

ATTACHMENT 6

**FINAL MEMO AND RESPONSE TO COMMENTS**

Attachment A: Mitigation Monitoring and Reporting Program

Attachment B: County Notice of Intent Filing



# memo san jose

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to **Susan Michael, Capital Improvements Program Manager**

from **Mike Campbell, Director of Environmental Analysis**

re **Final IS/MND Memo and Response to Comments - Lawrence-Mitty Park and Trail Project**

date **May 21, 2024**

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This memo was prepared as an informational document for the City of Cupertino for the Lawrence-Mitty Park and Trail Project. The purpose of this Final Initial Study/Mitigated Negative Declaration (IS/MND) memo is to summarize the public review process for the project. This Final IS/MND Memo and Attachments, together with the Draft IS/MND (February 2024), comprise the CEQA environmental review for the project.

Section 15074(b) of the CEQA Guidelines states, "Prior to approving a project, the decision-making body of the lead agency shall consider the proposed mitigated negative declaration together with any comments received during the public review process. The decision-making body shall adopt the proposed mitigated negative declaration only if it finds on the basis of the whole record before it (including the Initial Study and any comments received), that there is no substantial evidence that the project will have a significant effect on the environment and that the mitigated negative declaration reflects the lead agency's independent judgment and analysis."

The project includes mitigation to reduce potentially significant impacts to less than significant levels. The Mitigation Monitoring and Reporting Program (MMRP) (Attachment A) presents these mitigation measures, identifies the timing and responsible entity for implementation of the measures, and a sign-off for completion.

The 30-day public review period for the draft IS/MND began on February 12, 2024 and closed on March 13, 2024. The Notice of Intent (NOI) was filed at the Santa Clara County Clerk's office (Attachment B) and published in the San Jose Mercury News on February 12, 2024. The document was also submitted for State Agency review with the State Clearinghouse (SCH# 2024020394). The NOI was also

mailed to owners and occupants of properties within 300 feet of the project site and posted on the City's website at [www.Cupertino.gov/lawrencemitty](http://www.Cupertino.gov/lawrencemitty). The document was made available for review at City Hall, 10300 Torre Avenue, Cupertino.

One comment letter was received from a state agency, one letter was received from a local agencies and two comment letters were received from the public during the comment period. These letters are included on the following pages, with responses to the comments following on the subsequent pages.

### **COMMENT LETTERS RECEIVED**

Comment Letter 1: California Department of Transportation (Caltrans)

Comment Letter 2: Valley Water

Comment Letter 3: Archbishop Mitty High School

Comment Letter 4: Russ Danielson

Comment Letter 5: Kitty Moore (Cupertino City Council)

# California Department of Transportation

DISTRICT 4  
OFFICE OF REGIONAL AND COMMUNITY PLANNING  
P.O. BOX 23660, MS-10D | OAKLAND, CA 94623-0660  
[www.dot.ca.gov](http://www.dot.ca.gov)



March 12, 2024

SCH #:2024020394  
GTS #:04-SCL-2024-01262  
GTS ID: 31995  
Co/Rt/Pm: SCL/280/7.049

Susan Michael, Capital Improvement Programs Manager  
City of Cupertino  
10300 Torre Avenue  
Cupertino, CA 95014

## Re: Lawrence-Mitty Park and Trail Project— Mitigated Negative Declaration (MND)

Dear Susan Michael:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Lawrence-Mitty Park and Trail Project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system.

The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities. The following comments are based on our review of the February 2024 MND.

### Project Understanding

The proposed project involves the development of a new public park and an extension of the Saratoga Creek Trail. The site is located along the west side of Lawrence Expressway, south of I-280 and adjacent to Saratoga Creek in the City of Cupertino.

### Travel Demand Analysis

With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses Vehicle Miles Traveled (VMT) analysis for land use projects, please review Caltrans' Transportation Impact Study Guide ([link](#)).

The project VMT analysis and significance determination are undertaken in a manner consistent with the Office of Planning and Research's (OPR) Technical Advisory. Per

1-1

1-1

the IS/MND, this project is found to have a less than significant VMT impact, therefore working towards meeting the State's VMT reduction goals.

### **Construction-Related Impacts**

1-2

Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, please visit Caltrans Transportation Permits ([link](#)). Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the State Transportation Network (STN).

### **Equitable Access**

1-3

If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

### **Encroachment Permit**

1-4

Please be advised that any permanent work or temporary traffic control that encroaches onto Caltrans' Right-of-Way (ROW) requires a Caltrans-issued encroachment permit. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application package, digital set of plans clearly delineating Caltrans' ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement.

The checklist TR-0416 ([link](#)) is used to determine the appropriate Caltrans review process for encroachment projects. The Office of Encroachment Permit requires 100% complete design plans and supporting documents to review and circulate the permit application package. To obtain more information and download the permit application, please visit Caltrans Encroachment Permits ([link](#)). Your application package may be emailed to [D4Permits@dot.ca.gov](mailto:D4Permits@dot.ca.gov).

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Marley Mathews, Transportation Planner, via [LDR-D4@dot.ca.gov](mailto:LDR-D4@dot.ca.gov). For future early coordination opportunities or project referrals, please contact [LDR-D4@dot.ca.gov](mailto:LDR-D4@dot.ca.gov).

Susan Michael, Capital Improvement Programs Manager

March 12, 2024

Page 3

Sincerely,

A handwritten signature in black ink, appearing to read "Luo Yunsheng". The signature is fluid and cursive, with the first name "Luo" being more prominent and the last name "Yunsheng" written in a more connected, flowing style.

YUNSHENG LUO

Branch Chief, Local Development Review

Office of Regional and Community Planning

c: State Clearinghouse

## **Responses to Comment Letter 1: California Department of Transportation (Caltrans)**

Response to Comment 1-1: Comment noted.

Response to Comment 1-2: Comment noted. The City will coordinate with Caltrans to secure any permits needed for oversize or overweight vehicles that might be used during construction. Please see the following Errata section.

Response to Comment 1-3: Comment noted. No Caltrans facilities will be impacted by the project.

Response to Comment 1-4: Comment noted. The City shall apply for an encroachment permit for any permanent work or temporary traffic control that will encroach onto Caltrans' Right-of-Way.

## Comment Letter 2: Valley Water, March 13, 2024

**From:** Shree Dharasker <[sdharasker@valleywater.org](mailto:sdharasker@valleywater.org)>  
**Sent:** Wednesday, March 13, 2024 4:58 PM  
**To:** Susan Michael <[SusanM@cupertino.gov](mailto:SusanM@cupertino.gov)>  
**Cc:** Josh Weinik <[Jweinik@valleywater.org](mailto:Jweinik@valleywater.org)>; Sarah Gidre <[SGidre@valleywater.org](mailto:SGidre@valleywater.org)>  
**Subject:** RE: draft CEQA for Lawrence-Mitty

Hi Susan,

The Santa Clara Valley Water District (Valley Water) has reviewed the draft Initial Study/Mitigated Negative Declaration (IS/MND) for the Lawrence Mitty Park and Trail project (Project) and has the following comments:

- 2-1 | 1) The Project appears within the Valley Habitat Plan (VHP) according to Valley Water GIS files. The VHP is not discussed in the report and the Project may require VHP permits.
- 2-2 | 2) The list of special status species that were removed from consideration are not provided. Species-specific reasoning for removal should be included.
- 2-3 | 3) Existing understory habitats are comprised of mostly non-native and invasive species, which should be added to the understory habitat descriptions.
- 2-4 | 4) Page 4 of the Biological Constraints Analysis (BCA, page 36 of the pdf) states that candidate species under CESA in the biological resources considered section, were not included. This report was finalized in 2022, however there are now several CA candidate species that should be considered as the Project moves forward with permitting.
- 2-5 | 5) Very few wildlife species were analyzed in the BCA. Species included were CCC steelhead, California red-legged frog, yellow warbler, southwestern pond turtle, and SF dusky-footed woodrat. Nesting birds and bat roosts were also considered. Numerous additional special status species and candidate species for CA listing should have been analyzed even if they were then determined to be unlikely or absent (e.g. additional special status birds, special status bats such as western red bat, and special status fish such as southern coastal roach). Several additional species listed in the US Fish and Wildlife Service IPac should be considered. Additionally, this report is 2 years old and candidate species such as Monarch butterfly and Crotch's bumble bee should be analyzed in future permitting.
- 2-6 | 6) Valley Water has detected western pond turtle (WPT) along Saratoga Creek upstream of this project site. Under the WPT section it states that the nearest WPT detections were 6.5 and 9 miles north of the project area on San Tomas Aquino Creek. Valley Water biologists observed WPT basking along stream banks of Saratoga Creek about 1.9 miles south of the project area in January 2024. The report states "It is highly unlikely that pond turtles would disperse into the study area due to the greater than 6-mile distance separating the site from the nearest recorded occurrence... Nonetheless, this species may occur elsewhere in Saratoga Creek (e.g. upstream), thus; it is possible that an individual could occasionally disperse into the study area." This language addresses the potential for WPT to occur upstream, but it would be best to share Valley Water's known WPT upstream occurrence with the project team.



2-7

7) Valley Water has no right of way or facilities in this parcel. The project is in FEMA Flood Zone D which include areas where there are possible but undetermined flood hazards or unstudied areas.

2-8

8) The Project is adjacent to Saratoga Creek where Valley Water has a flood control easement. Project development should follow the design guides in [Guidelines and Standards for Land Use Near Streams](#), adopted by the City of Cupertino.

Please contact me if there are any questions,

Shree Dharasker  
Associate Engineer Civil  
Community Projects Review Unit  
(408)630-3037

## **Responses to Comment Letter 2: Valley Water**

Response to Comment 2-1: Comment noted. The project would not be covered under the Valley Habitat Plan (VHP) because the City of Cupertino has annexed the site from the City of San Jose, and the City of Cupertino is not a participating agency in the VHP. Only participating agencies are covered under the VHP. Additionally, even though Valley Water is a participating agency in the VHP, we do not believe that there would be a nexus for participation because there is no Valley Water right-of-way on the project site. Thus, no revisions to the IS/MND related to this comment are warranted.

Response to Comment 2-2: Comment noted. A brief discussion of special-status plant species considered in the Biological Constraints Report (BCR) was included on page 54 of the IS/MND.

The discussion in the BCR with the reasoning used to discount special-status animals has been added to the IS/MND. Please see the following Errata section.

Response to Comment 2-3: Comment noted. Discussions of the existing habitats (Mixed Oak Forest and Woodland Alliance, Coast Live Oak Woodland and Forest Alliance, and Developed) list several non-native and invasive species that are present in each of these habitats but does not call them out as such. See pages 44 – 46 of the IS/MND. We have added sentences at the end of the Mixed Oak Forest and Woodland Alliance and Coast Live Oak Woodland and Forest Alliance discussions in the Errata stating that most of the understory species are non-native and invasive species. Please see the following Errata section.

Response to Comment 2-4: Comment noted. Candidate species under CESA and FESA were considered in the BCR; however, a bullet item stating that they were considered was erroneously left out of the "Biological resources that were considered for this analysis" section, which starts on page 3 of the BCR.

We agree that the status of some of the species that were considered in the IS/MND have changed. The species that was addressed in the IS/MND, based on the BCR and whose status has changed since the BCR was prepared is the southwestern pond turtle. The southwestern pond had no federal status when the BCR was prepared. We recognize that the turtle is now a federal candidate for listing under the Federal Endangered Species Act (FESA) and it is still a California species of special concern. We agree that this newly-petitioned candidate species and potentially other new candidate species should be considered as the project moves

forward with permitting. An updated Biological Resources Report will be prepared to support the permit applications.

Response to Comment 2-5: Comment noted. As stated in Response to Comment 2-4, the BCR will be revised to include additional species whose status has changed prior to filing the permit applications. Regarding other species mentioned by the commentor, the analysis contained in Chapter 3.4 Biological Resources correctly focused on impacts and mitigation for the species that were most likely to occur on the site and/or be impacted by the project, based on our research and corroborated by our field investigation. An updated Biological Resources Report will be prepared to support the permit applications.

Response to Comment 2-6: Comment noted. We agree that Valley Water's recent observations of the western pond turtle should be included in the language that addresses the western pond turtle. We have added that information and a new reference. Please see the following Errata section.

Response to Comment 2-7: Comment noted. Section 3.10.1 of the Initial Study/MND describes the project site as being located outside the limits of the 100-year flood plain, and designated as being within Zone D (Area of Undetermined Flood Hazard). References to Valley Water's ownership of property or facilities have been deleted. Please see the following Errata section.

Response to Comment 2-8: Comment noted. Chapter 3.4.3 Impact Discussion of the Initial Study/MND has been revised to include a discussion of Valley Water's Guidelines and Standards for Land Use Near Streams. Please see the following Errata section.

Comment Letter 3: Archbishop Mitty High School



March 12, 2024

City of Cupertino, Public Works Department  
10300 Torre Avenue  
Cupertino, CA 95014  
ATTN: Susan Michael, Capital Improvement Programs Manager

Re: Lawrence Mitty Park and Trail project

Dear Susan:

Thank you for the opportunity to comment on the Draft MND for the Lawrence Mitty Park and Trail Project. I have reviewed the draft and would like to submit comment regarding existing multimodal access and pedestrian safety (Section 3.17.1 Environmental Setting). Archbishop Mitty High School opened at the 5000 Mitty Way site in the Fall of 1964 to 164 boys. We now educate over 1700 young men and women daily in the tradition of Catholic education and have built a robust campus environment that services students and their families all day on every day of the week.

3-1 The addition of the Lawrence Mitty Park and Trail Project is exciting for the neighborhood and we are in great support of the goals set forth in the project. As part of our own campus master planning activities, we are continuing to evaluate bicycle and pedestrian safety for our students and would be open to discussing increased mitigation efforts for the crosswalks, particularly at Lawrence Expressway and Mitty Way, as well as, Lawrence Expressway and Moorpark Avenue/Bollinger Road. With more proposed commercial and residential developments in the area, we anticipate increased car traffic on Lawrence Expressway, and have concern about bicycle and pedestrian safety for those families and residents who wish to access the trail park from the East side of Lawrence Expressway.

Please do not hesitate to engage us to discuss opportunities for partnership or advocacy. We are interested in working together to ensure the safest bicycle and pedestrian access routes for our students, families, and local neighborhood residents.

Sincerely,

Latanya Hilton  
President

### **Responses to Comment Letter 3: Archbishop Mitty High School**

Response to Comment 3-1: Comment Noted. The Initial Study/MND does not identify any potentially significant impacts requiring mitigation related to bicycle and pedestrian safety that would result from implementation of the proposed park and trail project. Any modifications to the existing crosswalks at the intersections of Lawrence Expressway and Mitty Way or Lawrence Expressway and Moorpark Avenue/Bollinger Road to improve bicycle and pedestrian safety would need to be facilitated by the Santa Clara County Roads and Airports Division and City of San Jose, who are responsible for the maintenance and improvement of these roads.

Comment Letter 4: Russ Danielson, February 20, 2024

February 20, 2024

Ms. Susan Michael (CIP) Manager  
City of Cupertino, Public Works Dept.  
10300 Torre Avenue  
Cupertino, Calif. 95014

RE:Lawrence Mitty Park & Trail Project

Dear Ms. Michael,

I am writing to detail 3 points that concern me about the above-mentioned project. My family has lived on Sterling Blvd @ Barnhart, since 1954. (Original Rancho Rinconada buyer) The proposed project would be just across the creek, from the family home. My Two Brothers live in that residence(10510 Sterling Blvd and I am the Trustee of the Dorothy M. Danielson Trust, and control the property.

My Three areas of concern are:

- 4-1 | 1) The Highway & Airports Dept. has parked and operated heavy equipment on this site for many years. Anyone who has ever looked where tractors and heavy trucks park, has seen the ground discoloration and evidence of fluid leakages.
- 4-2 | 2) I have seen many potentially viable projects of this nature ruined, when the site ends up being a glorified "Dog Park." As far as I'm concerned, a dog owner better have their animal on a leash, and they can stop by, but then move on - not "take over the area" with canines running wild.
- 4-3 | 30 PARKING ISSUES - As there seems to be only one way to access this proposed development (the Bridge by Sterling Barnhart Park) What plans are being made to mitigate the influx of cars, into an already impacted Sterling Blvd area? I wrote to the City yrs. ago, when Sterling-Barnhart park was proposed. I inquired about parking impact. The response was that "everyone" would walk there. (The City then rushed out and painted the curb Red by the park!)

Respectfully Submitted,



Russ Danielson - Trustee - 10510 Sterling Blvd Home

## **Responses to Comment Letter 4: Russ Danielson**

Response to Comment 4-1: The Initial Study/MND includes review and analyses of existing hazardous materials conditions at the site, as well analyses of potential impacts based on the findings and recommendations of technical reports prepared for the site by Cornerstone Earth Group (Cornerstone). The reports included a Phase I Environmental Site Assessment Update and Phase II Soil Quality Evaluation dated February 25, 2022, which were included in Appendix C. The report updates the Phase I ESA and Preliminary Soil Quality Evaluation that Cornerstone prepared previously for the site, dated April 18, 2016.

Cornerstone collected soil samples from areas of the site containing construction and demolition waste piles, and from an area of the site where a suspected truck wash was located. Analyses of samples of the construction and demolition waste did not detect organochlorine pesticides at concentrations exceeding residential screening levels, and no polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs) or total petroleum hydrocarbons as gasoline (TPHg) were detected. Additionally, the detected metals concentrations appeared to be typical of natural background concentrations. Analyses of a sample collected from sediments within the gravel in the suspected truck wash location detected total petroleum hydrocarbons as oil (TPHo) at 340 milligrams per kilogram (mg/kg), which does not exceed the RWQCB's current Environmental Screening Level (ESL) for TPHo of 1,600 mg/kg. The detected metal concentrations in the analysis appeared to be typical of natural background concentrations, and no VOCs were detected. Based on these test results, the Initial Study/MND concluded that the impact was less than significant with regard to significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Response to Comment 4-2: This is a comment on the merits of the proposed Park and trail project and not on the adequacy of the Initial Study/MND, and does not raise any significant environmental issues. No further response is required. Inclusion of these comments in this Final Initial Study/MND Memo will make the commentor's views available to the City of Cupertino City Council, and other public officials who will make decisions about the proposed project.

Response to Comment 4-3: As described in the document, the project, which is designed as a component of the existing San Tomas Aquino/Saratoga Creek Trail, provides no on-site parking and no direct vehicular access to the proposed park or trail. Visitors accessing the park by vehicle would need to park on the adjacent

public streets near Sterling Barnhart Park or in the neighborhood east of Lawrence Expressway across from the site, and use the existing bicycle/pedestrian access paths – the bridge from Sterling Barnhart Park and crosswalk on Lawrence Expressway at Mitty Way - to get to the park and trail.

Per the CEQA Guidelines, the Initial Study/MND is not required to analyze parking, and consequently does not include thresholds of significance for parking. The assessment prepared by Hexagon Transportation Consultants for the project therefore focused on potential impacts related to the CEQA Guidelines mandated issues of Vehicle Miles Traveled VMT, multimodal access, and pedestrian safety.



## Comment Letter 5: Kitty Moore

**From:** Kitty Moore <[KMoore@cupertino.gov](mailto:KMoore@cupertino.gov)>

**Sent:** Monday, February 12, 2024 12:57 PM

**To:** Susan Michael <[SusanM@cupertino.gov](mailto:SusanM@cupertino.gov)>

**Cc:** Pamela Wu <[PamelaW@cupertino.gov](mailto:PamelaW@cupertino.gov)>; Christopher Jensen <[ChristopherJ@cupertino.gov](mailto:ChristopherJ@cupertino.gov)>; Matt Morley <[MattM@cupertino.gov](mailto:MattM@cupertino.gov)>

**Subject:** IS/MND Comments Re: CEQA for Lawrence-Mitty

Hi Susan,

If there is an email we should be addressing our comments to, please let us know where to forward comments moving forward.

I have attached pages from the Cornerstone Earth Group Site Plan showing the various soil samples taken, and the tables of the soil sample data provided, but several samples were not included as noted below. I am also concerned about the lead screening level selected given that this is parkland, and I have included the same screening level tables used in the report as an attachment.

- 5-1
1. I have a question on where to locate/please provide the soil sample data for the following soil samples:

SS-2  
SS-3  
SS-7  
SS-8  
SS-10  
SS-11  
SS-14

Theses samples were from 2022.

- 5-2
2. I would like the 2016 referenced SP sample data as well:

SP-1 through SP-6 data were not included in the report.

- 5-3
3. The Cornerstone report uses a lead screening level of 80 mg/kg. See PDF 9 of 16 of the attached ESLs. I would like to understand why such a high level was selected, even higher than the terrestrial screening level which has parkland as an example: 32 mg/kg. Since this is vegetated parkland space, it seems the lower level would be more appropriate. What is the rationale for having such a high lead screening level, or may it be lowered to the Terrestrial level to provide a safer environment? Terrestrial is defined as: "Terrestrial Ecological Impacts: Address potential toxicity to terrestrial flora and fauna. For use in developed urban areas only."

Thank you,

Kitty Moore



**Kitty Moore**

Councilmember

City Council

[KMoore@cupertino.gov](mailto:KMoore@cupertino.gov)

[\(408\) 777-1389](tel:(408)777-1389)

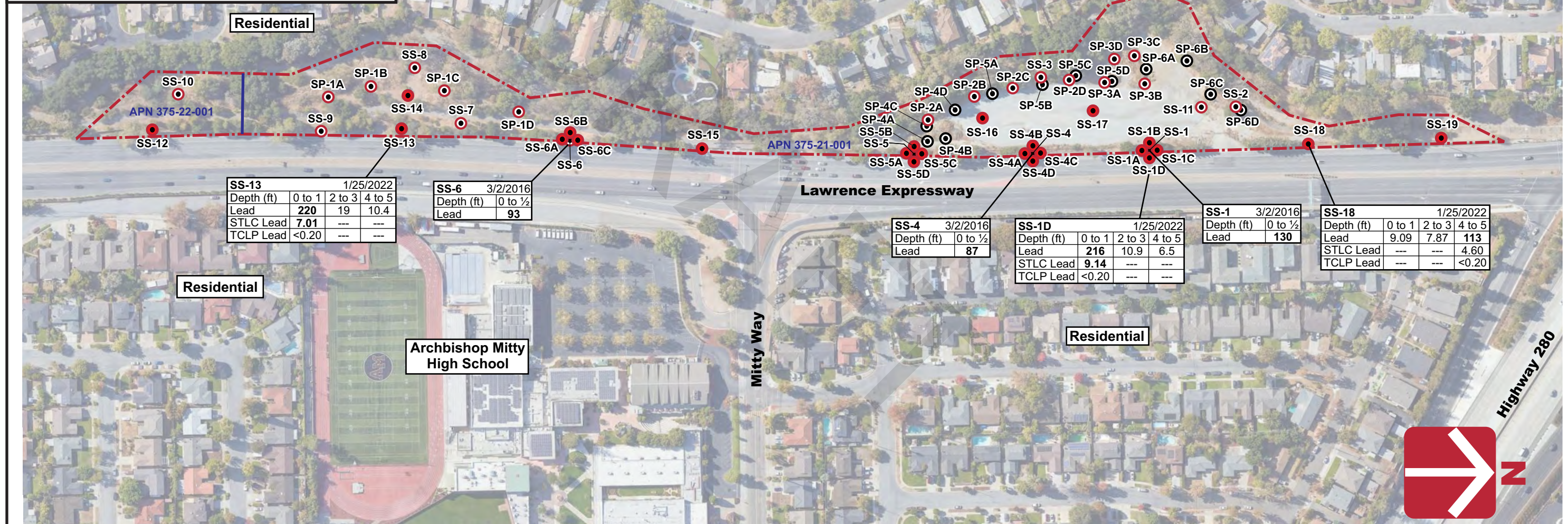


Screening Level

	Residential Environmental Screening Criteria <sup>1</sup>	STLC (California Hazardous Waste) Environmental Screening Criteria <sup>2</sup>	TCLP (Federal Hazardous Waste) Environmental Screening Criteria <sup>3</sup>
Lead	80	5 <sup>4</sup>	5 <sup>4</sup>

Concentrations measured in mg/kg unless noted otherwise

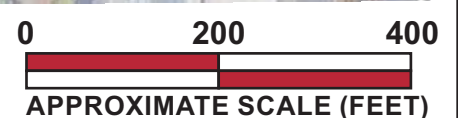
- 1 Department of Toxic Substances Control (DTSC) Residential Screening Level (SL), HERO HHRA Note 3 - April 2019
- 2 Soluble Threshold Limit Concentration - California Code of Regulations, Title 22, Chapter 11, Article 3.
- 3 Toxicity Characteristic Leaching Procedure - California Code of Regulations, Title 40, Chapter 1, Part 261.
- 4 milligrams per liter (mg/L)
- < Not detected at or above laboratory reporting limit
- BOLD** Concentration exceeds Residential Screening Criteria or STLC/TCLP regulatory value
- Not analyzed



**Legend**

- Approximate location of soil sample (SS) (Cornerstone, 01/25/2022)
- ⊙ Approximate location of soil sample (SS/SP) (Cornerstone, 03/02/2016)
- ⊙ Approximate location of soil sample (SP) (Cornerstone, 10/24/2016)

Figure presents analytical data from boring locations where lead concentrations were greater than selected environmental screening criteria.



