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Wildfire Evacuation Study

Southwest Village Project

DECEMBER 2022 – UPDATED SEPTEMBER 2024

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
CAL FIRE	California Department of Forestry and Fire Protection
CALTRANS	California Department of Transportation
CBC	California Building Code
CEQA	California Environmental Quality Act
CERT	Community Emergency Response Team
CHP	California Highway Patrol
City	City of San Diego
County	County of San Diego
DAS	Department of Animal Services
EAS	Emergency Alert System
EOP	Emergency Operations Plan
FEIR	Final Program Environmental Impact Report
FEMA	Federal Emergency Management Agency
FRAP	Fire and Resource Assessment Program
HOA	Homeowner's Association
IC	Incident Command
IFTSA	International Fire Service Training Association
NIMS	National Incident Command System
NFPA	National Fire Protection Association
NWFCG	National Wildland Fire Coordinating Groups
OA	Operational Area
OES	Office of Emergency Services
OMCP	Otay Mesa Community Plan
project	Southwest Village Project
SANDAG	San Diego Association of Governments
SDCFA	San Diego County Fire Authority
SDG&E	San Diego Gas & Electric
SDMC	San Diego Municipal Code
SDSD	San Diego Sheriff's Department
SEMS	State Emergency Management System
TEP	Temporary Evacuation Point
TRA	Temporary Refuge Area
VHFHSZ	Very High Fire Hazard Severity Zone
VoIP	Voice over Internet Protocol
VTM	Vesting Tentative Map
WES	Wildfire Evacuation Study
WUI	Wildland-Urban Interface

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Executive Summary

The City of San Diego's Otay Mesa Community Plan Area in southern San Diego County is home to approximately 18,397 residents (SANDAG Data Surfer 2024) across 14.5-square miles. The Southwest Village Specific Plan project (project) site is approximately 490 acres of largely undeveloped open space. Development of a Specific Plan was envisioned as part of the Otay Mesa Community Plan (OMCP), adopted March 11, 2014 (City of San Diego 2014). Specifically, the Otay Mesa Vision Map identifies the Specific Plan area within the Southwest District as a Village Opportunity area that would contain a mix of local commercial, office, and multi-family residential uses around a village center designed to encourage pedestrian-oriented design and encourage transit ridership. The OMCP requires preparation of a Specific Plan prior to consideration of any comprehensive development and rezoning proposals within the Southwest District in order to ensure development is consistent with applicable OMCP policies. This project would establish the Southwest Village Specific Plan consistent with the land use vision and policies laid out in the 2014 OMCP.

The Southwest Village Specific Plan project (project) proposes to develop up to 5,130 attached and detached residences and would facilitate creation of a new village anchored by up to 175,000 square feet of commercial and retail uses in a mixed-use Village Core. In addition to the mixed-use and residential land uses, the project would also include an elementary school, more than 36 acres of developed parks, in addition to trails, natural open space and habitat conservation. Access to the project site would be via two main access points including Caliente Avenue at the north and an extension of Beyer Boulevard, which would be completed prior to the implementation of Phase 1c. At buildout, the project site would be adjacent to wildland and other open space areas including Moody Canyon, Spring Canyon, Beyer Park and Furby North Preserve. Other surrounding existing land uses include a variety of residential communities, San Ysidro High School, San Ysidro Middle School and San Ysidro Adult School. The project site is located in an area designated as a Very High Fire Hazard Severity Zone (CAL FIRE 2007) and would be required to build to California Building Code, Chapter 7A requirements, which includes structural hardening and fuel modification for areas adjacent to wildland fuels.

This Wildfire Evacuation Study (WES) has been prepared to establish jurisdictional emergency operations procedures, increase occupant preparedness and facilitate efficient evacuation in the event of a wildland fire. Herein, information is provided addressing evacuation organization, planning and preparedness, evacuation routes, roadway capacities, contingencies, potential shelter-in-place, and other related issues.

Primary evacuation routes available to project occupants would include Caliente Avenue and Beyer Boulevard, Otay Mesa Road and local streets and roadway that may be used to accommodate evacuating traffic. Evacuees are likely to be directed north or west towards State Route 905 (SR-905), away from at-risk areas, in a wildland fire event. During Phase 1, roadway infrastructure would be established or improved during each subphase to accommodate the necessary emergency access and evacuation routes to support the project. At buildout of Phase 1, the project would have sufficient emergency vehicle and evacuation access to support the anticipated population of the entire Specific Plan, as proposed.

As part of the WES, evacuation time calculations were completed to evaluate potential project impacts to evacuation conditions. Five scenarios were analyzed to evaluate the time needed to evacuate the existing neighborhoods west, north and east of the project site as well as project populations. Using conservative assumptions, these six scenarios considered (1) Existing Conditions (2) Existing Conditions plus Opening Year 2024, (3) Existing Conditions plus Opening Year 2024 plus Phase 1a (4) Existing Conditions plus Opening Year 2024 plus Phases 1a, 1b, (5) Existing Conditions plus Opening Year 2024 plus Phases 1a,1b, 1c, (6) Existing Conditions plus Opening Year 2024 plus project Specific Plan Buildout.

The key finding of this study is that the available roadway capacity would be sufficient to safely accommodate the number of evacuating vehicles within the project area with the project development. Evacuation times would not significantly impact Existing Conditions + Opening Year 2024 conditions and would allow for safe evacuations to be conducted under all scenarios. The project would also not eliminate any existing evacuation routes. Considering these facts and others discussed herein, **the project would not expose people to a significant risk of loss or death involving wildland fires related to evacuation, would not interfere with evacuation response planning, and would not result in inadequate emergency access.**

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1 Introduction

Fire environments are dynamic systems and include many types of environmental factors and project site characteristics. Fires can occur in any environment where conditions are conducive to ignition and fire movement. Areas of naturally vegetated open space, like those surrounding the project site, are typically comprised of conditions that may be favorable to wildfire spread. The three major components of the fire environment are topography, vegetation (fuels), and climate. The state of each of these components and their interactions with each other determines the potential characteristics and behavior of a fire at any given moment. Understanding the existing wildland vegetation and urban fuel conditions on and adjacent to the project site is necessary to understand the potential for fire within and around the project site, which also provides context for the most likely reason an evacuation of the project would occur.

This Wildfire Evacuation Study (WES) considers the project site's fire environment and was prepared based on guidance from the City's Emergency Operations Procedures (City of San Diego 2018), County of San Diego Emergency Operations Plan (EOP) including Annex Q- Evacuation (County of San Diego 2018). The format and content of this report is consistent with the recommendations of the Evacuation Annex. A complete copy of the EOP can be downloaded here:

https://www.sandiegocounty.gov/content/sdc/oes/emergency_management/oes_jl_oparea.html.

Evacuation is a process by which people are moved from a place where there is immediate or anticipated danger, to a place of safety, and offered appropriate temporary shelter facilities. When the threat to safety is gone, evacuees are able to return to their normal activities, or to make suitable alternative arrangements. The overarching goal of evacuation planning in the San Diego County Operational Area (OA) is to maximize the preservation of life while reducing the number of people that must evacuate and the distance they must travel to seek safe refuge (County of San Diego 2018).

This Wildfire Evacuation Study would outline strategies, procedures, recommendations, and organizational structures that can be used to implement a coordinated evacuation effort in the case of a wildfire emergency effecting the Southwest Village project. It is noted, that the on-set of a wildfire or other emergency is generally unplanned and more often than not, residents and visitors would be faced with decisions that need to be made quickly and determined by on-scene first responders or by a collaboration between first responders and designated emergency response teams. Therefore, this Wildfire Evacuation Study is to be considered a tool that supports existing pre-plans and provides for residents who are familiar with the evacuation protocol but is subservient to emergency event-specific directives provided by agencies managing the event.

1.1 Project Description

The Southwest Village Specific Plan (Specific Plan) provides a comprehensive policy framework intended to guide future development in Southwest Village, consistent with land uses envisioned in the Otay Mesa Community Plan and consistent with the City of San Diego's City of Villages strategy. The Specific Plan encompasses approximately 490 acres in the Otay Mesa Plan Area within the City of San Diego (Figure 1,

Project Vicinity). The project proposes to develop up to 5,130 attached and detached residences and would facilitate creation of a new village anchored by up to 175,000 square feet of commercial and retail uses in a mixed-use Village Core. The Specific Plan would provide public facilities including dedication of a new elementary school, more than 36 acres of developed parks, in addition to trails, natural open space and habitat conservation. At build-out, access to the Specific Plan area would be via two main access points including Caliente Avenue at the north and an extension of Beyer Boulevard that would be implemented concurrent with the first Vesting Tentative Map (VTM), referred to as VTM-1.

The Specific Plan identifies a range of allowable residential densities for each planning area to allow for flexibility in future planning and design. Figure 2, Land Use Plan, shows the proposed land uses for the Specific Plan. The following land use designations are proposed:

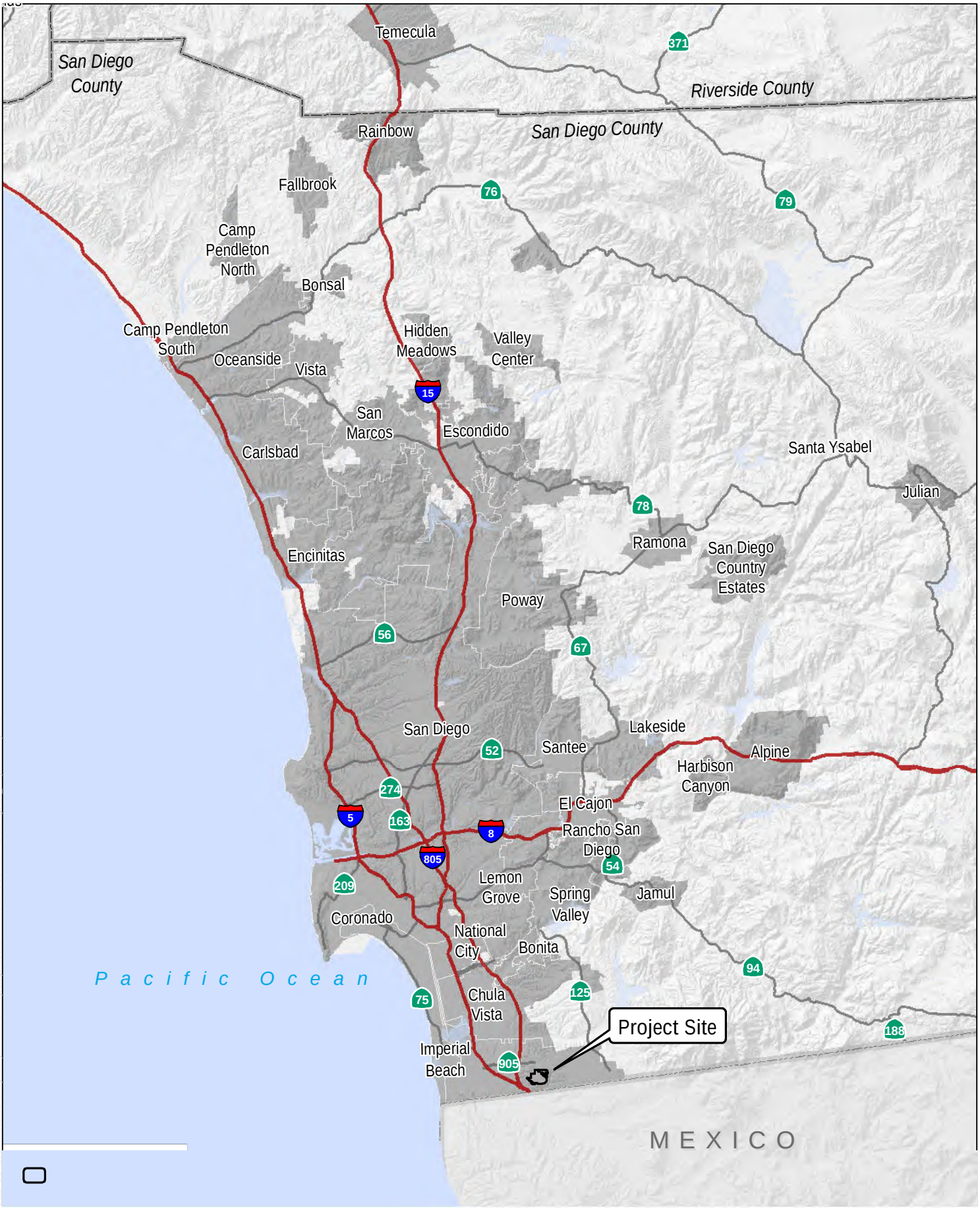
- Medium-Low Density Residential allowing 8 to 22 dwelling units per acre
- Medium Density Residential allowing 15 to 29 dwelling units per acre
- Medium-High Density Residential allowing 20 to 44 dwelling units per acre
- Mixed-Use allowing up to 175,000 square feet of commercial and retail uses at a maximum floor area ratio of 3.0 and multi-family attached residential units at a density range of 20 to 44 dwelling units per acre

The Specific Plan is designed around a village core mixed use area that is surrounded by residential uses connected through a grid street network. The Specific Plan allows for the development of up to two elementary schools, public parks, and conserved open space. Primary access to the Specific Plan would be provided via two access points: Caliente Avenue, offering north-south access from Otay Mesa Road, and Beyer Boulevard, offering east-west access from San Ysidro Boulevard. Caliente Avenue would be classified as a 4-lane Modified Urban Collector while Beyer Boulevard would be classified 4-lane Modified Urban Collector, with a reduced two-lane portion through a biologically constrained area west of the Specific Plan area.

The Specific Plan would be built out in phases consistent with the Specific Plan Phasing Plan (reference Table 7.2 of the Southwest Village Specific Plan). This Evacuation Study analyzes multiple phases of build-out including a full buildout scenario for the Specific Plan, which analyzed the ultimate build-out conditions and would be served by the same three key access points (Beyer Boulevard, Caliente Avenue, and the Secondary EVA) that would be constructed with the first phase, VTM-1. Additionally, given the project site's location in a VHFHSZ, all project structures would be built to ignition-resistant standards per the California Fire and Building Codes in effect at the time of building permit issuance. Chapter 7-A of the California Building Code focuses on structural ignition resistance from flame impingement and flying embers. Construction would include enhanced ignition resistant construction features, the installation of automatic interior residential fire sprinkler systems conforming to NFPA 13-D requirements), appropriate fire flow and water capacity, emergency access roads, and supporting infrastructure. The project would also establish a 100-foot fuel modification zone and defensible space areas surrounding the proposed structures.

The following Specific Plan build-out assumptions were used in developing the Evacuation Study:

- 1,158 single-family residential units
- 2,503 multi-family units under 20 dwelling units per acre
- 1,469 multi-family units over 20 dwelling units per acre
- 175,000 square feet of commercial/retail
- 2 Elementary Schools



SOURCE: BASE MAP- ESRI MAPPING SERVICE

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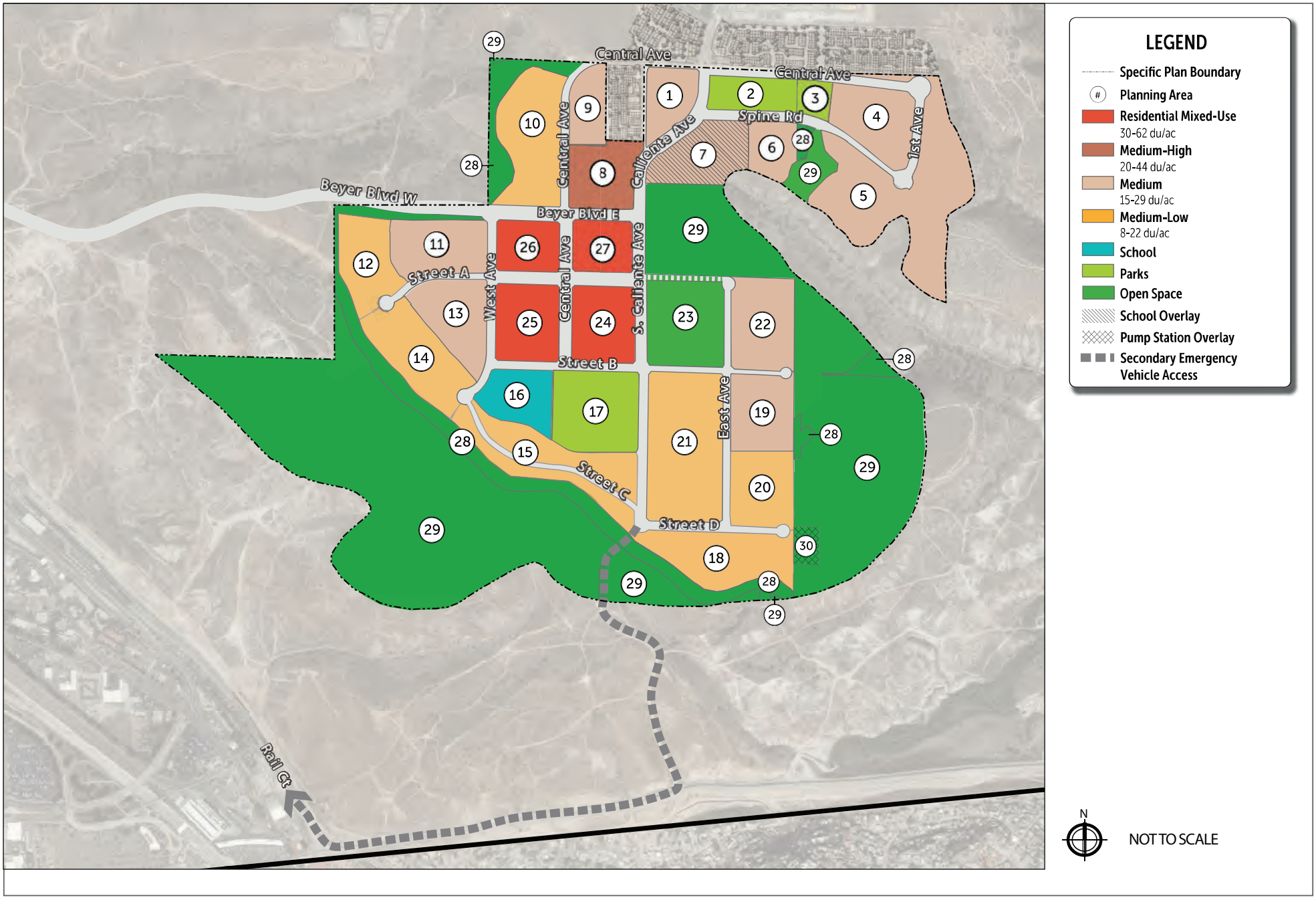
FIGURE 1

Project Vicinity

Wildfire Evacuation Study for the Southwest Village Project



SOURCE: Ieppert Engineering, 2024

FIGURE 2

Project Land Use Plan

Wildfire Evacuation Study for the Southwest Village Project

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The Specific Plan provides the framework and foundation for the buildout of the Specific Plan which is anticipated to be developed in multiple phases over time due to multiple property ownerships. This Wildfire Evacuation Study considers the implementation of Phase 1 of VTM-1, which includes subphases Phase 1a, Phase 1b and Phase 1c and the future buildout of the entire Specific Plan. During each subphase, transportation infrastructure, including emergency access roads and evacuation routes, would be provided to ensure emergency services are able to access the project site and project's occupants are able to evacuate in the event of an emergency. The following describes the implementation of Phase 1 by subphase:

Phase 1a would consist of the construction of 200 residential units. Central Avenue and the Caliente extensions would serve as the primary evacuation route, which would send evacuation traffic to SR-905 or Caliente Avenue to Otay Mesa Road to Beyer Boulevard to the SR-905 or Caliente Avenue to Ocean View Hills to I-805.

Phase 1b would consist of the construction of an additional 499 units for a total of 699 units. As part of Phase 1b, prior to the issuance of a building permit for the 201st dwelling unit, the construction of the remaining portion of Central Avenue and Beyer Boulevard East is required, which would provide two emergency access routes. The secondary emergency access would be gated with a knox box or knox key switch at the eastern terminus of Beyer Boulevard and serve as the Secondary Emergency Vehicle Access (EVA). The Secondary EVA would be improved, as described below, prior to the issuance of a building permit for the 201st dwelling unit. Primary evacuation would remain via Central Avenue to Caliente Avenue to SR-905, and the Secondary EVA would serve as access for emergency vehicles and first responders and could be used as an evacuation route under the discretion of SDFRD[1].

Phase 1c would consist of the construction of an additional 221 dwelling units for a total of 920 units and Beyer Boulevard to San Ysidro West. Completion of the Beyer Boulevard connection is required prior to the issuance of a building permit for the 700th dwelling unit for transportation and circulation purposes. The extension of Beyer Boulevard would include the construction of Beyer Boulevard West and striping of Beyer Boulevard between Old Otay Mesa Road and Enright Drive as a two-lane collector in San Ysidro. The different sections of Beyer Boulevard would be constructed as described below, and the completion would provide the remaining emergency vehicle access and evacuation infrastructure for Phase 1.

Beyer Boulevard East

As detailed in the Specific Plan, Beyer Boulevard within the Specific Plan boundary is referred to as Beyer Boulevard East and which is planned as a modified 4-lane Urban Major. During Phase one of VTM-1, this segment of Beyer Boulevard would be constructed as a two lane collector.

Beyer Boulevard West

The extension of Beyer Boulevard West from Enright Drive to West Avenue is referred to as Beyer Boulevard West, which is planned as a modified 4-lane Urban Collector. Although planned as a modified 4-lane Urban Collector, the roadway segment would be constructed as a two lane roadway due to environmental

[1] Per coordination with San Diego Fire and Rescue Department on July 24, 2024.

constraints. All manufactured slopes surrounding Beyer Boulevard would be revegetated with native plant species.

The proposed Beyer Boulevard West extension would incorporate wildlife movement features including undercrossings, an overcrossing, and wildlife fencing along both sides of the road. Along the western extent of the proposed Beyer Boulevard extension a 6-foot-tall masonry wall would be constructed on the north side of the road to provide separation and noise attenuation from the adjacent habitat. Two San Diego Gas and Electric (SDG&E) access points with gates are proposed along Beyer Boulevard to provide ongoing access to SDG&E easements and power lines within the surrounding open space. A number of retaining walls have been incorporated into the roadway design largely to limit habitat impacts. Retaining walls include 4-foot to 12-foot retaining walls along the north and south sides of Beyer Boulevard to minimize impacts to conserved properties.

Beyer Boulevard between Old Otay Mesa Road and Enright Drive (San Ysidro)

The current Beyer Boulevard in San Ysidro between Old Otay Mesa Road and Enright Drive is proposed to be restriped as a two-lane collector with buffered Class II bike lanes within the existing right-of-way limits during Grading Phase 1b. This is an interim improvement that would ensure adequate roadway functioning until the final roadway improvement as a four lane collector roadway is implemented as part of Phase 4 of the Specific Plan.

The limits of disturbance for this segment assume a wider area in anticipation of the requirement to widen this segment to its ultimate classification as a four lane collector, which would require acquisition of right-of-way from the San Ysidro School District. The required timing for this improvement corresponds to the implementation of Phase 4 of the Specific Plan prior to issuance of any building permit prior to the 3,301st dwelling unit (after construction of an elementary school and a 17.6 acre public park), although it may be implemented sooner.

1.2 Project Site Risk Analysis

1.2.1 Environmental Setting

The following sections discuss the project site characteristics, local climate, and fire history within and surrounding the project site. The following sections discuss the characteristics of the project site at a regional scale. The intent of evaluating conditions at this macro-scale is providing a better understanding of the regional fire environment, which is not constrained by property boundary delineations.

1.2.1.1 Topography

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread up-slope and slower fire spread down-slope in the absence of wind. Terrain that forms a funneling effect, such as chimneys, chutes, and saddles on the landscape can result in especially intense fire behavior. Conversely, flat terrain tends to have little effect on fire spread, resulting in fires that are driven by wind.

The approximately 490 acre project area is located on a very flat grass covered mesa that is 480 feet above sea level and is surrounded by and intruded by very deeply incised, heavily vegetated canyons. NRCS Soils Report and Map indicates that this area is classified by the State of California as prime Farmland. Despite the soils descriptions for the Huerhuero Series (HrC) the soils are very shallow and poorly developed. The Huerhuero Soils series includes the bulk of the acreage comprising the Southwest Village Site. Topographic features that may present a fire spread facilitator are slopes and canyon alignments, which may serve to funnel or channel winds, thus increasing their velocity and potential for influencing wildfire behavior. Topography in the open spaces surrounding the Project site include slopes and canyons, which could present an increased wildfire risk; however, the project would be required to comply with applicable City Fire Code and Building Code for development in high fire hazard severity zones to include ignition-resistant construction and brush management, which would reduce the overall wildfire risk onsite, and risk for the project to generate off-site ignitions, as detailed further in Section 1.2.2, Wildfire Risk Analysis.

1.2.1.2 Climate

The project site, like much of southern California, climate has a large influence on fire risk. The climate of San Diego County is typical of a Mediterranean area, with warm, dry summers and wet winters. The prevailing wind is an onshore flow from the Pacific Ocean with fall Santa Ana winds from the northeast that may gust up to 50 miles per hour (mph) or higher. Drying vegetation (fuel moisture of less than 5% for 1-hour fuels is possible) during the summer months becomes fuel available to advancing flames should an ignition occur. The average high temperature for the project area is approximately 73°F, with average daily highs in the summer and early fall months (June through October) averaging 89°F (AccuWeather 2024). Precipitation typically occurs between December and April with average rainfall of 9 inches.

From a regional perspective, the fire risk in southern California can be divided into three distinct “seasons” (Nichols et al. 2011, Baltar et al 2014). The first season, the most active season and covering the summer months, extends from late May to late September. This is followed by an intense fall season characterized by fewer but larger fires. This season begins late September and continues until early November. The

remaining months, November to late May cover the mostly dormant, winter season. Mensing et al. (1999) and Keeley and Zedler (2009) found that large fires in the region consistently occur at the end of wet periods and the beginning of droughts. Typically, the highest fire danger in southern California coincides with Santa Ana winds. The Santa Ana wind conditions are a reversal of the prevailing southwesterly winds that usually occur on a region-wide basis near the end of fire season during late summer and early fall. They are dry, warm winds that flow from the higher desert elevations in the east through the mountain passes and canyons. As they converge through the canyons, their velocities increase. Consequently, peak velocities are highest at the mouths of canyons and dissipate as they spread across valley floors. Localized wind patterns on the project site are strongly affected by both regional and local topography.

The prevailing wind pattern is from the west (onshore), but the presence of the Pacific Ocean causes a diurnal wind pattern known as the land/sea breeze system. During the day, winds are from the west–southwest (sea) and at night winds are from the northeast (land), averaging 2 miles per hour (mph). During the summer season, the diurnal winds may average slightly higher (approximately 19 mph) than the winds during the winter season due to greater pressure gradient forces. Surface winds can also be influenced locally by topography and slope variations. The highest wind velocities are associated with downslope, canyon, and Santa Ana winds. The project site does not include topography that would create unusual weather conditions, however, the open space areas to the north and west of the project site would be subject to periodic extreme fire weather conditions that occur throughout San Diego County and could result in fire ignition onsite.

1.2.1.3 Vegetation

1.2.1.3.2 Vegetative Fuel Dynamics

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, the native shrub species that compose the coastal sage scrub and mixed chaparral plant communities on site are considered to exhibit higher potential hazard (higher intensity heat and flame length) than grass dominated plant communities (fast moving, but lower intensity) if ignition occurred. The corresponding fuel models for each of these vegetation types are designed to capture these differences. Additionally, vegetative cover influences fire suppression efforts through its effect on fire behavior. For example, while fires burning in grasslands may exhibit lower flame lengths and heat outputs than those burning in native shrub habitats, fire spread rates in grasslands are often more rapid.

As described, vegetation plays a significant role in fire behavior, and is an important component of fire behavior models discussed in the report. A critical factor to consider is the dynamic nature of vegetation communities. Fire presence and absence at varying cycles or regimes disrupts plant succession, setting plant communities to an earlier state where less fuel is present for a period of time as the plant community begins its succession again. In summary, high-frequency fires tend to convert shrublands to grasslands or maintain grasslands, while fire exclusion tends to convert grasslands to shrublands, over time. In general, biomass and associated fuel loading would increase over time, assuming that disturbance (fire, or grading) or fuel reduction efforts are not diligently implemented. It is possible to alter successional pathways for

varying plant communities through manual alteration. This concept is a key component in the overall establishment and maintenance of the proposed fuel modification zones on-site. The project's FMZs would consist of irrigated and maintained landscapes as well as thinned native fuel zones that would be subject to regular "disturbance" in the form of maintenance and would not be allowed to accumulate excessive biomass over time, which results in reduced fire ignition, spread rates, and intensity. In contrast, conditions outside the fuel modification zones, where the wildfire threat would exist post-development, are classified as medium to heavy fuel loads due to the maturity of the vegetation, which haven't burned for many decades.

1.2.1.4 Fire History

Fire history is an important component of a site-specific WES. Fire history data provides valuable information regarding fire spread, fire frequency, most vulnerable areas, significant ignition sources, and vegetation/fuel mosaics across a given landscape. Fire frequency, behavior, and ignition sources are important for fire response and planning purposes. One important use for this information is as a tool for pre-planning. It is advantageous to know which areas may have burned recently and therefore may provide a tactical defense position, what type of fire burned on the project site, and how a fire may spread. In turn, this understanding of why fires occur in an area and how they typically spread can then be used for pre-planning and designing defensible communities. Figure 3, Fire History Map provides a graphical representation of the quantity of times the landscape has burned in the area.

Fire history represented in the FPP uses the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program (FRAP) database. FRAP summarizes fire perimeter data dating to the late 1800s, but which is incomplete due to the fact that it only includes fires over 10 acres in size and has incomplete perimeter data, especially for the first half of the 20th century (Syphard and Keeley 2016). However, the data does provide a summary of recorded fires and can be used to show whether large fires have occurred in the project area, which indicates whether they may be possible in the future.

According to available data from the CAL FIRE in the FRAP database (FRAP 2020)[2] there have been 18 fires recorded since 1910 within five miles, which range from approximately 0.5 acres to 2,983.4 acres and the average fire size is approximately 405.3 acres (not including fires smaller than 10 acres). It should be noted that one wildfire has burned on the project site in 1944 that totaled 156.4 acres (Un-named 1944). Table 1 summarizes the fire history for the area within five miles of the site.

Table 1. Fire History within Five Miles of the Southwest Village Project Site

Fire Year	Fire Name	Interval (years)	Total Area Burned (acres)
1941	UN-NAMED	N/A	117.3
1944	UN-NAMED	3	340.4
1944	**UN-NAMED**	**0**	**156.4**
1945	UN-NAMED	1	1,022.0

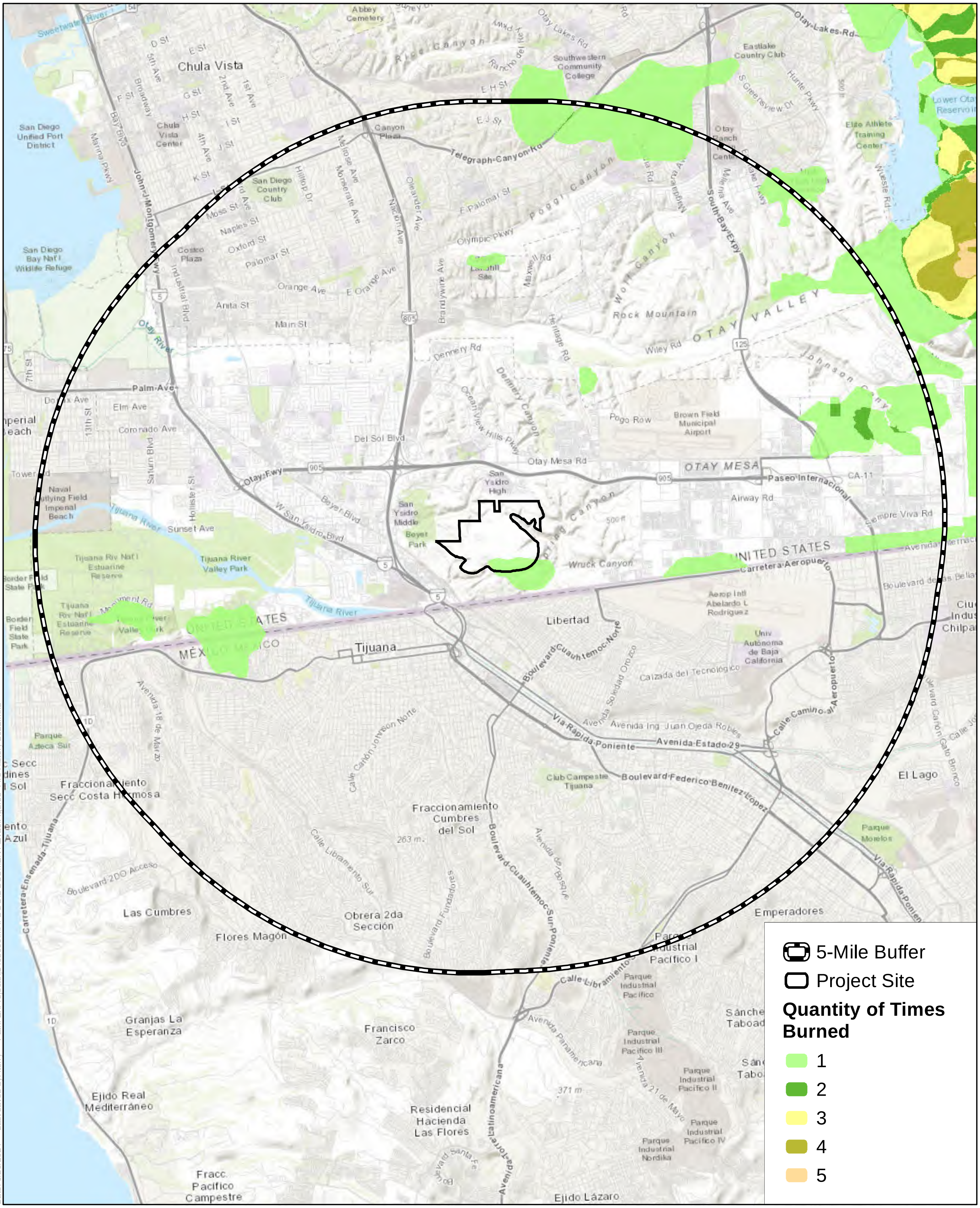
[2] Based on polygon GIS data from CAL FIRE's FRAP, which includes data from CAL FIRE, USDA Forest Service Region 5, BLM, NPS, Contract Counties and other agencies. The data set is a comprehensive fire perimeter GIS layer for public and private lands throughout the state and covers fires 10 acres and greater between 1878–2021.

Table 1. Fire History within Five Miles of the Southwest Village Project Site

Fire Year	Fire Name	Interval (years)	Total Area Burned (acres)
1953	LAZY A	8	363.2
1969	TELEGRAPH	16	370.8
1971	UN-NAMED	2	90.5
1979	UN-NAMED	8	211.6
1980	OTAY #12	1	168.3
1980	ASSIST #14	0	38.7
1980	OTAY #4	0	265.8
1983	ASSIST #49	3	130.9
1984	MAXWELL	1	43.1
1994	OTAY #4	10	2983.4
2005	BORDER #1	11	0.5
2013	OTAY	8	164.2
2022	LONE STAR	9	18.6
2022	FIVE	0	0.6

Source: CAL FIRE FRAP 2022
Note: Bold text indicates onsite fire.

Based on an analysis of the fire history data set, specifically, the years in which the fires burned, the average interval between wildfires within 5 miles of the project site was calculated to be approximately four years with intervals ranging between 0 (multiple fires in the same year) to 16 years. Based on the analysis, it is expected that there would be wildland fires within 5 miles of the project site at least every 16 years and on average, every four years, as observed in the fire history record. Based on fire history, wildfire risk for the project site is associated primarily with a Santa Ana wind-driven wildfire burning or spotting onsite from the north, although a fire approaching from the west during more typical on-shore weather patterns is possible. The proximity of the project to large expanses of open space to the north and west, has the potential to funnel Santa Ana winds, thereby increasing local wind speeds and increasing wildfire hazard in the project vicinity.



SOURCE: BASE MAP- ESRI MAPPING SERVICE; FIRE DATA-CALFIRE 2022

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FIGURE 3

Fire History Map

Wildfire Evacuation Study for the Southwest Village Project

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1.2.2 Wildfire Risk Analysis

1.2.2.1 Analysis of Wildfire Risk from Adding New Residents

Humans (i.e., human related activities or human created features, services, or processes) are responsible for the majority of California wildfires (Syphard et al. 2007; Romero-Calcerrada et al. 2008). Certain human activities result in sparks, flames, or heat that may ignite vegetative fuels without proper prevention measures in place. These ignitions predominantly occur as accidents, but may also be purposeful, such as in the case of arson. Roadways are a particularly high source for wildfire ignitions due to high usage and vehicle caused fires (catalytic converter failure, overheated brakes, dragging chains, tossed cigarette, and others). In southern California, and San Diego County, the population living at, working in, or traveling through the wildland urban interface is vast and provides a significant opportunity for ignitions every day. However, it is a relatively rare event when a wildfire occurs, and an even rarer event when a wildfire escapes initial containment efforts. Approximately 90 to 95 percent of wildfires are controlled below 10 acres (CAL FIRE 2019;).

Research indicates that the type of dense, master planned developments, like Southwest Village, are not associated with increased vegetation ignitions. Syphard and Keeley (2015) summarize all wildfire ignitions included in the CAL FIRE Fire and Resource Assessment Program (FRAP) database – dating back over 100 years. They found that in San Diego County, equipment-caused fires were by far the most numerous, and these also accounted for most of the area burned, followed closely by the area burned by power line fires. Ignitions classified as equipment caused frequently resulted from exhaust or sparks from power saws or other equipment with gas or electrical motors, such as lawn mowers, trimmers or tractors and associated with lower density housing. In San Diego County, ignitions were more likely to occur close to roads and structures, and at intermediate structure densities.

As Figures 4 through 6 illustrate, housing density directly influences susceptibility to fire because in higher density developments, there is one interface (the community perimeter) with the wildlands whereas lower density development creates more structural exposure to wildlands, less or no ongoing landscape maintenance (an intermix rather than interface), and consequently more difficulty for limited fire resources to protect well-spaced homes. The intermix includes housing amongst the unmaintained fuels whereas the proposed project converts all fuels within the footprint and provides a wide, managed fuel modification zone separating homes from unmaintained fuel and creating a condition that makes defense easier. Syphard and Keeley go on to state that “The WUI, where housing density is low to intermediate is an apparent influence in most ignition maps” further enforcing the conclusion that lower density housing poses a higher ignition risk than higher density communities. They also state that “Development of low-density, exurban housing may also lead to more homes being destroyed by fire” (Syphard et al. 2013). As discussed in detail throughout this WES, Southwest Village would be built to be an ignition resistant community designed to include professionally managed and maintained fire protection components, modern fire code compliant safety features and specific measures provided where ignitions are most likely to occur (such as roadways). Therefore, the development of the Southwest Village project and the addition of new residents would not be expected to materially increase the risk of vegetation ignitions.

