



HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: July 2, 2024
To: Toni Cupal, Healing Cultures, Inc.
From: Ollie Zhou, Tim Chang, Nivedha Baskarapandian
Subject: Traffic Study for Proposed 10707 La Honda Road project in Woodside, California

Hexagon Transportation Consultants, Inc. has completed a traffic study for the proposed La Honda Road project in Woodside, California. The project proposes to remodel the two existing residential structures, the main residence and a garage, and landscape parts of the property. The main residence would be remodeled into two areas. One side of the main residence would be converted to a multi-purpose relaxation, refreshment, and orientation space, and a small kitchen. The other side of the main residence would remodel the existing bedrooms and bathrooms as rooms for healing treatments and overnight stays. The ground level of the garage would be remodeled and serve as a yoga and meditation space. The project proposes to build a second level for a multipurpose room and ADA bathrooms. The project also plans to provide additional off-site parking south of the project site. Access to the site is provided via La Honda Road. The site location of the project site is shown on Figure 1.

Project Operations Overview

The project proposes to offer healing treatments on-site. These treatments would include training programs, day-long workshops, yoga classes, and meditation sessions. The hours of operation would be from Monday through Sunday from 9 AM to 6 PM. There would be 4 staff members operating the site, serving a maximum of 20 clients per day. On Mondays through Thursdays, up to two treatments and yoga classes would be offered. These activities would be by appointment only and will be staggered by at least an hour from each other. On Fridays through Sundays, up to two yoga classes would be offered only with a restore, refreshment, and reflection time offered between both yoga classes with workshops/classes being offered twice a month.

