File No	240343	Committee Item No. 2
		Board Item No. <u>13</u>
		ENDA PACKET CONTENTS LIST
	e: <u>Budget an</u>	d Finance Committee Date May 1, 2024 eeting Date May 7, 2024
Cmte Boa	Motion Resolution Ordinance Legislative Budget and Youth Com Introductio Departmen MOU Grant Infor Grant Budg Subcontract/Ag Form 126 – Award Lette Application	Digest I Legislative Analyst Report mission Report n Form t/Agency Cover Letter and/or Report mation Form jet et Budget greement Ethics Commission
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	FUC EITIEI	gency Declaration 3/21/2024
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Completed by:Brent JalipaDateApril 25, 2024Completed by:Brent JalipaDateMay 2, 2024

1	[Emergency Declaration - Repair and Restoration of Pine Lake Park Slope - \$5,000,000]
2	
3	Resolution approving an emergency declaration of the San Francisco Public Utilities
4	Commission pursuant to Administrative Code, Section 6.60, to contract resources for
5	tree removal, slope repair and restoration, debris removal, and geotechnical
6	engineering services in Pine Lake, which was damaged by flooding caused by a failed
7	air valve on a water transmission pipeline, with a total estimated cost of \$5,000,000.
8	
9	WHEREAS, On March 8, 2024, San Francisco Public Utilities Commission (SFPUC)
10	crews responded to a water main break on the 60-inch diameter water transmission pipeline
11	the Sunset Supply Line, in Pine Lake Park near Wawona Street at 28th Avenue; and
12	WHEREAS, The crews determined that an 8-inch air valve on the 60-inch diameter
13	Sunset Supply Line had failed; and
14	WHEREAS, The incident eroded a portion of the slope between Wawona Street and
15	Pine Lake Park adjacent to a nearby home and undermined several tall eucalyptus trees on
16	the slope; and
17	WHEREAS, The slope failure left portions of the 60-inch Sunset Supply Line, a 2-foot
18	by 3-foot concrete sewer, and a private concrete retaining wall exposed; and
19	WHEREAS, The slope failure and erosion on forested slopes of Pine Lake Park
20	compromised several mature eucalyptus trees, sent soil into the meadow at Pine Lake Park,
21	exposed a large diameter water transmission pipeline and sewer pipeline, and exposed a
22	private retaining wall, creating an imminent hazard to the public and critical SFPUC
23	infrastructure; and
24	WHEREAS, On March 21, 2024, the SFPUC General Manager declared an
25	emergency, which the President of the San Francisco Public Utilities Commission approved,

1	to contract resources to address the emergency condition through professional design and
2	construction services for the repair and restoration of the Pine Lake Park Slope; and
3	WHEREAS, Under Administrative Code, Section 6.60(d), the SFPUC General Manager
4	must seek the Board of Supervisors' approval in all cases where the estimated cost of the
5	emergency work exceeds \$250,000; and
6	WHEREAS, The SFPUC estimates the cost of construction requiring an emergency
7	contract under Section 6.60 to repair the damages of the air valve failure will be approximately
8	\$5,000,000; and
9	WHEREAS, Preliminary assessment of construction services required include
10	performing tree removal, protecting the existing concrete sewer, supporting the 60-inch
11	Sunset Supply Line, performing slope repair and restoration, restoring appropriate
12	landscaping, and removing debris in Pine Lake Park; and
13	WHEREAS, Professional services include performing geotechnical investigation and
14	design, performing a pipeline investigation, and providing design support; and
15	WHEREAS, While the SFPUC has addressed the initial incident, the emergency
16	remediation work must occur as soon as possible and is beyond the capabilities of City forces
17	and
18	WHEREAS, The SFPUC issued a request for qualifications and experience statements
19	to three construction firms, and has selected Anvil Builders based on its experience and
20	qualifications for similar projects, and CMD-certified LBE professional services contractor
21	AGS, Inc., as the geotechnical design firm based on their experience and qualifications on
22	similar projects; and
23	WHEREAS, The cost for this work is currently estimated at \$5,000,000; and
24	WHEREAS, The Controller has certified that funds are available for this emergency
25	work; now, therefore, be it