Figure 4. Example higher density development that is ignition resistant and excludes readily ignitable vegetative fuels throughout and provides a perimeter fuel modification zone. This type of new development requires fewer fire resources to defend and can minimize the likelihood of on-site fires spreading off-site.

Figure 5. Example of moderate density development. Homes are located on larger properties and include varying levels of ignition resistance and landscape / fuel modification provision and maintenance. This type of development results in a higher wildland exposure level for all homes and does not provide the same buffers from wildfire encroaching onto the site or starting at a structure and moving into the wildlands as a higher density project.

Figure 6. Example of "lower density" development where homes are interspersed amongst wildland fuels, are of varying ages, and include varying levels of fuel modification zone setbacks. Homes are exposed on most or all sides by flammable vegetation and properties rely solely on owners for maintenance, are often far distances from the nearest fire station, and have minimal buffer from on-site fire spreading to wildlands.

Moreover, frequent fires and lower density housing growth may lead to the expansion of highly flammable exotic grasses that can further increase the probability of ignitions (Keeley et al. 2012). This is not the case with the proposed project as the landscapes are managed and maintained to remove exotic fuels that may establish over time.

As discussed above, research indicates that it is less likely for higher density developments to be impacted by wildfires than lower density developments. The same protections that starve wildfire of fuels and minimize or prevent wildfire from transitioning into a high density community such as those proposed as part of the Southwest Village Specific Plan also serve to minimize or prevent on-site fires from transitioning into the wildlands. Further, the requirement that all structures would include interior fire sprinklers significantly reduces the likelihood that a building fire spreads to the point of flashover, where a structure would burn beyond control and produce embers. Interior sprinklers are very efficient, keeping fires to the room of origin, or extinguishing the fire before the responding firefighters arrive. Similarly, the irrigated fuel modification zones are positioned throughout the development areas as well as the first zones on the perimeter of the project's structures. Irrigated zones include plants with high internal moisture and spacing between plants and plant groups that 1) make it difficult to ignite and 2) make it difficult for fire to spread plant to plant. Lastly, the nearby fire station and additional humans on the site result in fast detection of

fires and fast firefighter response, a key in limiting the growth of fires beyond the incipient stage. Given the project's singular interface with unmaintained fuels, incorporation of ignition resistant features, and fuel modification the potential impacts would be less than significant.

1.2.2.2 Fire Protection Features' Beneficial Effect on Wildfire Ignition Risk Reduction

Each of the fire protection features provided as part of the code requirements or customized for this project are based on the Chapter 7A requirements for development in Very High FHSZs, which serves to provide protection to the project's occupants and structures from wildfires. These features also have a similar positive impact on the potential for wildfire ignitions caused by the project and its inhabitants.

Fire Protection Plan

The following information is consistent with Chapter 49 of the California Fire Code (4903.2.1.2) for Fire Protection Plan content.

1. Total Size of the project: 490 acres.

2. Information on the adjoining properties on all sides, including current land uses, and if known, existing structures and densities, planned construction, natural vegetation, environmental restoration plans, roads and parks.

   Surrounding existing land uses include a variety of residential communities of high density and San Ysidro High School to the north, open space to the east, south and west. Further west is San Ysidro Middle School and San Ysidro Adult School and other high density residential uses.

3. A map with all project boundary lines, property lines, slope contour lines, proposed structure foundation footprints, and proposed roads and driveways. The map shall identify project fuel modification zones and method of identifying the fuel modification zone boundaries.

   The Conceptual Landscape and Brush Management Plan is included as Appendix C. The landscape plan, when prepared, would identify all irrigated and non-irrigated zones and would include plant species, spacing, and ongoing maintenance to comply with state and City requirements.

4. A map identifying all proposed plants in the fuel modification zones with a legend that includes a symbol for each proposed plant species. The plan shall include specific information on each species proposed, including but not limited to:
   a. The plant life-form;
   b. The scientific and common name; and
   c. The expected height and width for mature growth.

   The Conceptual Landscape and Brush Management Plan, which identifies Brush Management Zones and landscaping for Phase 1, and is included as Appendix C. For future phases, detailed

landscape plans, when prepared, would identify all irrigated and non-irrigated zones and would include plant species, spacing, and ongoing maintenance to comply with state and City requirements.

5. Identification of irrigated and non-irrigated zones.

   Refer to Appendix C for irrigated a non-irrigated zones.

6. Requirements for vegetation reduction around emergency access and evacuation routes.

   Refer to Appendix C for delineated brush management/vegetation reduction areas along emergency access and evacuation routes.

7. Identification of points of access for equipment and personnel to maintain vegetation in common areas.

   Refer to Appendix C for maintenance access points.

8. Per CFC 4903.2.1.1, legally binding statements regarding community responsibility for maintenance of fuel modification zones.

   The project would prepare legally binding statements that would define community responsibility for the maintenance of fuel modification zones.

9. Per CFC 4903.2.1.1, legally binding statements to be included in covenants, conditions and restrictions regarding property owner responsibilities for vegetation maintenance.

   The project would prepare legally binding statements to be included in covenants, conditions and restrictions regarding property owner vegetation maintenance responsibilities.

Fire Safety Features

The identified fire risk at the site is addressed through design, construction methods, and ongoing maintenance. As mentioned previously, the ignition resistant landscapes and structures and the numerous specific requirements would minimize the ability for an on-site fire to spread to off-site fuels, as follows:

1. Ignition resistant, planned and maintained landscape – all site landscaping of common areas and fuel modification zones would be subject to strict plant types that are lower ignition plants with those closest to structures requiring irrigation to maintain high plant moistures which equates to difficult ignition. These areas are closest to structures, where ignitions would be expected to be highest, but would be prevented through these ongoing maintenance efforts.
2. Brush Management Zone around perimeter of project – the FMZ, which includes 35 feet of Zone 1 and 65 feet of Zone 2 (100 feet total) includes specifically selected plant species, very low fuel densities (30% to 50% retention of native plants in outer zones and irrigated inner zones), and ongoing HOA funded and applied maintenance, resulting in a wide buffer between

the developed areas and the off-site native fuels. Where a full 100 feet cannot be achieved, alternative compliance mitigation consistent with FPB Policy B-18-01 would be applied.

3. Ignition resistant structures – all structures would be built to the Chapter 7A (CBC) ignition resistant requirements that have been developed and codified as a direct result of after fire save and loss assessments. These measures result in homes that are designed, built and maintained to withstand fire and embers associated with wildfires. It must be noted that the wide FMZs would not result in wildfire directly next to these structures. Homes and buildings can be built in the VHFHSZs and WUI areas when they are part of an overall approach that contemplates wildfire and provides design features that address the related risk. A structure within a VHFHSZ that is built to these specifications can be at lower risk than an older structure in a non-fire hazard severity zone. The ignition resistance of on-site structures would result in a low incidence of structural fires, further minimizing potential for project-related wildfires.
4. Interior fire sprinklers – sprinklers in residences are designed to provide additional time for occupants to escape the home. Sprinklers in multi-family and commercial structures are designed to provide structural protection. The benefit of fire sprinklers is that they assist responding firefighters by containing the fire to the room of origin and delaying spread and flash over. This benefit also reduces the potential for an open space vegetation ignition by minimizing the possibility for structure fires to grow large and uncontrollable, resulting in embers that are blown into wildland areas.
5. Fire access roads – roads provide access for firefighting apparatus. Project roads would be compliant with CFC 503 and FPB Policy A-14-1..
6. Water – Water supply would be compliant with CFC 507, Appendix C and CRR Policy O-22-2. Water accessibility helps firefighters control structural fires and helps protect structures from and extinguish wildfires.

The project would incorporate all of the above fire safety features; therefore, potential impacts would be less than significant.

1.3 Applicable Regulations, Standards and Planning Tools

1.3.1 Federal

1.3.1.1 Disaster Mitigation Act

The Disaster Mitigation Act of 2000 requires that a state mitigation plan, as a condition of disaster assistance, add incentives for increased coordination and integration of mitigation activities at the state level through the establishment of requirements for two different levels of state plans: “Standard” and “Enhanced.” States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Disaster Mitigation Act also established a new requirement for local mitigation plans.

1.3.1.2 National Incident Management System (NIMS)

The NIMS guides all levels of government, nongovernmental organizations and the private sector to work together to prevent, protect against, mitigate, respond to and recover from incidents. NIMS provides community members with a shared vocabulary, systems and processes to successfully deliver the capabilities described in the National Preparedness System. The National Preparedness System is a Presidential Policy Directive establishing a common goal to create a secure and resilient nation associated with prevention, protection, mitigation, response and recovery to address the greatest risks to the nation. One core area is fire management and suppression.

NIMS defines operational systems that guide how personnel work together during incidents.

1.3.1.3 Pet Evacuation and Transportation Standards Act

The Pets Evacuation and Transportation Standards Act of 2006 amends the Stafford Act, and requires evacuation plans to take into account the needs of individuals with household pets and service animals, prior to, during, and following a major disaster or emergency.

1.3.2 State

1.3.2.1 Fire Hazard Severity Zones

To assist each fire agency in addressing its responsibility area, California Department of Forestry and Fire (CAL FIRE) uses a severity classification system to identify areas or zones of severity for fire hazards within the state. CAL FIRE is required to map these zones for State Responsibility Areas and identify Very High Fire Hazard Severity Zones (VHFHSZ) for Local Responsibility Areas. The Specific Plan is located within a VHFHSZ.

1.3.2.2 California Wildland-Urban Interface Code

On September 20, 2005, the California Building Standards Commission approved the Office of the State Fire Marshal's emergency regulations amending the California Building Code (CBC) (California Code of Regulations [CCR] Title 24, Part 2). Section 701A of the CBC includes regulations addressing materials and construction methods for exterior wildfire exposure and applies to new buildings located in State Responsibility Areas or Very High Fire Hazard Severity Zones in Local Response Areas.

1.3.2.3 California Fire Code

The 2016 California Fire Code (CCR Title 24, Part 9) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The

Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas. The City has adopted the California Fire Code as Chapter 5, Article 5, Division 1 of the City's Municipal Code (SDMC), including appendices addressing fire-flow requirements for buildings.

1.3.2.4 California Emergency Services Act

The California Emergency Services Act (California Government Code §8550, et seq.), provides for the creation of an Office of Emergency Services, assign and coordinate functions and duties to be performed during an emergency, facilitate mutual aid, and assign resources (including manpower and facilities) throughout the state for dealing with any emergency that may occur.

1.3.2.5 California Office of Emergency Services

The California Office of Emergency Services (OES) is responsible for the coordination of overall state agency response to disasters. Assuring the state's readiness to respond to, recover from all hazards and assisting local governments in their emergency preparedness, response, recovery and mitigation.

1.3.2.5.1 Standardized Emergency Management System (SEMS)

SEMS is the cornerstone of California's emergency response system and the fundamental structure for the response phase of emergency management. The system unifies all elements of California's emergency management community into a single integrated system and standardizes key elements. SEMS incorporates:

- Incident Command System (ICS) - A field-level emergency response system based on management by objectives
- Multi/ Inter-agency coordination - Affected agencies working together to coordinate allocations of resources and emergency response activities
- Mutual Aid - A system for obtaining additional emergency resources from non-affected jurisdictions.
- Operational Area Concept - County and its sub-divisions to coordinate damage information, resource requests and emergency response.

1.3.2.6 Attorney General Guidance

The California Office of the Attorney General issued (October 2022) guidance (Guidance) outlining best practices for analyzing and mitigating wildfire impacts of development projects under the California Environmental Quality Act (CEQA). The Guidance is intended to help local governments' evaluation and approval considerations for development projects in fire-prone areas, and to help project design in a way that minimizes wildfire ignition and incorporates emergency access and evacuation measures. Importantly,

the Guidance does not impose additional legal requirements on local governments, nor does it alter any applicable laws or regulations.

The Guidance states that evacuation modeling and planning should be required for all projects located in HFHSZ/ VHFHSZ that present an increased risk of ignition and/or evacuation impacts. It further states that local jurisdictions should require evacuation modeling and planning to be developed prior to project approval to provide maximum flexibility in design modifications necessary to address wildfire risks and impacts. The project is in an area designated as a VHFHSZ and adjacent to open space areas, which is why this Evacuation Study was prepared for the project and includes the analysis of several scenarios, including existing and with project conditions. The project would provide important road network improvements, including the connection of existing dead-end roads Beyer Boulevard (east-west) with Caliente Avenue (north-south). These improvements assist project access as well as provide a public benefit for existing residents.

The Guidance further states that evacuation modeling and analysis must augment existing information when necessary to include adequate analysis of the following:

- Evaluation of the capacity of roadways to accommodate project and community evacuation and simultaneous emergency access.
    - Existing and future roadway capacities are analyzed in Section 4 of this Evacuation Study.
- Assessment of the timing for evacuation.
    - Analysis of evacuation timing is detailed in Section 4.3.
- Identification of alternative plans for evacuation.
    - Alternative plans for evacuation such as shelter in place would be feasible due to the high ignition resistance level of project structures.
- Evaluation of the project's impacts on existing evacuation plans.
    - Existing evacuation plans do not exist for the area. The project would utilize primary evacuation routes that would be available to other evacuees, but with improved capacities, new connections and better flexibility and options. This Evacuation Study is based on the County's Emergency Operations Plan, including the Evacuation Annex.
- Consideration of the adequacy of emergency access, including the project's proximity to existing fire services and the capacity of existing services.
    - As detailed further in this WES, emergency access is provided that is consistent with the fire code requirements. During implementation of Phase 1a, primary access to the first 200 units would be via Caliente Avenue to Central Avenue. Prior to the issuance of a building permit for the 201st unit, as part of Phase1b, the project would provide a secondary emergency vehicle access that would be accessed via a knox box or knox key

switch at the eastern terminus of Beyer Boulevard/future Caliente Avenue intersection. Prior to the issuance of any building permit in Phase 1c (700th dwelling unit), the project would construct Beyer Boulevard West, which would serve as the secondary emergency access for the project, and the Secondary EVA would also continue to serve as an alternate (i.e., tertiary) emergency vehicle access for the project. At buildout of the Southwest Village Specific Plan, Caliente Avenue would be fully improved from Beyer Boulevard to Street D and the EVA's gate and knox box/know key switch would be relocated from Beyer Boulevard and Caliente Avenue to Caliente Avenue and Street D and would remain available as an alternate emergency access road.

- Traffic modeling to quantify travel times under various likely scenarios.
    - This Evacuation Study utilizes a basic formula approach that is comprehensive but based on # of vehicles anticipated in the study area, including the project, roadway capacities and with the project for 1) Phases 1a-1c (VTM-1) and 2) Specific Plan Buildout.

In consideration of the above, the AG Guidance encourages local jurisdictions to develop thresholds of significance for evacuation times based on community-wide standards. Any conclusion that an increase in evacuation times is a less than significant impact should be based on a threshold of significance that reflects community-wide goals and standards. Thresholds should also consider consistency with an adopted emergency operations or evacuation plan, a safety element updated to integrate wildfire and evacuation concerns, or recommendations developed by CAL FIRE relating to safety of subdivisions. The project also has the potential to minimize on-road traffic when it is considered necessary and/or safer by temporarily providing refuge on-site in protected structures, which offers a contingency not available to all communities/developments and assists in providing flexibility and options for emergency managers.

1.3.3 Local

1.3.3.1 San Diego County Multi-Jurisdictional Hazard Mitigation Plan

The purpose of the County's Multi-Jurisdictional Hazard Mitigation Plan (County of San Diego 2017) is to identify the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and human-made hazards. An important San Diego County Multi-Jurisdictional Hazard Mitigation Plan component is the Community Emergency Response Team (CERT), which educates community members about disaster preparedness and trains them in basic response skills, including fire safety.

1.3.3.2 San Diego County Emergency Operations Plan

The 2018 San Diego County Emergency Operations Plan (EOP) describes a comprehensive emergency management system that provides for a planned response to disaster situations associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents. It delineates operational concepts relating to various emergency situations, identifies components of the Emergency Management

Organization, and describes the overall responsibilities for protecting life and property and providing for the overall well-being of the population. The plan also identifies the sources of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies, and the private sector.

1.3.3.3 Unified San Diego County Emergency Services Organization and County of San Diego Operational Area Emergency Operations Plan – Evacuation Annex

The Evacuation Annex is intended to be used as a template for the development of jurisdictional evacuation plans and would support or supplement the evacuation plans prepared and maintained by each local jurisdiction. The annex outlines strategies, procedures, recommendations and organizational structures that can be used to implement a coordinated evacuation effort in the San Diego County Operational Area (OA).

1.3.3.4 County of SD Resilience Review Report: Wildland Fires

Prepared by the Chief Administrative Officer's Resilience Review Working Group, the Resilience Review Report: Wildland Fires provides recommendations for achieving community goals related to actively reducing risk of wildfire and improving efforts to respond and recover from wildfire events. The Working Group recommends 16 principal objectives divided among three focus areas: pre-fire, response, and recovery.

1. Pre-Wildfire: Focus on fire preparedness at the neighborhood-level. Specific community recommendations include:
    - Implementing a cohesive County pre-fire strategy
    - Enhancing pre-fire vegetation management
    - Improving pre-fire emergency planning
    - Strengthening fire safety measures in new construction
    - Reducing loss from wildfires in existing structures
2. Response: Improve fire suppression capabilities and on the ground safety measures including:
    - Increase County Fire's firefighting capabilities
    - Enhancement of accessible transportation services to include the evacuation of at-risk populations and large animals
    - Improved operational communications among response personnel

- More rapid and efficient restoration of essential services and systems
- Improved delivery of coordinated, timely, reliable, and actionable information to the whole community during a wildfire

3. Recovery: Enhance fire recovery effort including:

- The ongoing development of a County Debris Removal Framework
- Developing administrative tools and processes that improve the speed and efficiency in providing emergency interim housing options to victims of a wildfire
- Improvements in health and social services capabilities
- Increased County capacity to coordinate large-scale recovery operations

1.3.3.5 City of San Diego, Otay Mesa Community Plan

The Otay Mesa Community Plan is a set of goals, policies, and recommendations that represents a shared vision for the future of the area. It establishes a framework for ensuring that changes to the built environment, whether public or private, aid in maintaining or improving the fabric of the community and enhances its qualities as a place for living, recreating, and working. The project proposes updates to the existing plan.

1.3.3.5.1 Otay Mesa Community Plan PEIR

The project was previously analyzed as a part of the Otay Mesa Community Plan (OMCP) Update. The certified Final Program Environmental Impact Report (FEIR) prepared for the Otay Mesa Community Plan, project No. 30330/304032; State Clearinghouse Number 2004651076 certified March 2014 (OMCP FEIR) and addresses the potential environmental effects of the project in relation to the analysis contained in the OMCP FEIR. The OMCP refers to the project area as the Southwest District and identified the area as a location for future village development and resource preservation. The OMCP required that prior to consideration of any comprehensive development and rezoning proposals, a Specific Plan would be required to ensure development creates a sustainable and efficient land use pattern consistent with applicable OMCP policies. The proposed project evaluated herein includes the implementation of the Southwest Village Specific Plan.

Per the 2014 FEIR, due to "the existing and proposed land use patterns around which the community is formed, new development in the wildland interface areas may expose additional people and structures to wildland fire hazards, representing a potentially significant impact. Therefore, impacts associated with wildfires would be significant at the program-level. However, with the inclusion of mitigation measure HAZ-1, included below, impacts would be less than significant.

HAZ-1: Future projects implemented in accordance with the CPU shall be required to incorporate sustainable development and other measures into site plans in accordance with the City's Brush

Management Regulations, and Landscape Standards pursuant to General Plan and CPU policies intended to reduce the risk of wildfires. In addition, all future projects shall be reviewed for compliance with the 2010 California Fire Code, Section 145.0701 through 145.0711 of the LDC, and Chapter 7 of the California Building Code.

The project has prepared Conceptual Landscape and Brush Management Plan (Appendix C) for the implementation of Phase 1, and all future phases would be required to prepare similar landscape and brush management plans to be complaint with the then current code requirements. Additionally, while HAZ-1 refers to 2010 California Fire Code, this WES considers the project's compliance with the most current 2022 California Fire Code, which requires more restrictive, ignition resistant construction.

1.3.3.6 City's Emergency Operations Procedures

The City's Emergency Operations Procedures (EOP) is an Administrative Regulation adopted to facilitate effective operations during emergency incidents and disasters and is accordance with the State of California's Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS). The EOP sets up protocol for the control and coordination of on-scene emergency operations including the designation of an Incident Commander, establish Incident Command Posts, conduct response operations according to departmental protocols and SEMS/NIMS principles, request assistance from other City departments for support as needed, and inform senior City officials as appropriate.

1.3.3.7 City of San Diego Fire Code

The San Diego Fire Code consists of SDMC Chapter 5, Article 5, Sections 55.0101 through 55.9401, which adopts the 2016 California Fire Code with some modifications, and applicable sections of the CCR. Provisions of the California Fire Code are described under State Regulations, above.

1.3.3.8 City of San Diego Building Regulations

The City's Building Regulations (SDMC Chapter 14, Article 5, Division 1) are intended to regulate the construction of applicable facilities and encompasses (and formally adopts) associated elements of the CBC. Specifically, this includes regulating the "construction, alteration, replacement, repair, maintenance, moving, removal, demolition, occupancy, and use of any privately owned building or structure or any appurtenances connected or attached to such buildings or structures within this jurisdiction, except work located primarily in a public way, public utility towers and poles, mechanical equipment not specifically regulated in the Building Code, and hydraulic flood control structures." The City's Building Regulations also establish acceptable construction materials for development near open space to minimize fire risk through adoption of Chapter 7, "Fire Resistance-Rated Construction," and Chapter 7A, "Materials and Construction Methods for Exterior Wildlife Exposure," of the CBC (SDMC Chapter 14, Article 5, Division 7).

1.3.3.9 City of San Diego Brush Management

The City's Brush Management Regulations (SDMC Section 142.0412) are intended to minimize wildland fire hazards through prevention activities and programs. These regulations require the provision of mandatory setbacks, irrigation systems, regulated planting areas, and plant maintenance in specific zones, and are implemented at the project level through the grading and building permit process.

Brush management is required in all base zones on publicly or privately-owned premises that are within 100 feet of a structure and contain native or naturalized vegetation. The City requires Brush Management Plans for all new development, which are intended to reduce the risk of significant loss, injury, or death involving wildland fires. Unless otherwise approved by the City Fire Marshal, the brush management plans for all future development would consist of two separate and distinct zones as follows:

Zone One consists of the area adjacent to structures where flammable materials would be minimized through the use of pavement and/or permanently irrigated ornamental landscape plantings. This zone is not allowed on slopes with a gradient greater than 4:1.

Zone Two consists of the area between Zone One and any area of native or non-irrigated vegetation and consists of thinned native or naturalized vegetation.

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2 City/County Emergency Operations Background

This Southwest Village Wildfire Evacuation Study was prepared based on the City's Emergency Operations Procedures (San Diego 2010), County of San Diego Emergency Operations Procedures (EOP), the Unified San Diego County Emergency Services Organization and County of San Diego Operational Area Emergency Operations Plan – Evacuation Annex.

To establish a framework for implementing well-coordinated evacuations, the City, like most California emergency operations agencies, has adopted evacuation procedures in accordance with the State of California's Standardized Emergency Management System (SEMS) and the National Incident Command System (NIMS). Large-scale evacuations are complex, multi-jurisdictional efforts that require coordination between many agencies and organizations. Emergency services and other public safety organizations play key roles in ensuring that an evacuation is effective, efficient, and safe.

Evacuation is a process by which people are moved from a place where there is immediate or anticipated danger, to a safer place, and offered temporary shelter facilities. When the threat passes, evacuees are able to return to their normal activities, or to make suitable alternative arrangements.

Evacuation during a wildfire is not necessarily directed by the fire agency, except in specific areas where fire personnel may enact evacuations on-scene. The City's Police Department or Fire-Rescue Department have primary responsibility for emergency evacuations. These agencies work closely within the Unified IC System, with the City's Emergency Operations Center (EOC) and County OES. To that end, the San Diego Fire-Rescue Department (SDFRD), San Diego Police Department (SDPD), Public Works, Planning, Emergency Services Departments, and California Department of Transportation (Caltrans), amongst others, have worked as part of a Pre-Fire Mitigation Task Force to address wildland fire evacuation planning for City of San Diego.

Every evacuation scenario would include some level of unique challenges, constraints, and fluid conditions that require interpretation, fast decision making, and alternatives. For example, one roadway incident that results in blockage of evacuating vehicles may require short-term or long-term changes to the evacuation process. Risk is considered high when evacuees are evacuating late, and fire encroachment is imminent. This hypothetical scenario highlights the importance of continuing to train responding agencies, model various scenarios, educate the public, provide contingency plans, and take a very conservative approach to evacuation decision timelines.

Equally as important, the evacuation procedures should be regularly updated with lessons learned from actual evacuation events, as they were following the 2003, 2007, and 2014 San Diego County fires. The authors of this Wildfire Evacuation Study recommend that occasional updates are provided, especially following lessons learned from actual incidents, as new technologies become available that would aid in the evacuation process, and as changing landscapes and development patterns occur within and adjacent to the project site that may impact how evacuation is accomplished. At the time of this plan's preparation, there is no

encompassing emergency evacuation plan available for the southern San Diego region. This Southwest Village Wildfire Evacuation Study is consistent with the City evacuation planning standards and can be integrated into a regional evacuation plan and other pre-plans when and if the area officials and stakeholders (CAL FIRE, SDFRD, OES, San Diego Sheriff's Department, SDCFA, and others) complete one.

As demonstrated during large and localized evacuations occurring throughout San Diego County and the City over the last 15 years, an important component to successful evacuation is early assessment of the situation and early notification via managed evacuation declarations. The City utilizes early warning and informational programs to help meet these important factors. Among the methods available to citizens for emergency information are radio, television, social media/internet, neighborhood City patrol car and aerial public address notifications, and Reverse 9-1-1 or Alert San Diego. The County of San Diego, in partnership with Blackboard Connect Inc., instituted this regional notification system that is able to send telephone notifications to residents and businesses within San Diego County impacted by, or in danger of being impacted by, an emergency or disaster. This system, called Alert San Diego, is used by emergency response personnel to notify homes and businesses at risk with information on the event and/or actions (such as evacuation, shelter-in-place, gas leak, missing person, etc.) they are advised to implement. The system utilizes the region's 9-1-1 database, provided by the local telephone company(ies), and thus is able to contact landline telephones whether listed or unlisted. It is TTY/TDD capable.

Please also note that the major fire events that have occurred in San Diego County in the past 17 years (including the Cedar Creek and Witch Creek fires) have also resulted in substantial change in the individual and united approaches between City, County and State agencies, as well as substantial investment in fire-fighting resources. For example, San Diego County Fire Agencies and related partners have developed a robust ability to rationally predict wildfire movement. This is accomplished through pre-fire planning and fire behavior modeling, working with UCSD's WIFIRE lab advanced wildfire behavior projection technology, and SDG&E's nationally renowned weather system network. In addition, more than 500 million dollars has been invested to enhance the county's fire prevention, detection, response, suppression and recovery capabilities since the 2003 Cedar Fire. These efforts have proven effective in managing and responding to wildfire events, such as was accomplished during the successfully managed 2018 Lilac Fire.

Because the system uses the 9-1-1 database, only landline numbers are in the system. If you have a Voice over IP (VoIP) or cellular telephone and would like to be notified over that device, or if you would like an email notification, you must register those telephone numbers and/or email address for use by the system to receive voice, text, and email messages.

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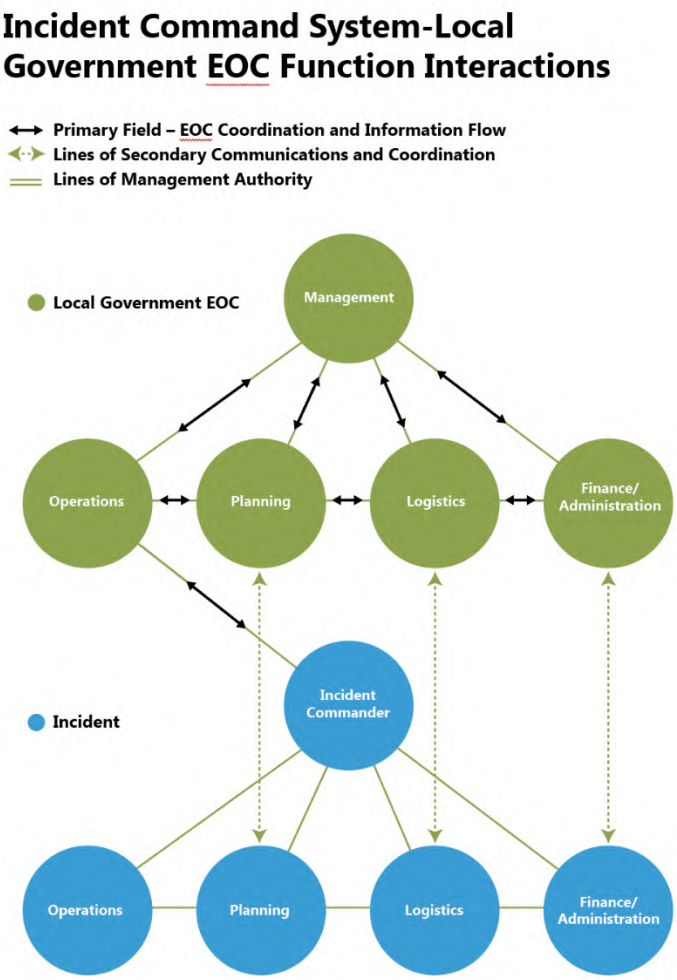
3 San Diego County Evacuation Planning

This Wildfire Evacuation Study incorporates concepts and protocols practiced throughout the City and San Diego County. The City's EOP follows basic protocols set forth in the City's Operation Area Emergency Operations Plan and the California Master Mutual Aid Agreement, which dictate who is responsible for an evacuation effort and how regional resources would be requested and coordinated.

First responders are responsible for determining initial protective actions before EOCs and emergency management personnel have an opportunity to convene and gain situational awareness. Initial protective actions are shared/communicated to local EOCs and necessary support agencies as soon as possible to ensure an effective, coordinated evacuation. Figure 7 summarizes the functional interactions of local government EOCs under the Incident Command System.

Figure 7. Incident Command System Local Government EOC Functional Interactions



During an evacuation effort, the designated City Evacuation Coordinator is the Police Chief, who is also the Law Enforcement Coordinator, although several official City positions are allowed to declare evacuations. The Evacuation Coordinator would be assisted by other law enforcement and support agencies. Law enforcement agencies, highway/road/street departments, and public and private transportation providers would conduct evacuation operations. Procurement, regulation, and allocation of resources would be accomplished by those designated. Evacuation operations would be conducted by the following agencies:

- City Police Department
- San Diego Fire and Rescue Department
- American Red Cross
- San Diego Humane Society

- San Diego County Department of Animal Services
- Department of Planning and Development Services
- Department of Environmental Services
- Department of Public Works
- Other City, County and state agencies, as needed
- The following overview contains information from the San Diego County Evacuation Annex and is consistent with the City's EOP. A complete copy of the EOC can be downloaded here: https://www.sandiegocounty.gov/content/sdc/oes/emergency_management/oes_jl_oparea.html.

3.1 Evacuation Objectives

The overall objectives of emergency evacuation operations and notifications for the City of San Diego are to:

- Expedite the movement of persons from hazardous areas;
- Institute access control measures to prevent unauthorized persons from entering vacated, or partially vacated areas;
- Provide for evacuation to appropriate transportation points, evacuation points, and shelters;
- Provide adequate means of transportation for persons with disabilities, the elderly, other persons with access and functional needs, and persons without vehicles;
- Provide for the procurement, allocation, and use of necessary transportation and law enforcement resources by means of mutual aid or other agreements;
- Control evacuation traffic;
- Account for the needs of individuals with household pets and service animals prior to, during, and following a major disaster or emergency;
- Provide initial notification, ongoing, and re-entry communications to the public through the EOC; and
- Assure the safe re-entry of the evacuated persons.

The San Diego Police Department is the lead agency for evacuations of areas within the City, including the proposed Southwest Village community. The SDPD, as part of a Unified Incident Command System, assesses and evaluates the need for evacuations, and orders evacuations according to established procedures. Additionally, as part of the Unified Incident Command System, the SDPD identifies available and appropriate evacuation routes and coordinate evacuation traffic management with the Caltrans, the California Highway Patrol (CHP), the San Diego County Sheriff's Department (SDSD), other supporting agencies, and jurisdictions.

The decision to evacuate an area is not made lightly and there is a significant impact to public safety and the economy. The following process describes how emergency evacuation decisions are coordinated, allowing emergency managers and other supporting response organizations to make collaborative decisions.

3.2 Evacuation Coordination Process

1. If the emergency only impacts the City, the decision to evacuate would be made at the local jurisdiction level with regional collaboration considerations.
    a. Based on the information gathered, local jurisdictions would generally make the determination on whether to evacuate communities as the need arises, on a case-by-case scenario basis.
    b. The decision to evacuate would depend entirely upon the nature, scope, and severity of the emergency; the number of people affected; and what actions are necessary to protect the public.
    c. Local jurisdictions may activate their EOC and conduct evacuations according to procedures outline in their EOP.
    d. The EOC may make recommendations on whether a community should evacuate and may help coordinate the evacuation effort.
    e. The Evacuation Annex is automatically activated when an incident occurs requiring an evacuation effort that impacts two or more jurisdictions.
    f. The EOC would coordinate with fire, law enforcement, public health, and other relevant support agencies to obtain recommendations on protective actions.
    g. The EOC would coordinate with jurisdictional emergency management personnel and other public safety personnel. The Policy Group within the EOC would coordinate with other officials from jurisdictions within the City's Operational Area (OA) to identify command decisions, including:
        i. Gaining regional situational awareness
        ii. Determining response status
        iii. Reviewing status of initial protective actions
        iv. Considering additional protective actions
        v. Evaluating public information needs
        vi. Determining next steps
        vii. Establishing a regular time to share updates

h. The EOC would coordinate emergency public information to citizens in accordance with established procedures.

i. The EOC may support coordinating the evacuation response according to the EOP, including:

   i. Providing transportation for those who need assistance

   ii. Providing support for people with disabilities and other access and functional needs

   iii. Coordinating and communicating with the private sector, community groups, and faith based organizations to utilize their services and resources available to support the response

   iv. Providing shelter for evacuees

3.3 Evacuation Response Operations

An evacuation of any area requires significant coordination among numerous public, private, and community/non-profit organizations. Wildfire evacuations would typically allow time for responders to conduct evacuation notification in advance of an immediate threat to life safety; giving residents time to gather belongings and make arrangements for evacuation. On the other hand, other threats, including wildfires igniting nearby, may occur with little or no notice and certain evacuation response operations would not be feasible (for example, establishing contra flow requires between 24 to 72 hours to be implemented; a no-notice event would not allow for contra flow to be established). Evacuation assistance of specific segments of the population may also not be feasible.

3.3.1 Evacuation Points and Shelters

When the SDPD or Incident Command (IC) implements an evacuation order, they coordinate with the responding fire and rescue agency, the EOC, and others, to decide on locations to use as a Temporary Evacuation Point (TEP). The City's Police Department Communications Division would utilize the Alert San Diego system to direct evacuees to the established TEPs or shelters. These evacuation points would serve as temporary safe zones for evacuees and would provide basic needs such as food, water, and restrooms. Possible shelters and assembly areas that can provide at least short-term refuge and that would be designated by emergency managers during an evacuation include:

- San Ysidro High School
- Ocean View Hills High School
- San Ysidro Middle School
- San Ysidro Adult School
- Vista Del Mar Middle School

Other refuge sites are available within developed communities primarily to the north and west of the project site.

If there are residents unable to evacuate or in need of transportation assistance to get to a TEP or shelter, the SDPD or IC may establish transportation points to collect and transport people without transportation resources to evacuation points. These transportation points should be large, well-known sites such as shopping centers, libraries, and schools. Transportation should be accessible to all populations, including people with disabilities and other access and functional needs.

3.3.2 Pet Evacuations

The Pets Evacuation and Transportation Standards Act of 2006 amends the Stafford Act, and requires evacuation plans to take into account the needs of individuals with household pets and service animals, prior to, during, and following a major disaster or emergency.

The San Diego County Department of Animal Services (DAS) has plans in place to transport and shelter pets in a disaster under Annex O of the OA EOP, including the Animal Control Mutual Aid Agreement. Animal Control Officers, the San Diego Humane Society, and private animal care shelters would assist in the rescue, transport, and sheltering of small and large animals. In addition, potential volunteer resources and private groups are identified and tracked in WebEOC by the County. Only non-emergency resources and personnel, such as public and private animal services agencies, would be used to rescue and transport animals during an evacuation effort.

In most cases, DAS and the OA EOC would coordinate and attempt to co-locate animal shelters with people shelters.

3.3.3 Shelter-in-Place (County EOP Discussion)

As stated in the County EOP, sheltering-in-place is the practice of going or remaining indoors during or following an emergency event. This procedure is recommended if there is little time for the public to react to an incident and it is safer for the public to stay indoors for a short time rather than travel outdoors. Sheltering-in-place also has many advantages because it can be implemented immediately, allowing people to remain in their familiar surroundings, and providing individuals with everyday necessities such as telephone, radio, television, food, and clothing. However, the amount of time people can stay sheltered-in-place is dependent upon availability of food, water, medical care, utilities, and access to accurate and reliable information.

The decision on whether to evacuate or shelter-in-place is carefully considered with the timing and nature of the incident (San Diego County 2022). Sheltering-in-place is the preferred method of protection for people that are not directly impacted or in the direct path of a hazard. This would reduce congestion and transportation demand on the major transportation routes for those that have been directed to evacuate by police or fire personnel. The communities adjacent to the proposed Southwest Village project includes homes built in the 2000s and are in varying states of ignition resistance. Unlike most new master planned communities that incorporate ignition-resistant construction and provide defensibility throughout (like Southwest Village would), responding fire and law enforcement personnel may not be able to direct existing residents to temporarily refuge in their homes; however, it would be possible for residents of Southwest Village. Homes that are not built to the ignition-resistant

standards can be retrofitted to increase their ability to withstand wildfire and ember storms by focusing on roofs, windows, walls, vents, appendages and defensible space. Attention to these components of a home's fire protection system is recommended for existing homeowners within the project Area.

