

File No. 100607

Committee Item No. 4

Board Item No. 26

## COMMITTEE/BOARD OF SUPERVISORS

### AGENDA PACKET CONTENTS LIST

Committee: BUDGET AND FINANCE

Date: July 14, 2010

BOARD OF SUPERVISORS MEETING

Date: 7/20/10

#### Cmte Board

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| <input type="checkbox"/>            | <input type="checkbox"/>            | Legislative Digest                             |
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| <input type="checkbox"/>            | <input type="checkbox"/>            | Introduction Form (for hearings)               |
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| <input type="checkbox"/>            | <input type="checkbox"/>            | Grant Information Form                         |
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#### OTHER

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Completed by: Andrea S. Ausberry

Date Friday, July 9, 2010

Completed by: \_\_\_\_\_

Date \_\_\_\_\_

An asterisked item represents the cover sheet to a document that exceeds 25 pages. The complete document is in the file.



1 [Adopting California Environmental Quality Act Findings for Sunnydale Sewer System  
2 Improvement Project]

3 **Resolution adopting findings under the California Environmental Quality Act (CEQA),**  
4 **CEQA Guidelines, and San Francisco Administrative Code Chapter 31, including the**  
5 **adoption of a mitigation monitoring and reporting program, related to the funding of**  
6 **Project No. CENMSCIC23, Sunnydale Sewer System Improvement Project, in the**  
7 **Visitacion Valley and Sunnydale neighborhood areas, and directing the Clerk of the Board**  
8 **of Supervisors to notify the Controller of this action.**

9  
10 WHEREAS, The San Francisco Public Utilities Commission (SFPUC) developed a  
11 project description for Project No. CENMSCIC23, Sunnydale Sewer System Improvement  
12 Project, in the Visitacion Valley and Sunnydale neighborhood areas (the "Project"), and

13 WHEREAS, The objectives of the Project are to construct new and replacement sewer  
14 facilities in the Visitacion Valley/Sunnydale neighborhood to improve conditions to reduce  
15 incidents of flooding. The Project will be constructed in two phases. Phase I will include  
16 construction of a sewer tunnel from the intersection of Sunnydale Avenue and Talbert Street  
17 to the Sunnydale Storage Facility and Pump Station at Harney Way and will include  
18 installation of approximately 4,000 feet of new pipeline. Phase II will include construction of  
19 sewer pipelines along Talbert Street between Visitacion Avenue and the former Union Pacific  
20 (UP) railroad right-of-way, along Visitacion Avenue between Rutland Street and Talbert  
21 Street, and along the former UP railroad right-of-way between Schwerin Street and Talbert  
22 Street and will include installation of approximately 2,800 feet of pipeline; and

23 WHEREAS, The Project is located primarily within the City and County of San  
24 Francisco, except for approximately 200 feet of pipeline near the southern end of Talbert  
25 Street within an existing sewer easement in Daly City in San Mateo County and a staging

1 area located partially in the City of Brisbane. The sewers will be constructed in street rights-of-  
2 way and in easements across private property; and

3 WHEREAS, A draft Initial Study/Mitigated Negative Declaration (IS/MND) for the  
4 Project was prepared and published for public review on February 26, 2010; and

5 WHEREAS, Public comments on the Draft IS/MND was available for public comment  
6 until March 29, 2010; and

7 WHEREAS, On April 8, 2010, the Planning Department reviewed and considered the  
8 IS/MND and found that the contents of said report and the procedures through which the  
9 IS/MND was prepared, publicized and reviewed complied with the California Environmental  
10 Quality Act (California Public Resources Code Sections 21000 et seq.) (CEQA), 14 California  
11 Code of Regulations Sections 15000 et seq. (the "CEQA Guidelines") and Chapter 31 of the  
12 San Francisco Administrative Code ("Chapter 31"); the Planning Department found the  
13 IS/MND was adequate, accurate and objective, reflected the independent analysis and  
14 judgment of the Department, and that the summary of comments and responses contained no  
15 significant revisions to the Draft IS/MND, adopted findings of no significant impacts associated  
16 with the Project and adopted the IS/MND in Planning Department File No.2009.0311E,  
17 located at 1650 Mission Street, Fourth Floor; and

18 WHEREAS, No appeals were filed with the City and County of San Francisco regarding  
19 the Project's MND; the April 8, 2010 MND is final, complete, and in accordance with CEQA,  
20 the CEQA Guidelines, and Chapter 31 of the San Francisco Administrative Code (Final  
21 IS/MND); and

22 WHEREAS, The SFPUC reviewed and considered the information contained in the  
23 Final IS/MND, all written and oral information provided by the Planning Department, the  
24  
25

1 public, relevant public agencies, SFPUC and other experts and the administrative files for the  
2 Project and the Final IS/MND; and

3 WHEREAS, On May 11, 2010, at a public meeting of the SFPUC, the SFPUC adopted  
4 Resolution No. 10-0082, in which the SFPUC: (1) adopted CEQA Findings and the Final  
5 IS/MND and, adopted the Mitigation Monitoring and Reporting Program (MMRP), which  
6 SFPUC Resolution and Attachments are incorporated herein as part of this Resolution by this  
7 reference thereto, and (2) approved the Project and authorized staff to proceed with actions  
8 necessary to implement the Project. SFPUC Resolution No. 10-0082, which is on file with the  
9 Clerk of the Board of Supervisors in File No. 100607, including its findings, is incorporated  
10 herein by reference as though fully set forth; and

11 WHEREAS, The SFPUC CEQA Findings reflected the SFPUC's independent review  
12 and consideration of the relevant environmental information contained in the Final IS/MND,  
13 and the administrative record; and

14 WHEREAS, This Board of Supervisors adopted Ordinance No. 95-10, approving a  
15 supplemental appropriation of \$348,064,054, including funds for the Project, subject to  
16 Controller's reserve; now, therefore, be it

17 RESOLVED, That the Board of Supervisors makes and adopts the findings set forth in  
18 San Francisco Public Utilities Commission's Resolution No. 10-0082 for the Project which  
19 reflects this Board's independent review and consideration of the relevant environmental  
20 information contained in the Final IS/MND, and the administrative record; and, be it

21 FURTHER RESOLVED, That the Board of Supervisors adopts the Final IS/MND,  
22 including the Mitigation Monitoring and Reporting Program; and, be it

23 FURTHER RESOLVED, That the Board of Supervisors directs the Clerk of the Board  
24 to forward this Resolution to the Controller.