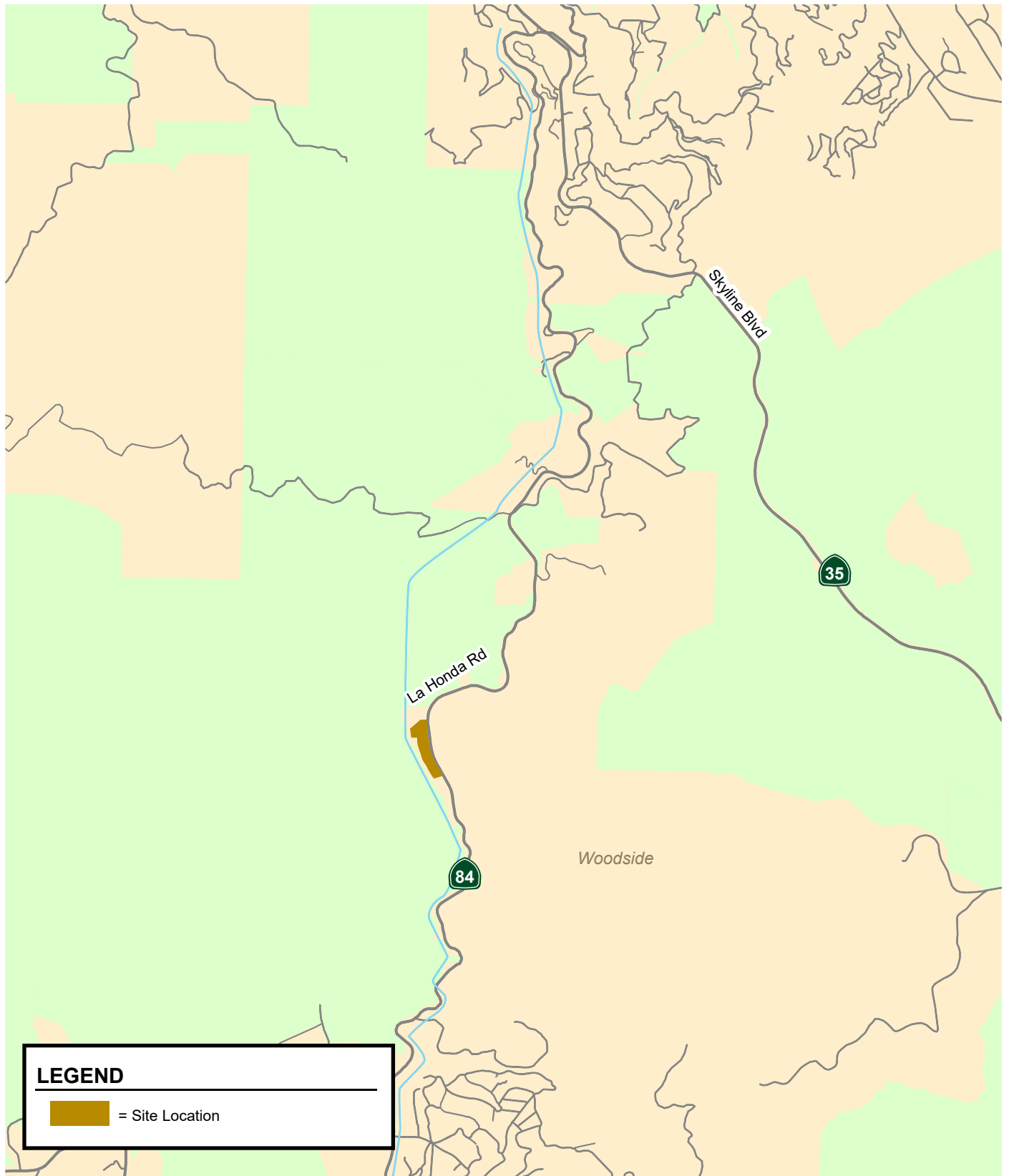


Figure 1
Site Location

Project Trip Generation

Trip generation analysis was conducted for the project based on the project operations overview. The trip generation analyzed the number of trips generated during weekday peak hours (7AM-9AM and 4PM-6PM). Generally, traffic on the roadways is the highest during weekday peak periods compared to weekend peak periods due to drivers travelling to and from work/school. Therefore, the analysis focuses on the project trips added to the roadways during weekday peak periods. According to the project description, there would be up to 4 staff members on site during normal business hours. It is assumed that staff would arrive an hour before opening and leave one hour after closing operations. Assuming each staff member would drive themselves to the site, there would be four trips generated during the AM and PM peak hours.

Daily Trip Generation

On Mondays through Thursdays, the project would serve a maximum of 20 guests for the day. Therefore, on a daily basis, assuming each guest and each staff take one vehicle to travel to the site and back, the project would generate a total of 48 daily trips (20 guests * 2 trips per guest + 4 staff * 2 trips per staff).

Peak Hour Trip Generation

The activities that are scheduled on weekdays are not set and may not necessarily attract traffic during the AM and PM commute peak periods. The site's heaviest traffic generating scenario would be an activity attended by 20 guests that either starts at 9 AM (when the site first opens), or one that ends between 4 PM to 6 PM (during the PM peak hour). In either situation, the site would attract 20 vehicles during the one-hour peak hour. If staff would arrive or leave within the same peak hour, then the site's maximum peak hour trip generation would be 24 vehicles. Therefore, during peak hours, the proposed project is estimated to generate a maximum of 24 trips during a one-hour (AM or PM) peak hour, and very few trips in the other (AM or PM) peak hour. These assumptions are conservative since the site is likely to host multiple activities throughout the day, with each activity attended by far fewer clients.

Given the low number of trips the project would generate (approximately 2 minutes per vehicle during the peak hour), it is expected that operations at the project driveways would have little to no change. Therefore, a level of service analysis at the project driveways is not performed.

Site Access and On-Site Circulation

The site access and on-site circulation evaluation at 10707 La Honda Road (main site) and at 10699 La Honda Road (off-site parking lot) are based on the June 25, 2024, site plan prepared by Kellond Architects (see Figure 2). Site access was evaluated to determine the adequacy of the site's driveways with regard to the following: geometric design, sight distance. On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards.

Main Site

The main site would have access to/from La Honda Road via a two-way driveway. The site plan shows that the driveway connecting to La Honda Road would lead to the main building on-site. According to the San Mateo County Driveway Standard Drawings, the driveway width for a commercial and industrial highway frontage along a 40 mph or more highway is no more than 40 feet. The posted speed limit on La Honda Road within the project site is 40 mph. The existing driveway at the project site is approximately 40 feet, which meets County's standard. The proposed project does not have plans to alter the existing driveway.