Options when evacuation is not considered feasible that may be available to responding fire and law enforcement personnel may include temporary refuge/sheltering onsite where residents are instructed to remain in their homes while firefighters perform their structure protection function if it is considered unsafe to evacuate. This approach is consistent with San Diego County's (San Diego County 2022) evacuation approach which states, "[A shelter-in-place] tactic shall only be used if an evacuation would cause a higher potential for loss of life. Consideration should be given to assigning incident personnel to monitor the safety of those remaining in place. The concept of shelter-in-place is an available option in those instances where physical evacuation is impractical." The surrounding communities do not currently include attributes that would allow a community-wide sheltering in place option, due primarily to the older construction methods and codes that guided construction at the time the homes were built. The structures in the Southwest Village community, including the proposed homes would conform to the ignition-resistant building codes codified in Chapter 7A of the California Building Code, would be ignition-resistant, defensible and designed to require minimal firefighting resources for protection, which enables this contingency option when it is considered safer than evacuation.

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4 Southwest Village Evacuation Road Network

As evidenced by mass evacuations during the 2007 Witch Creek Fire along with other San Diego County evacuations, even with roadways that are designed to the code requirements, it may not be possible, or even the best response, to move large numbers of persons at the same time as part of a mass-evacuation. Instead, informed, phased evacuations enable more streamlined evacuations where those at highest risk are moved first. Road infrastructure throughout the United States, and including San Diego County, is not designed to accommodate a short-notice, mass evacuation without some level of congestion (FEMA 2008). The need for evacuation plans, pre-planning, and tiered or targeted and staggered evacuations becomes very important for improving evacuation effectiveness. Among the most important factors for successful evacuations in urban settings is control of intersections downstream of the evacuation area. If intersections are controlled by law enforcement, barricades, signal control, and other means, potential backups and slowed evacuations can be minimized. Multiple evacuation points enable more evacuees the ability to evacuate with less impact on roadways.

If a wildfire starts in the nearest open space areas to the east and south of the project site, and is fanned by Santa Ana winds out of the northeast, the fire would likely tend to blow southwest, west, or south toward the project site. Wildfires occurring under typical weather conditions may also result in fire that burns toward the project site from the open space areas to the west, but the surrounding terrain does not support aggressive runs at the community. Additionally, wildfires during typical weather conditions are less aggressive and more manageable, rarely resulting in large evacuations. As conducted in past wildfires, an early evacuation of the area may occur several or more hours prior to actual threatening conditions at the project site, depending on conditions and fire spread projections.

The project is located within an area that is subject to occasional wildfires. Based on the residential uses to the north and open space areas to the south, west and east the wildfire potential within the project structures' direct sphere of influence is considered moderate; however, as the area continues to develop, direct exposure to unmaintained fuels would be reduced. The anticipated fire behavior would be expected to facilitate evacuations as well as potential onsite sheltering for properly constructed residences, if considered safer than a short-notice evacuation.

This approach is consistent with San Diego County's (2022) Evacuation approach which states, "the shelter-in-place procedure is recommended if there is little time for the public to react to an incident and it is safer for the public to stay indoors for a short time rather than travel outdoors. Although there is no designation for shelter-in-place communities, the structures within Southwest Village would include the level of ignition resistance and landscape maintenance, which are defensible against the short duration wildfire exposure anticipated, and are designed to require minimal resources for protection, which enables these contingency options that may not be available to other existing communities in the surrounding area.

Among the most important factors for successful evacuations at the project site is control of intersections downstream of the evacuation area. If intersections are controlled by law enforcement,

barricades, signal control, firefighters or other means, potential backups and slowed evacuations can be minimized. Another important aspect of successful evacuation is a managed and phased evacuation declaration. Evacuating in phases, based on vulnerability, location, or other factors, enables the subsequent traffic surges on major roadway to be smoothed over a longer time frame and can be planned to result in traffic levels that flow better than when mass evacuations include large evacuation areas at the same time. This WES defers to Law Enforcement and OES to appropriately phase evacuations and to consider the vulnerability of communities when making decisions. For example, newer development in the area, including the project's protected structures, would offer a high level of fire safety onsite, along with open-air options for firefighter safety zones and temporary onsite refuge as a contingency due to the setbacks from the nearest wildland areas.

Consistent with the County of San Diego EOP's Evacuation Annex (2022), major ground transportation corridors in the area would be used as primary evacuation routes during an evacuation effort. The road systems were evaluated to determine the best routes for fire response equipment and "probable" evacuation routes for relocating people to designated safety areas. The potential evacuation routes that would be used for the project are described below and represented in Figures 8a- 8d:

Phase 1a

- Central Avenue (project proposed)
- Caliente Avenue (Southern terminus to northern project boundary[3], project proposed)
- Caliente Avenue (existing)
- Otay Mesa Road (existing)
- Beyer Boulevard at Old Otay Mesa Road (existing)
- Ocean View Hills Parkway (existing)
- SR 905 (existing)

Phase 1b

- Central Avenue (project proposed)
- Caliente Avenue (Southern terminus to project boundary, project proposed)
- Caliente Avenue (existing)
- Secondary EVA (at the eastern terminus of Beyer Boulevard East/future Caliente Avenue intersection, along an existing utility road, to Rail Court, to be improved by the project)
- Beyer Boulevard East (project proposed)

[3] Caliente Avenue from the current southern terminus to the project's northern boundary, if not already constructed by the Candlelight project, would be constructed as part of Phase 1a of the project.

- Otay Mesa Road (existing)
- Beyer Boulevard at Old Otay Mesa Road (existing)
- Ocean View Hills Parkway (existing)
- SR 905 (existing)

Phase 1c

- Central Avenue (project proposed)
- Caliente Avenue (existing)
- Caliente Avenue (Southern terminus to northern project boundary, project proposed)
- EVA (Caliente Avenue along existing utility road, to Rail Court, project proposed)
- Beyer Boulevard East (project proposed)
- Beyer Boulevard West (project proposed)
- Otay Mesa Road (existing)
- Beyer Boulevard at Old Otay Mesa Road (existing)
- Ocean View Hills Parkway (existing)
- SR 905 (existing)

Southwest Village Specific Plan Buildout

- All internal project roadways (as proposed in land use plan)
- EVA (gated access at Caliente Ave/Street D, south along existing utility road to Rail Court, project proposed)
- Otay Mesa Road (existing)
- Beyer Boulevard at Old Otay Mesa Road (existing)
- Ocean View Hills Parkway (existing)
- SR 905 (existing)

These roads provide access to urbanized areas and major traffic corridors including SR-905.

During an emergency evacuation of the project, the primary and secondary roadways may be providing citizen egress while responding emergency vehicles are inbound. Because the required fire access roads throughout the project site are designed to meet or exceed City road requirements, including 24 foot-wide, unobstructed roadways, adequate parking, turning radius, grade maximums, and roadside fuel modification zones, potential conflicts that could reduce the roadway efficiency are minimized, allowing for

smoother evacuations. The existing utility road, which has been designated as an EVA, is 20-feet wide; however, its use as an EVA for the project has been approved by SDFRD.

The primary evacuation routes are accessed from internal roadways, which connect to primary evacuation routes (i.e., Caliente Avenue, Beyer Boulevard) that in turn intersect with major transportation corridors (i.e., SR 905). There are two primary evacuation routes from the project:

a. Caliente Avenue to SR 905
b. Beyer Boulevard to SR 905

Depending on the nature of the emergency requiring evacuation, at buildout of the Specific Plan, it is anticipated that most of the Southwest Village population would be directed to either Caliente Avenue or Beyer Boulevard and be directed westbound toward SR- 905. These are the most direct routes out of the project area. Evacuation movement would be determined primarily by the fire's location, its spread rate direction, and time available before it could threaten evacuation routes and traffic levels. Additionally, at buildout, the project would maintain the gated EVA at Caliente Avenue and Street D, as an option for emergency responders to evacuate some or all onsite populations. If less time is available, or one or more potential routes are considered unsafe, fire and law enforcement officials may direct all traffic in one direction and may consider directing some area communities or the project site's residents and guests, to temporarily refuge in protected structures.

The large developed and converted landscapes and lack of uninterrupted open space through the developed portions of this area significantly reduces the potential for dangerous evacuation conditions and evacuee exposure to wildfire.

Phase 1

The following describes the evacuation routes for each phase of implementation for Phase 1, and represented in Figures 8a-8c, as well as the project at buildout, represented in Figure 8d:

Phase 1a –The northern portion of Central Avenue would be constructed to provide ingress and egress to the project site and would provide sufficient emergency access for the anticipated population. As part of Opening Year 2024 conditions, it is assumed that either the proposed project or the Candlelight project to the north would construct the Caliente Avenue extensions from its current southern terminus to the northern boundary of the project site.

Phase 1b – The remaining portion of Central Avenue would be constructed by the project to connect to Beyer Boulevard East, which would have a temporary cul-de-sac, portion of Beyer Boulevard West with a temporary cul-de-sac, Street 'A', West Avenue, and a secondary access road would be constructed in this phase by the project. The additional roadway improvements and the Secondary EVA would provide sufficient emergency routes for the anticipated population.

Prior to the issuance of a building permit for the 201st dwelling unit, the Secondary EVA would be improved and would serve as the secondary emergency access to the Project. Primary evacuation would remain as

Caliente Avenue to SR 905. The Secondary EVA, under the discretion of SDFRD, could serve as an additional evacuation route.

Phase 1c – Beyer Boulevard West is required to be completed and constructed by the project prior to the issuance of a building permit for the 700th dwelling unit for transportation and circulation purposes. The extension of Beyer Boulevard would include the construction of Beyer Boulevard West and Beyer Boulevard between Old Otay Mesa Road and Enright Drive in San Ysidro. After Beyer Boulevard West is operational, this would serve as the project's permanent secondary access for Phase 1c and all future Phases. The EVA road would continue to serve as emergency vehicle access and an alternative evacuation route for all future phases.

Emergency Access Roads

The project includes multiple emergency access routes that may be utilized for evacuation of the project or for emergency vehicle access in the event of an emergency. The project includes three points of access at buildout, which includes Caliente Ave at Central Avenue, Beyer Boulevard and the Secondary Emergency Vehicle Access (EVA).

EVA roads for the project include the Secondary EVA route and the section of the eastern portion of Street A between S. Caliente Avenue and East Avenue. The Secondary EVA would be gated with a knox box or knox key switch at the eastern terminus of the Beyer Boulevard East, which is a temporary cul-de-sac. The Secondary EVA would extend southward passing through the project's southern boundary, extending southward until it reaches the United States – Mexico border, then extending westward until the route terminates in San Ysidro at Rail Court. The entirety of the Southern EVA would be suitable for use as emergency access and an evacuation route prior to development of Phase 1b.

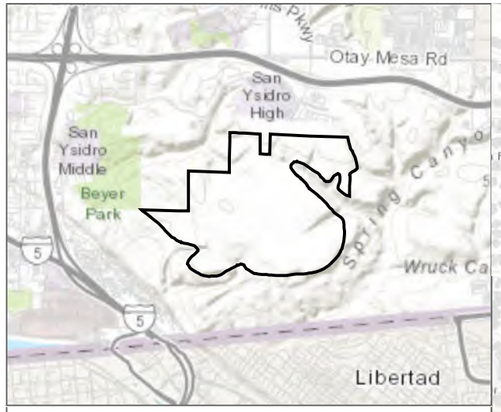
The eastern portion of Street A would provide an additional EVA, which extends east of S. Caliente Avenue to East Avenue. This EVA would be gated at the Street A/S. Caliente Avenue intersection and A Street/East Avenue intersection. This route would be constructed in a future phase and is considered in this evacuation analysis at full buildout.

EVAs provide additional emergency access flexibility by presenting additional options for firefighter ingress, and potentially public evacuation in some emergency evacuation scenarios at the discretion of SDFRD. The Secondary EVA is required to be constructed prior to the issuance of a building permit for the 201st unit and specifically associated with the interim period of project construction until the 700th unit when the connection to Beyer Boulevard West to San Ysidro is completed. The Secondary EVA would continue to be available after that connection is established; however, it is more likely to be used for firefighter access than for evacuation. The Secondary EVA would include various improvements depending on the grade and existing conditions, including grading, concrete surfacing, asphalt surfacing and decomposed granite surfacing. The Secondary EVA provides the following benefits:

- Fire-fighting access to area wildfires, resulting in faster response and higher likelihood of fire control
- Fire-fighting access to minimize wildfire impacts on open space

- A strategic operational function as a fire break, from which fires may be fought or back-firing may occur as part of efforts to control wildfire spread
- Additional evacuation or fire department access options. Options are important and adding reliable roadways with paved grades results in a useable route for many emergency scenarios.
- An important route for emergency evacuation for a wide variety of potential emergencies including a potential southerly route for existing residences and school should disruptions to existing east-west and northward roadways occur.

The Secondary EVA route is intended primarily for firefighter access during wildfires or other emergencies. During a wildfire, this route may not be available, depending on the wildfire location, spread direction, and potential to burn wildland fuels adjacent to the Secondary EVA. Once Beyer Boulevard West is extended to the development, evacuation of the Project's population would first utilize the paved Beyer Boulevard route through urbanized or semi-urbanized landscapes, and protected corridors with maintained fuels. Under the discretion of the SDFRD, the Secondary EVA provides an alternative option for Phase 1b and beyond that could be used to evacuate residents.



Project Boundary

Phase 1a

Development

Open Space

Phase 1a Evacuation Routes

Major Transportation Corridor

Primary Access Route

Future Evacuation Route

Temporary Phase 1a Cul-De-Sac

SOURCE: ESRI; SANGIS

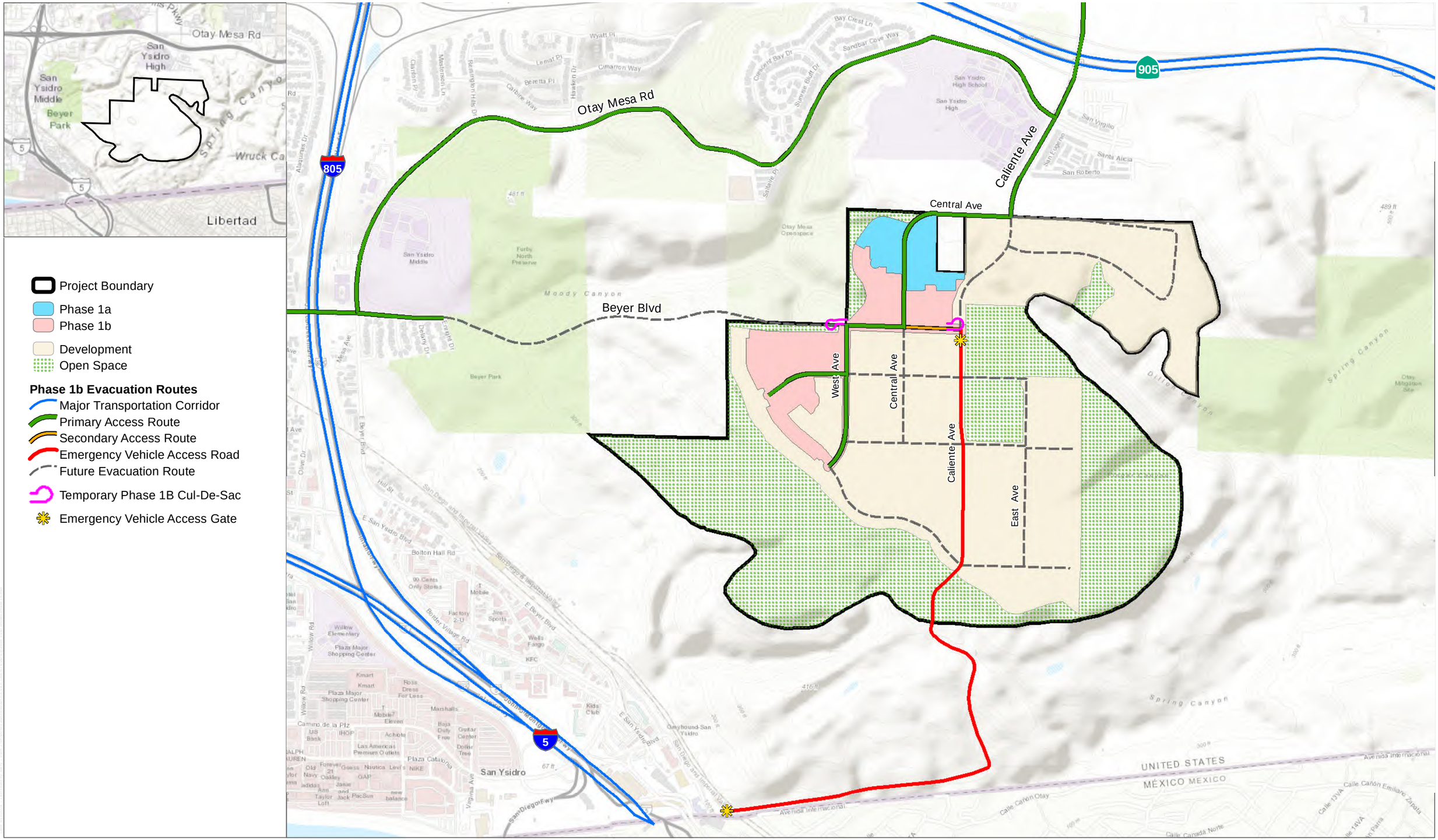
DUDEK

0 500 1,000 Feet

FIGURE 8A

Project Evacuation Routes - Phase 1a

Wildfire Evacuation Study for the Southwest Village Project



SOURCE: ESRI; SANGIS

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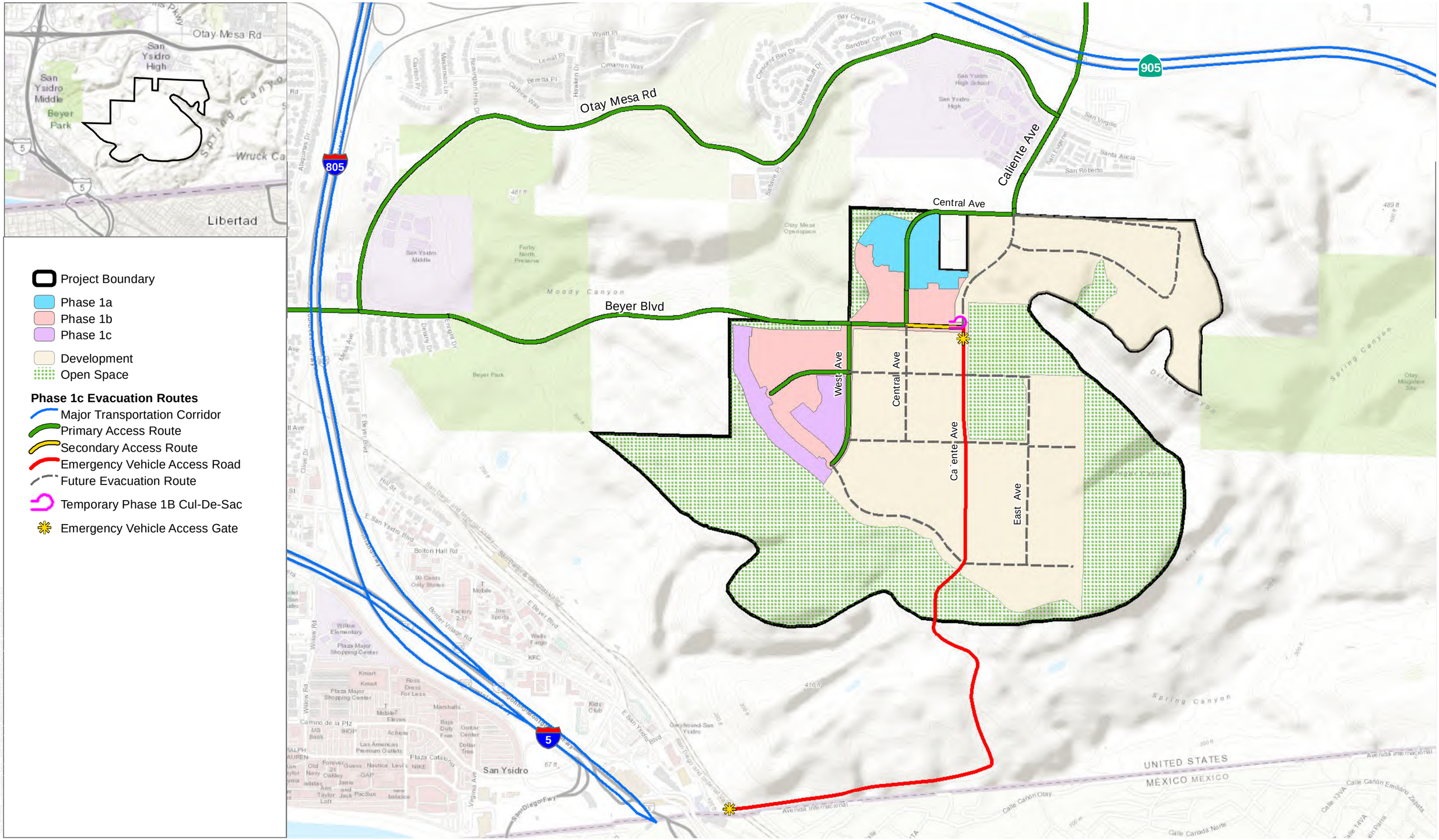
0 500 1,000 Feet

FIGURE 8B

Project Evacuation Routes - Phase 1b

Wildfire Evacuation Study for the Southwest Village Project



SOURCE: ESRI; SANGIS

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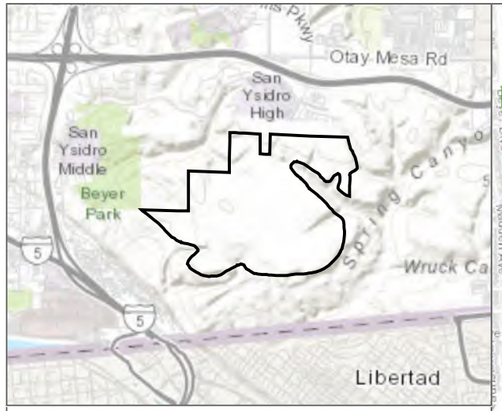
0 500 1,000 Feet

FIGURE 8C

Project Evacuation Routes - Phase 1c

Wildfire Evacuation Study for the Southwest Village Project



Project Boundary

Project Land Use

- Development
- Open Space
- Emergency Vehicle Access Gate

Evacuation Route

- Major Transportation Corridor
- Primary Access Route
- Emergency Vehicle Access Road
- Gated Emergency Vehicle Access

SOURCE: ESRI; SANGIS 2022

DUDEK

0 900 1,800 Feet

FIGURE 8D

Project Evacuation Routes-At Buildout

Wildfire Evacuation Study for the Southwest Village Project

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Evacuation Alternatives

Fires occurring on typical (non-extreme) fire weather days, when humidity is higher and winds are not as high or gusty, have been very successfully controlled at small sizes within minutes of ignition and would not typically trigger a need to evacuate the Southwest Village project and surrounding communities. Partial evacuation of some neighborhoods could be an option in on-shore wind wildfire, particularly those homes that are closest to the native fuels in the open space to the west, such as homes north of Otay Mesa Road.

If a wildfire ignited closer to the Southwest Village and surrounding communities during weather that facilitates fire spread, where multiple hours are not available for evacuation and placing residents on the roads could expose them to wildfire, an alternative evacuation approach would need to be explored. It is preferred to evacuate long before a wildfire is near, and in fact, history indicates that most human fatalities from wildfires are due to late evacuations when they are overtaken on roads. Therefore, it is necessary to consider a contingency option of temporary onsite refuge. For example, if a wildfire is anticipated to encroach upon the community in a timeframe that is shorter than would be required to evacuate all residents, then evacuations could be significantly impacted and the ability to temporarily shelter residents in their homes provides an alternate contingency for emergency responders.

Opening Year 2024

The project is a Specific Plan and implementation of Phase 1, when considering evacuation traffic, this analysis considered the Opening Year Cumulative projects list (LOS 2024) presented in Table 2 and graphically represented in Figure 9 to build assumptions regarding evacuation traffic for Scenarios 1-6.

Table 2. Opening Year 2024 Cumulative Projects

#	Project/Description	Location	Estimated Number of Units	Non Residential Uses	Permitted
1	7-11 *Convenience Store*	Northwest corner of Ocean View Hills Parkway/Caliente Avenue and Otay Mesa Road	-	2,940 sq/ft	No
2	Arco *Existing gas station, new fuel dispensers*	1625 Heritage Road	-	NA	No
3	Azul Playa Del Sol/Luna (California Terraces PA 6) *Residential*	Southwest corner of Ocean View Hills Parkway and Del Sol Blvd	740	-	Yes
4	Beyer Park** *City Park*	Southern terminus of Enright Dr	-	31.7 acres	Yes
5	California Terraces PA61 *Residential*	Southeast corner of Otay Mesa Road and Caliente Avenue	361	-	Yes
6	Candlelight *Multi-Family Residential*	Located on both sides of Caliente Avenue at the south of the existing Caliente Ave southern terminus	475	-	Yes

Table 2. Opening Year 2024 Cumulative Projects

#	Project/Description	Location	Estimated Number of Units	Non Residential Uses	Permitted
7	Festival* *Two fast food drive- through restaurants*	Northeast corner of San Ysidro Blvd and Center St	-	5,500 sq/ft	No
8	Lumina *Multi-family residential and commercial*	Along Cactus Rd south of Airway Road	1,129	62,530 sq/ft	Yes
9	Lumina III *Multi-family residential*	Along Cactus Rd south of Airway Road	25		Yes
10	Marijuana Production Facility *Marijuana Production Facility*	1221 1/3 Innovative Drive	-	86,400 sq/ft	Yes
11	Metropolitan Airpark *Aviation and commercial*	Northeast corner of Otay Mesa Road and Heritage Road	-	NA	Yes
12	Otay Mesa Floreo TM *Multi-family residential, commercial and park*	Northeast corner of Cactus Rd at Airway Rd	900	10,000 sq/ft	No
13	Plaza La Media North *Industrial buildings*	Southeast corner of Otay Mesa Road and La Media Road	-	126,200 sq/ft	Yes
14	Plaza La Media South *Industrial space*	Northeast corner of La Media Road and Airway Road	-	434,970 sq/ft	Yes
15	San Diego-Tijuana Cross Border Facility Phase 2 *Hotel, restaurant, gas station, car wash, retail, business park*	Southside of Siempre Viva Road approximately midway between Britannia Boulevard and La Media Road	-	340-room Hotel 40,000 sq/ft Retail 401,000 sq/ft Industrial/Business Park	Yes
16	**Southwind** ***Multi-family residential***	**West of Caliente Avenue and south of Airway Road**	**100**	**-**	**No**
17	Sunroad *Warehouse space*	Southside of Otay Mesa Road near Piper Ranch Road	-	845,050 sq/ft Warehouse	Yes

Source: LOS Engineering 2024

Notes:

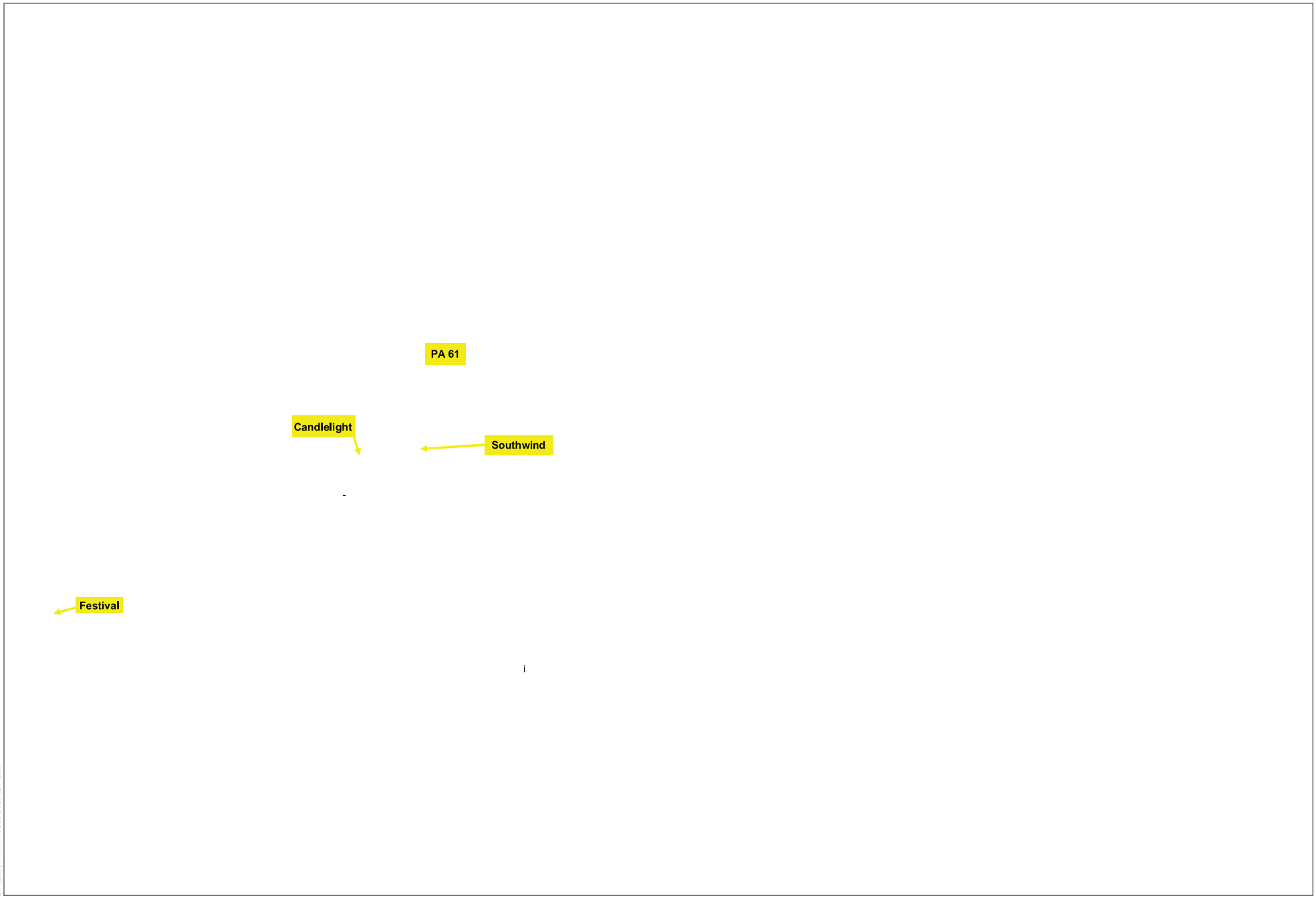
1. Cumulative projects in **bold** would use the same evacuation routes as the project and were considered in the vehicles estimates for the cumulative analysis.

2 NA = Not Available

3 sq/ft = square feet

*Cumulative project would only be impacted if the Secondary EVA was used for evacuation due to location at of San Ysidro Blvd and Center Street.

** Project would use Beyer Boulevard to SR-905, project population is assumed to be from existing and planned uses, so no additional population for this project was considered in the cumulative analysis.



SOURCE: LOS Engineering, Inc., 2024

FIGURE 9

Cumulative Projects

Wildfire Evacuation Study for the Southwest Village Project

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4.1 Roadway Capacities and Evacuation Time Estimates

Roadway capacity represents the maximum number of vehicles that can reasonably be accommodated on a road. Roadway capacity is typically measured in vehicles per hour and can fluctuate based on the number of available lanes, demand surges, number of traffic signals, construction activity, accidents, and obstructions as well as positively by traffic control measures. The estimated capacities for existing roads are provided in Table 3.

Each roadway classification has a different capacity based on level of service, with freeways having the highest capacities. Based on Synchro software analysis using the Highway Capacity Manual methodology for calculating adjusted saturation flow rates, roads that would be the most likely available to residents of Southwest Village and surrounding communities were analyzed and the hourly capacities are presented in Table 3. Table 5, in Section 4.1.3, provides vehicle speeds based on roadway capacities.

Table 3. Existing Roadway and Freeway Estimated Hourly Vehicle Capacities

Roadway	Segment	Lanes and Direction	Estimated Roadway and Freeway Capacity[1]				
			North	South	East	West	Total w/ ContraFlow (veh/hr)
Airway Rd/Old Otay Mesa Rd	Beyer Blvd to Caliente Ave	1 EB 1 WB			1,250	1,250	2,500
Beyer Blvd	SR-905 to Old Otay Mesa Rd	2 EB 2 WB			3,300	3,500	6,800
Beyer Blvd (planned)	Old Otay Mesa Rd to Caliente Ave	1 EB 1 WB			1,250	1,250	2,500
Caliente Ave	Otay Mesa Rd to SR-905	2 NB 3 SB	3,500	5,000			8,500
Caliente Ave	SR-905 to Airway/Otay Mesa Rd	3 NB 2 SB	5,000	3,500			8,500
Caliente Ave	Airway/Otay Mesa Rd to Caliente Ave	3 NB 2 SB	5,000	3,500			8,500
Caliente Ave (planned)	Caliente Ave to Beyer Blvd	1 EB 1 WB			1,250	1,250	2,500

Table 3. Existing Roadway and Freeway Estimated Hourly Vehicle Capacities

Roadway	Segment	Lanes and Direction	Estimated Roadway and Freeway Capacity[1]				
			North	South	East	West	Total w/ ContraFlow (veh/hr)
Ocean View Hills Pkwy	Dennery Rd to Del Sol Blvd	2 EB 2 WB			3,500	3,500	7,000
Ocean View Hills Pkwy	Del Sol Blvd to Otay Mesa Rd	3 NB 3 SB	5,100	5,100			10,200
Palm Ave	I-805 to Dennery Rd	3 EB 4 WB			5,000	6,200	11,200

Source: LOS Engineering 2023

1 Estimated vehicle traffic per hour, per Synchro, using the Highway Capacity Manual methodology for calculating adjusted saturation flow rates.

Note: The vehicle capacity estimates utilized for this evacuation plan are based on Synchro software, using the Highway Capacity Manual methodology for calculating adjusted saturation flow rates, and are discounted for various assumed traffic-related slowing. This evacuation plan assumes that law enforcement personnel are controlling downstream intersections to maintain traffic flow out of the area. If traffic flow is not maintained, then the estimated evacuation times would be expected to increase, potentially substantially, as is the case in any urban area.

Using these averages, the length of time it would take for an area to evacuate can be estimated by dividing the population by the average vehicle occupancy and then dividing by the roadway capacity (Figure 10). Table 4 provides a summary of the calculated number of evacuating vehicles and assumptions for the existing populations (Figure 11) and the proposed population of the Southwest Village project. The populations include:

- Existing – 3,267residents
- Project
    a. Phase 1a – 678 residents
    b. Phases 1a and 1b – 2,370 residents
    c. Phase 1a, 1b, and 1c - 3,119 residents
    d. Buildout – 17,391 residents
- Opening Year 2024 – 3,174 residents
- San Ysidro High School – 2,525 students and 97 staff
- San Ysidro Middle School – 652 students and 40 staff
- San Ysidro Adult School – 1,000 students and 30 staff

Figure 10 Evacuation Time Calculation

$$\text{Evacuation Time} = \frac{\left(\frac{\text{Evacuation Population}}{\text{Average Vehicle Occupancy}}\right)}{\text{Roadway Capacity}}$$

There are approximately 963 existing residential units, which is estimated to include 3.39 persons per dwelling unit (SANDAG 2022) for an existing population of approximately 3,267 persons. This analysis also considers residential uses that are expected to be operational prior to Opening Year 2024, which is anticipated to add 936 residential units and a projected population of 3,174. The Southwest Village project is proposed to develop 5,130 residential units at buildout, which is projected to include 3.39 persons per dwelling unit for an estimated project population of 17,391 persons, the projected number of units and estimated population for subphases Phase 1a-1c is detailed in Table 4. The combined population for the existing residential uses, Opening Year 2024 residential uses and proposed project residential uses for the would be 23,832 persons. During an evacuation, it is assumed that an average of 2 persons per vehicle would evacuate, resulting in up to 11,916 vehicles potentially evacuating in a major incident that required full evacuation of the project and the existing population. However, to be conservative, the evacuation travel time calculation is based on every residence evacuating two vehicles. This results in up to 1,926 vehicles generated from existing residential units (963 dwelling units x 2 vehicles), 1,872 vehicles from Opening Year uses (936 dwelling units x 2 vehicles), and 10,260 vehicles from Southwest Village (5,130 dwelling units x 2 vehicles), totaling up to 14,058 vehicles.

Additionally, within the existing land uses, there are several non-residential land uses, including: San Ysidro High School (43 busses, 266 student vehicles and 10 staff vehicles), San Ysidro Middle School (12 busses and 16 staff vehicles), San Ysidro Adult School (195 vehicles), and San Ysidro School District Administration Center (94 vehicles). Non-residential uses associated with the proposed project include 175,000 sq/ft of commercial uses (70 parking spaces) and two elementary schools (13 buses and 40 staff vehicles). The total population associated with these uses is approximately 805 (700 for institutional uses and 105 for commercial). This increases the worst-case existing and proposed population to 24,929 persons, as depicted in Table 4. Non-residential uses are not considered in the evacuation time analysis, as the evacuation scenario assumes an evening evacuation, when institutional and commercial uses would be closed and all residents would be expected to be home.

