

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

C.F. No. 18-1120

Date: August 7, 2019

To: Honorable Members, Los Angeles City Council

From: Ralph M. Tarrazas, Fire Chief



Sharon M. Tso, Chief Legislative Analyst

Subject: **WILDLAND-URBAN INTERFACE HAZARD MITIGATION****SUMMARY**

On April 17, 2019, the Council adopted a Motion (Bonin – Koretz – O’Farrell – Ryu), as amended by the Public Safety Committee, to direct the Fire Department (LAFD) and Chief Legislative Analyst (CLA), in consultation with the Police Department (LAPD), Emergency Management Department (EMD), Department of Transportation (DOT), Department of Recreation and Parks (RAP), Department of Animal Services (DAS), Information Technology Agency (ITA), Department of Neighborhood Empowerment (DONE), Department of Building and Safety (DBS), Department of City Planning (DCP), Department of Water and Power (DWP) and any other internal or external partners, to report on issues related to hazard mitigation efforts and goals in the Wildland-Urban Interface. The amended Motion stated that this report should include an outline of the scope of work and objectives for each Department with responsibilities in this area.

On January 31, 2019, the Fire Chief convened a meeting with representatives of the above City departments to discuss the roles that each play during a fire in the Wildland-Urban Interface and the City’s response to emergencies. Topics of discussion included evacuation routes, procedures for activating emergency shelters, emergency altering procedures, red flag warning parking restrictions, and other issues related to hazards present in the Wildland-Urban Interface. This report provides an overview of the roles that the following departments play in hazard mitigation in these areas, background on standing plans for emergencies, as well as information on their roles during an emergency such as a wildfire:

- Fire
- Police
- Emergency Management
- Transportation
- Water and Power
- Recreation and Parks

- Animal Services
- Neighborhood Empowerment
- City Planning
- Building and Safety

The LAFD will continue to work with these departments to implement new programs and policies to mitigate wildfire hazards, identify new technologies and tools to reduce the risk of wildfires, and to streamline the Department's response to fires in the future.

This report makes a number of recommendations for further reports on topics and issues raised by the initial Motion and by departments during discussions of the City's current procedures related to wildfires. These include a review of the Red Flag Warning Days parking program and the boundaries of the City's Very High Fire Hazard Severity Zones, as well as procedures for large animal evacuations and emergency notification.

RECOMMENDATIONS

That the Council, subject to the approval of the Mayor:

1. INSTRUCT the Fire Department to continue to work with relevant departments on continued hazard mitigation efforts in the Wildland-Urban Interface.
2. INSTRUCT the Fire Department to report on how the boundaries of Very High Fire Severity Zones are established, and if there is a need for updated boundaries to be created.
3. INSTRUCT the Fire Department, Police Department and Department of Transportation to report on any changes to the "Red Flag Warning Days" Parking Program that may be needed to make it more effective, including any need for enhanced messaging campaigns and ways to ensure areas that are impacted by Red Flag Warning Day restrictions have appropriate signage.
4. INSTRUCT the Emergency Management Department to report on ways to expand the use of NotifyLA and the Everbridge platform for mass notification and messaging by EMD, LAPD and LAFD – as well as on ways to ensure that the program is effective and operable during an emergency.
5. INSTRUCT the Emergency Management Department, Department of Animal Services and Department of Recreation and Parks to report on standard operating procedures for large animal evacuations.

BACKGROUND

The Wildland-Urban Interface (WUI) is the zone of transition between an urban area and areas that are unoccupied or have very limited human development. Communities in these areas may also be included in the WUI. In the City of Los Angeles, the WUI coincides with the City's Very High Fire Hazard Severity Zones (VHFHSZs). Residents in these zones are required to clear brush and other hazards near buildings, and buildings in these areas are subject to specific materials requirements in order to limit the threat of wildfire. The City established the VHFHSZ in 1999. The VHFHSZ includes most of the hilly and mountainous regions of the City, including portions of the following communities: Baldwin Hills, Bel Air Estates, Beverly Glen, Brentwood, Castellammare, Chatsworth, Eagle Rock, East Los Angeles, Echo Park, El Sereno, Encino, Glassel Park, Granada Hills, Hollywood, Lake View Terrace Los Angeles, Los Feliz, Montecito

Heights, Monterey Hills, Mount Olympus, Mount Washington, Pacific Palisades, Pacoima, Palisades Highland, Porter Ranch, San Pedro, Shadow Hills, Sherman Oaks, Silver Lake, Studio City, Sunland, Sun Valley, Sylmar, Tarzana, Tujunga, West Hills, Westwood and Woodland Hills. A map of the City's VHFHSZs can be found in Attachment 1.

