City of Rolling Hills INCORPORATED JANUARY 24, 1957

NO. 2 PORTUGUESE BEND ROAD
ROLLING HILLS, CA 90274
(310) 377-1521
FAX (310) 377-7288

**AGENDA**
**Adjourned Planning Commission**
**Field Trip**

**PLANNING COMMISSION**
**Tuesday, January 18, 2022**

**CITY OF ROLLING HILLS**
**6:30 PM**

**Executive Order N-29-20**

The Planning Commission makes the following findings pursuant to AB 361: 1.) A statewide state of emergency is currently in place; and 2.) State or local officials have imposed or recommended measures to promote social distancing in connection with COVID-19.All Planning Commissioners will participate by teleconference. Public Participation: City Hall will be closed to the public until further notice.A live audio of the Planning Commission meeting will be available on the City's website https://cms5.revize.com/revize/rollinghillsca/government/agenda/index.php

The meeting agenda is also available on the City's website:
https://www.rolling-hills.org/government/agenda/index.php

Join Zoom Meeting
https://us02web.zoom.us/j/99343882035?pwd=MWZXaG9ISWdud3NpajYwY3dFbllFZz09

Meeting ID: 993 4388 2035 Passcode: 647943

Members of the public may submit comments in real time by emailing the Planning Department at Planning@cityofrh.net. Your comments will become a part of the official meeting record. You must provide your full name but do not provide any other personal information (i.e., phone numbers, addresses, etc) that you do not want to be published.

1. **CALL MEETING TO ORDER**

2. **ROLL CALL**

3. **PLEDGE OF ALLEGIANCE**

4. **BLUE FOLDER ITEMS (SUPPLEMENTAL)**

*Blue folder (supplemental) items are additional back up materials to administrative reports, changes to the posted agenda packet, and/or public comments received after the printing and distribution of the agenda packet for receive and file.*

5. **PUBLIC PARTICIPATION ON NON-AGENDA ITEMS**

## 6. CONSENT CALENDAR

6.A. CONTINUATION OF REMOTE CITY COUNCIL AND COMMISSION MEETINGS DURING THE MONTH OF JANUARY 2022 PURSUANT TO THE REQUIREMENTS OF AB 361.
**RECOMMENDATION: Approve as presented.**

6.B. MINUTES OF THE DECEMBER 16, 2021, PLANNING COMMISSION MEETING.
**RECOMMENDATION: Approve as presented.**
12.16.2021 PC Regular Meeting Action Minutes.pdf

## 7. FIELD TRIPS

## 8. NEW BUSINESS

8.A. SAFETY ELEMENT UPDATE.
**RECOMMENDATION: Discuss the update to the Safety Element and direct staff to prepare a final version for the Planning Commission and City Council's consideration.**
Safety Element_Final_Draft.pdf
Rolling Hills Safety Element - PC Presentation 011822.pdf

## 9. PUBLIC HEARING

9.A. ZONING CASE NO. 21-13: REQUEST FOR APPROVAL OF A SITE PLAN REVIEW FOR A POOL, SPA, GRADING, AND OTHER IMPROVEMENTS FOR A PROPERTY LOCATED AT 4 STORM HILL LANE (GRZYWACZ)
**RECOMMENDATION: Adopt Resolution No. 2022-01 approving a Site Plan Review for a swimming pool, spa, grading, and other improvements.**
4 Storm Hill (ZC 21-13) Development Table.pdf
Development Plans - 4 Storm Hill (ZC 21-13).pdf
Vicinity Map - 4 Storm Hill Ln.pdf
Resolution 2022-01 (4 Storm Hill Lane) (ZC 21-13)-c1 (002)-c1-c1.pdf

## 10. DIRECTOR'S REPORT

10.A. INITIAL STUDY AND NEGATIVE DECLARATION FOR THE HOUSING AND SAFETY ELEMENTS.
**RECOMMENDATION: Receive and file.**

## 11. COMMISSIONER'S REPORT

## 12. ADJOURNMENT

Next meeting: Tuesday, February 15, 2022 at 6:30 p.m. via teleconference.

***Notice:***

*Documents pertaining to an agenda item received after the posting of the agenda are available for review in the City Clerk's office or at the meeting at which the item will be considered.*

*All zoning case items have been determined to be categorically exempt pursuant to the California Environmental Quality Act (CEQA) Guidelines unless otherwise stated.*

City of Rolling Hills INCORPORATED JANUARY 24, 1957

**Agenda Item No.: 6.A**
**Mtg. Date: 01/18/2022**

**TO:** **HONORABLE CHAIR AND MEMBERS OF THE PLANNING COMMISSION**

**FROM:** **CHRISTIAN HORVATH, CITY CLERK / EXECUTIVE ASSISTANT TO CITY MANAGER**

**THRU:** **ELAINE JENG P.E., CITY MANAGER**

**SUBJECT:** **CONTINUATION OF REMOTE CITY COUNCIL AND COMMISSION MEETINGS DURING THE MONTH OF JANUARY 2022 PURSUANT TO THE REQUIREMENTS OF AB 361.**

**DATE:** **January 18, 2022**

**BACKGROUND:**

With the Governor's approval of AB 361, public agencies have been granted the continuing ability to conduct virtual meetings during declared public health emergencies under specified circumstances until January 1, 2024. Based on the requirements of AB 361 (copy attached), in order for the City to hold virtual meetings, the Committee on Trees and Views needs to determine monthly that the following conditions exist:

1) There continues to be a health and safety risk due to COVID-19 as a proclaimed state of emergency with recommended measures to promote social distancing; and

2) Meeting in person during the proclaimed state of emergency would present imminent risks to the health and safety of attendees.

The other requirements associated with continued virtual meetings are outlined in the text of AB 361. The recommended action is for the Committee on Trees and Views to find that the following conditions exist and that they necessitate remote Committee meetings for the coming month:

1) There continues to be a health and safety risk due to COVID-19 as a proclaimed state of emergency with recommended measures to promote social distancing; and

2) Meeting in person during the proclaimed state of emergency would present imminent risks to the health and safety of attendees. These findings will need to be made by the City Council each month that the City opts to continue with remote meetings.

**DISCUSSION:**
None.

**FISCAL IMPACT:**
None.

**RECOMMENDATION:**
Approve as presented.

**ATTACHMENTS:**

City of Rolling Hills INCORPORATED JANUARY 24, 1957

**Agenda Item No.: 6.B**
**Mtg. Date: 01/18/2022**

**TO:** **HONORABLE CHAIR AND MEMBERS OF THE PLANNING COMMISSION**

**FROM:** **CHRISTIAN HORVATH, CITY CLERK / EXECUTIVE ASSISTANT TO CITY MANAGER**

**THRU:** **ELAINE JENG P.E., CITY MANAGER**

**SUBJECT:** **MINUTES OF THE DECEMBER 16, 2021, PLANNING COMMISSION MEETING.**

**DATE:** **January 18, 2022**

---

**BACKGROUND:**
None.

**DISCUSSION:**
None.

**FISCAL IMPACT:**
None.

**RECOMMENDATION:**
Approve as presented.

**ATTACHMENTS:**
12.16.2021 PC Regular Meeting Action Minutes.pdf

**REGULAR MEETING**
**OF THE PLANNING COMMISSION**
**CITY OF ROLLING HILLS**
**8:00 A.M.**
**THURSDAY, DECEMBER 16, 2021**
**VIA TELECONFERENCE**

## 1. CALL TO ORDER

A regular meeting of the Planning Commission of the City of Rolling Hills was called to order by Chair Chelf at 8:00 a.m. on Thursday, December 16, 2021 via teleconference.

## 2. ROLL CALL

| | |
|---|---|
| Present: | Chair Chelf, Vice Chair Kirkpatrick, Cardenas, Cooley and Douglass |
| Absent: | None |
| Staff Present: | John Signo, Planning and Community Services Director |
| | Christian Horvath, City Clerk |
| | Jane Abzug, City Attorney |
| | Barry Miller, Housing Consultant |
| Residents: | Teresa Hassanally |

## 3. APPROVAL OF THE AGENDA

MOTION: by Commissioner Douglass, seconded by Commissioner Cooley to approve order of the agenda. Motion carried unanimously with the following roll call vote:

| | |
|---|---|
| AYES: | Chair Chelf, Kirkpatrick, Cardenas, Cooley and Douglass |
| NOES: | None |
| ABSENT: | None |

## 4. PUBLIC COMMENTS ON MINUTES AND ANY ITEM NOT ON THE AGENDA - NONE

## 5. APPROVAL OF MINUTES

### 5.A. REGULAR MEETING OF THE PLANNING COMMISSION FOR DECEMBER 7, 2021

MOTION: by Vice Chair Kirkpatrick, seconded by Commissioner Douglass, to approve the minutes as presented. Motion carried unanimously with the following vote:

AYES: Chair Chelf, Kirkpatrick, Cardenas, Cooley and Douglass
NOES: None
ABSENT: None

## 6. RESOLUTIONS - NONE

## 7. PUBLIC HEARINGS ON ITEMS CONTINUED FROM PREVIOUS MEETING - NONE

## 8. NEW PUBLIC HEARINGS

### 8.A. 2021-2029 HOUSING & COMMUNITY DEVELOPMENT DRAFT OF THE ROLLING HILLS HOUSING ELEMENT

Public Hearing was opened.
Presentation: Barry Miller, Housing Consultant
Public Testimony: Resident Teresa Hassanally
Public Hearing was closed.

MOTION: by Commissioner Cardenas, seconded by Vice Chair Kirkpatrick, to receive and file. Motion carried unanimously with the following vote:

AYES: Chair Chelf, Vice Chair Kirkpatrick, Cardenas, Cooley and Douglass
NOES: None
ABSENT: None

## 9. NEW BUSINESS - NONE

## 10. OLD BUSINESS - NONE

## 11. SCHEDULED FIELD TRIPS - NONE

## 12. ITEMS FROM STAFF - NONE

## 13. ITEMS FROM PLANNING COMMISSION - NONE

## 14. ADJOURNMENT

Hearing no further business before the Planning Commission, Chair Chelf adjourned the meeting at 8:31 AM via teleconference. Next regular meeting: Tuesday, January 18, 2022 at 6:30 PM to be held via teleconference.

Respectfully submitted,

_____
Christian Horvath
City Clerk

Approved,

_____
Brad Chelf
Chairman

City of Rolling Hills INCORPORATED JANUARY 24, 1957

**Agenda Item No.: 8.A**
**Mtg. Date: 01/18/2022**

**TO:** **HONORABLE CHAIR AND MEMBERS OF THE PLANNING COMMISSION**

**FROM:** **JOHN SIGNO, DIRECTOR OF PLANNING & COMMUNITY SERVICES**

**THRU:** **ELAINE JENG P.E., CITY MANAGER**

**SUBJECT:** **SAFETY ELEMENT UPDATE.**

**DATE:** **January 18, 2022**

---

**BACKGROUND:**
The City began its efforts to update the Safety Element in mid-2020 after being awarded funding from the Governor's Office of Emergency Services (Cal OES). The City obtained the professional services of Rincon Consultants, Inc. to prepare the Draft Safety Element. Once completed, the Draft Safety was sent to the California Board of Forestry and Fire Protection for review, but no recommendations or changes were made.

**DISCUSSION:**
The Safety Element provides the City of Rolling Hills' (City's) goals, policies, and actions to minimize the hazards to safety in and around Rolling Hills. The Element evaluates natural and human-caused safety hazards that affect existing and future development and provides guidelines for protecting the community from harm. The Element describes existing and potential future conditions and sets policies for improved public safety. The goal of the Safety Element is to reduce the risk of injury, death, property loss, and other hardships to acceptable levels. The Safety Element is required to be reviewed and updated as necessary to address the risk of fire for land classified as state responsibility areas and land classified as very high fire hazard severity zones (Gov. Code, § 65302(g)(3)). The Safety Element is required to include:

- Fire hazard severity zone maps available from the Department of Forestry and Fire Protection.
- Any historical data on wildfires available from local agencies or a reference to where the data can be found.
- Information about wildfire hazard areas that may be available from the United States Geological Survey.
- The general location and distribution of existing and planned uses of land in very high fire hazard severity zones (VHFHSZs) and in state responsibility areas (SRAs), including structures, roads, utilities, and essential public facilities. The location and distribution of planned uses of land shall not require defensible space compliance measures required by state law or local ordinance to occur on publicly owned lands or open space designations of homeowner associations.
- The local, state, and federal agencies with responsibility for fire protection, including special

districts and local offices of emergency services (Gov. Code, § 65302(g)(3)(A)).

Based on that information, the Safety Element shall include goals, policies, and objectives that protect the community from the unreasonable risk of wildfire. (Gov. Code, § 65302(g)(3)(B)). To carry out those goals, policies, and objectives, feasible implementation measures shall be included in the Safety Element, which include but are not limited to:

- Avoiding or minimizing the wildfire hazards associated with new uses of land.
- Locating, when feasible, new essential public facilities outside of high fire risk areas, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, or identifying construction methods or other methods to minimize damage if these facilities are located in the SRA or VHFHSZ.
- Designing adequate infrastructure if a new development is located in the SRA or VHFHSZ, including safe access for emergency response vehicles, visible street signs, and water supplies for structural fire suppression.
- Working cooperatively with public agencies with responsibility for fire protection (Gov. Code, § 65302(g)(3)(C)).

The Safety Element shall also attach or reference any fire safety plans or other documents adopted by the City that fulfill the goals and objectives or contains the information required above (Gov. Code, § 65302(g)(3)(D)). This might include Local Hazard Mitigation Plans, Unit Fire Plans, Community Wildfire Protection Plans, or other plans.

**Next Steps**
The Safety Element will be brought back to the Planning Commission with the Housing Element Update at a future meeting. Also to be considered is a negative declaration prepared pursuant to the California Environmental Quality Act (CEQA) Guidelines. The purpose of tonight's meeting is to introduce the Safety Element to the Planning Commission and solicit discussion.

**FISCAL IMPACT:**
The City obtained a grant from CalOES for $47,624 to update the Safety Element. Certification of the Element provides an indirect positive fiscal impact by reducing legal risks and qualifying the City for State planning grants.

**RECOMMENDATION:**
Discuss the update to the Safety Element and direct staff to prepare a final version for the Planning Commission and City Council's consideration.

**ATTACHMENTS:**
Safety Element_Final_Draft.pdf
Rolling Hills Safety Element - PC Presentation 011822.pdf



# ROLLING HILLS GENERAL PLAN

## SAFETY ELEMENT


*prepared by*

**City of Rolling Hills**

Planning and Community Services
2 Portuguese Bend Road
Rolling Hills, California 90274

*prepared with the assistance of*

**Rincon Consultants, Inc.**

706 South Hill Street, Suite 1200
Los Angeles, California 90014



**November 2021**

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Appendix A Existing Conditions Report

# Introduction

The Safety Element provides the City of Rolling Hills' (City's) goals, policies, and actions to minimize the hazards to safety in and around Rolling Hills. The Element evaluates natural and human-caused safety hazards that affect existing and future development and provides guidelines for protecting the community from harm. The Element describes existing and potential future conditions and sets policies for improved public safety. The goal of the Safety Element is to reduce the risk of injury, death, property loss, and other hardships to acceptable levels.

## City Setting

Rolling Hills covers an area of approximately three square-miles on the Palos Verdes peninsula, approximately 18 miles south of downtown Los Angeles. The topography of the city and peninsula area is unique in that it rises above the Los Angeles Basin with rolling hills, steep slopes, and canyons. The city itself is in the San Pedro Hills. Due to its location near the coast, the area is generally cooler and has fewer air quality concerns compared to the nearby Los Angeles Basin. Table 1 summarizes the climatology of the area.



*Rolling Hills City Hall*

Rolling Hills is a residential community that consists of large parcels and ranch-style homes and has a sizable older adult[1] population of about 513 (28% of the city's total population). Important community demographic data for Rolling Hills is included in Table 2. The city is also an equestrian community, as many of residents are horse owners or have horses on their property.

## Regulatory Setting

Section 65302(g) of the California Government Code requires that the General Plans include a Safety Element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami,

**Table 1 Rolling Hills Climate Summary**

| Climate Character | Estimate |
|---|---|
| Annual Average Observed Maximum Temperature from 1961 - 1990 (Fahrenheit) | 71 |
| Annual Average Observed Minimum Temperature from 1961 – 1990 (Fahrenheit) | 50 |
| Annual Average Observed Precipitation from 1961 – 1990 (inches) | 19 |

Source: Cal-Adapt 2021

[1] An older adult is any adult over the age of 65 years old.

**Table 2 Rolling Hills Demographic Characteristics**

| Demographic Characteristics | Estimate |
|---|---|
| **General** | |
| Total Population | 1,739 |
| Population under 10 years | 7 percent |
| Population over 65 years | 28 percent[1] |
| Race | 77 percent White, 18 percent Asian, 5 percent Hispanic/Latino |
| Disability (hearing, vision, cognitive, ambulatory) | 12 percent |
| **Housing** | |
| Total Households | 645[1] |
| Average Household Size | 2.76 |
| Owner-occupied Households | 96 percent |
| Population over 65 years living alone | 15 percent of those over 65 years |
| **Employment** | |
| Unemployment Rate | 6 percent |
| Poverty Rate | 2 percent |
| Median Income | $ 239,000 |
| Insurance Coverage | 97 percent |

Source: U.S. Census 2018

seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence and other geologic hazards; flooding, and wildland and urban fire. In addition, Safety Elements are required to address non-hazard specific issues such as peak load water supply, evacuation routes, and military installations.

Senate Bill 379, adopted on October 8, 2015, requires cities to include climate change adaptation and resilience into the general plan process. To comply with SB 379, this Safety Element includes a vulnerability assessment; adaptation and resilience goals, polices, and objectives; and feasible implementation measures.

Senate Bill 99, adopted August 30, 2020, requires the cities to "identify residential developments in any hazard area identified in the safety element that does not have at least two emergency evacuation routes." SB 99 does not define neighborhood and cities are expected to define neighborhoods based on their community.

## Relationship to Other Documents

The Rolling Hills Safety Element is one of several plans that address safety in the City. The Safety Element must be consistent with these other plans to ensure the City has a unified strategy to address safety issues. The Safety Element includes information and policies from the following documents to ensure consistency.

### *Other General Plan Elements*

The Safety Element is one section of the Rolling Hills General Plan. Other elements include Land Use, Transportation, Housing,

Conservation, Open Space and Recreation and Noise. Policies in these other elements may be related to safety issues. Information and policies in the Safety Element should not conflict with those in other elements.

### *Hazard Mitigation Plan*

The City's Hazard Mitigation Plan includes resources and information to assist the City of Rolling Hills, its residents, and public and private sector organizations in planning for hazard events. The Plan provides a list of activities that may assist the City in reducing risk and preventing loss from future hazard events. The action items address multi-hazard issues, as well as activities specifically for reducing risk and preventing losses relating to earthquake, land movement, wildfire, and drought.

### *Community Wildfire Protection Plan*

The City's Community Wildfire Protection Plan (CWPP), adopted in July 2020, seeks to reduce wildfire risk in Rolling Hills. The Plan was developed collaboratively among stakeholders including the community, the City of Rolling Hills, the Rolling Hills Community Association, and the Los Angeles County Fire Department, and the Los Angeles Sheriff's Department. The Plan includes fire mitigation and evacuation strategies for the community.

## Critical Facilities and Infrastructure

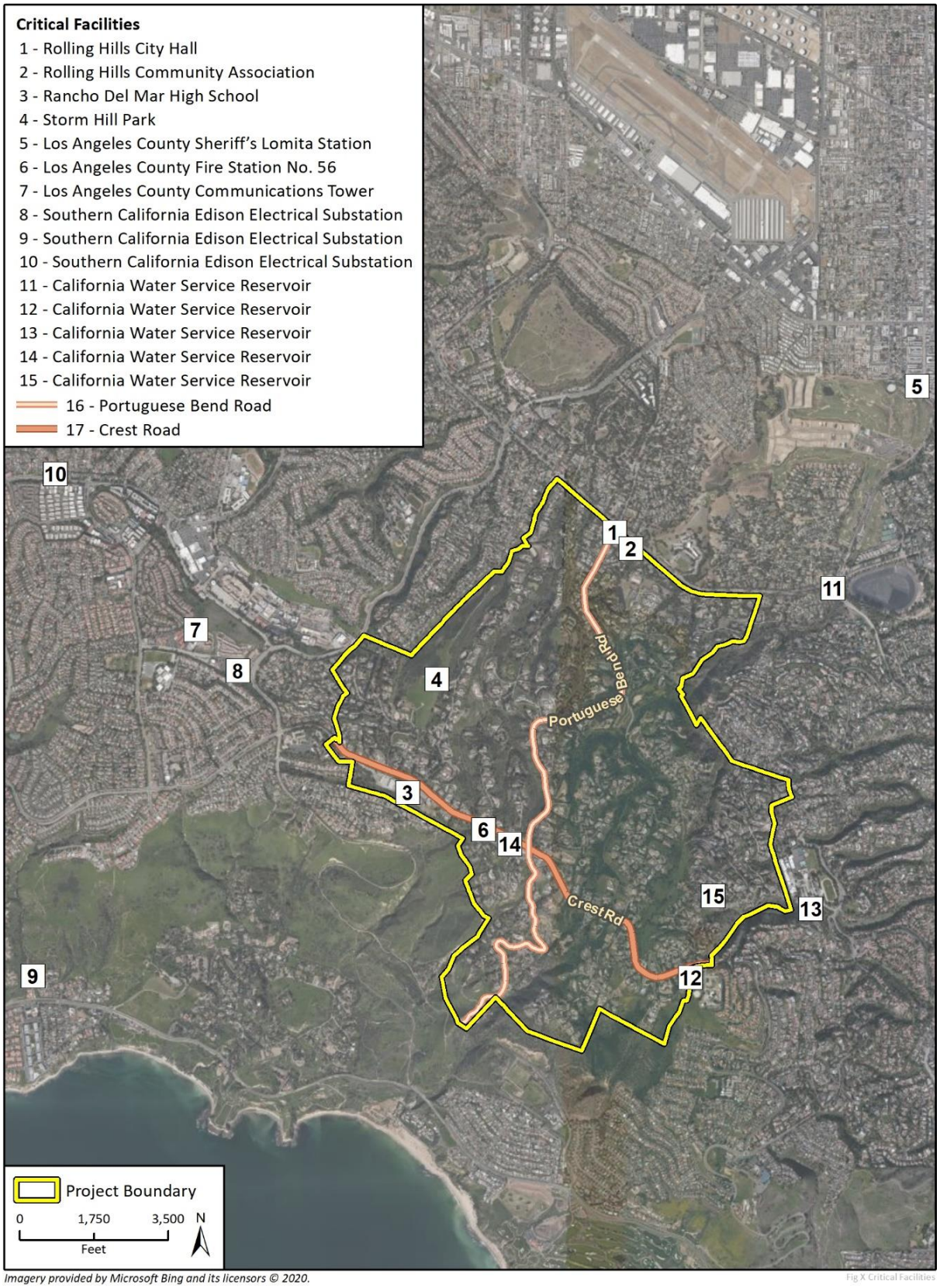
Critical facilities are places that provide emergency services or serve people who would be impacted by an emergency. Examples include hospitals, fire stations, police stations, emergency services facilities, utility facilities, and communication facilities. Critical facilities can also include the transportation system and schools. Due to the size and composition of Rolling Hills, many of the critical facilities that serve the city are located outside of city limits. No areas in Rolling Hills have been identified as lacking emergency service. Critical facilities that serve the city are shown in Figure 1 and include:

1. Rolling Hills City Hall: 2 Portuguese Bend Road, Rolling Hills, CA
2. Rolling Hills Community Association: 1 Portuguese Bend Road, Rolling Hills, CA
3. Rancho Del Mar High School: 38 Crest Road West, Rolling Hills, CA
4. Storm Hill Park: Agua Magna Canyon, Rolling Hills, CA
5. Los Angeles County Sheriff's Lomita Station: 26123 Narbonne Avenue, Lomita, CA
6. Los Angeles County Fire Station No. 56: 12 Crest Road West, Rolling Hills, CA
7. Los Angeles County Communications Tower: 5741 Crestridge Road, Rancho Palos Verdes, CA
8. Southern California Edison Electrical Substation: Crestridge Road, Rancho Palos Verdes, CA
9. Southern California Edison Electrical Substation: Tarragon Road, Rancho Palos Verdes, CA
10. Southern California Edison Electrical Substation: 27873 Hawthorn Boulevard, Rancho Palos Verdes, CA
11. California Water Service Reservoir: Palos Verdes Drive North/Palos Verdes Drive East (SW corner), Rolling Hills Estates, CA
12. California Water Service Reservoir: 3960 East Crest Road, Rancho Palos Verdes, CA
13. California Water Service Reservoir: Via Canada, Rancho Palos Verdes, CA
14. California Water Service Reservoir: 1 Spur Lane, Rolling Hills, CA
15. California Water Service Reservoir: 60 Eastfield Drive, Rolling Hills, CA
16. Portuguese Bend Road
17. Crest Road




*Rolling Hills Community Association*

**Figure 1 Critical Facilities Map**



# Hazards of Concern

## Geologic Hazards

Geologic processes that pose a threat to life, health, property, or infrastructure are considered geologic hazards. Natural geologic hazards that have the potential to affect Rolling Hills include seismic hazards, landslides, liquefaction, expansive soils, and weathering. In most cases, these natural processes cannot be prevented; however, the magnitude of destruction resulting from natural geologic hazards can be reduced through planning policies and measures.

### Landslide Hazards

Landslide activity refers to a wide range of gravity driven downslope earth movement, including rockslides, rotational slips, mudslides, and shallow debris flows. Geological and geomorphological conditions such as soil type, soil strength, slope angle, and slope height predispose slopes for failure. Other factors affecting the susceptibility to slope failure include the amount of precipitation, vegetation on the slope, groundwater seepage, and human modifications to the slope. Landslides often result in damage to property and roadways and can cause them to become unsafe due to displacement of the subsurface.

Much of the existing development in Rolling Hills is located on hilly terrain and have a greater potential to experience landslide hazards. Many of the canyons in Rolling Hills exhibit steep slopes with little vegetation coverage, leaving them susceptible to slope failure. Figure 2 shows the landslide zones in the City of Rolling Hills, as mapped by the California Geological Survey (CGS). Landslide activity has been well documented in the region. Relicts of landslides and rockslides are present throughout the City of Rolling Hills.

The following major landslides have occurred in and adjacent to the city. All are in the landslide hazards areas identified in Figure 2:

- Portuguese Bend Landslide: Beginning in[2] 1956 over approximately 270 acres in Rancho Palos Verdes
- Abalone Cove Landslide: Beginning in 1974 over 80 acres in Rancho Palos Verdes
- Klondike Canyon Landslide: Beginning in 1979 over to the south near the coastline
- Flying Triangle Landslide: Beginning in 1970s or 1980s over approximately 70 acres in the southeast area of the city

The Flying Triangle Landslide, shown in Figure 2, continues to impact the southeast portion of the city through impacts to private roads and above-ground utility lines. This area is relatively unsuitable for development due to the ongoing changes in topography.

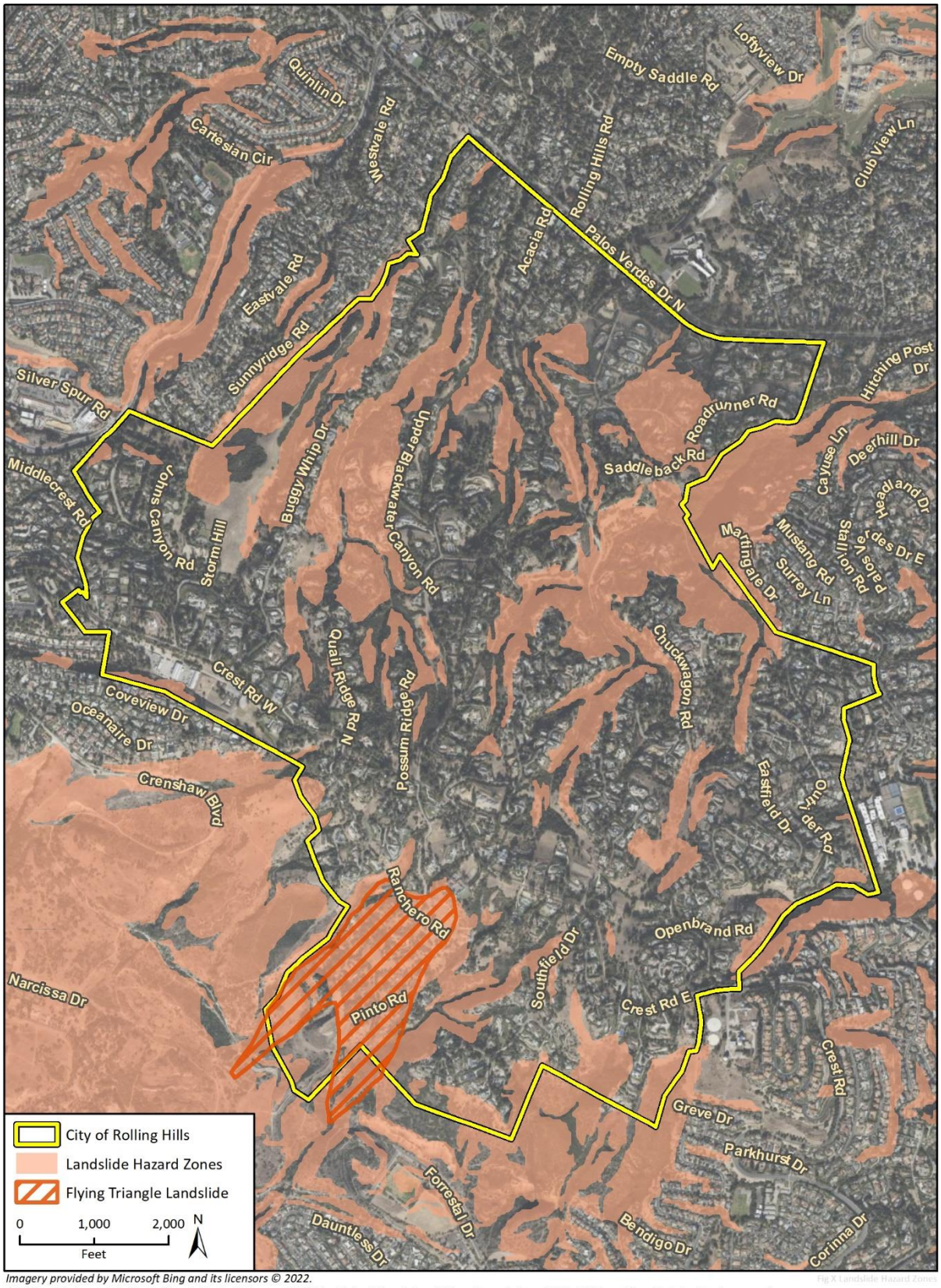
### Seismic Hazards

Rolling Hills is in a seismically active region of southern California. The last major earthquake in the Los Angeles area was the 5.1 magnitude La Habra earthquake in 2014. Rolling Hills is within 50 miles of the Whittier fault, Newport-Inglewood fault, Palos Verdes fault, Malibu Coast fault, Cabrillo fault, Santa Monica fault, and Redondo Canyon fault. Analysis of seismic data from the region indicates that the Whittier and Newport-Inglewood faults may generate a maximum credible earthquake of magnitude 7.2 and 7.4, respectively (SCEC 2013). Figure 3 shows the faults in the vicinity of Rolling Hills.

Typically, seismic shaking and fault rupture are primary hazards as they occur as a direct result of the interaction between the seismic wave energy and the earth's surface. Secondary hazards, such as liquefaction and earthquake-induced landslides, occur as a result of the primary earthquake hazards.

[2] "Beginning in" is defined as the first noted event of major rock movement

**Figure 2 Landslide Hazard Zones**




*Imagery provided by Microsoft Bing and its licensors © 2022.*
*Additional data provided by California Geologic Survey, 2015. The Flying Triangle Landslide polygon is from USGS, 2021, and is subject to data inaccuracies.*

**Figure 3 Faults in the Vicinity of Rolling Hills**




*Imagery provided by ESRI, Microsoft Bing and its licensors © 2020. Additional data provided by California Department of Conservation, California Geological Survey, 2016.*

Often, earthquake activity can result in other effects such as building damage/collapse, infrastructure failure, pipeline breakage, and damage to transportation and communication facilities. The size of the earthquake and distance from the fault rupture zone typically determine the severity of these events.

### *Seismic Shaking*

Seismic shaking, or ground shaking, refers to the movement of the earth's surface resulting from the energy release by an earthquake. Seismic shaking is typically the primary cause of property damage resulting from earthquake activity. Seismic shaking can destroy buildings, roadways, powerlines, and pipelines. Energy transmitted through the ground can travel hundreds of miles and may cause damage in many locations simultaneously. Closer proximity to the fault rupture area results in stronger shaking in that location.

The amount of ground shaking that occurs in a location depends on the magnitude of the earthquake, the distance from the epicenter, and local soil conditions. The intensity of ground shaking is related to the peak ground velocity during an earthquake. As shown in Figure 4, the earthquake shaking potential for Rolling Hills is low to moderate. The intensity of seismic shaking is measured using the Modified Mercalli scale.

According to the CGS, an active fault is one that has experienced surface movement in the past 11,000 years. The city is located near a number of active faults, including the Cabrillo Fault in city limits. Table 3 includes a list of nearby faults, their respective distance from the city, the maximum credible earthquake generated from each fault, and the likelihood of earthquake occurrence in each case.

The San Andreas fault is located approximately 80 miles to the east of Rolling Hills. Although the San Andreas fault is located at a greater distance from the city, seismic shaking originating from earthquakes occurring along the San Andreas fault poses a threat to the city. Figure 3 identifies the active and inactive faults located in the city and vicinity.

### *Fault Rupture*

Fault Rupture occurs when seismic movement on a fault break through the earth's surface. Hazards related to fault rupture arise when structures are built near or on top of an active fault. While there are a number of seismically active faults in the city and region, there are no active faults with the potential for ground rupture, defined by the Alquist-Priolo Earthquake Fault Zoning Act and delineated by CGS. Figure 3 shows the designated Alquist-Priolo study zones, the closest of which is the Newport-Inglewood Fault approximately nine miles northeast of the city.

**Table 3 Active Faults Located less than 50 Miles from Rolling Hills**

| Fault Name* | Approximate Distance from Rolling Hills |
|---|---|
| Whittier | 25 miles east |
| Newport-Inglewood | 9 miles east |
| Palos Verdes | <1 mile north |
| Malibu Coast | 20 miles northwest |
| Cabrillo | Located in the City boundaries |
| Santa Monica | 20 miles north-northwest |

*All faults listed are active. An active fault is one that has experienced surface movement in the past 11,000 years.

### *Liquefaction and Settlement*

Liquefaction is a ground failure phenomenon that occurs as a result of a seismic event. Liquefaction increases water content in surface soils until the soil reaches a semi-liquid state, contributing to a reduction in support, and ultimately resulting in shifting or subsidence of buildings and utilities. Ground failure typically occurs when the following conditions exist:

- Loose, unconsolidated granular soils
- Shallow groundwater
- Strong seismic ground shaking

While Rolling Hills has moderate to high seismic shaking potential, the subsurface soils generally lack saturated alluvial deposits and thick, granular soils. Figure 5 shows the liquefaction hazard areas, which are in the low-lying areas to the east and north, generally surrounding the Los Angeles Harbor and Harbor Lake. Liquefaction potential for Rolling Hills is low, as shown in Figure 5.

## Earthquake Induced Landslides

Ground failure or destabilization of slopes resulting from an earthquake can also occur following seismic activity in the form of Earthquake-Induced Landslides. Earthquake-induced landslides typically occur in areas with steep slopes or unstable soil conditions. As discussed above under Landslide Hazards, the risk of landslide activity in Rolling Hills is high. Much of the city overlies areas that have been identified as landslide zones by the CGS. Risk of landslide activity increases following rainfall events that result in saturated soils. Both shallow and deep seeded landslides have historically occurred in the city.

# Flooding

Rolling Hills participates in the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program. According to the FEMA flood maps, the city is not located in a flood hazard area and currently has a less than 0.2 percent annual chance to be inundated by flood waters as a result of a storm event (FEMA 2008). Overall, the city is not in any immediate risk from flooding caused by overflowing water bodies or heavy rains. However, runoff and minor flooding pose a risk if drainage systems fail along canyon bottoms, where natural drainage leads.