Existing Communities

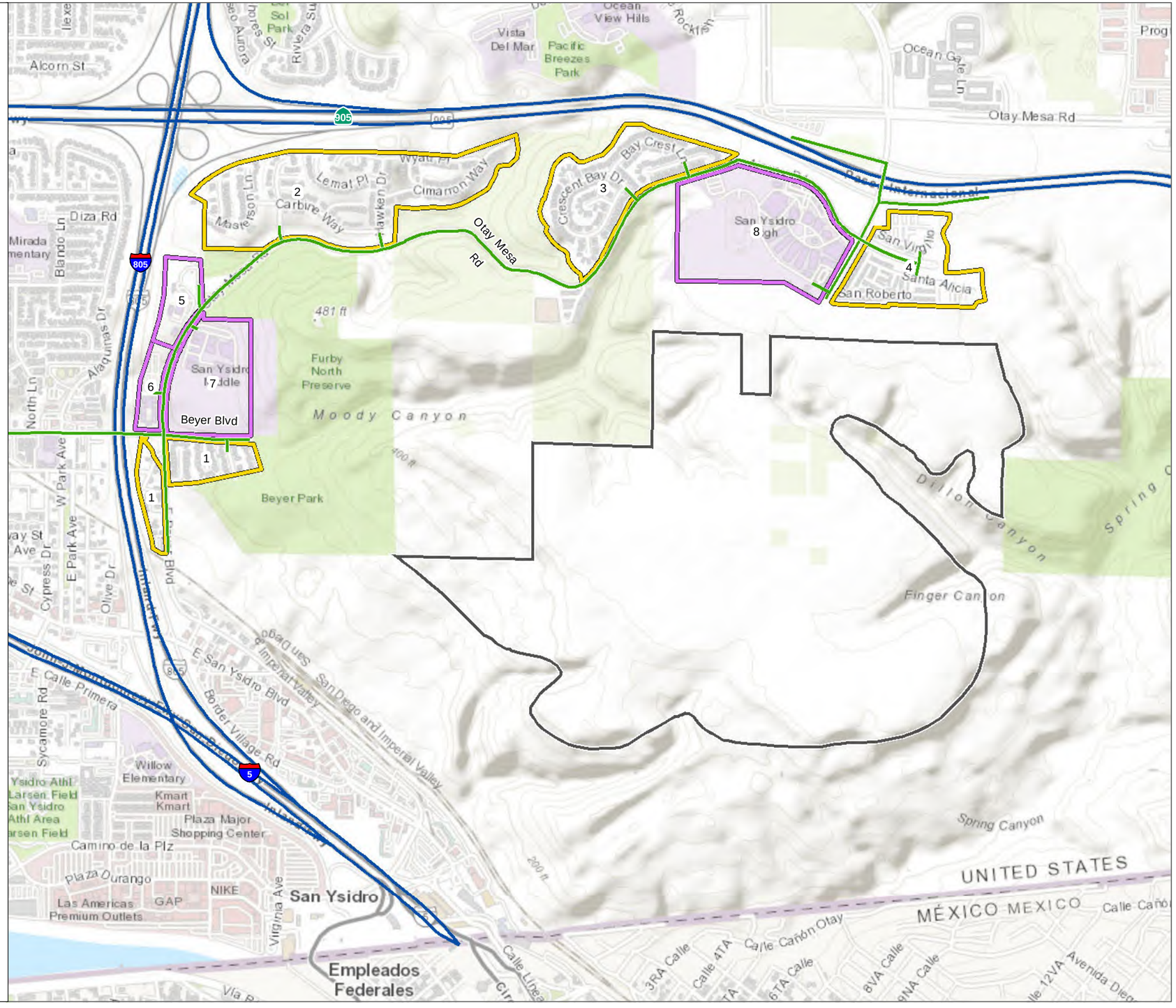
- Residential
- Institutional
- Project Site

Existing Evacuation Route

- Major Transportation Corridor
- Primary Access Route

RESIDENTIAL		
1	Beyer Blvd at Otay Mesa Rd	119 du
2	Remington Hills	253 du
3	California Terraces	178 du
4	Southview/Southview East	413 du

INSTITUTIONAL	
5	SYSD Administration Center
6	San Ysidro Adult School
7	San Ysidro Middle School
8	San Ysidro High School



SOURCE: BASEMAP-ESRI MAPPING SERVICE 2023

DUDEK

0 600 1,200 Feet

FIGURE 11

Existing Communities

Wildfire Evacuation Study for the Southwest Village Project

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Table 4. Population and Evacuation Vehicle Estimates for the Project and Vicinity Land Uses

Land Use	Dwelling Units/ SqFt	Persons Per Unit	Estimated Population	Total Estimated # of Vehicles
Existing Residential				
Beyer Boulevard East @ Otay Mesa Road	119	3.39	404	238
Remington Hills	253	3.39	858	506
California Terraces	178	3.39	604	356
Southview/Southview East	413	3.39	1,401	826
Total	**963**	-	**3,267**	**1,926**
Existing Institutional				
San Ysidro School District Administration	-	-	94	94
San Ysidro Adult School	-	-	195	195[a]
San Ysidro Middle School	-	-	652	12 buses/ 16 staff vehicles[b]
San Ysidro High School	-	-	2,525	43 buses/ 10 staff vehicles/ 266 student vehicles[c]
Total	-	-	**3,466**	**636**
Opening Year 2024				
PA61	361	3.39	1,224	722
Candlelight	475	3.39	1,611	950
Southwind	100	3.39	339	200
Total	**936**	-	**3,174**	**1,872**
Southwest Village Project				
Phase 1a (Residential Only)	200	3.39	678	400
Phase 1b (Residential Only)	699	3.39	2,370	1,398
Phase 1c (Residential Only)	920	3.39	3.119	1,840
Specific Plan Buildout (Residential)	5,130	3.39	17,391	10,260
Specific Plan Buildout (Institutional)[d]			634 students	13 Buses

			66 staff	40 staff vehicles[b]
Specific Plan Buildout (Commercial)[e]	175,000 sq/ft		105	70
Combined[f]				
Existing Conditions	963	3.39	3,267	1,926
Opening Year 2024	936	3.39	3,174	1,872
Existing + Opening Year 2024 + Project 1a	2,099	3.39	7,119	4,198
Existing + Opening Year 2024 + Project 1b	2,598	3.39	8,811	5,196
Existing + Opening Year 2024 + Project 1c	2,819	3.39	9,560	5,638
Existing + Opening Year 2024 + Project Buildout	7,029	3.39	23,832	14,058

Sources: SANDAG DataSurfer 2022, San Ysidro High School 2022, San Ysidro Middle School 2022

a Assumes all students and staff evacuating in a personal vehicle. Estimated number of vehicles is the total number of parking spaces available onsite.

b Assumes 50 students and 2 staff per bus and all other staff evacuating in a person vehicle.

c Assumes 20 percent of juniors and seniors evacuating in a personal vehicle, 50 students and 2 staff per bus, and all other staff evacuating in a person vehicle.

d Specific Plan Institutional Uses estimated based on the average student and staff population of San Ysidro School District elementary schools.

e Assumes 1.5 persons per vehicle for commercial uses

f This is the total maximum number of parking spaces assumed in the Specific Plan, calculated as follows; 175,000 SF / 1,000 (Parking Spaces Required per 1,000 Square Feet of Floor Area) = 175 / 2.5 (parking ratio per SDMC Table 142-05E) = 70 Parking Spaces

g These numbers represent the combined population totals for those uses included in the Weekend Evening evacuation scenario analyzed herein, which includes all residential uses and excludes institutional and commercial uses that would not be expected to be operational during an evening evacuation scenario. Further, the commercial uses proposed as part of the project are expected to serve the project's population and are not considered regional commercial uses.

4.1.1 Worst-Case Mass Evacuation Time Discussion

For purposes of determining an appropriate discount on the travel time vehicle capacity estimate, it is important to know the potential worst-case evacuation population (number of vehicles) that could occur. Discounting the maximum vehicle capacity essentially slows down the calculated travel times, imitating congested roadways and/or bottleneck intersections. The project would result in enhancements to Caliente Avenue and Beyer Boulevard, within the project footprint and the project's internal circulation that would improve the flow of traffic in and out of the area and provide additional evacuation routes for Opening Year 2024 projects (e.g., Candlelight and Southwind).

Evacuation Scenario- Weekend Afternoon Evacuation

To evaluate a "worst-case" scenario, the evacuation time calculations herein assume that the evacuation would transpire on a weekend afternoon, a time when all of the project residents are home, meaning all residential vehicles would be assumed to evacuate, and institutional and commercial uses would be closed. Additionally, the institutional and commercial uses provided as part of the project are intended to serve the residents of the project, rather than regional commercial uses that may attract a large population from outside the project area; therefore, the max residential population represents the "worst-case" evacuating conditions. This weekend afternoon evacuation scenario represents the worst-case, as it would generate the most evacuation traffic from Project occupants, which are primarily from residential uses, relative to other times when the majority of residents are not at home and institutional and commercial uses are open. In an actual evacuation scenario, the total number of vehicles needing to evacuate may actually be less. The IC would prioritize evacuation of land uses located closest to the area with immediate risk, depending on the location of the fire.

Worst-Case Mass Evacuation Scenario – Singular Access

At buildout of the Southwest Village Specific Plan, traffic moving off the project site would either go north along Caliente Avenue to SR- 905 or west along Beyer Boulevard to SR-905. Vehicles traveling north on Caliente Avenue would travel approximately 1.25 miles to access SR 905, while vehicles traveling west along Beyer Boulevard would travel approximately 3.45 miles to access the SR-905. As discussed above, phased evacuations is the current approach to evacuating large populations; however, to maintain a conservative analysis, this WES considers mass evacuation scenarios that assumes the primary and secondary access is available, which is most likely in the event of an evacuation; however, it is possible only one evacuation route would be available. Based on the project's estimated potential 10,260 vehicles and utilizing a vehicle roadway capacity of 2,500 vehicles per hour (see Table 2) during evacuation, it is estimated that the last vehicle can be off the project site and onto one of the major transportation corridors (SR 905) in approximately 246.2 minutes of wheels rolling. The total number of vehicles for Existing Conditions and Opening Year 2024, is 3,798 vehicles and evacuation would take approximately 91.5 minutes (3,798 vehicles/2,500 vehicles per hour). It is anticipated that the project would add 154.7 minutes to the Existing + Opening Year 2024 conditions.

During Phases 1a (400 vehicles) and 1b (1,398 vehicles), evacuating vehicles would use Central Avenue (1,250 vehicles per hour) for evacuation. In Phase 1a it is estimated to take about 19.2 minutes (400 vehicles/1,250 vehicles per hour).to evacuate all vehicles and in Phase 1b it is estimated to take about 67.1 minutes (1,398 vehicles/1,250 vehicles) to evacuate all vehicles. The total number of vehicles for Existing Conditions and Opening

Year 2024, is 3,798 vehicles and evacuation would take approximately 182.3 minutes (3,798 vehicles/1,250 vehicles per hour). If all evacuation traffic is considered for Existing Conditions and Opening Year 2024, the total number of vehicles would be 4,198 and 5,196, respectively, and evacuation would take approximately 201.5 minutes (4,198 vehicles/1,250 vehicles per hour) and 249.4 minutes (5,196 vehicles/1,250 vehicles per hour), respectfully. It is anticipated that the project would add 19.2 minutes and 67.1 minutes to the Existing + Opening Year 2024 conditions, respectively. In Phase 1c, to maintain a conservative approach, although Beyer Boulevard would provide secondary access, it is assumed all traffic would use Central Avenue. The total number of project vehicles for Phase 1c is estimated to be 1,840 vehicles and evacuation is estimated to take approximately 88.3 minutes (1,840 vehicles/1,250 vehicles per hour). If all evacuation traffic is considered for Existing Conditions and Opening Year 2024, the total number of vehicles would be 5,638 and evacuation would be anticipated to take 270.6 minutes. It is anticipated that the project Phase 1c would add approximately 88.3 minutes to the Existing Condition + Opening Year 2024 conditions.

The analysis above considers an unlikely scenario of a singular access evacuation, where only one evacuation route is available to evacuees. The project is a Specific Plan that would introduce a new population to an area that is currently largely undeveloped; therefore, the additional evacuation time for existing residents could be potentially significant; however, for the following reasons, the evacuation times presented in this analysis are less than significant:

1. This analysis considers a worst-case scenario; therefore, the total evacuation time would likely be shorter.

2. As presented in Section 4.2,2, time is not the only factor that determines if an evacuation would be safe, cited studies[4] show evacuations can be safely executed over 30 minutes or 10 hours.

3. As presented in Section 4.2.2, phased/targeted evacuations result in faster evacuation times than mass evacuations. Additionally, phased evacuations are the preferred approach for emergency managers in the County – smaller populations phased over longer time frames result in less traffic congestion (Li, et al. 2024, Fehr and Peers 2021, Department of Homeland Security 2019).

4. As presented in Section 1.3, the project includes a number of fire protection features, which provide protection for evacuees; therefore, longer evacuations aren't necessarily dangerous along hardened and protected corridors which keep evacuees away from at risk areas (like the project) vs evacuating through the fuel bed (as people evacuating the town of Paradise had to during the 2018 Camp Fire).

5. As presented in Section 4.2.2, the availability of contingency options in these newer communities that allow emergency managers flexibility (i.e., ability to move populations at highest risk first, shelter in place).

6. The evacuation timeframes detailed herein are a maximum amount of time for the last evacuees to leave the area, most of the evacuees are out of the area sooner than the maximum estimated evacuation times.

[4] Homeland Security 2019, Wong, et al. 2020

7. Since the Chapter 7A building codes were adopted in 2007, there has been no loss of any structure in a master planned community due to wildfire.

4.1.2 Impact of Mass Evacuation Vehicle Traffic

Mass evacuation events have become extremely rare as wildfire evacuation technology and capabilities have improved dramatically in the last 20 years. Wildfire evacuations are managed to move smaller populations in a successive phasing to minimize traffic surges. Populated areas are evacuated in phases based on proximity to the event and risk levels. For example, it is anticipated that wildfire evacuations of the project area would likely include the relocation of perimeter populations that are closest to open space, either to on-site temporary shelter sites or off-site, rather than mass evacuating the entire area. The project is built to ignition resistant standards of the Chapter 7A building code and represents fire-safe fuel breaks that provide emergency managers many options that do not all include a mass evacuation. The result of this type of evacuation is that residents who may be in locations that would be closest to a wildfire burning in open space areas are temporarily moved from the vicinity and vehicle congestion on evacuation routes is minimized, enabling a more efficient evacuation. Under this evacuation approach, the evacuation would include a much smaller population and would be implemented in a surgical way. The evacuation time would be even lower and would have very little impact on the existing communities, except for evacuees who decide to leave the area despite not being directed to do so (Sorensen and Vogt 2006).

PHASED EVACUATION

The purpose of a phased evacuation is to reduce congestion and transportation demand on designated evacuation routes by controlling access to evacuation routes in stages and sections. This strategy can also be used to prioritize the evacuation of certain communities that are in proximity to the immediate danger. A phased evacuation effort would need to be enforced by law enforcement agencies and coordinated with the EOC and affected jurisdictions.

Evacuations in San Diego County would soon be managed by a system that enables emergency managers to designate small areas in a surgical approach that can target neighborhoods, blocks or streets for alert messaging. Similarly, numerous cities and counties are implementing similar plans, with one example being an evacuation planning system called Genasys Protect. Genasys Protect is a software program that uses an algorithm incorporating various factors or inputs affecting disasters or emergency events to produce a digital evacuation map or real-time guide based on numerous, pre-set, community zones versus large swaths of a community. These factors include weather, traffic flows, street design, historical disaster data, geography and more. They are used to build a communitywide (city or county or whatever entity is purchasing the program) baseline digital map of evacuation zones.

First responders use these types of programs to guide decision-making for if, when, and where to order evacuations or evacuation warnings. Residents of affected zones are alerted using a variety of means, including alert systems, Nixle[5] local alerts, social media such as Twitter and Facebook, and door-to-door warnings.

[5] Nixle is a Community Information Service that allows local agencies (e.g., police department, OES) to communicate with citizens during an emergency via text and email communications.

Department of Homeland Security (2019) provides supporting data for why jurisdictions have moved to the surgical evacuation approach that leverages the power of situation awareness to support decision making. According to their Planning Considerations: Evacuation and Shelter in Place document, they indicate that delineated zones provide benefits to the agencies and community members. Evacuation and shelter-in-place zones promote phased, zone-based evacuation targeted to the most vulnerable areas, which allows jurisdictions to prioritize evacuation orders to the most vulnerable zones first and limit the need to evacuate large areas not under threat. Zones help:

- Jurisdictions to understand transportation network throughput and capacity, critical transportation and resource needs, estimated evacuation clearance times, and shelter demand.
- Planners to develop planning factors and assumptions to inform goals and objectives.
- Community members to understand protective actions to take during an emergency.
- Shelters to limit traffic congestion and select locations suitable for the evacuated population.

The amount of time needed to evacuate the project would vary by the type of incident, the number of evacuation routes utilized, the amount of mobilization time, actual areas at risk, and other factors. It has also been established herein that the targeted approach would minimize the size of the area being evacuated and use a phased approach, which may further reduce the evacuation time estimates.

There is no evacuation timeframe threshold that projects must meet in order to avoid an impact under the California Environmental Quality Act or to be consistent with codes, regulations or policies. Regardless, the project has provided a comprehensive evacuation evaluation, and the evacuation time results are comparable to similar sized populations under a mass evacuation.

Further, any additional time does not necessarily generate a greater safety risk. Emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Further, peak occupancy conditions like those assumed in the modeling typically do not occur as all residents are not typically at home while maximum occupancy at industrial, commercial and office uses is also occurring. Further, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event. Additionally, the project is designed to allow people to shelter-in-place or take temporary refuge within the project site, which could reduce evacuating traffic from the site.

The potential occurrence of a large evacuation event, including evacuation of existing populations, is minimal, but possible. In this case, the existing populations for the project would be existing residential north of Otay Mesa Road and south of Beyer Boulevard, San Ysidro High School, San Ysidro Middle School and San Ysidro Adult School. During a large wildfire moving from east to west, it is most likely, that evacuations would be directed west along SR 905 or north along I-5, depending on the fire location and movement. The vehicle capacity estimates utilized for this evacuation plan are based the current Highway Capacity Manual methodology for calculating adjusted saturation flow rates and are discounted for various assumed traffic-related slowing, such as higher volume and downstream bottlenecks (Intersecting Metrics 2022); therefore, the discounted vehicle capacity (2,500 vehicles per hour, per Table 2) includes capability to absorb additional vehicles.

In an actual evacuation scenario, a phased evacuation would be implemented where orders are given to evacuate based on vulnerability, location, and/or other factors, which enables the subsequent traffic surges on major roadways to be smoothed over a longer time frame and improve traffic flow. A phased strategy can also be used to prioritize the evacuation of certain communities that are in proximity to the immediate danger. The limitations of the model used for this analysis are such that it cannot accurately reflect phased evacuation conditions; hence, a worst-case mass evacuation scenario was assumed.

4.1.3 Potential for Project Evacuation Impact on Existing Conditions

The potential occurrence of a large evacuation event including evacuation of existing populations is minimal, but possible. In this case, the existing populations would be associated with existing residences north of Otay Mesa Road and south of Beyer Boulevard, San Ysidro High School, San Ysidro Middle School and San Ysidro Adult School.

As mentioned, this analysis caps the evacuation route traffic capacity at 1,250 vehicles per hour on internal roads (e.g., Central Avenue, West Street, Spine Road, etc.) and 2,500 vehicles per hour on the major evacuation route roadways (e.g., Caliente Avenue and Beyer Boulevard) in each direction. This capacity is lower than each ~~travel lane~~ street could support under ideal conditions but is utilized as a method to reflect evacuation conditions, where there may be a traffic surge that slows vehicle speeds. Understanding the speed vehicles would travel to support 1,250 or 2,500 vehicles per hour provides additional supporting context. If the average vehicle is approximately 16 feet long and allowing approximately 10 feet between vehicles (26 total feet per vehicle) for 1,250 vehicles per hour and 15 feet between vehicles (31 total feet per vehicle) for 3,500 vehicles per hour, an average travel speed of approximately 10 or 15 mph would enable 1,250 or 2,500 vehicles to pass a given point every hour, respectively. This is calculated by the following:

- 1,250 vehicles per hour = 20.83 vehicles per minute = 1 vehicle every 2.9 seconds
- 6.2 mph = 9.14 feet per second (1 mph = 1.47 feet per second)

Therefore, at 9.14 feet/second x 2.9 seconds = 26.5 feet. Each vehicle (16 feet + 10 feet = 26 feet) is allotted 2.9 seconds to pass a given point. In order for 1,000, 2,000, or 3,000 vehicles to pass that given point, a speed of 5, 9.8 and 14.8 mph is necessary, respectively, per Table 5. The average human walking speed is around 3 mph.

Table 5. Vehicle Speeds Based on Road Capacity

Vehicles per hour	Vehicles per minute	Seconds for a vehicle (26) to pass a given point	Feet per second for a vehicle to pass a given point	mph for a vehicle to pass a given point
1,000	16.67	3.60	7.35	5
1,250	20.83	2.9	9.14	6.2
2,000	33.33	1.80	14.44	9.8
2,500	41.67	1.44	18.06	12.5
3,000	50	1.20	21.67	14.8

Table 5. Vehicle Speeds Based on Road Capacity

Vehicles per hour	Vehicles per minute	Seconds for a vehicle (26) to pass a given point	Feet per second for a vehicle to pass a given point	mph for a vehicle to pass a given point
3,500	58.33	1.03	25.73	17.5

Therefore, the following travel time and evacuation estimates are not reliant on unrealistic vehicle speeds in order to achieve the use of 1,250 and up to 2,500 vehicles per hour capacity and are representative of congested roadways that can occur during evacuations, especially the initial phase where traffic surges are common. It is likely that more than 2,500 vehicles per hour would be possible on Caliente Avenue and Beyer Boulevard or 1,250 vehicles on Central Avenue with law enforcement traffic control.

Based on the factors and assumptions previously detailed regarding evacuation routes, evacuation time estimates are detailed in Tables 6a-6d. With the project, the same traffic conditions are expected, but the project's traffic would also be added to the formula. The following analysis scenarios describe the most likely evacuation routes and usage during an evacuation event, as detailed in Table 6 and illustrated in Figures 12-17.

Scenario 1 (Existing Condition): This scenario estimates the evacuation time for the populations associated with the existing land uses within the study area (Figure 11, Existing Communities). In this scenario, 52% of existing evacuation traffic would use Otay Mesa Road to Airway Road to Caliente Avenue to SR 905 and the remaining 48% would use Beyer Boulevard to SR 905. This scenario is depicted in Figure 12.

Scenario 2 (Existing + Opening Year 2024): This scenario estimates the evacuation time for the populations associated with Existing + Opening Year 2024 land uses (Figure 9) within the study area. In this scenario, 76% of evacuation traffic would use Otay Mesa Road to SR-905 and the remaining 24% would use existing Beyer Boulevard to SR-905. This scenario is depicted in Figure 13.

Scenario 3 (Existing + Opening Year 2024 + Project Phase 1a): This scenario estimates the evacuation time for the populations associated with Existing + Opening Year 2024 uses within the study area plus the population proposed for project Phase 1a. In this scenario, 76% of Existing and Opening Year evacuation traffic would use Otay Mesa Road to Airway Road to Caliente Avenue to SR-905 and the remaining 24% would use Beyer Boulevard to SR 905 100% of project evacuation traffic would use Central Avenue to Caliente Avenue to SR-905. Overall, 78% of all evacuation traffic would use Caliente Avenue to SR-905, and 22% would use existing Beyer Boulevard to SR-905. This scenario is depicted in Figure 14

Scenario 4 (Existing + Opening Year 2024 + Project Phases 1a and 1b): This scenario estimates the evacuation time for the populations associated with Existing + Opening Year 2024 uses within the study area plus the population proposed for project Phases 1a and 1b. In this scenario, 76% of Existing and Opening Year evacuation traffic would use Otay Mesa Road to Airway Road to Caliente Avenue to SR-905 and the remaining 24% would use existing Beyer Boulevard to SR-905. 100% of project evacuation traffic would use Central Avenue to Caliente Avenue

to SR-905. Overall, 82% of all evacuation traffic would use Caliente Avenue to SR-905, and 18% would use existing Beyer Boulevard to SR-905. This scenario is depicted in Figure 15.

Scenario 5 (Existing + Opening Year 2024 + Project Phases 1a, 1b, and 1c): This scenario estimates the evacuation time for the populations associated with Existing + Opening Year 2024 uses within the study area plus the population proposed for project Phase 1a, 1b and 1c. 76% of Existing and Opening Year evacuation traffic would use Otay Mesa Road to Airway Road to Caliente Avenue to SR-905 and the remaining 24% would use Beyer Boulevard to SR 905. In this scenario, the Beyer Boulevard connection would be complete, and 50% of project evacuation traffic is expected to use Central Avenue to Caliente Avenue to SR-905 and 50% is estimated to use Central Avenue to Beyer Boulevard to SR-905. Overall, 67% of all evacuation traffic would use Caliente Avenue to SR-905, and 33% would use Beyer Boulevard to SR-905. This scenario is depicted in Figure 16.

Scenario 6 (Existing + Opening Year + Specific Plan Buildout): This scenario estimates the evacuation time for the populations associated with Existing + Opening Year 2024 uses within the study area plus the population proposed for project Buildout. 76% of Existing and Opening Year evacuation traffic would use Otay Mesa Road to Airway Road to Caliente Avenue to SR-905 and the remaining 24% would use Beyer Boulevard to SR 905. 50% of project evacuation traffic is expected to use Central Avenue to Caliente Avenue to SR-905 and 50% is estimated to use Central Avenue to Beyer Boulevard to SR-905. Overall, 57% of all evacuation traffic would use Caliente Avenue to SR-905, and 43% would use Beyer Boulevard to SR-905. This scenario is depicted in Figure 17.

Existing Communities

Project Site

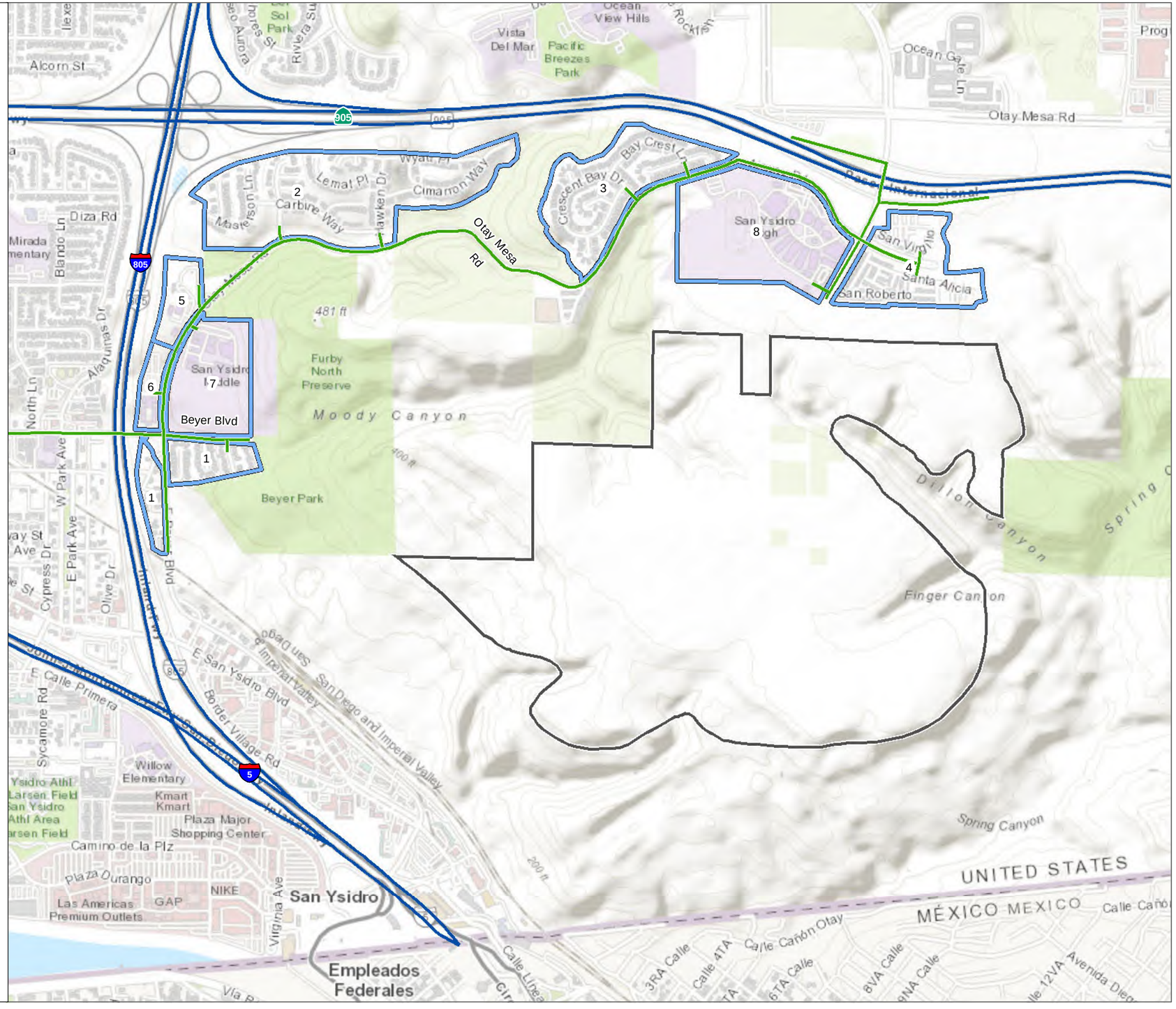
Existing Evacuation Route

Major Transportation Corridor

Primary Access Route

RESIDENTIAL		
1	Beyer Blvd at Otay Mesa Rd	119 du
2	Remington Hills	253 du
3	California Terraces	178 du
4	Southview/Southview East	413 du

INSTITUTIONAL	
5	SYSD Administration Center
6	San Ysidro Adult School
7	San Ysidro Middle School
8	San Ysidro High School



SOURCE: BASEMAP-ESRI MAPPING SERVICE 2023

DUDEK

0 600 1,200 Feet

FIGURE 12

Scenario 1 - Existing Communities

Wildfire Evacuation Study for the Southwest Village Project

Existing Communities

Opening Year 2024 Cumulative Projects

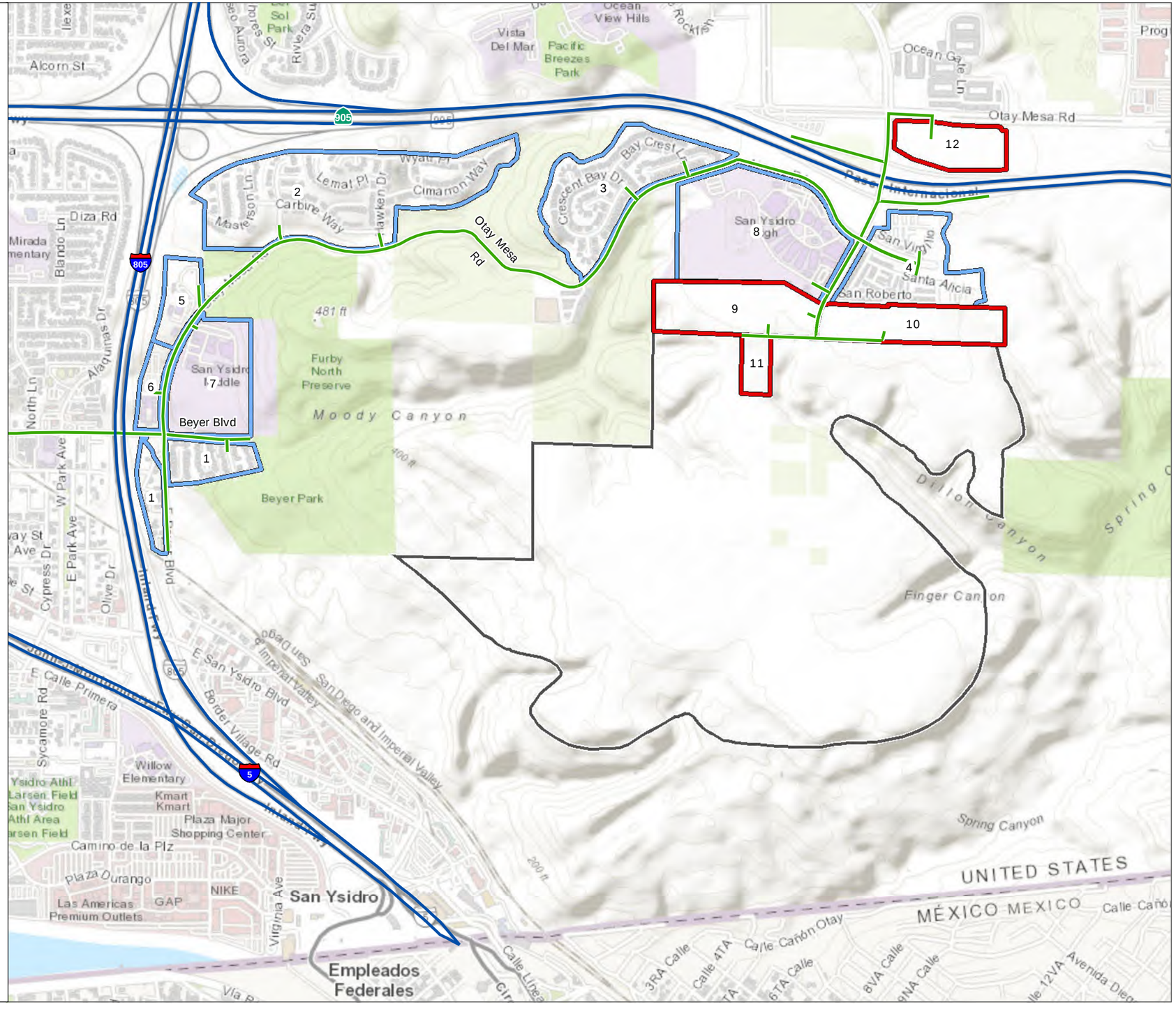
Project Site

Evacuation Route

Major Transportation Corridor

Primary Access Route

Existing Communities	
1	Beyer Blvd at Otay Mesa Rd (Residential)
2	Remington Hills (Residential)
3	California Terraces (Residential)
4	Southview/Southview East (Residential)
5	SYSD Administration Center (Institutional)
6	San Ysidro Adult School (Institutional)
7	San Ysidro Middle School (Institutional)
8	San Ysidro High School (Institutional)
Opening Year 2024 Cumulative Projects	
9	Southview LLC (Residential)
10	Southview LLC (Residential)
11	Candlelight Properties (Residential)
12	Cal Terraces PA 61 (Residential)



SOURCE: BASEMAP-ESRI MAPPING SERVICE 2023

DUDEK

0 600 1,200 Feet

FIGURE 13

Scenario 2 - Existing Communities + Open Year 2024 Cumulative Projects

Wildfire Evacuation Study for the Southwest Village Project

Existing Communities

Opening Year 2024 Cumulative Projects

Project Site

Southwest Village Phase

Phase 1a

Southwest Village Land Use

Future Development

Open Space

Evacuation Routes

Major Transportation Corridor

Primary Access Route

Future Evacuation Route

Temporary Phase 1A Cul-De-Sac

Existing Communities	
1	Beyer Blvd at Otay Mesa Rd (Residential)
2	Remington Hills (Residential)
3	California Terraces (Residential)
4	Southview/Southview East (Residential)
5	SYSD Administration Center (Institutional)
6	San Ysidro Adult School (Institutional)
7	San Ysidro Middle School (Institutional)
8	San Ysidro High School (Institutional)
Opening Year 2024 Cumulative Projects	
9	Southview LLC (Residential)
10	Southview LLC (Residential)
11	Candlelight Properties (Residential)
12	Cal Terraces PA 61 (Residential)

SOURCE: BASEMAP-ESRI MAPPING SERVICE 2023

DUDEK

0 600 1,200 Feet

FIGURE 14

Scenario 3 - Existing Communities + Open Year 2024 Cumulative Projects + Southwest Village Project Phase 1a

- Existing Communities
- Opening Year 2024 Cumulative Projects
- Project Site

Southwest Village Phases
- Phase 1a
- Phase 1b

Southwest Village Land Use
- Future Development
- Open Space

Evacuation Routes
- Major Transportation Corridor
- Primary Access Route
- Secondary Access Route
- Emergency Vehicle Access Road
- Future Evacuation Route
- Temporary Phase 1B Cul-De-Sac
- Emergency Vehicle Access Gate

Existing Communities	
1	Beyer Blvd at Otay Mesa Rd (Residential)
2	Remington Hills (Residential)
3	California Terraces (Residential)
4	Southview/Southview East (Residential)
5	SYSD Administration Center (Institutional)
6	San Ysidro Adult School (Institutional)
7	San Ysidro Middle School (Institutional)
8	San Ysidro High School (Institutional)
Opening Year 2024 Cumulative Projects	
9	Southview LLC (Residential)
10	Southview LLC (Residential)
11	Candlelight Properties (Residential)
12	Cal Terraces PA 61 (Residential)

SOURCE: BASEMAP-ESRI MAPPING SERVICE 2023

DUDEK

0 600 1,200 Feet

FIGURE 15

Scenario 4 - Existing Communities + Open Year 2024 Cumulative Projects + Southwest Village Project Phases 1a and 1b

- Existing Communities
- Opening Year 2024 Cumulative Projects
- Project Site

Southwest Village Phases
- Phase 1a
- Phase 1b
- Phase 1c

Southwest Village Land Use
- Future Development
- Open Space

Evacuation Routes
- Major Transportation Corridor
- Primary Access Route
- Secondary Access Route
- Emergency Vehicle Access Road
- Future Evacuation Route
- Temporary Phase 1B Cul-De-Sac
- Emergency Vehicle Access Gate

Existing Communities	
1	Beyer Blvd at Otay Mesa Rd (Residential)
2	Remington Hills (Residential)
3	California Terraces (Residential)
4	Southview/Southview East (Residential)
5	SYSD Administration Center (Institutional)
6	San Ysidro Adult School (Institutional)
7	San Ysidro Middle School (Institutional)
8	San Ysidro High School (Institutional)
Opening Year 2024 Cumulative Projects	
9	Southview LLC (Residential)
10	Southview LLC (Residential)
11	Candlelight Properties (Residential)
12	Cal Terraces PA 61 (Residential)

SOURCE: BASEMAP-ESRI MAPPING SERVICE 2023

DUDEK

0 600 1,200 Feet

FIGURE 16

Scenario 5 - Existing Communities + Open Year 2024 Cumulative Projects + Southwest Village Project Phases 1a, 1b, and 1c

Existing Communities

Opening Year 2024 Cumulative Projects

Project Site

Southwest Village Land Use

Development

Open Space

Evacuation Route

Major Transportation Corridor

Primary Access Route

Emergency Vehicle Access Road

Gated Emergency Vehicle Access

Emergency Vehicle Access Gate

Existing Communities	
1	Beyer Blvd at Otay Mesa Rd (Residential)
2	Remington Hills (Residential)
3	California Terraces (Residential)
4	Southview/Southview East (Residential)
5	SYSD Administration Center (Institutional)
6	San Ysidro Adult School (Institutional)
7	San Ysidro Middle School (Institutional)
8	San Ysidro High School (Institutional)
Opening Year 2024 Cumulative Projects	
9	Southview LLC (Residential)
10	Southview LLC (Residential)
11	Candlelight Properties (Residential)
12	Cal Terraces PA 61 (Residential)

SOURCE: BASEMAP-ESRI MAPPING SERVICE 2023

DUDEK

0 600 1,200 Feet

FIGURE 17

Scenario 6 - Existing Communities + Open Year 2024 Cumulative Projects + Southwest Village Project at Buildout

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Table 6. Evacuation Route Usage

	Existing Condition (Scenario 1)		Existing Condition + Opening Year 2024 (Scenario 2)		Existing Condition + Opening Year 2024+ Phase 1a (Scenario 3)		Existing Condition + Opening Year 2024+ Phases 1a, 1b (Scenario 4)		Existing Condition + Opening Year 2024+ Phases 1a, 1b, 1c (Scenario 5)		Existing Condition + Opening Year 2024+ Buildout (Scenario 6)	
Evacuation Route using;	Percent of Vehicles	Total Vehicles	Percent of Vehicles	Total Vehicles	Percent of Vehicles	Total Vehicles	Percent of Vehicles	Total Vehicles	Percent of Vehicles	Total Vehicles	Percent of Vehicles	Total Vehicles
Caliente Avenue to SR 905	52	1,004	76	2,876	78	3,276	82	4,274	67	3,796	57	8,006
Beyer Boulevard to SR 905	48	922	24	922	22	922	18	922	33	1,842	43	6,052
Total	100	1,926	100	3,798	100	4,198	100	5,196	100	5,638	100	14,058

Notes: Evacuation route usage was determined based on the location, points of ingress/egress, and number of vehicles associated with each land use, as illustrated in Figures 12-17.

