

Draft

**SFPUC-COH-EBMUD WATER
SYSTEM EMERGENCY
INTERTIE PROJECT**

*Initial Study, Mitigated Negative Declaration,
and Mitigation Monitoring and Reporting
Program*

February 26, 2003

Prepared for:

City of Hayward (COH)

in association with

San Francisco Public Utilities Commission (SFPUC)

East Bay Municipal Utility District (EBMUD)

Alameda County Water District (ACWD)

ESA Environmental
Science
Associates

Exhibit B

Draft

SFPUC-COH-EBMUD WATER SYSTEM EMERGENCY INTERTIE PROJECT

*Initial Study, Mitigated Negative Declaration,
and Mitigation Monitoring and Reporting
Program*

February 26, 2003

Prepared for:

City of Hayward (COH)

in association with

San Francisco Public Utilities Commission (SFPUC)

East Bay Municipal Utility District (EBMUD)

Alameda County Water District (ACWD)

8950 Cal Center Drive, Bldg 3, Suite 300
Sacramento, California 95826
(916) 564-4500

436 14th Street, Suite 600
Oakland, California 94612
(510) 839-5066

225 Bush Street, Suite 1700
San Francisco, California 94104
(415) 896-5900

4221 Wilshire Boulevard, Suite 480
Los Angeles, California 90010
(323) 933-6111

2685 Ulmerton Road, Suite 102
Clearwater, Florida 33762
(727) 572-5226

700 Fifth Avenue, Suite 4120
Seattle, Washington 98104
(206) 442-0900

1751 Old Pecos Trail, Suite O
Santa Fe, New Mexico 87505
(505) 992-8860

ESA | Environmental
Science
Associates

TABLE OF CONTENTS

SFPUC – COH – EBMUD WATER SYSTEM EMERGENCY INTERTIE PROJECT INITIAL STUDY / DRAFT MITIGATED NEGATIVE DECLARATION, AND MITIGATION MONITORING AND REPORTING PROGRAM

	<u>Page</u>
1. PROJECT OVERVIEW AND DESCRIPTION	1-1
1.1 Introduction	1-1
1.2 Background	1-4
1.3 Project Objectives and Need	1-5
1.4 CEQA Compliance	1-7
1.5 Existing and Proposed Facilities	1-8
1.6 Schedule	1-22
1.7 Authorizations, Approvals, or Permit Requirements	1-22
2. EVALUATION OF ENVIRONMENTAL IMPACTS	2-1
3. MITIGATION MEASURES	3-1
4. REPORT PREPARERS	4-1

LIST OF TABLES

Table 1-1.	Intertie Project - Proposed Facilities and Improvements	1-8
Table 1-2	Proposed Pipelines	1-13
Table 1-3	Proposed Ball Valve Replacement Locations	1-14
Table 1-4	Delivery Scenarios and Water Allocation	1-18
Table 2-1	Localized Contamination at the Hayward Executive Airport	2-21
Table 2-2	Noise Compatibility Standards for Affected Jurisdictions	2-22

LIST OF FIGURES

Figure 1.	Project Location and Overview of Proposed Improvements	1-2
Figure 2.	Proposed Intertie Facilities in Hayward Executive Airport	1-3
Figure 3.	Proposed Skywest Pump Station, Pipeline, and Surrounding Uses	1-10
Figure 4.	Intertie System Layout	1-11
Figure 5.	Skywest Pump Station Layout	1-12
Figure 6.	SFPUC Improvements at Newark Turnout	1-17

SECTION 1

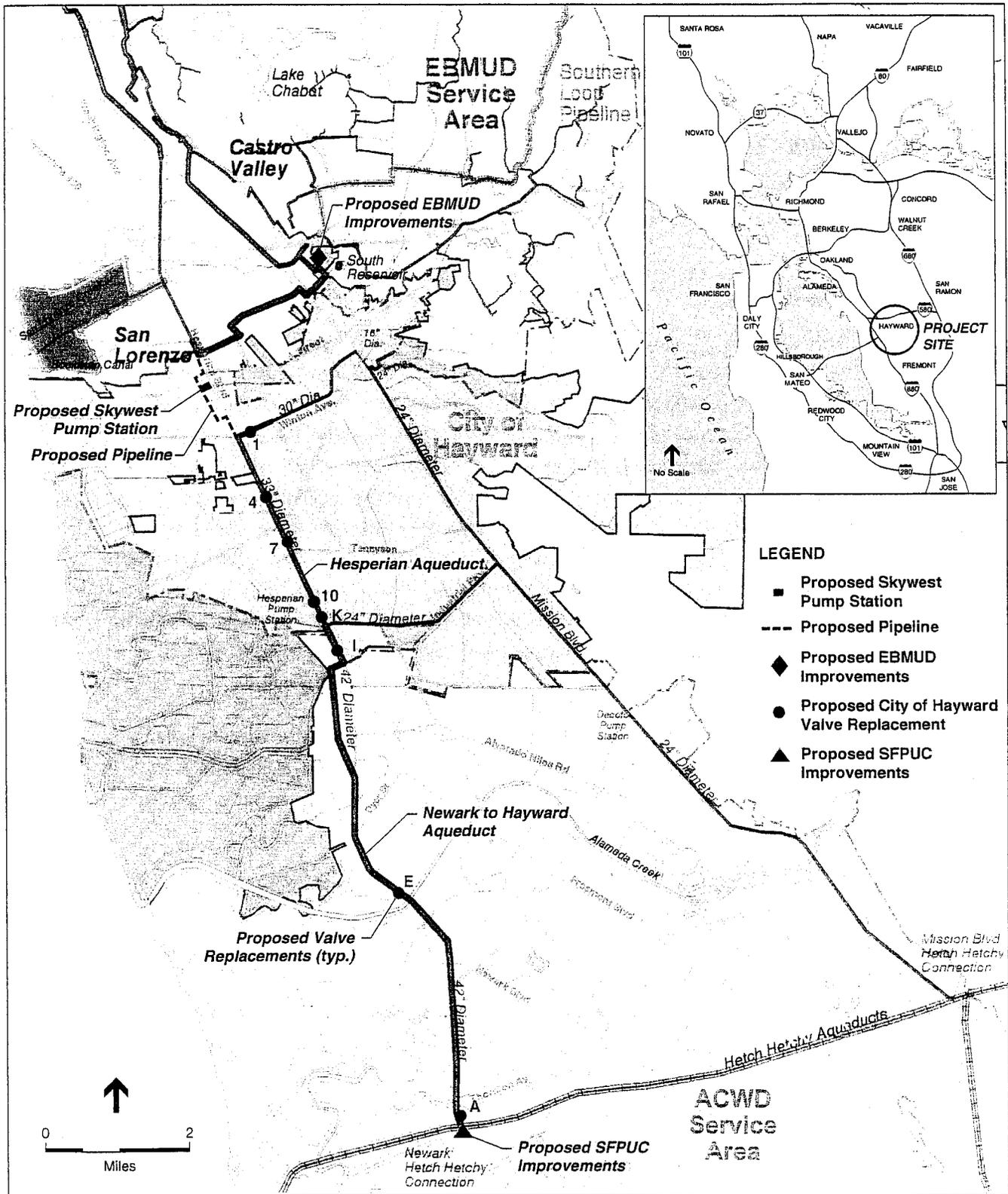
PROJECT DESCRIPTION

1.1 INTRODUCTION

The City of Hayward (City), in association with San Francisco Public Utilities Commission (SFPUC), East Bay Municipal Utility District (EBMUD), and Alameda County Water District (ACWD), proposes to construct a pump station and approximately 1.5 miles of pipeline that would connect the EBMUD and SFPUC water systems in the event of an emergency such as natural disaster or outage associated with repairs. The proposed project would be located within the three service areas of EBMUD, Hayward, and ACWD (see Figure 1), but primarily on the City of Hayward Executive Airport property in the City of Hayward (see Figure 2). The proposed pump station ("Skywest" Pump Station) would be located on an unoccupied parcel off of Skywest Drive adjacent to the existing La Quinta Inn and Home Depot. The proposed pipeline, connecting the Skywest Pump Station and the EBMUD and SFPUC systems, would be located along Skywest Drive and Hesperian Boulevard. Other minor improvements to be constructed include valve replacements and minor pipe and bypass installations.

It is the intent of the agencies to make good faith efforts to supply water to the others in the event of an emergency without significantly impacting the supplying agency's own customers. However, each agency has the sole right to determine whether it has sufficient water supplies available to provide water to the other agencies during an emergency.

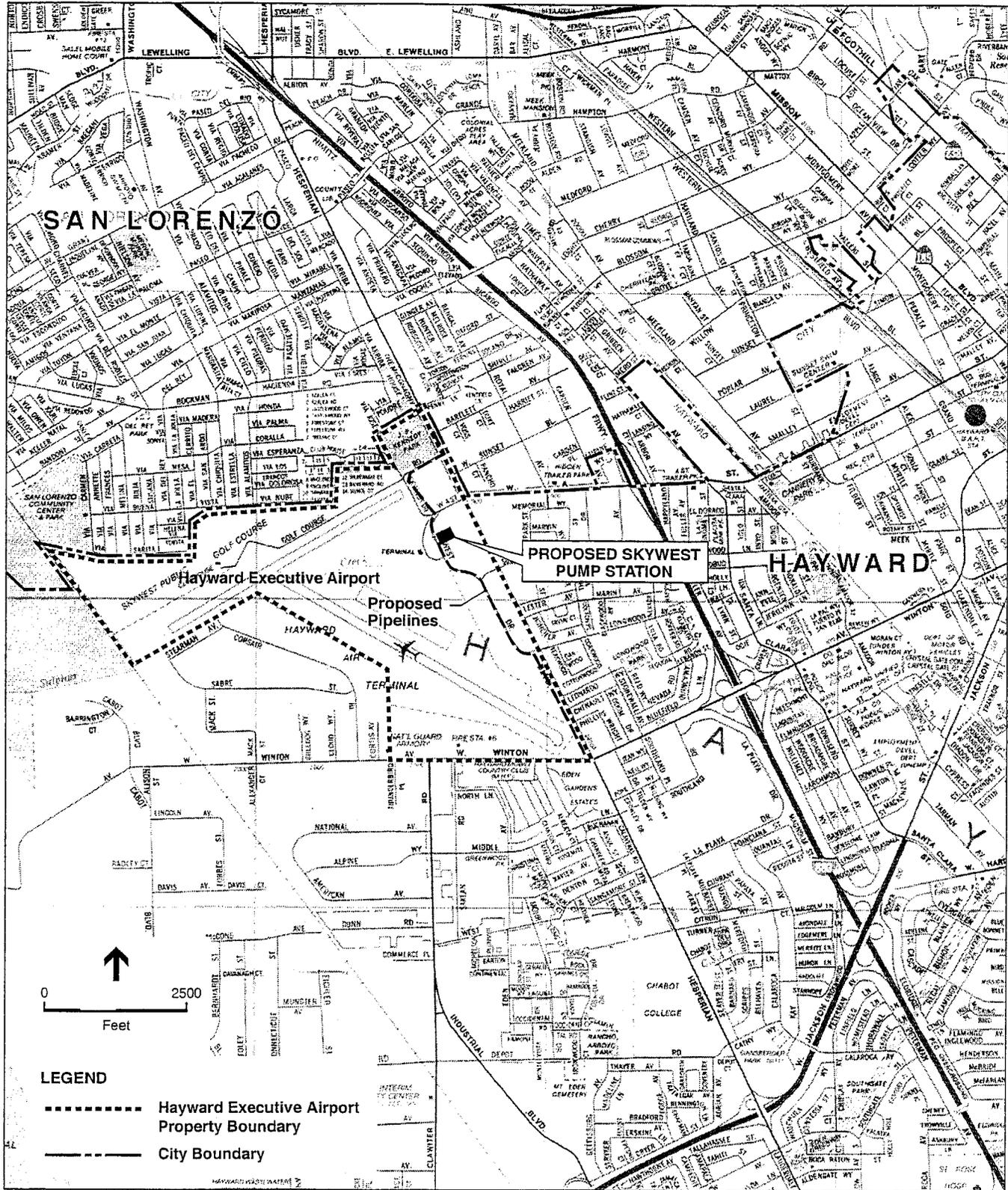
This Initial Study/Mitigated Negative Declaration (IS/MND) was prepared in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended), the State CEQA guidelines, and California Administrative Code, Title 14, Division, Chapter 3. This report is organized as follows: Section 1, Project Description, provides an introduction, background, needs and objectives, and discusses the proposed structures and appurtenant facilities. Section 2, Evaluation of Environmental Impacts, presents the CEQA Initial Study Environmental Checklist analyzing environmental impacts resulting from the project and describing the mitigation measures that would be incorporated into the project to avoid or reduce impacts to less-than-significant levels. Section 3, Summary of Mitigation Measures and Mitigation Monitoring and Reporting Program, presents a summary of mitigation measures and a mitigation monitoring program, which have been incorporated into the project.



SOURCE: City of Hayward

SFPUC-COH-EBMUD Water System Emergency Intertie Project IS/MND / 202702 ■

Figure 1
Project Location and
Overview of Proposed
Improvements



SOURCE: Environmental Science Associates

SFPUC-COH-EBMUD Water System Emergency Intertie Project IS/MND / 202702 ■

Figure 2
 Proposed Intertie Facilities & Improvements
 Vicinity Map

The facilities described herein could also be used to connect the EBMUD and SFPUC systems in the event of a major system outage associated with planned repair of facilities. Any such activity will be subject to all necessary environmental review, including permitting.

1.2 BACKGROUND

Figure 1 shows the location of the three service areas that are within the project area. These include, from north to south, EBMUD, City of Hayward, and ACWD. Each agency operates and maintains its own network of water facilities. The SFPUC Hetch Hetchy Aqueducts pass through the ACWD service area. A discussion of each agency is provided below.

EAST BAY MUNICIPAL UTILITY DISTRICT

EBMUD is a publicly owned utility formed under the Municipal Utility District Act passed by the California Legislature in 1921, which permits formation of multipurpose government agencies to provide public services on a regional basis. EBMUD provides water service to 20 incorporated cities and 15 unincorporated areas in Alameda and Contra Costa Counties, which encompass a 325-square mile area and approximately 1.3 million people. The EBMUD service area extends from Crockett to San Lorenzo, and from the San Francisco Bay to Walnut Creek, including the San Ramon Valley. EBMUD also has two existing small intertie connections with the City of Hayward that could provide approximately 8 million gallons per day (mgd) of water between the two systems during an emergency.

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

The SFPUC is a subdivision of the City and County of San Francisco. It provides retail water to San Francisco, and wholesale water to 29 service providers in three other Bay Area counties. SFPUC provides water to 2.4 million people in San Francisco, Santa Clara, Alameda and San Mateo counties, including the City of Hayward and ACWD. The regional system includes a series of dams, pipelines and tunnels, which convey water from the Sierra Nevada Mountains westward to the San Francisco Bay Area. Water flowing west from the mountains is diverted at various points in the East Bay: 1) to the Sunol Valley Water Treatment Plant for treatment; 2) to Calaveras Reservoir for storage; 3) to Bay Division Pipelines (BDPL) 3 and 4, two parallel pipelines serving the South Bay; and 4) to BDPL No. 1 and No. 2, two parallel pipelines serving the City of Hayward, ACWD, and the peninsula. Water is treated at chlorination points near the City of Livermore prior to delivery to individual cities. The 60-inch BDPL No. 1 and 66-inch BDPL No. 2 pass through ACWD's service area within the southern portion of the proposed project area, and are connected to both City of Hayward and ACWD turnouts. Connection to the City of Hayward's pipeline facilities are shown on **Figure 1**, at the Newark and Mission Turnouts. ACWD is supplied water via four turnouts between the Mission and Newark turnouts. The dual aqueducts provide the only source of alternative conveyance during emergency events, in which one could be shut off while another is being repaired. There are no redundant delivery

mechanisms that could supply water during emergency events in this part of the system should both pipelines fail.

CITY OF HAYWARD

The City of Hayward Public Works Department is responsible for planning, constructing, and maintaining all public infrastructure facilities in Hayward, including operation of the City's water system. The City of Hayward obtains 100 percent of its water from SFPUC (average water delivery of approximately 18 mgd). The City of Hayward has emergency supply provided by five wells (approximately 15 mgd), and existing small emergency interties with EBMUD and ACWD, as described above.

ALAMEDA COUNTY WATER DISTRICT

ACWD was established in 1914 by the state legislature under the California County Water District Act. Originally, the District was created to protect the groundwater basin, conserve the waters of the Alameda Creek Watershed, and develop supplemental water supplies, primarily for agricultural use. In 1930, urban water distribution became an added function of the District. Today, the District provides drinking water to the more than 318,000 people living within a 101 square mile service area encompassing the cities of Fremont, Newark, and Union City. ACWD obtains its water from several sources, including SFPUC, State Water Project (SWP) deliveries via the South Bay Aqueduct (SBA), and from local surface and groundwater supplies. The average water delivery from SFPUC to ACWD is approximately 12.4 mgd (1997 data).

1.3 PROJECT OBJECTIVES AND NEED

In California, utility districts and water agencies have recognized the potential for major earthquake events and similar emergency events that could damage portions of local and regional systems. The primary and secondary effects of earthquakes could result in structural damage to water treatment, storage, and transmission facilities. When such damage occurs, water delivery may be halted indefinitely to local customers, until such time that facilities could be repaired. The lack of water to municipal, industrial, and agricultural users may have an adverse, long-term effect on the regional economy. As the possibility of an earthquake along the San Andreas, Hayward, and other nearby faults are probable within the next 30 years, utility districts and water agencies are investigating alternative water supplies or conveyance that would allow for sustained delivery to their customers in the event of such an emergency, until such time that the existing delivery systems are repaired. Other scenarios that may result in water supply shortages and interruptions would include a significant water quality event or repairs of critical water supply facilities that requires one of the utilities to shutdown a substantial portion of its system for a period of time. The possibility of any of these scenarios has resulted in further investigations of alternative emergency supply. Scenarios involving shutdown of facilities for planned inspections and repairs will be subject to all necessary environmental review, including permitting.

In September 2002, Carollo Engineers, in coordination with the City of Hayward, EBMUD, and SFPUC, conducted a feasibility study on the proposed Intertie Project. The study evaluated the viability of conveying treated water between the EBMUD and SFPUC systems using existing and proposed facilities in the City of Hayward in the event that a serious disruption in supply capacity occurs. The study evaluated six delivery scenarios (delivering from 20 to 40 mgd between agencies) to assess the water system's ability to operate under varying delivery volumes for an extended time period. The study found that there would be a significant increase in capital improvements requirements when the proposed intertie capacity is increased from 30 to 40 mgd. To maximize the use of the existing infrastructure and to meet the requirements of two-directional flow and overcoming the pressure differential between the various water systems, the study recommended an intertie pump station in the City of Hayward. In addition, the study recommended construction of approximately 1.5 miles of pipeline to connect the two water systems, and a series of valve replacements and minor improvements to the EBMUD and SFPUC systems.

On October 25, 2002, the City of Hayward, EBMUD, SFPUC, and ACWD signed a Memorandum of Agreement (MOA) to enter into the initial phase of the Intertie Project, which requires development of CEQA environmental documentation on the proposed intertie system. The MOA establishes cost sharing between the parties, and individual member's decision to participate in future phases of the project (including Design and Construction, and Operation and Maintenance) if the environmental review identifies a viable project.

The September 2002 feasibility study and October 2002 MOA specify the project purpose and need. The purpose of the Intertie Project is identified in the MOA "to provide mutual aid by supplying potable water to the Parties during emergencies or planned critical work." An emergency is defined as "1) an actual or imminent failure of facilities, such as major pipelines, treatment plants, or pumping plants; or 2) major disruptions in water supply caused by natural conditions, manmade disasters or temporary regulatory conditions." These emergency scenarios may include an earthquake, a significant water quality event such as a failure at a water treatment plant, or an event that may require repair of critical water supply facilities. Specific objectives of the project, which incorporate the individual agency's mission statements, include:

- Provide redundancy and reliability to the regional system in the event of an emergency;
- Provide a reliable, high quality water supply to customers during an emergency event;
- Reduce direct and indirect costs to customers associated with increased regional system redundancy and reliability;
- Plan, design, construct and operate intertie facilities efficiently, effectively and safely, bearing in mind the agencies' responsibility to be a good neighbor and a good steward of the environment; and

- Responsibly manage the resources by reducing impacts to the environment associated with construction and implementation of this project to the extent feasible.

As noted previously, it is the intent of the agencies to make good faith efforts to supply water to the others in the event of an emergency without significantly impacting the supplying agency's own customers. However, each agency has the sole right to determine whether it has sufficient water supplies available to provide water to the other agencies during an emergency.

1.4 CEQA COMPLIANCE

Per CEQA Guidelines Section 15367, the City of Hayward will act as Lead Agency for the proposed Intertie Project, as the City "has the principal responsibility for carrying out or approving a project" because it must approve siting and construction of the pump station and 1.5 miles of pipeline within City boundaries. EBMUD, SFPUC, and ACWD are Responsible Agencies per CEQA definitions, as they provide funding for the project, and would also have the responsibility for carrying out and approving the project.

The City of Hayward (lead agency), in association with SFPUC, EBMUD, and ACWD, has prepared this Mitigated Negative Declaration (MND) to provide the public, and Responsible and Trustee Agencies reviewing this project, with information about the potential effects, both beneficial and adverse, on the local and regional environment. This MND was prepared in compliance with Section 15070 of the California Environmental Quality Act (CEQA) Guidelines of 1970 (as amended), and California Administrative Code, Title 14, Division, Chapter 3. In accordance with Section 15070, a Mitigated Negative Declaration shall be prepared if the following criteria are met:

- There is no substantial evidence that the project may have a significant effect; or
- Where there may be a potentially significant effect, revisions to the project would avoid or mitigate the effects to a point where clearly no significant effects would occur.

In accordance with Section 15073 of the CEQA Guidelines, this document is being circulated to local, state and federal agencies and to interested organizations and individuals who may wish to review and comment on the report. Written comments may be forwarded to:

Henry Louie
City of Hayward
Department of Public Works
777 B Street, Hayward
CA 94541-5007

Supporting documentation is available for review during regular business hours at the Hayward Public Works Office, at the above address.

1.5 EXISTING AND PROPOSED FACILITIES

EXISTING FACILITIES AND OPERATION

The facilities of relevance to this project include portions of the City of Hayward's water system, SFPUC's BDPL Nos. 1 and 2, and portions of EBMUD's water system. As shown in **Figure 1**, the Hayward water system is situated between the EBMUD and SFPUC systems, thereby making it a preferable locale for the siting of the proposed facilities. The City of Hayward's water system consists of two major northwest / southeast trending transmission facilities that are connected to the BDPL Nos. 1 and 2.

