinging, and blisters. Skin reactions associated with the exposure of poisonous plants can be reduced by the application of pre-contact and cleanser treatments applied to the skin prior to and during fieldwork, respectively. If exposure or contact occurs, wash the affected area, but do not spread the resin to uncontacted areas.

6.13 Radiological Hazards

Radioactive hazards are not expected at the site but waste disposal sites of this era contain unclassified wastes and therefore may include radioactive materials. The decision to monitor for radioactive materials will be at the discretion of the SHSO. If determined necessary by the SHSO(s), a general-use alpha-beta-gamma detection instrument will be used to screen materials. The following table provides radiation types and their properties.

Table 3 – Radiation Types and Action Levels		
Type Measurement	**Action Level**	**Action**
External alpha/beta/gamma	> 2 X Background	Contact CIH
Transferable alpha/beta/gamma contamination	> 2 x background	Contact CIH
Notes: mR = milliroentgen CSHM = Corporate Health and Safety Manager		

The action level for contacting the project Certified Industrial Hygienist (CIH) is set at two times (2x) background radiation.

7 SPILL PREVENTION AND CONTROL MEASURES

Liquids and other potentially spilled materials are not anticipated to be used during this fieldwork. In case unanticipated conditions are encountered and these types of materials are subsequently brought into the field, the following applies:

7.1 Preventive Measures

- Inspect all containers upon delivery to the site for visible defects and ensure that each drum or container includes a re-sealable lid.
- Set any 55-gallon drums on wooden pallets where possible.
- Perform weekly inspections of the storage area.
- Select flat areas for temporary storage away from high-traffic zones and storm or sewer drains.

7.2 Spill Containment Measures

The following actions will be taken by RABC-ECC or their subcontractor field personnel assigned to the field activities in the event of a spill:

- The Project Manager and SHSO(s) are to be notified immediately;
- Workers not involved in spill containment and/or cleanup shall evacuate the immediate area and designated emergency response personnel attired in appropriate PPE (see Section 9), shall proceed to the spill area with a spill cleanup and control kit, including absorbent materials;
- Attempts shall be made to stop the source(s) of spillage immediately; and
- The SHSO shall monitor for exposure to chemicals or hazardous substances during spill cleanup work and shall stay at the spill area until the area has been cleared, inspected, and readied for reentry. A spill incident report shall be prepared by the SHSO.

7.3 Record Keeping and Notifications

The SHSO shall thoroughly document the spill in an Incident Report which will be forwarded to the Corporate Health and Safety Manager and Project Manager(s). Records of all hazardous materials releases shall be maintained with the project files. The Project Manager(s) will make any necessary notifications to off-site authorities and the SHSO will approve the reentry to the site for routine use and will issue a final release report pertaining to cleanup of the area.

8 HAZARD MONITORING

During fieldwork, excavating/trenching will be performed in only one area at a time using a CAT excavator (or equivalent). Air monitoring will be performed during excavating/trenching, at the point of contact with wastes and soil being excavated and near the worker's breathing zones. The person to be monitored will likely be personnel in the closest proximity to open trenches. The methods, frequencies, and action levels for chemical agent monitoring are specified in Table 4.

8.1 Air Monitoring

Air monitoring for the purposes of worker protection will occur during all intrusive activity (waste excavation). While entry into excavations/trenches is not anticipated appropriate instrumentation, a 5-gas MiniRae [or equivalent] will be used on site to allow the SHSO to obtain the best available information on potential atmospheric hazards.

8.2 Instrumentation

The monitoring instrument to be used during site activities is a 5-gas MiniRae meter (or equivalent). The 5-gas meter will be used to measure landfill gases, lower explosive limit (LEL), oxygen levels (as applicable), and VOCs.

8.3 Frequency

Air monitoring for background levels of air contamination upwind of each work location will be performed prior to the start of field activities. Air monitoring with above described instruments will be conducted at a minimum of every 30 to 60 minutes or at the direction of the SHSO. When excavating in waste or if Level "C" conditions are encountered, air monitoring will be performed continuously.

8.4 Dust Monitoring

Dust production will be monitored visually. Airborne exposure to metals, PAHs, PCBs, and dioxins generally occurs through inhaling dust. Vapor monitoring devices do not detect airborne particles and are not a reliable protective method. Therefore, whenever visible airborne dust is produced during site activities, dust suppression techniques such as lightly misting or wetting the area or modifying work

processes will be required. Although not anticipated, wearing Level "C" PPE (using a respirator with HEPA/OV cartridges) will be required if significant dust cannot be mitigated. The SHSO will direct site personnel to upgrade PPE, as appropriate.

8.5 Calibration and Documentation

Air monitoring equipment will be maintained and calibrated daily to manufacturer specifications before starting work.

8.6 Personnel Monitoring

Personnel monitoring will be initiated if the action levels are exceeded, and/or personnel are required to work using respiratory protection for periods exceeding one hour.

Table 4 – Air Monitoring Action Levels

Chemical/ Hazard	Instrument	Initial Frequency	Action Level	Protection Action
Volatile Organic Compounds (Organic Vapor)	PID	Start of task, hourly, continuous if	Background to 2 ppm above background	No action required.
			> 2 ppm	Air purifying respirator, half or full face, level C protection with appropriate cartridges
			> 5 ppm	Air purifying respirator, full face, Level C protection, personnel monitoring required to I.D. contaminants
			> 10 ppm	Supplied air protection, Level B
			> 50 ppm	STOP WORK.
Landfill/ Combustible Gas	RKI Eagle (or equivalent)	Start of task, hourly, continuous if zone of contamination encountered	< 10% LEL[6]	No action.
			10% to 20% LEL	Start continuous monitoring; permit only classified electrical equipment and nonsparking tools
			> 20% LEL	STOP WORK, ascertain source of gas
Oxygen Concentration	RKI EAGLE (OR EQUIVALENT)	Start of task, hourly, continuous if zone of contamination encountered	< 19.5% O_2	Leave area, evaluate reason for deficiency, monitor again remotely or with immediately dangerous to life or health (IDLH) entry program
			19.5 to 20.5% O_2	Slight deficiency, continue continuous monitoring
			20.5 to 21.0% O_2	Normal range
			> 22.0% O_2	Elevated reading, check calibration, investigate cause, STOP any potential spark-producing activity No action
Hydrogen Sulfide	RKI EAGLE (OR EQUIVALENT)	Start of task, hourly, continuous if zone of contamination encountered	> 10 ppm H_2S	Leave area, evaluate reason for elevated reading, monitor again remotely or with IDLH entry program
Dust	Aerosol Monitor	Start of task, hourly	> 1 mg/m^3	Stop work, institute engineering controls until no visible dust is present
Metals/ Others	Visual Dust Monitoring	Continuous	Visible Dust	Upgrade to Level C with organic vapor/high-efficiency particulate air (HEPA) cartridges. Slow work & use dust control (water); stop work if dust is excessive

Table 5 – Action Levels for Heat Stress		
Type Measurement	**Action Level**	**Action**
Ear insertable core temperature	100.4°F or greater	Remove from work
Ear insertable core temperature	<99°F	Return to work

8.7 Fire Extinguishers

At least one, fully-charged fire extinguisher should be present on the site in a visible and accessible location, and the location indicated during the tailgate meetings. The minimum acceptable extinguisher rating is 10-pound ABC. The fire extinguisher should be maintained in a fully-charged condition at all times. Extinguishers are to be periodically inspected and maintained in accordance with manufacturer's specifications.

8.8 Severe Weather

Most construction activities routinely continue through hot weather, cold weather, and light rain. It is recommended that work stop when rain interferes with construction operations to the point of causing a safety hazard. Such hazards can exist when vision is impaired, when workers are more concerned with staying dry than with the work being done, when footing becomes slippery and difficult, or when equipment stability is compromised. When visible lightening occurs, all operations will stop until conditions clear.

9 PERSONAL PROTECTIVE EQUIPMENT

Based on information obtained from historical documents and site visits, the anticipated level of PPE for most of the field activities will be Level D/modified Level D, and if required, Level C. The minimum required level of personal protection during field activities is Level D. In addition, modified Level D will include the use of chemical-resistant gloves mandatory for field personnel during handling of burned wastes and soils. Ear plugs will be worn if, at any time, verbal communication becomes difficult to comprehend within a radius of 3 feet. All PPE must meet current American National Standards Institute standards.

Level C PPE will be required at any activity location where the levels of contaminants exceed the action levels listed in this plan. Upgrading to Level C PPE involves Level D PPE with the addition of Tyvek coveralls, nitrile gloves, and an appropriate respirator with high efficiency particulate air/organic vapor cartridges (HEPA/OV). The following table describes the PPE associated with each level of protection.

Table 6 – Personal Protective Equipment Levels

Level	Body	Respirator	Skin	Other
D	Normal work clothes Long pants	None	Nitrile or Work gloves	Hard hat Safety glasses
Mod. D[a]	Tyvek® suit	None	Chemical-resistant latex or nitrile gloves	Hard hat Safety glasses
C	Tyvek® suit	Air purifying respirator with HEPA and OV	Chemical-resistant latex or nitrile gloves	Hard hat Safety glasses
B	Tyvek® suit	Self-contained breathing apparatus or supplied-air respirator	Chemical-resistant latex or nitrile gloves	Hard hat Safety glasses
A	Encapsulating chemical-protective suit	Self-contained breathing apparatus or supplied-air respirator	Chemical-resistant latex or nitrile gloves	Hard hat Safety glasses

Note:
[a] = Where the potential for heat stress exists, modified Level D may be downgraded to Level D if continuous monitoring verifies the absence of organic vapor.

Changes to these specified items of PPE will not be made without the approval of the SHSO. The SHSO will have the authority to either upgrade or downgrade the level of PPE based on actual site conditions. If at any time there is a potential for increased chemical exposure, the appropriate upgrade of PPE will be required.

10 CONFINED SPACE ENTRY

Site work involves the excavation of large areas, which includes the operation of fuel-fired heavy equipment and possibly, workers performing tasks within the excavation. Ninyo & Moore and subcontractor workers will perform work under the direction of a Competent Person for excavations who will identify and control potential hazards including oxygen deficiency, toxic agent exposure, heat stress, and engulfment. Inspections will occur at least daily, prior to workers entering the excavation.

11 DECONTAMINATION

This section describes personnel, vehicle and equipment decontamination.

11.1 Personnel Decontamination

A minimal decontamination procedure (consisting of washing exposed skin with soap and water) shall be required at the site at the end of each workday and prior to eating, drinking or smoking.

11.2 Vehicle and Equipment Decontamination

The primary focus of any decontamination program is to minimize the spread of contaminated material beyond a given site. During field activities, vehicles and excavation equipment will be

used at the site. The level of potential contamination for vehicles and equipment at this site is low for support vehicles used in uncontaminated areas and/or for non-intrusive field activities, and medium for intrusive activities at potentially contaminated/contaminated locations.

12 MEDICAL SURVEILLANCE REQUIREMENTS

Site personnel, including subcontractors, directly involved with the field work must meet the medical surveillance requirements of 29 CFR 1910.120 and 8 CCR 5192. All site personnel will be required to participate in their employer's medical surveillance program before being permitted to work on location. Contractors and subcontractors will be required to demonstrate, by document submittal, their maintenance of OSHA-compliant programs and to maintain records as required by the applicable contract.

Medical surveillance includes baseline medical examinations for field work certification and annual follow-up examinations. Special medical tests or examinations are not anticipated for personnel assigned to this project. The medical surveillance program is conducted under the guidance of an occupational medicine physician who established the medical exam protocol and certification requirements. Medical records of a confidential nature will be maintained by the medical provider or by each employer.

13 SITE CONTROL

Although potential chemical and physical hazards have been identified in this SHSP, if unexpected conditions arise, the SHSO will stop work at the site and notify the appropriate point of contact. Work will not resume until the SHSP and working conditions have been reevaluated and the SHSP revised accordingly.

13.1 Controlled Area Designation

At locations where field activities are taking place such as trenching and sampling, only authorized personnel with the proper training and PPE will be allowed to enter these active work areas which will include the operation of heavy equipment, and the potential for exposure to hazardous conditions/materials. In these areas, access may be controlled with caution tape and/or barricades.

13.2 Open Trenches

Trenches will be immediately backfilled after documenting subsurface conditions and sampling and will not be left open overnight.

14 CONTINGENCY PLAN

In the event of an onsite emergency related to Project activities, the SHSO should notify the project CIH and dial "911," as appropriate. In case of a medical emergency:

- Remove the exposed or injured person(s) from immediate danger.
- Render first aid if necessary. Decontaminate affected personnel if necessary or obtain paramedic service or ambulance transport to the local hospital by calling 911. Another field personnel member will accompany any person to the medical facility and remain with the person until release or admittance is determined.
- If applicable, evacuate other personnel at the facility to a safe distance until the Fire Department determines that it is safe for work to resume.
- Any accident/incident resulting in an OSHA-reportable injury or illness, treatment at a hospital or physician's office, property damage, or a near-accident, requires that an accident/incident report be completed and submitted to the appropriate authorities.

The implementation of a spill contingency plan is not anticipated for this project. The planned field activities involve neither large quantities of materials nor the movement of containers of hazardous materials. For spills of less than one-half gallon, the subcontractor will respond by using rags or sorbent material and dispose of the sorbent material in a labeled container. When reporting a spill, the subcontractor will provide the following information:

- Worker name, organization, phone number, and location.
- Number of injured personnel, if any, and nature of injuries if known.
- Substance spilled.
- Source and cause of the spill.
- Approximate amount and extent of the spill.
- Approximate rate of release.
- Action taken so far.
- Approximate time spill occurred.
- Any other pertinent information asked by the operator.

15 EMERGENCY ACTION PLAN

In the event of a medical emergency or fire during activities at the project site, the standard "**911**" emergency telephone number shall be called from an on-site mobile phone. Field personnel have mobile telephones that they can use during site activities. Although unlikely,

during the daily tailgate meeting if field personnel indicate that they do not have a personal telephone, they will make it known and a telephone will be provided to them or they will work with someone that has an available telephone. A first aid kit and fire extinguisher will be located on site in a readily accessible location. The emergency facility for this project is **Providence Queen of the Valley Medical Center.** The hospital address is **1000 Trancas St 1st Floor, Napa, CA 94558.**

Emergency	Number	Contact
Medical, Fire or Police	911	Emergency operator
Providence Queen of the Valley Medical Center 1000 Trancas St 1st Floor, Napa, CA 94558	(707)252-4411	Emergency room

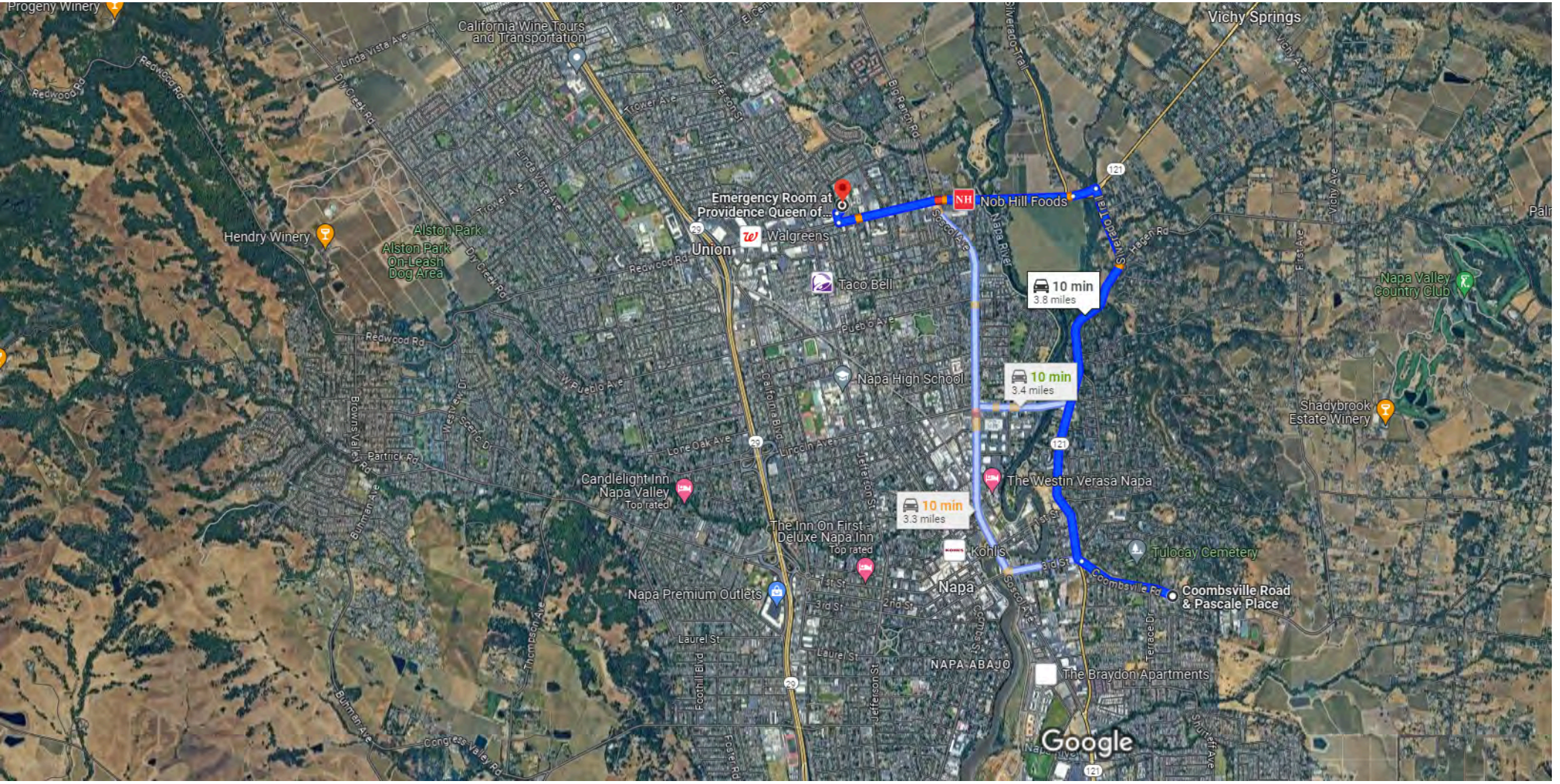
The route from the project site to the hospital is shown on Figure 1.

CERTIFIED INDUSTRIAL HYGIENIST REVIEW

The above Site Specific Health & Safety Plan has been reviewed and approved by the certified industrial hygienist (CIH) indicated below.

Stephen J. Waide, CIH, CSP
Certified Industrial Hygienist No. CP 7005
Expires 6/1/22

FIGURE



Imagery ©2024 Airbus, Landsat / Copernicus, Maxar Technologies, Map data ©2024 Google 2000 ft

Coombsville Rd & Pascale Place
Napa, CA 94559

1. Head northwest on Coombsville Rd toward Little St
0.5 mi
2. Slight right onto CA-121 N/Silverado Trail
2.0 mi

3. Turn left onto Monticello Rd

0.1 mi

4. Continue onto Trancas St

1.2 mi

5. Turn right

259 ft

6. Turn right

Destination will be on the left

85 ft

Emergency Room at Providence Queen of the Valley Medical Center

1000 Trancas St 1st Floor, Napa, CA 94558

ATTACHMENT 4

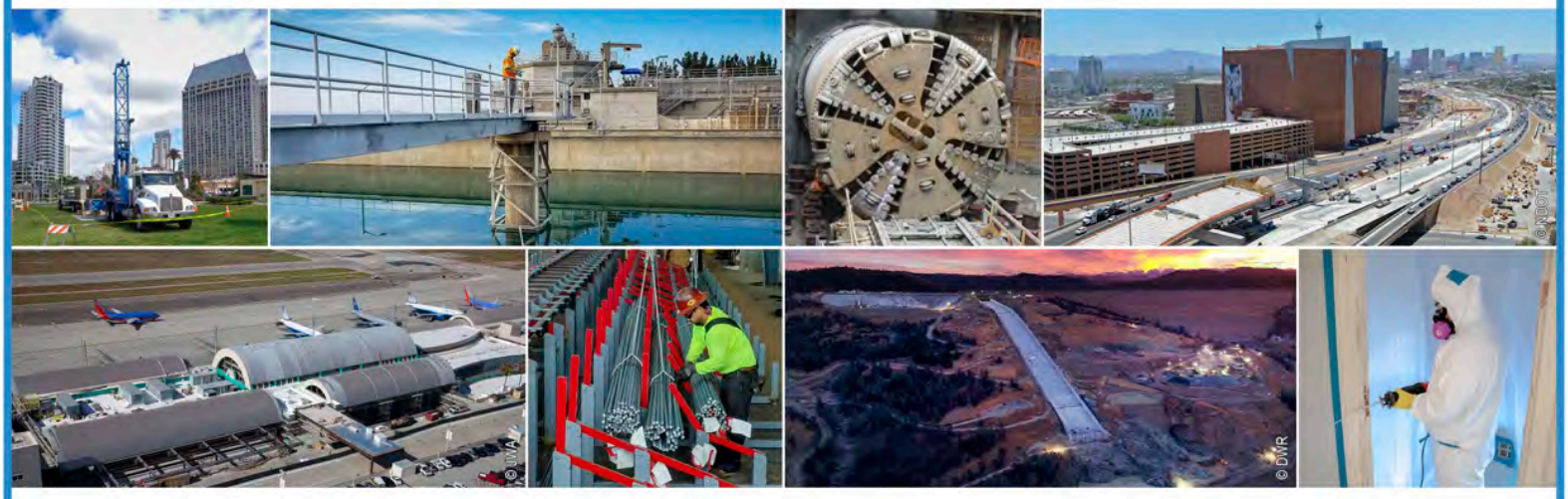
APPENDIX A

Site Health and Safety Plan Acknowledgement Form

ONSITE WORKING PERSONNEL SIGN IN

The personnel listed below have 40-hour HAZWOPER or 24-hour training with current refresher status and have read and understood this Health and Safety plan, and agree to abide by its provisions.