Base by Google Earth, dated 09/04/2020



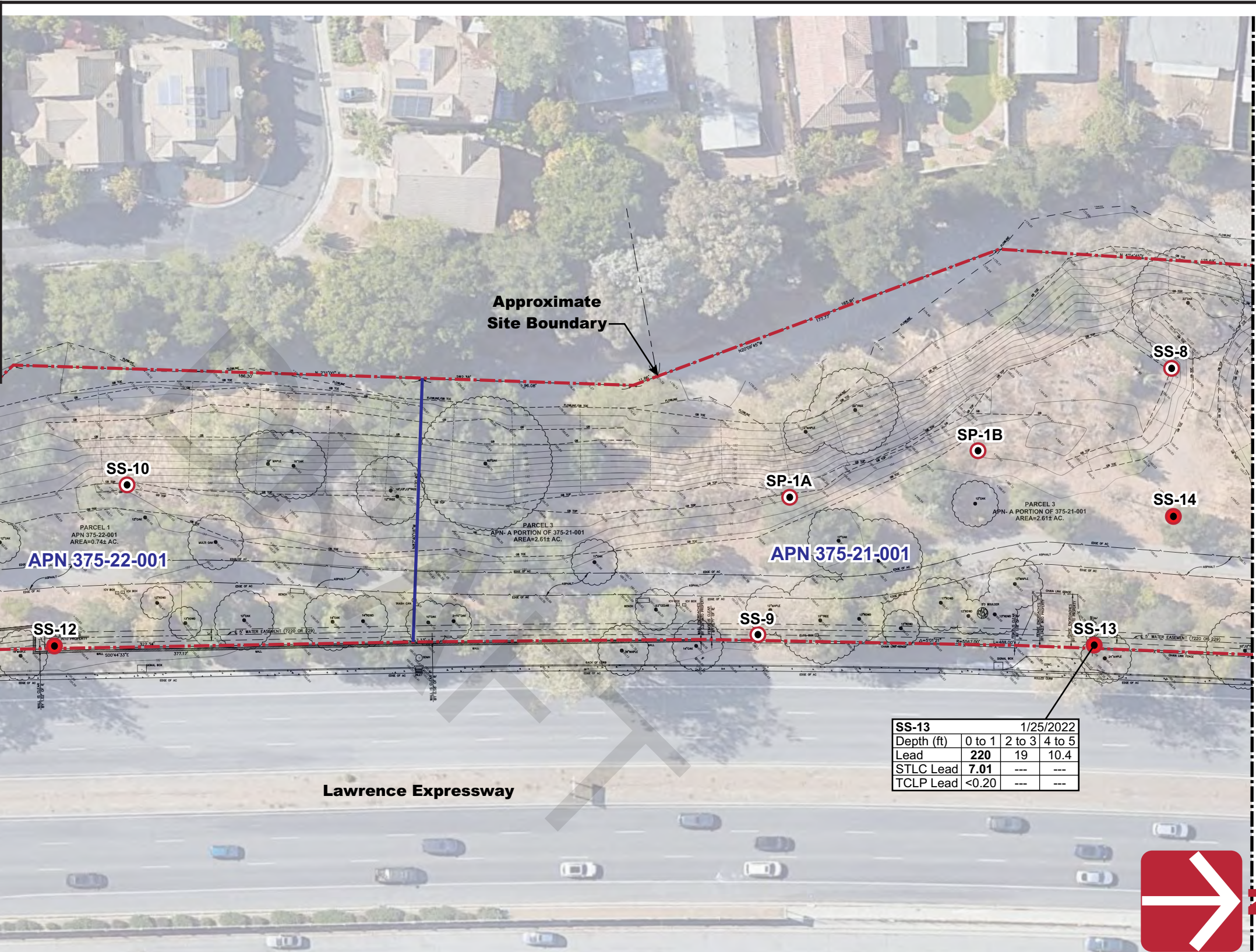
**Site Plan**  
Lawrence Mitty Park  
Cupertino, CA

Project Number	1340-1-1
Figure Number	Figure 2
Date	March 2022
Drawn By	RRN

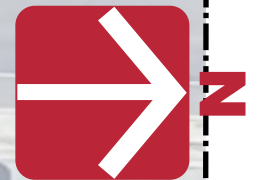
Screening Level	Residential Environmental Screening Criteria <sup>1</sup>	STLC (California Hazardous Waste) Environmental Screening Criteria <sup>2</sup>	TCLP (Federal Hazardous Waste) Environmental Screening Criteria <sup>3</sup>
Lead	80	5 <sup>4</sup>	5 <sup>4</sup>

Concentraions measured in mg/kg unless noted otherwise

1 Department of Toxic Substances Control (DTSC) Residential Screening Level (SL), HERO HHRA Note 3 - April 2019  
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 --- Not analyzed



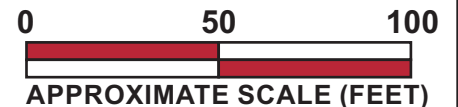
Matchline: See Figure 2B



**Legend**

- Approximate location of soil sample (SS) (Cornerstone, 01/25/2022)
- Approximate location of soil sample (SS/SP) (Cornerstone, 03/02/2016)

Figure presents analytical data from boring locations where lead concentrations were greater than selected environmental screening criteria.



Base by Google Earth, dated 09/04/2020  
 Overlay by Giuliani & Kull - San Jose, Inc., ALTA/NSPS  
 Land Title Surveys - Sheets 2-4, dated 07/01/2020



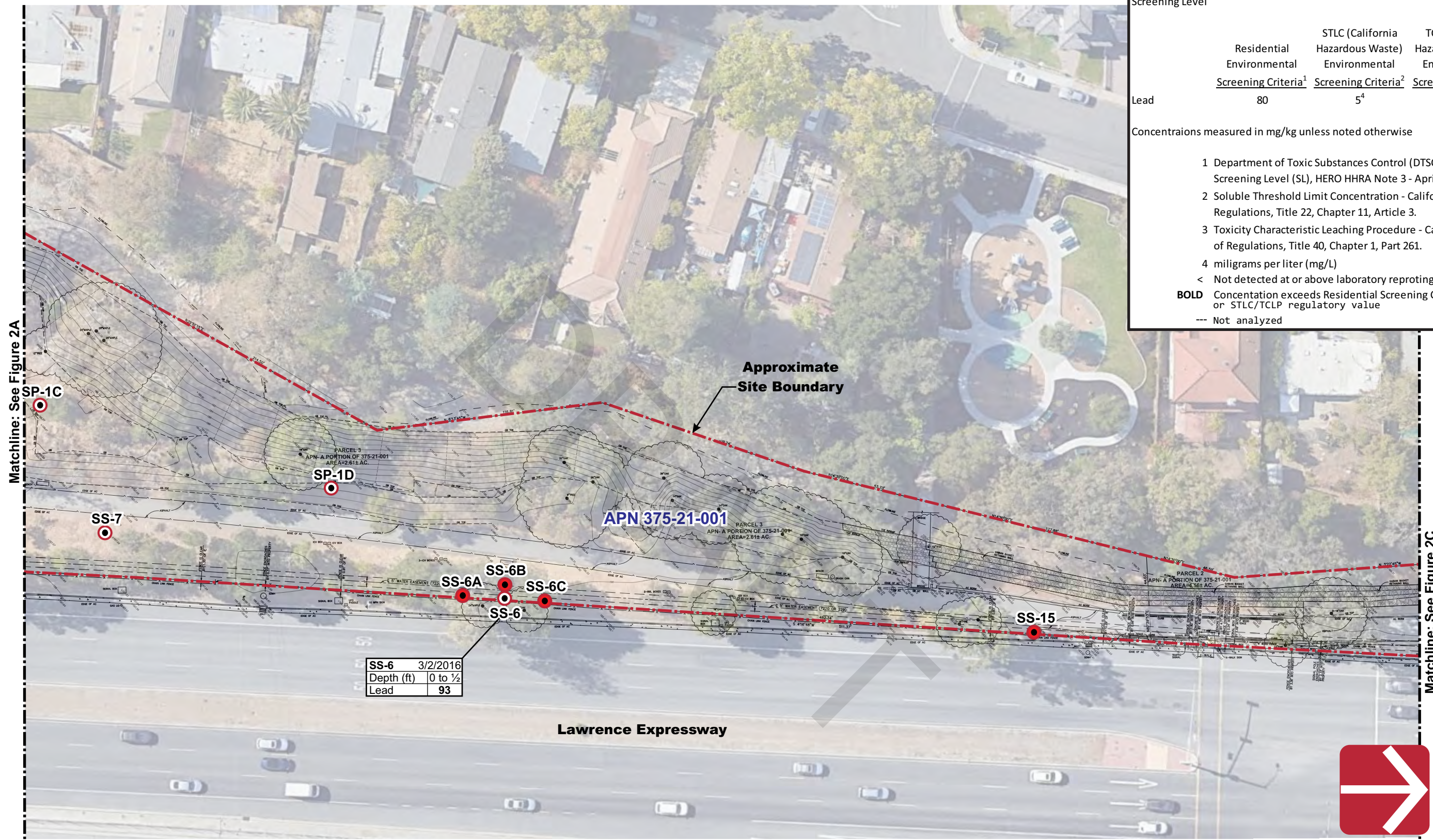
Site Plan  
 Lawrence Mitty Park  
 Cupertino, CA

Project Number	1340-1-1
Figure Number	Figure 2A
Date	March 2022
Drawn By	RRN

Screening Level	Residential Environmental	STLC (California Hazardous Waste) Environmental	TCLP (Federal Hazardous Waste) Environmental
	Screening Criteria <sup>1</sup>	Screening Criteria <sup>2</sup>	Screening Criteria <sup>3</sup>
Lead	80	5 <sup>4</sup>	5 <sup>4</sup>

Concentraions measured in mg/kg unless noted otherwise

1 Department of Toxic Substances Control (DTSC) Residential Screening Level (SL), HERO HHRA Note 3 - April 2019  
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 4 milligrams per liter (mg/L)  
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**BOLD** Concentration exceeds Residential Screening Criteria or STLC/TCLP regulatory value  
 --- Not analyzed



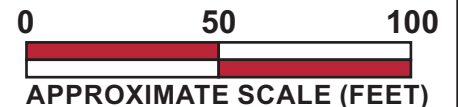
Matchline: See Figure 2A

Matchline: See Figure 2C

**Legend**

- Approximate location of soil sample (SS) (Cornerstone, 01/25/2022)
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Figure presents analytical data from boring locations where lead concentrations were greater than selected environmental screening criteria.



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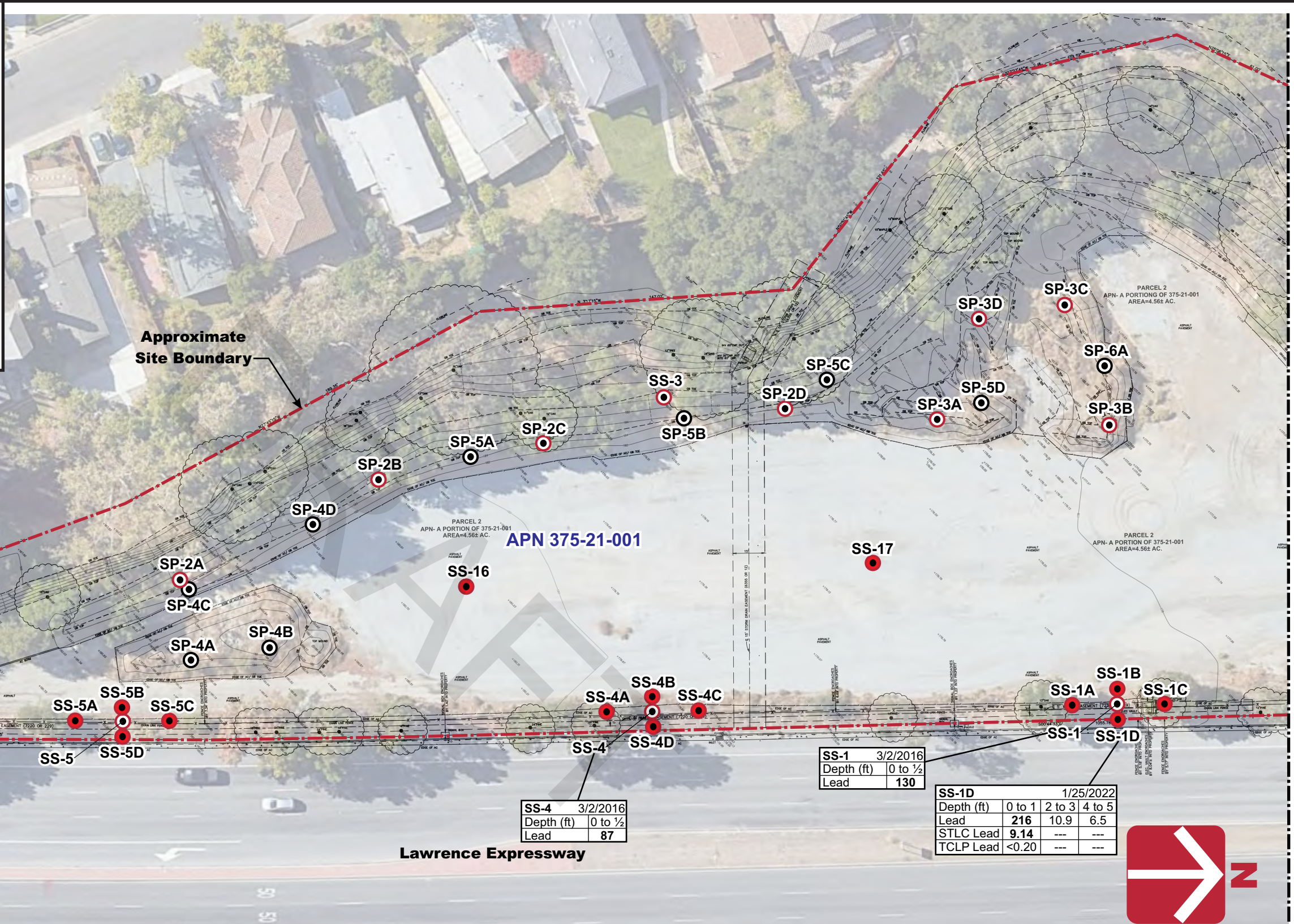


<b>Site Plan</b>	Project Number 1340-1-1	
	Figure Number Figure 2B	
<b>Lawrence Mitty Park Cupertino, CA</b>	Date March 2022	Drawn By RRN

Screening Level	STLC (California Residential Environmental Screening Criteria <sup>1</sup>	TCLP (Federal Hazardous Waste Environmental Screening Criteria <sup>2</sup>	TCLP (Federal Hazardous Waste Environmental Screening Criteria <sup>3</sup>
Lead	80	5 <sup>4</sup>	5 <sup>4</sup>

Concentraions measured in mg/kg unless noted otherwise

1 Department of Toxic Substances Control (DTSC) Residential Screening Level (SL), HERO HHRA Note 3 - April 2019  
 2 Soluble Threshold Limit Concentration - California Code of Regulations, Title 22, Chapter 11, Article 3.  
 3 Toxicity Characteristic Leaching Procedure - California Code of Regulations, Title 40, Chapter 1, Part 261.  
 4 milligrams per liter (mg/L)  
 < Not detected at or above laboratory reprotng limit  
**BOLD** Concentration exceeds Residential Screening Criteria or STLC/TCLP regulatory value  
 --- Not analyzed



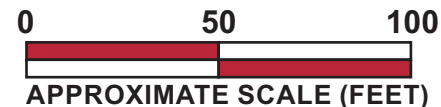
Matchline: See Figure 2B

Matchline: See Figure 2D

**Legend**

- Approximate location of soil sample (SS) (Cornerstone, 01/25/2022)
- ⊙ Approximate location of soil sample (SS/SP) (Cornerstone, 03/02/2016)
- ⊙ Approximate location of soil sample (SP) (Cornerstone, 10/24/2016)

Figure presents analytical data from boring locations where lead concentrations were greater than selected environmental screening criteria.



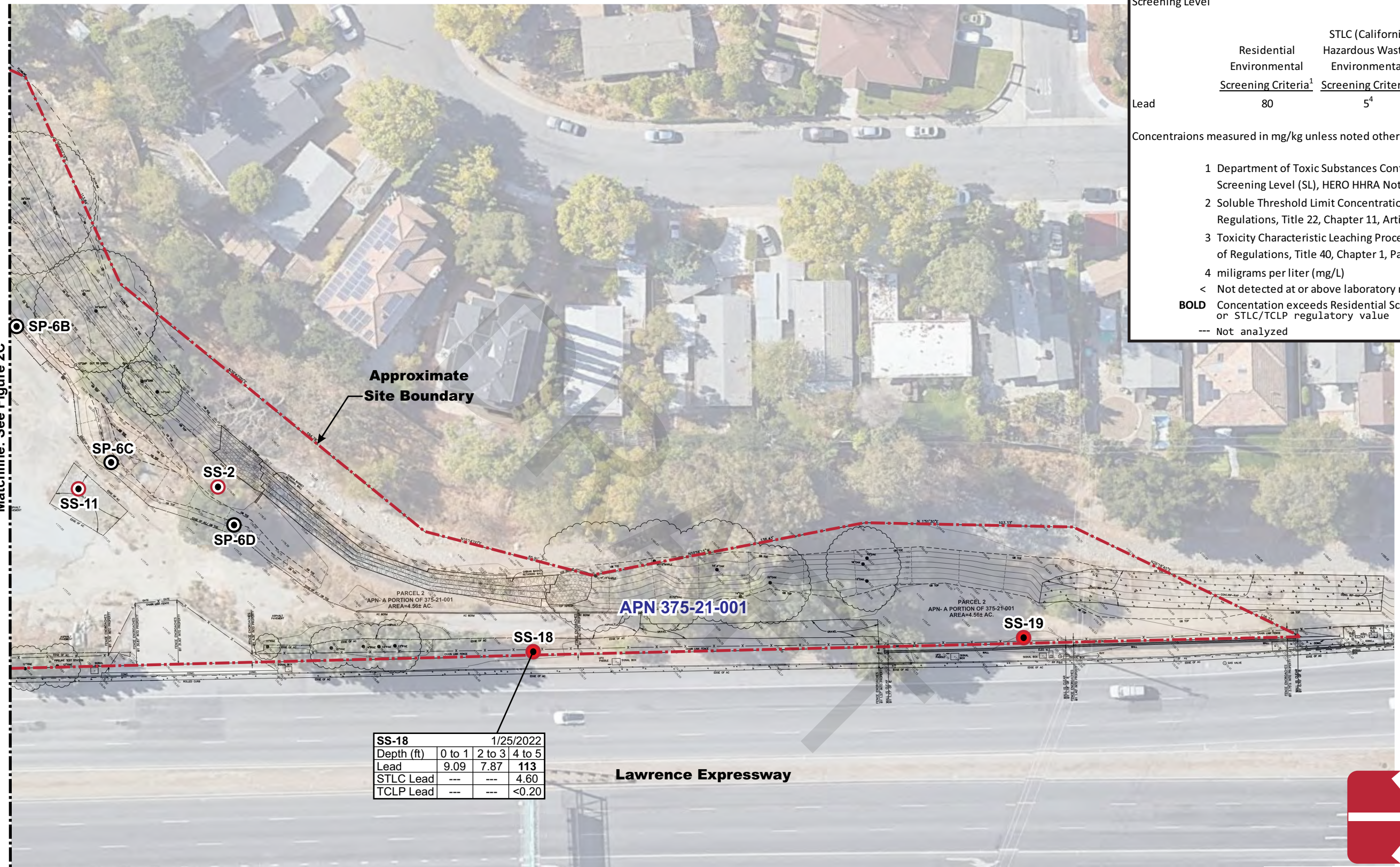
Base by Google Earth, dated 09/04/2020  
 Overlay by Giuliani & Kull - San Jose, Inc., ALTA/NSPS  
 Land Title Surveys - Sheets 6-9, dated 07/01/2020



Site Plan  
 Lawrence Mitty Park  
 Cupertino, CA

Project Number	1340-1-1
Figure Number	Figure 2C
Date	March 2022
Drawn By	RRN

Matchline: See Figure 2C



Screening Level	Residential Environmental	STLC (California Hazardous Waste) Environmental	TCLP (Federal Hazardous Waste) Environmental
	Screening Criteria <sup>1</sup>	Screening Criteria <sup>2</sup>	Screening Criteria <sup>3</sup>
Lead	80	5 <sup>4</sup>	5 <sup>4</sup>

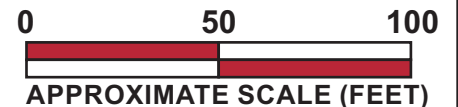
Concentraions measured in mg/kg unless noted otherwise

1 Department of Toxic Substances Control (DTSC) Residential Screening Level (SL), HERO HHRA Note 3 - April 2019  
 2 Soluble Threshold Limit Concentration - California Code of Regulations, Title 22, Chapter 11, Article 3.  
 3 Toxicity Characteristic Leaching Procedure - California Code of Regulations, Title 40, Chapter 1, Part 261.  
 4 milligrams per liter (mg/L)  
 < Not detected at or above laboratory reprotng limit  
**BOLD** Concentation exceeds Residential Screening Criteria or STLC/TCLP regulatory value  
 --- Not analyzed

**Legend**

- Approximate location of soil sample (SS) (Cornerstone, 01/25/2022)
- Approximate location of soil sample (SS/SP) (Cornerstone, 03/02/2016)
- ⊙ Approximate location of soil sample (SP) (Cornerstone, 10/24/2016)

Figure presents analytical data from boring locations where lead concentrations were greater than selected environmental screening criteria.