During normal conditions, the City of Hayward receives approximately 18 mgd of treated water on average from SFPUC via its two turnouts (2001 data). ACWD received approximately 12.4 mgd of treated water from SFPUC (1997 data) via its four existing turnouts. EBMUD has its own source of water, and conveyance, treatment, and storage facilities. The average daily demand for EBMUD service area is about 220 mgd. The average daily demand for the southern portion of EBMUD's Central Pressure Zone is approximately 25 mgd.

PROJECT DESCRIPTION

The proposed project consists primarily of improvements within the City of Hayward (see **Figure 2**), with minor improvements to the EBMUD and SFPUC systems. No improvements are required for the ACWD system. **Table 1-1** summarizes improvements required as part of the proposed project. The discussion below provides detailed descriptions of the proposed project components. These improvements are shown in **Figure 1**.

**TABLE 1-1
PROPOSED INTERTIE PROJECT FACILITIES AND IMPROVEMENTS**

Proposed Facility / Improvements	Location	Jurisdiction	Service Area	Responsible Agency
Skywest Pump Station	Skywest Drive	Hayward Executive Airport Property within City of Hayward	Hayward	Hayward
Pipelines connecting Skywest Pump Station and EBMUD / Hayward systems (~1.5 miles)	Skywest Drive / Hesperian Boulevard	City of Hayward	Hayward	Hayward

TABLE 1-1 (continued)
PROPOSED INTERTIE PROJECT FACILITIES AND IMPROVEMENTS

Proposed Facility / Improvements	Location	Jurisdiction	Service Area	Responsible Agency
Valve replacements along the City of Hayward's 33-inch and 42-inch Aqueducts	Various	Hayward, Newark, Fremont, and unincorporated Alameda County	Hayward	Hayward
Bypass installation at EBMUD Oak Rate Control Station	Oak Street, near Grove Way	Castro Valley (unincorporated Alameda County)	EBMUD	EBMUD
SFPUC's Newark Turnout Improvements	End of Hickory Street	City of Newark SFPUC (easement)	ACWD	SFPUC

SKYWEST PUMP STATION

As shown in **Figure 1**, to take advantage of the proximity to the EBMUD and SFPUC water systems, the City of Hayward's existing infrastructure, as well as the hydraulic criteria, the proposed Skywest pump station would be located in the City of Hayward. The site is located on a parcel within the City of Hayward Executive Airport, owned and operated by the City of Hayward (see **Figure 2**). It is located off Skywest Drive, near the intersection of West A Street. **Figures 3 and 4** show land uses adjacent to the proposed facilities. The Skywest Pump Station would be located on the southwest corner of an existing undeveloped parcel, immediately north of an existing Home Depot and west of the existing La Quinta Inn. The City of Hayward will grant a lease to SFPUC and EBMUD for use of this property.

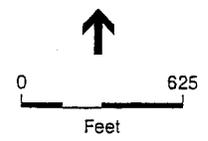
Figure 5 shows the conceptual layout of the pump station, which would consist of an approximately 100- by 40-foot structure made of masonry block material, with an approximate height of 18 feet. The building would include a pump room with up to five pumps and an emergency generator room for a diesel driven generator. The pumps would allow reverse pumping to facilitate bi-directional flows. An approximated eight-foot high, twelve-inch thick block wall would have a clearance of approximately 30 feet on all sides of the proposed structure. The fence would provide security and added noise attenuation. The clearance would allow sufficient space for driving, parking, or equipment staging during maintenance activities. Exterior lighting would be installed for security and nighttime maintenance. Landscaping would be planted outside of the block fencing fronting Skywest Drive.

The proposed pumps would be exercised approximately once a week for several hours each time to ensure that facilities are in good working order. The generators would be exercised once a month. Testing of the pump and emergency generator would be confined to daytime hours when surrounding uses, including La Quinta Inn, would be less sensitive to noise.



LEGEND

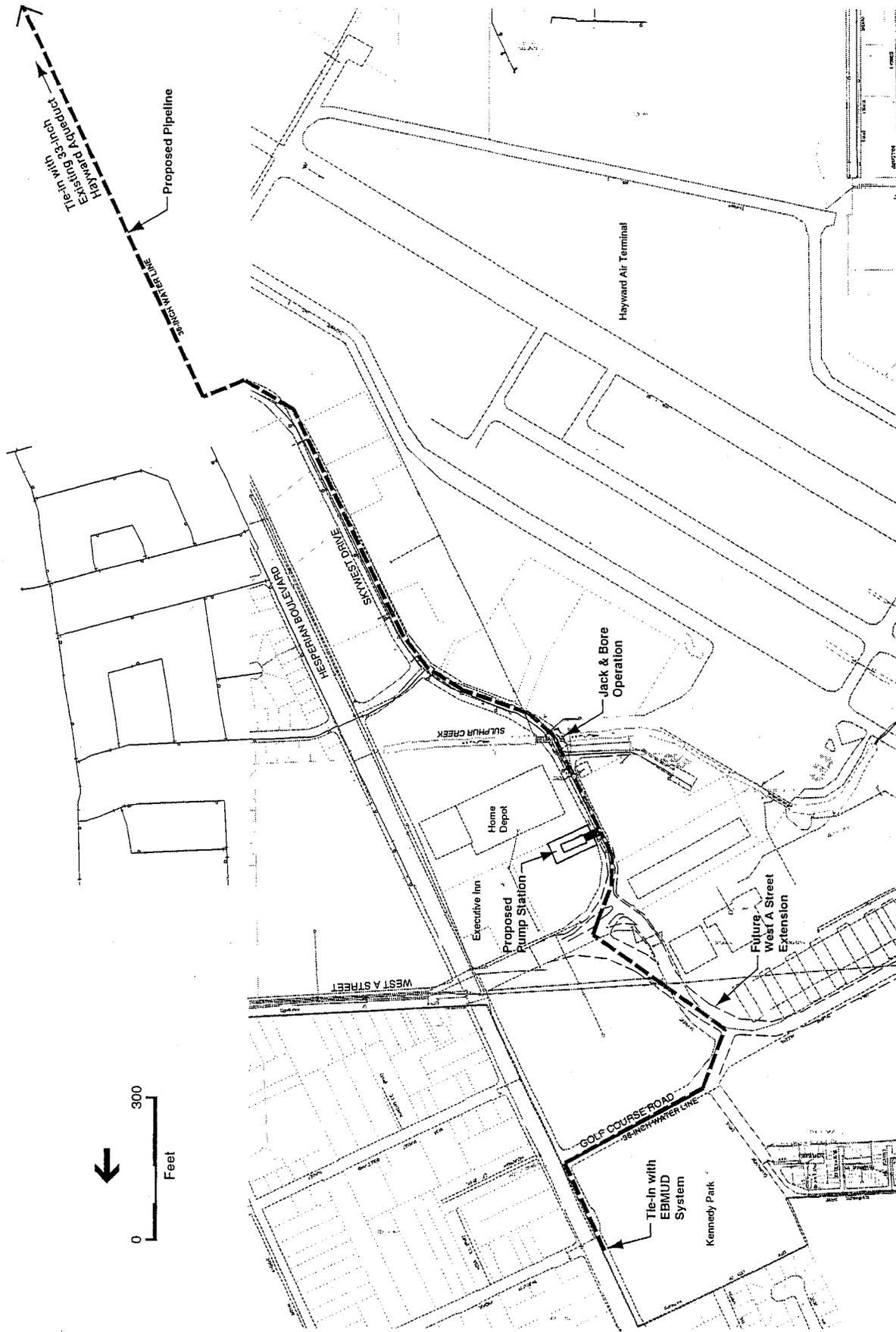
- RES Residential
- COM Commercial
- IND Industrial



SOURCE: Environmental Science Associates

SFPUC-COH-EBMUD Water System Emergency Intertie Project IS/MND / 202702 ■

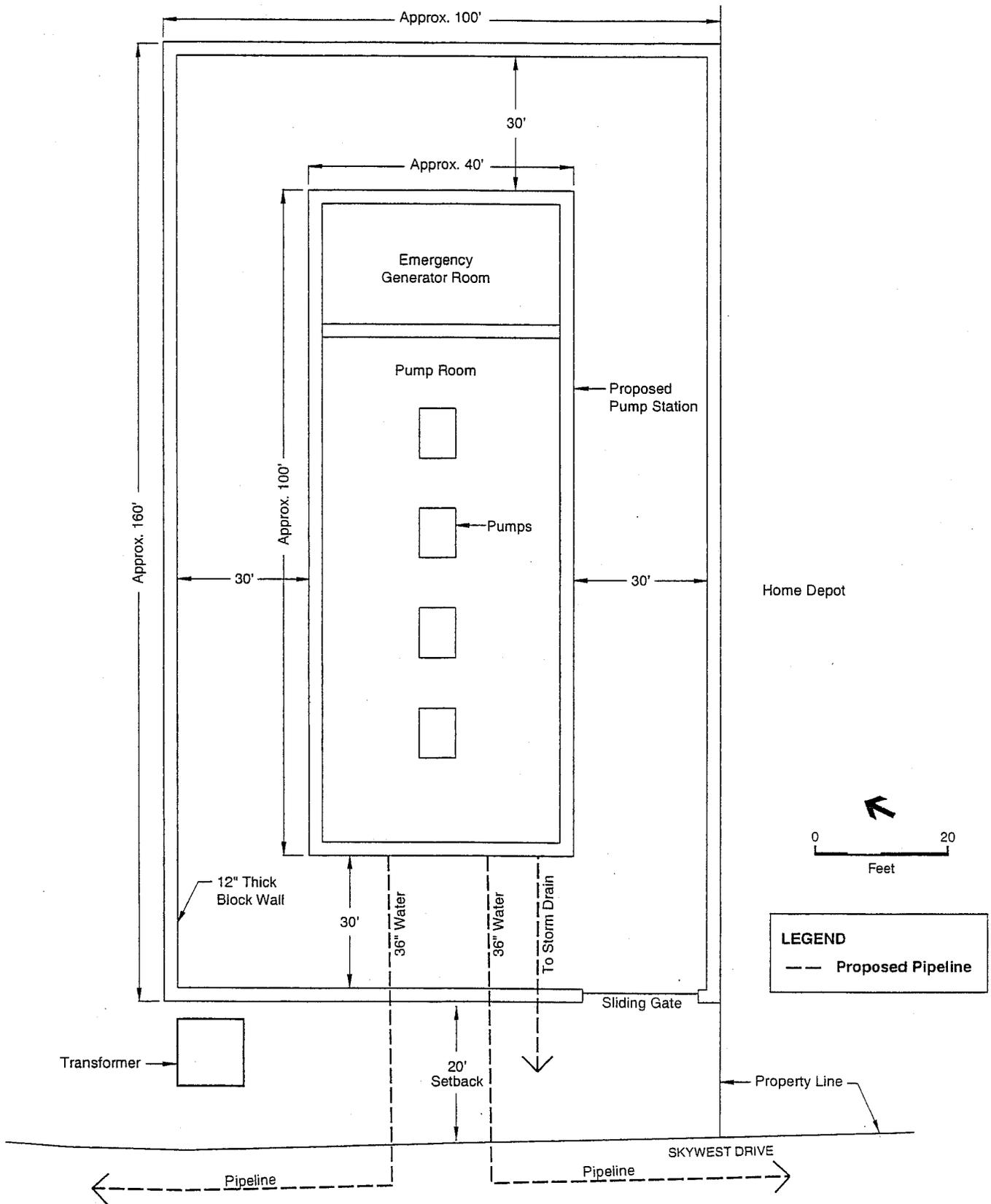
Figure 3
Proposed Skywest Pump Station,
Pipeline, and Surrounding Uses



SFPUC-COH-EBMUD Water System Emergency Intertie Project IS/MND / 202702

Figure 4
Intertie System Layout

SOURCE: Environmental Science Associates



SOURCE: City of Hayward

SFPUC-COH-EBMUD Water System Emergency Inertie Project IS/MND / 202702 ■

Figure 5
Proposed Skywest Pump Station Layout

During both start-up and shut-down of the intertie facilities, water in the system would be recycled back into the system or discharged from the pump station. The treated water would be reused to the extent feasible, otherwise it would be discharged into the existing sewer or storm drain system. If treated water is discharged to the storm drain system, dechlorination prior to discharge in accordance with American Water Works Association (AWWA) guidelines would occur. All planned discharges of dechlorinated water in the storm drain system or natural drainages would require authorization from the San Francisco Bay Regional Water Quality Control Board (RWQCB).

PIPELINES

The City proposes to build approximately 1.5 miles of new 36-inch welded, jointed steel pipeline to connect the proposed Skywest Pump Station to the existing tie-ins to the EBMUD and Hayward Transmission systems. **Table 1-2** describes the routing of the two pipeline segments. **Figures 2, 3 and 4** show the location of the pipeline segments relative to the proposed pump station, surface streets, and surrounding uses. The existing land uses in the project area (Skywest Drive) include industrial (airport-related facilities), and commercial uses (Home Depot and offices). John F. Kennedy Memorial Park is located off Golf Course Road and Hesperian Boulevard. Hesperian Boulevard consists of primarily commercial uses, including large retail stores and restaurants, as well as some residential uses.

**TABLE 1-2
PROPOSED PIPELINES**

Pipeline	Location / Distance	Construction Technique	Length
Northern Segment from Skywest Pump Station to 42-inch EBMUD pipeline	Skywest Drive / Golf Course Road / Hesperian Boulevard (to Bartlett Avenue)	Open Trench	~0.5 mile
Southern Segment from Skywest Pump Station to 33-inch Hayward Aqueduct	Skywest Drive / Hesperian Boulevard (to West Winton Avenue)	Open Trench Jack & Bore at Sulphur Creek	~1 miles

The northern pipeline route to the EBMUD system would follow Skywest Drive east on Golf Course Road, and north along Hesperian Boulevard to Bartlett Avenue, to connect to the existing 42-inch EBMUD pipeline. The northern segment of Skywest Drive, between West A Street and Golf Course Road, would be realigned in the future as part of the "West A Street Extension" Project by the City of Hayward (see **Figure 4**). The proposed pipeline would be located in the realigned new road in anticipation of the realignment.

The southern route would trend south and east on Skywest Drive to Hesperian Boulevard, where it would continue south to West Winton Avenue and connect to the existing 33-inch diameter Hesperian Aqueduct.

The pipelines would be open trenched, with the exception of the crossing of Sulphur Creek at Skywest Drive, which would require jack and bore technique (see **Figure 4** for the location). The pipeline alignment would be located in the northbound lane of Skywest Drive, the eastbound lane of Golf Course Road, and would be confined within the shoulder of the southbound lane on Hesperian Boulevard, with minor crossing of the northbound lane to connect to the EBMUD's existing 42-inch pipeline. Pipeline installation activities would require closure of one lane of traffic on all affected roads. Because of the high volume of traffic along Hesperian Boulevard, the City proposes to limit construction along this street during the off-peak traffic hours. The City evaluated the possibility of nighttime construction along Hesperian Boulevard to avoid potentially adverse impacts on traffic. However, in recognition of the resulting adverse noise impacts on the residences along approximately 1,400 feet of Hesperian Boulevard, the City decided to limit construction to the daytime off-peak traffic hours only.

BALL VALVE REPLACEMENT

The project includes replacing eight (8) undersized ball valves on the existing 33-inch Hesperian Aqueduct and 42-inch Newark - Hayward Aqueduct with new valves matching the existing pipe diameter of the aqueducts to meet design flows through the pipeline. These valves control water flow through the pipeline and allow for isolated pipeline repairs when valves are shut off. Four (4) 20-inch ball valves on the 33-inch Hesperian Aqueduct would be replaced with new valves to match the pipe diameter. Four (4) 30-inch valves on the 42-inch Newark - Hayward Aqueduct would be replaced with new valves to match the existing pipe diameter. **Table 1-3** describes the approximate location of each valve. These valves are situated primarily beneath roadways within the cities of Hayward, Newark, Fremont, and unincorporated Alameda County, as described in **Table 1-3** (see also **Figure 1**). A variety of uses are located in the vicinity of the valve sites, including residential, commercial, industrial, and open space uses.

**TABLE 1-3
PROPOSED BALL VALVE REPLACEMENT LOCATIONS**

No.	Jurisdiction	Street Location	Specific Location
<i>Hesperian Aqueduct</i>			
1	Hayward	Hesperian Blvd., at Wright Drive	Next to median
4	Hayward	Hesperian Blvd., 100' South of Cathy Wy	Next to median
7	Hayward	Hesperian Blvd., 450' south of Aldengate Wy	Middle lane
10	Hayward	Hesperian Blvd., 100' South of Arf Ave	Middle lane

**TABLE 1-3 (continued)
PROPOSED BALL VALVE REPLACEMENT LOCATIONS**

No.	Jurisdiction	Street Location	Specific Location
<i>Newark - Hayward Aqueduct</i>			
K	Hayward	Industrial Pkwy W. and Hesperian Boulevard	Middle of intersection
I	Unincorporated Alameda County	Hesperian Blvd., 40' North of ACFCWD Line "A" Drainage Channel	Middle of the road
E	Fremont (SFPUC easement)	Union City Blvd., 100' north of Lowry Rd.	Next to dirt access road
A	Newark (SFPUC easement)	End of Hickory Street, at Hetch Hetchy Connection (Newark Turnout)	Within existing vault in open area

REVERSE FLOW PIPING AT HESPERIAN PUMP STATION

To facilitate two-way flow through the current Hesperian Aqueduct and Newark - Hayward Aqueduct, the City of Hayward proposes the installation of reverse flow piping at the Hesperian Pump Station. Reverse flow piping consists of less than 50 feet of 42-inch piping. The installation would occur as part of the Hesperian Pump Station replacement, which is currently under design to increase the water pressure in the northeastern part of the City's service area. The excavation and disturbance area associated with the proposed pipe would be contained within the construction footprint of the Hesperian Pump Station improvements.

EBMUD IMPROVEMENTS

EBMUD proposes to install two 12- to 16-inch bypasses ("T-connection") to provide emergency pump connections at its existing Oak Rate Control Station (ORCS), located on Oak Street north of Grove Way in Castro Valley. The bypasses would be equipped with flexible connections to allow hookup with EBMUD's portable pumps. These pumps would have a capacity of three to six mgd, such that water could be pumped north of the ORCS as needed. Surrounding uses include single-family dwellings. The bypasses would be housed within buried concrete structures on the northeast and southwest sides of the existing buried rate control station. The ORCS is currently situated in the shoulder of the road, and there would be sufficient room for a portable pump (mounted to a trailer) to park along side the T-connections for hook-up without disruption to traffic. Due to the surrounding residential uses, operation of diesel pumps would increase ambient noise levels. Therefore, during operation of the diesel pumps, temporary noise barriers would be installed around the pumps or pumps with noise-reduction enclosures would be used to reduce noise levels.

SFPUC IMPROVEMENTS

SFPUC proposes bypass piping and valves at the Newark Turnout to facilitate flows coming from EBMUD to SFPUC. The existing site consists of small, separate SFPUC and City of Hayward vaults containing meters and valves. These facilities are located generally in an undeveloped area south of Union Sanitary District's sewage treatment plant and west of the Ohlone Wildlife Rehabilitation Center. A railroad corridor traverses south of the site. **Figure 6** shows the site layout with the existing and proposed facilities.

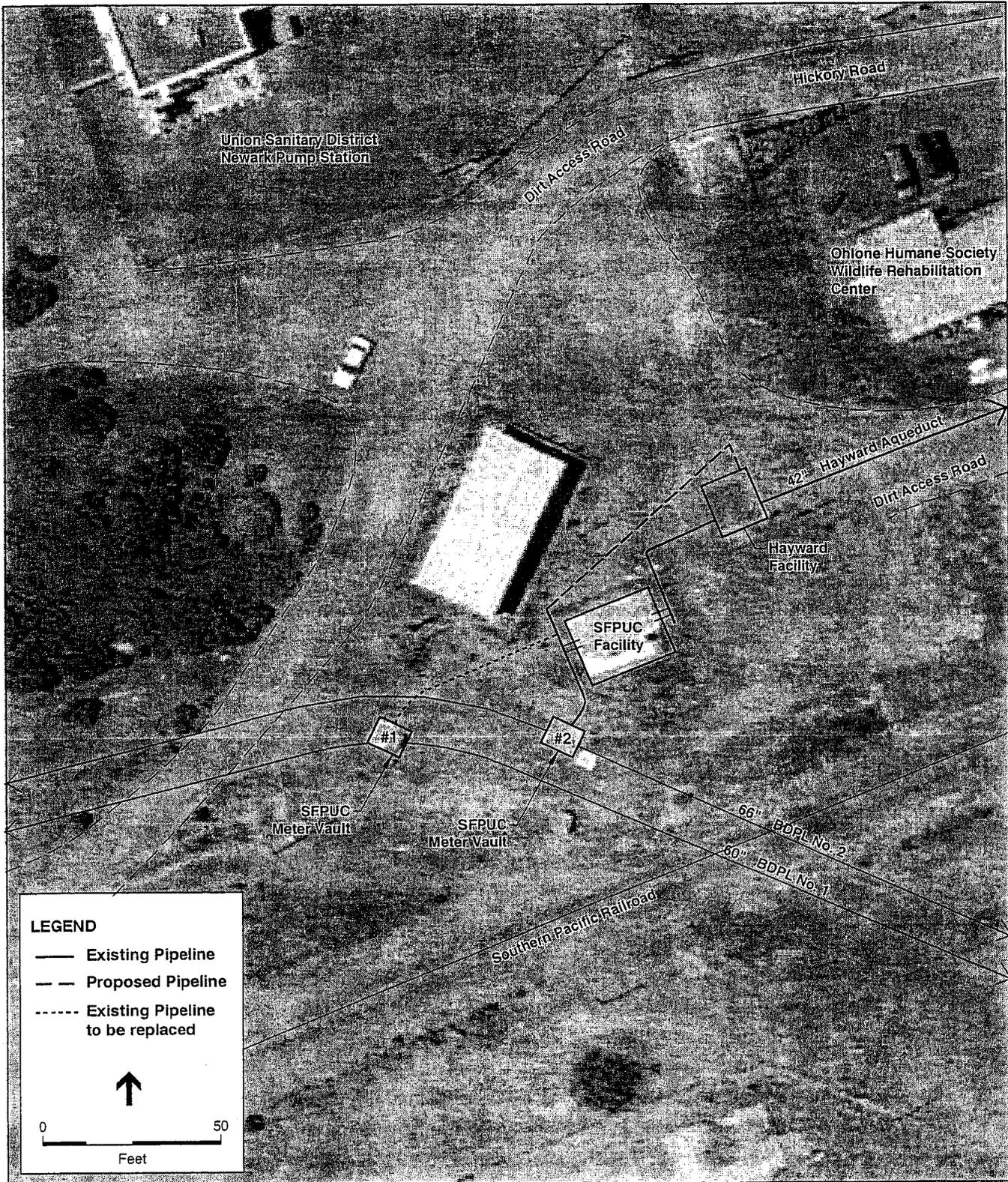
Proposed improvements include installation of up to 75 feet of 42-inch mortar-coated steel pipe, and replacement of up to 30 feet of an existing 20-inch welded steel pipe with a 24-inch mortar-coated and lined steel pipe. In addition, SFPUC proposes to install new valves and a flow meter. The additional piping is necessary to receive flows from north to south (EBMUD to SFPUC), in the opposite direction of its existing flow regime. Installation of this piping would minimize the work involved in conversion of the existing facilities at the turnout to accommodate reverse flow operation. The valves and meter would be housed in a concrete vault with dimensions of up to 20- by 12- by 6-feet (length, width, and depth), depending on the equipment selected and the clearance requirements by maintenance staff. The majority of the vault would be located below-ground, with approximately one foot of the structure located aboveground to prevent traffic from running over the vault. All improvements would be located within SFPUC's existing easements.