Onsite Personnel Name	Signature	Company	Date



5710 Ruffin Road | San Diego, California 92123 | p. 858.576.1000

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Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

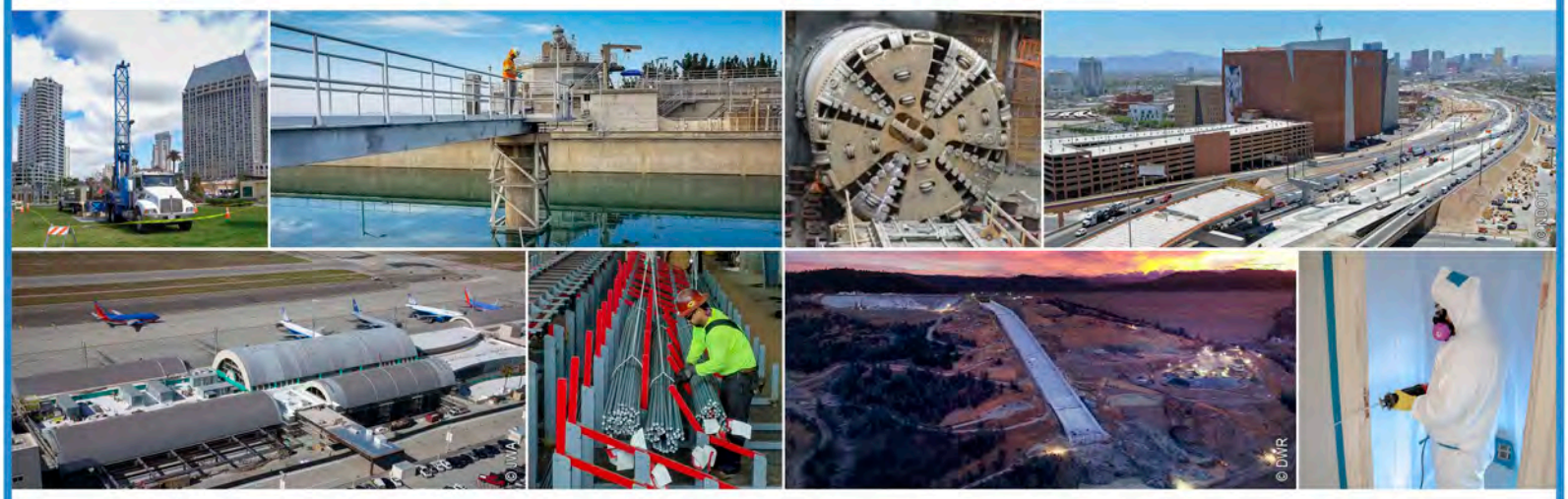
APPENDIX E

Community Health and Safety Plan

Community Health and Safety Plan
Hidden Glen Dump
Coombsville Road
Napa, California
SWIS No. 28-AA-0028

Napa County Local Enforcement Agency
1195 Third Street, Suite 210 I Napa, California 94559

October 1, 2024 | Project No. 109558001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

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35+ YEARS

Community Health and Safety Plan
Hidden Glen Dump
Coombsville Road
Napa, California
SWIS No. 28-AA-0028

Mr. Peter Ex, REHS
Napa County Local Enforcement Agency
1195 Third Street, Suite 210 I Napa, California 94559

October 1, 2024 | Project No. 109558001

Nathan Diem
Senior Geologist

Stephen J. Waide, CIH, CSP, CIEC, CMC
Principal Environmental Scientist

NDD/SJW/mp

CONTENTS

FIGURES

1 INTRODUCTION

This Master Community Health and Safety Plan (CHSP) provides measures to protect the public and surrounding land uses from potential health hazards during future on-site construction-related activities performed at the Hidden Glen Dump in Napa, California (site, Figure 1). This plan is intended to serve as a master document and shall be implemented during future construction related activities on the site that involve disturbing subsurface materials within or outlying the assumed waste footprint and at locations within approximately 1,000 feet outward from the assumed waste footprint.

A detailed project description, site map indicating the location of proposed work, a list of contact names and phone numbers, and a statement that this CHSP will be implemented during the proposed work will be prepared for each new project and submitted to the Napa County, Solid Waste Local Enforcement Agency (LEA) for their review and approval prior to conducting subsurface construction activities at the site.

2 SITE DESCRIPTION

The waste disposal site (WDS) is listed as “Hidden Glen Dump” in the CalRecycle Solid Waste Information System (SWIS) database and assigned SWIS No. 28-AA-0028. According to the database, the dump is listed as an unpermitted, closed, solid waste disposal site (WDS). The City-owned property referred to as “Parcel A” corresponds to a 2.18-acre area and is assigned Napa County Assessor Parcel Number (APN) 045-411-022-000 (Figure 2). The dump is located in a residential setting with wastes occurring at the previously capped portion of the dump, “buffer zone” and at adjacent residential properties downslope to the north, west, and south and generally upslope to the east. Adjacent residential properties are not separated by a road or other features. A cemetery is located across Pascale Place to the west.

The dump has three relatively recently constructed Landfill Gas (LFG) monitoring wells referred to as MW-1 through MW-3 (Figure 3). The wells were constructed in December 2020 and are monitored quarterly. The wells are dual and triple completions; MW-1 and MW-2 are constructed with screened intervals at 5 to 10 feet, 15 to 20 feet and 25 to 35 feet and MW-3 is constructed with two screened intervals at 5 to 10 feet and 15 to 20 feet.

Site:	Hidden Glen Dump Coombsville Road Napa, California (SWIS No. 28-AA-0028)
GIS Coordinates	Latitude: 38.2977 Longitude: -122.2679

Land Owner	City of Napa 955 School Street Napa, California 94559
Site Health and Safety Manager (SHSM):	To Be Determined by General Contractor
Community Health and Safety Manager (CHSM):	To Be Determined by the City
Oversight Agency:	Napa County Solid Waste Program LEA 1195 Third Street, Suite 210 Napa, California 94559 Contact: Mr. Peter Ex (707) 253-4419

3 PROPOSED PROJECT ACTIVITIES

Future work at the site that would require implementation of this plan includes construction-related activities that involve disturbing the subsurface materials at the site including but not limited to grading, subsurface excavation/trenching activities associated with maintenance/repairs or new construction.

Prior to conducting subsurface construction activities at the site, the following should be submitted to the LEA for their review and approval:

- a detailed project description,
- site map indicating the location of proposed work,
- the name and contact information for the contractor or agency performing the work, SHSM, and the CHSM, and
- a statement that this CHSP will be implemented during the proposed work.

4 SITE BACKGROUND AND HISTORY

Initially the dump was an excavated quarry that operated into the 1940s. Reportedly, groundwater was encountered when the quarrying operations reached at a depth of about 70 to 80 feet (below ground surface (bgs). However, reportedly subsequent subsurface investigations as summarized in the McClaren-Hart (1990) Closure Plan indicated that based on borings advanced within the waste disposal pit area, the waste thicknesses range from approximately 5 to 24 feet with an average depth of 20 feet. Reportedly, the quarry was abandoned due to the presence of groundwater. Sometime after quarry operations ended, the excavation was used as

a general garbage dump by a private operator. Reportedly, *"garbage"* was dumped and then burned *"and spread as a landfill."* It was stated that it was possible that *"old"* automobiles from a local demolition derby were also abandoned at the dump. In the early l960's, the dump reportedly was abandoned when the South County landfill became operational. The City reportedly began using the Hidden Glen Dump to dispose tree prunings and brush, along with asphalt and concrete wastes. The brush and prunings were reportedly burned *"and spread."*

Several closure plans (aka remedial action plans) were previously prepared for the dump and remedial action activities were conducted to close the site. ENGEO (1988) prepared a closure plan consisting of capping the waste disposal site *"in place."* In 1990, Harding Lawson Associates (HLA) (1990) prepared an addendum to the closure plan that maintained the planned *"in-place capping"* of the dump. In April 2000 McClaren-Hart prepared a Closure Plan for the Hidden Glen Dump (McClaren-Hart, Inc, 2000) that was generally consistent with the previous 1988 ENGEO and 1990 HLA closure plans and similarly proposing capping the waste disposal site *"…in place and dedicating the site as open space as part of a planned residential development of the surrounding site."* The closure plan proposed to cap in place the dump and reportedly *"…gain agency concurrence for closure, which is sought by the land owner to allow him to proceed with planned residential development of the overall 14-acre site."* Reportedly the 1990 McClaren-Hart Closure Plan report was prepared as an addendum to the 1988 Closure Plan.

In general, the McClarren-Hart Closure Plan described methods proposed to cap in place the dump and obtain regulatory agency concurrence for closure which was being sought by the land owner to allow them to proceed with the planned residential development of the overall 14-acre site, a portion of which included the dump. Post closure activities were indicated as consisting of a 5-year cap and methane monitoring program even though methane was not expected to be encountered at levels of environmental concern.

In June 2000 Harding Lawson conducted surface sampling, followed by HSI GeoTrans (GeoTrans) performing follow up soil sampling in November 3, 2000 *"…to further revaluate lead concentrations in surface soil outside the perimeter of the landfill."* GeoTrans stated that the purpose of the *"follow-up soil sampling"* was to further evaluate concentrations of lead in surface *"soils"* at three proposed parcels (7, 10 and 11) reportedly related to initial screening level "soil" sampling performed in June 2000 that indicated lead concentrations in *"surface soil*" above 200 ppm at each of these three parcels. Both of the investigations indicated elevated lead concentrations (greater than 200 parts per million [ppm] lead) at locations outlying the assumed waste disposal area/proposed area to be capped.

Geotrans (Geotrans) stated that while excavating the western ***"debris field"*** a *"trench feature"* filled with *"landfilled debris"* was discovered. It was reported that the *"trench"* extended up to approximately 10 feet deep, and measured approximately 15 feet in width and 60 feet in length. Geotrans indicated that the material from this *"trench area"* was excavated to a bedrock base and placed into the interior of the landfill. Geotrans proposed to collect five confirmation samples of *"rock material"* across the base of the excavated area to verify that there is no impact in this area, and to allow this area to be considered ***"clean"*** and *"outside the perimeter of the landfill."* Geotrans stated that this area is slated to be an easement area for access to the future closed waste disposal site and will not be within a proposed parcel or lot.

In January 2002, Geotrans submitted a documentation report of the waste cap construction on behalf of the Napa Garbage Service that included as-built drawings, liner test results, compaction test results, site photographs, and a description of the work performed. It was stated that the "landfill" cap was constructed in accordance with the design specifications and closure plan requirements. Geotrans stated that the closure was performed with oversight and direction from the Water Board, CIWMB and the LEA and in general accordance with the April 6, 2000 closure plan prepared by McLaren/Hart, Inc. titled, "*Closure Plan, Hidden Glen Landfill, Napa, California"* as amended by the December 6, 2000 letter prepared by Geotrans titled, *"Addendum to April 6, 2000 Hidden Glenn Landfill Closure Plan, Napa, California."* GeoTrans stated that the construction documentation report indicated that *"landfill closure"* included importing and stockpiling clean fill material for use as foundation fill and protective soil cover; clearing and grubbing the waste area surface; placing and grading foundation fill soils over the waste materials; installing a cap system consisting of a geosynthetic clay liner (GCL), 80-mil high density polyethylene (HDPE) layer, and geocomposite drainage layer; placing protective soils and top soil over the cap; placing a hydroseed mixture on the topsoil; and installing surface water drainage and erosion control features.

Landfill closure activities were reported as being conducted from June 28 to November 28, 2001. The closure report (aka remedial action) appears to have provided the required documentation and supporting information pertaining to the activities conducted at the dump related to constructing the waste cap. The closure report in conjunction with other documents also provided information about the removal of wastes outlying the cap at two "debris fields" (one being the waste trench) previously located on three lots (6, 9 and 10) and four areas of lead impacted "soils" on three lots (7, 10 and 11) and the on-site reconsolidation of these materials in the capped area. Furthermore, t was stated that the results were communicated to regulatory agency staff that concurred "no further action was required.

Beginning in September 2018, Langan conducted subsurface site investigations (drilling and sampling) of residential properties at Lots 6, 7, 8, 9 and 10, outlying the capped portion of the Hidden Glen Dump. Langan indicated that the purpose of their investigations was to collect "subsurface information" to develop a plan for remedial action "to address debris impacts in shallow soil on the five lots and, if needed, on adjacent areas between the lots and the landfill footprint." Results of their investigations indicated the presence of relatively shallow wastes extending onto the residential properties. These wastes contain elevated lead concentrations at some locations. The results of their investigations indicate that the lateral extent of the waste disposal site extends beyond the area that was capped.

5 EVALUATION OF POTENTIAL PUBLIC EXPOSURE TO HAZARDS

During construction activities, care must be taken to protect surrounding receptors, such as the adjacent residential properties. Community exposures to hazards from site activities and/or releases that may migrate to human and environmental off-site receptors will be minimized. Future project activities that would require implementation of this plan include construction-related activities that disturb the subsurface environment, which includes, but is not limited to, grading, subsurface excavation/trenching activities associated with maintenance/repairs or new construction, and other subsurface disturbances at and/or within approximately 1,000 feet from the waste footprint boundary.

Future construction work may be conducted within or in close proximity to the assumed waste footprint and areas of potential human health and environmental impact from the buried waste include the site and off-site areas approximately 1,000 feet outward of the assumed waste footprint. There is potential for encountering landfill wastes if construction activities are within the assumed waste footprint. There is also potential to encounter LFG during future construction activities within or outlying the assumed waste footprint; however, based on the active LFG extraction system operating at the site, there is a low likelihood of encountering high concentrations of LFG in areas outlying the waste footprint, but high concentrations of landfill gas could be encountered in areas located within the waste footprint. The potential public hazards and nuisances from future subsurface construction activities include:

- organic vapors,
- landfill gases,
- airborne contaminant particles and dust, and
- odors.

Based on historical records elevated lead and total petroleum hydrocarbons (TPH) concentrations were detected at the dump site and on adjacent properties. Other constituents of potential concern (COPCs) include landfill gas, metals, total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), organochlorine pesticides (OCPs), and volatile and semi-volatile organic compounds (VOCs and SVOCs, respectively). PCBs, OCPs, VOCs and SVOCs were detected in soil samples at concentrations below their respective Region Water Quality Control Boards Environmental Screening Levels and may be present at the site. Chemical characteristics of the constituents of potential concern are described in the following sections. Although not directly relevant to community exposure, occupational exposure limits, where available, are given for informational purposes and, if measured at the source, would be protective of the community. The perimeter monitoring, action levels, and the required notifications and control measures, if action levels are exceeded, are described in further detail in the following sections.

For the purposes of this CHSP, the monitoring points of compliance will be along the perimeter of the active work area, unless otherwise determined by the CHSM, or designee, based on actual site conditions and activities. The CHSM will be a Certified Industrial Hygienist.

5.1 Dust

Material removal, stockpiling of bulk soil and other materials, handling of potentially contaminated soil or other items, and general excavation and grading can generate airborne dust that can become a nuisance or a hazard to nearby sensitive receptors. In addition, certain contaminants can adhere or adsorb to various particles in dust, resulting in potential offsite impacts. Visible dust will be monitored and controlled at the site by the Contractor. The Project Environmental Consultant will monitor dust at the site perimeter during soil disturbance activities, if indications of possible contamination are encountered.

5.2 Odors

If landfill wastes are encountered, odors may be present as a result of degradation of buried organic wastes in the landfill. Odor monitoring by qualitative (olfactory) and semi-quantitative (photoionization detector [PID]) methods and by LFG monitoring will be performed to identify potential odor issues.

5.3 Landfill Gases

Because of the possibility of decomposition of organic materials buried at the site (e.g., municipal solid waste), a discussion of landfill gases is necessary. Decomposition of organic

material results in the production of several gases that may present a safety and health concern.

5.3.1 Methane Gas

Methane gas has been monitored at the site since December 2020 and is currently monitored on a quarterly basis. Methane monitoring results have been below regulatory limits during all monitoring events. Methane gas may be encountered during excavation activities. Methane is odorless and non-toxic, but can present an explosive hazard in high concentrations, can act as a simple asphyxiant (can displace oxygen) in low-lying areas or confined spaces, and may be an indicator of the presence of other potentially hazardous landfill gases. Methane will continue to be monitored as an explosive gas.

5.3.2 Hydrogen Sulfide

Hydrogen sulfide (H_2S) is a colorless, heavier-than-air gas with a characteristic odor. (Note that desensitization can occur, i.e., the inability to "smell" the odor, resulting in increased danger of overexposure.) H_2S is commonly found at landfills as a result of waste decomposition. It can be toxic or fatal if inhaled in high concentrations.

5.3.3 Vinyl Chloride

Vinyl chloride results from the decomposition of chlorinated materials such as plastics and solvents. Vinyl chloride is a recognized human carcinogen. The Occupational Safety and Health Administration (OSHA) standard for vinyl chloride (to occupational workers) established an exposure limit of 1 ppm as a time-weighted average (TWA) and 5 ppm as a short-term exposure limit (i.e., 15 minutes). The action levels established for this site are designed to adequately protect the public from fugitive emission of this toxic gas. In the unlikely event that site conditions indicate the need to monitor worker exposures to vinyl chloride, perimeter monitoring will be initiated. The CHSM will determine the type and frequency of monitoring based on site conditions.

5.4 Metals

Elevated concentrations of lead at the site have been documented during previous site assessments activities. Although metal and metal ions do not present volatility or flammability problems, they can present acute and chronic effects if the host material is inhaled in the form of dust or fumes. Metal ions can cause irritation of mucous membranes and lung tissues and some metals such as lead are suspected carcinogens. Public exposure to metals in the burned waste

and soil by dermal contact or ingestion is not likely. Therefore, this plan addresses potential exposure by inhalation of dust containing metals generated by site activities.

Lead is the primary metal of concern. It is a toxic heavy metal and a suspected carcinogen that may be encountered in inorganic or organic forms. The Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL)- time weighted average (TWA) for lead in air is 0.05 milligram per cubic meter (mg/m3). Visible dust will be monitored and controlled during construction activities as described in Section 7.

5.5 Petroleum Hydrocarbons

TPHmo and TPHd were detected in soil samples in adjacent properties (Langan, 2019). TPH is a term used to describe a large family of several hundred chemical compounds that originally come from crude oil. TPH is a mixture of chemicals, but they are all made mainly from hydrocarbons. Some chemicals that may be found in TPH are hexane, jet fuels, mineral oils, benzene, toluene, xylenes, naphthalene, and fluorene, as well as other petroleum products and gasoline components. Some of the TPH compounds can affect your central nervous system. One compound can cause headaches and dizziness at high levels in the air. Another compound can cause a nerve disorder called "peripheral neuropathy," consisting of numbness in the feet and legs. Other TPH compounds can cause effects on the blood, immune system, lungs, skin, and eyes.

Animal studies have shown effects on the lungs, central nervous system, liver, and kidney from exposure to TPH compounds. Some TPH compounds have also been shown to affect reproduction and the developing fetus in animals. The International Agency for Research on Cancer (IARC) has determined that one TPH compound (benzene) is carcinogenic to humans. IARC has determined that other TPH compounds (benzo[a]pyrene and gasoline) are probably and possibly carcinogenic to humans. Most of the other TPH compounds are considered not to be classifiable by IARC.

5.6 Semi-Volatile Organic Compounds

Semi-volatile organic compounds (SVOC) have been detected in soil samples below regulatory screening levels from adjacent properties and include bis (2-ethylhexyl), phthalate, and pyrene (Langan, 2019). Although SVOCs have not been detected at elevated concentrations, SVOCs may be encountered during excavation actives and for the purpose of this CHSP, hazards are explained below.

SVOCs area organic compound which have a boiling point higher than water and which may vaporize when exposed to conditions above room temperature. Significant airborne levels of

SVOCs are not typical during fieldwork however they can be present in airborne dust. SVOCs include phenols and PAHs. Short-term effects of phenol exposure include respiratory irritation, headaches, and burning eyes. Chronic effects of high exposures include weakness, muscle pain, anorexia, weight loss, and fatigue; effects of long-term low-level exposures include increases in respiratory cancer, heart disease, and effects on the immune system. PAHs are produced from coal tar and other sources and are used in a variety of industrial products. PAH is a recognized human carcinogen. Studies in animals have also shown that PAHs can cause harmful effects on skin, body fluids, and the body's system for fighting disease after both short- and long-term exposure; however, these effects have not been reported in people. The current OSHA PEL is 0.2 milligrams per cubic meter (mg/m^3); however, exposure by any route to PAH and other recognized human carcinogens will be maintained at the absolute practicable minimum level. Exposure to SVOCs are expected to be adequately controlled with the designated action levels for airborne vapor and dust.

5.7 Organochlorine Pesticides

OCPs were detected in soil samples below regulatory screening levels in adjacent properties and include endosulfan, p,p-DDD, p,p-DDE, and p,p-DDT, aldrin, alpha- BHC, and dieldrin (Langan, 2019). As with PAHs above, action levels for lead and total dust will serve to keep exposure to OCPs well below recognized exposure limits and should eliminate offsite impacts.

5.8 Polychlorinated Biphenyls

PCBs have been detected in soil samples below regulatory screening levels. Although PCBs are not expected at elevated concentrations, for the purposes of this CHSP, hazards are described below.

PCBs, also referred to as aroclors, are synthetic industrial products which have been commonly used as cooling fluid and for electrical insulation. PCBs are common contaminants of oily type waste and are found around railroad tracks and in industrial areas and dumps. PCBs are recognized environmental pollutants and suspected human carcinogens.

The United States Environmental Protection Agency (EPA) currently classifies PCBs as a Class B2, or probable, human carcinogen. Skin exposure may contribute significantly to uptake of these chemicals, and therefore all skin exposure should be strictly avoided. Work involving exposure to PCBs above the atmospheric action level or in contact materials exceeding 100 micrograms per gram may require special medical evaluation and approval of the SHSO. PCBs are not volatile and exposure will be controlled by limiting airborne dust.

6 HAZARD MONITORING AND EQUIPMENT

If, odors, or other indications of possible contamination are observed, hand-held, direct-reading (real-time) instruments will be used to monitor air for VOCs, combustible gases, and/or dust at the site perimeter. Air monitoring will not be performed if odors or other indicators of contamination are not present.

The dust monitoring program will consist of the following activities: 1) monitoring for the presence of visible dust generated during earth moving activities; 2) if dust is observed, notify the contractor and request that dust be reduced/eliminated by appropriate engineering controls (e.g., application of water via hose, water truck, etc.); 3) use a portable monitoring instrument to measure total dust levels at the downwind perimeter of the site at an appropriate sampling frequency (e.g., approximately every half hour); and 4) document dust monitor readings, including date, time, and location of each measurement.

VOCs and LEL monitoring will be performed at the site perimeter during earthwork activities. The monitoring equipment will consist of a direct-reading instrument for VOCs using a photoionization detector and combustible gases using a 4-gas meter, as applicable. Calibration of the instruments will be performed in accordance with the manufacturer's specifications. If VOCs or LEL are detected above the action levels indicated in Section 6.2 of this plan engineering controls will be implemented to mitigate vapors and gases. Readings will be collected and documented similarly to the dust readings as described above.

6.1 Air Monitoring Procedures and Methodology

The Project Environmental Consultant will use aerosol monitoring equipment to monitor total dust at the work site perimeter and direct-reading instrument for VOCs and combustible gases. The monitoring locations will be determined by the Project Environmental Consultant based on prevailing wind, project activities, and potential sensitive receptors. Air monitoring readings will be documented at approximately 30-minute intervals, unless modified by the Project Environmental Consultant.

A MiniRAM or other aerosol monitor that measures total airborne dust will be used to comply with the action level indicated below. A photoionization detector will be used to measure VOCs and a 4-gas meter will be used to measure combustible gases. Field personnel trained in proper calibration, use, and maintenance will calibrate equipment in accordance with the manufacturer's specifications.

Instrument readings collected for monitoring purposes will be recorded in a daily log by the Project Environmental Consultant. The log will include, at a minimum:

- Diagram indicating site boundaries, the areas of material disturbance, and the perimeter monitoring locations.
- Direct reading instruments listed above, including equipment make and model, serial number, and calibration record.
- Table of direct reading results including collection time and collection location.
- Weather observations including time, wind direction, wind speed, temperature, and precipitation.
- Other conditions or circumstances that may influence instrument readings.

When downwind direction cannot be determined or if wind direction varies throughout the day, the onsite Project Environmental Consultant personnel will use their best judgment to determine appropriate perimeter monitoring locations.

6.2 Action Levels for Perimeter Monitoring

The action level for air monitoring will be any visible dust or 1 milligram per cubic meter (mg/m3) measured with an aerosol monitor as measured at the site perimeter.

The action level for VOC and combustible gas monitoring will be greater than 2 parts per million (ppm) for VOCs sustained for over two minutes at the immediate work area perimeter or 10% LEL for combustible gases at the work activity.

The monitoring action levels for the site are provided in Table 1.

Table 1 – Direct Reading or Quantitative Sampling and Analysis

Constituent	Work Area Perimeter Action Level
Airborne dust	Visible dust or 1 mg/m3 as measured with real-time instrument
Total VOCs	2 ppm over background, sustained over 2 minutes
Methane	10% of LEL at work activity
H_2S	10 ppm at work activity
CO	10 ppm
Oxygen concentration (O_2)	< 19.5% O_2 or > 22.0% O_2
Notes: LEL = lower explosive limit mg/m^3 = milligram per cubic meter ug/m^3 = microgram per cubic meter	

Field personnel trained in proper calibration, use, and maintenance will calibrate direct air monitoring equipment in accordance with the manufacturer's specifications.