Base by Google Earth, dated 09/04/2020  
 Overlay by Giuliani & Kull - San Jose, Inc., ALTA/NSPS  
 Land Title Surveys - Sheets 8-11, dated 07/01/2020



Site Plan  
 Lawrence Mitty Park  
 Cupertino, CA

Project Number	1340-1-1
Figure Number	Figure 2D
Date	March 2022
Drawn By	RRN



**Table 1. Analytical Results of Soil Samples**  
(Concentrations in mg/kg; unless otherwise noted)

Boring ID	Sample ID	Date	Depth (feet)	Lead	STLC - Lead (mg/L)	TCLP - Lead (mg/L)
SS-1	SS-1 (0-0.5)	3/2/2016	0-½	<b>130</b>	---	---
SS-1A	SS-1A (0-1)	1/25/2022	0-1	26.5	---	---
	SS-1A (2-3)	1/25/2022	2-3	9.14	---	---
	SS-1A (4-5)	1/25/2022	4-5	6.55	---	---
SS-1B	SS-1B (0-1)	1/25/2022	0-1	10.5	---	---
	SS-1B (2-3)	1/25/2022	2-3	6.43	---	---
	SS-1B (4-5)	1/25/2022	4-5	6.32	---	---
SS-1C	SS-1C (0-1)	1/25/2022	0-1	20.5	---	---
	SS-1C (2-3)	1/25/2022	2-3	7.36	---	---
	SS-1C (4-5)	1/25/2022	4-5	6.38	---	---
SS-1D	SS-1D (0-1)	1/25/2022	0-1	<b>216</b>	<b>9.14</b>	<0.20
	SS-1D (2-3)	1/25/2022	2-3	10.9	---	---
	SS-1D (4-5)	1/25/2022	4-5	6.5	---	---
SS-4	SS-4 (0-0.5)	3/2/2016	0-½	<b>87</b>	---	---
SS-4A	SS-4A (0-1)	1/25/2022	0-1	13.4	---	---
	SS-4A (2-3)	1/25/2022	2-3	7.31	---	---
	SS-4A (4-5)	1/25/2022	4-5	6.78	---	---
SS-4B	SS-4B (0-1)	1/25/2022	0-1	3.69	---	---
	SS-4B (2-3)	1/25/2022	2-3	7.7	---	---
	SS-4B (4-5)	1/25/2022	4-5	5.67	---	---
SS-4C	SS-4C (0-1)	1/25/2022	0-1	25.1	---	---
	SS-4C (2-3)	1/25/2022	2-3	7.13	---	---
	SS-4C (4-5)	1/25/2022	4-5	7	---	---
SS-4D	SS-4D (0-1)	1/25/2022	0-1	48.3	---	---
	SS-4D (2-3)	1/25/2022	2-3	10.7	---	---
	SS-4D (4-5)	1/25/2022	4-5	18.6	---	---



**Table 1 continued. Analytical Results of Soil Samples**  
(Concentrations in mg/kg; unless otherwise noted)

Boring ID	Sample ID	Date	Depth (feet)	Lead	STLC - Lead (mg/L)	TCLP - Lead (mg/L)
SS-5	SS-5 (0-0.5)	3/2/2016	0-½	75	---	---
SS-5A	SS-5A (0-1)	1/25/2022	0-1	28.9	---	---
	SS-5A (2-3)	1/25/2022	2-3	8.92	---	---
	SS-5A (4-5)	1/25/2022	4-5	9.44	---	---
SS-5B	SS-5B (0-1)	1/25/2022	0-1	10.4	---	---
	SS-5B (2-3)	1/25/2022	2-3	7.63	---	---
	SS-5B (4-5)	1/25/2022	4-5	8.36	---	---
SS-5C	SS-5C (0-1)	1/25/2022	0-1	9.52	---	---
	SS-5C (2-3)	1/25/2022	2-3	7.85	---	---
	SS-5C (4-5)	1/25/2022	4-5	8.89	---	---
SS-5D	SS-5D (0-1)	1/25/2022	0-1	70.1	<0.20	---
	SS-5D (2-3)	1/25/2022	2-3	7.66	---	---
	SS-5D (4-5)	1/25/2022	4-5	9.6	---	---
SS-6	SS-6 (0-0.5)	3/2/2016	0-½	<b>93</b>	---	---
SS-6A	SS-6A (0-1)	1/25/2022	0-1	26.4	---	---
	SS-6A (2-3)	1/25/2022	2-3	9.88	---	---
	SS-6A (4-5)	1/25/2022	4-5	10.2	---	---
SS-6B	SS-6B (0-1)	1/25/2022	0-1	11.1	---	---
	SS-6B (2-3)	1/25/2022	2-3	11.6	---	---
	SS-6B (4-5)	1/25/2022	4-5	9.52	---	---
SS-6C	SS-6C (0-1)	1/25/2022	0-1	14.5	---	---
	SS-6C (2-3)	1/25/2022	2-3	9.18	---	---
	SS-6C (4-5)	1/25/2022	4-5	10.6	---	---
SS-9	SS-9 (0-0.5)	3/2/2016	0-½	27	---	---
SS-12	SS-12 (0-1)	1/25/2022	0-1	35.3	---	---
	SS-12 (2-3)	1/25/2022	2-3	8.4	---	---
	SS-12 (4-5)	1/25/2022	4-5	9.15	---	---

**Table 1 continued. Analytical Results of Soil Samples**  
(Concentrations in mg/kg; unless otherwise noted)

Boring ID	Sample ID	Date	Depth (feet)	Lead	STLC - Lead (mg/L)	TCLP - Lead (mg/L)
SS-13	SS-13 (0-1)	1/25/2022	0-1	<b>220</b>	<b>7.01</b>	<0.20
	SS-13 (2-3)	1/25/2022	2-3	19	---	---
	SS-13 (4-5)	1/25/2022	4-5	10.4	---	---
SS-15	SS-15 (0-1)	1/25/2022	0-1	12.8	---	---
	SS-15 (2-3)	1/25/2022	2-3	16.8	---	---
	SS-15 (4-5)	1/25/2022	4-5	11	---	---
SS-18	SS-18 (0-1)	1/25/2022	0-1	9.09	---	---
	SS-18 (2-3)	1/25/2022	2-3	7.87	---	---
	SS-18 (4-5)	1/25/2022	4-5	<b>113</b>	4.60	<0.20
SS-19	SS-19 (0-1)	1/25/2022	0-1	6.7	---	---
	SS-19 (2-3)	1/25/2022	2-3	8.12	---	---
	SS-19 (4-5)	1/25/2022	4-5	8.55	---	---
Maximum Detection				<b>220</b>	9.14	<0.20
Environmental Screening Criteria				80	5	5
----- Screening Criteria Basis				DTSC-SL <sup>1</sup> (Residential)	STLC <sup>2</sup>	TCLP <sup>3</sup>

- 1 Department of Toxic Substances Control (DTSC) Residential Screening Level (SL), HERO HHRA Note 3 - April 2019
  - 2 Soluble Threshold Limit Concentration (STLC) - California Code of Regulations, Title 22, Chapter 11, Article 3.
  - 3 Toxicity Characteristic Leaching Procedure (TCLP) - California Code of Regulations, Title 40, Chapter 1, Part 261.
- ND Not detected at or above laboratory reporting limit  
 < Not detected at or above laboratory reporting limit  
 --- Not analyzed  
**BOLD** Concentration exceeds selected Environmental Screening Criteria

## Tier 1 ESLs<sup>1</sup>

2019 (Rev. 2)

Based on a generic conceptual site model designed for use at most sites<sup>2</sup>

Chemicals	CAS No.	Groundwater (µg/L)	Soil (mg/kg)	Subslab / Soil Gas (µg/m <sup>3</sup> )	Indoor Air (µg/m <sup>3</sup> )
Acenaphthene [PAH]	83-32-9	1.5E+01	1.2E+01	1.7E+04	5.1E+02
Acenaphthylene [PAH]	208-96-8	1.5E+01	6.4E+00	--	--
Acetone	67-64-1	1.5E+03	9.2E-01	1.0E+06	3.1E+04
Aldrin	309-00-2	1.4E-04	2.4E-03	1.9E-02	5.7E-04
Anthracene [PAH]	120-12-7	7.3E-01	1.9E+00	--	--
Antimony	7440-36-0	6.0E+00	1.1E+01	--	--
Arsenic	7440-38-2	1.0E+01	6.7E-02	--	--
Barium	7440-39-3	1.0E+03	3.9E+02	--	--
Benzene	71-43-2	4.2E-01	2.5E-02	3.2E+00	9.7E-02
Benzo[a]anthracene [PAH]	56-55-3	1.7E-02	6.3E-01	3.1E-01	9.2E-03
Benzo[b]fluoranthene [PAH]	205-99-2	4.9E-02	1.1E+00	--	--
Benzo[k]fluoranthene [PAH]	207-08-9	4.9E-02	2.8E+00	--	--
Benzo[g,h,i]perylene [PAH]	191-24-2	1.0E-01	2.5E+00	--	--
Benzo[a]pyrene [PAH]	50-32-8	1.4E-02	1.1E-01	--	--
Beryllium	7440-41-7	2.7E+00	5.0E+00	--	--
1,1-Biphenyl	92-52-4	5.0E-01	4.2E-01	1.4E+01	4.2E-01
Bis(2-chloroethyl) ether	111-44-4	6.3E-03	3.4E-05	1.3E-01	4.0E-03
Bis(2-chloro-1-methylethyl) ether	108-60-1	3.6E-01	5.1E-03	9.4E+00	2.8E-01
Bis(2-ethylhexyl) phthalate	117-81-7	4.0E+00	8.0E-01	--	--
Boron	7440-42-8	1.6E+00	1.2E+02	--	--
Bromodichloromethane	75-27-4	8.7E-01	1.6E-02	2.5E+00	7.6E-02
Bromoform (Tribromomethane)	75-25-2	8.0E+01	6.9E-01	8.5E+01	2.6E+00
Bromomethane	74-83-9	7.5E+00	3.6E-01	1.7E+02	5.2E+00
Cadmium (soil)	7440-43-9	--	1.9E+00	--	--
Cadmium (water)	7440-43-9	2.5E-01	--	--	--
Carbon tetrachloride	56-23-5	4.3E-01	7.6E-02	1.6E+01	4.7E-01
Chlordane	12789-03-6	5.9E-04	8.5E-03	2.8E-01	8.3E-03
p-Chloroaniline	106-47-8	3.6E-01	6.7E-03	--	--
Chlorobenzene	108-90-7	2.5E+01	1.4E+00	1.7E+03	5.2E+01
Chloroethane	75-00-3	1.6E+01	1.2E+00	3.5E+05	1.0E+04
Chloroform	67-66-3	8.1E-01	2.3E-02	4.1E+00	1.2E-01
Chloromethane	74-87-3	1.9E+02	1.1E+01	3.1E+03	9.4E+01
2-Chlorophenol	95-57-8	1.8E-01	1.2E-02	6.3E+02	1.9E+01
Chromium (total)	7440-47-3	5.0E+01	1.6E+02	--	--
Chromium III	16065-83-1	1.8E+02	1.2E+05	--	--
Chromium VI	18540-29-9	2.0E-02	3.0E-01	--	--
Chrysene [PAH]	218-01-9	4.9E-02	2.2E+00	--	--
Cobalt	7440-48-4	3.0E+00	2.3E+01	--	--
Copper	7440-50-8	3.1E+00	1.8E+02	--	--
Cyanide	57-12-5	1.0E+00	3.4E-03	2.8E+01	8.3E-01
Dibenz[a,h]anthracene [PAH]	53-70-3	2.5E-02	1.1E-01	--	--
Dibromochloromethane	124-48-1	3.4E+01	3.5E-01	--	--
1,2-dibromo-3-chloropropane	96-12-8	2.8E-02	5.9E-04	5.6E-03	1.7E-04
1,2-Dibromoethane	106-93-4	5.0E-02	5.3E-04	1.6E-01	4.7E-03
1,2-Dichlorobenzene	95-50-1	1.4E+01	1.0E+00	7.0E+03	2.1E+02
1,3-Dichlorobenzene	541-73-1	6.5E+01	6.0E+00	--	--
1,4-Dichlorobenzene	106-46-7	2.6E+00	2.0E-01	8.5E+00	2.6E-01
3,3-Dichlorobenzidine	91-94-1	4.6E-02	2.5E-02	--	--
DDD	72-54-8	8.4E-04	2.7E+00	--	--
DDE	72-55-9	5.9E-04	3.3E-01	9.6E-01	2.9E-02
DDT	50-29-3	5.9E-04	1.1E-03	--	--
1,1-Dichloroethane	75-34-3	5.0E+00	2.0E-01	5.8E+01	1.8E+00
1,2-Dichloroethane	107-06-2	5.0E-01	7.0E-03	3.6E+00	1.1E-01
1,1-Dichloroethene	75-35-4	3.2E+00	5.4E-01	2.4E+03	7.3E+01
cis-1,2-Dichloroethene	156-59-2	6.0E+00	1.9E-01	2.8E+02	8.3E+00
trans-1,2-Dichloroethene	156-60-5	1.0E+01	6.5E-01	2.8E+03	8.3E+01
2,4-Dichlorophenol	120-83-2	3.0E-01	7.5E-03	4.7E+04	1.4E+03



# Environmental Screening Levels

San Francisco Bay Regional Water Quality Control Board



## Tier 1 ESLs<sup>1</sup>

2019 (Rev. 2)

Based on a generic conceptual site model designed for use at most sites<sup>2</sup>

Chemicals	CAS No.	Groundwater (µg/L)	Soil (mg/kg)	Subslab / Soil Gas (µg/m <sup>3</sup> )	Indoor Air (µg/m <sup>3</sup> )
1,2-Dichloropropane	78-87-5	2.3E+00	6.5E-02	9.4E+00	2.8E-01
1,3-Dichloropropene	542-75-6	5.0E-01	1.7E-02	5.8E+00	1.8E-01
Dieldrin	60-57-1	1.4E-04	4.6E-04	2.0E-02	6.1E-04
Diethyl phthalate	84-66-2	1.5E+00	2.5E-02	--	--
Dimethyl phthalate	131-11-3	1.5E+00	3.5E-02	--	--
2,4-Dimethylphenol	105-67-9	1.0E+02	8.1E+00	3.3E+01	1.0E+00
2,4-Dinitrophenol	51-28-5	3.9E+01	3.0E+00	--	--
2,4-Dinitrotoluene	121-14-2	2.4E-01	2.3E-02	--	--
1,4-Dioxane	123-91-1	3.8E-01	1.7E-04	1.2E+01	3.6E-01
Dioxin (2,3,7,8-TCDD)	1746-01-6	1.4E-08	4.8E-06	2.5E-06	7.4E-08
Endosulfan	115-29-7	8.7E-03	9.8E-03	--	--
Endrin	72-20-8	2.3E-03	1.1E-03	--	--
Ethylbenzene	100-41-4	3.5E+00	4.3E-01	3.7E+01	1.1E+00
Fluoranthene [PAH]	206-44-0	8.0E+00	6.9E-01	--	--
Fluorene [PAH]	86-73-7	3.9E+00	6.0E+00	--	--
Heptachlor	76-44-8	2.1E-04	1.2E-01	7.2E-02	2.2E-03
Heptachlor epoxide	1024-57-3	1.1E-04	1.8E-04	3.6E-02	1.1E-03
Hexachlorobenzene	118-74-1	7.7E-04	8.0E-04	1.8E-01	5.5E-03
Hexachlorobutadiene	87-68-3	1.4E-01	2.8E-02	4.3E+00	1.3E-01
g-Hexachlorocyclohexane (Lindane)	58-89-9	1.6E-02	7.4E-03	--	--
Hexachloroethane	67-72-1	3.3E-01	1.9E-02	8.5E+00	2.6E-01
Indeno[1,2,3-c,d]pyrene [PAH]	193-39-5	4.9E-02	4.8E-01	--	--
Lead	7439-92-1	2.5E+00	3.2E+01	--	--
Mercury (elemental)	7439-97-6	2.5E-02	1.3E+01	1.0E+00	3.1E-02
Methoxychlor	72-43-5	3.0E-03	1.3E-02	--	--
Methylene chloride	75-09-2	5.0E+00	1.2E-01	3.4E+01	1.0E+00
Methyl ethyl ketone	78-93-3	5.6E+03	6.1E+00	1.7E+05	5.2E+03
Methyl isobutyl ketone	108-10-1	1.2E+02	3.6E-01	1.4E+04	4.2E+02
Methyl mercury	22967-92-6	3.0E-03	3.4E-02	--	--
2-Methylnaphthalene	91-57-6	2.1E+00	8.8E-01	2.3E+03	6.8E+01
Methyl tertiary butyl ether (MTBE)	1634-04-4	5.0E+00	2.8E-02	3.6E+02	1.1E+01
Molybdenum	7439-98-7	1.0E+02	6.9E+00	--	--
Naphthalene [PAH]	91-20-3	1.7E-01	4.2E-02	2.8E+00	8.3E-02
Nickel	7440-02-0	8.2E+00	8.6E+01	--	--
Pentachlorophenol	87-86-5	1.0E+00	1.3E-02	--	--
Perchlorate	7790-98-9	6.0E+00	5.5E+01	--	--
Petroleum - Gasoline	--	1.0E+02	1.0E+02	3.3E+03	1.0E+02
Petroleum - Stoddard Solvent	--	1.0E+02	1.0E+02	1.1E+04	3.3E+02
Petroleum - Jet Fuel	--	1.0E+02	1.0E+02	1.1E+04	3.3E+02
Petroleum - Diesel	--	1.0E+02	2.6E+02	8.9E+03	2.7E+02
Petroleum - HOPs	--	1.0E+02	--	--	--
Petroleum - Motor Oil	--	--	1.6E+03	--	--
Phenanthrene [PAH]	85-01-8	4.6E+00	7.8E+00	1.8E+03	5.5E+01
Phenol	108-95-2	5.0E+00	1.6E-01	5.2E+03	1.6E+02
Polychlorinated biphenyls (PCBs)	1336-36-3	1.7E-04	2.3E-01	1.6E-01	4.9E-03
Pyrene [PAH]	129-00-0	2.0E+00	4.5E+01	--	--
Selenium	7782-49-2	5.0E-01	2.4E+00	--	--
Silver	7440-22-4	1.9E-01	2.5E+01	--	--
Styrene	100-42-5	1.0E+01	9.2E-01	3.1E+04	9.4E+02
tert-Butyl alcohol	75-65-0	1.2E+01	7.5E-02	--	--
1,1,1,2-Tetrachloroethane	630-20-6	5.7E-01	1.7E-02	1.3E+01	3.8E-01
1,1,2,2-Tetrachloroethane	79-34-5	1.0E+00	1.8E-02	1.6E+00	4.8E-02
Tetrachloroethene	127-18-4	6.4E-01	8.0E-02	1.5E+01	4.6E-01
Thallium	7440-28-0	2.0E+00	7.8E-01	--	--
Toluene	108-88-3	4.0E+01	3.2E+00	1.0E+04	3.1E+02
Toxaphene	8001-35-2	2.0E-04	5.1E-01	--	--
1,2,4-Trichlorobenzene	120-82-1	5.0E+00	1.2E+00	7.0E+01	2.1E+00



# Environmental Screening Levels

San Francisco Bay Regional Water Quality Control Board



## Tier 1 ESLs <sup>1</sup>

2019 (Rev. 2)

Based on a generic conceptual site model designed for use at most sites<sup>2</sup>

Chemicals	CAS No.	Groundwater (µg/L)	Soil (mg/kg)	Subslab / Soil Gas (µg/m <sup>3</sup> )	Indoor Air (µg/m <sup>3</sup> )
1,1,1-Trichloroethane	71-55-6	6.2E+01	7.0E+00	3.5E+04	1.0E+03
1,1,2-Trichloroethane	79-00-5	5.0E+00	7.6E-02	5.8E+00	1.8E-01
Trichloroethene	79-01-6	1.2E+00	8.5E-02	1.6E+01	4.8E-01
2,4,5-Trichlorophenol	95-95-4	1.1E+01	2.9E+00	--	--
2,4,6-Trichlorophenol	88-06-2	6.3E-01	4.0E-02	1.0E+01	3.0E-01
1,2,3-Trichloropropane	96-18-4	5.0E-03	1.1E-04	1.0E+01	3.1E-01
Vanadium	7440-62-2	1.9E+01	1.8E+01	--	--
Vinyl chloride	75-01-4	8.6E-03	1.5E-03	3.2E-01	9.5E-03
Xylenes	1330-20-7	2.0E+01	2.1E+00	3.5E+03	1.0E+02
Zinc	7440-66-6	8.1E+01	3.4E+02	--	--

**Notes:**

1 - ESLs are developed based on methodologies discussed in the User's Guide. Evaluation of laboratory detection limits and naturally occurring background or ambient concentrations should be independently conducted. See User's Guide Chapter 12 (Additional Considerations) for further information.

2 - Generic Conceptual Site Model - See User's Guide Chapter 2. Input settings are:

- Land Use = Residential
- Groundwater Use = Drinking Water Resource
- MCL Priority over Risk-Based Levels = Yes
- Discharge to Surface Water = Saltwater & Freshwater
- Vegetation Level = Substantial
- Soil Exposure Depth = Shallow

**Abbreviations:**

- DDD - Dichlorodiphenyldichloroethane
- DDE - Dichlorodiphenyldichloroethene
- DDT - Dichlorodiphenyltrichloroethane
- HOPs - Hydrocarbon Oxidation Products (biodegradation metabolites and photo-oxidation products of petroleum hydrocarbons). See User's Guide Chapter 4 for further information.
- PAH - Polycyclic aromatic hydrocarbon
- TCDD - Tetrachlorodibenzodioxin

2019 (Rev. 2)		Summary of Groundwater ESLs (µg/L)														
Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table GW-1)			Aquatic Habitat Goal Levels (Table GW-2)			Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3)				Gross Contamination Levels (GW-4)	Odor Nuisance Levels (Table GW-5)		GW Tier 1 ESL	Basis
		MCL Priority <sup>1</sup>	Tapwater Cancer Risk	Tapwater Non-cancer Hazard	Fresh Water Ecotox	Saltwater Ecotox	Seafood Ingestion Human Health	Residential		Commercial/Industrial			Drinking Water	Non-Drinking Water		
								Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard					
Acenaphthene [PAH]	83-32-9	5.3E+02	--	5.3E+02	2.3E+01	1.5E+01	2.7E+03	--	--	--	--	2.0E+03	2.0E+01	2.0E+02	1.5E+01	Aquatic Habitat
Acenaphthylene [PAH]	208-96-8	--	--	--	--	1.5E+01	--	--	--	--	--	2.0E+03	--	--	1.5E+01	Aquatic Habitat
Acetone	67-64-1	1.4E+04	--	1.4E+04	1.5E+03	--	--	--	2.3E+07	--	9.7E+07	5.0E+04	2.0E+04	2.0E+05	1.5E+03	Aquatic Habitat
Aldrin	309-00-2	9.2E-04	9.2E-04	2.0E-03	3.0E-01	1.3E-01	1.4E-04	3.2E-01	--	1.4E+00	--	8.5E+00	1.7E+01	1.7E+02	1.4E-04	Aquatic Habitat
Anthracene [PAH]	120-12-7	1.8E+03	--	1.8E+03	7.3E-01	1.5E+01	1.1E+05	--	--	--	--	2.2E+01	--	--	7.3E-01	Aquatic Habitat
Antimony	7440-36-0	6.0E+00	--	1.0E+00	3.0E+01	5.0E+02	4.3E+03	--	--	--	--	5.0E+04	--	--	6.0E+00	MCL
Arsenic	7440-38-2	1.0E+01	4.0E-03	7.0E-02	1.5E+02	3.6E+01	--	--	--	--	--	5.0E+04	--	--	1.0E+01	MCL
Barium	7440-39-3	1.0E+03	--	2.0E+03	--	--	--	--	--	--	--	5.0E+04	--	--	1.0E+03	MCL
Benzene	71-43-2	1.0E+00	1.5E-01	5.7E+00	4.6E+01	3.5E+02	7.1E+01	4.2E-01	1.4E+01	1.8E+00	5.7E+01	5.0E+04	1.7E+02	2.0E+04	4.2E-01	Vapor Intrusion
Benzo[a]anthracene [PAH]	56-55-3	1.7E-02	1.7E-02	--	2.7E-02	1.5E+01	4.9E-02	1.9E+01	--	2.3E+02	--	4.7E+00	--	--	1.7E-02	Tap Canc-Risk
Benzo[b]fluoranthene [PAH]	205-99-2	2.5E-01	2.5E-01	--	--	1.5E+01	4.9E-02	--	--	--	--	7.5E-01	--	--	4.9E-02	Aquatic Habitat
Benzo[k]fluoranthene [PAH]	207-08-9	2.5E+00	2.5E+00	--	3.7E+00	1.5E+01	4.9E-02	--	--	--	--	4.0E-01	--	--	4.9E-02	Aquatic Habitat
Benzo[g,h,i]perylene [PAH]	191-24-2	--	--	--	1.0E-01	1.5E+01	--	--	--	--	--	1.3E-01	--	--	1.0E-01	Aquatic Habitat
Benzo[a]pyrene [PAH]	50-32-8	2.0E-01	7.0E-03	6.0E+00	1.4E-02	1.5E+01	4.9E-02	--	--	--	--	8.0E-01	--	--	1.4E-02	Aquatic Habitat
Beryllium	7440-41-7	4.0E+00	--	1.0E+00	2.7E+00	--	--	--	--	--	--	5.0E+04	--	--	2.7E+00	Aquatic Habitat
1,1-Biphenyl	92-52-4	8.3E-01	3.8E+00	8.3E-01	1.4E+01	--	--	--	3.2E+01	--	1.3E+02	3.8E+03	5.0E-01	5.0E+00	5.0E-01	Odor/Nuis
Bis(2-chloroethyl) ether	111-44-4	6.3E-03	6.3E-03	--	6.1E+01	--	1.4E+00	5.6E+00	--	2.5E+01	--	5.0E+04	3.6E+02	3.6E+03	6.3E-03	Tap Canc-Risk
Bis(2-chloro-1-methylethyl) ether	108-60-1	3.6E-01	3.6E-01	7.1E+02	6.1E+01	--	1.7E+05	9.4E+01	--	4.1E+02	--	5.0E+04	3.2E+02	3.2E+03	3.6E-01	Tap Canc-Risk
Bis(2-ethylhexyl) phthalate	117-81-7	4.0E+00	5.6E+00	4.0E+02	3.2E+01	--	5.9E+00	--	--	--	--	1.4E+02	--	--	4.0E+00	MCL
Boron	7440-42-8	1.0E+03	--	1.0E+03	1.6E+00	--	--	--	--	--	--	5.0E+04	--	--	1.6E+00	Aquatic Habitat
Bromodichloromethane	75-27-4	8.0E+01	1.2E-01	3.8E+02	1.1E+03	3.2E+03	--	8.7E-01	--	3.8E+00	--	5.0E+04	--	--	8.7E-01	Vapor Intrusion
Bromoform (Tribromomethane)	75-25-2	8.0E+01	2.9E+00	3.8E+02	1.1E+03	3.2E+03	3.6E+02	1.2E+02	--	5.1E+02	--	5.0E+04	5.1E+02	5.1E+03	8.0E+01	MCL
Bromomethane	74-83-9	7.5E+00	--	7.5E+00	1.6E+02	3.2E+03	4.0E+03	--	1.7E+01	--	7.3E+01	5.0E+04	--	--	7.5E+00	Tap NC-Hazard
Cadmium (soil)	7440-43-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium (water)	7440-43-9	5.0E+00	--	4.0E-02	2.5E-01	9.3E+00	--	--	--	--	--	5.0E+04	--	--	2.5E-01	Aquatic Habitat
Carbon tetrachloride	56-23-5	5.0E-01	1.0E-01	3.6E+01	2.4E+02	3.2E+03	4.4E+00	4.3E-01	3.8E+01	1.9E+00	1.6E+02	5.0E+04	5.2E+02	5.2E+03	4.3E-01	Vapor Intrusion
Chlordane	12789-03-6	1.0E-01	1.3E-02	1.3E+00	4.3E-03	4.0E-03	5.9E-04	4.1E+00	3.7E+02	1.8E+01	1.5E+03	2.8E+01	2.5E+00	2.5E+01	5.9E-04	Aquatic Habitat
p-Chloroaniline	106-47-8	3.6E-01	3.6E-01	7.6E+01	5.0E+00	--	--	--	--	--	--	5.0E+04	--	--	3.6E-01	Tap Canc-Risk
Chlorobenzene	108-90-7	7.0E+01	--	7.0E+01	2.5E+01	6.5E+01	2.1E+04	--	4.0E+02	--	1.7E+03	5.0E+04	5.0E+01	5.0E+02	2.5E+01	Aquatic Habitat
Chloroethane	75-00-3	2.1E+04	--	2.1E+04	--	--	--	--	2.3E+04	--	9.7E+04	5.0E+04	1.6E+01	1.6E+02	1.6E+01	Odor/Nuis
Chloroform	67-66-3	8.0E+01	2.2E-01	9.7E+01	6.2E+02	3.2E+03	--	8.1E-01	6.8E+02	3.6E+00	2.9E+03	5.0E+04	2.4E+03	2.4E+04	8.1E-01	Vapor Intrusion
Chloromethane	74-87-3	1.9E+02	--	1.9E+02	1.1E+03	3.2E+03	--	--	2.6E+02	--	1.1E+03	5.0E+04	--	--	1.9E+02	Tap NC-Hazard
2-Chlorophenol	95-57-8	9.1E+01	--	9.1E+01	4.4E+02	--	4.0E+02	--	--	--	--	5.0E+04	1.8E-01	1.8E+00	1.8E-01	Odor/Nuis
Chromium (total)	7440-47-3	5.0E+01	--	--	1.8E+02	--	--	--	--	--	--	5.0E+04	--	--	5.0E+01	MCL
Chromium III	16065-83-1	2.2E+04	--	2.2E+04	1.8E+02	1.0E+03	--	--	--	--	--	5.0E+04	--	--	1.8E+02	Aquatic Habitat
Chromium VI	18540-29-9	2.0E-02	2.0E-02	4.4E+01	1.1E+01	5.0E+01	--	--	--	--	--	5.0E+04	--	--	2.0E-02	Tap Canc-Risk