Fire Department

Overview

The Fire Department protects the City through the work of four geographic bureaus; Operations Central Bureau, Operations Valley Bureau, Operations South Bureau and Operations West Bureau. The geographic bureau commanders oversee the operation of 14 battalions, which supervise the activities of the 106 neighborhood fire stations.

Each day, the Department's leadership evaluates the anticipated weather conditions and determines if staffing additional resources are warranted. Based on the analysis, the Department will pre-deploy resources to the most advantageous staging locations throughout the City. The type of apparatus that are pre-deployed will depend on the type of threat the Department is facing. Pre-deployed resources may include engine companies, brush patrols, command officers and other support resources.

The LAFD also has prepared quick response packages for areas of the City that are at risk of a wildfire. These packages contain LAFD Brush Maps with pre-identified evacuation routes, safe refuge areas, possible road closure points, traffic control points, and a description of each at risk canyon area.

Brush Fire Clearance

In addition, the LAFD manages the Brush Fire Clearance program for the VHFHSZ. Each spring, the LAFD begins Brush Clearance season by notifying all private parcel owners of property in the designated Brush areas. If compliance is not complete by a specified date, property owners are subject to the \$28.00 fee if their property fails the inspection.

Parcel owners in the VHFHSZ are required to maintain their property in accordance with the Fire Code (L.A.M.C. 57.322). Year-round compliance shall be maintained on all native brush, weeds, grass, trees and hazardous vegetation within 200 feet of any structures or building, whether those structures are on the owner's property or adjoining properties, and within 10 feet of any combustible fence or roadway/driveway used for vehicular travel. All parcel owners are provided clearance requirements via mass mailer. Additional information is provided on the LAFD website.

Red Flag Warning Days

When a Red Flag Warning Day is declared, the LAFD and DOT implement parking restrictions in the VHFHSZ. This program was implemented with the assistance of the City Council to remove vehicles that create a hazardous condition on Red Flag Warning Days. When this program was implemented, Station Commanders were asked to survey their district and identify critical areas where parked vehicles could delay citizens trying to evacuate and fire companies attempting to gain access during a Brush Incident. Station Commanders were asked to identify areas such as very narrow roads, hairpin turns, tight curves, and key intersections that, if not cleared of vehicles, would create a choke point. These intersections were highlighted and given to the Department of Transportation. The DOT has posted 1700 signs related to Red Flag parking restriction in these identified areas since January 1, 2006.

Evacuations

In Certain incidents, the LAFD may issue evacuation orders in some areas. The Department's ultimate goal in the evacuation process is to effectively move civilians to a safe location. The LAPD and LAFD share concurrent jurisdiction in emergencies involving evacuations within the City. The three most common types of evacuation are sheltering in place, voluntary evacuation, and mandatory evacuation.

Currently, LAFD is working with ITA to create a mobile application within an existing application to alert residents of an emergency.

Police Department

The LAPD maintains the following protocols for responding to an emergency or a brush fire with evacuations:

The Brush Fire Response Guide: outlines the LAPD protocols for any response to a brush fire. The LAFD is the lead agency in a fire-related emergency, while the LAPD is the primary agency to conduct any evacuation. The established protocol is to meet with the on-scene LAFD resources. The LAFD will provide expertise as to where the direction and movement of the fire and what area(s) will need to be evacuated. This ensures timely evacuations of the threatened community members are conducted with as little delay as possible.

This guide discusses many topics such as the issuance of a Red Flag Alert during a Red Flag Condition, officer safety issues and protocols, responsibilities of LAPD Watch Commanders responding to a brush fire, the difference between an evacuation and a rescue, who can access a closed area due to a wildfire, media access, evacuation procedures, updated procedures for people with disabilities and others with access and functional needs, how to obtain the proper inclusive transportation for evacuees from DOT, how to properly contact RAP for evacuation shelters, the integration of DAS for animal evacuations, and the need to ensure the Department on Disability (DOD) is integrated into any evacuation scenario.

The Emergency Mass Communication Plan and the Los Angeles Police Department Press Conference / Community Meeting Planning Checklist: outlines the process and procedures for ensuring all public messaging including social media, press conferences, public meetings, and handouts are inclusive for the whole community.