6.3 Action Plan to Reduce Airborne Concentrations

If the action level in Table 1 is exceeded, project activities will immediately cease until engineering controls are implemented to reduce airborne concentrations to below the action levels. Engineering controls and best management practices discussed in Section 5 of this document may be used by the Contractor to prevent exposure to the public; however, it will be the Contractor's responsibility to select and provide effective dust suppression controls.

If the Contractor's engineering controls fail to reduce airborne concentrations to below the action level, the Project Environmental Consultant will notify the District and request that work stop until options for effective controls to protect the community are evaluated and implemented.

7 CONTROL METHODS

Administrative and engineering controls will be implemented by the Contractor to prevent or minimize public exposure to potential hazards created by field activities. Control methods to reduce public access, prevent or minimize dust, and reduce noise and other physical hazards will be used. If other contamination hazards are observed by the Contractor during the course of work, the Project Environmental Consultant will be notified and appropriate assessments performed.

7.1 Site Security

Controlled areas will be established by the Contractor prior to commencement of construction activities at the site, using fencing or barricades. Only authorized personnel, with the proper training and personal protective equipment, will be allowed to enter any work area boundaries after they agree to abide by the provisions of the Contractor's site-specific worker HSP, and are informed of potential dangers that could be encountered while onsite. Site workers will also be briefed on the requirements of this plan, where necessary for implementation. Work areas will be surrounded by construction fencing and pedestrian barricades and will be securely locked at the end of each work day to prevent unauthorized entry.

7.2 Dust and Debris Control

Soil-intrusive activities will likely generate airborne dust. Under certain atmospheric conditions, this dust may become a nuisance or a hazard to nearby sensitive receptors such as residential communities. Site personnel will visually monitor airborne dust and, if impacted soils/materials, the Project Environmental Consultant will document the results of perimeter monitoring during work in those areas. During activities that may create large quantities of dust, such as excavation and loading of trucks, implementation of strict dust control (e.g., watering or procedural change) will be undertaken by the Contractor. The Contractor will generally mitigate dust with water, applied by

water trucks or hoses, in the active work areas. Best management practices to control run-on or run-off from the site will be used by the Contractor to ensure that contaminants not leave the site during storms or excessive water application.

Trucks carrying waste shall be enclosed such that there is no dust or odor during transportation along the haul route. Open trucks that may produce dust during transport will not be permitted to haul waste from the site.

7.3 VOCs and Combustible Gases Control

If VOCs or combustible gases are detected above the action levels at the site perimeter, work shall be stopped, the source of vapors and/or combustible gases shall be assessed and proper ventilation or vapor mitigation measures will be implemented. If mitigation measures fail to reduce airborne concentrations to below the action levels, the activity causing the exceedance will stop, the area will be secured and the City of Napa will be notified.

7.4 Stockpiled Soil

Soil stockpiles shall be maintained by the Contractor according to project plans, specifications, and Storm Water Pollution Prevention Plan (SWPPP), and all local, state, and federal regulations and requirements. Soil stockpiling procedures are detailed in the Remedial Action Plan develop by Ninyo & Moore concurrent with this CHSP.

7.5 Quality Assurance and Control Measures

Quality control and assurance measures will be implemented to ensure proper calibration of instrumentation, to document the use of appropriate sample collection and handling procedures, and to assess whether additional air monitoring and sampling is necessary.

All real-time instrumentation will be calibrated according to the manufacturer's specifications prior to use each day. A record of this calibration will be logged on an appropriate form and will include: equipment manufacturer and model, serial number, factory calibration date and time, methodology, and results of the daily field calibration.

7.6 Best Management Practices

To minimize or prevent the discharge of contaminated or potentially contaminated materials from the subject site, best management practices will be implemented by the Contractor, and all local, state, and federal regulations regarding the handling, storage, transportation, and disposal of contaminated or potentially contaminated materials will be adhered to.

Vehicles entering and/or exiting the site for loading of wastes and contaminated material slated for disposal shall be tracked by the Contractor through documentation and decontaminated (where applicable), prior to their departure from the site. Care shall be exercised to avoid spillage of contaminated materials from vehicles leaving the site.

In addition, the Contractor will contain, collect, treat, detain, test, and release site storm water and/or groundwater as required by the SWPPP, National Pollutant Discharge Elimination System (NPDES), and project plans and specifications.

8 EMERGENCY PLANNING

In the event of an emergency or unauthorized release of a hazardous substance or waste, the following actions will be taken:

In the event of a release that causes a sudden hazard to life or the environment, the Contractor's Site Health and Safety Manager (SHSM) must be immediately contacted and informed of the health and/or environmental risk. These individuals have the knowledge and integrated authorities to cease any activity or condition contributing to the hazard.

The Contractor's SHSM is also responsible for notifying the appropriate emergency response agencies and the District. The Contractor's SHSM will be determined prior to commencement of construction activities, and the applicable contact names and numbers will be posted to report any hazards at the project site.

Other required actions include:

- Stop work activities, as necessary;
- Lower background noise to speed communication;
- Notify other site personnel;
- Begin emergency procedures as mentioned below; and
- Immediately contain the source and spread of the release per OSHA Hazardous Waste Operations and Emergency Response training.

If an injury or illness occurs:

- Get first aid for the injured person(s) immediately;
- Obtain professional medical attention if injury is serious; and
- Notify the Contractor's SHSO.

Rescue and response actions should be decided and the necessary steps implemented. No one should attempt emergency rescue until qualified personnel and evacuation routes have been identified.

Following are local emergency telephone numbers:

GENERAL	***911***	
FIRE	Napa County Fire Department	911 or (707) 253-4940
HOSPITAL	Providence Queen of the Valley Medical Center	911 or (707) 252-4411
POLICE	City of Napa Police Department	911 or (707) 257-9223

9 PUBLIC NOTIFICATION

This Public Notice and Proposition 65 Warning are intended to advise the neighboring community of the planned activities. Prior to the initiation of project activities, the CHSP will be reviewed and approved by the LEA. Signs will be posted at the project entrance that provides the following:

- Project name;
- Project commencement and expected completion dates;
- Project-specific warnings,
- Any required Proposition 65 warnings; and
- Emergency contact information

10 REFERENCES

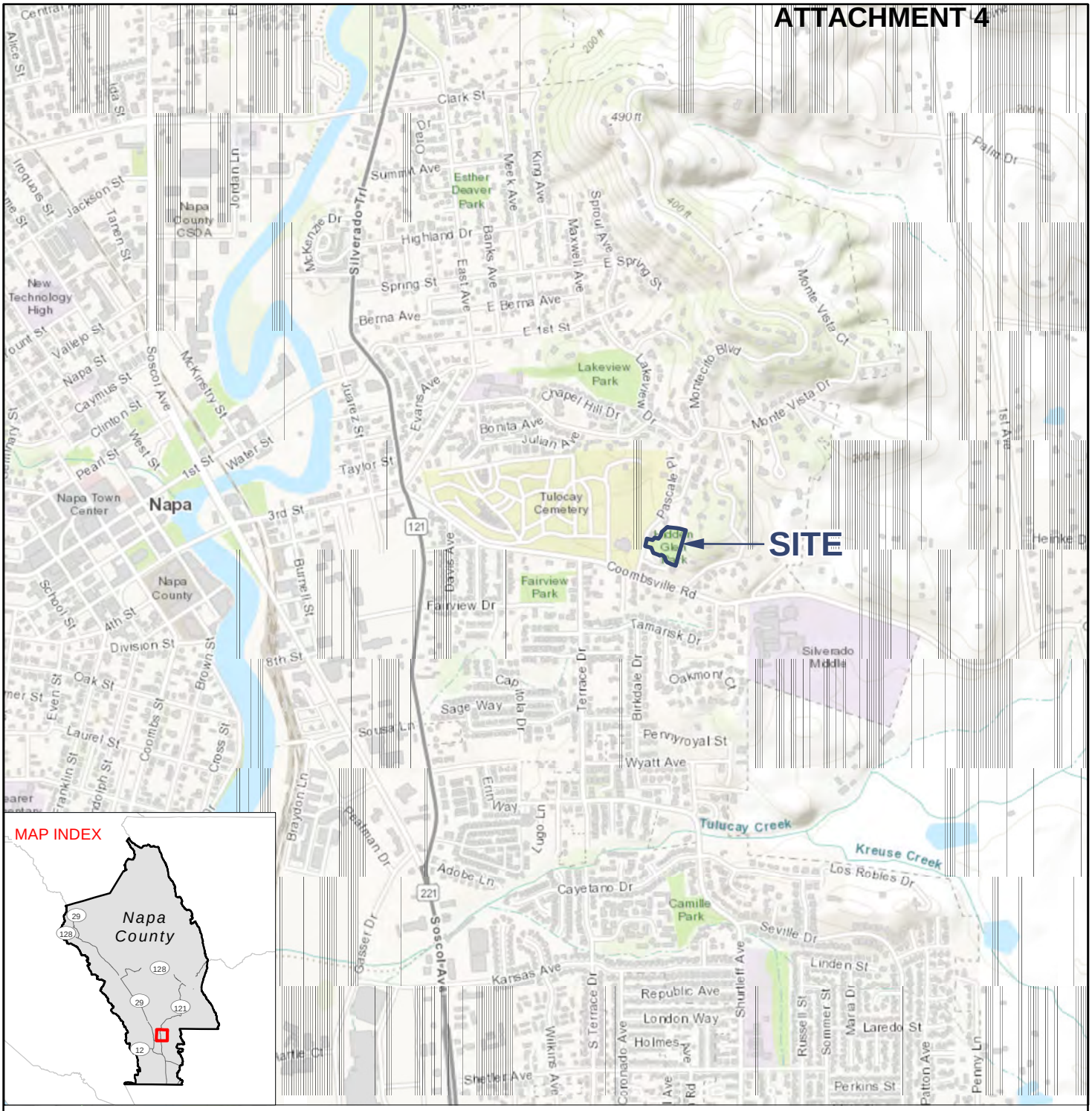
Engeo, 1988, Geotechnical Exploration, Hidden Glenn – Fennell Property, Napa, California: dated March 2.

Kunkel, F., and Upson, 1960, Geology and Groundwater in the Napa and Sonoma Valley areas. U.S.G.S. Water Supply Paper 1495.

McClaren-Hart, Inc, 2000, Closure Plan Hidden Glen Landfill, Napa, California: dated April 6.

SCS Engineers, 2020, Property Management Plan for City-Owned Parcel (APN 045-411-022-000), Investigation and Clean-Up of Closed Hidden Glen Landfill, Napa, California: dated March 2.

FIGURES



NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCE: ESRI WORLD TOPO, 2024

N

FEET

0 1,500 3,000

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FIGURE 1

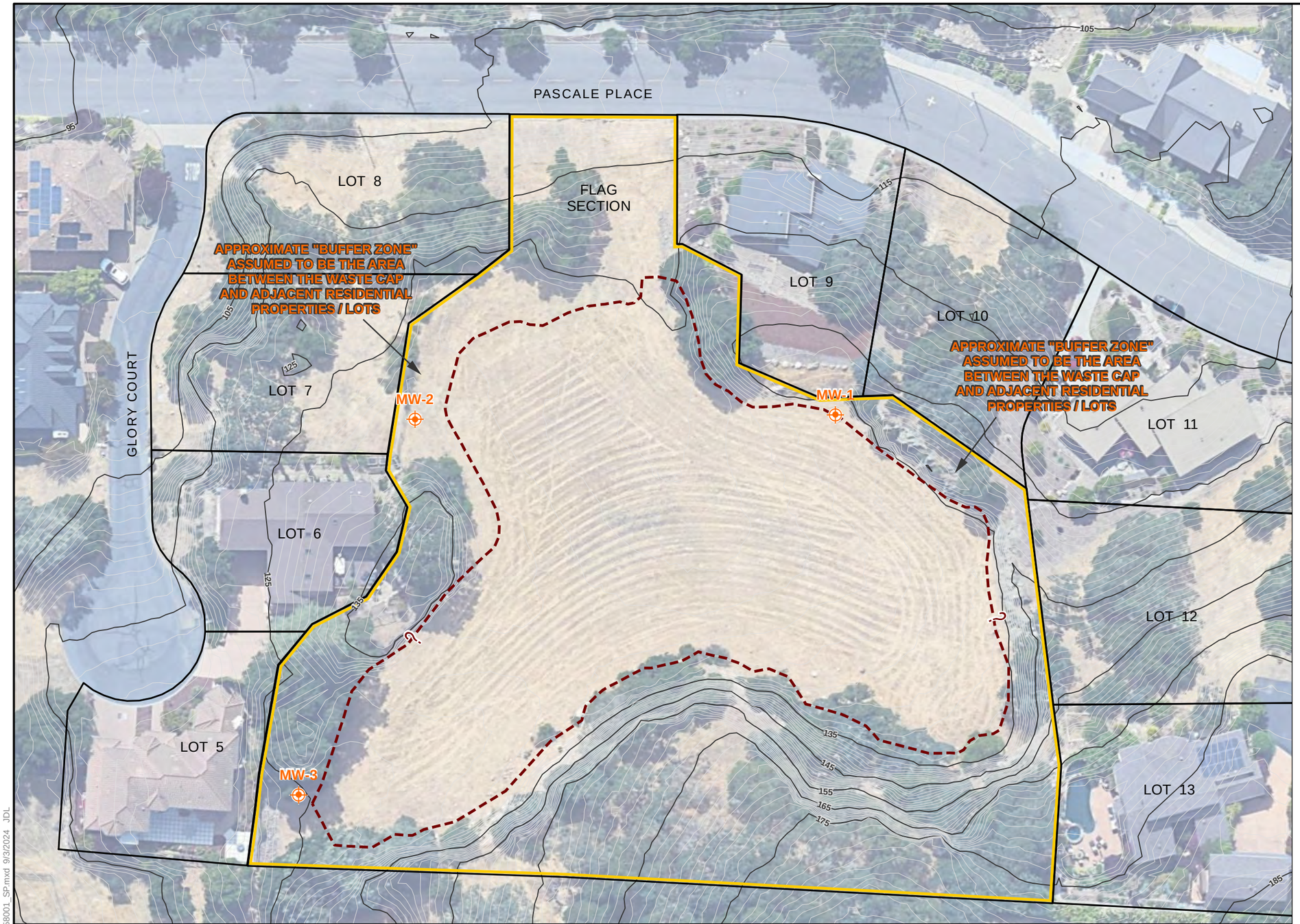
SITE LOCATION

HIDDEN GLEN DUMP
COOMBSVILLE ROAD, NAPA, CALIFORNIA

109558001 | 9/24

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

ATTACHMENT 4



LEGEND

MW-3 — LANDFILL GAS WELL (SCS ENGINEERS, 2020)

PARCEL A BOUNDARY APN: 045-411-022-000 (SCS ENGINEERS, 2020)

PARCEL BOUNDARY

ADAPTED FROM LANGAN (2018)

APPROXIMATE LIMIT OF CAP

N

FEET
0 50 100

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCES: SITE PLAN - SCS ENGINEERS, DATED: 2-26-20; TOPO - NOAA/USGS LIDARNOAA LIDAR, 2018-2019, NORTHERN CALIFORNIA WILDFIRE-QL2; GOOGLE EARTH, 2024

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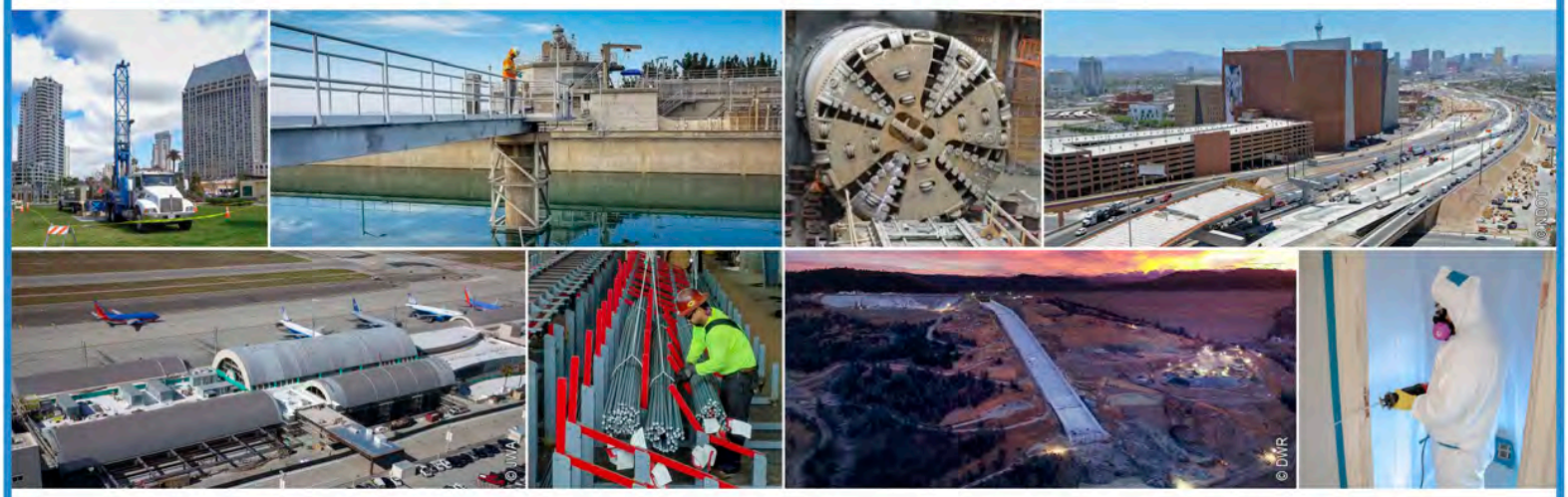
FIGURE 2

SITE PLAN

HIDDEN GLEN DUMP
COOMBSVILLE ROAD, NAPA, CALIFORNIA

109558001 | 9/24

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants



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APPENDIX F

Alternative Acceptance of Neighboring Property Waste Soil Grading Plans

PASCALE

PASCALE PLACE

LIMIT OF WORK

LOT 8

LOT 9

LOT 10

LOT 7

LOT 11

LOT 6

LOT 12

LOT 5

LOT 13

UPLAND AREA

Cr. 1.0 STAND PIPE MON. WELL

STAND PIPE MON. WELL

GRADING AND DRAINAGE LEGEND

RELOCATED SOIL WITH WASTE (TOTAL STOCKPILE DEBRIS = 2,753 CY)

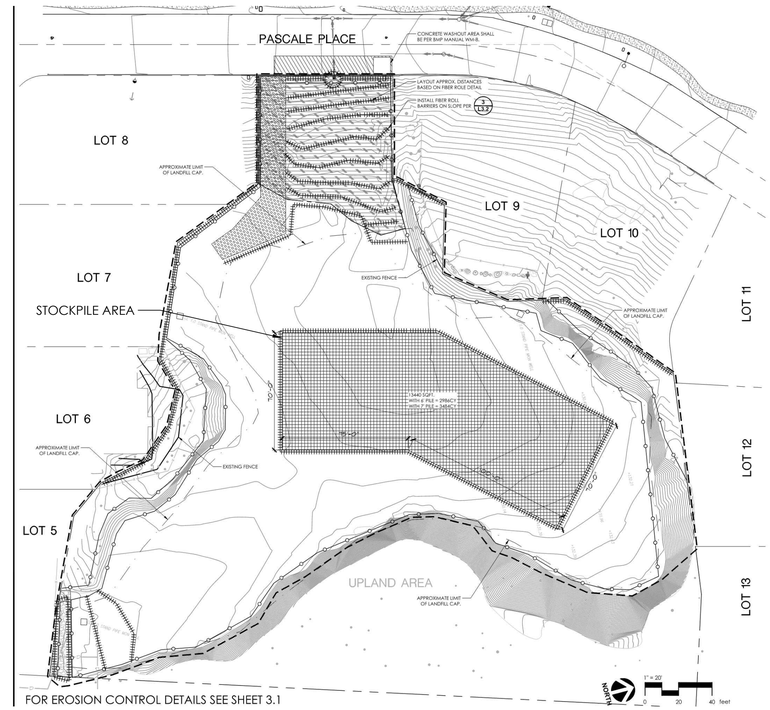
SECTION CUT

EXISTING CONTOUR: 1'-0" INTERVAL TYP.

PROPOSED CONTOUR: 1'-0" INTERVAL TYP.

GRADING AND DRAINAGE NOTES

1. GRADING AND DRAINAGE: ALL PROPOSED PAVING, CURBS, WALLS, AND PLANTING AREAS SHALL SMOOTHLY CONFORM TO EXISTING ADJACENT FEATURES TO REMAIN. PROVIDE POSITIVE DRAINAGE ON ALL PAVING AND THROUGHOUT ALL PLANTING AREAS.
2. SOIL STOCKPILE: STRIP AND STOCKPILE EXISTING 6" LAYER OF SOIL FROM AREAS DISTURBED DURING GRADING OR EXCAVATION.
3. GRADING: CONTRACTOR SHALL PERFORM ALL EARTHWORK AND GRADING PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
4. LANDFILL CAP PROTECTION: REFER TO SPECIAL PROVISIONS SECTION 00 72 00 GENERAL REQUIREMENTS, SECTION 1.3.C FOR LANDFILL CAP PROTECTION REQUIREMENTS.