OPERATION

The project proposes delivery of up to 30 mgd of treated water between the two major water suppliers (EBMUD and SFPUC). The intertie system would be equipped with pumps and reverse flow piping such that water can be moved in both directions. One of three scenarios may result in the use of the intertie system:

- During an emergency event in which the EBMUD system is partially or entirely disabled, either from an earthquake, water quality event, or during major repairs requiring pipeline outages; or
- During an emergency event in which the SFPUC system is partially or entirely disabled, either from an earthquake, water quality event, or during major repairs requiring pipeline outages; or
- During an emergency event in which the Hayward Aqueduct is partially or entirely disabled, either from an earthquake, water quality event, or during major repairs requiring pipeline outages.

Any such activity associated with planned outages as described above will be subject to all necessary environmental review, including permitting.



SOURCE: SFPUC

SFPUC-COH-EBMUD Water System Emergency Intertie Project IS/MND / 202702 ■

Figure 6.
SFPUC Improvements
at Newark Turnout

Depending on the nature of the system outage (e.g., planned outage for pipeline repair versus unplanned outage resulting from an earthquake), deliveries may vary in duration. Water supply deliveries would be conveyed via the proposed and existing facilities, including EBMUD's existing 42-inch pipeline, the proposed 36-inch pipeline, the proposed Skywest Pump Station, the City of Hayward's Hesperian Pump Station (currently in design), existing Decoto Pump Station, Hesperian Aqueduct, Newark - Hayward Aqueduct, and BDPL No. 1 and 2. Water delivery to SFPUC customers south of Hayward may require reverse flow in the BDPL Nos. 1 and 2. Reverse flow in the BDPL is possible as pumping in the Skywest pump station and Hesperian Pump Station would create enough pressure for water to flow east once it enters the Hetch Hetchy aqueducts.

Table 1-4 shows the three delivery scenarios between the water suppliers under both the planned maintenance and an emergency event. During a maintenance or emergency event within the EBMUD service area, 30 mgd of treated water could be delivered from the SFPUC system to EBMUD.

**TABLE 1-4
DELIVERY SCENARIOS AND WATER ALLOCATION ^a**

Delivery Scenario	Planned Maintenance	Emergency
SFPUC to EBMUD	30 mgd	30 mgd
EBMUD to SFPUC	30 mgd	30 mgd
EBMUD to COH	15 mgd	15 mgd

^a Actual delivered supply would depend on the demand and water availability during the time of repairs.

During a maintenance or emergency event within the SFPUC service area, 30 mgd of treated water could be delivered from the EBMUD system to the SFPUC system. Depending on whether the shutdown is for planned maintenance or emergency, the allocation of the 30 mgd to SFPUC customers would vary.

Under an emergency event in which the Hayward Aqueduct is partially or entirely disabled, either from an earthquake, water quality event, or during major repairs requiring planned outage, EBMUD could provide 15 mgd of treated water to the City.

Implementation of the Intertie system during either an emergency or planned outage event would likely result in mandatory short-term demand management measures in the affected agencies, as the amount of water provided to each party would likely be less than actual demand under normal circumstances. All agencies have existing conservation measures that are implemented during water shortages. In the event of an emergency in which the intertie is used to send water from EBMUD to Hayward and/or SFPUC, EBMUD anticipates relying on its local water rights to support the provision of that emergency water, while SFPUC would rely on its water rights to

support the provision of water to EBMUD. In the event of an outage due to planned critical work, to the extent there are water rights issues, it is anticipated that those issues will be addressed as part of the project specific environmental documentation.

As the City of Hayward's existing infrastructure would be an integral part of the Intertie system, it was critical to ensure that the proposed system would not adversely affect the City's existing facilities or operation. The capacity of the Intertie system was designed to meet the City of Hayward's existing operations requirement. Under the three emergency delivery scenarios, the 15 mgd (average wintertime demand) provided to the City of Hayward by SFPUC would not allow refill of the City of Hayward's reservoir. To maintain enough pressure (40 psi) for fire fighting, the reservoir must have sufficient water. Therefore, subsequent to the emergency events, flows must be adjusted to refill the reservoir to maintain reliability of the City of Hayward's water system. As part of the Intertie Project, the collaborating agencies would prepare an operational plan that facilitates making maximum use of the intertie taking into consideration use of existing facilities and refilling the City's reservoirs when necessary. In addition, the parties would prepare an operational plan that addresses water quality issues associated with reversing flows.

CONSTRUCTION

SKYWEST PUMP STATION

Construction of the proposed pump station would involve grading, excavation, structural erection, and back filling. The existing parcel consists of a concrete slab, which would be removed prior to excavation. The foundation would be excavated (and shored) to a depth of approximately seven feet, followed by construction of the facility. Staging would occur in the adjacent empty lot next to the proposed site. All trench spoil would be loaded directly into dump trucks or stockpiled in the empty lot until it could be loaded directly into dump trucks, and hauled away for disposal per requirements of the City of Hayward. Alternatively, the spoil would be reused per requirements of the City of Hayward. Access to the project site would be from Skywest Drive. Construction of the pump station would last up to approximately 14 months.

PIPELINE INSTALLATION

Open Trench Construction

The entire pipeline alignment, with the exception of the crossing at Sulphur Creek, would be constructed using open-cut trenching. The trench would average six feet wide and eight feet deep. Trenches would be braced using a trench box or shoring. All soil removed from trenches would be loaded directly into dump trucks and hauled away for disposal or reuse per requirements of the City of Hayward. Most of the backfill material would be imported and stockpiled near the open trench. Once filled and compacted, the area would be resurfaced using either asphalt or concrete to match the surrounding material. A temporary patch would be used

until final repaving occurs, between two to six weeks after pipeline installation is complete within a given street segment.

The active work area along the open trench would be about 5 feet on one side of the trench and 10 to 12 feet on the other side for access by trucks and loaders, resulting in a construction easement width of approximately 25 feet. The pace of work is estimated at 100 feet per day per crew along the entire route, and the overall active work zone on any given work day would average 300 to 600 feet in length. Staging areas would occur at various locations along the construction routes for storage of pipe, but would primarily be located in the empty parcel next to the proposed Skywest Pump Station.

Jack and Bore Construction

Special construction methods would be needed to cross beneath Sulphur Creek. This method would involve use of a horizontal boring machine or auger to drill a hole, and a hydraulic jack to push a casing through the hole under the crossing. As the boring proceeds, a steel casing pipe is jacked into the hole using a large hydraulic jack in a pit located at one end of the crossing; the pipeline is then installed in the casing. The jacking pit is excavated (and shored) with typical dimensions of 12 to 15 feet wide, 30 to 35 feet long, and 10 to 12 feet deep. Shoring, appropriate to the pit depth, would be used to secure the walls. An additional area of 2,000 square feet would be needed around the pit for temporary storage of pipe sections and for loading material removed from the bore. The receiving pit at the other end of the bore is smaller, encompassing approximately 1,000 square feet for the pit and staging.

BALL VALVE REPLACEMENTS

Replacement of each valve would involve excavation of an area of approximately 8- by 8-feet, to a depth of 8 feet. The disturbance area would extend beyond the excavation area for equipment staging and material storage. Construction activities would involve excavation and shoring, drainage of aqueducts, removal of existing valves, and installation of new valves. Construction activities would last approximately two days per site, and would require lane closures where valves are located beneath roadways. At Ball Valve K, more than one lane of traffic may be closed as this site is located in the middle of the Hesperian Boulevard and Industrial Boulevard intersection. Traffic control would be implemented at all road locations to minimize traffic hazard and ensure vehicular and worker safety. At Ball Valve A near the Newark Turnout, the existing vault box containing the 30-inch valve may be reconstructed depending on whether additional clearance is required.

Construction activities for the ball valves would occur during the winter, when the water demand is low and an outage of the pipeline could occur without interruption to water service. The 33-inch Hesperian Aqueduct and 42-inch Newark - Hayward Aqueduct would be drained prior to construction activities. Treated water would be discharged to nearby sewer system or

dechlorinated prior to discharge to nearby storm drains or natural drainages. Dechlorination would be in accordance with standard O&M practices, as well as per AWWA Guidelines. In addition, the City of Hayward would obtain authorizations from the RWQCB and affected jurisdictions in advance of discharge to storm drains or natural drainages. Appropriate erosion and sediment control devices would be used at discharge points as necessary to prevent sedimentation into nearby drainages and storm drains.

EBMUD IMPROVEMENTS

Installation of the bypasses would require an excavation area of approximately 6- by 6 feet, to a depth of approximately 6 feet at each end of the ORCS. The disturbance area would extend beyond the excavation area for equipment staging and material storage. Construction would last approximately three to six weeks, for excavation of the existing 24-inch diameter pipeline, welding the new prefabricated connections to the existing pipeline, and construction of a buried concrete box around each connection. A segment of the existing 24-inch diameter pipeline would be drained to facilitate construction activities at the ORCS. EBMUD would dechlorinate the treated water prior to discharge into nearby storm drains in accordance with standard O&M practices and in accordance with AWWA guidelines. In addition, EBMUD would obtain authorizations from the RWQCB and Alameda County prior to discharge of dechlorinated water into storm drains or natural drainages. Construction would require closure of one lane of traffic, but one through lane would be maintained. Appropriate erosion and sediment control devices would be used at discharge points as necessary to prevent sedimentation into nearby drainages and storm drains.

SFPUC IMPROVEMENTS

Pipeline installation and replacement would require open-cut trenching technique. Construction of the vault box containing valves and meters would require excavation and shoring, to approximate dimensions of 20- by 12-feet, and 6 feet deep. A small area southwest of the work zone considered to have potential wetland characteristics would be fenced and isolated prior to construction activities. Staging would be accommodated on site. Construction activities would last several days, and would require at least one day of pipeline outage for tie-in to the new facility. As part of the shut-down, treated water would be dechlorinated and discharged. Dechlorination of the pipeline would be conducted in accordance with existing O&M procedures, as outlined in SFPUC's *Disinfection /Dechlorination Standard Operating Procedures, Version 0700* and would require notification of the RWQCB and the City of Newark. Appropriate erosion and sediment control devices would be used at discharge points as necessary to prevent sedimentation into nearby drainages and storm drains.

CONSTRUCTION CREW AND EQUIPMENT

The typical crew size would be 10 to 12 people, plus inspectors, but would depend on the actual work involved. Several crews may be working simultaneously on any part of the project.

Typical construction equipment would include: pavement saws/jack hammers, excavators, backhoes, ten-wheel dump trucks, front-end loaders, forklifts, flatbed delivery trucks, paving equipment (asphalt and/or concrete trucks, rollers), and vibratory compactors.

1.6 SCHEDULE

Construction of the facilities is expected to start as early as in fall 2003. Construction is expected to last up to approximately 14 months, and would occur generally Monday through Fridays, from 7:30 a.m. to 4:30 p.m., with the exception of Hesperian Boulevard. Construction along Hesperian Boulevard would be limited to off-peak traffic hours, from 9:00 a.m. to 5:30 p.m. in the south bound lane, and 9:00 a.m. to 3:00 p.m. in the northbound lane. Tie-ins to the existing transmission facilities would occur during weekend daytime hours.

1.7 AUTHORIZATION, APPROVAL, OR PERMIT REQUIREMENTS

The following authorizations, approval, or permits are required for implementation of this project:

- Authorization from RWQCB, the City and/or County for discharge of dechlorinated water to nearby creeks or storm drains for planned maintenance activities. Water would be dechlorinate per AWWA guidelines and regulatory limits.
- Encroachment permits from Alameda County and the cities of Hayward, Newark and Fremont for construction within public rights-of-way.
- Permit for emergency, diesel generators from Bay Area Air Quality Management District (BAAQMD) and City of Hayward Fire Department.
- Bay Conservation and Development Commission (BCDC) permits are not required as the proposed project sites are not within BCDC jurisdiction.

REFERENCES

EBMUD, *SFPUC/EBMUD Intertie Feasibility Study*, September 12, 2002.

Memorandum of Agreement Between City and County of San Francisco Public Utilities Commission, East Bay Municipal Utility District, City of Hayward, and Alameda County Water District – to Pursue CEQA Documentation for an Emergency / Maintenance Water System Intertie Project, October 19, 2002.

Lau, Bob, EBMUD Project Engineer, personal communication, November 2002.

Patel, Suresh, SFPUC Project Manager, personal communication, November 2002.

SECTION 2.0

EVALUATION OF ENVIRONMENTAL IMPACTS

1. **Project Title:** SFPUC – COH – EBMUD Water System Emergency Intertie Project
2. **Lead Agency Name and Address:** City of Hayward
Department of Public Works
777 B Street
Hayward, CA 94541-5007
3. **Contact Person and Phone Number:** Henry Louie, P.E.
Project Manager
(510) 583-4715
4. **Project Location:** All components within County of Alameda. Locations of specific elements are listed below:
 - Skywest Pump Station – Skywest Drive (City of Hayward)
 - Pipelines – Skywest Dr. / Golf Course Road / Hesperian Boulevard (City of Hayward)
 - Ball Valve Replacement – Various, in Hayward, Newark, and Fremont
 - EBMUD Improvements – Castro Valley
 - SFPUC Improvements - Newark
5. **Project Sponsor's Name and Address:** See No. 2., Lead Agency, above.
6. **General Plan Designation:** Commercial (Hayward Executive Airport Master Plan); the City of Hayward General Plan identifies the western and southern Hayward as an Industrial Corridor (2002c)
7. **Zoning:** AT-C (Air Terminal Commercial)
8. **Description of Project:** See Section 1.0, Project Description
9. **Surrounding Land Uses and Setting.** Commercial / Industrial; Hayward Executive Airport and facilities to west; Home Depot to south; La Quinta Inn to east; Vagabond Inn to north.
10. **Other public agencies whose approval is required:**
 - Authorization from RWQCB, the City and/or County for discharge of dechlorinated water to nearby creeks or storm drain for planned maintenance activities. Water would be dechlorinated per AWWA guidelines and regulatory limits.
 - Encroachment permits from Alameda County, City of Hayward, Newark, and Fremont for construction within public rights-of-way.
 - Permit for emergency diesel generators with engines greater than 50 horsepower from BAAQMD.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

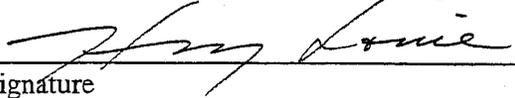
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Incorporation of mitigation measures identified in this document would reduce all impacts to a less than significant level.

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology / Soils |
| <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning |
| <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing |
| <input type="checkbox"/> Public Services | <input checked="" type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation / |
| Traffic | | |
| <input type="checkbox"/> Utilities / Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



 Signature

2/21/2003

 Date

Henry Louie

 Printed Name

2/21/2003

 For

POTENTIAL ENVIRONMENTAL IMPACTS:

Issues (and Supporting Information Sources):	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

a,b) Skywest Pump Station: The proposed project includes installation of an approximate 100- by 40-foot pump station structure with a height of 18 feet. The Skywest Pump Station would be built of masonry wall and surrounded on all sides by a eight-foot high, twelve-inch thick block wall of the same material. The pump station would be located on the southwest corner of an undeveloped parcel within the City of Hayward's Executive Airport property, off Skywest Drive. Nearby streets include West A Street and Hesperian Boulevard. The Skywest Pump Station would be along an existing commercial / industrial corridor, with Home Depot to the south, motels to the west and north, and airport facilities (control tower, hangars) to the west. The proposed pump station would be designed in accordance with the City's Design Guidelines (adopted November 9, 1993) for industrial uses, and would therefore visually integrate with the architectural appearance of the surrounding commercial / industrial uses. As the proposed site is located within a industrial corridor fronting the Hayward Executive Airport, there are no scenic vistas or scenic resources (i.e., scenic highway) in the vicinity.

As discussed in the Project Description, the City would provide landscaping in front of the Skywest Pump Station along Skywest Drive. Landscaping would be planted in accordance with the City's Design Guidelines, and would soften the industrial appearance of the pump station. The presence of the Skywest Pump Station would not alter substantially the industrial / commercial appearance of the surrounding area. The proposed project would not have an adverse effect on scenic vistas or scenic resources, nor degrade the existing visual character of the surrounding area.

Ball Valve Replacements and EBMUD Improvements: Proposed ball valve replacements and EBMUD improvements would not have any long-term visual impacts as all the improvements would be buried underground.

SFPUC Improvements: Proposed SFPUC improvements would consist of underground pipelines and a vault box containing valves and meters. The proposed vault would be primarily buried

underground, with approximately one foot of the box daylighted. The proposed vault would also be fenced to provide security. The proposed site is located around similarly fenced areas containing vault and metering boxes, including SFPUC's SCADA system, vaults containing access to BDPL Nos. 1 and 2, and the City of Hayward's access vault to Ball Valve A. Within the vicinity, Union Sanitary District's sewage treatment plant, the Ohlone Humane Society Wildlife Rehabilitation Center, and the railroad tracks are visible from the proposed site. The proposed SFPUC improvements would be consistent with surrounding industrial facilities, and therefore would not result in degradation to the surrounding visual environment. As there are no scenic vistas or scenic resources in the vicinity of the project site, no impacts to these resources would occur.

- c) All Components: Please refer to Item (a), above, for a discussion of the individual project component's effect on the surrounding visual quality. Operation of the proposed project would not result in degradation to the existing visual character or quality of the surrounding environment.

Construction activities would have a temporary, adverse effect on the visual quality of the project sites' surrounding land uses. Proposed improvements would be located along or in the middle of roadways, and would be visible from surrounding commercial, industrial, and residential areas. However, as all the improvements are located on flat terrain, views of the construction sites would be limited to adjacent areas only. Due to the limited duration of construction activities and the agencies' commitment to restore disturbed areas (see **Measure AES-1**), potential impacts would be reduced to a less-than-significant level. Restoration of the project site to its pre-construction condition would reduce the potential for short-term construction impacts to become long-term visual impacts.

- d) Skywest Pump Station: The project proposes outdoor lighting at the Skywest pump station for security and night maintenance purposes. Long-term light and glare may be generated by new lighting. The contribution of light and glare would be reduced by the orientation of the light downwards (see **Measure AES-2**) and the intervening landscaping that would be planted along Skywest Drive as part of the proposed project. Therefore, the project would not create a new source of light or glare that would adversely affect day or nighttime views in the area.

All Other Components: The project does not propose outdoor lighting for the pipeline or other components. As construction would occur during the daytime, light and glare impacts would not result.

Mitigation Measures

Measure AES-1 This measure applies to all project components. The City of Hayward or its contractors shall restore disturbed areas to their pre-project conditions, such that short-term construction disturbance does not result in long-term visual impacts.

Measure AES-2: This measure applies to the Skywest Pump Station. The City, or its contractors, shall ensure that all permanent exterior lighting at the Skywest Pump Station is directed downward and oriented away from sensitive uses to ensure that diffuse light does not affect surrounding land uses.

Implementation of these measures would reduce potential impacts to the visual environment to a less-than significant level.

Issues (and Supporting Information Sources):	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a,b,c) All Components: The proposed project sites are located in urban settings surrounded by either industrial, commercial, and / or residential uses. There are no agricultural resources located on any of the project sites; therefore, no effect on agricultural resources would occur.

Issues (and Supporting Information Sources):

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a,b,c) All Components: The proposed project is located within the San Francisco Bay Area Air Basin. The entire Bay Area is designated as “nonattainment” for the state standards for ozone and PM-10. The basin is designated “nonattainment” for the federal ozone standard and as a “maintenance” area relative to the national 8-hour-average carbon monoxide standard. As a result of the “non-attainment” status, air quality plans have been adopted.

The proposed project would not conflict with or obstruct the implementation of the applicable air quality plans because operational air emissions would be met through compliance with acquisition and implementation of air-quality permits (see discussion below) and construction-phase emissions are accounted for in the Bay Area Air Quality Management District’s (BAAQMD’s) emission inventory. This inventory is the basis for regional air quality plans. Thus, construction-related emissions are not expected to impede attainment or maintenance of ozone or carbon monoxide standards in the Bay Area.

Skywest Pump Station: Direct air emissions generated by the proposed project would be associated with the operation of the proposed emergency diesel-powered generator at the Skywest Pump Station. The proposed generator would be used only during an emergency event or during monthly maintenance as described in the Section 1.0, Project Description. Operation of the proposed

generator would require permits from BAAQMD, including an Authority to Construct permit which sets the operational parameters and emissions standards for the emergency generator (see **Measure AQ-1**). A Permit to Operate is granted if after testing, the engine achieves the standards outlined in the Authority to Construct permit. The permit review process would ensure that all air emissions associated with the facility would comply with applicable BAAQMD standards. Best Available Control Technology (BACT) would be required as part of the Authority to Construct permit, and would include, but is not limited to, the following: constraints on the use of the generator, implementation of BAAQMD approved sources tests to verify compliance with emissions standards, and preparation of monthly reporting materials to be made available to BAAQMD upon request. BAAQMD Guidelines state that "sources of air pollutant emissions complying with all applicable District regulations generally will not be considered to have a significant air quality impact"(BAAQMD, 1999).

EBMUD Improvements: The operation of the proposed bypasses at EBMUD's ORCS would require use of a diesel-powered portable pump. EBMUD currently owns portable pumps that can be trucked to work sites during an emergency. This option would be implemented under the SFPUC to EBMUD emergency water delivery scenario, when water is required in the area north of the ORCS. EBMUD has obtained permits from BAAQMD for operations of these pumps. Therefore, operation of the pumps would not result in emissions violations or associated air quality impacts.

- d) *All Components:* Residential areas are considered to be sensitive to air pollutants where residents such as children and the elderly tend to be at home for extended periods of time, resulting in sustained exposure to pollutants present. There are no sensitive receptors such as residences adjacent to the Skywest Pump Station and the SFPUC improvements. However, for the pipeline component, ball valve replacements and EBMUD improvements, the closest residence would be located approximately 50 to 100 feet from the project sites. Project construction would result in a temporary increase in air pollutant emissions such as dust. The main sources would be particulate matter (including PM-10) from earthmoving operations, and other criteria air pollutants, primarily from excavation activities and operation of heavy equipment. Construction dust could impact sensitive receptors at these residences; however, due to the temporary nature of construction activities, impacts would be reduced to a less-than-significant level with the implementation of dust control measures (see **Measure AQ-2**). Measures include, but are not limited to, watering and sweeping the active construction areas.
- e) *All Components:* No objectionable odors would be expected to result from the construction or operation of the emergency intertie system,; only treated drinking water would be delivered.