1	RESOLVED, That the Board of Supervisors approves the SFPUC declaration of
2	emergency dated March 21, 2024, to contract resources for tree removal, slope repair and
3	restoration, and debris removal in Pine Lake, which was damaged by flooding caused by a
4	failed air valve on a water transmission pipeline, with a total estimated cost of \$5,000,000;
5	and, be it
6	FURTHER RESOLVED, That the Board of Supervisors ratifies actions taken by the
7	San Francisco Public Utilities Commission to remediate the emergency condition.
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# \$5,000,000 Available

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	Description	Number
Fund ID:	WTR Local 2021 Bond Fund	26419
Department ID:	WTR0304 CDD	232406
Project ID:	Local Water Conveyance/Distrib	10015134
Authority ID:	UW Pipeline Replacement	15531
Account ID:	Bldgs, Struct&Imprv Proj-Budget	567000
Activity ID:	UW Pipeline Replacement	0001

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# 12 RECOMMENDED: FUNDS AVAILABLE:

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15	/s/	/S/
15	Dennis Herrera	Greg Wagner

# 16 General Manager of the SFPUC Controller

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Supervisor Engardio
BOARD OF SUPERVISORS

Item 2	Department:
File 24-0343	San Francisco Public Utilities Commission (SFPUC)

### **EXECUTIVE SUMMARY**

### **Legislative Objectives**

- The proposed resolution would approve SFPUC's emergency declaration for slope restoration and repair, tree and debris removal, and geotechnical engineering services in Pine Lake due to a water main break on March 8, 2024.
- Any contracts entered into under the emergency authority are exempt from Administrative Code Chapters 6 (public works contracting policies and procedures), 12A (human rights commission), 12B (non-discrimination in contracts), 12C (non-discrimination in property contracts), and 14B (local business enterprise utilization).

#### **Key Points**

- A break occurred in a water transmission pipeline in Pine Lark Park near Wawona Street at 28<sup>th</sup> Avenue because an air valve on the pipeline had failed, causing a release of water that eroded a section of a slope and damaged several eucalyptus trees. Other damage includes soil in the meadow at Pine Lark Park, an exposed sewer pipeline and water transmission pipeline, and an exposed private retaining wall.
- The agency contacted three construction firms and determined that Anvil Builders was the
  most qualified contractor. SFPUC staff also selected AGS, Inc. to perform geotechnical
  design work based on the firm's status as a Local Business Enterprise (LBE) professional
  services contractor, availability, and previous geotechnical engineering work.

#### **Fiscal Impact**

• The total estimated cost for construction and professional design services is \$5 million. SFPUC estimates that construction costs could total \$4 million, based on a March 2024 engineering estimate from Anvil Builders, cost escalation, and a contingency budget for unforeseen work. The professional design services work to be performed by AGS, Inc. is estimated to be \$1,000,000 based on the assumption that the level of effort will be similar to the emergency slope repair at Stern Grove Park. The \$5,000,000 estimated cost will be sourced from the Local Water Conveyance and Distribution Program, funded by Water Revenue Bonds.

#### **Policy Consideration**

 SFPUC's asset management plan does not factor in air valves or other appurtenances specifically; these features are replaced when the water mains are replaced. Following this water main break at Pine Lake, the PUC replaced all air valves on that main in the neighborhood. SFPUC staff states that none of the replaced air valves showed any signs of potential failure.

#### Recommendation

Approve the proposed resolution.

#### MANDATE STATEMENT

Administrative Code Section 6.60(d) states that emergency work that costs more than \$250,000 is subject to Board of Supervisors approval. Prior to the commencement of emergency work above the \$250,000 threshold, the Department must also secure approval in writing from the Mayor or the President of the appropriate Board or Commission. If the emergency does not permit approval of the emergency determination by the Board of Supervisors before work begins, the Department must submit a resolution approving the emergency determination to the Board of Supervisors within 60 days of the Department head's declaration of emergency.

