

MEMORANDUM REPORT

DATE: November 21, 2023

TO: Board of Commissioners of the Los Altos Hills County Fire District

FROM: Page Mill Road Project Team,

Ryan Cronin, Technical Analyst/Project Manager

Denise Gluhan, Community Education & Risk Reduction Manager

Paige Russell, Operations/Project Manager

Eugenia Woods, Programs, Planning and Grants Manager

SUBJECT: Page Mill Road Evacuation Route Maintenance Project Final Reports

RECOMMENDATION:

Receive Page Mill Road Evacuation Route Project Final Reports

BACKGROUND

The Los Altos Hills County Fire District (District or LAHCFD) 2023-2027 Strategic Plan Goals & Strategies (Attachment 1), Strategic Goal 1 Prevention, Protection, Resiliency, aims to fund, develop and maintain programs to protect life, property and enhance safety to build a resilient community. Evacuation Route Hardening is an initiative of this goal. Integrated Hazardous Fuel Reduction (IHFR) programs identified in the LAHCFD Chart of Services (Attachment 2) include the Community-Focused Evacuation Route Hardening projects. These IHFR programs are based on fire science, the LAHCFD Community Wildfire Protection Plan (CWPP) Annex 4, and the expenditures allocated in the annual District budget. IHFR projects are designed to enhance community resiliency, educate District residents, and reduce community fire hazards. In accordance with Goal 1, staff identified high fire risk areas and initiated collaborative solutions with regional partners including the Santa Clara County FireSafe Council and the Santa Clara County Central Fire Protection District (County Fire or Fire Department). The projects targeted roadside hazardous vegetation reduction on major transportation corridors such as Page Mill Road - Phase I and Phase II in 2020/2021, Moody/El Monte

Roads in 2021, Altamont Road in spring 2022, Arastradero Road in fall of 2022 and maintenance on Page Mill Road in 2023. The fundamental goal of these evacuation route and road hardening projects is to provide greater protection for life safety and to reduce property losses in the event of wildfire by providing safer egress and ingress for evacuees and emergency responders.

Santa Clara County FireSafe Council (SCCFSC) was the project manager for the Page Mill Road, Phase I and Phase II, Moody/El Monte Roads, Altamont Road, Arastradero Road, and Page Mill Road maintenance projects that were designed to remove hazardous vegetation from the roadside and thereby create multiple evacuation routes for egress and ingress in event of a wildfire or emergency incident. These LAHCFD evacuation route projects were successfully completed, resulting in greater public safety and alignment with LAHCFD's and Santa Clara County's evacuation initiatives.

The Page Mill Road evacuation route project was initially selected because it is a connecting road between the Skyline Boulevard (SR-35) and Junipero Serra Freeway (I-280). This route provides two alternate routes for egressing traffic flowing from Los Altos Hills. It is a familiar travel route for many residents and commuters.

The length of Page Mill Road, that is within the District from Arastradero Road to 10920 Page Mill Road, received hazardous fuel reduction treatment. The treated areas are visually pleasing, with significantly improved visibility for travelers.

Information about this project, and other District projects can be found on the Department website at https://www.lahcfd.org/community-projects/.

DISCUSSION

The Santa Clara County FireSafe Council Final Report for the Page Mill Road Evacuation Route maintenance project is Attachment 3. The District provides this Report and summary of costs for the project. The Page Mill Road Evacuation Route Maintenance project was successful in attaining the goal of reducing hazardous fuel to provide for a safer evacuation route.

The Page Mill Road project was unique in the volume of vehicle traffic encountered. Drivers familiar with the roadway tend to travel fast, adding to the safety concerns. Based upon our immediate observations, the traffic control contract was expanded to include an additional traffic control technician, and extended cone patterns. Since this was a maintenance project requiring less tree work, and the depth of treatment was limited by terrain, and the crews were well staffed and expeditious, the work progressed rapidly. The added traffic control elements allowed for the control zone to move and keep pace with the work being performed. Proudly, there were no injuries or traffic related incidents on this project.

A modest volume of trash was exposed by the removal of vegetation. Trash is always unsightly, interferes with the work being done and presents another fuel source in the event of wildfire. Anticipating the opportunity to collect and remove trash, LAHCFD and SCCFSC staff were provided both trash and recycling collection bags. This facilitated

separating landfill from recycling. We express our gratitude to the Town of Los Altos Hills Maintenance Department for disposing of it properly.