Mitigation Measures

Measure AQ-1: This measure applies to the Skywest Pump Station. The City shall acquire relevant permits from the BAAQMD associated with the use of a diesel-powered generator. Compliance with the permit conditions (including implementation of Best Available Control Technology (BACT)) would ensure that pollutants emitted from operation of the generator would meet emissions standards and thus would reduce potential air quality impacts to less-than-significant levels. Examples of these conditions include, but are not limited to: constraints

on the use of the generator, implementation of BAAQMD approved sources tests to verify compliance with emissions standards, and preparation of monthly reporting materials to be made available to BAAQMD upon request.

Measure AQ-2: The list of measures below is recommended by BAAQMD as feasible control measures to reduce construction dust emissions. The construction contractor shall implement dust control, which includes but are not limited to, the following elements:

- Water all active construction areas daily;
- Discontinue construction grading activity in wind conditions that cause excessive neighborhood dust problems;
- Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer) in accordance with Section 23114 of the California Vehicle Code during transit to and from the site;
- Pave, apply water or (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites;
- Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites;
- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets; and
- Designate a person or persons to oversee the implementation of a comprehensive dust control program and to increase watering, as necessary.

Implementation of these mitigation measures would reduce impacts associated with air quality to less-than-significant levels.

Issues (and Supporting Information Sources):

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
--	---	--	---	----------------------

IV. BIOLOGICAL RESOURCES -- Would the project:

- | | | | | |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) Skywest Pump Station and Proposed Pipeline: The Hayward Executive Airport Master Plan, Final Environmental Assessment / Environmental Impact Report (EA / EIR) identified and evaluated biological resources, including Special Status Species, that occur within the Airport property. As the proposed Skywest Pump Station and pipelines are located within this property, the information presented in the Final EA / EIR is relevant. The Final EA / EIR was compiled from a variety of sources, including 1) a list of biological resources provided by the USFWS for the Hayward and San Leandro USGS 7.5 minute quadrangles; 2) the California Natural Diversity Data Base (CNDDB) for these quadrangles; 3) a previous biological reconnaissance of the airport

vicinity (City of Hayward, 2002a); and 4) a general wildlife survey conducted at the Airport on June 2, 2000 by staff of Environmental Science Associates.

Animal Species: The proposed pump station is located less than 300 feet west of Sulphur Creek. The pipeline would be installed under Sulphur Creek using jack and bore construction technique. The Final EA / EIR determined that special-status animal species potentially occurring in the wetland area of Sulphur Creek include one threatened species, the California red legged frog (*Rana aurora draytonii*), and two species of special concern, the California tiger salamander (*Ambystoma californiense*) and the burrowing owl (*Athene cunicularia*) (City of Hayward, 2002a). Sulphur Creek provides a small amount of potential habitat for red-legged frogs and marginal habitat for California tiger salamanders. Burrowing owls are present on the grassland portions of the Airport (Hayward, 2002a). A number of other special status animal species were listed by the CNDDDB for the Airport area. These include species associated with wetlands, grasslands, and riparian habitat, as well as bats, fish, birds, and invertebrates.

The Final EA / EIR indicated that suitable habitat for CRLF and CTS includes areas consisting of permanent water, extensive emergent vegetation, and areas of grasslands containing ponds. The proposed Skywest Pump Station would be located within disturbed, mostly paved areas away from Sulphur Creek; therefore, special status species would not occur at this site. The proposed pipeline would be confined within paved roadways, and would cross Sulphur Creek via jack and bore technique, thereby avoiding any direct impacts to riparian habitat. It is unlikely that CRLF and CTS would be present along the pipeline corridor due to the absence of permanent water, vegetation and grassland habitats; therefore, potential impacts to CRLF and CTS for this component would be considered less than significant.

Flat, open lands characterized by low-growing vegetation and limited tree cover is considered suitable habitat for the burrowing owl. Burrowing owls have been seen at the Airport, generally during breeding season, although they are not present every year (City of Hayward, 2002a). A daytime survey for the burrowing owl at the adjacent Home Depot site in June 1997 did not result in any evidence of owls or their burrows (City of Hayward, 1999). It is unlikely that burrowing owls would be present at the Skywest Pump Station site due to the presence of the concrete slab and because the remaining site area was recently graded, which have completely cleared the area of vegetation. The proposed pipeline would be located entirely within the paved road. Potential impacts to burrowing owls are considered less than significant for both components.

Plant Species: The Final EA / EIR indicated that the CNDDDB listed nine special status species found within the quads containing the Airport. However, no special status plant species are expected to occur on Airport property as required habitat was not found there, due to past and ongoing habitat modifications and disturbance. As discussed above, the Skywest Pump Station and proposed pipeline are located within paved or recently graded areas that are devoid of vegetation. Therefore, special status plant species would not occur at the project site.

Ball Valve Replacements and EBMUD Improvements: Proposed ball valve replacements and EBMUD improvements would be confined within the middle of roadways in urban areas, with the exception of Ball Valve E, which is located adjacent to a dirt road surrounded by fennel plants. Fennel is an invasive, non-native plant without any special status. Special status species are not expected to be present at any of these sites due to the paved condition or disturbed nature of the sites. Therefore, impacts to special status plants and animals would not occur.

SFPUC Improvements and Ball Valve A Replacement: The SFPUC improvements and Ball Valve A replacement would be located within a generally open area defined by industrial uses. The proposed facilities would be located adjacent to other similar access vaults and buried pipelines. A preliminary biological survey was conducted on November 21, 2002 by an Environmental Science Associates biologist at the SFPUC Improvements and Ball Valve A Replacement sites. A narrow drainage ditch with freshwater wetland vegetation parallels the BDPL and extends to within approximately 120 feet of the site, and provides marginally suitable habitat for California clapper rail, a state and federal endangered species, and California black rail, a state threatened species and federal candidate for listing as threatened or endangered. California clapper rail has been identified within the marshes of Newark Slough, approximately 0.5 to 2.0 miles north and west of the SFPUC Improvements site (CNDDDB, 2002). California black rail has been observed at Dumbarton Point, three miles southwest of the site. Previously, regulatory agencies imposed restrictions on SFPUC as a result of construction activities within clapper rail habitat. Specifically, construction work was restricted within a 700 foot radius of any clapper rail nest during the rail breeding season (February 1 through August 31). USFWS has indicated that the likelihood of rail occurrences decreases in the eastern sections of the BDPL, i.e., in the vicinity of the SFPUC Improvements and Ball Valve A Replacement sites. A biologist from Ibis Environmental conducted a habitat assessment of the project site and vicinity on February 16, 2002, and confirmed that the area within 700 feet of the project site is unsuitable for clapper rail. The survey showed the first signs of any salt marsh vegetation occurring more than 600 feet away from the proposed construction area. At 700 feet, the salt marsh vegetation does not exhibit habitat suitability for clapper rail nesting. Therefore, construction activities occurring at the project site would not result in significant impacts to rails, and no mitigation measures are required or recommended.

- b,c) Proposed Pipeline and SFPUC Improvements: The proposed project would be located primarily within developed, paved areas. Potential riparian habitat and sensitive natural community include Sulphur Creek, which would be crossed by the proposed pipeline via jack and bore construction technique, and an isolated wetland located due southwest of the proposed work activities at the SFPUC improvements site. Installation of the pipe via jack and bore construction would avoid impacts to Sulphur Creek. The wetland near the SFPUC improvements site consists of a localized small depression (approximately 35 by 15 feet) that retains surface water. Soil saturation is evident, and the area supports saltgrass (*Distichlis spicata*) and alkali heath (*Frankenia salina*), both wetland indicator plant species. The site would not likely qualify as a jurisdictional wetland since the U.S. Army Corps of Engineers no longer assumes jurisdiction

over isolated wetlands. Construction activities would not occur within the wetland, and measures are proposed to prevent inadvertent encroachment by construction vehicles, staging and storage of equipment and material, and trampling by foot that could result in potentially significant impacts. Installation of exclusion fencing prior to construction activities would ensure that potential impacts to the sensitive wetland resource would be reduced to less-than-significant levels (see **Measure BIO-1**).

All Other Components: There are no riparian habitat, wetlands, or other sensitive natural community at the other project sites.

- d) All Components: The proposed project would be constructed within existing developed areas that do not serve as migratory corridors for fish or wildlife. In addition, there are no native wildlife nursery sites in the vicinity of the project areas. Therefore, no impacts would occur.
- e) All Components: The proposed project would not conflict with any local policies or ordinances protecting biological resources, including native trees. The proposed project would not require removal of any trees. Therefore, it would not conflict with any local policies or ordinances protecting biological resources.
- f) All Components: The project site is not subject to a Habitat Conservation Plan, Natural Conservation Community Plan or other habitat conservation plan.

Mitigation Measures

Measure BIO-1: This measure applies to SFPUC improvements. The City or its contractors shall install exclusion silt fencing around the potential wetland due southwest of the SFPUC improvements site prior to start of construction. The City or its contractors shall retain a qualified biologist to direct the contractor on placement of the fencing. The fencing shall be keyed into a shallow (i.e., 4-6 inch deep) trench, and shall be maintained in good condition throughout the course of construction. No construction vehicles, equipment and materials shall be allowed on the protected side of the fence. Movement of the fence for any purpose shall be approved by the qualified biologist.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

a) Skywest Pump Station and Proposed Pipeline: A literature search of recorded cultural resources and inventories of historic resources was conducted by the Northwest Information Center (NWIC) for the Skywest Pump Station and proposed pipeline corridor. There are no historic resources located along the project corridor (NWIC, 2002; City of Hayward, 2002a). A pre-1955 airplane hanger in the project vicinity was identified as a historical resource, but was determined not to be eligible for listing in the National Registry of Historic Places. As no historical resources would be located within the construction zone, the proposed project would not have any impacts on known historical resources.

All Other Components: The City ball valve replacements, and EBMUD and SFPUC improvements would be located within previously disturbed areas within roadways or dirt roads. No structures are located adjacent to the work zone; therefore, no impacts to historical resources would occur.

b, c) Skywest Pump Station and Proposed Pipeline: The Hayward Executive Airport is located within a designated “moderate” sensitivity zone for archaeological resources (City of Hayward, 2002a). A site-specific search of the proposed Skywest Pump Station site and pipeline corridor by the NWIC indicated that the project site contains no recorded archaeological resources (NWIC, 2002). The potential for encountering and disturbing known or unknown cultural resources may occur, but would be minimized to a less-than-significant level with the implementation of **Measure CR-1** and **Measure CR-2**.

All other components: The City’s ball valve replacements, EBMUD improvements, and portions of the SFPUC improvements would be built or installed within previously excavated areas. In general, the potential for construction activities to affect cultural resources at these sites is considered low, as all excavation would occur within land that was previously disturbed during installation of existing aqueducts, pipelines, and vaults. Therefore, it is unlikely that known or unknown paleontological or cultural resources would be encountered during excavation. The potential for encountering and disturbing known or unknown cultural resources may occur, but

would be minimized to a less than significant level with the implementation of **Measure CR-1** and **Measure CR-2**.

- d) All Components: Native American archaeological sites in this portion of Alameda County tend to be situated near drainages transecting the bayshore plain. Within the proposed Skywest Pump Station site and pipeline corridor, the potential to encounter Native American sites, including burials, is considered low (NWIC, 2002). For all other components, no human remains are known or expected to occur in the project area, due to the presence of previously disturbed soils. However, **Measure CR-2** addresses the procedures that should be implemented in the event that human remains are unearthed during construction. The potential for encountering and disturbing human remains would be reduced to a less-than-significant level with the implementation of this measure.

Mitigation Measures

Measure CR-1: The following measure shall be implemented to minimize potential adverse impacts to unknown cultural resources during construction and applies to all project components:

If cultural resources are encountered during construction of the project, the contractor shall avoid altering the materials and discontinue earthwork within 100 feet of the find. At this time, the contractor must contact a qualified archaeologist, one certified by the Registry of Professional Archeologists (RPA), to evaluate the situation. Any identified archaeological resources shall be recorded by the archaeologist on form DPR 422 (archaeological sites) and/or DPR 523 (historic properties) or similar forms. Project personnel shall not collect cultural resources. Procedures for stopping construction in the event that cultural resources are exposed shall be part of the project plans and specifications. In anticipation of discovering cultural deposits, procedures shall be in place so that the contractor can move on to another phase of work, thus allowing sufficient time to evaluate the nature and significance of the find and implement appropriate management procedures.

Measure CR-2: The following measure shall be implemented in the event that human remains are unearthed during construction and applies to all project components:

In the event that prehistoric human remains are encountered, there shall be no further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent human remains until the County coroner makes a determination. If the coroner determines that the remains are Native American, then the Native American Heritage Commission in Sacramento shall be contacted within 24 hours, along with the Most Likely Descendant(s) of the deceased Native American. The dignified treatment or disposition of Native American burial remains and artifacts shall be agreed upon by the City and the appropriate Native Americans in advance of construction (as provided by Public Resources Code Section 5097.98) and shall be written into construction specifications.

Implementation of these measure would reduce potential impacts to unknown cultural resources to less-than significant levels.

Issues (and Supporting Information Sources):	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
--	---------------------------------------	--	-------------------------------------	------------------

VI. GEOLOGY AND SOILS -- Would the project:

- | | | | | |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a) The proposed project would not expose people to substantial adverse risks of loss, injury, or death since the proposed project does not include construction of habitable structures. The project sites are not located within an Alquist-Priolo "Earthquake Fault Zone" for fault rupture hazard, and the potential for fault rupture to damage any of the facilities is considered low. However, due to the location within the seismically active region of Northern California and proximity to the Hayward fault, the project area may be subject to strong ground shaking.

All Components: The Skywest Pump Station is located two miles west of the Hayward fault, so the project area may be subject to ground shaking. The United States Geologic Survey (USGS) estimates that the probability for an earthquake of magnitude greater than 6.7 on the southern Hayward fault segment is 17 percent. An earthquake of the same magnitude or greater on the entire

Hayward system is 32 percent. According to ABAG's Earthquake Hazard Map, a 6.9 magnitude earthquake on the southern segment of the Hayward fault would result in shaking intensities from Violent to Very Violent. These shaking intensities correspond with heavy to extreme damage on the Modified Mercalli Intensity Scale (ABAG, 2002a).

Secondary hazards of earthquakes include liquefaction and landslides. According to ABAG's Liquefaction Susceptibility Map, liquefaction potential within project sites vary from High to Very High. Landslide potential is considered low due to the flat terrain. Extreme earth movement could impact the integrity of the Skywest Pump Station and associated facilities causing system failure or rupture.

The project would consist of new and upgraded water facilities that are non-habitable structures, thereby minimizing risks to people. To reduce the risk of damage from seismic groundshaking and associated secondary seismic impacts to a level of acceptable risk, and therefore to a less-than-significant impact under CEQA, project design would be in accordance with applicable sections and editions of the 2001 California Building Code (CBC) and local building code provisions (see **Measure GEO-1**). Compliance with these provisions would reduce potential seismic impacts on these facilities to a less-than-significant level. In addition, compliance with **Measure GEO-2**, which provides for an analysis of liquefiable soils as part of the geotechnical foundations survey, would ensure that potential impacts associated with liquefaction triggered by an earthquake event would be considered less than significant.

The construction of a new intertie pump station and upgrades of existing facilities is intended to provide alternative sources of water when damages to water facilities occur on any one of the three water systems during emergency events such as earthquakes. The project would be designed to maintain water flow to customers in the affected service area(s) during such an emergency event until facilities are restored. Therefore, implementation of the project, in compliance with **Measures GEO-1** and **GEO-2**, would be considered beneficial.

- b) All Components: Construction activities involving soil disturbance, such as excavation, stockpiling, and grading, could result in increased erosion and sedimentation to surface waters. Substantial erosion could affect water quality in Sulphur Creek, which is located in proximity (less than 300 feet) to the Skywest Pump Station and crossed by the proposed pipeline. Construction activities would be confined within paved areas, and the proposed pipeline would cross the channel via jack and bore technique. Implementation of standard engineering erosion-control techniques and best management practices would reduce potential impacts to water quality to a less-than-significant level (see **Measure WQ-1** in **Section VIII, Hydrology and Water Quality**).
- c,d) Proposed Skywest Pump Station and Pipeline: The Soils Conservation Survey's *Soil Survey of Alameda County, California, Western Part*, (1981) has identified the presence of the following surface soils at the proposed sites where new structures would be constructed: Danville silty clay loam, Botello loam, and Reyes clay. Danville silty clay loam, a very deep, well drained soil that formed on low terraces in alluvium and derived from sedimentary rock (SCS, 1981), is found generally within the Skywest Pump Station area. This soil type has slow permeability, high shrink-swell potential and low strength. The proposed pipeline traverses both the Danville silty clay loam and Botella loam, the latter of which is also a very deep, well drained soil on low terraces and

alluvial fans deriving from sedimentary rock. This soil is defined by moderately slow permeability, moderate shrink-swell potential, and low strength.

Because of the proposed Skywest Pump Station's function as an intertie system that would be used during an emergency, including earthquakes, subsurface investigations would be necessary as part of project design to analyze potential hazards for unstable soils to occur at the project site. Due to the likelihood of shrink-swell soils to be present at the proposed Skywest Pump Station, the City would conduct a geotechnical study to assess the potential for expansive soils (see **Measure GEO-2**). The City shall implement the recommendations of the study; these recommendations may include, but are not limited to the following: removal of expansive soils, replacement of expansive soils with engineered fill, mixture of the expansive soil with coarse material or lime, or incorporation of a rigid, reinforced concrete slab design.

SFPUC Improvements: The proposed SFPUC improvements, which include installation of a new pipeline segment connecting the City's Newark - Hayward Aqueduct to the Hetch Hetchy system, would be located generally on Reyes clay. This soil is characterized as a very deep, very poorly drained soil found on tidal flats, with very slow permeability and highly acid when drained.

There is a potential that surface soils at the site are considered potentially corrosive. Corrosive soils could create problems for concrete structures, if it is in contact with the soil. The proposed project would require installation of a mortar-coated and lined pipeline to reduce damage to the pipelines from corrosive soils. In addition, implementation of **Measure GEO-3** would reduce potential impacts associated with corrosive soils to less than significant.

Implementation of **Measure GEO-3** would also reduce impacts associated with unstable soils, including lateral spreading, subsidence, liquefaction, or collapse, to less-than-significant levels.

All Other Components: No soil hazards are expected at the ball valve replacement locations, as these are located on engineered fill that was previously placed during the installation of the City's aqueducts. Similarly, no soil hazards are expected at the EBMUD improvements site, as the proposed facility would be located on engineered fill that was previously placed during installation of the ORCS.

As described in Item VI(a), above, landslide potential is considered low due to the flat terrain.

- e) All Components: No septic tanks are proposed for the project; therefore, no impacts are anticipated.

Mitigation Measures

Measure GEO-1: This measure is applicable to the Skywest Pump Station. Proposed facilities would be designed in accordance with the 2001 California Building Code (based on 1997 Uniform Building Code) requirements for seismic activity or more stringent local building code provisions.

Measure GEO-2: This measure is applicable to the Skywest Pump Station and Proposed Pipeline. An analysis of expansive and liquefiable soils shall be conducted as part of the geotechnical investigation for the proposed Skywest Pump Station and proposed pipeline. The investigation shall be conducted by a licensed geotechnical engineer. The study shall provide recommendations applicable to foundation design, earthwork, and site preparation prior to or during the project design phase. Recommendations shall address site specific and adverse soil conditions associated with unstable soils that could affect development of the project. Measures to reduce potential impacts associated with expansive or liquefiable soils include, but are not limited to, the following:

- Removal of the unstable soil, and placement and compaction of select engineered fill for the building pad and foundation support in accordance with ASTM Test Method D 1557; and/or
- Lime treatment of the native expansive clay soils;
- Mixture of the unstable soil with coarse material; or
- Incorporation of a rigid, reinforced concrete slab design.

Measure GEO-3: This measure is applicable to the SFPUC improvements. Due to the potential presence of corrosive soils at the SFPUC improvements site, an analysis of corrosive soils shall be conducted prior to design of the pipeline. Measures to reduce potential impacts associated with corrosive soils include, but are not limited to removal of the corrosive soil and placement and compaction of select engineered fill in accordance with ASTM Test Method D 1557.

Implementation of these measures would reduce potential impacts associated with geologic hazards to less-than significant levels.

Issues (and Supporting Information Sources):

**VII. HAZARDS AND HAZARDOUS MATERIALS --
Would the project:**

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a,b) Proposed Skywest Pump Station: Operation of the Skywest Pump Station would not require the routine transport, use, or disposal of hazardous materials, and therefore would not create a significant hazard to the public or the environment through its normal operations. However, as diesel fuel would be required for the generator at the pump station during emergency events, infrequent transport and disposal, as well as long-term storage of the diesel would be necessary. The fuel would be contained in storage tanks located either aboveground within the generator room

or below ground. With proper handling and storage methods, and adequate design of secondary containment facilities based on local, state and federal regulations, potential on- or off-site consequences associated with accidental spills or releases of these chemicals are considered minimal. If diesel storage exceeds 55 gallons, the City will prepare a Hazardous Materials Business Plan (HMBP) for the Skywest Pump Station (see **Measure HM-1**). The plan would include a hazardous materials inventory listing chemicals stored and used at the Skywest Pump Station. This document will be provided to the City's Fire Department to meet the requirements of the Department's Hazardous Waste Program.

The State Regional Water Control Board (SRWCB) administers the Aboveground Storage Tank Program. The Program requires that "facilities storing 'petroleum' in a single tank greater than 1,320 gallons or facilities storing 'petroleum' in aboveground tanks or containers with a cumulative storage capacity of greater than 1,320 gallons" would be subject to SWRCB regulations. The Program requires that the owners or operators file a storage statement, pay a facility fee, and prepare and implement a federal Spill Prevention Control and Countermeasure (SPCC) Plan. The Plan would discuss the procedures, methods, and equipment in place at the facility to prevent discharges of petroleum from reaching navigable waters. If diesel storage equals or exceeds 1,320 gallons, the City would be required to establish and implement the SPCC (see **Measure HM-2**). Implementation of this measure would reduce potential impacts to less-than-significant levels.

