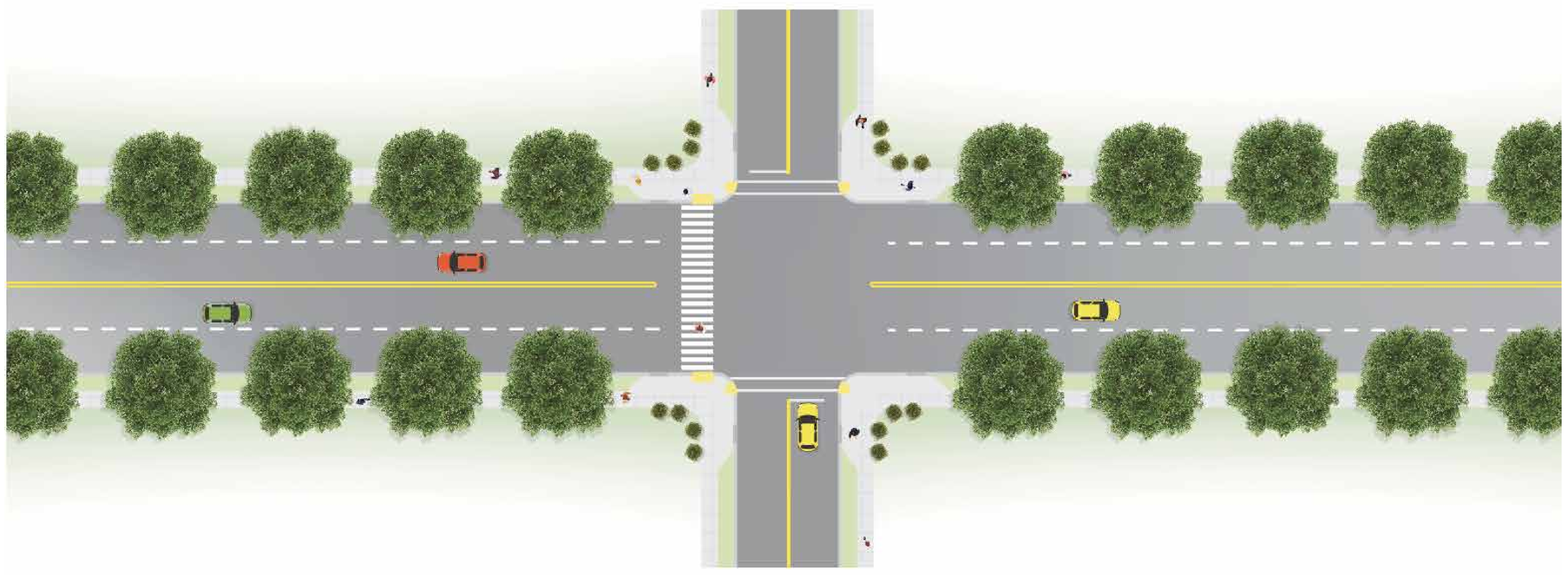
PROJECT OVERVIEW

Our Goals

- PRESERVE EL CAMINO REAL'S UNIQUE CHARACTER
- MAKE EL CAMINO REAL SIDEWALKS AND ROADWAY SAFER FOR ALL



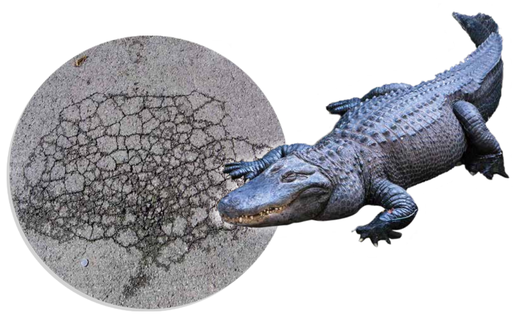
MISSION STATEMENT

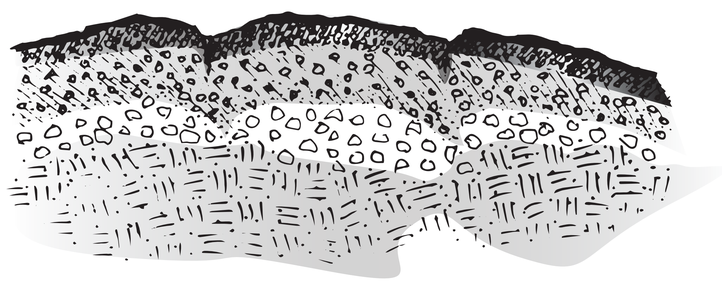
The Caltrans mission is to provide a safe and reliable transportation network that serves all people and respects the environment. This mission aligns with the two overarching goals originally set forth by the El Camino Real Task Force.

EXISTING CONDITIONS

Roadway

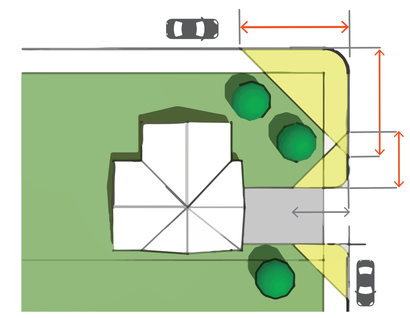
PAVEMENT
Settlement, Cracking, Heaving, and Potholes

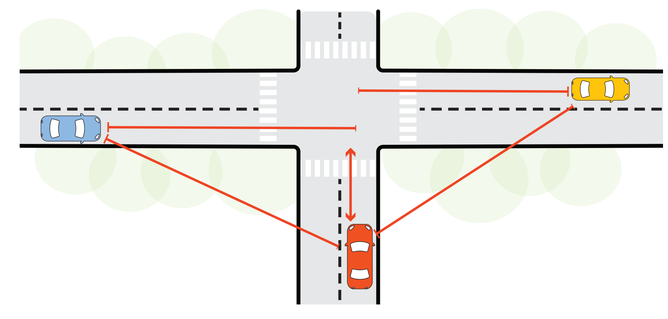




Alligator cracking on the surface of a roadway is an indication of compromised subgrade. Layers must be dug up and recompacted.