A concerned effort was afforded to improving visibility at roadway and driveway intersections as well as blind corners. The Town of Los Altos Hills municipal code Title 10, Chapter 1, Article 5, Section 1.507(f)(12) declares, "all shrubs and plants shall be pruned to a height not to exceed three (3) feet above the road level at its nearest point in an area bounded by the center line of intersecting roads or easements for vehicular access, public or private and a straight line joining points on such center lines eighty (80) feet distant from their intersection (see figure). All side limbs of trees in such area shall be pruned to a height of not less than six (6) feet above the road surface. The purpose of the provisions of this section is to provide an unobstructed view of approaching traffic on the intersecting roads." With this guidance overgrown vegetation in the described locations was addressed.

A concern was raised by a resident about a Conservation Easement, currently referred to as an Open Space Easement. They were reluctant to agree to a Right-Of-Entry (ROE) contract because their understanding was that no vegetation in the easement may be disturbed. Compounding this, the resident had received an order to abate weeds from the Santa Clara County Weed Abatement program. The result is that an exception to Open Space Easements and historical Conservation Easements restrictions is provisions for Fire Protection. Therefore, the perimeter of the property that abuts a roadway that may be traversed by fire protection apparatus must be cleared of weeds, brush and fire hazards for ten (10) feet.

QUANTITATIVE RESULTS and EXPENSES

Date	Distance	Cubic Yards
Wednesday, May 31, 2023	0.45	1,350
Thursday, June 1, 2023	1.57	1,000
Friday, June 2, 2023	1.12	1,000
Monday, June 5, 2023	1.20	1,350
Tuesday, June 6, 2023	0.90	900
Wednesday, June 7, 2023	0.40	800
Total	5.64	6,400
Trash removed	2.5 cubic yards	

Production volume and distance of treatment give insight to the work being performed. For instance, on Wednesday, May 31st, the days' work focused on a eucalyptus grove resulting in minimal distance but significant volume. Conversely, the last day focused on trimming a short distance that mostly contained grasses with modest volume.

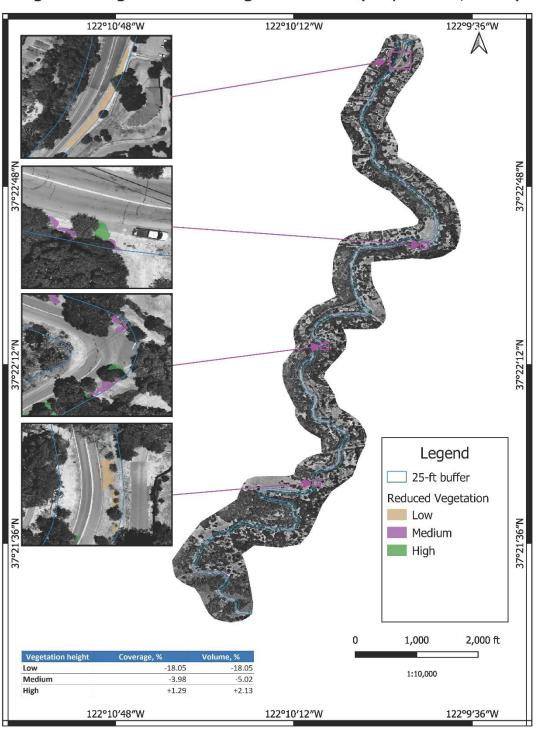
Contractor / Staff	Service	Project services completed	Amount
SCC FireSafeCouncil	IHFR Project management.	May / June	\$20,836.51
SCC FireSafeCouncil	Project supplies (maps, safety vests)	May / June	\$78.09
SCC FireSafeCouncil	Personnel Mileage Reimbursement	May / June	\$564.96
Bay Area Traffic Solutions, Inc.	Traffic control plan	May	\$1,000.00
Bay Area Traffic Solutions, Inc.	Changeable Message Sign (CMS)	May	\$1,343.33
Statewide	Project Traffic control	May / June	\$23,942.80
Huertas	Hazardous fuel reduction and biomass disposal	May / June	\$76,944.00
Dudek	Environmental survey and report	May	\$5,032.74
Folger Graphics	Mailers, Postage, Banners, Signage	May	\$973.89
Jackson Ricketts	Data collection telemetry	May / June	\$10,762.50
Eugenia Woods	Supplies purchase	May	\$57.42
Page Mill Road Evac. Route Harde	ening Project Cost	Total:	\$141,478.82

Costs directly associated with the Page Mill Road Evacuation Route Project.