Emergency Preparedness Bulletin No. 8 – Conducting Community Outreach During an Emergency – The Role of the Senior Lead Officer - Use of Senior Lead Officers during an evacuation: outlines the responsibility a Senior Lead Officer (SLO) with the LAPD has during an evacuation. SLOs have specific knowledge of and contacts within their community of responsibility. Recognizing this, the LAPD has developed guidance to have the assigned SLOs of the affected areas respond to the Command Post during an evacuation to assist in identifying locations of community members that might need more time to evacuate.

Emergency Preparedness Bulletin No. 7 - Considerations During an Emergency Response for People with Disabilities and Others with Access and Functional Needs: outlines updated inclusive evacuation methods and procedures. This includes the use of assistive technology and pictograms to bridge the communication gap with people that might have a language barrier, disability or functional need. The Pictogram is a two-sided laminated sheet of paper that has 14

internationally recognized symbols on the front for hazards and evacuation. The back side is blank and allows the officer to provide additional direction to the person such as a specific address for shelter.

Emergency Operations Guide Volume 2 – Supervisors Field Operations Guide and the Emergency Operations Guide Volume 4 – Command Officers Guide: is an outline and checklist for what should occur when dealing with an evacuation. It outlines roles, responsibilities, what information needs to be communicated, and how to leverage the Department Operations Center (DOC) to assist the field responders.

In addition to the above plans, each Geographic Area within the LAPD maintains an Area Standing Plan. These plans identify information and threats to a specific Area, as well as locations that may have vulnerable community members. If necessary, the Area Commanding Officer can implement portions of their Area Standing Plan in order to reduce the overall impact of the emergency on the Area's ability to service the community.

In 2014, at the direction of the Mayor, all City Departments formed a working group to review and update all their respective documents related to a response to emergencies and evacuations. Any gaps that were identified were addressed to ensure that each Department understood the impact their actions had on other departments.

LAPD and the LAFD

The LAFD developed quick response packages for areas of the City that are at risk of a wildfire, as described above. Every LAPD Operations-Valley Bureau Geographic Area and the LAPD's West Los Angeles Division, Hollywood Division, and Northeast Division have received a copy of their respective LAFD quick response package.

The LAFD has three established Field Incident Management Teams (FIMTs) that are on a scheduled weekly on-call duty responsibility. For the last four years, one member of the LAPD's Emergency Services Division, Major Incident Response Team (MIRT), has been a member of each LAFD FIMT. As a member of the LAFD FIMT, the officers can continually assess the LAPD's emergency procedures based on real-world best practices and lessons learned. The LAFD FIMTs have deployed with the LAPD MIRT team member to multiple fires, including the La Tuna and Skirball Fires, debris flow incidents, and other incidents.

LAPD and the California Department of Forestry and Fire Protection (CAL FIRE)

CAL FIRE maintains six state-wide Type-1 Incident Management Teams to respond to major disasters throughout the state. For the last six years, the CAL FIRE and the LAPD have partnered to allow three LAPD members to be assigned to three Type-1 Incident Management Teams.

This partnership has significantly benefitted the LAPD and the City by allowing LAPD personnel to deploy as management and planning during a wildfire response. With these deployments, they assisted with hundreds of evacuation and repopulation plans. This has provided them with the ability to bring back firsthand knowledge of best practices and lessons learned to be applied directly to the processes and procedures for evacuation and repopulation. Another benefit to this partnership is understanding how information flow occurs during a major wild fire and what impact that has on the City.

During the Woolsey Fire, the CAL FIRE IMT deployed to the incident had an LAPD officer as a member of the IMT. Additionally, LAPD assigned a Command Officer to the Command Post in Ventura as an LAPD Agency Representative to ensure all critical information needed by the LAPD was passed along.

Unified Homeless Response Center (UHRC)

The establishment of the City's UHRC has provided another resource to assist in the response to a wildfire. During a Red Flag Warning Day, before a fire starts, the UHRC coordinates with many LAPD resources, to include the Bureau HOPE Teams, the Off-Road Unit, and Air Support Division. These resources advise members of the community who are homeless and located in an area impacted by the Red Flag Warning. Officers lead with available services coordinated by the City and the UHRC to help assist those in need. This coordination by the UHRC reduces the risk of injury or loss of life from members of the community who are more exposed to a potential fire.

Training

Department employees have been and continue to be trained on the updated emergency and evacuation procedures and brushfire response utilizing many methods. The LAPD will continue to implement training to ensure it is prepared for wildfire response.