2019 (Rev. 2)		Summary of Groundwater ESLs (µg/L)														
Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table GW-1)			Aquatic Habitat Goal Levels (Table GW-2)			Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3)				Gross Contamination Levels (GW-4)	Odor Nuisance Levels (Table GW-5)		GW Tier 1 ESL	Basis
		MCL Priority <sup>1</sup>	Tapwater Cancer Risk	Tapwater Non-cancer Hazard	Fresh Water Ecotox	Saltwater Ecotox	Seafood Ingestion Human Health	Residential		Commercial/Industrial			Drinking Water	Non-Drinking Water		
								Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard					
Chrysene [PAH]	218-01-9	2.5E+01	2.5E+01	--	3.5E-01	1.5E+01	4.9E-02	--	--	--	--	1.0E+00	--	--	4.9E-02	Aquatic Habitat
Cobalt	7440-48-4	6.0E+00	--	6.0E+00	3.0E+00	--	--	--	--	--	--	5.0E+04	--	--	3.0E+00	Aquatic Habitat
Copper	7440-50-8	1.0E+03	--	3.0E+02	9.0E+00	3.1E+00	--	--	--	--	--	5.0E+04	1.0E+03	--	3.1E+00	Aquatic Habitat
Cyanide	57-12-5	1.5E+02	--	1.5E+00	5.2E+00	1.0E+00	2.2E+05	--	2.0E+02	--	8.3E+02	5.0E+04	1.7E+02	1.7E+03	1.0E+00	Aquatic Habitat
Dibenz[a,h]anthracene [PAH]	53-70-3	2.5E-02	2.5E-02	--	7.5E+00	1.5E+01	4.9E-02	--	--	--	--	1.3E+00	--	--	2.5E-02	Tap Canc-Risk
Dibromochloromethane	124-48-1	8.0E+01	8.7E-01	3.8E+02	1.1E+03	3.2E+03	3.4E+01	--	--	--	--	5.0E+04	--	--	3.4E+01	Aquatic Habitat
1,2-dibromo-3-chloropropane	96-12-8	2.0E-01	3.0E-04	3.7E-01	--	--	--	2.8E-02	3.5E+01	3.4E-01	1.5E+02	5.0E+04	1.0E+01	1.0E+02	2.8E-02	Vapor Intrusion
1,2-Dibromoethane	106-93-4	5.0E-02	7.5E-03	1.7E+00	1.4E+03	--	--	1.7E-01	3.1E+01	7.6E-01	1.3E+02	5.0E+04	--	--	5.0E-02	MCL
1,2-Dichlorobenzene	95-50-1	1.0E+02	--	3.0E+02	1.4E+01	6.5E+01	1.7E+04	--	2.7E+03	--	1.1E+04	5.0E+04	1.0E+02	1.0E+02	1.4E+01	Aquatic Habitat
1,3-Dichlorobenzene	541-73-1	6.0E+02	--	6.0E+02	7.1E+01	6.5E+01	2.6E+03	--	--	--	--	5.0E+04	--	--	6.5E+01	Aquatic Habitat
1,4-Dichlorobenzene	106-46-7	5.0E+00	4.8E-01	5.7E+02	1.5E+01	6.5E+01	2.6E+03	2.6E+00	8.4E+03	1.1E+01	3.5E+04	4.1E+04	5.0E+00	1.1E+02	2.6E+00	Vapor Intrusion
3,3-Dichlorobenzidine	91-94-1	4.6E-02	4.6E-02	--	2.5E+02	--	7.7E-02	--	--	--	--	1.6E+03	--	--	4.6E-02	Tap Canc-Risk
DDD	72-54-8	3.1E-02	3.1E-02	--	1.0E-03	1.0E-03	8.4E-04	--	--	--	--	4.5E+01	--	--	8.4E-04	Aquatic Habitat
DDE	72-55-9	4.6E-02	4.6E-02	--	1.0E-03	1.0E-03	5.9E-04	1.7E+01	--	7.4E+01	--	2.0E+01	--	--	5.9E-04	Aquatic Habitat
DDT	50-29-3	2.3E-01	2.3E-01	1.0E+01	1.0E-03	1.0E-03	5.9E-04	--	--	--	--	2.8E+00	3.5E+02	3.5E+03	5.9E-04	Aquatic Habitat
1,1-Dichloroethane	75-34-3	5.0E+00	2.7E+00	3.8E+03	4.7E+01	--	--	7.6E+00	--	3.3E+01	--	5.0E+04	--	--	5.0E+00	MCL
1,2-Dichloroethane	107-06-2	5.0E-01	1.7E-01	1.3E+01	1.0E+04	1.1E+04	9.9E+01	2.2E+00	1.5E+02	9.8E+00	6.4E+02	5.0E+04	7.0E+03	2.0E+05	5.0E-01	MCL
1,1-Dichloroethene	75-35-4	6.0E+00	--	1.0E+01	2.5E+01	2.2E+04	3.2E+00	--	6.6E+01	--	2.8E+02	5.0E+04	1.5E+03	1.5E+04	3.2E+00	Aquatic Habitat
cis-1,2-Dichloroethene	156-59-2	6.0E+00	--	1.1E+01	5.9E+02	2.2E+04	--	--	4.9E+01	--	2.1E+02	5.0E+04	--	--	6.0E+00	MCL
trans-1,2-Dichloroethene	156-60-5	1.0E+01	--	5.0E+01	5.9E+02	2.2E+04	1.4E+05	--	2.2E+02	--	9.2E+02	5.0E+04	2.6E+02	2.6E+03	1.0E+01	MCL
2,4-Dichlorophenol	120-83-2	4.6E+01	--	4.6E+01	1.8E+02	--	7.9E+02	--	--	--	--	5.0E+04	3.0E-01	3.0E+00	3.0E-01	Odor/Nuis
1,2-Dichloropropane	78-87-5	5.0E+00	4.4E-01	8.3E+00	2.9E+03	1.5E+03	3.9E+01	2.3E+00	3.5E+01	1.0E+01	1.5E+02	5.0E+04	1.0E+01	1.0E+02	2.3E+00	Vapor Intrusion
1,3-Dichloropropene	542-75-6	5.0E-01	2.0E-01	3.9E+01	1.2E+02	7.9E+01	1.7E+03	1.2E+00	1.4E+02	5.1E+00	5.8E+02	5.0E+04	--	--	5.0E-01	MCL
Dieldrin	60-57-1	7.1E-04	7.1E-04	2.0E-03	5.6E-02	1.9E-03	1.4E-04	1.5E+00	--	6.5E+00	--	1.0E+02	4.1E+01	4.1E+02	1.4E-04	Aquatic Habitat
Diethyl phthalate	84-66-2	1.5E+04	--	1.5E+04	1.5E+00	1.7E+00	1.2E+05	--	--	--	--	5.0E+04	--	--	1.5E+00	Aquatic Habitat
Dimethyl phthalate	131-11-3	--	--	--	1.5E+00	1.7E+00	2.9E+06	--	--	--	--	5.0E+04	--	--	1.5E+00	Aquatic Habitat
2,4-Dimethylphenol	105-67-9	1.0E+02	--	1.0E+02	5.3E+02	1.1E+02	2.3E+03	--	--	--	--	5.0E+04	4.0E+02	4.0E+03	1.0E+02	Tap NC-Hazard
2,4-Dinitrophenol	51-28-5	3.9E+01	--	3.9E+01	7.5E+01	4.9E+02	1.4E+04	--	--	--	--	5.0E+04	--	--	3.9E+01	Tap NC-Hazard
2,4-Dinitrotoluene	121-14-2	2.4E-01	2.4E-01	3.8E+01	1.2E+02	1.9E+02	9.1E+00	--	--	--	--	5.0E+04	--	--	2.4E-01	Tap Canc-Risk
1,4-Dioxane	123-91-1	3.8E-01	3.8E-01	5.7E+01	3.4E+05	5.0E+05	--	1.8E+03	1.6E+05	8.0E+03	6.6E+05	5.0E+04	2.3E+05	--	3.8E-01	Tap Canc-Risk
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.0E-05	1.2E-07	1.2E-05	5.0E-06	--	1.4E-08	3.7E-05	2.1E-02	1.6E-04	8.8E-02	1.0E-01	--	--	1.4E-08	Aquatic Habitat
Endosulfan	115-29-7	1.0E+02	--	1.0E+02	5.6E-02	8.7E-03	2.4E+02	--	--	--	--	1.7E+02	--	--	8.7E-03	Aquatic Habitat
Endrin	72-20-8	2.0E+00	--	3.0E-01	3.6E-02	2.3E-03	8.1E-01	--	--	--	--	1.3E+02	4.1E+01	4.1E+02	2.3E-03	Aquatic Habitat
Ethylbenzene	100-41-4	3.0E+01	1.5E+00	3.0E+02	2.9E+02	4.3E+01	2.9E+04	3.5E+00	3.3E+03	1.5E+01	1.4E+04	5.0E+04	3.0E+01	3.0E+02	3.5E+00	Vapor Intrusion
Fluoranthene [PAH]	206-44-0	8.0E+02	--	8.0E+02	8.1E+00	8.0E+00	3.7E+02	--	--	--	--	1.3E+02	--	--	8.0E+00	Aquatic Habitat
Fluorene [PAH]	86-73-7	2.9E+02	--	2.9E+02	3.9E+00	1.5E+01	1.4E+04	--	--	--	--	8.5E+02	--	--	3.9E+00	Aquatic Habitat

2019 (Rev. 2)		Summary of Groundwater ESLs (µg/L)														
Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table GW-1)			Aquatic Habitat Goal Levels (Table GW-2)			Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3)				Gross Contamination Levels (GW-4)	Odor Nuisance Levels (Table GW-5)		GW Tier 1 ESL	Basis
		MCL Priority <sup>1</sup>	Tapwater Cancer Risk	Tapwater Non-cancer Hazard	Fresh Water Ecotox	Saltwater Ecotox	Seafood Ingestion Human Health	Residential		Commercial/Industrial			Drinking Water	Non-Drinking Water		
								Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard					
Heptachlor	76-44-8	1.0E-02	1.4E-03	1.3E+00	3.8E-03	3.6E-03	2.1E-04	1.8E-01	--	7.9E-01	--	9.0E+01	2.0E+01	2.0E+02	2.1E-04	Aquatic Habitat
Heptachlor epoxide	1024-57-3	1.0E-02	1.4E-03	1.2E-01	3.8E-03	3.6E-03	1.1E-04	1.3E+00	--	5.5E+00	--	1.0E+02	--	--	1.1E-04	Aquatic Habitat
Hexachlorobenzene	118-74-1	1.0E+00	8.8E-03	1.6E+01	3.7E+00	6.5E+01	7.7E-04	7.9E-02	--	3.4E-01	--	3.1E+00	3.0E+03	3.0E+04	7.7E-04	Aquatic Habitat
Hexachlorobutadiene	87-68-3	1.4E-01	1.4E-01	6.5E+00	4.7E+00	3.2E+00	5.0E+01	3.0E-01	--	1.3E+00	--	1.6E+03	6.0E+00	6.0E+01	1.4E-01	Tap Canc-Risk
g-Hexachlorocyclohexane (Lindane)	58-89-9	2.0E-01	3.2E-02	3.6E+00	8.0E-02	1.6E-02	6.3E-02	--	--	--	--	3.7E+03	1.2E+04	1.2E+05	1.6E-02	Aquatic Habitat
Hexachloroethane	67-72-1	3.3E-01	3.3E-01	6.2E+00	1.2E+01	9.4E+01	8.9E+00	1.6E+00	2.0E+02	7.0E+00	8.2E+02	2.5E+04	1.0E+01	1.0E+02	3.3E-01	Tap Canc-Risk
Indeno[1,2,3-c,d]pyrene [PAH]	193-39-5	2.5E-01	2.5E-01	--	--	1.5E+01	4.9E-02	--	--	--	--	9.5E-02	--	--	4.9E-02	Aquatic Habitat
Lead	7439-92-1	1.5E+01	9.2E+00	2.0E-01	2.5E+00	8.1E+00	--	--	--	--	--	5.0E+04	--	--	2.5E+00	Aquatic Habitat
Mercury (elemental)	7439-97-6	2.0E+00	--	6.1E-02	2.5E-02	2.5E-02	5.1E-02	--	8.9E-02	--	3.8E-01	3.0E+01	--	--	2.5E-02	Aquatic Habitat
Methoxychlor	72-43-5	3.0E+01	--	9.0E-02	1.9E-02	3.0E-03	--	--	--	--	--	5.0E+01	4.7E+03	4.7E+04	3.0E-03	Aquatic Habitat
Methylene chloride	75-09-2	5.0E+00	9.3E-01	1.0E+02	2.2E+03	3.2E+03	1.6E+03	7.8E+00	3.2E+03	9.4E+01	1.3E+04	5.0E+04	9.1E+03	9.1E+04	5.0E+00	MCL
Methyl ethyl ketone	78-93-3	5.6E+03	--	5.6E+03	1.4E+04	--	--	--	2.3E+06	--	9.5E+06	5.0E+04	8.4E+03	8.4E+04	5.6E+03	Tap NC-Hazard
Methyl isobutyl ketone	108-10-1	1.2E+02	--	1.2E+02	1.7E+02	--	--	--	5.6E+05	--	2.3E+06	5.0E+04	1.3E+03	1.3E+04	1.2E+02	Tap NC-Hazard
Methyl mercury	22967-92-6	2.0E+00	--	2.0E+00	3.0E-03	--	--	--	--	--	--	5.0E+04	--	--	3.0E-03	Aquatic Habitat
2-Methylnaphthalene	91-57-6	3.6E+01	--	3.6E+01	2.1E+00	3.0E+01	--	--	--	--	--	1.3E+04	1.0E+01	1.0E+02	2.1E+00	Aquatic Habitat
Methyl tertiary butyl ether (MTBE)	1634-04-4	5.0E+00	1.3E+01	6.3E+03	6.6E+04	8.0E+03	--	4.5E+02	1.3E+05	2.0E+03	5.5E+05	5.0E+04	5.0E+00	1.8E+03	5.0E+00	Odor/Nuis
Molybdenum	7439-98-7	1.0E+02	--	1.0E+02	2.4E+02	--	--	--	--	--	--	5.0E+04	--	--	1.0E+02	Tap NC-Hazard
Naphthalene [PAH]	91-20-3	1.7E-01	1.7E-01	6.1E+00	2.4E+01	1.5E+01	--	4.6E+00	1.7E+02	2.0E+01	7.3E+02	1.6E+04	2.1E+01	2.1E+02	1.7E-01	Tap Canc-Risk
Nickel	7440-02-0	1.0E+02	1.2E+01	2.2E+02	5.2E+01	8.2E+00	4.6E+03	--	--	--	--	5.0E+04	--	--	8.2E+00	Aquatic Habitat
Pentachlorophenol	87-86-5	1.0E+00	4.0E-02	2.3E+01	1.5E+01	7.9E+00	8.2E+00	--	--	--	--	7.0E+03	3.0E+01	5.9E+03	1.0E+00	MCL
Perchlorate	7790-98-9	6.0E+00	--	1.0E+00	6.0E+02	--	--	--	--	--	--	5.0E+04	--	--	6.0E+00	MCL
Petroleum - Gasoline	--	7.6E+02	--	7.6E+02	4.4E+02	3.7E+03	--	--	--	--	--	5.0E+04	1.0E+02	5.0E+03	1.0E+02	Odor/Nuis
Petroleum - Stoddard Solvent	--	2.1E+02	--	2.1E+02	6.4E+02	6.4E+02	--	--	--	--	--	2.5E+03	1.0E+02	5.0E+03	1.0E+02	Odor/Nuis
Petroleum - Jet Fuel	--	2.1E+02	--	2.1E+02	6.4E+02	6.4E+02	--	--	--	--	--	2.5E+03	1.0E+02	5.0E+03	1.0E+02	Odor/Nuis
Petroleum - Diesel	--	2.0E+02	--	2.0E+02	6.4E+02	6.4E+02	--	--	--	--	--	2.5E+03	1.0E+02	5.0E+03	1.0E+02	Odor/Nuis
Petroleum - HOPs	--	4.1E+02	--	4.1E+02	5.1E+02	5.1E+02	--	--	--	--	--	5.0E+04	1.0E+02	5.0E+03	1.0E+02	Odor/Nuis
Petroleum - Motor Oil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene [PAH]	85-01-8	--	--	--	6.3E+00	4.6E+00	--	--	--	--	--	4.1E+02	1.0E+03	1.0E+04	4.6E+00	Aquatic Habitat
Phenol	108-95-2	4.2E+03	--	4.2E+03	1.3E+03	5.8E+02	4.6E+06	--	--	--	--	5.0E+04	5.0E+00	7.9E+04	5.0E+00	Odor/Nuis
Polychlorinated biphenyls (PCBs)	1336-36-3	5.0E-01	1.9E-03	--	1.4E-02	3.0E-02	1.7E-04	2.9E-01	--	1.3E+00	--	3.5E+02	--	--	1.7E-04	Aquatic Habitat
Pyrene [PAH]	129-00-0	1.2E+02	--	1.2E+02	2.0E+00	1.5E+01	1.1E+04	--	--	--	--	7.0E+01	--	--	2.0E+00	Aquatic Habitat
Selenium	7782-49-2	5.0E+01	--	3.0E+01	5.0E+00	5.0E-01	--	--	--	--	--	5.0E+04	--	--	5.0E-01	Aquatic Habitat
Silver	7440-22-4	1.0E+02	--	9.4E+01	3.4E+00	1.9E-01	--	--	--	--	--	5.0E+04	1.0E+02	--	1.9E-01	Aquatic Habitat
Styrene	100-42-5	1.0E+01	5.0E-01	1.1E+03	--	--	--	--	8.5E+03	--	3.6E+04	5.0E+04	1.0E+01	1.1E+02	1.0E+01	Odor/Nuis
tert-Butyl alcohol	75-65-0	1.2E+01	1.2E+01	--	1.8E+04	--	--	--	--	--	--	5.0E+04	--	--	1.2E+01	Tap Canc-Risk
1,1,1,2-Tetrachloroethane	630-20-6	5.7E-01	5.7E-01	4.8E+02	9.3E+02	--	--	3.8E+00	--	1.7E+01	--	5.0E+04	--	--	5.7E-01	Tap Canc-Risk



**2019 (Rev. 2) Summary of Groundwater ESLs (µg/L)**

Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table GW-1)			Aquatic Habitat Goal Levels (Table GW-2)			Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3)				Gross Contamination Levels (GW-4)	Odor Nuisance Levels (Table GW-5)		GW Tier 1 ESL	Basis
		MCL Priority <sup>1</sup>	Tapwater Cancer Risk	Tapwater Non-cancer Hazard	Fresh Water Ecotox	Saltwater Ecotox	Seafood Ingestion Human Health	Residential		Commercial/Industrial			Drinking Water	Non-Drinking Water		
								Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard					
1,1,2,2-Tetrachloroethane	79-34-5	1.0E+00	7.6E-02	3.6E+02	4.2E+02	9.0E+02	1.1E+01	3.2E+00	--	1.4E+01	--	5.0E+04	5.0E+02	5.0E+03	1.0E+00	MCL
Tetrachloroethene	127-18-4	5.0E+00	6.0E-02	4.1E+01	1.2E+02	2.3E+02	8.9E+00	6.4E-01	5.8E+01	2.8E+00	2.4E+02	5.0E+04	1.7E+02	3.0E+03	6.4E-01	Vapor Intrusion
Thallium	7440-28-0	2.0E+00	--	1.0E-01	2.0E+01	2.1E+02	6.3E+00	--	--	--	--	5.0E+04	--	--	2.0E+00	MCL
Toluene	108-88-3	4.0E+01	--	1.5E+02	1.3E+02	2.5E+03	2.0E+05	--	1.2E+03	--	4.9E+03	5.0E+04	4.0E+01	4.0E+02	4.0E+01	Odor/Nuis
Toxaphene	8001-35-2	3.0E+00	3.0E-02	--	2.0E-04	2.0E-04	7.5E-04	--	--	--	--	2.8E+02	1.4E+02	1.4E+02	2.0E-04	Aquatic Habitat
1,2,4-Trichlorobenzene	120-82-1	5.0E+00	1.1E+00	4.0E+00	2.5E+01	6.5E+01	--	--	3.6E+01	--	1.5E+02	2.5E+04	3.0E+03	3.0E+04	5.0E+00	MCL
1,1,1-Trichloroethane	71-55-6	2.0E+02	--	1.0E+03	6.2E+01	3.1E+03	--	--	1.5E+03	--	6.3E+03	5.0E+04	9.7E+02	5.0E+05	6.2E+01	Aquatic Habitat
1,1,2-Trichloroethane	79-00-5	5.0E+00	2.8E-01	4.1E-01	4.7E+03	--	4.2E+01	5.2E+00	6.1E+00	2.3E+01	2.6E+01	5.0E+04	--	--	5.0E+00	MCL
Trichloroethene	79-01-6	5.0E+00	4.9E-01	2.8E+00	3.6E+02	2.0E+02	8.1E+01	1.2E+00	5.2E+00	7.5E+00	2.2E+01	5.0E+04	3.1E+02	1.0E+05	1.2E+00	Vapor Intrusion
2,4,5-Trichlorophenol	95-95-4	--	--	1.2E+03	6.3E+01	1.1E+01	--	--	--	--	--	5.0E+04	2.0E+02	2.0E+03	1.1E+01	Aquatic Habitat
2,4,6-Trichlorophenol	88-06-2	6.3E-01	6.3E-01	1.2E+01	4.9E+02	--	6.5E+00	--	--	--	--	5.0E+04	1.0E+02	1.0E+03	6.3E-01	Tap Canc-Risk
1,2,3-Trichloropropane	96-18-4	5.0E-03	7.0E-04	6.2E-01	2.7E+03	6.0E-03	--	--	2.2E+01	--	9.4E+01	5.0E+04	--	--	5.0E-03	MCL
Vanadium	7440-62-2	--	--	5.0E+01	1.9E+01	--	--	--	--	--	--	5.0E+04	--	--	1.9E+01	Aquatic Habitat
Vinyl chloride	75-01-4	5.0E-01	9.7E-03	4.4E+01	7.8E+02	--	5.3E+02	8.6E-03	9.5E+01	1.4E-01	4.0E+02	5.0E+04	3.4E+03	3.4E+04	8.6E-03	Vapor Intrusion
Xylenes	1330-20-7	2.0E+01	--	1.9E+02	--	1.0E+02	--	--	3.9E+02	--	1.6E+03	5.0E+04	2.0E+01	5.3E+03	2.0E+01	Odor/Nuis
Zinc	7440-66-6	5.0E+03	--	6.0E+03	1.2E+02	8.1E+01	--	--	--	--	--	5.0E+04	5.0E+03	--	8.1E+01	Aquatic Habitat

**Notes:**  
 1 - "MCL Priority" lists all available MCL values. If no MCL values are available, the lower of the cancer and noncancer tapwater direct exposure levels is listed.  
 - Cadmium (Soil) - No groundwater values are listed since groundwater ESLs only apply to dissolved chemicals.  
 - Petroleum Motor Oil is composed of large carbon chain compounds (C24-C36+) having negligible solubility. Detections in water samples typically are Petroleum HOPs, nonaqueous phase liquid (NAPL or free product), contaminated sediment entrained in the water sample, or naturally occurring compounds. Review the chromatograms to help determine the nature of the compounds being detected. See User's Guide Chapter 4.