Successes

Effective utilization of Unmanned Aircraft Systems (UAS) for image telemetry.
 JACKSONS DRONES was contracted to provide aerial photos and to identify treatment areas, and quantitatively measure hazardous fuel reduction.

Page Mill Vegetation: Change Detection (May - June, 2023)



 As was done with previous projects, LAHCFD staff collected data before and after the project with ground photos to dramatically show the fuel reduction.

An ignored Eucalyptus grove with an abundance of sluffed off bark and duff.

Before Treatment



After Treatment



- With assistance of County Counsel, the project team completed CEQA compliance by filing a Notice of Exemption (NOE) through the Office of the Santa Clara County Clerk. By filing the NOE, LAHCFD utilized a process that notified the public of the proposed mitigation work, provided the public the opportunity to voice concerns, and if concerns were expressed, allowed for time to address, and remedy the concerns prior to commencing the project. No concerns were received, and the project commenced as planned.
- Recognition that the insurance industry is now incentivizing the high value of hazardous vegetation management programs to reduce the threat of wildfire and property losses. LAHCFD efforts strongly support the Office of the Insurance Commissioner's Initiative for the insurance industry to recognize wildfire mitigation efforts as a benefit to the insured.
- Appreciation is expressed for the dedicated support of the LAHCFD Board of Commissioners, the Fire Department, Town of Los Altos Hills, Santa Clara County FireSafe Council, County Roads& Airports, and the contractor, crews and traffic control involved in the success of the project.
- The Page Mill Road Evacuation Route maintenance project enhances and refines staff experience necessary for improvement of future evacuation road projects.
 Future projects will seek more community input to guide the upcoming road evacuation route designs.

Community Outreach



LAHCFD staff promoted this project, and the other programs of the District, though several outreach activities.

- Letters were mailed to all property owners along the project. They were offered the opportunity to make inquiries, and have their property participate in the vegetation management efforts.
- LAHCFD staff walked the project route, door knocking, and spoke with residents about the project, made ROE requests, and promoted other District programs.
- Sandwich board signs were posted at strategic entry points to the project, two weeks before the project commenced, alerting hikers, bikers, and motorists to the upcoming work.
- Spontaneous contacts and interactions with the community provided staff the opportunity to educate citizens about the project as well as other District programs and services.

During these community contacts, recognition and gratitude from the community and agencies for the public safety benefits of the project were received.

Insights/Lessons Learned

- Attention to schedule pre-meeting and tour of the route with the traffic control vendor to assure the traffic control crew is briefed and prepared for the traffic flow, pace of the project, and key areas along the route. Review safety procedures, increase traffic personnel as needed to ensure safety for crew members, drivers and the public.
- In some instances, it is appropriate to leave larger logs and rounds on the ground in positions and areas where they will not roll down slope. At this size, these are not flash fuels, and have a low ignition potential. Their decomposition acts to recycle nutrients into the soil for plants, provide habitat for amphibians, small reptiles, and other small creatures vital to the food web in our natural areas and wildland urban intermix.
- Ensure flexibility of the project plan to accommodate potential staffing issues.
 Contingency plans could include having additional crewmembers, tools and a
 second chipper to provide resources to meet project timeline in case of staffing
 issues or equipment failures. Focus on key parcels was effective to increase
 participation of residents to grant ROE access in strategic locations along the
 route. Preparation, outreach, and education of residents along the route of key
 parcels resulted in several ROEs that allowed for critical work to be completed.
- Crew production rates are impacted by heat and weather. As opposed to the Altamont project in the spring, Arastradero was completed in December and had rain delays. The field crews were prepared for this possibility and pivots were in place that allowed the project to be completed in the week it was originally planned to be done. Interactions with community spontaneously, at events and during field projects are a key component of participation and success of each fuel reduction project. As with previous projects, residents who did not participate in the project became aware of the value and will have the opportunity to participate in the future when projects receive maintenance services for vegetation mitigation.
- Daily safety and operational briefings with field crews. Field Operations gets momentum once a project starts. It is imperative to take a pause and review the scope of work, safety items and objectives daily.
- Additional meetings for special easements, i.e., Stanford University and Caltrans. Larger organizations tend to be more bureaucratic and may have more stakeholders. Additional communication and time to engage all parties will help flush out concerns and requirements resulting in a smoother execution of the project.



Trash is a disheartening reality of any project.
Removing the trash was healing and beautifying.
Thank you again the Town of Los Altos Hills
maintenance department for facilitating the
disposal. Much of the disposed trash included
recyclable materials.