Emergency Management Department

EMD (along with LAPD, and LAFD in the near future) is the City's lead agency for issuing emergency public mass notifications for events such as brush fires and floods through the NotifyLA system. Alerts can be issued 24/7 by the EMD Duty Officer or the City's Emergency Operations Center (EOC), when it is activated. EMD states that NotifyLA has been used successfully for recent fires and storms. EMD is currently addressing areas for improvement in NotifyLA as identified in the Controller's audit (C.F. No. 11-0930-S1). The system uses the Everbridge product and EMD is working with the vendor on upgrades including more precise geo-fencing and issuing alerts in multiple languages.

EMD assists LAFD and LAPD with coordination of mass care and shelter operations in cooperation with Recreation and Parks, the American Red Cross, DAS, DOD, the Los Angeles Unified School District (LAUSD) and the Housing and Community Investment Department (HCID). The EMD Duty Officer is a 24/7 resource for Incident Commanders to coordinate mass care and shelter operations. When activated, the EOC Mass Care Branch includes agency representatives from the above mentioned agencies to ensure shelter operations are well-coordinated and comprehensive, and include accessibility for persons with disabilities and others with access and functional needs. EMD and the EOC also coordinate emergency public information to ensure City websites and social media sites post details on shelter operations.

Mass care operations include shelter for animals, as EMD works with DAS and RAP to coordinate shelters for pets and large animals. EMD recently coordinated the execution of a Memorandum of Agreement with Pierce College and is working with DAS and RAP on standard operating procedures for use of the large animal shelter facilities at the LA Equestrian Center and Hansen Dam.

Department of Transportation

DOT and LAFD are responsible for the City's Red Flag Parking Restrictions program, which imposes parking restrictions on Red Flag Warning Days in specified areas. After the initial City meeting on the Wildland-Urban Interface (WUI), DOT held an internal meeting to discuss the Red Flag Parking Restrictions program. The discussion included the DOT Emergency Management Coordinator, members of the Parking Enforcement and Traffic Control command staff, and representatives from the DOT Engineering Division.

DOT notes the need for continued, unified messaging when the parking restrictions are activated. With the growth of traditional and social media since 2005 (when the program began), the public is well informed and in some cases, has more up to date information than the proper City response agencies. This can lead to confusion at times due to conflicting messaging and/or the timing of program activities.

Recognizing that this is an opportune time to review existing protocols for the Red Flag Warning Parking Restriction program, the question was raised if the LAFD reviews sign locations for missing or damaged signs. Currently, DOT will only replace signs if notified of the need. Additionally, DOT is unaware what, if any, new maps have been created reflecting the Red Flag Warning Parking Restriction zones.

DOT noted that some operational issues related to the Red Flag Warning Parking Restriction programs should be discussed further with LAPD and LAFD, including issues pertaining to potential evacuation concerns during the Red Flag Parking Restriction activations.

Department of Water and Power

During the January 31, 2019 meeting, DWP noted that it spends more money on maintenance and hazard mitigation efforts than other power providers that have been involved in wildfires, which reduces the risk of a wildfire being sparked by their equipment. DWP also has a power system wildfire prevention plan, which it initiated in 2008. The plan includes construction standards, vegetation management programs and an inspection and maintenance program. DWP states that during Red Flag warnings, it limits all non-essential work in brush clearance zones and VHFHSZs, and only allows work on jobs that are necessary for safety and to reduce fire risks. Crews working on these days must follow strict rules to limit risk, and must have a shovel, fire extinguisher and radio on hand in case of a fire.

DWP states that it is currently working on overlays to existing fire maps to show its distribution system, but it will not be completed soon. However, DWP has implemented standards to mitigate risks associated with power conveyance, including hardened buildings standards. DWP construction standards can be found in Attachment 2.

Department of Recreation and Parks

RAP, as the Chief Public Welfare and Shelter Division, is responsible for arranging, coordinating, and directing shelter and welfare services for persons rendered homeless or evacuated in the course of a local emergency. RAP has developed standard operating procedures in the assessment, selection, and activation of RAP facilities as shelters or evacuation sites at the request of first responder agencies. RAP has access to seventy-four first-tier Americans with Disabilities Act (ADA) compliant sites and thirty-eight second-tier sites, which require slight

modifications to become fully ADA compliant. Historically, when requested, RAP has been able to immediately identify a location and activate a site within one to two hours of the request.