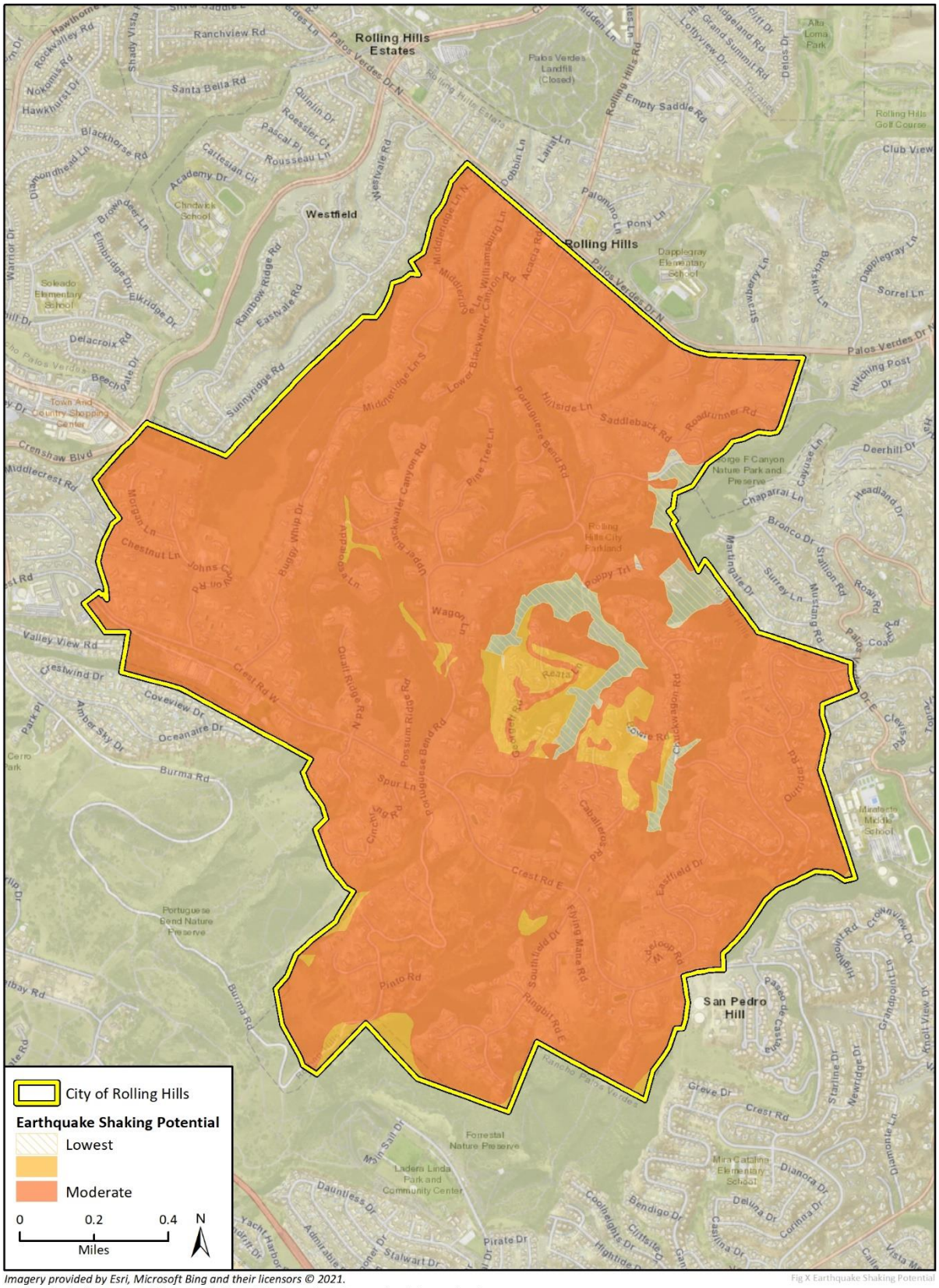
## Dam Inundation

No water storage facilities that the State of California identifies as dams are located in Rolling Hills. Just outside city limits are three water storage facilities identified as dams, which include:

- **Palos Verdes Reservoir.** Owned by the Metropolitan Water District of Southern California and located at the southeast corner of Palos Verdes Drive East and Palos Verdes Drive North. According to the California Department of Water Resources, the reservoir can hold approximately 1,100 gallons of water and has an extremely high downstream hazard.
- **10 MG Walteria and 18 MG Walteria.** Two reinforced concrete tanks which are owned by the City of Torrance and located at Crenshaw Boulevard and Crest Road. The tanks can hold 31 and 58 acre-feet (AF) of water, respectively.

Senate Bill 92, adopted in 2017, is a new dam safety requirement that requires dam owners to map the downstream inundation areas for dams governed by the Department of Water Resources. Figure 6 shows the inundation areas for the nearby water storage facilities. Due to their locations and the topography of the area, the inundation areas do not enter or affect any portion of the city.

**Figure 4 Rolling Hills Earthquake Shaking Potential**




*Imagery provided by Esri, Microsoft Bing and their licensors © 2021.*
*Earthquake Shaking Potential data provided by California Geological Survey (CGS), last updated 2019.*

Fig X Earthquake Shaking Potential

**Figure 5 Rolling Hills Liquefaction Hazard Areas**




*Imagery provided by Microsoft Bing and its licensors © 2020.*
*Additional data provided by California Geologic Survey, 2015.*

**Figure 6 Dam Inundation Areas**




*Imagery provided by Microsoft Bing and its licensors © 2020.*
*Additional data provided by California Department of Water Resources, 2020.*

# Wildland and Urban Fires

The entire City of Rolling Hills is designated a Very High Fire Hazard Severity Zone (VHFHSZ) by the California Department of Forestry and Fire Protection (CalFire), as shown in Figure 7. Rolling Hills terrain is comprised of several large and steep canyons that limit and challenge vegetation management and present conditions where a fire can quickly travels up and downslope to nearby homes. Due to the rural nature and large residential lots, many homes are surrounded by more substantial vegetation and dense brush than in more suburban settings. The bridle trails for hikers and equestrian access also contain dense vegetation and management difficulties, which contributes to the fire risk of the city. Electrical power lines pose a hazard to starting fires in the city if lines are not automatically de-energized when knocked down by extreme weather or if the surrounding vegetation is not adequately managed.

There is a history of fires in the city and the surrounding Palos Verdes Peninsula. Three major fires have been documented on the Peninsula and in the city in:

- 1923: an estimated 4,000 acres burned in Palos Verdes Hills
- 1945: 3,000 acres burned
- 1973: approximately 900-925 acres burned, 12 homes destroyed, and 10 homes damaged
- 2005: 212 acres burned near Del Cero Park
- 2009: 230 acres burned, 6 homes damaged, and forced 1,200 residents on the Peninsula to evacuate
- 2015: 3 acres burned




*Los Angeles County Fire Station No. 56*

**Figure 7 Fire Hazard Zones**




*Imagery provided by Microsoft Bing and its licensors © 2020.*
*Additional data provided by CalFire, 2020.*

Fig X Critical Facilities and Fire Hazard Zones

For many of the developed residences in the city that are vulnerable to fires, their risk may increase with construction techniques that may not meet current wildfire standards. Rolling Hills Building Code and Los Angeles County Fire Department, under the VHFHSZ standards, require new development to include more stringent design and material standards for roofing, eaves, and rafter tails as well as exterior finishes and fire buffer zones. While compliance with these standards reduces the vulnerability to new structures, existing structures that have not complied with these standards may be susceptible to undue fire risk.

## Existing Fire Risk Reduction Strategies

- Rolling Hills Municipal Code (RHMC) Chapter 8.24 Abatement of Nuisances, Chapter 8.30: Fire Fuel Abatement, and Chapter 15.20 Fire Code
- Los Angeles County Fire Department Fuel Modification Plans
- Los Angeles County Fire Code Section 4908
- Rolling Hills Community Wildfire Protection Plan vegetation management standard recommendations
- Rolling Hills Community Association fire fuel management strategies



*Portuguese Bend Road, south of Crest Road*

## Hazardous Materials

According to the Department of Toxic Substances Control (DTSC), there are no hazardous waste sites or facilities in Rolling Hills (DTSC 2020). The city and surrounding area do not contain heavy industrial uses that would create a hazardous material risk in the event of a spill, release, or natural disaster.

The city is not located near any major transit routes involving transport of a substantial quantity of hazardous material through the city. However, the nearby oil refineries (located along Sepulveda Boulevard approximately six miles northeast) and Port operations (located approximately three miles to the east) could create air quality impacts if wind patterns and release events occur. Air quality impacts are discussed in the *Open Space and Conservation Element* of the Rolling Hills General Plan.

# Community Communication

## Emergency Response and Evacuation

### Police Response and Crime

The Los Angeles County Sheriff's Department is contracted with the city to provide police services and protection to the city. The Lomita Station of the Sheriff's Department located at 26123 Narbonne Avenue serves the city.

According to the Lomita Station crimes report from January 1, 2020, through December 31, 2020, Rolling Hills had 7 reported crimes (LACSD 2020). The crimes were related to theft, burglary, and arson. Outside the city limits and in the Lomita District, 401 crimes were reported during this same period, 79 of which were violent crimes (LACSD 2021). The difference in crimes in the city and the surrounding area is attributed to the private nature of the city. There are three entrances to the city, all of which are gated and staffed 24 hours a day. Visitors are required to be on a resident's guest list to enter city limits, reducing crime in the city and demand on Los Angeles County Sheriff's Department.

### Fire Response

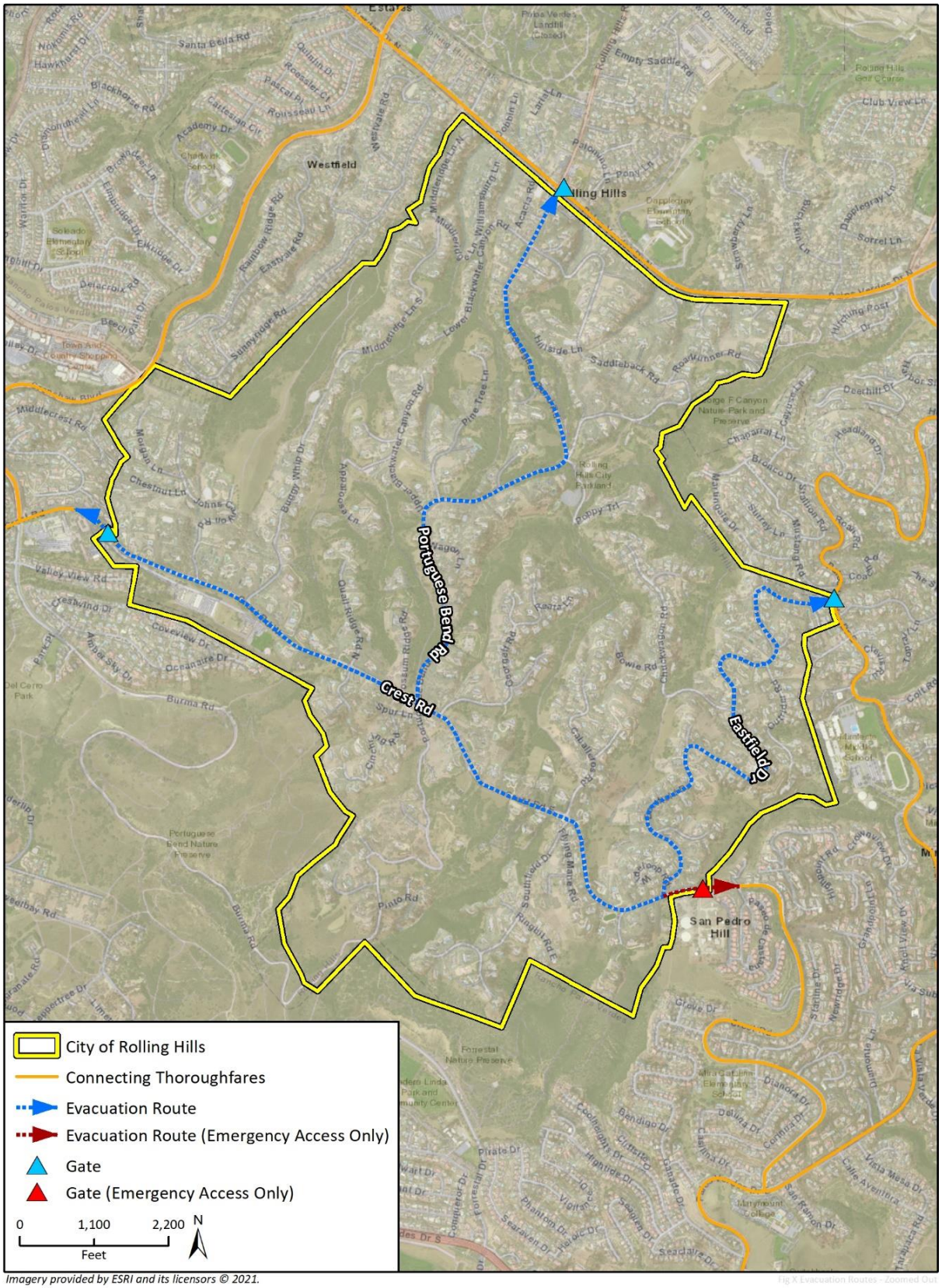
The Los Angeles County Fire Department provides emergency operations support to the City and participates in the California mutual aid system. Mutual aid is emergency assistance that is dispatched upon request across jurisdictional boundaries. Fire Station 56, located at 12 Crest Road West, serves the city under Battalion 14, which also serves the remaining Palos Verdes Peninsula, Lomita, and Avalon Canyon. Fire response constraints in the city include ability to access certain homes or areas due to inadequate road widths for fire maneuvering. One of the major topics of concern related to fire response in the city relates to vegetation clearing along roadways. Ten-foot clearance on each side of the roadway, especially the limited access roads, is important for fire response and evacuation during a fire, according to Scott Hale, Assistant Fire Chief.

### Evacuation Strategies and Routes

Because a variety of hazards could affect city residents, it is vital to identify critical routes for evacuation in the event of a major event.

Senate Bill 99, adopted August 30, 2020, requires cities to "identify residential developments in any hazard area identified in the safety element that does not have at least two emergency evacuation routes." Due to the size of Rolling Hills and that it has four evacuation routes, no neighborhoods have been identified as not having two evacuation routes. As shown on the Figure 8, the evacuation routes also connect to major

**Figure 8 Existing Evacuation Routes**




*Imagery provided by ESRI and its licensors © 2021.*

roadways in the area that are multi-directional such as Crenshaw Boulevard, Palos Verdes Drive North and Palos Verdes Drive East.

Figure 8 identifies the existing evacuation routes in the city, which are:

- Main Gate at Rolling Hills Road and Palos Verdes Drive North
- Crest Gate at Crest Road near Crenshaw Blvd
- Eastfield Gate at Eastfield Drive and Palos Verdes Drive East
- Crest Road East Gate at the end of Crest Road East

Crest Road East Gate has been updated with a motor and has no guards. This gate is available as an emergency exit to the city during emergencies. The City's recently adopted CWPP establishes evacuation strategies and methodologies, including:

- Using the City's Block Captains[3] as important coordinators for residents
- Communication goals between the City, emergency responders, Rolling Hills Community Association, and residents
- Details for residents regarding how people get notified during an evacuation
- Responsibilities and operations of the Emergency Operations Center

## Disease Prevention

As evidenced by the COVID-19 pandemic, unforeseen infectious diseases can be disastrous for communities, especially vulnerable groups such as older adults, and people with compromised immune systems. The City worked diligently during the pandemic to minimize risk to community members. The Block Captains regularly checked in on old adults in the community,



*Fire Station Trail*

[3] The Rolling Hills Block Captain Program is a city-sponsored, resident-based community program of volunteers. Their role is to get to know neighbors, help them to prepare for an emergency, and be a liaison between first responders and City of Rolling Hills during an emergency.

finding out what residents needed, helping run errands, and providing hand sanitizer Additionally, the City disseminated information regularly including where to buy groceries at the beginning of the pandemic, testing information, and more. Policies regarding infectious disease can help expedite recovery and prepare the community for future risks.

# Climate Change

Climate change is expected to affect future occurrences of natural hazards in and around Rolling Hills. Some hazards are projected to become more frequent and intense in the coming decades, and in some cases, climate impacts have already begun.

In developing the Safety Element, the City competed a Climate Change Vulnerability Assessment consistent with Government Code Section 65302(g), which assesses how the populations and assets in Rolling Hills are vulnerable to different climate hazards. The full Climate Change Vulnerability Assessment can be found in Appendix A: Existing Conditions Report. According to the Vulnerability Assessment, the city is most vulnerable to wildfire impacts, extreme heat, and landslide impacts from climate change.

According to the Vulnerability Assessment and the California's Fourth Climate Change Assessment, Rolling Hills can expect the following changes to natural hazard events:

- Projected annual average maximum temperature is expected to increase in Rolling Hills between 1.8- and 6.6-degrees Fahrenheit (°F) compared to 1990, depending on the greenhouse gas (GHG) emissions scenario.[4]
- Extreme heat events are also expected to increase in Rolling Hills. The annual number of average extreme heat days is projected to increase from a baseline of 4 between 1950 and 2005 to 8 or 14 between 2030 and 2099, depending on the GHG emissions scenario.
- Although only small changes in average precipitation are projected, the Los Angeles Region, which includes Rolling Hills, is expected to experience dry and wet precipitation extremes and higher frequency and severity of storms. Increasing storm intensity may exacerbate landslide hazards in the city. Warmer and drier conditions state-wide could increase the prevalence of drought conditions that could impact Rolling Hills.
- Wildfire is projected to increase over all of southern California.

## Vulnerable Populations and Assets

As climate change occurs, communities will be affected to varying degrees and impacts depending on the hazard as well as how sensitive the communities are to impacts. Virtually all people and assets in a community will be affected by climate change in some way, but some communities may be more sensitive. The Vulnerability Assessment identified the following sensitivities:

### Populations

- **Children.** Approximately 6.6 percent of the total population in Rolling Hills are ten years old or younger.
- **Persons in Poverty.** This is identified for people living in households with an income below the poverty limit, which is $26,200 for a household of four people. There are approximately 26 people in

[4] The Vulnerability Assessment uses two GHG emissions scenarios: Representative Concentration Pathway (RCP) 4.5 and RCP 8.5. RCP 4.5 describes a scenario in which GHG emissions peak around 2050 and then decline. RCP 8.5 is the scenario in which GHG emissions continue to rise through 2050 before leveling off around 2100.

Rolling Hills who live in poverty, or approximately 1.6 percent of the total population for whom poverty status can be determined.

- **Persons with Chronic Health Conditions.** These are people who have a long-term or permanent health condition that can create regular challenges in their day-to-day lives. These health problems include obesity, cancer, heart disease, and arthritis. In addition, those with any kind of disability, including mobility challenges, hearing, or vision impairments, behavioral disabilities, and challenges living independently or taking care of themselves. Approximately 11.5 percent of the population have identified having a disability.
- **Renters.** These are people who live in homes that they (or the head of their household) do not own. Approximately 24 housing units, or 4 percent of the housing units in Rolling Hills, are renter-occupied.
- **Older Adults.** These are persons 65 years or older are more at risk for climate change impacts, especially those living alone. 28 percent of the population of Rolling Hills are over 65 years, and 15 percent of those over 65 years live alone.
- **Limited English Proficiency.** Approximately three percent of households have identified being limited English-speaking. Of those, a majority spoke Asian and Pacific Island languages and Spanish.

## Infrastructure

- **Access Roads.** These roadways are one of a few, or the only, ways in and out of some communities or neighborhoods. The single or limited number of entry and exit points does not make the road itself more vulnerable than other roads, but loss of these roadways can effectively cut off large numbers of people from other areas in the Palos Verdes Peninsula and the rest of Los Angeles County. Portuguese Bend Road and Crest Road are the primary access roads into and out of the city.
- **Bridle Trails.** Throughout the community are over 25 miles of trails available to residents and non-city residents who obtain permits. The trails are maintained by the Rolling Hills Community Association and located primarily in canyon areas.
- **Electrical Substations.** Electrical substations are facilities that convert electricity from one voltage to another, making it suitable for long-distance transmission or for use by homes, businesses, and other electrical customers. There are no electrical substations located in city limits, but three are located near the city in Rancho Palos Verdes and owned/operated by Southern California Edison.
- **Electrical Utility Lines.** These lines transmit and deliver electricity from Southern California Edison to the city. The city has both underground and overhead electric utility lines.
- **Natural Gas Transmission Pipelines.** Natural gas pipelines carry large volumes of natural gas between communities. There are no transmission lines in the city. One transmission line ends at the intersection of Rolling Hills Road and Palos Verdes Drive North, adjacent to city limits.
- **Water Reservoirs and System.** The system that stores and supplies drinking water for residents. Palos Verdes Water District of the California Water Service supplies water to Rolling Hills. There are two California Water Service water reservoirs in the city limits.

## Services

- **Public Safety Response.** Public safety services are provided by law enforcement

and fire agencies. These agencies include the Los Angeles County Sheriff and Fire Departments.

- **Water Services.** These services involve treating and transporting water to be used by customers and transporting and treating wastewater so it can be safely released into the environment. California Water Service provides drinking water to the city.
- **Energy Delivery.** Energy services in Rolling Hills include electricity and natural gas delivered through utility lines from Southern California Edison and Southern California Gas Company.

# Vulnerability Assessment Results

The Vulnerability Assessment indicates that the city's populations, infrastructure, and services are most vulnerable to wildfire, extreme heat, and extreme precipitation events.

## Populations

Vulnerable populations such as older adults, residents with chronic health conditions, and those with financial trouble are most at risk to extreme heat and wildfire impacts.

28 percent of the city's population is over 65 years. Older adults do not adjust as well as young people to sudden changes in temperature and are more likely to have medical conditions that can worsen with extreme heat (CDC 2017a). Older adults who are living alone are even more at risk as the actions necessary to mitigation extreme heat are more difficult alone. Getting water, changing clothes, showering, or turning on the air conditioner may be more difficult for older adults with physical disabilities and do not have a partner to assist them. Extreme heat can be highly dangerous to persons with chronic health conditions, because very high temperatures can exacerbate diabetes, cardiovascular conditions, respiratory ailments, and other diseases. Some of these people have weakened immune systems which can make them more likely to contract illnesses and vulnerable to human health hazards. In addition, they may be taking medications that make the effects of extreme heat worse (CDC 2017b). While there are not many households in poverty in the city, those who are have limited financial resources to upgrade their homes to have air conditioning to better resist extreme heat.

Older adults, residents with chronic health conditions, and those with financial trouble are the populations most at risk to wildfire impacts. Older adults are almost three times more likely to die in a fire than the overall population (USFA 2017), and typically have increased mobility or mental health issues. Therefore, older adults, especially those in the city living alone, have more difficulties evacuating to safe areas when there is a need. Those in Rolling Hills with limited financial resources are more unlikely to retrofit their homes to better resist climate-related hazards such as wildfires. In addition to direct impacts, indirect impacts such as poor air quality also creates public health hazards to the city. Recent California wildfires in August and September 2020 had areas of California recording the worst air quality in the world and highlighted the hazards of secondary impacts from wildfires, which could impact the city from fires throughout the State. Older adults and individuals with chronic health conditions are likely to be impacted most by these secondary impacts. Also, those with limited finances or without air conditioning would be impacted by secondary smoke impacts that occur during local and regional wildfires.

## Infrastructure

Access roads, residential structures, and community facilities and government buildings are the most vulnerable

infrastructure to wildfire and extreme precipitation impacts from climate change.

All city infrastructure is located in a VHFHSZ. Portuguese Bend Road and Crest Road are critical for access to and evacuation from many areas of the city. Wildfires may not significantly damage the infrastructure, but they could result in closure or the inability to travel on them during wildfire events, which can isolate areas of the city and create severe health and safety risks. Wildfires are unlikely to substantially damage trails directly, but they can force widespread trail closures which are an important asset to the community.

The greatest potential impact of life and well-being would be to residential structures, which are the primary structures in the city. In addition, impacts to Rolling Hills Community Association and City Hall structures would impact community functions and government services.

Critical infrastructure most at risk in Rolling Hills to minor flooding impacts and landslides from increased storms would be access roads, bridle trails, electrical utility lines, and water systems. Because Portuguese Bend Road and Crest Road are critical for access to and evacuation from the city, any damage or closure can effectively isolate areas of the city, potentially creating severe health and safety risks. Bridle trails are predominantly located in canyon areas, which would be more susceptible to flooding and landslides. Landslides could impact utilities, as seen in the existing Flying Triangle Landslide area, which has moved utility lines above ground in certain areas due to the continuous movement of the earth in this area. Due to the limited accessibility of the city, there is a medium potential for impacts to access roads and bridle trails and a low potential impact for the remaining vulnerable infrastructure.

## Services

Energy delivery, specifically electricity delivery, could be impacted from increased wildfires. Direct impacts to Southern California Edison electricity transmission infrastructure could impact power in the city. In addition, utility companies have begun shutting off power to areas to avoid wildfires during times when weather creates high wildfire risk. Public safety services could be strained during wildfire events, which are expected to increase.

Overall, climate change impacts from wildfire are projected to have the greatest potential impact to the city.

# Goals, Policies, and Implementation

## Hazard Mitigation

### Goal 1 Minimization of Loss of Life, Injury, and Property Damage Resulting from Geologic Hazards

**Policy 1.1** Ensure that existing structures throughout the City meet seismic safety standards and that new facilities are developed to updated standards.

**Implementation Measure 1.1.1:** The City will work with Los Angeles County Building and Safety Department and other agencies to ensuring that all proposed structures in the city meet current seismic safety code requirements.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and LA County Building and Safety Department

**Funding:** General Fund and permit fees

**Policy 1.2** Support earthquake strengthening and provision of alternative or backup services, such as water, sewer, electricity, and natural gas pipelines and connections, especially in areas of high seismic or geologic high hazard or where weak segments are identified by existing or future studies.

**Implementation Measure 1.2.1:** Require future development in active fault areas to provide geotechnical studies indicating the location of the fault trace relative to proposed improvements and identify appropriate mitigation. The City will evaluate the seismic risk to existing infrastructure in these areas and where appropriate, examine the feasibility of mitigating the risk over time.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and LA County Building and Safety Department

**Funding:** General Fund and private developers

**Policy 1.3** Enforce seismic design provisions from the California Building Code into all development and ensure adequate review and inspection.

**Implementation Measure 1.3.1:** The City will work with Los Angeles County Building and Safety Department and other agencies to ensuring that all proposed structures in the city meet current seismic safety code requirements.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and LA County Building and Safety Department

**Funding:** General Fund and private developers

**Implementation Measure 1.3.2:** Require fault investigations along traces of the Palos Verdes and Cabrillo faults to comply with guidelines implemented by the Alquist-Priolo Special Studies Zone Act. Buildings for human occupancy should be set back a minimum of 50 feet from those faults that are shown to be active or from fault traces where the risk cannot be determined.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and LA County Building and Safety Department

**Funding:** General Fund and private developers

**Policy 1.4** Require review by a structural engineer when a critical building or facility undergoes substantial improvements.

**Implementation Measure 1.4.1:** City staff will review existing ordinances to ensure that the appropriate review requirements are included in them. In addition, the Seismic Safety Ordinance will require a structural engineer to review development proposals in designated Special Studies Zones.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and LA County Building & Safety Department

**Funding:** General Fund and private developers

**Policy 1.5** Ensure that water supplies are not interrupted by seismic events such as surface rupture, ground shaking or ground failure.

**Implementation Measure 1.5.1:** The City may conduct a seismic vulnerability assessment of current water supply systems to address peak load water supply requirements. If the vulnerability assessment indicates a potential interruption of water supply due to damage from a seismic event, designate emergency sources of water.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and LA County Building & Safety Department

**Funding:** General Fund

**Policy 1.6** Discourage development adjacent to earthquake faults and other geological hazards.

**Implementation Measure 1.6.1:** All development will comply with the Seismic Hazards Overlay Zone.

**Timing:** Immediate and ongoing

**Agency:** Planning Department

**Funding:** General Fund and private developers

**Policy 1.7** Continue to require preliminary investigations of tract sites by State-registered geotechnical engineers and certified engineering geologists (Chapter 70 County Building Code) and ensure regular inspection of grading operations.

**Implementation Measure 1.7.1:** The City will continue to enforce the Building Code and Safety regulations.

**Timing:** Immediate and ongoing

**Agency:** Planning Department

**Funding:** General Fund

## Goal 2 Minimization of Loss of Life, Injury, and Property Damage Due to Flood Hazards

**Policy 2.1** Maintain storm drains to prevent local flooding and debris flows, and encourage residents to assist in maintaining those drains that are the responsibility of the homeowner.

**Implementation Measure 2.1.1:** The City will cooperate with the Los Angeles County Public Works Department to maintain storm drains in the City.

**Timing:** Immediate and ongoing

**Agency:** LA County Building & Safety Department

**Funding:** General Fund

**Implementation Measure 2.1.2:** The City will encourage homeowner maintenance of storm drains by developing educational materials to be added to the City website and included in the City's newsletter.

**Timing:** Immediate and ongoing

**Agency:** LA County Building & Safety Department

**Funding:** General Fund

**Policy 2.2** Avoid construction in canyon bottoms and participate in the National Flood Insurance Program. Require new development or expansion of existing development adjacent to canyons to assess potential environmental impacts from increased run-off and erosion and evaluate appropriate mitigation. Mitigation measures should address projected impacts from climate change.

**Implementation Measure 2.2.1:** The City will evaluate the flood hazard potential and address climate change impacts in future environmental review. The City will ensure that development in areas designated as a Flood Hazard Overlay Zone mitigates potential flood impacts.

**Timing:** Immediate and ongoing

**Agency:** Planning Department

**Funding:** General Fund and private developers

**Implementation Measure 2.2.2:** The City will require the submission of soil engineering reports for land development permits when soil erosion problems are suspected.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund and private developers

## Goal 3 Minimization of Loss of Life, Injury, and Property Damage Resulting from Fire Hazards

**Policy 3.1** Develop stringent initial site design and on-going maintenance standards incorporating adequate mitigation measures into individual developments to achieve an acceptable level of risk, considering the increased risk associated with increased wildland fire hazards due to climate change.

**Implementation Measure 3.1.1:** The City will work with the Los Angeles County Fire Department, Los Angeles County Sheriff's Department, and Rolling Hills Community Association to review current standards for wildfire prevention and improve standards and/or regulations where required.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 3.1.2:** The City will implement recommended fire mitigation strategies from the Community Wildfire Protection Plan including infrastructure hardening and vegetation management for and around existing and new development.

**Timing:** Immediate and ongoing

**Agency:** Planning Department/Building & Safety Department

**Funding:** General Fund

**Policy 3.2** Reduce potential fire ignition sources.

**Implementation Measure 3.2.1:** The City will continue to implement the utility undergrounding projects described in the Community Wildfire Protection Plan.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 3.2.2:** Designate and publicize emergency access routes with the city and sub region. Prioritize undergrounding of utilities to enhance reliability of emergency access routes and minimize conflagration hazards from fallen power lines.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 3.3** Develop and implement a comprehensive retrofit strategy for existing structures.

**Implementation Measure 3.3.1:** The City will develop and implement a comprehensive retrofit strategy for existing structures and lifeline utilities in very high fire risk areas to increase public safety and reduce the risk of property loss and damage during wildfires.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and LA County Building & Safety Department

**Funding:** General Fund

**Implementation Measure 3.3.2:** Enforce existing ordinances and regulations that apply to roofing materials. The City will enforce a Class A Roofing Ordinance for all structure, as described in the Community Wildfire Protection Plan. The City will require old roofs to be removed prior to reroofing to increase the fire-resistance of the structure.

**Timing:** Immediate and ongoing

**Agency:** Planning Department/Building & Safety Department

**Funding:** General Fund

**Policy 3.4** Ensure that all new residential development has at least two emergency evacuations.

**Implementation Measure 3.4.1:** The City will review and update emergency response and evacuation plans and procedures annually to reflect current conditions and community needs.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and LA County Building & Safety Department

**Funding:** General Fund

**Implementation Measure 3.4.2:** Create secondary access in communities with single access.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 3.4.3:** Identify special populations and large animals, especially horses, that may need assistance to evacuate.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 3.5** Whenever feasible, locate the following outside flood and fire hazard zones: health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities.

**Implementation Measure 3.5.1:** The City will require review of new essential facilities and, as necessary, development of measures to avoid flood and fire hazard impacts.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and LA County Building & Safety Department

**Funding:** General Fund and private developers

**Policy 3.6** Educate residents on fire hazard reduction strategies to employ on their properties, focusing on the most vulnerable populations such as older adults and individuals with chronic health conditions.

**Implementation Measure 3.6.1:** The City will promote vegetation management strategies outlined in the Community Wildfire Protection Plan (i.e., fuel management in canyons and fire fuel management standards for individual properties) in the City's quarterly newsletter, through the website, brochures, videos, and block captain meetings.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and City Manager

**Funding:** General Fund

**Policy 3.7** Work with the County to ensure that all fire equipment remains operable and adequate to respond to a major disaster.

**Implementation Measure 3.7.1:** City staff will monitor the City's fire protection rating and cooperate with the Fire Department in the correction of deficiencies.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 3.8** Require new development to meet or exceed hardening requirements in the most current version of the California Building Codes and California Fire Code.

**Policy 3.9** Evaluate evacuation route capacity, safety, and viability under a range of emergency scenarios as part of the next update to the Rolling Hills Hazard Mitigation Plan, in accordance with AB 747.

**Policy 3.10** Update the City's development standards to be in conformance with title 14, CCR, division 1.5, chapter 7, subchapter 2, articles 1-5 (commencing with section 1270) (SRA Fire Safe Regulations) and title 14, CCR, division 1.5, chapter 7, subchapter 3, article 3 (commencing with section 1299.01) (Fire Hazard Reduction Around Buildings and Structures Regulations).

**Policy 3.11** Minimize risks to existing development by identifying existing non-conforming development to contemporary fire safe standards, in terms of road standards and vegetative hazard, and requiring all development to meet or exceed CCR, division 1.5, chapter 7, subchapter 2, articles 1-5 requirements (SRA Fire Safe Regulations).

**Policy 3.12** Require fire protection plans for all new development.

**Policy 3.13** Require all properties in the city to enforce precautionary measures to create defensible space including, but not limited to, maintaining a fire break by removing brush and flammable vegetation located within 30 feet of the property, maintaining any tree adjacent to or overhanging any building free of dead or dying wood, and maintaining roofs free of leaves, needles, or other dead vegetation growth, as described in the Rolling Hills Hazard Mitigation Plan.

**Policy 3.14** Evaluate the City's capacity to adequately suppress wildfire, taking into account water supply availability, as part of the next Rolling Hills Hazard Mitigation Plan update.

**Policy 3.15** Coordinate with Palos Verdes Water District to support the provision of adequate water availability throughout the City and provision of adequate water storage to meet future peak fire demand during times of peak domestic demands.

**Policy 3.16** Maintain emergency roadways and improve them as necessary and appropriate to ensure ongoing serviceability.

**Policy 3.17** Establish and maintain community fire breaks and fuel modification/reduction zones, including public and private road clearance.

**Policy 3.18** Require that all homes have visible street addressing and signage.

## Goal 4 Minimization of Impacts to Life and Property Associated with the Use, Storage, or Transport of Hazardous Materials

**Policy 4.1** Restrict the travel of vehicles carrying hazardous material through the city.

**Implementation Measure 4.1.1:** The City will ensure the Los Angeles County Sheriff's Department enforce licensing and current laws regarding the transport of hazardous materials through the city.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 4.2** Work to promote the safe use and disposal of household hazardous wastes.

**Implementation Measure 4.2.1:** The City will work with agencies responsible for the disposal of household hazardous wastes.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

# Community Communication

## Goal 5 Protection of the Community from Disasters and Emergencies

**Policy 5.1** Designate and develop specific critical facilities as emergency centers to serve the entire City and work with other cities to maintain existing trauma care facilities that serve the region.

**Implementation Measure 5.1.1**: The City will meet with other communities in the region to discuss the loss of trauma care centers in the region. The City will examine the feasibility of establishing the development of a critical/trauma care unit at one of the local clinics or hospitals in the region.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.2** Cooperate with the Los Angeles County Sheriff's Department to ensure that law enforcement services are ready and available to serve the city in the event of a major disaster.

**Implementation Measure 5.2.1:** City staff will monitor the City's contract and budget with the Sheriff's Department to ensure that adequate service levels are maintained.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.3** Develop and coordinate medical assistance procedures in the event of a major disaster.

**Implementation Measure 5.3.1:** City staff will develop and update the Emergency Operations Plan, which will be distributed to the community. The update of the Emergency Operations Plan will include an assessment of current emergency service and projected emergency service needs, and goals or standards for emergency services training for City staff and volunteers.

**Timing:** Ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.4** Inventory and, where necessary, acquire supplemental disaster communication equipment and other equipment, tools, and supplies used by Block Captains during an emergency.

**Implementation Measure 5.4.1:** City staff will complete an inventory of infrastructure needed to support emergency communications and equipment needed for use by Block Captains and the City to communicate during emergencies, as described in the Community Wildfire Protection Plan.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.4.2:** A survey will be done by the City periodically to establish an inventory of equipment which could be used in the event of a major disaster.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.5** Ensure that adequate provisions are made to supply drinking water for extended periods of time in the event of a major disaster.

**Implementation Measure 5.5.1:** City staff will inventory sources of potable water that could be used in the event of an emergency and the means to distribute that water to residents and others in the Planning Area.

**Timing:** Immediate and ongoing

**Agency:** LA County Building & Safety Department

**Funding:** General Fund

**Policy 5.6** Develop procedures to follow in the event of wildfire, flooding, erosion, and possible reservoir failure and investigate ways of reducing the likelihood of their occurrence.

**Implementation Measure 5.6.1**: The City will update the Hazard Mitigation Plan every five years to reduce the risk from hazards by identifying resources, information, and strategies for risk reduction, while helping to guide and coordinate mitigation activities throughout the city.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.6.2:** City staff will develop and maintain an Emergency Operations Plan, which will set forth an operating strategy for managing potential emergencies (as described in the Hazard Mitigation Plan)

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.7** Ensure that City Hall maintains a current emergency supply of water, food, blankets, and first aid to provide for all employees for a 3-day period.

**Implementation Measure 5.7.1**: A City staff person will be assigned the task of compiling a list of supplies and maintaining an adequate stockpile.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.8** Encourage private businesses to develop disaster preparedness plans for their employees.

**Implementation Measure 5.8.1:** The City will prepare and distribute a brochure outlining recommendations for stockpiling supplies for employees.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.9** Encourage residents to attend periodic training programs on wildfire mitigation and disaster planning, and to develop disaster preparedness and evacuation plans.

**Implementation Measure 5.9.1:** The City will work with the RHCA and Block Captains to launch a communication and education program that will include a workshop on How to Develop an Evacuation Plan for your Family, as described in the Community Wildfire Protection Plan.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.9.2:** The City will work with the RHCA and Block Captains to promote training programs on wildfire mitigation and disaster planning through the newsletter and the City website.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding**: General Fund

**Policy 5.10** Support the development and further implementation of a peninsula-wide disaster plan.

**Implementation Measure 5.10.1:** The City will coordinate its disaster planning efforts with neighboring jurisdictions in the region as part of Hazard Mitigation Plan updates

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.11** Increase public awareness of City emergency response plans, evacuation routes and shelters, and in ways to reduce risks at the home and office, focusing on the most vulnerable populations such as older adults and individuals with chronic health conditions.