VISIBILITY
Sight Distance and Setbacks



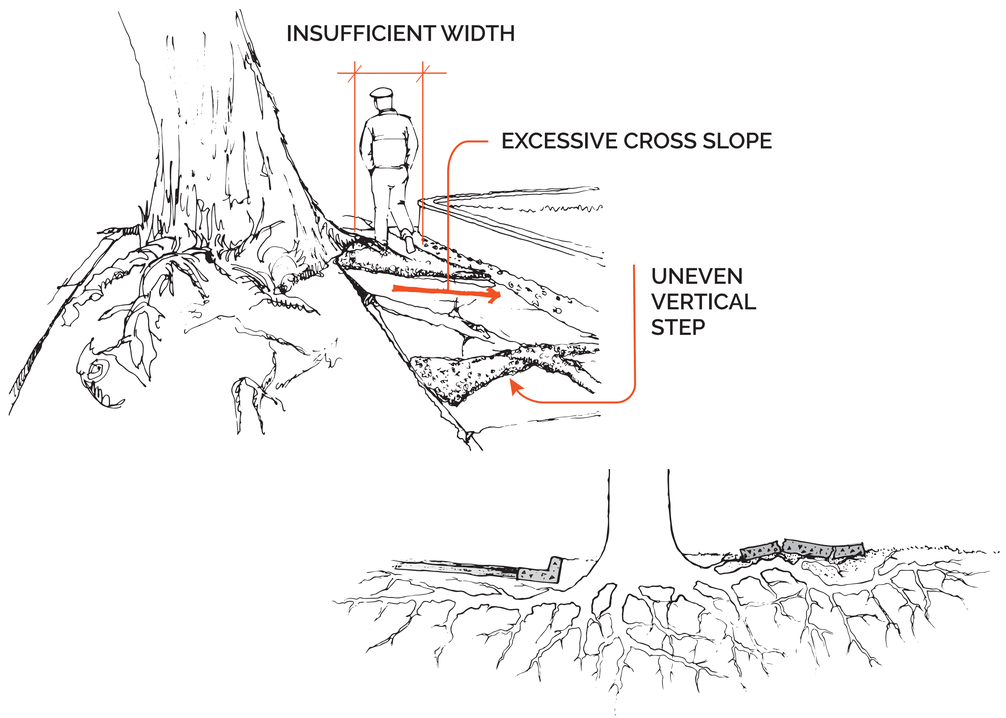


For drivers to have a clear view of other vehicles and pedestrians, proper setbacks from corners and driveways must be maintained.

EXISTING CONDITIONS

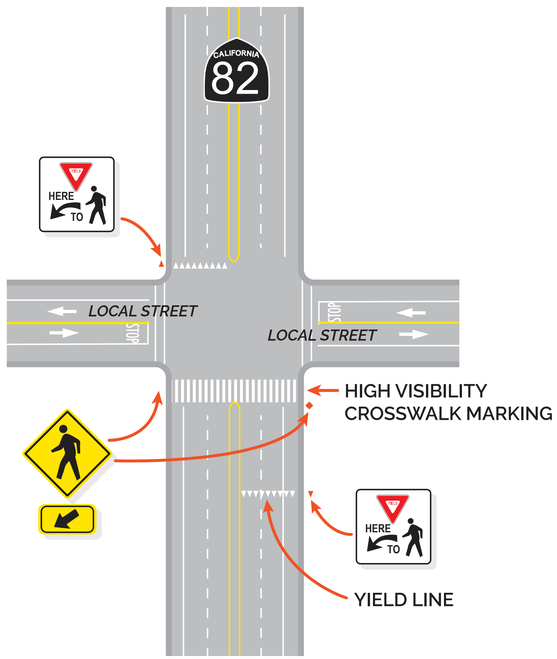
Sidewalks

SAFETY
ADA Compliance



Insufficient width, excessive cross slope, and uneven vertical steps are some of the conditions that make many El Camino Real sidewalks inaccessible.