Furthermore, RAP is responsible for authorizing the use of Hansen Dam and the Los Angeles Equestrian Center. RAP has been working closely with the EMD and DAS to finalize the standard operating procedure for large animal shelter activations.

Other Departments

Department of Animal Services: DAS, in coordination with RAP and EMD, is responsible for the evacuation of large animals, such as horses, during emergencies. The Department is continuing to work with its partners on establishing procedures for evacuations and the activation of Hansen Dam and the Los Angeles Equestrian Center as shelter points during an emergency.

The Department of Neighborhood Empowerment: DONE can help with outreach and spreading the word to Neighborhood Councils and the Neighborhood Council Emergency Preparedness Liaisons. DONE has also partnered with the Mayor's office in promoting the Shake Alert application and emergency alerts, and is working with the Mayor's office on the development of resiliency plans for each Neighborhood Council.

City Planning: DCP is able to coordinate with other departments (such as Building and Safety, Fire, etc.) to better understand their code requirements and processes, so that DCP staff can develop potential mitigation measures, regulatory compliance measures, and/or possible standard project specific conditions for any proposed project (including but not limited to: new construction, additions, etc.) within the VHFHSZ.

Department of Building and Safety: DBS is responsible for enforcing the Building Code, which includes specific materials and construction methods for the exteriors of new buildings within a WUI as specified in Chapter 7A of the California Building Code.