All Components: Construction activities would require the use of certain potentially hazardous materials such as fuels, oils, and solvents. These materials would generally be used for excavation equipment, generators, and other construction equipment and would be contained within vessels engineered for safe storage. Due to the rate of construction, storage of significant quantities of these materials at the construction site is not anticipated. Rather, tender vehicles would most likely provide fuel and lubricant to construction equipment on a daily basis and would be mobilized from an off-site location. Spills during on-site fueling of equipment or an upset condition (i.e., puncture of a fuel tank through operator error), could result in a release of fuel or oils into the environment, including sensitive waterways (i.e., Sulphur Creek). Inclusion of hazardous materials management/spill prevention measures listed in **Measure HM-3** in contractor specifications would reduce impacts from hazardous materials release to a less-than-significant level. Implementation of Best Management Practices for sediment and erosion control (see **Measure WQ-1**) would further reduce the risks associated with hazardous materials release.

- c) EBMUD Improvements: Strobridge School is located approximately one-quarter mile from EBMUD's proposed bypasses at the ORCS. Operation of the bypasses would require use of the portable pump station that is diesel-powered. However, as the diesel would be stored within containment that meet federal, state, and local standards, and the frequency of use would likely be minimal, the potential for accidental release of hazardous materials would be considered less than significant.

Ball Valve Replacements: Mt. Eden High School is located less than one-quarter mile east of the project site. Due to the short duration and limited extent of construction activity, the potential for accidental release of hazardous materials associated with construction activities to affect the nearby school would be considered less-than-significant.

All Other Improvements : There are no existing or proposed schools within one-quarter mile of the other projects components. Therefore, no impacts would occur.

- d) Proposed Skywest Pump Station and Pipeline: The proposed Skywest Pump Station is located on an existing empty lot, which had been used previously as a military base (City of Hayward, 1999). The proposed pipeline is located along Skywest Drive, Golf Course Road, and Hesperian Boulevard. The proposed Skywest Pump Station would not be located on a site that is on a list of hazardous materials sites (*Hazardous Waste and Substances Site List*) compiled pursuant to Government Code Section 65962.5 (State of California, 1998). In accordance with the City's standard procedures, a Phase I Environmental Assessment would be conducted prior to development of the Skywest Pump Station to assess the presence or absence of hazardous materials onsite.

Hazardous materials releases have occurred at the Airport that have resulted in localized contamination (City of Hayward, 2002a). These incidents are summarized in **Table 2-1**, below.

**TABLE 2-1
LOCALIZED CONTAMINATION AT THE HAYWARD EXECUTIVE AIRPORT**

Site	Summary Description
American Air Craft Sales, 21015 Skywest Drive	Five underground tanks were removed from this site in April of 1999. Total Petroleum Hydrocarbons (TPH) were found in the soil and groundwater. Notes in the case file indicate that the tank removal contractor may have punctured the tank during the removal process. There is no indication of remedial action within the case file.
Flightcraft, 19990 Skywest Drive	Four underground tanks were removed from this site in September 1989. The site has been remediated and the case closed by Hayward Fire Department (HFD). However, the Closure Report requires that any soil or groundwater subsequently removed from this site be characterized.
Silver Wings Aviation, 21587 Skywest Drive	A fuel spill from an aircraft onto the tarmac occurred on December 29, 1994. Fuels were contained and absorbed with the assistance of the Hayward Fire Department.
Valley Oil Co. (Flightcraft), 20511 Skywest Drive.	Three underground tanks were removed from this site in January of 1997. Upon closure in 1998 groundwater contamination had been reduced.
FAA, 20305 Skywest Drive	An underground tank was removed in October 1995. Groundwater samples have been collected, and contamination was recorded in the most recent monitoring report (1997). There is no indication of remedial action at this site within the case file.

TABLE 2-1 (continued)
LOCALIZED CONTAMINATION AT THE HAYWARD EXECUTIVE AIRPORT

Site	Summary Description
Air National Guard, 1525 Winton Avenue	The portion of the Airport occupied by the Air National Guard is currently undergoing an Installation Restoration Program (IRP). Two contaminated areas have been identified. A Preliminary Assessment of the site is anticipated to start at the end of 2000.
JT's Fuel & Oil, 20499 Hesperian Boulevard	Four underground tanks were removed from this site in October 1992. The plume is moving toward the south and west and may have commingled with releases from existing and former service stations on the other side of Hesperian Boulevard.

Source: City of Hayward, 2002a

Based on the types of existing and past industrial land uses located in the vicinity of the pump station site and pipeline corridor, and the incidents located in the vicinity of the proposed work sites, there is a potential that site disturbance activities such as excavation could expose hazardous materials from known or unrecorded spills. Encountering of hazardous material may create a significant hazard to the public or the environment. Both the federal and California Division of Occupational Safety and Health Administrations (OSHA) regulate worker exposure and safety during construction activities. Construction workers have to comply with all state and federal regulations for the cleanup, removal, and disposal of hazardous materials, if found, including those set forth by the California Environmental Protection Agency (EPA) and the Department of Toxic Substances Control (DTSC). Implementation of **Measure HM-4**, inclusion of procedures in contractor specifications to follow in the event that contaminated soils are encountered, would reduce impacts from hazardous materials release to a less-than-significant level. This measure would ensure that contaminated material are excavated and disposed of appropriately.

All Other Improvements: Other improvements would be confined to areas previously excavated during installation of water pipelines. It is possible that excavation activities would encounter contaminated soils, if there is migration of contaminated groundwater. However, implementation of **Measure HM-4** would ensure that potential impacts are reduced to less-than-significant levels.

- e,f) Proposed Skywest Pump Station: The Skywest Pump Station and associated pipelines are located within the City of Hayward Executive Airport boundary. These are not habitable structures. Operation of these facilities would not require permanent staff working at the pump station site, but would require routine maintenance by City staff once a week. Maintenance and use of the intertie system during emergency events would not interfere with airport operations, and therefore would not result in safety hazards or risk for people working in the project area.

All Other Components: The other components of the project are located between one to ten miles from the Hayward Executive Airport. Maintenance of the buried pipelines would not expose staff to safety hazards or risks.

- g) ***All Components:*** The proposed project is an intertie system consisting of a pump station and associated buried facilities. Emergency operation of the intertie system would not interfere with an emergency response plan or emergency evacuation plan. Please refer to **Section XV, Transportation / Traffic** for a discussion of emergency access during construction.
- h) ***All Components:*** The proposed project is located within an urban setting and would not expose people to wildfire risks; therefore, no impacts are anticipated.

Mitigation Measures

Measure HM-1: This measure applies to the Skywest Pump Station if 55 gallons or more of diesel is stored onsite. The City shall prepare a HMBP for the Skywest Pump Station prior to its operation; the Plan shall specify the emergency response procedures identified below in the event of a chemical emergency. The City shall provide a copy of the HMBP to the City's Fire Department as part of the Hazardous Materials Program.

- A fire, spill, release or threatened release of hazardous materials or hazardous waste is immediately reported to the facility supervisor during normal working hours and during off hours. If emergency assistance is required, the initial observer or supervisor calls 911.
- The supervisor and/or on-site personnel will notify appropriate City staff or regulatory agencies and/or initiate site-specific response plans or procedures, as appropriate.
- Concurrent with notification, trained personnel or outside contractors will begin cleanup and/or containment of the spill or release as soon as it is safe to do so.
- Should evacuation be necessary, the facility supervisor or incident commander will direct personnel to evacuate the facility. Upon notification, all employees will immediately secure their area and proceed to the assembly area prescribed by the evacuation plan map.
- In the event of an earthquake, conflagration, flood or other major emergency, the evacuation and response plans will be invoked.
- In the event that an employee experiences a serious chemical exposure, illness, or injury, 911 is called and the victim will be transported to the nearest hospital or treated as determined by the paramedics responding to the call. For lesser exposures, any affected employee will be transported to a local medical facility in accordance with City procedures.

Measure HM-2: This measure applies to the Skywest Pump Station if 1,320 gallons of diesel is stored in aboveground storage tanks. The City shall retain a Registered Chemical Engineer to prepare a SPCC Plan in accordance with the guidelines contained in the United States Environmental Protection Agency's regulations on oil pollution prevention (40 CFR 112). This plan discusses procedures, methods, and equipment in place at the facility to prevent discharges of petroleum from reaching navigable waters. A complete copy of the Plan shall be maintained on site.

Measure HM-3: This measure applies to all components. The following hazardous materials management, spill prevention, and spill response/cleanup measures shall be included in contractor specifications for all proposed facilities:

- A facility site plan, including delineation of hazardous material and hazardous waste storage areas, access and egress routes, waterways, emergency assembly areas, and temporary hazardous waste storage areas;
- Materials Safety Data Sheets for all chemicals used and stored at the construction site;
- Spill control and countermeasures, including employee spill prevention/response training;
- An inventory list of emergency equipment;
- Off-loading, safety, and handling procedures for each chemical;
- Notification and documentation procedures.

Measure HM-4: The following procedures shall be included in contractor specifications, in the event that contaminated soils are identified (either visually or through odor detection) during construction activities:

- Stop work in areas of contact;
- If necessary, call responsible agencies. Typically, the Alameda County Health Care Services Agency and the Department of Environmental Health, would be the responsible agency; the San Francisco Bay Regional Water Quality Control Board could be involved if the groundwater or surface water is contaminated, and the California Department of Toxic Substances Control could become involved if soils are contaminated;
- Fence off areas of contamination;
- Perform appropriate clean-up procedures; and
- All contaminated soils would be segregated, profiled, and disposed of appropriately off-site. Required disposal method will depend on the types and concentrations of chemicals identified in the soil. Any site investigations or remediations will be performed in accordance with applicable laws.

Implementation of these measures would reduce potential impacts to less-than significant levels.

Issues (and Supporting Information Sources):	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion of siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation of seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) Proposed Skywest Pump Station and Pipeline: Sulphur Creek crosses the proposed pipeline, and is located less than 300 feet southwest of the Skywest Pump Station. The San Francisco RWQCB is responsible for protecting and regulating water quality in the San Francisco Bay. The RWQCB has developed a Water Quality Control Plan (Basin Plan) (1995) that establishes water quality policies and standards for water bodies in the San Francisco Bay region. Sulphur Creek is not identified in the Basin Plan, but is presumed to share the same beneficial uses as the nearest downstream segment for which uses are specifically identified (San Francisco Bay located approximately 1.5 miles west of the Hayward Executive Airport)¹. The Basin Plan also provides qualitative and numeric water quality standards for the various beneficial uses. Construction activities may contribute to soil erosion and degradation in downstream surface water quality. In addition, effluent from dewatering activities may contain substantial sediment loads. The potential for water quality impacts would be reduced by the use of standard erosion control techniques during project construction activities (see **Measure WQ-1**). These include use of silt fencing, sediment traps, sandbags, baker tanks, and other erosion control devices to control contamination of surface water, as specified in the California Storm Water Best Management Practices Handbook (Stormwater Quality Task Force, 1993) and/or the Manual of Standards for Erosion and Sediment Control Measures (ABAG, 1995).

All Other Components: There are no creeks in the vicinity of the other project elements. However, construction activities may result in water quality degradation of downstream waterways through sedimentation into local storm drains. Implementation of **Measure WQ-1** would reduce potential water quality impacts to a less-than-significant level.

All Components: The proposed construction activities would disturb less than one acre of land. Therefore, the project would not be subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit), and a Storm Water Pollution Prevention Plan (SWPPP) is not required.

- b) All Components: The proposed project would not require the withdrawal of groundwater resources. Construction operations may include dewatering at excavations that are located in areas with high groundwater. Groundwater within the airport is located at depths of approximately 5 to 20 feet below ground surface, but which fluctuates with seasonal variations in precipitation (City of Hayward, 2002a). Dewatering would result in short-term, localized alterations in groundwater levels near the surface in the immediate vicinity of construction sites. These surficial alterations in groundwater levels would not affect groundwater production. Therefore, potential impacts to groundwater resources are considered less than significant.

- c,d,e) All Components: The installation of proposed, new structures, including the Skywest Pump Station and the SFPUC vault would not alter the existing drainage pattern of the project sites because no alteration of streams would occur and there would be minimal new impermeable surfaces. The Skywest Pump Station would be located in an area partially overlain by concrete. Limited new

¹ Beneficial Use of Surface Waters for the Lower San Francisco Bay include: 1) Ocean, commercial and sport fishing; 2) Estuarine Habitat; 3) Industrial Service Supply; 4) Fish migration; 5) Navigation; 6) Preservation of rare and endangered species; 7) Water contact recreation; 8) Noncontact water recreation; 9) Shellfish harvesting; and 10) Wildlife Habitat.

impermeable surface would be associated with the Skywest Pump Station and a vault box at the SFPUC Improvements site. Potential impacts to existing drainage patterns would be considered less than significant.

- f) Please refer to **Sections VI(b), Geology and Soils**, and Item a, above.
- g,h,i) *All Components*: The project does not propose housing or structures within the 100-year flood boundary (FEMA, 1986; FEMA, 1987); therefore, the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding. As new facilities are limited in size, they would not impede or redirect flood flows. Therefore, no impacts relative to flooding are anticipated.
- j) *All Components*: The project sites are not located on or at the foot of hilly terrain or next to large bodies of water. Therefore, they are not subject to seiches, tsunamis, or mudflows, and no impacts are anticipated.

Mitigation Measures

Measure WQ-1: This measure applies to all project components. Best Management Practices shall be implemented to minimize potential water quality impacts during construction.

The City, SFPUC, and EBMUD shall require contractors to implement Best Management Practices (BMPs) for construction activities as specified by the California Storm Water Best Management Practices Handbook (Stormwater Quality Task Force, 1993) and/or the Manual of Standards for Erosion and Sediment Control Measures (ABAG, 1995). The BMPs include measures guiding the management and operation of construction sites to control and minimize the potential contribution of pollutants to storm runoff from these areas. These measures address procedures for controlling erosion and sedimentation and managing all aspects of the construction process to ensure control of potential water pollution sources. Erosion and sedimentation control practices include installation of silt fencing, straw wattle, soils stabilization, revegetation, and runoff control to limit increases in sediment in storm water runoff (e.g., detention basins, straw bales, silt fences, check dams, geofabrics, drainage swales, and sand bag dikes).

This measure would reduce potential impacts to water quality to a less-than significant level.

Issues (and Supporting Information Sources):	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
IX. LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) All Components: The proposed intertie system consists of a pump station, pipelines, and improvements on existing pipelines that connect the SFPUC and EBMUD systems. These improvements are located generally within industrial areas or roadways. The majority of the improvements would be buried underground; of the two facilities that are located above ground, they would be situated in industrial areas that would not result in a disruption, physical division, or isolation of existing residential areas. Therefore, no land use impacts would occur.
- b) Proposed Skywest Pump Station and Pipeline: The majority of the project elements are located within the City of Hayward. Both the Skywest Pump Station and proposed pipelines would be subject to the City of Hayward's General Plan, as well as the Hayward Executive Airport Master Plan and other airport related documents due to the proposed facilities' locations within Airport boundaries.

Hayward Executive Airport Master Plan (April 2002) is a comprehensive development plan for the Hayward Executive Airport. It identifies existing facilities, aviation demand forecasts, as well as a development program for the airport to meet future growth. The Master Plan evaluates alternatives to meet air- and land-side development needs to accommodate aviation demand for the Airport service area over the next twenty years. The Master Plan identifies a recommended Master Plan Concept that maximizes developable properties at the airport for aviation and non-aviation related development. In the northern portion of the property east of the control tower, the Master Plan proposes hangars, helicopter parking positions, a public-use terminal building, paving, and realignment of Skywest Drive / West A Street. The Master Plan does not identify any proposed development on the unoccupied parcel that is the site of the proposed Skywest Pump Station. As the proposed Skywest Pump Station would be located on a parcel that is not intended for airport operations, and the proposed pipeline segment has also been routed to accommodate future road realignment, the project would be consistent with the Master Plan. Therefore, no impacts would result.

Development within the airport property is subject to the Federal Aviation Administration (FAA) policies and regulations, California Department of Transportation's guidelines, and Alameda County Airport Land Use Commission's (ALUC) Airport Land Use Policy Plan (ALUP). Within the project area, the height restrictions is approximately 150 feet. Therefore, the proposed development is consistent with height restrictions of all relevant policies.

Airport policies and regulations protect critical, designated zones (i.e., runway protection zone, inner safety zone, inner turning zone, outer safety zone, sideline safety zone, traffic pattern zone). These zones are intended to be obstacle-free with the exception of specific functions associated with airport operations. As the proposed Skywest Station would be located outside of these designated zones, it would not conflict with relevant airport plans. Therefore, the implementation of the proposed facilities within the airport facilities would not have an adverse effect on airport operations and no impacts would occur.

All Other Components: Other City improvements (ball valve replacements) are located within the City of Hayward, Fremont, Newark, and unincorporated Alameda County. EBMUD improvements are located within unincorporated Castro Valley, and SFPUC improvements are located within the City of Newark. With the exception of the SFPUC vault box, these improvements would not result in new structures. Once in place, these improvements would be consistent with existing uses, and thus would not conflict with plans and policies of affected jurisdictions. The proposed SFPUC improvements consist of installation of up to 75 feet of 42-inch pipe and replacement of up to 30 feet of an existing 20-inch pipe. These improvements would be consistent with adjacent SFPUC and City of Hayward facilities, and would not conflict with plans and policies of the City of Newark. As construction of these improvements would occur within public rights-of-way, the City would be required to obtain necessary encroachment permits from affected jurisdictions (see **Measure LU-1**).

Please see Air Quality, Noise, and Traffic for a discussion of disturbance of land uses during construction.

- c) Please see Section IV.f. No conflicts would occur.

Mitigation Measures

Measure LU-1: This measure applies to all project components except SFPUC Improvements. The City of Hayward Public Works Department and EBMUD shall obtain necessary encroachment permits from affected jurisdictions for construction activities within public rights-of-way.

Issues (and Supporting Information Sources):	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a,b) All Components: The project sites are located primarily on urban lands (unoccupied parcels or roadways), with the exception of the SFPUC improvements and Ball Valve A replacement which are located on an industrial area surrounded by open space. The only aggregate mineral resource of significance is located at the La Vista Quarry (City of Hayward, 2002c). None of the proposed project sites are located within the quarry; therefore, no impacts to mineral resources of value would result from project implementation.

Mitigation Measures

None required or recommended.

Issues (and Supporting Information Sources):	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
XI. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a,b,d) The regional noise environment of the Proposed Project is dominated by noise from transportation sources such as aircraft, freeways, highways, and major arterials. Aircraft operations contribute to the regional environment primarily during takeoff and landing operations, which occur at the City of Hayward Executive Airport. Project construction would result in intermittent, elevated, temporary noise levels in and around the project sites. Construction noise would result from operation of equipment and vehicles. Peak noise levels are associated with backhoes and excavators, which can generate noise levels ranging from approximately 71 to 95 dBA² at 50 feet (Bolt, Baranek, and Newman, 1971; Harns, 1979). Construction noise would fluctuate depending on construction phase, equipment type, and duration of use; distance between noise source and receptor; and presence or absence of barriers between noise source and receptor. Noise from construction activities generally attenuates six to nine dBA per doubling of distance.

Each jurisdiction establishes noise compatibility standards, as shown in **Table 2-2**. Typically, noise levels associated with construction activities are not restricted to the standards outlined below as

² A decibel (dB) is a unit of sound energy intensity. Sound waves, traveling outward from a source, exert a sound pressure level (commonly called "sound level") measured in dB. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response of the typical human ear at commonly encountered noise levels.

these are criteria relevant to permanent development projects. However, they provide guidelines on the acceptable, external noise environment.

**TABLE 2-2
NOISE COMPATIBILITY STANDARDS FOR AFFECTED JURISDICTIONS**

Jurisdiction	Noise Compatibility Standards
City of Hayward	For single family residences and mobile homes: exterior noise environment up to 55 DNL is considered normally acceptable For multi-family residences and hotels, the acceptable noise levels: up to 65 DNL; conditionally acceptable – up to 70 DNL
Castro Valley (unincorporated Alameda County)	For noise-sensitive land uses, acceptable noise levels: up to 60 dBA, L_{dn} ³
City of Fremont	For residential land use, acceptable noise levels: less than 60 L_{dn} .
City of Newark	For Industrial uses, acceptable is 75 dB DNL; conditionally acceptable – up to 80 dB DNL

Source: City of Hayward General Plan, 2002; Alameda County ECAP, 1993; City of Fremont General Plan, 1991; City of Newark General Plan, 1992.

Construction would vary from a couple days to up to approximately 14 months, depending on the project element. Potentially significant impacts would result if the project exposes people to a substantial amount of noise or if the project exceeds the established standards identified in local plans and ordinances. Construction of the proposed project would temporarily increase ambient noise levels at nearby sensitive receptors (residences). Sensitive residential receptors are located approximately 50 to 100 feet away from construction activities along Hesperian Boulevard (where the proposed pipeline installation and some ball valve replacements would occur) and at Oak Street (where the proposed EBMUD improvements would occur). The Ohlone Humane Society Wildlife Rehabilitation Center, located adjacent to SFPUC improvements and Ball Valve A, would be considered potentially sensitive as it houses rehabilitating animals in their preparation to return to the wild. This center is located within approximately 25 feet of proposed work sites.

Proposed Skywest Pump Station: The Skywest pump station is located in an industrial corridor that is surrounded by motels to the north and west. The Skywest Pump Station is located more than 200 feet from the nearest motel. Assuming that peak noise levels associated with construction activity

³ L_{eq} , the energy-equivalent noise level (or "average" noise level), is the equivalent steady-state continuous noise level which, in a stated period of time, contains the same acoustic energy as the time-varying sound level that actually occurs during the same period. L_{dn} , the day-night average noise level, is a weighted 24-hour noise level. With the L_{dn} descriptor, noise levels between 10:00 p.m. and 7:00 a.m. are adjusted upward by 10-dBA to take into account the greater annoyance of nighttime noise as compared to daytime noise.

operation is 95 dBA (as indicated above), at 200 feet, noise levels would attenuate to 77 to 83 dBA. Construction activities would be intermittent and thus would not be sustained at peak levels throughout its duration. Given the distance of construction activities from nearby sensitive receptors, its timing during the daytime hours when it would not cause sleep disturbance, and implementation of **Measures N-1** (use of noise controls on equipment), construction-related noise generated by the proposed Skywest Pump Station would be considered less than significant.

Proposed Pipeline: The proposed pipeline along Skywest Drive, Golf Course Drive, and Hesperian Boulevard would be installed during the day. No sensitive residential receptors are located along Skywest Drive and Golf Course Drive. Residences are located along approximately 1,400 linear feet of Hesperian Boulevard (east side) between Skywest Drive and West Winton Avenue. As previously noted, peak noise levels associated with backhoes and excavators can range as high as 95 dBA at 50 feet. As construction would occur during the daytime hours (when noise standards are less restrictive and sleep disturbance is not an issue), and construction noise would be temporary and intermittent, potential impacts would be reduced to less-than-significant levels with implementation of **Measure N-1**, below. **Measure N-1** identifies methods to reduce noise levels during construction activities, including the use of best available noise control techniques such as mufflers and noise jackets on equipment and tools.