**Implementation Measure 5.11.1:** The City will prepare communication materials outlining procedures to follow in the event of a major disaster. These materials will be distributed to every household and business in the city.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.11.2**: The City will maintain the City-wide Neighborhood Watch program.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.11.3:** The City will define refuge areas in the event of a wildfire event to include in the Emergency Operations Plan. This effort will be led by the Fire Department and the Sherriff's Department.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.11.4:** The City will distribute educational materials for large animal evacuation, consistent with Community Wildfire Protection Plan recommendations. This will include adding the information to the City website and including it in the City's newsletter during the fire season.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.11.5:** The City will work with Block Captains to provide emergency education and information through the City's newsletter and website and by providing workshops and seminars described in the Community Wildfire Protection Plan.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.12** Maintain a Hazard Mitigation Plan.

**Implementation Measure 5.12.1:** The City will coordinate with the American Red Cross and Los Angeles County Fire, Sheriff, and Public Social Services to develop specific plans for responding to emergencies as part of Hazard Mitigation Plan updates. The City will submit copies of its Hazard Mitigation Plan to the Los Angeles County Fire and Sheriff's Departments for review. The City will review similar plans prepared by neighboring cities.

**Timing:** Every five years

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.13** Ensure maximum accessibility throughout the city in the event of a disaster.

**Implementation Measure 5.13.1**: The City will ensure that multipurpose trails are maintained in order to be serviceable by emergency vehicles in the event of a disaster.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.14** Ensure the reliability of essential facilities such as communications towers, electrical substations, water services, and first-response buildings in the event of an emergency through promoting grid resilience and energy independence. Work to implement on-site power generation through solar photovoltaic systems and battery storage.

**Implementation Measure 5.14.1:** The City will work with telecommunication providers to identify opportunities to improve reliability of cell service throughout the city.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.14.2:** The City will work with electricity and natural gas providers to identify opportunities to promote grid resilience.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.14.3:** The City will seek funding to enhance telecommunication service.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.14.4:** The City will provide educational materials to residents (i.e., newsletter, webpage, brochure) to promote solar panels and battery storage installation on existing development.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.15** Minimize the risk of spread of infectious diseases and associated economic disruption.

**Implementation Measure 5.15.1:** The City will coordinate with the County of Los Angeles Public Health Department to provide testing and contact tracing resources to the Rolling Hills community.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.15.2:** The City will maintain up-to-date public health services on the City's website.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.15.3:** The City will explore the need for additional marketing campaigns to promote public safety protocol among City departments.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measures 5.15.4:** The City will partner with local non-governmental organizations (NGOs) to provide additional support and services in the city.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measures 5.15.5:** The City will partner with community groups and neighborhood organizations to advertise what resources are available to residents.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.16** Increase access to essential resources and facilitate effective communication in the community to accelerate recovery following such a disaster.

**Implementation Measure 5.16.1:** The City will connect the newly unemployed with talent-seeking industries, such as through a job portal.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Implementation Measure 5.16.2:** The City will supplement federal relief efforts, such as creating a resilience fund for residents to assist those in need.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.17** Provide City officials with a basis for disaster preparedness decision making and establish a public education program for disaster preparedness.

**Implementation Measure 5.17.1:** The Emergency Services Coordinator will conduct annual meetings with City personnel to ensure they are familiar with procedures outlined in the Hazard Mitigation Plan and Emergency Operations Plan.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.18** Establish a line of command to ensure that the decision-making process will function satisfactorily in the event of a major disaster.

**Implementation Measure 5.18.1:** The City will implement the Hazard Mitigation Plan.

Timing: Immediate and ongoing

Agency: City Manager

Funding: General Fund

**Policy 5.19** Coordinate with citizen groups, such as Block Captains, and organizations to establish a viable body to provide emergency assistance in the event of a natural disaster.

**Implementation Measure 5.19.1:** The City Emergency Services Coordinator will work with local equestrian groups and other organizations to establish a Rolling Hills Search and Rescue Team.

**Timing:** Immediate and ongoing

**Agency:** City Manager and LA County Building & Safety Department

**Funding:** General Fund

**Policy 5.20** Encourage cooperation among adjacent communities to provide back-up law enforcement assistance in emergency situations.

**Implementation Measure 5.20.1:** The City will submit copies of its Hazard Mitigation Plan updates to the Los Angeles County Fire and Sheriff's Departments for review. The City will review similar plans prepared by neighboring cities.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 5.21** Incorporate health threats into early warning systems.

**Implementation Measures 5.21.1:** Partner with the Los Angeles County Vector Control District and the Los Angeles County Department of Public Health to develop and enhance disaster and emergency early warning systems to incorporate objective data and information for potential health threats such as heat-illness, illnesses complicated by low air quality, precipitation events, and vector borne diseases due to climate change hazards.

## Goal 6 Maintenance of Public Safety for All Residents

**Policy 6.1** Work with, and support the Sheriff's Department in crime prevention and law enforcement efforts, to make sure there are adequate resources to meet the needs of the community.

**Implementation Measure 6.1.1:** The City will conduct an annual review of its contract with the Los Angeles County Sheriff's Department to ensure current service standards are maintained. Alternatives will be considered if service levels are considered inadequate.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 6.2** Cooperate with neighboring cities, Los Angeles County, California State and U.S. Federal agencies in crime prevention and law enforcement.

**Implementation Measure 6.2.1:** The City will continue to regularly coordinate with all law enforcement agencies in combating crime.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

**Policy 6.3** Evaluate the incidence of crime and develop measures needed to deter crime or apprehend the criminals.

**Implementation Measure 6.3.1:** The City will monitor crime statistics for the peninsula and the city. The City will meet with Los Angeles County on a regular basis to discuss programs, ordinances, and other measures that will be effective in combating crime.

**Timing:** Immediate and ongoing

**Agency:** City Manager

**Funding:** General Fund

# Climate Change Adaptation and Resilience

## Goal 7 Protection of the Community from the Effects of Climate Change

**Policy 7.1** The City will continue to enforce updated State-mandated water conservation regulations.

**Implementation Measure 7.1.1:** The City will continue to update the City's zoning ordinance as necessary to enforce and implement State-mandated water conservation regulations.

**Timing:** Immediate and ongoing

**Agency:** Planning Department

**Funding:** General Fund

**Policy 7.2** Prepare for and adapt to the effects of climate change by considering climate change vulnerability in planning decisions, including those involving new public facilities and private development.

**Implementation Measure 7.2.1:** The City will:

a. Re-evaluate the City's Climate Change Vulnerability analysis over time, as new data becomes available
b. Update mitigation strategies and the City's vulnerability and adaptive capacity, as appropriate
c. Identify opportunities for new goals and policies related to climate change using the best available data.

**Timing:** Immediate and ongoing

**Agency:** Planning Department and LA County Building & Safety Department

**Funding:** General Fund

**Policy 7.3** Amend the local building code to account for climate change stressors.

**Implementation Measure 7.3.1:** The City will amend the local building code to take into account additional stressors on buildings including, increased storm events and intensity, flood proofing for intermittent inundation, slope/soils, subsidence risk and erosion potential in securing foundations, building materials to reduce the impacts of high heat days, and fireproofing in preparation for increasing fire risk.

**Timing:** Immediate

**Agency:** Planning Department and LA County Building & Safety Department

**Funding:** General Fund

**Policy 7.4** The City will engage surrounding jurisdictions in climate adaptation planning.

**Implementation Measure 7.4.1:** Ensure the community's engagement strategy for climate adaptation planning includes surrounding jurisdictions to identify synergies and harmonization of policies.

**Timing:** Immediate and ongoing

**Agency:** Planning Department

**Funding:** General Fund

**Policy 7.5** Partner with the South Bay Cities Council of Government to implement climate adaptation strategies at the sub-regional level.

**Implementation Measure 7.5.1:** Collaborate with the South Bay Cities Council of Governments Senior Services Working Group to ensure that service providers in and around Rolling Hills are educated on the climate risks of the area and steps they can take to better serve and protect vulnerable groups in Rolling Hills.

**Timing:** Immediate and ongoing

**Agency:** Planning Department

**Funding:** General Fund

**Implementation Measure 7.5.2:** Implement climate adaptation strategies that can address issues at a local and sub-regional level and issues in which coordination and pooling of resources (i.e., emergency centers, transit agency support in an emergency, and large animal evacuation centers) is a benefit to all participating communities.

**Timing:** Immediate and ongoing

**Agency:** Planning Department

**Funding:** General Fund

**Policy 7.6** Update emergency/disaster response measures to account for increased heat days.

**Implementation Measure 7.6.1:** As part of the Hazard Mitigation Plan and Emergency Operations Plan, update response measures to account for an increased number of heat days and their impacts on current and future response mechanisms such as warning systems, emergency response and medical service coordination, and shelters.

**Timing:** Every five years

**Agency:** Planning Department

**Funding:** General Fund

**Policy 7.7** Provide education on heat related illness.

**Implementation Measure 7.7.1:** Incorporate links and references on the City website and incorporate interpretive signage at multi-use path trailheads providing education on heat related illness and personal care steps.

**Timing:** Immediate and ongoing

**Agency:** Planning Department

**Funding:** General Fund

**Policy 7.8** Require air conditioning alternatives.

**Implementation Measure 7.8.1:** Require alternatives to air conditioning such as ceiling fans, air exchangers, increased insulation and low-solar-gain exterior materials to reduce peak electrical demands during high heat events to ensure reliability of the electrical grid.

**Timing:** Immediate and ongoing

**Agency:** Planning Department

**Funding:** General Fund

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# Appendix A

Existing Conditions Report




# Rolling Hills General Plan Safety Element

## Existing Conditions Report

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# Summary

## Key Findings

- The city is most at risks to impacts from wildfire, extreme heat, and landslide events, which are all anticipated to increase as a result of climate change impacts. Vulnerable populations such as older adults and residents with chronic health conditions are most at risk to extreme heat and wildfire impacts. Access roads and residential structures are also the most vulnerable to wildfire and landslide impacts from climate change.
- The city has a moderate risk for shaking potential from earthquakes.
- Flood risks in the city are minimal and limited to natural drainage areas in the canyons.
- Vegetation clearing along roadways is a concern and major goal for improving fire response and evacuation in the city.
- Evacuation strategies and education are important to reduce risk from hazards due to the lack of evacuation routes in the city and the remote development on private roads. The need to further analyze evacuation routes and access is one of the most recent changes in Safety Element requirements. A key opportunity for the Safety Element update is to address specific evacuation needs.
- The City has recently adopted a number of planning documents such as the Hazard Mitigation Plan and Community Wildfire Protection Plan, which seek to reduce the risk of hazards in the city. An opportunity for the Safety Element update would be to utilize existing recommendations from the Community Wildfire Protection Plan as implementation tools for the Safety Element.

# Introduction

Section 65302(g) of the California Government Code requires that the General Plan include a Safety Element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence and other geologic hazards; flooding, wildland and urban fire, and climate change adaptation and resilience. In addition, Safety Elements are required to address non-hazard specific issues such as peak load water supply, evacuation routes, and military installations.

This Existing Conditions Report is a comprehensive assessment of natural and man-made hazards for the City of Rolling Hills. The report serves as the foundation for the Safety Element and includes detailed Geographic Information System (GIS) hazard mapping and analyses. The following City plans were also utilized for this report along with existing local data from governmental agencies and scientific research: Hazard Mitigation Plan, Community Wildfire Protection Plan, and the existing Safety Element.

## Setting

Rolling Hills covers an area of approximately three square-miles on the Palos Verdes peninsula, approximately 18 miles south of downtown Los Angeles. The topography of the city and peninsula area is unique in that it rises above the Los Angeles Basin with rolling hills, steep slopes, and canyons. The city itself is located in the San Pedro Hills. Due to its location near the coast, the area is cooler and has fewer air quality concerns compared to the nearby Los Angeles Basin. Table 1 summarizes the climatology of the area.

**Table 1 Rolling Hills Climate Summary**

| Climate Character | Estimate |
|---|---|
| Annual Average Observed Maximum Temperature from 1961 - 1990 (Fahrenheit) | 71 |
| Annual Average Observed Minimum Temperature from 1961 – 1990 (Fahrenheit) | 50 |
| Annual Average Observed Precipitation from 1961 – 1990 (inches) | 19 |

Source: Cal-Adapt 2021

Rolling Hills is a residential community that consists of large parcels and ranch-style homes and has a sizable older adult[1] population of about 513 (28% of the city's total population). The city is also an equestrian community, as many of residents are horse owners or have horses on their property. Important community demographic data for Rolling Hills is included in Table 2.

[1] An older adult is any adult over the age of 65 years old.

**Table 2 Rolling Hills Demographic Characteristics**

| Demographic Characteristics | Estimate |
|---|---|
| **General** | |
| Total Population | 1,860[1] |
| Population under 10 years | 7 percent |
| Population over 65 years | 28 percent[1] |
| Race | 77 percent White, 18 percent Asian, 5 percent Hispanic/Latino |
| Disability (hearing, vision, cognitive, ambulatory) | 12 percent |
| **Housing** | |
| Total Households | 645[1] |
| Average Household Size | 2.76 |
| Owner-occupied Households | 96 percent |
| Population over 65 years living alone | 15 percent of those over 65 years |
| **Employment** | |
| Unemployment Rate | 6 percent |
| Poverty Rate | 2 percent |
| Median Income | $ 239,000 |
| Insurance Coverage | 97 percent |

Source: U.S. Census 2018

[1]Information obtained from the Community Wildfire Protection Plan, which is includes more recent data than the U.S Census

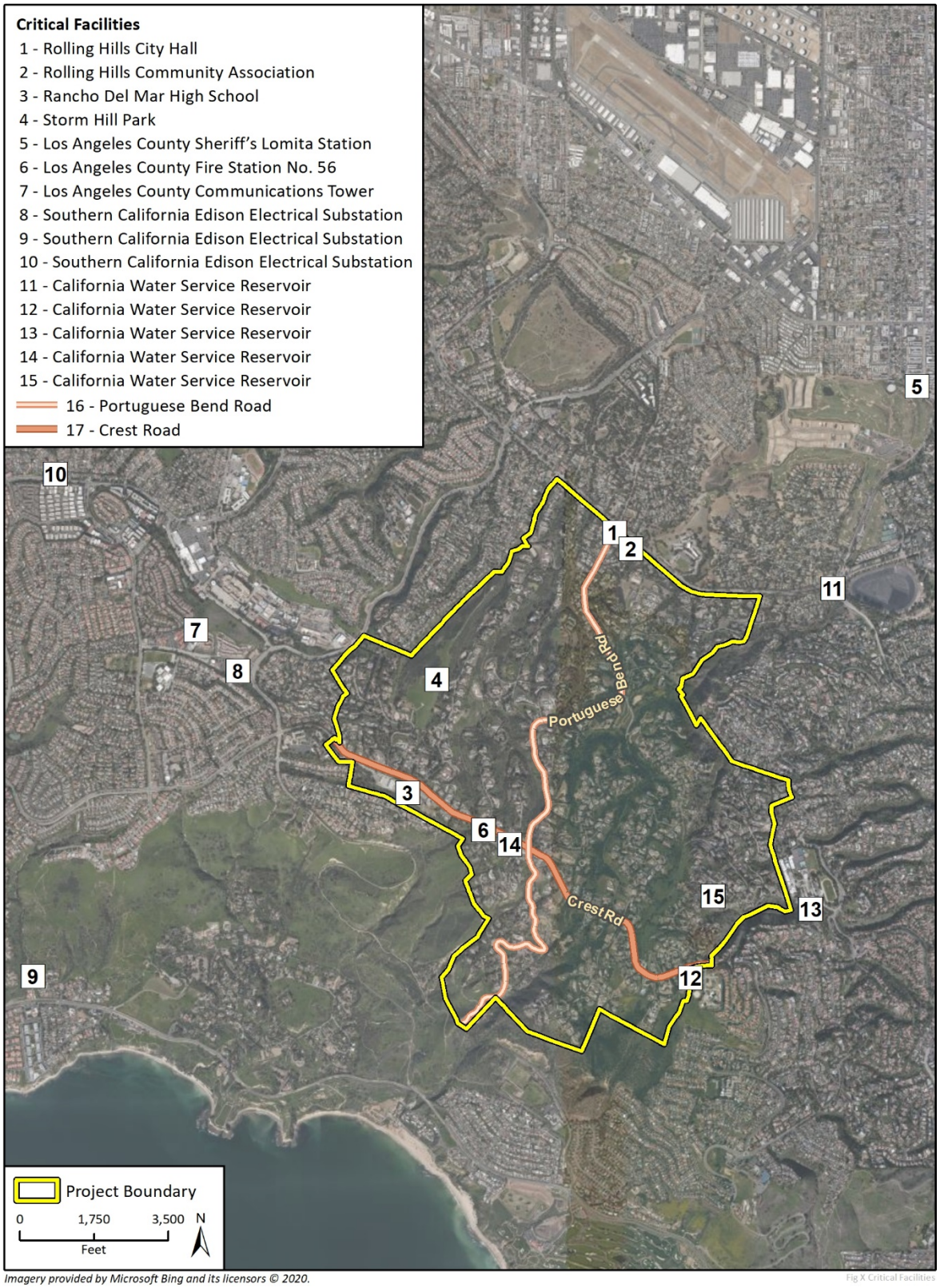
## Critical Facilities and Infrastructure

Critical facilities are places that provide emergency services or serve people who would be impacted by an emergency. Examples include hospitals, fire stations, police stations, emergency services facilities, utility facilities, and communication facilities. Critical facilities can also include the transportation system and schools. Due to the size and composition of Rolling Hills, most of the critical facilities that serve the city are located outside of City limits. Critical facilities that serve the city are shown in Figure 1 and include:

1. Rolling Hills City Hall: 2 Portuguese Bend Road, Rolling Hills, CA
2. Rolling Hills Community Association: 1 Portuguese Bend Road, Rolling Hills, CA
3. Rancho Del Mar High School: 38 Crest Road West, Rolling Hills, CA
4. Storm Hill Park: Agua Magna Canyon, Rolling Hills
5. Los Angeles County Sheriff's Lomita Station: 26123 Narbonne Avenue, Lomita, CA
6. Los Angeles County Fire Station No. 56: 12 Crest Road West, Rolling Hills, CA
7. Los Angeles County Communications Tower: 5741 Crestridge Road, Rancho Palos Verdes, CA
8. Southern California Edison Electrical Substation: Crestridge Road, Rancho Palos Verdes, CA
9. Southern California Edison Electrical Substation: Tarragon Road, Rancho Palos Verdes, CA

10. Southern California Edison Electrical Substation: 27873 Hawthorn Boulevard, Rancho Palos Verdes, CA
11. California Water Service Reservoir: Palos Verdes Drive North/Palos Verdes Drive East (SW corner), Rolling Hills Estates, CA
12. California Water Service Reservoir: 3960 East Crest Road, Rancho Palos Verdes, CA
13. California Water Service Reservoir: Via Canada, Rancho Palos Verdes, CA
14. California Water Service Reservoir: 1 Spur Lane, Rolling Hills, CA
15. California Water Service Reservoir: 60 Eastfield Drive, Rolling Hills, CA
16. Portuguese Bend Road
17. Crest Road

**Figure 1 Critical Facilities Map**



# Hazards of Concern

## Geologic Hazards

Geologic processes that pose a threat to life, health, property, or infrastructure are considered geologic hazards. Natural geologic hazards that have the potential to affect Rolling Hills include seismic hazards, landslides, liquefaction, expansive soils, and weathering. In most cases, these natural processes cannot be prevented; however, the magnitude of destruction resulting from natural geologic hazards can be reduced through planning policies and measures.

### Landslide Hazards

Landslide activity refers to a wide range of gravity driven downslope earth movement, including rockslides, rotational slips, mudslides, and shallow debris flows. Geological and geomorphological conditions such as soil type, soil strength, slope angle, and slope height predispose slopes to failure. Other factors affecting the susceptibility to slope failure include the amount of precipitation, vegetation on the slope, groundwater seepage, and human modifications to the slope. Landslides often result in damage to property and roadways and can cause them to become unsafe due to displacement of the subsurface.

A majority of the existing development in Rolling Hills is located on hilly terrain and have a greater potential to experience landslide hazards. Many of the canyons in Rolling Hills exhibit steep slopes with little vegetation coverage, leaving them susceptible to slope failure. Figure 2 shows the landslide zones within the City of Rolling Hills, as mapped by the California Geological Survey. Landslide activity has been well documented in the region. Relicts of landslides and rockslides are present throughout the City of Rolling Hills. The following major landslides have occurred within and adjacent to the city. All are within the landslide hazards areas identified in Figure 2:

- Portuguese Bend Landslide: Beginning in[2] 1956 over approximately 270 acres in Rancho Palos Verdes
- Abalone Cove Landslide: Beginning in 1974 over 80 acres in Rancho Palos Verdes
- Klondike Canyon Landslide: Beginning in 1979 over to the south near the coastline
- Flying Triangle Landslide: Beginning in 1970s or 1980s over approximately 70 acres in the south area of the city

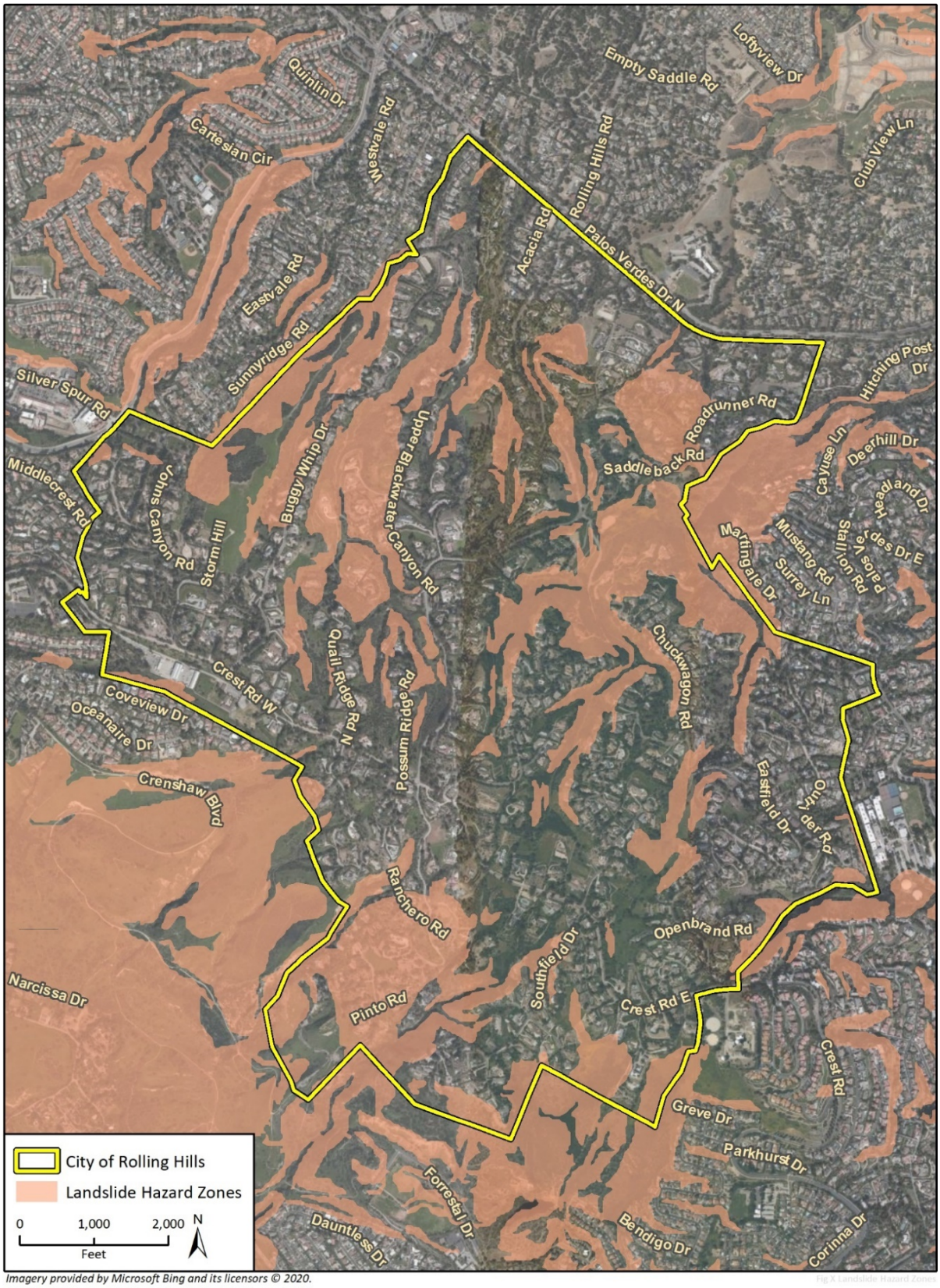
The Flying Triangle Landslide continues to impact the southeast portion of the city through impacts to private roads and requiring above-ground utility lines. This area is relatively unsuitable for development due to the ongoing changes in topography.

### Seismic Hazards

Rolling Hills is located in a seismically active region of southern California. The last major earthquake in the Los Angeles area was the 5.1 magnitude La Habra earthquake in 2014. Rolling Hills is located within 50 miles of the Whittier fault, Newport-Inglewood fault, Palos Verdes fault, Malibu Coast

[2] "Beginning in" is defined as the first noted event of major rock movement

**Figure 2 Landslide Hazard Zones**




*Imagery provided by Microsoft Bing and its licensors © 2020.*
*Additional data provided by California Geologic Survey, 2015.*

fault, Cabrillo fault, Santa Monica fault, and Redondo Canyon fault. Analysis of seismic data from the region indicates that the Whittier and Newport-Inglewood faults may generate a maximum credible earthquake of magnitude 7.2 and 7.4, respectively (Southern California Earthquake Center 2013). Figure 3 shows the faults in the vicinity of Rolling Hills.

Typically, seismic shaking and fault rupture are primary hazards as they occur as a direct result of the interaction between the seismic wave energy and the earth's surface. Secondary hazards, such as liquefaction and earthquake-induced landslides, occur as a result of the primary earthquake hazards. Often, earthquake activity can result in other effects such as building damage/collapse, infrastructure failure, pipeline breakage, and damage to transportation and communication facilities. The size of the earthquake and distance from the fault rupture zone typically determine the severity of these events.

### *Seismic Shaking*

Seismic shaking, or ground shaking, refers to the movement of the earth's surface resulting from the energy release by an earthquake. Seismic shaking is typically the primary cause of property damage resulting from earthquake activity. Seismic shaking has the ability to destroy buildings, roadways, powerlines, and pipelines. Energy transmitted through the ground has the potential to travel hundreds of miles and may cause damage in many locations simultaneously. Closer proximity to the fault rupture area results in stronger shaking in that location.

The amount of ground shaking that occurs in a location is dependent on the magnitude of the earthquake, the distance from the epicenter, and local soil conditions. The intensity of ground shaking is related to the peak ground velocity during an earthquake. According to the CGS Map Sheet 48, the earthquake shaking potential for Rolling Hills is moderate. The intensity of seismic shaking is measured using the Modified Mercalli scale.

According to the California Geologic Survey, an active fault is one that has experienced surface movement in the past 11,000 years. The city is located near a number of active faults, including the Cabrillo Fault within city limits. Table 3 includes a list of nearby faults, their respective distance from the city, the maximum credible earthquake generated from each fault, and the likelihood of earthquake occurrence in each case.

**Table 3 Faults Located within 50 Miles of Rolling Hills**

| Fault Name | Approximate Distance from Rolling Hills |
|---|---|
| Whittier | 25 miles east |
| Newport-Inglewood | 9 miles east |
| Palos Verdes | <1 mile north |
| Malibu Coast | 20 miles northwest |
| Cabrillo | Located within the City boundaries in the southwest |
| Santa Monica | 20 miles north-northwest |

The San Andreas fault is located approximately 80 miles to the east of Rolling Hills. Although the San Andreas fault is located at a greater distance from the city, seismic shaking originating from earthquakes occurring along the San Andreas fault poses a threat to the city. Figure 3 identifies the active and inactive faults located within the city and vicinity.

### *Fault Rupture*

Fault Rupture occurs when seismic movement on a fault breaks through the earth's surface. Hazards related to fault rupture arise when structures are built near or on top of an active fault. While there are a number of seismically active faults in the city and region, there are no active faults with the potential for ground rupture, defined by the Alquist-Priolo Earthquake Fault Zoning Act and delineated by CGS. Figure 3 shows the designated Alquist-Priolo study zones, the closest of which is the Newport-Inglewood Fault approximately nine miles northeast of the city.

### *Liquefaction and Settlement*

Liquefaction is a ground failure phenomenon that occurs as a result of a seismic event. Liquefaction increases water content in surface soils until the soil reaches a semi-liquid state, contributing to a reduction in support, and ultimately resulting in shifting or subsidence of buildings and utilities. Ground failure typically occurs when the following conditions exist:

- Loose, unconsolidated granular soils
- Shallow groundwater
- Strong seismic ground shaking

While the Rolling Hills has moderate to high seismic shaking potential, the subsurface soils generally lack saturated alluvial deposits and thick, granular soils. Figure 4 shows the liquefaction hazard areas, which are located in the low-lying areas to the east and north, generally surrounding the Los Angeles Harbor and Harbor Lake. Liquefaction potential for Rolling Hills is low, as shown in Figure 4.

### Earthquake Induced Landslides

Ground failure or destabilization of slopes resulting from an earthquake can also occur following seismic activity in the form of Earthquake-Induced Landslides. Earthquake-induced landslides typically occur in areas with steep slopes or unstable soil conditions. As discussed above under Landslide Hazards, the risk of landslide activity in Rolling Hills is high. Much of the city overlies areas that have been identified as landslide zones by the California Geological Survey. Risk of landslide activity increases following rainfall events that result in saturated soils. Both shallow and deep seeded landslides have historically occurred in the city.

## Flooding

Rolling Hills participates in the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program. According to the FEMA flood maps, the city is not located in a flood hazard area and currently has a less than 0.2 percent annual chance to be inundated by flood waters as a result of a storm event (FEMA 2008). Overall, the city is not in any immediate risk from flooding caused by overflowing water bodies or heavy rains. However, runoff and minor flooding pose a risk if drainage systems fail along canyon bottoms, where natural drainage leads to.

**Figure 3 Faults in the Vicinity of Rolling Hills**




*Imagery provided by ESRI, Microsoft Bing and its licensors © 2020. Additional data provided by California Department of Conservation, California Geological Survey, 2016.*

Fig X Active Faults in Vicinity

**Figure 4 Rolling Hills Liquefaction Hazard Areas**




*Imagery provided by Microsoft Bing and its licensors © 2020.*
*Additional data provided by California Geologic Survey, 2015.*

### Dam Inundation

No water storage facilities that the State of California identifies as dams are located in Rolling Hills. Just outside city limits are three water storage facilities identified as dams, which include:

- **Palos Verdes Reservoir**: Owned by the Metropolitan Water District of Southern California and located at the southeast corner of Palos Verdes Drive East and Palos Verdes Drive North. According to the California Department of Water Resources, the reservoir can hold approximately 1,100 gallons of water and has an extremely high downstream hazard.
- **10 MG Walteria and 18 MG Walteria**: Two reinforced concrete tanks which are owned by the City of Torrance and located at Crenshaw Boulevard and Crest Road. The tanks can hold 31 and 58 acre-feet (AF) of water respectively.

Senate Bill 92, adopted in 2017, is a new dam safety requirement that requires dam owners to map the downstream inundation areas for dams governed by the Department of Water Resources. Figure 5 shows the inundation areas for the nearby water storage facilities. Due to their locations and the topography of the area, the inundation areas do not enter or affect any portion of the city.

## Wildland and Urban Fires

The entire City of Rolling Hills is designated a Very High Fire Hazard Severity Zone (VHFHSZ) by the California Department of Forestry and Fire Protection (CalFire), as shown in Figure 6. Rolling Hills terrain is comprised of several large and steep canyons that limit and challenge vegetation management and present conditions where a fire can quickly travels up and downslope to nearby homes. Due to the rural nature and large residential lots, many homes are surrounded by substantial vegetation and dense brush than in more suburban settings. The bridle trails for hikers and equestrian access also contain dense vegetation and management difficulties, which contributes to the fire risk of the city. Electrical power lines pose a hazard to starting fires in the city if lines are not automatically de-energized when knocked down by extreme weather or if the surrounding vegetation is not adequately managed.

There is a history of fires in the city and the surrounding Palos Verdes Peninsula. Three major fires have been documented on the Peninsula and in the city in:

- 1973: almost 1,000 acres burned, and 13 homes destroyed
- 2005: 212 acres burned near Del Cero Park
- 2009: 230 acres burned and forced 1,200 residents on the Peninsula to evacuate

For many of the developed residences in the city that are vulnerable to fires, their risk may increase with the presence of construction techniques that may not meet current wildfire standards. Rolling Hills Building Code and Los Angeles County Fire Department, under the VHFHSZ standards, require new development to include more stringent design and material standards for roofing, eaves, and rafter tails as well as exterior finishes and fire buffer zones. While compliance with these standards reduces the vulnerability to new structures, existing structures that have not complied with these standards may be susceptible to undue fire risk.

### Existing Fire Risk Reduction Strategies

- Rolling Hills Municipal Code (RHMC) Chapter 8.30: Fire Fuel Abatement
- VHRHSZ building requirements

- Los Angeles County Fire Department property line and structure vegetation buffer requirements
- Rolling Hills Community Wildfire Protection Plan vegetation management standard recommendations
- Rolling Hills Community Association

**Figure 5 Dam Inundation Areas**




*Imagery provided by Microsoft Bing and its licensors © 2020.*
*Additional data provided by California Department of Water Resources, 2020.*

**Figure 6 Fire Hazard Zones**




*Imagery provided by Microsoft Bing and its licensors © 2020.*
*Additional data provided by CalFire, 2020.*

# Hazardous Materials

According to the Department of Toxic Substances Control (DTSC), there are no hazardous waste sites or facilities in Rolling Hills (DTSC 2020). The city and surrounding area do not contain heavy industrial uses that would create a hazardous material risk in the event of a spill, release, or natural disaster.

The city is not located near any major transit routes involving transport of a substantial quantity of hazardous material through the city. However, the nearby oil refineries (located along Sepulveda Boulevard approximately six miles northeast) and Port operations (located approximately three miles to the east) could create air quality impacts if wind patterns and release events occur. Air quality impacts are discussed in the *Open Space and Conservation Element* of the Rolling Hills General Plan.

# Emergency Response and Evacuation

## Police Response and Crime

The Los Angeles County Sheriff's Department is contracted with the city to provide police services and protection to the city. The Lomita Station of the Sheriff's Department located at 26123 Narbonne Avenue, approximately 1.5 miles northeast of the Portuguese Bend Road entrance, serves the city.

According to the Lomita Station crimes report from January 1, 2020, through June 30, 2020, Rolling Hills had three reported crimes (LACSD 2020). The crimes were related to theft, assault, and burglary. Outside the city limits and in the Lomita District, 433 crimes were reported during this same period, 71 of which were violent crimes (LACSD 2020). The difference in crimes in the city and the surrounding area is attributed to the private nature of the City. There are three entrances to the city, all of which are gated and staffed 24 hours a day. Visitors are required to be on a resident's guest list in order to enter city limits. This reduces crime within the city and demand on Los Angeles County Sheriff's Department.

## Fire Response

The Los Angeles County Fire Department provides emergency operations support to the City. Fire Station 56, located at 12 Crest Road West, serves the city under Battalion 14, which also serves the remaining Palos Verdes Peninsula, Lomita, and Catalina Island. Fire response constraints in the city include ability to access certain homes or areas due to inadequate road widths for fire maneuvering. One of the major topics of concern related to fire response in the city relates to vegetation clearing along roadways. Ten-foot clearance on each side of the roadway, especially the limited access roads, is important for fire response and evacuation during a fire, according to Scott Hale, Assistant Fire Chief.