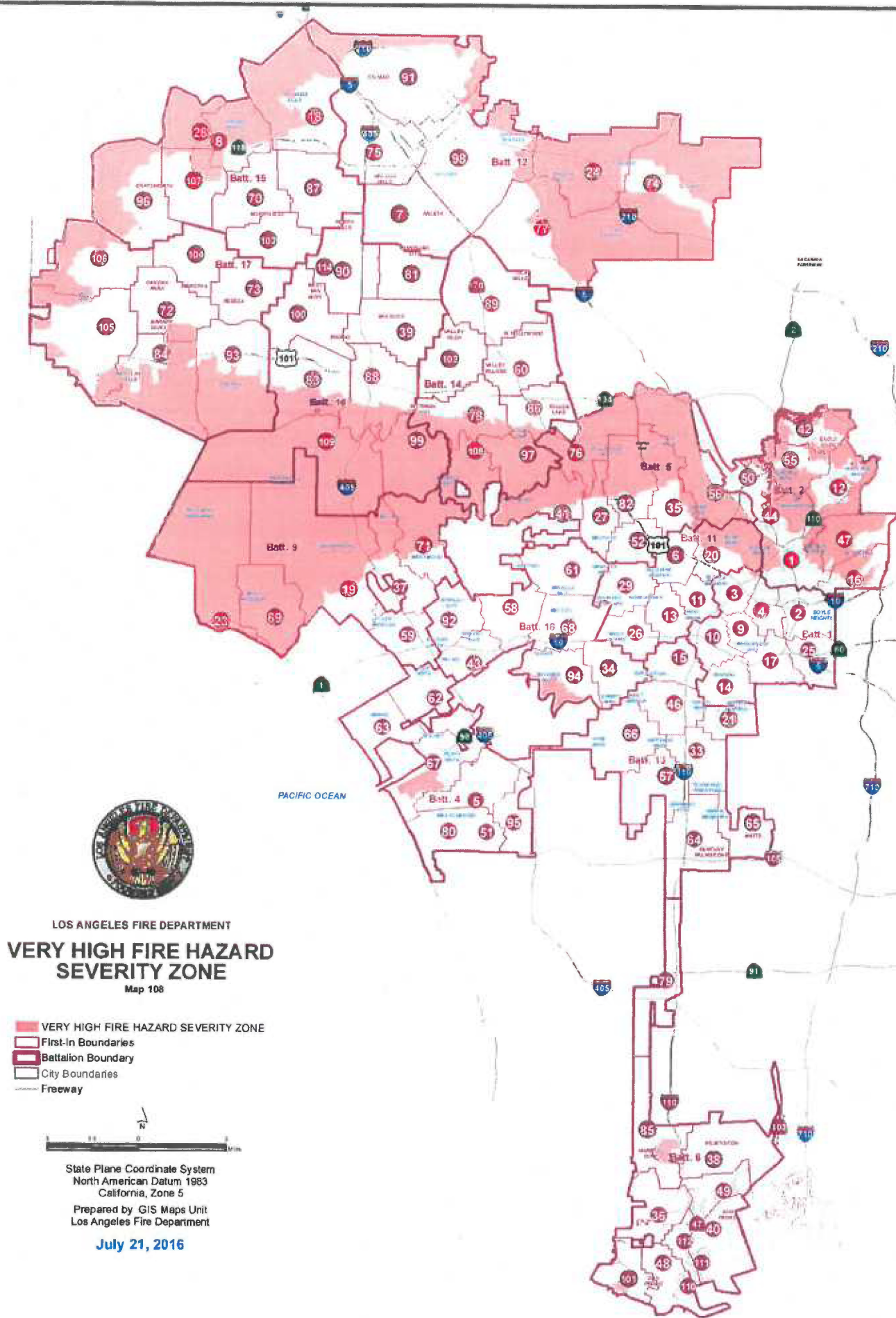
FISCAL IMPACT STATEMENT

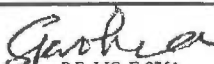
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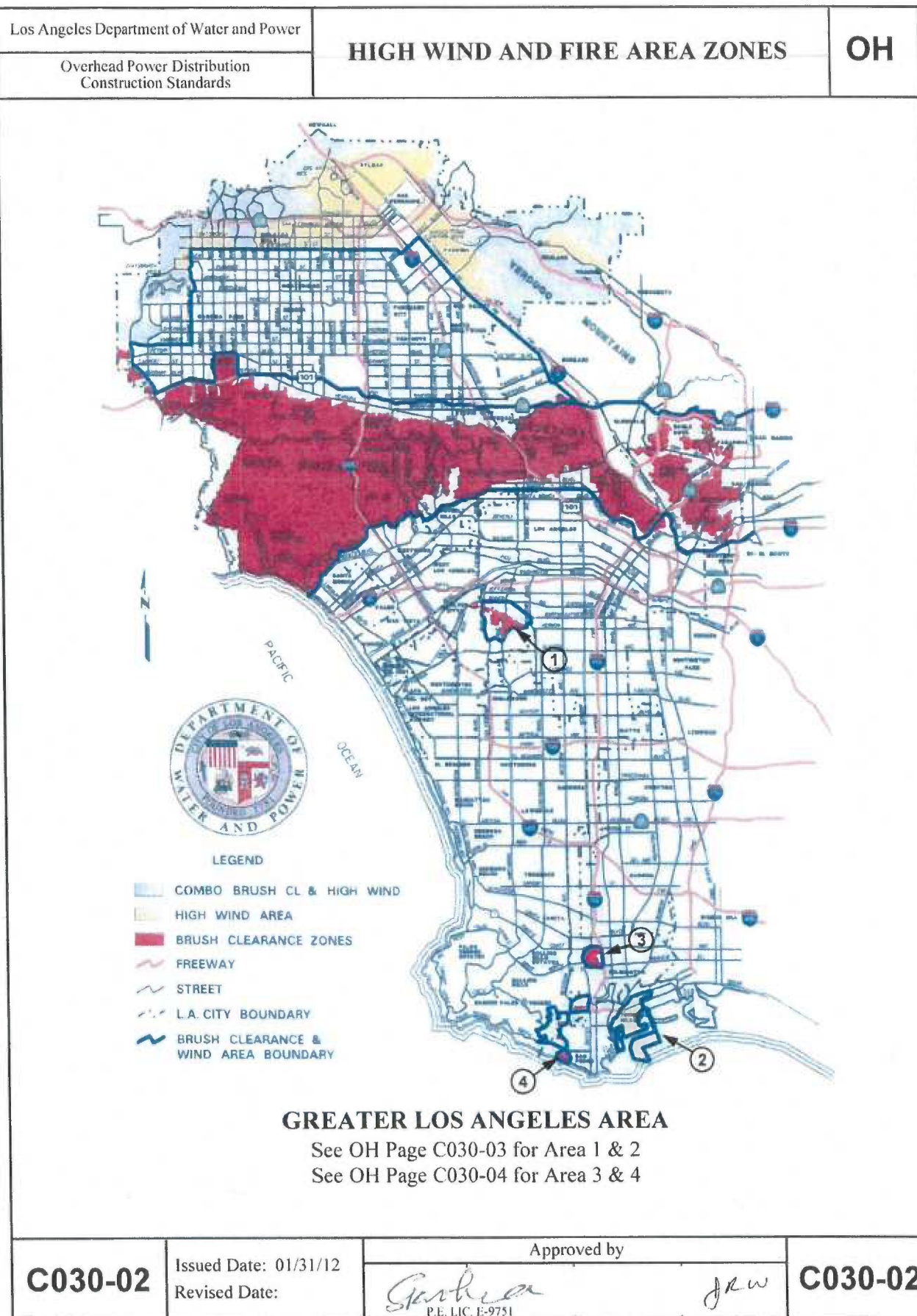