Ball Valve Replacements, EBMUD Improvements, SFPUC Improvements: Construction at the above sites would occur during the daytime hours. The Ball Valve Replacement sites are located generally within major roadways, some of which are within 50 feet of residential uses. The SFPUC improvements are located within an industrial area, but adjacent to a Wildlife Rehabilitation Center. Construction activities may increase temporary noise levels in the immediate vicinity. However, as construction would occur during the daytime hours, when noise standards are less restrictive and sleep disturbance is not an issue, potential impacts at the Ball Valve Replacement and EBMUD improvement sites would be reduced to less-than-significant levels with implementation of **Measure N-1**. Depending on the presence of recovering wildlife present at the Rehabilitation Center, potential noise impacts may be considered potentially significant. The City and SFPUC would coordinate with the Center's staff to ensure that staff are aware of construction schedules and can take actions to protect wildlife during this construction, including the relocation of the animals if necessary (**Measure N-2**). Implementation of **Measure N-2** would ensure that potential impacts to rehabilitating wildlife would be reduced to less-than-significant levels.

- c) *Proposed Skywest Pump Station:* Operation of the proposed Skywest Pump Station would generate temporary increases in ambient noise levels when it is operating for maintenance or emergency events. The proposed facility would be designed to comply with the City's noise compatibility standard for uses adjacent to hotels. As shown in Table 2-2, above, the acceptable and conditionally acceptable external noise levels for hotels are 65 to 70 DNL, respectively. Due to the emergency nature of the proposed use for this pump station facility and infrequency of use, the conditionally acceptable noise level may be adequate. The City would design the proposed pump station such that the appropriate standard is met at the property line of the nearest sensitive receptors.

Weekly maintenance activities and exercising of the pumps, and monthly exercising of the generators would occur during the daytime hours. Operation during an emergency or planned

outage may occur both in the day and night. Based on the likely infrequent pump station use and implementation of **Measure N-3** (design of the pump station to meet noise compatibility standards), potential noise impacts associated with operation of an emergency pump station on surrounding sensitive receptors would be considered less than significant regardless of whether the pumps are operated during the day or night.

EBMUD improvements: Operation of the EBMUD bypasses would require use of a diesel-powered portable pump. The nearest sensitive receptors are located approximately 50 feet to the east and west of the proposed work area. As discussed in Section 1.0, Project Description, EBMUD would install temporary noise barriers or use pumps with noise-reduction enclosures during operations of the portable pumps to minimize noise impacts on surrounding residential uses. The portable pump would be operated only during an emergency or planned outage event. It is not possible to predict the duration of its use. Operation of the pump station may be considered significant if it were operated throughout the evening hours, depending on the level of noise reduction achieved by noise enclosures or barriers. Due to the infrequent nature of use, use of pumps with noise enclosures or installation of noise barriers, and implementation of **Measure N-4** (provision of hotel options for sensitive receptors significantly affected by the diesel pump) potential impacts would be reduced to a less than significant level.

- e,f) *Skywest Pump Station:* The Skywest Pump Station is located within the Hayward Executive Airport. As discussed, no permanent staff would be stationed at the proposed site. Therefore, there are no impacts associated with exposing workers to excessive noise levels from airport activities.

All Other Components: No permanent staff would be stationed at the proposed sites. Therefore, no impacts associated with exposing workers to excessive noise levels from airport activities would occur,

Mitigation Measures

Measure N-1: The following measures apply to all components and shall be implemented to minimize potential noise impacts during construction:

To reduce noise impacts due to construction, the City shall require that construction contractors muffle or control noise from construction equipment through implementation of the following measures:

- Equipment and trucks used for construction should utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, installation of sound blanket around the project site, wherever feasible and necessary). Construction vehicles should be properly maintained and equipped with exhaust mufflers that meet state standards;
- Impact tools (e.g., jack hammers and pavement breakers) used for construction should be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of

pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust should be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves should be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures should be used such as drilling rather than impact equipment whenever feasible; and

- Stationary noise sources should be located as far from sensitive receptors as possible. If they must be located near sensitive receptors, they should be muffled to the extent feasible and enclosed within temporary sheds.

Measure N-2: This measure applies to construction at the Newark Turnout (SFPUC improvements and Ball Valve A replacement). The City and SFPUC shall coordinate with the Humane Society Wildlife Rehabilitation Center to alert Rehabilitation Center staff of the construction dates for the few days of construction near the center. The Center's staff could then monitor the rehabilitating animals during these construction days or move them from the site if necessary.

Measure N-3: This measure applies to the Skywest Pump Station. The City shall design the pump station with noise attenuation such that external noise levels at the property line of the closest sensitive receptor would not exceed 65 or 70 DNL, as appropriate. After completion of the project and during testing of the pump station, the City shall conduct noise tests to ensure that this noise standard is met.

Measure N-4: This measure applies to operation of diesel-powered, portable pump at the proposed bypasses. EBMUD shall coordinate with adjacent residents regarding operation of the diesel-powered portable pumps during night-time hours. EBMUD could offer hotel stays to adjacent residents in cases where nighttime operation exceeds three continuous nights due to an emergency, and where the noise level from the portable pumps exceeds 60 dBA at their properties on a continuous level (exterior) during night-time hours.

Implementation of these measures would reduce potential construction noise impacts to a less-than significant level.

Issues (and Supporting Information Sources):	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) *All Components:* As discussed in Section 1.0, Project Description, and as established in the MOA signed on October 25, 2002, the proposed Intertie system would “provide mutual aid by supplying potable water to the Parties [water agencies] during emergencies or planned critical work.” The proposed improvements would not be used on a routine basis to serve existing demands and would not be used to serve additional growth. Therefore, no impact would occur.
- b,c) *All Components:* The proposed Intertie system consists of new facilities in industrial areas or improvements to existing facilities. The proposed project would not displace existing housing. Therefore, this project would not necessitate the construction of replacement housing elsewhere.

Mitigation Measures

None required or recommended.

Issues (and Supporting Information Sources):	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
--	---	--	---	----------------------

XIII. PUBLIC SERVICES --

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) All Components: Construction of the proposed Intertie System does not involve alteration of government facilities. In addition, as the proposed project would not induce growth (see **Section XII(a), Population and Housing**, above), nor would it result in the need for or creation of increased public services. Therefore, no physical or environmental impacts associated with the provision of new or altered governmental facilities would result.

Mitigation Measure

None required or recommended.

Issues (and Supporting Information Sources):	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
--	---	--	---	----------------------

XIV. RECREATION --

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a,b) Proposed Pipelines: The proposed northern pipeline segment would be located along Golf Course Road and Hesperian Boulevard, roads which front John F. Kennedy Memorial Park. Golf Course Road provides ingress and egress to both the park and Skywest Golf Course (see **Figure 3**), although alternative access is available on West A Street and Skywest Drive, as well as the unnamed road on the northern perimeter of the park. The proposed pipeline would be located on the eastbound lane of Golf Course Road and southbound lane of Hesperian Boulevard. Open trench construction would require closure of one lane of traffic on both roadways, but it would not result in direct impacts to recreational facilities as the construction zones would be confined within the road. Through traffic would also be maintained such that access to the recreation facilities would be unaffected. Indirect effects on nearby recreational users include increased dust, noise, as well as safety hazards. Implementation of mitigation measures identified in **Section III, Air Quality, Section XI, Noise, Section XV, Transportation / Traffic, and Measure R-1** (installation of appropriate signage and fencing) would reduce potential construction-related impacts to less-than-significant levels. No short- or long-term activities or programs would be affected at John F. Kennedy Memorial Park or the Skywest Golf Course as a result of the proposed project.

Ball Valve E is located along a dirt road accessed via the East Bay Regional Park District's Alameda Creek Regional Trail / Stables recreational facility entrance. Construction activity would not have any direct impacts on recreational users, as the work location is not located on or near the trail. Construction-related vehicle access effects on recreational uses at this facility would be considered less than significant.

All Other Components: There are no recreational facilities located within any of the other improvement sites.

Mitigation Measures

Measure R-1: This measure applies to the proposed pipeline component. The City shall place signage in the vicinity of John F. Kennedy Memorial Park warning of ongoing construction activities along Golf Course Road and Hesperian Boulevard. The signage shall provide an estimated duration of construction. In addition, the City shall place construction tape or fencing around the construction zone to reduce safety hazards to those who use the park, especially children.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XV. TRANSPORTATION / TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a, b) **Existing Regional and Local Roadway System:** Regional access to the proposed Skywest Pump Station, and other City improvement sites is provided by Interstate 880 (I-880) (see **Figure 1**). I-880 provides access to Oakland to the north and San Jose to the south, and connects to the network of other regional highways serving the project area (including I-238, I-580, State Route (SR) 92, and SR 84).

Skywest Pump Station and Proposed Pipeline: The Skywest Pump Station is accessed via I-880, Hesperian Boulevard, West A Street, and Skywest Drive (see **Figure 2**). The proposed pipeline is located on Skywest Drive, Hesperian Boulevard, and Golf Course Road. These roads are accessed via I-880, Hesperian Boulevard, and West A Street (see **Figure 2**).

Ball Valve Replacements: The ball valves replacement sites are located along roadways (including Hesperian Boulevard and Union City Boulevard) and nearby flood control channels, as identified in **Table 1-3** of the Project Description. City valve replacement sites are assessed via I-880, Hesperian Boulevard and Union City Boulevard.

EBMUD Improvements: The EBMUD improvement site is located on Oak Street in Castro Valley, a local residential street which is accessed via either Grove Way or Apple Avenue, via I-580 and Foothill Boulevard.

SFPUC Improvements and Ball Valve A Replacement: The SFPUC improvements and Ball Valve A replacement sites are located at the Newark Turnout, which is accessed via Thornton Avenue and Hickory Street. Hickory Street provides access primarily to the Cargill salt ponds located west of the project area, as well the Union Sanitary District sewage treatment plant and the Ohlone Humane Society Wildlife Rehabilitation Center.

Construction Vehicle Trip Generation: Traffic-generating construction activities would include trucks importing / exporting soils and hauling equipment and materials, and the daily arrival and departure of construction workers to and from the work sites.

Skywest Pump Station: Excavation would generate the most off-site construction truck trips. An estimated 1,000 cubic yards (cy) of soil would be excavated for the pump station component. Using the conservative assumption that all soils would be disposed off-site, and an average truck load of 10 cy, approximately 20 one-way truck trips per day would be generated for the Skywest Pump Station on a two week, five working-days per week period⁴. Miscellaneous trips associated with delivery of materials to and from work sites would also occur.

There would be up to 12 workers at the Skywest Pump Station on a daily basis. Assuming that each worker would travel in his own vehicle to and from the work site, and that some midday worker trips would occur, this would result in an estimated 50 construction worker vehicle one-way trips per day.

Based on the number of one-way truck and worker trips calculated above, the peak total traffic trips associated with the Skywest Pump Station component could be up to 75 one-way trips per day. However, actual daily truck trips would depend on the type and intensity of construction activity, as well as the length of the excavation phase.

Proposed Pipeline: An estimated 4,300 cubic yards (cy) of soil would be excavated for the pipeline component. Using the conservative assumption that all soils would be disposed of off-site, and an average truck load of 10 cy, approximately 20 one-way truck trips per day would be generated for the pipeline component on a two month, five working-days per week period⁵. Miscellaneous trips associated with delivery of materials to and from work sites would also occur.

There would be up to 12 workers working along the pipeline route on a daily basis, potentially scattered in more than one location. Assuming that each worker would travel in his own vehicle to and from the work site, and that some midday worker trips would occur, this would result in an estimated 50 construction worker vehicle one-way trips per day.

Based on the number of one-way truck and worker trips calculated above, the peak total traffic trips associated with the pipeline component could be up to 75 one-way trips per day. However, actual

⁴ 1000 cy / 10 cy per truck / 10 days (2 weeks at 5 days per week) = 10 round trips or 20 one-way trips per day

⁵ 4,300 cy / 10 cy per truck / 40 days = 10.7 round trips or 21.5 one-way trips (approximately 20)

daily truck trips would depend on the type and intensity of construction activity, as well as the length of the excavation phase.

Other sites: Construction at the other sites would vary from a couple days to several weeks, and would contribute minor truck trips for short durations relative to the entire project due to the limited excavation required and limited crew involved.

Traffic Impacts

Skywest Pump Station: Construction staging and materials storage for this component would be contained within the existing open parcel adjacent to the proposed site. Traffic-related impacts would result from increased traffic volume on roadways associated with delivery of equipment and materials, import and export of soil, and worker commuting to and from the work site. Impacts associated with increased trips include off-site impacts from the movement of construction trucks. These include short-term and intermittent lessening of roadway capacities due to slower movements of trucks and larger turning radii of the trucks compared to passenger vehicles.

The Final Hayward Executive Airport EA / EIR for the Airport Master Plan provided existing traffic conditions at the airport, and evaluated traffic impacts associated with each airport development scenario (City of Hayward, 2002a). Seventeen study intersections were selected for analysis in the Final EA / EIR. Most of these intersections are located on Hesperian Boulevard, within the project vicinity, and therefore are applicable to the proposed project. As identified in the Final EA / EIR, all of the study intersections currently operate at acceptable levels during both the morning and afternoon peak periods, except at the unsignalized study intersections including the one on Hesperian and Sueirro (City of Hayward, 2002a). Signals at the Suierro Drive and Hesperian Boulevard intersection has since been installed as part of the Home Depot project.

As calculated above, the proposed pump station construction may generate up to 75 one-way trips per day. Worker trips would be limited primarily to the start and end of work, and the remainder of the trips would be dispersed throughout the day. Traffic volumes would not significantly affect local circulation due to the dispersal of the truck trips and the temporary nature of construction activities, particularly as most of the truck trips are concentrated during the excavation period. Based on these factors and the proximity to the freeway system, potential impacts associated with increased traffic congestion and delays would be reduced to less than significant levels with preparation and implementation of a Traffic Control Plan (**Measure T-1**).

Operation of the proposed Skywest Pump Station would result in an average of one round trip per week associated with maintenance of the facility. The number of truck trips could be higher during an emergency or planned outage. However, this contribution would not result in any long-term degradation in operating conditions of the roadway through increase in traffic volume.

Proposed Pipeline: One lane each of Skywest Drive, Golf Course Road, and Hesperian Boulevard would require temporary closure during pipeline installation. Pipeline installation on all project roadways would occur during the daytime hours. Skywest Drive is a two-lane road that provides local circulation for the City of Hayward Executive Airport property, and Golf Course Road is a two-lane road that provides access to the Skywest Golf Course and John F. Kennedy Memorial

Park. Both of these land uses has alternative access via Skywest Drive and an unnamed access road north of John F. Kennedy Memorial Park. Open trench construction would occur at a rate of approximately 100 feet per day, thereby limiting the length of roadway affected by lane closure on any particular day. Due to the short-term nature of construction, maintenance of traffic flows along affected segments, proximity to the freeway system, and implementation of a Traffic Control Plan (see **Measure T-1**), potential traffic impacts associated with closure of a lane along these roads would be considered less than significant.

Hesperian Boulevard is a six-lane arterial which provides an alternative route to I-880. Traffic impacts associated with decreased roadway capacity from closure of one lane of Hesperian Boulevard compounded with the increase of overall construction-related truck traffic during the daytime hours could be considered significant if it occurs during the peak commute hours, as it would result in increased traffic congestion and delays on a highly traveled road. Implementation of **Measure T-1**, limiting construction activities to off-peak traffic hours during the weekdays (9:00 a.m. to 5:30 p.m. in the southbound lane and 9:00 to 3:00 p.m. in the northbound lane) would be required to reduce potentially significant impacts to less-than-significant levels. Due to the short-term nature of construction, maintenance of traffic flows, proximity to the freeway system, implementation of a Traffic Control Plan (including limitations of work hours, potential traffic impacts associated with closure of a lane would be considered less than significant (see **Measure T-1**).

Traffic impacts associated with increased traffic (up to 80 one-way trips per day) on the local roadway system would be similar to those identified for the proposed Skywest Pump Station, and would be considered less than significant as truck trips would be dispersed throughout the day.

Operation of the proposed pipeline would not result in increases in permanent traffic volumes. Therefore, no impacts would occur.

Ball Valve Replacements: Replacements of the ball valves would occur during the daytime. Construction activities along several ball valve replacement sites on Hesperian Boulevard may require closure of portions of one lane of traffic or intersection, including at Hesperian Boulevard and Industrial Parkway, where the ball valve replacement would occur in the middle of the intersection. Construction activities associated with lane closure may result in traffic congestion and delays. However, due to the limited excavation required at these sites, two-way traffic would be maintained at all sites. Due to the temporary nature of construction and with the implementation of **Measure T-1**, which requires preparation and implementation of a Traffic Control Plan and limitations on work hours, potential traffic impacts would be reduced to less than significant levels. Construction-generated traffic would not result in any long-term degradation in operating conditions or level of service on affected roadways. Operation-related truck trips associated with this component are considered less than significant as manual operation of the ball valves would occur only during emergency or planned outage events, which are anticipated to be infrequent.

EBMUD Improvements: Construction activities would require closure of one lane of traffic (approximately 50 feet in length) in the immediate vicinity of the ORCS (near Grove Way). As the road at the work site is wide, it would accommodate one lane of through traffic during construction activities. Due to available alternative access to this street, maintenance of one-lane of traffic flow

using flagger control (see **Measure T-1**), and the temporary nature of construction activities (three to six weeks), potential traffic impacts associated with reduced roadway capacity would be considered less-than-significant. Traffic impacts associated with an increase of construction-related vehicles within the local roadway system would be considered less-than-significant due to the minor vehicles generated from this component.

Operation-related truck trips associated with this component would require hook-up of a portable pump (parked along the shoulder of the road) to the proposed tie-in. Due to the infrequent use (during emergency or planned outage events only), and the existing roadway width, potential impacts would be considered less-than-significant.

SFPUC Improvements and Ball Valve A Replacement: Construction staging and activities for the proposed project would be confined within existing SFPUC easements south of Hickory Street, and would not affect ingress or egress into the salt ponds or adjacent land uses. Potential impacts associated with increased traffic volumes and congestion would be considered less than significant due to minor traffic that would result from this component and the proximity to the highway system. Operation-related truck trips associated with these components are considered less than significant as manual operation of the SFPUC valves and the City's ball valve would require one or two staff accessing the site only during emergency or planned outage events, which would likely be infrequent.

- b) The Alameda County Congestion Management Agency (CMA) prepared and adopted the Alameda County Congestion Management Plan (August 2001), that describes strategies to address congestion problems in the County. Level of Service standards identified in the Plan are intended to regulate long-term traffic increases from future development within the roadway network, and do not apply to temporary construction projects.
- c) The proposed project is an intertie system that is intended to convey treated water between public agencies. It would not affect air traffic patterns; therefore, no impact would occur.
- d) The proposed project does not include design features that would result in safety risks. The majority of the improvements would be located underground. Proposed structures would be located within parcels away from roadways. However, during construction activities, lane closure could increase safety hazards for pedestrians and bicyclists. Potential safety impacts are considered less than significant with the implementation of **Measure T-2**, below.
- e) Construction activities would not result in inadequate emergency access as through traffic would be maintained at all project roadways. Access to adjacent land uses (i.e., residential, commercial, industrial, and park uses) may be blocked during pipeline installation. There are no highly sensitive land uses such as police, fire, medical centers with emergency services, or schools located adjacent to any construction work site. A fire station is located along an access road leading to Ball Valve E; due to its distance from the construction work zone, access into and out of the fire station would be unaffected. To minimize disruption of access to driveways of adjacent residential, commercial, or industrial uses, and thereby reduce the potential for inadequate emergency access, contractor(s) will be required to maintain steel trench plates at the construction sites to restore

access across open trenches (see **Measure T-1**). Implementation of this measure would reduce potential impacts to less-than-significant levels.

- f) Construction-related equipment and trucks for the proposed Skywest Pump Station and proposed pipeline would likely be stored within the empty lot adjacent to the Skywest Pump Station. Pipeline installation along Golf Course Road, Skywest Drive, as well as installation of the bypasses at EBMUD's ORCS would temporarily displace parking along these roadways, including parking for the users of John F. Kennedy Memorial Park along Golf Course Road. Additional parking is available along the north end of the park for park users. Pipeline construction would not require closure of all roadway segments simultaneously. Therefore, parking spaces would also not be displaced at the same time. Due to the temporary nature of construction activities, as well as the limited parking spaces displaced, potential parking impacts are considered less than significant.
- g) The Alameda Contra Costa Transit District (AC Transit) provides bus service in the project vicinity. Bus stops are located along the Hesperian Boulevard. Pipeline installation could affect operation of the bus lines. Disruption to bus service would be minimized with implementation of **Measure T-3**, which requires coordination with AC Transit and relocation of bus stops as necessary. Implementation of this measure would reduce potential impacts to less-than-significant levels. As the proposed pipeline would be installed underground, no long-term impacts to bus service would result. Therefore, the proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation.

Mitigation Measures

Measure T-1: This measure applies to the following components: proposed Skywest Pump Station, proposed pipeline, ball valve replacements, and EBMUD improvements. The City and EBMUD shall incorporate into contract specifications the following requirement: The contractor(s) shall prepare a traffic control plan(s) in accordance with professional traffic engineering standards to show specific methods for maintaining traffic flows on roadways directly affected by pipeline installation, ball valve replacements, and EBMUD improvements. Limitations and restrictions established in the Traffic Control Plan include, but are not limited to the following:

- The City shall restrict hours of construction along Hesperian Boulevard. Specifically, construction would be limited to 9:00 a.m. to 5:30 p.m. in the southbound lane and 9:00 a.m. to 3:00 p.m. on the northbound lane.
- The City shall restrict construction activities for the Skywest Drive / Golf Course Road portion of the pipeline installation to 7:30 a.m. to 4:30 p.m..
- The City shall restrict construction activities for the ball valve sites located in the middle of roadways or intersections to the hours established for construction on Hesperian Boulevard above.
- Contractors shall provide flagger-control along pipeline installation sites to manage traffic control and flows.
- Contractors shall limit the construction work zone in each block to a width that, at a minimum, maintains alternate one-way traffic flow past the construction zone.

- To minimize disruption of access to driveways to adjacent land uses, contractor(s) will be required to maintain steel trench plates at the construction sites to restore access across open trenches. Construction trenches in streets will not be left open after work hours.
- Construction work areas will be secured (i.e., fencing) such that the public is not endangered as a result of construction activities.
- Contractors shall post advanced warning of construction activities to allow motorists to select alternative routes in advance.
- The City shall notify emergency service providers in advance of construction activities for the pipeline component.

Measure T-2: This measure applies to the proposed pipeline, ball valve replacement, and EBMUD improvements components to reduce potential safety hazards to bicyclists and pedestrians. The City and EBMUD shall install appropriate barriers or fencing around construction zones and put up signage showing detours to ensure the safety of bicyclists and pedestrians.