## Evacuation Strategies and Routes

Because a variety of hazards could affect city residents, it is vital to identify critical routes for evacuation in the event of a major event. Figure 7 identifies the existing evacuation routes in the city, which are limited to:

- Main Gate at Rolling Hills Road and Palos Verdes Drive North

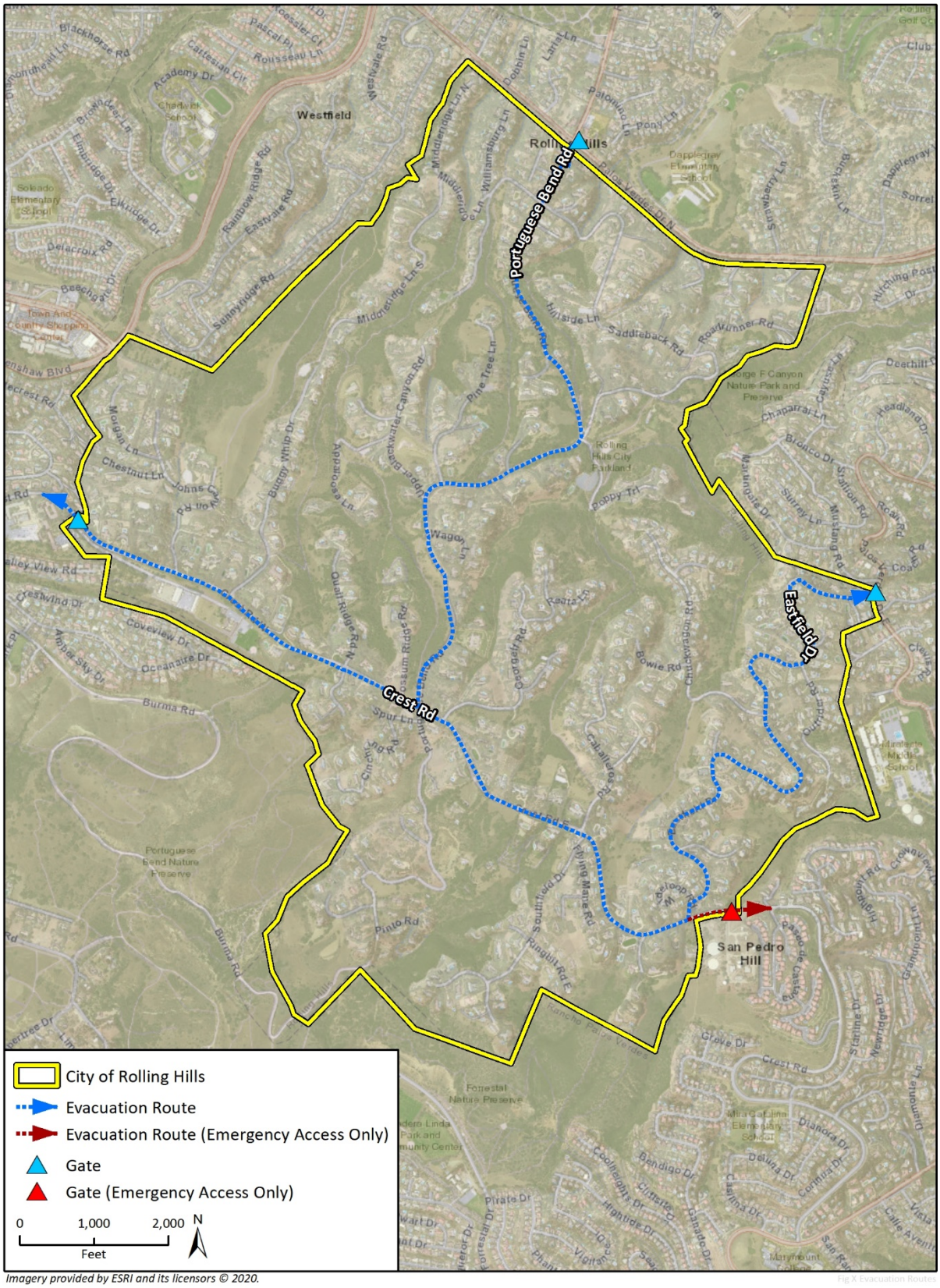
- Crest Gate at Crest Road near Crenshaw Blvd
- Eastfield Gate at Eastfield Drive and Palos Verdes Drive East
- Crest Road East Gate at the end of Crest Road East

Crest Road East Gate at the end of Crest Road East gate has recently been updated with a motor and has no guards. This gate is available as an emergency exit to the city during emergencies. The recently adopted Community Wildfire Protection Plan for the city establishes evacuation strategies and methodologies for the city, which include:

- Using the City's Block Captains as important coordinators and managers of residents in the 24 City zones[3]
- Communication goals between the City, emergency responders, Rolling Hills Community Association, and residents
- Details for residents regarding how people get notified during an actual evacuation and the responsibilities and operations of the Emergency Operations Center
- Traffic control responsibilities and levels
- Identification of special need residents who may need specific attention and/or assistance

[3] The city is divided into 24 zones and each zone has 2-3 block captains to represent the residents within the zone.

**Figure 7 Existing Evacuation Routes**



# Climate Change Vulnerability

In accordance with Senate Bill 379, this section provides a climate change vulnerability assessment for Rolling Hills, which evaluates the potential impacts of climate change on community assets and populations. The Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report defines vulnerability as "the propensity or predisposition to be adversely affected." It adds that vulnerability "encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt" (IPCC, 2013). Understanding the vulnerabilities that the city may face due to climate change provides a foundation to define future adaptation strategies for the Safety Element update and other planning efforts in Rolling Hills and the region.

Consistent with the California Adaptation Planning Guide (Cal OES 2020) the assessment is comprised of the following five elements:

- **Exposure** – the nature and degree to which the community experiences a stress or hazard;
- **Sensitivity** – the aspects of the community (i.e., people, structures, and functions) most affected by the identified exposures;
- **Potential Impacts** – the nature and degree to which the community is affected by a given stressor, change, or disturbance;
- **Adaptive Capacity** – the ability to cope with extreme events, to make changes, or to transform to a greater extent, including the ability to moderate potential damages and to take advantage of opportunities; and
- **Vulnerability Scoring** – systematic scoring based on potential impacts and adaptive capacity, to inform major climate vulnerabilities to address adaptation framework strategies.

In addition to City data, Cal-Adapt was used to complete the assessment. Cal-Adapt is an interactive, online platform developed by the University of California and Berkeley to synthesize climate change projections and climate impact research for California's scientists and planners. This assessment uses Cal-Adapt to study potential future changes in average and extreme temperatures, precipitation, wildfire, and storms. Cal-Adapt is consistent with State guidance to use the "best available science" for evaluating climate change vulnerability.

This assessment uses two greenhouse gas (GHG) emissions scenarios included in Cal-Adapts analysis: Representative Concentration Pathway (RCP) 4.5 and RCP 8.5. RCP 4.5 describes a scenario in which GHG emissions peak around 2050, decline over the next 30 years and then stabilize by 2100 while RCP 8.5 is the scenario in which GHG emissions continue to rise through the middle of the century before leveling off around 2100. The climate projections used in this report are from four models selected by California's Climate Action Team Research Working Group and the California Department of Water Resources. These models include:

- A *warm/dry* simulation (HadGEM2-ES)
- A *cooler/wetter* simulation (CNRM-CM5)
- An *average* simulation (CanESM2)

- The model that presents a simulation most unlike these three and incorporates 10 other models, for full representation of possible forecasts (MIROC5)[4]

The average of the model projections is used in this analysis.

# Exposure

Climate change is a global phenomenon that has the potential to adversely affect local health, natural resources, infrastructure, emergency response, and many other facets of society. Projected changes to climate are dependent on location. According to Cal-Adapt, climate change could lead to increasing temperatures, temperature extremes, and changes in precipitation patterns in Rolling Hills. These conditions could lead to exposure associated with extreme heat, drought, wildfires, and extreme storms in the region. The climate hazards of concern for Rolling Hills addressed in this analysis are:

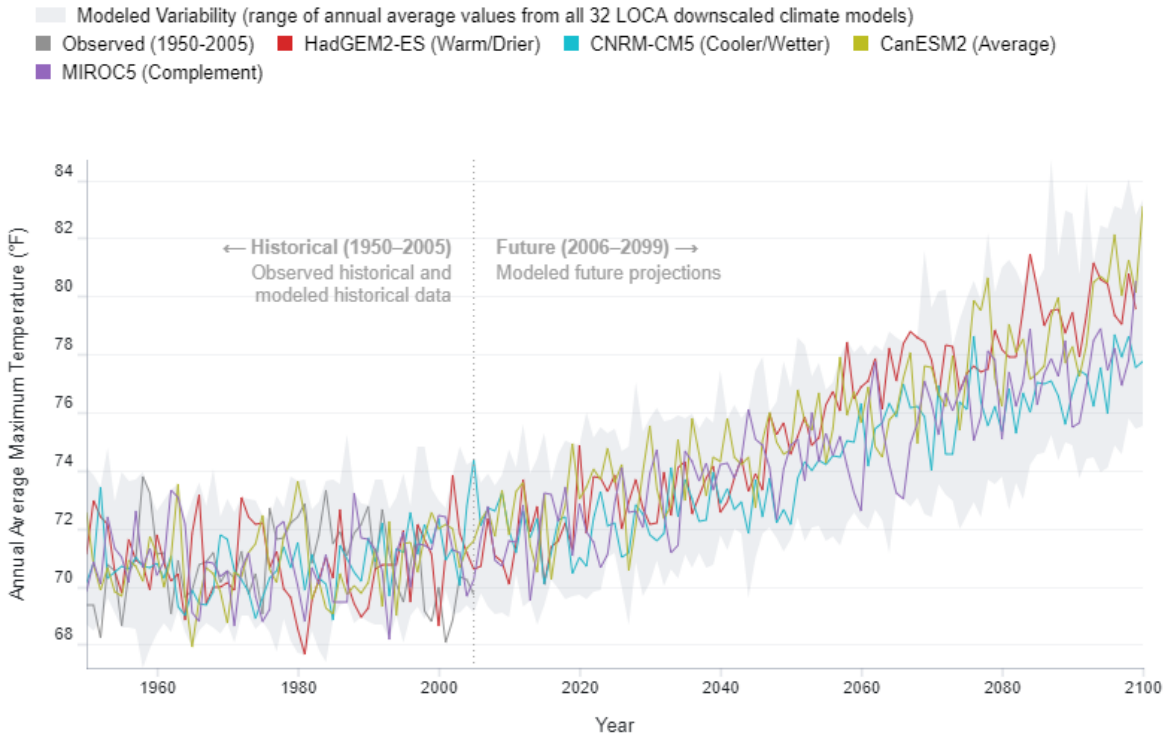
- Extreme Heat
- Storms and Extreme Weather
- Drought
- Wildfire

## Extreme Heat

Figure 8 below shows observed and projected annual average maximum temperature in Rolling Hills. As shown in Figure 8, average temperatures in the city and region have increased, which is a trend at both the local scale and the global scale. Compared to 1990, annual average maximum temperatures in Rolling Hills are expected to rise between 1.8°F and 6.6°F by the end of the century, depending on the GHG emissions scenario (CEC 2020).

[4] There were 10 California GCM models that were ranked from 1-10 by California's Climate Action Team Research Working Group and the California Department of Water Resources for different temperature and precipitation factors. The models ranged from the "warm/dry" model which had all metrics closest to 1 to the "cool/wet" model which had all metrics closest to 10. The MIROC5 displays a pattern of ranking that is most unlike the other 3 models and therefore, is included to represent the full spread of all 10 model simulations.

**Figure 8 Historical and Projected Annual Average Maximum Temperature in Rolling Hills5**




Extreme heat is a period when temperatures are abnormally high relative to the normal temperature range. There are generally three types of extreme heat events:

- **Extreme Heat Days**: a day during which the maximum temperature surpasses 98 percent of all historic high temperatures for the area, using the time between April and October from 1950 to 2005 as the baseline
- **Warm Nights**: a day between April to October when the minimum temperature exceeds 98 percent of all historic minimum daytime temperatures observed between 1950 to 2005
- **Extreme Heat Waves**: a successive series of extreme heat days and warm nights where extreme temperatures do not abate. While no universally accepted minimum length of time for a heatwave event exists, Cal-Adapt considers four, successive extreme heat days and warm nights to be the minimum threshold for an extreme heatwave

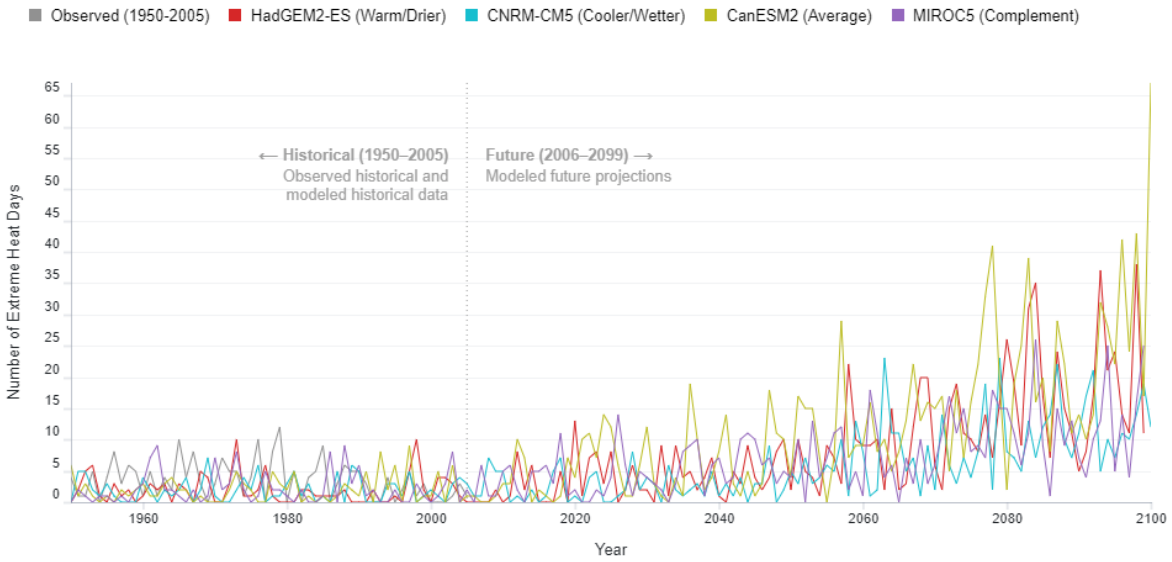
Extreme heat events will feel different from region to region since different areas have different historic high temperatures. For example, an extreme heat day on the coast will feel different than an extreme heat day in the desert. According to Cal-Adapt, an extreme heat day in Rolling Hills involves a temperature that exceeds 91.7° F (CEC 2020).

Historically (between 1950 and 2005), Rolling Hills experienced an average four extreme heat days per year, typically occurring between April and October. As a result of rising average temperatures and climate change as discussed above, the city is projected to experience between 8 and 14 extreme heat days annually from 2030 to 2099 under medium and high emissions projections (CEC

5 Chart shows annual average maximum temperature for Rolling Hills (Grid Cell 33.78125, -118.34375) under RCP 8.5 (emissions continue to rise strongly through 2050 and plateau around 2100)

2020). As shown in Figure 9, the number of extreme heat days each year is variable, but overall they are increasing from historic averages and would continue to increase through the century.

**Figure 9 Number of Extreme Heat Days by Year in Rolling Hills[6]**




Extreme heat waves are defined as four or more consecutive extreme heat days. These events have been historically infrequent in Rolling Hills, with the historical average being 0.3 heat waves annually. The city is expected to experience a minor increase in heat wave frequency as the climate changes. Between 2030 and 2099, the city is projected to experience between 0.4 and 1.1 heat waves per year (CEC 2020).

## Drought

Droughts are somewhat frequent in California, and currently approximately 42 percent of California's population are in a drought, or in an abnormally dry area (NIDIS 2020). Changes in weather patterns resulting in increases in global average temperatures are already causing decreases in snowpack, which provides as much as a third of California's water supply (DWR 2019). According to the U.S. Drought Monitor, Los Angeles County and Rolling Hills are not currently experiencing drought conditions based on this mapping (National Drought Mitigation Center 2020). Southern California is not currently considered to be in a drought condition, while other parts of the State (northern California and the Sierra Nevada mountain range) are experiencing moderate drought conditions due to lower than average precipitation.

The projected changes in annual precipitation for Rolling Hills are shown in Table 4. Under both the medium and high GHG emissions scenarios, Rolling Hills is not expected to experience substantial changes in average precipitation. However, the city would experience increased variability in precipitation. The city's minimum annual precipitation would decrease while the maximum annual precipitation would increase under both emissions scenarios.

[6] Chart shows the number of days in a year when daily maximum temperature is above the extreme hear threshold of 91.7° F for Rolling Hills (Grid Cell 33.78125, -118.34375) under RCP 8.5

**Table 4 Changes in Annual Average Precipitation**

| Scenario | Annual Precipitation | | |
|---|---|---|---|
| | Minimum (inches) | Average (inches) | Maximum (inches) |
| Historical Average (1950-2005) | 6.7 | 19.2 | 37.0 |
| Medium Emissions Scenario (2030-2099) | 6.0 | 21.3 | 48.2 |
| High Emissions Scenario (2030-2099) | 4.8 | 22.2 | 57.0 |

Source: CEC 2020

While overall precipitation levels are expected to change substantially in the city, a drought may occur when conditions in areas where water sources are located experience drought conditions, even though the local region does not. Rolling Hills obtains its water from the Palos Verdes District of the California Water Service. Water supply from the District to this area is purchased from the Metropolitan Water District of Southern California (MWD), which imports its water from the Colorado River and State Water Project from northern California.

Recent research suggests that extended drought occurrence could become more pervasive in future decades (CEC 2020). An extended drought scenario is predicted for all of California from 2051 to 2070 under a climate model using business as usual conditions. The extended drought scenario is based on the average annual precipitation over 20 years. This average value equates to 78 percent of the historic median annual precipitation averaged for the North Coast and Sierra California Climate Tracker regions. Overall precipitation levels in the city are not expected to be significantly impacted. However, variability in precipitation and drought conditions in other areas of the state could impact water supply.

## Wildfire

Wildfire hazards to the city are widespread and discussed above under Hazards of Concern. Wildfires in the city are influenced by a range of factors including droughts, severe winds, wildfire fuel (i.e. dry vegetation), and previous wildfire suppression activity. Climate change is expected to exacerbate wildfire risk by creating hotter and drier landscapes, as discussed above under Extreme Heat, which are more susceptible to burning.

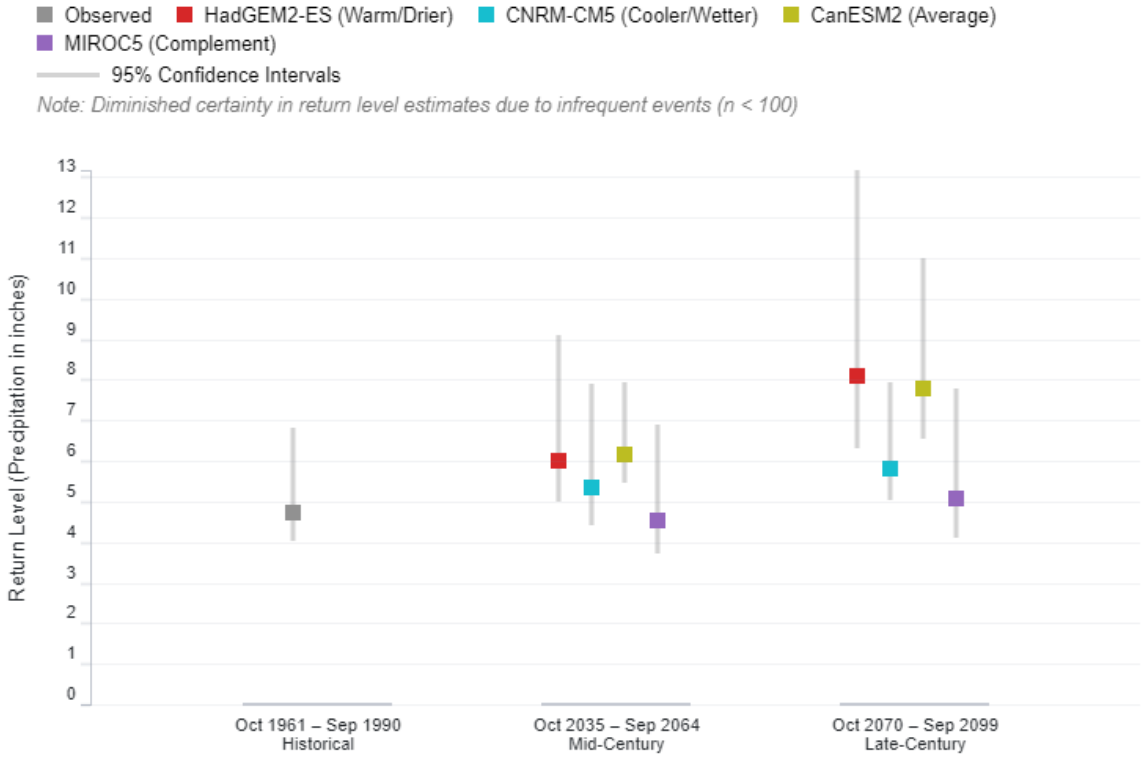
Cal-Adapt provides projections for annual mean hectares burned. This projection only accounts for areas that could experience wildfire events. Los Angeles County wildfire occurrence is anticipated to increase under all emissions and population scenarios from historic averages (CEC 2020). In 2020 alone, California has experienced six of the 20 largest fires in modern history and as of the date of this report, over three million acres of land have burned. These fires arose during extreme fire weather conditions and record-breaking heat waves across California. The observed frequency of autumn days with extreme fire weather, which are associated with extreme autumn wildfires, has more than doubled in California since the early 1980s (Goss et al. 2020). Due to the increases in factors that contribute to wildfires (variability in precipitation, hotter and dryer landscapes) and because the city is in a VHFZSZ, it is expected to see an increase in wildfire hazards due to climate change.

## Storms and Extreme Weather

A warming climate is likely to influence the frequency and intensity of storms. Both increased temperatures and altered precipitation patterns can lead to altered seasons and intense rainstorms in Rolling Hills. As depicted in Figure 10, there is a high degree of variability in these extreme

precipitation event projections, with some models projecting little to no change while others project increased intensity (CEC 2020) These projections further vary depending on the return period[7] selected. Increasing intensity of rainstorms could result in more flooding, which could adversely affect human safety in Rolling Hills. During years of intense levels of precipitation and storms, the city could also see an increase in the number of landslides or make landslides greater than usual. Due to the number of landslide hazard zones in the city, as shown in 2, Rolling Hills may see an increase in landslides due to changes in precipitation from climate change.

**Figure 10 Changes in Intensity of Extreme Precipitation Events in Rolling Hills[8]**




# Community Sensitivity

As climate change occurs, communities will be affected to varying degrees depending on the exposure levels as well as how sensitive the communities are to impacts. Virtually all people and assets in a community will be affected by climate change in some way. However, it is not usually feasible to assess the vulnerability of every population group or every asset in the community. The sensitivity of a community depends on the aspects of the community (i.e., specific populations and assets) most affected by the identified exposures, and how prevalent they are in the community.

As described in the Exposure section above, the most likely primary impacts of climate change that Rolling Hills may experience include extreme heat, increases in wildfire risk and prevalence, and drought conditions affecting water supply. This section of the Vulnerability Analysis identifies the

[7] Average time between extreme events (e.g., "1 in 100-year event")

[8] Chart shows estimated intensity (*Return Level*) of Extreme Precipitation events which are exceeded on average once every 20 years (*Return Period*) for Rolling Hills (Grid Cell 33.78125, -118.34375) under RCP 8.5 emissions scenario. Extreme precipitation events are described as days during a water year (Oct-Sept) with 2-day rainfall totals above an extreme threshold of 1.02 inches.

sensitive areas of the Rolling Hills community from the demographic and community facility information in the Introduction section above and is based on the following categories:

- Populations
- Infrastructure
- Buildings and Facilities
- Services

## Populations

The vulnerability assessment considers the following population groups that may be disproportionally harmed by the impacts of climate change in Rolling Hills.

**Children**: Approximately 6.6 percent of the total population in Rolling Hills are ten years old or younger.

**Persons in poverty**: This is identified for people living in households with an income below the poverty limit, which is $26,200 for a household of four people. There are approximately 26 people in Rolling Hills who live in poverty, or approximately 1.6 percent of the total population for whom poverty status can be determined.

**Persons with chronic health conditions**: These are people who have a long-term or permanent health condition that can create regular challenges in their day-to-day lives. These health problems include obesity, cancer, heart disease, and arthritis. In addition, those with any kind of disability, including mobility challenges, hearing, or vision impairments, behavioral disabilities, and challenges living independently or taking care of themselves. Approximately 11.5 percent of the population have identified having a disability.

**Renters**: These are people who live in homes that they (or the head of their household) do not own. Approximately 24 housing units, or 4 percent of the housing units in Rolling Hills, are renter-occupied.

**Older adults**: These are persons 65 years or older are more at risk for climate change impacts, especially those living alone. 28 percent of the population of Rolling Hills are over 65 years, and 15 percent of those over 65 years live alone.

**Limited English proficiency**: Approximately three percent of households have identified being limited English-speaking. Of those, a majority spoke Asian and Pacific Island languages and Spanish.

## Infrastructure

The vulnerability assessment considers the following infrastructure in the city that was identified as bring sensitive to climate change impacts.

**Access Roads**: These roadways are one of a few, or the only, ways in and out of some communities or neighborhoods. The single or limited number of entry and exit points does not make the road itself more vulnerable than other roads, but loss of these roadways can effectively cut off large numbers of people from other areas in the Palos Verdes Peninsula and the rest of Los Angeles County. Portuguese Bend Road and Crest Road are the primary access roads into and out of the city.

**Bridle Trails**: Throughout the community are over 25 miles of trails available to city residents and non-city residents who obtain permits. The trails are maintained by the Rolling Hills Community Association and located primarily in canyon areas.

**Electrical Substations**: Electrical substations are facilities that convert electricity from one voltage to another, making it suitable for long-distance transmission or for use by homes, businesses, and other electrical customers. There are no electrical substations located within city limits, but three are located near the city in Rancho Palos Verdes and owned/operated by Southern California Edison.

**Electrical Utility Lines**: These lines transmit and deliver electricity from Southern California Edison to the city. The city has both underground and overhead electric utility lines.

**Natural Gas Transmission Pipelines**: Natural gas pipelines carry large volumes of natural gas between communities. There are no transmissions lines in the city. One transmission line ends at the intersection of Rolling Hills Road and Palos Verdes Drive, adjacent to city limits.

**Water Reservoirs and System**: The system that stores and supplies drinking water for residents. Palos Verdes Water District of the California Water Service supplies water to Rolling Hills. There are two California Water Service water reservoirs within the city limits.

### Building and Facilities

**Residential Structures**: Residential structures in Rolling Hills consist of single-family dwellings and are the main type of building in the city.

**Community Facilities and Government Buildings**: Community and government facilities are public properties and are important to the residents as well as the operation of the city. Rolling Hills is a private community. Therefore, community and government facilities are available only to its residents, which are the Rolling Hills Community Association and City Hall.

**Community Parks**: Storm Hill is an open space area owned by the City which is utilized for equestrian purposes. The City also has two equestrian rings and tennis courts.

**Schools**: Rancho Del Mar High School is the only school in the city

**Public Safety Facilities**: Public safety facilities include sheriff and fire buildings. Los Angeles County Fire Station 56 is located within the city. The Lomita Station of the Los Angeles County Sheriff serves the city but is not located within the city limits.

### Services

**Public Safety Response**: Public safety services are provided by law enforcement and fire agencies. These agencies include the Los Angeles County Sheriff and Fire Departments.

**Water Services**: These services involve treating and transporting water to be used by customers and transporting and treating wastewater so it can be safely released into the environment. California Water Service provides drinking water to the city.

**Energy delivery**: Energy services in Rolling Hills include electricity and natural gas delivered through utility lines from Southern California Edison and Southern California Gas Company.

## Potential Impacts

Impact vulnerability is the nature and degree to which the community is affected by a given stressor, change, or disturbance. As climate change continues to progress, increased stress to vulnerable community populations, infrastructure, building and facilities, and services are expected. As described in the Exposure section above, the most likely primary impacts of climate change

Rolling Hills may experience include extreme heat, wildfire, and drought conditions impacting water supply. The vulnerability of Rolling Hills to the primary exposures of climate change is discussed below. The vulnerability scores discussed in the Vulnerability Scoring section are based on the potential impact analysis below. Each of the vulnerable areas in the city were given a low, medium, or high vulnerability to the potential impacts, based off the descriptions in the Vulnerability Scoring section.

## Temperature and Extreme Heat

As describe in the Exposure section above, Rolling Hills may experience a variety of impacts from climate change, which include an increase of average annual maximum temperature between 1.8°F and 6.6°F by the end of the century (CEC 2020) This increase in temperature may result in changes in seasonal patterns, an increase in heat waves, drought, and potentially increased storm frequency and intensity. Rolling Hills is expected to experience between 8 and 14 extreme heat days annually. Overall quality of life in the city would be impacted during extreme heat events as outdoor activities would be limited and overall comfort reduced.

The potential direct and indirect impacts to community populations, infrastructure, building and facilities, and services are described below.

### *Populations*

The vulnerable populations discussed above that are most at risk to extreme heat impacts from climate change are older adults, individuals with chronic conditions such as heart and lung disease, diabetes, and mental illnesses, children, and those who are economically disadvantaged.

The primary vulnerable population to temperature increases and extreme heat in Rolling Hills is older adults, as 28 percent of the city's population is over 65 years. Older adults do not adjust as well as young people to sudden changes in temperature and are more likely to have medical conditions that can worsen with extreme heat (CDC 2017a). Older adults who are living along are even more at risk as the actions necessary to mitigation extreme heat are more difficult alone. Getting water, changing clothes, showering, or turning on the air conditioner may be more difficult for older adults with physical disabilities and do not have a living partner to assist them. Children are also at risk to extreme heat impacts, especially those under the age of four, due to their less-developed physiology, immune system, and dependence on others (CDC 2019).

Extreme heat can be highly dangerous to persons with chronic health conditions, because very high temperatures can exacerbate diabetes, cardiovascular conditions, respiratory ailments, and other diseases. Some of these people have weakened immune systems which can make them more likely to contract illnesses and vulnerable to human health hazards. In addition, they may be taking medications that make the effects of extreme heat worse (CDC 2017b).

While there are not many households in poverty in the city, those who are have limited financial resources to upgrade their homes and use air conditioning to better resist extreme heat.

Each of the vulnerable populations has a high potential impact from extreme heat.

### *Infrastructure*

Extreme heat and temperature increase due to climate change would not directly impact infrastructure in Rolling Hills. Indirect impacts on electrical substations and utility lines could occur from increased use of the system from running air conditioners, leading to power outages in the

city. In addition, indirect impacts to the water system through increased evaporation or water use could occur. These infrastructure facilities would have a medium potential impact from extreme heat.

### *Building and Facilities*

Extreme heat and temperature increase due to climate change

would not directly affect buildings or facilities in Rolling Hills. Extreme heat and temperature increases could impact the ability for residents to enjoy community park facilities. In addition, extreme heat could create wildfire conditions which could indirectly impact all buildings and facilities within the city. Overall, there is a low potential impact from extreme heat to City buildings and facilities.

### *Services*

The important services discussed above that are most at risk to extreme heat impacts from climate change are water services and energy delivery.

High temperatures would contribute to a reduced water supply. For instance, higher temperatures will melt the Sierra snowpack earlier and drive the snowline higher. In addition to a reduction in precipitation falling as snow, higher temperatures would result in less snowpack to supply water to California users (CNRA 2009). Increased temperatures could therefore result in decreased potable water supply for the city which relies on imported water from the State Water Project and Colorado River water (Cal Water 2016). Therefore, there is a medium potential impact for high temperatures and drought on the city.

Long periods of intense heat may result in increased use of electricity for home cooling purposes that could tax the overall electrical system and result in electricity restrictions or blackouts. During extreme heat events in August 2020, California had its first rolling blackouts since 2001. Therefore, the city will experience greater potential for power outages due to climate change and has a medium potential impact.

## Storms/Extreme Weather and Drought

As mentioned in the Exposure section above, the storm and extreme weather projections for Rolling Hills show variability, with some models projecting little to no change while others project increased intensity. This could result in impacts to community populations, infrastructure, building and facilities, and services, particularly related to temporary flooding and landslides which can be triggered from intense rainfall events. The city currently has a less than 0.2 percent annual chance to be inundated by flood waters as a result of a storm event (FEMA 2008). Increases in intense precipitation could result in slope failures in landslide prone areas shown in Figure 2, including the existing Flying Triangle Landslide area.

As discussed in the Exposure section above, Rolling Hills is not expected to experience substantial changes in average precipitation. However, the city receives its water from the Colorado River and State Water Project from northern California, and extended drought scenario is predicted for these areas, which equates to 78 percent of the historic median annual precipitation. Therefore, areas that supply water to Rolling Hills and other jurisdictions are expected to see a 22 percent reduction of their water supply, which could reduce the amount of potable water available for delivery to the city.

### *Populations*

The city's older adults and those with chronic health conditions are the populations in Rolling Hills that are more at risk of injury and or death resulting from minor floods or fallen trees created by more intense storms induced by climate change. Indirect impacts to these populations from impacts to the transportation system could include reduced access to emergency response and health centers for those who need consistent medical care. There is a medium potential for impacts to these vulnerable populations.

### *Infrastructure*

Critical infrastructure most at risk in Rolling Hills to minor flooding impacts and landslides from increased storms would be access roads, bridle trails, electrical utility lines, and water systems. Because Portuguese Bend Road and Crest Road are critical for access to and evacuation from the city, any damage or closure can effectively isolate areas of the city, potentially creating severe health and safety risks. Bridle trails are predominantly located in canyon areas, which would be more susceptible to flooding and landslides. Landslides could impact utilities, as seen in the existing Flying Triangle Landslide area, which has moved utility lines above ground in certain areas due to the continuous movement of the earth in this area. Due to the limited accessibility of the city, there is a medium potential impact for access roads and bridle trails and a low potential impact for the remaining vulnerable infrastructure.

### *Building and Facilities*

Buildings and facilities most at risk from impacts of more intense storms would be residential structures and community parks. The proper functioning residential septic systems could be impacted by more intense rainfall and minor flooding. In addition, landslides could be triggered as indirect impacts from more intense storms and rainfall. Residential structures located in landslide hazard areas shown in Figure 2 could be impacted. In addition, the Storm Hill open space area is an important facility in the city and is also located in a landslide area. Due to the variability in weather projections, there is a low potential impact for buildings and facilities.

### *Services*

Increased storm intensity and drought conditions from climate change could impact public safety response, energy delivery and water services in the city. Emergency response systems could be impacted from flooding or landslides within or outside of city limits, which could restrict the ability for emergency response to access the city and impact response times.

More intense storms could adversely affect electricity delivery from Southern California Edison from power outages caused by downed electrical utility lines from wind of landslide events. In addition, water service from the California Water Service Palos Verdes District could be affected by increased drought conditions throughout the state. There is a medium potential impact for buildings and facilities.

## Wildfire

Wildfires in Los Angeles County are projected to increase under all emissions and population scenarios. As discussed in the Exposure section above, wildfire hazards to the city are widespread and wildfire conditions are expected to be exacerbated by a range of factors including droughts,

more severe winds, wildfire fuel (i.e., dry vegetation), and hotter and drier landscapes from increased temperatures and extreme heat.

### *Populations*

The vulnerable populations discussed above that are most at risk to increases in wildfire from climate change are older adults, persons in poverty, and persons with chronic health conditions. Older adults are almost three times more likely to die in a fire than the overall population (USFA 2017), and typically have increased mobility issues or mental health. Therefore, older adults, especially those in the city living alone, have more difficulties evacuating to safe areas when there is a need. Those in Rolling Hills with limited financial resources are more unlikely to retrofit their homes to better resist climate-related hazards such as wildfires.

In addition to direct impacts, indirect impacts such as poor air quality also creates public health hazards to the city. Recent California wildfires in August and September 2020 had areas of California recording the worst air quality in the world and highlighted the hazards of secondary impacts from wildfires, which could impact the city from fires throughout the State. Older adults and individuals with chronic health conditions are likely to be impacted most by these secondary impacts. Also, those with limited finances or without air conditioning would be impacted by secondary smoke impacts that occur during local and regional wildfires. There is a high potential for wildfire impacts on the vulnerable populations.

### *Infrastructure*

All city infrastructure is located in a VHFHSZ. The critical infrastructure most at risk to increased wildfire impacts would be access roads, bridle trails, above ground electrical utility lines, and water systems. Portuguese Bend Road and Crest Road are critical for access to and evacuation from many areas of the city. Wildfires may not significantly damage the infrastructure, but they could result in closure or the inability to travel on them during wildfire events, which can isolate areas of the city and create severe health and safety risks. There is a high potential for impacts to access roads from wildfires.

Wildfires are unlikely to substantially damage trails directly, but they can force widespread trail closures which are an important asset to the community. Above ground electrical lines are also at risk from wildfires and could impact electricity services to residents in Rolling Hills. Water systems could be directly affected by wildfires in addition to indirect impacts from water use from firefighting activities and peak load water supply in remote portions of the city. There is a medium potential for impact to these infrastructures.

### *Building and Facilities*

As discussed under Hazards of Concern section, all of Rolling Hills is designated a VHFHSZ. Therefore, all buildings and facilities within the city are at risk of increased wildfires caused by climate change. The greatest potential impact of life and well-being would be to residential structures, which are the primary structures in the city. In addition, impacts to Rolling Hills Community Association and City Hall structures would impact community functions and government services. There is a high potential for impact to buildings and facilities from wildfire.

### *Services*

Energy delivery, specifically electricity delivery, could be impacted from increased wildfires. Direct impacts to Southern California Edison electricity transmission infrastructure could impact power in the city. In addition, utility companies have begun shutting off power to areas to avoid wildfires during times when weather creates high wildfire risk. In addition, public safety services could be strained during wildfire events, which are expected to increase. There is a medium potential for impacts to services in the city from wildfire.

## Adaptive Capacity

Adaptive capacity is the current ability to cope with climate change impacts to community populations and assets (Cal OES 2020). Specifically, adaptative capacity is the ability to mitigate the potential impacts and damages or take advantage of the opportunities from climate change. Many communities have adaptive capacity in the form of policies, plans, programs, or institutions. Rolling Hills has actively taken steps to increase the city's adaptive capacity, which include preparing a community wildfire protection plan, hazard mitigation plan, undergrounding utility lines, and adopting strict new building standards. Table 5 lists various guiding documents, projects, plans, and policies that have an underlying emphasis on adaptive capacity in the city.