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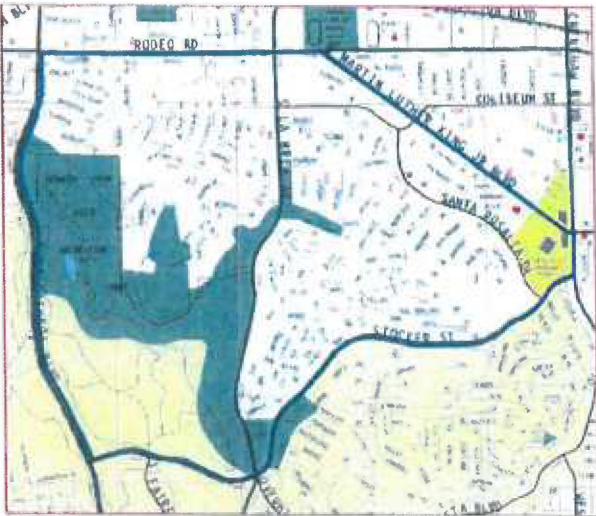
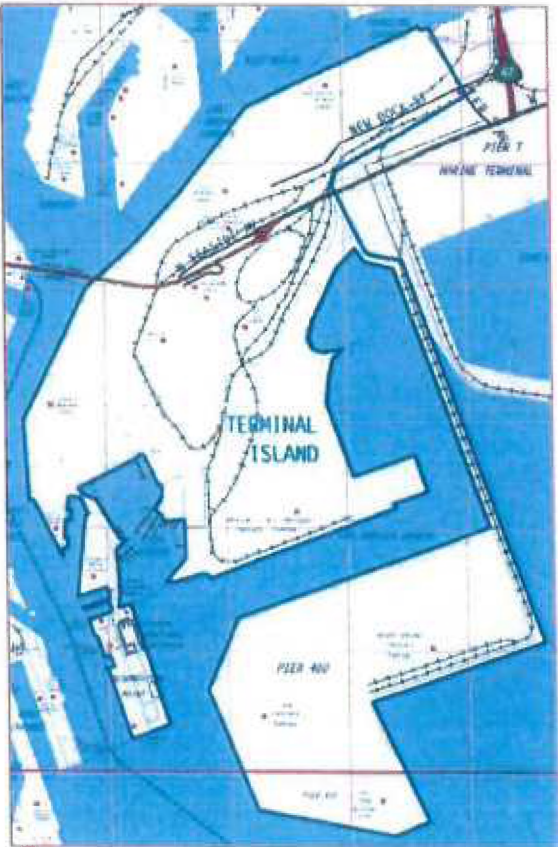
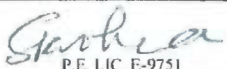