1/5.0 EROSION CONTROL PLAN

NORTH

1" = 20'

0 20 40 feet

Callander Associates
Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 10/14/24
DESIGNED BY: BS DATE 5/22/24
CHECKED BY: MR DATE 5/22/24

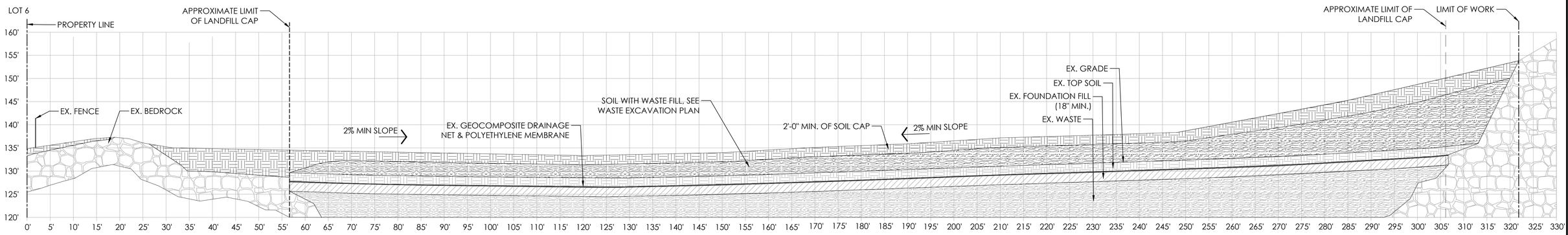
CITY OF NAPA

UTILITIES DEPARTMENT

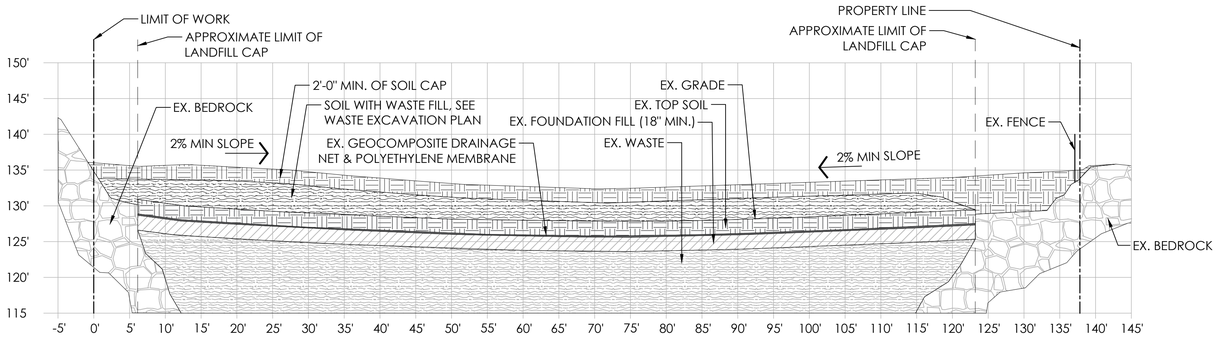
HIDDEN GLEN DUMP REMEDIATION- ALL WASTE
GRADING PLAN

SCALE
HORIZ. _____
VERT. _____

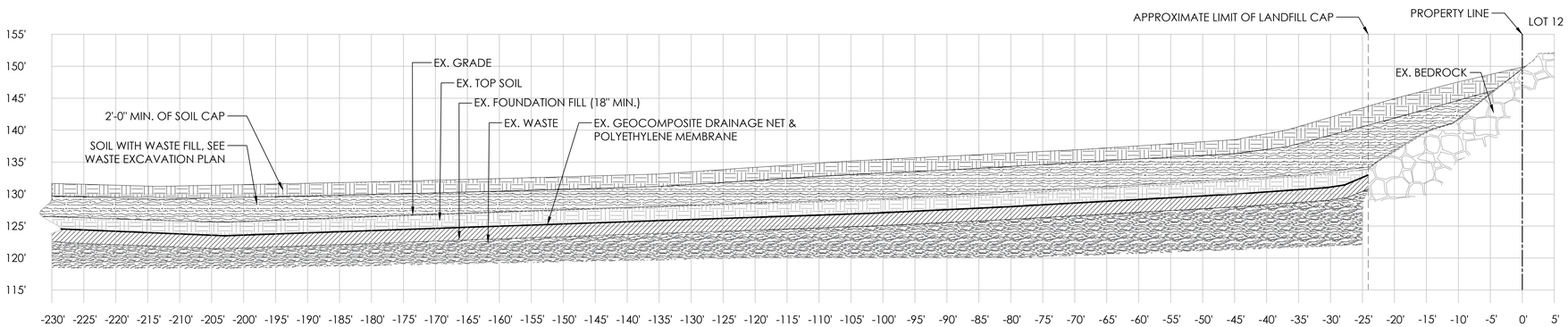
DATE: OCTOBER 14, 2024
CAD FILE: A17058_GD_Accept all Debris.dwg
DRAWING NO. 5.0
SHEET NO. 1 OF 2



1 L5.1 SECTION 1 - GRADING
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'



2 L5.1 SECTION 2 - GRADING
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'



3 L5.1 SECTION 3 - GRADING
SECTION VERTICAL SCALE: 1"=10' HORIZONTAL SCALE: 1"=10'

Callander Associates
Landscape Architecture
12150 Tributary Point Drive
Gold River CA 95670
T 916.985.4366

CALA Project No. 17058A

REVISIONS

NO.	DESCRIPTION	DATE	BY

BENCH MARK
ELEV. _____
DESCRIPTION:

DRAWN BY: RH/OP DATE 10/14/24
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CITY OF NAPA

UTILITIES DEPARTMENT

HIDDEN GLEN DUMP REMEDIATION- ALL WASTE
SECTIONS

SCALE
HORIZ. _____
VERT. _____

DATE: OCTOBER 14, 2024
CAD FILE: A17058_GD_Accept all Debris.dwg
DRAWING NO. 5.1
SHEET NO. 2 OF 2

APPENDIX G

DTSC Information Advisory – Clean Imported Fill

Information Advisory
Clean Imported Fill Material

October 2001

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

It is DTSC's mission to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California

California Environmental Protection Agency

Executive Summary

This fact sheet has been prepared to ensure that inappropriate fill material is not introduced onto sensitive land use properties under the oversight of the DTSC or applicable regulatory authorities. Sensitive land use properties include those that contain facilities such as hospitals, homes, day care centers, and schools. This document only focuses on human health concerns and ecological issues are not addressed. It identifies those types of land use activities that may be appropriate when determining whether a site may be used as a fill material source area. It also provides guidelines for the appropriate types of analyses that should be performed relative to the former land use, and for the number of samples that should be collected and analyzed based on the estimated volume of fill material that will need to be used. The information provided in this fact sheet is not regulatory in nature, rather is to be used as a guide, and in most situations the final decision as to the acceptability of fill material for a sensitive land use property is made on a case-by-case basis by the appropriate regulatory agency.

Introduction

The use of imported fill material has recently come under scrutiny because of the instances where contaminated soil has been brought onto an otherwise clean site. However, there are currently no established standards in the statutes or regulations that address environmental requirements for imported fill material. Therefore, the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) has prepared this fact sheet to identify procedures that can be used to minimize the possibility of introducing contaminated soil onto a site that requires imported fill material. Such sites include those that are undergoing site remediation, corrective action, and closure activities overseen by DTSC or the appropriate regulatory agency. These procedures may also apply to construction projects that will result in sensitive land uses. The intent of this fact sheet is to protect people who live on or otherwise use a sensitive land use property. By using this fact sheet as a guide, the reader will minimize the chance of introducing fill material that may result in potential risk to human health or the environment at some future time.

Overview

Both natural and manmade fill materials are used for a variety of purposes. Fill material properties are commonly controlled to meet the necessary site specific engineering specifications. Because most sites requiring fill material are located in or near urban areas, the fill materials are often obtained from construction projects that generate an excess of soil, and from demolition debris (asphalt, broken concrete, etc.). However, materials from those types of sites may or may not be appropriate, depending on the proposed use of the fill, and the quality of the assessment and/or mitigation measures, if necessary. Therefore, unless material from construction projects can be demonstrated to be free of contamination and/or appropriate for the proposed use, the use of that material as fill should be avoided.

Selecting Fill Material

In general, the fill source area should be located in nonindustrial areas, and not from sites undergoing an environmental cleanup. Nonindustrial sites include those that were previously undeveloped, or used solely for residential or agricultural purposes. If the source is from an agricultural area, care should be taken to insure that the fill does not include former agricultural waste process byproducts such as manure or other decomposed organic material. Undesirable sources of fill material include industrial and/or commercial sites where hazardous ma-

Potential Contaminants Based on the Fill Source Area

Fill Source:	Target Compounds
Land near to an existing freeway	Lead (EPA methods 6010B or 7471A), PAHs (EPA method 8310)
Land near a mining area or rock quarry	Heavy Metals (EPA methods 6010B and 7471A), asbestos (polarized light microscopy), pH
Agricultural land	Pesticides (Organochlorine Pesticides: EPA method 8081A or 8080A; Organophosphorus Pesticides: EPA method 8141A; Chlorinated Herbicides: EPA method 8151A), heavy metals (EPA methods 6010B and 7471A)
Residential/acceptable commercial land	VOCs (EPA method 8021 or 8260B, as appropriate and combined with collection by EPA Method 5035), semi-VOCs (EPA method 8270C), TPH (modified EPA method 8015), PCBs (EPA method 8082 or 8080A), heavy metals including lead (EPA methods 6010B and 7471A), asbestos (OSHA Method ID-191)

**The recommended analyses should be performed in accordance with USEPA SW-846 methods (1996). Other possible analyses include Hexavalent Chromium: EPA method 7199*

Recommended Fill Material Sampling Schedule

Area of Individual Borrow Area	Sampling Requirements
2 acres or less	Minimum of 4 samples
2 to 4 acres	Minimum of 1 sample every 1/2 acre
4 to 10 acres	Minimum of 8 samples
Greater than 10 acres	Minimum of 8 locations with 4 subsamples per location
Volume of Borrow Area Stockpile	**Samples per Volume**
Up to 1,000 cubic yards	1 sample per 250 cubic yards
1,000 to 5,000 cubic yards	4 samples for first 1000 cubic yards +1 sample per each additional 500 cubic yards
Greater than 5,000 cubic yards	12 samples for first 5,000 cubic yards + 1 sample per each additional 1,000 cubic yards

terials were used, handled or stored as part of the business operations, or unpaved parking areas where petroleum hydrocarbons could have been spilled or leaked into the soil. Undesirable commercial sites include former gasoline service stations, retail strip malls that contained dry cleaners or photographic processing facilities, paint stores, auto repair and/or painting facilities. Undesirable industrial facilities include metal processing shops, manufacturing facilities, aerospace facilities, oil refineries, waste treatment plants, etc. Alternatives to using fill from construction sites include the use of fill material obtained from a commercial supplier of fill material or from soil pits in rural or suburban areas. However, care should be taken to ensure that those materials are also uncontaminated.

Documentation and Analysis

In order to minimize the potential of introducing contaminated fill material onto a site, it is necessary to verify through documentation that the fill source is appropriate and/or to have the fill material analyzed for potential contaminants based on the location and history of the source area. Fill documentation should include detailed information on the previous use of the land from where the fill is taken, whether an environmental site assessment was performed and its findings, and the results of any testing performed. It is recommended that any such documentation should be signed by an appropriately licensed (CA-registered) individual. If such documentation is not available or is inadequate, samples of the fill material should be chemically analyzed. Analysis of the fill material should be based on the source of the fill and knowledge of the prior land use.

Detectable amounts of compounds of concern within the fill material should be evaluated for risk in accordance with the DTSC Preliminary Endangerment Assessment (PEA) Guidance Manual. If

metal analyses are performed, only those metals (CAM 17 / Title 22) to which risk levels have been assigned need to be evaluated. At present, the DTSC is working to establish California Screening Levels (CSL) to determine whether some compounds of concern pose a risk. Until such time as these CSL values are established, DTSC recommends that the DTSC PEA Guidance Manual or an equivalent process be referenced. This guidance may include the Regional Water Quality Control Board's (RWQCB) guidelines for reuse of non-hazardous petroleum hydrocarbon contaminated soil as applied to Total Petroleum Hydrocarbons (TPH) only. The RWQCB guidelines should not be used for volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCS). In addition, a standard laboratory data package, including a summary of the QA/QC (Quality Assurance/Quality Control) sample results should also accompany all analytical reports.

When possible, representative samples should be collected at the borrow area while the potential fill material is still in place, and analyzed prior to removal from the borrow area. In addition to performing the appropriate analyses of the fill material, an appropriate number of samples should also be determined based on the approximate volume or area of soil to be used as fill material. The table above can be used as a guide to determine the number of samples needed to adequately characterize the fill material when sampled at the borrow site.

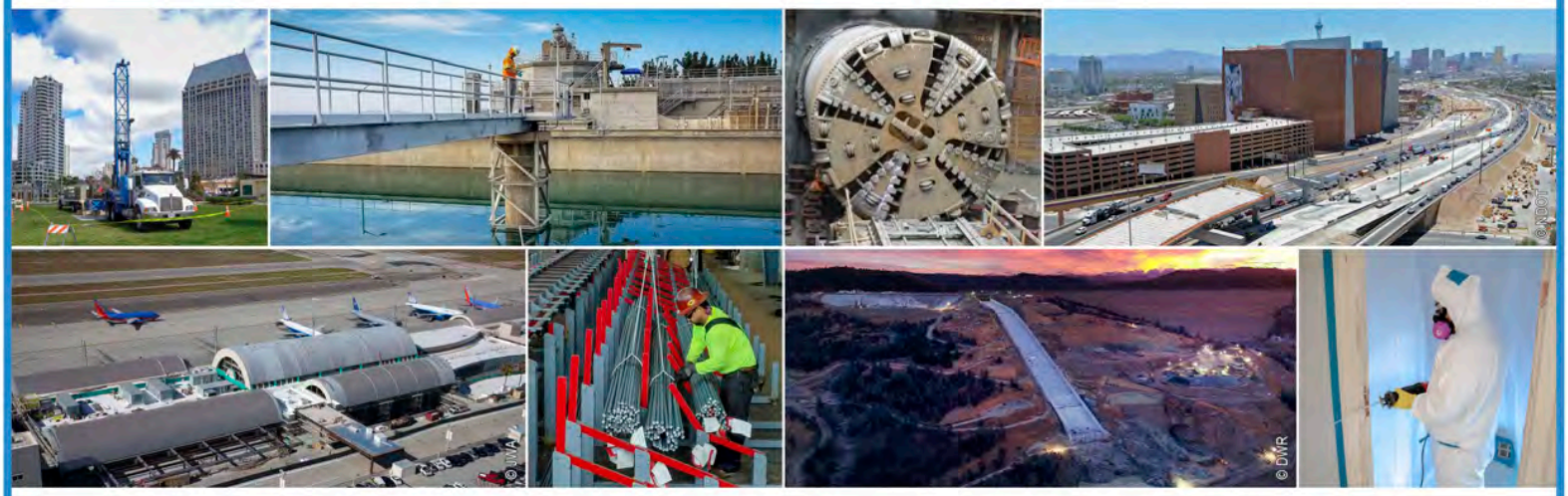
Alternative Sampling

A Phase I or PEA may be conducted prior to sampling to determine whether the borrow area may have been impacted by previous activities on the property. After the property has been evaluated, any sampling that may be required can be determined during a meeting with DTSC or appropriate regulatory agency. However, if it is not possible to analyze the fill material at the borrow area or determine that it is appropriate for use via a Phase I or PEA, it is recommended that one (1) sample per truckload be collected and analyzed for all compounds of concern to ensure that the imported soil is uncontaminated and acceptable. (See chart on Potential Contaminants Based on the Fill Source Area for appropriate analyses). This sampling frequency may be modified upon consultation with the DTSC or appropriate regulatory agency if all of the fill material is derived from a common borrow area. However, fill material that is not characterized at the borrow area will need to be stockpiled either on or off-site until the analyses have been completed. In addition, should contaminants exceeding acceptance criteria be identified in the stockpiled fill material, that material will be deemed unacceptable and new fill material will need to be obtained, sampled and analyzed. Therefore, the DTSC recommends that all sampling and analyses should be completed prior to delivery to the site to ensure the soil is free of contamination, and to eliminate unnecessary transportation charges for unacceptable fill material.

Composite sampling for fill material characterization may or may not be appropriate, depending on quality and homogeneity of source/borrow area, and compounds of concern. Compositing samples for volatile and semivolatile constituents is not acceptable. Composite sampling for heavy metals, pesticides, herbicides or PAH's from unanalyzed stockpiled soil is also unacceptable, unless it is stockpiled at the borrow area and originates from the same source area. In addition, if samples are composited, they should be from the same soil layer, and not from different soil layers.

When very large volumes of fill material are anticipated, or when larger areas are being considered as borrow areas, the DTSC recommends that a Phase I or PEA be conducted on the area to ensure that the borrow area has not been impacted by previous activities on the property. After the property has been evaluated, any sampling that may be required can be determined during a meeting with the DTSC.

For further information, call Richard Coffman, Ph.D., R.G., at (818) 551-2175.



5710 Ruffin Road | San Diego, California 92123 | p. 858.576.1000

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ninyoandmoore.com

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

APPENDIX C

AIR QUALITY, GREENHOUSE GAS EMISSIONS, & ENERGY SUPPORTING INFORMATION

Napa Hidden Glenn

CalEEMod Version 2022.1.1.29 Inputs

Project Characteristics

Start of Construction: August 1, 2025

End of Construction: October 30, 2025

Location: Napa County

Air District: Bay Area Air Quality Management District

Utility Company: Pacific Gas & Electric (Electricity)

Project Specifics

No existing buildings will be demolished.

The project site is 2.18-acres.

The project would require 3,500 cubic yards of waste soil export using 18.5-ton capacity haul trucks. Waste soil would be transported to Kettleman Hills Class I non-RCRA hazardous waste landfill (470 miles per round trip and involve 25 percent of the soil export trips) and Altamont Class II non-hazardous waste landfill (146 miles per roundtrip and involve 75 percent of the soil export trips). Therefore, there would be 71 round trips to Kettleman Hills and 213 round trips to Altamont. The average round trip would be 227 miles. As a result, there would be a total of 284 round trips of waste soil export with a total of 64,468 miles traveled.

The project would require 6,050 cubic yards of clean soil fill using a combination of 18.5-ton capacity haul trucks and 12-ton haul trucks. Each round trip would be 16 miles. As a result, there would be a total of 595 round trips of clean soil fill import with a total of 9,520 miles traveled.

The project would require approximately ten construction workers per day. Typically, construction activities would occur between 8 a.m. and 5 p.m. (eight hours per day), on Monday through Friday.

On-Road fugitive dust inputs left as default.

Estimated Construction Schedule

Description	Start	End	Hours per Day	Working Days
Mobilization	8/1/2025	8/14/2025	5	10
Grading	8/15/2025	9/11/2025	5	20
Clean Fill Import	9/12/2025	10/16/2025	5	25
Restoration	10/17/2025	10/30/2025	5	10

SOURCE: Applicant Data Response (March 11, 2025).

Estimated Construction Equipment Usage

Phase	Equipment	Amount	Daily Hours	HP	LF
Mobilization	Graders	1	8	148	0.41
Mobilization	Scrapers	1	8	423	0.48
Mobilization	Tractors/Loaders/Backhoes	1	7	84	0.37
Grading	Graders	1	8	148	0.41
Grading	Rubber Tired Dozers	1	8	367	0.40
Grading	Tractors/Loaders/Backhoes	2	7	84	0.37
Grading	Excavators	2	8	36	0.38
Grading	Plate Compactors	1	8	8	0.43
Clean Fill Import	Tractors/Loaders/Backhoes	2	7	84	0.37
Clean Fill Import	Graders	1	8	148	0.41
Clean Fill Import	Rubber Tired Dozers	1	8	367	0.4
Restoration	Graders	1	8	148	0.41
Restoration	Scrapers	1	8	423	0.48
Restoration	Tractors/Loaders/Backhoes	1	7	84	0.37

SOURCE: Applicant Data Response (March 11, 2025) and CARB CalEEMod Version 2022.1.

Napa Hidden Glenn Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Napa Hidden Glenn
Construction Start Date	8/4/2025
Lead Agency	City of Napa
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	42.2
Location	38.297890785929496, -122.26649688813013
County	Napa
City	Napa
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	805
EDFZ	2
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	2.18	Acre	2.18	0.00	2.18	2.18	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.46	1.90	22.8	19.6	0.06	0.81	4.39	5.20	0.72	1.78	2.50	—	8,675	8,675	0.34	0.96	13.3	8,982
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.95	1.61	15.3	15.8	0.03	0.66	3.11	3.76	0.60	1.42	2.02	—	3,329	3,329	0.14	0.14	0.06	3,375
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.35	0.28	2.91	2.79	0.01	0.12	0.49	0.61	0.10	0.20	0.30	—	861	861	0.03	0.06	0.40	881
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.05	0.53	0.51	< 0.005	0.02	0.09	0.11	0.02	0.04	0.06	—	142	142	0.01	0.01	0.07	146

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.46	1.90	22.8	19.6	0.06	0.81	4.39	5.20	0.72	1.78	2.50	—	8,675	8,675	0.34	0.96	13.3	8,982

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.95	1.61	15.3	15.8	0.03	0.66	3.11	3.76	0.60	1.42	2.02	—	3,329	3,329	0.14	0.14	0.06	3,375
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.35	0.28	2.91	2.79	0.01	0.12	0.49	0.61	0.10	0.20	0.30	—	861	861	0.03	0.06	0.40	881
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.06	0.05	0.53	0.51	< 0.005	0.02	0.09	0.11	0.02	0.04	0.06	—	142	142	0.01	0.01	0.07	146

3. Construction Emissions Details

3.1. Mobilization (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43	—	0.43	—	2,717	2,717	0.11	0.02	—	2,726
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.04	0.03	0.30	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.4	74.4	< 0.005	< 0.005	—	74.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.01	0.01	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.92	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.74	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.47	4.47	< 0.005	< 0.005	0.01	4.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	< 0.005	0.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Restoration (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43	—	0.43	—	2,717	2,717	0.11	0.02	—	2,726
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.4	74.4	< 0.005	< 0.005	—	74.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	0.84	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	162	162	0.01	0.01	0.02	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.47	4.47	< 0.005	< 0.005	0.01	4.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	< 0.005	0.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.0	16.8	0.03	0.70	—	0.70	0.65	—	0.65	—	2,772	2,772	0.11	0.02	—	2,782
Dust From Material Movement	—	—	—	—	—	—	2.77	2.77	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	0.88	0.92	< 0.005	0.04	—	0.04	0.04	—	0.04	—	152	152	0.01	< 0.005	—	152
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.16	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.2	25.2	< 0.005	< 0.005	—	25.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.92	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.74	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.30	0.08	6.74	1.91	0.04	0.11	1.46	1.57	0.07	0.41	0.48	—	5,729	5,729	0.22	0.93	12.6	6,024
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.94	8.94	< 0.005	< 0.005	0.02	9.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	< 0.005	0.39	0.10	< 0.005	0.01	0.08	0.08	< 0.005	0.02	0.03	—	314	314	0.01	0.05	0.30	330
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.48	1.48	< 0.005	< 0.005	< 0.005	1.50
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	52.0	52.0	< 0.005	0.01	0.05	54.6

3.7. Clean Fill Import (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

ATTACHMENT 4

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.80	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	2.77	2.77	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.80	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	2.77	2.77	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.96	0.99	< 0.005	0.04	—	0.04	0.04	—	0.04	—	168	168	0.01	< 0.005	—	169
Dust From Material Movement	—	—	—	—	—	—	0.19	0.19	—	0.09	0.09	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.8	27.8	< 0.005	< 0.005	—	27.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.92	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.74	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.02	1.11	0.43	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	712	712	0.04	0.12	1.49	749
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	0.84	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	162	162	0.01	0.01	0.02	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.02	1.17	0.44	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	712	712	0.04	0.12	0.04	748
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.02	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.8	48.8	< 0.005	0.01	0.04	51.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.88

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.07	8.07	< 0.005	< 0.005	0.01	8.48

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Mobilization	Site Preparation	8/1/2025	8/14/2025	5.00	10.0	1
Restoration	Site Preparation	10/17/2025	10/30/2025	5.00	10.0	4
Grading	Grading	8/15/2025	9/11/2025	5.00	20.0	2
Clean Fill Import	Grading	9/12/2025	10/16/2025	5.00	25.0	3

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Mobilization	Graders	Diesel	Average	1.00	8.00	148	0.41
Mobilization	Scrapers	Diesel	Average	1.00	8.00	423	0.48

Mobilization	Tractors/Loaders/Back	Diesel	Average	1.00	7.00	84.0	0.37
Restoration	Graders	Diesel	Average	1.00	8.00	148	0.41
Restoration	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Clean Fill Import	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Clean Fill Import	Graders	Diesel	Average	1.00	8.00	148	0.41
Clean Fill Import	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Mobilization	—	—	—	—
Mobilization	Worker	20.0	11.7	LDA,LDT1,LDT2
Mobilization	Vendor	0.00	8.40	HHDT,MHDT
Mobilization	Hauling	0.00	20.0	HHDT
Mobilization	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	0.00	8.40	HHDT,MHDT
Grading	Hauling	14.2	114	HHDT

Grading	Onsite truck	0.00	—	HHDT
Clean Fill Import	—	—	—	—
Clean Fill Import	Worker	20.0	11.7	LDA,LDT1,LDT2
Clean Fill Import	Vendor	0.00	8.40	HHDT,MHDT
Clean Fill Import	Hauling	23.8	8.00	HHDT
Clean Fill Import	Onsite truck	0.00	—	HHDT
Restoration	—	—	—	—
Restoration	Worker	20.0	11.7	LDA,LDT1,LDT2
Restoration	Vendor	0.00	8.40	HHDT,MHDT
Restoration	Hauling	0.00	20.0	HHDT
Restoration	Onsite truck	0.00	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Mobilization	0.00	0.00	15.0	0.00	—
Restoration	0.00	0.00	15.0	0.00	—
Grading	0.00	3,500	20.0	0.00	—

Clean Fill Import	6,050	0.00	25.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.4	annual days of extreme heat
Extreme Precipitation	7.95	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	15.6	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A

Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	45.9
AQ-DPM	35.9
Drinking Water	43.0
Lead Risk Housing	46.3
Pesticides	66.6
Toxic Releases	54.5
Traffic	9.82
Effect Indicators	—
CleanUp Sites	75.6
Groundwater	65.3
Haz Waste Facilities/Generators	7.35
Impaired Water Bodies	33.2
Solid Waste	70.4
Sensitive Population	—
Asthma	32.2
Cardio-vascular	20.3
Low Birth Weights	13.5
Socioeconomic Factor Indicators	—
Education	24.6
Housing	8.86
Linguistic	32.0
Poverty	22.0
Unemployment	0.00

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.32490697
Employed	85.83344027
Median HI	82.40728859
Education	—
Bachelor's or higher	74.51559091
High school enrollment	16.64314128
Preschool enrollment	19.87681252
Transportation	—
Auto Access	87.47593995
Active commuting	28.80790453
Social	—
2-parent households	85.55113563
Voting	92.53175927
Neighborhood	—
Alcohol availability	34.56948544
Park access	50.84049788
Retail density	16.54048505
Supermarket access	26.85743616
Tree canopy	95.09816502
Housing	—
Homeownership	56.88438342
Housing habitability	91.81316566
Low-inc homeowner severe housing cost burden	84.04978827
Low-inc renter severe housing cost burden	93.46849737

Uncrowded housing	68.66418581
Health Outcomes	—
Insured adults	80.31566791
Arthritis	12.5
Asthma ER Admissions	61.0
High Blood Pressure	18.2
Cancer (excluding skin)	9.1
Asthma	51.9
Coronary Heart Disease	23.5
Chronic Obstructive Pulmonary Disease	37.6
Diagnosed Diabetes	70.5
Life Expectancy at Birth	71.8
Cognitively Disabled	28.0
Physically Disabled	68.4
Heart Attack ER Admissions	91.4
Mental Health Not Good	71.0
Chronic Kidney Disease	45.1
Obesity	54.6
Pedestrian Injuries	63.5
Physical Health Not Good	64.0
Stroke	45.2
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	70.0
No Leisure Time for Physical Activity	75.4
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	74.5

Children	78.7
Elderly	19.2
English Speaking	84.7
Foreign-born	26.1
Outdoor Workers	53.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.2
Traffic Density	13.1
Traffic Access	49.0
Other Indices	—
Hardship	18.0
Other Decision Support	—
2016 Voting	96.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	15.0
Healthy Places Index Score for Project Location (b)	81.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Applicant Data Responses March 11, 2025
Construction: Off-Road Equipment	Applicant Data Response March 11, 2025
Construction: Dust From Material Movement	Applicant Data Response March 11, 2025
Construction: Trips and VMT	Applicant Data Response March 11, 2025

APPENDIX D

BIOLOGICAL RESOURCES ASSESSMENT

Biological Resources Assessment

Hidden Glen Remediation Project
City of Napa
April 2025

Prepared for:

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RCH Group
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SWIFT BIOLOGICAL

ATTACHMENT 4

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1 Introduction

The City of Napa (the City) is proposing a remediation project at the Hidden Glen Dump near the intersection of Pascale Place and Glory Court in Napa, California. The dump is a City-owned property that was formerly a waste disposal site. During a 2018 site investigation, waste-impacted soils and high lead concentrations were detected, exceeding environmental standards. The City is proposing a remediation project to remove the contaminated soil and cover it with imported clean fill.