SAFETY
Pedestrian Crossing Upgrades



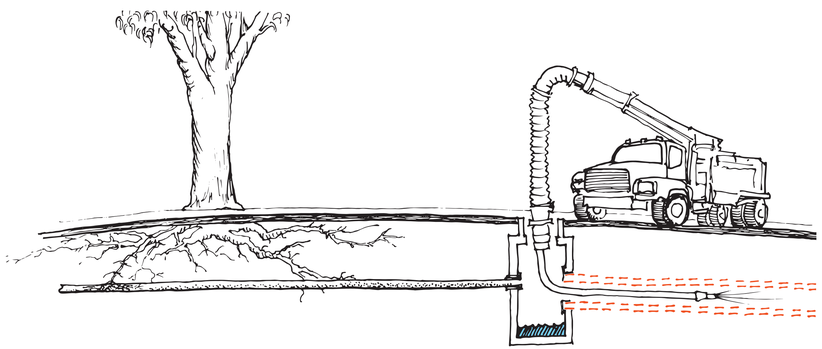
Typical Layout

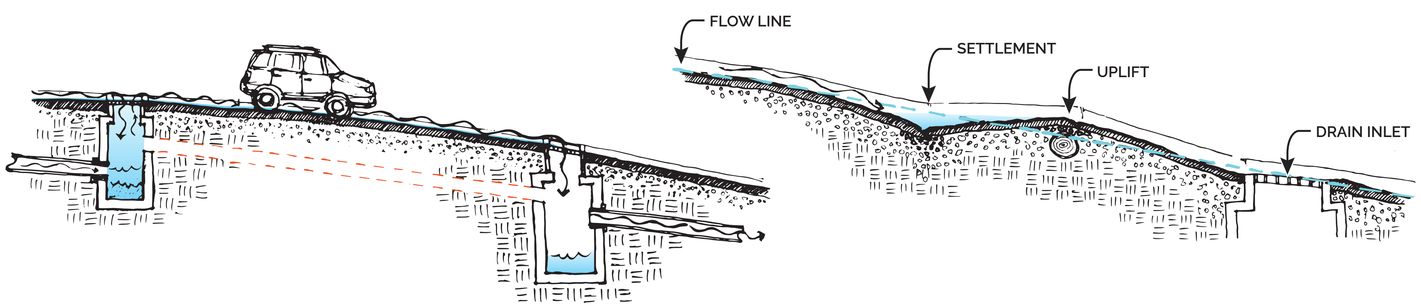
A total of 16 intersections in the project area need pedestrian crossing improvements, such as highly visible pavement markings indicating yield signs.

EXISTING CONDITIONS

Drainage

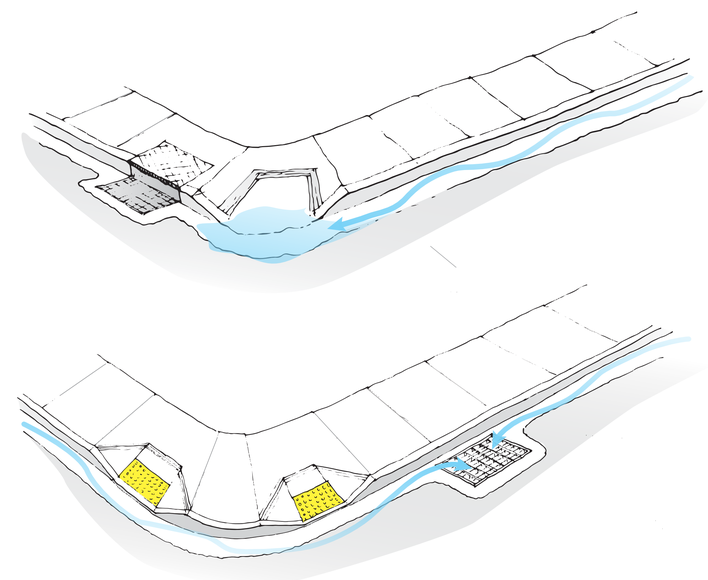
DRAINAGE
Root Incursion, Old Pipes, Bubbling Up, and Flow Line Disruption





A new modern drainage system is needed for El Camino Real. New pipes and better integration of inlets will decrease flooding.

CURB RAMPS
Drainage at Pedestrian Crossings



Sidewalk settlement that occurs near a curb ramp can disrupt the flow of water to drain inlets resulting in puddling and flooding.

EL CAMINO REAL HISTORY

Howard-Ralston Tree Rows

The El Camino Real tree rows, which consist of English elms and eucalyptus, were designed by John McLaren to beautify and promote land development of large estates such as those owned by George H. Howard and William C. Ralston, for whom the tree rows are named.

1770s

Spanish expeditions establish El Camino Real (ECR) along routes used by Native Americans, linking missions, presidios, and pueblos from San Diego to San Francisco

1874

Local landowners hire **John McLaren**, famed gardener of Golden Gate Park, to plant trees to line ECR: elms for shade and fast-growing eucalyptus to shelter the slower-growing elms

Cable cars celebrate one-year anniversary of operating in San Francisco[1]

1912

Paving of ECR begins; one year later, Burlingame declares the tree rows to be historically significant

Average building lots in Burlingame cost between $50 and $550[2]

1930

Burlingame enacts the nation's first zoning ordinances to protect tree rows on ECR from development

San Mateo County population reaches 77,405[3]

1770 | 1800 | 1830 | 1860 | 1900 | 1930

John McLaren photograph used by permission of San Francisco History Center, San Francisco Public Library

SOURCES
[1]SFMTA.com
[2]The San Francisco Call (newspaper)
[3]Bay Area Census, 1930

Caltrans

EL CAMINO REAL ROADWAY RENEWAL

CALIFORNIA 82

1985
Caltrans begins replacing historic trees lost to damage/disease

Caltrain service to Burlingame continues, 5 years after taking over from Southern Pacific[4]

2008
Caltrans documents the Howard-Ralston Eucalyptus Tree Rows, including size, type and location of each tree

2012
The Howard-Ralston Eucalyptus Tree Rows are listed on the National Register of Historic Places

Burlingame celebrates centennial[5]

2017
ECR Task Force is formed and recommends options to address challenges along the roadway while preserving the tree rows. Today's work is a continuation of the effort.

2019
Caltrans advances ADA upgrades and roadway improvements for preliminary design and environmental approval

1930 1960 2000 2030

EL CAMINO REAL ROADWAY RENEWAL

SOURCES
[4]caltrain.com/about/History.html?PageMode
[5]Burlingame Voice, 2008

HOWARD-RALSTON EUCALYPTUS TREE ROWS

Eligibility and Mitigation

NATIONAL HISTORIC PRESERVATION ACT OF 1966

The National Historic Preservation Act of 1966 acknowledges the importance of protecting our nation's heritage.

It establishes the National Register of Historic Places (NRHP).

<u>The Howard-Ralston Eucalyptus Tree Rows</u> became listed on the National Register of Historic Places (NRHP) in 2012 because of their influence on the **development of Burlingame**, because of the impact the trees made in forming the areas **unique character** and early **zoning regulations**, and because they are the work of a **master gardener, John McLaren**.

Protecting Historic Properties

Section 106 of the National Historic Preservation Act requires impacts to historic properties to be evaluated when projects involving federal agencies, permits, or funding have the potential to impact the property. Caltrans has determined that the El Camino Real Roadway Renewal project will adversely effect the Howard-Ralston Eucalyptus Tree Rows. Caltrans is working on the following measures to mitigate impacts of the project:

1

At least 70% of the total trees within the Tree Rows must contribute to the NRHP eligibility of the Tree Rows.