**Table 5 Rolling Hills Existing Adaptive Capacity**

| Project, Policy, or Plan | Year Established | Climate Change Impact |
|---|---|---|
| City of Rolling Hill Community Wildfire Protection Plan | 2020 | Wildfire |
| City of Rolling Hills Safety Element | 2003 | Wildfire, Storms |
| California Water Service Palos Verdes Water District Urban Water Management Plan | 2016 | Drought |
| Utility Undergrounding Requirement | n/a | Wildfire |
| Fire Prevention Power Line Undergrounding | 2020 | Wildfire |
| RHMC Chapter 8.30: Fire Fuel Abatement | n/a | Wildfire |
| Hazard Mitigation Plan | 2019 | Wildfire, Drought, Storm-induced Landslides |
| Emergency Operations Plan | 2020 | Wildfire, Storm, Extreme Heat |
| Emergency Notification and Notify Me | n/a | Wildfire, Storms |
| VHFHSZ Building Requirements | n/a | Wildfire |
| Rolling Hills Municipal Code Requirements for lot slope and lot stability | n/a | Storm-Induced Landslides |

Rolling Hills has a number of plans and policies specific to wildfire hazards. The city's recently adopted the Community Wildfire Protection Plan that includes fire mitigation strategies and evacuations strategies specific for the city. In addition, the Hazard Mitigation Plan provides an analysis of historical hazards, a local hazard assessment, hazard impacts on the community, and recommended mitigation strategies. The City requires the undergrounding of utility lines with specific home upgrades and has a reimbursement program for utility pole replacement. In addition, building code requirements for development within VHFHSZ, such as Class A roofing, would help reduce wildfire impacts to structures in the city.

The Rolling Hills Building and Zoning Codes include controls on development on steep slopes and canyon bottoms. In addition, development requires proof of stability of the property through geotechnical reports and only a percentage of each lot can be disturbed.

The Palos Verdes Water District's Urban Water Management Plan (UWMP) provides water supply and demand projections and includes a climate change analysis. The 2015 UWMP projected that water supply reductions to the District due to climate change would be small for through the end of the century. In addition, the UWMP includes a water shortage contingency plan and demand reduction measures in the event water supply to the District is impacts from drought due to climate change.

In addition, the city's population has a high degree of adaptive capacity due to the high levels of home ownership, low poverty levels, and high average income levels. These characteristics improve resident's ability to upgrade their homes and come back from potential impacts to their property from wildfire and extreme storm events.

## Vulnerability Scoring

Vulnerability scores are based on the combination of potential impacts from climate hazards and adaptive capacity in order to identify the climate vulnerabilities in the city to address with additional adaptation strategies. A vulnerability score was determined for each sensitivity area based on the potential impacts and adaptive capacity from climate change in the city. Vulnerability was accessed on a scale from 1 to 5:

- V-1: Minimal Vulnerability
- V-2: Low Vulnerability
- V-3: Moderate Vulnerability
- V-4: High
- V-5: Severe

Cal OES recommended the following scoring rubric to determine the vulnerability score for the potential impacts and adaptive capacity.

- **Low Potential Impact**: Impact is unlikely based on projected exposure; would result in minor consequences to public health, safety, and/or other metrics of concern
- **Medium Potential Impact**: Impact is somewhat likely based on projected exposure; would result in some consequences to public health, safety, and/or other metrics of concern
- **High Potential Impact**: Impact is highly likely based on projected exposure; would result in substantial consequences to public health, safety, and/or other metrics of concern
- **Low Adaptive Capacity**: The population or asset lacks capacity to manage climate impact; major changes would be required
- **Medium Adaptive Capacity**: The population or asset has some capacity to manage climate impact; some changes would be required
- **High Adaptive Capacity**: The population or asset has high capacity to manage climate impact; minimal to no changes are required

Table 6 shows how the final vulnerability score was determined. To summarize, potential impacts from climate change that are highly likely to occur in the city based on projected exposure would

create a high vulnerability score. However, if the city has a high adaptive capacity to manage the impact, then the overall vulnerability score would be reduced.

**Table 6 Vulnerability Score Matrix**

| Potential Impacts | | | | |
|---|---|---|---|---|
| | High | V-3 | V-4 | V-5 |
| | Medium | V-2 | V-3 | V-4 |
| | Low | V-1 | V-2 | V-3 |
| | | High | Medium | Low |
| | | Adaptive Capacity | | |

The vulnerability scoring for the identified population and assets for each climate impact is included below in Table 7 and based on Cal OES California Adaptation Planning Guide. For those populations and assets that are not anticipated to be impacted directly or indirectly from the identified climate impacts, no vulnerabilty score or color is provided. For example, drought impacts on children were determined to not be a threat in Rolling Hills.

For the purposes of this vulnerability assessment, a score of V-4 or V-5 is considered significant. Populations and assets that score at least a V-4 for one or more exposures are considered substantially vulnerable. As shown in Table 7, the potential impacts from climate change the city's population and assets are most vulnerable to are wildfire, extreme heat, and landslides. Vulnerable populations such as older adults, residents with chronic health conditions, and those with financial trouble are most at risk to extreme heat and wildfire impacts and are substantially vulnerable to climate change impacts in the city. Access roads and residential structures are also the most vulnerable to wildfire and landslide impacts from climate change. Overall, climate change impacts on wildfire are the greatest potential impact to the city. While the City has adopted a significant number of adaptation strategies related to wildfire impacts, because they were recently adopted and some of the strategies were included as recommendations, it will be important to determine and monitor if implementation is occurring and which recommendations should be included in the Safety Element update.

This vulnerability assessment and the results in Table 7 will be used to identify specific policies and implementable strategies for adapting to climate change in the Safety Element, thus making the Rolling Hills community more resilient.

## Table 7 Vulnerability Assessment Results

| Community Sensitivity | Storms/Extreme Weather | Extreme Heat | Wildfire | Landslides |
|---|---|---|---|---|
| **Population** | | | | |
| Children | | V-3 | V-2 | V-2 |
| Persons with Chronic Health Conditions | V-2 | V-4 | V-4 | V-2 |
| Persons in Poverty | V-2 | V-3 | V-4 | V-2 |
| Renters | | V-3 | V-2 | V-2 |
| Older Adults | V-2 | V-4 | V-4 | V-2 |
| Limited English Speaking | | | V-2 | V-2 |
| **Infrastructure** | | | | |
| Access Roads | V-2 | | V-4 | V-3 |
| Bridle Trails | V-2 | | V-3 | V-2 |
| Electrical Substations | V-1 | V-2 | V-3 | |
| Electrical Utility Lines | V-2 | V-1 | V-3 | V-2 |
| Natural Gas Transmission Pipelines | | | V-2 | V-2 |
| Water Reservoirs and Systems | V-1 | V-2 | V-3 | V-3 |
| **Buildings and Facilities** | | | | |
| Residential Structures | V-1 | | V-5 | V-3 |
| Community Facilities and Government Buildings | V-1 | | V-4 | V-1 |
| Community Parks | V-1 | V-1 | V-3 | V-3 |
| Schools | V-1 | | V-3 | V-1 |
| Public Safety Facilities | V-1 | | V-3 | V-1 |

| Community Sensitivity | Storms/Extreme Weather | Extreme Heat | Wildfire | Landslides |
|---|---|---|---|---|
| **Services** | | | | |
| Public Safety Response | V-2 | | V-3 | V-1 |
| Water Services | V-2 | V-2 | V-3 | V-2 |
| Energy Delivery | V-2 | V-3 | V-4 | V-2 |

Notes: Drought was not included in this table because the city's vulnerability to drought is primarily low. White boxes indicate very low to now vulnerability.

# Summary of Issues and Opportunities

Existing hazards of concern in the city that should be a major focus of the Safety Element update include landslide and wildfire hazards. In addition, emergency response and evacuation should be a focus due to the city's accessibility issues. Climate change is expected to increase potential hazards the city experiences. From the vulnerability analysis, the city is most vulnerable to wildfire impacts, extreme heat, and landslides impacts from climate change.

## Hazards of Concern and Community Sensitivity

While there are a number of hazards that could impacts the city, the following are hazards of concern that pose the greatest challenge to the city.

### Wildfire

The greatest hazard of concern for the city is wildfire as the entire city limits are within a VHFHSZ and the city contains many remote areas and limited evacuation routes. Some existing residential and accessory structures are not built to current standards that apply to VHFHSZ and as a result many of these structures may require mitigation and retrofit to reduce this potential threat. The area's most vulnerable to wildfire impacts include older adults, persons with chronic health conditions, residential structures, government and community buildings, and access roads.

### Landslides

Landslides are also a major concern for the city, whether they are earthquake induced, induced from high precipitation events, or occur due to the underlying soil conditions. Existing landslides are impacting the southern portion of the city. Climate change has the potential to create more landslide events if Rolling Hills experiences more intense storms and precipitation events. The area's most vulnerable to landslide impacts include access roads, residential structures, and community parks.

### Extreme Heat

The city is expected to see increases in the number and length of extreme heat days and events due to climate change, which could impact vulnerable people in the city and lead to increased wildfire risks. The area's most vulnerable to extreme heat impacts from climate change include older adults, persons with chronic health conditions, and the energy system.

## Opportunities

The need to further analyze evacuation routes and access is one of the most recent changes in Safety Element requirements. These new requirements focus on the identification of areas where routes are lacking or inadequate. A key opportunity for the Safety Element update is address specific evacuation needs.

The City has recently adopted a number of planning documents, such as the Hazard Mitigation Plan and Community Wildfire Protection Plan, that seek to reduce the risk of hazards in the city. Many of the strategies included in these documents are recommendations and are used for educational purposes. An opportunity for the Safety Element update would be to include the recommendations

as implementation tools for the Safety Element and to conduct outreach with the community to determine if community preparedness is occurring.

The California Legislature recently adopted Senate Bill 182 (SB 182) and is awaiting Governor approval. SB 182 would require the Safety Element to include a comprehensive retrofit strategy as necessary to reduce the risk of property loss and damage during wildfires. Additionally, in order to reduce development pressures in the VHFHSZ through the Regional Housing Needs Allocation process, SB 182 requires a lower proportion of state housing allocation to jurisdictions that meet specified conditions. The City should monitor and incorporate these elements as necessary.

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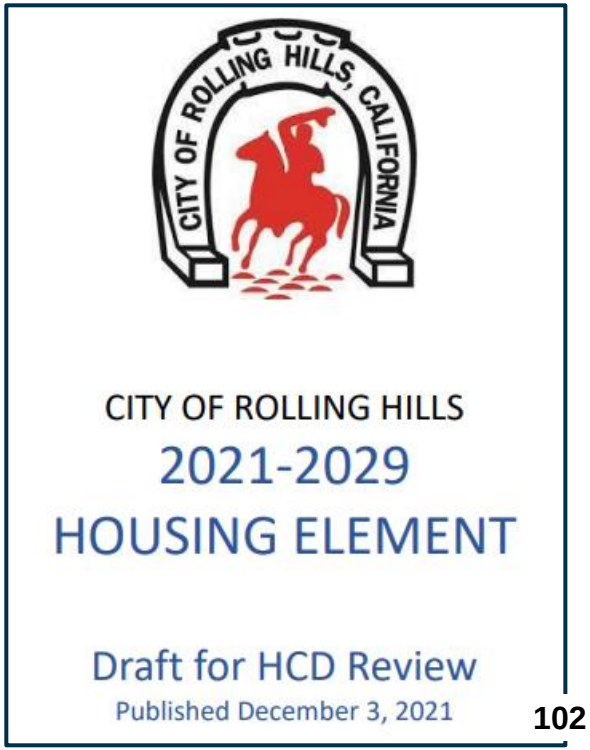
# 2022 Safety Element

## City of Rolling Hills, CA

# Safety Element Overview

- Required element of the General Plan
- Helps protect Rolling Hills against threats to public health and safety and addresses both natural and human-caused disasters
- Support for and in alignment with the City's Community Wildfire Protection Plan (2020)
- The 6th Cycle Housing Element triggered SB 379, requiring Rolling Hills to update the Safety Element



# Safety Element Regulatory Context

## Climate Change Legislation

**SB 379:** Requires local governments to address climate change vulnerabilities

## Wildfire Legislation

**SB 99**: Requires local governments to identify residential developments in any hazard areas that do not have at least two emergency evacuation routes

**AB 747**: Requires local governments to identify evacuation routes and evaluate

# Climate Change Legislation (SB 379)

## Climate hazards identified

- Increased temperature and extreme heat
- Increased storm frequency and intensity
- Increased drought risk
- Increased wildfire risk

## Community Sensitivities

- Populations (e.g., older adults, young children, individuals with chronic health conditions, etc.)
- Infrastructure (e.g., roads, electrical utility lines, etc.)
- Buildings and Facilities (e.g., residential structures, public safety facilities, etc.)
- Services (e.g., public safety response, water services, etc.)



# Wildfire Legislation (SB 99 and AB 747)

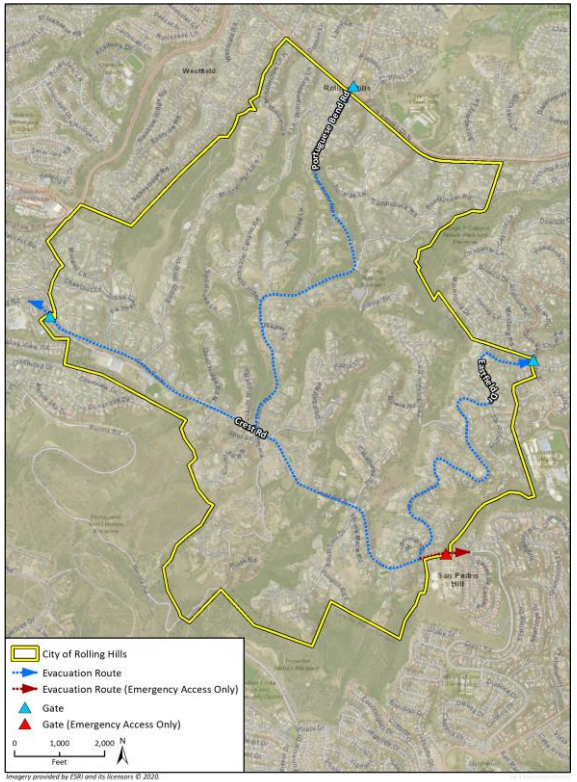
**SB 99**

- Due to its small size, the City is considered one neighborhood/residential development with 4 evacuation routes.

**AB 747**

- Triggered by the next Rolling Hills Hazard Mitigation Plan Update.

**All fire-related policies were reviewed by CAL FIRE and the California Board of Forestry and Fire Protection. No further recommendations were provided.**



# Wildfire Legislation (SB 99 and AB 747)

## Existing Topics

- Seismic and Geologic Hazards
- Flood and Inundation Hazards
- Urban and Wildland Fire Hazards
- Hazardous Materials
- Crime

## Additional Topics Included in Update

- Hazards of Concern
- Disease Prevention
- Climate Change Adaptation/Resilience

# New & Updated Policies

| Legislation Addressed | Policy |
|---|---|
| **SB 99** | **PS-3.4:** Ensure that all new residential development has at least two emergency evacuations. |
| **AB 747** | **PS-3.9:** Evaluate evacuation route capacity, safety, and viability under a range of emergency scenarios as part of the next update to the Rolling Hills Hazard Mitigation Plan, in accordance with AB 747. |
| **CAL FIRE Recommendation** | **PS-3.13**: Require fire protection plans for all new development. |
| **CAL FIRE Recommendation** | **PS-3.17:** Establish and maintain community fire breaks and fuel modification/reduction zones, including public and private road clearance. |

# New & Updated Policies

| Legislation Addressed | Policy |
|---|---|
| **N/A** | **PS-5.4:** Inventory and, where necessary, acquire supplemental disaster communication equipment and other equipment, tools, and supplies used by Block Captains during an emergency. |
| **N/A** | **PS 5.15**: Minimize the risk of spread of infectious diseases and associated economic disruption. |
| **CAL FIRE Recommendation** | **PS-5.9:** Encourage residents to attend periodic training programs on wildfire mitigation and disaster planning, and to develop disaster preparedness and evacuation plans. |
| **SB 379** | **PS-7.2**: Prepare for and adapt to the effects of climate change by considering climate change vulnerability in planning decisions, including those involving new public facilities and private development. |
| **SB 379** | **PS-7.6**: Update emergency/disaster response measures to account for increased heat days. |

# Thank You

## Questions?

**Agenda Item No.: 9.A**
**Mtg. Date: 01/18/2022**

**TO:** **HONORABLE CHAIR AND MEMBERS OF THE PLANNING COMMISSION**

**FROM:** **JOHN SIGNO, DIRECTOR OF PLANNING & COMMUNITY SERVICES**

**THRU:** **ELAINE JENG P.E., CITY MANAGER**

**SUBJECT:** **ZONING CASE NO. 21-13: REQUEST FOR APPROVAL OF A SITE PLAN REVIEW FOR A POOL, SPA, GRADING, AND OTHER IMPROVEMENTS FOR A PROPERTY LOCATED AT 4 STORM HILL LANE (GRZYWACZ)**

**DATE:** **January 18, 2022**

## BACKGROUND:

### Zoning, Location, and Lot Description

The property is zoned RAS-2 and has a net lot area of 298,606 square feet (6.86 acres). The lot is developed with a 5,453-square-foot single family residence and a 950-square-foot garage. There are five existing building pads on site with approximately 40 feet difference in elevation. The existing residence, garage and project area are located on the highest and largest pad (45,702 square feet) in the middle of the property; the secondary pad (16,311 square feet) is located behind the main pad and contains a tennis court and guesthouse; the third pad (18,228 square feet) is in the southern portion of the property and contains an arena and corral; the fourth pad (3,869 square feet) is located south of the main pad and includes a corral; the fifth pad (8,065 square feet) in the front of the property is developed with a corral and stable. The existing topography of the project site has a gradual slope and is an ideal location for a swimming pool and spa in that it is located outside of required setbacks.

## DISCUSSION:

### Project Description

The applicant is proposing to construct a 920-square-foot swimming pool and spa, pool equipment, barbecue and kitchen area, patio extension, water feature, trellis, garden, garden walls, and landscaping. The project includes 4,761 square feet of new flatwork: 2,719 square feet of patio area and 2,042 square

for a pool deck. The proposed project will create 2,843 square feet of newly disturbed land and includes 496 cubic yards of grading, which wills be balanced on site. Excavation for the swimming pool is exempt from grading calculations, but is included as part of the project to level the grade. No import or export of dirt will occur.

**Site Plan Review**

The applicant is requesting a Site Plan Review (SPR) to exceed the 800 square feet allowed by-right for a swimming pool, and conduct 496 square feet of total grading.

Swimming Pool

The proposed swimming pool and spa is 920 square feet. A Site Plan Review is required because the pool and spa exceeds the 800 square feet allowed by right. Section 17.46.020.A.2.a of the Rolling Hills Municipal Code states:

- "A swimming pool and spa, which is less than eight hundred square feet in area (area of surface water), that do not require grading and when such construction would not cause exceedance of the requirements for structural and total net lot coverage and disturbed area of the lot. For the purpose of this section, the actual excavation for the swimming pool or spa is not considered grading. However, should there be a need to create a buildable pad for the purpose of locating the swimming pool or spa on the pad, and if such construction does not meet the exemption criteria pursuant to Section 15.04.120 of the Building and Construction Code, a site plan review shall be required."

The proposed pool and spa is more than 800 square feet, which is the maximum size allowed without a Site Plan Review. The proposed pool and spa will not encroach into any required yards and will be on relatively flat land. The proposed uses will be located behind the house in an area with views of the Los Angeles basin. There are other locations on site for the proposed uses, however, the other locations are on separate building pads and are much smaller. Locating the proposed uses on a higher elevation, behind the residence, eliminates the line of sight to the pool and does not block the view from adjacent residences. As such, the proposed location is viable and safe for a pool and spa due to the existing topography.

Grading

The applicant is requesting to use the excavated dirt from the proposed swimming pool area to flatten the surrounding area. Typically, dirt excavated for a swimming pool and spa is exempt from grading calculations, however, the applicant will be using the 113 cubic yards (CY) of dirt from the swimming pool/spa to flatten the surrounding area. As a result, no export of dirt will occur. The total grading for the project is 496 cubic yards (CY): 248 CY of cut and 248 CY of fill. A second area of grading near the front of the property will be done to create a garden area. A third area of grading occurs in the northern portion of the site to improve bio-infiltration of storm water. Balancing grading on site complies with the goals of the General Plan by eliminating the need to import or export dirt. The proposed grading will not impact site drainage.

Section 17.46.050 - Required Site Plan Review findings.

The Commission shall be required to make findings in acting to approve, conditionally approve, or deny a site plan review application. No project which requires Site Plan Review approval shall be approved by the Commission, or by the City Council on appeal, unless the following findings can be

made:

1. The project complies with and is consistent with the goals and policies of the General Plan and all requirements of the Zoning Ordinance;
2. The project substantially preserves the natural and undeveloped state of the lot by minimizing building coverage. Lot coverage requirements are regarded as maximums, and the actual amount of lot coverage permitted depends upon the existing buildable area of the lot;
3. The project is harmonious in scale and mass with the site, the natural terrain and surrounding residences;
4. The project preserves and integrates into the site design, to the greatest extent possible, existing topographic features of the site, including surrounding native vegetation, mature trees, drainage courses and land forms (such as hillsides and knolls);
5. Grading has been designed to follow natural contours of the site and to minimize the amount of grading required to create the building area;
6. Grading will not modify existing drainage channels nor redirect drainage flow, unless such flow is redirected into an existing drainage course;
7. The project preserves surrounding native vegetation and mature trees and supplements these elements with drought-tolerant landscaping which is compatible with and enhances the rural character of the community, and landscaping provides a buffer or transition area between private and public areas;
8. The project is sensitive and not detrimental to the convenient and safe movement of pedestrians and vehicles; and
9. The project conforms to the requirements of the California Environmental Quality Act.

If all of the above findings cannot be made with regard to the proposed project, or cannot be made even with changes to the project through project conditions imposed by City staff and/or the Planning Commission, the Site Plan Review application shall be denied. Findings to support the proposed project are included in the resolution.

**Public Participation**

No calls or letters were received.

**Environmental Review**

The proposed project has been determined not to have a significant effect on the environment and is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) Guidelines pursuant to Section 15303 (New Construction or Conversion of Small Structures), which exempts accessory structures including garages, carports, patios, swimming pools, and fences.

**FISCAL IMPACT:**
None.

**RECOMMENDATION:**

Adopt Resolution No. 2022-01 approving a Site Plan Review for a swimming pool, spa, grading, and other improvements.

**ATTACHMENTS:**

4 Storm Hill (ZC 21-13) Development Table.pdf
Development Plans - 4 Storm Hill (ZC 21-13).pdf
Vicinity Map - 4 Storm Hill Ln.pdf
Resolution 2022-01 (4 Storm Hill Lane) (ZC 21-13)-c1 (002)-c1-c1.pdf

| Development Table Zoning Case No. 2021-13 (4 STORM HILL LANE) | | | |
|---|---|---|---|
| | **EXISTING** | **PROPOSED** | **TOTAL** |
| | Single family residence, garage, spa, equipment, guest house, stable, recreation court, entryways, sheds/trellises, bbq | New swimming pool, spa, bbq/kitchen, water feature, deck and grading | Requires Site Plan Review |
| Net Lot Area | 298,606 SF | 0 SF | 298,606 SF |
| Residence | 5,453 SF | 0 SF | 5,453 SF |
| Garage | 950 SF | 0 SF | 950 SF |
| Swimming Pool/Spa | 76 SF | 920 SF | 996 SF |
| Pool Equipment | 60 SF | 108 SF | 160 SF |
| Guest House | 800 SF | | 800 SF |
| Stable | 2,064 SF | | 2,064 SF |
| Recreation Court | 7,047 SF | | 7,047 SF |
| Entryway, Breezeway | 877 SF | | 877 SF |
| Sheds, Trellises, Gazebo | 541 SF | | 541 SF |
| Barbecue, Outdoor Kitchen | 18 SF | 59 SF | 77 SF |
| Water Features, Etc. | | 66 SF | 66 SF |
| Service Yard | 120 SF | | 120 SF |
| Total Structure Area | 18,006 SF | 1,153 SF | 19,159 SF |
| Structural Coverage | 6.0 % | 0.4 % | 6.4 % |
| Total Structures Excluding: up to 5 legal and up to 800 SF detached structures that are not higher than 12 ft (no more than 120 SF per structure per deduction, except for trellis) | 17,465 SF | 1,076 SF | 18,481 SF |
| Structural Coverage (20% maximum) | 5.8% | 0.4% | 6.2% |
| Grading (balanced on site) INCLUDING POOL EXCAVATION | | | CUT: 248 CY FILL: 248 CY |
| Total Lot Coverage (35% maximum) | 13.2% | 2.0% | 15.2% |
| Building Pad Coverage 1 (30%maximum) | 16.3% | 2.2% | 18.5% |
| Building Pad Coverage 2 (30%maximum) | 48.1% | 0% | 48.1% |
| Building Pad Coverage 3 (30%maximum) | 0% | 0% | 0% |
| Building Pad Coverage 4 (30%maximum) | 16.7% | 0% | 16.7% |
| Building Pad Coverage 5 (30%maximum) | 17.5% | 0% | 17.5% |
| Disturbed Area (40% maximum) | 41% | 1% | 42% |
| Stable min. 450 SF | 2,064 SF | 0 SF | 2,064 SF |
| Corral min. 550 SF | >18,000 SF | 0 SF | >18,000 SF |

# GRZYWACZ RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA 90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

## PROJECT INFORMATION :

| | |
|---|---|
| OWNER | : CLAUDIA & TOM GRZYWACZ |
| MAILING ADDRESS | : 4 STORM HILL LANE ROLLING HILLS, CA 90247 |
| PROJECT ADDRESS | : 4 STORM HILL LANE ROLLING HILLS, CA 90247 |
| PHONE NUMBER | : 310-534-5232 |
| LANDSCAPE ARCHITECT | : RICHIE-BRAY, INC |
| MAILING ADDRESS | : 904 SILVER SPUR ROAD, ROLLING HILLS ESTATES, CA 90274 |
| PHONE NUMBER | : (310) 377-5868 |
| ENGINEER | : PLOTNIK & ASSOCIATES (LARRY CARR) |
| MAILING ADDRESS | : 18626 S. WILINGTON AVE, RANCHO DOMINGUEZ, CA 90220 |
| PHONE NUMBER | : (310) 605-6657 |

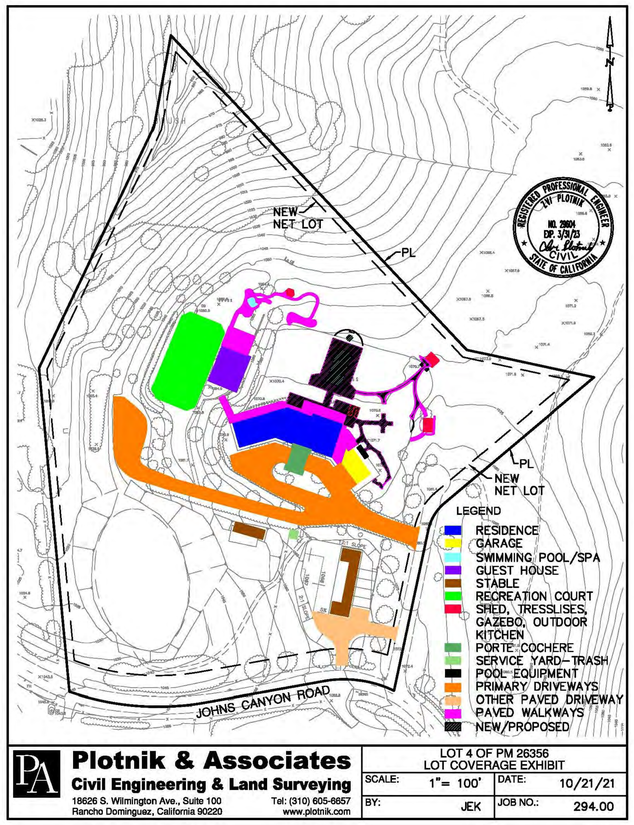
| DWG. NO. | SCALE | DATE | REV. DATE | DESCRIPTIONS |
|---|---|---|---|---|
| L-0 | N/A | 10-05-2021 | ---01-12-2022 | COVER SHEET |
| L-1 | 1/32" = 1'-0" | 10-04-2021 | ---12-03-2021 | FULL PROPERTY, SETBACKS, SOW |
| L-1.1 | 1/32" = 1'-0" | 10-04-2021 | ---12-03-2021 | BUILDING PADS COVERAGE |
| L-1.2 | 1/32" = 1'-0" | 10-04-2021 | ---12-03-2021 | COLOR MARKERS AS PER CHECKLIST |
| L-2 | 1" = 10'-0" | 10-07-2021 | ---12-03-2021 | EXISTING CONDITIONS |
| L-2.1 | 1" = 10'-0" | 07-13-2021 | ---12-03-2021 | HARDSCAPE LAYOUT & MATERIALS |
| L-2.2 | 1" = 10'-0" | 10-08-2021 | ---12-03-2021 | GRADING AND DRAINAGE CONCEPT |
| L-3 | 1/4" = 1'-0" | 10-05-2021 | ---12-03-2021 | DETAILS - POOL |
| L-3.1 | SEE SHEET | 10-05-2021 | ---12-03-2021 | DETAILS - FIRE-PIT, VEGGIE BEDS, BOCCE |
| L-3.2 | SEE SHEET | 10-04-2021 | ---12-03-2021 | DETAILS - BBQ / KITCHEN |
| LP-1 | 1" = 10'-0" | 10-04-2021 | ---01-12-2022 | CONCEPTUAL LANDSCAPE AREAS |
| LP-2 | 1" = 10'-0" | 12-03-2021 | ---01-12-2022 | HYDROZONES - MWELO CALCS |

## SCOPE OF WORK:

THE SCOPE OF WORK FOR THIS PROJECT INCLUDES THE FOLLOWING NEW FEATURES :

REAR YARD REMODEL INCLUDING:
- HARDSCAPE - PATIO , WALLS, STEPPING STONES
- BOCCE BALL COURT
- FIRE PIT
- SWIMMING POOL / SPA
- BBQ / OUTDOOR KITCHEN
- WATER FEATURES
- RAISED VEGGIE BEDS

## LOT CALC AREA BREAKDOWN WITH ENGINEER STAMP:




**Plotnik & Associates**
**Civil Engineering & Land Surveying**
18626 S. Wilmington Ave., Suite 100, Rancho Dominguez, California 90220
Tel: (310) 605-6657 www.plotnik.com

LOT 4 OF PM 26356
LOT COVERAGE EXHIBIT

| | | | |
|---|---|---|---|
| SCALE: | 1"= 100' | DATE: | 10/21/21 |
| BY: | JEK | JOB NO.: | 294.00 |

DATE 10.20.21 ZONING CASE NO. _____ ADDRESS 4 STORM HILL LANE

**ALL MEASUREMENTS TO BE TAKEN FROM THE EXTERIOR FINISHED WALLS OF STRUCTURES. ALL STRUCTURES MUST BE SHOWN ON THE PLAN AND LISTED HERE**

**CALCULATION OF LOT COVERAGE**

| AREA AND STRUCTURES | EXISTING | PROPOSED | TOTAL |
|---|---|---|---|
| NET LOT AREA | 298,606 sq.ft. | 0 sq.ft. | 298,606 sq.ft. |
| RESIDENCE | 5453 sq.ft. | 0 sq.ft. | 5453 sq.ft. |
| GARAGE | 950 sq.ft. | 0 sq.ft. | 950 sq.ft. |
| SWIMMING POOL/SPA | 76 sq.ft. | 920 sq.ft. | 996 sq.ft. |
| POOL EQUIPMENT | 60 sq.ft. | 108 sq.ft. | 168 sq.ft. |
| GUEST HOUSE | 800 sq.ft. | 0 sq.ft. | 800 sq.ft. |
| CABANA | 0 sq.ft. | 0 sq.ft. | 0 sq.ft. |
| STABLE (dirt volume to be included in grading quantities) | 2064 sq.ft. | 0 sq.ft. | 2064 sq.ft. |
| RECREATION COURT | 7047 sq.ft. | 0 sq.ft. | 7047 sq.ft. |
| ATTACHED COVERED PORCHES | 0 sq.ft. | 0 sq.ft. | 0 sq.ft. |
| ENTRYWAY/ PORTE COCHERE, BREEZEWAYS | 877 sq.ft. | 0 sq.ft. | 877 sq.ft. |
| ATTACHED TRELLISES | 0 sq.ft. | 0 sq.ft. | 0 sq.ft. |
| *DETACHED STRUCTURES: (circle all that applies) SHEDS, TRELLISES, GAZEBO, | 541 sq.ft. | 0 sq.ft. | 541 sq.ft. |
| BARBECUE, OUTDOOR KITCHEN, | 18 sq.ft. | 59 sq.ft. | 77 sq.ft. |
| ROOFED PLAY EQUP.- over 15 ft. high and over 120 sq. ft. in area, | 0 sq.ft. | 0 sq.ft. | 0 sq.ft. |
| WATER FEATURES, ETC. | 0 sq.ft. | 66 sq.ft. | 66 sq.ft. |
| SERVICE YARD | 120 sq.ft. | 0 sq.ft. | 120 sq.ft. |
| OTHER _____ | 0 sq.ft. | 0 sq.ft. | 0 sq.ft. |
| BASEMENT AREA (volume to be included in grading quantities) | 0 sq.ft. | 0 sq.ft. | 0 sq.ft. |
| DEPTH OF BASEMENT | 0 | 0 | 0 |
| TOTAL STRUCTURES | 18,006 sq.ft. | 1152 sq.ft. | 19,099 sq.ft. |
| % STRUCTURAL COVERAGE | 6.0 % | .4 % | 6.4 % |
| TOTAL STRUCTURES EXCLUDING: *up to 5 (legal) & up to 800 sq. ft. detached structures that are not higher than 12 ft. (no more than 120 sq.ft. per structure per deduction, except for trellis)* | 17,465 sq.ft. | 1076 sq.ft. | 18,481 sq.ft. |
| % STRUCTURAL COVERAGE | 5.8 % | .4 % | 6.2 % |



**ALL FLATWORK MUST BE SHOWN ON THE PLAN**

| | EXISTING | PROPOSED | TOTAL |
|---|---|---|---|
| PRIMARY DRIVEWAY(S) | 16,160 sq.ft. | 0 sq.ft. | 16,160 sq.ft. |
| PAVED WALKS, PATIO AREAS, COURTYARDS | 2535 sq.ft. | 2719 sq.ft. | 5254 sq.ft. |
| POOL DECKING | 0 sq.ft. | 2042 sq.ft. | 2042 sq.ft. |
| OTHER PAVED DRIVEWAYS, ROAD EASEMENTS, PARKING PADS | 3200 sq.ft. | 0 sq.ft. | 3200 sq. ft. |
| TOTAL FLATWORK | 21,895 sq.ft. | 4761 sq.ft. | 26,656 sq.ft. |
| % TOTAL FLATWORK COVERAGE | 7.3 % | 1.6 % | 8.9 % |
| TOTAL STRUCTURAL & FLATWORK COVERAGE | 39,901 sq.ft. | 5913 sq.ft. | 45,4755 sq.ft. |
| % TOTAL COVERAGE | 13.4 % | 2.0 % | 15.3 % |
| TOTAL STRUCTURAL & **structural** FLATWORK COVERAGE **flat work** *Excl. the allowance of up to 5 – 800 sq. ft. structures from previous page.* | 17,465 sq.ft. 21,895 sq.ft. 39,360 | 1076 sq.ft. 4761 sq.ft. 5837 | 18,481 sq.ft. 26,656 sq.ft. 45,137 |
| % TOTAL COVERAGE | 13.2 % | 2.0 % | 15.1 % |
| SCOPE OF WORK AREA TOTAL DISTURBED AREA | 0 sq.ft. | 36,352 sq.ft. | 36,352 sq.ft. |
| SCOPE OF WORK AREA % DISTURBED AREA | 0 % | 12.2 % | 12.2 % |
| GRADING QUANTITY *(include future stable, corral and access way; basement and all other areas to be graded/excavated)* | (248 - CUT 248 - FILL) 496 cubic yards | | |

AREA TO BE REGRADED = 8199 SQFT 2.7%

All structures (attached and detached) must be listed.

- *Free standing legal, conforming accessory structures such as sheds, trellises, covered patios, gazebo, fountains, barbecue, outdoor fire place, etc., are not counted towards coverages and disturbed area, unless their combined area exceeds 800 sq. ft., are over 120 sq.ft. in size each (except for trellis) or if there are more than 5 such structures on the property.*



## NOTES :

1. ANY PLANTING OR HARDSCAPE ON CITY RIGHT OF WAY WILL BE REQUIRED TO BE REVIEWED AND APPROVED BY THE CITY.
2. ALL PLANTING THAT GROWS TO A HEIGHT THAT BECOMES A VIEW OBSTRUCTION, WILL BE REQUIRED TO BE TRIMMED.
3. VERIFY ALL DIMENSIONS ON SITE AND NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORKS.
4. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
5. LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR ANY MEANS OR METHODS OF CONSTRUCTION.
6. LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR PROPOSED OR EXISTING CONDITIONS.
7. ALL DIMENSIONS ARE TO FINISHED SURFACES.
8. SEE ENGINEER'S DRAWINGS FOR ALL DETAILS & REQUIREMENTS OF CONCRETE, CMU WALLS, REBARS, ETC.
9. ALL EXPOSED GALV. STEEL PARTS TO BE PAINTED W/ PRIMER & 2 COATS OF POLYURETHANE PAINT.
10. CONTRACTOR TO VERIFY ALL EQUIPMENT SIZES, UTILITY REQUIREMENTS ETC. PRIOR TO CONSTRUCTION.
11. CONTRACTOR TO SUBMIT ALL MATERIAL & COLOR SAMPLES FOR APPROVAL PRIOR TO ANY WORK COMMENCES.
12. SURVEY INFORMATION WERE OBTAINED FROM OTHER'S RECORDS AND EXISTING SITE CONDITIONS. CONTRACTOR TO VERIFY ALL CONDITIONS PRIOR TO CONSTRUCTION.
13. SURVEY PREPARED BY OTHERS:
14. SHOULD EXISTING CONDITIONS DIFFER FROM THIS LAYOUT, CONTRACTOR ARE TO INFORM LANDSCAPE ARCHITECT FOR VERIFICATION PRIOR TO WORK COMMENCES.