The driveway would lead to the parking spaces on-site. The project would provide 90-degree parking spaces and parallel parking spaces in front of the building entrance. The area of the standard and ADA parking spaces is 180 square feet at the main site. The drive aisles that lead to 4 parking spaces are approximately 16 feet wide, which generally provides sufficient space for vehicles to drive through. Generally, the proposed plan would provide adequate vehicle traffic connectivity through the site. There is a dead-end aisle for about 50 feet. However, the project proposes a firetruck turnaround space before the dead-end aisle. The short distance of the dead-end aisle should allow vehicles to see to the end and determine if there is available space before entering the dead-end aisle. A vehicle that drives into the dead-end aisle and finding no available spaces would have to back out and use the fire-truck turnaround space to exit.

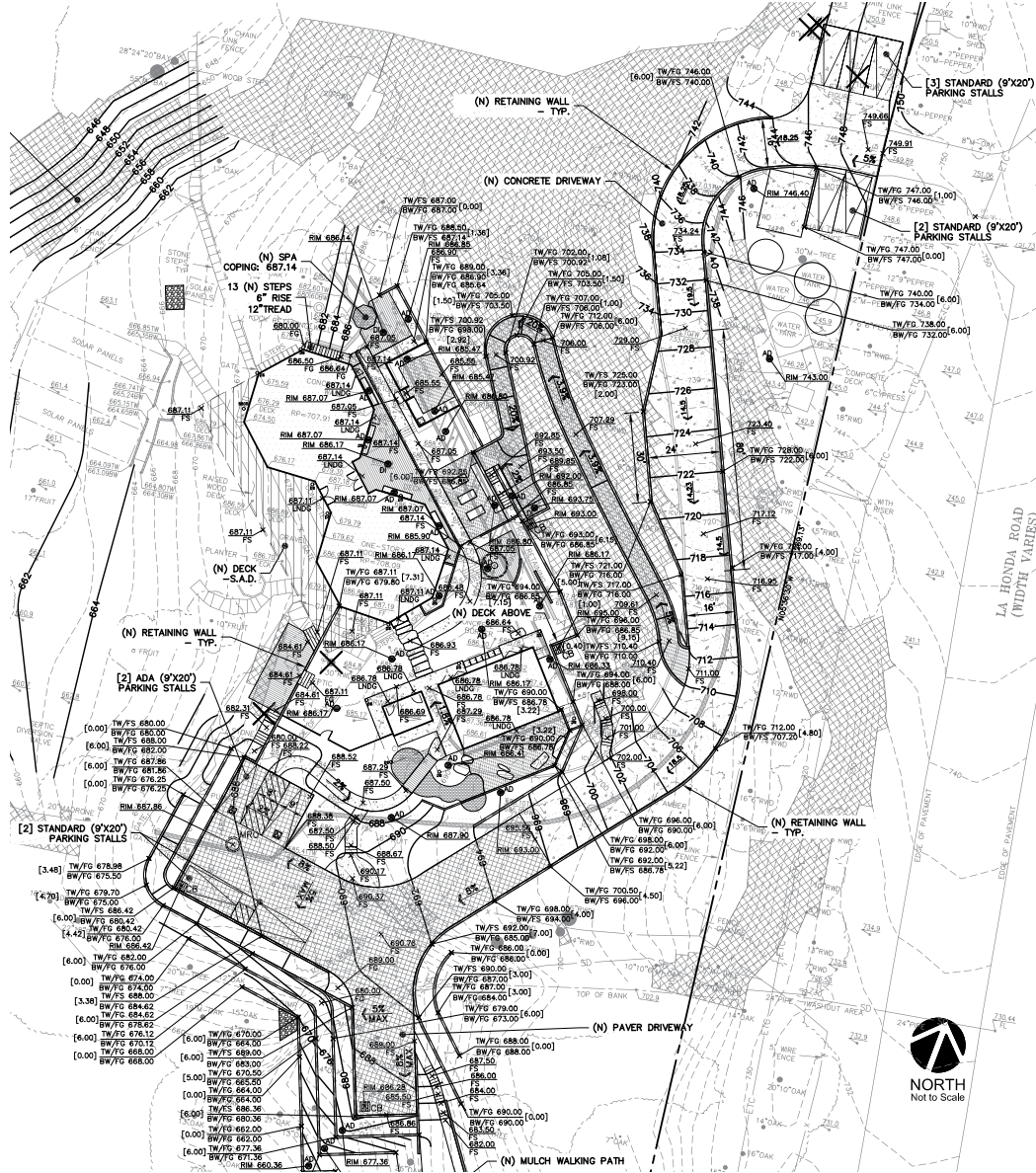
There would also be 5 parking spaces provided at the main site located at the entrance of the project site. It is likely that parking at this site would be used by staff members. Clients using the ADA parking spaces should be directed to park at the main site, while other clients should be directed to park in the off-site parking lot, discussed below.