2

Any replacement trees must not detract from the NRHP eligibility.

3

The Tree Rows will be documented before, during, and after construction.

4

Trees will be tagged and GPS locations noted to track the health and number of trees.

5

A long-term management plan for the Tree Rows will be developed.

6

A self-guided history walk with plaques, a time capsule, and custom benches constructed of the wood from removed trees.

7

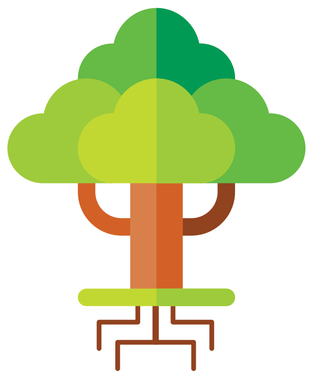
An *El Camino Real Historic Resource Management Plan* will be developed to assist the city of Burlingame in management of resources within the corridor.

TREES

Examination Criteria

The rows of mature trees are what make this stretch of El Camino Real special. To determine the proper path for this project, Caltrans landscape professionals, engineers, historians, and arborists will carefully examine each tree and will be considering important questions:

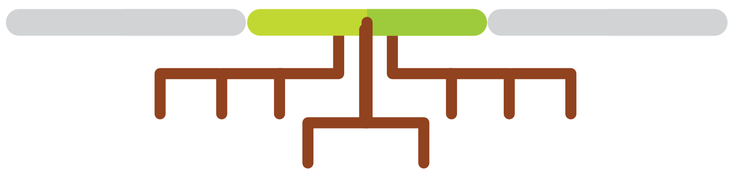
Is the tree healthy overall?



Is the tree structurally sound?

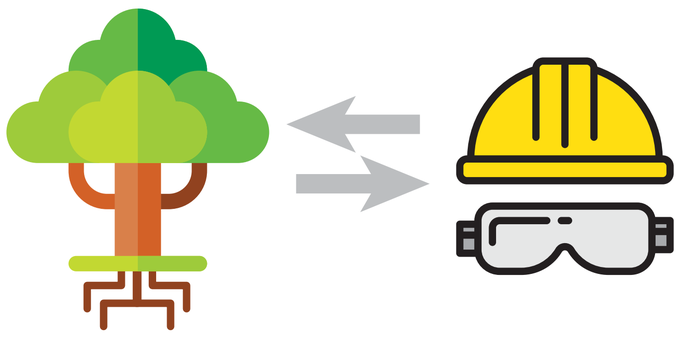
Does the tree obscure drivers' visibility

Can sidewalks go around the tree?



Can the roots be protected from necessary drainage and pavement repairs?

What measures can be taken to protect each tree during construction?



Are the tree's roots compatible with construction activities?

TREE ASSESSMENTS

When is Removal Required?

Caltrans assessed both the health and condition of the trees and the severity of expected construction impacts to their root systems. Together, these factors were used to identify trees unlikely to survive these impacts and therefore require removal. Caltrans is committed to identifying trees that can be retained and determining the best methods to protect them throughout the Design and Construction phases.

✓ 2020

Caltrans Landscape Architect Surveys

Over 600 street trees between Peninsula Avenue and Ray Drive were surveyed, noting tree type, size, and visual indicators of health (e.g., presence of fungus, exudate, canopy die off, leaning). **Fewer than half of the trees surveyed were found to be in good condition.**

✓ 2020

Caltrans Review of Construction Impacts

Excavation is necessary to repair the road, sidewalks, and drainage system and can damage tree roots. Caltrans mapped the impacts and determined which trees will be most affected.

✓ 2021

Anticipating Removals

Based on the Caltrans tree surveys, the expected impacts to tree roots and the preliminary findings of the arborist surveys, it was determined that 300-350 of the trees within the project area are likely to require removal.

✓ 2021

Independent Arborist Surveys

Independent arborists have assessed 225 trees in the project area and will provide recommendations for preservation, protection, and/or removal.

☐ 2022-23

Detailed Project Design

Caltrans will look for ways to reduce impacts and protect individual trees. This might include meandering sidewalks around trees and working with PG&E to ensure underground utilities avoid roots. Location of replacement trees will be determined at this time

☐ 2023-24

Detailed Protection Measures

Caltrans will continue its work with independent arborists to develop measures to protect individual trees. These measures will be in keeping with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties.

☐ 2023-onward

Long-Term Management

Caltrans will work with HortScience (Bartlett Consulting) to develop a long-term management plan for the maintenance and monitoring of the Howard-Ralston Eucalyptus Tree Rows, in conjunction with the plant establishment period at the end of construction in 2026.

