ATTACHMENT 9

MULTI-HAZARD EMERGENCY RESPONSE PLAN

POINT MOLATE

Multi-Hazard Emergency Response Plan

CITY OF RICHMOND | JUNE 2020

WINEHAVEN LEGACY
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DRAFT

POINT MOLATE MIXED-USE PROJECT MULTI-HAZARD EMERGENCY RESPONSE PLAN

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
Cal ARP	California Accidental Release Prevention
CAER	Community Awareness and Emergency Response
CERT	Community Emergency Response Team
CWS	Community Warning System
CWPP	Community Wildfire Protection Plan
CCHS	Contra Costa Health Services
EAS	Emergency Alerting System
EDIS	Emergency Digital Information System
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
FMAG	Fire Management Assistance Grant
HMCP	Hazardous Materials Contingency Plan
IC	Incident Command
ICS	Incident Command System
MHERP	Multi- Hazard Emergency Response Plan
NIMS	National Incident Management System
OAEOP	Operations Area Emergency Operations Plan
REACT	Richmond Emergency Action Community Teams
RFD	Richmond Fire Department
RMC	Richmond Municipal Code
RMP	Risk Management Plan
ROW	Right-of-way
SFBAAB	San Francisco Bay Area Air Basin
SEIR	Supplemental Environmental Impact Report
SEMS	Standardized Emergency Management System
TENS	Telephone Emergency Notification System
USGS	United States Geological Survey
WERP	Wildfire Emergency Response Plan
WETA	Water Emergency Transportation Authority
WUI	Wildland-Urban Interface
WWTP	Waste Water Treatment Plant

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Executive Summary

California is prone to various disasters, most notably those from excessive rain (flooding and other storm damage), fires, and earthquakes. The Governor has made 309 State of Emergency declarations, about 40 percent of which were related to floods and about 30 percent of which were related to fires in the period from 1950-2017. Major earthquakes have occurred less frequently than flooding and fires—representing about 7 percent of state emergency declarations. However, when they do occur, earthquakes can be some of the most destructive types of disasters. Specifically, three out of the last five most deadly disasters in the state since 1950 have been earthquakes (Legislative Analyst Office, 2019).

The number of state emergency declarations has averaged about 60 per decade and the state typically has had 10 to 20 Major Disaster and Emergency Declarations per decade in recent decades. An exception to this general stable rate is federal Fire Management Assistance Grant (FMAG) declarations for large wildfires that risk becoming major disasters. The number of FMAGs that the state has received has increased substantially in recent decades, from an average of fewer than five per decade in the 1970s, 1980s, and 1990s to an average of about ten per year (100 per decade) since 2000. (Legislative Analyst Office, 2019).

Considering the inevitability of disaster occurrence, the importance of emergency preparedness cannot be understated. Emergency preparedness refers to the preventive measures taken to reduce the severity of impacts that can result from an emergency. The goal of emergency preparedness is to lessen the impact of an emergency on vulnerable populations, to ready an organization for an influx of activity, and to design a coordinated plan that reduces the waste of resources, time, and efforts. Emergency preparedness has the potential to save the maximum number of lives and property during a disaster, and it aims to return the affected populations to normalcy as quickly as possible. An Emergency Response Plan provides guidance and outlines responsibilities of preparedness activities specific to an organization or community.

In order to comply with the required Supplemental Environmental Impact Report (SEIR) Mitigating Measures for the Point Molate Mixed Use Project (Project), this site-specific Multi-Hazard Emergency Response Plan (MHERP) has been developed to guide safe evacuations of the Project Site during an emergency in a manner that does not interfere with existing evacuation plans and procedures for sheltering in place. The MHERP is a companion document to the Project's Wildfire Emergency Response Plan (WERP) prepared by Dudek (May 2020), which focuses solely on community preparedness efforts and pre- and post-wildfire response measures. While the MHERP also addresses wildfire, the focus of this document is earthquake and chemical release hazards, which, although rare in occurrence, are the most likely hazards to impact the Project Site.

The MHERP is a tool to be utilized by the Project's HOA, community members, and local emergency responders to support a communitywide understanding of the most common hazards that could impact the Project Site (Chapter 4), the community's emergency response strategy (Chapter 5), plan implementation and preparedness functions and responsibilities (Chapter 6), and community response action guides (Chapter 7).

Note that Chapter 7 is a quick reference guide for Project residents and business owners, providing recommended disaster-specific response procedures.

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1 Introduction, Purpose, and Objectives

Natural and man-made hazards may threaten any community and at any time. Disaster-related losses in the United States continue to rise (FEMA, 2020), which makes emergency response planning in new and existing communities an essential task. Threats to the Point Molate Mixed Use Project may include wildfires, earthquakes, intruders, and severe weather, among others. This Multi-Hazard Emergency Response Plan in tandem with the Project's Wildfire Emergency Response Plan considers those threats that are most likely to occur within the Project Site, which include wildfire, earthquake, and chemical release.

Communities have numerous reasons to become more "Disaster-Resistant." The occurrence of disasters has resulted in a realization that improving resistance to disasters will protect lives and safeguard residents and the public services they rely upon.

1.1 Purpose

The purpose of preparing this MHERP for the Project is to ensure safe evacuation of the Project Site during an emergency in a manner that does not interfere with existing evacuation plans and procedures for sheltering in place (City of Richmond, 2020a). The MHERP establishes protocols for evacuation, identifies refuge areas, and provides recommendations for how the Point Molate community can prepare for a potential emergency, such as establishing annual informational sessions, informing the community of both the MHERP and WERP and encouraging them to become familiar with their content, assembling emergency supply kits, providing instructions for how to shelter-in-place, and coordinating the warning system response with regional agencies.

1.2 Goals and Objectives

Ultimately, the goal of this MHERP is to ensure that the Project Site design does not unnecessarily expose the site's population to unsafe conditions by providing an evaluation of the likeliest threats and the appropriate responses, given the site's unique location and response alternatives. This MHERP must also comply with and complement existing emergency response and evacuation plans, adopted by local and regional agencies charged with responding to hazard-based emergencies on or impacting the Project Site. Other goals of this plan include:

- Protect lives and property;
- Ensure the safety of community residents and visitors;
- Respond to emergencies promptly and properly;
- Ensure coordination with local authorities, emergency operations plans and community resources;
- Provide emergency response plans, services, and supplies to businesses and residents; and
- Restore normal services as quickly as possible.

In order to achieve these goals, the MHERP meets the following objectives:

- Increase awareness of the Project area's most likely hazards;
- Reduce the likelihood of hazards negatively impacting the Project area;
- Implement systems and practices to avoid or minimize hazard impacts; and
- Identify preparedness functions and responsibilities.

Further, the MHERP addresses the following, per the Project's SEIR Mitigation Measure 4.7-1:

- Identify protocols for evacuation.
- Provide recommendations regarding emergency supply kits and HEPA filter masks in the case of an earthquake, wildfire, or chemical release.
- Identify the location of warning system devices such as sirens and describe how the warning system would be integrated with the Community Warning System (CWS).
- Identify the locations of appropriate refuge areas, emergency evacuation routes, and shelter-in-place as a contingency to evacuation.
- Require community informational sessions to inform citizens of the evacuation procedures, refuge locations, and shelter-in-place procedures and how to appropriately respond during an emergency.
- Identify signage locations on the Project Site that will inform residents and visitors of the location of refuge areas and places to shelter in place.
- Require coordination of emergency plans with Contra Costa Health Services (CCHS) to ensure an adequate level of emergency preparedness for Project Site visitors.
- Require coordination with the Water Emergency Transportation Authority (WETA) to provide emergency response planning and coordinated water-escape services.

2 Site Description and Project Overview

2.1 Project Location and Site Description

The Project Site is owned by the City of Richmond (City) and is located on the San Pablo Peninsula within the City limits in Contra Costa County (County) (**Figure 1 and Figure 2**). The Project Site is bound by the San Francisco Bay (Bay) to the west, open space parcels to the north and south, and the Chevron®-Richmond Refinery to the east, with the 480-foot tall hillsides of Potrero Ridge separating the refinery from the Project Site. Approximately 136 acres of the approximately 412-acre Project Site are submerged in the Bay, leaving approximately 276 acres above water. The Project Site is approximately 1.5 miles north of Interstate 580 (I-580) and the Richmond-San Rafael Bridge, and has direct freeway access via Stenmark Drive, a City-owned roadway. The Assessor's Parcel Number of the Project Site is 561-100-008.

Historically (20th Century), the Project Site was used primarily for fishing, commercial, and most recently, naval activities. The Project Site is now in caretaker status, with the City providing maintenance of the remaining buildings and facilities. Multiple small businesses currently hold licenses to utilize space on the Point Molate Site, but these licenses will be reevaluated for feasibility and may be terminated to allow Project development. The City currently uses approximately 18 acres of the southwest portion of the Project Site for Point Molate Beach Park. The park includes a paved parking area, picnic tables, portable toilets, and shoreline access. Public use is allowed at the Point Molate Beach Park during specified hours. The Project would retain Point Molate Beach Park for public use.

The vicinity surrounding the Project Site is dominated by industrial uses and open space. Current uses on the peninsula include the Chevron®-Richmond Refinery, a chemical plant, railroad terminals, parks, and a yacht harbor. The Chevron® refinery facilities cover over half of the peninsula (City of Richmond, 2012), including lands adjacent to the Project Site. To the north of the Project Site is open space that serves as a buffer for Chevron® oil operations, a rod and gun club for Chevron® employees, and a marina. Further to the north lies the Point San Pablo Yacht Harbor. To the east is Potrero Ridge, dominated on its east side by above-ground storage tanks and refinery facilities owned and operated by Chevron®.

2.1.1 Geography

Topography

Generally, the topography of Contra Costa County is hilly and mountainous, including such areas as the San Pablo Ridge and Mount Diablo, and low-lying regions throughout. The topography of the Project Site is characteristic of both uplands in the coastal range and Bay tidal flats. Elevations on the Project Site range from mean sea level, along the western shoreline of the Project Site, to 480 feet above mean sea level along the crest of the Potrero Ridge, which forms the Project Site's eastern border. The Project Site slopes range from relatively flat within the open shoreline areas to over 30 percent along the steep Potrero Ridge hillsides.

Geology

The location of the Project Site is in California's Coast Ranges geomorphic province, which lies between the Pacific Ocean and the Great Valley of California and stretches from the Oregon border to the north and continues south to the Santa Ynez River near Santa Barbara. The northern and southern portions of the province are divided by a depression containing the Bay. Much of the Coast Range province is characterized by northwest trending mountain ranges, ridges, and valleys composed of the Franciscan Complex (California State Parks, 2015). The Franciscan Complex forms the bedrock of the Project Site, specifically Franciscan sandstone and shale (ENGEO, 2019).

Soils

Over the past century, mud flats along the shoreline have been artificially filled to create the low-lying areas of the Project Site. Virtually all fills in the Bay region have been placed on top of soft sediments known as "Bay Mud."

2.1.2 Climate

The climate of the Bay Area is characterized as Mediterranean, with cool, wet winters and relatively warm, dry summers. Analysis of long-term precipitation records indicates that wetter and drier cycles, lasting several years each, are common in the region.

Richmond enjoys a very mild climate year-round. The climate is slightly warmer than the coastal areas of San Francisco, the Peninsula, and Marin County; it is however more temperate than areas further inland. The average highs range from 57° F (14° C) to 73° F (23° C) and the lows between 43° F (6° C) to 56° F (13° C) year-round. Richmond usually enjoys a late summer, and September is, on average, the warmest month. January is on average the coldest month (Contra Costa County, 2018).

The Project Site is subject to a coastal climate regime. Summer months are often characterized by the presence of a semi-permanent high-pressure cell centered over the California coast. This high cell sits off the California coast and is the main influence on air quality in the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are generally weak and diffuse by the time they reach the Bay Area.

The average annual rainfall at the Project Site is 23.14 inches, with 83 percent of the precipitation occurring from November through March. Summer maximum temperatures average 70.4 degrees Fahrenheit (ºF) in July with September averaging the highest temperatures annually at 74.1ºF, and winter minimum temperatures average 42.6ºF in January (Western Regional Climate Center, 2016).

Winds originating from the open ocean find their way into the Bay and are swept eastward through the Carquinez Straits to the Sacramento and San Joaquin valleys. The average wind speed is 6 to 9 miles per hour with stronger winds from March through August; the strongest winds are in June.

SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 1

Regional Location

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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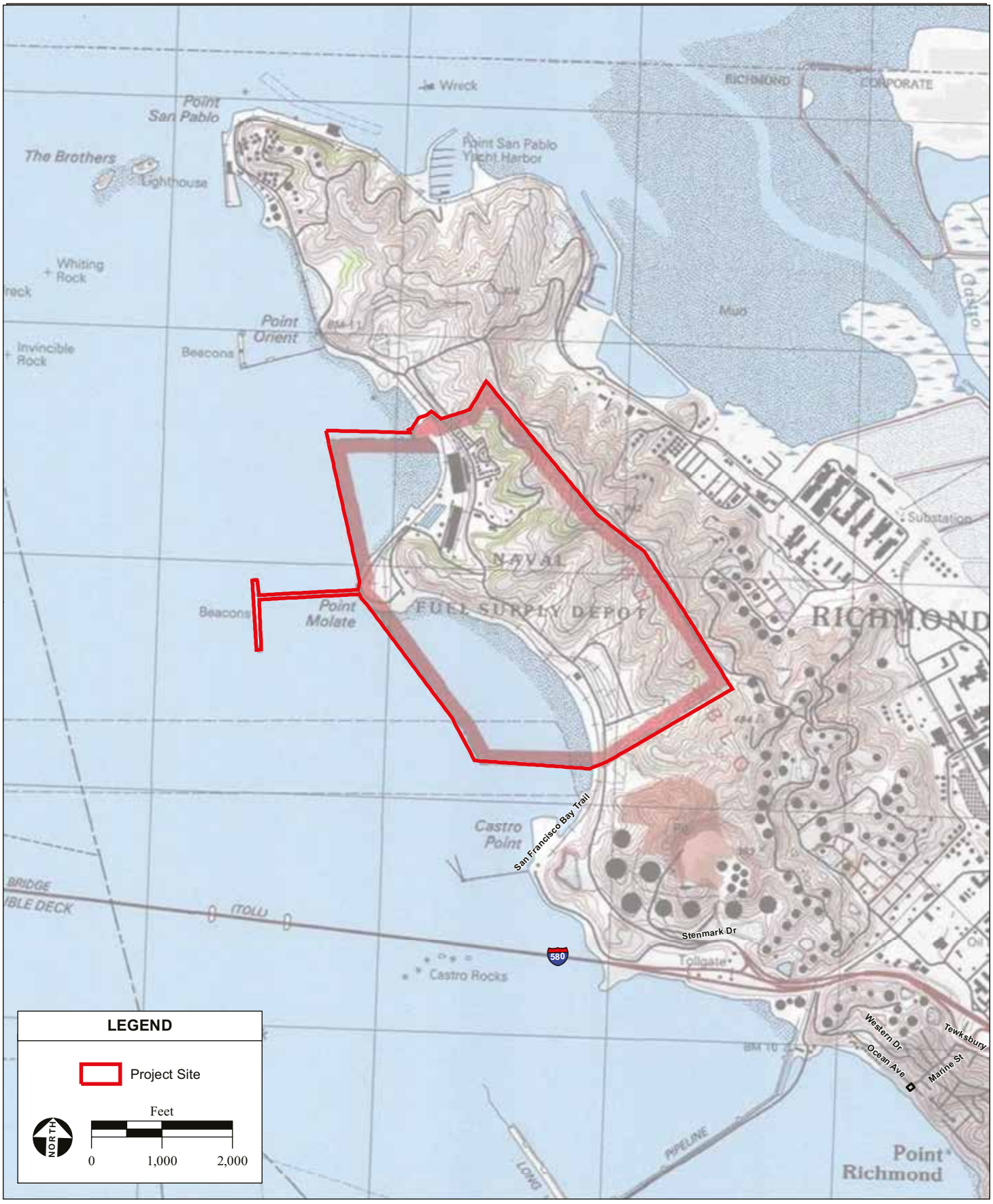

SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 2

Site Vicinity

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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2.1.3 Past Disasters

Natural and manmade hazards that have affected the San Pablo Peninsula vicinity in the past are likely to occur again; consequently, the process of identifying hazards includes determining if a hazard has occurred previously. **Tables 1 and 2** identify the type of disasters declared in Contra Costa County and specific disaster events that have occurred between 1950 and 2009, respectively. More detailed discussion of Contra Costa County hazard history is provided in the CalOES 2010 Multi-Jurisdictional Local Hazard Mitigation Plan. The nearly 60-year span covered by this document is considered appropriate for representing the disaster types and frequencies that the Project site may experience, although many of these disasters are specific to features not occurring at the Project Site.

Table 1. Declared Disasters Affecting Contra Costa County 1950-2009

Hazard	Number of Incidents
Flood	12
Weather/Storm	6
Drought	3
Wildfire	0
Energy Shortage	2
Earthquake	1
Landslide	0
Infrastructure Related	1
Oil Spill	1
Total:	**26**

Source: Association of Bay Area Governments, 2011.

2.2 Project Overview

The Project identifies eight Planning Areas within the Project Site that could be developed with the proposed mixed-use community, as shown in Figure 3. Potential development areas would be limited to no more than 30 percent of the total above-water Project Site area (approximately 82.74 acres) by the Project's entitlements. Development within the Winehaven Historic District would include rehabilitation and adaptive reuse of the existing historic buildings. The Project proposes to rehabilitate all the contributors to the Historic District per the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Any structures located onsite that are not considered contributing elements of the Historic District may be demolished. Grading for hillside stability would be conducted in "Hillside Grading Areas" outside the Planning Areas, which would be revegetated and designated as Open Space after construction. No permanent structures other than retaining walls would be located in the Hillside Grading Areas.

The Planning Areas within the Project Site would be assigned General Plan land use designations that exist in the current General Plan, consisting of Medium Intensity Mixed-Use and Low-Density Residential, Medium-Density Residential, and Low-Density Residential, and rezoned pursuant to a Planned Area Development Plan. The Project would make minor text amendments to the Medium Intensity Mixed-Use designation to make it compatible with the existing historic buildings in the Historic District and to provide flexibility on the height limits and the Medium-Density Residential designation to provide flexibility on the density range. The Project's zoning would further refine the development regulations proposed by its proposed General Plan land use designations. The hillside open space will

be assigned a General Plan land use designation of Open Space and the shoreline open space would be designated as Parks and Recreation.

Table 2. Select Contra Costa County and Nearby Declared Disasters 1950-2009

Declared Disaster	Description	Damage
November 9, 2007 – Oil Spill	A container ship struck the San Francisco-Oakland Bay Bridge in thick fog. The spill spread rapidly and affected a large of area of the California North Coast. The East Bay received the majority of the damage, including Richmond.	53,000 gallons of oil spilled into San Francisco Bay.
April 29, 2007 – Freeway Collapse	A tanker truck exploded on the Oakland to San Francisco Bay Bridge, which caused a connector ramp to collapse. This caused traffic delays, especially for commuters. Although this disaster occurred in Alameda, it was declared for neighboring Contra Costa and San Francisco Counties.	$6 million in roadway damage in Alameda County.
December 17, 2005 to January 12, 2006 – '05-'06 Winter Storms	Severe Storms, Flooding, Mudslides, and Landslides, which occurred in Contra Costa, Alameda, Marin, Napa, San Mateo, Solano, Sonoma.	Over $100 million in damage across impacted counties. Two deaths. Around 50 businesses and 3 homes were damaged by mudslides.
February 2, 1998 – El Nino – Severe flooding and landslides.	More than 11,000 people were evacuated because of 80 mph winds and floods. Severe and widespread landslides triggered by intense rain all winter occurred in many counties, including Contra Costa and the City of Richmond.	$550 million in damage total for all nine Bay Area counties.
December 1996 to January 1997 – January 1997 Floods	In total, over 120,000 people had to be evacuated within the 48-affected counties. Several levee breaks were reported across the Sacramento and San Joaquin Valleys; agricultural lands, bridges, and roads were damaged. 48 counties in Northern California were impacted, including Contra Costa	$1.8 billion, with 8 deaths;300 square miles of land flooded; 23,000 homes, 2,000 businesses damaged or destroyed in the 48-affected counties.
October 17, 1989 – Loma Prieta Earthquake Magnitude 7.1	7.1 magnitude Earthquake occurred in Loma Prieta, which impacted 12 counties, including Contra Costa, Alameda, Monterey, San Benito, San Mateo, Santa Clara, Santa Cruz, San Francisco, Marin, City of Isleton, City of Tracy, and Solano.	Contra Costa $25 million in damage. Total: $5.9 billion; 23,408 homes damaged, 3,530 businesses damaged, 1,018 homes destroyed, 366 businesses destroyed. Additionally, there were a total of 63 deaths and 3,757 injuries.
December 1983 – Levee Failure	First declared in Contra Costa County in December of 1983, and then in Alameda County in January of 1984.	Damage in all three counties: public-$5,313,198; private-$1,651,800; total-$6,964,998.
December 1982 – High Tides, Strong Winds, and Rains	High winds, high tides, floods, storms, wind driven water occurred in Contra Costa, Sacramento, and San Joaquin counties.	Damage in all three counties: public-$11,158,700; private-$1,479,500; agricultural-$3,887,195; total - $17,388,013.
January 1980 – Delta Levee Break	A 350-foot section of a dirt levee gave way flooding crops and more than 20 houses and 50 barns, forcing 270 people to evacuate. The saltwater threatened the freshwater fish and water supplies. Rain, high tides, winds, and flooding. Impacts occurred in Contra Costa, Sacramento, and San Joaquin counties.	Damage in all three counties: public-$11,158,700; private-$1,479,500; agricultural-$3,887,195; total - - $17,388,013.