Based on the preceding assumptions and the travel time formula, the evacuation time estimates for Scenarios 1-6 are summarized in Tables 6a-6d. It should be noted, there is limited existing development in the project area and the project, which is a Specific Plan covering approximately 490 acres, would create substantial population growth in the area as compared to the existing conditions; therefore, although the increase in travel times are significant as compared to existing conditions, with the proposed roadway improvements along Caliente Avenue, Beyer Boulevard, and the Secondary EVA that can serve as a third access point/evacuation route, the project would provide multiple options for evacuation routes out of the area, for Southwest Village project and existing residents. Further, this analysis does not consider the option for law enforcement to use the Secondary EVA, which would add additional lane capacity and could reduce overall evacuation times.

Table 6a. Evacuation Travel Time Calculations – Phase 1a

Evacuation Route Scenario	Existing Cond. (Scenario 1)	Existing Cond. + Opening Year 2024 (Scenario 2)	Existing Condition + Opening Year 2024+ Phase 1a (Scenario 3)	Minimum Road Capacity (vehicles per hour)	Existing Cond. Estimated Evacuation Travel Timeframe**	Existing Cond. + Opening Year 2024 Estimated Evacuation Travel Timeframe***	Existing Cond. + Opening Year 2024 Phase 1a + Estimated Evacuation Travel Timeframe***	Worst case Travel Time Increase with Project Phase 1a (Scenario 2 v Scenario 3)
Caliente Avenue to SR 905	1,004	2,876	3,276	2,500	1,004 vehicles 0.40 hrs or 24 min	2,876 vehicles 1.15 hrs or 69 min	3,276 vehicles 1.31 hrs or 78.6 min	**0.16 hrs or 9.6 min**
Beyer Boulevard to SR 905	922	922	922	2,500	922 vehicles 0.37 hrs or 22.1 min	922 vehicles 0.37 hrs or 22.1 min	922 vehicles 0.37 hrs or 22.1 min	**0 hrs or 0 min**
Total Vehicles	**1,926**	**3,798**	**4,198**	-	**1,926**	**3,798**	**4,198**	-

Note: In this scenario, the Beyer Boulevard connection would not be complete and no Project traffic is anticipated along existing Beyer Boulevard; therefore, there would be no change in evacuation time for Beyer Boulevard to SR-905 route.

Table 6b. Evacuation Travel Time Calculations – Phase 1b

Evacuation Route Scenario	Existing Cond. (Scenario 1)	Existing Cond. + Opening Year 2024 (Scenario 2)	Existing Condition + Opening Year 2024+ Phase 1b (Scenario 4)	Minimum Road Capacity (vehicles per hour)	Existing Cond. Estimated Evacuation Travel Timeframe**	Existing Cond. + Opening Year 2024 Estimated Evacuation Travel Timeframe***	Existing Cond. + Opening Year 2024 Phase 1b + Estimated Evacuation Travel Timeframe***	Worst case Travel Time Increase with Project Phase 1b (Scenario 2 v Scenario 4)
Caliente Avenue to SR 905	1,004	2,876	4,274	2,500	1,004 vehicles 0.40 hrs or 24 min	2,876 vehicles 1.2 hrs or 69 min	4,274 vehicles 1.7 hrs or 102.6 min	**0.5 hrs or 33.6 min**

Table 6b. Evacuation Travel Time Calculations – Phase 1b

Evacuation Route Scenario	Existing Cond. (Scenario 1)	Existing Cond. + Opening Year 2024 (Scenario 2)	Existing Condition + Opening Year 2024+ Phase 1b (Scenario 4)	Minimum Road Capacity (vehicles per hour)	Existing Cond. Estimated Evacuation Travel Timeframe**	Existing Cond. + Opening Year 2024 Estimated Evacuation Travel Timeframe***	Existing Cond. + Opening Year 2024 Phase 1b + Estimated Evacuation Travel Timeframe***	Worst case Travel Time Increase with Project Phase 1b (Scenario 2 v Scenario 4)
Beyer Boulevard to SR 905	922	922	922	2,500	922 vehicles 0.37 hrs or 22.1 min	922 vehicles 0.37 hrs or 22.1 min	922 vehicles 0.37 hrs or 22.1 min	**0 hrs or 0 min**
Total Vehicles	**1,926**	**3,798**	**5,196**	-	**1,926**	**3,798**	**5,196**	-

Note: In this scenario, the Beyer Boulevard connection would not be complete and no Project traffic is anticipated along existing Beyer Boulevard; therefore, there would be no change in evacuation time for Beyer Boulevard to SR-905 route.

Table 6c. Evacuation Travel Time Calculations – Phase 1c

Evacuation Route Scenario	Existing Cond. (Scenario 1)	Existing Cond. + Opening Year 2024 (Scenario 2)	Existing Condition + Opening Year 2024+ Phase 1c (Scenario 5)	Minimum Road Capacity (vehicles per hour)	Existing Cond. Estimated Evacuation Travel Timeframe**	Existing Cond. + Opening Year 2024 Estimated Evacuation Travel Timeframe***	Existing Cond. + Opening Year 2024 + Phase 1c Estimated Evacuation Travel Timeframe***	Worst case Travel Time Increase with Project Phase 1c (Scenario 2 v Scenario 5)
Caliente Avenue to SR 905	1,004	2,876	3,796	2,500	1,004 vehicles 0.40 hrs or 24 min	2,876 vehicles 1.15 hrs or 69 min	3,796 vehicles 1.5 hrs or 91.1 min	**0.35 hrs or 21 min**
Beyer Boulevard to SR 905	922	922	1,842	2,500	922 vehicles 0.37 hrs or 22.1 min	922 vehicles 0.37 hrs or 22.1 min	1,842 vehicles 0.74 hrs or 44.2 min	**0.37 hrs or 22.1 min**
Total Vehicles	**1,926**	**3,798**	**5,638**	-	**1,926**	**3,798**	**5,638**	-

Table 6d. Evacuation Travel Time Calculations – Project Buildout

Evacuation Route Scenario	Existing Cond. (Scenario 1)	Existing Cond. + Opening Year 2024 (Scenario 2)	Existing Condition + Opening Year 2024+ Buildout (Scenario 6)	Minimum Road Capacity (vehicles per hour)	Existing Cond. Estimated Evacuation Travel Timeframe**	Existing Cond. + Opening Year 2024 Estimated Evacuation Travel Timeframe***	Existing Cond. + Opening Year 2024 Buildout + Estimated Evacuation Travel Timeframe***	Worst case Travel Time Increase with Project Buildout (Scenario 2 v Scenario 6)
Caliente Avenue to SR 905	1,004	2,876	8,006	2,500	1,004 vehicles 0.40 hrs or 24 min	2,876 vehicles 1.15 hrs or 69 min	8,006 vehicles 3.2 hrs or 192.1 min	**2.05 hrs or 123 min**
Beyer Boulevard to SR 905	922	922	6,052	2,500	922 vehicles 0.37 hrs or 22.1 min	922 vehicles 0.37 hrs or 22.1 min	6,052 vehicles 2.4 hrs or 145.2 min	**2.03 hrs or 121.8 min**
Total Vehicles	**1,926**	**3,798**	**14,058**	-	**1,926**	**3,798**	**14,058**	-

As shown in Tables 6,a-6d the following is a summary of the evacuation time for each scenario:

- Scenario 1: It would take 241 minutes and 22.1 minutes to evacuate the Existing Condition uses from Caliente Avenue to SR 905 and existing Beyer Boulevard to SR 905, respectively.
- Scenario 2: It would take 22.1 minutes and 1 hour and 9 minutes to evacuate the Existing Condition + Opening Year 2024 uses from Caliente Avenue to SR 905 and existing Beyer Boulevard to SR 905, respectively..
- Scenario 3: It would take 1 hour and 18.6 minutes and 22.1 minutes to evacuate the Existing Condition + Opening Year 2024 uses Plus Phase 1a(Table 6a) from Caliente Avenue to SR 905 and Beyer Boulevard to SR 905, respectively. In this scenario, the Beyer Boulevard connection would not be complete, and no project traffic is anticipated along existing Beyer Boulevard; therefore, there is no change in evacuation time for Beyer Boulevard to SR-905 route. Under this scenario, the project would cause the following increases:
    - 9.6 minutes along Caliente Avenue to SR-905
    -
- Scenario 4: It would take 1 hour and 42.6 minutes and 22.1 minutes to evacuate the Existing Condition + Opening Year 2024 uses Plus Phase 1b (Table 6b) from Caliente Avenue to SR 905 and Beyer Boulevard to SR 905, respectively. In this scenario, the Beyer Boulevard connection would not be complete, and no project traffic is anticipated along existing Beyer Boulevard; therefore, there is no change in evacuation time for Beyer Boulevard to SR-905 route. Under this scenario, the project would cause the following increases:
    - 33.6 minutes along Caliente Avenue to SR-905
    -
- Scenario 5: It would take 1 hour 31 minutes and 44.2 minutes to evacuate the Existing Condition + Opening Year 2024 uses Plus Phase 1c (Table 6c) from Caliente Avenue to SR 905 and Beyer Boulevard to SR 905, respectively. Under this scenario, the project would cause the following increases:
    - 21 minutes along Caliente Avenue to SR-905
    - 22.1 minutes along Beyer Boulevard to SR-905
- Scenario 6: It would take 3 hours and 12 minutes and 2 hours and 25.2 minutes to evacuate the Existing Condition + Opening Year 2024 + project Buildout uses (Table 6d) from Caliente Avenue to SR 905 and Beyer Boulevard to SR 905, respectively. Under this scenario, the project would cause the following increases:
    - 123 minutes along Caliente Avenue to SR-905
    - 121.8 minutes along Beyer Boulevard to SR-905

As discussed above, safely undertaking large-scale evacuations is a complicated process that involves many factors that cannot necessarily be determined in advance. A large-scale evacuation may take several hours or more and require moving people long distances to designated areas. Further, evacuations are fluid and timeframes may vary widely depending on numerous factors, including, among other things, the number of vehicles evacuating, the road capacity to accommodate those vehicles, occupants' awareness and preparedness, evacuation messaging and direction, and on-site law enforcement control.

Technological advancements and improved evacuation strategies learned from prior wildfire evacuation events have resulted in a system, reflected in the EOPs and the experience of the people tasked with coordinating events, which is many times more capable of managing evacuations. With the technology in use today in the City and County, evacuations are more strategic and surgical than in the past, evacuating smaller areas at highest risk and phasing evacuation traffic so that it flows more evenly and minimizes the surges that may slow an evacuation. Mass

evacuation scenarios where large populations are all directed to leave simultaneously, resulting in traffic delays, are thereby avoided, and those populations most at risk safely evacuate.

Due to the ignition resistant construction and fuel modification that would be required for development of the project, the project would offer Incident Command the option to shelter the project's population onsite. Additionally, the project would not eliminate any existing evacuation routes. Considering these facts and others discussed herein, the project would not expose people to a significant risk of loss or death involving wildland fires related to evacuation, would not interfere with evacuation response planning, and would not result in inadequate emergency access. Overall, project impacts would be less than significant.

4.2 Evacuation Route Determination

Typically, fire and law enforcement officials would identify evacuation points before evacuation routes are announced to the public. Evacuation routes are determined based on the location and extent of the incident and its spread rate and direction and include as many pre-designated transportation routes as possible. However, field conditions and shifting fire behavior may result in real-time changes to predetermined routes. Having additional evacuation route options is considered critical in these conditions. Under extreme fire weather events, it is unlikely that evacuation would occur to the east and this analysis assumes all traffic, existing and project related would be sent west to SR-905.

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5 Southwest Village Wildfire/Evacuation Awareness

The project should be active in its outreach to all occupants regarding fire safety and general evacuation procedures. There are aspects of fire safety and evacuation that require a significant level of awareness by all occupants in order to reduce and/or avoid problems with an effective evacuation. Resolving potential impediments to successful evacuations requires focused and repeated information through a strong educational outreach program. The project should engage occupants and coordinate with local fire agencies for fire safety awareness through a variety of methods.

The focus of the "Ready, Set, Go!" program is on public awareness and preparedness, especially for those living and/or working in wildland-urban interface 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. There are three components to the program:

- **"READY" – Preparing for the Fire Threat**: Take personal responsibility and prepare long before the threat of a wildfire so you and your home or place of business are ready when a wildfire occurs. Residents should prepare household evacuation plans and employees should assemble an emergency kit for their car. All occupants should confirm registration of cellular numbers for Reverse 911, Alert San Diego.

- **"SET" – Situational Awareness When a Fire Starts:** If a wildfire occurs and there is potential for it to threaten the project site and surrounding communities, be ready to evacuate. Stay aware of the latest news from local media and your local fire department for updated information on the fire. If you are uncomfortable, leave the area.

- **"GO!" – Leave Early!** Leaving early, well before a wildfire is threatening the project area, provides you with the least delay and results in a situation where, if a majority of neighboring developments also leave early, firefighters are now able to better maneuver, protect and defend structures, evacuate other occupants who couldn't leave early, and focus on citizen safety.

"Ready, Set, Go!" is predicated on the fact that being unprepared and attempting to flee an impending fire late (such as when the fire is physically close to your community) is dangerous and exacerbates an already confusing situation. This WEP provides key information that can be integrated into the individual evacuation plans, including the best available routes to use in the event of an emergency evacuation.

Situation awareness requires a reliable information source. The City of San Diego utilizes Alert San Diego for its Community Emergency Notification System, and all occupants should be encouraged to register for emergency alerts. Additionally, the San Diego County operates the Reverse 911 notification system that provides a recorded message over land line telephone systems relating to evacuation notices. Further, Alert San Diego has the capability to send emergency notifications over both land lines as well as to cell phones and via text messages. It is up to

individual employees to register their cell phones for Alert San Diego. The registration of cell phones can be done online at https://www.alertsandiego.org/. In addition, the San Diego Emergency Alert System (EAS) is county-wide and broadcasts emergency information via two radio stations: KOGO AM 600 and KLSD AM 1360.

As part of the project, this WES would be available to the HOA or property management who can provide it to future owners and tenants. It is also recommended that all future HOAs or Property Management Companies identify a Fire Safety Coordinator that is responsible for:

1. Preparing and distributing the annual reminder notice that shall be provided to each occupant encouraging them to review this WES and be familiar with community evacuation protocols.

2. Coordination with local fire agencies to hold an annual fire safety and evacuation preparedness informational meeting for occupants. The meeting should be attended by representatives of appropriate fire agencies and important fire and evacuation information should be reviewed.

3. Maintaining fire safety information on the development's website, including the WES and materials from the "Ready, Set, Go!" Program.

For non-residential uses, Fire Safety Coordinators should also be responsible for:

4. The Fire Safety Coordinator(s) would coordinate an annual fire evacuation drill/fire exercise to ensure proper safety measures have been implemented, facility awareness and preparation of a facility-wide "Ready, Set, Go!" plan. The Fire Safety Coordinator would also organize employee training and awareness through various practices:

    a. New hire fire awareness and evacuation training

    b. Ongoing staff training

    c. Strategically placed fire safety and evacuation/sheltering protocol information, as determined by the Fire Safety Coordinator.

Sample emergency preparedness resources are provided in Appendix A (Resident "Ready, Set, Go!" Wildland Fire Action Plan) Appendices B-1 through B-4 (Family Disaster Checklists and Communications Plans), and Appendix D, Resident Quick Reference Guide, and residents are encouraged to become familiar with the concepts detailed at the following websites:

1. "Ready, Set, Go!" Personal Wildland Fire Action Guide:
2. https://www.readysandiego.org/content/dam/oesready/en/wildfire/wildfire_preparedness_guide.pdf
   Red Cross Emergency Planning:

   http://www.redcross.org/get-help/how-to-prepare-for-emergencies/make-a-plan

3. Hazardous Materials Emergency Preparedness:

   https://www.ready.gov/hazardous-materials-incidents

4. Building a disaster kit:

   http://www.redcross.org/get-help/prepare-for-emergencies/be-red-cross-ready/get-a-kit

5. Making a Plan Checklist:

   https://www.ready.gov/make-a-plan

6. Family Communication Plan:

   https://www.fema.gov/media-library-data/1440449346150-1ff18127345615d8b7e1effb4752b668/Family_Comm_Plan_508_20150820.pdf

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6 Southwest Village Evacuation Procedures

6.1 Relocation/Evacuation

It is estimated that the minimum amount of time needed to move the exiting and project populations to urbanized and/or designated evacuation areas may require up to 4.37 hours or more under varying constraints that may occur during an evacuation. This does not include additional allowances for the time needed to detect and report a fire, for fire response and on-site intelligence, for phone, patrols, and aerial based notifications, and for notifying special needs citizens.

Wolshon and Marchive (2007) simulated traffic flow conditions in a computer derived WUI under a range of evacuation notice lead times and housing densities. To safely evacuate more people, they recommended that emergency managers (1) provide more lead time to evacuees and (2) control traffic levels during evacuations so that fewer vehicles are trying to exit at the same time.

Wildfire emergency response procedures would vary depending on the type of wildfire and the available time in which decision makers (IC, SDFRD, CAL FIRE, SDSD, and/or County Office of Emergency Management) can assess the situation and determine the best course of action. Based on the Southwest Village project and surrounding communities, its road network, and the related fire environment, the first and primary type of evacuation envisioned is an orderly, pre-planned evacuation process where people are evacuated to more urban areas further from an encroaching wildfire (likely to urban areas north and west) well before fire threatens. This type of evacuation must include a conservative approach to evacuating; i.e., when ignitions occur and weather is such that fires may spread rapidly, evacuations should be triggered on a conservative threshold that includes time allowances for unforeseen, but possible, events that would slow the evacuation process.

The second type of evacuation is considered by many to offer the highest level of life protection to the public, but it can result in evacuees being placed in harm's way if the time available for evacuation is insufficient (Cova et al. 2011). An example of this type of evacuation, which is highly undesirable from a public safety perspective, is an evacuation that occurs when fire ignites close to vulnerable communities. This type of situation is inherently dangerous because there is generally a higher threat to persons who are in a vehicle on a road when fire is burning in the immediate area than in a well-defended, ignition-resistant home. Conditions may become so poor that the vehicle drives off the road or crashes into another vehicle, and flames and heat overcome the occupants. A vehicle offers little shelter from a wildfire if the vehicle is situated near burning vegetation or catches fire itself. This type of evacuation must be considered a very undesirable situation by law and fire officials in all but the rarest situations where late evacuation may be safer than seeking temporary refuge in a structure (such as when there are no nearby structures, the structure[s] is/are already on fire, or when there is no other form of refuge). Temporary refuge would be possible within the Southwest Village project structures, but structures within surrounding communities, as previously discussed, are less desirable due to their higher vulnerability to ignition.

The third potential type of evacuation is a hybrid of the first two. In cases where evacuation is in process and changing conditions result in a situation that is considered unsafe to continue evacuation, it may be advisable to direct evacuees to pre-planned temporary refuge locations, including their own home if it is ignition-resistant and defensible, such as those within Southwest Village project. As with the second type of evacuation discussed above, this situation is considered highly undesirable, but the evacuation pre-planning must consider these potential scenarios and prepare decision makers at the IC level and at the field level for enacting a contingency to evacuation when conditions dictate.

Indications from past fires and related evacuations, in San Diego County and throughout Southern California, which have experienced increasingly more frequent and larger fires, are that evacuations are largely successful, even with a generally unprepared populace. It then stands to reason that an informed and prepared populace would minimize the potential evacuation issues and related risk to levels considered acceptable from a community perspective.

Evacuation orders or notifications are often triggered based on established and pre-determined model buffers, which are based on topography, fuel, moisture content of the fuels and wind direction. Evacuations are initiated when a wildfire reaches or crosses one of these pre-determined buffers. Evacuations can also be very fluid. The IC, law enforcement and OES would jointly enact evacuations based on fire behavior.

6.2 Southwest Village Project Evacuation Baseline

For purposes of this Wildfire Evacuation Study, the first and most logical choice for all of the residents and guests within the boundaries of Southwest Village project is to adhere to the principles and practices of the “Ready, Set, Go!” Program previously mentioned in this document. As part of this program, it is important that each household develop a plan that is clearly understood by all family members and participates in the educational and training programs sponsored by the Southwest Village HOA and the SDFRD. In addition, it is imperative that the “Ready, Set, Go!” program information be reviewed on a routine basis along with the accompanying maps illustrating evacuation routes, temporary evacuation points and pre-identified evacuation points. It must be kept in mind that conditions may arise that would dictate a different evacuation route than the normal roads used on a daily basis.

Residents are urged to evacuate as soon as they are notified to do so or earlier if they feel uncomfortable. Directions on evacuation routes would be provided in most cases, but when not provided, residents of the project would proceed according to known available routes away from the encroaching fire as detailed in the Quick Reference section of this WES. Residents are cautioned not to rely on navigation aid apps which may inadvertently lead them toward an oncoming fire. Depending on the type of emergency and the resulting evacuation, it could take as long as four hours and twenty-two minutes or more to complete a Southwest Village community-wide evacuation, based on road capacities and competing use of the roads by residents from other areas.

Note: this evacuation plan would require adjustment and continued coordination by the Southwest Village HOA and/or developer and fire/law enforcement agencies during each of the construction phases. With each phase, the evacuation routes may be subject to changes with the addition of both primary and secondary evacuation routes.

6.3 Civilian and Firefighter Evacuation Contingency

As of this document's preparation, no community in California has been directed to shelter-in- place during a wildland fire. Even the communities in Rancho Santa Fe, California, which are designed and touted as shelter-in-place communities, were evacuated during the 2007 Witch Creek Fire. This is not to say that people have not successfully sheltered-in-place during wildfire, where there are numerous examples of people sheltering in their homes, in hardened structures, in community buildings, in swimming pools, and in cleared or ignition-resistant landscape open air areas. The preference would always be early evacuation following the "Ready, Set, Go!" model, but there exists the potential for unforeseen civilian evacuation issues, and having a contingency plan would provide direction in these situations that may result in saved lives.

Potential problems during wildfire evacuation from the Southwest Village community include:

- Inadequate time to safely evacuate
- Fire evacuations during rush hour traffic or when large events are occurring
- Blocked traffic due to accidents or fallen tree(s) or power pole(s)
- The need to move individuals who are unable to evacuate

It is recommended that local law enforcement and fire agencies conduct concerted pre-planning efforts focusing on evacuation contingency planning for civilian populations when it is considered safer to temporary seek a safer refuge than evacuation. Southwest Village structures would allow for the possibility of temporary sheltering while structures in surrounding communities would not typically be considered ignition-resistant and therefore, not appropriate for temporary refuge.

6.3.1 Safety Zones

The International Fire Service Training Association (IFTSA; Fundamentals of Wildland Fire Fighting, 3rd Edition) defines "safety zones" as areas mostly devoid of fuel, which are large enough to assure that flames and/or dangerous levels of radiant heat would not reach the personnel occupying them. Areas of bare ground, burned over areas, paved areas, and bodies of water can all be used as safety zones. The size of the area needed for a safety zone is determined by fuel types, its location on slopes and its relation to topographic features (chutes and saddles) as well as observed fire behavior. Safety zones should never be located in topographic saddles, chutes or gullies. High winds, steep slopes or heavy fuel loads may increase the area needed for a safety zone.

The National Wildland Fire Coordinating Groups (NWFCG), Glossary of Wildland Fire Terminology provides the following definitions for safety zones:

> *Safety Zone*. An area cleared of flammable materials used for escape in the event the line is outflanked or in case a spot fire causes fuels outside the control line to render the line unsafe. In firing operations, crews progress so as to maintain a safety zone close at hand allowing the fuels inside the control line to be consumed before going ahead. Safety zones may also be constructed

> as integral parts of fuelbreaks; they are greatly enlarged areas, which can be used with relative safety by firefighters and their equipment in the event of blowup in the vicinity.

According to NWFCG, safety zone(s):

- Must be survivable without a fire shelter
- Can include moving back into a clean burn
- May take advantage of natural features (rock areas, water, meadows)
- Can include constructed sites (clear-cuts, roads, helispots)
- Are scouted for size and hazards
- Consider the topographic location (larger if upslope)
- Should be larger if downwind
- Should not include heavy fuels
- May need to be adjusted based on site-specific fire behavior

The definition for a safety zone includes provisions for separation distance between the firefighter and the flames of at least four times the maximum continuous flame height. Distance separation is the radius from the center of the safety zone to the nearest fuels.

Safety zones are not readily available within the existing community, but the shopping center on Dennery Road north of the project site offers the best possibility for a safety zone for firefighter use. The Southwest Village community would include the ability for firefighters to seek safety zones within the ignition-resistant landscapes, but identification of other potential safety zones would require additional focused study by SDFRD and other fire and law enforcement agencies.

6.3.2 Temporary Firefighter Refuge Areas

Firescope California (Firefighting Resources of Southern California Organized for Potential Emergencies) was formed by legislative action to form a partnership between all facets of local, rural, and metropolitan fire departments, CAL FIRE and federal fire agencies. Firescope defines a contingency plan when it is not possible to retreat to a safety zone. This contingency includes establishment of firefighter temporary refuge areas (TRAs), which are defined as:

> A preplanned area where firefighters can immediately take refuge for temporary shelter and short-term relief without using a fire shelter in the event that emergency egress to an established safety zone is compromised.

Examples of a TRA may include the lee side of a structure, inside of a structure, large lawn or parking areas, or cab of a fire engine, amongst others. Differences between a TRA and a Safety Zone is that TRAs are closer to the immediate firefighting

area, are considered a contingency to being able to get to a safety zone, do not include a requirement for a large area set back four times the flame lengths of adjacent fuels, and cannot be feasibly pre-planned until firefighters arrive on-scene and size up the situation.

Firescope appropriately notes that although safety zones and viable escape routes shall always be identified in the WUI environment, they may not be immediately available should the fire behavior increase unexpectedly. Often a TRA is more accessible in the WUI environment. A TRA would provide temporary shelter and short-term relief from an approaching fire without the use of a fire shelter and allow the responders to develop an alternate plan to safely survive the increase in fire behavior.

The major difference between a TRA and a safety zone is that a TRA requires another planned tactical action; i.e., TRAs cannot be considered the final action, but must include self-defense and a move out of the area when the fire threat subsides. A TRA should be available and identified on site at a defended structure. TRAs are NOT a substitute for a safety zone. TRA pre-planning is difficult, at best because they are very site- and fire behavior-specific. For the existing community, TRAs would likely include navigating into any of the Southwest Village neighborhoods within the more densely developed areas where firefighters would be separated from the unmaintained wildland fuels by wide areas including site-wide maintained landscapes, ignition-resistant residences, and wide roads that offer numerous opportunities for TRA.

The entire developed portion of Southwest Village neighborhoods, but especially the interior areas of neighborhoods, are considered TRAs. This is an important concept because it offers last-resort, temporary refuge of firefighters, and in a worst-case condition, residents. This approach would be consistent with Firescope California (2013), which indicates that firefighters must determine if a safe evacuation is appropriate and if not, to identify safe refuge for those who cannot be evacuated, including civilians.

Each of the project site's residences that can be considered for TRA include the following features:

- Ignition-resistant construction
- Annual landscape inspections by 3rd party inspectors
- Wide roadways with fire hydrants
- Maintained landscapes and roadside fuel modification
- Ember-resistant vents
- Interior fire sprinklers

Because there is the possibility that evacuation of the project and surrounding communities may be less safe than temporarily refuging on site, such as during a fast-moving, wind-driven fire that ignites nearby, including temporary refuge within some properly designed, constructed and maintained residences onsite is considered a contingency plan for the Southwest Village project. This concept is considered a component of the "Ready, Set, Go!" model as it provides a broader level of "readiness" should the ability to execute an early evacuation be negated by fire, road congestion, or other unforeseen issues.

Note: this approach would be considered a last-resort contingency during wildfire with the primary focus being on early evacuation. The decision for evacuation or temporarily refuging on site would be made by responding law enforcement and/or fire personnel.

6.4 Social Aspects of Wildfire Evacuation

Orderly movement of people is the result of planning, training, education, and awareness, all of which are promoted in San Diego. Evacuation has been the standard term used for emergency movement of people and implies imminent or threatening danger. The term in this Wildfire Evacuation Study, and under the "Ready, Set, Go!" concept, indicates that there is a perceived threat to persons and movement out of the area is necessary, but would occur according to a pre-planned and practiced protocol, reducing the potential for panic.

Citizen reactions may vary during an evacuation event, although several studies indicate that orderly movement during wildfire and other emergencies is not typically unmanageable. Evacuation can be made even less problematic through diligent public education and emergency personnel training and familiarity. Social science research literature indicates that reactions to warnings follow certain behavior patterns that are defined by people's perceptions (Aguirre 1994; Drabek 1991; Fitzpatrick and Mileti 1994; Gordon 2006; Collins 2004) and are not unpredictable. In summary, warnings received from credible sources by people who are aware (or have been made aware) of the potential risk, have the effect of an orderly decision process that typically results in successful evacuation. This success is heightened when evacuations are not foreign to residents (Quarantelli and Dynes 1977; Lindell and Perry 2004) as would occur within the project area. Further, in all but the rarest circumstances, evacuees would be receiving information from credible sources during an evacuation. It would be anticipated that law enforcement and/or fire personnel would be on site to help direct traffic and would be viewed by evacuees as knowledgeable and credible. The importance of training these personnel cannot be overstated and annual education and training regarding fire safety and evacuation events would be essential for successful future evacuations.

6.4.1 Evacuation of Special Populations

Vogt (1990 and 1991) defines special populations as those groups of people who, because of their special situations or needs, require different planning strategies from those of the general population. Special needs populations include those in institutions or special facilities, those with disabilities in homes, those who need care, children, and others who cannot provide for their own evacuation if necessitated. The special needs population is concentrated in facilities but is also widespread in terms of facility locations and those who live in residences. Special needs populations in Southwest Village include the hearing or visually impaired, foreign speaking, visitors passing through the area, temporary visitors such as day workers, and the non-ambulatory confined to residences either temporarily or permanently.

Tourists and temporary visitors may not have knowledge of the area's fire hazard, they may not know how to react in a fire emergency, and they may not understand what they are being told to do. Conversely, this segment of the population would typically be easier to evacuate quickly as they have no possessions or pets they would need to prepare. They can get in their cars and be directed out of the area.

6.4.2 Animal Evacuations

Animal evacuations present a host of challenges that may affect the overall successful movement of people and their possessions out of harm's way. For example, livestock owners do not always have the means to load and trailer their livestock out of the area. Further, most wildfire evacuation relief shelters or commercial lodging facilities do not allow people to bring in pets or other animals. Sorensen and Vogt (2006) indicate that an issue receiving increasing attention is what evacuees do with pets or other animals such as livestock when they leave their homes and whether having pets or animals impacts their decision to evacuate.

The Southwest Village project would not accommodate livestock onsite. However, household pets are a common occurrence.

6.4.3 Re-Entry Procedures

An important component of evacuations is the citizen re-entry process. Guidance and procedures to ensure a coordinated, safe, and orderly re-entry into impacted communities following an incident is provided in the County of San Diego Re-Entry Protocol.

Re-entry would be initiated by the Incident Commander of the Incident Management Team, with the support of the Director of Emergency Services, the OA EOC Director, and the Operations Section Chief at the OA EOC. In most cases, the OA EOC would remain activated until full re-entry is complete. In the event that the OA EOC has been deactivated, the IC or the Liaison Officer of the Incident Management Team would initiate re-entry procedures.

The IC would designate a Re-Entry Coordinator and the Operations Section Chief of the OA EOC would coordinate with and support the Re-Entry Coordinator. The Re-Entry Coordinator is responsible for coordinating the re-entry procedures with all involved agencies and ensuring effective communication.

The impacted areas must be thoroughly investigated to ensure it is safe for residents to return and normal operations have been restored.

The public would be notified of the re-entry status through the notification measures previously mentioned in this annex, including SDCountyEmergency.com, SDEmergency App for smart phones, emergency broadcast radio, television, press releases, informational phone lines such as 2-1-1, community briefings, and informational updates at shelters.

Once evacuees are permitted to return, it is important that procedures are established to properly identify residents and critical support personnel, as well as ensure the legitimacy of contractors, insurance adjustors, and other personnel. Re-entry points should be staffed by law enforcement personnel.

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7 Limitations

This Wildfire Evacuation Study has been developed based on City of San Diego wildfire and evacuation standards and the San Diego City and County Evacuation Annexes and is specifically intended as a guide for evacuations for the Southwest Village project. This plan provides basic evacuation information that would familiarize residents of the project with the evacuation route options that may be available to them during an emergency. However, because emergencies requiring evacuation have many variables and must be evaluated on a case-by-case basis, real-time law enforcement and fire personnel/agencies' decision-making and direction during an emergency requiring evacuation would supersede this plan.

This plan analyzes the existing community's evacuation times currently and with the proposed Southwest Village project. The estimated evacuation times are based on several assumptions as detailed in this WES. However, actual evacuation times may be faster or slower than the estimates, depending on the type of emergency, the extent of the evacuation, the time of day, and other factors. A collective, community–wide evacuation of existing populations and the proposed population from the project would include congested roads in its existing condition that are improved, but still congested, with the Southwest Village project. Congested roads are normal in any urban setting when a mass evacuation is declared unless it is managed and evacuation areas are staggered to reduce the potential traffic surges that can significantly impact evacuations. Therefore, even though the additional evacuation road to the west via the proposed extension of Beyer Boulevard there would likely still be congestion and delays.

This Wildfire Evacuation Study promotes the "Ready, Set, Go!" model, adopted by County OES, CAL FIRE, and many fire agencies statewide, including SDFRD. The goal is to raise agency and citizen awareness of potential evacuation issues and get a majority of the public "Ready" by taking a proactive stance on preparedness, training drills, visitor education, and evacuation planning efforts. The Southwest Village populace would be "Set" by closely monitoring the situation whenever fire weather occurs and/or when wildland fire occurs and elevating pre-planned protocol activities and situation awareness. Lastly, officials would implement the plan and mandate that populations "Go" by executing pre-planned evacuation procedures in a conservative manner (i.e., evacuation would occur based on conservative decision points, as proposed in this evacuation plan or when directed by fire and law enforcement personnel, whichever is more conservative). The preferred alternative would always be early evacuation. However, there may be instances when evacuation is not possible, is not considered safe, or is not an option based on changing conditions. For example, should a fire occur and make evacuation from the project area ill advised, a contingency plan for residents should be available. This contingency would include moving people to pre-designated TRAs until it is safe to evacuate or the threat has been mitigated.

Ultimately, it is the intent of this Wildfire Evacuation Study to guide the implementation of evacuation procedures such that the process of evacuating people from the Southwest Village project and surrounding communities is facilitated in an efficient manner and according to a pre-defined evacuation protocol as well as providing a contingency option of temporarily refuging (for Southwest Village) if evacuation is considered less safe. The Southwest Village residents should be aware of this evacuation plan, and the project is encouraged to implement the recommended fire and evacuation awareness program. This educational outreach would result in a populace that understands the potential for evacuations and the routes and options that may be presented to them.

During extreme fire weather conditions, there are no guarantees that a given structure would not burn or that evacuations would be successful all of the time. Wildfires may occur in the area that could damage property or harm persons. However, successful implementation of the procedures outlined in this Wildfire Evacuation Study would provide for an informed populace regarding evacuations.

This WES does not provide a guarantee that all persons would be safe at all times because of the procedures discussed. There are many variables that may influence overall safety. This WES provides a summary for implementation of standard evacuation protocols, suggested roadway enhancements, and public outreach, which should result in reduced wildfire related risk and hazard. Even then, fire can compromise the procedures through various, unpredictable ways. The goal is to reduce the likelihood that the system is compromised through implementation of the elements of this WES and regular occurring program maintenance and updates.

It is recommended that the evacuation process is carried out with a conservative approach to fire safety. This approach must include establishing and maintaining the Southwest Village project's fuel modification landscape on a property-by-property basis, infrastructural, and ignition-resistant construction components (retrofitting as possible) according to the appropriate standards and embracing a "Ready, Set, Go!" stance on evacuation. Accordingly, evacuation of the wildfire areas should occur according to pre-established evacuation decision points, or as soon as they receive notice to evacuate, which may vary depending on many environmental and other factors. Fire is a dynamic and somewhat unpredictable occurrence, and it is important for anyone living at the wildland-urban interface to educate themselves on practices that would improve safety.

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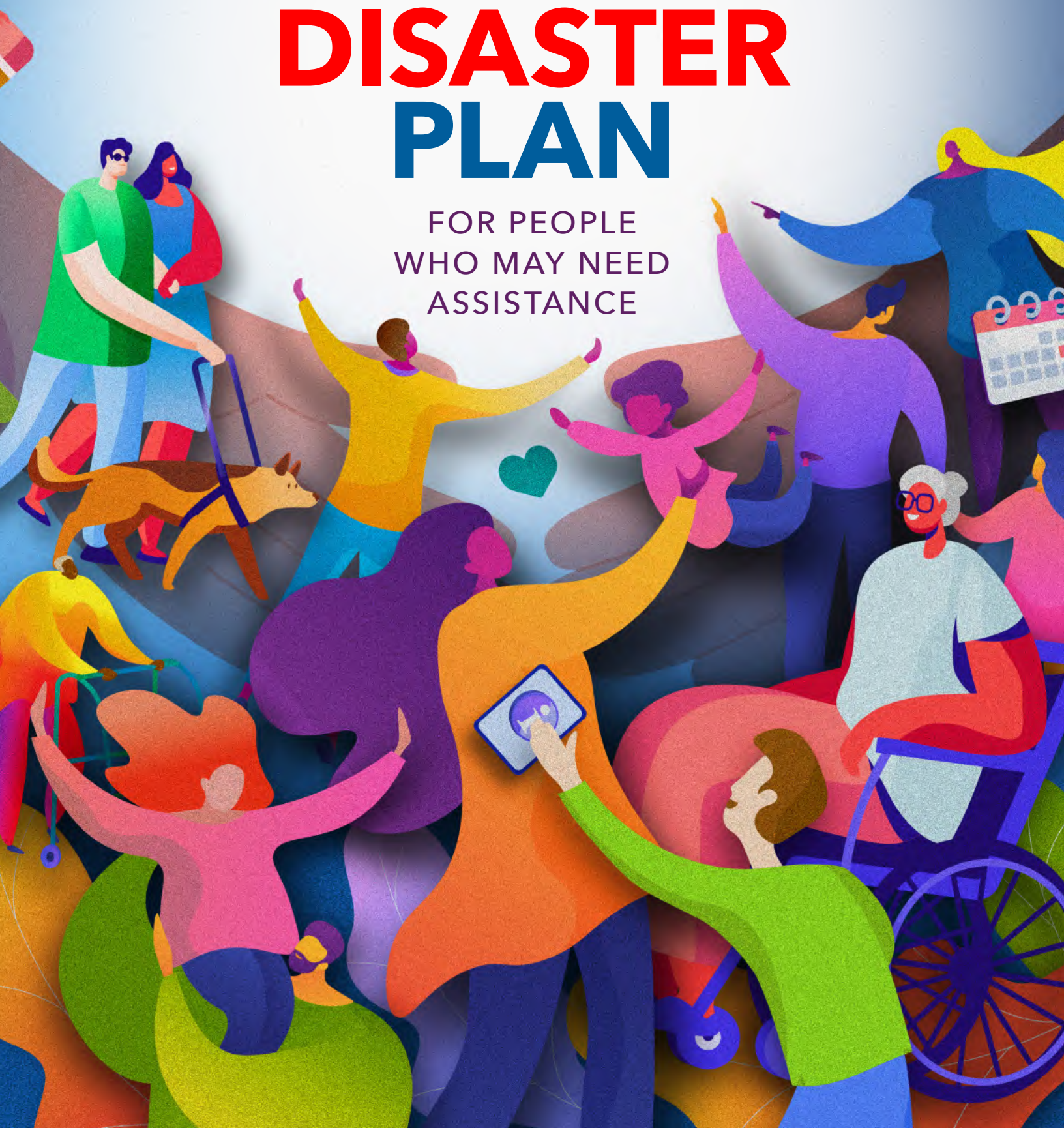
Appendix A1-A3

City of San Diego Emergency Preparedness Resources, San Diego County Emergency Preparedness Resources and "Ready, Set, Go!" Wildland Fire Action Guide

COUNTY OF SAN DIEGO OFFICE OF EMERGENCY SERVICES

PERSONAL DISASTER PLAN

FOR PEOPLE WHO MAY NEED ASSISTANCE



Introduction

This guide supports older adults, people with disabilities, caregivers, and others who may benefit from help when planning for disasters.