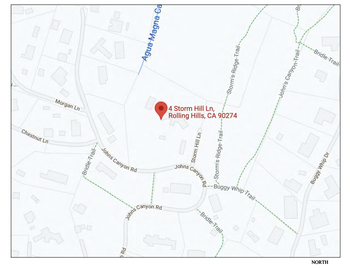
## GENERAL NOTES :

1. ANY YARD DRAINAGE IMPROVEMENTS SHALL BE INSPECTED AND CERTIFIED BY THE ENGINEER OF RECORD PRIOR TO FINAL APPROVAL.
2. ANY DRAINAGE DIRECTED TO THE STREET THROUGH PIPING SHALL BE DRAWN UP BY A LICENSED CIVIL ENGINEER AND SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO OBTAINING A PUBLIC WORKS PERMIT FOR CURB CORING.
3. CONTRACTOR TO VERIFY LOCATIONS OF SMOKE DETECTORS AND CARBON MONOXIDE ALARMS IN NEW WORK PER SECTIONS R314 & R315 OF THE CRC RESPECTIVELY.
4. ALL CONSTRUCTION WASTE AND DEBRIS MUST BE CONTAINERIZED AT ALL TIMES & MUST BE ATHENS DUMPSTERS ONLY (CALL 1-888-336-6100)
5. A RE-INSPECTION FEE MAY BE CHARGED BY THE CITY FOR AN INSPECTION WHICH IS NOT ACCESSIBLE, OR APPROVED PLANS ARE NOT ON SITE, OR JOB IS NOT READY AND ALL COSTS SHALL BE BORNE BY THE CONTRACTOR RESPONSIBLE FOR THE SAID WORK.
6. ANY AND ALL DEVIATIONS FROM THE PLANNING COMMISSION APPROVED PLANS REQUIRE THAT REVISED PLANS BE SUBMITTED TO THE PLANNING DEPARTMENT FOR REVIEW AND APPROVAL.
7. ALL GENERAL CONTRACTORS, SUB-CONTRACTORS, ARCHITECTS & ENGINEERS CONDUCTING BUSINESS WITHIN THE CITY ARE REQUIRED TO MAINTAIN A CURRENT CITY BUSINESS LICENSE AS DESCRIBED IN THE MUNICIPAL CODE ORDINANCE NO. 092-559 AND RESLOLUTION NO. R92-72.
8. PER LOCAL REQUIREMENTS, THE WORKING HOURS ARE BETWEEN 7:00 AM TO 7:00 PM MONDAY THROUGH THURSDAY; 7:00 AM TO 5:00 PM ON FRIDAY AND 9:00 AM TO 5:00 PM ON SATURDAY WITH NO WORK ON SUNDAYS OR HOLIDAYS. THE ABOVE LIMITS ARE FOR REFERENCE ONLY AND CONTRACTOR ARE RESPONSIBLE TO ASCERTAIN THE WORKING HOUR LIMIT FROM RELEVANT CITY REQUIREMENTS.
9. ALL WORKS SHALL CONFORM TO ALL RELEVANT CURRENT CODES INCLUDING BUT NOT LIMITED TO :
   - 2019 CALIFORNIA BUILDING CODE
   - 2019 CALIFORNIA RESIDENTIAL CODE
   - 2019 CALIFORNIA PLUMBING CODE
   - 2019 CALIFORNIA MECHANICAL CODE
   - 2019 CALIFORNIA ELECTRICAL CODE
   - THE CURRENT REQUIREMENTS OF THE ENERGY
   - COUNTY OF LOS ANGELES FIRE CODE
10. DUST CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
11. SEPARATE PUBLIC WORKS PERMIT SHALL BE REQUIRED FOR ANY APPROACH TO PRIVATE DRIVEWAYS, SEWER LATERALS, CURBS, CURB CORES, STEEET IMPROVEMENTS OR ANY WORK IN THE PUBLIC RIGHT OF WAY OR PARKWAYS.
12. CONTRACTOR TO ASCERTAIN ALL REQUIRED SWIMMING POOL FENCING TO BE MAINTAINED DURING CONSTRUCTION OR THE POOL SHALL BE EMPTIED.
13. PRIOR TO ANY DEMOLITION/GRADING WORK COMMENCES, A PRE-DEMO/GRADING MEETING SHALL BE ARRANGED WITH CITY BUILDING OFFICIALS, GENERAL CONTRACTOR, OWNER OR OWNER'S REPRESENTATIVE, SOIL ENGINEER, LANDSCAPE ARCHITECT AND/OR GRADING CONTRACTOR.
14. CONTRACTOR TO INSTALL ALL NECESSARY EROSION CONTROL AND SEDIMENT RETENTION PROVISIONS ACCORDING TO PLAN OR AS NECESSARY.
15. DETACHED PATIO COVERS, CARPORTS, ARBORS, OPEN LATTICE WORK & SUN SHADES MAY BE CONSTRUCTED OF ANY MATERIALS ALLOWED BY CODE.

## MAINTENANCE REQUIREMENTS

LANDSCAPE MAINTENANCE REQUIREMENTS SHALL BE AS FOLLOWS :

1. AN AUTOMATIC SPRINKLER OR IRRIGATION SYSTEM SHALL BE INSTALLED AND PERMANENTLY MAINTAINED IN WORKING ORDER.
2. ALL LANDSCAPING SHALL BE PERMANENTLY MAINTAINED.
3. LAWN AND GROUND COVERS SHALL BE MOWED OR TRIMMED REGULARLY. ALL PLANTED AREAS SHALL BE KEPT FREE OF WEEDS AND DEBRIS.
4. ALL PLANTINGS SHALL BE KEPT IN A HEALTHY AND GROWING CONDITION. ADJUSTMENTS, REPLACEMENTS, REPAIRS AND CLEANING SHALL BE A PART OF THE REGULAR MAINTENANCE.
5. STAKES, GUYS AND TIES ON TREES SHALL BE CHECKED REGULARLY FOR CORRECT FUNCTION. TIES SHALL BE ADJUSTED TO AVOID CREATING ABRASION OR GIRDING ON TRUNKS OR BRANCHES.




VICINITY MAP
SCALE: NTS




SITE AERIAL VIEW
SCALE: NTS

I AGREE TO COMPLY WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

APPLICANT SIGNATURE _____ DATE 8/11/2021

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

APPLICANT SIGNATURE _____ DATE 8/11/2021

## LIST OF BMPS (BEST MANAGEMENT PRACTICES)

| | | |
|---|---|---|
| 1. | CA1 | DEWATERING OPERATIONS - REMOVE SEDIMENTS FROM GROUND WATER |
| 2. | CA2 | PAVING OPERATIONS - REDUCE DISCHARGE OF POLLUTANTS FROM PAVING OPERATIONS |
| 3. | CA3 | STRUCTURE CONSTRUCTION AND PAINTING - PREVENT & REDUCE DISCHARGE FROM CONSTRUCTION SITES & PAINTING PROJECTS |
| 4. | CA10 | MATERIAL DELIVERY AND STORAGE - PREVENT & REDUCE DISCHARGE OF POLLUTANTS TO STORM WATER FROM MATERIAL DELIVERY & STORAGE |
| 5. | CA11 | MATERIAL USE - PREVENT & REDUCE DISCHARGE OF POLLUTANTS TO STORM WATER FROM MATERIAL USE |
| 6. | CA12 | SPILL PREVENTION AND CONTROL - PREVENT & REDUCE DISCHARGE OF POLLUTANT TO STORM WATER SYSTEMS WITH GOOD HOUSKEEPING |
| 7. | CA20 | SOLID WASTE MANAGEMENT - PREVENT & REDUCE DISCHARGE OF POLLUTANTS TO STORM WATER SYSTEMS FROM SOLID WASTE OR CONSTRUCTION |
| 8. | CA21 | HAZARDOUS WASTE MANAGEMENT - PREVENT & REDUCE DISCHARGE OF POLLUTANTS TO STORM WATER FROM TOXIC MATERIALS |
| 9. | CA22 | CONTAMINATED SOIL MANAGEMENT - PREVENT & REDUCE DISCHARGE OF POLLUTANTS TO STORM WATER CONTAMINATED SOIL |
| 10. | CA23 | CONCRETE WASTE MANAGEMENT - PREVENT & REDUCE DISCHARGE OF POLLUTANTS TO STORM WATER FROM CONCRETE WASTE |
| 11. | CA24 | SANITARY/SEPTIC WASTE MANAGEMENT - PREVENT & REDUCE DISCHARGE OF POLLUTANTS TO STROM WATER FROM SANITARY & SEPTIC SYSTEMS |
| 12. | CA30 | VEHICLE AND EQUIPMENT CLEANING - PREVENT & REDUCE DISCHARGE OF POLLUTANTS TO STORM WATER FROM CLEANING OF VEHICLES AND EQUIPMENT |
| 13. | CA31 | VEHICLE AND EQUIPMENT FUELING - PREVENT & REDUCE DISCHARGE OF POLLUTANTS TO STORM WATER FROM FUELING OF VEHICLES & EQUIPMENT |
| 14. | CA32 | VEHICLE AND EQUIPMENT MAINTENANCE - PREVENT & REDUCE DISCHARGE OF POLLUTANTS TO STORM WATER FROM MAINTENANCE OF VEHICLES & EQUIPMENT |
| 15. | CA40 | EMPLOYEE/SUBCONTRACTOR TRAINING -SWPPP STORM WATER POLLUTION PREVENTION PLAN |
| 16. | ESC1 | SCHEDULING - SEQUENCING THE CONSTRUCTION PROJECT TO REDUCE THE AMOUNT OF SOIL EXPOSED TO EROSION |
| 17. | ESC2 | PRESERVATION OF EXISTING VEGETATION - MINIMIZE DAMAGE AND EROSION BY PRESERVING THE EXISTING VEGETATION |
| 18. | ESC10 | SEEDING AND PLANTING - MINIMIZE EROSION WITH SEEDING AND PLANTING |
| 19. | ESC11 | MULCHING - FOR STABILIZING CLEARED AND FRESHLY SEEDED AREAS |
| 20. | ESC20 | GEOTEXTILES AND MATS - FOR STABILIZATION OF SOILS |
| 21. | ESC31 | DUST CONTROLS - REDUCE DUST AND SOIL EROSION |
| 22. | ESC22 | TEMPORARY STREAM CROSSING - RECOMMENDATIONS FOR INSTALLING A TEMPORARY CULVER, FORD OR BRIDGE |
| 23. | ESC23 | CONSTRUCTION ROAD STABILIZATION - RECOMMENDATIONS FOR DUST AND EROSION CONTROL |
| 24. | ESC24 | STABILIZED CONSTRUCTION ENTRANCE - RECOMMENDATIONS FOR DUST, SEDIMENT AND EROSION CONTROL FOR PUBLIC STREETS |
| 25. | ESC30 | EARTH DIKE - TEMPORARY BERM OR RIDGE OF COMPACTED SOIL |
| 26. | ESC31 | TEMPORARY DRAINS AND SWALES - TO DIVERT OFF-SITE RUNOFF AROUND A CONSTRUCTION SITE |
| 27. | ESC32 | SLOPE DRAIN - TEMPORARY PIPE TO DIVERT RUNOFF FROM THE TOP OF A SLOPE TO THE BOTTOM WITHOUT CAUSING EROSION |
| 28. | ESC40 | OUTLET PROTECTION - INSTALL RIP-RAP TO REDUCE SEDIMENT IN THE SOIL |
| 29. | ESC41 | CHECK DAMS - REDUCES VELOCITY OF CONCENTRATED STORM WATER FLOWS AND REDUCES EROSION |
| 30. | ESC42 | SLOPE ROUGHENING/TERRACING - CREATES MICROCLIMATES FOR ESTABLISHING VEGETATION |
| 31. | ESC50 | FOR SEDIMENTATION CONTROL |
| 32. | ESC51 | STRAW BALE BARRIERS - FOR SEDIMENTATION CONTROL |
| 33. | ESC52 | SAND BAG BARRIER - FOR SEDIMENTATION CONTROL |
| 34. | ESC53 | BRUSH OR ROCK FILTER - FOR SEDIMENTATION CONTROL AND VELOCITY REDUCTION |
| 35. | ESC54 | STORM DRAIN INLET PROTECTION - DEVICES WHICH DETAIN SEDIMENT LADEN RUNOFF |
| 36. | ESC55 | SEDIMENT TRAP - SMALL EXCAVATED OR BERMED AREA FOR SEDIMENTATION |
| 37. | ESC56 | SEDIMENT BASIN - POND CREATED TO ALLOW EXCESSIVE SEDIMENT TO SETTLE |

Richie-Bray, Inc.
LANDSCAPE ARCHITECTURE

904 Silver Spur Road #395
Rolling Hills Estates, CA 90274
(310) 377-5868

E-mail: deb@richie-bray.com

LICENSED LANDSCAPE ARCHITECT
DEBORAH RITCHIE BRAY
No. 4141
Renewal Date 08/31/2022
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ RESIDENCE
4 STORM HILL LANE
ROLLING HILLS, CA 90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

COVER

CITY RE-SUBMITTAL 01.12.22

REVISIONS

12-03-2021
11-01-2021
10-26-2021
10-21-2021
10-12-2021
01-12-2022 10-11-2021
10-08-2021

SCALE: N/A
DATE: 10-05-2021
DRAWN BY:
CHECKED:
XREF FILE:

PROJECT NO.

SHEET NO.

L-0

NET LOT COVERAGE AREA LINE

PROPERTY LINE

BUILDING SETBACK

SCOPE OF WORK / PROJECT AREA - APPROX 36,352 SQFT
PROPOSED: NEW POOL & POOL DECK, EXPANDED EXISTING PATIO,
NEW VEGETABLE GARDEN, NEW BOCCE COURT, NEW FIRE PIT,
NEW GARDEN PATHS, NEW OUTDOOR BBQ AREA
AND 2 NEW WATER FEATURES

HOA EASEMENT LINE

ROAD CENTER LINE

DISTANCE TO NEIGHBORING DWELLINGS




























EXISTING RESIDENCE

EXISTING DRIVEWAY

STORM HILL LANE

STORM RIDGE TRAIL

JOHNS CANYON ROAD

BUILDING SETBACK LINE

ASSOCIATION GENERAL EASEMENT

ROADWAY EASEMENT

HOA EASEMENT

DISTANCE TO CORRAL

2:1 SLOPE

5%

UTILITY POLES

Richie-Bray, Inc.
LANDSCAPE ARCHITECTURE

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LICENSED LANDSCAPE ARCHITECT
DEBORAH RITCHIE BRAY
No. 3435
Expiration Date 01/31/23
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ
RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA
90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

FULL PROPERTY SURVEY, SETBACKS, DIST TO NEIGHBORING DWELLINGS & SCOPE OF WORK

CITY
RE-SUBMITTAL
12.03.21

REVISIONS

12-03-2021
11-01-2021
10-27-2021
10-26-2021
10-20-2021
10-11-2021

SCALE: 1/32" = 10'

DATE: 10-04-2021

DRAWN BY:

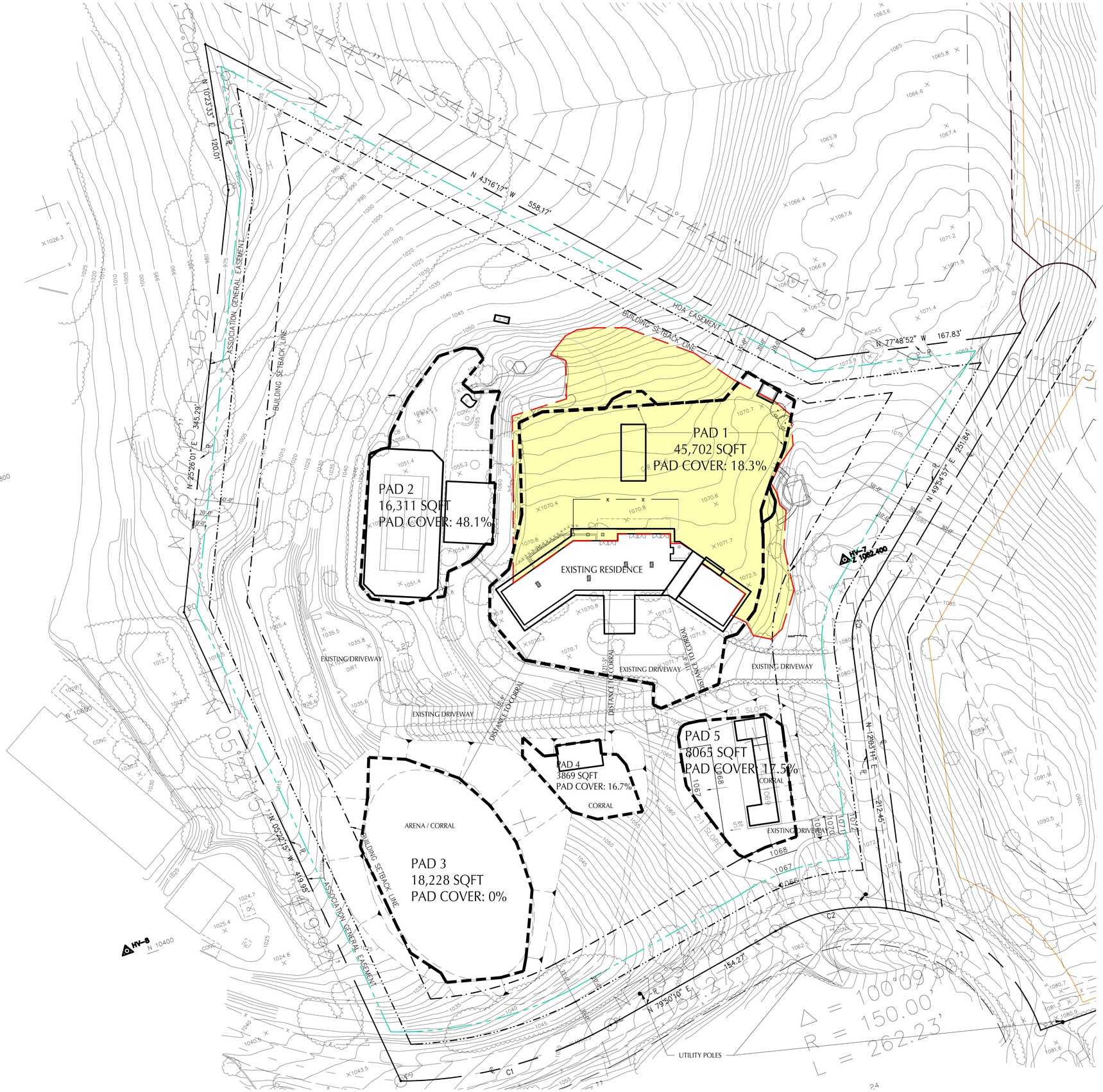
CHECKED:

XREF FILE:

PROJECT NO.

SHEET NO.

L-1




SCOPE OF WORK / PROJECT AREA -
APPROX 36,352 SQFT
PROPOSED: NEW POOL & POOL DECK, EXPANDED EXISTING PATIO, NEW VEGETABLE GARDEN, NEW BOCCE COURT, NEW FIRE PIT, NEW GARDEN PATHS, NEW OUTDOOR BBQ AREA AND 2 NEW WATER FEATURES

Richie-Bray, Inc.
LANDSCAPE ARCHITECTURE

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LICENSED LANDSCAPE ARCHITECT
DEBORAH RICHIE BRAY
6/30/22
Renewal Date
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ
RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA
90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

BUILDING PADS
COVERAGE

CITY
RE-SUBMITTAL
12.03.21

REVISIONS

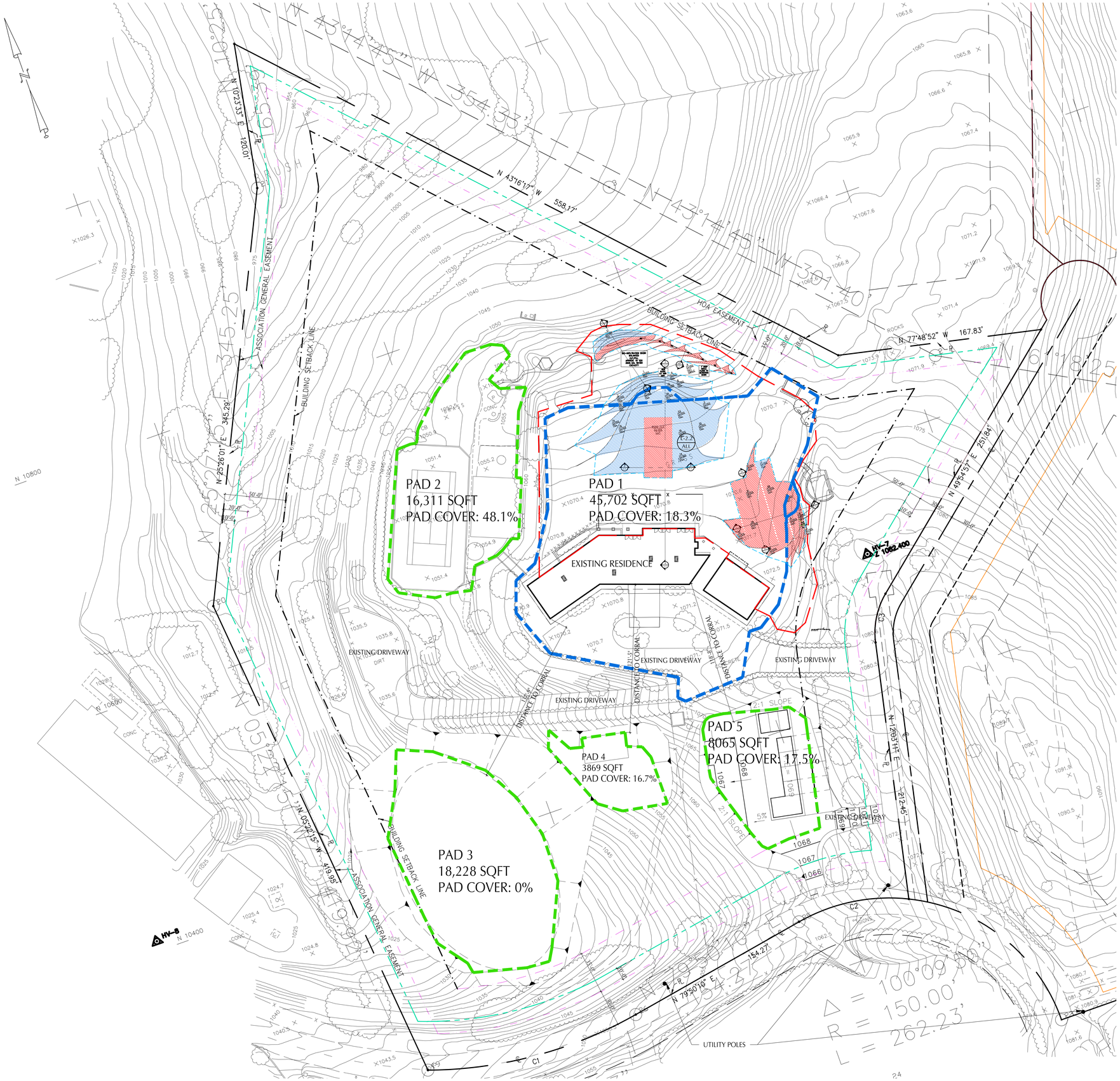
12-03-2021
11-01-2021
10-26-2021
10-20-2021
10-11-2021

SCALE: 1/32" = 10'
DATE: 10-04-2021
DRAWN BY:
CHECKED:
XREF FILE:

PROJECT NO.

SHEET NO.

L-1.1




DIFFERENT COLOR MARKERS AS PER PLAN SUBMITTAL CHECKLIST - PG 6

RESIDENTIAL BUILDING PA (NOT IN SETBACKS)

ADDITIONAL BUILDING PADS (NOT IN SETBACKS)

DISTURBED AREAS

NET LOT BOUNDARY

SETBACK LINES

BUILDING SETBACK

HOA EASEMENT

CUT AREAS FOR GRADING

FILL AREAS FOR GRADING

SCOPE OF WORK - PROPOSED PROJECT AREA

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LICENSED LANDSCAPE ARCHITECT
DEBORAH RICHIE BRAY
No. 4437
Expiration Date
12/31/22
Signature Date
12.1.21
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA
90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

DIFFERENT COLOR MARKERS AS PER PLAN SUBMITTAL CHECKLIST PG 6

CITY RE-SUBMITTAL 12.03.21

REVISIONS

12-03-2021
11-01-2021
10-26-2021
10-20-2021
10-11-2021

SCALE: 1/32" = 10'
DATE: 10-04-2021
DRAWN BY:
CHECKED:
XREF FILE:

PROJECT NO.

SHEET NO.

L-1.2



LOMPOC FLAGSTONE FOR POOL DECK, PATIO BORDER, STEPPING STONES & PATHWAYS - TO MATCH EXISTING PV STONE SURFACES



LOMPOC STONE FOR ALL NEW WALLS, WALL CAPS, RAISED VEGGIE BEDS AND STEPS - VERTICAL SURFACES TO MATCH EXISTING PV COLUMNS ON HOUSE



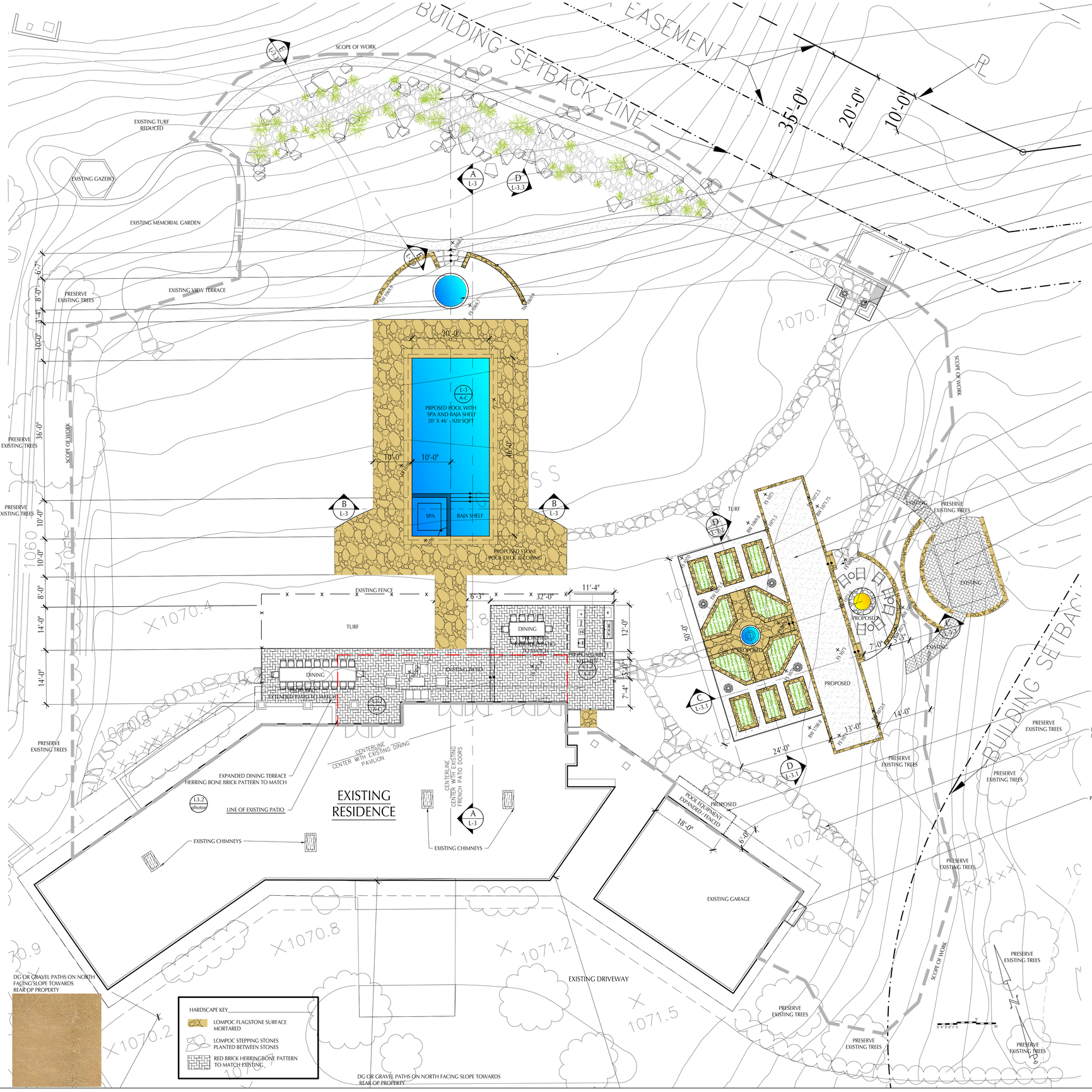
CRUSHED OYSTER SHELL SURFACE FOR BOCCE COURT, GATHERING AREA AROUND FIRE PIT AND AROUND RAISED VEGGIE BEDS



NEW GATES AND EXPANDED PICKET FENCE AROUND MAIN PATIO TO MATCH EXISTING

EXPANDED MAIN PATIO SURFACE TO MATCH EXISTING RED BRICK IN HERRING BONE PATTERN



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LICENSED LANDSCAPE ARCHITECT
DEBORAH RICHIE-BRAY
No. 4178
Renewal Date 04/30/22
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA 90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

HARDSCAPE LAYOUT PLAN & MATERIALS

CITY RE-SUBMITTAL 12.03.21

| REVISIONS | |
|---|---|
| | 10-11-2021 |
| | 10-08-2021 |
| 12-03-2021 | 10-01-2021 |
| 11-01-2021 | 09-29-2021 |
| 10-27-2021 | 09-16-2021 |
| 10-26-2021 | 09-10-2021 |
| 10-20-2021 | 08-11-2021 |

| | |
|---|---|
| SCALE: | 1" = 10' |
| DATE: | 07-13-2021 |
| DRAWN BY: | |
| CHECKED: | |
| XREF FILE: | |

PROJECT NO.

SHEET NO.

L-2.1

PHOTO # 10



EDGE OF BACK TURF AREA

PHOTO # 09



PLAY HOUSE

PHOTO # 11



BACK LAWN

PHOTO # 17



PV COLUMNS & STEPPING STONES
WITH RED BRICK GARDEN WALL

PHOTO # 15



AC - FENCED ENCLOSURE
FUTURE POOL ENCLOSURE

PHOTO # 18



PV & BRICK PATIOS @ GUEST HOUSE

PHOTO # 12



FENCED REAR PATIO

PHOTO # 13



REAR PATIO - FRENCH DOORS

PHOTO # 14



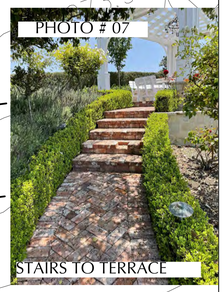
VIEW FROM MAIN LIVING SPACE

PHOTO # 08



PLAY HOUSE

PHOTO # 07



STAIRS TO TERRACE

PHOTO # 06



RESIDENCE AND LAWN

PHOTO # 16



EXISTING RED BRICK TERRACE
WITH PV GARDEN WALL

PHOTO # 05



BACK LAWN

PHOTO # 04



BACK LAWN AND DINING PAVILION

PHOTO # 03



MAIN BRICK PATIO

PHOTO # 01



BREEZWAY

PHOTO # 02



SIDE LAWN

SCOPE OF WORK / PROJECT AREA -
APPROX 36,352 SQFT
INCLUDES PROPOSED: NEW POOL &
POOL DECK, EXPANDED EXISTING
PATIO,
NEW VEGETABLE GARDEN, NEW
BOCCE COURT, NEW FIRE PIT,
NEW GARDEN PATHS, NEW
OUTDOOR BBQ AREA
AND 2 NEW WATER FEATURES

BUILDING SETBACK LINE
EASEMENT
35'-0"
20'-0"
10'-0"
EXISTING GAZEBO
EXISTING MEMORIAL GARDEN
EXISTING VIEW TERRACE
EXISTING HEDGE
EXISTING PLAYHOUSE
EXISTING ROSES AND ARCH
EXISTING TREES
EXISTING FENCE
EXISTING PATIO
EXISTING DINING TERRACE
LINE OF EXISTING PATIO
EXISTING RESIDENCE
EXISTING AC UNITS
EXISTING GARAGE
EXISTING DRIVEWAY
TURF
#01
#02
#03
#04
#05
#06
#07
#08
#09
#10
#11
#12
#13
#14
#15
#16
#17
#18

Richie-Bray, Inc.
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LICENSED LANDSCAPE ARCHITECT
DEBORAH RICHIE BRAY
No. 4487
Expiration Date
10-31-21
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ
RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA
90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

EXISTING CONDITIONS

CITY
RE-SUBMITTAL
12.03.21

REVISIONS

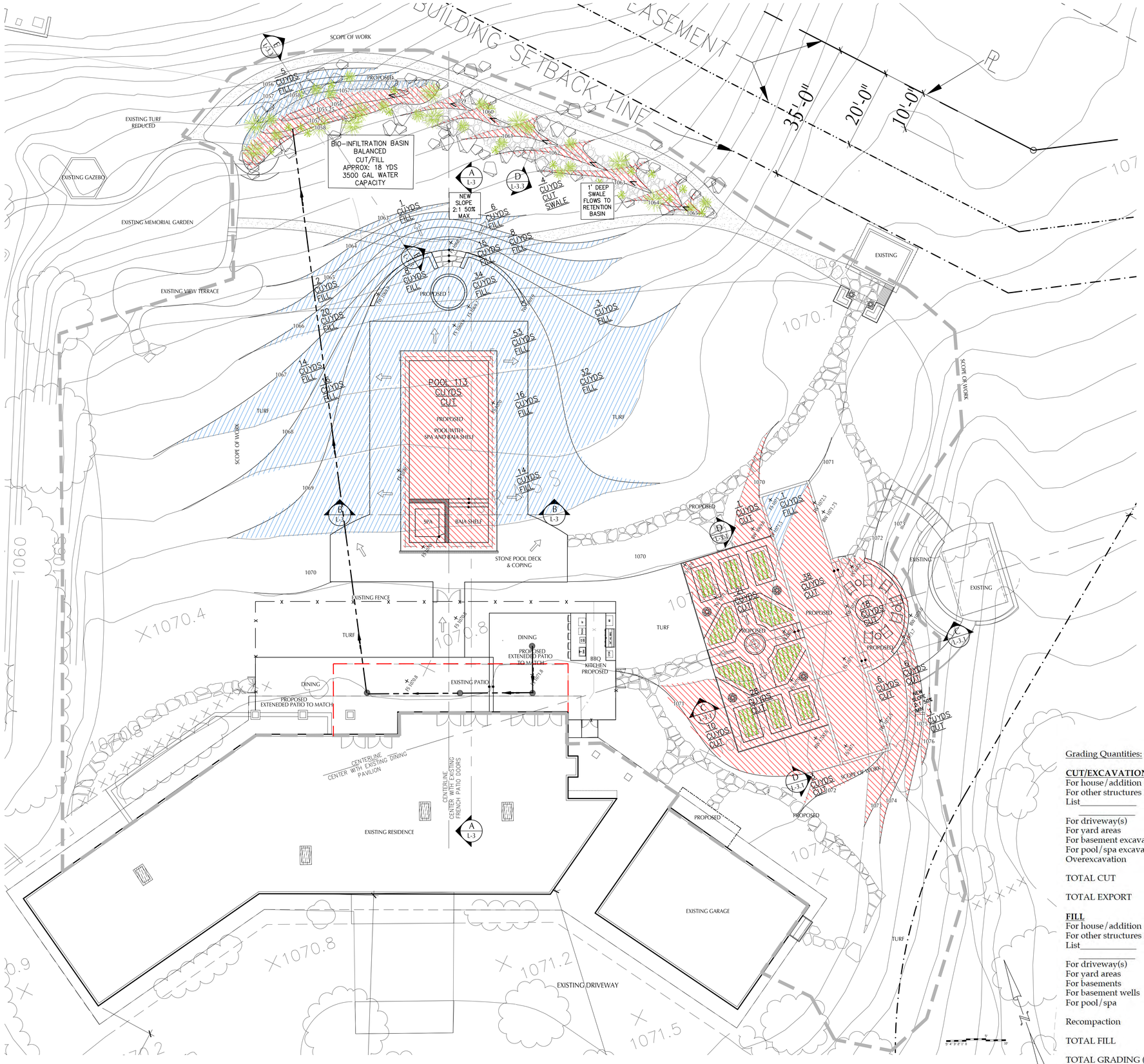
12-03-2021
11-01-2021
10-26-2021
10-20-2021
10-11-2021

SCALE: 1" = 10'
DATE: 10-07-2021
DRAWN BY:
CHECKED:
XREF FILE:

PROJECT NO.

SHEET NO.

L-2




## GRADING

CUT AREAS:
248 CUBIC YARDS

TOTAL DISTURBEDAREA
3438 SQFT

FILL AREAS:
248 CUBIC YARDS

TOTAL DISTURBED AREA:
4761 SQFT

CUT & FILL TOTAL DISTURBED
8199 SQFT
2.7% NET LOT AREA

NEW CONTOUR

## DRAINAGE

SHEET FLOW

AREA DRAIN

DRAIN PIPE FLOW DIRECTION

COBBLE LINED BIOFILTRATION SWALE WITH BIORETENTION BASIN

NOTE:

ALL SLOPES SHALL NOT BE STEEPER IN SLOPE THAN TWO HORIZONTAL TO ONE VERTICAL, OR EXCEED A VERTICAL HEIGHT OF THIRTY FEET (30') BELOW OR ABOVE THE NATURAL GRADE. SHALLOWER SLOPES ARE STRONGLY ENCOURAGED. ALL SLOPES SHALL BE MARKED WITH GRADE. (MUNICIPAL CODE TITLE 17). CUT AND FILL MUST BE BALANCED ON SITE.