Swift Biological Consulting LLC (Swift Biological) was retained by RCH Group through a contract with the City of Napa to complete a biological resources assessment of the proposed remediation project. The purpose of this report is to identify sensitive biological communities and special-status species and their habitats within the project site[1], evaluate potential impacts on sensitive resources resulting from the proposed project, and recommend measures to avoid, minimize, or mitigate potential impacts. This report is based on information available at the time of the biological surveys, site conditions observed, currently available information, and the report preparer's best professional judgment. This report will support the City's California Environmental Quality Act (CEQA) analysis and/or agency consultations.

1.1 Project Setting

The project is on a 2.18-acre property along Pascale Place near Glory Court in Napa, California (APN 045-411-022-000). The project site is accessible from Pascale Road. It is accessible from the east side of Highway 121 from Coombsville Road. It is approximately one mile east of downtown Napa. The property is a former landfill site and remains undeveloped, except for three monitoring wells that are used to track landfill gas. It is situated in a residential area, bordered by residential parcels to the north, east, and south, and Pascale Place to the west. It is mapped on the Napa USGS quadrangle (38.2977°N, 122.2679°W).

The project site is in the Napa Valley, located between the Mayacamas and Vaca Mountains in southern Napa County. The valley stretches from the city of Calistoga in the north to the baylands in the south. The Napa River runs down the valley. It is a 426-square-mile watershed that drains the Napa Valley and flows into San Pablo Bay. The Napa River flows to the east of the property. Drainage from the site flows through the City’s storm drain system before entering the Napa River.

[1] The term “project site” is used to define the project footprint (i.e., remediation site, access routes, and a buffer around). The resources on the larger property are included for context and are important for understanding the biological resource conditions and impact determinations beyond the project footprint.

Figure 1. Project Location

Sources: Aerial - ESRI, Parcel - City of Napa

Biological Resources Assessment
Hidden Glen Remediation Project, City of Napa
April 2025

SWIFT BIOLOGICAL CONSULTING LLC

Figure 2. Site Map

Sources: Aerial - ESRI, Parcel - City of Napa

Biological Resources Assessment
Hidden Glen Remediation Project, City of Napa
April 2025

SWIFT BIOLOGICAL CONSULTING LLC

1.2 Proposed Project

The City of Napa is proposing to conduct remedial action activities at the former Hidden Glen Dump site. The 2.18-acre City-owned property is located near the intersection of Pascale Place and Glory Court in Napa, CA (APN #045-411-022-000). The site was initially an excavated quarry that operated into the 1940s. After quarry operations were abandoned, a private operator used the site as a general garbage dump until it was abandoned in the 1960s. In 2001, a landfill cap was installed at the dump site. In 2020, three methane monitoring wells were installed to monitor landfill gases (LFG).

The project site contains waste-impacted soil and debris in the shallow soils from its previous operation as the former Hidden Glen Dump and requires remedial action. On November 26, 2019, the County of Napa Environmental Health, Solid Waste Local Enforcement Agency (LEA) issued a letter to the City of Napa requiring the submittal of a work plan to ensure that State Minimum Standards are addressed at the City-owned property in compliance with Title 27 of the California Code of Regulations (CCR). To comply with State Minimum Standards, the letter requires the City to remove and/or cover waste-impacted soil on the site.

A Remedial Action Plan (RAP) was prepared by Ninyo & Moore in October 2024 and approved by the LEA on December 20, 2024. Under the RAP, waste-impacted soil around the perimeter of the landfill cap would be excavated to bedrock, where feasible, to depths of approximately 10 to 20 inches or greater. The depth of excavation will be reduced if bedrock is encountered at shallower depths. Where waste removal is not possible due to access, stability, and/or other restrictions, the remaining waste will be covered with two feet of clean, imported soil to meet state minimum standards. The waste-impacted soil to be removed would be reconsolidated onsite and covered with a minimum of two feet of clean fill, essentially capping it. Alternatively, the waste-impacted soil may be hauled offsite to an appropriate landfill for disposal. The proposed access road would be constructed off a paved private driveway to the lot east of the City-owned property. The access road would be approximately 10 feet wide by 75 feet long. Alternatively, the site may be accessed off Pascale Place. The maximum amount of waste to be removed is approximately 3,500 cubic yards, and clean fill imported into the site is approximately 6,050 cubic yards. Equipment would include large and mini excavators, backhoes, loaders, dump trucks, dozers, and sheep-foot compactors. Excavation would occur within disturbed annual grassland. Several native coast live oak trees may need to be removed to accommodate construction. Construction is anticipated to take place from August to October 2025.

2 Methods

2.1 Background Review

Information on special-status species and habitats was compiled through a review of background literature and databases. The search focused on the known occurrences of special-status species on the Napa 7.5-minute USGS quadrangle where the project is located and the surrounding quadrangles. The following resources were consulted to determine species and habitats within the site:

- The California Natural Diversity Database[2] (CNDDB) maintained by the California Department of Fish and Wildlife (CDFW 2025a); RareFind Version 5.3.0, BIOS 6 Version 6.25.0026 (including unprocessed data from CNDDB Online Field Survey Forms), CNDDB GIS Data Version March 31, 2025; this included species reported within a 5-mile buffer around the project,
- CDFW's Special Animals List, April 2025 (CDFW 2025b),
- CDFW's Special Vascular Plants, Bryophytes, and Lichens List, January 2025 (CDFW 2025c),
- CDFW's California Natural Communities List, February 27, 2025 (CDFW 2025d),
- CDFW's California Sensitive Natural Communities List, February 27, 2025 (CDFW 2025e),
- U.S. Fish and Wildlife Service's Information for Planning and Consultation (IPaC) database (USFWS 2025a),
- California Native Plant Society's (CNPS) A Manual of California Vegetation Online (CNPS 2025a),
- California Native Plant Society's Rare Plant Inventory (CNPS 2025b),
- Calflora's Observation Search and Search for Plants databases (Calflora 2025),
- USDA Natural Resources Conservation Service Web Soil Survey (WSS; NRCS 2025b),
- USDA Soil Survey for Napa County (USDA 1978),
- National Wetlands Inventory (NWI) (USFWS 2025b)
- Google Earth aerial images,
- USGS (2025) topographic maps,
- VegCAMP Vegetation Classification and Mapping Program (CDFW 2016b) and
- Historical and current accounts of biological resources within the Napa River watershed and species-specific information are presented in other technical reports, publications, and field guides.

[2] The California Natural Diversity Database is an inventory of the status and locations of rare plants and animals in California and is maintained by the California Department of Fish and Wildlife. It is part of an international network of natural heritage programs, managed by NatureServe. It is a positive detection database and only contains records where species have been detected; there are no organized inventory or survey efforts used to populate the database. Observations are submitted by local agencies, researchers, and consultants and reviewed by CDFW staff prior to entry into the database. The CNDDB is not a public dataset; the maps and information provided in this report are for internal review only and should not be used for any public reports or other documents.

2.2 Biology Field Surveys

Swift Biological completed biological surveys of the project site on March 19, 2025, and April 8, 2025. The field surveys followed the methods described in CDFW's *Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Populations and Natural Communities* (CDFW 2009) and Napa County's *Guidelines for Preparing Biological Resources Reconnaissance Surveys* (Napa County 2016). The surveys were completed to 1) document vegetation communities, 2) compile a list of plant and animal species present, 3) evaluate the project site for the presence of special-status species and their habitats, and 4) evaluate the project site for jurisdictional aquatic features. Areas adjacent to the project site were also observed for context and to evaluate the potential for impacts on off-site resources.

Before the surveys, a background review was completed to generate a list of potentially sensitive biological communities and special-status species that may occur within the project site; see *Background Review*. A base map of the project site was produced before the field surveys, with the parcel boundaries overlaid on an aerial photograph. The site boundaries and aerial data were also downloaded into the ESRI Field Maps application, and GPS field data on biological features were collected in the field. During the surveys, the entire site and a buffer around it were systematically and thoroughly surveyed to inventory all biological resources present.

Plants. Botanical surveys of the project site were completed to describe the vegetation communities and evaluate for the presence of special-status plants. Surveys were completed in March and April 2025, with an additional survey planned for May 2025 to coincide with the peak blooming periods of special-status plants. Plant communities were identified and described based on the Manual of California Vegetation (CNPS 2025a) definitions. Data downloaded from the VegCAMP Vegetation Classification and Mapping Program for Napa County was used to evaluate vegetation communities within the site (CDFW 2016b). The botanical inventory was floristic in nature, and every plant taxon that occurs on the site was identified to the taxonomic level necessary to determine rarity or listing status. All plants were identified using the Jepson eFlora (Jepson Flora Project 2025) and A Flora of Napa County (Ruygt 2020). Representative plant species observed were incorporated into the Existing Plant Communities section below. A complete list of plants observed is provided in Table 1.

Wildlife. Wildlife surveys of the project site were completed in March and April 2025 to describe the wildlife species and habitats present and evaluate for the presence of special-status species. Binoculars (Swarovski 10x42) and a high-resolution camera (Canon PowerShot SX70) were used. All wildlife species were identified by sight or sound, and details of wildlife behavior and activity were recorded. The surveys were carried out under suitable weather conditions to maximize the potential for the detection of wildlife species. The surveys included daytime inspections of all vegetation and an evaluation of unique wildlife habitat features. Representative plant species observed were incorporated into the Wildlife Habitat section below. A complete list of plants observed is provided in Table 2.

Aquatic Resources. The project site was reviewed for the presence of wetlands, waters of the US and State, and riparian habitat[3]under the jurisdiction of the US Army Corps of Engineers (Corps), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). Wetland jurisdiction is determined based on a preliminary assessment of hydrophytic vegetation, hydric soils, and hydrology; a site must meet these three parameters to be considered jurisdictional (Corps 1987, 2008b). Waters and other drainage areas are identified based on wetland indicators and other physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, or the presence of litter and debris to indicate the presence of an OHWM (Corps 2008a). Riparian habitat is identified by the riparian vegetation that serves as the demarcation between riparian and upland habitat and/or the top of the stream bank based on topographical changes or other indicators.

2.3 Maps and Photographs

Maps for this report were generated using ESRI ArcGIS ArcMap 10.8.2 software. Field data was collected using the ESRI Field Map application and downloaded in the office to support the mapping efforts. Aerial imagery and existing GIS layers available from ArcGIS Online on soil types, land cover/vegetation, and hydrology were used to create figures that represent conditions on the site. Data downloaded from the VegCAMP Vegetation Classification and Mapping Program for Napa County was also used to characterize the site (CDFW 2016b). Digital photographs were collected in the field to characterize on-site conditions and document biological resources.

[3] See Section 6 for definitions.

3 Existing Conditions

3.1 Physical Characteristics

The project is situated on a 2.18-acre parcel of land. The capped waste disposal area is relatively flat, with an elevation of approximately 126 to 139 feet. The northwest, north, and east sides are near vertical quarry walls. There is an upper terrace above the disposal area to the east with a peak elevation of 176 feet. The site slopes downward to the west along Pascale Place, reaching an elevation of 105 feet along the road. There is a small rocked depression at the western edge of the site and a storm drain along Pascale Place.

According to the USDA's Natural Resources Conservation Service Soil Survey, the property is underlain by one soil mapping unit: Hambright-Rock outcrop complex, 2 to 30 percent slopes (USDA 1978, NRCS 2025b). It is found on plateaus and uplands. This soil is formed from weathered material from basic rock. It is very stony loam from 0 to 12 inches and bedrock from 12 to 22 inches. The Hambirght-Rock outcrop is moderately well-drained, and the runoff class is medium to rapid. It is not subject to flooding or ponding. This soil is primarily used for wildlife habitat, watersheds, and limited grazing. This soil is not listed as a hydric soil (NRCS 2025a).

3.2 Existing Plant Communities

Plant communities are assemblages of plant species that occur together in the same area, defined by their species composition and relative abundance. According to the 2016 Vegetation Map of Napa County, the parcel is mapped as valley oak woodland (MCV Scientific Name: *Quercus lobata*) and coast live oak woodland (MCV Scientific Name: *Quercus agrifolia* - *Quercus douglasii*; CDFW 2016b). The mapped communities only partially reflect the current conditions. The margins of the capped waste disposal area are dominated by California annual forb/grass vegetation. The edges and hillside above the main disposal area support native oak woodlands dominated by coast live oak (*Quercus agrifolia*) and blue oak (*Q. douglasii*).

The main waste disposal area is an open and relatively flat area. It is dominated by non-native annual grasses and forbs and is classified as the *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance (wild oats and annual brome grasslands) based on A Manual of California Vegetation (CNPS 2025a). This alliance can occur in a variety of topographical settings, from foothills, waste places, rangelands, and openings in woodlands (CNPS 2025a), and it is widely distributed in Napa County. The plant composition across the site reflects a history of soil disturbance. Native cover is less than 5% within the non-native annual grassland. Non-native grasses dominate and include wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft chess (*B. hordeaceus*), perennial rye grass (*Festuca perennis*), and foxtail barley (*Hordeum murinum*). Non-native forbs are abundant, and representative species include wild geranium (*Geranium dissectum*), smooth cat's ear (*Hypochaeris glabra*), burclover (*Medicago polymorpha*), wild radish (*Raphanus sativus*), chickweed (*Stellaria media*), clover (*Trifolium* sp.), and vetch (*Vicia villosa*). Scattered native forbs are also present. These include annual lupine (*Lupinus bicolor*) and

fiddleneck (*Amsinckia intermedia*). Native Miner's lettuce (*Claytonia perfoliata*) and bedstraw (*Galium aparine*) grow along the edges in shadier locations. Small native coyote brush (*Baccharis pilularis*) have also colonized the center of the disposal area; these plants are approximately a foot in height. The slope above Pascale Road is also dominated by non-native annual grasses and forbs with similar species composition; however, non-native broad-leaf filaree (*Erodium botrys*), bristly ox-tongue (*Helminthotheca echioides*), and rose clover (*Trifolium hirtum*) are more prevalent in this location. Native annual lupine and California poppy (*Eschscholzia californica*) are also growing on the slope above Pascale Road. Native purple needle grass (*Stipa pulchra*) is growing in cracks along the edge of the roadside curb. Patches of non-native French broom (*Genista monspessulana*) are present around the main disposal area, especially at the southwest corner.

The northwest, north, and east sides of the main disposal area are near vertical walls with a rock outcrop to the south, all remnants from the quarry operation. The rock faces are partially vegetated, and there is a stand of intact native woodland on the terrace above the cliffs along the eastern boundary. These areas are characterized as *Quercus douglasii* Forest and Woodland Alliance (blue oak woodland and forest) based on A Manual of California Vegetation (CNPS 2025a). The canopy is predominately *Q. douglasii* in the upland tree canopy, with *Q. agrifolia* as a co-dominant. The southwestern corner of the project site also includes a stand of oak trees; at this location, *Quercus agrifolia* is the only oak species; this area would be characterized as a remnant stand of *Quercus agrifolia* Forest and Woodland Alliance based on *A Manual of California Vegetation* (CNPS 2025a). Both of these tree communities are widely distributed in Napa County.

The vertical walls and rock outcrops support stands of native coast live oak, blue oak, gray pine (*Pinus sabiniana*), California bay (*Umbellularia californica*), and toyon (*Heteromeles arbutifolia*). The understory and lower slopes of the vertical walls support native coyote brush, Miner's lettuce, sticky monkeyflower (*Diplacus aurantiacus*), wild cucumber (*Marah fabacea*), poison oak (*Toxicodendron diversilobum*), and soap plant (*Chlorogalum pomeridianum*). The upper terrace woodland is similar in species composition with a canopy dominated by coast live oak, blue oak, and a few gray pines. The understory is dominated by non-native annual grasses and non-native and native forbs, including milkmaids, soap plant, blue dicks (*Dipterostemon capitatus*), Pacific sanicle (*Sanicula crassicaulis*), and blue-eyed grass (*Sisyrinchium bellum*). The rock outcrop to the south supports both coast live oak and blue oak, with toyon and poison oak in the understory. The southwestern corner of the project site supports a small stand of coast live oak with poison oak and annual grasses in the understory.

The property does not contain any wetlands or other natural aquatic habitat features, such as stream channels or drainages. There is a small unvegetated rocked depression at the western edge of the site, but it does not appear to carry water from the site. There is a grated storm drain along Pascale Place to capture street runoff. No evidence of hydrophytic vegetation, hydric soils, and stream or wetland hydrology was observed during biological surveys of the site. All of the plant communities present are dominated by upland grasses, forbs, and woody vegetation.

Native Trees

Native trees[4] and plants on public property in the City of Napa are protected under Chapter 12.44 Public Trees and Plants in the municipal code. Removal or pruning of any protected native tree, significant tree, or tree within the public right-of-way requires a permit from the City of Napa Parks and Recreation Services Department unless it is approved via authorized signature on the development plan; per see Sheet 3 of 5 of the Hidden Glen Dump Remediation Demolition Plan dated October 14, 2024 (Ninyo & Moore 2024). The project will require the removal of several native coast live trees along Pascale Place and/or near the proposed access road. Along Pascale Place, there are two smaller oaks, 3- and 4-inch DBH[5] on the lower slope, and a cluster of three trees on the upper slope measuring 15-, 17-, and 20-inch DBH. Near the proposed access road at the southwest corner, there is a multi-trunk coast live oak tree that will need to be removed along with some trimming of larger branches of nearby trees. The remaining trees on the site will be protected in accordance with the Tree Protection Notes and Tree Protection Fencing specifications outlined in the Hidden Glen Dump Remediation Demolition Plan under the guidance of a certified arborist (see Sheet 3 of 5; Ninyo & Moore 2024).

3.3 Wildlife Habitats

Despite its urban location, the project site supports grassland and native oak woodland vegetation and provides habitat for many wildlife species. These areas offer animals nesting habitat, food, shelter, and refuge from the surrounding developed areas. They support a variety of wildlife species that can live and thrive in urban and suburban environments. These species generally have a high tolerance for human disturbance, utilize human food resources, and are typically omnivorous and generalists with regard to food and habitat. The annual grassland is an open habitat with limited shrub and tree cover. This area provides some foraging opportunities for wildlife, especially with the nearby vegetated cover and rock outcrop habitat features. Black-tailed deer (*Odocoileus hemionus*) were observed foraging in the open grassland. Evidence of fossorial species was observed in the grassland, including small dirt piles and rodent tunnels, despite it being imported topsoil over fill material. Birds in the grassland were limited to house finch (*Haemorhous mexicanus*) and California towhee (*Melozone crissalis*). Western fence lizards (*Sceloporus occidentalis*) were observed on the periphery of the grassland near the rock outcrops.

The woodland areas surrounding the main waste disposal area and open grassland support a diversity of species. These wooded areas support native tree and shrub cover. The coast live oak and blue oak trees are especially valuable to wildlife. These native trees provide food, shelter, and nesting opportunities for a variety of native wildlife, including a number of species that are closely associated with them. Every aspect of the oak tree is utilized as forage, including acorns, leaves, twigs, pollen, roots, and sap. The trees themselves contain nooks, crannies, and perches where wildlife can live, breed, and take shelter. Birds were abundant in the wooded areas. These included

[4] Under Chapter 12.45 Trees on Private Property, these include valley oaks (*Q. lobata*), coast live oak, black oak (*Q. kelloggii*), California bay, and black walnut (*Juglans hindsi*) over 12 inches or greater in diameter, blue oak 6 inches or greater in diameter, and coast redwood (*Sequoia sempervirens*) 36 inches or greater in diameter.

[5] DBH = Diameter at Breast Height

both year-round residents, seasonal migrants, and winter residents based on the field visit timing. Representative species included California scrub-jay (*Aphelocoma californica*), oak titmouse (*Baeolophus inornatus*), ruby-crowned kinglet (*Corthylio calendula*), Anna's hummingbird (*Calypte anna*), Nuttall's woodpecker (*Dryobates nuttallii)*, dark-eyed junco (*Junco hyemalis*), bushtit (*Psaltriparus minimus*), and white-breasted nuthatch (*Sitta carolinensis*). A great horned owl (*Bubo virginianus*) was observed roosting in an oak tree on the vertical walls above the main disposal area in both March and April. Whitewash was observed below its roost, along with an opossum carcass. California ground squirrels (*Otospermophilus beecheyi*) were observed in the wooded areas; burrows were carved into the rock on the vertical faces. Black-tailed deer were observed in the wooded areas as well. Bats could roost in the trees and forage over the site, but no evidence of them was observed during a survey of the trees.