**Abbreviations:**  
 Canc - Cancer  
 Contam - Contamination  
 DDD - Dichlorodiphenyldichloroethane  
 DDE - Dichlorodiphenyldichloroethene  
 DDT - Dichlorodiphenyltrichloroethane  
 HOPs - Hydrocarbon Oxidation Products (biodegradation metabolites and photo-oxidation products of petroleum hydrocarbons). See User's Guide Chapter 4 for further information.  
 MCL - Maximum Contaminant Level  
 NC - Noncancer  
 Odor/Nuis - Odor Nuisance  
 PAH - Polycyclic aromatic hydrocarbon  
 Tap - Tapwater  
 TCDD - Tetrachlorodibenzodioxin

2019 (Rev. 2)		Summary of Soil ESLs (mg/kg)																
Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table S-1)						Terrestrial Habitat Levels (Table S-2)			Leaching to Groundwater Levels (Table S-3)		Gross Contamination Levels (Table S-4)	Odor Nuisance Levels (Table S-5)			Soil Tier 1 ESL	Basis
		Residential: Shallow Soil Exposure		Commercial/Industrial: Shallow Soil Exposure		Construction Worker: Any Land Use/Any Depth Soil Exposure		Significantly Vegetated Area	Minimally Vegetated Area	Drinking Water	Non-drinking Water	Res: Shallow Soil Exposure		Com/Ind: Shallow Soil Exposure	Any Land Use: Any Soil Exposure (CW)			
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Examples: Parkland or single family homes with yards	Examples: High density residential or commercial/industrial areas									
Acenaphthene [PAH]	83-32-9	--	3.6E+03	--	4.5E+04	--	1.0E+04	6.6E+03	4.6E+04	1.2E+01	1.2E+01	1.2E+02	1.0E+03	2.5E+03	2.5E+03	1.2E+01	Leaching	
Acenaphthylene [PAH]	208-96-8	--	--	--	--	--	--	--	--	6.4E+00	6.4E+00	5.9E+01	5.0E+02	1.0E+03	1.0E+03	6.4E+00	Leaching	
Acetone	67-64-1	--	6.1E+04	--	6.7E+05	--	2.7E+05	5.6E+01	5.6E+01	9.2E-01	9.2E-01	1.1E+05	5.0E+02	1.0E+03	1.0E+03	9.2E-01	Leaching	
Aldrin	309-00-2	3.5E-02	2.1E+00	1.5E-01	2.9E+01	1.0E+00	7.4E+00	2.4E-03	1.0E-01	8.4E+00	8.4E+00	8.4E+00	1.0E+03	2.5E+03	2.5E+03	2.4E-03	Terr Habitat	
Anthracene [PAH]	120-12-7	--	1.8E+04	--	2.3E+05	--	5.0E+04	3.1E+00	4.0E+01	1.9E+00	1.9E+00	4.1E+00	5.0E+02	1.0E+03	1.0E+03	1.9E+00	Leaching	
Antimony	7440-36-0	--	1.1E+01	--	1.6E+02	--	5.0E+01	2.5E+01	5.0E+01	--	--	--	--	--	--	1.1E+01	NC-Hazard	
Arsenic	7440-38-2	6.7E-02	2.6E-01	3.1E-01	3.6E+00	2.0E+00	9.8E-01	2.5E+01	5.0E+01	--	--	--	--	--	--	6.7E-02	Canc-Risk	
Barium	7440-39-3	--	1.5E+04	--	2.2E+05	--	3.0E+03	3.9E+02	6.7E+02	--	--	--	--	--	--	3.9E+02	Terr Habitat	
Benzene	71-43-2	3.3E-01	1.1E+01	1.4E+00	4.7E+01	3.3E+01	4.5E+01	6.0E+01	3.1E+02	2.5E-02	2.5E-02	1.9E+03	5.0E+02	1.0E+03	1.0E+03	2.5E-02	Leaching	
Benzo[a]anthracene [PAH]	56-55-3	1.1E+00	--	2.0E+01	--	1.1E+02	--	6.3E-01	1.3E+00	1.0E+01	1.0E+01	1.0E+01	5.0E+02	1.0E+03	1.0E+03	6.3E-01	Terr Habitat	
Benzo[a]pyrene [PAH]	50-32-8	1.1E-01	1.8E+01	2.1E+00	2.2E+02	1.1E+01	1.0E+01	2.5E+01	9.0E+01	5.7E+00	5.7E+00	5.7E+00	5.0E+02	1.0E+03	1.0E+03	1.1E-01	Canc-Risk	
Benzo[b]fluoranthene [PAH]	205-99-2	1.1E+00	--	2.1E+01	--	1.1E+02	--	--	--	5.4E+00	7.5E+01	5.4E+00	5.0E+02	1.0E+03	1.0E+03	1.1E+00	Canc-Risk	
Benzo[g,h,i]perylene [PAH]	191-24-2	--	--	--	--	--	--	8.3E+00	1.7E+01	2.7E+01	2.7E+01	2.5E+00	5.0E+02	1.0E+03	1.0E+03	2.5E+00	Gross Contam	
Benzo[k]fluoranthene [PAH]	207-08-9	1.1E+01	--	2.1E+02	--	9.1E+02	--	9.5E+00	1.9E+01	4.8E+00	3.9E+01	2.8E+00	5.0E+02	1.0E+03	1.0E+03	2.8E+00	Gross Contam	
Beryllium	7440-41-7	1.6E+03	1.6E+01	6.9E+03	2.3E+02	1.8E+02	2.7E+01	5.0E+00	1.0E+01	--	--	--	--	--	--	5.0E+00	Terr Habitat	
1,1-Biphenyl	92-52-4	6.8E+01	4.7E+01	2.9E+02	2.0E+02	1.7E+03	1.8E+02	--	--	4.2E-01	4.2E+00	2.3E+02	5.0E+02	1.0E+03	1.0E+03	4.2E-01	Leaching	
Bis(2-chloroethyl) ether	111-44-4	1.0E-01	--	4.7E-01	--	6.4E+00	--	--	--	3.4E-05	3.1E-02	5.0E+03	5.0E+02	1.0E+03	1.0E+03	3.4E-05	Leaching	
Bis(2-chloro-1-methylethyl) ether	108-60-1	5.0E+00	3.1E+03	2.3E+01	4.7E+04	2.7E+02	1.4E+04	--	--	5.1E-03	8.7E-01	1.0E+03	5.0E+02	1.0E+03	1.0E+03	5.1E-03	Leaching	
Bis(2-ethylhexyl) phthalate	117-81-7	3.9E+01	1.3E+03	1.6E+02	1.6E+04	9.5E+02	3.8E+03	8.0E-01	3.5E+01	1.9E+02	6.4E+02	1.9E+02	5.0E+02	1.0E+03	1.0E+03	8.0E-01	Terr Habitat	
Boron	7440-42-8	--	1.6E+04	--	2.3E+05	--	4.5E+04	1.2E+02	1.2E+02	--	--	--	--	--	--	1.2E+02	Terr Habitat	
Bromodichloromethane	75-27-4	2.9E-01	1.6E+03	1.3E+00	2.3E+04	2.8E+01	7.1E+03	--	--	1.6E-02	1.6E-02	9.3E+02	1.0E+03	2.5E+03	2.5E+03	1.6E-02	Leaching	
Bromoform (Tribromomethane)	75-25-2	1.8E+01	1.6E+03	8.0E+01	2.3E+04	1.2E+03	7.1E+03	--	--	6.9E-01	1.0E+00	9.2E+02	5.0E+02	1.0E+03	1.0E+03	6.9E-01	Leaching	
Bromomethane	74-83-9	--	6.9E+00	--	3.0E+01	--	2.9E+01	--	--	3.6E-01	8.3E-01	3.5E+03	5.0E+02	1.0E+03	1.0E+03	3.6E-01	Leaching	
Cadmium (soil)	7440-43-9	9.1E+02	7.8E+01	4.0E+03	1.1E+03	1.1E+02	5.1E+01	1.9E+00	1.9E+00	--	--	--	--	--	--	1.9E+00	Terr Habitat	
Cadmium (water)	7440-43-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Carbon tetrachloride	56-23-5	6.2E-01	5.3E+01	2.7E+00	2.5E+02	5.3E+01	2.2E+02	7.3E+00	1.5E+01	7.6E-02	7.6E-02	4.5E+02	5.0E+02	1.0E+03	1.0E+03	7.6E-02	Leaching	
Chlordane	12789-03-6	4.8E-01	3.6E+01	2.2E+00	5.0E+02	1.4E+01	1.3E+02	8.5E-03	8.5E-03	2.3E+01	2.3E+01	2.3E+01	1.0E+03	2.5E+03	2.5E+03	8.5E-03	Terr Habitat	
p-Chloroaniline	106-47-8	3.5E+00	3.1E+02	1.6E+01	4.7E+03	1.2E+02	1.4E+03	2.5E+01	5.0E+01	6.7E-03	9.1E-02	3.0E+03	5.0E+02	1.0E+03	1.0E+03	6.7E-03	Leaching	
Chlorobenzene	108-90-7	--	2.7E+02	--	1.3E+03	--	1.2E+03	7.5E+00	1.5E+01	1.4E+00	1.4E+00	7.5E+02	5.0E+02	1.0E+03	1.0E+03	1.4E+00	Leaching	
Chloroethane	75-00-3	--	1.4E+04	--	5.9E+04	--	5.9E+04	--	--	1.2E+00	1.2E+01	2.1E+03	5.0E+02	1.0E+03	1.0E+03	1.2E+00	Leaching	
Chloroform	67-66-3	3.2E-01	2.0E+02	1.4E+00	1.0E+03	3.4E+01	8.6E+02	4.3E+01	8.5E+01	2.3E-02	2.3E-02	2.6E+03	5.0E+02	1.0E+03	1.0E+03	2.3E-02	Leaching	
Chloromethane	74-87-3	--	1.1E+02	--	4.7E+02	--	4.7E+02	--	--	1.1E+01	1.5E+01	1.3E+03	1.0E+02	5.0E+02	5.0E+02	1.1E+01	Leaching	
2-Chlorophenol	95-57-8	--	3.9E+02	--	5.8E+03	--	1.8E+03	2.0E+00	3.9E+00	1.2E-02	1.2E-01	2.7E+04	1.0E+02	5.0E+02	5.0E+02	1.2E-02	Leaching	
Chromium (total)	7440-47-3	--	--	--	--	--	--	1.6E+02	1.6E+02	--	--	--	--	--	--	1.6E+02	Terr Habitat	
Chromium III	16065-83-1	--	1.2E+05	--	1.8E+06	--	5.3E+05	--	--	--	--	--	--	--	--	1.2E+05	NC-Hazard	
Chromium VI	18540-29-9	3.0E-01	2.3E+02	6.2E+00	3.5E+03	2.8E+00	4.0E+02	1.0E+01	1.0E+01	--	--	--	--	--	--	3.0E-01	Canc-Risk	
Chrysene [PAH]	218-01-9	1.1E+02	--	2.1E+03	--	9.1E+03	--	8.8E+00	1.8E+01	2.2E+00	1.0E+01	2.2E+00	5.0E+02	1.0E+03	1.0E+03	2.2E+00	Leaching	
Cobalt	7440-48-4	4.2E+02	2.3E+01	1.9E+03	3.5E+02	4.9E+01	2.8E+01	5.0E+01	1.0E+02	--	--	--	--	--	--	2.3E+01	NC-Hazard	
Copper	7440-50-8	--	3.1E+03	--	4.7E+04	--	1.4E+04	1.8E+02	3.0E+02	--	--	--	--	--	--	1.8E+02	Terr Habitat	
Cyanide	57-12-5	--	5.5E+00	--	2.5E+01	--	2.2E+01	1.1E-01	1.1E-01	3.4E-03	3.4E-03	1.9E+04	1.0E+02	5.0E+02	5.0E+02	3.4E-03	Leaching	
Dibenz[a,h]anthracene [PAH]	53-70-3	1.1E-01	--	2.1E+00	--	1.1E+01	--	--	--	2.9E+01	3.9E+02	2.9E+01	5.0E+02	1.0E+03	1.0E+03	1.1E-01	Canc-Risk	
Dibromochloromethane	124-48-1	8.3E+00	1.6E+03	3.9E+01	2.3E+04	2.9E+02	7.1E+03	--	--	3.5E-01	1.1E+01	8.0E+02	1.0E+02	5.0E+02	5.0E+02	3.5E-01	Leaching	
1,2-dibromo-3-chloropropane	96-12-8	4.4E-03	4.8E+00	5.9E-02	2.6E+01	1.1E+00	2.0E+01	--	--	5.9E-04	5.9E-04	9.9E+02	5.0E+02	1.0E+03	1.0E+03	5.9E-04	Leaching	
1,2-Dibromoethane	106-93-4	3.6E-02	7.2E+00	1.6E-01	3.0E+01	3.3E+00	3.0E+01	--	--	5.3E-04	1.9E-03	1.3E+03	5.0E+02	1.0E+03	1.0E+03	5.3E-04	Leaching	

2019 (Rev. 2)		Summary of Soil ESLs (mg/kg)																
Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table S-1)						Terrestrial Habitat Levels (Table S-2)			Leaching to Groundwater Levels (Table S-3)		Gross Contamination Levels (Table S-4)	Odor Nuisance Levels (Table S-5)			Soil Tier 1 ESL	Basis
		Residential: Shallow Soil Exposure		Commercial/Industrial: Shallow Soil Exposure		Construction Worker: Any Land Use/Any Depth Soil Exposure		Significantly Vegetated Area	Minimally Vegetated Area	Drinking Water	Non-drinking Water	Res: Shallow Soil Exposure		Com/Ind: Shallow Soil Exposure	Any Land Use: Any Soil Exposure (CW)			
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Examples: Parkland or single family homes with yards	Examples: High density residential or commercial/industrial areas									
1,2-Dichlorobenzene	95-50-1	--	1.8E+03	--	9.4E+03	--	7.8E+03	4.3E+00	8.5E+00	1.0E+00	1.0E+00	3.8E+02	1.0E+03	2.5E+03	2.5E+03	1.0E+00	Leaching	
1,3-Dichlorobenzene	541-73-1	--	--	--	--	--	--	6.0E+00	1.2E+01	7.4E+00	7.4E+00	6.1E+02	1.0E+02	5.0E+02	5.0E+02	6.0E+00	Terr Habitat	
1,4-Dichlorobenzene	106-46-7	2.6E+00	3.4E+03	1.2E+01	2.6E+04	2.8E+02	1.5E+04	4.5E+00	9.0E+00	2.0E-01	2.0E-01	1.9E+02	5.0E+02	1.0E+03	1.0E+03	2.0E-01	Leaching	
3,3-Dichlorobenzidine	91-94-1	5.8E-01	--	2.7E+00	--	2.0E+01	--	--	--	2.5E-02	1.3E+02	6.0E+01	5.0E+02	1.0E+03	1.0E+03	2.5E-02	Leaching	
DDD	72-54-8	2.7E+00	--	1.2E+01	--	8.1E+01	--	8.5E+00	1.7E+01	6.5E+01	6.5E+01	6.5E+01	5.0E+02	1.0E+03	1.0E+03	2.7E+00	Canc-Risk	
DDE	72-55-9	1.8E+00	--	8.3E+00	--	5.7E+01	--	3.3E-01	6.5E-01	2.9E+01	2.9E+01	2.9E+01	5.0E+02	1.0E+03	1.0E+03	3.3E-01	Terr Habitat	
DDT	50-29-3	1.9E+00	3.7E+01	8.5E+00	5.2E+02	5.7E+01	1.4E+02	1.1E-03	7.8E+00	5.6E+00	5.6E+00	5.6E+00	5.0E+02	1.0E+03	1.0E+03	1.1E-03	Terr Habitat	
1,1-Dichloroethane	75-34-3	3.6E+00	1.6E+04	1.6E+01	2.3E+05	3.7E+02	7.1E+04	1.1E+01	2.1E+01	2.0E-01	3.1E-01	1.7E+03	5.0E+02	1.0E+03	1.0E+03	2.0E-01	Leaching	
1,2-Dichloroethane	107-06-2	4.7E-01	3.2E+01	2.1E+00	1.4E+02	4.5E+01	1.3E+02	2.9E+01	2.9E+01	7.0E-03	3.1E-02	3.0E+03	1.0E+02	5.0E+02	5.0E+02	7.0E-03	Leaching	
1,1-Dichloroethene	75-35-4	--	8.3E+01	--	3.5E+02	--	3.5E+02	4.3E+01	1.3E+02	5.4E-01	4.2E+00	1.2E+03	5.0E+02	1.0E+03	1.0E+03	5.4E-01	Leaching	
cis-1,2-Dichloroethene	156-59-2	--	1.9E+01	--	8.5E+01	--	7.8E+01	8.4E+01	9.4E+02	1.9E-01	1.6E+00	2.4E+03	1.0E+02	5.0E+02	5.0E+02	1.9E-01	Leaching	
trans-1,2-Dichloroethene	156-60-5	--	1.3E+02	--	6.0E+02	--	5.7E+02	8.4E+01	9.4E+02	6.5E-01	1.4E+01	1.9E+03	5.0E+02	1.0E+03	1.0E+03	6.5E-01	Leaching	
2,4-Dichlorophenol	120-83-2	--	2.3E+02	--	3.5E+03	--	1.1E+03	2.1E+00	--	7.5E-03	7.5E-02	5.6E+03	5.0E+02	1.0E+03	1.0E+03	7.5E-03	Leaching	
1,2-Dichloropropane	78-87-5	1.0E+00	1.6E+01	4.4E+00	6.6E+01	9.9E+01	6.6E+01	3.1E+01	6.3E+01	6.5E-02	6.5E-02	1.4E+03	1.0E+02	5.0E+02	5.0E+02	6.5E-02	Leaching	
1,3-Dichloropropene	542-75-6	5.7E-01	7.2E+01	2.5E+00	3.1E+02	5.3E+01	3.0E+02	3.1E+01	6.3E+01	1.7E-02	4.0E-02	1.6E+03	5.0E+02	1.0E+03	1.0E+03	1.7E-02	Leaching	
Dieldrin	60-57-1	3.7E-02	3.5E+00	1.6E-01	4.8E+01	1.1E+00	1.2E+01	9.6E-04	1.1E-01	4.6E-04	6.3E-03	2.4E+01	5.0E+02	1.0E+03	1.0E+03	4.6E-04	Leaching	
Diethyl phthalate	84-66-2	--	5.1E+04	--	6.6E+05	--	1.5E+05	1.3E+01	2.7E+01	2.5E-02	2.5E-02	7.7E+02	5.0E+02	1.0E+03	1.0E+03	2.5E-02	Leaching	
Dimethyl phthalate	131-11-3	--	--	--	--	--	--	2.1E+01	4.2E+01	3.5E-02	3.5E-02	4.7E+03	5.0E+02	1.0E+03	1.0E+03	3.5E-02	Leaching	
2,4-Dimethylphenol	105-67-9	--	1.6E+03	--	2.3E+04	--	7.1E+03	--	--	8.1E+00	8.9E+00	2.4E+04	1.0E+02	5.0E+02	5.0E+02	8.1E+00	Leaching	
2,4-Dinitrophenol	51-28-5	--	1.6E+02	--	2.3E+03	--	7.1E+02	--	--	3.0E+00	5.7E+00	8.0E+03	5.0E+02	1.0E+03	1.0E+03	3.0E+00	Leaching	
2,4-Dinitrotoluene	121-14-2	2.2E+00	1.6E+02	1.1E+01	2.3E+03	7.9E+01	7.1E+02	--	--	2.3E-02	1.1E+01	7.2E+02	5.0E+02	1.0E+03	1.0E+03	2.3E-02	Leaching	
1,4-Dioxane	123-91-1	4.7E+00	8.1E+02	2.2E+01	4.5E+03	2.1E+02	3.4E+03	1.8E+00	1.8E+00	1.7E-04	8.4E-01	1.2E+05	5.0E+02	1.0E+03	1.0E+03	1.7E-04	Leaching	
Dioxin (2,3,7,8-TCDD)	1746-01-6	4.8E-06	5.1E-05	2.2E-05	7.2E-04	1.5E-04	2.0E-04	1.3E-05	9.9E-05	3.0E-01	3.0E-01	3.0E-01	5.0E+02	1.0E+03	1.0E+03	4.8E-06	Canc-Risk	
Endosulfan	115-29-7	--	4.2E+02	--	5.8E+03	--	1.5E+03	2.3E-02	3.8E-01	9.8E-03	9.8E-03	1.3E+01	5.0E+02	1.0E+03	1.0E+03	9.8E-03	Leaching	
Endrin	72-20-8	--	2.1E+01	--	2.9E+02	--	7.4E+01	1.1E-03	1.1E-03	7.6E-03	7.6E-03	3.0E+01	5.0E+02	1.0E+03	1.0E+03	1.1E-03	Terr Habitat	
Ethylbenzene	100-41-4	5.9E+00	3.4E+03	2.6E+01	2.1E+04	5.4E+02	1.5E+04	9.0E+01	4.3E+02	4.3E-01	4.3E-01	4.9E+02	5.0E+02	1.0E+03	1.0E+03	4.3E-01	Leaching	
Fluoranthene [PAH]	206-44-0	--	2.4E+03	--	3.0E+04	--	6.7E+03	6.9E-01	1.2E+05	8.6E+01	8.6E+01	8.6E+01	5.0E+02	1.0E+03	1.0E+03	6.9E-01	Terr Habitat	
Fluorene [PAH]	86-73-7	--	2.4E+03	--	3.0E+04	--	6.7E+03	--	--	6.0E+00	6.0E+00	9.4E+01	5.0E+02	1.0E+03	1.0E+03	6.0E+00	Leaching	
Heptachlor	76-44-8	1.2E-01	3.5E+01	5.3E-01	4.8E+02	3.7E+00	1.2E+02	2.5E-01	5.0E-01	4.4E+01	4.4E+01	4.4E+01	1.0E+03	2.5E+03	2.5E+03	1.2E-01	Canc-Risk	
Heptachlor epoxide	1024-57-3	6.2E-02	9.1E-01	2.8E-01	1.3E+01	1.9E+00	3.2E+00	--	--	1.8E-04	6.0E-03	1.2E+01	1.0E+03	2.5E+03	2.5E+03	1.8E-04	Leaching	
Hexachlorobenzene	118-74-1	1.8E-01	5.6E+01	7.8E-01	7.7E+02	7.7E+00	2.0E+02	1.3E+02	2.5E+02	8.0E-04	8.2E-02	2.3E-01	5.0E+02	1.0E+03	1.0E+03	8.0E-04	Leaching	
Hexachlorobutadiene	87-68-3	1.2E+00	7.8E+01	5.3E+00	1.2E+03	1.0E+02	3.5E+02	--	--	2.8E-02	6.2E-02	1.7E+01	5.0E+02	1.0E+03	1.0E+03	2.8E-02	Leaching	
g-Hexachlorocyclohexane (Lindane)	58-89-9	5.5E-01	2.1E+01	2.5E+00	2.9E+02	1.6E+01	7.4E+01	7.4E+00	1.5E+01	7.4E-03	7.4E-03	1.2E+02	5.0E+02	1.0E+03	1.0E+03	7.4E-03	Leaching	
Hexachloroethane	67-72-1	1.8E+00	3.8E+01	7.8E+00	3.7E+02	1.3E+02	1.2E+02	--	--	1.9E-02	9.2E-02	6.7E+01	5.0E+02	1.0E+03	1.0E+03	1.9E-02	Leaching	
Indeno[1,2,3-c]pyrene [PAH]	193-39-5	1.1E+00	--	2.1E+01	--	1.1E+02	--	4.8E-01	9.5E-01	1.6E+01	3.2E+01	2.3E+00	5.0E+02	1.0E+03	1.0E+03	4.8E-01	Terr Habitat	
Lead	7439-92-1	8.2E+01	8.0E+01	3.8E+02	3.2E+02	2.7E+03	1.6E+02	3.2E+01	3.2E+01	--	--	--	--	--	--	3.2E+01	Terr Habitat	
Mercury (elemental)	7439-97-6	--	1.3E+01	--	1.9E+02	--	4.4E+01	1.5E+01	2.0E+01	--	--	--	5.0E+02	1.0E+03	1.0E+03	1.3E+01	NC-Hazard	
Methoxychlor	72-43-5	--	3.5E+02	--	4.8E+03	--	1.2E+03	1.3E-01	4.1E+03	1.3E-02	1.3E-02	1.6E+01	5.0E+02	1.0E+03	1.0E+03	1.3E-02	Leaching	
Methylene chloride	75-09-2	1.9E+00	3.1E+02	2.5E+01	2.5E+03	4.9E+02	1.4E+03	9.8E-01	2.0E+00	1.2E-01	1.9E-01	3.3E+03	5.0E+02	1.0E+03	1.0E+03	1.2E-01	Leaching	
Methyl ethyl ketone	78-93-3	--	2.7E+04	--	2.0E+05	--	1.2E+05	4.4E+01	8.8E+01	6.1E+00	1.5E+01	2.8E+04	5.0E+02	1.0E+03	1.0E+03	6.1E+00	Leaching	
Methyl isobutyl ketone	108-10-1	--	3.4E+04	--	1.4E+05	--	1.4E+05	--	--	3.6E-01	5.1E-01	3.4E+03	1.0E+02	5.0E+02	5.0E+02	3.6E-01	Leaching	
Methyl mercury	22967-92-6	--	6.3E+00	--	8.2E+01	--	1.9E+01	3.4E-02	3.4E-02	--	--	--	1.0E+02	5.0E+02	5.0E+02	3.4E-02	Terr Habitat	
2-Methylnaphthalene	91-57-6	--	2.4E+02	--	3.0E+03	--	6.7E+02	--	--	8.8E-01	8.8E-01	3.8E+02	5.0E+02	1.0E+03	1.0E+03	8.8E-01	Leaching	
Methyl tertiary butyl ether (MTBE)	1634-04-4	4.7E+01	1.6E+04	2.1E+02	6.6E+04	4.1E+03	6.5E+04	3.1E+01	6.3E+01	2.8E-02	2.5E+00	9.0E+03	1.0E+02	5.0E+02	5.0E+02	2.8E-02	Leaching	