As a result of the collaboration and coordination between LAHCFD and its
partners, the Page Mill Road Evacuation Route project was successful and
provided a strategic and high priority public safety benefit to the community in the
event of a wildfire or emergency incident. LAHCFD thanks the team, contractors,
Commissioners, community members and partner agencies for their
contributions to and support of this project.

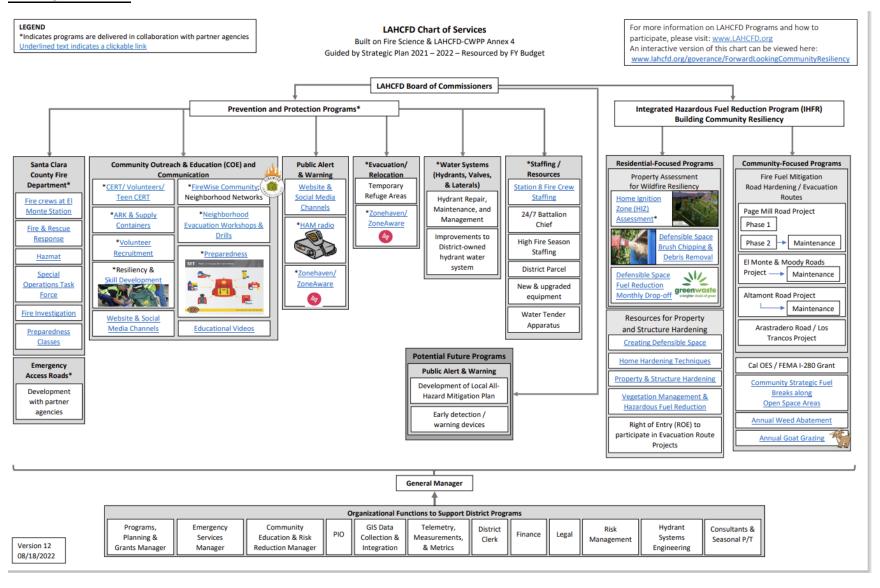
Attachment(s):

- 1. LAHCFD 2023-2027 Strategic Plan, Goal 1
- 2. LAHCFD Chart of Services, V11, 3/01/2022
- 3. Santa Clara County FireSafe Council Final Report: Page Mill Road Evacuation Route Maintenance project

2023—2027 LAHCFD Strategic Plan

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Mission	Protect the lives, property and environment within the District it serves prevention, protection and emergency response services, an					
Strategic Goals	1. Prevention, Protection, Resiliency					
Objectives	Fund, develop and maintain programs to protect life, property and enhance safety to build a resilient community. Current Programs described in the District's Chart of Services.					
Initiatives	Harden Evacuation Routes and Emergency Access Roads	Support reduction of hazardous fuels by residents	Update CWPP, Annex 4	Contribute resources to support and enhance operations at SCC Cen- tral Fire		
Strategies	Complete planning and preparations for additional evacuation routes	Continue targeted Chipping Program	Participate in County-wide regional committee on CWPP	Maintain contract for fire suppression and EMS services with County Fire		
	Maintain completed evacuation routes	Provide monthly vegetation drop off		Fund additional seasonal fire crews (high risk event extra staffing)		
	Implement vegetation mgmt services on emergency access roads in collaboration with Central Fire and Fire Safe Council	Continue Home Ignition Zone (HIZ) inspections and implement rebate program		Fund Station 8 to provide additional support and response		
	Support and advance I280 vegetation mgmt project	Support Central Fire fuels crew work		Apply for grants in a manner consistent with Commission discussion 6/21/22 to leverage tax dollars and maximize community benefit		

ATTACHMENT 2





Santa Clara County FireSafe Council

14380 Saratoga Ave. Saratoga CA, 95070

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ATTACHMENT 3 FINAL REPORT

Page Mill Rd. Evacuation Route

July 10, 2023

Introduction:

Page Mill Rd in Los Altos Hills, California, represents a significant thoroughfare for the Los Altos Hills Community. This road exists as egress and ingress in the case of fire. To secure this egress/ingress' integrity, Los Altos Hills County Fire District and Santa Clara County FireSafe Council propose a roadside treatment of fuels. The project will start south of the intersection of Arastradero Rd and Page Mill Rd, south of the Caltrans easement, and head south by southwest towards Foothills Nature Preserve ending at the District's jurisdiction line.