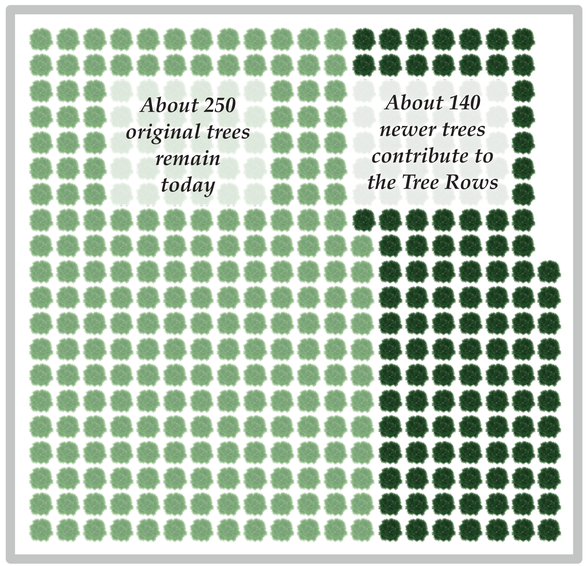
EXISTING TREES

Types and Contributors

TREE QUANTITIES & CATEGORIES

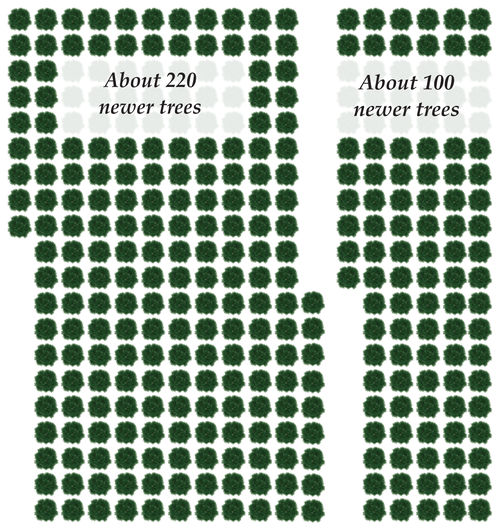
There are approximately 700 trees in the project area. Just over half of these are considered "contributors" to the Howard-Ralston Eucalyptus Tree Rows.* Contributors include trees that were original to the Tree Rows planted in the 1870s, as well as some newer trees planted as replacements.

HISTORIC CONTRIBUTORS



About 390 trees between Peninsula Avenue and Ray Drive contribute to the Tree Rows.

NEW TREES



Many newer trees have been planted within the Tree Rows, but are not contributors to this historic resource.

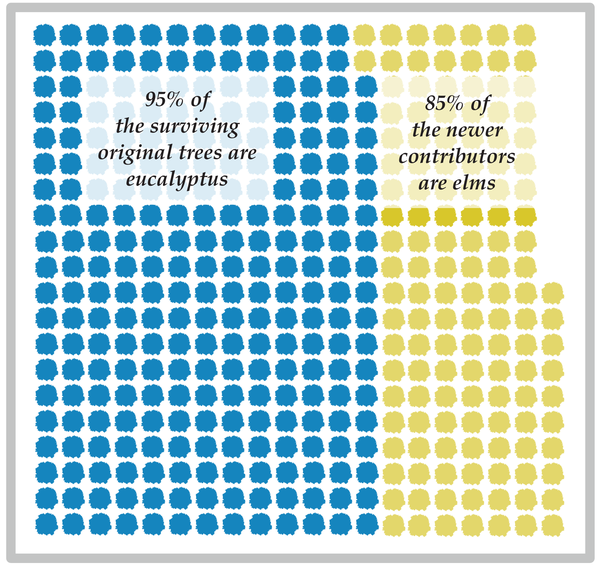
Trees to the north or south of the Tree Rows are not contributors.

* The Tree Rows, officially called the Howard-Ralston Eucalyptus Tree Rows, are on the National Register of Historic Places, and, contrary to the name, they actually include both eucalyptus and elms.

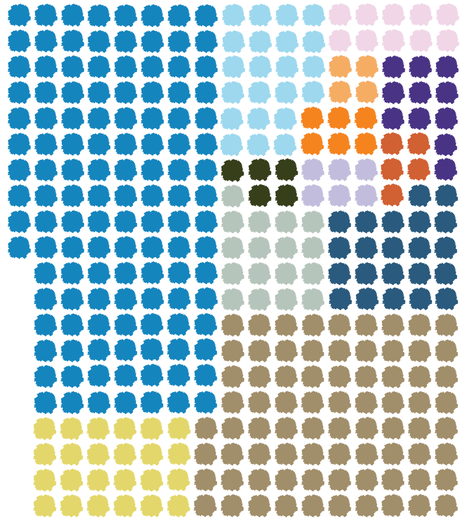
TREE VARIETIES

The Tree Rows were originally planted with elm trees for shade and eucalyptus to shelter the young elms. Today, mostly eucalyptus survive. Caltrans has planted replacement elms in recent years.

HISTORIC CONTRIBUTORS



NEW TREES



EUCALYPTUS AND ELMS ARE MOST COMMON, BUT MORE THAN A DOZEN VARIETIES EXIST

- Eucalyptus (53%)
- Elm (22%)
- Liquidambar (3%)
- Sycamore (3%)
- Acacia (2%)
- Pine (1.4%)
- California buckeye (0.8%)
- Coast redwood (1.5%)
- Magnolia (0.7%)
- Juniper (0.7%)
- Coast live oak (0.8%)
- Cedar (0.6%)
- Other, or undetermined (11%)

EXISTING TREES

Condition, Removals, and Replacements

CALTRANS FIELD REVIEW

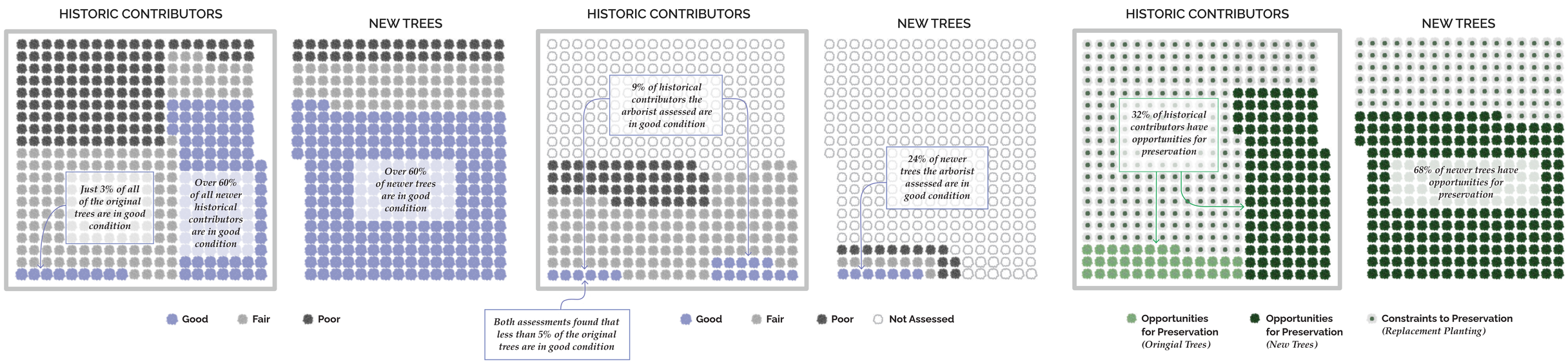
In 2020, Caltrans Landscape Architects conducted a visual assessment of the approximately 700 trees in the project corridor. The team found that the majority of the trees contributing to the historic tree rows were in fair or poor condition.