Emergencies can range from falls in the home to fires and earthquakes. Each person has unique abilities and needs during a disaster, and everyone can take steps to prepare.

This guide will help you evaluate your needs and make a personalized emergency plan so that you and your loved ones can be better prepared.

Steps to Prepare for any Emergency

GET CONNECTED

Preparedness is all about people.

Build your support network.

MAKE A PLAN

Know where to go, what to do, and who can help.

Share your plan with your support network.

GATHER SUPPLIES

Create a Go Kit with supplies you can easily take with you.

Assemble a Home Kit with supplies for sheltering in place.

STAY INFORMED

Get alerts and know your local resources.


Get Connected
The first step in disaster preparedness is building a support network of people who can help

Preparedness is all about People

Our social connections help us respond better to challenges during emergencies.

Social connections also provide physical and mental health benefits to improve your ability to react to disasters.

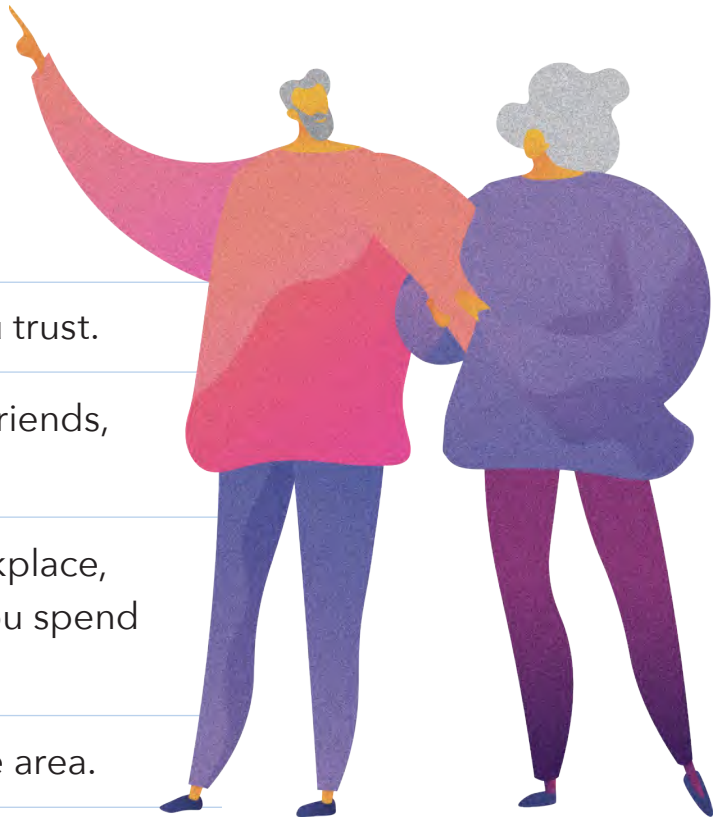
Think about the groups that you already belong to or could join:

- Volunteer groups
- Faith-based groups
- Co-workers
- School-based groups
- Neighborhood groups
- Exercise groups
- Support groups

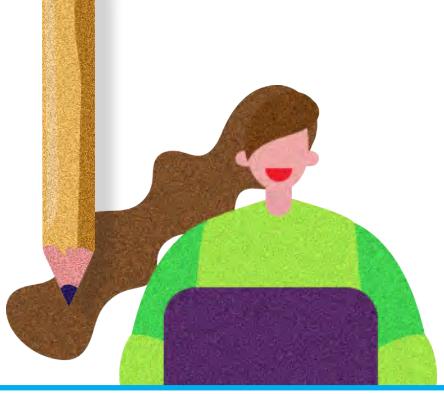
During an emergency or disaster, you and members of your community can come together to help each other.

Build your Support Network

Your support network can include anyone who can provide help during an emergency.



- Include a minimum of three people you trust.
- Consider family members, neighbors, friends, coworkers, and personal attendants.
- Organize networks for your home, workplace, volunteer sites, and any other places you spend a lot of time.
- Include one contact that lives out of the area.
- Network members should know your capabilities and limitations.
- Disasters can be stressful and overwhelming. Include people that are supportive when you are under stress.



CONTACTS

Name/Relationship

Home Phone | Cell Phone

Other Phone | Email

Name/Relationship

Home Phone | Cell Phone

Other Phone | Email

Name/Relationship

Home Phone | Cell Phone

Other Phone | Email

OUT-OF-AREA CONTACTS

Name/Relationship

Home Phone | Cell Phone

Other Phone | Email

Name/Relationship

Home Phone | Cell Phone

Other Phone | Email

Planning with your Support Network

Communicating with Your Network Members

- Share your disaster plan with your support network.
- Ask your network to notify you when an emergency arises.
- Agree on how you will contact each other during an emergency.
- When possible, text instead of calling during an emergency.
- Consider giving a trusted member of your network keys to your home and car.
- Choose an emergency meeting place where you can reunite.
- Show members of your network how to operate your medical equipment and assistive devices.
- If you have a service animal, make sure it knows and trusts the people in your network.

To learn more about the **NET** program or to connect with a **NET** member in your area.

readysd@sdcounty.ca.gov

858-565-3490

Neighborhood Evacuation Team

Connect with your Neighborhood Evacuation Team

The **Neighborhood Evacuation Team (NET)** pairs trained **Community Emergency Response Team** members with individuals who may have difficulty evacuating during an emergency.

Neighborhood Evacuation Team members can help you:

- Prepare and review your evacuation plan
- Identify emergency contacts
- Register for **AlertSanDiego** and learn about other emergency communication tools
- Connect you with other resources to help you better prepare for disasters

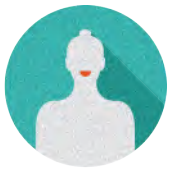
CERT COMMUNITY EMERGENCY RESPONSE TEAM

- Join a **Community Emergency Response Team (CERT)**: ReadySanDiego.org/get_involved

Call 2-1-1 to connect to resources

Free, 24 hour, confidential phone service in 200+ languages and a searchable online database. Trusted local, nonprofit organization providing access to 6000+ community, health, and disaster services such as:

- Food Assistance
- Housing & Utilities
- Disaster Relief & Prevention
- Financial & Legal Assistance
- Transportation
- Health, Nutrition & Primary Care
- Military & Veteran Services
- Enrollment Services



TALK

LIVE CHAT

SEARCH

ENROLL

If you have limitations hearing or speaking, a specially-trained **California Relay Service Communications Assistant** can relay telephone conversations for all of your calls. Dial **7-1-1** and ask to be connected with **2-1-1** at **(858) 300-1211**.

Facebook
211sandiego

Twitter
@211sd

Instagram
211sd

Food Assistance

Housing & Utilities

Disaster Relief
& Prevention

Financial &
Legal Assistance

Transportation

Health, Nutrition
& Primary Care

Military & Veteran
Services

Enrollment Services


Make
a Plan
NEWS
PASSPORT

Your Home

Emergency planning starts in your home

- Install smoke and carbon monoxide detectors on every level of your home and test regularly. If you are deaf or have hearing loss, install a system with flashing lights or vibrations. Call **2-1-1** if you need help installing smoke alarms.
- Know the location of utility valves and learn how to disconnect them during an emergency.

Write down the locations of utilities

Gas Valve: *

Water Valve:

Circuit Breaker:

Garage Door Manual Override:

Insurance Coverage

- Talk with your insurance agent to be sure that you have adequate insurance coverage. Typical homeowner's or renter's insurance may not provide full coverage for all hazards such as flooding, wildfires, or earthquakes.
- Inventory your possessions so you may claim reimbursement in case of loss or damage.

* *If you smell gas, hear a hissing sound, or suspect a leak, turn off the main gas valve, open windows, and leave the area immediately. Do not light candles or strike matches. Only shut off the gas if you suspect a leak, because only the gas company can restore service.*

Evacuation Plan

- **Know your evacuation routes.** Find the location of all exits, including doors and windows in each room.
- **Evacuate early.** If you have medical or mobility concerns, or pets or service animals, prepare to leave when an Evacuation Warning is issued instead of waiting for a mandatory Evacuation Order.
- **Plan for unique needs.** Consider the ability of you and your loved ones to evacuate, use stairs, and access transportation. Arrange help from your support network or call **2-1-1** for assistance before an emergency.
- **Meeting places.** Know where you will meet your friends and family after an emergency. Pick two places to meet, one right outside your home and meeting place outside of your neighborhood.

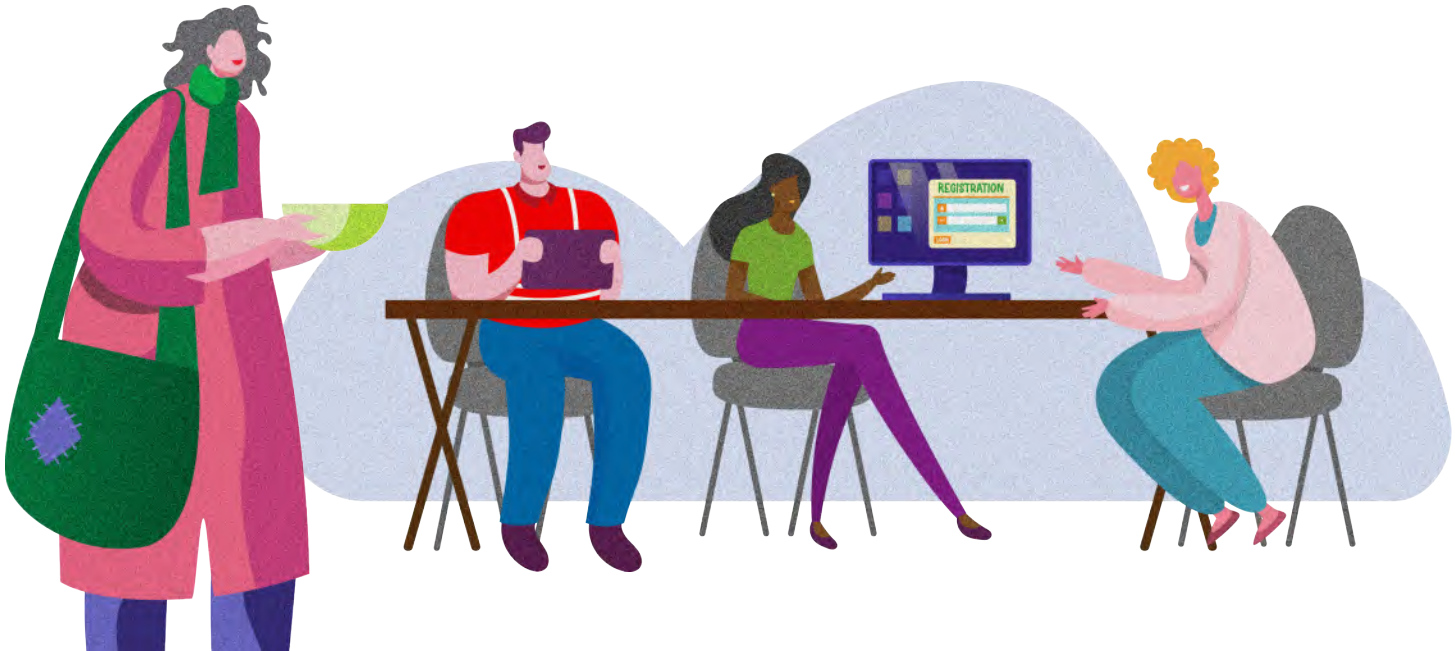
Meeting place close to home:

Meeting place outside of your neighborhood:

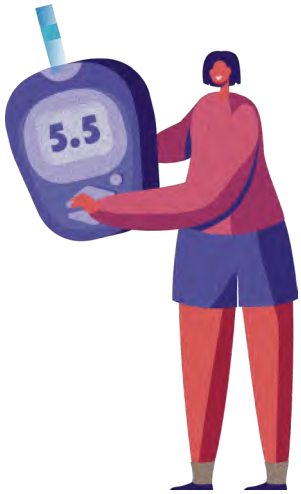
Emergency Shelters

If an emergency requires you to evacuate, consider going to a hotel, a friend or relative's home, or a shelter. Emergency shelters may be set up in schools, community buildings, and places of worship.

- Shelters provide food, water, and basic supplies.
- Bring items you need, including medical equipment.
- Shelters will be accessible and can meet needs of people with different abilities. Service animals are allowed.
- Shelters follow public health safety recommendations, such as social distancing during the COVID-19 pandemic.
- Call **2-1-1** or visit **AlertSD.org** to find a shelter near you.



Planning for Your Medical Equipment



- Attach instruction cards on how to use and move each item in case of evacuation.
- Identify critical supplies (such as catheters, colostomy supplies, etc.) that must be taken.
- If you rely on electric medical equipment, ask your medical supply company about a back-up power source, and ask your utility company about programs you may be eligible for.
- If you depend on dialysis or other life-sustaining treatment, know the location of more than one treatment facility.

- To request a free **Vial of LIFE** kit, please call: **1-800-339-4661**
- Fill out the medical information form included on the following pages or for a version with large print and different languages visit **readysandiego.org/make-a-plan/**
- Make copies and store in your wallet or purse. Share a copy with members of your support network.

Vial of LIFE

The **Vial of LIFE** program has saved countless lives by providing emergency responders with life-saving medical information. Store the **Vial of LIFE** envelope on your refrigerator.

Each Vial of LIFE kit includes:

- **A medical information form.** List your medical conditions, medications, emergency contacts, insurance, and hospital preference.
- **A vinyl envelope and magnet.** Place the completed medical form in the envelope and store it on the outside of your refrigerator. Add a copy of your power of attorney for health care and health care directive.
- **A Vial of LIFE sticker.** Place on the door jamb of your front door or a front window. This informs emergency responders that you completed a **Vial of LIFE**.

VIAL OF LIFE

LIVE WELL SAN DIEGO
LIVEWELLSD.ORG

Information & Assistance
1-800-339-4661
Updated On
____/____/____

Name _____

☐ Blind ☐ Deaf ☐ Alzheimer's Disease or Related Dementia

Address _____ City _____ Zip _____

Phone # _____ Male ☐ Female ☐ Date of Birth _____

Social Security Number (last four digits) _____

Medicare Number (last four digits) _____

Other Insurance _____ Policy Number _____

Do you have an Advance Health Care Directive? Yes ☐ No ☐

If yes, location _____ Agent _____ Phone # _____

Do you have a "Do Not Resuscitate Order" Yes ☐ No ☐

Registered with Sheriff's "Take Me Home"? Yes ☐ No ☐

Emergency Contacts

Name _____ Relationship _____ Phone # and E-mail _____

Name _____ Relationship _____ Phone # and E-mail _____

Caregiver _____ Phone # and E-mail _____

Clergy _____ Phone # and E-mail _____

Pet's Information Name & Type _____

Veterinarian _____ Phone # _____

Medical Information

Primary Doctor _____ Phone # _____

Secondary Doctor _____ Phone # _____

Hospital _____ Phone # _____

Height _____ Weight _____ Blood Type _____

Normal Bood Pressure _____

Allergies to drugs or foods _____

Please list any medical conditions that apply (for example: cardiac, diabetes, hypertension, stroke) _____

Surgeries (type and date)

Do you?

Wear dentures?	Yes ☐	No ☐	Wear glasses?	Yes ☐	No ☐
Wear contacts?	Yes ☐	No ☐	Use Oxygen?	Yes ☐	No ☐
Wear hearing aids?	Yes ☐	No ☐	Wheelchair?	Yes ☐	No ☐

Other Important Emergency Information

Immunizations

Where do you keep your medications?

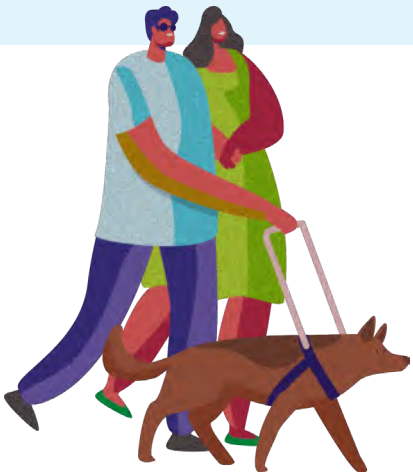
Medications
(Prescription, Over-the-counter Drugs, Vitamins, Herbal Supplelments)

Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose

Please record all information in a manner easy to read by emergency medical personnel.

Planning for Different Circumstances

Disasters are challenging for everyone. We benefit from understanding our own needs and the unique needs of our friends, neighbors, and family members. Disaster preparedness is an individual and a community effort. Review the tips below to help prepare for a variety of circumstances.



People with Pets or Service Animals

- Get your pet an ID tag. Ask for a free or discounted microchip.
- Pack food, water, medicine, and proof of immunization.
- Dial **2-1-1** for local animal service resources.

Older Adults

- Clear your home of clutter to prevent falls.
- If you receive home care, ask about their plans for emergencies.
- If you live in a retirement community, learn about their emergency plan.
- Consider getting a medical alert system so you can call for help.

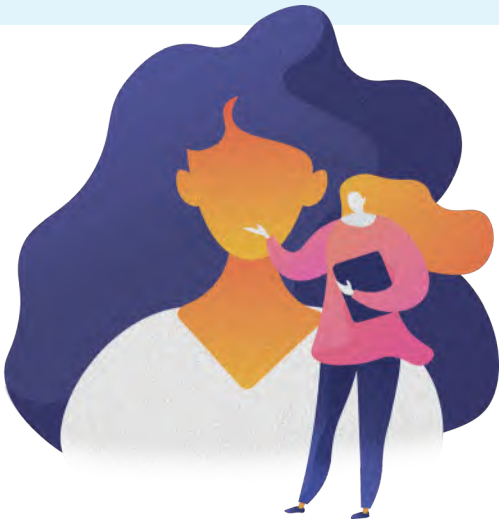
Rural Communities

- Share alerts through phone trees and ham radio networks.
- Meet with neighbors to discuss collaboration.
- Plan for evacuating large animals.

People with Developmental Disabilities

- Practice your disaster plan with your support network to help you feel safe.
- Ask emergency responders to repeat directions if you don't understand.
- Practice how you might quickly describe your disability to a rescuer.

People with Speech/Communication Disabilities



- Carry an instruction card on how to communicate with you.
- Carry communication devices, phrase cards, or picture boards, like on page 43 and 44.
- Know how to replace your assistive device if damaged.

People with Mobility or Other Physical Disabilities

- Identify paratransit or accessible transportation options.
- Plan for damaged ramps, rails, or elevators.
- Bring an extra wheelchair battery, tire repair kit, and seat cushion.

People who are Blind or who have Low Vision

- Mark emergency supplies with Braille or large print.
- Keep a Braille or deaf-blind communication device in your emergency supply kit.
- Keep Braille/text communication cards for two-way communication.

People with Dementia

- Move to a quieter place to avoid agitation. Limit stimulation.
- Redirect the person's attention if he or she becomes upset.
- Find outlets such as taking a walk or engaging in simple tasks.
- Avoid elaborate explanations. Use concrete terms.

Pregnant women and families with infants

- Find out where to get prenatal or well-baby checkups if your doctor's office closes.
- Include baby care supplies in your **Go Kit**.
- Tell shelter staff if you have a baby or have issues with your pregnancy.

Transportation Challenged

- Arrange for rides with neighbors if you must evacuate.
- Call **2-1-1** to identify transportation service providers in your area.
- Ask if public transit or ride share services may be free after a disaster.

People who speak Limited English

- Find trusted community sources to talk to about safety options.
- Call **2-1-1** for information in over 200 languages.
- Ask a bilingual person to share safety steps with you.
- Know which of your media sources provide emergency alerts.

New Californians

- Learn emergency system basics, like dialing **2-1-1** for non-emergencies and **9-1-1** for emergencies.
- Ask your community how disasters here are different.
- Find trusted sources in emergencies beyond the government.

Planning for Different Emergencies

In this section you will find tips on what to do in different disaster situations.

Fires

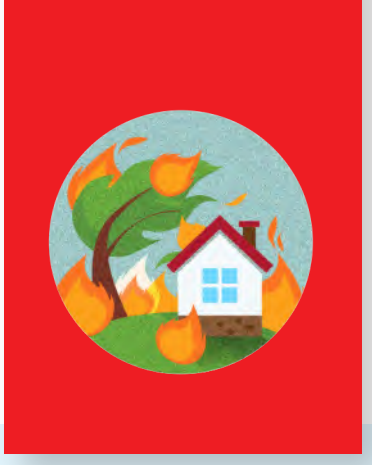
Power Outages

Tsunamis

Floods

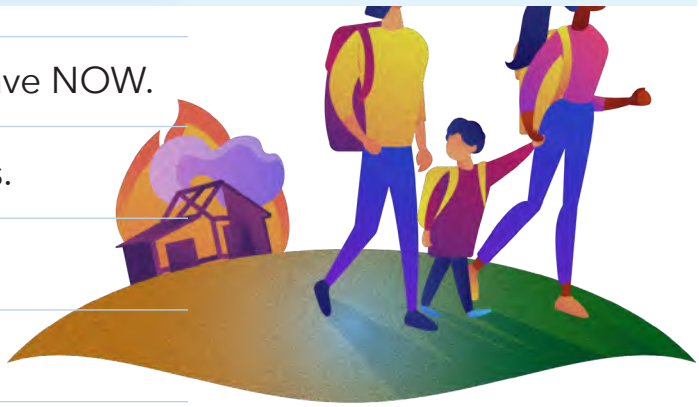
Heat Waves

Earthquakes



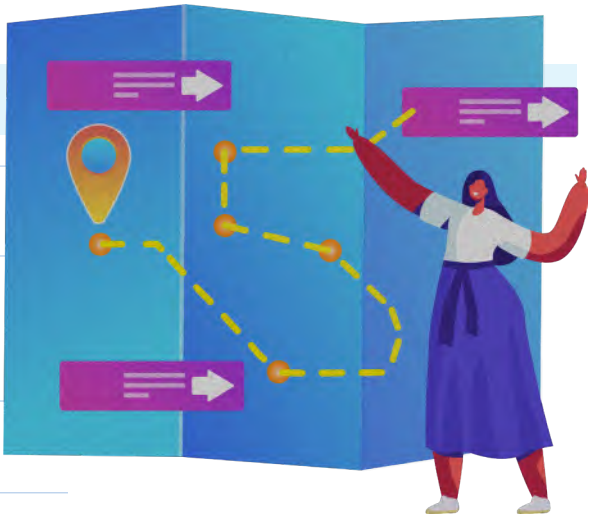
Fires

Before:



- Evacuation warning means prepare to leave NOW.
- Plan for no electricity. Do not use candles.
- Get a bandana or mask to protect lungs.
- Plan escape routes from each room.
- Clean gutters. Remove brush near home. Call **2-1-1** to see if local Fire Safe Councils can assist.

During:



- Evacuation order means you must leave NOW.
- Don't "wait and see." Leave immediately when ordered to evacuate.
- When a door feels hot, do not open it.
- If trapped, close doors and windows to keep smoke out.
- If your clothes are on fire, Stop, Drop and Roll.
- Leave smoky areas quickly. Stay low to the ground as smoke rises.

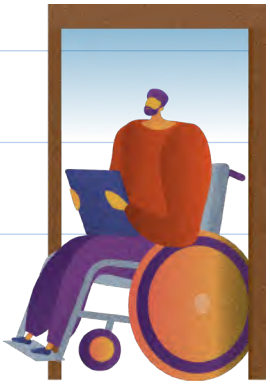
Earthquakes

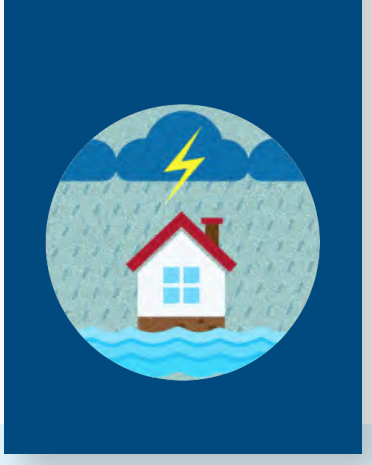
Before:

- Secure furniture to walls.
- Identify safe spots in each room, like sturdy tables and desks.
- Identify dangerous spots near windows, mirrors, and hanging objects.
- Learn how to shut off gas, water, and electricity.

During:

- Don't rush outside. Get under a desk or table.
- If outside, move away from buildings, trees, streetlights, or powerlines.
- If driving, pull over and stop away from buildings and trees.
- Using a wheelchair: Go into a doorway, lock wheels, cover head and neck.
- Be ready for aftershocks.
- Watch for tsunamis on the coast.





Flooding

Before:

- Keep storm pipes and drains clear.
- Move valuables to higher floors.
- Monitor TV and radio for flood watches or warnings.
- Learn best escape routes to higher ground.
- Use sandbags to divert water.

During:

- Don't "wait and see." Leave immediately when ordered to evacuate.
- Never walk, swim, or drive through moving water. Remember, Turn Around, Don't Drown.
- Watch for mudslides.
- Avoid downed powerlines.
- If instructed, turn off water and electricity and unplug appliances.

Power Outages

Before:

- Prepare flashlights – no candles.
- Keep an emergency backup phone charger.
- Buy food that won't spoil and doesn't need cooking.
- Keep car gas tank at least half full.

During:

- Unplug appliances/electronics to prevent damage.
- Leave one light plugged in.
- Keep your refrigerator and freezer door closed.
- Do not use your gas stove for heat.
- Use generators, camp stoves, and grills outdoors.

Be prepared for public safety power shutoff

San Diego Gas & Electric® (SDG&E®) sometimes turns power off in fire-prone areas during adverse weather conditions as a safety precaution. This is known as a **Public Safety Power Shutoff (PSPS).** While these events are more likely to occur in high fire-risk areas, all San Diegans could be affected and should be prepared. **SDG&E** aims to send early notifications via phone calls, text alerts, emails and other means before turning off power.

Stay informed during PSPS

Update Your Contact Information and/or Sign Up for Outage Notifications

Visit **sdge.com/notifications** or call **1-800-411-7343** to update your contact information and/or sign up to receive voice, text and/or email notifications, even if you don't have an **SDG&E** account.

Community Resource Centers

SDG&E may open **Community Resource Centers** near affected communities during a PSPS event. Visitors can receive preparedness materials, ice, water, snacks,

SDGE®

Follow SDG&E on social media and the NewsCenter for updates during a PSPS

Facebook: facebook.com/SanDiegoGasandElectric

Twitter: twitter.com/SDGE

Instagram: instagram.com/sdge

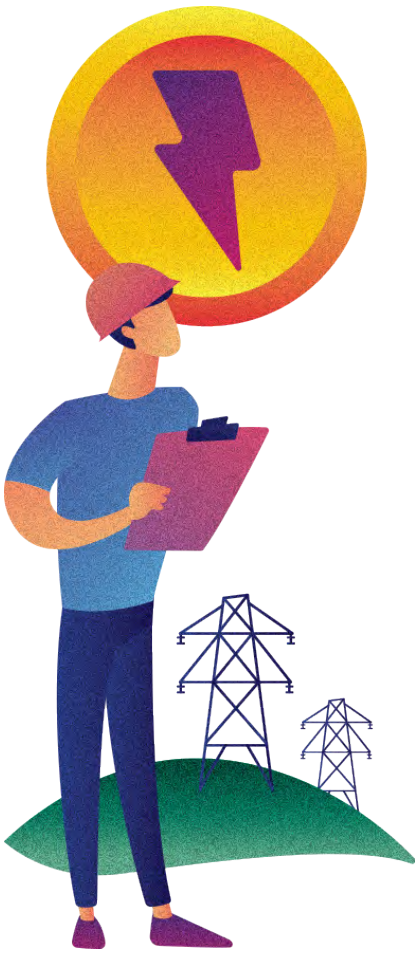
Nextdoor: San Diego Gas & Electric

NewsCenter: sdgenews.com

charging for mobile devices, small solar powered batteries, radios and up-to-date information about the shutoff event. Public health protocols may also be in place including social distancing measures, routine deep cleaning and drive through service. Learn more at **sdge.com/resource-centers**.

Event Duration/Backup Generation

A PSPS event will require power to remain out for as long as a threat to public safety and to the electric system continues. Before power can be restored, crews must inspect power lines and equipment and make any needed repairs.



You are encouraged to explore safe, alternative power sources to operate your critical equipment during PSPS events. For additional information on choosing a generator or an alternative back-up system, please consult a licensed electrician and **SDG&E**. Learn more at **sdge.com/generator**.

Medical Baseline Allowance program

If you or someone in your household has a qualifying medical condition or needs certain in-home medical equipment, you may be eligible for more electricity or natural gas at a lower rate. The person with the qualifying medical condition must live at the address on the application, and the medical equipment must be for home-use only. This program can also help by providing extra notifications in advance of a PSPS event. Learn more at **sdge.com/medicalbaseline**.

CARE and FERA programs

CARE and **FERA** are two **SDG&E** programs that can provide you with a monthly discount on your bill.

- **California Alternate Rates for Energy (CARE)**
  30% or more monthly bill discount.
- **Family Electric Rate Assistance (FERA)**
  18% monthly bill discount. **FERA** is only open to households with three or more people.

Learn more about qualifications, income guidelines, and apply to these programs at **sdge.com/CARE**.

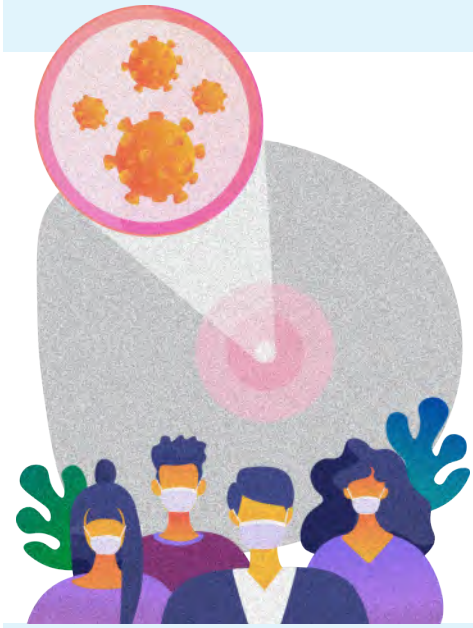
Energy Savings Assistance program

Energy-efficient home improvements can make your home more comfortable, save you money now, and for years to come. You may be eligible to receive low- or no-cost products and installation. Learn more and apply at **sdge.com/ESA**.

Access & Functional Needs (AFN) Resources

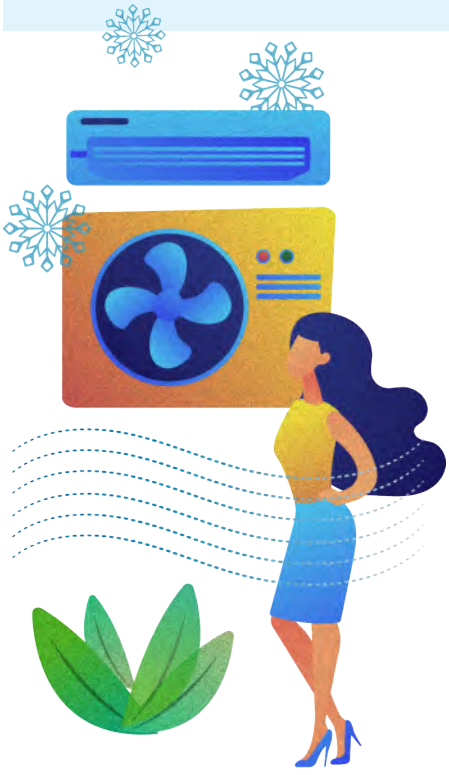
SDG&E and **2-1-1** San Diego partner to support individuals with Access and Functional Needs. Information and services are provided to increase preparedness and self-resilience during PSPS events and emergencies. Services may include assisted transportation, backup power, preparedness items, food security, temporary shelter and welfare checks. Learn more at **211SanDiego.org** or dial **2-1-1**.

Tips for other Emergencies



Pandemics and Public Health Emergencies

- Store a two-week supply of water and food.
- Keep prescription drugs on hand.
- Wash hands frequently.
- Cover coughs or sneezes.
- Stay home if you are sick.



Extreme Heat

- Seek air conditioning or a fan.
- Go to libraries, shopping malls, or call **2-1-1** to find a designated cool zone or visit **coolzones.org**.
- Take a cool bath.
- Drink cool, non-alcoholic, non-caffeinated beverages.
- If you feel ill, call a doctor or **9-1-1** immediately.

Extreme Cold

- Stay indoors.
- Wear warm, comfortable, dry clothing.
- Watch for frostbite, hypothermia, or overexertion.
- Do not use a charcoal or gas grill for heat inside your home.

Tsunami

- Move to higher ground, inland and/or to a higher floor.
- Listen to your radio or TV for emergency instructions.
- Leave immediately if ordered to do so.
- Do not go sightseeing – stay away from the coast.
- Do not return to the hazard zone until local safety officials give the "all clear."

Terrorism

- Report suspicious activities to authorities.
- Do not accept packages from strangers.
- Follow instructions from emergency officials.
- Be ready for instructions to shelter in place or evacuate.
- Remain calm, patient, and contact someone in your personal support network.

For more information on responding to specific emergencies, visit the County's preparedness website: ReadySanDiego.org

Evacuation Warning: The alerting of people in an affected area of potential threat to life and property. An Evacuation Warning considers the probability that an area will be affected in the near future and prepares people for a potential Evacuation Order. Vulnerable populations such as people with disabilities, with access or functional needs, and/or large animals should leave now.

Evacuation Order: Requires immediate movement out of an affected area due to an imminent threat to life.

Shelter in Place: Go inside. Shut and lock doors and windows. Prepare to self-sustain until further notice and/or contacted by emergency officials.


Gather Supplies
MEDICATION LIST
ID CARD
PASSPORT

Go Kit

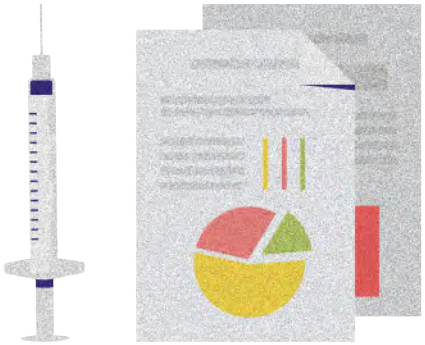
Most disasters are unexpected and happen fast. You might not have time to shop or pack. Pack a "Go Kit" for when you must leave in a hurry.

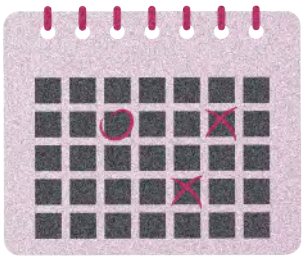
Check off items you have and add those you will need:

- ☐ Bottled water and nonperishable food, such as granola bars
- ☐ Copies and/or a USB flash drive of your important documents in a waterproof container (identification, insurance, photos of family and pets for identification)
- ☐ List of the medications you take, why you take them, and their dosages
- ☐ If any medication needs to be refrigerated, keep an extra ice pack in the freezer
- ☐ Contact information for your household and members of your support network
- ☐ Flashlight, hand-crank or battery-operated AM/FM radio, and extra batteries
- ☐ Cash, in small bills
- ☐ Notepad and pen
- ☐ Antibacterial wipes and hand sanitizer

- ☐ Face mask or bandana
- ☐ Back-up medical equipment (e.g., glasses, batteries) and chargers
- ☐ Aerosol tire repair kits and/or tire inflator to repair flat wheelchair or scooter tires
- ☐ Supplies for your service animal or pet (food, extra water, bowl, leash, cleaning items, vaccination records, and medications)
- ☐ Portable cell phone chargers
- ☐ This guide

Other items you will need:





Home Kit

In some emergencies, you may be safer staying at home. You may not have water to drink or be able to flush the toilet. You may not have electricity to keep your food cold, turn on the light, or charge your phone. Prepare a "Home Kit" to survive for at least three days without water or electricity.

Check off items you have and add those you will need:

- ☐ One gallon of drinking water, per person, per day
- ☐ Food that won't spoil, like ready-to-eat canned foods, and a manual can opener
- ☐ First-aid kit
- ☐ Medications, including a list of the medications you take, why you take them, and their dosages
- ☐ Flashlight or battery-powered lantern, battery-operated AM/FM radio, and extra batteries, or wind-up radios that do not require batteries
- ☐ Whistle or bell
- ☐ Back-up medical equipment, if possible (e.g., oxygen, medication, scooter battery, hearing aids, mobility aids, glasses, facemasks, gloves)
- ☐ Style and serial numbers of medical devices (such as pacemakers) and usage instructions

Other personal items:

TIP: Your hot water heater is a source of water. Turn off the power and let the water cool. To get water, place a container underneath and open the drain valve on the bottom of the tank.

Communication Tools

During an emergency, your normal way of communicating may be impacted by changes in environment, noise, service disruptions, or confusion.

If you are blind or have low vision, practice explaining to others how to guide you.

If you are Deaf or hard of hearing, find alternate ways to communicate your needs, such as through gestures, note cards, or text messages. Keep communication cards in your emergency supply kits.