#### **BACKGROUND**

On March 8, 2024, a break occurred in a 60-inch water transmission pipeline – the Sunset Supply Line – in Pine Lark Park near Wawona Street at 28<sup>th</sup> Avenue because an eight-inch air valve on the pipeline had failed. The break caused a release of water that eroded a section of the slope between Wawona Street and Pine Lake Park and damaged several eucalyptus trees. The impacts of slope erosion include soil in the meadow at Pine Lark Park, an exposed sewer pipeline and water transmission pipeline, and an exposed private retaining wall. As of this writing, the City is still investigating the cause of the infrastructure failure.

On March 22, 2024, the San Francisco Public Utilities Commission (SFPUC) General Manager requested, and the SFPUC President approved, a declaration of emergency, which allowed the SFPUC to immediately contract with a construction and a professional services firm to perform concrete sewer repair, slope restoration and repair, and tree removal, restore landscaping, and remove debris in Pine Lake Park. In addition, professional services activities include geotechnical design and investigation, pipeline investigation and design support. The SFPUC considered the declaration necessary because the repair work was beyond the capacity of City staff and needed to be completed as soon as possible.

According to the proposed resolution, the cost of the work is estimated to be \$5 million, and the Controller has certified that funds are available.

The proposed resolution was introduced on April 2, 2024, within the sixty-day timeframe required by Administrative Code Section 6.60(d).

#### **DETAILS OF PROPOSED LEGISLATION**

The proposed resolution would approve SFPUC's emergency declaration with an estimated total cost of \$5 million. The emergency contracting authority would be used for slope restoration and repair, tree and debris removal, and geotechnical engineering services in Pine Lake due to a water main break on March 8, 2024. Any contracts entered into under the emergency authority are exempt from Administrative Code Chapters 6 (public works contracting policies and procedures), 12A (human rights commission), 12B (non-discrimination in contracts), 12C (non-discrimination in property contracts), and 14B (local business enterprise utilization).

#### **Procurement**

According to SFPUC staff, the agency contacted three construction firms on March 12, 2024, to request qualifications and experience statements for the proposed construction site. Staff then evaluated and ranked the qualifications and experience statements and determined that Anvil Builders was the most qualified construction contractor.

In addition, SFPUC staff selected AGS, Inc. to perform geotechnical design work based on the firm's status as a Local Business Enterprise (LBE) professional services contractor, availability, and the firm's previous geotechnical engineering work to address the slope stability construction at Stern Grove Park due to an emergency that occurred on August 23, 2021.

According to SFPUC, the urgent need for design services to begin did not allow for the time needed to conduct a competitive Request for Proposal process, which would take approximately nine months.

### Scope of Work

The scope of work for the professional design and construction services includes the following:

- Performing geotechnical investigation and assessment of the slope failure;
- Securing the perimeter of the work area with fencing for public safety;
- Covering the slope scar with plastic sheeting to protect the slope from rain and further erosion;
- Developing analysis and modeling of the slope for design criteria;
- Evaluating slope restoration design alternatives;
- Providing design support for existing concrete sewer and water pipeline;
- Removing additional trees where needed to accommodate the final slope restoration design;
- Performing settlement and vibration monitoring of existing utilities and structures;
- Installing protection and support for existing sewer and water infrastructure;
- Removing and disposing of material that cannot be reused in the slope repair (e.g., roots, branches);
- Establishing access for SFPUC crews to repair and replace the failed air valve;
- Performing slope restoration work as designed; and
- Installing new landscaping.

#### **Project Timeline**

According to SFPUC staff, the project team is currently evaluating project needs and design alternatives. The goal is to complete the design and commence construction activities by this Fall 2024. The team aims for construction to be substantially completed by the end of December 2024, with final completion and contract closeout targeted for February 2025.

#### **FISCAL IMPACT**

The emergency declaration and resulting proposed resolution states that the total estimated cost for construction and professional design services at \$5 million.

The SFPUC estimates that construction costs could total \$4 million, based on a March 2024 engineering estimate from Anvil Builders, cost escalation, and a contingency budget for unforeseen work.

Finally, the professional design services work to be performed by AGS, Inc. is estimated to cost \$1,000,000. According to SFPUC staff, the cost is based on the assumption that the level of effort will be similar to the emergency slope repair at Stern Grove Park and that additional design support will be needed for work near the impacted pipeline.