Measure T-3: This measure applies to the City's improvements along Hesperian Boulevard. The City shall coordinate with AC Transit, and incorporate into contract specifications the following requirements: The City shall incorporate a plan, as needed, for the temporary relocation of bus stops on Hesperian Boulevard.

Implementation of these measures would reduce potential impacts to a less-than significant level.

Issues (and Supporting Information Sources):

XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) The proposed Intertie system consists of pumping and conveyance facilities to deliver treated water during emergency or planned outage events. The proposed project would not generate wastewater, and therefore would not exceed wastewater treatment requirements. No impacts would occur.
- b) The proposed Intertie system does not propose nor would it result in the construction of new water or wastewater treatment facilities. Therefore, no impacts would occur.
- c) The proposed project does not propose or result in the construction of new storm water drainage facilities or expansion of existing facilities. The proposed Skywest Pump Station may require connection to the existing storm drain to facilitate discharge of dechlorinated water during pump station start-up and shut-down. Construction and operation of the drainage connection would be considered less than significant due to its limited size and infrequent use.

- d) The proposed project would not require acquisition of additional water supplies beyond the amount already used by the agencies. The Intertie system would be implemented as an emergency facility that would deliver up to 30 mgd of existing water supply from SFPUC to EBMUD or vice versa, and up to 15 mgd of existing water supply from EBMUD to the City of Hayward. As no new water supplies or entitlements would be required, no impacts would occur.
- e) The proposed project consists of an intertie system to pump and convey water from one agency to another during an emergency or planned outage. It would not require wastewater capacity; therefore, no impacts would result from implementation of the project.
- f) Solid waste generation would be limited to construction activities, and would not affect available solid waste disposal capacity in the region. No long-term solid waste generation would be associated with the proposed project and no impacts would occur.
- g) The contractor would be required to comply with all pertinent regulations regarding the disposal of solid waste generated by construction activities.

Mitigation Measures

None required or recommended.

Issues (and Supporting Information Sources):

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
--	---	--	---	----------------------

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| <p>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>b) Does the project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion

- a) Without mitigation, the proposed project does have the potential to degrade the quality of the environment, and to adversely affect potential wetlands habitat (refer to Section IV, Biological Resources). However, with the mitigation measures included as part of this Initial Study, all potentially significant impacts would be reduced to a less-than significant level.
- b) Chapter 5 of the Hayward Executive Airport Master Plan Final EA / EIR evaluated cumulative impacts of the airport development alternatives in combination with 12 residential and four non-residential projects east of I-880, bounded to the north and south by the San Leandro limit and Highway 92, respectively (City of Hayward, 2002a). Due to the location of the proposed Intertie Project within the Airport, the cumulative analysis in the Final EA / EIR would be applicable. The cumulative analysis reviewed impacts in areas including: noise; compatible land use; air quality, water quality; historic, architectural, archaeological and cultural resources; biotic communities; endangered and threatened species of flora and fauna; wetlands; floodplains; farmlands; light emissions; solid waste; design, art and architecture; geology and seismicity; and hazardous materials. The majority of the impacts reviewed would not result in cumulatively considerable incremental effects nor contribute to significant cumulative effects. For those impacts which have that potential to result in incremental significant impacts, implementation of mitigation measures would reduce potential effects to less than cumulatively considerable.

Cumulative construction impacts were evaluated separately. The Final EA / EIR concluded that construction impacts are temporary and of relatively short duration, and that such impacts under the

Airport development alternatives would not result in cumulatively considerable impacts nor contribute to significant cumulative impact.

The proposed project's environmental impacts would be limited to short-term construction impacts which would be reduced to less-than-significant levels with implementation of mitigation measures identified in this document. Therefore, the project would not contribute to cumulatively considerable impacts.

- c) Without mitigation, the project does have the potential to adversely affect human beings, primarily associated with construction activities. However, these impacts would be temporary, lasting only for the duration of construction, and the mitigation measures included as part of this Initial Study would reduce these impacts to a less-than significant level.

REFERENCES:

Alameda County, *East County Area Plan*, (Draft), February 1993.

Alameda County Congestion Management Agency, *Alameda County Congestion Management Plan*, August 2001.

Association of Bay Area Governments (ABAG), *Earthquake Liquefaction Hazards Map (interactive map)*, <http://www.abag.ca.gov/bayarea/eqmaps/liquefac/liquefac.html>.

ABAG, *Earthquake Hazard Map for Hayward / Union City / San Lorenzo – Scenario: South Hayward Segment of the Hayward-Rodgers Creek Fault System*, <http://www.abag.ca.gov/cgi-bin/pickmapx.pl>, posted 13 October 1999.

ABAG, *Earthquake Hazard Map for Fremont / Newark – Scenario: South Hayward Segment of the Hayward-Rodgers Creek Fault System*, <http://www.abag.ca.gov/cgi-bin/pickmapx.pl>, posted 13 October 1999.

Bay Area Air Quality Management District, BAAQMD, *BAAQMD CEQA Guidelines - Assessing the Air Quality Impacts of Projects and Plans*, December 1999.

City of Fremont, *Fremont General Plan*, 1991.

City of Hayward, *General Policies Plan*, amended 24 February 1998.

City of Hayward, *Department of Community and Economic Development, Mitigated Negative Declaration for Planned Development 99-120-01 – Greenberg Farrow Architecture (Applicant) / City of Hayward (Owner)*, June 29, 1999.

City of Hayward, *Hayward Executive Airport Master Plan – Final Environmental Assessment / Environmental Impact Report*, 20 February 2002 (2002a).

City of Hayward, *Hayward Executive Airport Master Plan – Final Technical Report, April 2002* (prepared by Coffman Associates, Inc., Airport Consultants in association with Environmental Science Associates) (2002b).

City of Hayward, *Draft General Plan*, adopted March 12, 2002, last amended November 5, 2002 (2002c).

City of Newark, *Newark General Plan*, 1992.

Federal Emergency Management Agency (FEMA), *Flood Insurance Rate Map, City of Hayward, California, Alameda County, Community Panel No. 065033 0010 D*, Revised 19 December 1986.

FEMA, *Flood Insurance Rate Map, City of Newark, California, Alameda County, Community Panel No. 06009 0005 D*, Revised 16 July 1987.

Ibis Environmental, Inc., *Clapper Rail Habitat Assessment*, 20 February 2003.

Soil Conservation Survey, *Soil Survey of Alameda County, California, Western Part*, issued March 1981.

State Clearinghouse, Office of Planning and Research, *CEQA Guidelines*, 2002.

Sonoma State University, Northwest Information Center, 2002.

State of California, *Hazardous Wastes and Substances Sites List*, April 1998.

SECTION 3

SUMMARY OF MITIGATION MEASURES AND MITIGATION MONITORING AND REPORTING PROGRAM

The following is a summary of mitigation measures integrated into the project which are adequate to reduce all potentially significant impacts to a less-than-significant level.

The MMRP is organized in a table format, keyed to each significant impact and each mitigation measure incorporated into the project. The tables following each measure provide a breakdown of how mitigation measure would be implemented, who would be responsible, and when it would occur. They consist of four column headings which are defined as follows:

- **Implementation Procedure:** If needed, this column provides additional information on how the mitigation measures will be implemented.
- **Monitoring and Reporting Actions:** This column contains an outline of the appropriate steps to verify compliance with the mitigation measure.
- **Monitoring Responsibility:** This column contains an assignment of responsibility for the monitoring and reporting tasks.
- **Monitoring Schedule:** The general schedule for conducting each monitoring and reporting task, identifying where appropriate both the timing and the frequency of the action.

3.1 AESTHETICS

Measure AES-1 This measure applies to all project components. The City of Hayward or its contractors shall restore disturbed areas to their pre-project conditions, such that short-term construction disturbance does not result in long-term visual impacts.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City of Hayward, SFPUC, and EBMUD shall include restoration requirements in contractor specifications	1. The City, SFPUC, and EBMUD review construction specifications.	1. City	1. Prior to construction
2. Contractor restores disturbed areas.	2. Documentation by City, SFPUC, and EBMUD that measures are being implemented.	2. City	2. During construction and final inspection

Measure AES-2: This measure applies to the Skywest Pump Station. The City, or its contractors, shall ensure that all permanent exterior lighting at the Skywest Pump Station is directed downward and oriented away from sensitive uses to ensure that diffuse light does not affect surrounding land uses.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City shall include permanent lighting requirements in contractor specifications.	1. The City reviews construction specifications.	1 City	1. Prior to construction
2. Contractor directs permanent and temporary lighting downwards during construction activities.	2. Documentation by the City that measures are being implemented.	2. City	2. During construction and final inspection

3.2 AIR QUALITY

Measure AQ-1: This measure applies to the Skywest Pump Station. The City shall acquire relevant permits from the BAAQMD associated with the use of a diesel-powered generator. Compliance with the permit conditions (including implementation of Best Available Control Technology (BACT)) would ensure that pollutants emitted from operation of the generator would meet emissions standards and thus would reduce potential air quality impacts to less-than-significant levels. Examples of these conditions include, but are not limited to: constraints on the use of the generator, implementation of BAAQMD approved sources tests to verify compliance with emissions standards, and preparation of monthly reporting materials to be made available to BAAQMD upon request.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City shall submit permit applications to BAAQMD	1. Retain application forms and all supporting material in the Administrative file.	1.City	1. Prior to construction
2. The City shall obtain Authority to Construct from BAAQMD	2. Retain Authority to Construct in Administrative File.	2. City	2. Prior to construction
3. The City shall obtain a Permit to Operate from BAAQMD.	3. Retain Permit to Operate along with emissions test results showing compliance with standards established in the Authority to Construct	3. City	3. Prior to operation

Measure AQ-2: The list of measures below is recommended by BAAQMD as feasible control measures to reduce construction dust emissions. The construction contractor shall implement dust control, which includes but are not limited to, the following elements:

- Water all active construction areas daily;

- Discontinue construction grading activity in wind conditions that cause excessive neighborhood dust problems;
- Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer) in accordance with Section 23114 of the California Vehicle Code during transit to and from the site;
- Pave, apply water or (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites;
- Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites;
- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets; and
- Designate a person or persons to oversee the implementation of a comprehensive dust control program and to increase watering, as necessary.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City, SFPUC, and EBMUD include dust abatement requirements in contractor specifications.	1. City, SFPUC, and EBMUD reviews dust abatement program.	1. City	1. Prior to construction
2. Contractor implements measures in the program.	2. City, SFPUC, and EBMUD document that measures are being implemented.	2. City	2. During construction and final inspection

3.3 BIOLOGICAL RESOURCES

Measure BIO-1: This measure applies to SFPUC improvements. The City or its contractors shall install exclusion silt fencing around the potential wetland due southwest of the SFPUC improvements site prior to start of construction. The City or its contractors shall retain a qualified biologist to direct the contractor on placement of the fencing. The fencing shall be keyed into a shallow (i.e., 4-6 inch deep) trench, and shall be maintained in good condition throughout the course of construction. No construction vehicles, equipment and materials shall be allowed on the protected side of the fence. Movement of the fence for any purpose shall be approved by the qualified biologist.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City shall include silt fencing requirements in contractor specifications.	1. City and SFPUC reviews construction specifications	1. City and SFPUC	1. Prior to construction
2. City retains a qualified biologist to install silt fencing.	2. The City retains contract with biologist in Administrative Record. City and SFPUC documents that measures are being implemented.	2. City and SFPUC	2. During Construction

3.4 CULTURAL RESOURCES

Measure CR-1: The following measure shall be implemented to minimize potential adverse impacts to unknown cultural resources during construction and applies to all project components:

If cultural resources are encountered during construction of the project, the contractor shall avoid altering the materials and discontinue earthwork within 100 feet of the find. At this time, the contractor must contact a qualified archaeologist, one certified by the Registry of Professional Archeologists (RPA), to evaluate the situation. Any identified archaeological resources shall be recorded by the archaeologist on form DPR 422 (archaeological sites) and/or DPR 523 (historic properties) or similar forms. Project personnel shall not collect cultural resources. Procedures for stopping construction in the event that cultural resources are exposed shall be part of the project plans and specifications. In anticipation of discovering cultural deposits, procedures shall be in place so that the contractor can move on to another phase of work, thus allowing sufficient time to evaluate the nature and significance of the find and implement appropriate management procedures.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City, SFPUC, and EBMUD shall review contractor specifications to ensure procedures for cultural resources discovery are included.	1. The City, SFPUC, and EBMUD review construction specifications.	1. The City	1. Prior to construction
2. In the event that cultural resources are found, construction shall stop and a qualified archaeologist shall be consulted.	2. The Contractor shall notify the City, SFPUC, or EBMUD of any cultural resource discovery. Copies of DPR 422 or 523 shall be retained in the administrative files.	2. The City	2. During construction

Measure CR-2: The following measure shall be implemented in the event that human remains are unearthed during construction and applies to all project components:

In the event that prehistoric human remains are encountered, there shall be no further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent human remains until the County coroner makes a determination. If the coroner determines that the remains are Native American, then the Native American Heritage Commission in Sacramento shall be contacted within 24 hours, along with the Most Likely Descendant(s) of the deceased Native American. The dignified treatment or disposition of Native American burial remains and artifacts shall be agreed upon by the City and the appropriate Native Americans in advance of construction (as provided by Public Resources Code Section 5097.98) and shall be written into construction specifications.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
<ol style="list-style-type: none"> The City, SFPUC, and EBMUD shall review contractor specifications to ensure procedures for human remains discovery are included. In the event prehistoric human remains are found, work shall stop and procedures identified above shall be followed. 	<ol style="list-style-type: none"> The City, SFPUC, and EBMUD review contractor specifications. The contractor shall notify the City, SFPUC, and EBMUD of any historic human remains discovery. The City, SFPUC, and EBMUD retain agreement with Native Americans in administrative files and the agreed upon treatment of the find. 	<ol style="list-style-type: none"> The City The City 	<ol style="list-style-type: none"> Prior to construction During construction

3.6 GEOLOGY AND SOILS

Measure GEO-1: This measure is applicable to the Skywest Pump Station. Proposed facilities would be designed in accordance with the 2001 California Building Code (based on 1997 Uniform Building Code) requirements for seismic activity or more stringent local building code provisions.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
<ol style="list-style-type: none"> The City shall include requirements of the California Building Code in facility design. 	<ol style="list-style-type: none"> The City, SFPUC and EBMUD shall review designs to ensure design incorporates seismic requirements. 	<ol style="list-style-type: none"> The City 	<ol style="list-style-type: none"> During design

Measure GEO-2: This measure is applicable to the Skywest Pump Station and Proposed Pipeline. An analysis of expansive and liquefiable soils shall be conducted as part of the geotechnical investigation for the proposed Skywest Pump Station and proposed pipeline. The investigation shall be conducted by a licensed geotechnical engineer. The study shall provide recommendations applicable to foundation design, earthwork, and site preparation prior to or during the project design phase. Recommendations shall address site specific and adverse soil conditions associated with unstable soils that could affect development of the project. Measures to reduce potential impacts associated with expansive or liquefiable soils include, but are not limited to, the following:

- Removal of the unstable soil, and placement and compaction of select engineered fill for the building pad and foundation support in accordance with ASTM Test Method D 1557; and/or
- Lime treatment of the native expansive clay soils;
- Mixture of the unstable soil with coarse material; or
- Incorporation of a rigid, reinforced concrete slab design.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City shall retain a qualified geotechnical engineer to contact a geotechnical investigation of the proposed Skywest Pump Station site.	1. The City, SFPUC, and EBMUD retain contract in administrative files.	1. The City	1. Prior to construction
2. The City shall incorporate recommendations of the geotechnical report in contract specifications/	2. The City, SFPUC and EBMUD review construction specifications.	2. The City	2. Prior to Construction
3. The contractor implements recommendations.	3. The City, EBMUD, and SFPUC document that measures are being implemented.	3. The City	3. During construction and final inspection

Measure GEO-3: This measure is applicable to the SFPUC improvements. Due to the potential presence of corrosive soils at the SFPUC improvements site, an analysis of corrosive soils shall be conducted prior to design of the pipeline. Measures to reduce potential impacts associated with corrosive soils include, but are not limited to removal of the corrosive soil and placement and compaction of select engineered fill in accordance with ASTM Test Method D 1557.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City and SFPUC shall incorporate requirements in contract specifications.	1. City and SFPUC reviews construction specifications.	1. City	1. Prior to construction
2. The contractor implements recommendations.	3. City and SFPUC documents that measures are being implemented.	2. City	2. During construction and final inspection

3.7 HAZARDS AND HAZARDOUS MATERIALS

Measure HM-1: This measure applies to the Skywest Pump Station if 55 gallons or more of diesel is stored onsite. The City shall prepare a HMBP for the Skywest Pump Station prior to its operation; the Plan shall specify the emergency response procedures identified below in the event of a chemical emergency. The City shall provide a copy of the HMBP to the City's Fire Department as part of the Hazardous Materials Program.

- A fire, spill, release or threatened release of hazardous materials or hazardous waste is immediately reported to the facility supervisor during normal working hours and during off hours. If emergency assistance is required, the initial observer or supervisor calls 911.
- The supervisor and/or on-site personnel will notify appropriate City staff or regulatory agencies and/or initiate site-specific response plans or procedures, as appropriate.
- Concurrent with notification, trained personnel or outside contractors will begin cleanup and/or containment of the spill or release as soon as it is safe to do so.
- Should evacuation be necessary, the facility supervisor or incident commander will direct personnel to evacuate the facility. Upon notification, all employees will immediately secure their area and proceed to the assembly area prescribed by the evacuation plan map.
- In the event of an earthquake, conflagration, flood or other major emergency, the evacuation and response plans will be invoked.
- In the event that an employee experiences a serious chemical exposure, illness, or injury, 911 is called and the victim will be transported to the nearest hospital or treated as determined by the paramedics responding to the call. For lesser exposures, any affected employee will be transported to a local medical facility in accordance with City procedures.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City shall prepare a HMBP for the Skywest Pump Station if more than 55 gallons of diesel is stored onsite.	1. The City shall review HMBP for accuracy.	1. City	1. Prior to construction
2. The City shall submit the HMBP to the City's Fire Department.	2. The City retains submittal or signs-off that a copy of the HMBP was submitted to the City's Fire Department.	2. City	2. During construction / prior to operation
3. The City shall retain a copy of the HMBP at the pump station.	3. The City shall signs-off that a copy is being kept at the pump station.	3. City	3. During operation

Measure HM-2: This measure applies to the Skywest Pump Station if 1,320 gallons of diesel is stored in aboveground storage tanks. The City shall retain a Registered Chemical Engineer to prepare a SPCC Plan in accordance with the guidelines contained in the United States Environmental Protection Agency's regulations on oil pollution prevention (40 CFR 112). This plan discusses procedures, methods, and equipment in place at the facility to prevent discharges of petroleum from reaching navigable waters. A complete copy of the Plan shall be maintained on site.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City shall retain a registered chemical engineer to prepare a SPCC Plan if more than 1,320 gallons of diesel is stored in aboveground storage tanks.	1. The City shall retain contract in administrative files and review SPCC for accuracy.	1. City	1. During construction / prior to operation
2. The City shall retain a copy of the HMBP at the pump station.	2. The City signs-off that a copy is being kept at the pump station.	2. City	2. During operation

Measure HM-3: This measure applies to all components. The following hazardous materials management, spill prevention, and spill response/cleanup measures shall be included in contractor specifications for all proposed facilities:

- A facility site plan, including delineation of hazardous material and hazardous waste storage areas, access and egress routes, waterways, emergency assemble areas, and temporary hazardous waste storage areas;
- Materials Safety Data Sheets for all chemicals used and stored at the construction site;
- Spill control and countermeasures, including employee spill prevention/response training;

- An inventory list of emergency equipment;
- Off-loading, safety, and handling procedures for each chemical;
- Notification and documentation procedures.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City, SFPUC, and EBMUD shall incorporate requirements in contract specifications	1. The City, SFPUC, and EBMUD review construction specifications.	1. City	1. Prior to construction
2. The contractor implements recommendations.	3. The City, SFPUC, and EBMUD document that measures are being implemented.	2. City	2. During Construction

Measure HM-4: The following procedures shall be included in contractor specifications, in the event that contaminated soils are identified (either visually or through odor detection) during construction activities:

- Stop work in areas of contact;
- If necessary, call responsible agencies. Typically, the Alameda County Health Care Services Agency and the Department of Environmental Health, would be the responsible agency; the San Francisco Bay Regional Water Quality Control Board could be involved if the groundwater or surface water is contaminated, and the California Department of Toxic Substances Control could become involved if soils are contaminated;
- Fence off areas of contamination;
- Perform appropriate clean-up procedures; and
- All contaminated soils would be segregated, profiled, and disposed of appropriately off-site. Required disposal method will depend on the types and concentrations of chemicals identified in the soil. Any site investigations or remediations will be performed in accordance with applicable laws.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City, SFPUC, and EBMUD shall incorporate procedures in the event that contaminated soils are identified in contract specifications.	1. The City, SFPUC, and EBMUD review construction specifications.	1. City	1. Prior to construction
2. The contractor implements recommendations if contaminated soils are encountered.	3. The City, SFPUC, and EBMUD document that measures are being implemented.	2. City	2. During Construction

3.8 HYDROLOGY AND WATER QUALITY

Measure WQ-1: This measure applies to all project components. Best Management Practices shall be implemented to minimize potential water quality impacts during construction.

The City, SFPUC, and EBMUD shall require contractors to implement Best Management Practices (BMPs) for construction activities as specified by the California Storm Water Best Management Practices Handbook (Stormwater Quality Task Force, 1993) and/or the Manual of Standards for Erosion and Sediment Control Measures (ABAG, 1995). The BMPs include measures guiding the management and operation of construction sites to control and minimize the potential contribution of pollutants to storm runoff from these areas. These measures address procedures for controlling erosion and sedimentation and managing all aspects of the construction process to ensure control of potential water pollution sources. Erosion and sedimentation control practices include installation of silt fencing, straw wattle, soils stabilization, revegetation, and runoff control to limit increases in sediment in storm water runoff (e.g., detention basins, straw bales, silt fences, check dams, geofabrics, drainage swales, and sand bag dikes).