ARBORIST FINDINGS

A team of experienced, independent arborists also assessed 224 trees in the corridor to identify the best candidates for preservation. They focused on large, visually significant, and contributor trees that would not obviously require removal due to construction. The arborists confirmed Caltrans' findings.

OPPORTUNITIES FOR PRESERVATION

For every tree removed, Caltrans will plant a replacement tree on El Camino Real. Trees that are candidates for preservation will be in good or fair health with limited construction conflicts and sufficient space to grow. It will be more difficult to preserve trees with extensive excavation near them and/or insufficient growing space to maintain good health.



Definitions

GOOD: Do not face the issues of trees in "poor" or "fair" condition. For trees in good condition, preservation opportunities depend on construction impacts and available growing space.

FAIR: Mainly a result of topping and crown reduction. These trees might be more resilient to some amount of construction impacts.

POOR: Generally due to twig and branch die-back, fungal infection, and poor tree structure. These trees are unlikely to survive even minor impacts from sidewalk and roadway construction.

Caltrans is committed to planting and establishing replacement trees and to maintaining the health and character of the historic Tree Rows.

PHYSICAL CONSTRAINTS

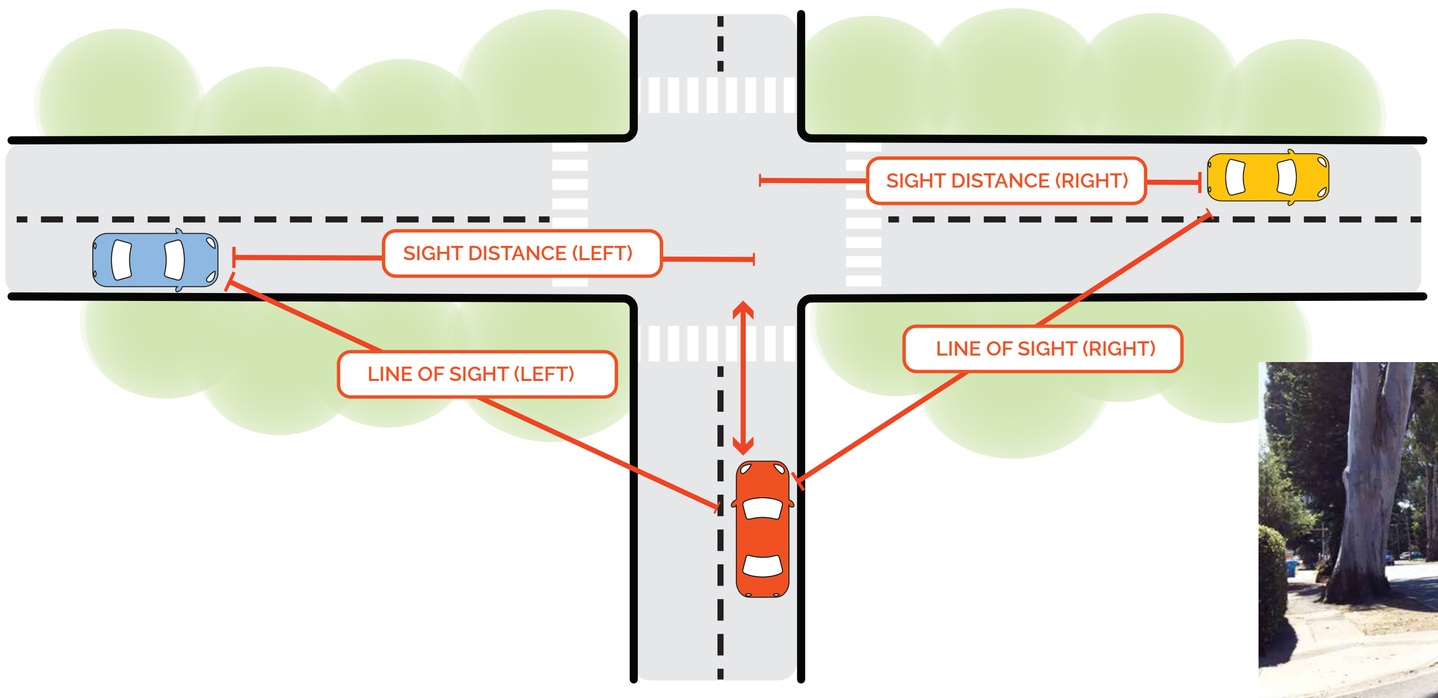
Built Infrastructure and Street Trees

VISIBILITY

Sufficient Sight Distance

1. Allows drivers at cross-streets to see oncoming traffic in order to safely enter or cross the highway
2. Provides drivers with a clear view of other vehicles and pedestrians, allowing time to slow or stop to avoid a collision