Items 2, 3, and 4

Files 10-0687, 10-0688, and 10-0607

Department(s):

Public Utilities Commission (PUC)

**EXECUTIVE SUMMARY****Legislative Objectives**

- File 10-0687: Resolution authorizing the Public Utilities Commission to purchase various permanent underground easements and temporary licenses to enter and use above-ground property from Universal Paragon Corporation, or affiliate entities of Universal Paragon Corporation, for a total price of \$2,459,664, in order to allow for the construction of the Sunnydale Sewer System Improvement Project.
- File 10-0688: Resolution authorizing the Public Utilities Commission to purchase various permanent underground easements from Recology Properties, Inc. and Recology San Francisco, for a total price of \$174,001, in order to allow for the construction of the Sunnydale Sewer System Improvement Project (SSSIP).
- File 10-0607: Resolution adopting findings under the California Environmental Quality Act for the Sunnydale Sewer System Improvement Project, and directing the Clerk of the Board of Supervisors to notify the Controller of this action.

**Key Points**

- The existing Sunnydale Sewer Tunnel transports wastewater and stormwater from a 720 acre drainage basin in southeast San Francisco to a pump station near the San Francisco Bay. According to Mr. Manfred Wong, Project Manger for the PUC, this sewer tunnel has inadequate capacity to meet drainage needs during significant storms, such that temporary flooding occurs in Visitacion Valley. The PUC's SSSIP is a \$57,700,000 project which would provide an additional 6,800 feet of sewer pipeline to increase the capacity of the Sunnydale Sewer System, such that flooding would be prevented or minimized.
- The proposed easement acquisitions would provide the PUC with (a) permanent access to the underground area where the new pipeline will be constructed, and (b) temporary access, during the SSSIP construction period, to additional areas above and adjacent to the new underground pipeline to allow for construction of the new pipeline.

**Fiscal Impacts**

- The proposed total easement purchases of \$2,633,665 (\$2,459,664 plus \$174,001) would be funded from Wastewater Revenue Bond proceeds for the PUC's SSSIP as previously appropriated by the Board of Supervisors.
- Through multiple previous appropriations, the Board of Supervisors appropriated a total of \$57,700,000 to the Sunnydale Sewer System Improvement Project, including \$1,500,000 for the purchase of permanent easements. The total cost to acquire the proposed easements is \$2,633,665, or \$1,133,665 more than the previous appropriation of \$1,500,000, which was approved in August of 2009 (File 09-0546). The increased costs of \$1,133,655 have resulted because (a) the PUC did not anticipate paying \$675,000 above fair market value for one

underground easement in order to compensate the seller for modifications to the foundation of the seller's building which sits above the easement area, and (b) the PUC had underestimated the total acquisition costs by an additional \$458,665. While the cost of the proposed easements have increased since August of 2009 (when the \$1,500,000 for the proposed easement acquisitions was appropriated by the Board of Supervisors), other project costs have decreased such that the overall SSSIP budget remains at \$57,700,000.

### Recommendations

- Amend the title of the proposed resolution (File 10-0688) to include reference to the purchase of a permanent subsurface easement at Assessor's Parcel Number 5104/1, which was included in the body of the resolution but inadvertently excluded from the title of the proposed resolution.
- Approve (a) the proposed resolution (File 10-0687), and (b) the proposed resolution (File 10-0688), as amended.
- Amend the proposed resolution (File 10-0607) adopting findings under the California Environmental Quality Act (CEQA) to reference the appropriation ordinance which placed funds on reserve pending completion of environmental review, as shown in the Recommendations Section of this report.
- Approve the proposed resolution (File 10-0607), as amended.

## MANDATE STATEMENT AND BACKGROUND

### Mandate Statement

The proposed easement purchases are subject to Board of Supervisors approval pursuant to Section 23.1 of the City's Administrative Code.

### Background

The existing Sunnydale Sewer Tunnel, constructed in 1913, transports wastewater and stormwater from a 720 acre drainage basin in southeast San Francisco (consisting of residential areas of Visitacion Valley, open space in McLaren Park, and industrial areas east of Bayshore Boulevard) to a pump station near the San Francisco Bay. This sewer tunnel has inadequate capacity to meet drainage needs during significant storms, such that temporary flooding occurs within Visitacion Valley. The PUC's Sunnydale Sewer System Improvement Project (SSSIP) is a \$57,700,000 project which would provide for an additional 6,800 feet of sewer pipeline to increase the capacity of the Sunnydale Sewer System, such that flooding would be prevented or minimized.

The proposed easement purchases (Files 10-0687 and 10-0688) would provide the PUC with (a) permanent access to the underground the area where the new pipeline will be constructed, and (b) temporary access, during the SSSIP construction period, to additional areas above and adjacent to the new underground pipeline to allow for construction of the new pipeline.

Through previous multiple appropriations, the Board of Supervisors appropriated a total of \$57,700,000 to the Sunnydale Sewer System Improvement Project. In the most recent appropriation, in the amount of \$7,000,000 for the SSSIP (out of a total appropriation of \$348,064,054 to various PUC wastewater capital improvement projects), the Board of Supervisors placed the entire \$7,000,000 on a Controller's reserve pending the completion of the environmental review required by the California Environmental Quality Act (CEQA). Environmental review was completed on April 8, 2010. The proposed resolution (File 10-0607) would approve the findings of that environmental review, and notify the Controller of the approval to allow the Controller to release the \$7,000,000 of funds on reserve.

Construction of the SSSIP is estimated to begin in August of 2010 and be completed in December of 2012.

### DETAILS OF PROPOSED LEGISLATION

The PUC is requesting authorization to purchase various easements, totaling \$2,633,665, as shown in Table 1 below.

**Table 1: Easements Proposed To Be Purchased**

File	Seller	Property	Duration	Square Feet	Purchase Price	Price Per Square Foot
10-0687	Universal Paragon <sup>1</sup>	APN 4991/24/65	Permanent	11,677.70	\$654,000	\$56.00
		APN 5100/3, 5101/7, and 5102/9	Permanent	24,468.00	1,020,000	41.69
		APN 4991/24,61,65 and Brisbane APN (005-153-030)	24 Months <sup>2</sup>	69,783.00	639,212	9.16
		APN 5100/3 and 5107/1	24 Months <sup>3</sup>	24,613.70	146,452	5.95
Subtotal for File 10-0687				130,542.40	\$2,459,664	*
10-0688	Recology <sup>4</sup>	APN 5104/1	Permanent	5,955.00	35,000	5.88
		APN 5104/4	Permanent	4,470.00	22,000	4.92
		APN 4991/7,8	Permanent	15,437.00	82,000	5.31
		APN 4991/9	Permanent	5,964.00	35,000	5.87
		APN 4991/68	Permanent	0.19	1	5.26
Subtotal for File 10-0688				31,826.19	\$174,001	**
<b>Total</b>				<b>162,368.59</b>	<b>\$2,633,665</b>	<b>\$16.22</b>

\* Average price per square foot for the easements included in File 10-0687 is \$18.84.