## GRADING AND EXCAVATION INFORMATION

| Grading Quantities: | Cubic Yds. | Max. Depth | Max. Depth Location |
|---|---|---|---|
| **CUT/EXCAVATION** | | | |
| For house/addition | | | |
| For other structures (i.e. walls) List | | | |
| For driveway(s) | | | |
| For yard areas | 135 | 2'-0" | S.E. CORNER BOCCE COURT |
| For basement excavation | | | |
| For pool/spa excavation | 113 | 7'-7" | NORTH END POOL - DEEP END |
| Overexcavation | | | |
| TOTAL CUT | 248 | | |
| TOTAL EXPORT | | | 0 |
| **FILL** | | | |
| For house/addition | | | |
| For other structures (i.e.walls) List | | | |
| For driveway(s) | | | |
| For yard areas | 248 | 4'-7" | NORTH OF POOL @ WATER FEATURE |
| For basements | | | |
| For basement wells | | | |
| For pool/spa | | | |
| Recompaction | | | |
| TOTAL FILL | 248 | | |
| TOTAL GRADING (Sum of total cut and total fill) | 496 | | |

Richie-Bray, Inc.
LANDSCAPE ARCHITECTURE
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Rolling Hills Estates, CA 90274
(310) 377-5868
E-mail: deb@richie-bray.com

LICENSED LANDSCAPE ARCHITECT
DEBORAH RITCHIE BRAY
Signature
Date 12/3/21
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA
90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

CONCEPTUAL GRADING AND DRAINAGE PLAN

CITY RE-SUBMITTAL 12.03.21

REVISIONS

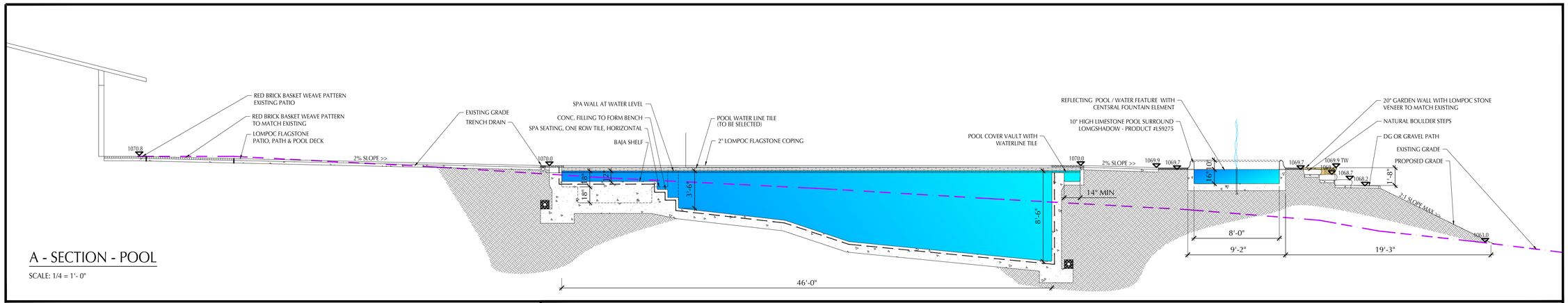
12-03-2021
11-01-2021
10-26-2021
10-20-2021
10-12-2021
10-08-2021

SCALE: 1" = 10'
DATE: 10-08-2021
DRAWN BY:
CHECKED:
XREF FILE:

PROJECT NO.

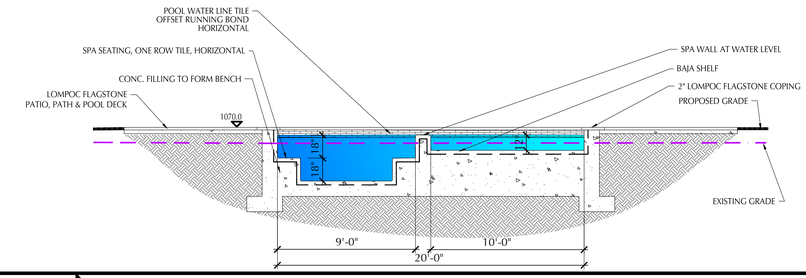
SHEET NO.

L-2.2




## A - SECTION - POOL

SCALE: 1/4 = 1'- 0"




## B - SECTION - POOL

SCALE: 1/4 = 1'- 0"

Drowning Prevention Safety Features - LA COUNTY CODE

Effective January 1, 2018, Health and Safety Code Section 115922 (LACBC 3109.4.4.2) requires new swimming pools or spas or remodeled swimming pools or spas at a private single-family home to be equipped with at least 2 drowning prevention safety features.

A. Removable mesh fencing that meets ASTM Standard F2286.
B. A pool safety cover that meets ASTM Standard F1346.
C. A pool alarm that, when placed in the pool, will sound upon detection of entrance into the water. The pool alarm shall meet ASTM Standard F2208.
D. Other means of protection, if the degree of protection afforded is equivalent to the other devices specified above and has been independently verified by an approved testing laboratory as meeting standards for the device established by ASTM or ASME.

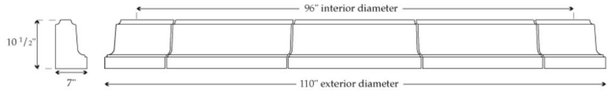
NOTE:

AS PER COUNTY CODE ABOVE POOL WILL BE EQUIPPED WITH:

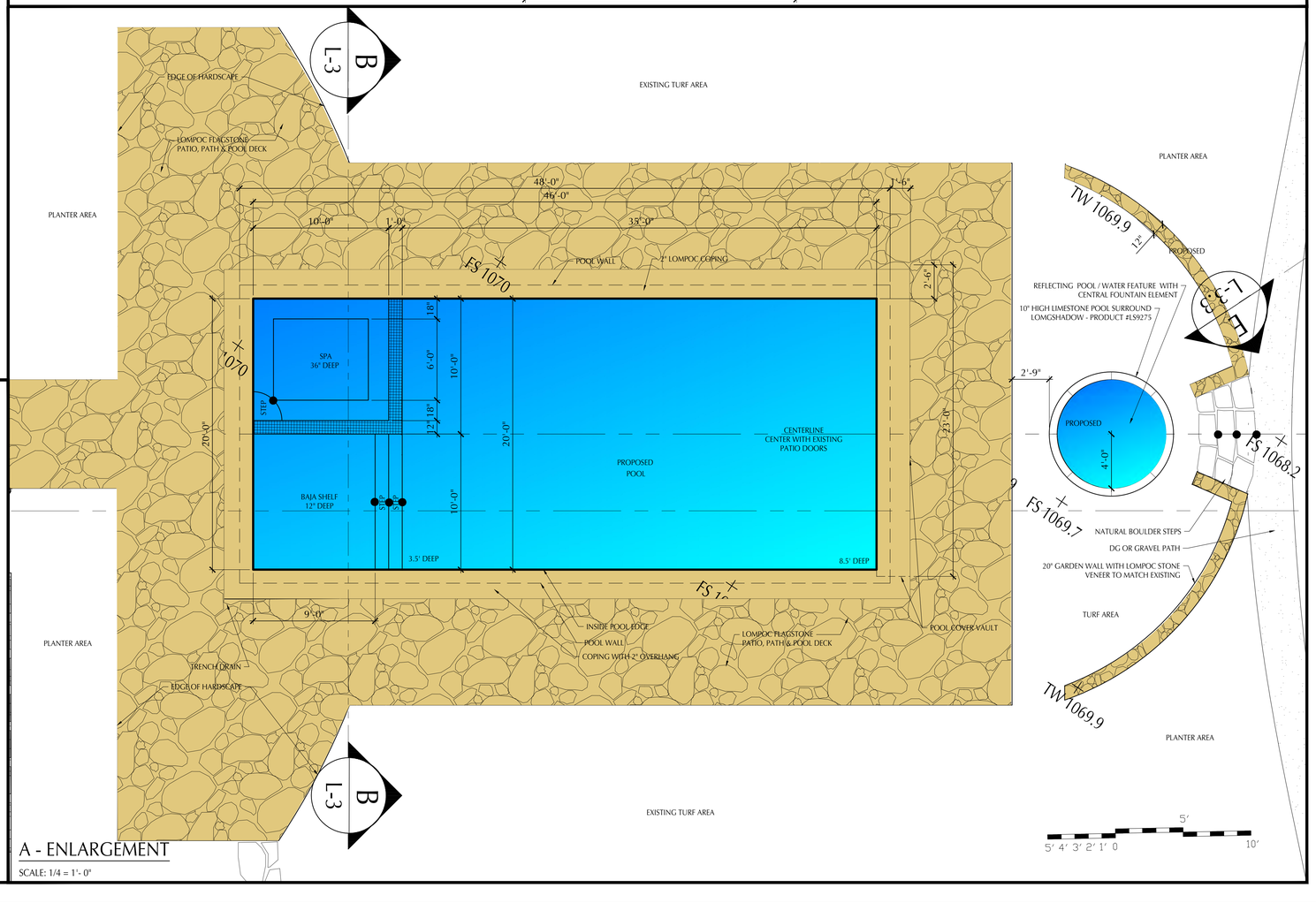
1. A pool safety cover that meets ASTM Standard F1346.
2. A pool alarm that, when placed in the pool, will sound upon detection of entrance into the water. The pool alarm shall meet ASTM Standard F2208.



Pool Surround 8 Feet
LS 9275
in 8 sections
10.5" high
96" interior diamter - 110" exterior diameter
1288 lb.




## A - IMAGES - FOUNTAIN




## A - ENLARGEMENT

SCALE: 1/4 = 1'- 0"

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LICENSED LANDSCAPE ARCHITECT
DEBORAH A. RICHIE-BRAY
No. 4187
Renewal Date
08-31-22
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ
RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA
90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

POOL DETAILS AND
ENLARGEMENTS

CITY
RE-SUBMITTAL
12.03.21

REVISIONS

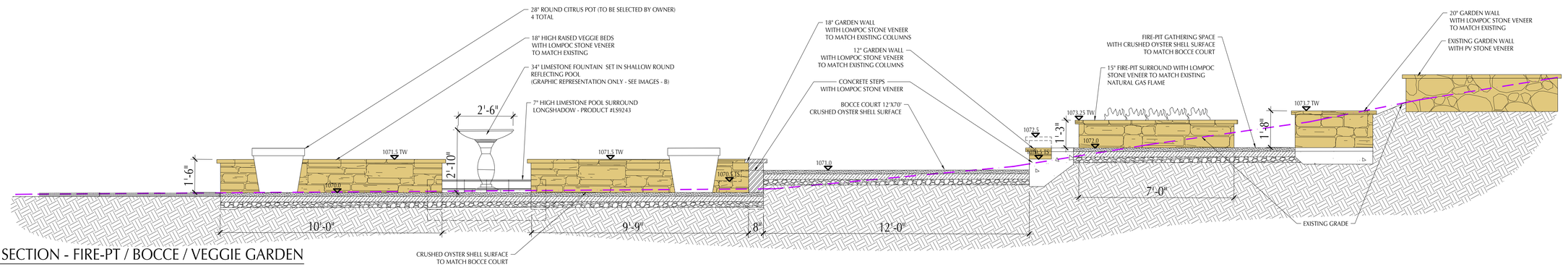
11-01-2021
10-27-2021
10-26-2021
10-20-2021
10-12-2021
12-03-2021 10-11-2021

SCALE: 1/4" = 1'-0"
DATE: 10-05-2021
DRAWN BY:
CHECKED:
XREF FILE:

PROJECT NO.

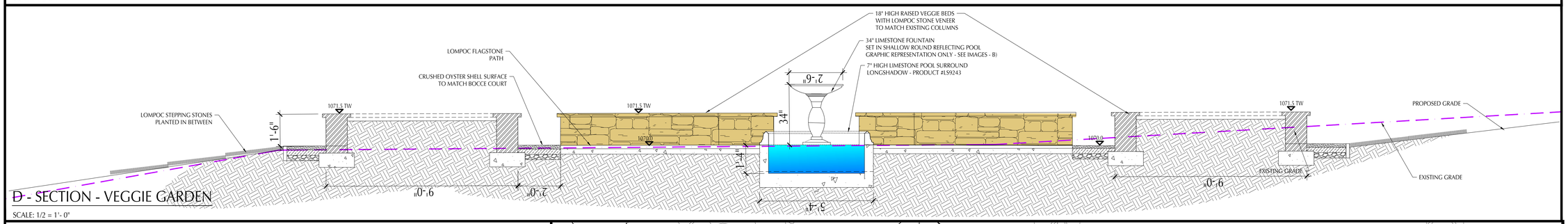
SHEET NO.

L-3




## C - SECTION - FIRE-PT / BOCCE / VEGGIE GARDEN

SCALE: 1/2 = 1'- 0"

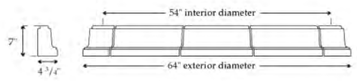



## D - SECTION - VEGGIE GARDEN

SCALE: 1/2 = 1'- 0"

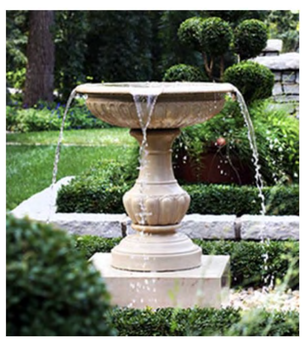


Pool Surround 4.5 Feet
LS 9243
in 8 sections
7" high
54" interior diamter - 64" exterior diameter
396 lb.

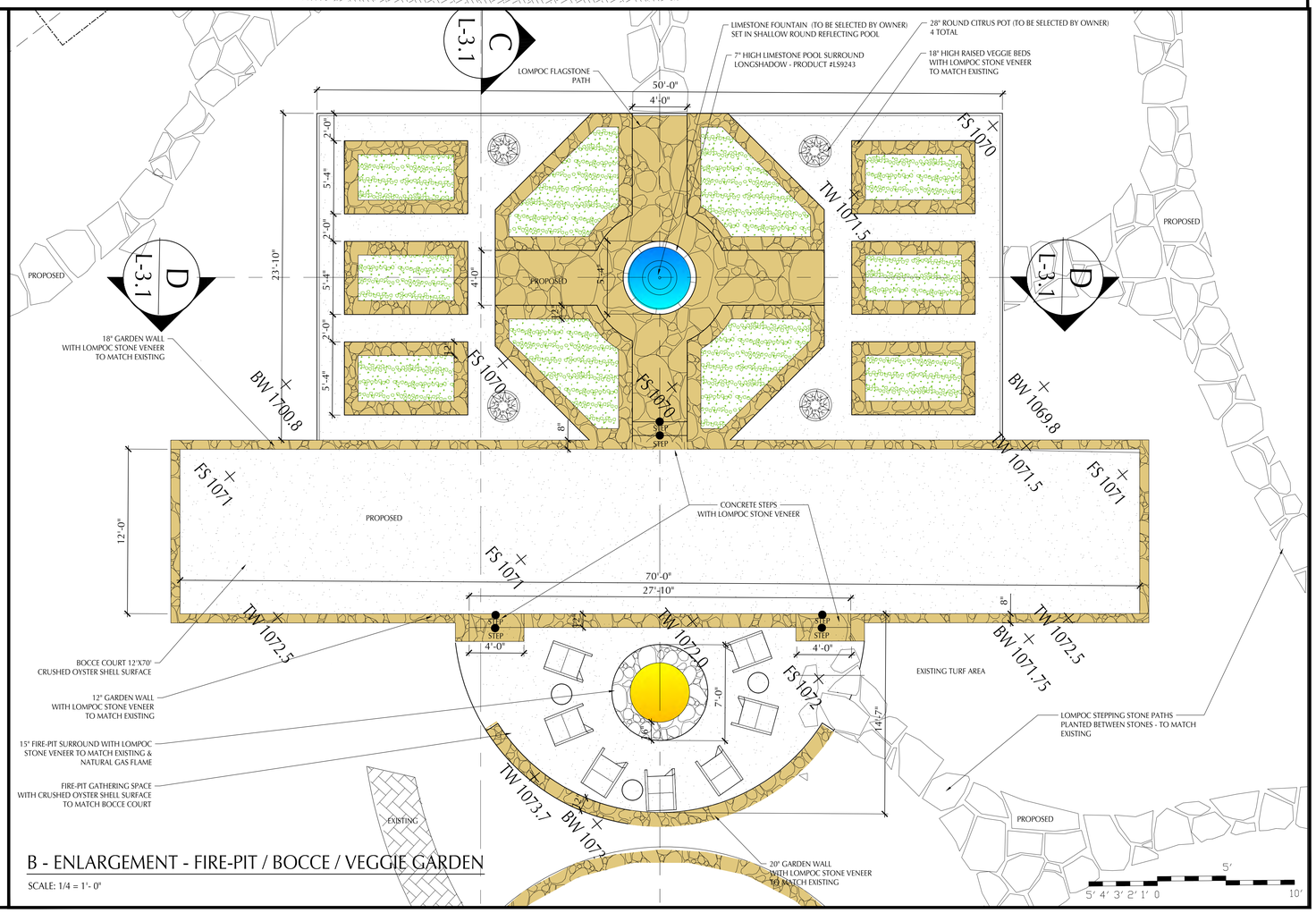



Bocelli Fountain
LS 9571
34" high
30" diameter - 17.5" diameter base
316 lb.





## B - IMAGES - FOUNTAIN




## B - ENLARGEMENT - FIRE-PIT / BOCCE / VEGGIE GARDEN

SCALE: 1/4 = 1'- 0"

Richie-Bray, Inc.
LANDSCAPE ARCHITECTURE
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Rolling Hills Estates, CA 90274
(310) 377-5868
E-mail: deb@richie-bray.com

LICENSED LANDSCAPE ARCHITECT
DEBORAH A. RICHIE
Signature
12/20/22
Renewal Date
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ
RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA
90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

FIRE-PIT, VEGGIE
GARDEN & BOCCE
COURT DETAILS &
ENLARGEMENTS

CITY
RE-SUBMITTAL
12.03.21

REVISIONS

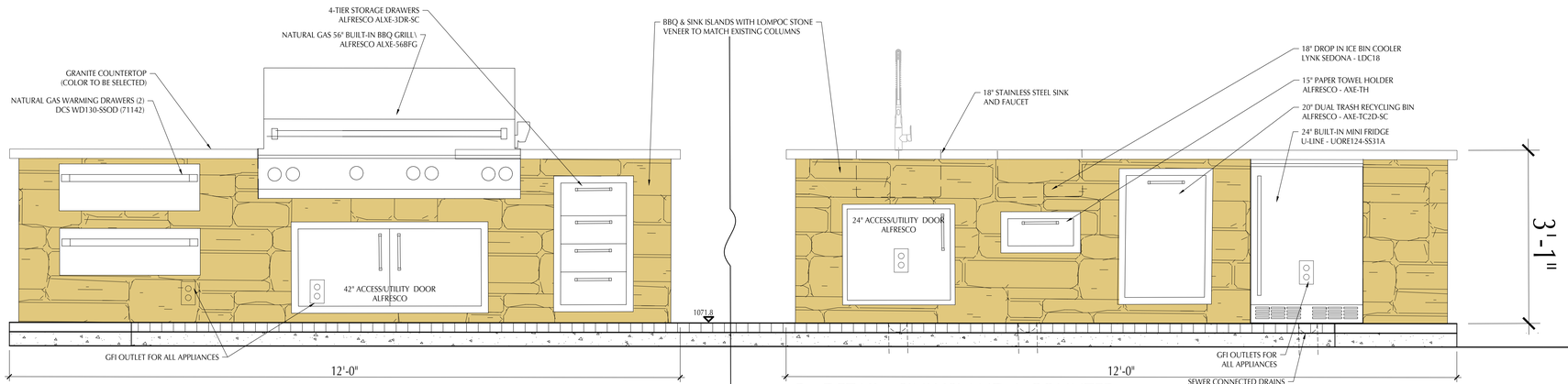
12-03-2021
10-26-2021
10-20-2021
10-12-2021
10-11-2021

SCALE: 1/4" = 1'-0"
DATE: 10-05-2021
DRAWN BY:
CHECKED:
XREF FILE:

PROJECT NO.

SHEET NO.

L-3.1

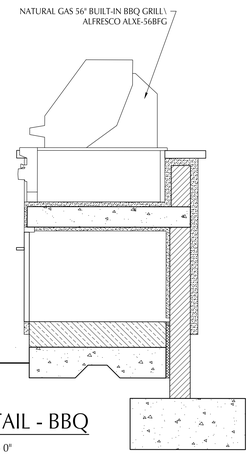



## A - DETAIL - BBQ ISLAND & COUNTER

SCALE: 1" = 1'- 0"

## B - DETAIL - SINK ISLAND & COUNTER

SCALE: 1" = 1'- 0"




## C - DETAIL - BBQ

SCALE: 1" = 1'- 0"

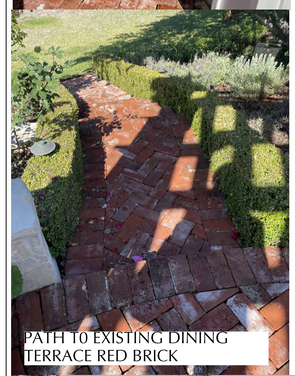
## EXISTING BRICK & LOMPOCM (pv stone) CONNECTIONS THROUGHOUT PROPERTY



EXISTING DINING TERRACE
RED BRICK AND PV STONE



EXISTING DINING TERRACE
RED BRICK AND PV STONE



PATH TO EXISTING DINING
TERRACE RED BRICK

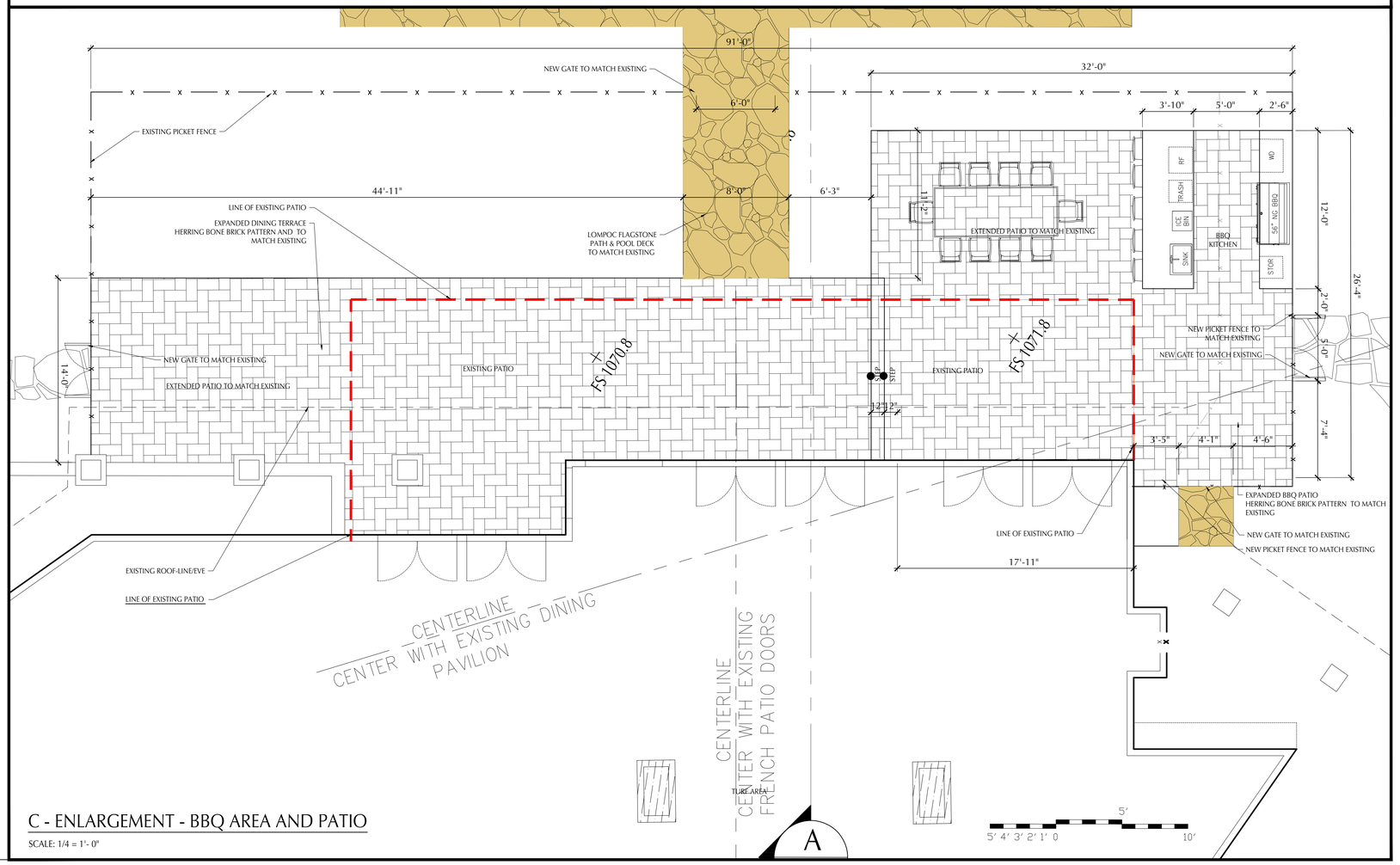


EXISTING BRICK GARDEN WALL
WITH PV COLUMNS AND
STEPPING STONES



EXISTING PV PATIO AND RED
BRICK PATIOS @ GUEST HOUSE

## C - IMAGES - PV STONE & BRICK




## C - ENLARGEMENT - BBQ AREA AND PATIO

SCALE: 1/4 = 1'- 0"

Richie-Bray, Inc.
LANDSCAPE ARCHITECTURE

904 Silver Spur Road #395
Rolling Hills Estates, CA 90274
(310) 377-5868

*E-mail: deb@richie-bray.com*

LICENSED LANDSCAPE ARCHITECT
DEBORAH RICHIE-BRAY
No. 3202
Renewal Date
10-31-21
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ
RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA
90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

BBQ AREA DETAILS
AND ENLARGEMENTS

CITY
RE-SUBMITTAL
12.03.21

REVISIONS

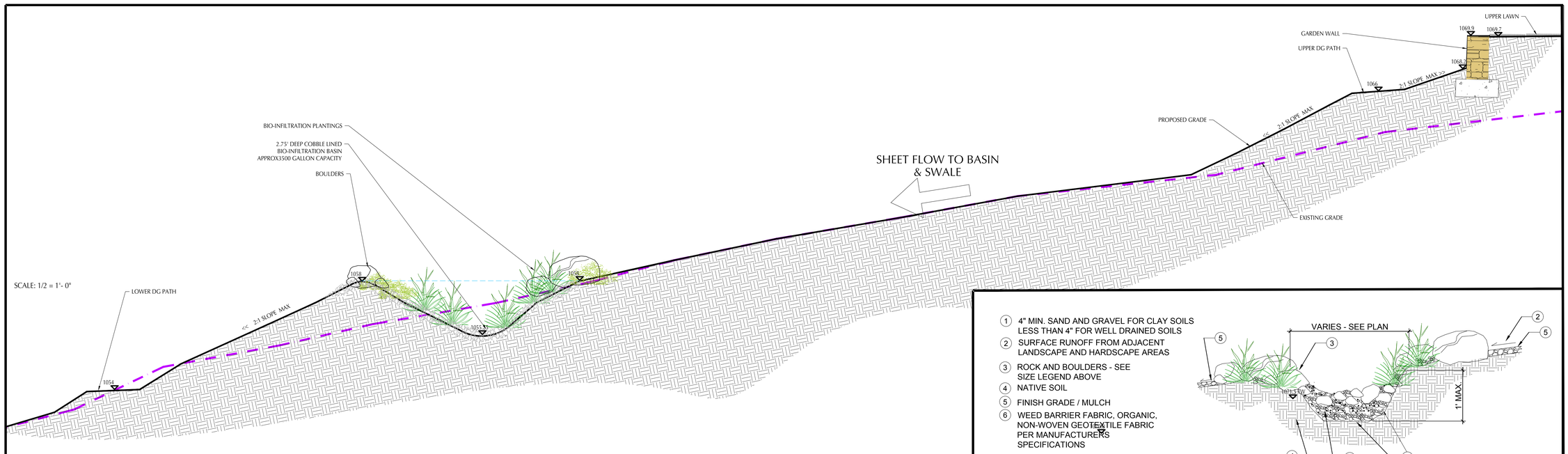
12-03-2021
10-26-2021
10-21-2021
10-11-2021

SCALE: 1/4" = 1'-0"
DATE: 10-05-2021
DRAWN BY:
CHECKED:
XREF FILE:

PROJECT NO.

SHEET NO.

L-3.2




## E - COBBLE LINED BIO-INFILTRATION BASIN

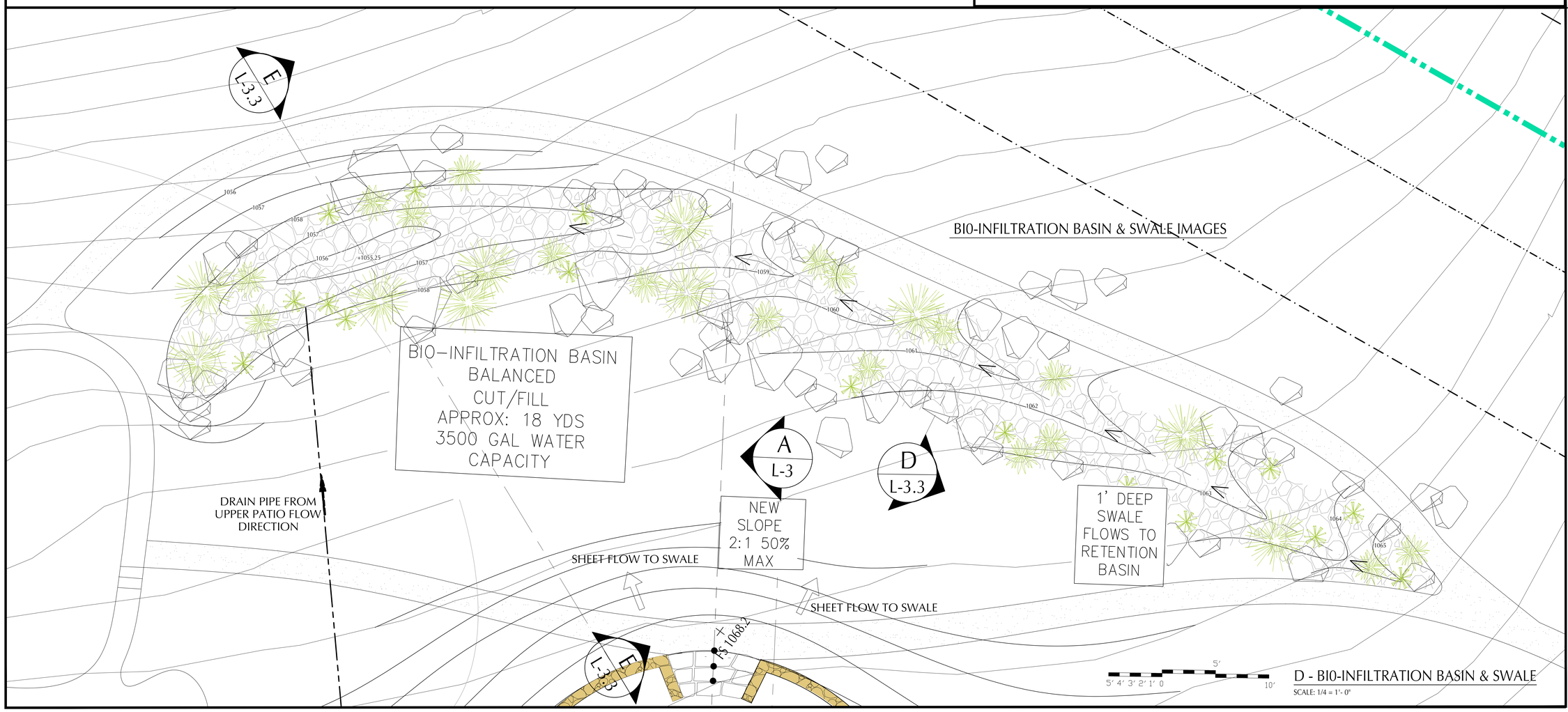
SCALE: 1/2 = 1'- 0"

1. 4" MIN. SAND AND GRAVEL FOR CLAY SOILS LESS THAN 4" FOR WELL DRAINED SOILS
2. SURFACE RUNOFF FROM ADJACENT LANDSCAPE AND HARDSCAPE AREAS
3. ROCK AND BOULDERS - SEE SIZE LEGEND ABOVE
4. NATIVE SOIL
5. FINISH GRADE / MULCH
6. WEED BARRIER FABRIC, ORGANIC, NON-WOVEN GEOTEXTILE FABRIC PER MANUFACTURERS SPECIFICATIONS




## D COBBLE LINED VEGITATED BIO-INFILTRATION SWALE

SCALE: NTS




## BIO-INFILTRATION BASIN & SWALE IMAGES

## D - BIO-INFILTRATION BASIN & SWALE

SCALE: 1/4 = 1'- 0"

Richie-Bray, Inc.
LANDSCAPE ARCHITECTURE

904 Silver Spur Road #395
Rolling Hills Estates, CA 90274
(310) 377-5868

*E-mail: deb@richie-bray.com*

LICENSED LANDSCAPE ARCHITECT
DEBORAH A. RICHIE-BRAY
Expiration Date
01-31-23
STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ
RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA
90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

COBBLE LINED
BIO-INFILTRATION
BASIN & SWALE

CITY
RE-SUBMITTAL
12.03.21

REVISIONS

12-03-2021
11-01-2021

SCALE: 1/4" = 1'-0"
DATE: 10-29-2021
DRAWN BY:
CHECKED:
XREF FILE:

PROJECT NO.

SHEET NO.

L-3.3

DELTA BLUE GRASS COMP - CA NATIVE MOW FREE MIX- 9672 SQFT - LOW/MED WATER USE

MOWED
4858 SQ FT

NOT MOWED
4814 SQFT



SUSTAINABLE CALIFORNIA MEADOW MIX - 2421 SQFT - LOW

| | |
|---|---|
| COMMON YARROW | BLUE GRAMA GRASS |
| DOUGLAS IRIS | NODDING NEEDLE GRASS |
| CALIF POPPY | PURPLE NEEDLE GRASS |
| GIKIA | COAST RANGE MELIC |
| BLUE EYED GRASS | MINIATURE LUPIN |
| FOOTHILL PENSTEMON | MOUNTAIN GARLAND |
| WESTERN COLUMBINE | BABY BLUE EYES |
| CALIFORNIA POPPY | OWLS CLOVER |
| CALIFORNIA ASTER | CLARKIA |



GROUND COVER AREAS - 2067 SQFT - LOW

COMMON YARROW
THYME
DYMONIA

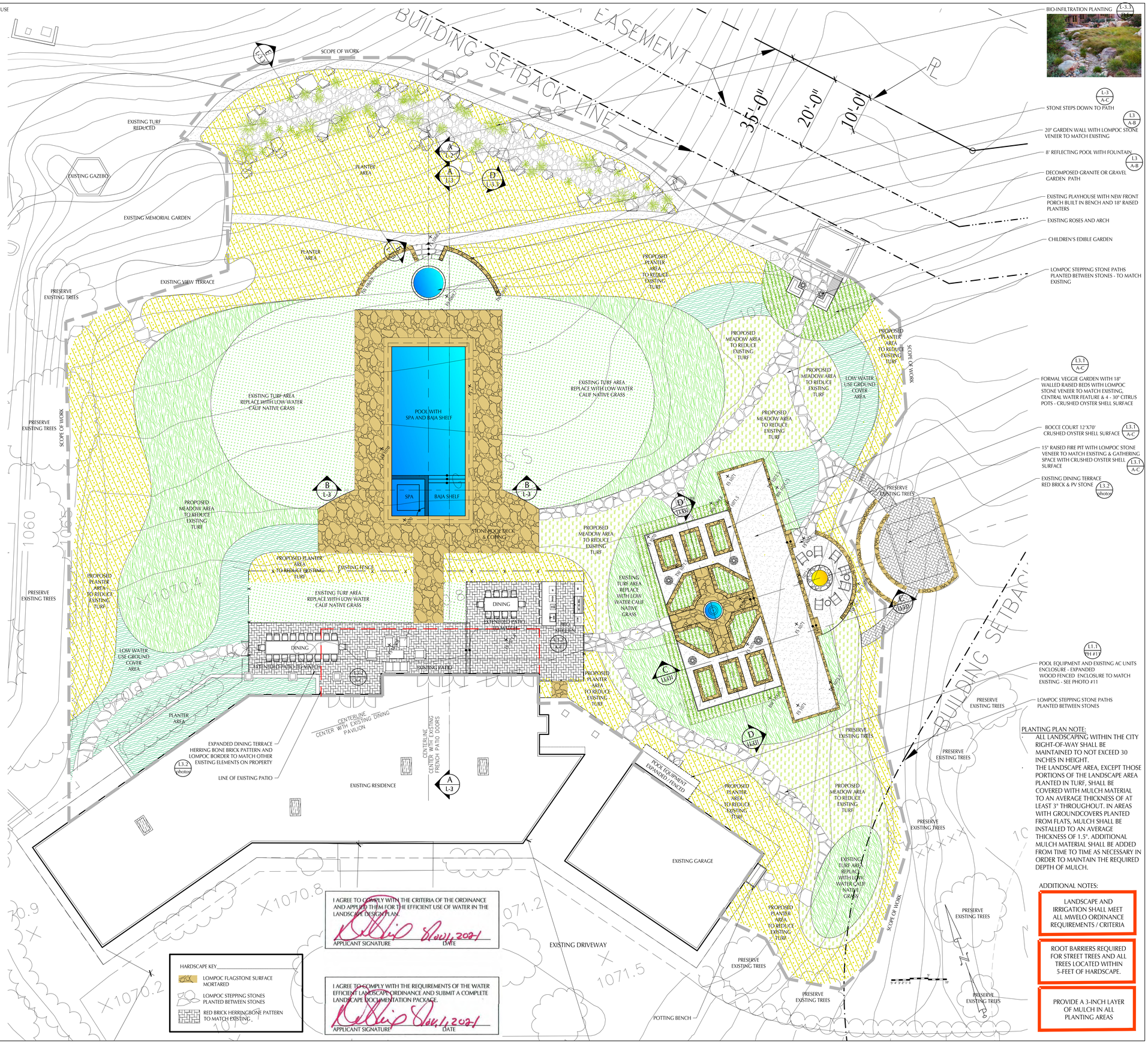


SUSTAINABLE CALIFORNIA FRIENDLY PLANTINGS - 9885 SQFT - LOW

| | |
|---|---|
| LAVENDER (MULTI VAR) | LEMONADE BERRY |
| CEANOTHUS | ROSEMARY |
| MONKEY FLOWER | CANYON PRINCE GRASS |
| DEER GRASS | BUCKWHEAT |
| WESTRINGIA | BUSH LUPIN |
| BACCHARIS | TAGETES |
| ARTEMISIA | ELDERBERRY |
| SALVIA (MULTI VAR) | GOOSEBERRY |
| MATILIJA POPPY | BUSH SUNFLOWER |



EDIBLE GARDENS - 894 SQFT




I AGREE TO COMPLY WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

APPLICANT SIGNATURE — DATE 10/1/2021

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

APPLICANT SIGNATURE — DATE 10/1/2021

HARDSCAPE KEY

- LOMPOC FLAGSTONE SURFACE MORTARED
- LOMPOC STEPPING STONES PLANTED BETWEEN STONES
- RED BRICK HERRINGBONE PATTERN TO MATCH EXISTING

PLANTING PLAN NOTE:

- ALL LANDSCAPING WITHIN THE CITY RIGHT-OF-WAY SHALL BE MAINTAINED TO NOT EXCEED 30 INCHES IN HEIGHT.
- THE LANDSCAPE AREA, EXCEPT THOSE PORTIONS OF THE LANDSCAPE AREA PLANTED IN TURF, SHALL BE COVERED WITH MULCH MATERIAL TO AN AVERAGE THICKNESS OF AT LEAST 3" THROUGHOUT. IN AREAS WITH GROUNDCOVERS PLANTED FROM FLATS, MULCH SHALL BE INSTALLED TO AN AVERAGE THICKNESS OF 1.5". ADDITIONAL MULCH MATERIAL SHALL BE ADDED FROM TIME TO TIME AS NECESSARY IN ORDER TO MAINTAIN THE REQUIRED DEPTH OF MULCH.