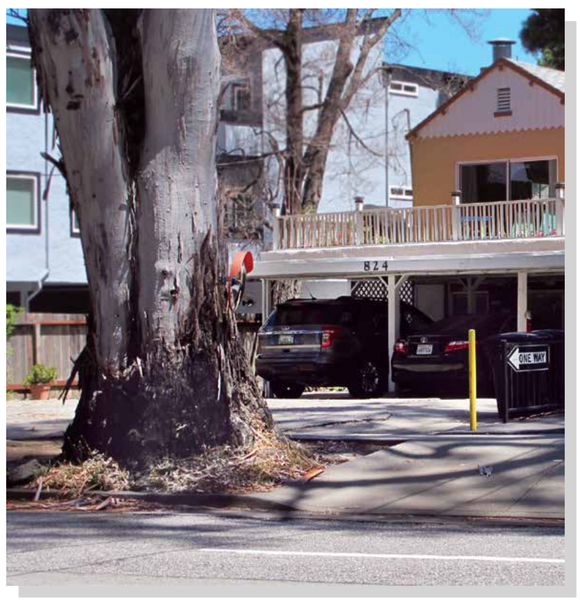
Required sight distances are determined by the speed of traffic and the type of vehicle.



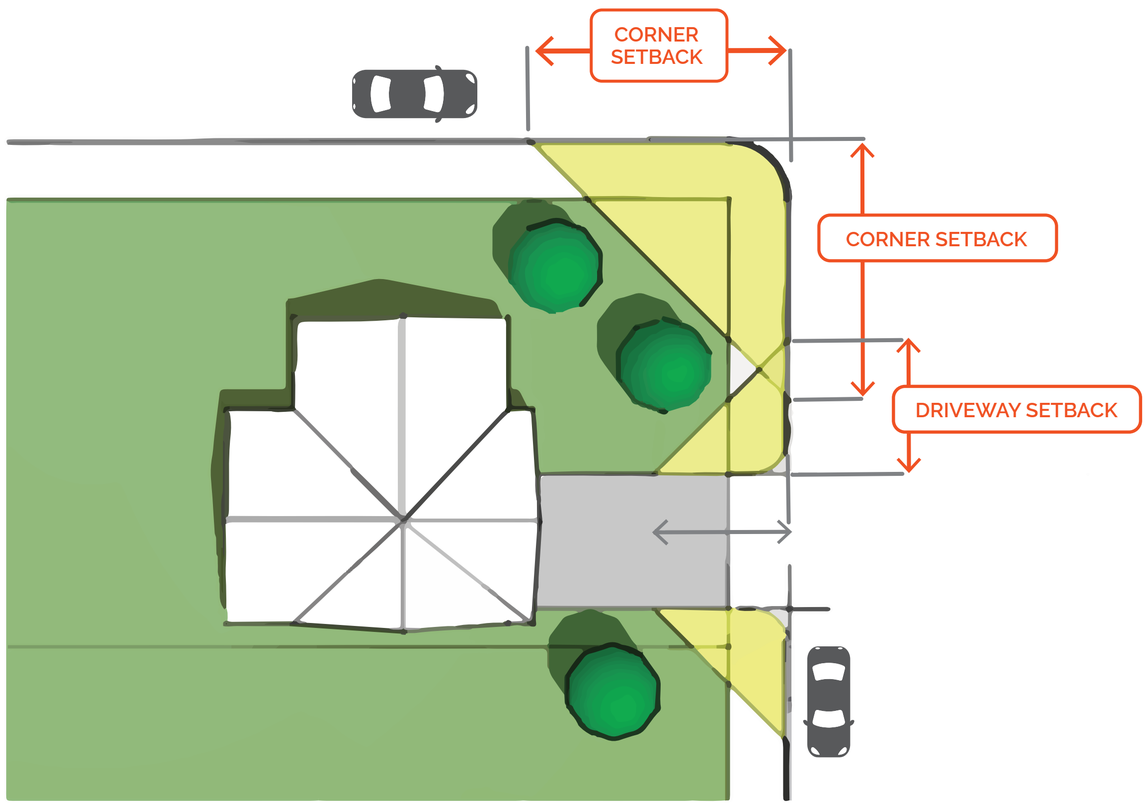
A large tree trunk obscures oncoming traffic

SETBACKS

Keeping setbacks from corners and driveways clear of obstructions allows pedestrians and motorists to see oncoming traffic. The size of setback needed varies based on the real-world conditions at a given location.



Residents have mounted a mirror to compensate for poor visibility at a driveway



Caltrans engineers are studying El Camino Real and will use State and Federal guidelines to determine appropriate sight distances and setbacks to improve safety.

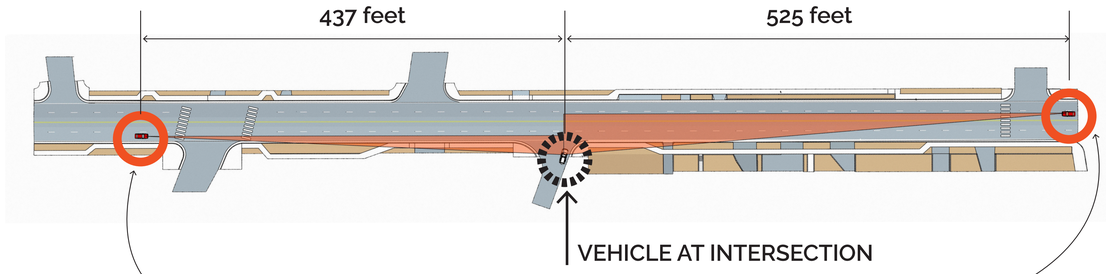
SIGHT DISTANCE

Intersections and Driveways

Greater visibility has been shown to reduce crashes. Caltrans has specific safety guidelines that dictate sight distance. Proximity of trees to corners and from the edge of travel lanes can affect visibility and safety.