3.4 Wildlife Connectivity

Wildlife movement is essential for their survival. This includes both the day-to-day movements needed for wildlife to acquire food, shelter, and mates, but also for dispersal and migration to ensure gene flow, recolonization of unoccupied habitat, and geographic shifts in response to climate change. Movement is necessary to maintain healthy ecological and evolutionary processes. Habitat linkages are landscape connections that facilitate movement between large, core habitat areas for diverse organisms and processes. These can be critical at both the local and regional levels. Wildlife crossings are structures that allow animals to cross over human-made barriers to allow collections between habitats or allow animals to navigate through areas where they would be prone to vehicle collisions. Barriers can include urban development, roads, fences, and open areas with limited cover. Crossings can range in size from small culverts and underpasses to larger overpasses or green bridges.

The project site is undeveloped, but it is located within a residential community just outside the city. It is bordered by residences to the north, east, and south. Pacscale Place, a paved residential street, forms the western boundary. A cemetery is located across Pascale Place to the west. The adjacent residential properties are separated by fences or partially fenced. Wildlife likely travel through the site; however, the boundary fencing may restrict wildlife movement to a certain degree. The remedial action project will be concentrated in an existing residential neighborhood and outside of any critical wildlife corridor.

4 Special-status Species and Habitats

4.1 Special-status Species Definition

Special-status Species is a term used primarily in the California regulatory community for species that are considered sufficiently rare and require special consideration and/or protection. They are defined as follows:

- Species listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (ESA) and California Endangered Species Act (CESA);
- Animals designated by CDFW as Species of Special Concern or Fully Protected;
- Plants considered by the California Native Plant Society to be rare, threatened, or endangered in California (List 1B, 2, 3, and 4);
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code);
- Species considered sensitive by other federal agencies (i.e., US Fish and Wildlife Service, US Forest Service, Bureau of Land Management) or State and local agencies or jurisdictions; and
- Species that meet the definitions of rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines.

4.2 Special-status Species Evaluation Criteria

The potential for each special-status species identified during the background review was evaluated for potential occurrence within the project site. The potential for special-status species to occur on the site is based on the existing site conditions, known distribution and habitat requirements of the species, and the professional expertise of the biologist completing this assessment. The following criteria were used:

No Potential – Suitable habitat is not present, and/or the project site is outside the species' range.

Not Expected – Habitat is generally unsuitable or of very poor quality, key habitat elements are absent, and/or the project site is isolated from the nearest extant occurrences. The species is not expected to be found within the project site.

Moderate Potential – Marginally suitable habitat or some key habitat elements that could support this species are present within the project site or immediately adjacent to the site. Species has a moderate potential to occur within the project site.

High Potential – All of the habitat components required by this species are present, and/or the suitable habitat is adjacent to the project site. This species would be expected to be found during focused field surveys. Species has a high potential to occur within the project site.

Present – Species was observed directly or indirectly during surveys and/or known from reported occurrences that are believed to be still extant.

4.3 Special-status Plants

Based on the background review, a list of special-status plants with the potential to occur within the project site was generated. The background review identified 25 plant species with reported occurrences within the region (Table 3; CDFW 2025a and USFWS 2025a). Table 3 details all special-status plant species documented within a 5-mile radius of the project site as well as any of the other special-status species identified in the database review that could potentially occur based on ecological considerations; the table includes their listing status, habitat requirements, and the potential for occurrence within the site.

No special-status plants were observed during the March and April 2025 botanical surveys of the project site. An additional survey is planned for May 2025 to coincide with the peak blooming periods of special-status plants, but none are expected to be found. The proposed remediation work will be completed within the main waste disposal area. This area has a long history of disturbance, first as a former rock quarry and then as a dump site. The surface of the site supports a topsoil layer over geocomposite drainage net and polyethylene membrane, foundation fill, and waste. Native soils and intact native plant communities are absent from the proposed remediation work area. The surrounding vertical walls, rock outcrops, and upper terrace support native bedrock and soil and oak woodland; however, no work will occur there, and no special-status plants have been observed in these locations to date. The proposed remediation work area is highly disturbed, making it unsuitable for special-status plants. This lacks native vegetation communities, hydrological and topographic conditions, and unique soil characteristics necessary to support species-status plants. The project is not likely to impact special-status plants.

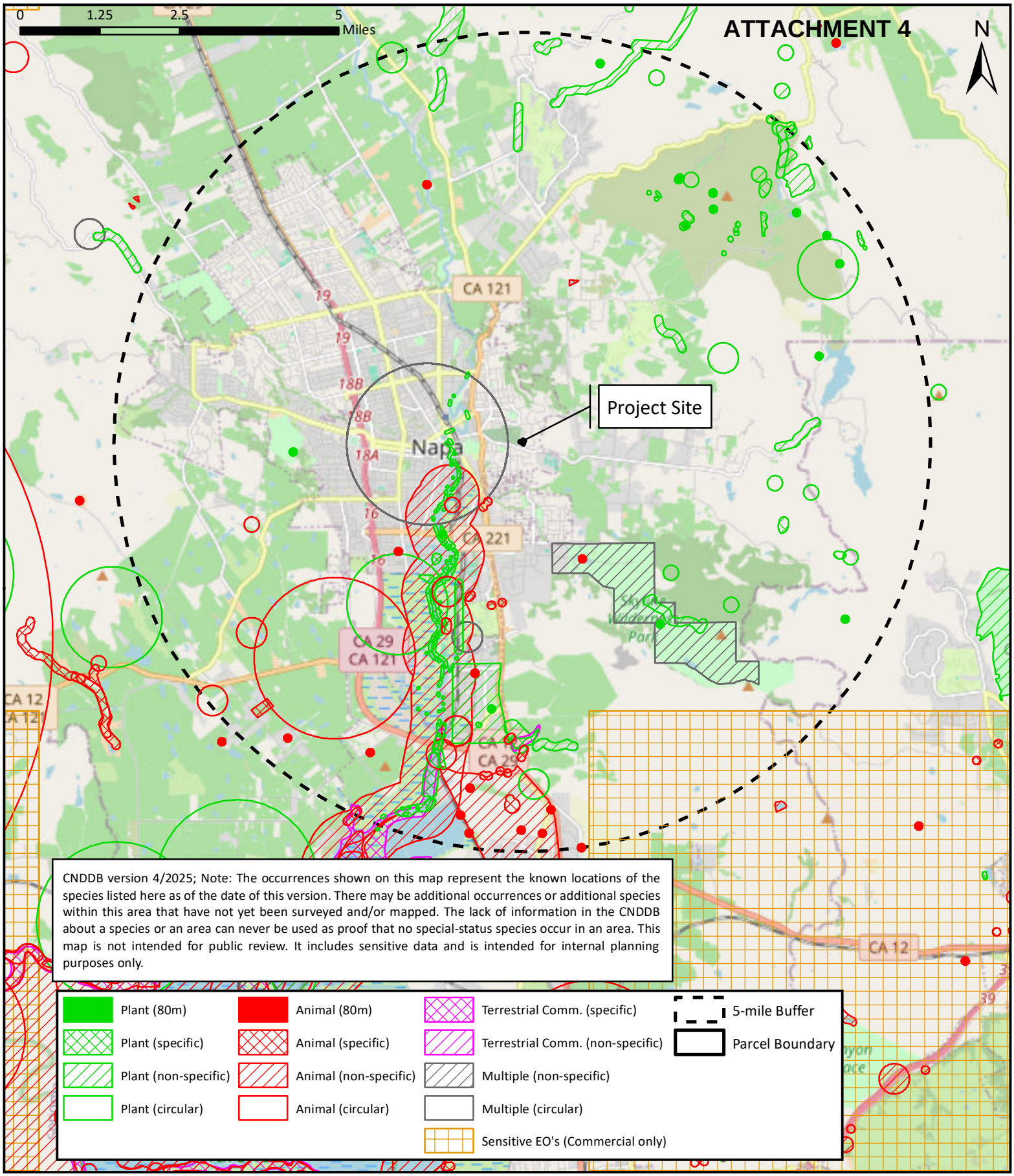

Figure 3. California Natural Diversity Database Occurrences

Biological Resources Assessment
Hidden Glen Remediation Project, City of Napa
April 2025

Sources: Street Map - ESRI, Parcel - City of Napa, CNDDB Occurrences - CDFW

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4.4 Special-status Animals

Based on the background review, a list of special-status animals with the potential to occur within the project site was generated (Table 4; CDFW 2025a and USFWS 2025a). The background review identified 29 animal species with reported occurrences within the region. Table 4 details all special-status animal species documented within a 5-mile radius of the project site as well as any of the other special-status species identified in the database review that could potentially occur based on ecological considerations; the table includes their listing status, habitat requirements, local observations, and the potential for occurrence within the site.

Two special-status animal species were observed during the biological surveys of the project site and surrounding habitats. These included oak titmouse (*Baeolophus inornatus*) and Nuttall's woodpecker (*Dryobates nuttallii*), both USFWS Birds of Conservation Concern and common birds of oak woodlands and wooded suburban areas in Napa County. The project site, including areas of proposed remediation work, supports habitat features, including native trees and understory vegetation that may support protected nesting birds, including oak titmouse and Nuttall's woodpecker, and limited roosting habitat for common and special-status bats. Protected nesting birds and bats are described further below. Recommended protection measures are included in the conclusions section.

The remaining special-status animal species identified in the review of background literature were determined to have no or low potential to occur within the project site due to the absence of suitable habitat elements in and immediately adjacent to the site. For these species, the project site lacks the required native vegetation communities, perennial or intermittent streams, ecologically significant wetland habitats, and other wildlife habitat features such as dens, burrows, and other habitat features necessary to support most of the species-status animals identified. The project site is also constrained by the lack of interconnectivity to the documented occupied habitat.

<u>Protected Nesting Birds</u>

There are over 300 bird species that have been documented in Napa County, including 156 that have possible to confirmed breeding status in Napa County (Berner et al. 2003). These include a wide range of species, from habitat generalists to specialists, year-round residents, winter residents, summer residents, spring and fall migrants, and rare vagrants. Bird species of concern are reported in CDFW's CNDDB, USFWS (2025a), and other bird reporting databases (eBird, iNaturalist). USFWS also identifies migratory and non-migratory Birds of Conservation Concern (beyond those already designated as threatened or endangered) that represent species of high conservation priority that deserve proactive attention (USFWS 2021).

Native birds are protected under several federal and State regulations, including the Migratory Bird Treaty Act of 1918 (MBTA; 50 CFR 10.13), Bald and Golden Eagle[6] Protection Act of 1940 (16 USC 668-668c), Endangered Species Acts, California Fish and Wildlife Code (§3503, 3503.5, and §3513), and California Endangered Species Act. All native nesting birds, with a few exceptions, are protected under these laws. Non-nesting protections extend to golden and bald eagles, CDFW fully protected species, and listed species and their habitats listed under the ESA and CESA.

Under the federal MBTA, "it is unlawful to pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg or any such bird unless authorized under a permit issued by the Secretary of the Interior. Take is defined as: 'pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect". The Migratory Bird Treaty Reform Act (MBTRA) of 2004 updated the criteria for species to be protected under the MBTA to include "all species native to the United States or its territories, which are those that occur as a result of natural biological or ecological processes." The MBTA does not protect "nonnative species whose occur in the US are solely the result of intentional or unintentional human-assisted introduction." Within California, these exceptions include non-native European starling (*Sturnus vulgaris)*, house sparrow (*Passer domesticus*), rock pigeon (*Columba livia)*, and non-migratory game birds such as California quail, pheasant, and grouse, wild turkey in the families Odontophoridea and Phasianidae. However, non-migratory game birds are protected under the California Fish and Game Code. Under §3503 of the California Fish and Game Code, "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Under §3513 of the California Fish and Game Code, "it is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA."

Construction activities in areas with nesting birds can result in the alteration of the nesting habitat and disruption of nesting activities. Construction activities (including grading, vegetation removal, and worker presence) can result in the destruction of eggs or occupied nests, mortality of young, and the abandonment of nests with eggs or young birds before fledging. If construction-related activities are scheduled during the nesting season, preconstruction nesting bird surveys are required to be completed by a qualified biologist. If nesting birds are found, protection buffers are required, and ongoing monitoring may be necessary. If work is delayed, additional surveys may also be required. Implementation of standard construction Best Management Practices that limit construction activities, including vegetation removal, to the non-nesting season (typically September 1 – January 31) can avoid impacts on native nesting birds. Native birds typical of human-dominated landscapes and suburban woodland and grasslands habitat may occur seasonally or year-round within the project site. Several bird species were observed within the project site, including the oak titmouse and Nuttall's woodpecker, Birds of Conservation Concern

[6] Bald and golden eagles are reported on USFWS IPac list (USFWS 2025a). However, suitable habitat is not present, and these species are not discussed further in this section; see Table 4.

with USFWS. Native birds may nest within the project site. Nesting birds should be protected per the recommendations provided below.

Common and Special-status Bats

In California, 25 species of bats have been reported, with approximately 15 species reported in the San Francisco Bay area (CDFW 2016a, Zeiner et al 1990). Some species of bats in this region are year-round residents, while others are seasonal. Ten of California's bat species are listed as Species of Special Concern by CDFW. There are no federally or state-listed bat species occurring within California; therefore, ESA and CESA protections for bats do not apply. There are no laws in California protecting bats as a specific wildlife taxonomic group; however, CEQA requires State and local agencies within California to follow a protocol of analysis and public disclosure of environmental impacts of a proposed project and adopt measures to mitigate those impacts. CEQA is the single most important law protecting bats, including SSCs and large roosting colonies, within California. The National Forest Service, Bureau of Land Management, and the Western Bat Working Group (WBWG) have identified sensitive bat species and ranked them accordingly. CDFW tracks WBWG priority species; WBWG priority species may be reviewed during CEQA.

Bats forage over a range of habitats and use a variety of features for roosting, including caves, mines, trees, bridges, and buildings. Bat roosts provide security and protection where bats can rest, sleep, hibernate, mate, socialize, and feed. Bats will move between different roost sites throughout the year to support their life cycle requirements. Roosting behavior is species-dependent. Bats will roost in colonies or as solitary individuals. Bats will also use a range of different features within a roost. Some bats prefer cavities, such as open surfaces; some like crevices, and some use both at different times. A few species will also roost in foliage. Bat roosts are generally defined as the following: 1) hibernation/winter – roosts that are used for extended periods of torpor or hibernation during low temperatures and when food supplies are limited (late fall to early spring), 2) transient - sites used by bats when moving between hibernacula and maternity roosts, often where breeding occurs (spring and fall), 3) day – used by individual bats or small groups of males and non-breeding females to rest or shelter during the day in the breeding season (sunrise to sunset), 4) night– used by individuals or groups of bats to rest and digest food between foraging bouts (sunset to sunrise), and 5) maternity (nursery) – used by females for raising young; these roosts are generally thermally stable, with a low risk of falling and predation of pups (April – August). Bats are particularly vulnerable to disturbance during the maternity season and during winter hibernation. During the maternity season (typically April 15 – September 1), bats are especially vulnerable as females are nursing pups, and the pups are non-volant (not capable of true flight). In the fall, when nighttime temperatures drop below 45^{o}F and the onset of rainfall greater than ½" in 24 hours, bats enter sustained torpor for winter hibernation or maintain a low level of activity; they become more active around March 1 when nighttime temperatures are above 45^{o}F, and rainfall is less than ½" in 24 hours.

Construction activities have the potential to negatively impact bats through direct disturbance to roosting individuals, mortality, and temporary or permanent loss of roosting habitat. The presence

of construction equipment and personnel can disturb bats through noise and vibrations. Modifications to roosting habitat can impact a bat's ability to use a roost through changes to entrances, airflow, temperature, and humidity. Modification or removal of suitable roost trees or structures can displace bats. Disruption of bat roosts during the maternity and overwintering periods can impact breeding success, bat fitness, and survivability. Most construction projects are not likely to disrupt the foraging behavior of bats, as bats are mostly nocturnal, and work is generally restricted to daylight hours.

One bat species, the pallid bat (*Antrozous pallidus*), is reported within a 5-mile buffer of the project (CDFW 2025a; see Table 4). Additional bat species may be present; however, bats are generally underrepresented in the CNDDB. Suitable bat roosting and foraging habitat is present within the project site. Bats could roost in the mature oak trees, especially in the trees with hollows and crevices. The trees proposed for removal were inspected for the presence of bats. This included observing evidence of live or dead bat specimens, bat fecal pellets, urine splashes, and squeaking noises. No evidence of bats was observed. Bats may roost in the mature trees and forage over the site. Construction will occur only during daylight hours and will not interfere with the foraging ability of bats. Construction could require the removal of a number of trees (greater than 12” in DBH with suitable roost sites). Roosting bats should be protected per the recommendations provided below during any tree removal.

5 Sensitive Natural Communities

Sensitive natural communities are vegetation communities that are considered sensitive by the California Department of Fish and Wildlife based on the range and distribution of a given type of vegetation, the proportion of occurrences that are of good ecological integrity, and threats and trends. Communities are evaluated at both a global (full range within and outside of California) and state (within California) using NatureServe's Heritage Program methodology. Rankings include a single G (global) and S (state) rank ranging from 1 (very rare and threatened) to 5 (demonstrably secure), with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. CDFW maintains the California Sensitive Natural Communities list of current vegetation alliances, associations, special stands, and their global and state rarity ranks (CDFW 2025e), as well as the Manual of California Vegetation (Sawyer et al. 2009). It should be noted that some alliances that are not considered sensitive may contain associations that are listed as sensitive by CDFW. Sensitive natural communities may also be identified in local or regional plans, policies, or regulations. Impacts on sensitive natural communities must be considered and evaluated under the CEQA (CCR Title 14, Div. 6, Chap. 3, Appendix G).

As described under Existing Plant Communities, the main waste disposal area and area of proposed remediation is dominated by non-native annual grasses and forbs and is classified as the *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance (wild oats and annual brome grasslands; CNPS 2025a). The surrounding vertical walls, rock outcrops, and upper terrace support native woodlands classified as *Quercus douglasii* Forest and Woodland Alliance (blue oak woodland and forest; CNPS 2025a). The southwestern corner includes several coast live oak trees; at this location, *Quercus agrifolia* is the only oak species. This area would be characterized as a remnant stand of *Quercus agrifolia* Forest and Woodland Alliance due to its current size of a few oak trees (CNPS 2025a).

The wild oats and annual broom grasslands are dominated by non-native species and are not considered sensitive. The blue oak woodland and forest association present on the site is *Quercus douglasii – Quercus agrifolia*; CDFW CA Code 71.020.01. This is ranked G4 S4 and is not considered sensitive (CDFW 2025d). The coast live oak woodland and forest association present on the site is *Quercus agrifolia*/grass; CDFW CA Code 71.060.09. This is ranked G5 S5 and is not considered sensitive (CDFW 2025d). Based on the current alliances and associations, no sensitive plant communities are present within the project site.

6 Aquatic Resources

Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources. They fall under the jurisdiction of several regulatory agencies. The US Army Corps of Engineers exerts jurisdiction over "waters of the US." They regulate the discharge of dredged or fill material into Waters of the US under Section 404 of the Clean Water Act and regulate structures or work in navigable Waters of the US under Section 10 of the Rivers and Harbors Appropriation Act of 1899. The Regional Water Quality Control Board also regulates "waters of the state" under the Porter-Cologne Water Quality Control Act and the federal Clean Water Act. CDFW regulates wetlands and riparian resources associated with rivers, streams, and lakes under the California Fish and Game Code.

Waters of the US include "the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide, tributaries, lakes, and ponds, and impoundments of jurisdictional waters; and adjacent wetlands" (85 FR 22340). Waters of the State include "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050(e)). This is broadly construed to include all waters within the State's boundaries, whether private or public, including both natural and artificial channels.

Wetlands include swamps, bogs, seasonal wetlands, seeps, marshes, and other aquatic habitats. 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." They are typically delineated based on the presence of wetland plants, soils, and hydrology indicators. Under SB9, wetlands are defined based on the United States Fish and Wildlife Service Manual, Part 660 FW 2, June 21, 1993 (USFWS 1993).

As described under *Existing Conditions*, the project site contains no wetlands or other natural aquatic habitat features, such as stream channels or drainages. There is a small unvegetated rocked depression at the western edge of the site, but it does not appear to carry water from the site. There is a grated storm drain along Pascale Place to capture street runoff. No evidence of hydrophytic vegetation, hydric soils, and stream or wetland hydrology was observed during biological surveys of the site. All of the plant communities present are dominated by upland grasses, forbs, and woody vegetation.

7 Conclusions

The City of Napa is proposing to conduct remedial action activities at the former Hidden Glen Dump site. The 2.18-acre City-owned property is located near the intersection of Pascale Place and Glory Court in Napa, CA (APN #045-411-022-000). The site was initially an excavated quarry that operated into the 1940s. After quarry operations were abandoned, the site was used as a general garbage dump by a private operator until it was abandoned in the 1960s. In 2001, a landfill cap was installed at the dump site. During a 2018 site investigation, waste-impacted soils and high lead concentrations were detected, exceeding environmental standards. The City is proposing a remediation project to remove the contaminated soil and cover it with imported clean fill.

Swift Biological Consulting LLC was retained by RCH Group through a contract with the City of Napa to complete a biological resources assessment of the proposed remediation project. This section summarizes the biological resources present on the site based on the background literature, data search, and field surveys and provides conservation measures that should be incorporated into the project. The following discussion is based on a review of the site and the proposed actions outlined in the Remedial Action Plan (Ninjo & Moore 2024) and project documentation provided by the City of Napa.

7.1 Existing Plant Communities

Vegetation communities mapped within the project site include wild oats and annual brome grasslands, blue oak woodland, and remnant coast live oak woodland. The main waste disposal area, and the area of proposed remediation, is an open and relatively flat area. It is dominated by non-native annual grasses and forbs. This area supports primary introduced annual grasses such as wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft chess (*B. hordeaceus*), perennial rye grass (*Festuca perennis*), foxtail barley (*Hordeum murinum*), and other herbaceous non-native species. Native cover is less than 5% within the non-native annual grassland. Surrounding the main disposal area are vertical walls and a rock outcrop to the south, all remnants from the quarry operation. The rock faces are partially vegetated, and there is a stand of intact native woodland on the terrace above the cliffs along the eastern boundary. These areas support stands of native coast live oak (*Quercus agrifolia*), blue oak (*Quercus douglasii*), gray pine (*Pinus sabiniana*), California bay (*Umbellularia californica*), and toyon (*Heteromeles arbutifolia*). The understory supports some native shrubs and herbaceous species but is predominately non-native plants. The southwestern corner of the project site supports a small stand of coast live oak with poison oak (*Toxicodendron diversilobum*) and annual grasses in the understory.

The project will require the removal of several native coast live trees along Pascale Place and/or near the proposed access road off a paved private driveway to the lot east of the City-owned property. Along Pascale Place, there are two smaller oaks (3 to 4 inches in diameter) on the lower slope and a cluster of three larger trees (15 to 20 inches in diameter) on the upper slope. Near the proposed access road at the southwest corner, there is a multi-trunk coast live oak tree that may need to be removed along with some trimming of larger branches of nearby trees. The remaining

trees on the site will be protected in accordance with the Tree Protection Notes and Tree Protection Fencing specifications outlined in the Hidden Glen Dump Remediation Demolition Plan under the guidance of a certified arborist (see Sheet 3 of 5; Ninyo & Moore 2024).

7.2 Sensitive Natural Communities

Based on the current alliances and associations, no sensitive plant communities are present within the project site. The main waste disposal area and area of proposed remediation is dominated by non-native annual grasses and forbs and is classified as the *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance (wild oats and annual brome grasslands; CNPS 2025a). This is not a sensitive natural community. The surrounding vertical walls, rock outcrops, and upper terrace support native woodlands classified as *Quercus douglasii* Forest and Woodland Alliance (blue oak woodland and forest; CNPS 2025a). This is ranked G4 S4 and is not considered sensitive (CDFW 2025d). The southwestern corner includes several coast live oak trees; at this location, *Quercus agrifolia* is the only oak species. Due to its current size of a few oak trees, this area would be characterized as a remnant stand of *Quercus agrifolia* Forest and Woodland Alliance (CNPS 2025a). This is ranked G5 S5 and is not considered sensitive (CDFW 2025d).