Off-Site Parking Lot

The off-site parking lot is located at 10699 La Honda Road, approximately 900 feet south of the project site. The off-site parking lot would provide access to/from La Honda Road via a two-way driveway. The site plan shows that the driveway connecting to La Honda Road would lead to the parking lot. The existing driveway width is approximately 10 feet wide, which provides adequate space for one-way travel. Given the operations at the project site, guests travelling to the site would be staggered with guests in the previous session leaving the site so that there would only be one-way of vehicular travel at any time at the off-site parking lot. To further ensure the one-way operations, the off-site parking lot could also be operated via valet-parking only.

The project provides standard parking throughout the off-site parking lot. The site plan shows that the off-site parking lot proposes to have 13 parking spaces. The site plan shows that the drive aisles that lead to the parking spaces are approximately 20 feet wide and should provide adequate width space for vehicles to drive through. The parking lot provides adequate space for vehicles to back out of the parking spaces. Overall, the parking lot provides adequate circulation throughout the site.

10707 La Honda Road



10699 La Honda Road

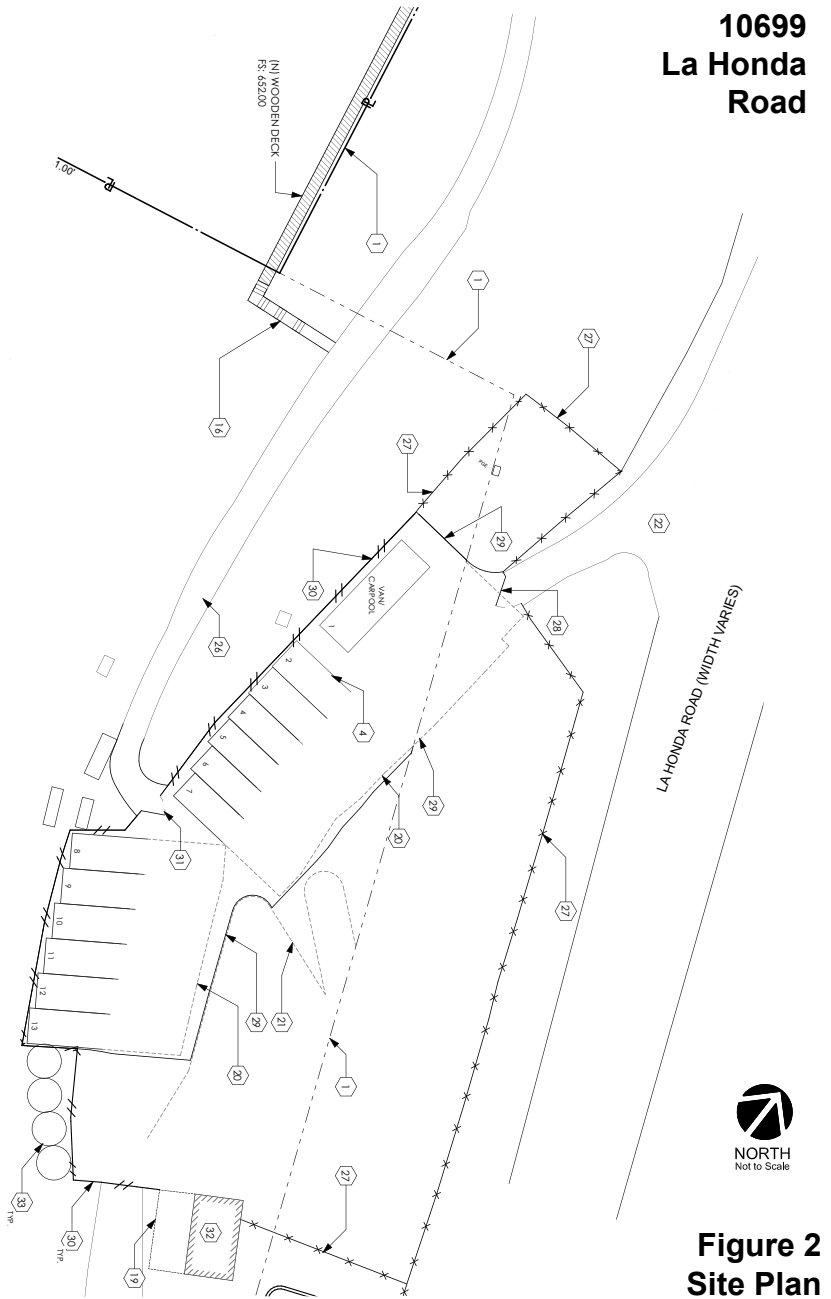


Figure 2 Site Plan

Access between the Main Site and Parking Lot

The project provides vehicular parking at the main site and at a parking lot located south of the main site. The project proposes to connect these two locations via a nature walking path. The nature walking path would be approximately 900 feet in length. With this walking path, clients would be able to access the main building from the parking lot.

On-Site Parking

The parking requirements for this site are based on the County of San Mateo Zoning Regulations. The project proposes to have the existing house and garage to be converted healing treatment room, relaxation space, and yoga studio. The relaxation, refreshment, and orientation space, healing treatment room, and yoga studio land uses are not listed under the County’s Zoning Regulations. Therefore, these uses require 1 space per 160 square feet of gross floor area excluding basement and storeroom. The relaxation, refreshment, and orientation space would be 638 square feet, the healing treatment room would be 