Cooperators:

There were multiple agencies, contractors, property owners, and organizations that contributed to the project; Santa Clara County Fire Safe Council, Los Altos Hills County Fire District, Statewide Safety Systems, Huerta's Tree Service, Bay Area Traffic Solutions, the County of Santa Clara, County Road and Airports, and the Town of Los Altos Hills to name a few.

Goals For This Project:

- 1. Remove ladder fuel vegetation on the ground, limb up trees and remove accumulated dead fuel build up along the roadway.
- 2. Remove previously downed smaller trees that may pose a fire hazard during drier months.
- 3. Conduct hazardous fuel reduction up to 15'- 30' from the road edge to help provide a safer evacuation route in the event of an actual wildfire.
- 4. Removal of hazard trees; dead, dying, under-slung and overhanging that may fall on the roadway during extremely windy conditions.
- 5. No live trees (either native or non-native) that are large enough to require a tree removal permit are removed.
- 6. Prune live trees amounting to less than 25% of the canopy.
- 7. Chipped material spread over the treatment area.





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- 8. Remove Dead trees in close proximity to the roadway.
- 9. Increase visibility for intersections and driveway turn outs.

Project Site:

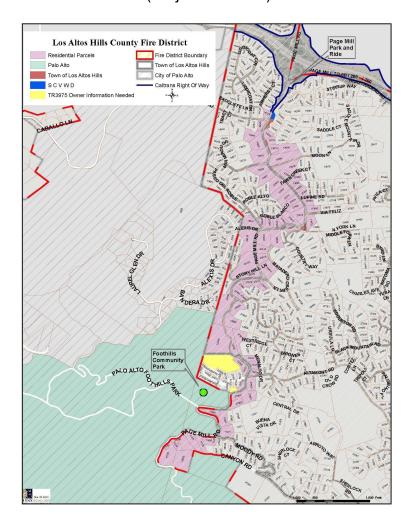
Page Mill Rd in Los Altos Hills, starting south of the intersection of Arastradero Rd and Page Mill Rd, south of the Caltrans easement, and heading south by southwest towards Foothills Nature Preserve. For the north and west side of Page Mill Rd the project will conclude northwest by north of the Foothill Nature Preserve park entrance, after including the last lot of the Altamont Hills development, track 3975, and on the south and east side of the road it will conclude beyond the intersection of Moody Rd and Page Mill Rd after including the Page Mill Road curb line abutting 10920 Page Mill Road. The length of road in the project area is 3 miles heading south by southwest on Page Mill Rd and 3.5 miles heading north by northeast on Page Mill Rd. Therefore, the total treatment will be 6.5 miles for both sides of the road.





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Page Mill Road Evacuation Route (Project Location)



Permissions:

One of the biggest challenges in these types of projects is getting permission to treat the properties. During planning of the project, we conducted an extensive public outreach effort to get the permissions needed. It included mailers, newspaper articles, door-to-door visits, and a social media campaign. We were able to include 23 of the 99 parcels involved. This represents about 23% participation for the completion of the

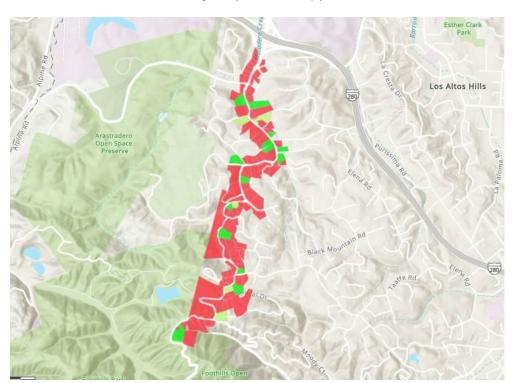




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project. Prior to the project, LAHCFD staff conducted a survey of the area to identify key parcels within the project scope. We always strive for 100 percent participation, but every project has a few property owners with reservations. An average participation rate is around 30% for first time maintenance projects (with the goal of 100% participation). SCCFSC's timeframe for ROE forms to be returned was 30 days with a due date of March 31st. The staff of SCCFSC and LAHCFD executed door knocking on April 14, 2023, in efforts to get as much community involvement as possible.

Page Mill Road Evacuation Route Project (Parcel Map)







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Biological Precautions:

As with all of our projects, protecting the biodiversity of the area is a high priority. A Biological Survey was conducted on May 26, 2023, by Dudek, the week before the project started. The biologist identified and flagged wood rats nests, active birds' nests, and any habitat within the treatable area. The biological review was completed outside of nesting season. Heritage trees were identified during the field verification stage and were not included in the work plan. Finally, a buffer of 25 feet was implemented along stream beds and seasonal waterways.