\*\* Average price per square foot for the easements included in File 10-0688 is \$5.47.

<sup>1</sup> For the purposes of Table 1 above, the term "Universal Paragon" refers to either (a) Universal Paragon Corporation, or (b) one of their affiliate organizations (Visitation Development, LLC or EP Associates, LLC).

<sup>2</sup> According to Ms. Claudine Venegas of the Real Estate Division, the 24 month term of this temporary easement at a total cost of \$639,212 includes (a) an 18 month term at a cost of \$479,409, and (b) an optional 6 month extension at an additional cost of \$159,803.

<sup>3</sup> According to Ms. Venegas, the 24 month term of this temporary easement at a total cost of \$146,452 includes (a) an 18 month term at a cost of \$109,839, and (b) an optional 6 month extension at an additional cost of \$36,613.

<sup>4</sup> For the purposes of Table 1 above, the term "Recology" refers to either Recology Properties, Inc. or Recology San Francisco.



As discussed above, the easements shown in Table 1 above would provide the PUC with (a) permanent access to the underground the area where the new pipeline will be constructed, and (b) temporary access, during the SSSIP construction period, to additional areas above and adjacent to the new underground pipeline to allow for construction of the new pipeline.

As shown in Table 1 above, the average price per square foot of the easements to be purchased from Universal Paragon is \$18.84, which is \$13.37 per square foot, or 244.4 percent, more than the average price per square foot for easements purchased from Recology at \$5.47 per square foot. Ms. Venegas stated that the easements purchased from Universal Paragon are 244.4 percent more expensive because the easements impose a greater limit on the value of Universal Paragon's property since (a) the easements extend through the center of the property rather than the periphery, (b) the easements impact the ability of the owner to develop the property underground (which would be necessary for developments such as an underground parking garage), and (c) the zoning for three of the parcels to be purchased from Universal Paragon (specifically APN 5100/3, 5101/7, and 5102/9) allows for high-density housing and retail development, which, according to Ms. Venegas, is much more valuable than the industrial zoning found at the other locations.

The PUC is also requesting approval of CEQA findings for the Sunnydale Sewer System Improvement Project (File 10-0607). Environmental review was completed by the Planning Department on April 8, 2010. The proposed resolution (File 10-0607) would approve the findings of that environmental review, and notify the Controller of the approval to allow the Controller to release the \$7,000,000 of funds on reserve, as discussed above.

## **FISCAL IMPACTS**

The purchase of the proposed easements total \$2,633,665 which would be funded from the proceeds of Wastewater Revenue Bonds previously appropriated by the Board of Supervisors on August 18, 2009 (File 09-0546), to the PUC's Sunnydale Sewer System Improvement Project (SSSIP).

The debt service on such Wastewater Revenue Bonds is paid through wastewater rates<sup>5</sup> charged to PUC's wastewater customers.

According to Ms. Claudine Venegas, Senior Real Property Officer at the Real Estate Division, the prices paid for each easement shown in Table 1 above represent the fair market value for each easement, as calculated by an independent appraisal<sup>6</sup>.

<sup>5</sup> Wastewater rates through FY 2013-2014 were considered approved by the Board of Supervisors on June 5, 2009 because, pursuant to Proposition E approved by the voters on November 5, 2002, the rates were not rejected by the Board of Supervisors within 30 days of their submission to the Board.

<sup>6</sup> The purchase price of all easements is equal to the fair market value as determined by an independent appraisal except for the proposed easement purchase at APN 5100/3, 7, 9 at a total cost of \$1,020,000, which is the sum of (a) \$345,000 for the fair market value of the easement according to an independent appraisal, and (b) \$675,000 to compensate the seller for the anticipated costs of foundation modifications necessary as a result of the SSSIP.

**OTHER CONSIDERATIONS**

**The proposed easement purchases in the amount of \$2,633,665, exceed the cost anticipated at the time funds were appropriated for such easement purchases of \$1,500,000 by \$1,133,665.**

According to Mr. Manfred Wong, PUC Project Manager for the SSSIP, the cost of the proposed easement acquisitions totaling \$2,633,665 is \$1,133,665 more than the \$1,500,000 cost which was estimated at the time the funds were appropriated for such easement purchases. Mr. Wong stated that this is because at the time of the \$1,500,000 estimate in August of 2009, (a) the PUC did not anticipate paying \$675,000 above fair market value for one underground easement in order to compensate the seller for modifications to the foundation of the seller's building which sits above the easement area (see Footnote 6 above), and (b) the PUC had underestimated the total acquisition costs by an additional \$458,665, resulting in total increased costs of \$1,133,665 (\$675,000 plus \$458,665),

**The title of the proposed resolution (File 10-0688) does not include reference to one of the easements proposed for purchase**

The title of File 10-0688 does not include reference to Assessor's Parcel Number (APN) 5104/1. However, the body of the proposed resolution (File 10-0688) includes the authorization to purchase the proposed easement on APN 5104/1. According to Ms. Venegas, the title of the proposed resolution (File 10-0688) should include reference to the proposed easement on APN 5104/1. Therefore the Budget and Legislative Analyst recommends amending the title of the proposed resolution (File 10-0688) to include reference to the purchase of a permanent subsurface easement at APN 5104/1.

**The proposed resolution (File 10-0607) refers to a reserve which is not relevant to environmental review.**

As discussed above, in the most recent appropriation to the SSSIP in File 10-0339 (Ordinance 95-10), the Board of Supervisors appropriated \$7,000,000 to the SSSIP (out of a total appropriation of \$348,064,054 to various PUC wastewater capital improvement projects) and placed the entire \$7,000,000 on a Controller's reserve pending the completion of the environmental review required by the California Environmental Quality Act.

However, the proposed resolution (File 10-0607) refers to \$119,800,000 which was placed on reserve by the Board of Supervisors in File 09-0546 (Ordinance 201-09). This reference, while technically correct, is not relevant to the proposed resolution because File 09-0546 placed funds on Controller's reserve pending sale of Wastewater Revenue Bonds, not completion of environmental review. Therefore, the Budget and Legislative Analyst recommends amending the proposed resolution (File 10-0607) as shown below.

Delete paragraph, beginning on page 3 line 14:

“WHEREAS, This Board of Supervisors adopted Ordinance No. 201-09, approving a supplemental appropriation of \$119,800,000, including funds for the Project, subject to Controller’s reserve; now, therefore, be it”

New paragraph, to begin on page 3, line 14 (changes underlined):

“WHEREAS, This Board of Supervisors adopted Ordinance No. 95-10, approving a supplemental appropriation of \$348,064,054, including funds for the Project, subject to Controller’s reserve; now, therefore, be it”

## RECOMMENDATIONS

1. Amend the title of the proposed resolution (File 10-0688) to include reference to the purchase of a permanent subsurface easement at APN 5104/1, which was included in the body of the resolution but inadvertently excluded from the title of the proposed resolution.
2. Approve (a) the proposed resolution (File 10-0687), and (b) the proposed resolution (File 10-0688), as amended.
3. Amend the proposed resolution (File 10-0607) adopting findings under the California Environmental Quality Act (CEQA) to reference the appropriation ordinance which placed funds on reserve pending completion of environmental review, as shown below.

Delete paragraph, beginning on page 3 line 14:

“WHEREAS, This Board of Supervisors adopted Ordinance No. 201-09, approving a supplemental appropriation of \$119,800,000, including funds for the Project, subject to Controller’s reserve; now, therefore, be it”

New paragraph, to begin on page 3, line 14 (changes underlined):

“WHEREAS, This Board of Supervisors adopted Ordinance No. 95-10, approving a supplemental appropriation of \$348,064,054, including funds for the Project, subject to Controller’s reserve; now, therefore, be it”

4. Approve the proposed resolution (File 10-0607), as amended.



# AGENDA ITEM

## Public Utilities Commission

City and County of San Francisco



DEPARTMENT Infrastructure Division AGENDA NO. \_\_\_\_\_  
MEETING DATE May 11, 2010

**Approve Project - Mitigated Negative Declaration: Regular Calendar**  
Bureau Manager: Irina P. Torrey

**Project No. CENMSCIC23, Sunnydale Sewer System Improvement Project**  
**Staff Recommendation: Approve Project**

<p><b>Summary of Proposed Commission Action:</b></p>	<p><b>Approve Project No. CENMSCIC23, Sunnydale Sewer System Improvement Project, in the Visitacion Valley and Sunnydale neighborhood areas within the City and County of San Francisco (CCSF); adopt the Mitigated Negative Declaration (MND), the CEQA Findings as required by the California Environmental Quality Act (CEQA), and the Mitigation Monitoring and Reporting Program (MMRP); and authorize the General Manager to implement the Project, in compliance with the Charter and applicable law, and subject to Board of Supervisors approval where required, including the following:</b></p> <p>1. In compliance with Government Code Section 7260 <i>et seq.</i>, undertake the process for possible acquisition (including but not limited to negotiating and entering into purchase agreements, easement deeds, and license agreements), for a combined purchase price not to exceed \$2,700,000, of interests (temporary and permanent) in real property located in San Francisco County and San Mateo County, as follows: (1) Assessor's Parcel No. 4991/24, No. 4991/61, No. 4991/65 in San Francisco, owned by Sunpark Properties, Inc., (2) Assessor's Parcel No. 005-153-030 in Brisbane, owned by Grand Sierra Properties, (3) Assessor's Parcel No. 5100/3, No. 5101/7, No. 5102/9, and No. 5107/1 in San Francisco, owned by Visitacion Development LLC, and (4) Assessor's Parcel No. 5104/1, No. 5104/4, No. 4991/7/8, and No. 4991/9 in San Francisco, owned by Recology Properties, Inc.</p>
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**APPROVAL:**

DEPARTMENT / BUREAU \_\_\_\_\_  
COMMISSION SECRETARY Mike Housh

FINANCE Todd L. Rydstrom  
GENERAL MANAGER Ed Harrington

	<p>combined purchase price not to exceed \$2,700,000, of interests (temporary and permanent) in real property located in San Francisco County and San Mateo County, owned by Sunpark Properties, Inc., Grand Sierra Properties, Visitation Development LLC, and Recology Properties, Inc.</p> <ol style="list-style-type: none"> <li>2. Obtain from CalTrans, Peninsula Corridor Joint Powers Board, Bay Conservation and Development Commission, and City of Brisbane, as necessary, encroachment permits/licenses or other permits for the project.</li> <li>3. Consultation with and/or obtain approvals by state and federal regulatory agencies, including but not limited to: California Department of Toxic Substances Control, State Historic Preservation Officer, U.S. Fish &amp; Wildlife Service, California Department of Fish and Game, San Francisco Regional Water Quality Control Board, Bay Area Air Quality Management District and California Department of Transportation.</li> </ol>
<p><b>Environmental Review:</b></p>	<p>The Environmental Review Officer (ERO), San Francisco Planning Department, approved a Mitigated Negative Declaration for Project No. CENMSCIC23, Sunnydale Sewer System Improvement Project on April 8, 2010. CEQA requires agencies to review and consider the Mitigated Negative Declaration, and adopt mitigation measures that would avoid or substantially lessen a project's identified significant environmental impacts or potential significant impacts if such measures are feasible. In order to move forward with the Sunnydale Sewer System Improvement Project, the Commission must: (1) review and consider the MND prepared for the Project, and (2) adopt the MND, the CEQA Findings and the MMRP.</p> <p>The Final MND identified and analyzed Project-specific potentially significant impacts including the resource areas of aesthetics, air quality, cultural and paleontological resources, noise, biological resources, geology and soils, hydrology and water quality, and hazardous materials. All potentially significant impacts will be reduced to a less than significant level by implementation of the mitigation measures outlined in the Final MND and the MMRP for the construction and post-construction phases.</p> <p>It is the intention of the SFPUC to avoid significant impacts through the adoption of all of the mitigation measures identified in the Final MND, each of which is incorporated herein by reference and listed in the MMRP. The MMRP specifies the process by which all adopted mitigation measures are to be carried out, along with responsibilities for enforcement. The MMRP is attached as Attachment B.</p>
<p><b>Recommendation:</b></p>	<p>SFPUC staff recommends that the Commission adopt the attached Resolution. Subsequent approval of the construction contract by the Commission would be required.</p>
<p><b>Attachments:</b></p>	<p>1. SFPUC Resolution</p>

## PUBLIC UTILITIES COMMISSION

City and County of San Francisco

RESOLUTION NO. 10-0082

WHEREAS, San Francisco Public Utilities Commission (SFPUC) staff have developed a project description for improvements to the wastewater system, otherwise known as Project No. CENMSCIC23, Sunnydale Sewer System Improvement Project, in the Visitacion Valley and Sunnydale neighborhood areas within the City and County of San Francisco (CCSF); and

WHEREAS, The objectives of the Project are to make improvements to reduce past flooding in the area by constructing a sewer tunnel from the intersection of Sunnydale Avenue and Talbert Street to the Sunnydale Storage Facility and Pump Station at Harney Way and constructing new sewer pipelines along Talbert Street between Visitacion Avenue and the former Union Pacific (UP) railroad right-of-way, along Visitacion Avenue between Rutland Street and Talbert Street, and along the former UP railroad right-of-way between Schwerin Street and Talbert Street; and

WHEREAS, A Draft Initial Study/Mitigated Negative Declaration (IS/MND) for Project No. CENMSCIC23, the Sunnydale Sewer System Improvement Project was prepared and published for public review on February 26, 2010; and

WHEREAS, The Draft IS/MND was available for public comment until March 29, 2010; and

WHEREAS, On April 8, 2010, the Environmental Review Officer (ERO), San Francisco Planning Department, Major Environmental Analysis Division, reviewed and considered the Final Mitigated Negative Declaration (FMND) and found that the contents of said report and the procedures through which the FMND was prepared, publicized, and reviewed complied with the California Environmental Quality Act (California Public Resources Code Sections 21000 et seq.) ("CEQA"), 14 California Code of Regulations Sections 15000 et seq. (the "CEQA Guidelines") and Chapter 31 of the San Francisco Administrative Code ("Chapter 31"); and

WHEREAS, The ERO, San Francisco Planning Department, found the FMND was adequate, accurate and objective, and reflected the independent analysis and judgment of the San Francisco Planning Department, and approved the FMND for the Project in compliance with CEQA, the CEQA Guidelines and Chapter 31; and

WHEREAS, The San Francisco Planning Department, is the custodian of records, located in File No.2009.0311E, at 1650 Mission Street, Fourth Floor, San Francisco, California; and

WHEREAS, San Francisco Public Utilities Commission (SFPUC) staff prepared the findings in Attachment A, (CEQA Findings), and a Mitigation Monitoring and, Reporting

SFPUC finds that the measures it is adopting can be carried out by the SFPUC at the designated time and are feasible at this time. To the extent that these measures require supplemental appropriations to SFPUC operating budgets, it is the SFPUC's intent to seek and obtain the necessary appropriations for implementation of the adopted mitigation measures; and be it

FURTHER RESOLVED, That the SFPUC further finds that since the MND was finalized, there have been no substantial project changes and no substantial changes in project circumstances that would require major revisions to the MND due to the involvement of new significant environmental effects or an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth in the MND; and be it

FURTHER RESOLVED, That the SFPUC hereby authorizes the General Manager to undertake, in compliance with Government Code Section 7260 *et seq.*, the process for possible acquisition (including but not limited to negotiating and entering into purchase agreements, easement deeds, and license agreements) of interests (temporary and permanent) in the following real property located in San Francisco County and San Mateo County, as follows: (1) Assessor's Parcel No. 4991/24, No. 4991/61, No. 4991/65 in San Francisco, owned by Sunpark Properties, Inc., (2) Assessor's Parcel No. 005-153-030 in Brisbane, owned by Grand Sierra Properties, (3) Assessor's Parcel No. 5100/3, No. 5101/7, No. 5102/9, and No. 5107/1 in San Francisco, owned by Visitation Development LLC, and (4) Assessor's Parcel No. 5104/1, No. 5104/4, No. 4991/7/8, and No. 4991/9 in San Francisco, owned by Recology Properties, Inc., provided that the total combined purchase price for the acquisition of these property interests is to not exceed \$2,700,000, and subject to Board of Supervisors approval, where required; and be it

FURTHER RESOLVED, The General Manager will confer with the Commission during the negotiation process on real estate agreements as necessary, and report to the Commission on all agreements submitted to the Board of Supervisors for approval; and notwithstanding the authority granted in this Resolution, the General Manager is not authorized to enter into an agreement to dispose of any real property interests under the jurisdiction of this Commission, in any manner, including by sale, exchange or transfer ("Transfer"), without this Commission approving such Transfer by Resolution setting forth findings required by Charter Section 8B121(e) and subject to Board of Supervisors' approval under Charter section 9.118; and be it

FURTHER RESOLVED, That the SFPUC authorizes the General Manager to apply for and execute various necessary permits and encroachment permits with CalTrans, Peninsula Corridor Joint Powers Board, and City of Brisbane, and those permits shall be consistent with SFPUC existing fee or easement interests, where applicable. To the extent that the terms and conditions of the permits will require SFPUC to indemnify the respective jurisdictions, those indemnity obligations are subject to review and approval by the San Francisco Risk Manager. The General Manager is authorized to agree to such terms and conditions, including but not limited to those relating to maintenance, repair and relocation of improvements, that are in the public interest, and in the judgment of the General Manager, in consultation with the City Attorney, are reasonable and appropriate for the scope and duration of the requested use as necessary for the; and be it

**ATTACHMENT A**  
**SUNNYDALE SEWER SYSTEM IMPROVEMENT PROJECT**  
**CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS**  
**SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

**I. INTRODUCTION**

The following findings are adopted by the San Francisco Public Utilities Commission (SFPUC) with respect to Project No. CENMSCIC2354, the Sunnydale Sewer System Improvement Project (the Project) Final Mitigated Negative Declaration pursuant to the requirements of the California Environmental Quality Act (California Public Resources Code Sections 21000 et seq.) ("CEQA"), 14 California Code of Regulations Sections 15000 et seq. (the "CEQA Guidelines") and Chapter 31 of the San Francisco Administrative Code. The project is being undertaken by the SFPUC to increase reliability of the combined sewer system and minimize potential flooding in the project area. The San Francisco Planning Department is the lead agency under the California Environmental Quality Act.

**II. PROJECT DESCRIPTION**

The San Francisco Public Utilities Commission (SFPUC) is proposing the Sunnydale Sewer System Improvement Project (Project). The proposed Project includes the construction of new and replacement sewer facilities in the Visitacion Valley/Sunnydale neighborhoods to address conditions that have led to past flooding. The Project will be constructed in two phases. Phase I will include construction of a sewer tunnel from the intersection of Sunnydale Avenue and Talbert Street to convey wastewater eastward to the Sunnydale Transport/Storage (T/S) structure, located adjacent to the San Francisco Bay by Harney Way and Alana Way. Phase II will include construction of sewer pipelines along Talbert Street between Visitacion Avenue and the former Union Pacific (UP) railroad right-of-way, along Visitacion Avenue between Rutland Street and Talbert Street, and along the former UP railroad right-of-way between Schwerin Street and Talbert Street.

In Phase I of the proposed Project, all sewers constructed will be new and there will be no replacement of existing sewer pipelines. Approximately 4,000 feet of new pipeline will be constructed in Phase I. In Phase II, approximately 2,800 feet of pipeline will be constructed, including 1,600 feet of new pipeline and 1,200 feet of replacement pipeline. The Project is located primarily within the City and County of San Francisco (CCSF), except for approximately 200 feet of pipeline near the southern end of Talbert Street within an existing sewer easement in Daly City in San Mateo County and a staging area located partially in the City of Brisbane. The sewers will be constructed in street rights-of-way and in easements across private property. Construction methods include tunneling in Phase I and cut-and-cover construction in Phase II.



The SFPUC shall ensure implementation of all mitigation measures identified in the FMND either directly or via binding contractual mechanisms. The SFPUC finds that the measures it is adopting can be carried out by the SFPUC at the designated time and are feasible at this time. To the extent that these measures require supplemental appropriations to SFPUC operating budgets, it is the SFPUC's intent to seek and obtain the necessary appropriations for implementation of the adopted mitigation measures.

## V. CONCLUSION

Pursuant to the terms of San Francisco Administrative Code section 31.11(h) and CEQA Guidelines section 15074, the SFPUC has reviewed and considered the information presented in the FMND, public comments, and the record as a whole for the Project. Based upon the whole record, the SFPUC finds that the FMND reflects the independent judgment and analysis of the San Francisco Planning Department and there is no substantial evidence that the proposed Project, given the implementation of the mitigation measures as stated in the FMND and adopted herewith, would have a significant effect on the environment as shown in the FMND.

The SFPUC further finds that the proposed Project as approved herein is consistent with the project description contained in the FMND and would not result in significant impacts not identified in the mitigated negative declaration or cause significant effects already identified in the mitigated negative declaration to be substantially more severe.



**SAN FRANCISCO  
PLANNING DEPARTMENT**

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**Mitigated Negative Declaration**

*Date:* February 26, 2010; amended on April 5, 2010. (Amendments to PMND are shown as deletions in ~~strike through~~; additions in double underline.)

*Case No.:* 2009.0311E

*Project Title:* Sunnydale Sewer System Improvement Project

*BPA Nos.:* Not applicable

*Zoning:* Not applicable, in public right-of-way and subsurface easements

*Block/Lot:* Within private easements: AB5104, Lot 1; AB5104, Lot 4; AB 4991, Lot 7; AB 4991, Lot 8; AB 4991, Lot 9; AB 4991, Lot 24; AB 4991, Lot 65; AB 5100, Lot 3; AB 5101, Lot 7; AB 5100, Lot 9; AB 5104, Lot 5; AB 4991, Lot 68; AB 4991, Lot 67; AB 4991, Lot 66; AB 4991, Lot 61; AB 4991, Lot 65; and AB5107, Lot 1.

*Lot Size:* The width of the easement (along the new alignment within the Sunnydale segment) would be approximately 25 feet.

*Project Sponsor* San Francisco Public Utilities Commission (SFPUC)  
1145 Market Street, 5th Floor, San Francisco, CA 94103  
Debra Lutske – (415) 554-3113

*Lead Agency:* San Francisco Planning Department

*Staff Contact:* Steven H. Smith – (415) 558-6373  
[steve.smith@sfgov.org](mailto:steve.smith@sfgov.org)

**PROJECT DESCRIPTION:**

The San Francisco Public Utilities Commission (SFPUC) is proposing the Sunnydale Sewer System Improvement Project (Project). The proposed Project includes the construction of new and replacement sewer facilities in the Visitacion Valley/Sunnydale neighborhood to address conditions that have led to past flooding. The proposed Project would be constructed in two phases. Phase I would include construction of a sewer tunnel from the intersection of Sunnydale Avenue and Talbert Street to convey wastewater eastward to the Sunnydale Transport/Storage (T/S) structure, located adjacent to the San Francisco Bay by Harney Way and Alana Way. Phase II would include construction of sewer pipelines along Talbert Street between Visitacion Avenue and the former Union Pacific (UP) railroad right-of-way (ROW), along Visitacion Avenue between Rutland Street and Talbert Street, and along the former UP railroad ROW between Schwerin Street and Talbert Street.

In Phase I of the proposed Project, all sewers constructed would be new, and there would be no replacement of existing sewer pipelines. Approximately 4,000 feet of new pipeline would be

\* To view full document  
Request file # 100607

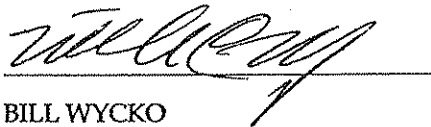
constructed in Phase I. In Phase II, approximately 2,800 feet of pipeline would be constructed, including 1,600 feet of new pipeline and 1,200 feet of replacement pipeline. The Project is located primarily within the City and County of San Francisco (CCSF), except for approximately 200 feet of pipeline near the southern end of Talbert Street, which is within an existing sewer easement in Daly City in San Mateo County. The sewers would be constructed in street ROW and in easements across private property. Construction methods include tunneling in Phase I and cut-and-cover construction in Phase II.

**FINDING:**

This Project could not have a significant effect on the environment. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance), and 15070 (Decision to prepare a Negative Declaration), and the following reasons as documented in the Initial Evaluation (Initial Study) for the Project, which is attached.

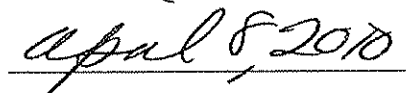
Mitigation measures are included in this Project to avoid potentially significant effects. See individual resources sections for mitigation measures.

In the independent judgment of the Planning Department, there is no substantial evidence that the project could have a significant effect on the environment.



BILL WYCKO  
Environmental Review Officer

For John Rahaim, Director of Planning



Date of adoption of Final Mitigated  
Negative Declaration

cc: Distribution List, Master Decision File and Scott Macpherson, SFPUC



**Initial Study**  
**Planning Department Case No. 2009.0311E**  
**Sunnydale Sewer System Improvement Project**

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LIST OF ABBREVIATIONS AND ACRONYMS

ABAG	Association of Bay Area Governments
ADRP	Archaeological Data Recovery Plan
APE	Area of Potential Effects
ASC	Anthropological Studies Center
ATMP	Archaeological Testing and Monitoring Plan
BAAQMD	San Francisco Bay Area Air Quality Management District
BAOS	Bay Area 2005 Ozone Strategy
BART	Bay Area Rapid Transit
BCDC	San Francisco Bay Conservation and Development Commission
bgs	below ground surface
BMP	best management practice
BRT	Bus Rapid Transit
BSD	Bayshore Sanitary District
BWD	batch wastewater discharge
CAA	Clean Air Act
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CCSF	City and County of San Francisco
CEQA	California Environmental Quality Act
CH <sub>4</sub>	methane
City	City and County of San Francisco
CO <sub>2</sub>	carbon dioxide
CRHR	California Register of Historic Places
cy	cubic yards
dBA	A-weighted decibel
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control, California Environmental Protection Agency

EIR	Environmental Impact Report
EMFAC	Emission Factors Model
EPBM	earth pressure balance machine
ERO	Environmental Review Officer
ESL	Environmental Screening Level
FARR	Final Archaeological Resources Report
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
GWP	global warming potential
IS/MND	Initial Study/Mitigated Negative Declaration
Leq	equivalent steady sound level that provides an equal amount of acoustical energy as the time-varying sound
Lmax	instantaneous maximum noise level measured during the measurement period of interest
LOS	level of service
LUST	leaking underground storage tank
MEA	Major Environmental Analysis Division, San Francisco Planning Department
MID	Municipal Improvement District
MLD	Most Likely Descendant
MND	mitigated negative declaration
MRZ	Mineral Resource Zone
N <sub>2</sub> O	nitrous oxide
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O <sub>3</sub>	ozone
PM <sub>10</sub>	particulate matter less than 10 micrometers in diameter
PM <sub>2.5</sub>	particulate matter less than 2.5 micrometers in diameter ("fine" particles)



PPV	peak particle velocity
PRG	preliminary remediation goal
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gas
ROW	right-of-way
RWQCB	San Francisco Bay Regional Water Quality Control Board
SEP	Southeast Water Pollution Control Plant
SFDPW	San Francisco Department of Public Works
SFPUC	San Francisco Public Utilities Commission
SOMA	South of Market Area
SRF	State Revolving Fund
STLC	California Soluble Threshold Limit Concentration
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCLP	toxicity characteristic leaching procedure
TPH	total petroleum hydrocarbons
T/S	transport/storage [structure]
TTLIC	California total threshold limit concentration
UP	Union Pacific
UPC	Universal Paragon Corporation
URBEMIS	urban emissions model
US-101	U.S. Highway 101
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound
WSA	William Self Associates

## GLOSSARY

**5-year design storm**—A storm event that has the probability of occurring once every 5 years, thus requiring installation of sewers large enough in diameter to collect and transport the expected runoff from such an event. In any given year, there is a 20 percent chance that a 5-year storm will occur.

**Alluvium**—Unconsolidated mixtures of gravel, sand, clay, and silt typically deposited by streams.

**AM and PM peak hour**—The morning (8:00 AM to 9:00 AM) and evening (5:00 to 6:00 PM) rush hour times when roadways are most congested.

**Asbestos**—A term used for several types of naturally occurring fibrous materials found in many parts of California, some of which have been found to be cancer-causing agents.

**A-weighted decibel, dBA**—Refers to a scale of noise measurement that approximates the range of sensitivity of the human ear to sounds of different frequencies. The human ear is not equally sensitive to all sound frequencies within the entire spectrum; thus, human response is factored into sound descriptions in a process called "A-weighting," expressed as "dBA." On this scale, the normal range of human hearing extends from about 0 dBA to about 140 dBA. A 10-dBA increase in the level of a continuous noise represents a perceived doubling of loudness.

**Barkentine**—A sailing vessel with three or more masts.

**Capacity**—Engineering term for describing volume or flow of structures. There are multiple uses of the term. This document uses the term "design capacity," which is the maximum capacity or flow rate to which a treatment facility or transmission system component is designed to operate, under a specified set of regulatory criteria, engineering standards, or other engineering assumptions.

**Channel**—A natural or artificial watercourse with a defined bed and banks to confine and convey continuously or periodically flowing water.

**Cultural resource**—A nonrenewable remain of human activity that is valued by or significantly representative of a culture, or that contains significant information about a culture. Cultural resources encompass archaeological, traditional, and built environmental resources, including landscapes or districts, sites, buildings, structures, objects, or cultural practices that are usually greater than 50 years of age and possess architectural, historic, scientific, or other technical value.

**Cumulatively considerable**—A California Environmental Quality Act (CEQA) term used to indicate whether or not a cumulative impact is significant.

**Cut-and-Cover construction**—Soil and pavement would be removed to install the pipeline along the planned alignment. Prior to the start of construction, the construction boundary and the location of all underground utilities would be identified. Soil would be removed to the required

depth, and the bottom of the trench would be compacted. A crushed rock layer would be placed at the base of the trench after the compaction process has been completed. After placement of the crushed rock layer, the new pipeline would be installed and the pipe segments connected, and the trench would be backfilled with imported sand or native soil. The backfill would be compacted, and the disturbed surface over the trench would be restored to the pre-construction condition.

**Dewatering**—Process of removing water from a pipeline for repair and maintenance or removing groundwater from a trench during construction.

**Discharge**—The flow of surface water in a stream or canal or the outflow of groundwater from a flowing artesian well, ditch, or spring. Also refers to the discharge of liquid effluent from a facility or to chemical emissions into the air through designated venting mechanisms.

**Disturbance**—Any event or series of events that disrupt ecosystem, community, or population structures and alter the physical environment.

**Early Holocene period**—11,600 – 7,700 years before present.

**Easement**—The right to use another's property for a particular purpose.

**Ecosystem**—A geographically identifiable area that encompasses unique physical and biological characteristics. It is the sum of the plant community, animal community, and environment in a particular region or habitat.

**Enhancement**—Measures that develop or improve the quality or quantity of existing conditions or resources beyond a condition or level that would have occurred without an action.

**Exit Portal**—A vertical shaft excavated to the depth of the sewer.

**Floruit**—Period or date at which a person/thing was active/working.

**Flow**—The volume of water passing a given point per unit of time.

**Flow control structures**—Underground concrete boxes connecting pipelines or other utilities.

**Fugitive dust**— Small airborne particles that are released to the atmosphere by some means other than through a stack or tailpipe (non-point source emissions).

**Fugitive emissions**—See Fugitive dust above. **Greenhouse gas**—A gas that contributes to the greenhouse effect by absorbing or trapping heat from the sun as it is reflected back into the atmosphere, much like what a greenhouse does. By capturing heat in this manner, greenhouse gases (GHGs) contribute to global climate change. Some examples of greenhouse gases are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), ozone (O<sub>3</sub>), nitrous oxide (N<sub>2</sub>O), and water vapor (H<sub>2</sub>O).

**Groundwater recharge**—Inflow to aquifers from precipitation, infiltration, through-flow, and/or other means that replaces groundwater lost through pumping or other forms of discharge. The process of water being added to the saturated zone or the volume of water added by this process.

**Habitat**—The specific area or environment in which a particular type of animal or plant lives.

**Lead agency**—The public agency that has the principal responsibility for carrying out or approving a project that may have a Potentially Significant effect upon the environment.

**Level of service (LOS)**—A road's LOS in the transportation analysis is defined as a qualitative description of a facility's performance based on average delay per vehicle, vehicle density, or volume-to-capacity ratios. The operational characteristics associated with each LOS category are defined by descriptions from the Transportation Research Board's *Highway Capacity Manual* (2000). LOS ranges from LOS A, which indicates free-flow or excellent conditions with short delays, to LOS F, which indicates congested or overloaded conditions with extremely long delays. 4

**Lithology**—The gross physical character of a rock or rock formation.

**L<sub>max</sub>**—The instantaneous maximum noise level measured during a measurement period of interest.

**Midden**—A mound or deposit containing shells, animal bones, and other refuse that indicates the site of a human settlement.

**Middle Holocene period**—5,500 – 2,200 years before present.

**Missionized**—Native Americans living within the Franciscan mission compound or one of its ancillary facilities.

**Mitigation**—Measure for: (1) Avoiding an impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of an action and its implementation; (3) rectifying an impact by repairing, rehabilitating, or restoring the affected environment; or (4) compensating for an impact by replacing or providing substitute resources or environments.

**Ozone precursors**—Ozone is not emitted directly but formed by the effect of the sun's energy on other chemicals, primarily volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>). These chemicals are known as ozone precursors.

**Paleosols**—Buried, formerly relatively stable land surfaces.

**Peak particle velocity (PPV)**—To assess the potential for structural damage associated with vibration, the vibratory ground motion in the vicinity of the affected structure is measured in terms of peak particle velocity (PPV) in the vertical and horizontal directions (vector sum), typically in units of inches per second (in/sec).

**Pipe-jacking construction**—A trenchless pipe installation method that involves laying underground pipelines by assembling the pipes at the foot of an access shaft and pushing them through the ground.

**Pleistocene era**—The earlier epoch of the Quaternary period extending from the end of the Pliocene, about 2 million years ago, to the beginning of the Holocene, about 10,000 years ago.

**Reverse-slip fault**—A geological fault in which the upper side appears to have been pushed upward by compression.

**Right-of-way**—The area of land (usually a strip) acquired for and devoted to the provision of utilities.

**Ruderal habitat**—An artificial habitat associated with disturbance from construction, including disturbance from grading, excavating, dumping of dirt, and vehicle traffic. The plant species composition in ruderal habitat varies greatly, depending on microhabitat conditions and disturbance history where the area is not occupied by developed facilities or landscaping. Ruderal habitat is often dominated by an assortment of weedy, non-native annual and perennial herbs. Ruderal sites often have a considerable amount of bare ground.

**Seiche**—An oscillation of a body of water. Seiches occur most frequently in enclosed or semi-enclosed basins, such as lakes, bays, or harbors, and may be triggered by strong winds, changes in atmospheric pressure, earthquakes, tsunamis, or tides. A seiche of approximately 4 inches occurred during the 1906 earthquake, an event of magnitude 8.3 on the Richter scale.

**Sensitive receptor**—Noise-sensitive land uses and/or receptors including residences of all types, schools, hospitals, convalescent facilities, rest homes, hotels, motels, and places of worship as defined by the City and County of San Francisco. Sensitive uses from a noise perspective include places where there is a reasonable expectation that individuals could be sleeping, learning, worshipping, or recuperating.

**Shipbreaking**—A type of ship disposal involving the breaking up of ships for scrap recycling.

**Spoil**—Excess soil and rock from excavations.

**Strike-slip fault**—A geological fault in which one of the adjacent surfaces appears to have moved horizontally.

**Subsidence**—The lowering, settling or sinking of the land surface.

**Surface water**—All water that is naturally open to the atmosphere (i.e., rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.).

**Suspended particulates (PM<sub>10</sub> and PM<sub>2.5</sub>)**—Particulate matter is a class of air pollutants that consists of solid and liquid airborne particles in an extremely small size range. Particulate matter is measured in two size ranges: PM<sub>10</sub> for particles less than 10 micrometers in diameter, and PM<sub>2.5</sub> for particles less than 2.5 microns in diameter. One micron is equal to 0.00003937 inches.

**Sustainability**—Sustainability or sustainable development can be identified as development that meets the needs of the present without compromising the ability of future generations to meet their needs.

**Troposphere**—The lowest level of the earth's atmosphere.

**Volume-to-Capacity Ratio**—A measure of road congestion. Volume refers to the level of traffic on a road, and capacity refers to the level of traffic a road can handle. The volume divided by the capacity equals the volume-to-capacity ratio. A volume-to-capacity ratio of 1.00 means the roadway segment has reached capacity.

✓ **Wetland**—A zone periodically or continuously submerged or having high soil moisture, which has aquatic and/or riparian vegetation components and is maintained by water supplies significantly in excess of those otherwise available through local precipitation.