1,142 square feet, and the yoga studio would be 1,238 square feet. Therefore, the project would be required to provide 4, 8, and 8 spaces respectively, totaling 20 required parking spaces. The project proposes to provide 2 ADA compliant spaces, 2 spaces for holistic treatment, and 5 spaces for staff parking on-site. The project also proposes 13 spaces provided off-site at 10699 La Honda Road, which would be accessed through an easement. Therefore, the project will provide 22 total spaces between the two locations, which exceeds the County’s parking requirements. Table 1 lists the provided and required parking spaces.

**Table 1
Required and Proposed Parking Spaces**

Land Use	Rate	Vehicle Parking Spaces
Proposed		
ADA Compliant Spaces	-	2
Holistic Treatment Spaces	-	2
Staff Parking Spaces	-	5
Off-Site Parking Spaces	-	13
Total Vehicle Parking Spaces Provided	-	22
Parking Requirements ¹		
1070 La Honda Road	638 s.f. Relaxation, Refreshment, Orientation Space	1.00 per 160 s.f. 4
	1,142 s.f. Healing Treatment	1.00 per 160 s.f. 8
	1,238 s.f. Yoga Studio	1.00 per 160 s.f. 8
Total Vehicle Parking Spaces Required		20
Notes		
s.f. = square feet		
¹ Source: San Mateo County Zoning Regulations, Chapter 3 Parking, Section 6119, Parking Spaces Required		

Sight Distance at the Driveways

A sight distance evaluation was conducted for the proposed project driveways, located on the west side of La Honda Road, to determine if there would be any deficiencies with the driveway positions that would cause operational problems. Sight distances were evaluated in accordance with the standards and methodologies contained in the 7th edition of the *Caltrans Highway Design Manual* (HDM).

This analysis is based on stopping sight distance. The minimum stopping sight distance is the distance required by a vehicle on the primary road, traveling at a given speed, to bring the vehicle to stop after an object (vehicle, pedestrian, bicyclist, debris, etc.) on the road becomes visible. The stopping sight distance is the minimum sight distance that must be available for a vehicle to exit the project driveways safely.

When checking sight distances at an intersection, the position of the driver on the side street approach must be assumed. Per section 405.1 (2) (a) of the HDM, setback for the driver should be a minimum of 10 feet plus the shoulder width of the major road but not less than 15 feet from the traveled way.

The minimum stopping sight distance was determined based on the design speed and the grade of the roadway. The design speed was assumed to be 5 MPH higher than the posted speed limit. In the vicinity of the proposed project driveway, La Honda Road has a downgrade in the southbound direction. Section 201.3 of the HDM specifies that the stopping sight distance should be increased by 20 percent on sustained downgrades steeper than 3 percent and longer than one mile. The approximate grade of the road in front of the project driveways is approximately 6 percent. However, with the information currently available, it is not known if this grade extends for more than a mile. To provide a conservative analysis, it is assumed that this is a sustained downgrade.

Note that the HDM procedures result in a conservative analysis of stopping sight distance due to the required 20-percent increase in stopping sight distance, regardless of the actual grade. Additionally, the HDM procedures do not allow a reduction in sight distance for uphill grades.

Per Table 201.1 and Section 201.3 of the HDM, the stopping sight distance for the two directions of travel are:

- 360 feet for 45 MPH (northbound direction)
- 432 feet for 45 MPH on a sustained downgrade (southbound direction)

Figure 3 shows the estimated available sight distances at the project driveways.

North Driveway Sight Distance

Due to the curve in the road just north of the project site, sight lines to the left at the north driveway are better if the driver exiting the driveway does not pull all the way up to the edge of the road. At the north driveway, the sight distance to the left for a driver positioned about 27' from the shoulder stripe would be adequate if one tree immediately north of the driveway is removed. The sight distance to the right at the north driveway exceeds the required sight distance for a driver positioned between 15'-27' from the shoulder stripe.

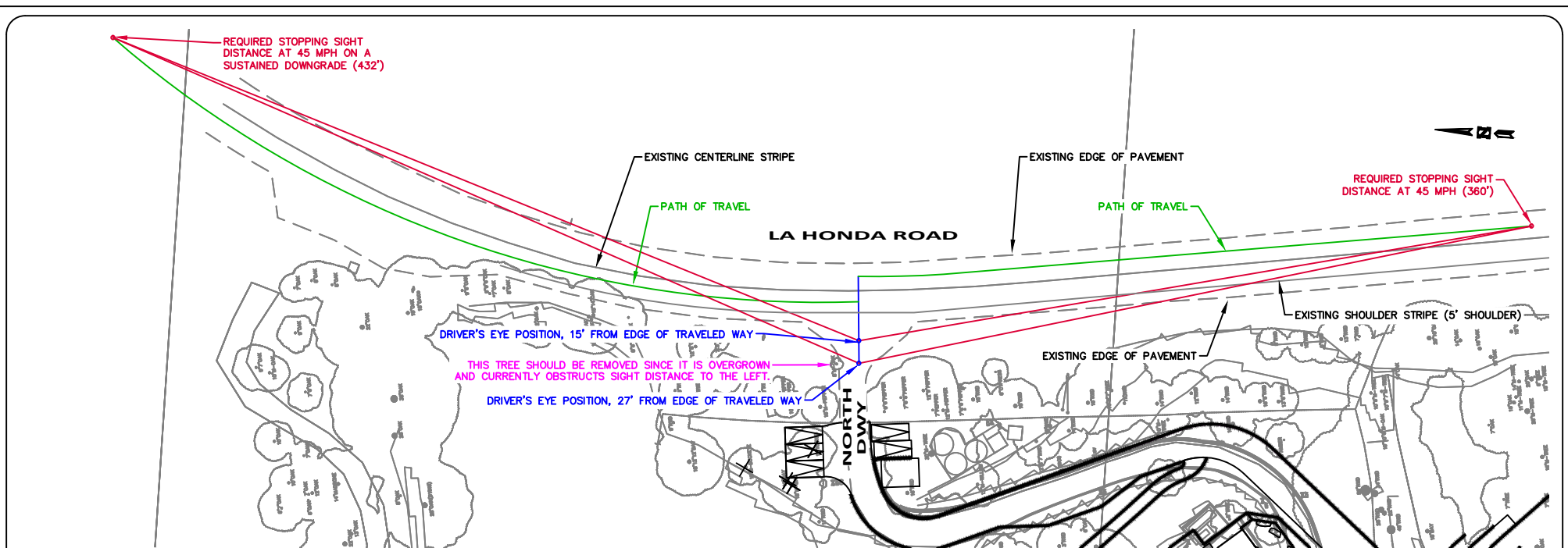
South Driveway Sight Distance

At the south driveway, the sight distance to the left for a driver positioned 15' from the shoulder stripe (edge of traveled way) exceeds the required sight distance, and the sight distance to the right is obstructed by one existing tree immediately south of the driveway and potentially by a second existing tree further to the south and closer to the edge of pavement. The two trees that are potentially contributing to sight obstructions were identified in the field and are shown on Figure 3.

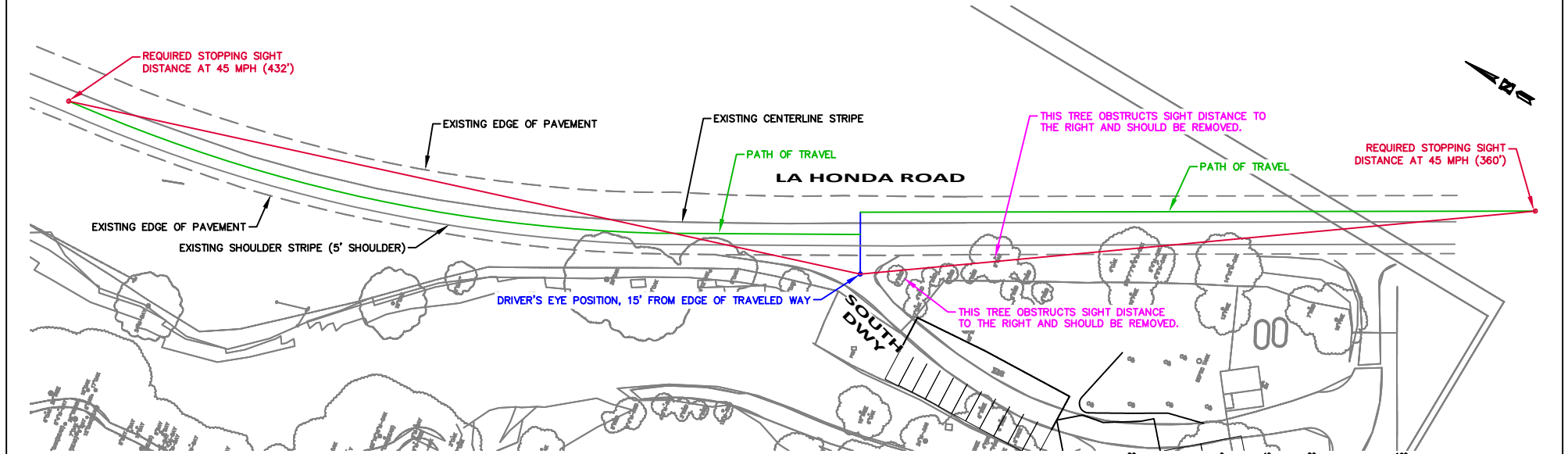
Removing both of these identified existing trees would allow sight distance to the right to exceed the required sight distance.

Recommendation

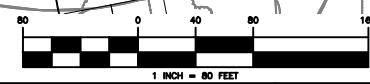
The three trees obstructing sight distance are shown on Figure 3. All three identified trees should be removed to provide adequate sight distance. Sight distances and recommended tree removals were field verified in November 2023 (see Figures 4 to 6). In addition, landscaping (shrubs, bushes, ground cover, and hedges), walls, and signage shall be kept to a maximum height of 3 feet in the sight triangles on either side of the two project driveways shown on Figure 3.



NORTH DRIVEWAY SIGHT DISTANCE



SOUTH DRIVEWAY SIGHT DISTANCE



DRAWN T. CHANG	SCALE 1" = 80'
CHECKED J. ELJA	DATE 11/15/2023

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SAN MATEO COUNTY

10707 LA HONDA ROAD

DRIVEWAY SIGHT DISTANCE EXHIBIT

FIGURE NO. 3

Figure 4
North Driveway (15 feet back) Sight Distance

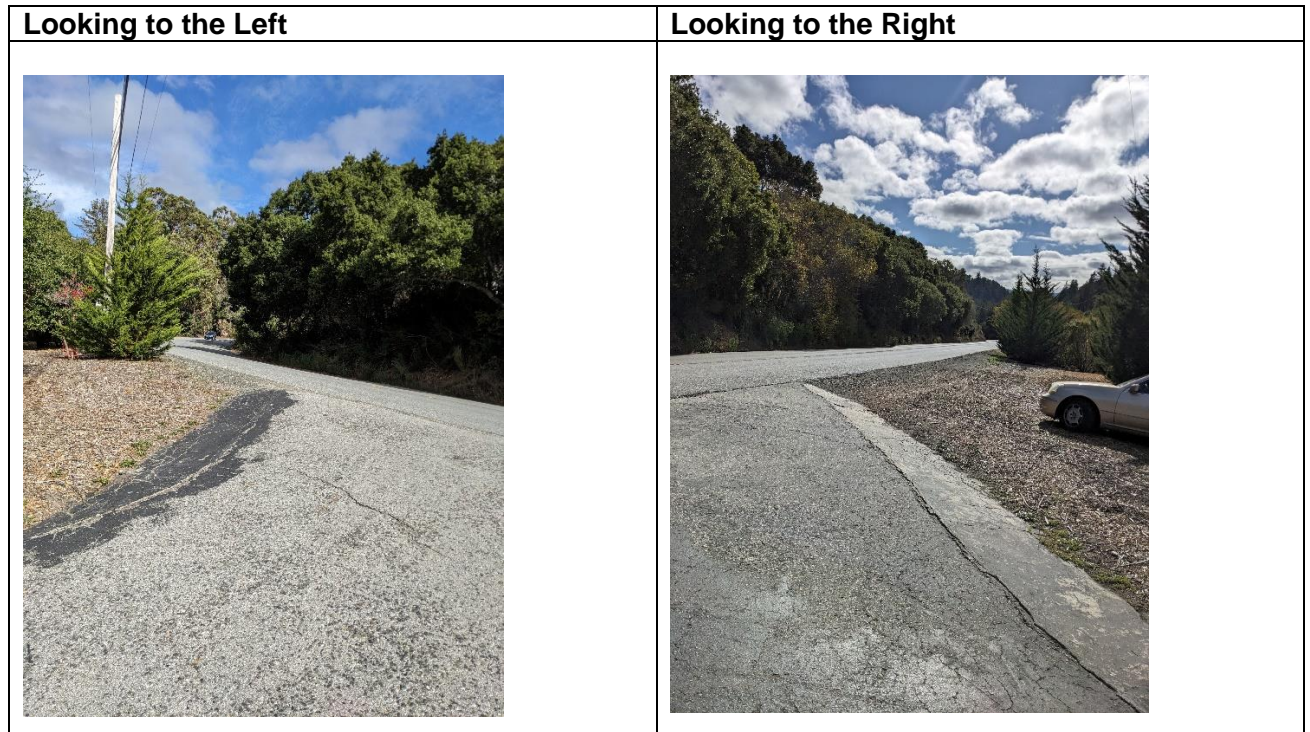


Figure 5
North Driveway (27 feet back) Sight Distance



Figure 6
South Driveway (15 feet back) Sight Distance



Conclusions

Hexagon conducted a trip generation analysis, and site plan review for the proposed healing center project at 10707 La Honda Road. Using the most conservative assumptions, the project would generate approximately 48 daily trips, 24 trips during one of the AM or PM peak hours, and very few traffic during the other peak hour. This equates to approximately one vehicle every two minutes. The driveways under project conditions are expected to operate without significant issues. Hexagon provides the following recommendations based on the Site Access and On-site Circulation and Sight Distance:

- It is assumed that parking on the main site would be used by staff members. Clients using the ADA parking spaces should be directed to park at the main site, and other clients should be directed to park in the off-site parking lot.
- Landscaping (shrubs, bushes, ground cover, and hedges), walls, and signage shall be kept to a maximum height of 3 feet in the sight triangles on either side of the two project driveways.
- Three trees as indicated in Figure 3 should be removed to ensure adequate sight distances.