**2019 (Rev. 2) Summary of Soil ESLs (mg/kg)**

Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table S-1)						Terrestrial Habitat Levels (Table S-2)		Leaching to Groundwater Levels (Table S-3)		Gross Contamination Levels (Table S-4)	Odor Nuisance Levels (Table S-5)			Soil Tier 1 ESL	Basis
		Residential: Shallow Soil Exposure		Commercial/Industrial: Shallow Soil Exposure		Construction Worker: Any Land Use/Any Depth Soil Exposure		Significantly Vegetated Area	Minimally Vegetated Area	Drinking Water	Non-drinking Water		Res: Shallow Soil Exposure	Com/Ind: Shallow Soil Exposure	Any Land Use: Any Soil Exposure (CW)		
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Examples: Parkland or single family homes with yards	Examples: High density residential or commercial/industrial areas								
Molybdenum	7439-98-7	--	3.9E+02	--	5.8E+03	--	1.8E+03	6.9E+00	4.0E+01	--	--	--	--	--	6.9E+00	Terr Habitat	
Naphthalene [PAH]	91-20-3	3.8E+00	1.3E+02	1.7E+01	5.8E+02	4.0E+02	5.0E+02	7.5E-01	2.8E+01	4.2E-02	1.2E+00	2.8E+02	5.0E+02	1.0E+03	1.0E+03	4.2E-02	Leaching
Nickel	7440-02-0	1.5E+04	8.2E+02	6.4E+04	1.1E+04	1.7E+03	8.6E+01	1.3E+02	3.4E+02	--	--	--	--	--	8.6E+01	NC-Hazard	
Pentachlorophenol	87-86-5	1.0E+00	2.5E+02	4.0E+00	2.8E+03	2.0E+01	5.6E+02	1.3E-02	3.9E+01	9.8E-02	7.7E-01	5.1E+01	5.0E+02	1.0E+03	1.0E+03	1.3E-02	Terr Habitat
Perchlorate	7790-98-9	--	5.5E+01	--	8.2E+02	--	2.5E+02	--	--	--	--	--	--	--	5.5E+01	NC-Hazard	
Petroleum - Gasoline	--	--	4.3E+02	--	2.0E+03	--	1.8E+03	1.2E+02	1.2E+02	1.1E+03	4.9E+03	1.0E+03	1.0E+02	5.0E+02	5.0E+02	1.0E+02	Odor/Nuis
Petroleum - Stoddard Solvent	--	--	2.6E+02	--	1.4E+03	--	1.1E+03	2.6E+02	2.6E+02	1.3E+03	8.0E+03	2.3E+03	1.0E+02	5.0E+02	5.0E+02	1.0E+02	Odor/Nuis
Petroleum - Jet Fuel	--	--	2.7E+02	--	1.4E+03	--	1.1E+03	2.6E+02	2.6E+02	1.3E+03	8.0E+03	2.3E+03	1.0E+02	5.0E+02	5.0E+02	1.0E+02	Odor/Nuis
Petroleum - Diesel	--	--	2.6E+02	--	1.2E+03	--	1.1E+03	2.6E+02	2.6E+02	1.1E+03	7.3E+03	2.3E+03	5.0E+02	1.0E+03	1.0E+03	2.6E+02	NC-Hazard
Petroleum - HOPs	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Petroleum - Motor Oil	--	--	1.2E+04	--	1.8E+05	--	5.4E+04	1.6E+03	1.6E+03	--	--	5.1E+03	--	--	--	1.6E+03	Terr Habitat
Phenanthrene [PAH]	85-01-8	--	--	--	--	--	--	7.8E+00	1.6E+01	1.1E+01	1.1E+01	6.9E+01	5.0E+02	1.0E+03	1.0E+03	7.8E+00	Terr Habitat
Phenol	108-95-2	--	2.3E+04	--	3.5E+05	--	9.8E+04	9.4E+00	9.4E+00	1.6E-01	1.8E+01	1.0E+05	5.0E+02	1.0E+03	1.0E+03	1.6E-01	Leaching
Polychlorinated biphenyls (PCBs)	1336-36-3	2.3E-01	--	9.4E-01	--	5.5E+00	--	1.1E+00	1.1E+00	3.3E+02	3.3E+02	3.3E+02	5.0E+02	1.0E+03	1.0E+03	2.3E-01	Canc-Risk
Pyrene [PAH]	129-00-0	--	1.8E+03	--	2.3E+04	--	5.0E+03	4.7E+03	9.9E+04	4.5E+01	4.5E+01	4.5E+01	5.0E+02	1.0E+03	1.0E+03	4.5E+01	Leaching
Selenium	7782-49-2	--	3.9E+02	--	5.8E+03	--	1.7E+03	2.4E+00	5.5E+00	--	--	--	--	--	2.4E+00	Terr Habitat	
Silver	7440-22-4	--	3.9E+02	--	5.8E+03	--	1.8E+03	2.5E+01	5.0E+01	--	--	--	--	--	2.5E+01	Terr Habitat	
Styrene	100-42-5	--	5.7E+03	--	3.3E+04	--	2.5E+04	2.2E+01	4.3E+01	9.2E-01	1.0E+01	8.7E+02	5.0E+02	1.0E+03	1.0E+03	9.2E-01	Leaching
tert-Butyl alcohol	75-65-0	--	--	--	--	--	--	--	--	7.5E-02	1.1E+02	3.2E+05	1.0E+02	5.0E+02	5.0E+02	7.5E-02	Leaching
1,1,1,2-Tetrachloroethane	630-20-6	2.0E+00	2.3E+03	8.9E+00	3.5E+04	1.9E+02	1.1E+04	--	--	1.7E-02	1.1E-01	7.0E+02	1.0E+02	5.0E+02	5.0E+02	1.7E-02	Leaching
1,1,2,2-Tetrachloroethane	79-34-5	6.1E-01	1.6E+03	2.7E+00	2.3E+04	4.9E+01	7.1E+03	--	--	1.8E-02	5.8E-02	1.9E+03	5.0E+02	1.0E+03	1.0E+03	1.8E-02	Leaching
Tetrachloroethene	127-18-4	5.9E-01	8.2E+01	2.7E+00	3.9E+02	3.3E+01	3.5E+02	4.5E+00	4.3E+01	8.0E-02	8.0E-02	1.7E+02	5.0E+02	1.0E+03	1.0E+03	8.0E-02	Leaching
Thallium	7440-28-0	--	7.8E-01	--	1.2E+01	--	3.5E+00	1.8E+00	4.5E+00	--	--	--	--	--	7.8E-01	NC-Hazard	
Toluene	108-88-3	--	1.1E+03	--	5.3E+03	--	4.7E+03	1.4E+02	6.6E+02	3.2E+00	1.0E+01	8.1E+02	5.0E+02	1.0E+03	1.0E+03	3.2E+00	Leaching
Toxaphene	8001-35-2	5.1E-01	--	2.2E+00	--	1.4E+01	--	--	--	2.5E+02	2.5E+02	2.5E+02	5.0E+02	1.0E+03	1.0E+03	5.1E-01	Canc-Risk
1,2,4-Trichlorobenzene	120-82-1	2.4E+01	5.9E+01	1.1E+02	2.6E+02	8.5E+02	2.4E+02	1.6E+01	3.0E+01	1.2E+00	6.0E+00	4.2E+02	5.0E+02	1.0E+03	1.0E+03	1.2E+00	Leaching
1,1,1-Trichloroethane	71-55-6	--	1.7E+03	--	7.3E+03	--	7.2E+03	2.2E+01	4.4E+01	7.0E+00	7.0E+00	6.5E+02	5.0E+02	1.0E+03	1.0E+03	7.0E+00	Leaching
1,1,2-Trichloroethane	79-00-5	1.2E+00	1.5E+00	5.1E+00	6.4E+00	1.1E+02	6.3E+00	1.0E+02	2.0E+02	7.6E-02	7.9E-02	2.2E+03	1.0E+02	5.0E+02	5.0E+02	7.6E-02	Leaching
Trichloroethene	79-01-6	9.5E-01	4.2E+00	6.1E+00	1.9E+01	1.3E+02	1.8E+01	8.1E+00	2.5E+02	8.5E-02	8.5E-02	7.0E+02	5.0E+02	1.0E+03	1.0E+03	8.5E-02	Leaching
2,4,5-Trichlorophenol	95-95-4	--	7.8E+03	--	1.2E+05	--	3.5E+04	5.5E+00	1.0E+01	2.9E+00	2.9E+00	1.2E+04	5.0E+02	1.0E+03	1.0E+03	2.9E+00	Leaching
2,4,6-Trichlorophenol	88-06-2	9.9E+00	7.8E+01	4.7E+01	1.2E+03	3.5E+02	3.5E+02	5.5E+00	1.0E+01	4.0E-02	3.1E+01	1.9E+03	1.0E+02	5.0E+02	5.0E+02	4.0E-02	Leaching
1,2,3-Trichloropropane	96-18-4	2.3E-02	4.9E+00	1.1E-01	2.1E+01	8.3E-01	2.0E+01	--	--	1.1E-04	1.3E-04	1.4E+03	1.0E+02	5.0E+02	5.0E+02	1.1E-04	Leaching
Vanadium	7440-62-2	--	3.9E+02	--	5.8E+03	--	4.7E+02	1.8E+01	1.8E+01	--	--	--	--	--	1.8E+01	Terr Habitat	
Vinyl chloride	75-01-4	8.3E-03	7.0E+01	1.5E-01	3.8E+02	3.4E+00	3.0E+02	4.3E+00	8.5E+00	1.5E-03	1.5E-03	3.9E+03	5.0E+02	1.0E+03	1.0E+03	1.5E-03	Leaching
Xylenes	1330-20-7	--	5.8E+02	--	2.5E+03	--	2.4E+03	5.5E+01	2.1E+02	2.1E+00	1.0E+01	2.7E+02	5.0E+02	1.0E+03	1.0E+03	2.1E+00	Leaching
Zinc	7440-66-6	--	2.3E+04	--	3.5E+05	--	1.1E+05	3.4E+02	3.4E+02	--	--	--	--	--	3.4E+02	Terr Habitat	

**Notes:**  
 - Cadmium (Water): Groundwater levels do not apply to cadmium in soil so no soil level are listed.  
 - Petroleum - HOPs: Soil ESLs have not been developed at this time.

**Abbreviations:**  
 Canc - Cancer  
 Com/Ind - Commercial/Industrial  
 Contam - Contamination  
 CW - Construction Worker  
 DDD - Dichlorodiphenyldichloroethane

<b>2019 (Rev. 2)</b>	<b>Summary of Soil ESLs (mg/kg)</b>												
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Chemicals	CAS No.	Direct Exposure Human Health Risk Levels (Table S-1)						Terrestrial Habitat Levels (Table S-2)		Leaching to Groundwater Levels (Table S-3)		Gross Contamination Levels (Table S-4)	Odor Nuisance Levels (Table S-5)			Soil Tier 1 ESL	Basis
		Residential: Shallow Soil Exposure		Commerical/ Industrial: Shallow Soil Exposure		Construction Worker: Any Land Use/ Any Depth Soil Exposure		Significantly Vegetated Area	Minimally Vegetated Area	Drinking Water	Non-drinking Water		Res: Shallow Soil Exposure	Com/Ind: Shallow Soil Exposure	Any Land Use: Any Soil Exposure (CW)		
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard				Examples: Parkland or single family homes with yards	Examples: High density residential or commercial/ industrial areas			

DDE - Dichlorodiphenyldichloroethene  
 DDT - Dichlorodiphenyltrichloroethane  
 Exp - Exposure  
 HOPs - Hydrocarbon Oxidation Products (biodegradation metabolites and photo-oxidation products of petroleum hydrocarbons). See User's Guide Chapter 4 for further information.  
 NC - Noncancer  
 Odor/Nuis - Odor Nuisance  
 PAH - Polycyclic aromatic hydrocarbon  
 Res - Residential  
 TCDD - Tetrachlorodibenzodioxin  
 Terr - Terrestrial

2019 (Rev. 2)		Summary of Vapor ESLs													
Chemicals	CAS No.	Subslab/ Soil Gas ( $\mu\text{g}/\text{m}^3$ )							Indoor Air ( $\mu\text{g}/\text{m}^3$ )						
		Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels (Table SG-1)				Subslab/ Soil Gas Vapor Intrusion: Odor Nuisance Levels (Table SG-2)	Tier 1 ESL	Basis	Direct Exposure Human Health Risk Levels (Table IA-1)				Odor Nuisance Levels (Table IA-2)	Tier 1 ESL	Basis
		Residential		Commercial/ Industrial					Residential		Commercial/ Industrial				
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard				Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard			
Acenaphthene [PAH]	83-32-9	--	--	--	--	1.7E+04	1.7E+04	Odor/Nuis	--	--	--	--	5.1E+02	5.1E+02	Nuis/Odor
Acenaphthylene [PAH]	208-96-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	67-64-1	--	1.1E+06	--	4.5E+06	1.0E+06	1.0E+06	Odor/Nuis	--	3.2E+04	--	1.4E+05	3.1E+04	3.1E+04	Nuis/Odor
Aldrin	309-00-2	1.9E-02	--	8.3E-02	--	8.8E+03	1.9E-02	Canc-Risk	5.7E-04	--	2.5E-03	--	2.6E+02	5.7E-04	Canc-Risk
Anthracene [PAH]	120-12-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	7440-36-0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	7440-38-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	7440-39-3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	71-43-2	3.2E+00	1.0E+02	1.4E+01	4.4E+02	1.6E+05	3.2E+00	Canc-Risk	9.7E-02	3.1E+00	4.2E-01	1.3E+01	4.9E+03	9.7E-02	Canc-Risk
Benzo[a]anthracene [PAH]	56-55-3	3.1E-01	--	3.7E+00	--	--	3.1E-01	Canc-Risk	9.2E-03	--	1.1E-01	--	--	9.2E-03	Canc-Risk
Benzo[a]pyrene [PAH]	50-32-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo[b]fluoranthene [PAH]	205-99-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo[g,h,i]perylene [PAH]	191-24-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo[k]fluoranthene [PAH]	207-08-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	7440-41-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Biphenyl	92-52-4	--	1.4E+01	--	5.8E+01	2.0E+03	1.4E+01	NC-Hazard	--	4.2E-01	--	1.8E+00	6.0E+01	4.2E-01	NC-Hazard
Bis(2-chloroethyl) ether	111-44-4	1.3E-01	--	5.8E-01	--	9.6E+03	1.3E-01	Canc-Risk	4.0E-03	--	1.7E-02	--	2.9E+02	4.0E-03	Canc-Risk
Bis(2-chloro-1-methylethyl) ether	108-60-1	9.4E+00	--	4.1E+01	--	7.5E+04	9.4E+00	Canc-Risk	2.8E-01	--	1.2E+00	--	2.2E+03	2.8E-01	Canc-Risk
Bis(2-ethylhexyl) phthalate	117-81-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	7440-42-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	75-27-4	2.5E+00	--	1.1E+01	--	3.7E+08	2.5E+00	Canc-Risk	7.6E-02	--	3.3E-01	--	1.1E+07	7.6E-02	Canc-Risk
Bromoform (Tribromomethane)	75-25-2	8.5E+01	--	3.7E+02	--	4.5E+05	8.5E+01	Canc-Risk	2.6E+00	--	1.1E+01	--	1.3E+04	2.6E+00	Canc-Risk
Bromomethane	74-83-9	--	1.7E+02	--	7.3E+02	2.7E+06	1.7E+02	NC-Hazard	--	5.2E+00	--	2.2E+01	8.0E+04	5.2E+00	NC-Hazard
Cadmium (soil)	7440-43-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium (water)	7440-43-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	56-23-5	1.6E+01	1.4E+03	6.8E+01	5.8E+03	2.1E+06	1.6E+01	Canc-Risk	4.7E-01	4.2E+01	2.0E+00	1.8E+02	6.3E+04	4.7E-01	Canc-Risk
Chlordane	12789-03-6	2.8E-01	2.4E+01	1.2E+00	1.0E+02	2.8E+02	2.8E-01	Canc-Risk	8.3E-03	7.3E-01	3.6E-02	3.1E+00	8.4E+00	8.3E-03	Canc-Risk
p-Chloroaniline	106-47-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	108-90-7	--	1.7E+03	--	7.3E+03	3.3E+04	1.7E+03	NC-Hazard	--	5.2E+01	--	2.2E+02	1.0E+03	5.2E+01	NC-Hazard
Chloroethane	75-00-3	--	3.5E+05	--	1.5E+06	1.3E+07	3.5E+05	NC-Hazard	--	1.0E+04	--	4.4E+04	3.8E+05	1.0E+04	NC-Hazard
Chloroform	67-66-3	4.1E+00	3.4E+03	1.8E+01	1.4E+04	1.4E+07	4.1E+00	Canc-Risk	1.2E-01	1.0E+02	5.3E-01	4.3E+02	4.2E+05	1.2E-01	Canc-Risk
Chloromethane	74-87-3	--	3.1E+03	--	1.3E+04	--	3.1E+03	NC-Hazard	--	9.4E+01	--	3.9E+02	--	9.4E+01	NC-Hazard
2-Chlorophenol	95-57-8	--	--	--	--	6.3E+02	6.3E+02	Odor/Nuis	--	--	--	--	1.9E+01	1.9E+01	Nuis/Odor

2019 (Rev. 2)		Summary of Vapor ESLs													
Chemicals	CAS No.	Subslab/ Soil Gas ( $\mu\text{g}/\text{m}^3$ )							Indoor Air ( $\mu\text{g}/\text{m}^3$ )						
		Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels (Table SG-1)				Subslab/ Soil Gas Vapor Intrusion: Odor Nuisance Levels (Table SG-2)	Tier 1 ESL	Basis	Direct Exposure Human Health Risk Levels (Table IA-1)				Odor Nuisance Levels (Table IA-2)	Tier 1 ESL	Basis
		Residential		Commercial/ Industrial					Residential		Commercial/ Industrial				
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard				Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard			
Chromium (total)	7440-47-3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium III	16065-83-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI	18540-29-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene [PAH]	218-01-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	7440-48-4	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	7440-50-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide	57-12-5	--	2.8E+01	--	1.2E+02	2.2E+04	2.8E+01	NC-Hazard	--	8.3E-01	--	3.5E+00	6.5E+02	8.3E-01	NC-Hazard
Dibenz[a,h]anthracene [PAH]	53-70-3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	124-48-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-dibromo-3-chloropropane	96-12-8	5.6E-03	7.0E+00	6.8E-02	2.9E+01	--	5.6E-03	Canc-Risk	1.7E-04	2.1E-01	2.0E-03	8.8E-01	--	1.7E-04	Canc-Risk
1,2-Dibromoethane	106-93-4	1.6E-01	2.8E+01	6.8E-01	1.2E+02	6.7E+06	1.6E-01	Canc-Risk	4.7E-03	8.3E-01	2.0E-02	3.5E+00	2.0E+05	4.7E-03	Canc-Risk
1,2-Dichlorobenzene	95-50-1	--	7.0E+03	--	2.9E+04	1.0E+07	7.0E+03	NC-Hazard	--	2.1E+02	--	8.8E+02	3.1E+05	2.1E+02	NC-Hazard
1,3-Dichlorobenzene	541-73-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	106-46-7	8.5E+00	2.8E+04	3.7E+01	1.2E+05	3.7E+04	8.5E+00	Canc-Risk	2.6E-01	8.3E+02	1.1E+00	3.5E+03	1.1E+03	2.6E-01	Canc-Risk
3,3-Dichlorobenzidine	91-94-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DDD	72-54-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DDE	72-55-9	9.6E-01	--	4.2E+00	--	--	9.6E-01	Canc-Risk	2.9E-02	--	1.3E-01	--	--	2.9E-02	Canc-Risk
DDT	50-29-3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	75-34-3	5.8E+01	--	2.6E+02	--	4.2E+06	5.8E+01	Canc-Risk	1.8E+00	--	7.7E+00	--	1.3E+05	1.8E+00	Canc-Risk
1,2-Dichloroethane	107-06-2	3.6E+00	2.4E+02	1.6E+01	1.0E+03	8.1E+04	3.6E+00	Canc-Risk	1.1E-01	7.3E+00	4.7E-01	3.1E+01	2.4E+03	1.1E-01	Canc-Risk
1,1-Dichloroethene	75-35-4	--	2.4E+03	--	1.0E+04	6.7E+07	2.4E+03	NC-Hazard	--	7.3E+01	--	3.1E+02	2.0E+06	7.3E+01	NC-Hazard
cis-1,2-Dichloroethene	156-59-2	--	2.8E+02	--	1.2E+03	--	2.8E+02	NC-Hazard	--	8.3E+00	--	3.5E+01	--	8.3E+00	NC-Hazard
trans-1,2-Dichloroethene	156-60-5	--	2.8E+03	--	1.2E+04	2.2E+06	2.8E+03	NC-Hazard	--	8.3E+01	--	3.5E+02	6.7E+04	8.3E+01	NC-Hazard
2,4-Dichlorophenol	120-83-2	--	--	--	--	4.7E+04	4.7E+04	Odor/Nuis	--	--	--	--	1.4E+03	1.4E+03	Nuis/Odor
1,2-Dichloropropane	78-87-5	9.4E+00	1.4E+02	4.1E+01	5.8E+02	4.0E+04	9.4E+00	Canc-Risk	2.8E-01	4.2E+00	1.2E+00	1.8E+01	1.2E+03	2.8E-01	Canc-Risk
1,3-Dichloropropene	542-75-6	5.8E+00	7.0E+02	2.6E+01	2.9E+03	1.4E+05	5.8E+00	Canc-Risk	1.8E-01	2.1E+01	7.7E-01	8.8E+01	4.2E+03	1.8E-01	Canc-Risk
Dieldrin	60-57-1	2.0E-02	--	8.9E-02	--	--	2.0E-02	Canc-Risk	6.1E-04	--	2.7E-03	--	--	6.1E-04	Canc-Risk
Diethyl phthalate	84-66-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	131-11-3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	105-67-9	--	--	--	--	3.3E+01	3.3E+01	Odor/Nuis	--	--	--	--	1.0E+00	1.0E+00	Nuis/Odor
2,4-Dinitrophenol	51-28-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	121-14-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dioxane	123-91-1	1.2E+01	1.0E+03	5.3E+01	4.4E+03	2.0E+07	1.2E+01	Canc-Risk	3.6E-01	3.1E+01	1.6E+00	1.3E+02	6.1E+05	3.6E-01	Canc-Risk