- (1) City of Los Angeles VHFHSZ Map
- (2) DWP High Wind and Fire Hazards Construction Standards


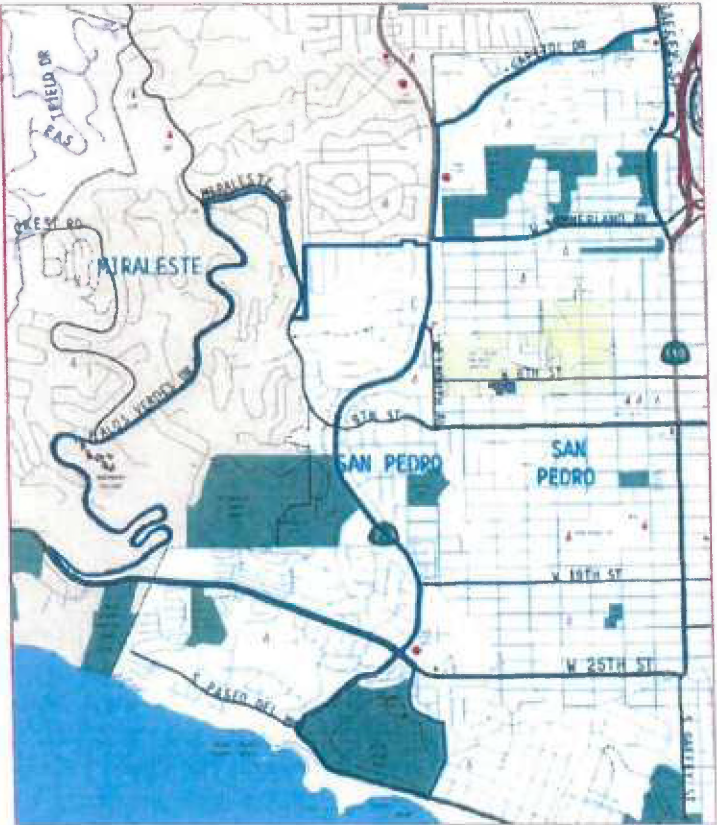
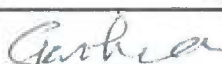
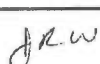
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| Los Angeles Department of Water and Power | DESIGNATED HIGH WIND AND FIRE HAZARD AREAS | OH |
| Overhead Power Distribution Construction Standards | | |
| <p style="text-align: center;">SPECIAL CONSTRUCTION FOR DESIGNATED HIGH WIND AND FIRE HAZARD AREAS</p> <p>The following methods of construction were developed to prevent downed power lines in the designated high-wind and fire hazard areas.</p> <ol style="list-style-type: none"> 1) Perform pole loading calculations with 16 pound wind pressure (80 mph) applied when: <ol style="list-style-type: none"> a. Additional facilities are installed on poles which increase the load on the structure by more than five percent. b. Existing poles are replaced. c. New poles are installed. 2) Install alternative material poles such as: ductile iron; steel; concrete; etc. as required to meet General Order 95 Safety Factors, and for reduced tension spans. 3) Install fiberglass cross arms for their greater strength rating on all new installations. 4) When new 4.8kV circuits are installed or when existing 4.8kV circuits fail or require upgrade, the conductor size must be at least #3/0 aluminum conductor steel reinforced (ACSR) in non-coastal areas, or in coastal areas that require copper conductors, #1/0 copper (Cu) for multiple spans or #4 Cu for single spans. 5) Utilize one of the following methods to reduce the risk of electrical arcs caused by 4.8kV conductor sway: <ol style="list-style-type: none"> a. When conductors are installed or when existing conductors are re-worked the spacing on cross arms should be at least 39 inches when practical. b. When three conductors are placed on one side of the cross arm, the center phase shall be placed on a taller pin c. Use conductor spacers where span length is excessive d. Use vertical construction where practical. 6) Replace existing bare low-voltage conductors in spans with multi-conductor cables. <p>NOTES:</p> <ol style="list-style-type: none"> 1. The aforementioned requirements do not apply when the entire span is above non-combustible surfaces, such as; concrete or asphalt. 2. See OH page C030-02 to C030-04 for the High Wind and Fire Area (Brush Clearance) Zone Maps. | | |
| C030-12 | Issued Date: 01/31/12 Revised Date: | Approved by  P.E. LIC. E-9751 |
| C030-01 | | |



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| Los Angeles Department of Water and Power | <h2 style="text-align: center;">HIGH WIND AND FIRE AREA ZONES</h2> | | <h1 style="text-align: center;">OH</h1> |
| Overhead Power Distribution Construction Standards | | | |
| <div style="text-align: center;">  <p>① BALDWIN HILLS AREA BRUSH CLEARANCE ZONE</p>  <p>② TERMINAL ISLAND HIGH WIND AREA</p> </div> | | | |
| C030-03 | Issued Date: 01/31/12 Revised Date: | Approved by   <p style="text-align: center;">P.E. LIC. E-9751</p> | C030-03 |

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| Los Angeles Department of Water and Power Overhead Power Distribution Construction Standards | <h1 style="text-align: center;">HIGH WIND AND FIRE AREA ZONES</h1> | | <h1 style="text-align: center;">OH</h1> |
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| <div style="text-align: center;">  <p>③ LOS ANGELES HARBOR COLLEGE AREA BRUSH CLEARANCE ZONE</p>  <p>④ SAN PEDRO AREA BRUSH CLEARANCE ZONE</p> </div> | | | |
| <h2>C030-04</h2> | Issued Date: 01/31/12 Revised Date: | Approved by <div style="text-align: center;">  P.E. LIC. E-9751 </div> <div style="text-align: right;">  </div> | <h2>C030-04</h2> |