I need a translator

Necesito un traductor

Tôi cần một người phiên dịch

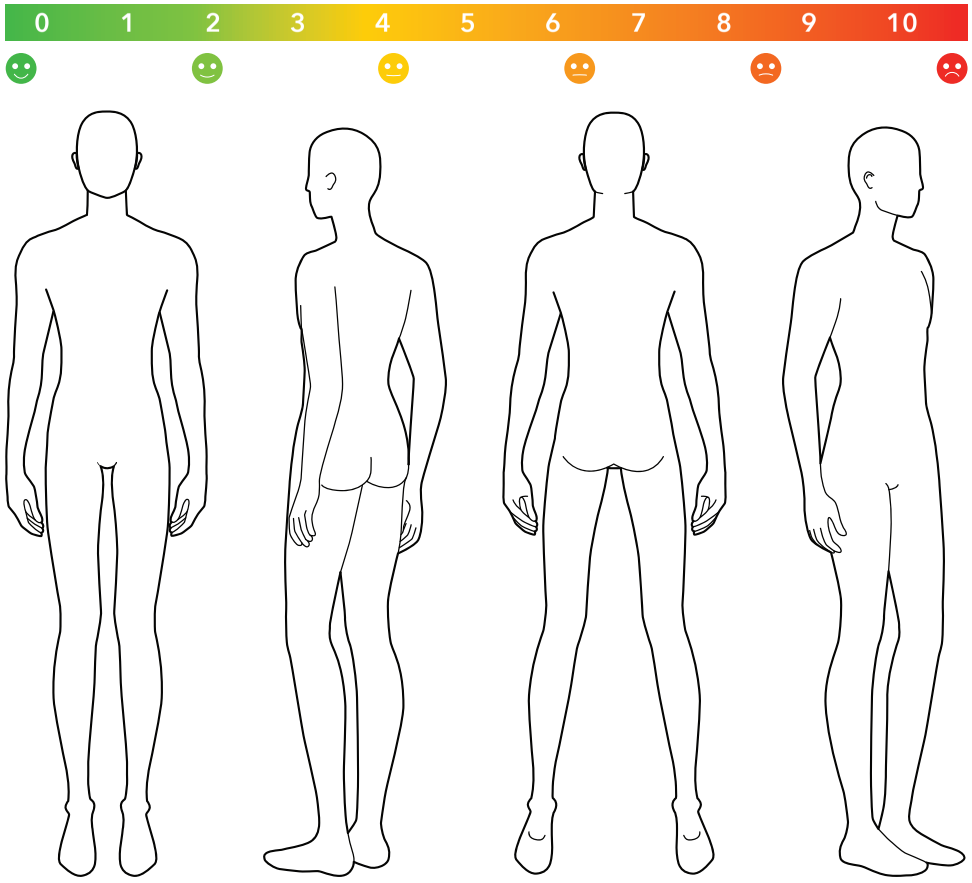
انا بحاجة الى الترجمة

Kailangan ko ng tagasalin

我需要翻

A	B	C	D	E	F	G	H	I	J
K	L	M	N	Ñ	O	P	Q	R	S
T	U	Ü	V	W	X	Y	Z		
1	2	3	4	5	6	7	8	9	0
.	'	,	?	!	+	-	SPACE		

PAIN CHART | LEVEL OF PAIN




Dull


Sharp


Radiating

I want pain medicine


Shot


One pill


Two pills


Itches


Stings


Hurts/aches


Burns


Can't move/numb


How am I doing?


What day/time?


What is happening?


When is tube coming out?


IV


Remove restraints


Excercise


Massage


leave me alone

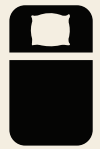

Don't leave


Come back later


Prayer


Bathroom

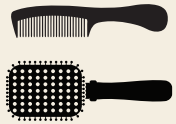

Cool cloth


Pillow/blanket


Glasses/Socks


Wash face


Shampoo/Bath


Comb/Brush


Teeth brushed

I AM


Short of breath


In pain


Choking


Feeling sick


Hungry/Thirsty


Cold/Hot


Tired


Dizzy

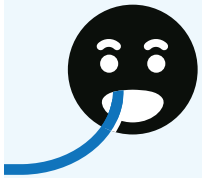

Angry

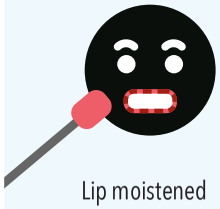

Afraid


Frustrated


Sad

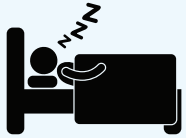
I WANT


To be suctioned


Lip moistened


Water/Ice


To be comforted


To sleep


TV/Video/DVD


Call light/Remote


It quiet


Lights Off/On

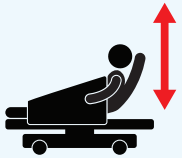

To go home


To sit up


To lie down


To turn left


To turn right

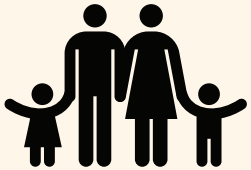

Head of bed up/down


Get out of bed

I WANT TO SEE


Doctor


Nurse


Family


Chaplain


Pen/Paper

Thank you

I Love you ❤

For infection control purposes, please do not reuse this board between patients.


SD County Emergency
ReadySanDiego
Plan, Prepare
Emergency
Disaster Info, Maps, Shelters
Recovery
Resources, Assi
Disaster Info | Refreshed:
PT
Excessive Heat Warning Is
8/14/20,12:00 p.m. throug
Fri Aug 14, 2020 12:00 PM
Excessive Heat Warning
ued Today,
7/30/20,11:00 a.m. through 8/02/20, 9:00 p.m.
ASL/Audio
Stay Informed
SanDiegoCounty.gov
211

Stay Informed

ReadySanDiego.org
Prepare. Plan. Stay Informed.

AlertSanDiego
Get signed up. Get notified.

ACCESSIBLE AlertSanDiego
Get signed up. Get notified.

San Diego County

Twitter.com/ReadySanDiego

Facebook.com/ReadySanDiego

- County's preparedness website: **ReadySanDiego.org**
- Register your cell phone number, VoIP phone number and email at **ReadySanDiego.org/AlertSanDiego.** This is the County's emergency mass notification system used by first responders to send evacuation instructions and other disaster information through calls, text, and email.
- Download the free **SD Emergency App**, available in English and Spanish for iOS and Android mobile devices. Visit **ReadySanDiego.org/SDEmergencyApp**.
- During an emergency, visit **AlertSD.org** or the **SD Emergency App** for incident updates, shelter locations, evacuation areas, hazard perimeters, official social media feeds, and more.
- The main **Emergency Alert System** radio stations for San Diego County are ***KOGO AM 600*** and ***KLSD AM 1360***.
- For recovery information, visit **RecoverSD.org**.
- For non-emergency questions and updated disaster information, call **2-1-1**.
- If you are experiencing a life-threatening emergency, call **9-1-1**.

Getting Support

Disasters can be stressful and overwhelming. You may feel irritable, sad, or angry. You may experience headaches or not be able to sleep.

Talk to someone about your feelings, even though it might be difficult.

Look to your support network or seek help from a professional.

San Diego Access and Crisis Line

If you need support, experienced counselors are available 7 days a week/24 hours a day to provide you with a referral to meet your needs and help determine eligibility for mental health or substance use services.

- Call **(888) 724-7240** or visit our web site: **www.sandiegocounty.gov/hhsa/programs/bhs**

National Alliance on Mental Health (NAMI) San Diego

You can connect with a trained crisis counselor to receive free crisis support 24 hours a day.

- Text **NAMI** to **741-741** or call **(888) 523-5933**

National Suicide Prevention Lifeline and Veterans Crisis Line

We can all help prevent suicide. The Lifeline provides 24/7, free and confidential support for people in distress, prevention and crisis resources for you or your loved ones, and best practices for professionals.

- Call **(800) 273-8255** or call **9-8-8**

County of San Diego
www.sandiegocounty.gov
(800) 694-3900

Office of Emergency Services
www.sandiegocounty.gov/oes
(858) 565-3490

Listos California
www.listoscalifornia.org
(916) 845-8510

Thank you to the **County of San Diego Health and Human Services Agency**, Aging & Independence Services for their contributions to this guide. For aging resources, visit www.aging.sandiegocounty.gov

WILDFIRE IS COMING. ARE YOU READY TO...

GO!

WILDFIRE EVACUATION GUIDE.

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
CAL FIRE
SINCE 1885

GIVE YOUR FAMILY THE BEST CHANCE OF SURVIVING A WILDFIRE BY EVACUATING EARLY.

ReadyForWildfire.org

TAKE ACTION IMMEDIATELY WHEN WILDFIRE STRIKES

Follow these steps as soon as possible to get ready to Go!

1. Review your Evacuation Checklist.
2. Ensure your Emergency Supply Kit is in your vehicle.
3. Cover up to protect against heat and flying embers. Wear long pants, long sleeve shirt, heavy shoes/boots, cap, dry bandanna for face cover, goggles or glasses. 100% cotton is preferable.
4. Locate your pets and take them with you.

WHEN TO EVACUATE

Leave as soon as evacuation is recommended by fire officials to avoid being caught in fire, smoke or road congestion. Don't wait to be ordered by authorities to leave. Evacuating early also helps firefighters keep roads clear of congestion, and lets them move more freely to do their job. In an intense wildfire, they may not have time to knock on every door. If you are advised to leave, don't hesitate!

- Officials will determine the areas to be evacuated and escape routes to use depending upon the fire's location, behavior, winds, terrain, etc.
- 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 to your radio/TV for announcements from law enforcement and emergency personnel.
- You may be directed to temporary assembly areas to await transfer to a safe location.

The terms "Voluntary" and "Mandatory" are used to describe evacuation orders. However, local jurisdictions may use other terminology such as "Precautionary" and "Immediate Threat." These terms are used to alert you to the significance of the danger. All evacuation instructions provided by officials should be followed immediately for your safety.

WHAT TO DO IF YOU BECOME TRAPPED

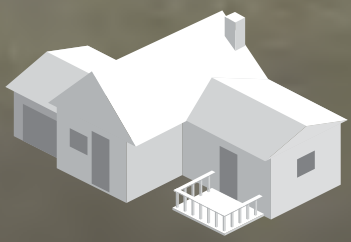
WHILE IN YOUR VEHICLE:

- Stay calm.
- Park your vehicle in an area clear of vegetation.
- Close all vehicle windows and vents.
- Cover yourself with a wool or cotton blanket or jacket.
- Lie on vehicle floor.
- Use your cell phone to advise officials—**Call 911.**

WHILE ON FOOT:

- Stay calm.
- Go to an area clear of vegetation, a ditch or depression on level ground if possible.
- Lie face down and cover up your body.
- Use your cell phone to advise officials—**Call 911.**

WHILE IN YOUR HOME:



- Stay calm and keep your family together.
- **Call 911** and inform authorities of your location.
- Fill sinks and tubs with cold water.
- Keep doors and windows closed, but unlocked.
- Stay inside your house.
- Stay away from outside walls and windows.

PRE-EVACUATION PREPARATION STEPS

When an evacuation is anticipated, follow these checklists (*if time allows*) to give your home the best chance of surviving a wildfire:

OUTSIDE

- ☐ 1 Gather up flammable items from the exterior of the house and bring them inside (patio furniture, children's toys, door mats, trash cans, etc.) or place them in your pool.
- ☐ 2 Turn off propane tanks.
- ☐ 3 Move propane BBQ appliances away from structures.
- ☐ 4 Connect garden hoses to outside water valves or spigots for use by firefighters. Fill water buckets and place them around the house.
- ☐ 5 Don't leave sprinklers on or water running; they can affect critical water pressure.
- ☐ 6 Leave exterior lights on so your home is visible to firefighters in the smoke or darkness of night.
- ☐ 7 Put your Emergency Supply Kit in your vehicle.
- ☐ 8 Back your car into the driveway with vehicle loaded and all doors and windows closed. Carry your car keys with you.
- ☐ 9 Have a ladder available and place it at the corner of the house for firefighters to quickly access your roof.
- ☐ 10 Seal attic and ground vents with pre-cut plywood or commercial seals.
- ☐ 11 Monitor your property and the fire situation. Don't wait for an evacuation order if you feel threatened and need to leave.
- ☐ 12 Check on neighbors and make sure they are preparing to leave.

INSIDE THE HOUSE

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

ANIMALS

- ☐ 19 Locate your pets and keep them nearby.
- ☐ 20 Prepare farm animals for transport and think about moving them to a safe location early.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NEIGHBORING
PROPERTY

KNOW THE LAW
BE READY TO EVACUATE

CALIFORNIA LAW AUTHORIZES OFFICERS TO RESTRICT ACCESS TO ANY AREA WHERE A MENACE TO PUBLIC HEALTH OR SAFETY EXISTS DUE TO A CALAMITY SUCH AS FLOOD, STORM, FIRE, EARTHQUAKE, EXPLOSION, ACCIDENT OR OTHER DISASTER. REFUSAL TO COMPLY IS A MISDEMEANOR. (PENAL CODE 409.5)

HOW TO BE PREPARED
BEFORE WILDFIRE STRIKES

DEVELOP AN ACTION PLAN THAT INCLUDES:

Where to Go

Have a safe destination planned. It should be a low-risk area, such as a well-prepared friend's or relative's house, an evacuation center, motel, etc.

How To Get There

Plan several travel route options in case one route is blocked by the fire or by emergency vehicles and equipment.

What To Take

Assemble your emergency supply kit long before a wildfire or other disaster occurs. Plan to be away from your home for at least three days. Don't forget to plan for your pets or livestock as well.

For more information on preparing your family, pets and property for wildfire see the Ready for Wildfire "Are You Set?" brochure or visit ReadyforWildfire.org/set.

RETURNING HOME
AFTER A WILDFIRE

Do not return to your home until fire officials determine it is safe. Notification that it is safe to return home will be given as soon as possible considering safety and accessibility.

When you return home:

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

READY, SET, GO! PREPARATION GUIDES

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WILDFIRE IS COMING PREPARATION GUIDES:

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CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
CAL FIRE
SINCE 1885

Go to ReadyForWildfire.org for more detailed information on all three guides to prepare for and survive a wildfire.

WILDFIRE IS COMING. ARE YOU...

READY?

DEFENSIBLE SPACE AND HARDENING YOUR HOME.

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
CAL FIRE
SINCE 1885

THOUSANDS OF WILDFIRES STRIKE CALIFORNIA EVERY YEAR. IT'S NOT A MATTER OF IF YOUR HOME IS AT RISK, BUT WHEN.

ReadyForWildfire.org

PLANT AND TREE SPACING

The spacing between grass, shrubs, and trees is crucial to reduce the spread of wildfire. The spacing needed is determined by the type and size of the shrubs and trees, as well as the slope of the land. For example, a property on a steep slope with larger plant life will require greater spacing between trees and shrubs than a level property that has small, sparse vegetation.

VERTICAL SPACING

Remove all tree branches at least 6 feet from the ground.

If shrubs are under trees, additional vertical space is needed. Lack of vertical space can allow a fire to move from the ground to the shrubs to the treetops like a ladder.

FIRE-SAFE LANDSCAPING

Fire-safe landscaping isn't necessarily the same thing as a well-maintained yard. Fire-safe landscaping uses fire-resistant plants that are strategically planted to resist the spread of fire to your home.

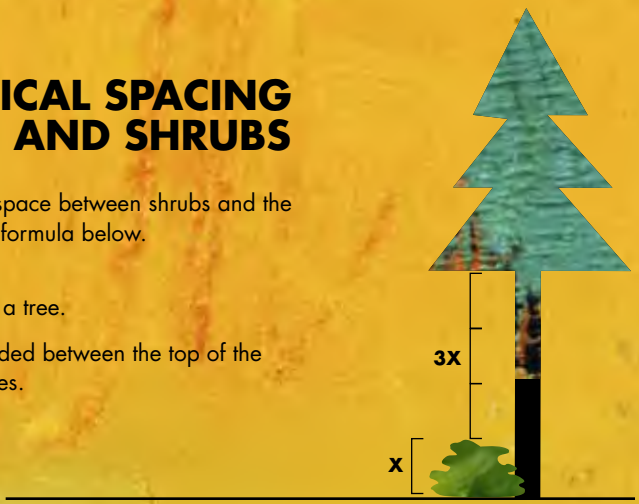
The good news is that you don't need to spend a lot of money to make your landscape fire-safe. And fire-safe landscaping can increase your property value and conserve water while beautifying your home. For more information on fire-safe landscaping, visit: **ReadyForWildfire.org/landscaping**.

MINIMUM VERTICAL SPACING BETWEEN TREES AND SHRUBS

To determine the proper vertical space between shrubs and the lowest branches of trees, use the formula below.

Example:
A five-foot shrub is growing near a tree.

3 x 5 = 15 feet of clearance needed between the top of the shrub and the lowest tree branches.

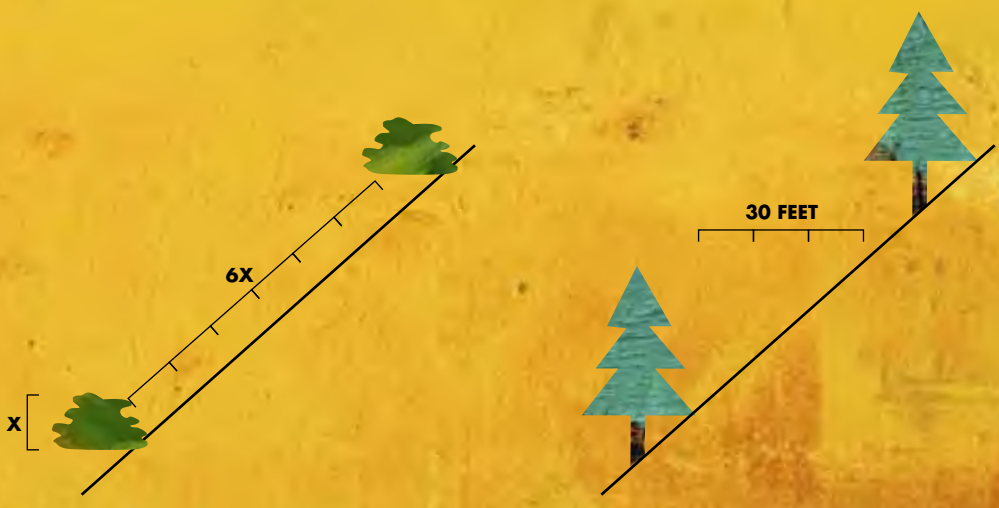


MINIMUM HORIZONTAL SPACING FOR TREES AND SHRUBS

Horizontal spacing depends on the slope of the land and the height of the shrubs or trees. Check the diagrams below to determine spacing distance.

FLAT TO MILD SLOPE (LESS THAN 20%)

MILD TO MODERATE SLOPE (20%–40%)



MODERATE TO STEEP SLOPE (GREATER THAN 40%)

DEFENSIBLE SPACE

Creating and maintaining defensible space is essential for increasing your home's chance of surviving a wildfire. It's the buffer that homeowners are required to create on their property between a structure and the plants, brush and trees or other items surrounding the structure that could catch fire. This space is needed to slow the spread of wildfire and improves the safety of firefighters defending your home.

Two zones make up the required 100 feet of defensible space:

ZONE 1 Extends 30 feet out from buildings, decks, and other structures

1. Remove all dead plants, grass and weeds.
2. Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
3. Trim trees regularly to keep branches a minimum of 10 feet from other trees.
4. Remove dead branches that hang over your roof. And keep branches 10 feet away from your chimney.
5. Relocate exposed woodpiles outside of Zone 1 unless they are completely covered in a fire resistant material.
6. Remove or prune flammable plants and shrubs near windows.
7. Remove vegetation and items that could catch fire from around and under decks.
8. Create a separation between trees, shrubs and items that could catch fire, such as patio furniture, swing sets, etc.

ZONE 2 Extends 30 to 100 feet from buildings and other structures

9. Cut or mow annual grass down to a maximum height of 4 inches.
10. Create horizontal spacing between shrubs and trees. (See diagram)
11. Create vertical spacing between grass, shrubs and trees. (See diagram)
12. Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of 4 inches if erosion control is an issue.

BOTH ZONES—0 to 100 feet from buildings and other structures

13. Mow before 10 a.m., but never when it's windy or excessively dry.
14. Protect water quality. Do not clear vegetation near waterways to bare soil. Vegetation removal can cause soil erosion—especially on steep slopes.

ARE YOU DOING THE RIGHT THING—THE WRONG WAY?

Each year, CAL FIRE responds to hundreds of fires started by Californians using equipment the wrong way. If you live in a wildland area, all equipment must be used with extreme caution.

Lawn mowers, metal-bladed trimmers, chain saws, grinders, welders, and tractors can all start a wildland fire if not used properly. Do your part to keep your community fire-safe.

HERE'S HOW TO DO IT THE RIGHT WAY:

Mowing

Metal blades striking rocks can create sparks and start fires in dry grass. Use caution.

Spark Arresters

In wildland areas, spark arresters are required on all portable, gasoline-powered equipment. This includes tractors, harvesters, chainsaws, weed-trimmers and mowers.

- Keep the exhaust system, spark arresters and mower in proper working order and free of carbon buildup.
- Use the recommended grade of fuel, and don't top it off.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HARDENING YOUR HOME

FLYING EMBERS CAN DESTROY HOMES UP TO A MILE AHEAD OF A WILDFIRE. PREPARE (HARDEN) YOUR HOME NOW BEFORE FIRE STARTS.

SOME THINGS YOU CAN DO TO HARDEN YOUR HOME:

Roof: Your roof is the most vulnerable part of your home. Homes with wood or shingle roofs are at high risk of being destroyed during a wildfire.

Build your roof or re-roof with materials such as composition, metal or tile. Block any spaces to prevent embers from entering and starting a fire.

Vents: Vents on homes create openings for flying embers.

- Cover all vent openings with 1/8-inch to 1/4-inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.
- Protect vents in eaves or cornices with baffles to block embers. (Mesh is not enough.)

Eaves and Soffits: Eaves and soffits should be protected with ignition-resistant or non-combustible materials.

Windows: Heat from a wildfire can cause windows to break even before the home ignites. This allows burning embers to enter and start fires inside. Single-paned and large windows are particularly at risk.

- Install dual-paned windows with one pane of tempered glass.
- Consider limiting the size and number of windows that face large areas of vegetation.

Decks: Surfaces within 10 feet of the building should be built with ignition-resistant, non-combustible, or other approved materials.

- Remove all combustible items from underneath your deck.

Exterior Walls: Wood products such as boards, panels or shingles are common siding materials. However, they are combustible and not good choices for fire-prone areas.

- Build or remodel your walls with ignition-resistant building materials, such as stucco, fiber or cement siding, fire-retardant-treated wood, or other approved materials.
- Be sure to extend materials from the foundation to the roof.

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

Patio Cover: Use the same ignition-resistant materials for patio covers as a roof.

Fences: Consider using ignition-resistant or non-combustible fence materials to protect your home during a wildfire.

Additional Home Fire Safety Steps:

Go to ReadyForWildfire.org/hardening for more important information on the following:

- Driveways and Access Road Information
- Garage Safety
- Address Visibility
- Water Supply Access
- Equipment Use Safety
- Ignition-Resistant Materials

READY, SET, GO! PREPARATION GUIDES

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WILDFIRE IS COMING PREPARATION GUIDES:

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CAL FIRE
SINCE 1885

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WILDFIRE IS COMING.
ARE YOU...
SET?
GET PREPARED TO EVACUATE
BEFORE WILDFIRE STRIKES.
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ReadyForWildfire.org

USE THIS GUIDE TO PREPARE YOUR EVACUATION PLAN AND EMERGENCY SUPPLY KIT

Once you complete your plan, rehearse and discuss it regularly with your family. Consider practicing the plan at night as well. Keep it in a safe, visible place for quick access when a wildfire emergency occurs.

Reminder: In an emergency it is easy to become confused or panicked. Preparing your wildfire action plan in advance will help keep you focused and able to act quickly when evacuation is anticipated or needed.

For more information on wildfire evacuation planning and survival, see the Ready for Wildfire "Go!" brochure or visit ReadyforWildfire.org/go.

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KNOW THE LAW
BE READY TO EVACUATE

CALIFORNIA LAW AUTHORIZES OFFICERS TO RESTRICT ACCESS TO ANY AREA WHERE A MENACE TO PUBLIC HEALTH OR SAFETY EXISTS DUE TO A CALAMITY SUCH AS FLOOD, STORM, FIRE, EARTHQUAKE, EXPLOSION, ACCIDENT OR OTHER DISASTER. REFUSAL TO COMPLY IS A MISDEMEANOR. (PENAL CODE 409.5)

CREATE
A WILDFIRE ACTION PLAN

Your Wildfire Action Plan must be prepared and familiar to all members of your household well in advance of a wildfire. Use the checklist below to help create your plan. Each family's plan will be different, depending on a variety of issues, needs and situations.

YOUR WILDFIRE ACTION PLAN CHECKLIST:

Create an evacuation plan that includes:

- ☐ A designated emergency meeting location outside the fire or hazard area. This is critical to determine who has safely evacuated from the affected area.
- ☐ Several different escape routes from your home and community. Practice these often so everyone in your family is familiar in case of emergency.
- ☐ Have an evacuation plan for pets and large animals such as horses and other livestock.
- ☐ A family communication plan that designates an out-of-area friend or relative as a point of contact to act as a single source of communication among family members in case of separation. (It is easier to call or message one person and let them contact others than to try and call everyone when phone, cell, and internet systems can be overloaded or limited during a disaster.)

Be Prepared:

- ☐ Have fire extinguishers on hand and train your family how to use them. (Check expiration dates regularly.)
- ☐ Ensure that your family knows where your gas, electric, and water main shut-off controls are located and how to safely shut them down in an emergency.
- ☐ Assemble an Emergency Supply Kit for each person, as recommended by the American Red Cross. (See next section for details.)
- ☐ Maintain a list of emergency contact numbers posted near your phone and in your emergency supply kit.
- ☐ Keep an extra emergency supply kit in your car in case you cannot get to your home because of fire or other emergency.
- ☐ Have a portable radio or scanner so you can stay updated on the fire.
- ☐ Tell your neighbors about Ready, Set, Go! and your Wildfire Action Plan.

REMEMBER THE SIX "P's"
KEEP THESE SIX "P's" READY IN CASE IMMEDIATE EVACUATION IS REQUIRED:

- **People and pets**
- **Papers, phone numbers, & important documents**
- **Prescriptions, vitamins, and eyeglasses**
- **Pictures and irreplaceable memorabilia**
- **Personal computer hard drive and disks**
- **"Plastic" (credit cards, ATM cards) and cash**

ASSEMBLE
AN EMERGENCY SUPPLY KIT

Put together your Emergency Supply Kit long before a wildfire or other disaster occurs and keep it easily accessible so you can take it with you when you have to evacuate. Plan to be away from your home for an extended period of time. Each person should have a readily accessible Emergency Supply Kit. Backpacks work great for storing these items (except food and water) and are quick to grab. Storing food and water in a tub or chest on wheels will make it easier to transport. Keep it light enough to be able to lift it into your car.

Emergency Supply Kit Checklist:

- ☐ Three-day supply of non-perishable food and three gallons of water per person
- ☐ Map marked with at least two evacuation routes
- ☐ Prescriptions or special medications
- ☐ Change of clothing
- ☐ Extra eyeglasses or contact lenses
- ☐ An extra set of car keys, credit cards, cash or traveler's checks
- ☐ First aid kit
- ☐ Flashlight
- ☐ Battery-powered radio and extra batteries
- ☐ Sanitation supplies
- ☐ Copies of important documents (birth certificates, passports, etc.)
- ☐ Don't forget pet food and water!

Items to take if time allows:

- ☐ Easily carried valuables
- ☐ Family photos and other irreplaceable items
- ☐ Personal computer information on hard drives and disks
- ☐ Chargers for cell phones, laptops, etc.

ALWAYS KEEP A STURDY PAIR OF SHOES AND A FLASHLIGHT NEAR YOUR BED AND HANDY IN CASE OF A SUDDEN EVACUATION AT NIGHT.

FOR MORE INFORMATION ON EMERGENCY SUPPLIES, VISIT WWW.READY.GOV.

SAVE THIS
FAMILY COMMUNICATION PLAN

Fill out this form and place it near your telephone where it can easily be found by everyone in your household. Copy the form and keep it in your Emergency Supply Kits. This will allow all family members to have access to this key information in case you get separated.

WHEN WE HAVE TO EVACUATE, WE WILL MEET AT:

_____

OUR OUT-OF-AREA EMERGENCY CONTACT PERSON IS:

Name: _____ Relationship: _____

Home Phone #: _____ Cell Phone #: _____

E-mail: _____

OTHER IMPORTANT NUMBERS ARE:

Emergency 911: _____ Local Police: _____

Local Fire Department: _____ Other: _____

Other: _____ Other: _____

OUR TWO EVACUATION ROUTES ARE (SKETCH ROUTES BELOW):

READY, SET, GO! PREPARATION GUIDES

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San Diego County Office of Emergency Services

Family Disaster Plan and Personal Survival Guide

Family Disaster Plan and Personal Survival Guide

I. PREPARATION

Family Meetings

At least once a year, have a meeting with your family to discuss and update your disaster plan. Determine what additional training, equipment, and supplies are needed to meet your family's needs. Don't forget to practice! Occasional drills can improve reaction time and help to avoid panic in an actual emergency.

A. Know how and where to shut off utilities.

Location of Main Water Valve: _____

Location of Gas Valve*: _____

Location of Wrench: _____

Location of Garage Door Manual Override: _____

Location of Other Utilities: _____

* Do not shut off gas unless you suspect a leak exists.

B. On a separate sheet of paper, draw a floor plan of your home showing the location of exit doors and windows, utility shutoffs, first aid kit, and emergency supplies. Ensure EVERYONE in your household is familiar with it. Show it to babysitters and house guests when you're going away.

C. Reunion locations: Establish two places where you and your family can meet following an emergency. One immediately outside of your home, e.g. a neighbor's mailbox, or community park **AND** another site outside of your immediate community in case you are unable to return home.

Home Location: _____

Away-from-Home Location: _____

D. Out-of-State Contact: Name and telephone number of a person outside of the state for family members to call and report their location and condition. Everyone should memorize this number!

Name: _____

Location: _____ Phone: (_____) _____

E. What is your children's school disaster policy?

_____

_____

_____

Are medical consent forms for your children complete and current? _____

Where are they located? _____

F. Assemble a Home Emergency Supply Kit. Store it in a convenient and accessible location. See Section VII for details on what to put inside your Home Emergency Supply Kit.

Location of Home Emergency Supply Kit: _____

Family Disaster Plan and Personal Survival Guide

II. TRAINING

A. Learn how to protect yourself from falling objects, smoke, fire, toxic fumes, etc.

B. Learn First Aid/CPR

Person(s) Trained:

Name: _____ Date Training Expires: _____

Name: _____ Date Training Expires: _____

III. BEFORE A DISASTER

There are many different kinds of disasters, such as earthquakes, fires, floods, airplane crashes, chemical spills, and explosions, which seldom give warning and can be equally devastating to their victims. Although this guide is primarily about earthquake preparation, the steps you take will help your family prepare for any type of disaster that could strike in your community. For additional information on local disaster preparedness for your home, school, and business visit **www.ReadySanDiego.org**.

A. Register your cell phone, Voice over Internet Protocol (VoIP) phone, and email address with AlertSanDiego*. **Listed and unlisted landlines are already registered. Registering makes it more likely that you will receive an emergency notification. Registration is quick and simple.** **Also available in accessible formats such as American Sign Language.*

B. Download the **SD Emergency App** for Android and iOS devices.

C. Inspect your home. Identify potential hazards and evacuation routes.

D. Secure water heater and tall or heavy furniture to wall studs.

E. Move heavy items to lower shelves in bookcases.

F. Install clips, latches and other locking devices on cabinet doors.

G. Provide strong support and flexible connections on gas appliances.

H. Remove or isolate and secure flammable materials.

I. Review and practice this plan.

IV. DURING AN EARTHQUAKE

A. If you are indoors STAY THERE. Move away from windows, bookcases, and high/overhanging shelves. Get under a sturdy table or desk and hold onto it. Be prepared to move with it and HOLD that position until the shaking stops and it is safe to relocate. If there is no desk or table to get under, brace yourself in an interior corner. Watch for falling, flying and sliding objects, and be especially careful around windows, as they can shatter during an earthquake.

> **NOTE:** *If you are in a mobile home which is resting on A-Frame supports, get on top of the bed or sofa and cover your head and face. If a mobile home slips off the supports they may penetrate the flooring and cause injuries.*

B. If you are outdoors, move to an open area away from buildings, trees, power poles, brick or block walls and other objects that could fall.

C. If you are in an automobile, stop and stay in it until the shaking ends. Avoid stopping near trees and power lines or on or under overpasses or bridges.

D. If you are in a multi-level building, get under a desk and hold on, or crouch next to an interior wall until the shaking stops. **DO NOT USE THE ELEVATOR TO EVACUATE.** Use the stairs.

E. If you are in a store, get under a table or any sturdy object. Avoid stopping under anything that could fall. **DO NOT RUN FOR THE EXIT.** After the shaking has stopped, choose your exit carefully.

Family Disaster Plan and Personal Survival Guide

V. IF YOU EVACUATE

A. Take with you:

- Medicines and first aid kit
- Flashlight, radio and batteries
- Important documents and cash
- Blankets and extra clothes
- Personal sanitary items
- Any additional items you feel are necessary (e.g. photos, heirlooms, jewelry, etc.)

B. Make arrangements for pets. Don't forget food, medications, vaccination records, and other important items.

VI. AFTER A DISASTER

A. Put on heavy shoes immediately to avoid injury from stepping on glass.

B. Locate a light source, such as a flashlight, if necessary.

C. Check for injuries and administer first aid.

D. Check for fires and fire hazards.

- Sniff for gas leaks, starting at the hot water heater. If you smell gas, hear a hissing sound or suspect a leak, turn off the main gas valve, open the windows and carefully leave the house. **DO NOT TURN LIGHTS ON OR OFF. DO NOT STRIKE MATCHES.**

  NOTE: *Do not shut off the gas unless you suspect a leak exists. Only the gas company can restore service.*

- If necessary, turn off the electrical system at the main circuit breaker or fuse box.

E. Check on your neighbors.

F. Visit **www.SDCountyEmergency.com** or the **SD Emergency App** for updates, shelter locations, interactive mapping information (e.g. evacuation areas and hazard perimeters), official social media feeds, and other critical information.

G. Listen for advisories using a battery powered radio. The primary Emergency Alert System station for San Diego County is KOGO AM 600. The secondary station is KLSD AM 1360.

H. Do not use the phone except in emergencies. Only call 9-1-1 for life threatening emergencies. Have a plug-in analog phone in case the power is out, but phone lines are still working.

I. For general and updated disaster information or volunteer opportunities, call 2-1-1.

J. Do not touch downed power lines or objects touching downed wires. Do not stand in water near downed lines.

K. Remove fallen debris that may cause personal injury.

L. Assess house, roof, and chimney for damages.

M. Be prepared for aftershocks.

N. Open closets and cupboards carefully because items may have fallen or become rearranged.

O. Cooperate with public safety officials.

P. Be prepared to evacuate when/if necessary.

Q. DO NOT GO SIGHTSEEING!

PREPAREDNESS STARTS WITH YOU!

Family Disaster Plan and Personal Survival Guide

VII. HOME EMERGENCY SUPPLIES

This list contains items usually available in your home. It is recommended that they be organized and located together for easy access during an emergency. Your emergency supplies should be sufficient to sustain you, your family and pets for a ***minimum of 72 hours***. A two (2) week supply of prescription and necessary over-the-counter medications is recommended**.**

Basic Supplies

- ❒ Water* – minimum of 1 gallon per person per day
- ❒ Non-Perishable Foods*
- ❒ First Aid Kit and Manual
- ❒ Can opener – non-electric
- ❒ Watch or clock – non-electric
- ❒ Plug-in analog telephone
- ❒ Cash
- ❒ Important documents
- ❒ Blankets or sleeping bags for each member of the family
- ❒ Radio – portable, with spare batteries
- ❒ Prescription and over-the-counter medications*
- ❒ Additional equipment – glasses, dentures, hearing aids
- ❒ Flashlight – spare batteries and light bulb
- ❒ Fire extinguisher – multipurpose labeled "ABC"
- ❒ Whistle
- ❒ Dust mask
- ❒ Activity items for adults (e.g. deck of cards) and kids (e.g. coloring books with crayons)

*Rotate food, water, and medications as necessary. Remember to consider household members with unique needs: infants, elderly, disabled, allergies. Avoid salty foods, as they will make you thirsty.

Water Tips

The best option is to store drinking water prior to a disaster, in appropriate containers. If purified water is not available, water should be boiled for 1 full minute, keeping in mind that some water will evaporate. Let the water completely cool before use.

Sanitation Supplies

- ❒ Large plastic trash bags for waste, sanitation, and protection
- ❒ Pre-moistened towelettes
- ❒ Hand soap and liquid detergent
- ❒ Shampoo
- ❒ Toothpaste & toothbrush
- ❒ Feminine supplies
- ❒ Infant supplies
- ❒ Toilet paper and paper towels
- ❒ Deodorant

Cooking Supplies

- ❒ Plastic bags – various sizes, sealable
- ❒ Paper plates, plastic utensils, paper towels
- ❒ Pots (cooking) – at least two
- ❒ Barbecue or gas grill; charcoal and lighter or propane (**for outdoor use only**); Sterno® stove

Family Disaster Plan and Personal Survival Guide

VII. HOME EMERGENCY SUPPLIES (CONTINUED)

Safety Supplies

- ❒ Knife, razor blade, and multipurpose tool
- ❒ Clothes – complete change for each family member (Preferably long pants and long sleeves for protection)
- ❒ Heavy gloves for each adult
- ❒ Heavy shoes for each family member

Pet Supplies

- ❒ Carrier
- ❒ Food
- ❒ Medications
- ❒ Important documents such as vaccination records and license information
- ❒ Collar with ID tag and harness or leash
- ❒ Water
- ❒ Sanitation items – Litter and litter box if appropriate

Car Survival Kit

- ❒ Non-perishable food
- ❒ Flares
- ❒ Bottled water
- ❒ First Aid Kit and Manual
- ❒ Fire extinguisher
- ❒ Blanket
- ❒ Sealable plastic bags
- ❒ Flashlight with batteries
- ❒ Tools and rubber hose
- ❒ Critical medications
- ❒ Pre-moistened towelettes and tissues
- ❒ Extra clothing

VIII. IMPORTANT TELEPHONE NUMBERS

USE "9-1-1" FOR LIFE THREATENING EMERGENCIES ONLY

NON-EMERGENCY FIRE DEPARTMENT: _____

NON-EMERGENCY LAW ENFORCEMENT AGENCY: _____

PRIMARY DOCTOR: _____

GAS COMPANY: _____

ELECTRIC COMPANY: _____

WATER COMPANY: _____

OUT-OF-STATE CONTACT: _____

POISON CONTROL: 1-800-222-1222

OTHER: _____

PREPAREDNESS STARTS WITH YOU!

Family Disaster Plan and Personal Survival Guide

IX. PRACTICE YOUR PLAN AS A FAMILY

A. Practice helps people feel less disoriented and better organized in case of a disaster – even in the middle of the night.