2019 (Rev. 2)		Summary of Vapor ESLs													
Chemicals	CAS No.	Subslab/ Soil Gas ( $\mu\text{g}/\text{m}^3$ )							Indoor Air ( $\mu\text{g}/\text{m}^3$ )						
		Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels (Table SG-1)				Subslab/ Soil Gas Vapor Intrusion: Odor Nuisance Levels (Table SG-2)	Tier 1 ESL	Basis	Direct Exposure Human Health Risk Levels (Table IA-1)				Odor Nuisance Levels (Table IA-2)	Tier 1 ESL	Basis
		Residential		Commercial/ Industrial					Residential		Commercial/ Industrial				
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard				Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard			
Dioxin (2,3,7,8-TCDD)	1746-01-6	2.5E-06	1.4E-03	1.1E-05	5.8E-03	--	2.5E-06	Canc-Risk	7.4E-08	4.2E-05	3.2E-07	1.8E-04	--	7.4E-08	Canc-Risk
Endosulfan	115-29-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	72-20-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	100-41-4	3.7E+01	3.5E+04	1.6E+02	1.5E+05	6.7E+04	3.7E+01	Canc-Risk	1.1E+00	1.0E+03	4.9E+00	4.4E+03	2.0E+03	1.1E+00	Canc-Risk
Fluoranthene [PAH]	206-44-0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene [PAH]	86-73-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	76-44-8	7.2E-02	--	3.1E-01	--	1.0E+04	7.2E-02	Canc-Risk	2.2E-03	--	9.4E-03	--	3.0E+02	2.2E-03	Canc-Risk
Heptachlor epoxide	1024-57-3	3.6E-02	--	1.6E-01	--	1.0E+04	3.6E-02	Canc-Risk	1.1E-03	--	4.7E-03	--	3.0E+02	1.1E-03	Canc-Risk
Hexachlorobenzene	118-74-1	1.8E-01	--	8.0E-01	--	--	1.8E-01	Canc-Risk	5.5E-03	--	2.4E-02	--	--	5.5E-03	Canc-Risk
Hexachlorobutadiene	87-68-3	4.3E+00	--	1.9E+01	--	4.0E+05	4.3E+00	Canc-Risk	1.3E-01	--	5.6E-01	--	1.2E+04	1.3E-01	Canc-Risk
g-Hexachlorocyclohexane (Lindane)	58-89-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	67-72-1	8.5E+00	1.0E+03	3.7E+01	4.4E+03	--	8.5E+00	Canc-Risk	2.6E-01	3.1E+01	1.1E+00	1.3E+02	--	2.6E-01	Canc-Risk
Indeno[1,2,3-c,d]pyrene [PAH]	193-39-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	7439-92-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury (elemental)	7439-97-6	--	1.0E+00	--	4.4E+00	--	1.0E+00	NC-Hazard	--	3.1E-02	--	1.3E-01	--	3.1E-02	NC-Hazard
Methoxychlor	72-43-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	75-09-2	3.4E+01	1.4E+04	4.1E+02	5.8E+04	1.9E+07	3.4E+01	Canc-Risk	1.0E+00	4.2E+02	1.2E+01	1.8E+03	5.6E+05	1.0E+00	Canc-Risk
Methyl ethyl ketone	78-93-3	--	1.7E+05	--	7.3E+05	1.1E+06	1.7E+05	NC-Hazard	--	5.2E+03	--	2.2E+04	3.2E+04	5.2E+03	NC-Hazard
Methyl isobutyl ketone	108-10-1	--	1.0E+05	--	4.4E+05	1.4E+04	1.4E+04	Odor/Nuis	--	3.1E+03	--	1.3E+04	4.2E+02	4.2E+02	Nuis/Odor
Methyl mercury	22967-92-6	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	91-57-6	--	--	--	--	2.3E+03	2.3E+03	Odor/Nuis	--	--	--	--	6.8E+01	6.8E+01	Nuis/Odor
Methyl tertiary butyl ether (MTBE)	1634-04-4	3.6E+02	1.0E+05	1.6E+03	4.4E+05	1.8E+04	3.6E+02	Canc-Risk	1.1E+01	3.1E+03	4.7E+01	1.3E+04	5.3E+02	1.1E+01	Canc-Risk
Molybdenum	7439-98-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene [PAH]	91-20-3	2.8E+00	1.0E+02	1.2E+01	4.4E+02	1.5E+04	2.8E+00	Canc-Risk	8.3E-02	3.1E+00	3.6E-01	1.3E+01	4.4E+02	8.3E-02	Canc-Risk
Nickel	7440-02-0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	87-86-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perchlorate	7790-98-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Petroleum - Gasoline	--	--	2.0E+04	--	8.3E+04	3.3E+03	3.3E+03	Odor/Nuis	--	6.0E+02	--	2.5E+03	1.0E+02	1.0E+02	Nuis/Odor
Petroleum - Stoddard Solvent	--	--	1.1E+04	--	4.6E+04	3.3E+04	1.1E+04	NC-Hazard	--	3.3E+02	--	1.4E+03	1.0E+03	3.3E+02	NC-Hazard
Petroleum - Jet Fuel	--	--	1.1E+04	--	4.6E+04	3.3E+04	1.1E+04	NC-Hazard	--	3.3E+02	--	1.4E+03	1.0E+03	3.3E+02	NC-Hazard
Petroleum - Diesel	--	--	8.9E+03	--	3.7E+04	3.3E+04	8.9E+03	NC-Hazard	--	2.7E+02	--	1.1E+03	1.0E+03	2.7E+02	NC-Hazard
Petroleum - HOPs	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Petroleum - Motor Oil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



2019 (Rev. 2)		Summary of Vapor ESLs													
Chemicals	CAS No.	Subslab/ Soil Gas ( $\mu\text{g}/\text{m}^3$ )							Indoor Air ( $\mu\text{g}/\text{m}^3$ )						
		Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels (Table SG-1)				Subslab/ Soil Gas Vapor Intrusion: Odor Nuisance Levels (Table SG-2)	Tier 1 ESL	Basis	Direct Exposure Human Health Risk Levels (Table IA-1)				Odor Nuisance Levels (Table IA-2)	Tier 1 ESL	Basis
		Residential		Commercial/ Industrial					Residential		Commercial/ Industrial				
		Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard				Cancer Risk	Non-cancer Hazard	Cancer Risk	Non-cancer Hazard			
Phenanthrene [PAH]	85-01-8	--	--	--	--	1.8E+03	1.8E+03	Odor/Nuis	--	--	--	--	5.5E+01	5.5E+01	Nuis/Odor
Phenol	108-95-2	--	--	--	--	5.2E+03	5.2E+03	Odor/Nuis	--	--	--	--	1.6E+02	1.6E+02	Nuis/Odor
Polychlorinated biphenyls (PCBs)	1336-36-3	1.6E-01	--	7.2E-01	--	--	1.6E-01	Canc-Risk	4.9E-03	--	2.2E-02	--	--	4.9E-03	Canc-Risk
Pyrene [PAH]	129-00-0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	7782-49-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	7440-22-4	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	100-42-5	--	3.1E+04	--	1.3E+05	4.5E+04	3.1E+04	NC-Hazard	--	9.4E+02	--	3.9E+03	1.4E+03	9.4E+02	NC-Hazard
tert-Butyl alcohol	75-65-0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1,2-Tetrachloroethane	630-20-6	1.3E+01	--	5.5E+01	--	--	1.3E+01	Canc-Risk	3.8E-01	--	1.7E+00	--	--	3.8E-01	Canc-Risk
1,1,2,2-Tetrachloroethane	79-34-5	1.6E+00	--	7.0E+00	--	3.5E+05	1.6E+00	Canc-Risk	4.8E-02	--	2.1E-01	--	1.0E+04	4.8E-02	Canc-Risk
Tetrachloroethene	127-18-4	1.5E+01	1.4E+03	6.7E+01	5.8E+03	1.1E+06	1.5E+01	Canc-Risk	4.6E-01	4.2E+01	2.0E+00	1.8E+02	3.2E+04	4.6E-01	Canc-Risk
Thallium	7440-28-0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	108-88-3	--	1.0E+04	--	4.4E+04	1.0E+06	1.0E+04	NC-Hazard	--	3.1E+02	--	1.3E+03	3.0E+04	3.1E+02	NC-Hazard
Toxaphene	8001-35-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	120-82-1	--	7.0E+01	--	2.9E+02	7.3E+05	7.0E+01	NC-Hazard	--	2.1E+00	--	8.8E+00	2.2E+04	2.1E+00	NC-Hazard
1,1,1-Trichloroethane	71-55-6	--	3.5E+04	--	1.5E+05	2.2E+06	3.5E+04	NC-Hazard	--	1.0E+03	--	4.4E+03	6.5E+04	1.0E+03	NC-Hazard
1,1,2-Trichloroethane	79-00-5	5.8E+00	7.0E+00	2.6E+01	2.9E+01	--	5.8E+00	Canc-Risk	1.8E-01	2.1E-01	7.7E-01	8.8E-01	--	1.8E-01	Canc-Risk
Trichloroethene	79-01-6	1.6E+01	7.0E+01	1.0E+02	2.9E+02	4.5E+07	1.6E+01	Canc-Risk	4.8E-01	2.1E+00	3.0E+00	8.8E+00	1.4E+06	4.8E-01	Canc-Risk
2,4,5-Trichlorophenol	95-95-4	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	88-06-2	--	--	--	--	1.0E+01	1.0E+01	Odor/Nuis	--	--	--	--	3.0E-01	3.0E-01	Nuis/Odor
1,2,3-Trichloropropane	96-18-4	--	1.0E+01	--	4.4E+01	--	1.0E+01	NC-Hazard	--	3.1E-01	--	1.3E+00	--	3.1E-01	NC-Hazard
Vanadium	7440-62-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	75-01-4	3.2E-01	3.5E+03	5.2E+00	1.5E+04	2.6E+07	3.2E-01	Canc-Risk	9.5E-03	1.0E+02	1.6E-01	4.4E+02	7.7E+05	9.5E-03	Canc-Risk
Xylenes	1330-20-7	--	3.5E+03	--	1.5E+04	1.5E+04	3.5E+03	NC-Hazard	--	1.0E+02	--	4.4E+02	4.4E+02	1.0E+02	NC-Hazard
Zinc	7440-66-6	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Abbreviations:**  
Canc-Risk - Cancer  
DDD - Dichlorodiphenyldichloroethane  
DDE - Dichlorodiphenyldichloroethene  
DDT - Dichlorodiphenyltrichloroethane  
HOPs - Hydrocarbon Oxidation Products (biodegradation metabolites and photo-oxidation products of petroleum hydrocarbons). See User's Guide Chapter 4 for further information.  
NC - Noncancer  
Odor/Nuis - Odor Nuisance  
PAH - Polycyclic aromatic hydrocarbon  
TCDD - Tetrachlorodibenzodioxin

2019 (Rev. 2)	Short-Term Action Levels for Trichloroethene (TCE)						
Land Use	Groundwater Trigger Level (µg/L)	Subslab/ Soil Gas Trigger Level (µg/m <sup>3</sup> )	Trigger Level Response Action	Indoor Air Accelerated Response Level (µg/m <sup>3</sup> )	Accelerated Response Action	Indoor Air Urgent Response Level (µg/m <sup>3</sup> )	Urgent Response Action
Residential	5.0E+00	6.7E+01	Expedite Indoor Air Sampling	2.0E+00	Mitigation* within Weeks	6.0E+00	Mitigation* within Days
Commercial	2.0E+01	2.7E+02		8.0E+00		2.4E+01	
<p><b>Notes:</b>            User's Guide Chapter 6 presents the basis for the short-term action levels for TCE in groundwater, soil gas, and indoor air.            Also see the USEPA Region 9 Memorandum Response Action Levels and Recommendations to Address Near-Term Inhalation Exposures to TCE in Air from Subsurface Vapor Intrusion (USEPA 2014d).  <b>*Mitigation</b> - Responses include but are not limited to the following:            - Residential: prompt mitigation such as increasing ventilation, sealing potential conduits, or treating indoor air            - Commercial: prompt mitigation such as increasing use of HVAC (e.g., increasing outdoor air intake, increasing building pressurization), sealing potential conduits, or treating indoor air</p>							

## **Responses to Comment Letter 5: Kitty Moore**

Response to Comment 5-1: The soil sample data for Samples SS2, SS-3, SS-7, SS-8, SS-10, SS-11 and SS-14 were presented in the Phase I Environmental Site Assessment (ESA) prepared for the site by Cornerstone Earth Group (Cornerstone) in 2016, and not the February 25, 2022 Report as noted by the commentor. These samples were found to all be below their respective ESLs for metals, pesticides and PCBs. The 2016 Phase I ESA report was summarized in, but not included in full as an attachment in the Phase I ESA Update and Phase II Soil Quality Evaluation prepared for the project by Cornerstone, dated February 25, 2022, and attached to the IS/MND as Appendix C.

The results of the 2016 Phase I ESA were summarized in the 2022 ESA Update report, but the 2016 ESA report itself was not included. Sample SS-11 was discussed in the summary analysis of soil quality in the 2022 report because the Water Board's Tier 1 screening ESL for one of the contaminants (TPHo) in the suspected truck wash area had changed since the 2016 report. The ESL had increased from 100 to 1,600 mg/kg, so Cornerstone's finding had changed from above the threshold to below the threshold. No other samples from the 2016 Phase I ESA were specifically mentioned.

Response to Comment 5-2: As stated in the response to the previous comment, the Phase I ESA prepared for the site by Cornerstone in 2016 was not included in or appended to the 2022 report. However, the summary analysis of soil quality in the 2022 report discusses the results of the sampling from the 2016 report, which included samples collected from the suspected truck wash location and construction and demolition waste piles. These areas of the site are where the SP samples (including SP-1 through SP-6) were taken from. The 2022 report concluded that organochlorine pesticides were not detected in the soil samples at concentrations exceeding residential screening levels, and that no PCBs, volatile organics compounds or total petroleum hydrocarbons as gasoline were detected. In addition, the detected metals concentrations in these samples appeared typical of natural background concentrations. Since the focus of the 2022 report was the lead-contaminated soils located closer to the Lawrence Expressway side of the project site, no further analysis of these samples was included in the 2022 report.

Response to Comment 5-3: As described in the 2022 Cornerstone report, no screening levels are published for properties used for park or recreational purposes. The available screening levels are based on potential health risks and exposure assumptions in residential and commercial settings. Exposure

assumptions for park users would be different from residential and commercial users. For example, the anticipated length of time that a park visitor would be exposed to impacted soil in a park setting would be less than the duration of exposure in a residential setting. Thus, the residential screening levels may be lower than what is adequate to protect human health in a park setting.

Given the short duration of time that park visitors are expected to be present within the planned park, it is Cornerstone's opinion that the observed lead concentrations do not pose a significant risk to human health under the planned land use scenario. The statistical analysis of the lead data, borne out by the sampling, shows that soil quality at the site is not significantly impacted by lead with the exception of a thin strip (less than approximately 20 feet wide) of shallow soil (upper approximate 1 to 2 feet) along the eastern property boundary adjacent to Lawrence Expressway. The project includes the excavation and off-haul of the lead-contaminated soil to a depth of approximately one foot in some portions of the site and disposal at an appropriately permitted facility. Other portions of the site with lead contamination such as the proposed berm areas, are proposed to be capped with a minimum 2-foot layer of clean soil. The City will seek regulatory oversight from an appropriate agency, such as the Santa Clara County Department of Environmental Health to oversee and approve the satisfactory handling and removal and capping of the lead impacted soil.

## ERRATA

Page 23: 10<sup>th</sup> Paragraph:

**10. Other public agencies whose approval is required:** Santa Clara Valley Water District (Valley Water), California Department of Fish and Wildlife, and San Francisco Bay Regional Water Quality Control Board, and Caltrans (Oversize/Overweight Vehicle Permit).

Page 44: First paragraph after Table 3.4-1:

### *Mixed Oak Forest and Woodland Alliance*

Mixed oak forest and woodland alliance vegetation community occurs along Saratoga Creek. Within the study area, the riparian habitat is composed entirely of this vegetation community as the individual trees are either rooted below the top of bank of Saratoga Creek or just at the top of the creek bank and have a tree canopy that overhangs the stream channel (Appendix B, Photos 1 and 2 of the BCA). This community also overhangs portions of a berm along the east side of the creek, both in the northern portion of the study area (Appendix B Photo 2 and 3 of the BCA) and the southern portion of the study area (Appendix B Photo 4 of the BCA). The berm is sparsely to heavily vegetated with trees and shrubs, and in some areas, it defines the top of bank of the creek. Within this natural community, valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), and California sycamore (*Platanus occidentalis*) are co-dominant. Other trees present include blue gum eucalyptus (*Eucalyptus globulus*), elderberry (*Sambucus* sp.), arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*), glossy privet (*Ligustrum lucidum*), and shamel ash (*Fraxinus uhdei*). These trees form a nearly continuous canopy, except in the southern portion of the creek and the engineered portions of the creek where bank stabilizing structures (e.g., gabions) are present. The understory consists of a combination of shrubs and herbaceous species, including Himalayan blackberry (*Rubus armeniacus*), English ivy (*Hedera helix*), castor bean (*Ricinus communis*), French broom (*Genista monspessulana*), periwinkle (*Vinca minor*), mugwort (*Artemisia vulgaris*), and horehound (*Marrubium vulgare*), and grasses including smilo grass (*Stipa miliacea*). With exception of mugwort, most of the understory species are non-native and some may be classified as invasive species.

Page 45: Second paragraph:

*The Coast Live Oak Woodland and Forest Alliance*

The Coast Live Oak Woodland and Forest Alliance vegetation community is located adjacent to most of the riparian community and extends to the eastern edge of the study area. Although this plant community is located adjacent to the riparian community, it is differentiated from the riparian community where there is a break in the tree canopy. Thus, this plant community is not part of the riparian community. The community is dominated by mature coast live oak trees. Other trees present included California buckeye (*Aesculus californica*), toyon (*Heteromeles arbutifolia*), Monterey pine (*Pinus radiata*), and strawberry tree (*Arbutus unedo*). This community forms a mix of continuous canopy to areas with sparser canopy (Appendix B. Photo 5 of the BCA). The understory is open and sparsely vegetated with a variety of native and non-native shrubs, including holly oak (*Quercus ilex*) and coyote brush (*Baccharis pilularis*); and herbaceous vegetation including Himalayan blackberry, French broom, fennel (*Foeniculum vulgare*), milk thistle (*Silybum marianum*), wild mustard (*Hirschfeldia incana*), Spanish broom (*Cytisus multiflorus*), and Mexican sage (*Salvia longistyla*); and grasses including smilo grass, and ripgut brome (*Bromus diandrus*). With exception of coyote bush, most of the understory species are non-native and some may be classified as invasive species.

Page 54: Insert the following text from the BCR after the **Special-Status Animals** header and before **Less than Significant with Mitigation** discussion.

Based on a review of the USFWS and CNDDDB databases (IPac 2022, CNDDDB 2022) and other data sources, and an assessment of the habitats within the study area, several special-status species occur within the study area region. Three of those species, northwestern pond turtle (*Actinemys marmorata*), yellow warbler (*Setophaga petechia*), and San Francisco dusky-footed woodrat have some potential to occur within the study area. However, most of the species that were considered in this analysis are not expected to occur within the study area due to the lack of suitable habitat (e.g., grassland, marsh, serpentine, perennial stream), the site is outside the range of the species, and/or it is isolated from the nearest known extant population by development or otherwise unsuitable habitat. Species

considered for occurrence, because potentially suitable habitat is present, but determined to have no potential to occur within the study area are the Central California Coast steelhead (*Oncorhynchus mykiss irideus*) and California red-legged frog (*Rana draytonii*). Those species considered for occurrence and the reasons they were determined to occur or not occur are discussed below.

Page 55: First new paragraph at top of page:

Saratoga Creek is an intermittent stream and was dry at the time of the survey. Southwestern pond turtles are not expected to be present in the creek due to the lack of emergent vegetation and lack of upland breeding habitat along the stretch of the creek. However, the creek may provide potential dispersal habitat for turtles in years when water is present for sufficient periods of time. Pond turtles are not known to occur within the study area but have been documented in San Tomas-Aquino Creek, near the confluence with Calabazas Creek, and in San Tomas-Aquino Creek, approximately 6.5 and nine miles north of the study area (CNDDDB 2022), and more recently approximately 1.9 miles upstream of the site in 2024 (Valley Water 2024). Even though the study area contains suitable dispersal habitat for western pond turtle, it is highly unlikely that pond turtles would disperse into the study area due to the greater than six-mile distance separating the site from the nearest recorded occurrence, and due to the high levels of disturbance and isolation from natural habitats in the region. Additionally, barriers to aquatic dispersal of fish further downstream may also block pond turtle movement. Nonetheless, this species may occur elsewhere in Saratoga Creek (e.g., upstream), thus; it is possible that an individual could occasionally disperse into the study area. Although the majority of the Plan would be constructed outside the riparian corridor, minor work within the riparian corridor or creek itself (e.g., stormwater outfall) and work adjacent to the riparian area could result in injury or mortality of turtles due to equipment, vehicle traffic, and foot traffic, a potentially significant impact under CEQA due to the regional rarity of this species.

Page 68: **Valley Water – Water Resources Protection Ordinance**, 2<sup>nd</sup> paragraph:

The existing Saratoga Creek Trail and Saratoga Creek within the study area may be subject to Valley Water jurisdiction if work ~~encroaches within~~ occurs in or near the existing Valley Water property or easements over Saratoga Creek. The proposed Plan would need to comply with the conditions of the Water Resources Protection Ordinance if ~~any design feature results in the modification of any Valley Water facility including, but not limited to, grading and the removal or installation of vegetation.~~ which requires that Ssuch actions would require an encroachment permit from Valley Water.