Project Duration:

The project started on Wednesday May 31, 2023, and completed on Wednesday, June 7,2023. We did not encounter any red flag days or any rain days.

Jurisdictions And Funders Involved:

Santa Clara County Fire Safe Council, Los Altos Hills County Fire District, Santa Clara County, County Roads and Airports, and Town of Los Altos Hills.

Contractors Selected:

Dudek was selected due to scheduling availability.

Huerta's Tree Service was selected due to their availability, familiarity with evacuation route projects within SCCFSC, and for rotation of contractors selected for LAHCFD projects.

Bay Area Traffic Solutions provided a traffic control plan and electronic message board for the project.

Statewide Safety Systems provided the flaggers and traffic control for project duration.





Project Photos:



Before

After













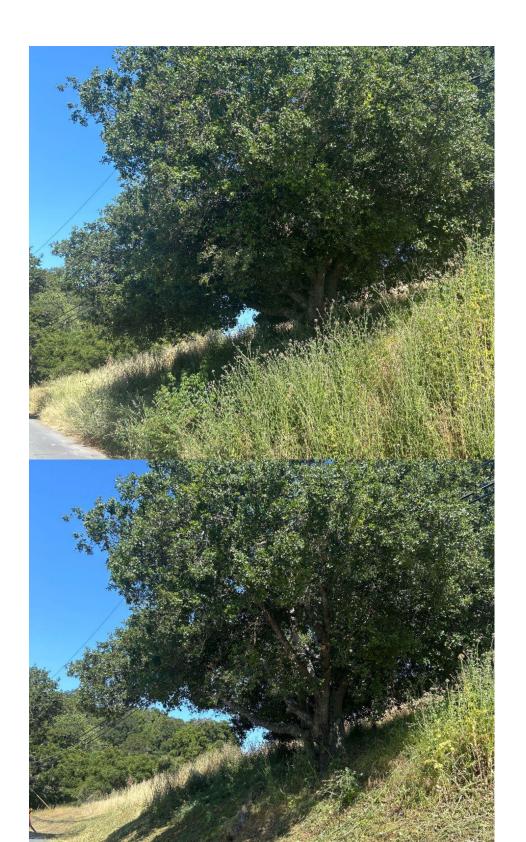
















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By The Numbers:

Area treated – 5.64 miles total area treated for both sides of Page Mill Rd. Most of which was treated 15 to 30 feet from the edge of the road unless marked for riparian area. On ROE properties treatment extended 30-50 feet from the edge of the road if needed. The daily average was 0.94 miles per day.

Acres treated = 13.68 acres with an average of 2.28 acres treated per day.

No poison oak was treated during this project.

6 days of treatment conducted by Huerta's Tree Service.

We overcame many challenges to complete this critical part of growing the evacuation route and vegetation treatment system in Santa Clara County. This project also supports goals in the LAHCFD CWPP annex as well as the overall Community Wildfire Protection Plan.

We would like to acknowledge the contribution made by Huerta's Tree Service, Statewide Safety Systems, Dudek, and Bay Area Traffic Solutions. All entities were committed to assisting Santa Clara County Fire Safe Council with the project from start to finish.

Statewide Safety Solutions provided three to four traffic control personnel every day to make sure that the work could be done in a safe manner. With Page Mill Rd. is a commuter road with multiple driveways, high bike traffic route, and a connection directly to the interstate 280 the fourth traffic control personnel was necessary for the safety of the tree crews, SCCFSC staff, LAHCFD staff, general traffic, and bicyclists in the LAH area. SCCFSC staff and Huerta's Tree Service were provided a radio from the Statewide Safety Solutions staff for constant communication. In addition, Huerta's Tree Service provided a translator each day to ensure maximum communication capabilities in an effort to provide complete safety coverage for the crews working and additional personnel on site. I'm happy to report, with Statewide Safety Solutions traffic control coverage and the safe working practices of Huerta's Tree Care, we were able to finish the project with no reported injuries or incident reports. In addition to that, Los Altos Hills County Fire District allowed our project crew to use their area for a staging area.





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Safety briefings were held by the safety officer, Irene Armstrong, each morning before start of work to discuss traffic control, personal protective equipment, local emergency services, environmental hazards, and weather conditions.

We would like to thank all the cooperators and property owners for all their support. If you have any questions or concerns, please feel free to direct them to:

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