B. Make sure your family knows where to locate fire extinguishers, gas and water valves, and the main circuit breaker.

C. Update your Family Disaster Plan every year.

- Verify the telephone numbers and personal information of everyone listed in the plan.
- Print updated copies for all the members of your family.

D. In case of emergency, you should know the school's disaster plan.

- Determine what is required to release your child to your representatives if you cannot get there yourself.
- Ensure that the school knows your current contact information and those people authorized to pick up your child.

E. Check the contents of your emergency kits.

- Change the batteries in your flashlights and portable radio; replace spare batteries.
- Replenish your emergency kits. Replace bottled water; ensure that all food is still safe to eat and that medications have not expired.

Every family member should carry a copy of this important information:

EMERGENCY CONTACT INFORMATION

Out-of-State Contact

Name:_____

Telephone: _____

Neighborhood Meeting Place:

_____

Out-of-Area Meeting Place:

_____

Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

EMERGENCY CONTACT INFORMATION

Out-of-State Contact

Name:_____

Telephone: _____

Neighborhood Meeting Place:

_____

Out-of-Area Meeting Place:

_____

Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

EMERGENCY CONTACT INFORMATION

Out-of-State Contact

Name:_____

Telephone: _____

Neighborhood Meeting Place:

_____

Out-of-Area Meeting Place:

_____

Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

EMERGENCY CONTACT INFORMATION

Out-of-State Contact

Name:_____

Telephone: _____

Neighborhood Meeting Place:

_____

Out-of-Area Meeting Place:

_____

Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

Family Disaster Plan and Personal Survival Guide

NOTICE:

The information presented in this brochure is believed to be accurate and of practical value in preparing for a disaster, however, no guarantee can be given that the guidance presented will provide protection.

The County of San Diego, the San Diego County Office of Emergency Services, the Unified San Diego County Emergency Services Organization, the Unified Disaster Council and each organization's officers, employees, and agents, assume no legal liability for the accuracy, completeness, or usefulness of any information, product, or process disclosed herein, or for any injuries or damages arising from any disaster or occurrence giving rise to the use or application of the information, products or processes described or disclosed herein.

ReadySanDiego.org
Prepare. Plan. Stay Informed.

County of San Diego Office of Emergency Services
Phone: (858) 565-3490
Website: www.ReadySanDiego.org

Background cover-photos provided by Robert A. Eplett/Cal-EMA

This document was prepared under a grant from FEMA's Grant Programs Directorate, U.S. Department of Homeland Security. Points of view or opinions expressed in this document are those of the authors and do not necessarily represent the official position or policies of FEMA's Grant Programs Directorate or the U.S. Department of Homeland Security.

PREPAREDNESS STARTS WITH YOU!

Appendix B1- B4

Family Disaster Plan and Personal Survival Guide

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

- ❑ 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,

Ready

FEMA

Federal Emergency Management Agency

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.

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.

SHARE

MAKE SURE EVERYONE HAS THE INFORMATION

- [ ] 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.

NOW IT'S TIME TO PRACTICE!

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!℠

Access Alerts and Warnings

Test Communication Plans

Assemble or Update Supplies

Drill or Practice Emergency Response

Participate in a Class, Training, or Discussion

Plan with Neighbors

Conduct an Exercise

Make Property Safer

Document and Insure Property

Safeguard Documents

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

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

Name: .....
Address:.....
Emergency/Hotline #: .....
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: .....

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

FOLD HERE

SCHOOL, CHILDCARE , CAREGIVER, AND WORKPLACE EMERGENCY PLANS

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

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

FOLD HERE

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

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

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: ..... #: .....
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: .....

American Red Cross

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

Appendix C
Brush Management Zone

POCKET PARK DD ENLARGEMENT
SEE SHEET 32, DETAIL 5

PA10- TRAIL AMENITY A
SEE SHEET 35, DETAIL 4

POCKET PARK CC ENLARGEMENT
SEE SHEET 32, DETAIL 1

MHPA LINE

BRUSH MANAGEMENT
ZONE

SITE BOUNDARY

RECREATION EASEMENT

PA10- TRAIL AMENITY B
SEE SHEET 35, DETAIL 3

POCKET PARK AA & PASEO GG
ENLARGEMENT
SEE SHEET 33, DETAIL 1

PASEO FF ENLARGEMENT
SEE SHEET 33, DETAIL 5

PA10- TRAIL AMENITY C
SEE SHEET 35, DETAIL 2

SEE SHEET 31 FOR
LANDSCAPE CONCEPT
PLAN BEYER BLVD

SEE SHEET 30 FOR
LANDSCAPE CONCEPT
PLAN SOUTH

POCKET PARK BB ENLARGEMENT
SEE SHEET 32, DETAIL 2

POCKET PARK II ENLARGEMENT
SEE SHEET 32, DETAIL 3

INDICATES PUBLIC PEDESTRIAN AND VEHICULAR ACCESS PERMITTED WITHIN THE PRIVATE DRIVEWAYS TO BE PROVIDED THROUGH PROJECT CC&RS

PUBLICLY ACCESSIBLE PEDESTRIAN AMENITY (TYP), SUCH AS:

1. ONE TRASH RECEPTACLE AND ONE RECYCLING CONTAINER;
2. SEATING COMPRISED OF MOVABLE SEATS, FIXED INDIVIDUAL SEATS, BENCHES WITH OR WITHOUT BACKS, OR DESIGN FEATURE SEATING, SUCH AS SEAT WALLS, LEDGES, OR SEATING STEPS;
3. PEDESTRIAN-SCALE LIGHTING THAT ILLUMINATES THE ADJACENT SIDEWALK;
4. PUBLIC ARTWORK;
5. COMMUNITY WAYFINDING SIGNS; OR
6. ENHANCEMENT OF A BUS STOP OR PUBLIC TRANSIT WAITING STATION WITHIN 1,000 FEET OF THE PREMISES.

POCKET PARK HH ENLARGEMENT
SEE SHEET 32, DETAIL 4

PA 10

PA 9

PA 8

PLANTING AREAS	
SYMBOL	PLANTING AREA
	NEIGHBORHOOD PLANTING
	STREETSCAPES AND ENTRIES PLANTING
	DEVELOPED PARKS PLANTING
	INTERIOR SLOPE PLANTING
	EXTERIOR PLANTING FOR MANUFACTURED SLOPES
	BRUSH MANAGEMENT ZONE 1
	MHPA ADJACENT LANDS AND BRUSH MANAGEMENT ZONE 2
	TEMPORARY SLOPE PLANTING
	WILDLIFE OVERCROSS PLANTING

SEE SHEET 31 & 36 FOR PLANT PALETTES AND PLANTING NOTES

PLANTING NOTES

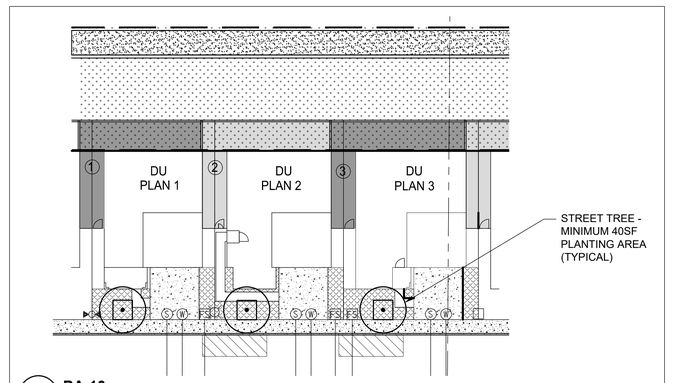
1. REFER TO SHEET 36 FOR PLANT PALETTES AND NOTES.
2. REFER TO SHEETS 37-39 FOR BRUSH MANAGEMENT PLANS, NOTES, AND DETAILS.
3. FOR MANUFACTURED SLOPES WITHIN / ADJACENT TO MHPA, PROVIDE NATIVE TREES (MINIMUM 1 GALLON CONTAINER SIZE) AT A RATE OF ONE PLANT PER 100 SQUARE FEET OF DISTURBED AREAS IN ADDITION TO THE MHPA HYDROSEED MIX.
4. REFER TO SHEETS 41 & 42 FOR LANDSCAPE CALCULATIONS.

PARK/OPEN SPACE AREAS

PARK ACREAGE REQUIREMENTS ARE ACCOMMODATED THROUGH A COMBINATION OF MINI/POCKET PARKS AND TRAILS.

MAILBOXES

A CENTRALIZED COMMUNAL MAILBOX LOCATION WILL BE PROVIDED FOR EACH PLANNING AREA AND WILL CONFORM TO US POSTAL SERVICE REQUIREMENTS.



1 **PA 10**
TYPICAL ROOT CLEARANCE DIAGRAM SCALE: 1" = 20'-0"

0 30' 60' 120'
GRAPHIC SCALE: 1" = 60'

N

PTS: 614791
I.O.: 24007991

PREPARED BY:

NAME: RICK ENGINEERING – LANDSCAPE ARCHITECTURE
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REVISIONS:

REVISION 10:	
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REVISION 4:	12/16/2022
REVISION 3:	07/15/2022
REVISION 2:	08/07/2020
REVISION 1:	11/15/2019

PROJECT NAME:
SOUTHWEST VILLAGE
VTM/PDP/SDP

SHEET TITLE:
LANDSCAPE CONCEPT PLAN
NORTH

ORIGINAL DATE: 03/29/2019

SHEET 29 OF 47

LICENSED LANDSCAPE ARCHITECT
PATRICIA TRAUTH
Signature
12-20-19
Renewal Date
Date
STATE OF CALIFORNIA

LANDSCAPE ARCHITECT OF RECORD:

PATRICIA TRAUTH RLA, AICP DATE
RLA NO: 3247

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SEE SHEET 31 FOR LANDSCAPE CONCEPT PLAN BEYER BLVD

SEE SHEET 29 FOR LANDSCAPE CONCEPT PLAN NORTH

BEYER BLVD

CONNECTION FROM BEYER BLVD TRAIL EXTENTION

PA12- TRAIL AMENITY D SEE SHEET 35, DETAIL 1

PA12- TRAIL AMENITY E SEE SHEET 35, DETAIL 5

PASEO TT ENLARGEMENT SEE SHEET 33, DETAIL 6

POCKET PARK SS & XX ENLARGEMENT SEE SHEET 33, DETAIL 2

PASEO UU & V V ENLARGEMENT SEE SHEET 34, DETAIL 3

PA14- TRAIL AMENITY F SEE SHEET 35, DETAIL 6

CONNECTION TO FUTURE PRIMITIVE TRAIL

POCKET PARK MM ENLARGEMENT SEE SHEET 33, DETAIL 3

POCKET PARK OO ENLARGEMENT SEE SHEET 33, DETAIL 4

POCKET PARK PP ENLARGEMENT SEE SHEET 34, DETAIL 4

PASEO QQ & WW ENLARGEMENT SEE SHEET 34, DETAIL 2

POCKET PARK RR ENLARGEMENT SEE SHEET 34, DETAIL 2

POCKET PARK YY ENLARGEMENT SEE SHEET 34, DETAIL 1

PA 11

PA 12

PA 13

PA 14

STREET A

WEST AVENUE

MATCHLINE SEE RIGHT

MATCHLINE SEE LEFT

* PUBLICLY ACCESSIBLE PEDESTRIAN AMENITY (TYP), SUCH AS:

1. ONE TRASH RECEPTACLE AND ONE RECYCLING CONTAINER;
2. SEATING COMPRISED OF MOVABLE SEATS, FIXED INDIVIDUAL SEATS, BENCHES WITH OR WITHOUT BACKS, OR DESIGN FEATURE SEATING, SUCH AS SEAT WALLS, LEDGES, OR SEATING STEPS;
3. PEDESTRIAN-SCALE LIGHTING THAT ILLUMINATES THE ADJACENT SIDEWALK;
4. PUBLIC ARTWORK;
5. COMMUNITY WAYFINDING SIGNS; OR
6. ENHANCEMENT OF A BUS STOP OR PUBLIC TRANSIT WAITING STATION WITHIN 1,000 FEET OF THE PREMISES.

PLANTING NOTES

1. REFER TO SHEET 36 FOR PLANT PALETTES AND NOTES.
2. REFER TO SHEETS 37-39 FOR BRUSH MANAGEMENT PLANS, NOTES, AND DETAILS.
3. FOR MANUFACTURED SLOPES WITHIN / ADJACENT TO MHPA, PROVIDE NATIVE TREES (MINIMUM 1 GALLON CONTAINER SIZE) AT A RATE OF ONE PLANT PER 100 SQUARE FEET OF DISTURBED AREAS IN ADDITION TO THE MHPA HYDROSEED MIX.
4. REFER TO SHEETS 41 & 42 FOR LANDSCAPE CALCULATIONS.

PARK/OPEN SPACE AREAS

PARK ACREAGE REQUIREMENTS ARE ACCOMMODATED THROUGH A COMBINATION OF MINI/POCKET PARKS AND TRAILS.

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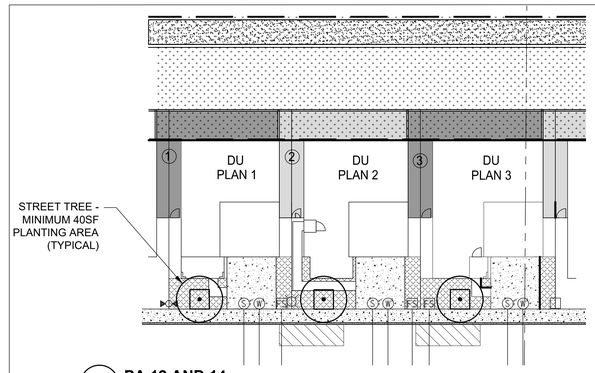
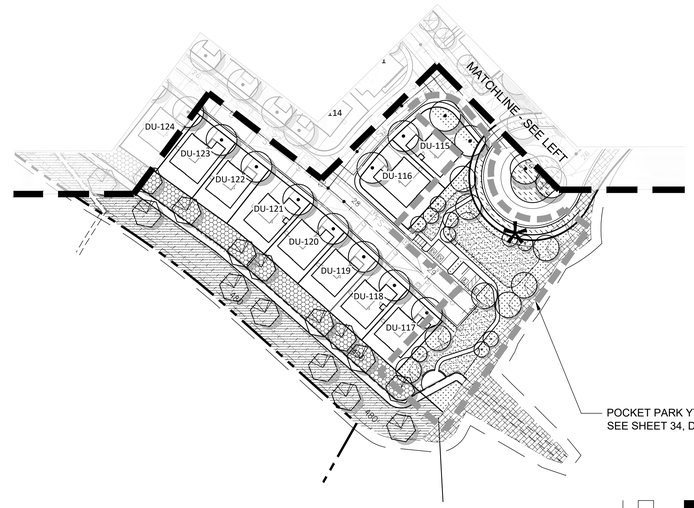
PLANTING AREAS	
SYMBOL	PLANTING AREA
	NEIGHBORHOOD PLANTING
	STREETSCAPES AND ENTRIES PLANTING
	DEVELOPED PARKS PLANTING
	INTERIOR SLOPE PLANTING
	EXTERIOR PLANTING FOR MANUFACTURED SLOPES
	BRUSH MANAGEMENT ZONE 1
	MHPA ADJACENT LANDS AND BRUSH MANAGEMENT ZONE 2
	TEMPORARY SLOPE PLANTING
	WILDLIFE OVERCROSS PLANTING

SEE SHEET 31 & 36 FOR PLANT PALETTES AND PLANTING NOTES



1 **PA 12 AND 14**
TYPICAL ROOT CLEARANCE DIAGRAM SCALE: 1" = 20'-0"



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REVISION 2:	08/07/2020
REVISION 1:	11/15/2019

LANDSCAPE ARCHITECT OF RECORD:

PATRICIA TRAUTH RLA, AICP
RLA NO: 3247

DATE

PROJECT NAME:
SOUTHWEST VILLAGE
VTM/PDP/SDP

SHEET TITLE:
LANDSCAPE CONCEPT PLAN SOUTH

ORIGINAL DATE: 03/29/2019

SHEET 30 OF 47

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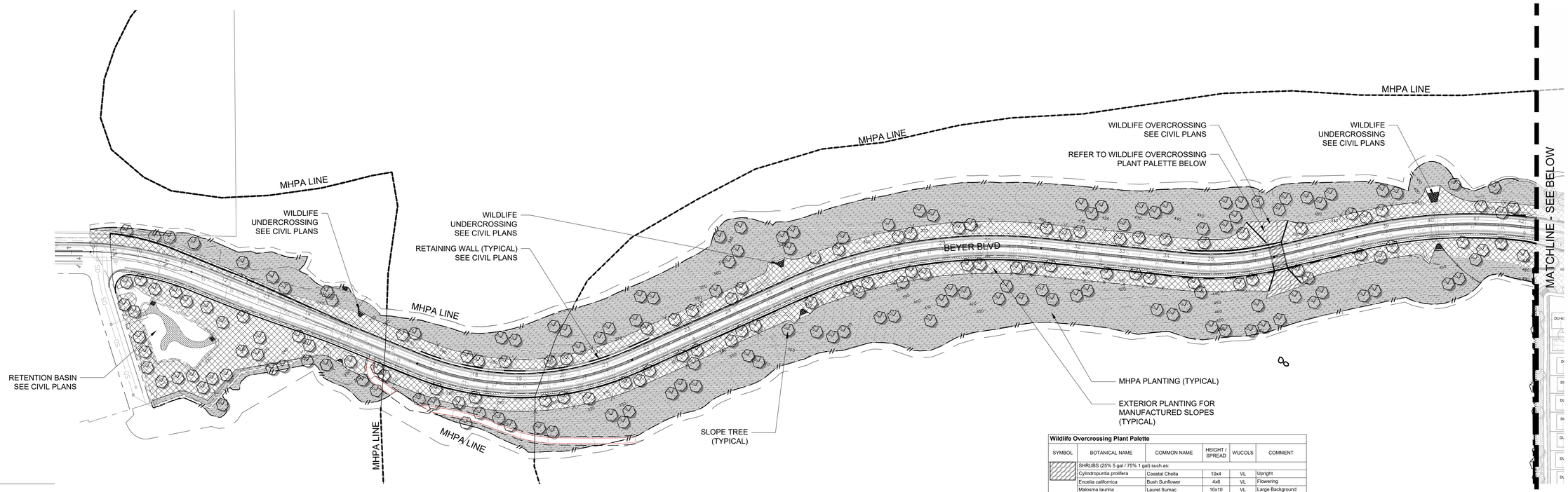

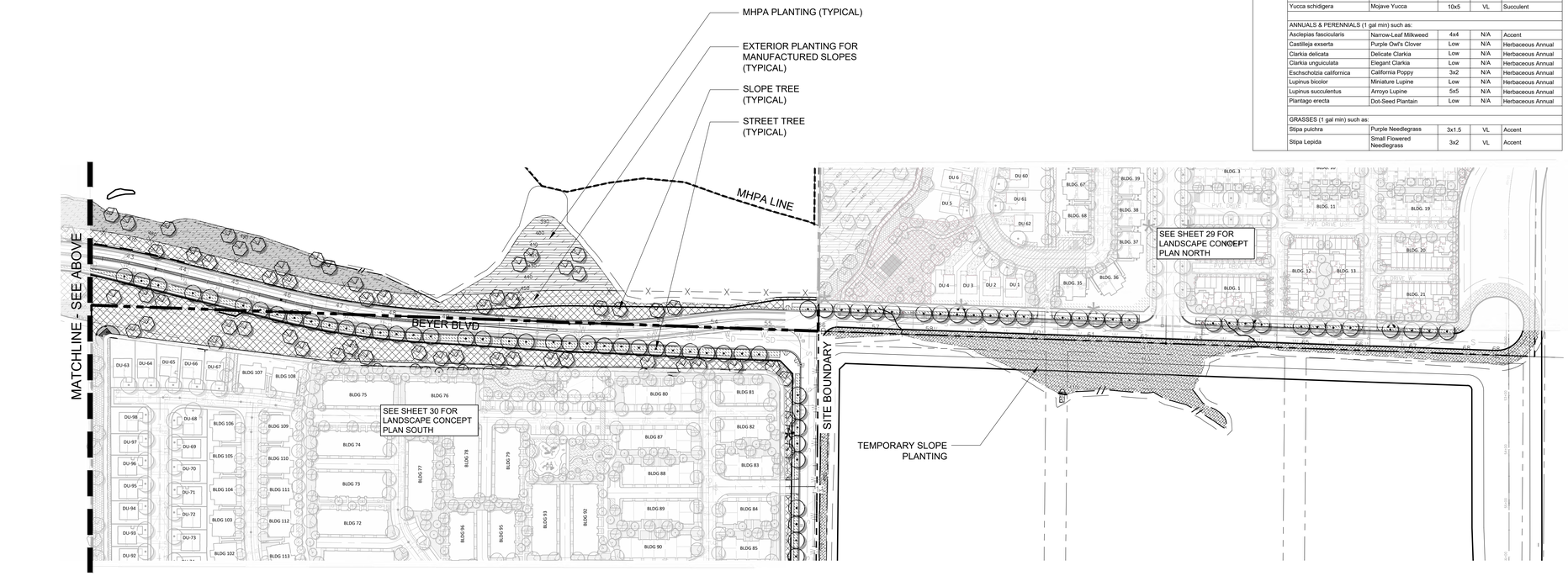

Wildlife Overcrossing Plant Palette

SYMBOL	BOTANICAL NAME	COMMON NAME	HEIGHT / SPREAD	WUCOLS	COMMENT
	SHRUBS (25% 5 gal / 75% 1 gal) such as:				
	Cylindropuntia prolifera	Coastal Cholla	10x4	VL	Upright
	Encelia californica	Bush Sunflower	4x6	VL	Flowering
	Malosma laurina	Laurel Sumac	10x10	VL	Large Background
	Opuntia littoralis	Coast Prickly Pear	3x5	VL	Succulent
	Peritoma arborea	Bladderpod	6x6	VL	Mounding
	Rhus integrifolia	Lemonade Berry	10x15	VL	Large Background
	Salvia mellifera	Black Sage	5x8	VL	Mounding
	Yucca schidigera	Mojave Yucca	10x5	VL	Succulent
	ANNUALS & PERENNIALS (1 gal min) such as:				
	Asclepias fascicularis	Narrow-Leaf Milkweed	4x4	N/A	Accent
	Castilleja exserta	Purple Owl's Clover	Low	N/A	Herbaceous Annual
	Clarkia delicata	Delicate Clarkia	Low	N/A	Herbaceous Annual
	Clarkia unguiculata	Elegant Clarkia	Low	N/A	Herbaceous Annual
	Eschscholzia californica	California Poppy	3x2	N/A	Herbaceous Annual
	Lupinus bicolor	Miniature Lupine	Low	N/A	Herbaceous Annual
	Lupinus succulentus	Arroyo Lupine	5x5	N/A	Herbaceous Annual
	Plantago erecta	Dot-Seed Plantain	Low	N/A	Herbaceous Annual
	GRASSES (1 gal min) such as:				
	Stipa pulchra	Purple Needlegrass	3x1.5	VL	Accent
	Stipa Lepida	Small Flowered Needlegrass	3x2	VL	Accent

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SEE SHEET 31 & 36 FOR PLANT PALETTES AND PLANTING NOTES

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PROJECT NAME:
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VTM/PDP/SDP

SHEET TITLE:
LANDSCAPE CONCEPT PLAN
BEYER BOULEVARD

ORIGINAL DATE: 03/29/2019

SHEET 31 OF 47

LICENSED LANDSCAPE ARCHITECT — PATRICIA TRAUTH — Signature — 11-30-25 — Renewal Date — Date — STATE OF CALIFORNIA

LANDSCAPE ARCHITECT OF RECORD:

PATRICIA TRAUTH RLA, AICP — DATE
RLA NO: 3247

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Appendix D
Quick Reference Guide

Quick Reference - Wildfire Preparedness

The Quick Reference Guide provides helpful tips and educational resources, so residents are prepared in the event of a wildland fire evacuation.

Figure 1 illustrates the emergency evacuation routes potentially available to Southwest Village project and surrounding communities. Figure 2 displays the Southwest Village Project's vicinity location and Figure 3 is the Project's land use plan.

The Project's evacuation routes for residents and guests are detailed below and in Figure 1. Visitors should know available routes, stay informed, and follow directions provided by law enforcement or fire agencies, news media, and other credible sources. Do not rely on navigation apps that may inadvertently lead persons toward the approaching wildfire.

The available and potential evacuation routes for the residents and guests of the Southwest Village community are detailed in Section 4[1]. Know your available routes, stay informed and follow directions provided by credible sources. Do not rely on navigation apps that may inadvertently lead you toward an approaching fire.

Nearest Medical Facilities

Hospitals:

Sharp HealthCare
765 Medical Center Court
Chula Vista, CA 91911

Directions:
Head north on Caliente Avenue
Merge onto SR-905 West
Merge onto I-805 North
Exit Olympic Parkway/E Orange Ave
Left onto Brandywine Avenue
Continue onto Medical Center Drive
Right onto Medical Center Court
Hospital on right

Scripps Mercy Hospital, Chula Vista
435 H Street,
Chula Vista, CA 91910

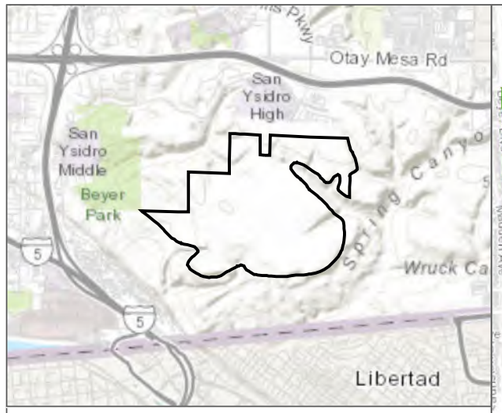
Directions:
Head north on Caliente Avenue
Merge onto SR-905 West
Merge onto I-5 North
Exit 7B for J Street
Left onto 4th Avenue
Left onto H Street
Hospital on right

Urgent Care Facilities:

[1] Directions of travel and use of routes noted here will be controlled by Emergency Personnel in the event of a wildfire based upon location of emergency and conditions such as weather, fire movement, and evacuation conditions.

Kaiser Urgent Care
4650 Palm Avenue
San Diego, CA 92154

Southbay Urgent Care
1628 Palm Avenue
San Diego, CA 92154



Project Boundary

Project Land Use

Development

Open Space

Emergency Vehicle Access Gate

Evacuation Route

Major Transportation Corridor

Primary Access Route

Emergency Vehicle Access Road

Gated Emergency Vehicle Access

SOURCE: ESRI; SANGIS 2022

DUDEK

0 900 1,800 Feet

FIGURE 1

Project Evacuation Routes-At Buildout

Wildfire Evacuation Study for the Southwest Village Project

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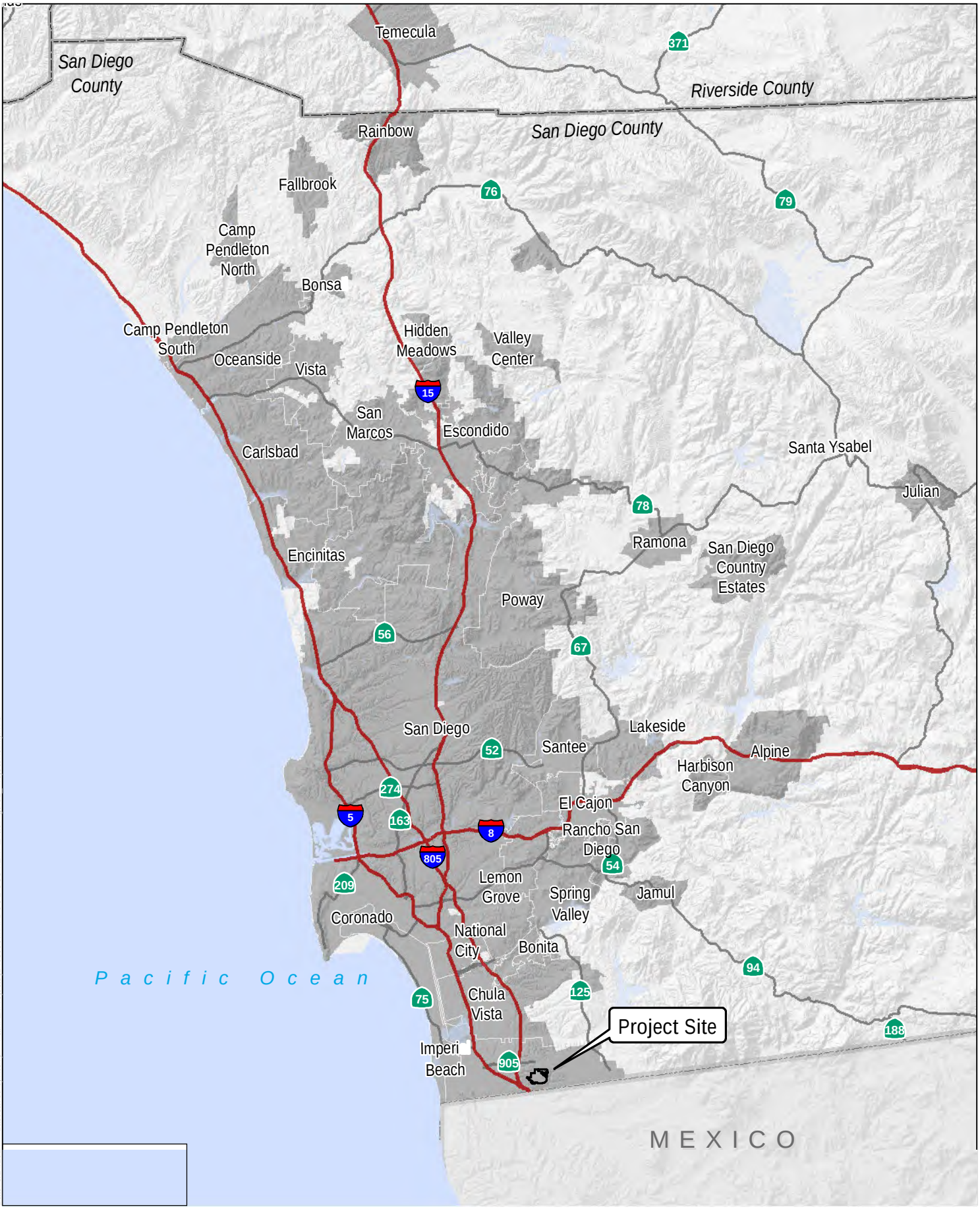

SOURCE: BASE MAP- ESRI MAPPING SERVICE

DUDEK

0 5 10 Miles

FIGURE 2

Project Vicinity

Wildfire Evacuation Study for the Southwest Village Project

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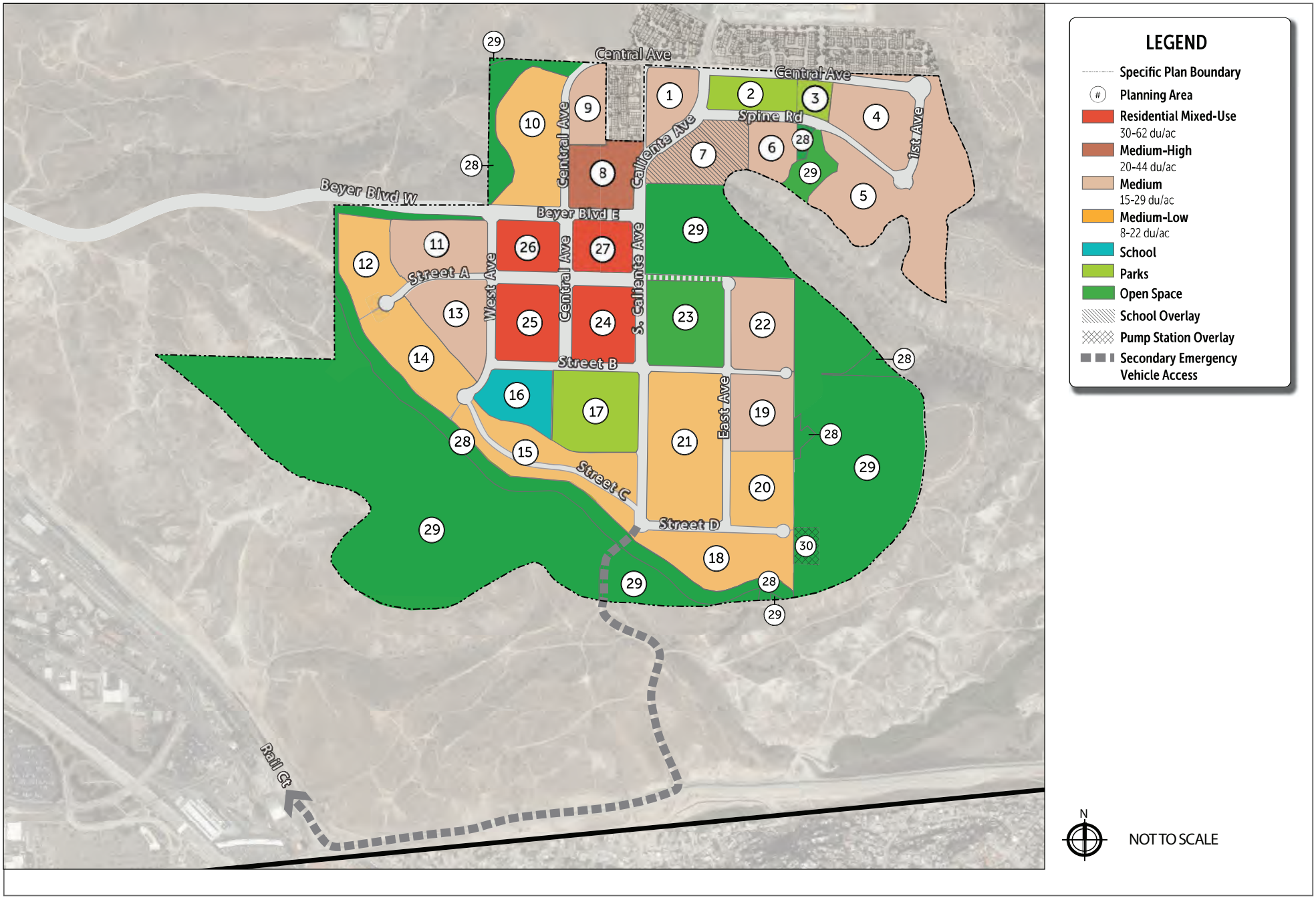

SOURCE: Ieppert Engineering, 2024

FIGURE 3

Project Land Use Plan

Wildfire Evacuation Study for the Southwest Village Project

DUDEK

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Register to Receive Emergency Alerts

The City of San Diego (City) utilizes Alert San Diego for its Community Emergency Notification System. Alert San Diego is a countywide standard system that is managed as a regional asset by the County of San Diego Office of Emergency Services. In the event of a wildfire within the City limits, the Incident Command (IC) or other City departments will contact the Police Department Communications Division. The communications center has the responsibility to request activation of the Alert San Diego system and release an emergency notification (San Diego 2010) to affected population. Therefore, residents of the Southwest Village Project (Project) are strongly advised to register their land lines, mobile phone numbers and email addresses with Reverse 9-1-1, Alert San Diego system (http://www.readysandiego.org/AlertSanDiego/) in order to receive emergency evacuation instructions. The residents of Southwest Village are part of the greater San Diego media market and the media outlets will also be a good source of information, via television and radio, on overall emergency situations and how residents should respond. In addition, the San Diego Emergency Alert System (EAS) is county-wide and broadcasts emergency information via two radio stations: KOGO AM 600 and KLSD AM 1360. Social media provides another outlet for news:

- https://twitter.com/cityofsandiego
- CityTV is another news sources available during an emergency and can be found online (http://granicus.sandiego.gov/MediaPlayer.php?publish_id=1648)
- Channel 24 - Cox Communications
- Channel 24 - Time Warner Cable
- Channel 99 - AT&T

Get Involved in Community Readiness

Residents of the Southwest Village Project are encouraged to form a volunteer Neighborhood Emergency Response Team with Community Emergency Response Team (CERT) experience (https://www.sandiego.gov/fire/services/cert). The Southwest Village Homeowner's Association (HOA) will organize annual evacuation public outreach for anyone interested from the community, engage directly with organizations such as Fire Safe Council of San Diego County, as well as maintain a fire safe page on the community website, including this Wildfire Evacuation Study and links to important citizen preparedness information. This information will be made available to all residents of the Project.

This Wildfire Evacuation Study is prepared specifically for the Southwest Village Project and focuses on wildland fire evacuations, although many of the concepts and protocols will be applicable to other emergency situations. Ultimately, this plan should be used by residents for awareness of evacuation approaches during wildfires and other similar emergencies. It is important for the residents to understand the importance of being prepared, so if/when the time comes where evacuation is necessary, they will be able to calmly implement their evacuation plan. Some actions the community residents can do in advance include:

- Follow the "Ready, Set, Go!" model developed for wildfire evacuations.
    - Create an escape plan from the residence, as well as an escape route once outside of the home.

- Know your available routes, stay informed and follow directions provided by credible sources.
- Do not rely on navigation apps that may inadvertently lead you toward an approaching fire.
- Create a car emergency kit, including cell phone charger, flashlight, jumper cables, water, and food.
- Gather important paperwork, including birth and marriage certificates, account documents, passports, Social Security cards, and any other important family photos or irreplaceable items and documents.
- As time allows, make sure to secure your home by locking all doors and windows, and unplugging electrical equipment, such as appliances and electronics.

Sample emergency preparedness resources available to the Southwest Village residents are provided in Appendix A (Resident "Ready, Set, Go!" Wildland Fire Action Plan) and Appendices B-1 through B-4 (Family Disaster Checklists and Communications Plans), and residents are encouraged to become familiar with the concepts detailed at the following websites:

1. "Ready, Set, Go!" Personal Wildland Fire Action Guide:
2. https://www.readysandiego.org/content/dam/oesready/en/wildfire/wildfire_preparedness_guide.pdf Red Cross Emergency Planning:

   http://www.redcross.org/get-help/how-to-prepare-for-emergencies/make-a-plan
3. Hazardous Materials Emergency Preparedness:

   https://www.ready.gov/hazardous-materials-incidents
4. Building a disaster kit:

   http://www.redcross.org/get-help/prepare-for-emergencies/be-red-cross-ready/get-a-kit
5. Making a Plan Checklist:

   https://www.ready.gov/make-a-plan
6. Family Communication Plan:

   https://www.fema.gov/media-library-data/1440449346150-1ff18127345615d8b7e1effb4752b668/Family_Comm_Plan_508_20150820.pdf

Evacuation Study Purpose and Limitations

Wildfire and other emergencies are often dynamic events and the need for evacuations are typically determined by on-scene first responders or by a collaboration between first responders and designated emergency response teams, including Office of Emergency Services and the IC established for larger emergency events. As such, and consistent with all emergency evacuation plans, this Wildfire Evacuation Study is to be considered a tool that supports existing pre-plans and provides for residents who are familiar with the evacuation protocol but is subservient to emergency event-specific directives provided by agencies managing the event.