Exhibit 1 below provides the details of the approximately \$5,000,000 cost estimate.

**Exhibit 1 Estimated Cost of Emergency Work** 

Cost Items	Estimate
Construction	\$3,981,284
Geotechnical	1,000,000
Total	\$4,981,284

Source: SFPUC

## **Funding Source**

The \$5,000,000 estimated cost will be sourced from the Local Water Conveyance and Distribution Program, which is funded by 2021 Water Revenue Bonds. The bond proceeds are intended to fund the design and construction of water main replacement projects as part of SFPUC's long-term capital improvement program to replace up to 15 miles per year of water distribution piping. According to SFPUC, the proposed emergency work will not impact the Department's planned water pipeline replacement projects. \$63 million is budgeted in FY 2024-25 for water distribution pipeline replacement, which is an increase of \$5 million from FY 2023-24.

### **POLICY CONSIDERATION**

The SFPUC has an asset management plan for its water distribution system that prioritizes water mains based on whether they have been identified for replacement in analysis conducted in 2012 and 2017, have had three or more breaks within 1,000 feet of each other, need to be replaced to improve system performance (see detailed discussion in File 23-1001). The asset management plan does not factor in air valves or other appurtenances specifically; these features are replaced when the water mains are replaced. According to SFPUC staff, air valves typically do not fail on their own. The 2021 Stern Grove water main break was due to an air valve failure from operator error.

Following this water main break at Pine Lake, the PUC replaced all air valves on that main in the neighborhood. According to SFPUC staff, none of the replaced air valves showed any signs of potential failure.

# **RECOMMENDATION**

Approve the proposed resolution.

#### OFFICE OF THE GENERAL MANAGER



525 Golden Gate Avenue, 13th Floor San Francisco, CA 94102 T 415.554.3155 F 415.554.3161 TTY 415.554.3488

#### **INTER-OFFICE MEMORANDUM**

**DATE:** March 21, 2024

**TO:** Commissioner Tim Paulson, President

FROM: Dennis Herrera, General Manager

SUBJECT: Declaration of Emergency: WD-2924(E), Pine Lake Emergency

**Slope Restoration** 

In accordance with San Francisco Administrative Code Chapter 6, Article IV, Section 6.60(d), I am declaring an emergency on behalf of the San Francisco Public Utilities Commission (SFPUC).

On March 8, 2024, SFPUC crews responded to a water main break on the 60-inch diameter water transmission pipeline – the Sunset Supply Line. The location was in Pine Lake Park near Wawona Street at 28<sup>th</sup> Avenue in San Francisco's Parkside District.

When crews arrived at the scene, water was spraying into the air at the top of a slope at Wawona Street, eroding the bank and washing the soil down the slope into the meadow near the dog park at Pine Lake Park. The crews determined that an 8-inch air valve on the 60-inch diameter Sunset Supply Line had failed. It took crews approximately two hours from the time of the break to isolate the flow of water out of the air valve and place the Sunset Supply Line back fully into service.

The incident eroded a portion of the slope between Wawona Street and Pine Lake Park adjacent to a nearby home (1715 Wawona Street) and undermined several tall eucalyptus trees on the slope. The slope failure left portions of the 60-inch Sunset Supply Line, a 2-foot by 3-foot concrete sewer, and a private concrete retaining wall exposed.

The magnitude of the damages to the impacted slope for this recent main break appears to be significantly less than the damages from a similar incident that occurred on August 23, 2021. During that event, crews were working on an air valve for the 54-inch San Andreas Pipeline No. 2, which unfortunately

London N. Breed Mayor

**Tim Paulson** President

Anthony Rivera
Vice President

Newsha K. Ajami Commissioner

Sophie Maxwell Commissioner

> Kate H. Stacy Commissioner

**Dennis J. Herrera** General Manager



OUR MISSION: To provide our customers with high-quality, efficient and reliable water, power and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care.

failed and resulted in flooding at Stern Grove Park. The cause of this more recent air valve failure is unknown at this time.