Table 2. Select Contra Costa County and Nearby Declared Disasters 1950-2009

Declared Disaster	Description	**Damage**
May 1973 – Eucalyptus Tree Freeze	Removal of approx. 2 million dead trees throughout Contra Costa and Alameda counties.	$8-10 million for both counties.
April 1970 – Storms and Floods		Not available

Source: Association of Bay Area Governments, 2011.

SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 3

Planning and Development Areas

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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The Project proposes a mixed-use community that would include the following components:

- 1,452 residential units, comprised of the following unit types:
  - 185 Single Family Homes
  - 241 Townhomes
  - 1,026 Apartments and Condominiums
- 453,774 square feet of nonresidential uses:
  - 55,000 retail/restaurant uses
  - 10,000 square feet of civic uses, including a fire station and police substation
  - 5,000 square feet water transit service terminal
  - 383,774 square feet office/RandD

The above mix of uses would occupy new construction and approximately 374,572 square feet of existing, historic buildings. The remainder of the Point Molate Site would remain as open space (approximately 193.06 acres), including recreational areas, parks, trails (including an approximately 1.5-mile portion of the San Francisco Bay Trail along the shoreline), vista overlooks, and other similar spaces that are open to the public.

The Project also would include new roads to serve the development within the Project Site, including widening Stenmark Drive from the Project Site to I-580 Ramps, and construction of utility and infrastructure needed to support the proposed development.

2.2.1 Land use

As represented in **Figure 4**, the Project proposes a mix of land use designations, including Low-Density Residential, Medium-Density Residential, Medium-Intensity Mixed-Use, Parks and Recreation, and Open Space. Currently the Draft EIR studies two options—Option 1 and Option 2—that both propose parks and recreational land use along the shoreline and open space land use along the hillside land in the northeastern portion of the Project Site. The Project application proposes the mix of uses described in Section 2.2 above.

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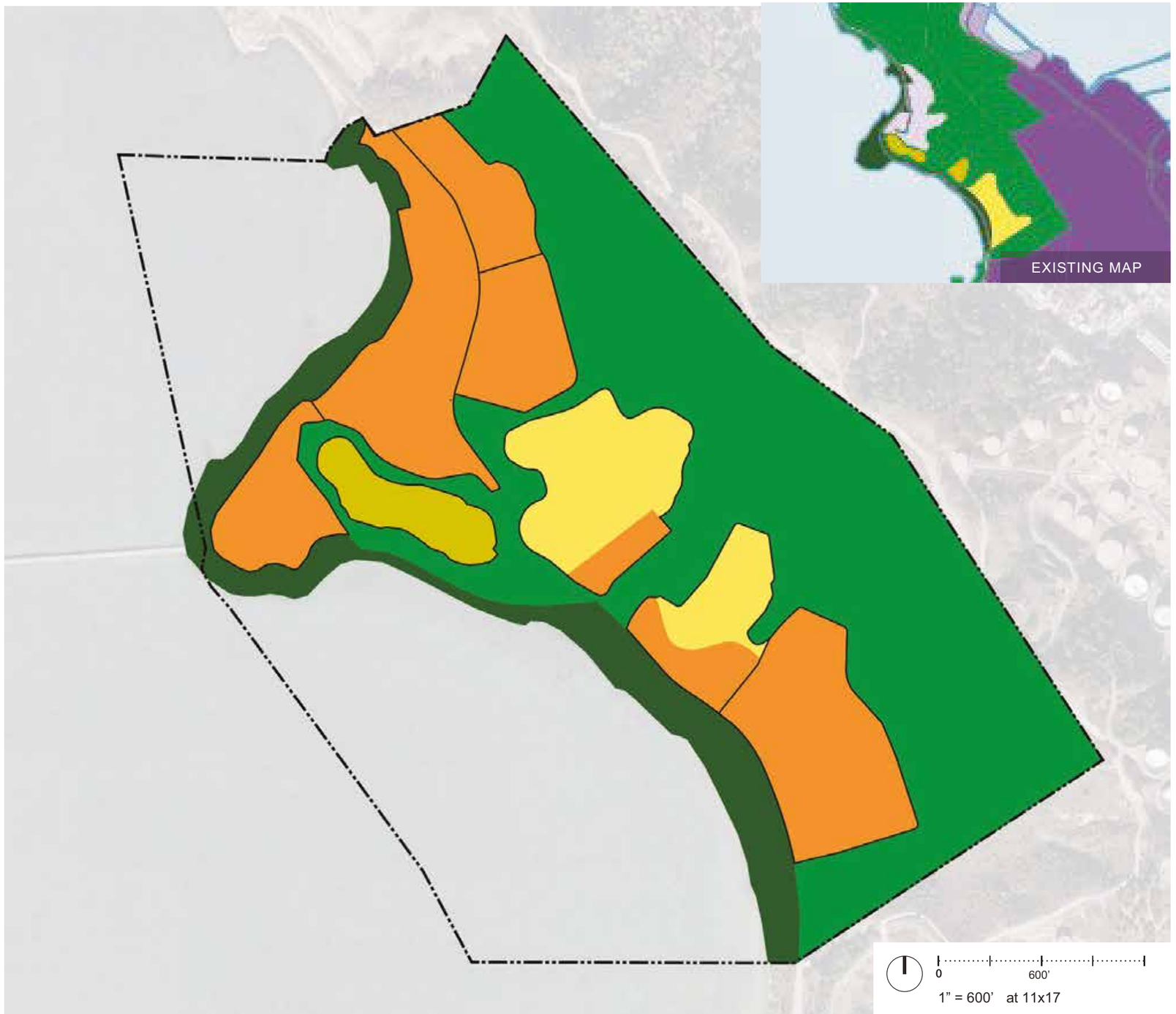
Land Use - General Plan Designations

- Low Density Residential
- Medium Density Residential
- Medium Density Mixed Use
- Open Space
- Parks & Recreation



SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 4
Proposed General Plan Land Use Designations

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2.2.2 Circulation / Transportation

The Project would be accessed by Stenmark Drive, which is the only access road that serves the Point San Pablo and Point Molate areas. Due to anticipated increases in traffic, the Project proposes to widen Stenmark Drive to accommodate 11- to 13-foot vehicle travel lanes, bicycle facilities/multi-use path, planter strips for street trees and verge plantings, and pedestrian sidewalks. The type of bicycle facilities along Stenmark are based on the adjacent uses, available right-of-way (ROW), safety, and other concerns. Bicycle facilities may include a 10 to 12-foot multi-use path (Class I) separated by a landscape area, portions of which will be accessible to emergency vehicles; where constrained by a narrow ROW, shared vehicular/bike travel lanes (Class III).

Additionally, Stenmark Drive would be widened to accommodate two southbound lanes from 500 feet north of the Dutra Materials Road intersection to the I-580 ramps. **Figure 5** provides an illustration of the proposed improvements to Stenmark Drive. The Project also proposes the installation of a traffic signal at Dutra Materials Road to address potential queuing issues and to provide a controlled pedestrian crossing for the San Francisco Bay Trail. While the majority of the widening of Stenmark Drive would be developed within the existing ROW, these improvements would require additional ROW be acquired from the adjacent landowner on Stenmark Drive. **Figure 6** illustrates the approximate locations of the ROW expansions to accommodate the proposed road widening. Undergrounding or relocating existing utility power poles along Stenmark Drive from the easterly boundary to freeway connection (I-580) would occur to accommodate completion of the anticipated improvements to Stenmark Drive.

Internal Circulation

Access to the Planning Areas would be provided by secondary and tertiary streets branching off Stenmark Drive as presented in **Figure 7**. Access to the beach park would be provided via a new single driveway directly off Stenmark Drive near the southern boundary of the Project Site. Roadways rights-of-ways within the Planning Areas would range between approximately 30 feet and 67 feet wide to accommodate emergency vehicles, in certain areas, street parking.

Water Transit

The existing fuel pier and the associated water transit terminal would be retrofitted for passenger use. The pier may be reconfigured to provide a more appropriate berthing area for water taxis by eliminating a portion of the southernmost end of the "T," and adding square footage in an equal or lesser amount to what would be eliminated in other sections of the pier. **Figure 8** presents a conceptual plan-view of the reconfigured pier. The reconfigured pier could be used for water evacuations in the event of an emergency.

2.2.3 Services, Facilities, Response Capabilities

Richmond Police Department

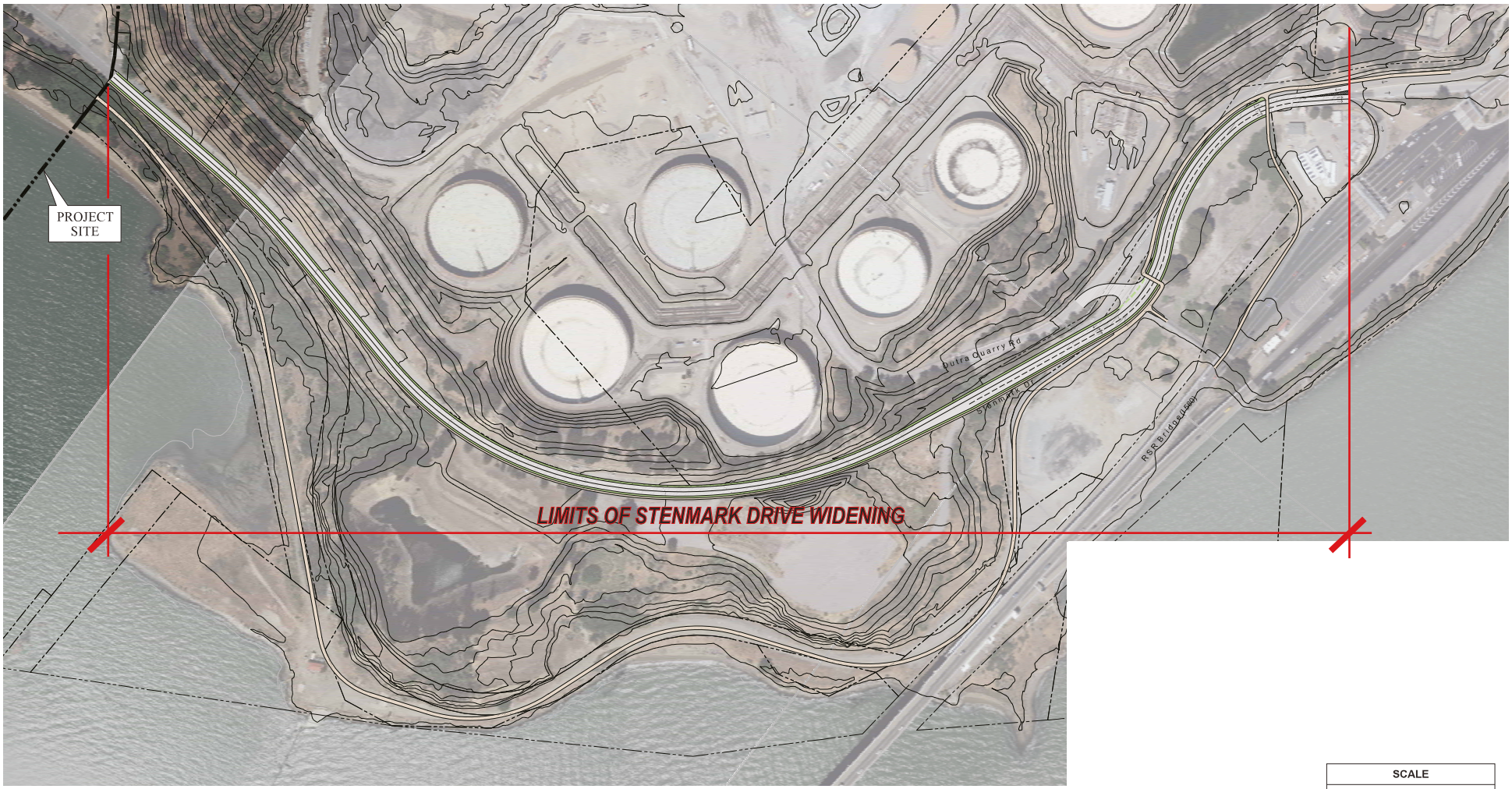
The Richmond Police Department has the overall City evacuation operations responsibility. Either field personnel or Emergency Operations Center (EOC) personnel will determine evacuation necessity. The EOC will direct the actual operation and will manage tactical operations. Police personnel will carry out the evacuation and ensure the safety of the evacuation route with support from other departments, as necessary. Once areas have been evacuated, the Police Department has the exclusive responsibility for protecting private and public property in all evacuated areas.

Richmond Fire Department

The Richmond Fire Department (RFD) provides fire protection and emergency medical services (basic life support level) within the City incorporated areas, including the Project Site. The RFD retains aid agreements with County Fire and El Cerrito Fire (City of Richmond, 2018). The department is comprised of six divisions: administration, support services, fire prevention, emergency services, training, and emergency operations. In total, there are 90 sworn officers and five non-sworn employees within the RFD. Within the Emergency Operations division, there are three platoons that are operated by eight companies, seven engines, and one truck. The companies are staffed by 24 personnel who are supervised by one battalion chief.

Fire personnel are allocated to seven City fire stations. Department apparatus and personnel includes seven engine companies, one truck company, one cross-staffed truck company, two rescue units, a hazardous materials unit, one breathing support unit, and one fire boat. The closest station to the Point Molate Site is Station 61, located at 140 W. Richmond Avenue, approximately three miles to the southeast. The next two closest stations are Stations 62 and 67. Station 64 houses the HazMat Response team along with equipment and supplies (Contra Costa County, 2009). Hazardous materials response team/decontamination members are trained to the level of Hazardous and Materials Technician. Company members are trained to the level of First Responder.

In addition to providing basic emergency care, the RFD Office of Emergency Services leads comprehensive emergency management. This includes planning and preparedness for, response and recovery from, and mitigation of natural, man-made, and accidental incidents involving a major aftermath. The Office of Emergency Services coordinates with neighboring agencies across the County and the nation to collaborate on and establish the best emergency response and recovery efforts in the event of a major disaster. As part of its operations efforts, the Office of Emergency Services maintains the City Emergency Operation Center and Community Emergency Response Teams program a state of operational readiness.



SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 5

Stenmark Drive Widening

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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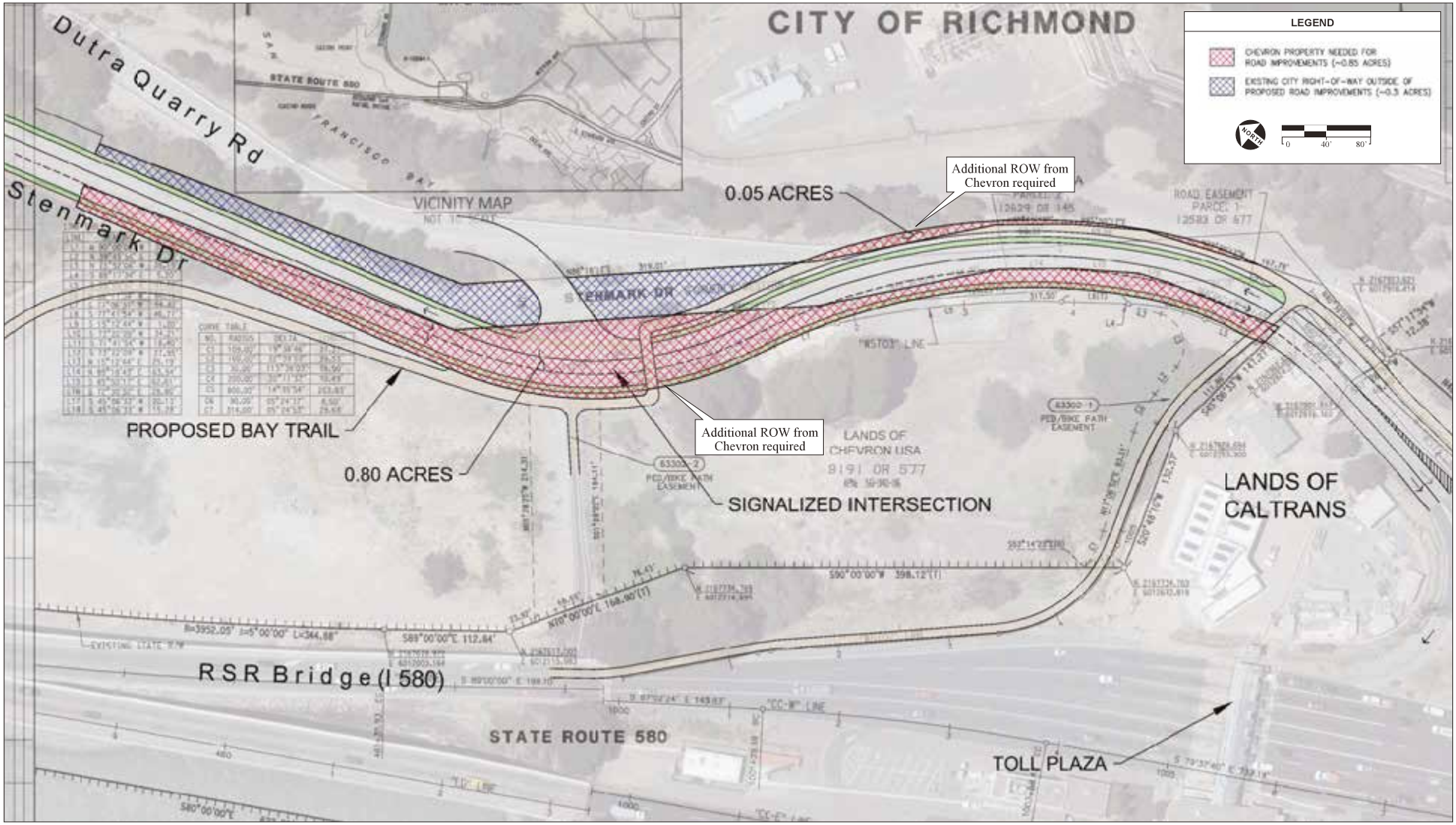

SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 6

Stenmark Drive Right-of-Way Expansion

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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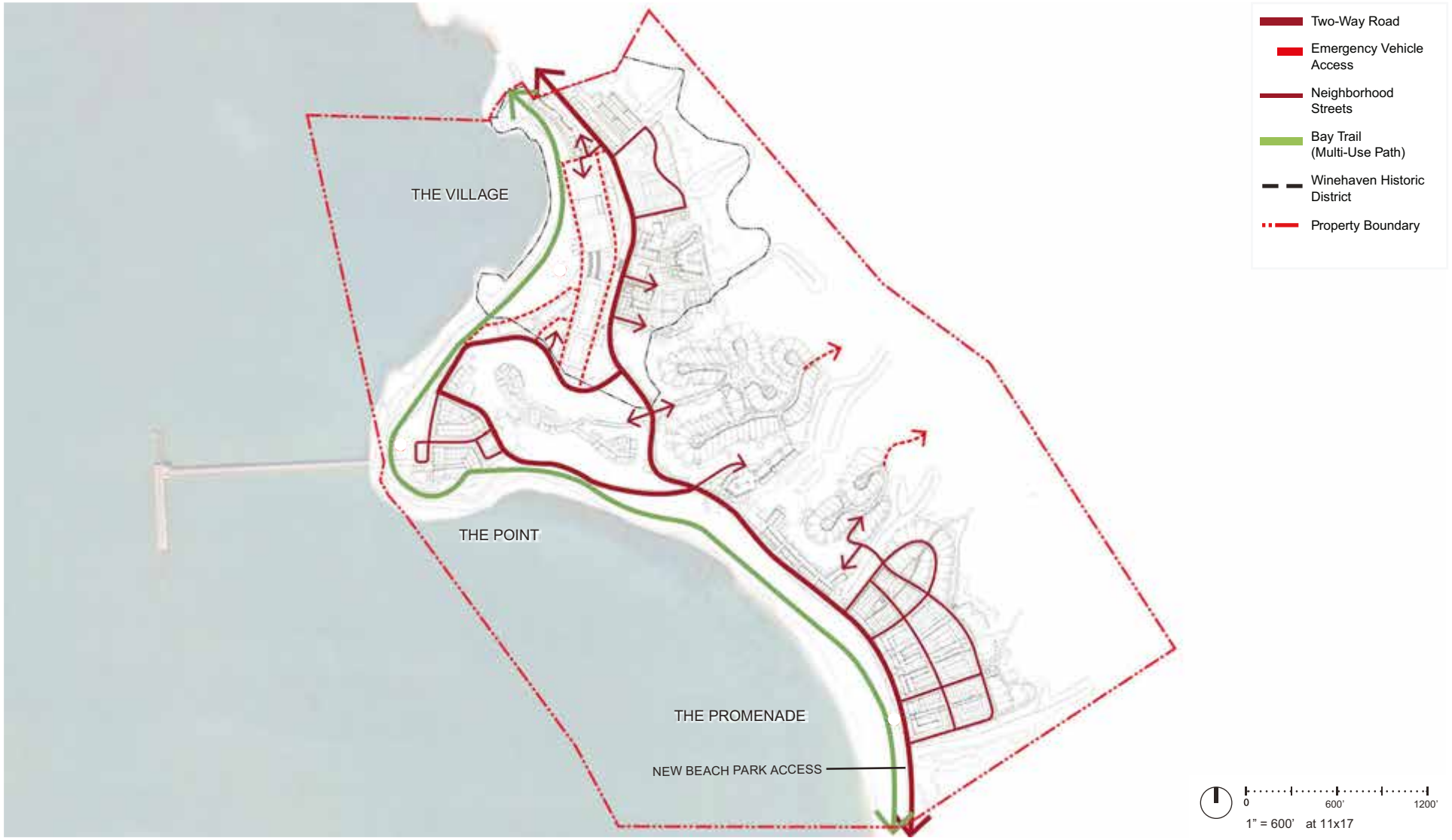

SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 7

Circulation and Access

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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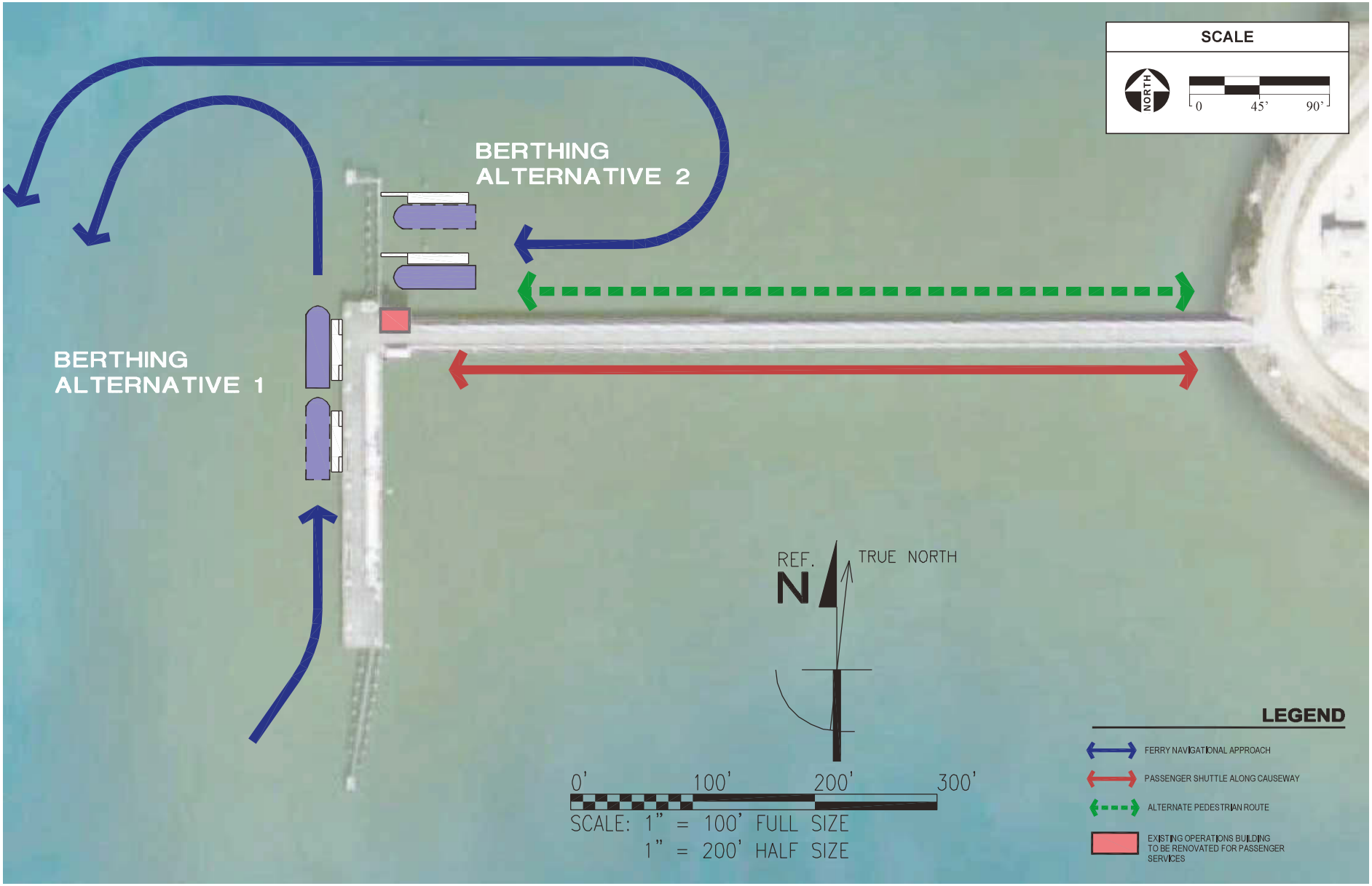

SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 8

Pier Reconfiguration Alternatives

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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3 Relevant Plans and Policies

In addition to the SEIR and related Project documents, existing plans and policies prepared by or for local regulatory agencies were reviewed to assist in preparing this MHERP, and relevant information has been incorporated as appropriate. The following is a complete list of the plans, reports, and technical information that were reviewed when preparing this update and how they were incorporated in this plan.

3.1 City of Richmond General Plan and Applicable Goals

The Project Site and all adjacent parcels to the Project Site are covered by the City General Plan 2030 (General Plan) that was adopted on April 25, 2012. The General Plan is a comprehensive guide for decisions about land use, economic development, transportation, natural resources, and public health and safety, which includes goals and policies for future City growth. Further, the General Plan provides direction that is the foundation of the MHERP. Specifically, the Public Safety and Noise Element identifies and evaluates public health and safety hazards, and outlines means of limiting unreasonable risks and minimizing losses that can occur as a result of natural or human-caused disasters. The Element addresses emergency preparedness and coordinated response, police and fire protection, and emergency services. Additionally, the Public Safety and Noise Element defines goals, policies, and implementing actions to address public safety issues. These goals and policies include:

- Emergency and Disaster Preparedness
- Risk Management of Natural and Human-Caused Disasters
- Geologic and Seismic
- Hazardous Materials Operations
- Fire Safety

3.2 City of Richmond Municipal Code

The Richmond Municipal Code (RMC) contains the city's local laws and includes codes and ordinance applicable to development and construction including Land Use, Subdivisions and Zoning. Specifically, floodplains and building safety are addressed along with Buildings and Construction, Fire prevention and life safety, Health and Safety, Public Services, water and wastewater treatment, and regulations to address drought. The RMC is an important regulatory tool for implementation of mitigations aimed at standards for public health and safety. The Project will meet all applicable codes.

3.3 City of Richmond Emergency Operations Plan

The City of Richmond's Emergency Operations Plan (EOP) was developed to ensure the most effective, efficient and economical allocation of resources for the maximum benefit and protection of people and property in time of emergency, and defines the City's planned response to extraordinary emergency situations associated with any type of disaster, natural, technological or otherwise. This EOP establishes the emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of planning efforts of the various emergency staff and service elements utilizing both California's Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). As an extension of the California Emergency Plan,

the objective of the EOP is to incorporate and coordinate all Richmond facilities and personnel into an efficient organization capable of responding effectively to any emergency.

Additionally, the EOP includes four annexes: 1) Evacuation Planning, 2) HazMat Notification, 3) Mass Care and Shelter for PWD/E (People with Disabilities/Elderly), and 4) Terrorism Plan. Each of these annexes provides additional specific response checklist and operational data for emergency responders.

3.4 City of Richmond Hazardous Materials Contingency Plan

The City has formulated a Hazardous Materials Contingency Plan (HMCP) to govern the cooperative operations of all agencies involved in a hazardous materials incident. The HMCP is a blueprint for hazardous materials emergencies. Within the framework of the HMCP, the City of Richmond Fire Department has established a set of standard operating procedures that are to be used by fire personnel during these emergencies. These procedures are based on the concept that fire personnel will perform at the level, greater than the standard of 1991 editions of National Fire Protection Association 472 and 29 CFR 1910.120. In order to differentiate the various responsibilities, training levels have been established commensurate with the following required duties (Richmond Fire Department, 2020). Dudek did not evaluate the HMCP as part of this MHERP preparation as it could not be released due to its inclusion of sensitive information.

3.5 Contra Costa County Operations Area Emergency Operations Plan

The Contra Costa Operational Area (OA) Emergency Operations Plan (OAEOP) addresses the response to emergency incidents within Contra Costa County. The Contra Costa OAEOP consists of the cities/towns, special districts, reclamation districts, municipal improvement districts and the unincorporated areas within the county. Additionally, the EOP addresses integration and coordination with other governmental, non-government, faith-based organizations, community-based organizations, and the private sector, when required. Further, the OAEOP establishes the emergency management organization required to mitigate any significant emergency or disaster affecting the Contra Costa OA, and establishes the overall operational concepts associated with the Contra Costa County's EOC activities and response process.

Based on the functions and principals of SEMS, NIMS, and the Incident Command System (ICS), the plan identifies how the Contra Costa County emergency operational system fits into the overall California and National risk-based, all hazard emergency response and recovery operations plans.

As noted in the OAEOP, during the Incident Evaluation process the initial emergency responders will assess the incident and determine the need for actions necessary to safeguard public health (shelter-in-place, evacuation) and determine the CWS level of the incident. The CWS will be used to disseminate information to the public in the event of a release or threatened release of a hazardous material (sirens, media, weather radios, phone notification, etc.).

Siren activation, phone call activation and weather radios are used to alert the public during Level 3 incidents only. Level 3 hazardous material incidents have offsite impacts that may include irritation to the general population, or includes fire, explosion or smoke impacts, or when the Incident Commander (IC) requests such notification.

3.6 Contra Costa County Hazard Mitigation Plan and City of Richmond Specifics

An update to the 2011 Contra Costa County Hazard Mitigation Plan, the current Contra Costa Hazard Mitigation Plan was adopted in 2018 and aims to reduce risks from natural disasters within the Contra Costa County OA, which covers the unincorporated county, 10 municipalities, and 25 special purpose districts. A planning partnership was formed by engaging eligible local governments within the Contra Costa County OA, for which the City of Richmond was a participating partner. The plan includes long- and short-term policies, programs, projects, and other activities to alleviate death, injury, and property damage that could result from a disaster.

Risk assessment models were used to determine the potential loss of life, personal injury, economic injury and property damage from natural hazards, as a means to determine the vulnerability of people, buildings, and infrastructure to natural hazards. Risk assessment for the Contra Costa Hazard Mitigation Plan included: hazard identification and profiling; assessment of the impact of hazards on physical, social, and economic assets; identification of areas of vulnerability; and estimates of the cost of potential damage. It was determined the earthquake hazard and landslides were the highest risk, while severe weather, wildfire, dam and levee failure, and flood posed medium risk for the county. Sea-level rise, tsunami and drought were rated at the lowest level of risk county-wide.

Ultimately, the goal of the County's Hazard Mitigation Plan is to reduce the vulnerability from hazards within the planning area in a cost-effective manner, within the capabilities of the planning partners. The planning partnership selected a range of appropriate mitigation actions to work toward achieving this goal. Mitigation actions include activities designed to reduce or eliminate losses resulting from natural hazards. A total of 522 mitigation actions were identified for implementation by individual planning partners. Additionally, countywide actions were identified to benefit the partnership as a whole. Implementation and maintenance of the plan includes annual progress reports, continued public involvement, a commitment to plan integration with other relevant plans and programs, and a commitment from the planning partnership to actively maintain the plan over the five-year performance period.

3.6.1 City of Richmond

As a planning partner, the Contra Costa County Hazard Mitigation Plan includes an annex for the City of Richmond, in which the annex provides a jurisdiction-specific hazard profile. According to the hazard risk assessment and similar to the county-wide assessment, it was determined that the City of Richmond highest risks are earthquake and landslides, while severe weather, sea level rise, flood, dam and levee failure, and wildfire posed medium risk, and tsunami and drought were rated at the lowest risk level.

3.7 Contra Costa Community Wildfire Protection Plan and City of Richmond Specifics

The Contra Costa Community Wildfire Protection Plan (CWPP) responds to the National and State Fire Plans, the Federal Emergency Management Agency Disaster Mitigation Act of 2000 and several locally developed documents, which mandate community-based planning efforts, coordination, project identification, prioritization, funding

review, and multi-agency cooperation. The purpose of the CWPP is to protect human life, critical infrastructure and natural resources and reduce wildfire-caused property loss. Additionally, the CWPP aims to help agencies, communities and local homeowners define, plan and prioritize types of actions that will limit the damage associated with an inevitable wildland fire event.

The CWPP provides recommendations for fuel management and structure ignition resistance within the Wildland Urban Interface (WUI). Fuel management recommendations include pulling or cutting vegetation, mowing and selective tree removal, grazing, herbicides, and prescribed burns. Recommended treatments for structural ignitability include managing vegetation, creating defensible space, construction design, the use of fire-resistant building materials, and the removal of combustible materials stored near structures.

3.7.1 City of Richmond

As an annex to the Contra Costa Countywide CWPP, the Richmond Fire Department, in conjunction with the Diablo Fire Safe Council, prepared the City of Richmond CWPP, which provides an analysis of the City's WUI wildfire hazards and risk, including adjacent unincorporated areas such as East Richmond Heights. Similar to the County's CWPP, the City's CWPP uses standards established by the federal Healthy Forest Restoration Act to identify and prioritize fuel reduction opportunities and address structure ignitability. Based on analysis, the City's CWPP provides recommendations to aid stakeholders in reducing the wildfire threat. The CWPP complements local agreements and existing plans for wildfire protection and a coordinated effort in determining appropriate fire management actions.

3.8 Contra Costa County Community Warning System

The Contra Costa County Community Warning System is recognized as one of the nation's most modern and effective all-hazard public warning systems. The CWS is a partnership of the Office of the Sheriff, the Health Services Department, other government agencies, industry, news media and the non-profit Community Awareness and Emergency Response (CAER) organization, all striving to deliver time-sensitive and potentially life-saving information to the Contra Costa County populace (Contra Costa County, 2020).

The CWS is a computer-integrated alerting and notification system that incorporates safety sirens, emergency responder pagers, Emergency Digital Information System (EDIS), the Emergency Alerting System (EAS), and a telephone emergency notification system (TENS). EDIS, and EAS are different ways of getting messages to emergency responders, including law enforcement, the media, and the National Weather Service (which transmits information to NOAA Weather Radios). The TENS calls households and businesses and transmits short messages about the incident and recommended protective actions. In addition to these tools, the CWS delivers text messages, make phone calls, send e-mail alerts to individuals that register their phones. The CWS alert messages are broadcasted over Facebook and Twitter. Information about an incident can be found at the time of the incident at cococws.us, including areas that are being requested to shelter-in-place (Contra Costa Heath Services, 2016).

Sirens

The CWS may use sirens to alert to a possible hazard in the area. It could be for any number of hazards and is sounded to draw attention away from daily activities. No matter the hazard, the best first protective action is to Shelter, Shut and Listen. Although it is not stated where persons should tune into to find our details, it is presumed

that local media, social media and other specific messaging to registered telephone lines and email addresses would occur during an emergency.

Sirens are tested on the first Wednesday of every month at 11:00am. The siren location closest to the Project Site is the Chevron CRTC R01 siren at the Chevron Research and Technology facility, 100 Chevron Way.

Voice, Text and Email alert messages

The CWS can alert residents and businesses within Contra Costa County that are impacted or are in danger of being impacted by an emergency. The CWS message will include basic information about the incident and what specific protective actions (shelter in place, lockdown, evacuate, avoid the area, etc.) are necessary to protect life and health. CWS is generally not used for traffic notifications or other non-life-threatening incidents.

Residents can register to receive voice, text and email alerts. In addition, the CWS Telephone Emergency Notification System is used for call-out in case of emergency. A computerized system makes telephone calls to the known telephone numbers in the vicinity of the hazard based on the incident specific issues. To streamline for fast activation in emergency, the areas around known places were predefined, so activation is faster. These predefined areas are the “TENS Zones”; the Project Site is in the Chevron Refinery, Richmond 0 zone.

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4 Hazard Identification, Analysis, and Assessment

Hazard identification is the process of identifying hazards that threaten an area including both natural and man-made events. Determining potential hazards includes review of hazards that have occurred along with hazards that may occur given a multitude of factors.

A natural event causes a hazard when it harms people or property. The Contra Costa County Hazard Mitigation Plan, City of Richmond Annex has identified hazards that could potentially affect the City of Richmond geographic area including, high risks hazards (earthquake and landslides), medium risk hazards (severe weather, sea level rise, flood, dam and levee failure, and wildfire), and low risk hazards (tsunami and drought). To identify the hazards, an extensive process was conducted, utilizing input from the Contra Costa County Office of Emergency Services, and emergency management personnel from cities, special districts and school districts in Contra Costa County using the best available data. Based on the likelihood of occurrence, this plan focuses on the following natural hazards with potential to occur at the Project or in the Project's vicinity: earthquakes, wildfires, chemical release.

Man-made hazard events are caused by human activity and include technological hazards and terrorism. Technological hazards are generally accidental and/or have unintended consequences, such as accidental hazardous materials release. Given the Project Site's proximity to the Chevron refinery, this MHERP addresses the potential for chemical release.

The following summaries provide additional information on the primary potential hazards that may affect the Project Site.

4.1 Hazard Characterization and Risk Assessment

4.1.1 Earthquake

An earthquake is a sudden motion or trembling that is caused by a release of strain accumulated within or along the edge of the Earth's tectonic plates. The effects of an earthquake can be felt far beyond the site of its occurrence. They usually occur without warning and, after just a few seconds, can cause massive damage and extensive casualties. Common effects of earthquakes are ground motion and shaking, surface fault ruptures, and ground failure. Ground motion is the vibration or shaking of the ground during an earthquake. When a fault ruptures, seismic waves radiate, causing the ground to vibrate. The severity of the vibration increases with the amount of energy released and decreases with distance from the causative fault or epicenter. Soft soils can further amplify ground motions. The severity of these effects is dependent on the amount of energy released from the fault or epicenter.

One widely used tool that describes earthquake intensity is the Richter scale. The Richter scale was devised as a means of rating earthquake strength and is an indirect measure of seismic energy released. The scale is logarithmic with each one-point increase corresponding to a 10-fold increase in the amplitude of the seismic shock waves generated by the earthquake. In terms of actual energy released, however, each one-point increase on the Richter scale corresponds to about a 32-fold increase in energy released. Therefore, a magnitude (M) 7 earthquake is 100 times (10 x 10) more powerful than a M5 earthquake and releases 1,024 times (32 x 32) the energy.

Faults

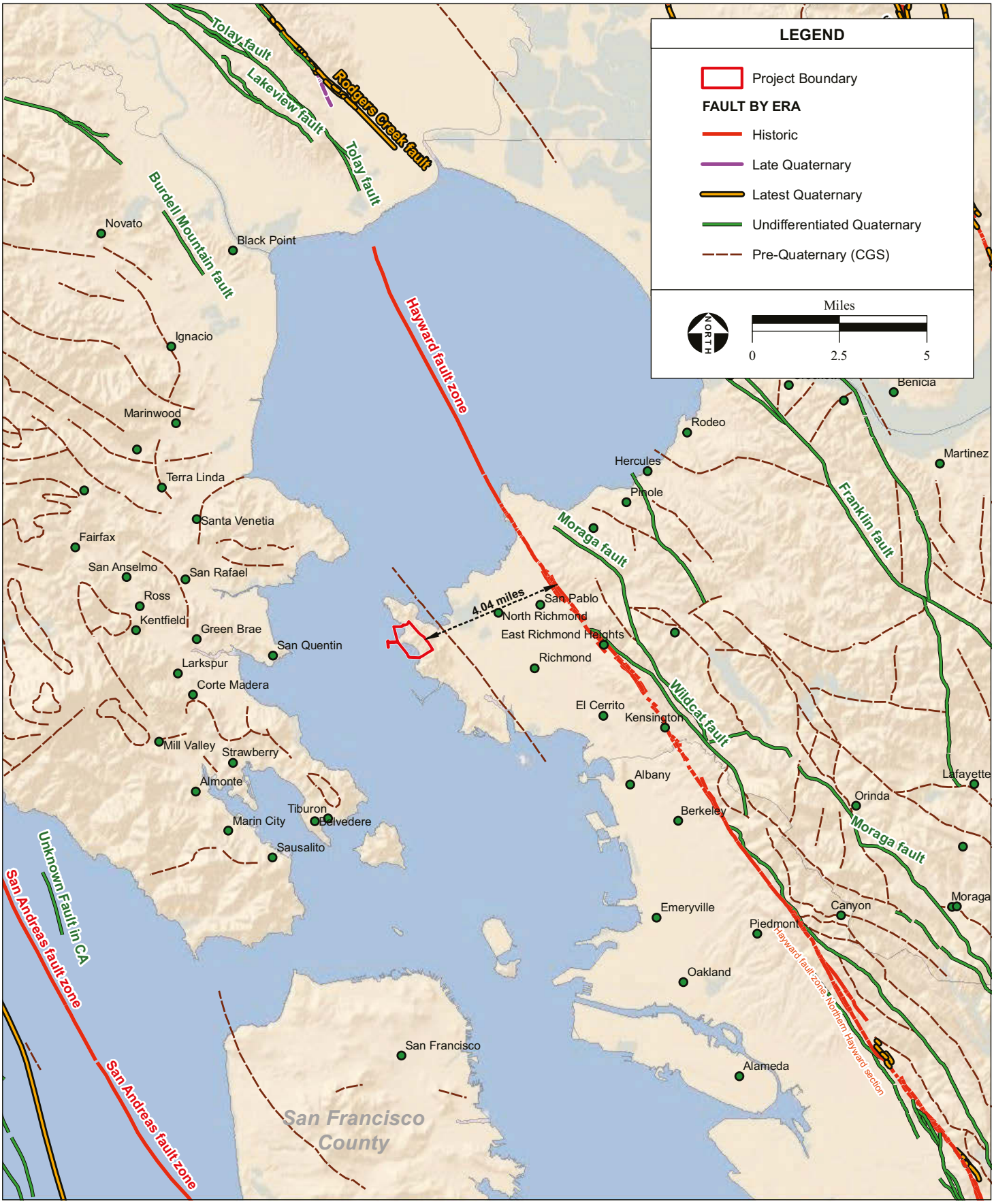
The Bay Area is a seismically active region with many active or potentially active faults, as shown in **Figure 9**. Large earthquakes have historically occurred in the region and many earthquakes of low magnitude occur every year. The three largest known faults in the vicinity of the Project Site are the Hayward-Rogers Creek Fault approximately four miles away, the San Andreas Fault approximately 14 miles away, and the Calaveras Fault approximately 25 miles away. These three faults are within the San Andreas Fault Complex.

No faults are located within the Project Site, nor is the Project Site within an Alquist-Priolo Fault Zone. There is one inactive fault line located approximately 0.5 miles away from the Project Site.

4.1.1.1 Historic Occurrences

Past occurrences of Bay Area Earthquake-Related Disasters

The 1906 San Francisco earthquake is a well-documented event, of which the death toll remains the greatest loss of life from a natural disaster in California's history and high on the lists of American disasters. Larger earthquakes generally affect larger areas; the San Francisco earthquake caused extensive damage in Oakland, San Jose and Santa Rosa. More recently, the 1989 Loma Prieta earthquake caused extensive damage in the Santa Cruz Mountains, as well as in Oakland and San Francisco. In addition, many moderate to great earthquakes (over magnitude 6.0) have affected the Bay Area; twenty-two such events have occurred in the last 165 years for an average of one every seven and a half years. There have been only three earthquake-related natural disasters in the Bay Area since 1950 – the April 1984 Morgan Hill earthquake, the 1989 Loma Prieta earthquake (declared a disaster in Contra Costa county), and the September 3, 2000 Napa earthquake (Association of Bay Area Governments, 2011).



SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 9

Regional Fault Locations

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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4.1.1.2 Probability of Future Earthquakes

Earthquakes are regular events in the Bay Area, and future earthquakes are certain to occur. Most earthquakes have a magnitude of 2.0 or below. These low intensity earthquakes are typically not perceptible to people and are unlikely to cause damage to life or property.

The United States Geological Survey (USGS) estimates that there is a 72% chance of one or more earthquakes of at least 6.7 magnitude in the next 30 years in the Bay Area. This magnitude may cause considerable ground shaking at the Project Site and serious structural damage. All buildings, existing (after retrofitting) and new, on the Project Site would comply with current industry standard geotechnical practices and seismic structural design (USGS, 2015).

The probabilities listed in Table 3 suggest that Project Site residents are likely to experience a severe earthquake during their lifetime.

Table 3. Likelihood of Earthquake > M6.7 Over the Next 30 Years

Earthquake Fault	Probability
San Andreas (Mendocino Coast to San Benito County)	33%
Hayward	28%
Calaveras	24%
Hunting Creek, Berryessa, Green Valley, Concord	24%
Maacama	23%
Rodgers Creek	15%
San Gregorio	5%
Greenville	6%
Mt. Diablo	3%
West Napa	2%

Source: USGS, 2015

4.1.1.3 Ground shaking

The fault rupture of the ground generates vibrations or waves in the rock that humans feel as ground shaking. Larger magnitude earthquakes generally cause a larger area of ground to shake hard, and to shake longer. As a result, one principal factor in determining shaking hazard is the magnitude of expected earthquakes. However, an earthquake shakes harder in one area versus another based not only on the magnitude, but also on other factors, including the distance of the area to the fault source of the earthquake and the type of geologic materials underlying the site, with stronger shaking occurring on softer soils. Earthquake intensity measures the strength of ground shaking in an individual earthquake at a given location. According to the Bay Area Regional Hazard Mitigation Plan, 92.5% of land in Contra Costa County has Very High or Extreme shaking potential (Association of Bay Area Governments, 2011).

4.1.1.4 Liquefaction

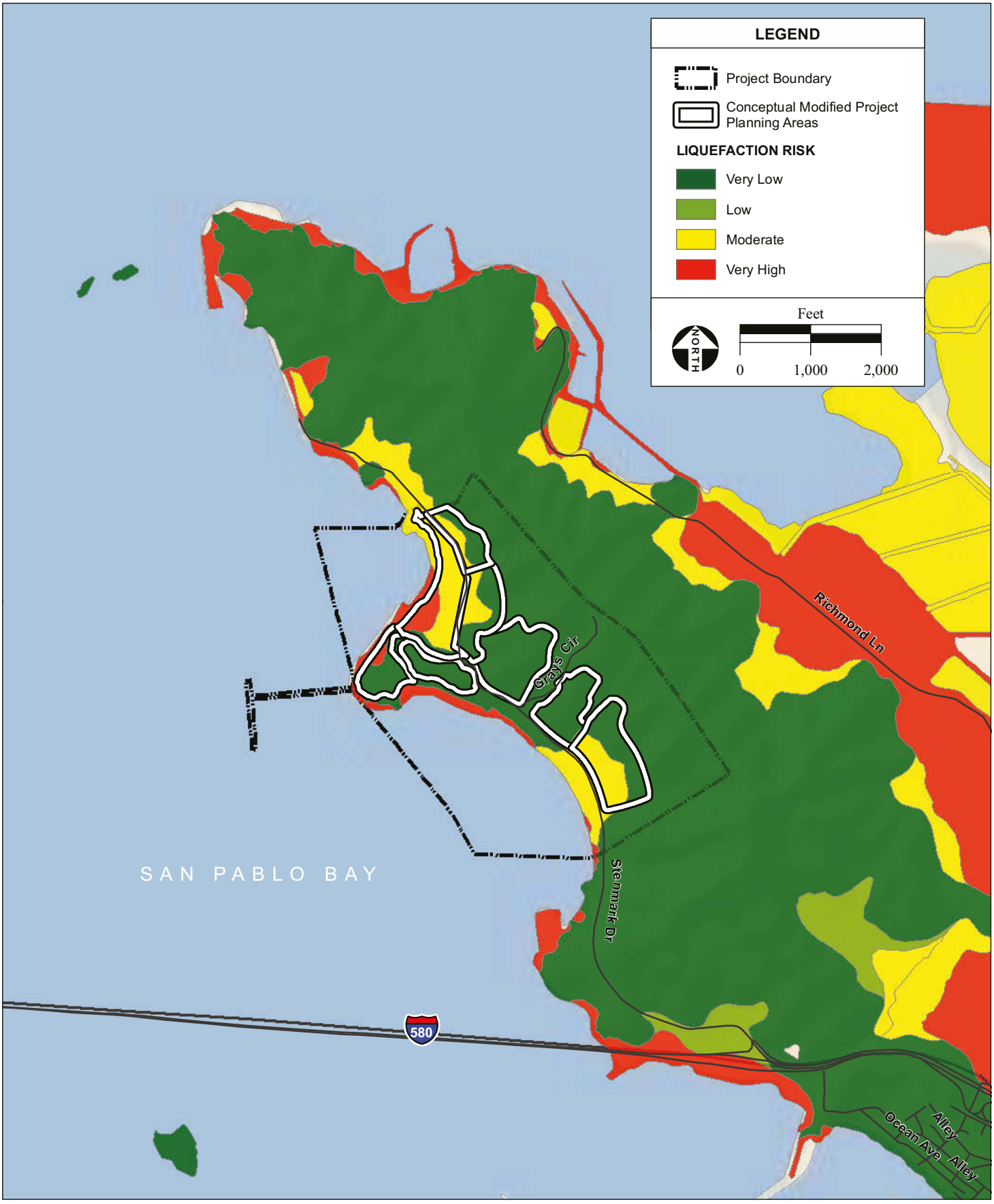
Liquefaction is the phenomenon that occurs when ground shaking causes loose soils to lose strength and act like viscous fluid. Liquefaction causes two types of ground failure: lateral spread and loss of bearing strength. Lateral spreads develop on gentle slopes and entails the sidelong movement of large masses of soil as an underlying layer liquefies. Loss of bearing strength results when the soil supporting structures liquefies and causes structures to collapse.

Based on the California Geological Survey, much of the potentially liquefiable soil (bay mud or alluvium) on the Project Site is outside of Planning Areas B, C, and D, as shown in Figure 10. However, some areas having a moderate to very high potential for liquefaction encroach into Planning Areas A, E, F, G, and H.

4.1.2 Wildfire

A wildfire is an uncontrolled fire spreading through vegetative fuels and threatening or possibly directly impinging upon structures, and often begin unnoticed and spread quickly. Naturally occurring and non-native species of grasses, brush, and trees, especially when dry, fuel wildfires. A wildland fire is a wildfire in an area in which development is essentially nonexistent, except for roads, railroads, power lines and similar facilities. A Wildland-Urban Interface fire is a wildfire in a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels. The project proposes significant development in the Point Molate area, which is located adjacent to Potrero Ridge, and has been designated a Very High Fire Hazard Severity Zone by the City (**Figure 11**).

Human activities are responsible for at least 80% of wildfires, usually from accidental causes, including carelessness or man-made machines/features, particularly power lines and sparking off-road vehicles, amongst others (Syphard et al. 2007). Since the Project Site already is surrounded on three sides by urbanized conditions, fire ignition sources are present, but have been managed to avoid vegetation ignitions on the site. Developing the Project will result in more humans in the area and the potential for vegetation ignitions. However, the Project's design features and fire safety measures including maintained fuel modification zones, an on-site fire department that can respond quickly to ignitions, ongoing educational outreach, and many eyes and ears monitoring the area, combine to minimize the likelihood of vegetation ignitions. Wildfire behavior is based on three primary factors: fuel, topography, and weather. The type, and amount of fuel, as well as its burning qualities and level of moisture affect wildfire potential and behavior. The continuity of fuels expressed in both horizontal and vertical components is also a determinant of wildfire potential and behavior. Topography is important because it affects the movement of air (and thus the fire) over the ground surface. The slope and shape of terrain can change the speed at which the fire travels, and the ability of firefighters to reach and extinguish the fire. Weather affects the probability of wildfire and has a significant effect on its behavior. Humidity and wind (both short and long term) unstable air, and drought, affect wildfire severity and duration (National Wildfire Coordinating Group 2020).



SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 10

Liquefaction Susceptibility

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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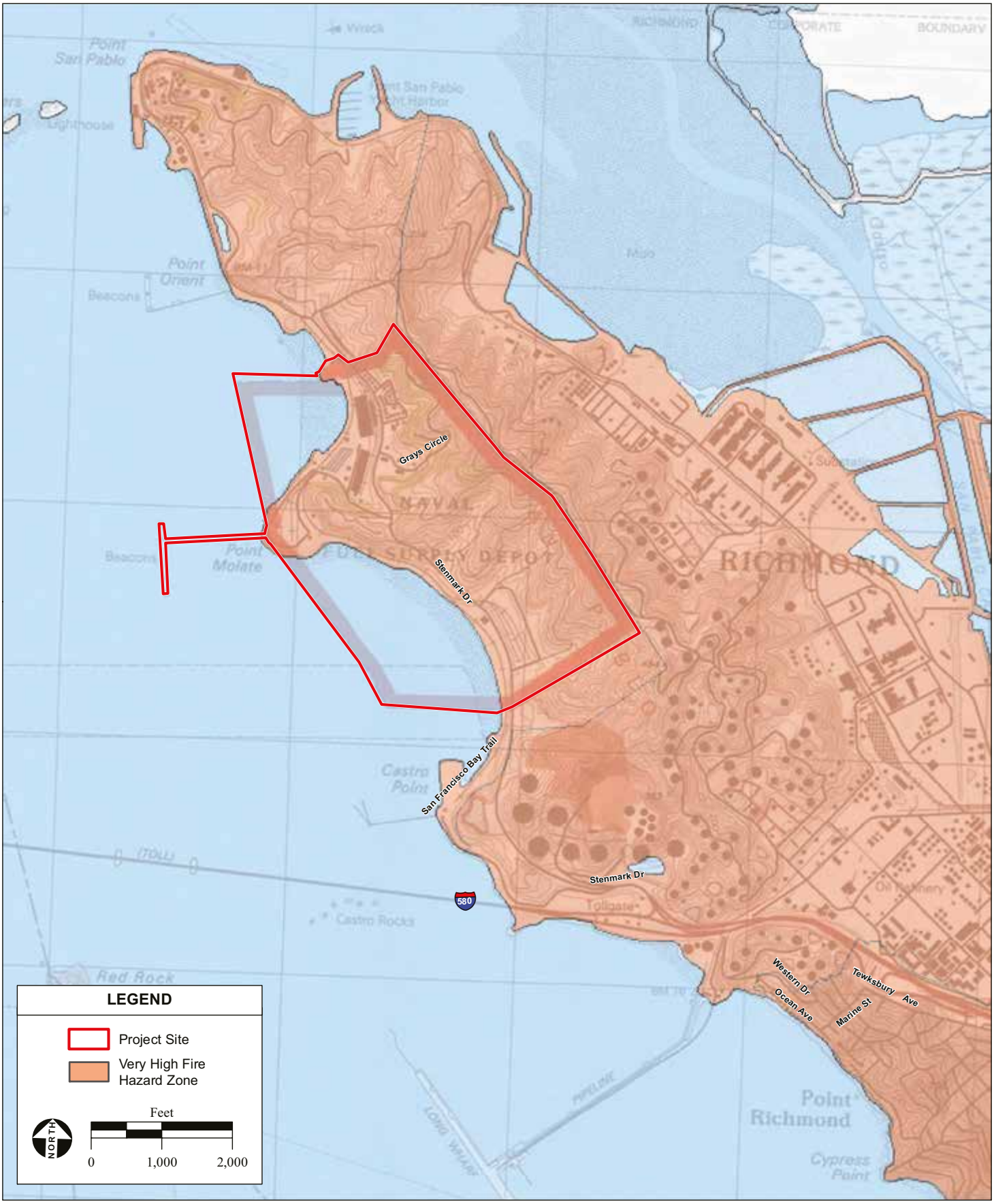

SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 11

Very High Fire Hazard Severity Zone Map

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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The Project Site's topography includes hilly and mountainous areas, such as the San Pablo Ridge, as well as low-lying regions throughout, and exhibits the characteristics of both the uplands in the coastal range and the tidal flats of the Bay. When fueled by shrub overgrowth, occasional "Diablo Winds" and unique localized wind patterns, and low humidity, often associated with high temperatures, creates a wildland fire threat. Extreme weather conditions such as low humidity, and/or winds of extraordinary force may cause an ordinary fire to expand into a "Mega-Fire". Highlighting this point, CAL FIRE estimates that 90% of wildfires in California occur during normal weather conditions and account for only 10% of the burned land area, while the 10% of wildfires that occur during extreme fire weather, are responsible for 90% of the land area burned. Others believe that even fewer fires cause the most damage with one researcher (Peterson 2018) stating that 2% of the wildfires in California account for 98% of the damage. Typical weather wildfires are substantially easier for firefighters to control and keep to small sizes while defending nearby structures.

Large wildfires would have several indirect effects beyond those that a smaller, more localized fire would create. These may include mass-evacuations, air quality and health issues, road closures, business closures, and others that increase the potential losses that can occur from this hazard.

4.1.2.1 Historic Occurrences

The Project Site has had no documented cases of wildfire between 1900 and 2018, as shown in **Figure 12**. Within a five-mile radius there have been three documented fires, all of which occurred west of the Project Site, across the San Francisco Bay. The most recent of these fires occurred in 2012 within the Ring Mountain Preserve. There have been no documented fires within five-miles east of the Project Site.

4.1.2.2 Probability of Future Wildfire

The lack of recorded Project Site wildfire occurrence may be related to a number of different reasons, including, 1) the site was historically largely devoid of vegetation, 2) the site's low population and land uses did not facilitate vegetation ignitions, 3) small vegetation fires may have been put out and not recorded, 4) dense vegetation has developed over time and more recently has become a higher potential hazard for ignition, and 5) the site's coastal location results in higher vegetation internal moisture content, resulting in higher ignition resistance.

Future wildfire probability can be based on a variety of factors including primarily the changing climate and changes in the land use to include higher populations and human presence. Absent specific measures to reduce vegetation ignitions, it would be anticipated that vegetation ignitions would occur at higher levels, simply through accidental human causes, including potentially from malfunctioning vehicles, small, internal combustion engines such as those used on landscape maintenance tools, tossed cigarettes, structural fires, and children playing with matches, amongst others.

However, given the specific project design features to minimize the potential for vegetation ignitions, it is considered a rare possibility that a vegetation fire would ignite in the open space areas and become a significant wildfire.

- Limited number of Del Diablo wind days – a 17-year study of Del Diablo events indicates a mean annual frequency of 2.5 events (Fire Weather Research Laboratory 2020)
- Del Diablo winds blow toward the Project from the north (down the adjacent ridge) – would tend to blow fire toward the project, but the slope with the vegetative fuel facilitates fire's ability to spread rapidly upslope and away from the Project.

- Wide, maintained fuel modification zones that are meant to protect structures by setting them back from unmaintained vegetation areas also protects open space areas from Project Site ignitions.
- Limited overall fuel bed – the vegetative fuels are limited to the sloped area to the north and east of the Project Site. This area could support a wildfire, but the duration of that fire would be limited due to the limited size and the isolation of the fuel bed by developed/urban landscapes and the San Francisco Bay.
- Increased number of humans provides greater area awareness, discourages arson and results in reporting of suspicious or reckless behavior to law enforcement
- Early detection of and quick response to ignitions due to the increased population and new fire station, resulting in fast response by on-site RFD station

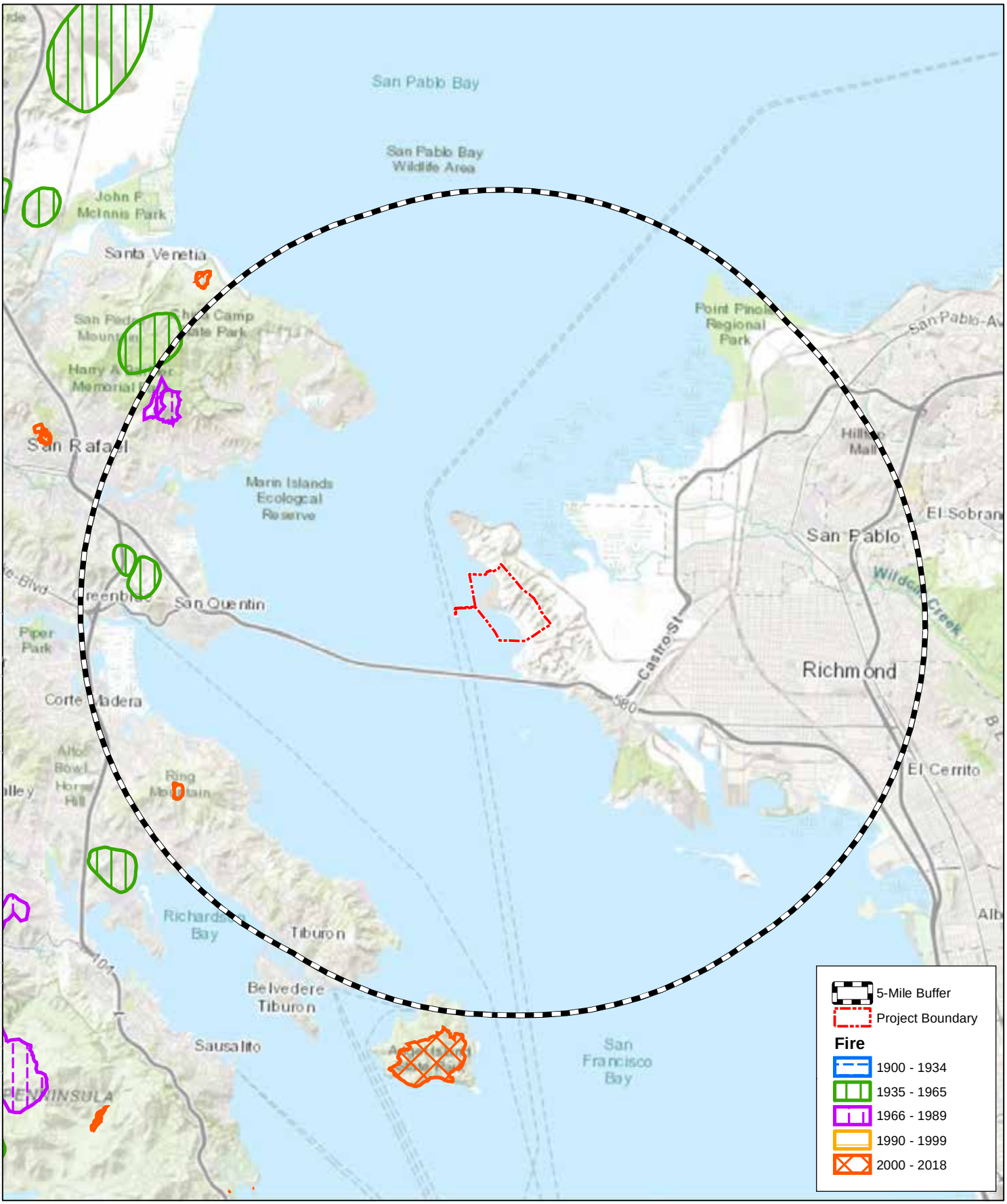
Further discussion of wildfire hazards is available in the Project's WERP (Dudek, 2020).

4.1.3 Chemical Release

Incidents involving hazardous material release can occur at facilities (fixed site) or along transportation routes (off-site). They can occur as a result of human carelessness, technological failure, intentional acts, and natural hazards. When caused by natural hazards, these incidents are known as secondary hazards, whereas intentional acts are terrorism. Hazardous materials releases, depending on the substance involved and type of release, can directly cause injuries and death and contaminate air, water, and soils. While the probability of a major release at the nearby refinery or similar facility in the area, or along a nearby transportation corridor, is relatively low, the consequences of releases of these materials can be very serious.

On-site Chemicals

According to the SEIR, no significant impacts relating to accidental conditions involving future on-site hazardous materials are anticipated at the Project Site. While limited hazardous materials would be stored onsite, the potential for an accidental release that would significantly impact human health, or the environment, would be minimal. Most on-site hazardous materials are expected to be limited to small quantities of cleaning and landscaping materials as well as diesel fuel for the on-site emergency generators. For the small quantities of diesel stored onsite for the generators, the diesel storage tanks would be self-contained and equipped with leak detectors. Other chemicals, such as cleaners and landscaping chemicals, would not be used in such large quantities that an accidental spill would create a significant impact. It is not anticipated at this time that an onsite Waste Water Treatment Plant (WWTP) would be constructed based on the Project application, but if one were constructed, chemicals would be stored within secure building and only qualified personnel would handle these chemicals. Due to the relatively limited quantities of most hazardous materials that would be stored and used onsite, as well as the containment measures for diesel fuel and WWTP chemicals and the expectation that laws would be followed, activities at the Project site would not result in a reasonably foreseeable upset or accident conditions involving the release of hazardous materials.



SOURCE: BASE-USGS; FIRE DATA-CALFIRE 2018

FIGURE 12

Fire History Map

Multi-Hazad Emergency Response Plan for Point Molate Mix-Use Development Project

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Off-site Chemicals

Chevron® owns and operates a petroleum refinery facility that is located immediately east of the Project Site. The Chevron®-Richmond facility is the largest refinery in the San Francisco Bay Area with a capacity of 240,000 barrels of crude oil per day. The primary business of the facility is to produce fuels for vehicle transportation. The facility also produces lubricating oils and liquefied petroleum gas. Ammonia (NH_3) is a by-product of the petroleum refining process; on-site storage areas capture and store the NH_3 gas (City of Richmond, 2020a).

In addition, General Chemical operates a sulfuric acid plant located over one mile from the Project Site. The various dangers of sulfuric acid arise primarily from its high chemical reactivity, the same property that makes it very useful in a range of scientific and industrial settings. When it comes into contact with materials and substances such as metal, concrete, water, and many others, chemical reactions occur — in many cases violently. Proper handling ensures that it only comes into contact with materials that it is intended to react with, thereby minimizing the potential danger. Ingestion or inhalation of sulfuric acid can lead to many different health problems depending on whether the ingestion is acute or occurs over time. The ingestion of a sizable dose at one time can lead to severe internal burns and organ damage and, if proper treatment is not administered, can be deadly. Some of the risks of sulfuric acid present only after long-term exposure and may affect those who regularly use cleaning products or laboratory materials with sulfuric acid. The long-term dangers of sulfuric acid exposure include lung damage, vitamin deficiency, and possibly cancer.

4.1.3.1 Historic Occurrences

Chevron Richmond Refinery

The California Accidental Release Prevention (CalARP) Program was implemented to "prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. This is accomplished by requiring businesses that handle more than a threshold quantity of a regulated substance listed in the regulations to develop a Risk Management Plan (RMP). An RMP is a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential" (CalOES, 2020).

CalARP regulation requires posting of major incidents, which are defined as an event that causes a fire, explosion or release of a highly hazardous material, and has the potential to result in death or serious physical harm, or results in an officially declared public shelter-in-place, or evacuation order. The Chevron Richmond Refinery had an incident in 2012 involving high-temperature hydrocarbons released in the Crude Unit at the refinery. That fire prompted a shelter-in-place order by Contra Costa County officials and caused 15,000 local residents to seek medical attention. No other major incidents were reported from this facility.

Settlements between Chevron U.S.A. and California state and local authorities after the 2012 incident required Chevron U.S.A. to "replace vulnerable pipes, institute integrity operating window parameters and alarms for safer operation, improve corrosion inspections and training, centralize safety authority within the corporation, conduct a study on improving fired heater safety during startup, and make other safety improvements at all its domestic refineries." In addition, the Richmond Fire Department received approximately $4.6M of equipment, including a fire engine and three fire trucks as part of the settlement (Environmental Protection Agency, 2018).

4.1.3.2 Probability of Future Chemical Release

The Project Site is in the proximity of the Chevron oil refinery and a sulfuric acid plant owned by General Chemical; the plant manufactures sulfuric acid. Accidental releases of toxic air contaminants have occurred in the past and could impact future residents. Based on modeling performed by the Chevron Refinery and General Chemical for compliance with the CalARP, these facilities have toxic and/or flammable chemicals that could, if released, impact the Project Site. Chevron's RMP results show that the Project Site could be affected by a release of ammonia from an ammonia storage vessel and a release of flammable substances. The General Chemical RMP shows that the Project Site could be affected by a release of oleum (San Pablo Peninsula Open Space Committee, 2005).

The 2007 Marine Research Specialists study (referenced in the 2011 Final Environmental Impact Report) found that the topography of Potrero Ridge, which separates the Project Site from the Chevron®-Richmond Refinery, creates an impediment for potential NH_3 releases reaching the Project Site. The 2007 study cites several factors that would affect the dispersion of an NH_3 vapor cloud: the Potrero Ridge increases the actual travel distance between the storage vessels and Project Site; the ridge would preclude NH_3 vapor cloud advection over the ridge during periods with extremely low wind speeds and increase turbulence and diffusion as the wind travels over the terrain; prevailing winds blow in the direction of the Project Site from the refinery approximately 16 percent of the time.

Several facilities outside of the Project Site identified releases of hazardous materials. However, these sites are either listed as closed cases or open with monitoring or remediation. The sites would not pose a significant risk to the on-site development and on-site development would not exacerbate any risk posed by these sites. Furthermore, none of these sites are adjacent to or near the off-site infrastructure improvement areas. Therefore, these sites would not pose a significant risk to the Project with the exception of the Chevron®-Richmond Refinery. The Chevron RMP represents areas that could be affected by releases under certain modeling assumptions. The modeling does not estimate the likelihood of the releases and therefore cannot quantify the risks associated with them (San Pablo Peninsula Open Space Committee, 2005).

4.1.4 Other Hazards

This MHERP specifically focuses on those hazards that are most likely to occur within the Project Site (earthquake, wildfire and chemical release). However, there are additional hazards that are known to occur within Contra Costa County that could potentially impact the Project Site, including landslides, flood, sea-level rise, and tsunami. For the following reasons, these hazards were not discussed in detail as part of this MHERP:

Landslides: According to the City's General Plan landslide potential map, the Project Site is mostly designated Category 3 –Generally Stable to Marginally Stable, which means that it is an area with greater than a 15 percent slope but is not underlain by landslide deposits or bedrock units susceptible to landslides.

Flood: Based on the most recent update of the FIRM for the Project Site, the majority of the Project Site designated for development is located within Zone X, which is outside of both the 100- and 500-year floodplains. The only infrastructure that would be located within a potential flood zone is the existing pier.

Sea-level Rise: Recently, the BCDC modeled the effects of sea level rise on the shoreline of the Bay. The modeling indicates that Point Molate would be largely unaffected by a rise of 12 inches, and only a tiny portion of the Project Site, located near the southern boundary, would be affected by a 52-inch rise in sea level. This holds for the most

extreme increase in sea level rise mapped by BCDC of 108 inches (BCDC, 2020). Additionally, none of the Modified Project's Planning Areas are located in the areas affected by either of these scenarios.

Tsunami: According to the California Geological Survey, the Project Site is not located within a mapped tsunami inundation area.

In the event one of these hazards does occur within the Project Site, the community response action guides, outlined in Section 7 of this MHERP, can be referenced.

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5 Emergency Response Strategy

5.1 Analysis Project ERP Mitigation Measures

SEIR Mitigation Measure 4.7-1 outlines multiple elements that the MHERP must address "to ensure safe evacuation of the Project Site during an emergency in a manner that does not interfere with existing evacuation plans and procedures for sheltering in place." Those elements include evacuation protocols, emergency supply kits, warning system, refuge area locations, emergency evacuation routes, shelter-in-place locations, and emergency plan coordination with CCHS and WETA.

In addition, SEIR Mitigation Measure 4.7-3 outlines requirements of the Project's WERP. Those requirements include coordination with the Richmond Fire Department, pre- and post-wildfire response measures, and long-term recovery and restoration plans.

The related SEIR Mitigation Measure 4.3-13 requires that the Project Site HOA CCandR's include vegetation management as a component along with landscaping, native vegetation, and maintaining consistency with the Open Space Plan.

The MHERP addresses the requirements of the above mitigation measures and incorporates the specific elements in the response strategy to ensure safe evacuation of the Project Site in coordination with existing plans and procedures. Wildfire related measures and safety approaches are detailed in the Point Molate Wildfire Emergency Response Plan (Dudek 2020).

5.2 Mitigation Goals

The goals of the mitigation measures are 1) to ensure safe evacuation of the Project Site during an emergency in a manner that does not interfere with existing evacuation plans and procedures for sheltering in place, 2) coordination with the Richmond Fire Department for pre- and post-wildfire response measures along with long-term recovery and restoration plans, and 3) include vegetation management in the HOA CCandR's.

5.3 Emergency Response Action Plan

5.3.1 Preparedness

The Project's funded management entity will be responsible for resident and visitor preparedness regarding potential hazards and disasters. The HOA, business owner's/leasing management entity or similar would provide a community Website with important emergency response information in a user-friendly format. Important information that should be placed on the Website includes:

- Evacuation Route Map
- Shelter in Place locations
- Emergency Response Plans
- Ready, Set, Go personal action toolkits
- Customized community outreach

In addition, focused outreach should occur through annual mailers, community events, and coordination with RFD for annual community presentations.

5.3.2 Warning System

The Project Site will include a warning system that is integrated with the Contra Costa Health Services and Community Warning System (see Sec. 4.7). Based on the coverages provided by existing warning sirens, an additional CWS siren shall be added to the Project Site. The Project shall work directly with CCHS to determine the best location for the siren; however, it is recommended the siren be located approximately in the central portion of the Project Site's developed areas.

In addition, community members will be strongly encouraged to register to receive important emergency messages at: https://docs.google.com/forms/d/e/1FAIpQLSeCxro7wt37uS3w_ELxlZt2hAPmVNwfIrs3qcpB400Flc0wxQ/viewform.

5.3.3 Communication

Emergency Public Information

The flow of accurate and timely emergency information is critical to the protection of lives and property immediately following a chemical release. The provisions listed below are to be included in the plan for the preparation and dissemination of notifications, updates, and instructional messages as a follow-up to initial warning. The following planning considerations should be addressed:

- Inform the community of health hazards associated with the chemical release through the CWS.
- Provide personal protective actions instructions at lease or sale, including:
  - Survival tips for people on what to do immediately after a chemical release has occurred.
  - Instructions for in-place protection (when to stay, where to stay, and what to do) when that option is chosen.
  - Event-specific evacuation instructions and information (routes, road closures, available transportation) when that option is chosen.

5.3.4 Response Actions

Initial Response

- Take immediate action
- Call 9-1-1
- Get the best information possible on the situation
- Assess potential risks
- Implement emergency response plan

Safety

- Take actions to minimize risks to life, health, safety
- Ensure residents are safe and secure

- Advise residents to take precautionary measures
- Response in first hours

Evacuation

- Identify evacuation routes away from harm
- Assess shelters
- Assess road and transportation conditions
- Coordinate for any evacuation actions

Repopulation and Recovery

- Assess shelter needs and/or plan closures
- Assess local damage

Fire/Police Substation Response

The Richmond Fire and Police Departments will provide fire protection, emergency medical services, and police services to the Project Site. The Project would include up to a 10,000-sq. ft. on-site joint fire and police substation that is proposed within the boundaries of the Winehaven Historic District, and to be operated by the City. The fire station would be sized to house all necessary fire apparatus and equipment to meet the Project's emergency response needs. The joint substation would provide fire protection and emergency medical services to the Project Site operating 24 hours a day. Consequently, the response time for emergencies within the Project Site would meet the City of Richmond Fire Department's goal of under four minutes for response to a fire suppression incident, and turnout time would be less than 80 seconds for fire incidents and less than 60 seconds for EMS incidents. Additionally, commuting hours, where vehicle traffic is higher than non-commuting hours, may have some impact on response times; however emergency responders are trained to provide fast response during all hours and vehicle drivers have a high compliance rate with facilitating emergency vehicle travel by ceding passage.[1] Primary response will occur from within the Project Site, which will also reduce overall response times. Further, in an emergency, the pier could be used to provide emergency access to the Project Site via the Richmond Fire Department's fire boat; the fire boat would dock and launch at the end of the pier.

[1] The portion of drivers who yielded the right-of -way to an approaching emergency vehicle was 77.1% (Savolainen, et. al. 2010).

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6 Plan Implementation, Recommendations and Maintenance Procedures

6.1 Plan Implementation

For disaster situations, a specific incident location or site may not exist in the initial response phase as local emergency responders begin initial response actions, such as mobilizing personnel and equipment, while issuing precautionary warnings to the public. Upon residents receiving the initial disaster warning information, the response plan should immediately be implemented. As the potential threat becomes clearer and a specific impact site or sites are identified, response direction and control will become more apparent.

6.1.1 Organization and Assignments

It is the Project's responsibility to provide residents with opportunities for seeking safe refuge from the effects of hazardous events. Residents, guests and visitors share responsibility with the Project's community management entity for identifying and mitigating hazards as well as preparing for, responding to, and managing recovery from emergency situations that affect the Project Site. Additionally, it is also necessary to provide emergency response education and training opportunities for residents to prepare for an emergency, as discussed in detail below.

To achieve the necessary objectives, an emergency program has been organized that is both integrated (employs the resources of the Project Site, residents, local emergency responders, and organized volunteer groups) and comprehensive (addresses mitigation/prevention, preparedness, response, and recovery). This MHERP is one element of the preparedness activities.

This plan is based on a multi-hazard approach to emergency planning. It addresses general functions that may need to be performed in the event of an emergency and identifies immediate action protocols as well as guidelines for responding to specific incidents types.

The ICS will be used by responding emergency officials to manage any larger Project Site emergencies that trigger ICS.

The NIMS establishes a uniform set of processes, protocols, and procedures that all emergency responders, at every level of government, will use to conduct response actions. This system ensures that those involved in emergency response operations understand what their roles are and have the tools they need to be effective.

It is recommended that the Project's HOA and leasing agency facilitate coordination with other components of local government and familiarization with ICS to respond to emergencies, as local residents and businesses may be first responders during an emergency. Following NIMS processes will enable a more effective response to any emergency and enhance communication between first responders and emergency responders.

Implementation of the ICS

In the event of a disaster, a specific incident site may not yet exist in the initial response phase and the local EOC may accomplish initial response actions, such as mobilizing personnel and equipment and issuing precautionary warning to the public. As the potential threat becomes clearer and a specific impact site or sites are identified, an Incident Command Post may be established. This scenario would likely occur during a community-wide disaster.

For most emergency functions, successful operations require a coordinated effort from many personnel. To facilitate a coordinated effort personnel are assigned responsibility for planning and coordinating specific emergency functions.

6.1.2 Operational Guidance

Initial Response

It is anticipated that Project residents and businesses will usually be first on the scene of an emergency. Therefore, individuals on-scene will typically make the initial assessment of the emergency and will provide information to the emergency responder agency with legal authority to assume responsibility.

The initial response may include:

- Lock down – When a person or situation presents an immediate threat. All exterior doors are locked, and employees and/or residents stay in their offices, work areas, residences.
- Building Evacuation – When conditions are safer outside than inside a building. Requires all employees and/or residents to leave the building(s) immediately, but in an organized, controlled manner. Individuals
- Reverse Evacuation – When conditions are safer inside a building than outside. Requires all employees and/or residents to go to safe places in the building(s) from outside. Individuals should go to the nearest area of refuge.
- Off-Site Evacuation – When conditions are safer off the Project Site or the local area. Requires employees and/or residents to leave the area immediately and in and organized process. Individuals should familiar themselves with the Project's evacuation routes and register for alert messages.
- Shelter-in-place – When evacuation from the area is not safe and conditions are safer on site, inside a building. [Shelter in place has different meanings depending on the type of emergency. For example, severe weather sheltering would include remaining inside buildings in interior rooms away from windows. For hazardous material release outdoors with toxic vapors, employees and residents would remain in buildings with windows and doors sealed and all ventilation systems shut off. Wildfire shelter in place would be a temporary situation where people would remain in a structure until the fire front passes, then evacuate the area with assistance from law and fire officials.]
- Drop, cover and hold – Drop low, take cover under furniture, cover eyes, head with hands and arms and protect internal organs. This initial response would be appropriate in an earthquake, severe windstorm, and other emergencies where it is critical for protection from flying debris.

Notification Procedures

In case of an emergency, the first call should be to 911. Information should include the location, nature of the incident and the impact on the Project Site.

Education and Training

Education and training are essential to the overall emergency response program. To ensure that all community members (residents and employees) are aware of the MHERP, educational and training opportunities will be offered. Information addressed in these sessions will include updated information on plans, procedures and personal safety. It is recommended that community members participate in external drills or exercises sponsored by local emergency responders.

6.1.3 Response Functions and Responsibilities

Source and Use of Resources

Community members will use available resources to respond to emergency situations until emergency response personnel arrive. If additional resources are required, the following options exist:

- Request assistance from volunteer groups active in disasters (local Community Emergency Response Team (CERT), Red Cross, Salvation Army, etc.).
- Request assistance from industry or individuals who have resources needed to assist with the emergency.

ICS

The IC is responsible for carrying out the ICS function of command—i.e., managing the incident. The IC is generally responsible for field operations, including:

- Isolating the scene.
- Directing and controlling the on-scene response to the emergency and managing the emergency resources committed there.
- Warning residents in the area of the incident and providing emergency instructions to them.
- Determining and implementing protective measures (evacuation or in-place sheltering) for the those in the area of the incident and for emergency responders at the scene.
- Implementing traffic control arrangements in and around the incident scene.
- Requesting additional resources.

The EOC is generally responsible for:

- Providing resource support for the incident command operations.
- Issuing community-wide warning.
- Issuing instructions and providing information to the general public.
- Organizing and implementing large-scale evacuation.
- Organizing and implementing shelter and massive arrangements for evacuees.

The Emergency Management Coordinator

The HOA should identify an Emergency Management Coordinator who will be responsible for the following pre- and post-emergency:

- Establish an emergency response plan review committee to coordinate all emergency response plans;
- Consult with the City of Richmond to analyze future system needs regarding emergency preparedness, planning and education and to ensure coordination of the plan with community emergency plans;
- Provide copies of this plan to businesses and residents;
- Develop and coordinate emergency response education;
- Coordinate local planning and preparedness activities and the maintenance of this plan;
- Prepare and maintain a resource inventory;
- Arrange appropriate training opportunities for emergency response, including annual informational meeting; and
- Coordinate periodic emergency exercises to test emergency plans and training.

During an emergency, the designated Emergency Management Coordinator shall monitor the emergency response, stay in contact with the leaders of the emergency service agencies, and follow directions of the IC.

Emergency Response Team

The Project's HOA will facilitate and encourage participation in the local Community Emergency Response Team (CERT) program (locally referred to as Richmond Emergency Action Community Teams (REACT)). The community's REACT will be responsible for the following:

- Assist during an emergency by providing support and care for affected employees and residents before local emergency services arrive or in the event of normal local emergency services being unavailable.
- Provide the following functions when necessary and when performing their assigned function will not put them in harm's way:
    - Evacuation – assist in the evacuation of all facilities (both building and off-site evacuations) and coordinate the assembly of the employees and residents once an evacuation has taken place.
    - First aid – provide basic first aid to those injured.

6.1.4 Emergency Recovery

If a disaster occurs, local emergency officials will initiate a recovery effort. Emergency stabilization could include identifying impending threats to safety and property and then actions immediately implemented to mitigate these identified threats. Short-term operations seek to restore vital services to the affected areas and provide for the basic needs. Long-term recovery focuses on restoring the community to its normal state. The recovery process may include assistance to businesses and residents. Examples of recovery programs that may be available include temporary relocation, restoration of services, temporary housing, debris removal, restoration of utilities, and disaster mental health services.

Post-wildfire response measures will include immediate fire suppression damage repair and emergency stabilization measures, including actions to minimize soil erosion impacts resulting from fire suppression activities. These actions will consider the installation of water run-off and erosion control structures, removal of burned vegetation, and installation of warning signs.

Long-term post-wildfire recovery and restoration measures include rehabilitation of any burned areas. These measures include restoring burned habitat, revegetation, monitoring fire effects, and treating noxious weed infestations. A recovery plan would be prepared by qualified personnel with burned area restoration expertise and in coordination with and to the approval of the Richmond Fire Department. The Project's WERP includes additional details on post-fire recovery efforts.

6.2 Monitoring and Maintenance

On an as needed basis, the following process will be used to assess the MHERP, enabling community leaders to address the overall effectiveness of the response strategies including:

- Review performance related to response actions;
- Compare MHERP strategies to actual hazard responses;
- Identify any necessary changes to existing MHERP response actions; and
- Identify new MHERP actions to be incorporated into the plan.

6.3 Amendments and Updates

This MHERP will be updated based upon ideas generated during actual emergency situations and when changes in threat hazards, resources, or capabilities occur. The MHERP must be revised or updated as necessary and will address all sections. The following should be considered when considering revisions to the MHERP:

- Consult with hazard experts to review the MHERP hazard analysis. The update shall include any new information about local hazards, the Project Site's exposure and vulnerabilities, as well as a review of all loss estimates.
- Measure progress on response actions since the MHERP inception.
- Assess response actions to determine if they should be removed, retained or rewritten.
- Propose new response actions for the updated MHERP.
- Perform a community review process, including input opportunities for community partners and residents.
- Incorporate appropriate feedback and conduct an outreach process.

6.4 Recommendations for Emergency Preparedness

An emergency, such as those discussed in this MHERP, can occur at any time and typically without warning. According to FEMA's Ready campaign, after an emergency, residents and business need to be prepared to survive on their own for at least 72 hours. The following recommendations are provided for consideration as ways to improve readiness and "disaster resistance" for both residents and business within the Project Site. These recommendations are based on evaluation of the proposed structures, access, fuel modification, nearby potential hazards, and other site-specific factors.

6.4.1 Preparedness Functions and Responsibilities

The HOA and leasing agency will be responsible for establishing and maintaining communitywide emergency preparedness efforts, including, but not limited to:

- Establishing and maintaining designated temporary shelters, with the input of RFD, in the event emergency evacuation is not feasible.
- Establishing a location where a Red Flag or sign can be placed when potentially hazardous conditions exist (e.g., red flag warning weather, severe storms with potential flooding, etc.).
- Providing and maintaining emergency evacuation route signage throughout the Project Site.
- Distributing hard copies of the Project's MHERP and WERP to homeowners and business owners, as well as posting both plans on the HOA's and leasing agency's websites.
- Holding an annual emergency and evacuation preparedness informational meeting in partnership with Richmond Fire Department's Office of Emergency Services.
- Providing Emergency Response Plans and maps to Fire, Police, and Marine safety Departments.
- Establishing Project Site community REACT team.
- Coordinating with Richmond first responders for early notifications during potentially hazardous conditions so early evacuations are facilitated.

6.4.2 Education and Outreach

The HOA will be active in its outreach to residents regarding emergency preparedness and general evacuation procedures. There are aspects of emergency preparedness and evacuation that require a significant level of awareness by the residents, business owners, and emergency services in order to reduce and/or avoid problems with an effective evacuation. Mitigating potential impediments to successful evacuations requires focused and repeated information through a strong educational outreach program. The HOA will engage residents and businesses through a variety of methods.

This emergency response plan will be provided to each homeowner/HOA member as well as being accessible on the HOA Website. The leasing agency will also provide this emergency response plan to lease holders as well as being accessible on the leasing agency's website. Annual reminder notices will be provided to each homeowner and lease holder encouraging them to review the plan and be familiar with community evacuation protocols. The HOA will coordinate with Richmond Fire Department's Office of Emergency Services to hold an annual emergency and evacuation preparedness informational meeting. Representatives of RFD will be invited to attend, and important emergency and evacuation information will be reviewed. One focus of these meetings and the HOA/leasing agency's annual message will be on the importance of each resident and business owner to prepare and be familiar with their own emergency plan, as described as part of FEMA's Ready campaign, detailed at: https://www.ready.gov/plan, further the information that guides preparation of an individual emergency plan is provided in Appendix A. Appendix B provides the "Ready, Set, Go!" personal action plan. Appendix C provides Evacuation Tips prepared by the Hills Emergency Forum.

The focus of the Ready campaign is to educate and empower individuals to prepare for, respond to and mitigate emergencies, including natural and man-made disasters. This campaign is designed to help individuals (1) stay informed about the different types of emergencies that could occur and their appropriate responses;

(2) make an emergency plan; (3) build an emergency supply kit; and (4) get involved in the community by taking action to prepare for emergencies.

Additionally, as described in the WERP, the "Ready, Set, Go!" program focuses on public awareness and preparedness for those living in WUI areas. The program is designed to incorporate the local fire protection agency as part of the training and education process in order to ensure that evacuation preparedness information is disseminated to those subject to the potential impact from a wildfire. Reference the Project's WERP for additional information regarding the "Ready, Set, Go!" program.

Further, situational awareness requires a reliable information source. The Richmond OES operates a program known as Nixle that has the capability to send emergency notifications via text message and email. It is up to individual residents to register their cell phones for Nixle. The registration of cell phones can be done online at http://www.ci.richmond.ca.us/nixle. The HOA will strongly encourage all residents to register telephone numbers.

As part of the Project's emergency preparedness and evacuation readiness program, information will be delivered in a variety of methods. The HOA will be responsible to provide and distribute to each homeowner a complete copy of the Project's WERP and this MHERP, including materials from the Ready campaign and READY! SET! GO! program. The HOA is also responsible for ensuring the distribution of copies of the aforementioned materials to those individuals that purchase/rent properties, and the leasing agency will be responsible to provide these materials to the lease holders of non-residential properties. Lease holders of the commercial properties will be responsible for the dissemination of both the WERP and MHERP information to their employees.

As part of the approval of this Project, it shall be binding on the HOA to actively participate as a partner with the RFD's OES to assist with the coordination and distribution of safety information they develop.

6.4.2.1 Additional Recommendations

In addition to the requirements outlined above, the HOA and leasing agency can take further action to improve readiness within the Point Molate community. The following are additional recommendations to ensure residents and businesses are prepared in the event of a disaster.

Community Workshops/Events

Hosting hands-on workshops and preparedness events are proactive measures that will improve disaster preparedness among all members of the community. The aim of these additional workshops and events is to provide opportunities for community members to have greater access to the information and tools they will need in the event of a disaster. Above and beyond the annual informational meeting, the following hands-on workshops and events are recommended:

- Build A Kit Workshop – Demonstrate what an emergency kit should include for a family of four to survive up to 72 hours.
- Prepare A Plan Workshop – Explain to residents and businesses what should be considered when developing an emergency plan and provide individuals materials to prepare their own plan.
- Defensible Space Cleanup Day – In the summer, schedule a day for the whole community to ensure the defensible space around their property is clear of potential fire hazards.

Local and National Emergency Preparedness Programs

In addition to hosting community workshops/events, the HOA should encourage participation in local and national emergency preparedness programs, such as:

- Great California Shake Out – Encourage participation in this annual event to practice "drop, cover, and hold".
- California Preparedness Day – This event features emergency preparedness activities as well as a variety of disaster readiness demonstrations, including watch water rescues, safety operations from land, water and air, all in the spirit of becoming a more prepared California. While this specific event takes place in Sacramento, consider holding a similar event at the Project.
- National Preparedness Month – Each September FEMA's Ready campaign hosts the month-long awareness program. Share this information with residents, and consider focusing outreach efforts, such as the annual information session, during this time.
- Ready Campaign Preparedness Calendar – This is a planning tool that marks preparedness activities and provides customizable resources to help promote preparedness throughout the year. Materials can be adapted to hazards the Project Site. Information is available at https://www.ready.gov/calendar.

Communication

There are a variety of ways to communicate with residents and businesses to promote disaster preparedness, and regular communication with residents and businesses is critical for developing disaster readiness among community members. In addition to posting both the WERP and MHERP on the HOA and leasing agency websites, information regarding upcoming events, how to register for emergency alerts, and additional resources should also be provided. Social media platforms, such as Facebook, Instagram, and NextDoor can also help bring awareness and generate interest community preparedness events, the community's emergency response plans, as well as encouraging participation in local and national preparedness programs. Further, similar communication can be provided through direct or electronic mail.

7 Community Response Action Guides

7.1 Emergency protocols

Emergency protocols form the core responses to incidents in this MHERP. These are written actions that are most often implemented when an emergency calls for specific response procedures and may include:

- Building Evacuation
- Off-site Evacuation
- Reverse Evacuation
- Shelter-in Place
- Drop, Cover, and Hold

The difference between an emergency protocol and an incident specific procedure is that a single emergency protocol may be utilized in one or more specific emergencies. For example, shelter-in-place may be utilized as one of several responses to an outside hazardous material spill and may include reverse evacuation into the building and/or an off-site evacuation, depending on the circumstances.

The following responses will be considered for emergency situations affecting the Project Site.

In the event a wildfire or smoke from a wildfire has been detected:

- Immediately call 9-1-1 to report a possible wildfire/vegetation fire.
- If communication with Fire Department is possible, consult with fire officials regarding off-site evacuation. If communication with Fire Department is not possible, conduct community assessment of situation including:
    - Fire location and distance from Project Site;
    - Weather conditions – wind strength and direction, humidity;
    - Fuel conditions – continuous fuels between fire and Project Site, fuel moisture levels;
    - Road conditions – free flowing, heavy traffic, blocked; and
    - Others as appropriate and that may affect timely evacuation.
- If the fire is small, weather conditions are not hot, dry and windy, and roads are not blocked, off-site evacuation in the opposite direction of the fire may be appropriate.
- If fire is close to the Project Site and weather conditions and fuels would promote wildfire spread, roadways are experiencing heavy traffic or is blocked, and there are a high number of people on site, sheltering on-site may be appropriate.
- Employees, residents and visitors should be notified immediately of the evacuation or on-site sheltering plan.

In the event of an earthquake:

- Call 9-1-1(if necessary) to report injuries, fire, rescue or other needs associated with significant earthquakes.
- DROP, COVER, AND HOLD. Seek safety under stout tables, desks, and doorways.

- Initiate a building evacuation alert after shaking stops. Evacuate using designated routes or alternate routes to the outside Emergency Evacuation Assembly Area.
- Shut off utilities and notify the appropriate utility company of damages (e.g., gas, power, water or sewer).
- Consult with emergency management and public safety officials to determine if the buildings are safe for re-occupancy.

In the event of a chemical release:

- Announce a SHELTER-IN-PLACE alert and a reverse evacuation into buildings.
- Call 9-1-1; identify the name/exact location of the incident, describe the emergency, state what actions are being taken to safeguard employees and residents.
- Turn off air handling/ventilation systems, close all windows and doors and turn off fans and air conditioners.
- Individuals outside should immediately be directed into buildings using the nearest entrance and proceed to the designated safer areas. If movement into the building would expose persons to hazardous chemical plume, instructors/staff should move to designated outdoor assembly areas upwind or crosswind from the spill.
- Contact local emergency response agencies and monitor radio and/or television concerning the incident.
- Remain in SHELTER-IN-PLACE until the fire official or appropriate agency provides clearance or is otherwise notified by emergency officials.
- Upon the first indication of an earthquake, DROP, COVER and HOLD, seek shelter and move away from windows and overhead hazards, as necessary.
- If outdoors, move away from buildings, gas and electrical lines.
- Be prepared to relocate to a remote site if an off-site evacuation is ordered.

To ensure coordination with CCHS for those affected by a hazardous materials incident, the County procedures for Shelter-in-Place and Evacuation Plans are listed below (Contra Costa County, 2009):

a. Determine the properties of the hazardous materials involved, including toxicity, physical, chemical, fire, explosion, quantity, concentration, vapor pressure, density and potential health effects;
b. Evaluate area topography, meteorology, hydrology, demography and facility characteristics, including the delineation of potentially impacted areas;
c. Determine whether shelter-in-place or evacuation is necessary;
d. Direct public to Shelter-In-Place first, and remain Sheltered-In-Place until it is determined that an evacuation is necessary;
e. Ensure timely notification of the affected public through activation of the CWS;
f. Coordinate available information with responding agencies and EMS to determine logistics (i.e. evacuation routes, mass-care facilities, shelter and reception areas); and
g. Ensure hospitals are notified by EMS of shelter-in-place and shelter-in-place release.

7.2 Evacuation

The type of evacuation response to an emergency varies depending on the nature and location of the hazard. The Project offers the ability to evacuate via an improved primary access road that offers additional vehicle capacity in the outbound direction. The Project also offers the ability to evacuate residents via water to the west from the improved pier. Additionally, the Project offers the ability to provide on-site sheltering for various types of emergencies. These combined options provide emergency managers with optionality during an emergency, which is an important component of successfully responding to and managing large evacuations. Despite the Project's reliance on one access route, these additional options provide contingency evacuation flexibility that combine to meet the intent of applicable code requirements. Richmond OES will notify residents of the type of evacuation that is required.

- Building evacuation. Whenever it is determined that it is safer outside than inside the building(s) (i.e., fire, explosion, hazardous material spill inside, structural failure, etc.).
- Off-site evacuation. Whenever it is determined that it is safer outside the Project Site than within (i.e., wildfire, chemical release). This protocol is used when circumstances require off-site evacuation and relocation to a remote site. **Figure 13** provides an evacuation route map.
- Reverse evacuation. When conditions are safer inside a building than outside such as: severe weather, community emergency, gang activity, hazardous material release outside, etc.

Wildfire

Wildfires most often require off-site evacuation. Evacuation procedures for wildfire are discussed more thoroughly in the Project's WERP.

Earthquake

Major consequences associated with an earthquake are the collapse of buildings and other structures, and landslides. In a metropolitan area that is struck by a major earthquake many hundreds to thousands of people could be trapped and would require immediate assistance. In such situations, it is likely that local and State governments would be overwhelmed by the demand for emergency services. Further, jurisdictions may not have a sufficient specialized equipment or enough trained teams available to accomplish the large-scale search and rescue operations that would be needed to respond to a catastrophic earthquake.

Thus, the local community must be prepared to respond to a major earthquake with or without the assistance of initial responders, and it is critical to provide the following as part of preparedness education and outreach:

- Survival tips for people on what to do during and immediately after an earthquake.
- Warnings and advice on the additional threat of fire, unsafe areas, building collapse, aftershocks, and other hazards.

Immediately following an earthquake people may need to be evacuated. People should first be evacuated from structures that have been damaged and are likely to receive more damage when hit by one or more of the aftershocks.

Chemical Release

Hazardous materials emergency response should address evacuation, including provisions for a precautionary evacuation and alternative traffic routes. Hazardous materials evacuation planning is little different from evacuation planning in general. The most important difference is that initial movements should be cross wind. Another difference is that some incidents may involve "selective evacuation" of a small area. The evacuation order should be clarified, and provision should be made for the necessary coordination with the responding agencies.

The following planning considerations should be developed:

- Maps that identify primary and alternate evacuation routes for risk zones around locations that present a significant threat to the Project Site.
- Assembly areas and modes of transportation to move evacuees.
- Provisions for moving special needs population in a chemical release situation.
- Tracking extent of evacuations ordered during response operations.

CWS may only issue an alert on behalf of the Health Services Department if the incident is deemed to have off-site impact (i.e. odor, smoke, etc.). CWS will alert the affected community about the specific hazardous situation, its location and the recommended protective action to take. Some fixed hazardous materials facilities have terminals to activate the CWS on behalf of Contra Costa County Health Services Department to expedite the notification process when a release has occurred (Contra Costa County, 2020).

Emergency Evacuation Assembly Areas

An emergency evacuation assembly area is a safe zone away from a building, identified and marked in advance, where people can congregate in the event of an emergency evacuation. This should be at a safe distance from buildings and should be universally known by all occupants. The exit routes to an evacuation assembly area will be marked, properly lit, and be of adequate size to accommodate the number of evacuees expected.

In contrast, an area of refuge is a location in a building designed to hold occupants during a fire or other emergency, when evacuation may not be safe or possible. The City's Building and Safety Department will ensure that refuge areas are included where required during the building permit plan check process.

There are three proposed emergency evacuation assembly areas for the Project Site, one each in the following areas: North Cove, Point Molate, and South Cove (**Figure 14**). All three locations are in designated open space areas near the waterfront, near the Bay Trail pedestrian pathway, and will be a minimum of 150 feet from all buildings. The exact locations of the assembly areas will depend upon the final approved Project design and building siting. Residents and employees will be notified of all three evacuation assembly areas and informed of the primary and secondary assembly areas for each area of the Project Site. **Table 4** identifies which of the planning and development areas would be served by each of the identified assembly areas. The Project Site HOA will prepare and distribute to residents information regarding the closest assembly areas (see sample below).

The primary assembly area for the occupants of all buildings located in **North Cove** is **North Cove Park**. The secondary assembly area is **The Point**. These buildings are: **1234 Main Street** and **5678 Second Street**.

Table 4. Emergency Evacuation Assembly Area Locations and Areas Served

Emergency Evacuation Assembly Area	Planning Areas Served	Development Areas Served
North Cove (The Village – Winehaven Historic District)	F, G, H	VI.1, VI.2, VII.1, VII.2
Point Molate (The Point)	C, D, E	III.1, III.2, IV, V
South Cove (The Promenade)	A, B	I, II.1, II.2

The Point emergency evacuation assembly area will also serve as a gathering site in the event a water escape evacuation is needed utilizing WETA resources and ferries. WETA is a regional public transit agency tasked with operating and expanding ferry service on the San Francisco Bay and with coordinating the water transit response to regional emergencies. The Project shall coordinate with WETA to provide emergency evacuation services to the Project Site.

The existing pier and the associated water transit terminal would be retrofitted for passenger use. A parking lot to serve the watercraft terminal or open space area would be provided near the pier and would also be used as an assembly area during an emergency.

Evacuation Signage

The Project's HOA shall be required to provide wayfinding signs throughout the Project Site that assist individuals in locating emergency assembly areas and evacuation routes. Examples of wayfinding signs are shown in Figure 14, and suggested locations of these signs throughout the Project Site, along primary road and neighborhood street access routes identified in Figure 7. The actual locations again will be dependent upon the final approved Project design.

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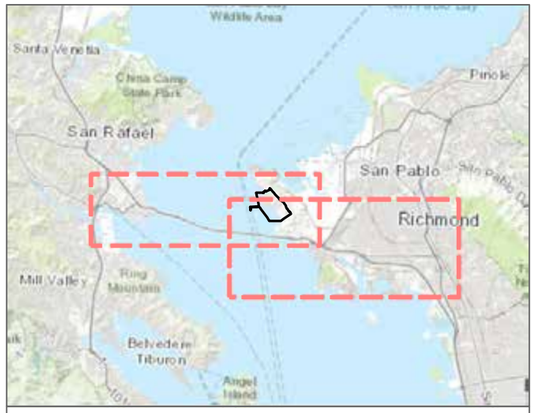


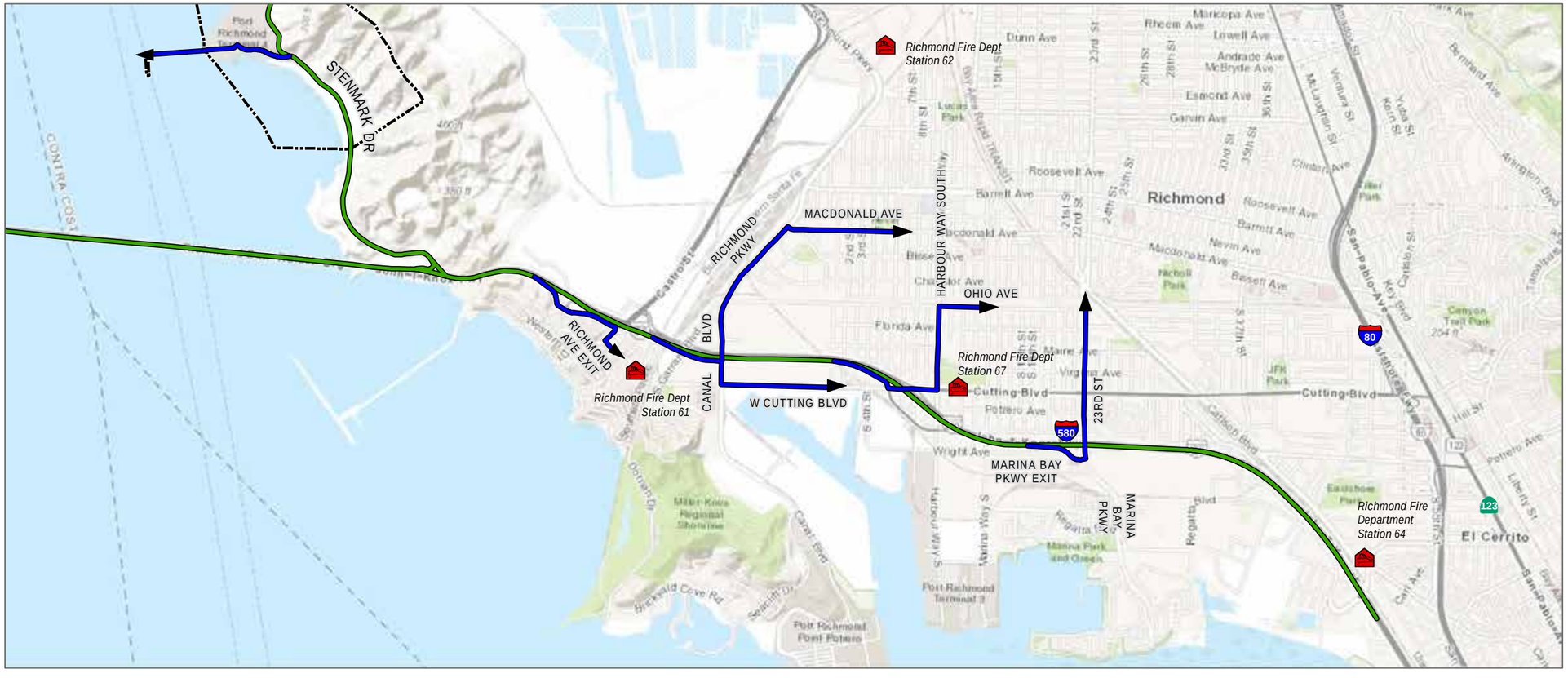
Project Boundary

Fire Station

Evacuation Routes

Secondary Evacuation Route

Primary Evacuation Route



SOURCE: BASE-ESRI

DUDEK

0 1,500 3,000 Feet

FIGURE 13

Evacuation Routes

Multi-Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

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SOURCE: ANALYTICAL ENVIRONMENTAL SERVICES 2020

FIGURE 15

Evacuation Assembly Areas

Multi–Hazard Emergency Response Plan for Point Molate Mix-Use Development Project

DUDEK

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Figure 15. Sample signs for Emergency Evacuation Assembly Areas and Access Routes

In the event of fire or other emergency that leads to an evacuation of the Project Site, the occupants should assemble at the designated assembly areas. Further evacuation may become necessary as directed by law and/or fire officials.

7.3 Shelter-in-place

Evacuation may not be always necessary or advisable and shelter-in-place may be the preferred option. Sheltering in place provides a refuge inside a residence or building during an emergency, such as severe weather or outdoor chemical release. This type of response maximizes the safety of occupants when evacuation would place people at risk.

Several "shelter-in-place" areas (areas of refuge) would be located within certain buildings in the Project Site to provide a safe location during emergencies to provide shelter and, if needed, provide staging areas for evacuation of the Project Site (Figure 13). These locations will be supplied by the HOA with earthquake emergency kits, filter masks and other appropriate supplies as recommended by the Richmond Fire Department. In some cases, it may be safest for residents to shelter within their homes, if directed by officials managing the incident. Therefore, preparedness outreach should also focus on homeowner's readiness and preparation of personal response toolkits.

For some chemical hazards, using wet towels and shutting off air circulation systems may suffice. It is also possible that the cloud could move past more quickly than an evacuation can be affected. Additionally, if the hazardous materials incident results from another hazard event (such as an earthquake or a flood), any protective action decision will have to factor in additional concerns.

Criteria will be used to determine when to rely on shelter-in-place protection instead of evacuation to protect the community. The following concerns should be considered:

- Health risks (respiratory and skin) associated with duration of exposure;
- Speed of onset and persistence of the chemical release; and
- Use of barriers (overhead protection, closing windows and doors, seeking shelter in home basements, etc.) to reduce exposure.

Community members should listen for public warning notifications, heed instructions to move to shelter or evacuation points, and keep listening to the radio or other source of information for updated instructions.

7.4 Drop, Cover and Hold

Drop, Cover and Hold is used when an incident occurs with little or no warning. This action is taken to seek protection from flying or falling debris resulting from explosions, structural failures, severe weather or earthquake.

8 Assumptions and Limitations

8.1 Assumptions

The following are assumptions made in the development of this MHERP:

- The Project Site will continue to be exposed to and subject to the impact of those hazards described previously, as well as, lesser hazards and others that may develop in the future.
- It is possible for a major disaster to occur at any time, and at any place. In many cases, dissemination of warning to the public and implementation of increased readiness measures may be possible. However, some emergency situations occur with little or no warning.
- A single site emergency, i.e., fire, gas main breakage, etc., could occur at any time without warning and the residents affected cannot, and should not, wait for direction from local response agencies. Action is required immediately to save lives and protect property.
- Following a major or catastrophic event, the Project Site will have to rely on its own resources to be self-sustaining for up to 72 hours or longer.
- There may be a number of injuries of varying degrees of seriousness to residents. However, rapid and appropriate response will reduce the number and severity of injury.
- Outside assistance will be available in most emergency situations. Since it takes time to summon external assistance, it is essential for the Project Site to be prepared to carry out the initial emergency response, as safely as possible, on an independent basis.
- Proper mitigation actions, such as creating situation awareness, pre-planning, and fire inspections, amongst others, can prevent or reduce disaster-related losses. Detailed emergency planning and training can improve the Project Site's readiness to deal with emergency situations.
- A spirit of volunteerism will result in providing assistance and support to emergency response efforts.

8.2 Limitations

This Multi-Hazard Emergency Response Plan has been prepared for the Point Molate Mixed-Use Project and is based on available information regarding natural and manmade hazards that are considered to have a possibility to occur within the Project Site. This MHERP explores potential hazards that may result in actions by the HOA, leasing agency, residents, business owners and employees. It does not include an analysis and assessment of all possible hazards.

During an emergency, many variables must be evaluated before making final decisions regarding appropriate actions. This MHERP provides standard responses and actions based on emergency response templates available through federal and local government agencies. Actual actions may deviate from those provided herein and should be based on events occurring at the time of the emergency. Whenever possible, communication and coordination with local emergency responders including law enforcement and fire officials should be made prior to making decisions regarding appropriate actions. When communication is not possible, this MHERP should be consulted for guidance on the types of actions that should be included in alternative analysis.

This MHERP must be maintained and updated as the Project Site and environmental conditions change. Likewise, as situational conditions change, the action plans require updating to improve efficiency and further customize the plans to the Project. In addition to updating and maintaining the MHERP, its contents must be distributed to residents and business owners, and training provided so that they understand their responsibilities for their own safety and how to respond to the most typical emergency situations.

This MHERP does not imply that hazardous or emergency situations will not occur or that all persons will be safe and out of harm's way. Nor does this MHERP indicate that the provided emergency actions are the only way or the correct way to react to emergency conditions in all circumstances.

Further, no guarantee of a perfect response system is implied by this plan. As emergency situations include events that cannot be entirely predicted, each event includes unique circumstances that make it impossible to completely pre-plan, and personnel and resources may be overwhelmed. The Project endeavors to make every reasonable effort to respond to emergency situations with the resources and information available at the time.

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Appendix A

Emergency Plan Preparations Guides

Additional Items to Consider Adding to an Emergency Supply Kit:

- ❑ **Prescription medications and glasses**
- ❑ **Infant formula and diapers**
- ❑ **Pet food and extra water for your pet**
- ❑ **Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container**
- ❑ **Cash or traveler's checks and change**
- ❑ **Emergency reference material such as a first aid book or information from www.ready.gov**
- ❑ **Sleeping bag or warm blanket for each person. Consider additional bedding if you live in a cold-weather climate.**
- ❑ **Complete change of clothing including a long sleeved shirt, long pants and sturdy shoes. Consider additional clothing if you live in a cold-weather climate.**
- ❑ **Household chlorine bleach and medicine dropper** – When diluted nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
- ❑ **Fire Extinguisher**
- ❑ **Matches in a waterproof container**
- ❑ **Feminine supplies and personal hygiene items**
- ❑ **Mess kits, paper cups, plates and plastic utensils, paper towels**
- ❑ **Paper and pencil**
- ❑ **Books, games, puzzles or other activities for children**

Ready

Prepare. Plan. Stay Informed.®

Emergency Supply List

FEMA

www.ready.gov

Recommended Items to Include in a Basic Emergency Supply Kit:

- **Water, one gallon of water per person per day for at least three days, for drinking and sanitation**
- **Food, at least a three-day supply of non-perishable food**
- **Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both**
- **Flashlight and extra batteries**
- **First aid kit**
- **Whistle to signal for help**
- **Dust mask, to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place**
- **Moist towelettes, garbage bags and plastic ties for personal sanitation**
- **Wrench or pliers to turn off utilities**
- **Can opener for food (if kit contains canned food)**
- **Local maps**

Through its *Ready* Campaign, the Federal Emergency Management Agency educates and empowers Americans to take some simple steps to prepare for and respond to potential emergencies, including natural disasters and terrorist attacks. *Ready* asks individuals to do three key things: get an emergency supply kit, make a family emergency plan, and be informed about the different types of emergencies that could occur and their appropriate responses.

All Americans should have some basic supplies on hand in order to survive for at least three days if an emergency occurs. Following is a listing of some basic items that every emergency supply kit should include. However, it is important that individuals review this list and consider where they live and the unique needs of their family in order to create an emergency supply kit that will meet these needs. Individuals should also consider having at least two emergency supply kits, one full kit at home and smaller portable kits in their workplace, vehicle or other places they spend time.

Ready

FEMA

Federal Emergency Management Agency
Washington, DC 20472

BE SMART. TAKE PART. CREATE YOUR FAMILY EMERGENCY COMMUNICATION PLAN

Join with others to prepare for emergencies and participate in America's PrepareAthon! | ready.gov/prepare

Creating your *Family Emergency Communication Plan* starts with one simple question: "What if?"

"What if something happens and I'm not with my family?" "Will I be able to reach them?" "How will I know they are safe?" "How can I let them know I'm OK?" During a disaster, you will need to send and receive information from your family.

Communication networks, such as mobile phones and computers, could be unreliable during disasters, and electricity could be disrupted. Planning in advance will help ensure that all the members of your household—including children and people with disabilities and others with access and functional needs, as well as outside caregivers—know how to reach each other and where to meet up in an emergency. Planning starts with three easy steps:

1. COLLECT.

Create a paper copy of the contact information for your family and other important people/offices, such as medical facilities, doctors, schools, or service providers.

2. SHARE.

Make sure everyone carries a copy in his or her backpack, purse, or wallet. If you complete your *Family Emergency Communication Plan* online at ready.gov/make-a-plan, you can print it onto a wallet-sized card. You should also post a copy in a central location in your home, such as your refrigerator or family bulletin board.

3. PRACTICE.

Have regular household meetings to review and practice your plan.

TEXT IS BEST!

If you are using a mobile phone, a text message may get through when a phone call will not. This is because a text message requires far less bandwidth than a phone call. Text messages may also save and then send automatically as soon as capacity becomes available.

July 2015

The following sections will guide you through the process to create and practice your *Family Emergency Communication Plan*.

HOUSEHOLD INFORMATION

Write down phone numbers and email addresses for everyone in your household. Having this important information written down will help you reconnect with others in case you don't have your mobile device or computer with you or if the battery runs down. If you have a household member(s) who is Deaf or hard of hearing, or who has a speech disability and uses traditional or video relay service (VRS), include information on how to connect through relay services on a landline phone, mobile device, or computer.

SCHOOL, CHILDCARE, CAREGIVER, AND WORKPLACE EMERGENCY PLANS

Because a disaster can strike during school or work hours, you need to know their emergency response plans and how to stay informed. Discuss these plans with children, and let them know who could pick them up in an emergency. Make sure your household members with phones are signed up for alerts and warnings from their school, workplace, and/or local government. To find out more about how to sign up, see *Be Smart. Know Your Alerts and Warnings* at http://1.usa.gov/1BDloze. For children without mobile phones, make sure they know to follow instructions from a responsible adult, such as a teacher or principal.

OUT-OF-TOWN CONTACT

It is also important to identify someone outside of your community or State who can act as a central point of contact to help your household reconnect. In a disaster, it may be easier to make a long-distance phone call than to call across town because local phone lines can be jammed.

EMERGENCY MEETING PLACES

Decide on safe, familiar places where your family can go for protection or to reunite. Make sure these locations are accessible for household members with disabilities or access and functional needs. If you have pets or service animals, think about animal-friendly locations. Identify the following places:

- ☐ *Indoor*: If you live in an area where tornadoes, hurricanes, or other high-wind storms can happen, make sure everyone knows where to go for protection. This could be a small, interior, windowless room, such as a closet or bathroom, on the lowest level of a sturdy building, or a tornado safe room or storm shelter.
- ☐ *In your neighborhood*: This is a place in your neighborhood where your household members will meet if there is a fire or other emergency and you need to leave your home. The meeting place could be a big tree, a mailbox at the end of the driveway, or a neighbor's house.
- ☐ *Outside of your neighborhood*: This is a place where your family will meet if a disaster happens when you're not at home and you can't get back to your home. This could be a library, community center, house of worship, or family friend's home.

- [ ] *Outside of your town or city*: Having an out-of-town meeting place can help you reunite if a disaster happens and:
  - You cannot get home or to your out-of-neighborhood meeting place; or
  - Your family is not together and your community is instructed to evacuate the area.

  This meeting place could be the home of a relative or family friend. Make sure everyone knows the address of the meeting place and discuss ways you would get there.

OTHER IMPORTANT NUMBERS AND INFORMATION

You should also write down phone numbers for emergency services, utilities, service providers, medical providers, veterinarians, insurance companies, and other services.

- [ ] Make copies of your *Family Emergency Communication Plan* for each member of the household to carry in his or her wallet, backpack, or purse. Post a copy in a central place at home. Regularly check to make sure your household members are carrying their plan with them.
- [ ] Enter household and emergency contact information into all household members' mobile phones or devices.
- [ ] Store at least one emergency contact under the name "In Case of Emergency" or "ICE" for all mobile phones and devices. This will help someone identify your emergency contact if needed. Inform your emergency contact of any medical issues or other requirements you may have.
- [ ] Create a group list on all mobile phones and devices of the people you would need to communicate with if there was an emergency or disaster.
- [ ] Make sure all household members and your out-of-town contact know how to text if they have a mobile phone or device, or know alternative ways to communicate if they are unable to text.
- [ ] Read *Be Smart. Know Your Alerts and Warnings* at http://1.usa.gov/1BDloze and sign up to receive emergency information.

Once you have completed your *Family Emergency Communication Plan*, made copies for all the members of your household, and discussed it, it's time to practice!

Here are some ideas for practicing your plan:

- [ ] Practice texting and calling. Have each person practice sending a text message or calling your out-of-town contact and sending a group text to your mobile phone group list.
- [ ] Discuss what information you should send by text. You will want to let others know you are safe and where you are. Short messages like "I'm OK. At library" are good.

- [ ] Talk about who will be the lead person to send out information about the designated meeting place for the household.
- [ ] Practice gathering all household members at your indoor and neighborhood emergency meeting places. Talk about how each person would get to the identified out-of-neighborhood and out-of-town meeting places. Discuss all modes of transportation, such as public transportation, rail, and para-transit for all family members, including people with disabilities and others with access and functional needs.
- [ ] Regularly have conversations with household members and friends about the plan, such as whom and how to text or call, and where to go.
- [ ] To show why it's important to keep phone numbers written down, challenge your household members to recite important phone numbers from memory—now ask them to think about doing this in the event of an emergency.
- [ ] Make sure everyone, including children, knows how and when to call 911 for help. You should only call 911 when there is a life-threatening emergency.
- [ ] Review, update, and practice your *Family Emergency Communication Plan* at least once a year, or whenever any of your information changes.

To help start the conversation or remind your family why you are taking steps to prepare and practice, you may want to watch the 4-minute video, *It Started Like Any Other Day*, about families who have experienced disaster, at www.youtube.com/watch?v=w_omgt3MEBs. Click on the closed captioning (CC) icon on the lower right to turn on the captioning.

After you practice, talk about how it went. What worked well? What can be improved? What information, if any, needs to be updated? If you make updates, remember to print new copies of the plan for everyone.

OTHER IMPORTANT TIPS FOR COMMUNICATING IN DISASTERS[1]

- [ ] Text is best when using a mobile phone, but if you make a phone call, keep it brief and convey only vital information to emergency personnel and/or family or household members. This will minimize network congestion, free up space on the network for emergency communications, and conserve battery power. Wait 10 seconds before redialing a number. If you redial too quickly, the data from the handset to the cell sites do not have enough time to clear before you've re-sent the same data. This contributes to a clogged network.
- [ ] Conserve your mobile phone battery by reducing the brightness of your screen, placing your phone in airplane mode, and closing apps you do not need. Limit watching videos and playing video games to help reduce network congestion.
- [ ] Keep charged batteries, a car phone charger, and a solar charger available for backup power for your mobile phone, teletypewriters (TTYs), amplified phones, and caption phones. If you charge your phone in your car, be sure the car is in a well-ventilated area (e.g., not in a closed garage) to avoid life-threatening carbon monoxide poisoning.

[1] Federal Communications Commission, Public Safety and Homeland Security Bureau. (n.d.) *Tips for communicating in an emergency.* Retrieved from http://transition.fcc.gov/pshs/emergency-information/tips.html

- [ ] If driving, do not text, read texts, or make a call without a hands-free device.
- [ ] Maintain a household landline and analog phone (with battery backup if it has a cordless receiver) that can be used when mobile phone service is unavailable. Those who are Deaf or hard of hearing, or who have speech disabilities and use devices and services that depend on digital technology (e.g., VRS, Internet Protocol [IP] Relay, or captioning) should have an analog phone (e.g., TTY, amplified phone, or caption phone) with battery backup in case Internet or mobile service is down.
- [ ] If you evacuate and have a call-forwarding feature on your home phone, forward your home phone number to your mobile phone number.
- [ ] Use the Internet to communicate by email, Twitter, Facebook, and other social media networks. These communication channels allow you to share information quickly with a widespread audience or to find out if loved ones are OK. The Internet can also be used for telephone calls through Voice over Internet Protocol. For those who are Deaf or hard of hearing, or who have speech disabilities, you can make calls through your IP Relay provider.
- [ ] If you do not have a mobile phone, keep a prepaid phone card to use if needed during or after a disaster.
- [ ] Use a pay phone if available. It may have less congestion because these phones don't rely on electricity or mobile networks. In some public places, you may be able to find a TTY that can be used by those who are Deaf or hard of hearing, or who have speech disabilities.

America's PrepareAthon! is a grassroots campaign for action to get more people prepared for emergencies. Make your actions count at ready.gov/prepare.

The reader recognizes that the Federal Government provides links and informational data on various disaster preparedness resources and events and does not endorse any non-Federal events, entities, organizations, services, or products.

10 WAYS TO PARTICIPATE IN AMERICA'S PrepareAthon!

FAMILY EMERGENCY COMMUNICATION PLAN

HOUSEHOLD INFORMATION

Home #: .....
Address:.....

Name: ..... Mobile #: .....
Other # or social media: .....
Email: .....
Important medical or other information: .....
.....

Name: ..... Mobile #: .....
Other # or social media: .....
Email: .....
Important medical or other information: .....
.....

Name: ..... Mobile #: .....
Other # or social media: .....
Email: .....
Important medical or other information: .....
.....

Name: ..... Mobile #: .....
Other # or social media: .....
Email: .....
Important medical or other information: .....
.....

SCHOOL, CHILDCARE, CAREGIVER, AND WORKPLACE EMERGENCY PLANS

Name: .....
Address:.....
Emergency/Hotline #: .....
Website: .....
Emergency Plan/Pick-Up: .....

SCHOOL, CHILDCARE, CAREGIVER, AND WORKPLACE EMERGENCY PLANS

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Website: .....
Emergency Plan/Pick-Up: .....

Name: .....
Address: .....
Emergency/Hotline #: .....
Website: .....
Emergency Plan/Pick-Up: .....

IN CASE OF EMERGENCY (ICE) CONTACT

Name: ..... Mobile #: .....
Home #: .....Email: .....
Address: .....

OUT-OF-TOWN CONTACT

Name: ..... Mobile #: .....
Home #: .....Email: .....
Address: .....

EMERGENCY MEETING PLACES

Indoor: .....
Instructions: .....
Neighborhood: .....
Instructions: .....

Out-of-Neighborhood: .....
Address: .....
Instructions: .....

Out-of-Town: .....
Address: .....
Instructions: .....

IMPORTANT NUMBERS OR INFORMATION

Police: ..... Dial 911 or #: .....
Fire: ..... Dial 911 or #: .....
Poison Control: .....#: .....
Doctor: .....#: .....
Doctor: .....#: .....
Pediatrician: .....#: .....
Dentist: .....#: .....
Hospital/Clinic: .....#: .....
Pharmacy: .....#: .....
Medical Insurance: .....#: .....
Policy #: .....
Medical Insurance: .....#: .....
Policy #: .....
Homeowner/Rental Insurance: .....
#: .....
Policy #: .....
Flood Insurance: .....#: .....
Policy #: .....
Veterinarian: .....#: .....
Kennel: .....#: .....
Electric Company: .....#: .....
Gas Company: .....#: .....
Water Company: .....#: .....
Alternate/Accessible Transportation: .....
#: .....
Other: .....#: .....
Other: .....#: .....
Other: .....#: .....

AMERICA'S PrepareAthon!
BE SMART. TAKE PART. PREPARE.

Ready

Write your family's name above

Family Emergency Communication Plan

IN CASE OF EMERGENCY (ICE) CONTACT

Name: ..... Mobile #: .....
Home #: ..... Email: .....
Address: .....

OUT-OF-TOWN CONTACT

Name: ..... Mobile #: .....
Home #: ..... Email: .....
Address: .....

FOLD HERE

HOUSEHOLD INFORMATION

Home #: .....
Address: .....

Name: ..... Mobile #: .....
Other # or social media: ..... Email: .....
Important medical or other information: .....

Name: ..... Mobile #: .....
Other # or social media: ..... Email: .....
Important medical or other information .....

FOLD HERE

Name: ..... Mobile #: .....
Other # or social media: ..... Email: .....
Important medical or other information: .....

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FOLD HERE

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Neighborhood: .....
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Instructions: .....
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Fire: ..... Dial 911 or #: .....
Poison Control: ..... #: .....
Doctor: ..... #: .....
Doctor: ..... #: .....
Pediatrician: ..... #: .....
Dentist: ..... #: .....
Medical Insurance: ..... #: .....
Policy #: .....
Medical Insurance: ..... #: .....
Policy #: .....
Hospital/Clinic: ..... #: .....

Pharmacy: ..... #: .....
Homeowner/Rental Insurance: ..... #: .....
Policy #: .....
Flood Insurance: ..... #: .....
Policy #: .....
Veterinarian: ..... #: .....
Kennel: ..... #: .....
Electric Company: ..... #: .....
Gas Company: ..... #: .....
Water Company: ..... #: .....
Alternate/Accessible Transportation: ..... #: .....
Other: .....
Other: .....

Family Disaster Plan

Family Last Name(s) or Household Address: **Date:**

Family Member/Household Contact Info (If needed, additional space is provided in #10 below):

Name	Home Phone	Cell Phone	Email:

Pet(s) Info:

Name:	Type:	Color:	Registration #:

Plan of Action

1. The disasters most likely to affect our household are:

2. What are the escape routes from our home?

3. If separated during an emergency, what is our meeting place near our home?

4. If we cannot return home or are asked to evacuate, what is our meeting place outside of our neighborhood?

_____

What is our route to get there and an alternate route, if the first route is impassible?

_____

_____

5. In the event our household is separated or unable to communicate with each other, our emergency contact outside of our immediate area is:

Name	Home Phone	Cell Phone	Email:

After a disaster, let your friends and family know you are okay by registering at "Safe and Well" at https://safeandwell.communityos.org/cms// or by calling 1-800-733-2767. You can also give them a call, send a quick text or update your status on social networking sites.

6. If at school/daycare, our child(ren) will be evacuated to:

Child's Name:	Evacuation Site (address and contact info):

7. Our plan for people in our household with a disability or special need is:

Person's Name:	Plan:

8. During certain emergencies local authorities may direct us to "shelter in place" in our home. An accessible, safe room where we can go, seal windows, vents and doors and listen to emergency broadcasts for instructions, is:

_____

9. Family Member Responsibilities in the Event of a Disaster

Task	Description	Family Member Responsible
Disaster Kit*	Stock the disaster kit and take it if evacuation is necessary. Include items you might want to take to an evacuation shelter. Remember to include medications and eye glasses.	
Be informed	Maintain access to NOAA or local radio, TV, email or text alerts for important and current information about disasters.	
Family Medical Information	Make sure the household medical information is taken with us if evacuation is necessary.	
Financial Information	Obtain copies of bank statements and cash in the event ATMs and credit cards do not work due to power outages. Bring copies of utility bills as proof of residence in applying for assistance.	
Pet Information	Evacuate our pet(s), keep a phone list of pet-friendly motels and animal shelters, and assemble and take the pet disaster kit.	
Sharing and Maintaining the Plan	Share the completed plan with those who need to know. Meet with household members every 6 months or as needs change to update household plan.	