7.3 Aquatic Resources

The project site does not contain any wetlands or other natural aquatic habitat features, such as stream channels or drainages. There is a small unvegetated rocked depression at the western edge of the site, but it does not appear to carry water from the site. There is a grated storm drain along Pascale Place to capture street runoff. No evidence of hydrophytic vegetation, hydric soils, and stream or wetland hydrology was observed during biological surveys of the site. All of the plant communities present are dominated by upland grasses, forbs, and woody vegetation.

7.4 Special-status Plants

Information on special-status plant species and their habitats was compiled through a review of background literature and databases (Table 3; CDFW 2025a and USFWS 2025a). The background review identified 25 plant species with reported occurrences within the region. Botanical surveys of the project site were completed in March and April 2025. An additional survey is planned for May 2025 to coincide with peak blooming periods for special-status plants. No special-status plants have been observed, and no special-status plant species are expected to be found within the project site. The proposed remediation work will be completed within the main waste disposal area. This area has a long history of disturbance, first as a former rock quarry and then as a dump site. The surface of the site supports a topsoil layer over geocomposite drainage net and polyethylene membrane, foundation fill, and waste. Native soils and intact native plant communities are absent from the proposed remediation work area. The surrounding vertical walls, rock outcrops, and upper terrace support native bedrock and soil and oak woodland; however, no work will occur there, and no special-status plants have been observed in these locations to date. The proposed remediation work area is highly disturbed, making it unsuitable for special-status

plants. This area lacks native vegetation communities, hydrological and topographic conditions, and unique soil characteristics necessary to support species-status plants. The project is not likely to impact special-status plants.

7.5 Special-status Animals

Information on special-status wildlife species and their habitats was compiled through a review of background literature and databases (Table 4; CDFW 2025a and USFWS 2025a). The background review identified 29 animal species with reported occurrences within the region. During the wildlife surveys completed in March and April 2025, two special-status animal species were observed. These included oak titmouse (*Baeolophus inornatus*) and Nuttall's woodpecker (*Dryobates nuttallii*), both USFWS Birds of Conservation Concern and common birds of oak woodlands and wooded suburban areas in Napa County. The project site, including areas of proposed remediation work, supports habitat features, including native trees and understory vegetation that may support protected nesting birds, including oak titmouse and Nuttall's woodpecker, and limited roosting habitat for common and special-status bats. Nesting bird and roosting bat protection measures are outlined below. The remaining special-status animal species identified in the review of background literature were determined to have no or low potential to occur within the project site due to the absence of suitable habitat elements in and immediately adjacent to the site. For these species, the project site lacks the required native vegetation communities, perennial or intermittent streams, ecologically significant wetland habitats, and other wildlife habitat features such as dens, burrows, and other habitat features necessary to support most of the species-status animals identified. The project site is also constrained by the lack of interconnectivity to the documented occupied habitat.

7.6 Nesting Birds

The project site supports breeding habitat for native bird species. Breeding birds are protected under the Migratory Bird Treaty Act, California Fish and Game Code, and federal and state ESAs. Project activities (including vegetation removal, grading, or other ground-disturbing activities) could result in the alteration of the nesting habitat and disruption of nesting activities. Construction activities can result in the destruction of eggs or occupied nests, mortality of young, and the abandonment of nests with eggs or young birds before fledging. To avoid potential impacts on native nesting birds, the following protection measures will be implemented:

- Preconstruction nesting bird surveys will be completed from February 1- August 31. A survey will be completed within 7 days before the beginning of project-related activities. The survey area will include the project site and an appropriate buffer around the site to identify any nesting that could be impacted directly or indirectly by the project-related activities. The survey will follow established nesting search protocols described in Martin and Geupel (1993) and CDFW and USFWS protocols, where appropriate. If the qualified biologist finds no active nests or breeding activity indicating nests are present, then work can proceed without

restrictions. If there is a lapse in project-related activities for 7 days or more, then a follow-up survey may be required per the recommendations of the qualified biologist.

- If active nests are identified during the survey and the nests are within the project site or the buffer area and nesting would be adversely affected, a "No Work Zone" buffer area will be demarcated around each nest site by the qualified biologist. Buffer distances for each bird nest will be site-specific and established to protect the bird's normal behavior to prevent nesting failure or abandonment. The buffer distance will vary by species, nest location, existing visual and topographical buffers, and intensity and extent of the construction-related disturbance. The buffer area may be as small as 25-50 feet for common, disturbance-adapted species or much larger (e.g., 100-250 feet) for sensitive species like raptors and owls. The "No Work Zone" will be established in the field with flagging, fencing, or other appropriate material and remain in place until all young in the nest have fledged or the nest otherwise becomes inactive due to predation or other natural causes as determined by the qualified biologist. The qualified biologist will continue to monitor the behavior of the birds at the nest site during construction activities to ensure that they are not disturbed by the project work. Nest monitoring will continue until the nesting attempt is complete. If state and/or federally-listed birds are found breeding within the area, consultation with the CDFW and USFWS may be required.
- If initial ground-disturbing activities occur outside of the nesting season (September 1 through January 31), then a preconstruction survey would not be required, and construction could begin unimpeded.

7.7 Special-status Bats

The project site supports potential roosting (tree) and foraging habitat for special-status and common bat species. Bats may be present within the trees during construction and forage over the site. Work will be restricted to daylight hours; therefore, no impacts on foraging bats are anticipated. Project construction activities could result in direct impacts on roosting bats if suitable roost trees are removed or significantly trimmed. Indirect impacts can occur as a result of increased human presence and noise during construction. To avoid potential impacts on roosting bats, the following precautionary measures will be implemented:

- Before tree removal/trimming (branches over 12" DBH), a qualified biologist will survey for potential bat roosts and occupied habitats. If active bat roosts are identified within the trees to be removed, the disturbance will not be allowed until the roost is abandoned or unoccupied.
- If tree trimming/removal is postponed or interrupted for more than two weeks from the date of the initial bat survey, the biologist will repeat the pre-construction survey.
- Tree removal or trimming is recommended from September 1 to October 15 or March 1 to April 15 to avoid the bat maternity roost and winter hibernation season.
- To the extent feasible, tree work should be avoided between April 15 and September 1 during the maternity roost season [bats are especially vulnerable during this period when females are nursing pups, and the pups are non-volant (not capable of true flight)].

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9 Photographs

Photographs dated March 19 and April 8, 2025

Looking east (above) and west (below) at the waste disposal site.

Looking northwest (above) and southwest (below) at the waste disposal site.

Looking southeast at the waste disposal site (above) and grassland conditions (below).

Vertical quarry walls adjacent to the disposal site.

Rocked depression leading to Pascale Place at the western edge of the site (above).
Coast live oak trees proposed for removal near Pascale Place (below).

Frontage off Pascale Place (above) and looking downslope to Pascale Place from the site (below).

Existing methane gas monitoring wells.

Coast live oak tree proposed for removal near the proposed access road and monitoring well (above) and access road area on adjacent property (below).

Ook woodland on the upper terrace above the waste disposal site.

10 Tables

Table 1. Plants Species Observed During Botanical Surveys, March – April 2025

Common Name	Scientific Name	Native or Non-native
American century plant	*Agave americana*	non-native
common fiddleneck	*Amsinckia intermedia*	native
wild oat	*Avena fatua*	non-native
coyote brush	*Baccharis pilularis*	native
ripgut brome	*Bromus diandrus*	non-native
soft chess brome	*Bromus hordeaceus*	non-native
milk maids	*Cardamine californica*	native
Italian thistle	*Carduus pycnocephalus*	non-native
soap plant	*Chlorogalum pomeridianum*	native
bullthistle	*Cirsium vulgare*	non-native
miner's lettuce	*Claytonia perfoliata*	native
Sticky monkeyflower	*Diplacus aurantiacus*	native
blue dicks	*Dipterostemon capitatus*	native
broad leaf filaree	*Erodium botrys*	non-native
red stemmed filaree	*Erodium cicutarium*	non-native
California poppy	*Eschscholzia californica*	native
brome fescue	*Festuca bromoides*	non-native
annual ryegrass	*Festuca perennis*	non-native
fennel	*Foeniculum vulgare*	non-native
cleavers	*Galium aparine*	native
French broom	*Genista monspessulana*	non-native
cut-leaf geranium	*Geranium dissectum*	non-native
herb Robert	*Geranium robertianum*	non-native
bristly ox-tongue	*Helminthotheca echioides*	non-native
toyon	*Heteromeles arbutifolia*	native
farmer’s foxtail	*Hordeum murinum*	non-native
common barley	*Hordeum vulgare*	non-native
smooth cat's ear	*Hypochaeris glabra*	non-native
miniature lupine	*Lupinus bicolor*	native
wild cucumber	*Marah fabacea*	native
burclover	*Medicago polymorpha*	non-native
Bermuda buttercup	*Oxalis pes-caprae*	non-native
phacelia	*Phacelia sp.*	native
gray pine	*Pinus sabiniana*	native
coast live oak	*Quercus agrifolia*	native
blue oak	*Quercus douglasii*	native
Endive daisy	*Rhagadiolus stellatus*	non-native

Common Name	Scientific Name	Native or Non-native
Pacific sanicle	*Sanicula crassicaulis*	native
common groundsel	*Senecio vulgaris*	non-native
blue-eyed grass	*Sisyrinchium bellum*	native
prickly sowthistle	*Sonchus asper*	non-native
common chickweed	*Stellaria media*	non-native
purple needle grass	*Stipa pulchra*	native
poison oak	*Toxicodendron diversilobum*	native
rose clover	*Trifolium hirtum*	non-native
clover	*Trifolium sp.*	non-native
California bay	*Umbellularia californica*	native
vetch	*Vicia villosa*	non-native

Table 2. Wildlife Species Observed During Botanical Surveys, March – April 2025

Common Name	Scientific Name
California Scrub-Jay	*Aphelocoma californica*
Oak Titmouse*	*Baeolophus inornatus*
Great Horned Owl	*Bubo virginianus*
Red-tailed Hawk	*Buteo jamaicensis*
Red-shouldered Hawk	*Buteo lineatus*
Anna's Hummingbird	*Calypte anna*
Ruby-crowned Kinglet	*Corthylio calendula*
American Crow	*Corvus brachyrhynchos*
Opossum**	*Didelphis virginiana*
Nuttall's Woodpecker*	*Dryobates nuttallii*
House Finch	*Haemorhous mexicanus*
Dark-eyed Junco	*Junco hyemalis*
California Towhee	*Melozone crissalis*
Northern Mockingbird	*Mimus polyglottos*
Black-tailed Deer	*Odocoileus hemionus*
California Ground Squirrel	*Otospermophilus beecheyi*
Bushtit	*Psaltriparus minimus*
Yellow-rumped Warbler	*Setophaga coronata*
Western Fence Lizard	*Sceloporus occidentalis*
White-breasted Nuthatch	*Sitta carolinensis*
European Starling*	*Sturnus vulgaris*
Violet-green Swallow	*Tachycineta thalassina*
Bewick's Wren	*Thryomanes bewickii*
*non-native **non-native	

Table 3. Special-status Plants Evaluated for Potential to Occur within the Project Site

Common Name	*Scientific Name*	Listing Status[7]	Life Form, Habitat Affinities, and Blooming Period	Potential for Occurrence within the Project Site
Franciscan onion	*Allium peninsulare var. franciscum*	1B.2	Perennial bulbiferous herb. Cismontane woodland and valley and foothill grassland; clay, volcanic, often serpentinite. Elevation: 170-1,000 feet. Blooms May-June.	Not expected. Typical habitat is not present within the project site. Additional survey planned during the reported blooming period.
alkali milk-vetch	*Astragalus tener var. tener*	1B.2	Annual herb. Alkaline playas, grassland (adobe clay), and vernal pools. Elevation: 5-195 feet. Blooms March-June.	No potential. Typical habitat not present within the project site.
narrow-anthered brodiaea	*Brodiaea leptandra*	1B.2	Perennial bulbiferous herb. Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland; volcanic soils. Elevation: 360-3,000 feet. Blooms May-July.	Not expected. Typical habitat is not present within the project site. Additional survey planned during the reported blooming period.
Brewer's caladrinia	*Calandrinia breweri*	4.2	Annual herb. Chaparral and coastal scrub; burned areas, disturbed areas, sometimes loam and sandy soils. Elevation: 35-405 feet. Blooms March-June	Not expected. Typical habitat is not present within the project site. Additional survey planned during the reported blooming period.

[7] Plant Listing Status Codes
Federal Endangered Species Act (ESA): FE - listed as endangered (in danger of extinction); FT - listed as threatened (likely to become endangered within the foreseeable future); FC - federal candidate species
California Endangered Species Act (CESA; State): SE - listed as endangered; ST - listed as threatened; SCE-state candidate to be listed as endangered; SCT-state candidate to be listed as threatened - listed as rare.
California Rare Plant Rank (CRPR): 1A - presumed extirpated in California and either rare or extinct elsewhere; 1B - rare or endangered in California and elsewhere; 2A - presumed extirpated in California, but common elsewhere; 2B - rare or endangered in California, but more common elsewhere; 3 - plants for which we need more information, a review list; 4 – plants of limited distribution, a watch list. The CRPR uses a decimal-style threat rank. The threat rank is an extension added onto the CRPR and designates the level of threats by a 1 to 3 ranking with 1 being the most threatened and 3 being the least threatened (CDFW 2025c).

Common Name	*Scientific Name*	Listing Status[7]	Life Form, Habitat Affinities, and Blooming Period	Potential for Occurrence within the Project Site
jonny-nip	*Castilleja ambigua var. ambigua*	4.2	Annual herb (hemiparasitic). Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, and vernal pools (margins). Elevation: 0-1,425 feet. Blooms March-August.	Not expected. Typical habitat is not present within the project site. Additional survey planned during the reported blooming period.
holly-leaved ceanothus	*Ceanothus purpureus*	1B.2	Perennial evergreen shrub. Chaparral and woodland; rocky, volcanic. Elevation: 395-2,100 feet. Blooms February-June.	No potential. Suitable habitat not present. No ceanothus plants present.
Tracy's clarkia	*Clarkia gracilis ssp. tracyi*	4.2	Annual herb. Chaparral (openings, and serpentinite). Elevation: 215 – 2,135 feet. Blooms April - July.	No Potential. Typical habitat and typical soil conditions are not present within the project site.
dwarf downingia	*Downingia pusilla*	2B.2	Annual herb. Vernal pools, often roadside ditches. Elevation: 5-1,460 feet. Blooms March-May.	No Potential. Typical habitat is not present within the project site.
small spike rush	*Eleocharis parvula*	4.3	Perennial herb. Marshes and swamps. Elevation: 5-9,910 feet. Blooms June-August.	No Potential. Typical aquatic habitat is not present within the project site.
Greene's narrow-leaved daisy	*Erigeron greenei*	1B.2	Perennial herb. Chaparral (serpentinite, volcanic). Elevation: 260-3,295 feet. Blooms May-September.	No Potential. Typical habitat and microhabitat soil conditions are not present within the project site.
St. Helena fawn lily	*Erythronium helenae*	4.2	Perennial bulbiferous herb. Chaparral, Cismontane woodland, lower montane coniferous forest, and valley and foothill grassland; sometimes serpentine and volcanic soils. Elevation: 1,150-4,005 feet. Blooms March-May.	Not expected. Typical habitat is not present within the project site. Additional survey planned during the reported blooming period.

Common Name	*Scientific Name*	Listing Status[7]	Life Form, Habitat Affinities, and Blooming Period	Potential for Occurrence within the Project Site
San Joaquin spearscale	*Extriplex joaquinana*	1B.2	Annual herb. Chenopod scrub, meadows and seeps, playas, and valley and foothill grassland; alkaline. Elevation: 5-2,740 feet. Blooms April-October.	No Potential. Typical habitat and microhabitat soil conditions are not present within the project site.
nodding harmonia	*Harmonia nutans*	4.3	Annual herb. Chaparral and cismontane woodland; volcanic, sometimes gravelly, rocky soils. Elevation: 245-3,200 feet. Blooms March-May.	No Potential. Typical habitat and microhabitat soil conditions are not present within the project site.
Contra Costa goldfields	*Lasthenia conjugens*	FE, 1B.1	Annual herb. Cismontane woodland, alkaline playas, valley and foothill grassland, vernal pools (mesic). Elevation: 0-1,540 feet. Blooms March-June.	No Potential. Typical habitat and microhabitat conditions are not present within the project site.
Delta tule pea	*Lathyrus jepsonii var. jepsonii*	1B.2	Perennial herb. Marshes and swamps (freshwater and brackish). Elevation: 0-15 feet. Blooms May-July.	No Potential. Typical aquatic habitat not present within the project site.
legenere	*Legenere limosa*	1B.1	Annual herb. Vernal pools. Elevation: 5-2,885 feet. Blooms April-June.	No Potential. Typical aquatic habitat is not present within the project site.
bristly leptosiphon	*Leptosiphon acicularis*	4.2	Annual herb. Grassland, woodland, and chaparral. Elevation: 55-1500 m. Blooms April-July.	Not expected. Typical habitat is not present within the project site. Additional survey planned during the reported blooming period.
Jepson's leptosiphon	*Leptosiphon jepsonii*	1B.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland; usually volcanic soils. Elevation: 330-1,640 feet. Blooms March-May.	Not expected. Typical habitat is not present within the project site. Additional survey planned during the reported blooming period.

Common Name	*Scientific Name*	Listing Status[7]	Life Form, Habitat Affinities, and Blooming Period	Potential for Occurrence within the Project Site
Mason's lilaeopsis	*Lilaeopsis masonii*	CR, 1B.1	Perennial rhizomatous herb. Marshes and swamps (brackish and freshwater), riparian scrub. Elevation: 0-35 feet. Blooms April-November.	No Potential. Typical aquatic habitat is not present within the project site.
Lobb's aquatic buttercup	*Ranunculus lobbii*	4.2	Annual aquatic herb. Vernal pools. Elevation: 50-1,540 feet. Blooms February-May.	No Potential. Typical aquatic habitat is not present within the project site.
Suisun Marsh aster	*Symphyotrichum lentum*	1B.2	Perennial rhizomatous herb. Marshes and swamps (brackish, and freshwater). Elevation: 0-10 feet. Blooms May-November	No Potential. Typical aquatic habitat not present within the project site.
Napa bluecurls	*Trichostema ruygtii*	1B.2	Annual herb. Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, and vernal pools. Elevation: 100-2,230 feet. Blooms June-October.	Not expected. Typical habitat is not present within the project site. Additional surveys planned during the reported blooming period.
two-fork clover	*Trifolium amoenum*	FE, 1B.1	Annual herb. Coastal bluff scrub, valley and foothill grassland (sometimes serpentinite); moist, heavy soils, disturbed areas. Elevation: 15-1,360 feet. Blooms April-June.	Not expected. Typical habitat is not present within the project site. Additional surveys planned during the reported blooming period.
saline clover	*Trifolium hydrophilum*	1B.2	Annual herb. Salt marshes and swamps, grassland (mesic, alkaline), vernal pools. Elevation: 0-985 feet. Blooms April-June.	No potential. Typical habitat is not present within the project site.
oval-leaved viburnum	*Viburnum ellipticum*	2B.3	Perennial deciduous shrub. Chaparral, woodland, lower montane coniferous forest. Elevation: 705-4,595 feet. Blooms May-June.	Not expected. Typical habitat is not present within the project site. Additional survey planned during the reported blooming period.

Table 4. Special-status Animals Evaluated for Potential to Occur within the Project Site

Common Name *Scientific Name*	Listing Status[8]	Habitat Requirements	Local Observations[9] and Potential for Occurrence within the Project Site
Amphibians			
California Giant Salamander *Dicamptodon ensatus*	SSC	One of the largest terrestrial salamanders in North America. Primarily nocturnal. Occurs in wet coastal forests near permanent and semi-permanent streams and seepages. Adults are generally found within 150 feet of aquatic habitat. Remain underground in retreats and are more active during the rainy season. Breeding occurs in spring and sometimes fall. Reproduction is aquatic. Larvae are stream-dwelling and require 18-24 months to transform. Eat small vertebrates and invertebrates.	No potential. California giant salamanders are known from sightings over 5 miles from the project site. Suitable upland and perennial stream habitats are not present within the project site.
Foothill Yellow-legged Frog *Rana boylii pop.1* North Coast DPS	SSC	Found in small tributary streams with perennial water. Breeding and rearing streams are generally sunlit with microhabitat features (e.g., boulders) and low flow velocities. Typically found within close proximity to the stream channel, small upland movements have been noted. Non-breeding habitat also includes adjacent terrestrial riparian habitat and nearby features that provide high-flow refuge. Breeding occurs in spring after winter runoff has subsided (typically May-June). Eggs attached to rock and vegetative substrates in shallow, slow-moving water. Mostly active during daylight. Adults consume a variety of aquatic invertebrates. Tadpoles graze algae and detritus.	No potential. Foothill yellow-legged frogs are known from both extirpated and extant sightings in the Napa River watershed over 5 miles from the project site. Suitable aquatic habitat is not present within the project site.
California Red-legged Frog *Rana draytonii*	FT, SSC	Largest native frog in the western US. Breed in a variety of aquatic habitats with still to slow-moving water and emergent vegetation must hold water into late summer or early fall. Found in streams, ponds, marshes, sag ponds, dune ponds, and lagoons, including both natural and manmade features. Non-breeding habitat includes areas used for breeding and other non-breeding habitats such as springs, vegetated seeps, riparian habitat, and oftentimes other less conspicuous upland locations like burrows and leaf litter. Breeding occurs between November and April (egg-laying is generally January – February). Eggs are deposited in a large grapefruit-sized mass on emergent vegetation just below the water's surface. Variable diet.	No potential. There are no reported occurrences of this species within 5 miles of the project site. Species reported on USFWS IPac list. Suitable habitat is not present within the project site.

[8] Animal Listing Status Codes
Federal: FE-federally listed as endangered, FT-federally listed as threatened, FC-federal candidate species, BCC-USFWS Bird of Conservation Concern
State: SE-state listed as endangered, ST-state listed as threatened, SC (Endangered)-state candidate to be listed as endangered under CESA, Candidate SE-state candidate to be listed as endangered under CESA, SC (Threatened)-state candidate to be listed as threatened under CESA, FP-CDFW fully protected, SSC-CDFW Species of Special Concern, and WL-CDFW Watch List (CDFW 2025b).
[9] Occurrence information based on CDFW's California Natural Diversity Database (CDFW 2025a).

Common Name *Scientific Name*	Listing Status[8]	Habitat Requirements	Local Observations[9] and Potential for Occurrence within the Project Site
Western Spadefoot *Spea hammondii*	FC (Threatened), SSC	A small 1 ½ to 2 ½-inch toad of mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Requires open areas with sandy or gravelly soils spends most of its life buried underground in earth-filled burrows. The species is completely terrestrial, only entering the water to breed. Breeds from January through May, peaking in February and March, 1-2 days after heavy rains. Breeding occurs in temporary pools or quiet streams without bullfrogs, fish, and crayfish. Eggs hatch after 3 to 4 days on average. Tadpoles transform in 4 to 11 weeks. Both juveniles and adults are nocturnal.	No potential. There are no reported occurrences of this species within 5 miles of the project site. Species reported on USFWS IPac list. Suitable aquatic and upland habitat is not present within the project site.
Reptiles			
Western Pond Turtle *Emys marmorata*	FC (Threatened), SSC	Only native turtle in Napa County. Found in ponds, lakes, rivers, streams, creeks, marshes, irrigation ditches, and upland areas. Nest dug in upland areas along stream or pond margins in sunny, grassy areas. Mating occurs from April to May (8-10 years old). 2-11 eggs laid. Hatchlings emerge in late summer-fall and sometimes overwinter in the ground. Active February-March. Diurnal and aquatic. Requires basking sites – logs, banks, etc. Eat plants, invertebrates, carrion, and occasionally frogs and fish.	No potential. Western pond turtle is known from multiple sightings within a 5-mile radius of the project site, including the mainstem Napa River, Tulucay Creek (0.8 miles, the nearest sighting), and other water bodies. The project site is isolated from known populations by heavily traveled roadways and development. Suitable habitat is not present within the project site.
Birds			
Golden Eagle *Aquila chrysaetos*	FP, WL (nesting and wintering)	The golden eagle is the most widely distributed bird in the Northern Hemisphere and one of the largest birds in North America. It occurs in open country, especially around mountains, hills, and cliffs. It is primarily solitary and feeds on mammals. It nests in large trees or on cliffs. The nest is a bulky platform of sticks lined with weeds, grass, leaves, and moss. It breeds from late January through August. Birds may mate for life. It is a year-round resident of Napa County, where it occupies mountain and ranch areas in the eastern portion of the county (Napa).	No potential. Golden eagles are known from mountainous and ranch country in eastern Napa County. There are historic and unprocessed records of this species in the CNDDB. They are also reported in the Berner et al. 2003. Suitable habitat is not present within the project site.
Oak Titmouse *Baeolophus inornatus*	BCC	Small, brown-tinged gray bird with small crest. Occurs in oak woodlands and open pine or mixed oak-pine forests. Their call resonates through woodland habitats, a harsh, fussy see-dee-dee or chick-a-dee-dee. Feeds among the branches and larger twigs of trees for insects among the foliage and bark. Feeds primarily on insects, nuts, and seeds. Pairs mate for life and defend	Present. Species observed within the project site. Suitable foraging and nesting habitat is present in the oak trees on the site. See breeding bird protection measures.

Common Name *Scientific Name*	Listing Status[8]	Habitat Requirements	Local Observations[9] and Potential for Occurrence within the Project Site
		territories year-round. Nest in cavities of trees or nest boxes. A year-round resident in Sonoma County.	
Swainson's Hawk *Buteo swainsoni*	ST	A large buteo with slender and long wings and a short tail. Coloration is variable but typically uniform dark upper side, dark chest, and dark gray flight feathers. They are uncommon in prairies and farmlands. Nesting occurs in isolated trees. They are usually solitary but migrate in larger flocks. They feed on small mammals and reptiles in summer and invertebrates during the rest of the year. Breeding is concentrated in the Central Valley and in the Great Basin area of northeastern California.	Not expected. Swainson's hawks have been reported within 5 miles of the project site. They are known to breed in the lower Napa River watershed in the vicinity of Suscol Creek, Napa Valley Business Park, County Airport, and nearby areas. The nearest confirmed nesting site is 3 miles from the project site. The project site features disturbed grasslands (less than 2 acres) with trees along the periphery. Residential parcels surround the project site. The site is not likely to support a breeding pair with suitable forage and protection from nearby residential disturbances. The site was visited on two occasions during the Swainson's hawk breeding season: Period II, during nest territory establishment, and Period III, during the active nesting period (SWHA TAC 2000). No raptors were observed. Due to its residential location and limited habitat, Swainson's hawk are not likely to be present within the project site.
Ferruginous Hawk *Buteo regalis*	WL	The ferruginous hawk is the largest hawk in North America. It occurs in North America, from southwestern Canada through the western United States and into northern Mexico, and occupies prairies, deserts, and open-range land. It is a predator of open country. It forages for ground squirrels, rabbits, hares, mice, and pocket gophers while soaring or hunting from low perch or ground. It is one of the most adaptable nesting raptors and will use various features, including trees, ledges, nest platforms, power poles, and other manmade structures. A pair will build or refurbish their stick nest, which may be re-used year after year. Winters in Napa County, no documented occurrences of breeding.	No potential. Ferruginous hawks were reported in the Napa Valley Business Park area in 1989 when the area supported open grasslands before development. This species is known to overwinter in Napa County, but there are no reported breeding occurrences (Berner et al. 2003). Suitable habitat is not present within the project site.

Common Name *Scientific Name*	Listing Status[8]	Habitat Requirements	Local Observations[9] and Potential for Occurrence within the Project Site
Nuttall's Woodpecker *Dryobates nuttallii*	BCC	Small woodpecker of oak woodland habitats. Feeds primarily on insect larvae by tapping and probing into the crevices of oak trees. This species is found year-round in oak woodlands, wooded suburban areas, and near streams. This species is non-migratory. It occurs throughout California's oak woodland communities but extends into Baja, Mexico. A cavity nesting species. Males excavate out a cavity in a dead tree. They form monogamous pairs and will defend their territories year-round. A permanent resident in Napa County oak woodlands.	Present. Species observed within the project site. Suitable foraging and nesting habitat is present in the oak trees on the site. See breeding bird protection measures.
White-tailed Kite *Elanus leucurus*	FP	A small hawk with a white body and black wingtips and shoulders. They are common in savannas, open woodlands, marshes, desert grasslands, partially cleared lands, cultivated fields, and even highway median strips. Hovers in flight and parachutes down on their prey. Feeds primarily on small mammals. Breeding occurs from February to October, with a peak in May to August. Nests are typically constructed in large bushes or trees, open in an isolated stand. During the non-breeding season, may roost communally. Fairly common permanent resident in Napa County.	Not expected. White-tailed kites are known to occur year-round in the valley and grasslands habitat of Napa County. This species is reported within 5-mile radius of the project site. If present nearby, kites could occasionally forage within the project site. Due to its residential location and limited habitat, there is low potential for white-tailed kites to breed within the project site. However, all nesting birds will be protected per the recommendations provided in this report.
American Peregrine Falcon *Falco peregrinus anatum*	Delisted	The peregrine falcon is the most widely distributed bird of prey, with 16 recognized subspecies. It is the world's fastest bird, with diving speeds of 186 mph, and feeds primarily on birds. It forages in woodlands, wetlands, forests, and coastal habitats, as well as agricultural areas and cities. Nests are typically constructed on cliff ledges, snags or old nests of other birds, and manmade structures. No nest is built; eggs are laid in a simple scrape. Birds may mate for life.	No potential. Peregrine falcons are known from mountainous and open spaces areas in Napa County. There is one reported occurrence of this species within a 5-mile radius of the project site. Suitable habitat is not present within the project site.
Saltmarsh Common Yellowthroat *Geothlypis trichas sinuosa*	BCC, SSC	The San Francisco or saltmarsh common yellowthroat is one of 13 recognized subspecies. It is endemic to the greater San Francisco Bay region, where it occupies wetlands with adjacent riparian thickets. This species is insectivorous and forages for insects and spiders. It constructs an open cup nest that is well-concealed near the ground in grasses and herbaceous vegetation. Breeding occurs from mid-March to late July and occurs year-round within its breeding range.	No potential. Saltmarsh common yellowthroats are reported in the tidal areas along the lower Napa River. Suitable wetland and riparian habitat are not present within the project site.

Common Name *Scientific Name*	Listing Status[8]	Habitat Requirements	Local Observations[9] and Potential for Occurrence within the Project Site
Black-crowned Night Heron *Nycticorax nycticorax*	None	A medium-sized heron with a black crown and back. Common in wetlands, including saltmarshes, freshwater marshes, swamps, streams, rivers, lakes, ponds, lagoons, tidal mudflats, canals, reservoirs, and wet agricultural fields. An opportunistic feeder that consumes a variety of terrestrial, freshwater, and marine animals. Typically nests in colonies with other herons. Nests are constructed in trees or in cattails and consist of a platform made of sticks, twigs, and other vegetation. Females lay 3-5 eggs. Nests and behaves socially all year.	No potential. Black-crowned night herons are known to forage in suitable wetland habitats within a 5-mile radius of the project site (eBird 2025). There is an old rookery site within 5 miles. No rookeries are present within the project site, and limited rookery habitat is present. Suitable foraging and nesting habitat is not present within the project site.
Bank Swallow *Riparia riparia*	ST	Smallest swallow in North America. Found primarily in riparian and other lowland habitats. Forages by hawking insects during long, gliding flights. Breeding season occurs from early May through July. A colonial nesting species. Nests on earthen banks and bluffs. Generally, dig their own nesting burrows, sometimes up to five feet long. A long-distance migrant, wintering in the lowlands of South America. There is one historic record of bank swallows nesting in Napa County from the 1930s (Berner et al. 2003).	No potential. There are no reported occurrences of this species within 5 miles of the project site. Suitable habitat is not present within the project site.
California Least Tern *Sternula antillarum browni*	FE, SE, FP	Small, migratory shorebird and one of three recognized subspecies. Winter in Central America, the Caribbean, and northern South America. During the breeding season, occur along the Pacific coast from San Pablo Bay to San Jose del Cabo in Baja, California. Known from 23 nest sites, some of which are natural, and others are man-made, including beaches close to river mouths, estuaries, and coastal embayment's. Breeding occurs from mid-April to mid-September. Nesting colonies consist of 15 to 300 pairs. Forage in nearshore waters, estuaries, and river mouths for small, slender fish.	No potential. There are no reported occurrences of this species within 5 miles of the project site. Species reported on USFWS IPac list. Suitable habitat is not present within the project site.
Northern Spotted Owl *Strix occidentalis caurina*	FT, ST	Occupies old-growth forests in the northern range and mixed old-growth and younger forest types in the southern range. Consumes primarily small mammals, other birds, and insects. It requires a large territory size for nesting and foraging. Nests in cavities or platforms in large trees. Breeding season occurs from early March through September. Permanent year-round resident in Sonoma County in old-growth and mixed forest habitats. Spotted owls have experienced a population decline due to the loss and degradation of existing mature and old-growth forests and, most recently, the establishment of barred owls in the west.	No potential. Spotted owls are known to occur in forested locations to the northwest, but not within a 5-mile radius of the project site. Suitable forested habitat is not present within the project site.

Common Name *Scientific Name*	Listing Status[8]	Habitat Requirements	Local Observations[9] and Potential for Occurrence within the Project Site
Fish			
Steelhead - Central California Coast DPS *Oncorhynchus mykiss*	FT, SSC	Steelhead transition from freshwater, tidal zones, to the ocean during different life stages. Steelhead immigrate during high flow events and sand bar breaches between December and April and spawn shortly after reaching their spawning grounds. Juvenile freshwater residence can range from one to three years depending on environmental conditions and growth rates. Adults typically spend one to two years in the ocean before returning to their natal streams to spawn. Steelhead may spawn more than one season before dying; however, the majority of adults only spawn one time.	No potential. Steelhead are known from the San Francisco Bay Estuary and the Napa River. Suitable aquatic habitat is not present within the project site.
Longfin Smelt *Spirinchus thaleichthys*	FE, ST	Small fish found along the Pacific coast from Alaska to California Estuary. In California they use a variety of habitats from nearshore waters, to estuaries and lower portions of freshwater streams. A slender-bodied fish, reaching 90-124 mm. A pelagic (lives in the open water column away from the bottom) and euryhaline species (tolerant of a wide salinity range). They consume primarily opossum shrimp but eat copepods and other small crustaceans. Spawning occurs from November through May, with a peak in February through April. Longfin smelt is semelparous, living two, sometimes three years, and dying after spawning.	No potential. Longfin smelt are known from the San Francisco Bay Estuary. Suitable aquatic habitat is not present within the project site.
Invertebrates			
Western Bumble Bee *Bombus occidentalis*	SC (Endangered)	The western bumble bee has a broad range extending from Canada to northern Mexico. Historically, it occurred in a range of habitats within California (shrublands, chaparral, gardens, and urban parks) from sea level to high elevations. It is currently restricted to coastal grasslands in northern California and high-elevation meadows, forests, and riparian areas in the Sierra Nevada and Cascade Range. It lives in small, highly social, and interdependent colonies. They are a generalist forager.	No potential. The western bumble bee is known from a 1962 collection in the Vallejo hills. This species is not known to currently occur within Napa County (CDFW 2023). Given the lack of Napa County sightings and historic land disturbances, suitable habitat is not present within the project site.
Conservancy Fairy Shrimp *Branchinecta conservatio*	FE	A small freshwater crustacean measuring 0.6 to 1.1 inches. It occurs in large, turbid freshwater vernal pool habitats. It is found only in California's Central Valley. They are opportunistic filter feeders. The average life span is 114 days. Eggs (cysts) sink to the bottom of a pool and remain viable for several years. They can withstand extreme environmental conditions and even digestion by predators due to their protective coating. There are 10 known populations in the Central Valley. Named after	No potential. There are no reported occurrences of this species within 5 miles of the project site. Species reported on USFWS IPac list. Suitable aquatic habitat is not present within the project site.

Common Name *Scientific Name*	Listing Status[8]	Habitat Requirements	Local Observations[9] and Potential for Occurrence within the Project Site
		The Nature Conservancy, which protected several pools where this species occurs.	
An Isopod *Calasellus californicus*	None	A freshwater isopod. Reaches up to 6.2 millimeters in length. Three collections in California from a freshwater well and two springs. Known from Lake, Napa, Marin, Santa Cruz, and Santa Clara Counties. There is no published information on the life history or behavior of this species.	No potential. This species was collected from a spring in 1969 near the town of Napa. Suitable habitat is not present.
Monarch Butterfly-California Overwintering Population *Danaus plexippus plexippus pop.1*	FC (Threatened)	Large, brightly colored butterfly. Two populations are separated by the Rocky Mountains. Populations along the California coast overwinter within 1.5 miles of the coastline. Overwintering sites are typically dominated by eucalyptus but are also found on Monterey pine, Monterey cypress, western sycamore, coast redwood, and coast live oak. Requires good solar radiation exposure and wind shelter. Arrives at overwintering grounds in September-October and disperses by February-March. Migrates to inland locations during the breeding season. Requires native narrow-leaf milkweed (*Asclepias fascicularis*) or showy milkweed (*A. speciosa*) for egg deposition. Larvae develop on milkweed plants.	Not expected. Monarch butterflies are known to overwinter in the coastal regions. Suitable overwintering habitat is not present on the project site. Monarchs can breed in inland locations, but suitable larval host plants are not present. Monarchs may occur in the region on a limited basis as a seasonal migrant. Plants on the project site provide limited adult nectar sources. Monarchs would not be expected to occur on the project site at any frequency.
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus*	FT	A medium-sized, red and dark green insect with long antennae. Males range in size from ½ to 1 inch, and females from ¾ to 1 inch. Endemic to riparian habitats in the Central Valley of California. Found in association with its host plant, elderberry (Sambucus spp.). Female lays her eggs on the bark of the elderberry plant, with larvae burrowing into the stems after hatching. Larval stage can last up to two years. Larvae emerge in March and June. Adults most active in spring and early summer.	No potential. There are no reported occurrences of this species within a 5-mile radius of the project site. Species reported on nearby quadrangles. Suitable habitat, including elderberry host plants, is not present within the project site.
Western Ridged Mussel *Gonidea angulata*	None	Freshwater mussel found in streams and, oftentimes lakes, with constant water flow and well-oxygenated substrates. Reach up to 5 inches in length. A filter feeder that siphons suspended particles from the water column. Consume plankton, bacteria, dissolved organic material, and algae. Limited mobility. Mature at approximately 7 years and expected to live up to 30 years. Occurs in California, Oregon, Washington, Idaho, Nevada, and British Colombia.	No potential. This species was collected at an unknown date near the town of Napa. Suitable aquatic habitat is not present.

Common Name *Scientific Name*	Listing Status[8]	Habitat Requirements	Local Observations[9] and Potential for Occurrence within the Project Site
California Freshwater Shrimp *Syncaris pacifica*	FE, SE	Endemic to Marin, Sonoma, and Napa Counties. Occur in low elevation (less than 380 feet), low gradient streams (less than 1%) with perennial flow, or intermittent streams with perennial pools. Streams are generally structurally diverse with undercut banks, overhanging woody debris and vegetation, and exposed roots. Reproduction occurs once a year in the fall. Females retain eggs through the winter and remain attached to the abdominal swimming legs until May or early July. Forage on fine particulate organic matter, but have been observed feeding on dead fish as well.	No potential. California freshwater shrimp are known from the Napa River and tributaries. Suitable aquatic habitat is not present within the project site.
Mammals			
Pallid Bat *Antrozous pallidus*	SSC	Grassland, shrubland, forest, and woodland habitats from sea level up through mixed coniferous forests. Found from south-central British Colombia to central Mexico and Cuba. Most common in open, dry habitats with rocky areas for roosting. A social species forming small colonies. Roosting sites include caves, mines, crevices, buildings, and hollow trees during the day, and more open sites are used at night. Feed on a variety of insects and arachnids; most prey are taken on the ground. The mating season ranges from October to February. One to three (typically twins) pups are born from April to July. A yearlong resident throughout most of its range.	Moderate potential. The pallid bat is reported from multiple sightings within 5 miles of the project site. Bats may forage over the project site. Some of the larger trees may provide limited roosting habtiat. See bat protection measures.
Salt Marsh Harvest Mouse *Reithrodontomys raviventris*	FE, SE, FP	Endemic to the San Francisco Bay Estuary. Occupies salt and brackish marshes and adjacent uplands. Prefers habitat dominated by pickleweed, alkali bulrush, and fat hen. Pickleweed is their primary food source. Breeding occurs from spring through autumn with up to two litters per year. Nests are constructed in wetland habitats with dense cover. Can live up to 18 months or possibly longer. Two subspecies are recognized, northern and southern, based on range and morphological characters.	No potential. Salt marsh harvest mice are reported in the tidal areas along the lower Napa River. Suitable marsh habitat is not present within the project site.
American Badger *Taxidea taxus*	SSC	Common in open grassland habitats may also occur in forest meadows, marshes, and brushy areas, with friable soils for digging for prey. They are fossorial carnivores. Prey includes pocket gophers, ground squirrels, moles, mice, and voles in this region. They will also eat snakes, birds, and other wildlife. They are typically nocturnal and do not hibernate, but become less active in winter. Mating occurs in late summer and early fall. Young are born from late March to early April. They dig their own burrows or enlarge other animal burrows.	No potential. The American badger is known from 1911 and 1937 collections within 5 miles of the project site. Evidence of American badgers was not observed during repeat surveys of the site. Given the lack of recent confirmed sightings within the general vicinity of the site, existing soil conditions, and urban setting, suitable habitat is not present within the project site.

APPENDIX E

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

MITIGATION MONITORING AND REPORTING PROGRAM – NAPA HIDDEN GLEN REMEDIATION PROJECT

Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
AIR QUALITY			
Mitigation Measure AQ-1: The applicant shall implement the following during construction of the Project: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. • All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. • All trucks and equipment, including their tires, shall be washed off prior to leaving the site. • Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel. • A publicly visible sign shall be posted with the telephone number and the person to contact the City regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.	City of Napa Utilities Department	During construction activities	
BIOLOGICAL RESOURCES			
Mitigation Measure BIO-1: To avoid potential impacts on nesting birds, the following protection measures shall be implemented: • Preconstruction nesting bird surveys shall be completed from February 1- August 31. A survey shall be completed within 7 days before the beginning of Project-related activities. The survey area shall include the Project site and an appropriate buffer around the site to identify any nesting that could be impacted directly or indirectly by the Project-related activities. The survey shall follow established nesting search protocols described in Martin and Geupel (1993) and CDFW and USFWS protocols, where appropriate. If the qualified biologist finds no active nests or breeding activity indicating nests are present, then work can proceed without restrictions. If there is a lapse in Project-related activities for 7 days or more, then a follow-up survey may be required per the recommendations of the qualified biologist. • If active nests are identified during the survey and the nests are within the Project site or the buffer area and nesting would be adversely affected, a "No Work Zone" buffer area shall be demarcated	City of Napa Utilities Department	Prior to construction activities	

MITIGATION MONITORING AND REPORTING PROGRAM – NAPA HIDDEN GLEN REMEDIATION PROJECT

Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
around each nest site by the qualified biologist. Buffer distances for each bird nest shall be site-specific and established to protect the bird's normal behavior to prevent nesting failure or abandonment. The buffer distance shall vary by species, nest location, existing visual and topographical buffers, and intensity and extent of the construction-related disturbance. The buffer area may be as small as 25-50 feet for common, disturbance-adapted species or much larger (e.g., 100-250 feet) for sensitive species like raptors and owls. The "No Work Zone" shall be established in the field with flagging, fencing, or other appropriate material and shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive due to predation or other natural causes as determined by the qualified biologist. The qualified biologist shall continue to monitor the behavior of the birds at the nest site during construction activities to ensure that they are not disturbed by the project work. Nest monitoring shall continue until the nesting attempt is complete. If state and/or federally-listed birds are found breeding within the area, consultation with the CDFW and USFWS may be required. • If initial ground-disturbing activities occur outside of the nesting season (September 1 through January 31), then a preconstruction survey would not be required, and construction could begin unimpeded.			
Mitigation Measure BIO-2: To avoid potential impacts on roosting bats, the following protection measures shall be implemented: • Before tree removal/trimming (branches over 12" Diameter at Breast Height [DBH]), a qualified biologist shall survey for potential bat roosts and occupied habitats. If active bat roosts are identified within the trees to be removed, the disturbance shall not be allowed until the roost is abandoned or unoccupied. • If tree trimming/removal is postponed or interrupted for more than two weeks from the date of the initial bat survey, the biologist shall repeat the pre-construction survey. • Tree removal or trimming is recommended from September 1 to October 15 or March 1 to April 15 to avoid the bat maternity roost and winter hibernation season. • To the extent feasible, tree work should be avoided between April 15 and September 1 during the maternity roost season [bats are especially vulnerable during this period when females are nursing pups, and the pups are non-volant (not capable of true flight)].	City of Napa Utilities Department	Prior to tree removal and trimming activities	
Mitigation Measure BIO-3: To avoid the potential impact associated with a potential conflict with City tree preservation policies, the following shall be implemented: • Prior to tree removal, the DBH of protected trees proposed for removal shall be confirmed and documented. For every 6 inches of DBH or fraction thereof removed, two trees of the same species shall be planted on or offsite within the City. Tree planting shall be completed by the City within one year of tree removal in a location to be determined and at the City's discretion.	City of Napa Utilities Department	Prior to tree removal activities	

MITIGATION MONITORING AND REPORTING PROGRAM – NAPA HIDDEN GLEN REMEDIATION PROJECT

Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
CULTURAL RESOURCES			
Mitigation Measure CUL-1: In the event that cultural resources are discovered, regardless of significance, all work shall be halted within a 50-foot radius of the discovery and a qualified archaeologist shall be immediately notified. Any soil or cultural or tribal cultural resources that have been removed shall be retained in as close to the original context as possible until reviewed by a qualified archaeologist and applicable tribal representative. Work shall continue outside of the 50-foot buffer around the discovery. If the find is deemed not significant by the qualified archaeologist and applicable tribal representative, work shall resume within the 50-foot buffer. If the find is deemed significant by the qualified archaeologist, additional work, such as shovel testing or data recovery, shall be required and shall be determined through consultation with the City, State Historic Preservation Office, regulatory agencies, affiliated Tribal governments, or other stakeholders, as appropriate.	City of Napa Utilities Department	During construction activities (if cultural resources are discovered)	
Mitigation Measure CUL-2: In the event of discovery or recognition of any human remains, the stipulations of State of California Health and Safety Code Section 7050.5 shall be followed to treat the discovery. The Napa County Coroner shall be notified immediately of the discovery of human remains and no further disturbance shall occur in the area of the discovery until the Napa County Coroner has made a determination of origin and disposition of the remains pursuant to PRC Section 5097.98. If the human remains are determined to be of Native American origin, the Coroner shall notify the NAHC, who will determine and notify a Most Likely Descendent (MLD). Treatment of the remains should be determined in consultation with the MLD and appropriate regulatory agencies.	City of Napa Utilities Department	During construction activities (if human remains are discovered)	

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