Page 68: 3rd paragraph:

**Valley Water – Guidelines and Standards for Land Use Near Streams.** ~~The project would comply with the requirements and design guidelines of the Valley Water’s Guidelines and Standards for Land Use Near Streams for any activities that would occur within the limits of Valley Water’s property. The manual outlines requirements and recommendations for land use activities in and around Santa Clara County streams, in order to protect stream resources. The City of Cupertino has adopted these guidelines and standards. The concept plan for the proposed project was developed to prioritize and maintain the natural riparian character of Saratoga Creek. The design increases adjacent riparian plantings, increases permeability, and improves water quality. As the detailed project drawings develop, the design guidelines in Guidelines and Standards for Land Use Near Streams will continue to be referenced for alignment.~~ related to riparian corridor protection, general landscaping, encroachments between the TOB, stormwater outfalls, site drainage, and trail constructions. Some of these requirements include the planting of native species, locating paved areas outside of riparian corridors, directing nighttime lighting away from riparian corridors, using drought-tolerant landscaping, and avoidance of new outfalls, among other requirements and recommendations. Conformance with these requirements would reduce potential impacts to less than significant.

Page 139: Last Paragraph:



**No Impact.** The project would construct a linear extension of an existing paved multi-use trail and a new public park that includes play areas, creek overlooks, seating areas and landscaping. The geometric design of the trail and park are designed to be ADA-compliant facilitate safe pedestrian and bicycle travel, safe play, and passive recreation. There are no hazardous or dangerous elements of the proposed project design. The project shall secure an Oversize/Overweight Vehicle permit from Caltrans for this type of truck use on State highway facilities. There are no incompatible uses.

Page 157: References, After Santa Clara County Zeiner reference:

Santa Clara Valley Water District (Valley Water). 2024. Western pond turtle observation by Valley Water biologists noted in a March 13, 2024, comment letter from Valley Water regarding the draft CEQA for Lawrence-Mitty.

#### **ATTACHMENTS:**

The following attachments are included for reference:

- Attachment A: Mitigation Monitoring and Reporting Plan (MMRP)
- Attachment B: Notice of Intent County and Filing Receipts

Attachment A: Mitigation Monitoring and Reporting Program

# Attachment A: Mitigation Monitoring and Reporting Program

## Lawrence-Mitty Park and Trail Project

### MITIGATION MONITORING AND REPORTING PROGRAM

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This Mitigation, Monitoring and Reporting Program (MMRP) has been prepared pursuant to the CEQA Guidelines, which state:

“When adopting a mitigated negative declaration, the lead agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to mitigate or avoid significant environmental effects” (§15074(d)) and;

“The Lead Agency may choose whether its program will monitor mitigation, report on mitigation, or both. “Reporting” generally consists of a written compliance review that is presented to the decision-making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. “Monitoring” is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both.” (§15097 (c))

The table beginning on the next page lists the impacts, mitigation measures, and timing of the mitigation measures (when the measures will be implemented) related to the City of Cupertino, Lawrence-Mitty Park and Trail Project. All mitigation measures listed here will be implemented by the City and its contractors.

According to CEQA Guidelines section 15126.4 (a) (2), “Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design.” Therefore, all mitigation measures as listed in this MMRP will be adopted by the City when the project is approved.

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
<p><b>Impact BIO-1.</b> Project construction and project activities could result in direct and indirect impacts to the southwestern pond turtle.</p>	<p><b>Mitigation Measure BIO-1a. Conduct Preconstruction Survey.</b> No more than 24 hours prior to the date of initial ground disturbance, a pre-construction survey for southwestern pond turtle will be conducted within the impact area by a qualified biologist. The survey will consist of walking the limits of impact to ascertain the possible presence of the species. The qualified biologist will investigate all potential areas that could be used by southwestern pond turtle for feeding, sheltering, movement, and other essential behaviors.</p> <p>A qualified biologist is an individual who shall have a degree in biological sciences or related resource management with a minimum of two seasonal years post-degree experience conducting surveys for each amphibian and reptile special-status species that may be present within the project area. During or following academic training, the qualified biologist shall have achieved a high level of professional experience and knowledge in biological sciences and special-status species identification, ecology, and habitat requirements. Additionally, the qualified biologist must be permitted or authorized to handle and relocate southwestern pond turtle.</p> <p><b>Mitigation Measure BIO-1b. Worker Environmental Awareness Program.</b> All construction personnel will participate in a worker environmental awareness program. These personnel will be informed about the possible presence of all special-status species and habitats associated with the species identified here to be potentially present in the parcel and that unlawful take of the animal or destruction of its habitat is a violation of law. Prior to construction activities, a qualified biologist will instruct all construction personnel about (1) the description and status of the species; (2) the importance of their associated habitats; (3) a list of measures being taken to reduce impacts on these species during project construction and implementation; and (4) measures to be followed if special-status species are encountered during construction activities. A fact</p>	<p><b>Implementation:</b> City of Cupertino or its contractor shall implement this measure with a qualified biologist.</p> <p><b>Timing:</b> During construction activities.</p>	<p><b>Monitoring:</b> City of Cupertino and a qualified biologist.</p> <p>Initials: _____</p> <p>Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>sheet conveying this information will be prepared for distribution to the construction crew and anyone else who enters the project site.</p> <p><b>Mitigation Measure BIO-1c. Install Wildlife Exclusion Barrier.</b> Prior to any ground disturbance in the work area, a temporary wildlife exclusion barrier will be installed along the limits of disturbance. A qualified biologist will inspect the area prior to installation of the barrier. The barrier will be designed to allow the southwestern pond turtles to leave the work area and prevent them from entering the work area. The fence will remain in place until all development activities have been completed. This barrier will be inspected daily and maintained and repaired as necessary to ensure that it is functional and is not a hazard to southwestern pond turtles on the outer side of the barrier.</p> <p><b>Mitigation Measure BIO-1d. Construction Monitoring.</b> A qualified biologist or biological monitor will be onsite during all project activities that may result in the take of any special status species. The qualified biologist will be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with construction personnel, any other person(s) at the project site, otherwise associated with the project, and regulatory agencies (e.g., USFWS or CDFW). The qualified biologist or biological monitor will have oversight over implementation of all the mitigation measures and will have the authority and responsibility to stop project activities if they determine any of the measures are not being fulfilled.</p> <p>A biological monitor is an individual who shall have academic and professional experience in biological sciences and related resource management activities as it pertains to this project, experience with construction-level biological monitoring, be able to recognize species that</p>		

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>may be present within the project area, and be familiar with the habits and behavior of those species.</p>		
<p><b>Impact BIO-2:</b> Project construction and project activities could result in direct and indirect impacts to the San Francisco dusky-footed woodrat.</p>	<p><b>Mitigation Measure BIO-2a: Pre-Construction Survey for San Francisco Dusky-Footed woodrats.</b> Within 30 days prior to the start of construction activities, a qualified biologist shall map all San Francisco dusky-footed woodrat houses within a 50-foot buffer around the project footprint. Environmentally sensitive habitat fencing shall be placed to protect the houses with a minimum 50-foot buffer. If a 50-foot buffer is not feasible, a smaller buffer may be allowable based on advice from a qualified biologist with knowledge of woodrat ecology and behavior, or Mitigation Measure BIO-2b may be implemented.</p> <p><b>Mitigation Measure BIO-2b: Relocation of Woodrat Houses.</b> In the unlikely event that one or more woodrat houses are determined to be present and physical disturbance or destruction of the houses cannot be avoided, then the woodrats shall be evicted from their houses and the nest material relocated outside of the disturbance area, prior to onset of activities that would disturb the house, to avoid injury or mortality of the woodrats. The reproductive season for San Francisco dusky-footed woodrats typically starts in February or March and breeding activity usually continues to July but can extend into September. Thus, relocation efforts should be completed in the fall to minimize the potential for impacts on young woodrats in the house. Additionally, it is recommended that the period between the completion of the relocation efforts and the start of construction activities be minimized to reduce the potential for woodrats to reconstruct houses in the project footprint prior to the start of construction activities.</p>	<p><b>Implementation:</b> City of Cupertino or its contractor shall implement this measure with a qualified biologist.</p> <p><b>Timing:</b> During construction activities.</p>	<p><b>Monitoring:</b> City of Cupertino and a qualified biologist. Initials: _____  Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
<p><b>Impact BIO-3:</b> Project construction activities could potentially result in the abandonment of roosting bat nest sites.</p>	<p><b>Mitigation Measure BIO-3a: Pre-Construction Survey for Roosting Bats.</b> A survey of culverts within the project site, including a 50-foot buffer (as feasible) shall be conducted by a qualified bat biologist no less than 30 days before the start of construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, tree removal, vegetation removal, fence installation, demolition, and grading). If construction activities are delayed by more than 30 days, an additional bat survey shall be performed. The survey may be conducted at any time of year but should be conducted in such a way to allow sufficient time to determine if special-status bats or maternity colonies are present on the site. The results of the survey shall be documented.</p> <p>If no habitat or signs of bats are detected during the habitat suitability survey, no further surveys are warranted. If suitable habitat is present and signs of bat occupancy (e.g., guano pellets or urine staining) are detected, Mitigation Measure BIO-3b shall apply.</p> <p><b>Mitigation Measure BIO-3b: Acoustic Survey.</b> If suitable habitat is present and signs of bat occupancy are detected, a follow-up dusk emergence survey shall be conducted no less than 30 days prior to construction activities. A dusk survey will determine the number of bats present and will also include the use of acoustic equipment to determine the species of bats present. The results of the survey shall be documented. If an active roost is observed within the project site, Mitigation Measure BIO-3c shall apply.</p> <p><b>Mitigation Measure BIO-3c: Roost Buffer.</b> If a day roost or a maternity colony is detected and is found sufficiently close to work areas to be disturbed by construction activities, the qualified biologist shall determine the extent of a construction-free buffer zone to be established around the roost in consultation with CDFW. Within the buffer zone, no site</p>	<p><b>Implementation:</b> City of Cupertino or its contractor shall implement this measure with a qualified biologist.</p> <p><b>Timing:</b> Prior to construction activities.</p>	<p><b>Monitoring:</b> City of Cupertino and a qualified biologist.</p> <p>Initials: _____</p> <p>Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>disturbance and mobilization of heavy equipment, including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition, and grading shall be permitted. Monitoring shall be required to ensure compliance with relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.</p>		
<p><b>Impact BIO-4:</b> Construction disturbance during the avian breeding season could cause the incidental loss of eggs or nestlings, or cause the abandonment of nests, resulting in the incidental take of protected nesting birds.</p>	<p><b>Mitigation Measure BIO-4: Pre-Construction/Pre-Disturbance Survey for Nesting Birds.</b></p> <p><i>Avoidance.</i> To the extent feasible, construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code would be avoided. The nesting season for most birds in Santa Clara County extends from February 1 through August 31.</p> <p><i>Pre-Construction Surveys.</i> If it is not possible to schedule construction activities between September 1 and January 31, then preconstruction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no nests would be disturbed during project implementation. These surveys shall be conducted no more than five days prior to the initiation of any site disturbance activities and equipment mobilization, including tree, shrub, or vegetation removal, fence installation, grading, etc. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. During this survey, the biologist will inspect all trees and other potential nesting habitats (e.g., trees, shrubs, culverts) in and immediately adjacent to the impact area for nests. Active nesting is present if a bird is building a nest, sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented.</p>	<p><b>Implementation:</b> City of Cupertino or its contractor shall implement this measure with a qualified biologist.</p> <p><b>Timing:</b> Prior to and during construction activities.</p>	<p><b>Monitoring:</b> City of Cupertino and a qualified biologist.</p> <p>Initials: _____</p> <p>Date: _____</p>



Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>If an active nest is found sufficiently close to work areas to be disturbed by these activities, the biologist will determine the extent of a construction-free buffer zone to be established around the nest (typically up to 1,000 feet for raptors and up to 250 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation. Within the buffer zone, no site disturbance and mobilization of heavy equipment, including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition, and grading will be permitted until the chicks have fledged. Monitoring shall be required to ensure compliance with MBTA and relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.</p>		
<p><b>Impact CUL-1:</b> Ground disturbing excavation related to the project may expose buried cultural resources including prehistoric Native American burials.</p>	<p><b>Mitigation Measure CUL-1:</b> The City of Cupertino (City) shall note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources including prehistoric Native American burials. Significant prehistoric cultural resources are defined as human burials, features or other clusterings of finds made, modified or used by Native American peoples in the past. The prehistoric and protohistoric indicators of prior cultural occupation by Native Americans include artifacts and human bone, as well as soil discoloration, shell, animal bone, sandstone cobbles, ashy areas, and baked or vitrified clays. Prehistoric materials may include:</p> <ul style="list-style-type: none"> <li>a. Human bone - either isolated or intact burials.</li> <li>b. Habitation (occupation or ceremonial structures as interpreted from rock rings/features, distinct ground depressions, differences in compaction (e.g., house floors).</li> </ul>	<p><b>Implementation:</b> The City of Cupertino shall implement this measure with a qualified Archaeologist.</p> <p><b>Timing:</b> During construction activities.</p>	<p><b>Monitoring:</b> City of Cupertino. In the event archaeological resources are discovered, a qualified archaeologist shall write a report detailing their findings and submit it to the City of Cupertino.</p> <p>Initials: _____</p> <p>Date: _____</p>

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>c. Artifacts including chipped stone objects such as projectile points and bifaces; groundstone artifacts such as manos, metates, mortars, pestles, grinding stones, pitted hammerstones; and shell and bone artifacts including ornaments and beads.</p> <p>d. Various features and samples including hearths (fire-cracked rock; baked and vitrified clay), artifact caches, faunal and shellfish remains (which permit dietary reconstruction), distinctive changes in soil stratigraphy indicative of prehistoric activities.</p> <p>e. Isolated artifacts.</p> <p><b>Mitigation Measure CUL-2:</b> It is recommended that prior to the start of ground disturbing construction, the City should implement a Worker Awareness Training (WAT) program for cultural resources. Training shall be required for all construction personnel participating in ground disturbing construction to alert them to the archaeological sensitivity of the project area and provide protocols to follow in the event of a discovery of archaeological materials. The training shall be provided by a Registered Professional Archaeologist (RPA). The RPA shall develop and distribute for job site posting an "ALERT SHEET" summarizing potential archaeological finds that could be exposed and the protocols to be followed as well as points of contact to alert in the event of a discovery.</p> <p><b>Mitigation Measure CUL-3:</b> The City shall retain a Professional Archaeologist on an "on-call" basis during ground disturbing construction to review, identify and evaluate any potential cultural resources that may be inadvertently exposed during construction. The archaeologist shall review and evaluate any discoveries to determine if they are historical resource(s) and/or unique archaeological resources under the California Environmental Quality Act (CEQA). If the Professional Archaeologist determines that any cultural resources exposed during construction constitute a historical</p>		

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
	<p>resource and/or unique archaeological resource under CEQA, he/she shall notify the City and other appropriate parties of the evaluation and recommend mitigation measures to mitigate to a less-than significant impact in accordance with California Public Resources Code Section 15064.5. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing and data recovery among other options. The completion of a formal Archaeological Monitoring Plan (AMP) and/or Archaeological Treatment Plan (ATP) that may include data recovery may be recommended by the Professional Archaeologist if significant archaeological deposits are exposed during ground disturbing construction. Development and implementation of the AMP and ATP and treatment of significant cultural resources will be determined by the City in consultation with any regulatory agencies.</p>		

Impact	Mitigation Measure	Implementation and Timing	Monitoring Responsibility
<p><b>Impact CUL-2:</b> Construction of the project may inadvertently uncover unrecorded human remains.</p>	<p><b>Mitigation Measure CUL-4:</b> In accordance with Section 7050.5 of the California Health and Safety Code, if potential human remains are found, immediately notify the lead agency (City of Cupertino or Santa Clara County) staff and the Santa Clara County Coroner of the discovery. The coroner would provide a determination regarding the nature of the remains within 48 hours of notification. No further excavation or disturbance of the identified material, or any area reasonably suspected to overlie additional remains, can occur until a determination has been made. If the County Coroner determines that the remains are, or are believed to be, of Native American ancestry, the coroner would notify the Native American Heritage Commission within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the Native American Heritage Commission must immediately notify those persons it believes to be the Most Likely Descendant from the deceased Native American. Within 48 hours of this notification, the Most Likely Descendant would recommend to the lead agency their preferred treatment of the remains and associated grave goods.</p>	<p><b>Implementation:</b> The City of Cupertino shall implement this measure.</p> <p><b>Timing:</b> During construction activities.</p>	<p><b>Monitoring:</b> City of Cupertino and a qualified archaeologist.</p> <p>Initials: _____</p> <p>Date: _____</p>
<p><b>Impact TRIB-1:</b> Project construction could disturb or damage unknown tribal cultural resources resulting in an adverse change in the significance of the tribal resource.</p>	<p><b>Mitigation Measure TRIB-1:</b> It is possible for a lead agency to determine that an artifact is considered significant to a local tribe, and thus considered a significant resource under CEQA, even if it would not otherwise be considered significant under CEQA. As such, all Native American tribal finds are to be considered significant until the lead agency has enough evidence to make a determination of significance. In the event that Native American archaeological resources are discovered, or suspected to have been discovered, Native American monitoring will be required before further ground disturbance shall be allowed.</p>	<p><b>Implementation:</b> The City of Cupertino or its contractor shall implement this measure.</p> <p><b>Timing:</b> During construction activities</p>	<p><b>Monitoring:</b> City of Cupertino. In the event paleontological resources are encountered, a paleontologist shall be contacted to evaluate the find.</p> <p>Initials: _____</p> <p>Date: _____</p>

## Attachment B: County Notice of Intent Filing

# Attachment B: County Notice of Intent Filing



SANTA CLARA COUNTY CLERK  
CEQA FILING COVER SHEET

Santa Clara County - Clerk-Recorder Office  
State of California

**File Number: ENV24976**

ENVIRONMENTAL FILING

No. of Pages: 2

Total Fees: \$0.00

File Date: 02/12/2024

Expires: 03/13/2024

**REGINA ALCOMENDRAS, Clerk-Recorder**

By: Ronald Nguyen, Deputy Clerk-Recorder

THIS SPACE FOR CLERK'S USE ONLY

Complete and attach this form to each CEQA Notice filed with the County Clerk

TYPE OR PRINT CLEARLY

### Check Document being Filed:

- Environmental Impact Report (EIR)
- Filing Fee (new project)
  - Previously Paid F&W (must attach F&W receipt and project titles must match)
  - No Effect Determination (F&W letter must be attached)
- Mitigated Negative Declaration (MND) or Negative Declaration (ND)
- Filing Fee (new project)
  - Previously Paid F&W (must attach F&W receipt and project titles must match)
  - No Effect Determination (F&W letter must be attached)
- Notice of Exemption (NOE)
- Other (Please fill in type):  
Notice of Intent

1. LEAD AGENCY: City of Cupertino
2. LEAD AGENCY EMAIL: capitalprojects@cupertino.gov
3. PROJECT TITLE: Lawrence Mitty Park and Trail project
4. APPLICANT NAME: Susan Michael PHONE: 408.777.1328
5. APPLICANT EMAIL: SusanM@cupertino.gov
6. APPLICANT ADDRESS: 10300 Torre Avenue, Cupertino, CA 95014
7. PROJECT APPLICANT IS A:  Local Public Agency  School District  Other Special District  State Agency  Private Entity
8. NOTICE TO BE POSTED FOR 30 DAYS.

Filing fees are due at the time a Notice of Determination/Exemption is filed with our office. For more information on filing fees and No Effect Determinations, please refer to California Code of Regulations, Title 14, section 753.5.



NOTICE OF INTENT TO ADOPT A  
MITIGATED NEGATIVE DECLARATION

Lawrence Mitty Park and Trail project

CITY OF CUPERTINO – PUBLIC WORKS  
10300 TORRE AVENUE  
CUPERTINO, CA 95014

PHONE: (408) 777-3354  
FAX: (408) 777-3333

**NOTICE IS HEREBY GIVEN** that the City of Cupertino (City) has prepared a Draft Mitigated Negative Declaration (MND) for the **Lawrence Mitty Park and Trail Project** which is available beginning on Monday, February 12, 2024 for review and comment by the public and all interested persons, agencies, and organizations for a period of 30 days, ending on Wednesday, March 13, 2024. All comments on the Draft MND must be received by that date.

**Project Location:** West Side of Lawrence Expressway, between Calvert Drive and Mitty Way.

**Project Description:** The project consists of the development of a new public park and extension of the existing Saratoga Creek Trail on an approximately 7.8-acre site, located along the west side of Lawrence Expressway, south of Interstate 280 and adjacent to Saratoga Creek in the City of Cupertino.

**Potentially Significant Environmental Effects:** Potentially significant impacts in the following areas are discussed in the Mitigated Negative Declaration: Biological Resources, Cultural and Tribal Cultural Resources. Each potentially significant effect is reduced to a less-than-significant level through mitigation.

**The document will be available for review at the following locations:**

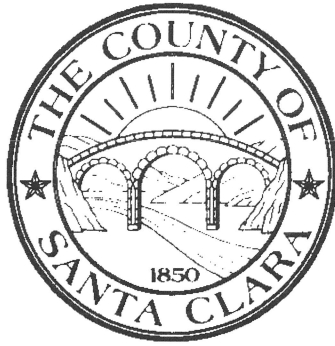
- Cupertino City Hall, 10300 Torre Avenue, Cupertino, CA
- Online at: [cupertino.gov/lawrencemitty](https://cupertino.gov/lawrencemitty)

**Comments on the Draft MND may be submitted in writing to:**

City of Cupertino, Public Works Department  
10300 Torre Avenue  
Cupertino, CA 95014  
ATTN: Susan Michael, Capital Improvement Programs (CIP) manager  
(408-777-1328 or [SusanM@cupertino.gov](mailto:SusanM@cupertino.gov))

Susan Michael, CIP Manager

February 12, 2024



**Regina Alcomendras**  
**Santa Clara County**  
**Clerk-Recorder**  
(408) 299-5688  
<https://www.clerkrecorder.org>

**Receipt: 24-21718**

<b>Product</b>	<b>Name</b>	<b>Extended</b>
CEQA	ENVIRONMENTAL FILING	\$0.00
	# Pages	2
	Document #	ENV24976
	Document Info:	CITY OF CUPERTINO
	Filing Type	F
<b>Total</b>		\$0.00
Change (Cash)		\$0.00

PLEASE KEEP FOR REFERENCE





State of California - Department of Fish and Wildlife  
**2024 ENVIRONMENTAL DOCUMENT FILING FEE**  
**CASH RECEIPT**  
 DFW 753.5a (REV. 01/01/24) Previously DFG 753.5a

RECEIPT NUMBER: ENV24976
STATE CLEARINGHOUSE NUMBER (If applicable)

**SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.**

LEAD AGENCY CITY OF CUPERTINO	LEAD AGENCY EMAIL capitalprojects@cupertino.gov	DATE 02/12/2024
COUNTY/STATE AGENCY OF FILING		DOCUMENT NUMBER

PROJECT TITLE  
LAWRENCE MITYY PARK AND TRAIL PROJECT

PROJECT APPLICANT NAME SUSAN MICHAEL	PROJECT APPLICANT EMAIL susanm@cupertino.gov	PHONE NUMBER (408) 777-1328
PROJECT APPLICANT ADDRESS 10300 TORRE AVENUE	CITY CUPERTINO	STATE CA
		ZIP CODE 95014

**PROJECT APPLICANT** (Check appropriate box)

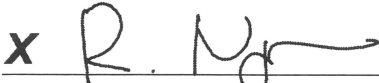
Local Public Agency     School District     Other Special District     State Agency     Private Entity

**CHECK APPLICABLE FEES:**

- Environmental Impact Report (EIR) \$4,051.25 \$ \_\_\_\_\_
- Mitigated/Negative Declaration (MND)(ND) \$2,916.75 \$ \_\_\_\_\_
- Certified Regulatory Program (CRP) document - payment due directly to CDFW \$1,377.25 \$ \_\_\_\_\_
- Exempt from fee
  - Notice of Exemption (attach)
  - CDFW No Effect Determination (attach)
- Fee previously paid (attach previously issued cash receipt copy)
- Water Right Application or Petition Fee (State Water Resources Control Board only) \$850.00 \$ \_\_\_\_\_
- County documentary handling fee \$ \_\_\_\_\_
- Other \$ \_\_\_\_\_

**PAYMENT METHOD:**

Cash     Credit     Check     Other    **TOTAL RECEIVED** \$ \_\_\_\_\_ **\$0.00**

SIGNATURE <b>X</b> 	AGENCY OF FILING PRINTED NAME AND TITLE Ronald Nguyen, Deputy County Clerk-Recorder
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