**What supplies and records should go in your disaster kit? Visit www.redcross.org*

10. Other information, if not able to be included above.

Congratulations on completing your family disaster plan! Please tell others: "We've made a family disaster plan and you can, too, with help from the American Red Cross."

Get the facts about what you should do if an emergency or disaster occurs at www.redcross.org

American Red Cross

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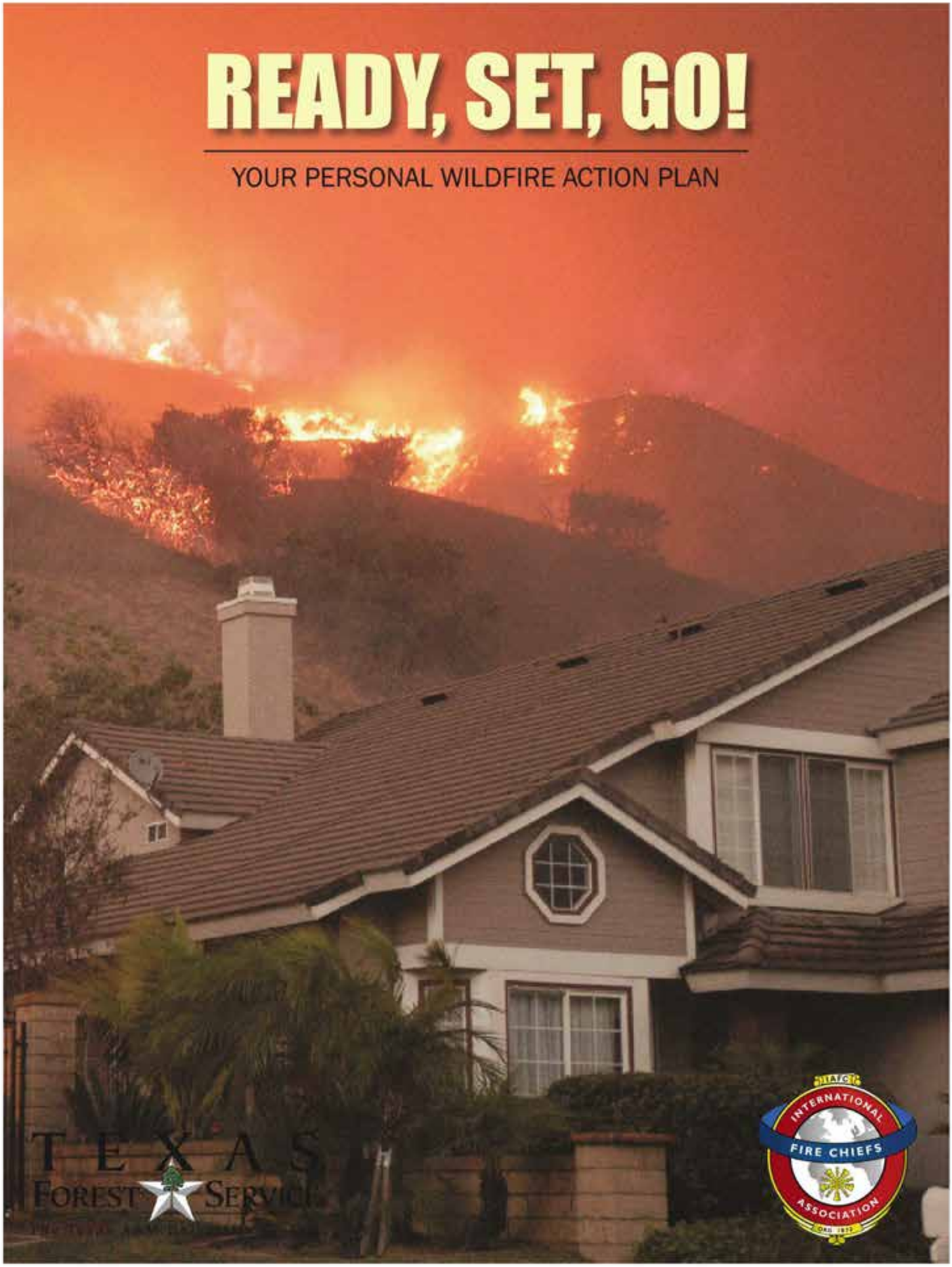
Appendix B

Ready, Set, Go! Personal Action Plan

READY, SET, GO!

YOUR PERSONAL WILDFIRE ACTION PLAN



TEXAS FOREST SERVICE

IAFC INTERNATIONAL FIRE CHIEFS ASSOCIATION

READY, SET, GO!

Wildfire Action Plan

Saving Lives and Property
through Advance Planning

The fire season is now a year-round reality in many areas, requiring firefighters and residents to be on heightened alert for the threat of wildfire throughout the year.

Each year, wildfires consume hundreds of homes in the Wildland/ Urban Interface (WUI). Studies show that as many as 80 percent of the homes lost to wildfires could have been saved if their owners had only followed a few simple fire-safe practices. In addition, wildfire-related deaths occur because people wait too late to leave their home.

Your fire department takes every precaution to help protect you and your property from wildfire. However, the reality is that in a major wildfire, there will simply not be enough fire engines or firefighters to defend every home.

Successfully preparing for a wildfire requires **you** to take personal responsibility for protecting yourself, your family and your property. In this publication, we hope to give you the tips and tools you need to prepare and be successful.

Fire is, and always has been, a natural occurance in the wildland. Our brush-covered hills, canyons and forests burned periodically long before we built homes there. Wildfires, fueled by a build-up of dry vegetation and driven by seasonal hot, dry winds, are extremely dangerous and impossible to control. However, many residents have built their homes and landscaped without fully understanding the impact a fire could have on them, and few have adequately prepared their families for a quick evacuation.

It's not a question of **if** but **when** the next major wildfire will occur. That's why the most important person in protecting your life and property is not the firefighter, but you. Through advance planning and preparation, we can all be ready for wildfire. We hope you find the tips in the next pages helpful in creating heightened awareness and a more fire-safe environment for you and your family.

TEXAS FOREST SERVICE
The Texas A&M University System

INSIDE

Living in the Wildland Urban Interface and the Ember Zone

Ready, Set, Go! begins with a house that firefighters can defend.

Defensible space works!

If you live next to a natural area, the Wildland Urban Interface, you must provide firefighters with the defensible space they need to protect your home. The buffer zone you create by removing weeds, brush and other vegetation helps to keep the fire away from your home and reduces the risks from flying embers.

A home within one mile of a natural area is in the Ember Zone. Wind-driven embers can attack your home. You and your home must be prepared well before a fire occurs. Ember fires can destroy homes or neighborhoods far from the actual flame front of the wildfire.

What is a Hardened Home?

Construction materials and the quality of the defensible space surrounding it are what gives a home the best chance to survive a wildfire. Embers from a wildfire will find the weak link in your home's fire protection scheme and gain the upper hand because of a small, overlooked or seemingly inconsequential factor. However, there are measures you can take to safeguard your home from wildfire. While you may not be able to accomplish all the measures listed below, each will increase your home's, and possibly your family's, safety and survival during a wildfire.

ROOFS

Roofs are the most vulnerable surface where embers land because they can lodge and start a fire. Roof valleys, open ends of barrel tiles and rain gutters are all points of entry.

EAVES

Embers can gather under open eaves and ignite exposed wood or other combustible material.

VENTS

Embers can enter the attic or other concealed spaces and ignite combustible materials. Vents in eaves and cornices are particularly vulnerable, as are any unscreened vents.

WALLS

Combustible siding or other combustible or overlapping materials provide surfaces or crevices for embers to nestle and ignite.

WINDOWS and DOORS

Embers can enter gaps in doors, including garage doors. Plants or combustible storage near windows can be ignited from embers and generate heat that can break windows and/or melt combustible frames.

BALCONIES and DECKS

Embers can collect in or on combustible surfaces or the undersides of decks and balconies, ignite the material and enter the home through walls or windows.

To harden your home even further, consider protecting your homes with a residential fire sprinkler system. In addition to extinguishing a fire started by an ember that enters your home, it also protects you and your family year-round from any fire that may start in your home.

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Garage: Have a fire extinguisher and tools such as a shovel, rake, bucket and hoe available for fire emergencies.

Install a solid door with self-closing hinges between living areas and the garage. Install weather stripping around and under door to prevent ember intrusion.

Store all combustibles and flammable liquids away from ignition sources.

Driveways and Access Roads: Driveways should be designed to allow fire and emergency vehicles and equipment to reach your house.

Access roads should have a minimum 10-foot clearance on either side of the traveled section of the roadway and should allow for two-way traffic.

Ensure that all gates open inward and are wide enough to accommodate emergency equipment.

Trim trees and shrubs overhanging the road to a minimum of 13 1/2 feet to allow emergency vehicles to pass.

Non-Combustible Fencing: Make sure to use non-combustible fencing to protect your home during a wildfire.

Non-Combustible Boxed In Eaves: Box in eaves with non-combustible materials to prevent accumulation of embers.

Raingutters: Screen or enclose rain gutters to prevent accumulation of plant debris.

Water Supply: Have multiple garden hoses that are long enough to reach any area of your home and other structures on your property.

If you have a pool or well, consider a pump.

Chimney: Cover your chimney and stovepipe outlets with a non-flammable screen of 1/4-inch wire mesh or smaller to prevent embers from escaping and igniting a fire.

Make sure that your chimney is at least 10 feet away from any tree branches.

Deck/Patio Cover: Use heavy timber or non-flammable construction material for decks.

Enclose the underside of balconies and decks with fire-resistant materials to prevent embers from blowing underneath.

Keep your deck clear of combustible items, such as baskets, dried flower arrangements and other debris.

The decking surface must be ignition resistant if it's within 10 feet of the home.

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GET SET | As the Fire Approaches

- ☐ Evacuate as soon as you are set!
- ☐ Alert family and neighbors.
- ☐ Dress in appropriate clothing (i.e., clothing made from natural fibers, such as cotton, and work boots). Have goggles and a dry bandana or particle mask handy.
- ☐ Ensure that you have your emergency supply kit on hand that includes all necessary items, such as a battery powered radio, spare batteries, emergency contact numbers, and ample drinking water.
- ☐ Stay tuned to your TV or local radio stations for updates, or check the fire department Web site.
- ☐ Remain close to your house, drink plenty of water and keep an eye on your family and pets until you are ready to leave.

INSIDE CHECKLIST

- ☐ Shut all windows and doors, leaving them unlocked.
- ☐ Remove flammable window shades and curtains and close metal shutters.
- ☐ Remove lightweight curtains.
- ☐ Move flammable furniture to the center of the room, away from windows and doors.
- ☐ Shut off gas at the meter. Turn off pilot lights.
- ☐ Leave your lights on so firefighters can see your house under smoky conditions.
- ☐ Shut off the air conditioning.

OUTSIDE CHECKLIST

- ☐ Gather up flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, door mats, etc.) or place them in your pool.
- ☐ Turn off propane tanks.
- ☐ Don't leave sprinklers on or water running - they can waste critical water pressure.
- ☐ Leave exterior lights on.
- ☐ Back your car into the driveway. Shut doors and roll up windows.
- ☐ Have a ladder available.
- ☐ Patrol your property and extinguish all small fires until you leave.
- ☐ Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.

IF YOU ARE TRAPPED: SURVIVAL TIPS

- ☐ Shelter away from outside walls.
- ☐ Bring garden hoses inside house so embers don't destroy them.
- ☐ Patrol inside your home for spot fires and extinguish them.
- ☐ Wear long sleeves and long pants made of natural fibers such as cotton.
- ☐ Stay hydrated.
- ☐ Ensure you can exit the home if it catches fire (remember if it's hot inside the house, it is four to five times hotter outside).
- ☐ Fill sinks and tubs for an emergency water supply.
- ☐ Place wet towels under doors to keep smoke and embers out.
- ☐ After the fire has passed, check your roof and extinguish any fires, sparks or embers.
- ☐ Check inside the attic for hidden embers.
- ☐ Patrol your property and extinguish small fires.
- ☐ If there are fires that you can not extinguish with a small amount of water or in a short period of time, call 9-1-1.

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Write up your Wildfire Action Plan and post it in a location where every member of your family can see it. Rehearse it with your family.

My Personal Wildfire Action Plan

During High Fire Danger days in your area, monitor your local media for information on brush fires and be ready to implement your plan. Hot, dry and windy conditions create the perfect environment for a wildfire.

Important Phone Numbers:

Out-of-State Contact: _____ Phone: _____

Work: _____ _____ _____

School: _____ _____ _____

Other: _____ _____ _____

Evacuation Routes: _____

_____

_____

Where to go: _____

_____

Location of Emergency Supply Kit: _____

_____

Notes: _____

_____

_____

TEXAS FOREST SERVICE
The Texas A&M University System

International Association of Fire Chiefs
4025 Fair Ridge Dr.
Fairfax, VA 22033
(703) 273-0911
www.iafc.org/ReadySetGo

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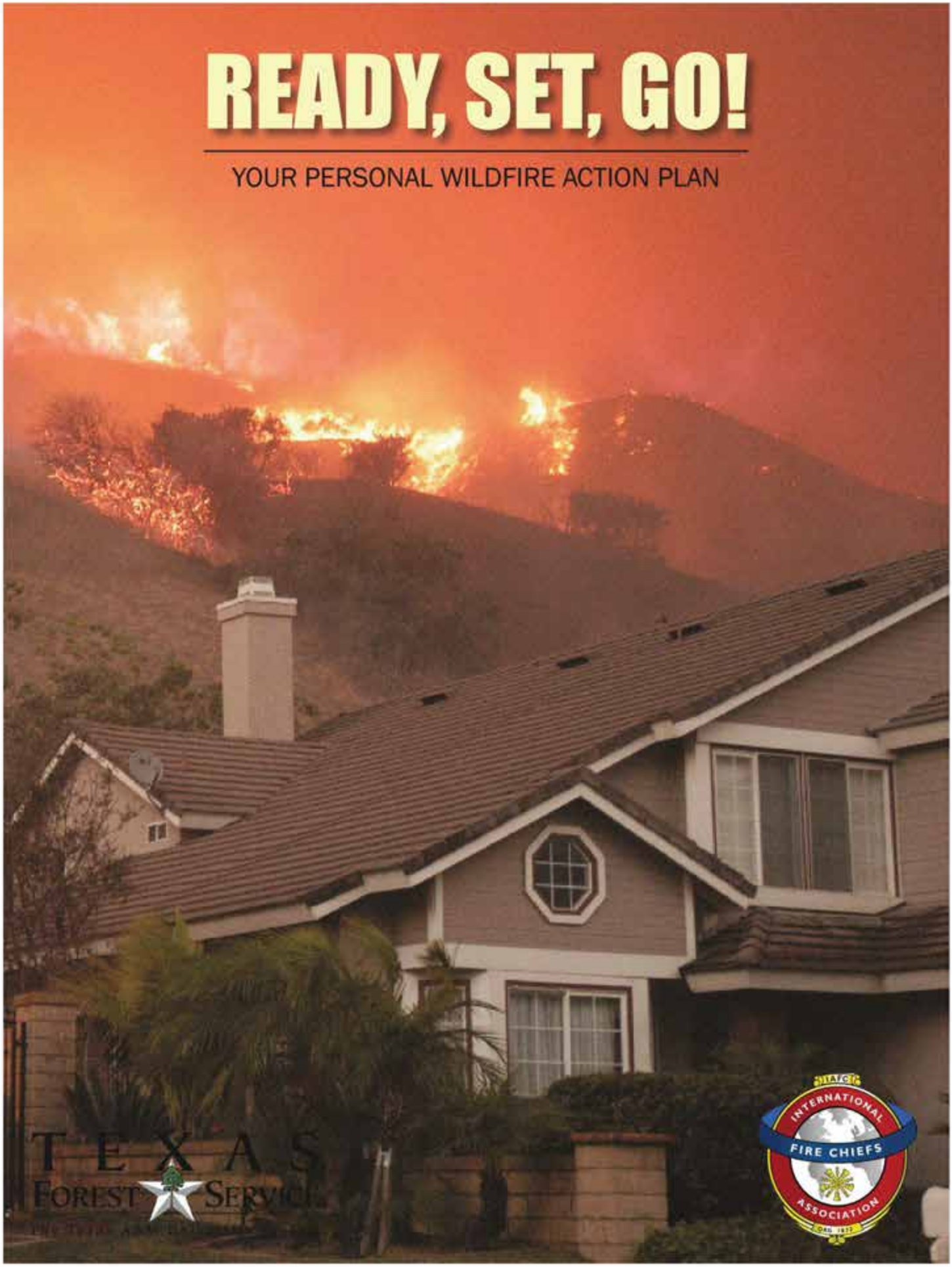
Appendix C

Wildfire Evacuation Tips

READY, SET, GO!

YOUR PERSONAL WILDFIRE ACTION PLAN



TEXAS FOREST SERVICE

IAFC INTERNATIONAL FIRE CHIEFS ASSOCIATION

EVACUATION TIPS

Evacuations save lives and allow responding personnel to focus on the emergency at hand.

Evacuate promptly when requested.

Practice before a fire. Drive your planned route of escape out of your neighborhood or from work before an actual emergency.

THE EVACUATION PROCESS

Law enforcement agencies are typically responsible for enforcing an evacuation order. Follow their directions promptly.

You will be advised of potential evacuations as early as possible.

You must take the initiative to stay informed and aware.

Listen for your neighborhood warning siren.

Tune your radio/ TV for announcements from law enforcement and emergency personnel.

Sign up for Alameda County for AC Alert, Contra Costa County community warning system cwsalerts.com/registration/ and local Nixel alert programs.

Program your local emergency number into your cell phone. Local emergency numbers:

Berkeley	(510) 981-5911
El Cerrito	(510) 233-5223
Moraga-Orinda	(925) 228-8282
Oakland	(510) 444-1616

If you use a cell phone to call 911, the call may go to California Highway Patrol in Vallejo and not local emergency providers.

EVACUATION ORDERS

There are many terms that may be used to alert you to the significance of danger from wildfire.

All evacuation instructions provided by officials should be followed immediately for your safety.

EVACUATION CHECKLIST

- ❑ Critical medications
- ❑ Important personal papers, photos
- ❑ Essential valuables
- ❑ Pets, collar and leads, carriers, medications, water and food for 72 hours
- ❑ Change of clothing and toiletries
- ❑ Cell phone and hand-cranked or solar charger
- ❑ Critical papers and effects
- ❑ Area map marked with at least two routes
- ❑ Agreed upon meeting place for family members.

HILLS EMERGENCY FORUM

Hills Emergency Forum

www.hillsemergencyforum.org

Keep a copy of these Tips in your car, at home and at work For When You Need Them

June 2018

Wildfire Evacuation Tips

IF EVACUATION IS A POSSIBILITY

- ❑ Locate your Evacuation Checklist and place the items in your vehicle.
- ❑ Park your vehicle facing outward and carry your car keys with you.
- ❑ Locate your pets and keep them ready to transport.
- ❑ Prepare large animals for transport.
- ❑ Set up a ladder for access to the roof.
- ❑ Move propane BBQ appliances away from structures.
- ❑ Place connected garden hoses and buckets full of water around the outside of the house.
- ❑ Cover up. Wear long pants, long sleeves shirt, heavy shoes/ boots, dry bandanna for face cover, goggles or glasses. 100% cotton is preferable.
- ❑ Leave lights on in house – door unlocked.
- ❑ Leave windows closed – vents/ air conditioning off.
- ❑ Identify in advance where to meet if you get separated. Select a common friend or relative to call.

Evacuations save lives and allow responding personnel to focus on the emergency at hand.

IF YOU BECOME TRAPPED

While in your vehicle

- ❑ Stay calm.
- ❑ Park your vehicle in an area clear of vegetation and power lines. Do not block the road.
- ❑ Keep the engine running and headlights on. Roll up windows and set the venting system to re-circulate to reduce smoke in the car.
- ❑ Cover yourself with wool blanket or jacket.
- ❑ Lie on vehicle floor.
- ❑ Use your cell phone to advise officials – Call your local emergency number.

While on foot

- ❑ Stay calm.
- ❑ Go to an area clear of vegetation, a ditch or depression, if possible.
- ❑ Lie face down, cover up.
- ❑ Use your cell phone to advise officials – Call your local emergency number.

While in your home

- ❑ Stay calm, keep your family together.
- ❑ Call your local emergency number and inform officials of your location.
- ❑ Fill your sinks and tubs with cold water.
- ❑ Keep doors and windows closed but unlocked.
- ❑ Stay inside your house.
- ❑ Stay away from outside walls and windows.

Note: It will get hot in the house. But it is much hotter, and more dangerous outside.

RETURNING HOME

Fire officials will determine when it is safe for you to return to your home. This will be done as soon as possible considering safety and accessibility.

WHEN YOU RETURN HOME

- ❑ Be alert for downed power lines and other hazards.
- ❑ Check your residence carefully for hidden embers or smoldering fires.
- ❑ Check propane tanks, regulators and lines before turning gas on.

FOR MORE INFORMAITON

Local Emergency Broadcast Stations:

City of Berkeley	1610 AM
City of Oakland	530 AM
El Cerrito NWS radio code 706013	
UC Berkeley	KALX 90.7 FM

Regional News

KCBS	740 AM
KGO	810 AM
KNBR	680 AM

Emergency Preparedness Websites

www.cityofberkeley.info/getready/
www.el-cerrito.org
https://www.oaklandca.gov/departments/firew
ww.lamorindacert.org
http://oem.berkeley.edu/
www.ready.gov