ADDITIONAL NOTES:

LANDSCAPE AND IRRIGATION SHALL MEET ALL MWELO ORDINANCE REQUIREMENTS / CRITERIA

ROOT BARRIERS REQUIRED FOR STREET TREES AND ALL TREES LOCATED WITHIN 5-FEET OF HARDSCAPE.

PROVIDE A 3-INCH LAYER OF MULCH IN ALL PLANTING AREAS

Richie-Bray, Inc.
LANDSCAPE ARCHITECTURE
904 Silver Spur Road #395
Rolling Hills Estates, CA 90274
(310) 377-5868
E-mail: deb@richie-bray.com

LICENSED LANDSCAPE ARCHITECT — DEBORAH RICHIE BRAY — 4939 — Renewal Date 08/31/23 — STATE OF CALIFORNIA

PROJECT TITLE

# GRZYWACZ RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA
90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

## CONCEPTUAL LANDSCAPE AREAS

CITY RE-SUBMITTAL 01.12.22

REVISIONS

| | |
|---|---|
| | 10-11-2021 |
| | 10-08-2021 |
| 01-12-2022 | 10-01-2021 |
| 01-04-2022 | 09-29-2021 |
| 12-03-2021 | 09-16-2021 |
| 10-26-2021 | 09-10-2021 |
| 10-20-2021 | 08-11-2021 |

| | |
|---|---|
| SCALE: | 1" = 10' |
| DATE: | 07-13-2021 |
| DRAWN BY: | |
| CHECKED: | |
| XREF FILE: | |

PROJECT NO.

SHEET NO.

LP-1

DELTA BLUE GRASS COMP - CA NATIVE MOW FREE MIX- 9672 SQFT - LOW/MED

MOWED 4858 SQ FT

NOT MOWED 4814 SQFT



SUSTAINABLE CALIFORNIA MEADOW MIX - 2421 SQFT - LOW

| | |
|---|---|
| COMMON YARROW | BLUE GRAMA GRASS |
| DOUGLAS IRIS | NODDING NEEDLE GRASS |
| CALIF POPPY | PURPLE NEEDLE GRASS |
| GIKIA | COAST RANGE MELIC |
| BLUE EYED GRASS | MINIATURE LUPIN |
| FOOTHILL PENSTEMON | MOUNTAIN GARLAND |
| WESTERN COLUMBINE | BABY BLUE EYES |
| CALIFORNIA POPPY | OWLS CLOVER |
| CALIFORNIA ASTER | CLARKIA |



GROUND COVER AREAS - 2067 SQFT - LOW

COMMON YARROW
THYME
DYMONIA



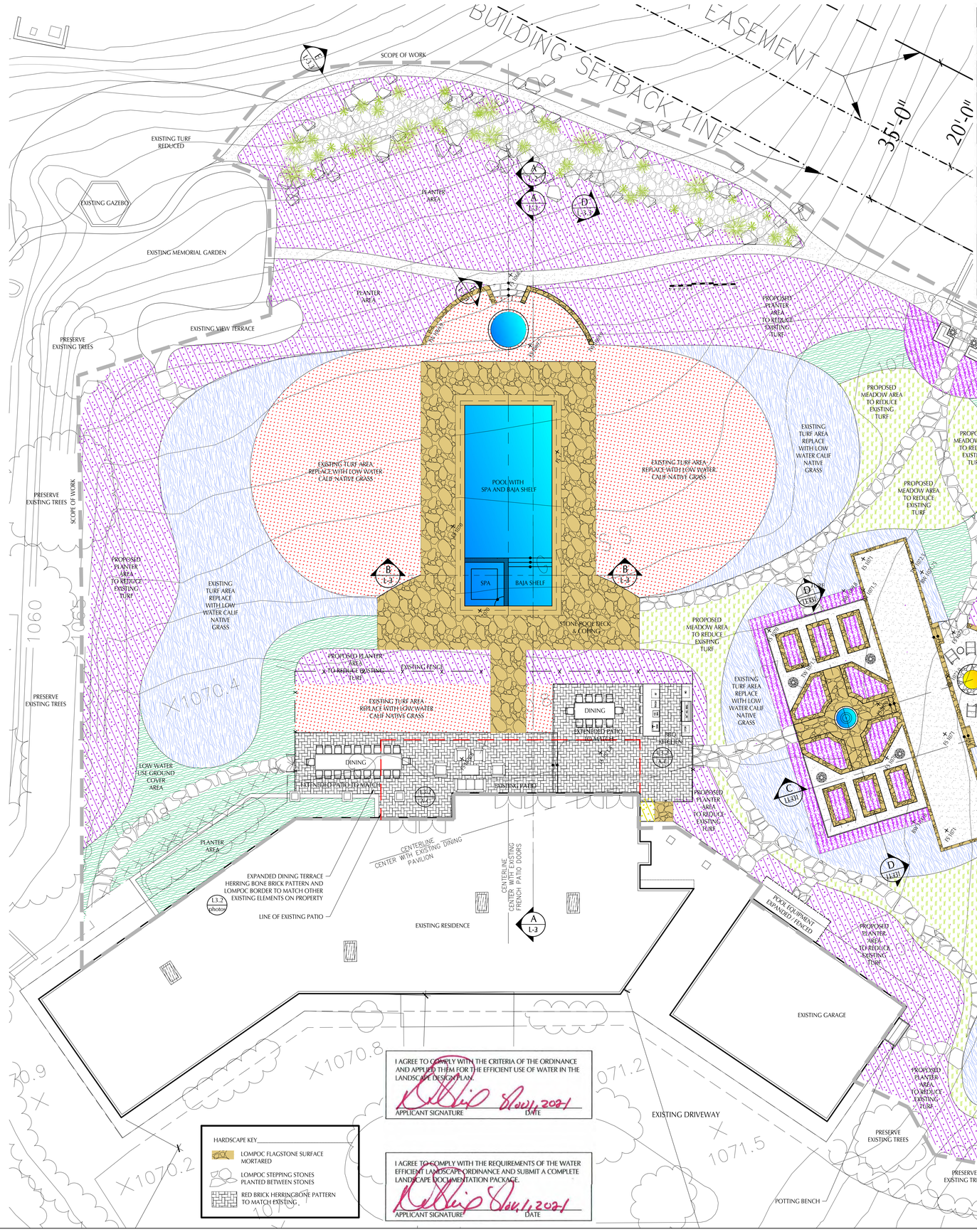
SUSTAINABLE CALIFORNIA FRIENDLY PLANTINGS - 9885 SQFT - LOW

| | |
|---|---|
| LAVENDER (MULTI VAR) | LEMONADE BERRY |
| CEANOTHUS | ROSEMARY |
| MONKEY FLOWER | CANYON PRINCE GRASS |
| DEER GRASS | BUCKWHEAT |
| WESTRINGIA | BUSH LUPIN |
| BACCHARIS | TAGETES |
| ARTEMISIA | ELDERBERRY |
| SALVIA (MULTI VAR) | GOOSEBERRY |
| MATILIJA POPPY | BUSH SUNFLOWER |



EDIBLE GARDENS - 894 SQFT






HARDSCAPE KEY

- LOMPOC FLAGSTONE SURFACE MORTARED
- LOMPOC STEPPING STONES PLANTED BETWEEN STONES
- RED BRICK HERRINGBONE PATTERN TO MATCH EXISTING

I AGREE TO COMPLY WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

APPLICANT SIGNATURE — DATE 01/11/2021

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

APPLICANT SIGNATURE — DATE 01/11/2021

**WELO**
**Water Budget and Water Use Calculator**

INSTRUCTIONS:
1. Enable macros.
2. Enter values in blue cells. Gray cells will automatically fill.
3. For Etc, refer to Appendix A of the ordinance, available here: https://www.water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency
4. Print this sheet and submit with Landscape Document Package for the Comprehensive Performance Compliance Pathway

| | |
|---|---|
| Date: | 1/12/22 |
| Project Name: | 4 STORM HILL LANE |
| Project Contact: | RORY SHEEHAN |
| Project Contact Email: | 213-925-7150 |

| Maximum Applied Water Allowance (MAWA) | Project Type | ETo | ETAF | Special Landscape Area (SLA) | Total Landscape Area Including SLA | MAWA (gal/yr) | |
|---|---|---|---|---|---|---|---|
| | RES ENT AL | 39.7 | | 894 | 25,924 | 360,854 | MAWA = (ETo) * (0.62) *[(ETAF*LA) + ((1-ETAF) * SLA)] |

| Estimated Total Water Use (ETWU) | ETo | (SF * PF) / IE | SLA | ETWU (gal/yr) | |
|---|---|---|---|---|---|
| | 39.7 | 13,527 | 894 | 354,962 | ETWU =(ETo) * (0.62) *((PF*SF/IE) + SLA) |
| Difference between MAWA and ETWU | | | | 5,891 | Project meets water budget. |

| ETWU Calculation (Regular landscape areas) | Zone # | Description | Select Irrigation | Square Feet (SF) | Plant Factor (PF) | Irrigation Efficiency (IE) | (SF * PF) / IE |
|---|---|---|---|---|---|---|---|
| | 1 | MOW-GRASS | SPRAY | 4,858 | 0.70 | 0.75 | 4,534 |
| | 2 | NO-MOW | DRIP | 4,814 | 0.70 | 0.81 | 4,160 |
| | 3 | MEADOW | DRIP | 2,421 | 0.30 | 0.81 | 897 |
| | 4 | G.C | DRIP | 2,067 | 0.20 | 0.81 | 510 |
| | 5 | SHRUBS | DRIP | 9,885 | 0.20 | 0.81 | 2,441 |
| | 7 | POOL/FOUNT | POOL | 985 | 1.00 | 1.00 | 985 |
| | | Landscape area (not including SLA) | | 25,039 | | | 13,527 |

| ETWU Calculation (Special Landscape Areas (SLA)) | Description | Square Feet (SF) | Plant Factor / Irrigation Efficiency (PF/IE) | (SF * PF) / IE |
|---|---|---|---|---|
| | Edible planting area | 894 | 1.0 | 894 |
| | Multi-use and sports field turf area | | 1.0 | - |
| | Area irrigated with recycled water | | 1.0 | - |
| | Pool | | 1.0 | - |
| | Total SLA | 894 | | 894 |
| | Total Landscape Area (including SLA) from ETWU Calculation | 25,924 | | |

**APPLICANT & PROJECT INFORMATION**

Name: CLAUDIA & TOM GRZYWACZ
Phone: 310-534-5232
Address: 4 STORM HILL LANE
Email: tgrzywacz@stormind.com

**Project**
Site Address: 4 STORM HILL LANE
Project Type (new dwelling or rehab): REHAB

___ The current project does not include landscaping. I am aware that future landscape installations may be required to comply with the City of Rolling Hills Water Efficient Landscape Ordinance Chapter 13.18.

X This project does incorporate landscaping. (Please provide the information below specific to the landscape area which will be completed as part of this project and specify the compliance method to be used):

Total Landscape Area (sq. ft.): 25924 Turf Area (sq. ft.): 4858
Non-Turf Plan Area (sq. ft.): 21066 Special Landscape Area (sq. ft.): 894
Water Type (potable, recycled, well): POTABLE
Name of water purveyor (If not served by private well): CAL WATER SERVICE

PLANTING PLAN NOTE:
- ALL LANDSCAPING WITHIN THE CITY RIGHT-OF-WAY SHALL BE MAINTAINED TO NOT EXCEED 30 INCHES IN HEIGHT.
- THE LANDSCAPE AREA, EXCEPT THOSE PORTIONS OF THE LANDSCAPE AREA PLANTED IN TURF, SHALL BE COVERED WITH MULCH MATERIAL TO AN AVERAGE THICKNESS OF AT LEAST 3" THROUGHOUT. IN AREAS WITH GROUNDCOVERS PLANTED FROM FLATS, MULCH SHALL BE INSTALLED TO AN AVERAGE THICKNESS OF 1.5". ADDITIONAL MULCH MATERIAL SHALL BE ADDED FROM TIME TO TIME AS NECESSARY IN ORDER TO MAINTAIN THE REQUIRED DEPTH OF MULCH.

ADDITIONAL NOTES:

LANDSCAPE AND IRRIGATION SHALL MEET ALL MWELO ORDINANCE REQUIREMENTS / CRITERIA

ROOT BARRIERS REQUIRED FOR STREET TREES AND ALL TREES LOCATED WITHIN 5-FEET OF HARDSCAPE.

PROVIDE A 3-INCH LAYER OF MULCH IN ALL PLANTING AREAS

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904 Silver Spur Road #395
Rolling Hills Estates, CA 90274
(310) 377-5868
E-mail: deb@richie-bray.com

LICENSED LANDSCAPE ARCHITECT — DEBORAH RICHIE BRAY — 4369 — Renewal Date 08/31/22 — STATE OF CALIFORNIA

PROJECT TITLE

GRZYWACZ RESIDENCE

4 STORM HILL LANE
ROLLING HILLS, CA 90247

REGION: 14 / CLUSTER: 14177
LOT 4 / P.M. 332-30-40
APN 7570-024-017

SHEET TITLE

HYDROZONE PLAN

CITY RE-SUBMITTAL 01.12.22

REVISIONS

01-12-2022

SCALE: 1" = 10'

DATE: 01-04-2022

DRAWN BY:

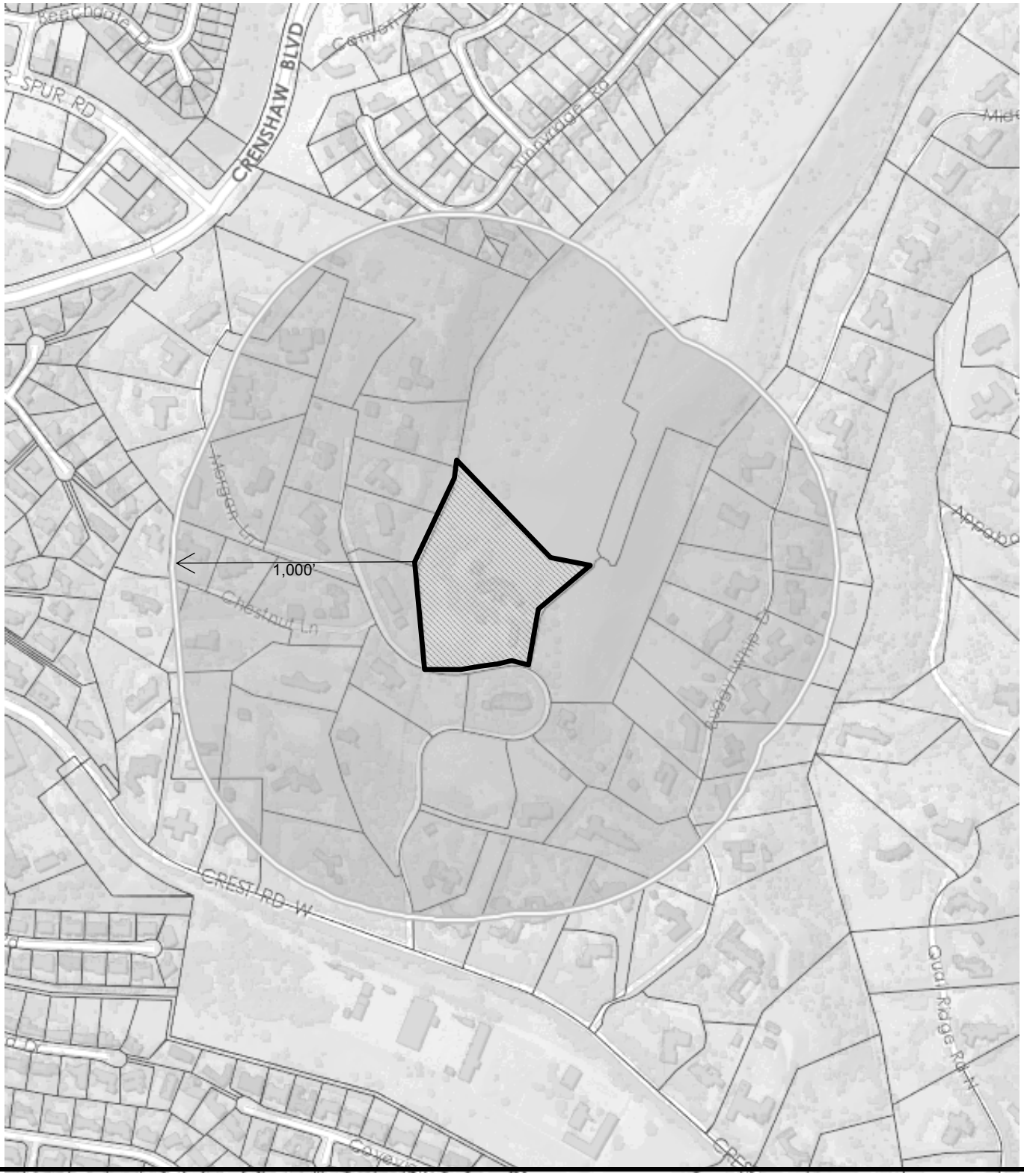
CHECKED:

XREF FILE:

PROJECT NO.

SHEET NO.

LP-2




*City of Rolling Hills* **2 PORTUGUESE BEND ROAD ROLLING HILLS, CA 90274**

**TITLE** VICINITY MAP **CASE NO.** Zoning Case No. 21-13
Site Plan Review

**OWNER** Grzywacz

**ADDRESS** 4 Storm Hill Lane, Rolling Hills 90274 **SITE**

**RESOLUTION NO. 2022-01**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ROLLING HILLS GRANTING A SITE PLAN REVIEW FOR THE CONSTRUCTION OF A NEW 920-SQUARE-FOOT SWIMMING POOL/SPA AND 496 CUBIC YARDS OF GRADING LOCATED AT 4 STORM HILL LANE (LOT 169-A-MS), ROLLING HILLS, CA (GRZYWACZ)**

THE PLANNING COMMISSION OF THE CITY OF ROLLING HILLS DOES HEREBY FIND, RESOLVE AND ORDER AS FOLLOWS:

Section 1. Property Owner, Claudia Grzywacz, ("Applicant") for the real property located at 4 Storm Hill Lane, Rolling Hills, CA is requesting a Site Plan Review for the construction of a new 920-square-foot swimming pool and spa; and 496 cubic yards of grading located on the main building pad (the "Project"). Also included in the Project, but not subject to discretionary review, is a request for a pool deck, pool equipment, barbecue and kitchen area, patio extension, water feature, trellis, garden, garden walls with a maximum height of three feet, and landscaping. The Project will be located adjacent to the residence and outside of all required setbacks.

Section 2. The Planning Commission conducted duly noticed public hearings to consider the application at an onsite meeting on January 18, 2022, at 7:34 AM and at their regular meeting on January 18, 2022, at 6:30 PM. Neighbors within a 1,000-foot radius were notified of the public hearings and a notice was published in the Daily Breeze on January 7, 2022. The Applicant and her agent were notified of the public hearings in writing by first class mail and the Applicant and her agent were in attendance at the hearings.

Section 3. The property is zoned RAS-2 with a net lot area of 298,606 square feet (6.86 acres), which exceeds the requirements of the RAS-2 zone that requires a minimum net lot area of 87,120 square feet. The lot is developed with a 5,453-square-foot single family residence and a 950-square-foot garage. There are five existing building pads on site with approximately 40 feet difference in elevation. The existing residence, garage, and Project area are located on the highest and largest pad (45,702 square feet) in the middle of the property; the secondary pad (16,311 square feet) is located behind the main pad and contains a tennis court and guesthouse; the third pad (18,228 square feet) is in the southern portion of the property and contains an arena and corral; the fourth pad (3,869 square feet) is located south of the main pad and includes a corral; the fifth pad (8,065 square feet) in the front of the property is developed with a corral and stable.

Section 4. The Project is exempt from the California Environmental Quality Act (CEQA) Guidelines pursuant to Section 15303, Class 3 (New Construction or Conversion of Small Structures), which exempts the construction and location of a limited numbers of new, small facilities or structures, including accessory structures, such as swimming pools, because it involves the construction of a 920-square-foot swimming pool. The Project is also exempt from CEQA Guidelines pursuant to Section 15301, Class 1 (Existing Facilities), which exempts the minor alteration of topographical features involving negligible or no expansion of use beyond that existing, because the Project involves minimal grading totaling 496 cubic yards (248 cubic yards cut and 248 cubic yards of fill) that will be balanced on site and will not affect the natural topography of the site.

Section 5. Section 17.16.020.A of the Rolling Hills Municipal Code requires Site Plan Review approval for a swimming pool/spa that is eight hundred square feet or greater, and for projects that require grading. The Applicant proposes the construction of a 920-square-foot swimming pool/spa and 496 cubic yards of grading. The Project also includes a pool deck, pool equipment, barbecue and kitchen area, patio extension, water feature, trellis, garden, garden walls with a maximum height of three feet, and landscaping, which are not subject to discretionary approval. With respect to the aforementioned request for a Discretionary Approval for a Site Plan Review, the Planning Commission finds as follows:

A. The proposed Project complies with and is consistent with the goals and policies of the general plan and all requirements of the zoning ordinance. The proposed pool/spa and other improvements will be constructed on the existing main building pad in the northern portion of the subject property. While disturbance is generally limited to forty percent of the net lot area, the disturbed area may be a maximum of fifty percent of the net lot area in order to encourage a gradual transition in grade and undulated and natural-appearing terrain between building pads and the surrounding slope, provided that no more than fifty percent of the slopes resulting from grading are greater (steeper) than 3:1, or three units horizontal (run to one unit vertical (rise). The Project creates areas of 2:1 slope adjacent to the new garden area and north of the new spa, but these areas are less than fifty percent of the slopes resulting from grading. The Project adds 1% of newly disturbed area to the 41% already disturbed, which will not exceed the maximum permitted amount of 50% since no more than 50% of the slopes resulting from the grading are greater (steeper) than 3:1, and development will be located outside of required setbacks. The granting of a Site Plan Review for the new pool/spa is consistent with the purposes and objectives of the General Plan because the proposed Project is consistent with similar amenities in the community, meets all the applicable code development standards and is located in an area on the property that is adequately sized to accommodate the proposed project. Additionally, the proposed 496 cubic yards of grading will be balanced on site and no export of dirt is required.

B. The Project substantially preserves the natural and undeveloped state of the lot by minimizing building coverage. The Project substantially preserves the natural and undeveloped state of the lot by balancing grading on site. The topography and the configuration of the irregular-shaped lot have been considered, and it was determined that the proposed Project will not adversely affect or be materially detrimental to adjacent uses, buildings, or structures. The proposed pool/spa will be located in the northern portion of the property on an existing building pad currently used for backyard activities. The pool equipment will be located behind the garage and be screened by a wooden fence. The Project will not impact the view or privacy of surrounding neighbors. The Project requires 496 cubic yards of grading, which will be balanced on site.

C. The Project is harmonious in scale and mass with the site, the natural terrain and surrounding residences. The Project is harmonious in scale and mass with the site and preserves the natural terrain. It poses no adverse impacts to the surrounding residences. The proposed Project will be orderly, attractive, and will not affect the rural character of the community. The proposed pool/spa and other improvements are located in the northern portion of the property, and the proposed pool equipment area will be located behind the garage and screened by a wooden fence. No impacts to views from the surrounding residences will occur.

D. The Project preserves and integrates into the site design, to the greatest extent possible, existing topographic features of the site, including surrounding native vegetation, mature trees, drainage courses and land forms (such as hillsides and knolls). The proposed pool will be built on an existing pad. The net lot is 6.86 acres and is sufficient to accommodate the proposed use. There will be no significant changes to the site design, as the residential uses will remain and the pool/spa and deck will be constructed in an already disturbed area. The existing topography or topographic features will not be affected and the trees, vegetation, plants, flowers, and natural landscaping will remain. New landscaping will be planted to match or complement existing landscape features. There will be no change to the drainage course.

E. Grading has been designed to follow natural contours of the site and to minimize the amount of grading required to create the building area. Grading will not affect the natural topography of the site. The proposed Project will be built on an existing pad. The Project proposes minimal grading totaling 496 cubic yards. Overall grading will include 248 cubic yards cut and 248 cubic yards of fill, which will be balanced on site. Excavated dirt from the pool will be used to flatten adjacent areas. No dirt will be exported.

F. Grading will not modify existing drainage channels nor redirect drainage flow. No drainage channels will be affected by the proposed grading. The proposed grading is already located in a disturbed area currently used as a backyard for the house.

G. The Project preserves surrounding native vegetation and mature trees and supplements these elements with drought-tolerant landscaping which is compatible with and enhances the rural character of the community and landscaping provides a buffer or transition area between private and public areas. Disturbed areas will be re-landscaped to match or complement existing landscape features.

H. The Project is sensitive and not detrimental to the convenient and safe movement of pedestrians and vehicles. The proposed pool/spa and deck are located in the northern portion of the property and in the center of the back yard on the main building pad. The pool equipment will be located behind the existing garage. The Project is not located near any roads, driveways, garages, or any vehicular areas. There are safe walkways surrounding the proposed location of the pool/spa and deck. The existing vehicular road accesses are not near the Project site.

I. The Project conforms to the requirements of the California Environmental Quality Act. The Project is exempt from the CEQA Guidelines pursuant to Section 15303, Class 3 (New Construction or Conversion of Small Structures), which exempts the construction and location of a limited numbers of new, small facilities or structures, including accessory structures, such as swimming pools, because it involves the construction of a 920 square foot swimming pool. The Project is also exempt from CEQA Guidelines pursuant to Section 15301, Class 1 (Existing Facilities), which exempts the minor alteration of topographical features involving negligible or no expansion of use beyond that existing, because the Project involves minimal grading totaling 496 cubic yards (248 cubic yards cut and 248 cubic yards of fill) that will be balanced on site and will not affect the natural topography of the site

Section 6. Based upon the foregoing findings, the Planning Commission hereby approves the Site Plan Review in Zoning Case No. 21-13 for the construction of a new 920-square-foot swimming pool and spa, and grading subject to the following conditions:

A. The Site Plan Review Permit approval shall expire within two years from the effective date of approval if construction pursuant to this approval has not commenced within that time period, as required by Section 17.46.080 of the Rolling Hills Municipal Code, or the approval granted is otherwise extended pursuant to the requirements of those sections.

B. If any condition of this resolution is violated, the entitlement granted by this resolution shall be suspended and the privileges granted hereunder shall lapse and upon receipt of written notice from the City, all construction work being performed on the subject property shall immediately cease, other than work determined by the City Manager or his/her designee required to cure the violation. The suspension and stop work order will be lifted once the Applicant cures the violation to the satisfaction of the City Manager or his/her designee. In the event that the Applicant disputes the City Manager or his/her designee's determination that a violation exists or disputes how the violation must be cured, the Applicant may request a hearing before the City Council. The hearing shall be scheduled at the next regular meeting of the City Council for which the agenda has not yet been posted, the Applicant shall be provided written notice of the hearing. The stop work order shall remain in effect during the pendency of the hearing. The City Council shall make a determination as to whether a violation of this Resolution has occurred. If the Council determines that a violation has not occurred or has been cured by the time of the hearing, the Council will lift the suspension and the stop work order. If the Council determines that a violation has occurred and has not yet been cured, the Council shall provide the Applicant with a deadline to cure the violation; no construction work shall be performed on the property until and unless the violation is cured by the deadline, other than work designated by the Council to accomplish the cure. If the violation is not cured by the deadline, the Council may either extend the deadline at the Applicant's request or schedule a hearing for the revocation of the entitlements granted by this Resolution pursuant to Chapter 17.58 of the Rolling Hills Municipal Code (RHMC).

C. The Project shall comply with all requirements of the Municipal Code, including the Building and Construction Ordinance and the Zoning Ordinance.

The lot shall be developed and maintained in substantial conformance with the site plan on file dated January 13, 2022, except as otherwise provided in these conditions. The working drawings submitted to the Department of Building and Safety for plan check review must conform to the development plan approved with this application. A copy of the conditions of this Resolution shall be printed on plans approved when a building permit is issued and a copy of such approved plans, including conditions of approval, shall be available on the building site at all times.

The licensed professional preparing construction plans for this Project for Building Department review shall execute a Certificate affirming that the plans conform in all respects to this Resolution approving this Project and including conformance with all of the conditions set forth therein and the City's Building Code and Zoning Ordinance.

Further, the person obtaining a building permit for this Project shall execute a Certificate of Construction stating that the Project will be constructed according to this Resolution and any plans approved therewith.

D. The total overall lot coverage of the net lot area shall not exceed 45,137 square feet or 15.1%.

E. The total structural coverage of the net lot shall not exceed 18,481 square feet or 6.2%.

F. The disturbed area of the lot shall not exceed 125,843 square feet or 42% (of net lot area).

G. At any time there are horses on the property, Best Management Practices (BMPs) shall be applied for manure control, including but not be limited to removal of the manure on a daily basis or provision of a receptacle with a tight closing lid that is constructed of brick, stone, concrete, metal or wood lined with metal or other sound material and that is safeguarded against access by flies. The contents of said receptacles shall be removed once a week. It is prohibited to dispose of manure or any animal waste into the Municipal Separate Storm Sewer System (**MS4**) or into natural drainage course.

H. A minimum of five-foot level path and/or walkway, which does not have to be paved, shall be provided around the entire perimeter of the pool and decking.

I. During the construction, the site shall be maintained in a safe manner so as not to threaten the health, safety, or general welfare of the public.

J. Per LA County Building Code, a pool barrier and/or fencing shall be required for the pool.

K. A drainage plan, as required by the Building Department shall be prepared and approved by City Staff prior to issuance of a construction permit. Such plan shall be subject to LA County Code requirements.

L. The pool equipment shall utilize the most quiet and technologically advanced equipment to dampen the sound. The pool equipment area shall be screened by a fence that is incorporated into the building design.

M. *During construction*, conformance with the air quality management district requirements, stormwater pollution prevention practices, county and local

ordinances and engineering practices so that people or property are not exposed to undue vehicle trips, noise, dust, and objectionable odors shall be required.

N. *During construction*, all parking shall take place on the Project site and, if necessary, any overflow parking shall take place within the unimproved roadway easements located on the north side adjacent to Project site only, and shall not obstruct neighboring driveways. During construction, to the maximum extent feasible, employees of the contractor shall car-pool into the City.

O. *During construction*, the property owners shall be required to schedule and regulate construction and related traffic noise throughout the day between the hours of 7 AM and 6 PM, Monday through Saturday only, when construction and mechanical equipment noise is permitted, so as not to interfere with the quiet residential environment of the City of Rolling Hills.

P. The property owners shall be required to conform to the Regional Water Quality Control Board and County Public Works Department Best Management Practices (BMP's) requirements related to solid waste, drainage and storm water management and comply with the City's Low Impact development Ordinance (LID), if applicable.

Q. A minimum of 65% of the construction material spoils shall be recycled and diverted. The hauler shall provide the appropriate documentation to the City.

R. All graded areas shall be landscaped. In addition, the swimming pool, spa, and pool equipment area shall be screened from the neighbors and a landscaping plan shall be submitted to the City for review and approval. If landscaping of 500 square foot area or greater is introduced or redeveloped, the landscaping shall be subject to the requirements of the City's Water Efficient Landscape Ordinance. Any plants introduced for this Project shall not grow into a hedge but be offset and shall not exceed the ridgeline of the house. The landscape plan shall address the issues provided by the City's landscape consultant in the letter dated January 7, 2022, which is on file at City Hall. The issues include compliance with the Model Water Efficient Landscape Ordinance (MWELO), providing an irrigation plan, and using a plant palette comprised of various hydroseed zones. The landscape plan shall be found in compliance prior to issuance of a building permit.

S. The Project must be reviewed by the Rolling Hills Community Association (RHCA) Architectural Review Committee.

T. The contractor shall not use tools that could produce a spark, including for clearing and grubbing, during red flag warning conditions. Weather conditions can be found at:

http://www.wrh.noaa.gov/lox/main.php?suite=safety&page=hazard_definitions#FIRE. It is the sole responsibility of the property owner and/or his/her contractor to monitor the red flag warning conditions. Should a red flag warning be declared and if work is to be conducted on the property, the contractor shall have readily available fire distinguisher.

U. Prior to finaling of the Project an "as graded" and an "as constructed" plans and certifications shall be provided to the Planning Department and the Building Department to ascertain that the completed Project is in compliance with the approved plans. In addition, any modifications made to the Project during construction, shall be depicted on the "as built/as graded" plan.

V. Until the Applicant executes an Affidavit of Acceptance of all conditions of this approval, the approvals shall not be effective. Such affidavit shall be recorded together with the resolution.

PASSED, APPROVED AND ADOPTED THIS 18th DAY OF JANUARY, 2022.

_____
BRAD CHELF, CHAIRMAN

ATTEST:

_____
CHRISTIAN HORVATH
CITY CLERK

Any action challenging the final decision of the City made as a result of the public hearing on this application must be filed within the time limits set forth in section 17.54.070 of the Rolling Hills Municipal Code and Code of Civil Procedure Section 1094.6.

STATE OF CALIFORNIA )
COUNTY OF LOS ANGELES ) §§
CITY OF ROLLING HILLS )

I certify that the foregoing Resolution No. 2022-01 entitled:

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ROLLING HILLS GRANTING A SITE PLAN REVIEW FOR THE CONSTRUCTION OF A NEW 920-SQUARE-FOOT SWIMMING POOL/SPA AND 496 CUBIC YARDS OF GRADING LOCATED AT **4 STORM HILL LANE** (LOT 169-A-MS), ROLLING HILLS, CA (GRZYWACZ).

was approved and adopted at a regular meeting of the Planning Commission on January 18, 2022, by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

and in compliance with the laws of California was posted at the following:

City Hall Administrative Office.

_____

CHRISTIAN HORVATH
CITY CLERK

City of Rolling Hills INCORPORATED JANUARY 24, 1957

**Agenda Item No.: 10.A**
**Mtg. Date: 01/18/2022**

**TO:** **HONORABLE CHAIR AND MEMBERS OF THE PLANNING COMMISSION**

**FROM:** **JOHN SIGNO, DIRECTOR OF PLANNING & COMMUNITY SERVICES**

**THRU:** **ELAINE JENG P.E., CITY MANAGER**

**SUBJECT:** **INITIAL STUDY AND NEGATIVE DECLARATION FOR THE HOUSING AND SAFETY ELEMENTS.**

**DATE:** **January 18, 2022**

**BACKGROUND:**
An Initial Study/Negative Declaration (IS/ND) for the 2021-2029 Housing Element Update and Safety Element Update has been prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines. A Notice of Intent (NOI) has been published in the Daily Breeze and City newsletter to inform the public.

**DISCUSSION:**
The IS/ND is required under the CEQA Guidelines to be adopted as part of the updates to the Housing Element and Safety Element. At this time, Commissioners should review the IS/ND as it will be brought back at a later time once the Elements are ready for adoption.

**FISCAL IMPACT:**
The City was awarded a Local Early Action Planning (LEAP) grant in the amount of $65,000 to prepare the Housing Element and related environmental documentation. LEAP will partially fund the preparation of the Negative Declaration with remaining costs paid through the General Fund.

**RECOMMENDATION:**
Receive and file.

**ATTACHMENTS:**