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City, SFPUC, and EBMUD shall incorporate BMP requirements in contract specifications.	1. The City, SFPUC, and EBMUD review construction specifications.	1. City	1. Prior to construction.
2. Contractor shall implement the BMPs.	2. The City, SFPUC, and EBMUD document that appropriate BMPs are implemented during construction	2. City	2. During construction

3.9 LAND USE AND PLANNING

Measure LU-1: This measure applies to all project components except SFPUC Improvements. The City of Hayward Public Works Department and EBMUD shall obtain necessary encroachment permits from affected jurisdictions for construction activities within public rights-of-way.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City and EBMUD shall incorporate need for permit and compliance with encroachment permit requirements in contract specifications.	1. The City and EBMUD review construction specifications.	1. City	1. Prior construction.
2. Contractor shall implement permit conditions.	2. The City and EBMUD document that permit conditions are implemented during construction	2. City	2. During construction and final inspection

3.10 NOISE

Measure N-1: The following measures apply to all components and shall be implemented to minimize potential noise impacts during construction:

To reduce noise impacts due to construction, the City shall require that construction contractors muffle or control noise from construction equipment through implementation of the following measures:

- Equipment and trucks used for construction should utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, installation of sound blanket around the project site, wherever feasible and necessary). Construction vehicles should be properly maintained and equipped with exhaust mufflers that meet state standards;
- Impact tools (e.g., jack hammers and pavement breakers) used for construction should be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust should be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves should be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures should be used such as drilling rather than impact equipment whenever feasible; and
- Stationary noise sources should be located as far from sensitive receptors as possible. If they must be located near sensitive receptors, they should be muffled to the extent feasible and enclosed within temporary sheds.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City, SFPUC, and EBMUD shall incorporate requirements in contract specifications	1. The City, SFPUC, and EBMUD review construction specifications.	1. City	1. Prior to construction
2. The contractor implements recommendations.	2. The City, SFPUC, and EBMUD document that measures are being implemented.	2. City	2. During construction

Measure N-2: This measure applies to construction at the Newark Turnout (SFPUC improvements and Ball Valve A replacement). The City and SFPUC shall coordinate with the Humane Society Wildlife Rehabilitation Center to alert Rehabilitation Center staff of the construction dates for the few days of construction near the center. The Center’s staff could then monitor the rehabilitating animals during these construction days or move them from the site if necessary.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City shall alert the Wildlife Rehabilitation Center of upcoming construction activities.	1. The City retains record of communication in administrative files.	1. City	1. At least a week prior to construction

Measure N-3: This measure applies to the Skywest Pump Station. The City shall design the pump station with noise attenuation such that external noise levels at the property line of the closest sensitive receptor would not exceed 65 or 70 DNL, as appropriate. After completion of the project and during testing of the pump station, the City shall conduct noise tests to ensure that this noise standard is met.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City shall design pump station facility to meet noise compatibility standards 65 or 70 DNL, as appropriate.	1. The City signs-off that the design is appropriate.	1. City	1. Prior to construction
2. The City shall conduct noise testing to ensure that 70 DNL is met at the nearest sensitive receptor (La Quinta Inn).	2. The City retains test results in the administrative files.	2. City	2. During initial testing.

Measure N-4: This measure applies to operation of diesel-powered, portable pump at the proposed bypasses. EBMUD shall coordinate with adjacent residents regarding operation of the diesel-powered portable pumps during night-time hours. EBMUD could offer hotel stays to adjacent residents in cases where nighttime

operation exceeds three continuous nights due to an emergency, and where the noise level from the portable pumps exceeds 60 dBA at their properties on a continuous level (exterior) during night-time hours.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. EBMUD shall coordinate with immediate residents; EBMUD could offer hotel stays to adjacent residences if conditions above apply.	1. EBMUD signs-off that coordination has occurred. If hotel options are given, EBMUD shall retain contract for hotel stays in administrative files.	1. EBMUD	1. During Operation

3.11 RECREATION

Measure R-1: This measure applies to the proposed pipeline component. The City shall place signage in the vicinity of John F. Kennedy Memorial Park warning of ongoing construction activities along Golf Course Road and Hesperian Boulevard. The signage shall provide an estimated duration of construction. In addition, the City shall place construction tape or fencing around the construction zone to reduce safety hazards to those who use the park, especially children.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City shall incorporate signage requirements for John F. Kennedy Memorial Park in contract specifications.	1. The City reviews construction specifications.	1. City	1. Prior to construction.
2. Contractor shall install signage.	2. The City, SFPUC, and EBMUD document that appropriate BMPs are implemented during construction	2. City	2. During construction

3.12 TRANSPORTATION / TRAFFIC

Measure T-1: This measure applies to the following components: proposed Skywest Pump Station, proposed pipeline, ball valve replacements, and EBMUD improvements. The City and EBMUD shall incorporate into contract specifications the following requirement: The contractor(s) shall prepare a traffic control plan(s) in accordance with professional traffic engineering standards to show specific methods for maintaining traffic flows on roadways directly affected by pipeline installation, ball valve replacements, and EBMUD improvements. Limitations and restrictions established in the Traffic Control Plan include, but are not limited to the following:

- The City shall restrict hours of construction along Hesperian Boulevard. Specifically, construction would be limited to 9:00 a.m. to 5:30 p.m. in the southbound lane and 9:00 a.m. to 3:00 p.m. on the northbound lane.
- The City shall restrict construction activities for the Skywest Boulevard / Golf Course Road portion of the pipeline installation to 7:30 a.m. to 4:30 p.m..
- The City shall restrict construction activities for the ball valve sites located in the middle of roadways or intersections to the hours established for construction on Hesperian Boulevard above.
- Contractors shall provide flagger-control along pipeline installation sites to manage traffic control and flows.
- Contractors shall limit the construction work zone in each block to a width that, at a minimum, maintains alternate one-way traffic flow past the construction zone.
- To minimize disruption of access to driveways to adjacent land uses, contractor(s) will be required to maintain steel trench plates at the construction sites to restore access across open trenches. Construction trenches in streets will not be left open after work hours.
- Construction work areas will be secured (i.e., fencing) such that the public is not endangered as a result of construction activities.
- Contractors shall post advanced warning of construction activities to allow motorists to select alternative routes in advance.
- The City shall notify emergency service providers in advance of construction activities for the pipeline component.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City and EBMUD shall incorporate requirements to prepare and implement a traffic control plan in contract specifications	1. The City and EBMUD review contract specifications	1. City	1. Prior to construction
2. The contractor implements traffic control plan.	2. The City and EBMUD sign-off that measures have been implemented..	2. City	2. During construction

Measure T-2: This measure applies to the proposed pipeline, ball valve replacement, and EBMUD improvements components to reduce potential safety hazards to bicyclists and pedestrians. The City and EBMUD shall install appropriate barriers or fencing around construction zones and put up signage showing detours to ensure the safety of bicyclists and pedestrians.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City and EBMUD shall incorporate requirements to install barriers, fencing, and signage in contract specifications	1. The City and EBMUD reviews contract specifications	1. City	1. Prior to construction
2. The contractor implements requirements.	2. The City signs-off that measures have been implemented.	2. City	2. During construction

Measure T-3: This measure applies to the City's improvements along Hesperian Boulevard. The City shall coordinate with AC Transit, and incorporate into contract specifications the following requirements: The City shall incorporate a plan, as needed, for the temporary relocation of bus stops on Hesperian Boulevard.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. The City shall coordinate with AC Transit and incorporate requirements to relocate bus stops in contract specifications	1. The City reviews contract specifications	1. City	1. Prior to construction
2. The contractor implements requirements.	2. The City signs-off that measures have been implemented.	2. City	2. During construction

SECTION 4.0

REPORT PREPARATION

4.1 REPORT AUTHORS

This report was prepared by Environmental Science Associates (ESA), under the direction of Henry Louie, City of Hayward. ESA staff involved include:

- Sue Chau
- Leslie Moulton
- Chris Rogers
- Paul Mitchell
- Paul Miller
- Dan Wormhoudt

In addition, Anne Flannery of Ibis Environmental provided support in the biological resources evaluation.



COMMENTS RECEIVED

AND

STAFF RESPONSE TO COMMENTS



LEAGUE OF
WOMEN VOTERS
OF THE BAY AREA

An Inter-League Organization of the San Francisco Bay Area

March 27, 2003

RECEIVED

MAR 31 2003

Dept. of Public Works

Henry Louie
777 B Street
Hayward, CA 94541-5007

RE: NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION FOR THE SFPUC-
CITY OF HAYWARD-EBMUD INTERTIE PROJECT

Dear Mr. Louie:

We are writing about the Negative Declaration for the Water System Emergency Intertie Project to let you know that we have found this project to be a good example of the cooperative effort among agencies to achieve a more efficient water supply service for the public. We support these cooperative efforts.

However, we do have one concern about the Negative Declaration. The last paragraph on page 2-11, indicates that there is a small wetland near the SFPUC improvement site. It goes on to state that "The site would not likely qualify as a jurisdictional wetland since the U.S. Army Corps of Engineers no longer assumes jurisdiction over isolated wetlands." We point out that this conclusion is premature. While a recent court decision may make this conclusion appear likely, the Corps has not yet made any determination. In fact, the public comment period on this regulatory change is still open, and will remain so for another 21 days.

Thank you for including our comment.

Sincerely,

Eva Alexis Bansner
President

Barbara Salzman
Chair, Water Committee
(510) 924-6057



CITY OF
HAYWARD
HEART OF THE BAY

April 2, 2003

Eva Alexis Bansner / Barbara Salzman
League of Women Voters of the Bay Area
611 Telegraph Avenue, Suite 300
Lafayette, CA 94549

Dear Ms. Bansner and Ms. Salzman:

Thank you for your comments on the SFPUC-COH-EBMUD Water System Emergency Intertie Project Initial Study / Mitigated Negative Declaration (IS/MND, SCH No. 2003022126). The City of Hayward (City) acknowledges the League of Women Voters' concerns regarding potential impacts to the small wetland near the SFPUC improvement site. As described on IS/MND page 2-12, the small wetland located near the SFPUC improvement site would not be affected by the proposed project. In the absence of a discharge of fill into a wetland, the U.S. Army Corps of Engineers does not require a permit regardless of the jurisdictional status of the wetland. By design, the proposed project would avoid the wetland, obviating the necessity for further consideration of its jurisdictional status.

The statement that the Corps "no longer assumes jurisdiction over isolated wetlands" was premature, but was based on recent experience in similar circumstances. Since the Supreme Court Decision on the Corps' authority over isolated wetlands (Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001), also known as SWANCC), and pending a final rule on the definition of "Waters of the U.S.", the San Francisco District Regulatory Branch has exercised discretion with regard to its authority over isolated wetlands on a case-by-case basis. The wetland present near the SFPUC improvements site is of a type and circumstance (i.e., small, seasonal, dominated by facultative wetland plants, and lacking any surface hydrological connection to other wetlands or waters of the U.S.) that is consistent with areas where the Corps has declined to claim its jurisdiction during field verifications and jurisdictional determinations.

Thank you again for your comments. Due to the limited water resources available in California, we will continue to work cooperatively to provide emergency, high-quality, and reliable water supplies to our customers. We will, of course, do this with the outmost regard to limiting and mitigating any environmental impacts. If you have any questions, please call me at (510) 583-4715.

Sincerely,

Henry W. Louie, PE, RCE, REE
Project Manager

cc: Dennis Butler, Director of Public Work -COH
Alex Ameri, Deputy Director of Public Work -COH
Alan Thompson, East Bay Municipal Utility District
Suresh Patel, San Francisco Public Utilities Commission
Steve Peterson, Alameda County Water District
Project File

DEPARTMENT OF PUBLIC WORKS
ADMINISTRATION

777 B STREET, HAYWARD, CA 94541-5007
TEL: 510/583-4700 • FAX: 510/583-3610 • TDD: 510/247-5540

DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5505
FAX (510) 286-5513
TTY (800) 735-2929

RECEIVED

APR 03 2003

Dept. of Public Works



*Flex your power!
Be energy efficient!*

March 5, 2003

ALA880594
ALA-880-18.35
SCH2003022126

Mr. Henry Louie
City of Hayward
Department of Public Works
777 "B" Street
Hayward, CA 94541-5007

Dear Mr. Louie:

HAYWARD INTERTIE PROJECT – NEGATIVE DECLARATION

Thank you for including the California Department of Transportation (Department) in the environmental review process for the Hayward Intertie project. The following comments are based on the Negative Declaration (ND).

Traffic Control Plan

1. In addition to the Traffic Analysis presented in the ND, a Traffic Control Plan should be submitted to the Department for review and approval. The Plan should clearly identify:
 - Staging areas,
 - Operating hours (including the hours during which trucks will be travelling State Routes), project duration, scheduling, phasing, and
 - The total number of construction vehicles and their respective haul routes *per project phase*. Haul routes should be carefully researched as truck prohibitions are in effect on some state routes during particular hours.
2. Hauling on state routes should occur only during off-peak hours only, e.g., from 9:00 AM until 3:00 PM, if possible.

Right of Way

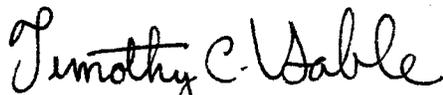
Work that encroaches onto the State right-of-way (ROW) requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans, clearly indicating State ROW, must be submitted to the address below.

Traffic-related mitigation measures will be incorporated into the construction plans during the encroachment permit process.

Sean Nozzari, District Office Chief
Office of Permits
California DOT, District 4
P.O. Box 23660
Oakland, CA 94623-0660

Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or patricia_maurice@dot.ca.gov with any questions regarding this letter.

Sincerely,



TIMOTHY C. WABLE
District Branch Chief
IGR/CEQA

c: Phillip Crimmins, State Clearinghouse



CITY OF
HAYWARD
HEART OF THE BAY

March 31, 2003

Mr. Timothy C. Sable - Department of Transportation
111 Grand Avenue
P.O. Box 23660
Oakland, CA 94623-0660

Subject: SFPUC-COH-EBMUD Water System Emergency Intertie Project -IS/MND

Dear Mr. Sable:

Thank you for your comments on the SFPUC-COH-EBMUD Water System Emergency Intertie Project Initial Study / Mitigated Negative Declaration (IS/MND). The City of Hayward (City) has reviewed the California Department of Transportation's (Department's) recommendations regarding additional provisions to be included in the Traffic Control Plan. The project is located primarily within the City of Hayward, with smaller work sites in Castro Valley and the cities of Fremont and Newark. Staging of equipment, materials, and worker vehicles would occur adjacent to the work sites, with the majority of the equipment and material stored at the open parcel adjacent to the proposed Skywest Pump Station off of Skywest Drive (see IS/MND pages 1-20). The proposed project would not occur within the Department's right-of-ways.

The City does not anticipate high volumes of truck traffic from either construction or operation of the proposed project affecting State Routes. Spoil material would be hauled to the nearest landfill in the City of Hayward. Due to the proximity of the main project sites to the Landfill Management's landfill at 4001 W. Winton Avenue, spoils would be hauled to this location via local roads. Haul routes include Hesperian Boulevard and W. Winton Avenue, both City roadways. Therefore, the City does not anticipate significant traffic volume on the highway system, especially during the peak traffic hours (as the City has imposed its own limitations on hours of construction activities (IS/MND page 1-22)). The City will incorporate into construction specifications a provision to limit any hauling (e.g. of project materials) on State Routes during the off-peak traffic hours to the extent feasible.

As the proposed project would not occur within the Department's rights-of-way, an encroachment permit is not required. Likewise, since any truck traffic from the site would not impact State Routes, the submittal of the Traffic Control Plan for review and approval would also not be required. However, the City will continue to encourage contractors to limit any hauling activities on State Routes during off-peak hours, to the extent feasible.

We appreciate your comment and time. If you have any questions, please call me at (510) 583-4715.

Sincerely,

Henry W. Louie, PE, RCE, REE
Project Manager

cc: Dennis Butler, Director of Public Work -COH Alex Ameri, Deputy Director of Public Works -COH
Alan Thompson, East Bay Municipal Utility District Steve Peterson, Alameda County Water District
Suresh Patel, San Francisco Public Utilities Commission
Project File

DEPARTMENT OF PUBLIC WORKS
ADMINISTRATION

777 B STREET, HAYWARD, CA 94541-5007

TEL: 510/583-4700 • FAX: 510/583-2610



Department of Toxic Substances Control



Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

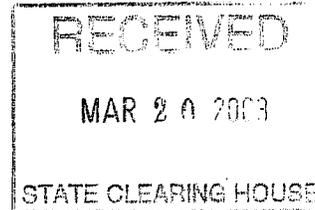
Edwin F. Lowry, Director
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Gray Davis
Governor

March 19, 2003

Mr. Henry Louie, P.E.
City of Hayward, Department of Public Works
777 B Street
Hayward, California 94541-5007

Clear
3-27-03
e



Dear Mr. Louie:

Thank you for the opportunity to comment on the proposed San Francisco Public Utilities Commission-City of Hayward, East Bay Municipal Utilities District, and Alameda County Water District (SFPUC-City-EBMUD-ACWD) Water System Emergency Intertie Project (Project) Initial Study, Mitigated Negative Declaration (IS/MND) [2003022126]. As you may be aware, the California Department of Toxic Substances (DTSC) oversees the cleanup of sites where hazardous substances have been released pursuant to the California Health and Safety Code, Division 20, Chapter 6.8. As a potential responsible agency, DTSC is submitting comments to ensure that the environmental documentation prepared for this project to address the California Environmental Quality Act (CEQA) adequately addresses any required remediation activities which may be required to remediate any hazardous substance release.

The project is being undertaken by the City, in coordination with the SFPUC, EBMUD, and ACWD and proposes the construction of a pump station and approximately 1.5 miles of pipeline that would connect the EBMUD and SFPUC water systems in the event of an emergency such as natural disaster or outage associated with repairs. The proposed project would be located within the three water service areas of EBMUD, Hayward, and ACWD. The proposed pump station (Skywest Pump Station) would be located on an unoccupied parcel off of Skywest Drive; the proposed pipeline would connect the Skywest Pump Station, the EBMUD and the SFPUC systems. The pipeline would traverse Golf Course Road, Skywest Drive, and Hesperian Boulevard. The IS/MND report indicated that the existing land uses in the project area include predominantly industrial and commercial uses, as well as some residential uses. A Phase I Environmental Assessment would be prepared for the Skywest Pump Station to assess whether hazardous substances have been released at the proposed station. We strongly recommend that a historical assessment of past uses along the proposed pipeline as well as the pump station be completed to determine if contaminated soil or groundwater may be encountered. Based on that information, sampling may be required. If hazardous substances have been released, they will need to be addressed as part of this project.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

Mr. Louie
March 19, 2003
Page Two

Section VII of the IS/MND also discussed some localized contamination identified at the Hayward Executive Airport area which may not have been remediated. If any of these contaminated areas will be disturbed during the construction phase of the project, they will also need to be addressed.

For example, if contaminated soil must be excavated, the CEQA document should include: (1) an assessment of air impacts and health impacts associated with the excavation activities; (2) identification of any applicable local standards which may be exceeded by the excavation activities, including dust levels and noise; (3) transportation impacts from the removal or remedial activities; and (4) risk of upset should there be an accident at the site.

DTSC can assist your agency in overseeing characterization and cleanup activities through our Voluntary Cleanup Program. A fact sheet describing this program is enclosed. We are aware that projects such as this one are typically on a compressed schedule, and in an effort to use the available review time efficiently, we request that DTSC be included in any meetings where issues relevant to our statutory authority are discussed.

Please contact Annina Antonio of my staff at (510) 540-3844 if you have any questions or would like to schedule a meeting. Thank you in advance for your cooperation in this matter.

Sincerely,



Barbara J. Cook, P.E., Chief
Northern California - Coastal Cleanup
Operations Branch

Enclosures

cc Please see next page

Mr. Louie
March 19, 2003
Page Three

cc: without enclosures

Governor's Office of Planning and Research
State Clearinghouse
P. O. Box 3044
Sacramento, California 95812-3044

Guenther Moskat
CEQA Tracking Center
Department of Toxic Substances Control
P. O. Box 806
Sacramento, California 95812-0806



CITY OF
HAYWARD
HEART OF THE BAY

March 31, 2003

Barbara J. Cook
Department of Toxic Substances Control
Northern California – Coastal Cleanup Operations Branch
700 Heinz Avenue, Suite 200
Berkeley, CA 94710-2721

Subject: SFPUC-COH-EBMUD Water System Emergency Intertie Project -IS/MND

Dear Ms. Cook:

Thank you for your comments on the SFPUC-COH-EBMUD Water System Emergency Intertie Project Initial Study / Mitigated Negative Declaration (IS/MND). The City of Hayward (City) acknowledges Department of Toxic Substances Control (DTSC's) concerns regarding exposure of hazardous materials during excavation and its recommendation to evaluate the consequences of such exposures and to address the presence of existing contaminated soil or groundwater within the project area. The project include standard engineering practices proposed as part of the project, compliance with relevant regulations, and mitigation measures to ensure that all potential impacts associated with hazardous materials would be reduced to a less-than-significant level.

CEQA requires the identification of potentially significant impacts and mitigation measures that would reduce such impacts to less than significant levels. The IS/MND provides a summary of the potential contaminants that may be encountered along pipeline corridor on Skywest Drive (p. 2-21 and 2-22). Due to the presence of hazardous materials in the vicinity, site disturbance activities could expose hazardous materials. That, in turn, may create a hazard to the public or the environment (IS/MND p. 2-22). As part of the project, the City shall conduct a Phase I Environmental Assessment prior to development of the Skywest Pump Station. The City acknowledges that "construction workers have to comply with all state and federal regulations for the cleanup, removal, and disposal of hazardous materials, if found, including those set forth by the California Environmental Protection agency (EPA) and the Department of Toxic Substances Control (DTSC)" (IS/MND p. 2-22)

The IS/MND also provides mitigation measures that would reduce potential hazardous materials impacts on public health and the environment. Specifically, Measure HM-3 would require inclusion of hazardous materials management, spill prevention, and spill response/cleanup measures in the construction specifications. Measure HM-4 outlines procedures (included as part of contractor specifications) that shall be taken in the event that contaminated soils are encountered, including stopping work, calling responsible agencies if necessary, fencing off areas of contamination, cleaning up site, and profiling / disposal off-site of contaminants. The City will adopt these measures as part of the Mitigation Monitoring and Reporting Program, which is a condition of project approval.

The City has adequately identified the potential for hazardous materials impacts in the IS/MND, and provided measures that would reduce such impacts to less than significant levels and therefore ensure the safety of public health and minimal risk to the environment. The specific evaluation of dust, noise, and traffic impacts associated with disturbance and transport of hazardous materials are indirectly addressed by

DEPARTMENT OF PUBLIC WORKS
ADMINISTRATION

777 B STREET, HAYWARD, CA 94541-5007
TEL: 510/583-4700 • FAX: 510/583-3610 • TDD: 510/247-3340

proper procedures to contain and dispose hazardous materials if found. No revisions to the analysis of the *Draft IS/MND* or the addition of mitigation measures are required.

We appreciate your comment and provision of information regarding the Voluntary Cleanup Program. If you have any questions, please call me at (510) 583-4715.

Sincerely,

A handwritten signature in black ink, appearing to read "Henry W. Louie". The signature is fluid and cursive, with a long horizontal stroke at the end.

Henry W. Louie, PE, RCE, REE
Project Manager

cc: Dennis Butler, Director of Public Work -COH
Alex Ameri, Deputy Director of Public Works -COH
Alan Thompson, East Bay Municipal Utility District
Suresh Patel, San Francisco Public Utilities Commission
Steve Peterson, Alameda County Water District
Project File