An "actual emergency" means a sudden, unforeseeable, and unexpected occurrence involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of or damage to, life, health, property, or essential public services. (Administrative Code Section 6.60.)

The slope failure and erosion on forested slopes of Pine Lake Park compromised several mature eucalyptus trees, sent soil into the meadow at Pine Lake Park, exposed a large diameter water transmission pipeline and sewer pipeline, and exposed a private retaining wall, creating an imminent hazard to the public and critical SFPUC infrastructure.

This request for an emergency declaration is to provide contract resources to address the emergency condition through professional design and construction services. Preliminary assessment of construction services required include: perform tree removal, protect the existing concrete sewer, support the 60-inch Sunset Supply Line, perform slope repair and restoration, restore appropriate landscaping, and remove debris in Pine Lake Park. Professional services include: perform geotechnical investigation and design, perform pipeline investigation, and provide design support. The work must occur as soon as possible and is beyond the capabilities of City forces and is estimated to exceed \$250,000. Subject to your approval, we will continue to proceed with the remediation. We will also seek approval by the Board of Supervisors as required under Administrative Code Section 6.60.

SFPUC estimates the cost of design and construction work will be \$5,000,000.

The proposed emergency declaration exempts the project from S.F. Administrative Code Chapters 6, 12A, 12B, 12C, and 14B. SFPUC issued a request for qualifications and experience statements to three construction firms. Conditioned on the approval of the declaration, SFPUC has selected Anvil Builders based on its experience and qualifications for similar projects, including the recent emergency contract at Stern Grove. Although the LBE participation requirements are not applicable for this emergency work, Anvil Builders has committed to using local LBE subcontractors for traffic control and trucking portions of the planned emergency work. Additionally, and also conditioned on approval of the declaration, SFPUC has selected AGS, Inc., a CMD-certified LBE professional services contractor, as the geotechnical design firm based on their experience and qualifications on similar projects, such as the recent Stern Grove Emergency Contract.

I am therefore declaring the existence of an emergency. I trust that this meets with your concurrence and approval.

### **CONCUR AND APPROVE:**

- Tim Com

March 22, 2024

Date

Tim Paulson – President,

San Francisco Public Utilities Commission

cc:

- A. Rivera
- N. Ajami
- S. Maxwell
- K. Stacy
- R. Flynn
- S. Robinson
- S. Ritchie
- N. Hom

## **Introduction Form**

(by a Member of the Board of Supervisors or the Mayor)

I hereby submit the following item for introduction (select only one): 1. For reference to Committee (Ordinance, Resolution, Motion or Charter Amendment) 2. Request for next printed agenda (For Adoption Without Committee Reference) (Routine, non-controversial and/or commendatory matters only) Request for Hearing on a subject matter at Committee 3. Request for Letter beginning with "Supervisor | 4. inquires..." 5. City Attorney Request Call File No. 6. from Committee. 7. Budget and Legislative Analyst Request (attached written Motion) Substitute Legislation File No. 8. Reactivate File No. 9. Topic submitted for Mayoral Appearance before the Board on 10. The proposed legislation should be forwarded to the following (please check all appropriate boxes): ☐ Small Business Commission ☐ Youth Commission ☐ Ethics Commission ☐ Building Inspection Commission ☐ Human Resources Department ☐ Planning Commission General Plan Referral sent to the Planning Department (proposed legislation subject to Charter 4.105 & Admin 2A.53): No. ☐ Yes (Note: For Imperative Agenda items (a Resolution not on the printed agenda), use the Imperative Agenda Form.) Sponsor(s): Supervisor Joel Engardio Subject: Emergency Declaration – Repair and Restoration of Pine Lake Park Slope – \$5,000,000 Long Title or text listed: Resolution approving an emergency declaration of the San Francisco Public Utilities Commission pursuant to Administrative Code Section 6.60, to contract resources for tree removal, slope repair and restoration, debris removal, and geotechnical engineering services in Pine Lake, which was damaged by flooding caused by a failed air valve on a water transmission pipeline, with a total estimated cost of \$5,000,000. Signature of Sponsoring Supervisor: