

**MULHOLLAND HIGHWAY  
MASTER PLAN FOR CAPITAL IMPROVEMENTS**

*Prepared for:*

City of Calabasas  
26135 Mureau Road  
Calabasas, California 91302

*Prepared by:*

Kimley-Horn and Associates, Inc.  
5550 Topanga Canyon Blvd., Suite 250  
Woodland Hills, California 91367

August 1, 2004  
094233003

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	II
1.0 INTRODUCTION .....	1
1.1 BACKGROUND .....	1
1.2 MASTER PLAN OBJECTIVES .....	2
1.3 KEY PLANNING ISSUES.....	3
2.0 ZONE 1 ELEMENTS.....	6
2.1 EXISTING ROADWAY AND LAND USE CHARACTERISTICS .....	6
2.2 TRAFFIC AND CIRCULATION IMPROVEMENTS .....	7
2.3 BICYCLE AND PEDESTRIAN FACILITIES .....	7
2.4 INTERSECTION TREATMENTS .....	8
2.5 ROADWAY AND UTILITY IMPROVEMENTS .....	9
2.6 LANDSCAPING IMPROVEMENTS .....	10
3.0 ZONE 2 ELEMENTS.....	11
3.1 EXISTING ROADWAY AND LAND USE CHARACTERISTICS .....	11
3.2 TRAFFIC AND CIRCULATION IMPROVEMENTS .....	12
3.3 BICYCLE AND PEDESTRIAN FACILITIES .....	15
3.4 INTERSECTION TREATMENTS .....	16
3.5 ROADWAY AND UTILITY IMPROVEMENTS .....	16
3.6 LANDSCAPING IMPROVEMENTS .....	17
4.0 ZONE 3 ELEMENTS.....	20
4.1 EXISTING ROADWAY AND LAND USE CHARACTERISTICS .....	20
4.2 INTERSECTION TREATMENTS.....	21
5.0 RIGHT-OF-WAY AND UTILITY ISSUES .....	25
5.1 RIGHT-OF-WAY .....	25
5.2 OVERHEAD UTILITIES .....	25
5.3 DRAINAGE.....	25
5.4 LIGHTING .....	26
5.5 WATER.....	26
6.0 IMPROVEMENT SUMMARY .....	27
6.1 FUNDING PLAN .....	33
6.2 IMPLEMENTATION PLAN.....	33
6.3 OPINIONS OF PROBABLE COSTS .....	34

## LIST OF FIGURES

FIGURE 1: MULHOLLAND HIGHWAY CORRIDOR.....	II
FIGURE 2: MASTER PLAN ZONES.....	2
FIGURE 3: ZONE 1 LIMITS .....	6
FIGURE 4: ZONE 2 LIMITS .....	11
FIGURE 5: ZONE 3 LIMITS .....	20
FIGURE 6: INTERSECTION ALTERNATIVE 1- STOP SIGN CONTROL .....	21
FIGURE 7: TRAFFIC SIGNAL CONTROL .....	22
FIGURE 8: INTERSECTION ALTERNATIVE 3 - ROUNDABOUT .....	23
FIGURE 9 - STRIPING PLAN 1.....	29
FIGURE 10- STRIPING PLAN 2.....	30
FIGURE 11- STRIPING PLAN 3.....	31
FIGURE 12- STRIPING PLAN 4.....	32

## LIST OF TABLES

TABLE 1 – OPINIONS OF PROBABLE COST .....	34
---	----

# EXECUTIVE SUMMARY

Over several years and leading up to City incorporation, land development and traffic growth changed the Mulholland Highway corridor from its original rural character. In 1997 the City of Calabasas completed the Mulholland Highway Master Plan document. The Master Plan identified corridor and community issues, and provided direction to help the City improve the traffic operations and landscaping along Mulholland Highway in the future.

In 2002 the City initiated an effort to update the 1997 document because of development proposals, approval of a new middle school and increased community interest in the corridor. This Master Plan for Capital Improvements (“Masterplan”) defines recommended improvements for the City to implement over time, as funding is available. The document describes improvement options that respond to the diversity of views and opinions about the future of this roadway.

The Mulholland Highway Master Plan for Capital Improvements is a long-range planning document that provides recommendations for traffic, circulation, roadway, and landscaping improvements along a 1.7-mile segment of Mulholland Highway. The corridor extends from Mulholland Drive to the southern (second) Old Topanga Canyon Road intersection. **Figure 1** illustrates the limits of the Master Plan. The Master Plan provides the City with recommendations to respond to the City’s General Plan vision statement for the area, which is to restore the original beauty of the Mulholland corridor by developing a comprehensive Master Plan for the roadway.



**Figure 1: Mulholland Highway Corridor**

The Master Plan includes input from the community, which has largely shaped the recommendations of the Plan. These recommendations include detailed circulation and landscaping improvements throughout the corridor. The corridor is divided into three zones that correspond to their existing characteristics. Zone 1 includes the segment from Mulholland Drive to Paul Revere Drive and is more suburban in nature. Zone 2 extends from Paul Revere Drive to the traffic signal in front of the high school. Zone 3 includes the segment from the high school to the southern (second) Old Topanga Canyon Road

intersection. This document presents information and recommendations for Zones 1 and 2 only. Zone 3 is considered to be a “transition zone” – between suburban and rural. The portion of Zone 3 between the two Old Topanga Canyon Road intersections will be analyzed by the City as part of another document.

Key elements of the Plan include the following.

- Roadway Improvements
- Median Treatments
- Bike Lane Enhancements
- Sign Usage
- Neighborhood Identification
- Crosswalk Consolidation/Enhancement
- Intersection Modifications
- Landscaping Enrichment

The Master Plan is intended to be a long-range planning tool. There are many different opinions about what the corridor should be like in the future, and the Master Plan represents a planning process that is ongoing and able to accommodate change over time. Implementation of the Plan will be incremental, and various elements may change before they are realized. The City may implement different elements of the Plan as funding is secured, thereby providing development consistency over time.

The document identifies Phase 1 and future implementation phases. Phase 1 is a transportation enhancement project that benefits health and safety through improved traffic management. Future phases are expected to include the improvements identified in this report—more landscaping, pedestrian amenities, and additional roadway improvements.

# 1.0 INTRODUCTION

## 1.1 BACKGROUND

Prior to municipal incorporation, the Mulholland Highway corridor was a county road that lacked a coordinated effort to manage future traffic, maintain a consistent landscape, and provide efficient access for pedestrians, bicyclists, and motorists. As more development has occurred along the corridor, the interplay of regional commuters, school and commercial traffic, and local commuters has increased. The rural characteristics of Mulholland Highway have been changed by development that has not always been consistent with the original function and design of the roadway.

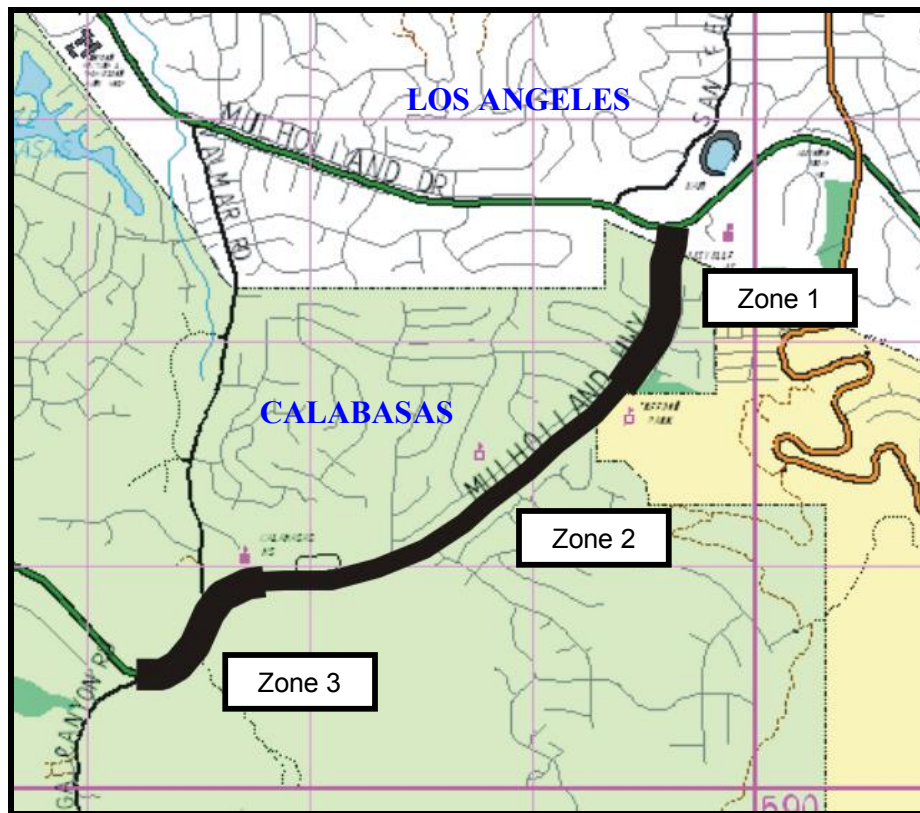
As the surrounding area has grown, the function of Mulholland Highway has changed from a local roadway used by Calabasas residents into a regional commuter route. The City recognizes the need to balance local travel, regional traffic flow, and community identity while preserving the scenic quality of the Santa Monica Mountains that establishes the environment for which people live in the City. Beautifying this corridor has been important to the greater Mulwood Homeowners Association and other residents of the area who requested that the City invest in landscaping, signage, and roadway improvements that would increase pedestrian safety and reduce the impacts of traffic congestion and noise pollution.

In the fall of 2002, the City of Calabasas hired a professional consulting team, including RRM Design Group and Marc Sefarian, to update the Mulholland Highway Master Plan, first drafted in 1995. The Master Plan has been an ongoing draft document that has now been formalized as a final Master Plan. The City's General Plan vision statement for the area is to help restore the original beauty of the Mulholland Highway corridor by addressing circulation and roadway improvements and corridor landscaping. Conditions along the corridor have changed since 1997, including the opening of the new A. C. Stelle Middle School in 2003, and community interest in the corridor has also increased since that time.

The overall planning area was divided into three zones to distinguish between their unique land use characteristics and recommended improvements. Zone 1 has a significant amount of commercial development and greater traffic volumes. Zone 2 is primarily residential with two public schools. Zone 3 includes the more rural areas and the two Old Topanga Canyon Road intersections. The zone boundaries are illustrated in **Figure 2** on the following page.

The Master Plan identifies Phase 1 and future phases time horizons for implementation. Phase 1 is a transportation enhancement project that benefits health and safety through improved traffic management. The project creates safer routes to the schools along Mulholland Highway and responds to increased pedestrian needs created by the opening of the new Middle School. Phase 1 improvements include construction of a curb-like berm to better separate vehicular traffic from pedestrian walkways, new lane striping, crosswalk striping and signage, and improved landscaping. These improvements were implemented in February 2004.

Future phases will include the ultimate improvements identified in the Master Plan—more native landscaping, pedestrian amenities, and additional roadway improvements.



**Figure 2: Master Plan Zones**

The Plan specifically investigates and evaluates the following issues.

- Refinement of previously adopted objectives,
- New and proposed development along the corridor,
- Current public interest and concern for development of the corridor, and
- Existing and forecasted future traffic patterns.

## **1.2 MASTER PLAN OBJECTIVES**

Several Plan objectives were identified through a cooperative effort by City Staff, private consultants, and community members who attended the public workshops. They include the following.

- Develop a comprehensive Master Plan that creates a unified highway with a character that is consistent with the community's image and vision.
- Provide recommendations for traffic and circulation, striping, lane configurations, and intersection improvements.
- Provide for a network of bicycle, pedestrian, and recreational facilities.
- Consolidate and make more effective the crosswalks along the corridor.
- Allow for future roadway widening in a way that will not adversely impact visual quality.
- Design retaining walls to integrate with the natural environment.
- Develop a plan to underground overhead utility lines.

- Create a unified landscape plan that will identify appropriate native street trees, highway landscaping, medians, sidewalks, signage, and other roadway beautification elements that will establish the desired character for various areas within the corridor.
- Identify primary entrances into residential and commercial areas.
- Provide recommendations for future improvements to the highway.
- Coordinate streetscape and traffic circulation design with existing, adjacent, and proposed development projects.

### 1.3 KEY PLANNING ISSUES

The Master Plan objectives were compared with ideas and directions contained in already-adopted City plans and programs. **Appendix A** provides a summary of the related plans and policies. A summary of the key planning issues addressed in the Mulholland Highway Master Plan is provided in the following pages.

#### *Land Use Issues*

- The City of Calabasas and the City of Los Angeles should coordinate land use decisions to respond to the various transportation needs of commercial, office, school, and residential land uses. Each individual use can conflict with another vis-à-vis traffic movement and congestion, pedestrian and bicyclist safety, design continuity, and gateway treatments into the two cities. Improving land use compatibility can be achieved through the adoption of a comprehensive Master Plan and coordination between agencies.
- The new A. C. Stelle Middle School located at the intersection of Mulholland Highway and Paul Revere Drive is the largest new traffic generator along the corridor. Coordination and cooperation with school officials is important to address any ongoing traffic-related issues. If traffic problems arise, the City will coordinate with school officials to consider additional circulation improvements.



*Calabasas High School Frontage on Mulholland Highway*

- Calabasas High School, located near the intersection of Mulholland Highway and Old Topanga Canyon Road, generates significant traffic volumes that have grown in recent years due to increased enrollment. Many students drive to school, and traffic congestion has increased during school peak hour periods. Parking has also overflowed onto adjacent streets causing additional congestion and safety issues. Ongoing coordination between the Las Virgenes Unified School District and the City should continue to ensure that beautification efforts, pedestrian and bicyclist facility development, and traffic improvements are consistent with the goals of both agencies.

## ***Traffic and Circulation Issues***

- Entrances into residential areas at the intersections of Declaration Avenue, Eddingham Avenue, Daguerre Avenue, Paul Revere Drive, and Freedom Drive should have more visible markings and/or signage in order to regulate traffic flow, improve efficiency, and safety. Turning storage and acceleration lanes should be provided where appropriate to increase safety. Sufficient sight distance should be maintained through suitable landscaping.
- The lack of continuous sidewalks and bicycle lane width is a concern throughout the corridor. Although some pedestrian and bicyclist improvements have been made since the 1997 Plan, a comprehensive network still does not exist.
- Schools consistently produce significant peak hour traffic volumes of short duration. School drop-off and pick-up areas should be improved with adequate right-turn storage lanes and restricted movements at the driveways to these institutions.
- The wider roadway sections have a paved shoulder that has a recently installed asphalt berm to better define the travel lanes. The travel lanes are better physically defined and consistent along the entire length of the corridor and attempt to discourage high travel speeds and improve traffic flow and safety.
- Existing crosswalks are located at most intersections along the corridor. Numerous crosswalks on a higher-speed roadway can actually decrease pedestrian safety. By reducing the number of crosswalks on higher-speed roadways, drivers can be made more aware of distinct crossing points. In addition, with proper signage and new “smart” crosswalk technology, these sidewalks can operate with greater visibility and safety.



*Mulholland Highway enters the City of Calabasas*

## ***Roadway and Utility Issues***

- A significant number of utility poles and power lines are located along the highway that detract from the natural beauty of this scenic highway. The City should consider the undergrounding of all wiring and high voltage lines along the highway.
- Newly landscaped areas will require additional water utilities for irrigation. Efforts should be made to minimize irrigation requirements through the planting of native and sustainable foliage.
- Changing traffic flow patterns at both the east and west ends of the highway will require roadway improvements to accommodate vehicular traffic as well as bicyclists and pedestrians.
- Future drainage engineering design should consider traps for hydrocarbons and sediments to reduce discharge and road pollutants consistent with NPDES standards, particularly at the east and west ends of the highway.



## ***Landscaping Issues***

- The community's interest in maintaining its image as a combined suburban and rural environment framed by the Santa Monica Mountains is evident. Landscaping used in the design should be native, and address this desire to represent suburban and rural characteristics.
- The City's Urban Forestry Strategic Program should be integrated with the Master Plan. Landscape materials that are indigenous and representative of the area should be used whenever possible.
- Calabasas' citywide rural character should be reinforced through the use of similar and compatible materials that have been planned for other key areas of the City (i.e. Old Town, Las Virgenes Road). This will add a consistent design to different parts of the City.
- Neighborhood entries are currently not defined. The City may wish to consider attracting attention to key intersections and reinforcing the citywide unifying image through consistent decorative lighting, landscaping, and signage.
- The residential environments of Zone 2 are flanked by schools and commercial land uses. Landscaping and roadway beautification should be coordinated to link the diverse land uses of the three zones within the project limits.
- The Santa Monica Mountains, open spaces, and surrounding hillside views should be preserved as much as possible.
- Existing landscaping is sparse along the single-family residential areas where steep slopes intersect with the Highway. The City should consider the revegetation of steep slopes and the removal or screening of incompatible fencing types, the establishment of uniform wall treatments, and the provision of vine cover to screen existing walls at the edge of the corridor right-of-way.

## ***Community Involvement***

The community contributed significantly to the development of this Master Plan document. Public workshops were held during December 2002 and January 2003. These workshops provided opportunities for the public to comment on proposals and debate ideas for the community's vision for the Mulholland Highway corridor. The City council provided additional input at the June 2, 2004 council meeting. Comments, discussion and additional public input at the council meeting led to an additional revision of this document.

Primary changes include establishment of a "Zone 3" to represent the more rural segment between Calabasas High School and the second (southern) Old Topanga Canyon Road intersection. Zone 3 beyond the first Old Topanga Canyon Road intersection will be analyzed in a separate document that is intended to be completed by the City in the near future. Other changes from the June 2, 2004 meeting include the use of only native plant materials and a 4<sup>th</sup> alternative for the Mulholland Highway/Old Topanga intersection – assignment of a traffic officer for peak travel times.

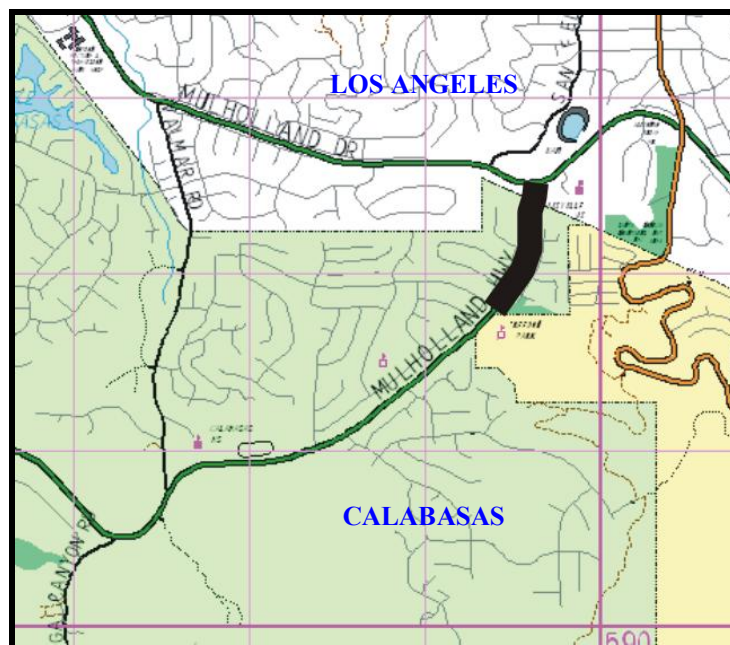


*On-Street Parking on North Side of  
Mulholland Highway adjacent to Calabasas High  
School*

## 2.0 ZONE 1 ELEMENTS

### 2.1 EXISTING ROADWAY AND LAND USE CHARACTERISTICS

Zone 1 of the Mulholland Highway corridor includes commercial and retail land uses on the north side and suburban residential properties and undeveloped land on the south side. Mulholland Highway begins in the City of Los Angeles at the Mulholland Drive intersection. Several roadway improvements have been implemented in this zone. However, many of the facilities are marginal and lack continuity. The Mulholland Drive intersection has successfully been treated as a gateway to the City.



**Figure 3: Zone 1 Limits**

The numerous closely-spaced driveways and street intersections have created some traffic safety issues. Existing roadway characteristics include the following.

- One 12-foot travel lane, both directions, from Paul Revere Drive to Freedom Drive
- Two 11-foot travel lanes westbound, and one 12-foot travel lane eastbound, from Freedom Drive to Mulholland Drive
- 5-foot bike lane, eastbound
- 2.5-foot to 5-foot bike lane westbound
- Curb and gutter, north side entire stretch
- Curb and gutter, south side Paul Revere Drive to Freedom Drive
- 0-foot to 7-foot striped and paved shoulder, north side
- 0-foot to 27-foot striped and paved shoulder, south side
- 4-foot to 5-foot planting strip and 4-foot to 5-foot concrete sidewalk, north side

- No planting strip, south side
- 8.5-foot concrete sidewalk from Paul Revere Drive to Gelson-foot's Shopping Plaza west driveway, south side
- No sidewalk exists from Gelson's Shopping Plaza west driveway to Mulholland Drive, south side
- 10-foot to 10.5-foot painted restricted left turn median from Paul Revere Drive to the Gelson's Shopping Plaza west driveway
- 10-foot raised and landscaped median from Gelson's Shopping Plaza west driveway towards Mulholland Drive

Large, unvegetated block walls currently exist on the south side of the roadway. They are intended to buffer the residential neighborhoods but are visually unappealing without landscaping.

## **2.2 TRAFFIC AND CIRCULATION IMPROVEMENTS**

### ***Vehicular Facilities***

Zone 1 consists of one to two travel lanes, in each direction, raised landscaped median islands, and curb and gutter throughout. Although existing and future traffic volumes on this roadway could be accommodated by a two-lane roadway, the numerous and busy commercial driveways will operate more efficiently if a four-lane road is used by providing additional gaps and acceleration lanes for vehicles entering the highway. However, the Gelson's Shopping Center east driveway should remain a right in, right-out only facility. Extending the existing median to the west will also prevent illegal left-turning vehicles currently using this driveway. Overall, this area needs to complete the existing network of transportation facilities and introduce a landscaping scheme that will help soften the streetscape.

Proposed improvements include the following.

- Two 12-foot travel lanes, in both directions from Paul Revere Drive to Gelson's Shopping Center east driveway, both sides
- Two 11-foot travel lanes, both sides from Gelson's Shopping Center west driveway to Mulholland Drive, both sides
- Curb and gutter, both sides
- 9-foot to 16-foot raised landscape median with intersection breaks

## **2.3 BICYCLE AND PEDESTRIAN FACILITIES**

Bike lanes, planting strips, and sidewalks are proposed to be improved and continuous throughout Zone 1 on both sides of the Highway. The roadway widening west of the intersection of Mulholland Drive will allow for an additional travel lane, a wider bike lane to meet Caltrans standards, and a sidewalk. A Class I bicycle facility (a path separated from the roadway) could not be constructed through the entire Zone 1 segment without the acquisition of additional right-of-way. In addition, this zone includes several business and residential driveways which can conflict with a Class I facility. An extended sidewalk to Mulholland Drive will provide improved pedestrian access to Louisville High School in the City of Los Angeles. Landscaping in the planting strips on both sides of the roadway will help detract from the unattractive presence of the expansive paved sections of the widened roadway, surface parking lots, and retaining walls.

Proposed improvements include the following.

- 3.5-foot to 5-foot bike lanes, both directions
- 4-foot to 5-foot planting strip, north side

- Retain existing 8-foot concrete sidewalk from Paul Revere Drive to Parched Drive, south side

## **2.4 INTERSECTION TREATMENTS**

Left-turn and right-turn storage lanes at most intersections and driveways are recommended to facilitate the safety of vehicular turning movements. Acceleration lanes will not be implemented in Zone 1 since there are four travel lanes. Median landscaping will be designed to provide adequate sight distance at all intersections.

Striping and signing improvements are recommended in the vicinity of the commercial driveways in an attempt to improve ingress and egress to and from the shopping center. Some driveway intersections will have restricted turning movements to provide for greater safety.

Proposed improvements include the following.

### Paul Revere Drive Intersection

- Installation of a “count-down” pedestrian signal (implemented as part of phase 1)
- 100-foot left-turn storage lane, eastbound
- 200-foot left-turn storage lane, westbound
- 100-foot right-turn storage lane, eastbound
- Dedicated right-turn lane, westbound

### Parched Drive Intersection

- 100-foot left-turn storage lane, westbound

### Freedom Drive Intersection

- Installation of a “smart” crosswalk across Mulholland Highway, west side
- 100-foot left-turn storage lane, eastbound
- 100-foot left-turn storage lane, westbound
- Continue second through lane through this intersection

### Gas Station driveway Intersection

- No improvements recommended

### Gelson’s Shopping Center west driveway Intersection

- 75-foot left-turn storage lane, eastbound

### Mulholland Drive Intersection

- 175-foot left-turn storage lane, westbound
- Two 175-foot right-turn storage lanes, eastbound (Mulholland Highway approach)

The intersection of Mulholland Highway and Mulholland Drive is within the City of Los Angeles limits. Improvements and funding arrangements at this location will be coordinated between the City of Calabasas and the City of Los Angeles Department of Transportation (LADOT).

## **2.5 ROADWAY AND UTILITY IMPROVEMENTS**

### ***Special Right-of-Way Considerations***

Most of the proposed improvements will occur within the existing right-of-way, with one exception: a retaining wall adjacent to Parcel 2173-001-011 & 012 at 4245 Balcony Drive at the eastern end of Zone 1. The conditions of approval of the parcel map require the landowner's cooperation to build a retaining wall and revegetate the cut slopes. In addition, cooperation from the residential neighborhood homeowner's associations and the City of Los Angeles will be required to enhance the neighborhood entries and address consistency issues between the two cities. Specifically, an encroachment permit and additional negotiations with the City of Los Angeles will be necessary to secure additional right-of-way needed for the additional westbound right-turn lane.

### ***Slopes and Retaining Wall***

The additional amount of right-of-way needed to create a four-lane section to Mulholland Drive requires a significant amount of grading. Two alternatives are discussed below.

#### Alternative 1: Natural Rock Slope

This alternative would result in a more natural (2:1), gentle slope along the abutting hillside and would permit complementary landscaping to help blend the grading into the surrounding environment. The rock in this area, upon field inspection, appears to make this alternative feasible. However, an analysis by a geotechnical engineer will need to be performed.

#### Alternative 2: Retaining Wall

This alternative requires the construction of a tiered concrete masonry retaining wall, which would be more expensive and visually more obtrusive than Alternative 1. The maximum wall height would be 6 feet with terraces sloped at a 10:1 ratio. If Alternative 1 is not feasible, it is recommended that the wall material and landscaping be selected to reduce the negative visual impact of the retaining wall.

### ***Roadway Widening and Curb Realignment***

The most restrictive area of this project is the segment immediately west of Mulholland Drive where steep embankments and limited right-of-way constrain roadway widening opportunities. Standards were established by City Staff for the minimum desirable widths of all roadway facilities in this section, and they include the following.

- 4-foot sidewalk, north side
- 5-foot planting strip, north side
- 5-foot bike lanes (including gutter) in both directions
- Two 11-foot travel lanes, both directions

The retaining wall design allowed for approximately 17-foot of additional useable right-of-way. These facilities can be accommodated with the proposed retaining wall design.

## 2.6 LANDSCAPING IMPROVEMENTS

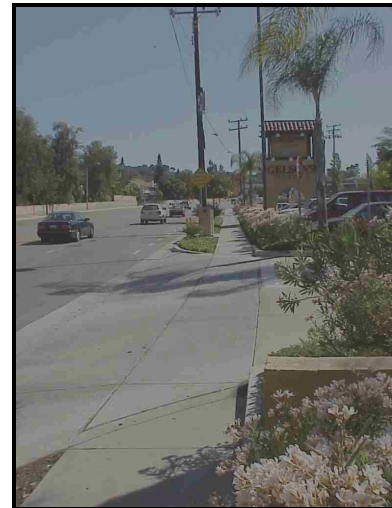
### *View Characteristics*

Landscaping improvements in Zone 1 will be formal in design, dense and layered with native plant species and varieties. The natural conditions along the slope bank at the southeast end of the zone should be enhanced with native planting and revegetated to its natural state following the roadway widening in order to provide an attractive visual softening of the highway. Large trees will grow into substantial canopies, providing shade, shadow, and greenery to this automobile-dominated segment of the highway. Due to the roadway width in the zone, these large tree canopies should not impede long-range views. New landscaping is intended to accentuate and frame mountain views, and new shrub planting should be arranged in an informal mosaic pattern.

### *Landscaping Elements*

The commercial retail center of Zone 1 is one of most active and developed areas of the project. The landscape character in this area will focus on a manicured, classical, and ornamental plant palette to reinforce the strong architectural features of the Gelson's shopping center and integrate the various uses in the area. Strong site lines created by repetitive plantings will emphasize the existing natural landscape. Color will be spread liberally throughout Zone 1. Fine texture and refinement will replace the native plantings along the rest of the corridor.

The median planting will complement and provide a welcome backdrop to the stone City entry monument. Plant species will be consistent with or compliment the plants used in the City of Los Angeles pocket park at the intersection of Mulholland Drive.



*Zone 2 Commercial Retail Center*

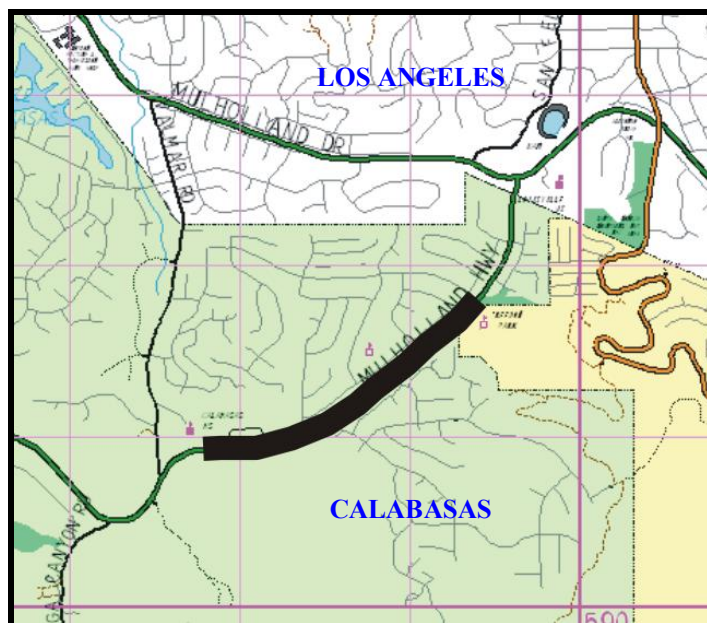
### *Retaining Wall and Hillside Vegetation*

If not properly landscaped, irrigated, and maintained, the engineered cut slopes could result in a scarring of the natural hillside. An essential design parameter will be to use wall materials that are natural in appearance, and indicative of the local environment. Planting should also complement the Santa Monica Mountain Mediterranean climate.

The hillside improvements in Zone 1 will consist of decorative, natural tone block walls, and generous planting. Revegetation of the cut slope on the Rumph parcel will use indigenous plants, which will be integrated into the more formalized landscape at the street level. Retaining wall design shall consider cost, but compatible and attractive material is essential to the Plan's beautification efforts.

### 3.0 ZONE 2 ELEMENTS

The primary purpose of the Mulholland Highway Master Plan is to refine the existing facilities and recommend new improvements to provide safe and comprehensive facilities for all travel modes along the corridor. The following sections describe in detail the existing conditions and the recommended improvements for Zone 2 illustrated below in **Figure 4**. Many components of the Master Plan have two phases for the implementation of identified improvements. Most of Phase 1 has been implemented as of the date of this Plan.



**Figure 4: Zone 2 Limits**

### 3.1 EXISTING ROADWAY AND LAND USE CHARACTERISTICS

This segment of the Mulholland Highway marks the transition from the rural areas of the Santa Monica Mountains to the commercial, school, and residential land use areas in the City of Calabasas. Existing roadway characteristics include the following.

- One 13-foot to 14-foot travel lane, in each direction
- 5-foot bike lanes in each direction
- 5-foot to 12-foot striped and paved shoulder with an inside 6-inch asphalt berm, north side
- 2-foot to 20-foot striped and paved shoulder with an inside 6-inch asphalt berm, south side
- Curb and gutter exist on both sides of the roadway, except for a segment on the south side between the high school and Declaration Avenue.
- 0-foot to 6-foot planting strip and 4-foot to 9-foot concrete sidewalk, north side
- 7.5-foot to 20-foot planting strip and no sidewalk, south side
- 0-foot to 14-foot painted transition median with left-turn storage lanes from the high school to Eddingham Avenue
- 14-foot raised and landscaped median from Eddingham Avenue to Daguerre Avenue

- 14-foot raised concrete median from Daguerre Avenue to the middle school

The City installed a traffic signal at the Calabasas High School west driveway intersection. This intersection forms the western boundary of Zone 2. Mulholland Highway was also restriped in the vicinity of the intersection to create turning storage lanes and an acceleration lane. Parking is allowed on the north side of the roadway between the Calabasas High School east driveway and Declaration Avenue.

West of Declaration Avenue, Mulholland Highway is bordered by the rural Mulwood residential neighborhoods. The roadway alignment straightens after leaving the Calabasas High School area and moderately slopes upwards to the east. The existing paved roadway abruptly widens after Declaration Avenue from approximately 50 to 80 feet.



*Existing Middle Segment of Zone 2*

Large barren walls and fences separate the highway from adjacent properties with minimal landscaping to act as a buffer. The existing landscaped median between Eddingham Avenue and Daguerre Avenue has softened the streetscape to some degree but has also created sight distance problems for drivers exiting intersecting streets.

The east end of Zone 2 has an uphill grade from west to east with walls and fences separating residential properties from the highway. As the roadway crests eastward, the travel path narrows and slightly curves near the new Middle School and continues to Paul Revere Drive. The new middle school began operating in the fall of 2003.

### **3.2 TRAFFIC AND CIRCULATION IMPROVEMENTS**

#### ***Phase 1***

The implementation of Phase 1 of the Mulholland Highway Master Plan consisted of several specific improvements. Some of them were related to the opening of the new A. C. Stelle Middle School near Paul Revere Drive. These improvements had a total cost of approximately \$250,000 and were implemented within Zone 2 of the corridor between Paul Revere Drive and Old Topanga Canyon Road. The improvements included the following.

- Right-turn lanes have been installed at many of the roadway's intersections. Shoulder chevrons were also removed along the corridor.
- The City has installed an asphalt berm on each side of the roadway in order to enforce the operation of the highway with one lane of travel in each direction. The bicycle lane in the direction of travel was maintained with this improvement. The previous configuration of the roadway included striped and cross-hatched pavement, which was often being used as an illegal passing lane by motorists. Enforcement in this area was not effective in curbing this maneuver. The opening of the middle school in the vicinity of the cross-hatched striping provided the City with an opportunity to improve the situation and make the environment safer for pedestrians, bicyclists, and schoolchildren in the area.





*New Asphalt Berm near Daguerre Drive*

- The new signal installed at the intersection of Paul Revere Drive serves as an access point into the new middle school. Innovative pedestrian countdown signals have been installed that allow pedestrians to know how many seconds they have to cross the street. The countdown is activated when the walk signal is called by the push-button.



*Pedestrian Countdown Signal  
at Paul Revere Drive*

- Part of the plan for crosswalks along the corridor has also been implemented. This included the implementation of a new “smart” crosswalk that provides for enhanced safety in an environment with children crossing to the Middle School. The “smart” crosswalk was installed on the west side of the intersection of Mulholland Highway and Eddingham Avenue. The new crosswalk features LED flashers that alert motorists to the existence of a crosswalk at that location. The LED lights are activated by a push-button that can be pressed by pedestrians before crossing.
  - A new speed monitoring device has also been installed in the corridor. This device is similar to the one presented on the following page and shows a motorist’s speed as they pass the device.
- Landscaping improvements are in the process of being installed between the roadway and the sidewalk along the corridor in many places. This landscaping was intended to be implemented in a reasonably short period of time and at minimal cost.



*Sample Speed Monitoring Device*

## ***Future Phases***

### Roadway Configuration

Existing and projected traffic volumes indicate that two travel lanes (one in each direction) can accommodate roadway traffic in Zone 2. **Appendix B** contains detailed traffic count data and analysis worksheets for intersections along the corridor. Curb and gutter are proposed within Zone 2, except for the segment west of Declaration Avenue, only a curb is proposed along the south side. No gutter is required in this segment. A series of left-turn storage lanes and acceleration lanes are recommended along the entire length of the corridor.

In the event that traffic volumes increase and the need for additional capacity becomes apparent, the asphalt berms installed as part of Phase 1 may be eliminated and the street striped for two lanes in each direction. In this event, the bike lanes would fit along most of the stretch between Paul Revere Drive and Declaration Avenue. Options for providing a continuous bikeway facility include the following.

- Transitioning to a Class 3 bike route
- Widening the roadway to accommodate continuous Class 2 bike lanes
- Transitioning to a Class 1 bike path facility adjacent to or as part of the sidewalk

A raised landscaped median and curb and gutter on both sides of the roadway are proposed east of Declaration Avenue. Travel lanes will be widened from 12 feet to 13 feet in order to promote a safer environment for the shared use of the roadway by vehicles and bicycles. Increased enrollment at Calabasas High School has led many students to use Declaration Avenue as a parking and drop-off/pick-up location. A new drop-off/pick-up location will be located on the westbound side of the Highway adjacent to the new Eddingham in-pavement LED flashing crosswalk. This area will interrupt the temporary berm and will be striped as a shoulder.

The A. C. Stelle Middle School frontage is located along the Mulholland Highway in the eastern portion of Zone 2. The primary access to the school is at the Paul Revere Drive intersection. A right-in, right-out driveway will be provided on Mulholland Highway. This access point is restricted to school employees and buses. Student pick-up and drop-off is currently routed to the Paul Revere driveway. An additional drop-off/pick-up area will be allowed east of Paul Revere Drive on the eastbound side of Mulholland Highway.

The recommended improvements for future phases include those listed below.

*From Calabasas High School to Declaration Avenue*

- One 12-foot travel lane, each direction
- Curb and gutter, north side; curb-only, south side
- Left turn storage lanes at all intersections and driveways

*From Declaration Avenue to Paul Revere Drive*

- One 13-foot travel lane, each direction
- Curb and gutter, both sides
- 14-foot raised landscaped median with intersection breaks
- Additional on-street parking for 10 to 15 spaces, north side at Declaration Avenue

### **3.3 BICYCLE AND PEDESTRIAN FACILITIES**

#### ***Phase 1***

Bike lanes, sidewalks, and planting strips are proposed to be continuous throughout Zone 2. There is an existing Class II 5-foot wide bike lane located adjacent to the travel lane on the roadway side of the asphalt berm. The bike lane was striped in Phase 1 of the Plan. The bike lane currently extends along the entire corridor of Mulholland Highway within the Master Plan limits. While a Class I bike path could be constructed along one side of the roadway in this zone, it would be more efficient to maintain a Class II facility. Changing between a Class I and a Class II as you travel along Mulholland would not be the preference of most bicyclists.



*Existing Crosswalks in Zone 2*

A meandering sidewalk was proposed for the south side of Mulholland Highway between Eddingham Avenue and the Middle School. Due to concerns about the proximity of a meandering sidewalk to the street, it was constructed as a linear facility as part of Phase 1. This type of sidewalk seeks to provide a maximum distance from the curb for enhanced safety, especially for schoolchildren walking to and from the middle school.

#### ***Future Phases***

The existing 4-foot concrete sidewalk on the north side is proposed for extension from the High School to Old Topanga Canyon Road in Zone 3. No sidewalk is recommended on the south side of the highway between the High School and Eddingham Avenue.

It is recommended that the sidewalk in the school frontage match the alignment and materials used for the recreational path proposed in this Master Plan.

Proposed future phase improvements include the following.

### *From Calabasas High School to Declaration Avenue*

- Widen the Class II bike lanes on both sides of the roadway to 5 feet, where needed.
- A 4- to 5-foot concrete sidewalk on the north side to connect with the Old Topanga Canyon intersection in Zone 3.
- Continuation of the south side sidewalk from Eddingham to Calabasas High School.

### *From Declaration Avenue to Paul Revere Drive*

- Maintain 5-foot bike lanes, both sides
- 12-foot to 14-foot planting strip, north side
- 19-foot to 25-foot planting strip, south side
- Retain the existing 4-foot concrete sidewalk on the north side

## **3.4 INTERSECTION TREATMENTS**

### ***Phase 1***

No intersection improvements have been identified as part of Phase 1.

### ***Future Phases***

Left-turn storage lanes, right-turn storage lanes, and acceleration lanes at all intersections are recommended at lay intersections to facilitate drivers' turning movements. Median landscaping will be designed to provide adequate sight distance for all approaches to corridor intersections.

## **3.5 ROADWAY AND UTILITY IMPROVEMENTS**

### ***Slopes and Retaining Wall***

The new HDC rear parking lot plans require a significant amount of grading to remove the existing berms on the south side of Mulholland Highway near Old Topanga Canyon Road. The proposed grading of Alternative 1 in this report is less extensive. No additional retaining walls are required for the proposed modifications to the Mulholland Highway in Zone 2.

### ***Roadway Widening and Curb Realignment***

Alternative 1 of the Old Topanga Road intersection (see Section 4.0) will produce a terrain that slopes gently downwards to the north and will increase the useable right-of-way for any future intersection improvements that may include double left-turn lanes for southbound traffic or a roundabout. The proposed grading will connect the curb and gutter on the north side of Mulholland Highway with the existing curb and gutter per original county plans in front of the shopping center.

Gutter is not recommended on the south side of the roadway west of Declaration Avenue due to useable right-of-way constraints. East of Declaration Avenue, curb and gutter will be constructed on both sides of the roadway to help physically delineate the travel lanes from the planting strip and pedestrian facilities.

Right-turn storage lanes will also be provided at all intersections. These may reduce the planting strip width by up to 12 feet.

### 3.6 LANDSCAPING IMPROVEMENTS

#### *View Characteristics*

In public workshops, the community expressed a common desire to preserve views of the pristine hillsides of the Santa Monica Mountains. The recommended roadway and landscaping improvements are intended to help accentuate and frame the views to the mountains, and new native plantings arranged in an informal pattern would reinforce the area's natural conditions. Maintaining the scenic quality of the undeveloped portions of the roadway is also a key objective.



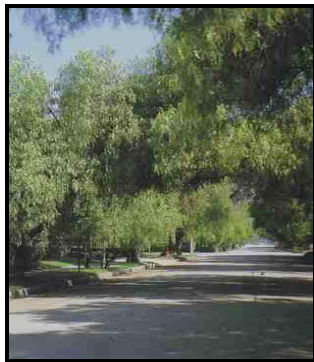
*View of the hillsides of the Santa Monica Mountains in Zone 2*

Landscaping improvements in Zone 2 will be dense and layered with native plant species and varieties. A new sidewalk is proposed for the north side of the highway. Large trees will grow into substantial canopies, which in some cases may impede long-range views. However, for the most part and whenever possible, new native landscaping is intended to accentuate and frame mountain views, and new plantings shall be arranged in an informal mosaic pattern.

#### *Hillside Planning Standards*

A number of existing single-family homes on the north side of Mulholland Highway have double frontage lots along both the Highway and their neighborhood internal access streets. These lots back onto the Highway public right-of-way and are downward sloping parcels, which are quite visible to Highway travelers. Many of these lots have been individually fenced, and property owners have developed sundry accessory uses in the backyards, including decks, storage areas, and various outdoor activities. To fulfill the intent of the Mulholland Highway Master Plan beautification effort, the City should consider implementing the alternative programs below.

- The City should consider adding language to the Draft Land Use and Development Code (Chapter 17.20 – General Property Development and Use Standards) to reinforce the natural character of the roadway, which includes the following provision.
  - New or replacement structures or accessory facilities should be discouraged in downward-sloping lots if visible from the public street right-of-way unless permitted by the Director or approved by the Planning Commission.



*Pepper Tree*

In addition to this development standard, the following guidelines should be applied to those properties backing onto the Mulholland Highway.

- New development, renovations, or replacements structures (accessory or primary), storage facilities, or landscape/site design elements should be set back 30 feet from the public right-of-way.

- Fences, walls, and hedges are encouraged to be constructed at the top of bank verses the toe of slope where a grade differential exists. In cases where fences or walls encroach within the 30-foot setback, they should be a maximum of 42 inches in height from the natural grade, and be constructed of wood, stone, or natural-appearing stone materials.
- A common fencing detail should be used wherever possible that is consistent with the selected materials in the Mulholland Highway Master Plan.
- Landscaping within the 30-foot setback shall be consistent with the plant palettes presented in **Appendix C**.

The City should attempt to obtain a scenic or conversation easement over properties where backyards are visible from the Highway, under the following scenario.

- In exchange for a scenic or conservation easement over down-sloping portions of individual or collective parcels, the City should pay for the removal of existing incompatible site elements, walls or fences, and construction of a common fencing detail at the top of the slope bank or back of property line, whichever is more appropriate. In addition, slope revegetation in the form of a landscape screen should be implemented so that at maturity, planting forms a consistent greenery mass visible from the Highway. Property owners would be required to dedicate the easement, and the City would establish a landscape and lighting district or similar funding mechanism to pay for demolition/construction and long-term maintenance of the easement area.

### ***Hillside Vegetation***

The engineered cut slopes could result in a scarring of the natural hillside setting if not properly landscaped, irrigated, and maintained. Thus, an essential design parameter should be employed to use wall materials that are natural in appearance and indicative of the local environment. Planting should also compliment the Santa Monica Mountains mediterranean climate.

Plantings adjacent to the street and sidewalk should exhibit formal manicured characteristics while the terraced areas will naturalize with the native California Flora. Trees should be planted throughout the terraces to help reduce the visual impact of the engineered slope improvements. The walls could be softened with aggressive vines and cascading shrubs. In a relatively short time period the hillside should become a billowy mass of green vegetation cover, diminishing the short-term impacts of the engineered cut slopes.

### ***Landscaping Elements***

The proposed landscape within Zone 2 is intended to serve as a transition from the native Santa Monica Mountain environment to the more developed environment in the suburban residential and commercial areas to the east. New landscaping will be planted on the slope, across from the High School, and into the streetscape planting. Varieties of indigenous plants will enhance the roadway improvements. With the steep slope and potential for erosion, pedestrian facilities are limited to the north side of the Highway. The Calabasas High School area will be accentuated with color plantings, repetitive plant material placement, and screening of the parking lot.



*Quercus Tree*

plant palette for Zone 2 shown in Appendix C will be used to screen unsightly fences and block walls running along either side of Mulholland Highway. A mosaic of layered ground covers will reduce the visual impact of the rear-yard slopes. The neighborhood entrances will be eye-catching to both the pedestrian and motorist. The intersections should be enhanced with boulders, cobblestones, fencing, signage, and accent color planting.

The eventual mature tree stands will provide spectacular canopies and view corridors to the Santa Monica Mountains. Landscaping in Zone 2 will mark a transition of improvements into a more suburban or manicured landscape as specified in the plant palettes. As the traveler progresses to the east towards Mulholland Drive, the plant material will become more formalized with the informal tree massing changing into plantings of regular spacing and the pathways meandering from sinuous to the back of the curb.

The area in front of the HDC commercial building at the intersection of Old Topanga Canyon Road and Mulholland Highway should be planted with low shrubs that do not restrict the line-of-sight views. The planting of more colorful flowering plants would increase the amount of greenery. A gateway or significant landscape feature and/or placement of appropriate art should also be constructed at this location.

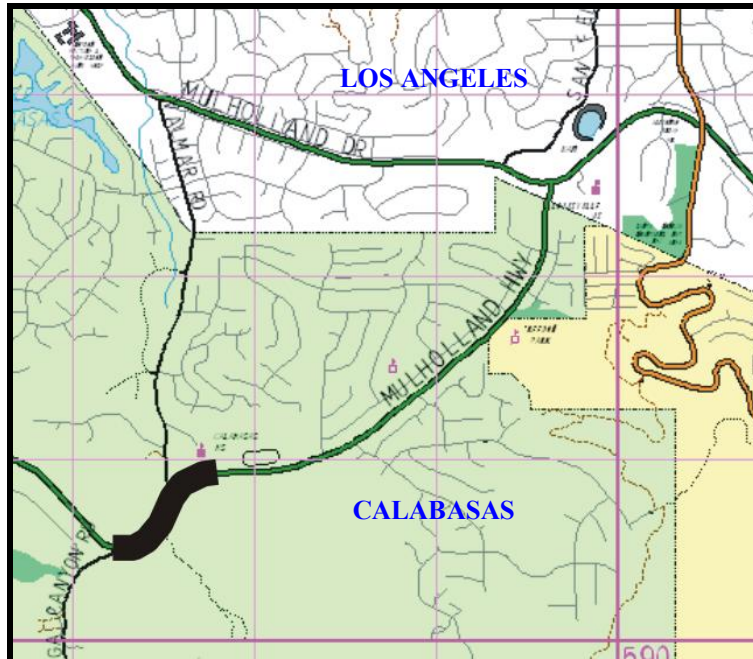
East of Declaration Avenue, the planting theme will be a rich blend of green and gray. Boulders and split-rail fences along the pedestrian sidewalk will reinforce the historical ranch character. The

## 4.0 ZONE 3 ELEMENTS

### 4.1 EXISTING ROADWAY AND LAND USE CHARACTERISTICS

Zone 3 includes the segment between Calabasas High School and the southern Mulholland Highway/Old Topanga Canyon Road intersection. This Master Plan includes analysis to the northern Mulholland Highway/Old Topanga Canyon Road intersection only. The segment between the two intersections has been referred to as the “transition zone” by the City Council and the community. This segment will be studied in the near future by the City, as part of a separate document. **Figure 5** illustrates the Zone 3 limits. The traffic and circulation improvements, bicycle and pedestrian facilities, roadway and utility improvements and landscaping improvements text for this zone can be found in the Zone 2 Elements section.

The Mulholland Highway/Old Topanga Canyon Road intersection is currently stop-controlled at all approaches. The original county-planned curb and gutter on the north side has been constructed and is considerably offset both vertically and horizontally from the existing roadway alignment. Improvements to this intersection may require significant grading in order to create additional useable right-of-way for bicycle and pedestrian facilities and more efficient traffic operation of the intersection. Signalization of the intersection or a roundabout have also been investigated, however it is possible that alignment and grading improvements may eliminate existing warrants for a signal at this intersection.



**Figure 5: Zone 3 Limits**

Descriptions of improvements at key intersections in Zone 2 are provided on the following pages.



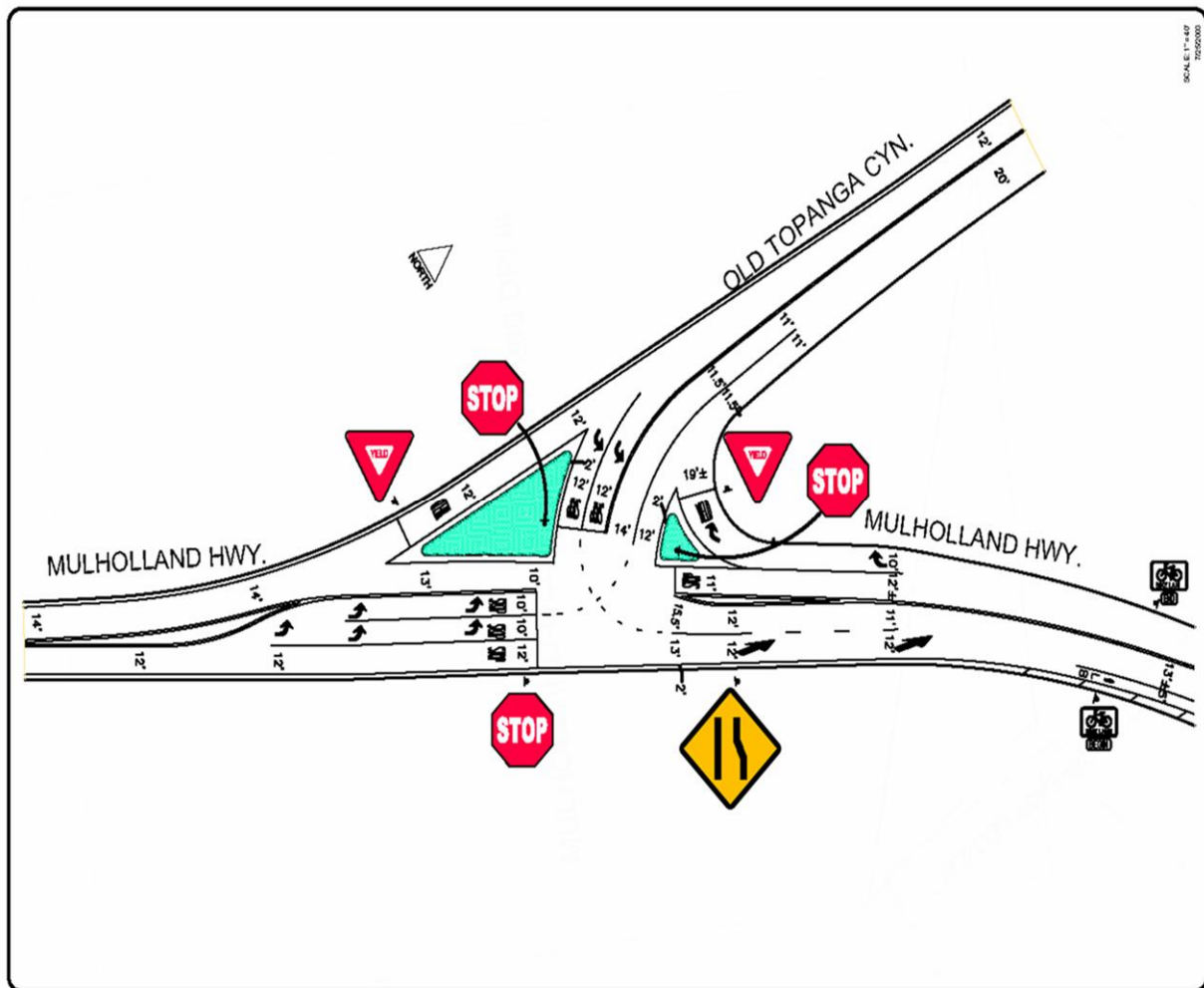
## 4.2 INTERSECTION TREATMENTS

### Old Topanga Canyon Road Intersection

Four improvement alternatives have been investigated at the intersection of Mulholland Highway and Old Topanga Canyon Road. These options include the following.

#### Alternative 1: Stop Sign Control

The westbound right-turn storage lane would be realigned and separated from the existing curb and gutter. The storage lane would be lengthened to 240 feet. This alternative creates a separated and channelized westbound right-turn lane that would be yield-controlled rather than stop-controlled, reduces the number of conflicting turn movements, and improves intersection level of service. This alternative would create a large island with a landscaping opportunity to serve as a western point gateway that could be more easily integrated with the proposed HDC parking lot plans. Alternative 1 is recommended to accommodate current (2004) traffic levels at this intersection, and is illustrated in **Figure 6**.

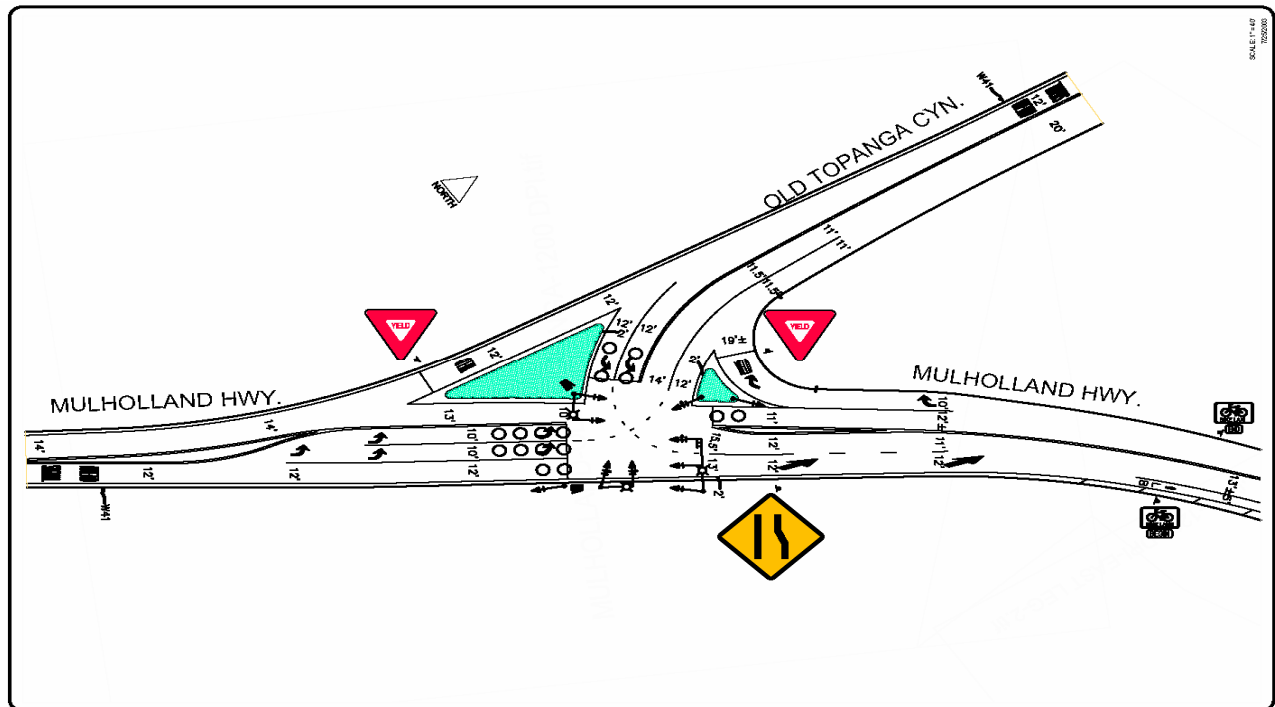


Source: Crain & Associates, 2003.

**Figure 6: Intersection Alternative 1- Stop Sign Control**

## Alternative 2: Traffic Signal Control

A second option for improving this intersection is signalization. Although some residents in the community have expressed their opposition to a traffic signal, the City may be required to install one in the future if warranted (required) by traffic volumes, pedestrian volumes or accidents. The configuration of the intersection would be similar to that of Alternative 1. **Figure 7** illustrates Alternative 2.

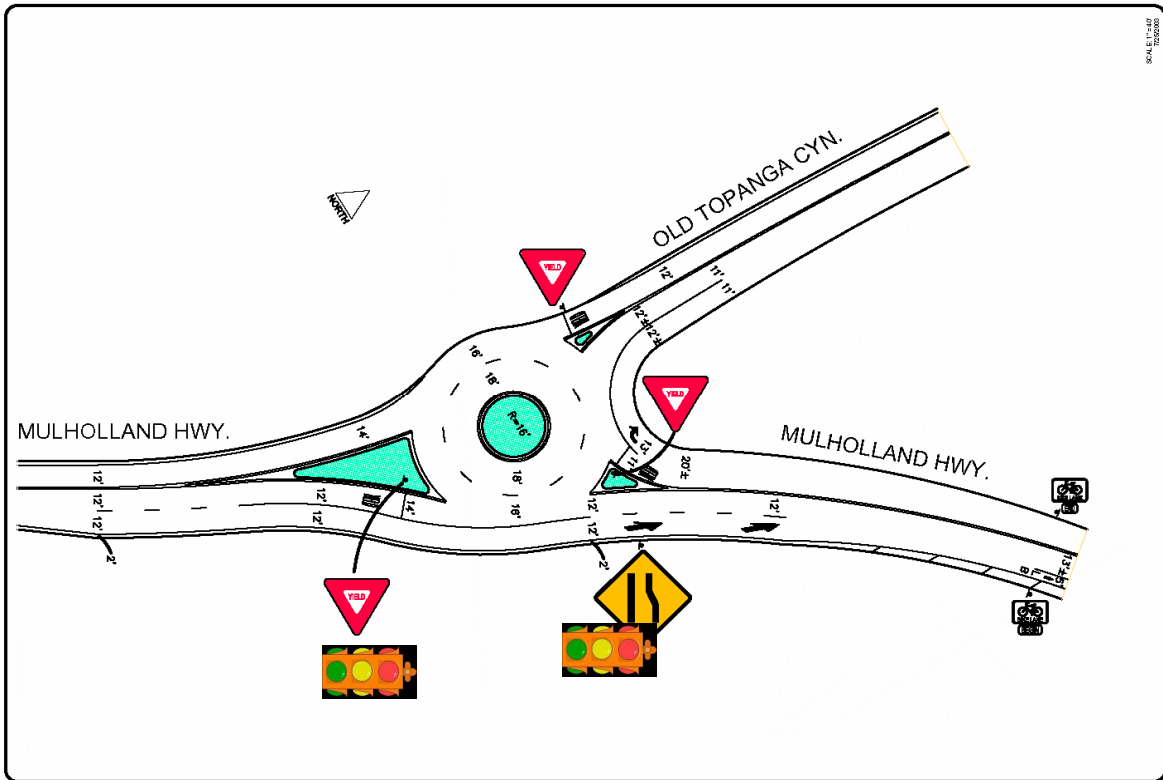


Source: Crain & Associates, Kimley-Horn & Associates, 2004.

**Figure 7: Traffic Signal Control**

## Alternative 3: Roundabout

In order to address the community's interest in future improvements to this intersection that do not include traffic signal installation, a third alternative was developed. A roundabout would be installed in the middle of the intersection and each approach to the roundabout would be yield-controlled. Modest widening of the intersection would be required on the north and south sides of the intersection. **Figure 8** illustrates Alternative 3.



Source: Crain & Associates, 2003.

**Figure 8: Intersection Alternative 3 - Roundabout**

#### Alternative 4: Traffic Officer

A result of City Council and community input has been the development of Alternative 4 – assignment of a traffic officer to the intersection during peak hours. Presence of an officer could help facilitate vehicle movement and adherence to traffic laws. Under this alternative, no lane modifications, signing or striping would be implemented. Alternative 4 would maintain existing conditions but add an officer during peak times. There is no figure for Alternative 4.

#### New HDC retail parking lot driveway Intersection

- 55-foot right-turn storage lane, westbound
- Restricted turning movements—right-in, right-out only

#### Calabasas High School west driveway Intersection

- 200- to 300-foot left-turn storage lane, eastbound
- 180-foot left-turn acceleration lane, eastbound

#### Calabasas High School east driveway Intersection

- 55-foot right-turn storage lane, westbound
- Restricted turning movements—no left-turn allowed into and out of the driveway

### Declaration Avenue Intersection

- 75-foot left-turn storage lane, eastbound
- 80-foot left-turn acceleration lane, eastbound
- 55-foot right-turn storage lane, westbound

The removal of the crosswalk at Declaration Avenue is recommended because of the proposed sidewalk extension that would end at the north-side sidewalk at Eddingham Avenue. The vision for the sidewalk is consistent with the Master Plan's goal of consolidating and reducing the number of existing crosswalks. Furthermore, recent turning movement counts indicate fewer conflicting left-turning vehicles at the Eddingham Avenue intersection.

### Eddingham Avenue Intersection

- 75-foot left-turn storage lane, eastbound
- 80-foot left-turn acceleration lane, westbound
- 55-foot right-turn storage lane, westbound

### Daguerre Avenue Intersection

- 75-foot left-turn storage lane, westbound
- 80-foot acceleration lane, westbound
- 55-foot right-turn storage lane, eastbound

## **5.0 RIGHT-OF-WAY AND UTILITY ISSUES**

### **5.1 RIGHT-OF-WAY**

The corridor improvements recommended in this document can be completed without acquiring additional right-of-way. Therefore, it is not likely that funding for acquisition of right-of-way would be required. However, there are a few areas that may benefit from right-of-way modifications by mutual agreement with the landowners, as described below.

Calabasas High School has a public sidewalk designated within its own property boundary. Any modifications, extensions, or repairs need to be performed with review and agreement in advance by the School District.

In each of the neighborhood entrances at Eddingham Drive, Daguerre Avenue, Paul Revere Drive, Parched Drive, and Freedom Drive, permission from either the corner property owners and/or the representative homeowner's association may be needed to construct the proposed landscaped entry statements. While individual title searches were beyond the scope of this Master Plan, it is anticipated that minor construction easements may be negotiated with individual property owners or homeowner's associations without purchasing formal easements.

With respect to slope revegetation, an attempt could be made to obtain slope easements from undeveloped parcels. Specifically, Parcel 2173-001-011 & 012 located at the east end of the planning area has been required to dedicate a 30-foot slope easement as a condition of the site's development. During the City's review of any proposed development along the Mulholland corridor, such easements may be negotiated. If any of the privately owned undeveloped parcels where slope easements are desired come under consideration in the near future, easements necessary to implement the retaining wall designs discussed in this Plan should be negotiated.

If the City decides to construct a Class I bike path in portions of, or the entire corridor, additional right-of-way would be required in some locations. A Class I facility is not recommended.

### **5.2 OVERHEAD UTILITIES**

Burying the overhead utility lines is recommended. The City of Calabasas currently has approximately \$500,000 in available allocations from Rule 20A funds with an additional \$250,000 in borrowable allocation funds to put the utilities underground. The probable cost to bury the remaining utilities is approximately \$1,300,000. Additional funds from other sources would need to be secured to fully finance this project.

### **5.3 DRAINAGE**

The improvements described in this document will reduce the quantity of stormwater run-off and not impact the existing drainage patterns. The amount of existing paved areas to be removed exceeds the amount of planned paved areas in the Master Plan. Specific drainage devices will be required in certain locations, particularly near the steep slope west of Daguerre Avenue. Currently a v-ditch delivers runoff onto the roadway near this steeply sloping area, and a considerable amount of seepage and sheetflow runoff from the hillside is generated. This may present an erosion problem in the future in other sections of the Highway that have a slope above three percent. Crossbars and other devices such as deflector boards may be needed in the landscaped areas at least until a solid groundcover is established and new

vegetation takes hold. These engineering improvements are minor in nature and can be addressed in final design development.

## **5.4 LIGHTING**

Because the Highway corridor extends from an urban setting on the east side to a rural setting on the west side, existing lighting levels vary substantially. Existing lighting at the east end of the project is provided by 30-foot-high marbelite pole standards with a cobra head style luminary. These light levels exceed those established by Los Angeles County standards. Due to potential liability exposure, the City should consider maintaining light levels to at least Los Angeles County standards. The desire to lower light levels and reduce spillover into adjacent neighborhoods was raised as a serious concern by many of the homeowners in the area. Since lighting can have positive and negative aesthetic impacts, the issue of light glare and aesthetics must be balanced with a concern for public safety. The City may desire to consider adopting its own standard for required lighting levels if the County standards are not sufficient. This may require the City to de-annex the County Lighting District.

Lighting along the easternmost stretch of the project was installed at the time of the residential tract development. It was likely designed with a higher level of lighting than required by County standards because of the proximity to a commercial area across the street.

If an equivalent level of lighting is desired in the future, the desired light fixture on 20-foot poles spaced at 55-foot intervals with 150-watt high pressure sodium bulbs would be required to meet the light level. If reduced lighting levels are desired, a lower pole standard could be used. At the time of design development a detailed lighting analysis, including photometric plans, should be done so that any issues regarding future light levels can be addressed. The City may want to consider replacing the existing 30-foot-high marbelite standards with a 17-foot-high pole and light fixture consistent with the globe being used in Old Town Calabasas and the one designated for the Las Virgenes Road Corridor Design Plan. This would have the effect of unifying commercial areas throughout the City in a single design.

For the remaining areas of the corridor, replacement lighting is considered expensive and not necessary unless the City decides that existing light levels are not satisfactory. Lighting at each neighborhood intersection with a decorative theme light standard 17-foot-high pole is recommended. Precise pole locations, height, and bulb wattage would be resolved during final design development.

The City may also desire consideration of increased light levels along the Calabasas High School frontage, provided some kind of cost-sharing agreement can be negotiated. Coordination would be required with school authorities and local law enforcement officials

## **5.5 WATER**

Water service for landscaping irrigation in the project area is supplied by the Las Virgenes Municipal Water District. Either potable water or reclaimed water can be used as a water supply. A steel potable water main runs the length of Mulholland Highway to Paul Revere Drive, and an 8" reclaimed water supply line was installed from Old Topanga Canyon Road to the Calabasas High School entrance in 1992. Line pressure is reported to be at least 200 pounds per square inch (psi) at the High School location, and this pressure is sufficient to serve the entire length of the corridor with proper pipe sizing. If potable water is to be used, a supply from an 8" transit line is available at Freedom Drive or from the 12" steel line located in the eastern portion of the corridor.

## **6.0 IMPROVEMENT SUMMARY**

### ***Traffic and Circulation Improvements***

The recommended traffic and circulation improvements include the following.

- Narrow roadway between Old Topanga Canyon Road and Paul Revere Drive to two lanes and widen roadway between Paul Revere Drive and Mulholland Drive to four lanes.
- Construct a continuous linear sidewalk on the south side of the highway from Eddingham Avenue to Parched Drive.
- Provide continuous Class II bike lanes on both sides of the highway.
- Build medians with left turn storage lanes throughout and left-turning acceleration lanes at all intersections within the two-lane section of the highway.
- Restrict turning movements at high activity driveways to improve safety and traffic flow.
- Improve school drop-off/pick-up facilities by locating them off of Mulholland Highway.
- Create planting strips between travel lanes and pedestrian paths on both sides of the highway to create a safety buffer between vehicular and pedestrian traffic.

### ***Roadway and Utility Improvements***

The recommended roadway and utility improvements include:

- Realign the westbound right-turn lane on Mulholland Highway at the intersection of Old Topanga Canyon Road. Shifting the right-turn lane to the north provides storage for an additional nine vehicles. It also lengthens their separation from the intersection, allowing those vehicles to yield rather than stop at Old Topanga Canyon Road.
- Construct retaining walls on the south side of Mulholland Highway near Mulholland Drive to provide for additional useable right-of-way that will accommodate a four-lane roadway section. The retaining walls should be designed to minimize their mass and size, and should be constructed of materials that blend with the natural environment to minimize visual impacts.
- Offset the curb and gutter from the right-of-way centerline on both sides of the roadway west of A.C. Stelle Middle School in order to provide room for landscaped parkway buffers between sidewalks and travel lanes.
- Underground overhead power lines.
- Establish a landscape maintenance district for the Mulholland Highway corridor.

### ***Landscaping Improvements***

The recommended landscaping improvements include the following.

- Landscape the existing corridor consistent with the community's image for a rural landscaped parkway framed by the Santa Monica Mountains. Transitions between the more commercialized "anchor districts" at both ends of the project need to be carefully integrated with the residential areas in the center median of the highway.
- Provide required sight distance at all intersections with appropriate landscaping of the medians and planting strips.
- Use landscape materials that are indigenous, non-invasive, and representative of the area whenever possible.

- Promote the use of wood rail fencing to exemplify rural look and feel.
- Beautify neighborhood entries to subtly draw attention to key intersections and reinforce the citywide unifying image through consistent decorative lighting, landscaping, and signage.
- Establish landscaping along single-family residential areas where steep slopes intersect with the Highway. Revegetate steep slopes and removing or screening incompatible fencing types.
- Establish uniformed wall treatment of material, color, and texture.
- Plant vines below existing fences and retaining walls to provide cover as they grow in order to reduce their visual impact.



*View of the Corridor Looking East from Eddingham Avenue*

The following four pages include the striping and landscaping plans for the Mulholland Highway corridor.

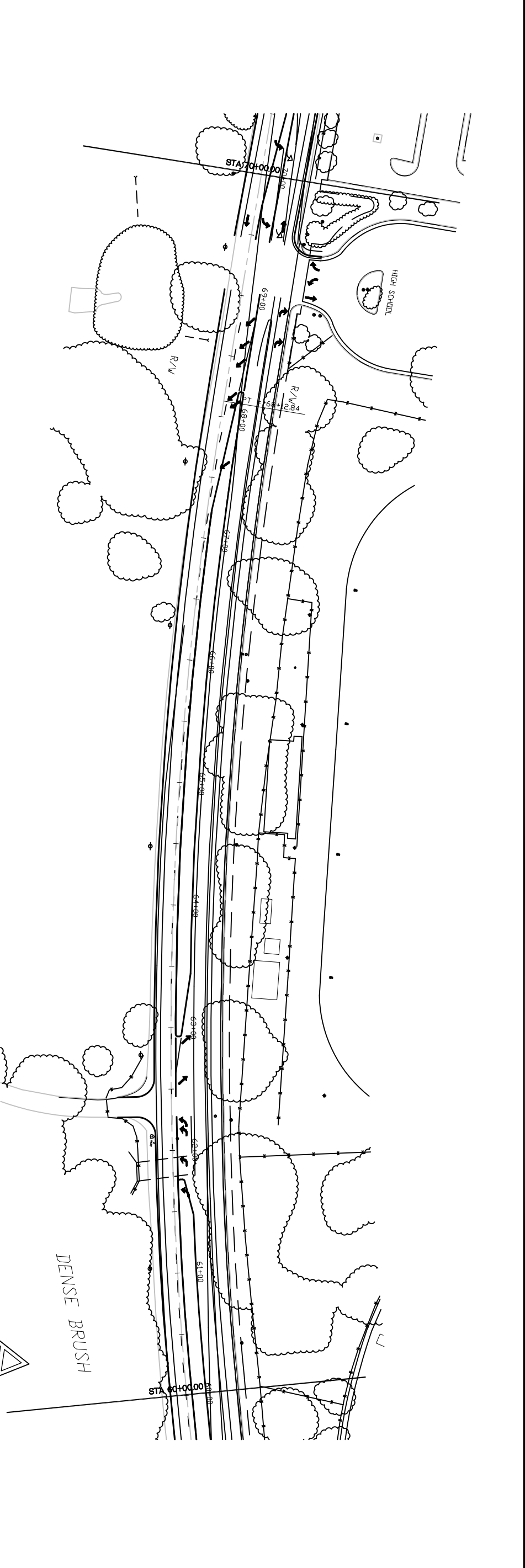


XREF: N/A  
 This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and caption by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

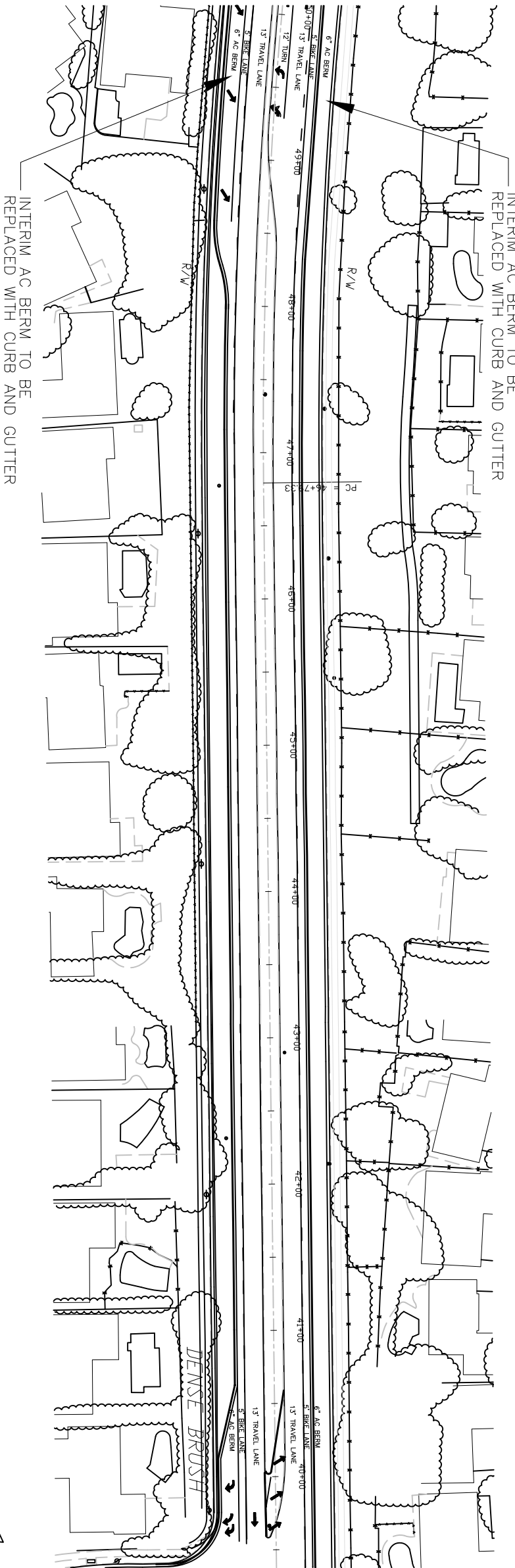


MULHOLLAND HWY  
 STA: 70+00.00 TO 80+00.00

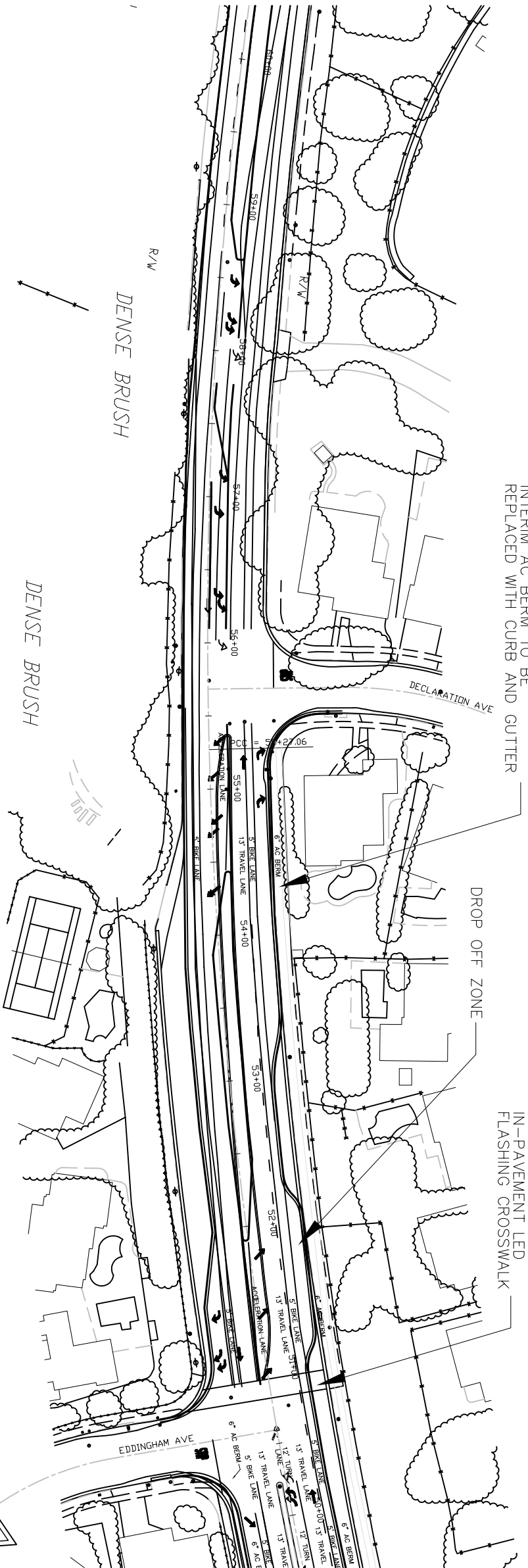
MULHOLLAND HWY  
 STA: 60+00.00 TO 70+00.00



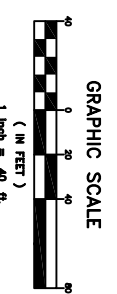
NO.	REVISION	BY	DATE	APPR.



MULHOLLAND HWY  
 STA: 40+00.00 TO 50+00.00



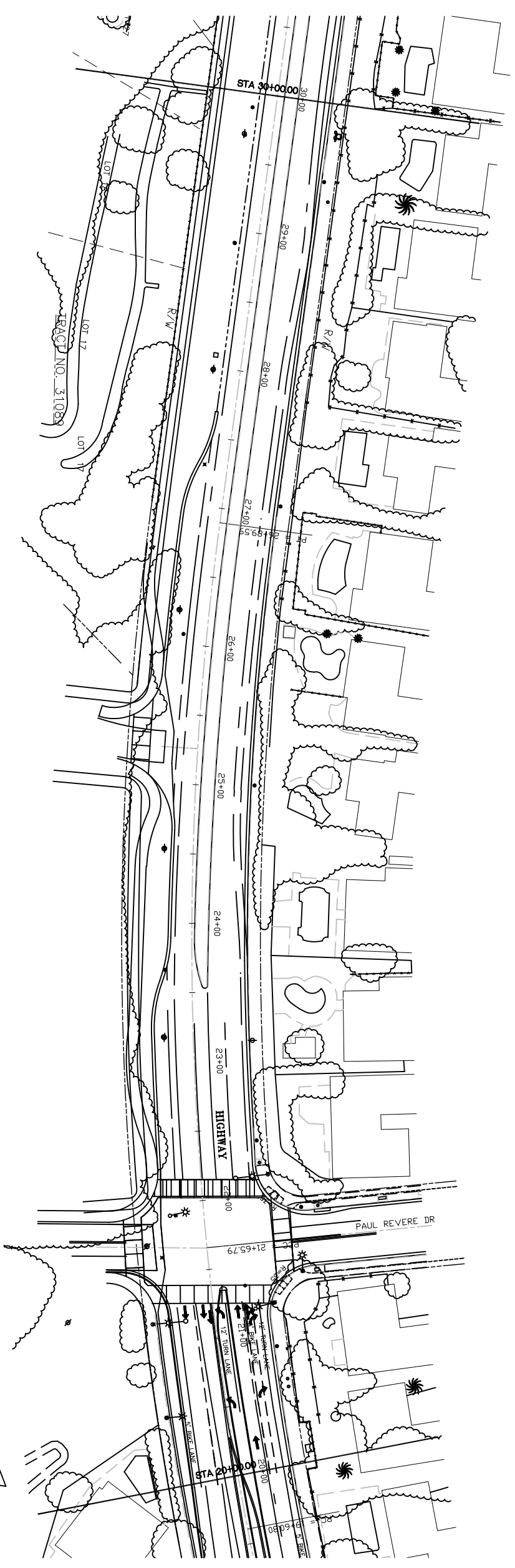
MULHOLLAND HWY  
 STA: 50+00.00 TO 60+00.00



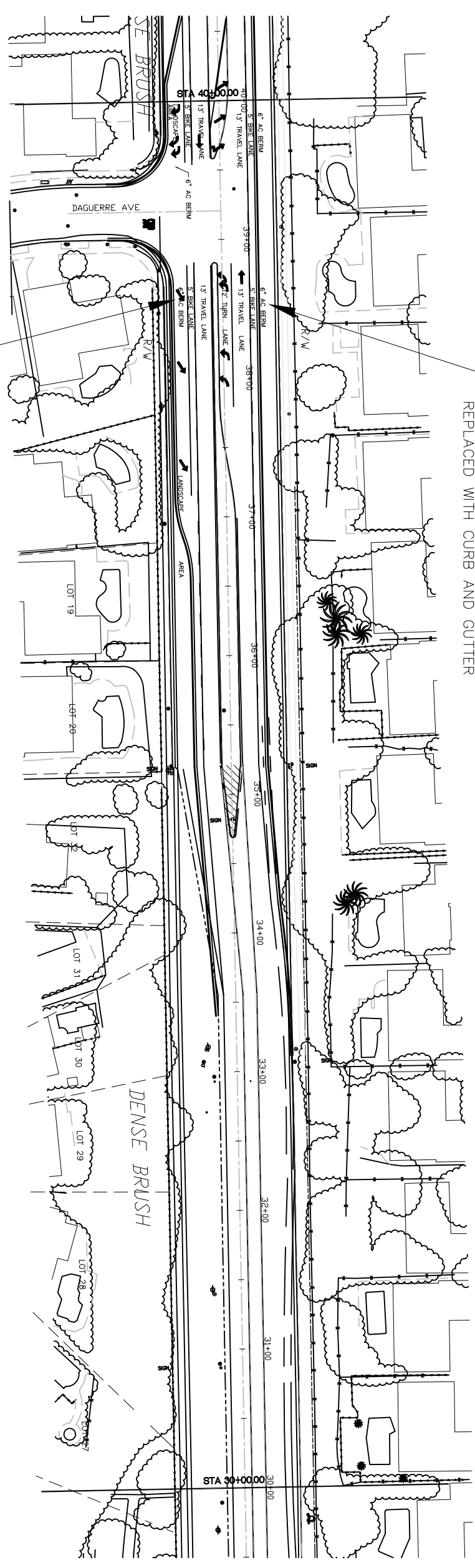
PROJECT NO. 9423003 DRAWING NAME 03 OF 08	<b>MULHOLLAND HWY                  MASTER PLAN                  UPDATE                  CITY OF CALABASAS</b>		SCALE (H): SCALE (V): N/A	© 2001 KIMLEY-HORN AND ASSOCIATES, INC. Engineering, Planning, and Environmental Consultants 18425 Burbank Boulevard, Suite 509 Tarzana, California 91356 (818) 609-8942	NO.	REVISION	BY	DATE	APPR.
	DESIGNED BY: P.D.O. DRAWN BY: P.D.O. CHECKED BY: J.E.K. DATE: 11-25-2002								

XREF: N/A  
 This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of any portion of this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

K:\1710\94233003 - Mulholland Hwy\4-Drawings\dwg\veh\hls\3003sem04.dwg 5-14-04-2:44 PM



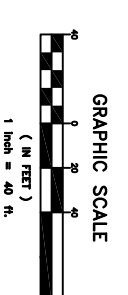
MULHOLLAND HWY  
 STA: 20+00.00 TO 30+00.00



INTERIM AC BERM TO BE  
 REPLACED WITH CURB AND GUTTER

INTERIM AC BERM TO BE  
 REPLACED WITH CURB AND GUTTER

MULHOLLAND HWY  
 STA: 30+00.00 TO 40+00.00



PROJECT NO.  
 9423003  
 DRAWING NAME  
 04 OF 08

MULHOLLAND HWY  
**MASTER PLAN  
 UPDATE**  
 CITY OF CALABASAS

SCALE (H):  
 SCALE (V): N/A  
 DESIGNED BY: P.D.O  
 DRAWN BY: P.D.O  
 CHECKED BY: J.E.K.  
 DATE: 11-25-2002

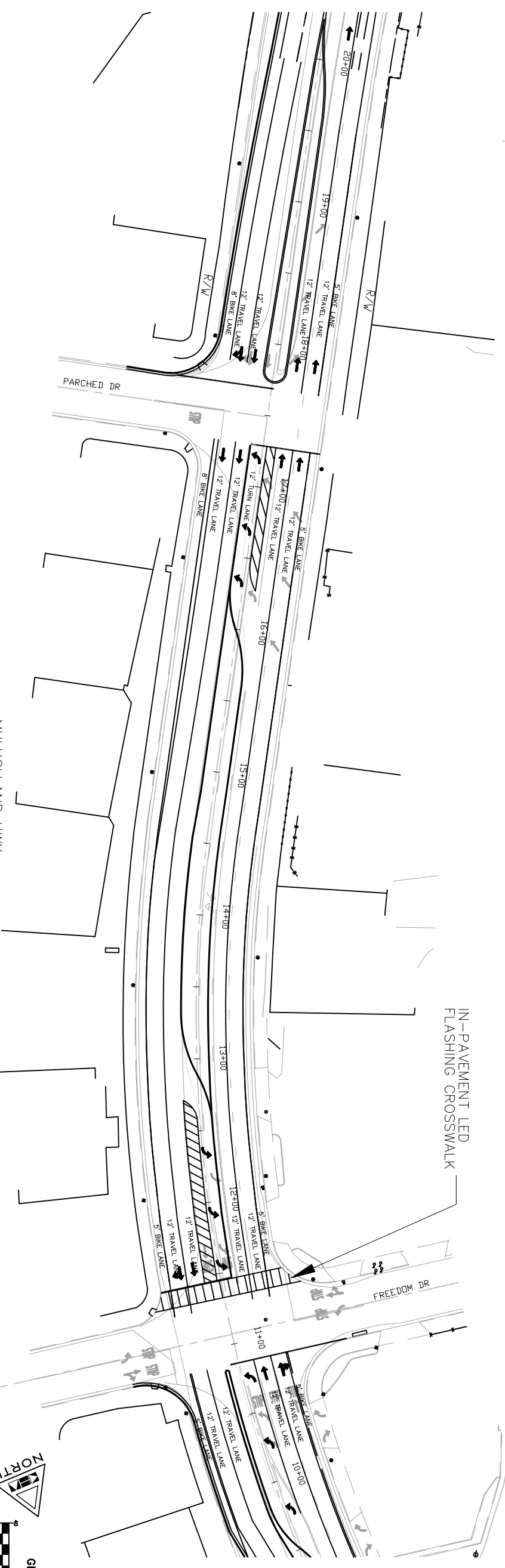
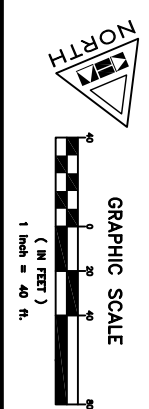
**Kimley-Horn  
 and Associates, Inc.**  
 © 2001 KIMLEY-HORN AND ASSOCIATES, INC.  
 Engineering, Planning, and Environmental Consultants 18425 Burbank Boulevard, Suite 509  
 Tarzana, California 91356 (818) 609-8942

NO.	REVISION	BY	DATE	APPR.

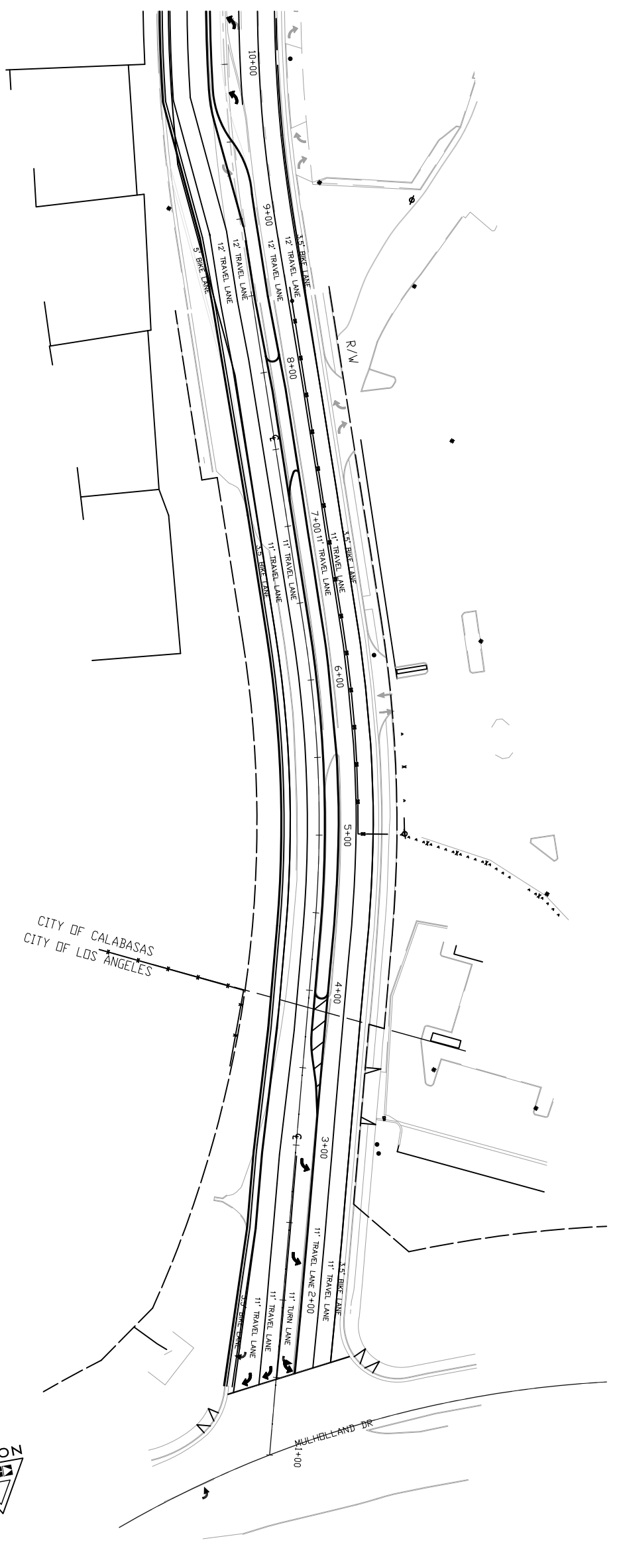
XREF: N/A  
 This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of any part of this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

K:\17101\9423003 - Mulholland Hwy\4-Drawings\dwg\vehbits\3003veh05.dwg 5-14-04-2:45 PM

MULHOLLAND HWY  
 STA: 10+00.00 TO 20+00.00



MULHOLLAND HWY  
 STA: 1+00.00 TO 10+00.00



MULHOLLAND HWY  
**MASTER PLAN UPDATE**  
 CITY OF CALABASAS

PROJECT NO. 9423003  
 DRAWING NAME

05 OF 08

SCALE (H):  
 SCALE (V): N/A

DESIGNED BY: P.D.O.  
 DRAWN BY: P.D.O.  
 CHECKED BY: J.E.K.

DATE: 11-25-2002

**Kimley-Horn and Associates, Inc.**  
 © 2001 KIMLEY-HORN AND ASSOCIATES, INC.  
 Engineering, Planning, and Environmental Consultants 18425 Burbank Boulevard, Suite 509 Tarzana, California 91356 (818) 609-8942

NO.	REVISION	BY	DATE	APPR.

## 6.1 FUNDING PLAN

### *Funding Sources and Local Agency Coordination*

One of the most frequently raised issues regarding the implementation of the Master Plan for Capital Improvements elements is how the City of Calabasas intends to finance the improvements. Funding and implementation involves securing the necessary capital resources to pay for improvements and coordinate with the various agencies and residents involved in the various improvements.

The Mulholland Highway Master Plan for Capital Improvements contains comprehensive recommendations for physical improvements, and a variety of funding sources are available to implement the proposals and recommendations. **Appendix D** includes descriptions of potential funding sources that are available from local, state, and federal level that may be pursued by the City and/or adjoining agencies to implement the planned improvements.

A number of agencies have jurisdiction within or near the corridor limits and will need to be involved during implementation of the improvements. Affected agencies and their representative roles include the following.

- Los Angeles County will guide improvements related to the Middle School located along the south side of Mulholland Highway in Zone 2.
- The City of Los Angeles boundary crosses the Mulholland Highway near the Gelson's Shopping Center. The City of Calabasas is responsible for implementation of all striping, landscaping, and pole relocation improvements at the intersection of Mulholland Drive. However, ongoing coordination with Los Angeles will be required.
- The Las Virgenes Unified School District controls a large segment of the Master Plan area comprising Calabasas High School and the A. C. Stelle Middle School, both located in Zone 2. Construction of sidewalk and landscaping improvements along this frontage requires their cooperation.

The implementation process may also require negotiations with private landowners in specific locations where improvements will require easements and/or cooperation to construct improvements.

## 6.2 IMPLEMENTATION PLAN

The implementation program is divided into three zones corresponding to the planned improvements. The project is primarily comprised of roadway and landscaping improvements, and overall implementation is estimated to be approximately \$5.7-million. While this figure does not appear prohibitive to the City's ability to implement the improvements, the City is currently burdened with multiple capital improvement projects that require significant funding and resources. Hence, the implementation timeline not immediate and may need to be phased based upon funding availability, potential development, agency cooperation, and landowner negotiations. There may be an opportunity to form a local benefit assessment district as part of the implementation of the Master Plan.

### 6.3 OPINIONS OF PROBABLE COSTS

Opinions of probable cost were developed for the Master Plan recommendations. **Table 1** provides a summary of the cost opinions by zone and type of improvement. More detailed cost calculations are provided in **Appendix E**.

**Table 1 –Opinions of Probable Cost**

Improvement	Zone			Total
	1	2	3	
Landscaping	\$500,000	\$1,200,000	\$ 300,000	\$2,000,000
Traffic/Roadway	\$1,630,000	\$ 95,000	\$ 500,000	\$2,425,000
Subtotal	\$2,130,000	\$1,495,000	\$ 800,000	\$4,425,000
Utilities	\$0	\$ 840,000	\$ 450,000	\$1,290,00
Total	\$2,130,000	\$2,335,000	\$1,250,000	\$5,715,000

Source: Kimley-Horn and Associates, Inc., 2004  
LA Group (for landscaping)

Note: The Zone 3 opinions of cost do not include Old Topanga Canyon Road segment. That segment will be analyzed by the City as part of an upcoming study.