CORNER SIGHT DISTANCE

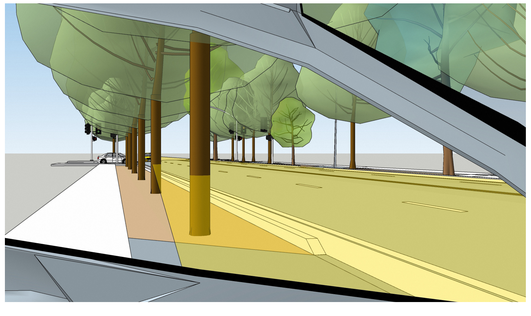
Provides a clear view of approaching vehicles allowing motorists to safely enter El Camino Real from a corner or intersection. Objects, such as trees that obstruct visibility, are not permitted within the corner sight distance areas, shown with the red-shaded triangles here.

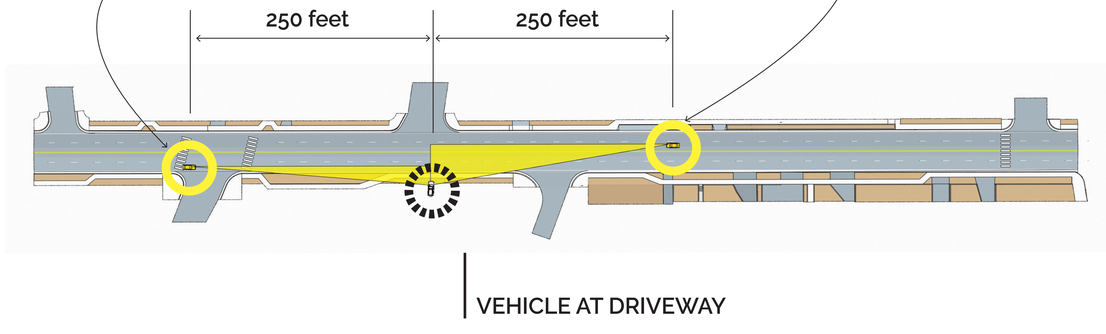


APPROACHING VEHICLE ON ECR TRAVELING AT THE 35 MPH SPEED LIMIT

STOPPING SIGHT DISTANCE

Provides enough distance for either vehicle to stop when a traveler enters El Camino Real from a side street or driveway before it is safe. Objects within the stopping sight distance area, shown in the yellow-shaded triangles here, must preserve some visibility.





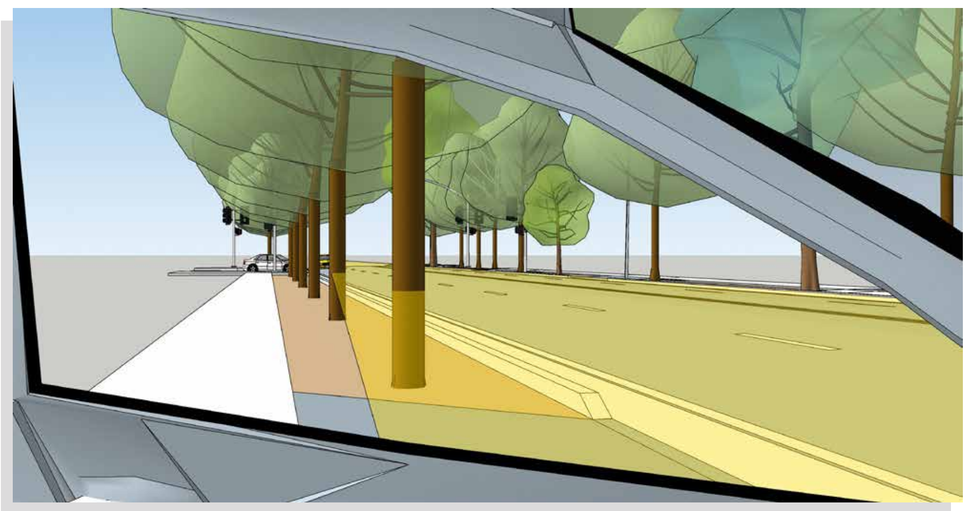
SIGHT DISTANCE

Sidewalk Design and Tree Placement

SIDEWALK BUFFER

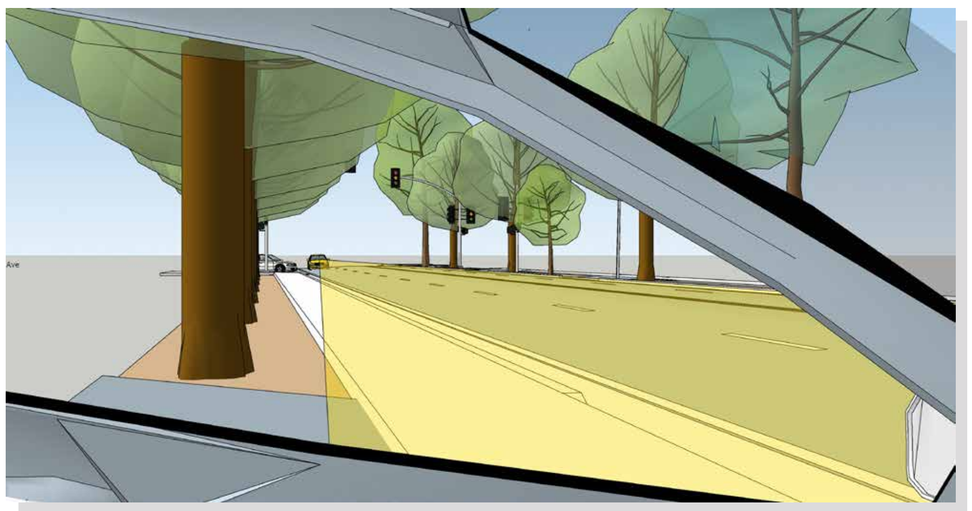
A planted buffer strip with trees between the sidewalk and the roadway can be more pleasant for pedestrians, but these trees can affect visibility if they occur within a sight triangle.

VISIBILITY WITH TREES CLOSER TO CURB



Trees planted closer to the curb within sight triangles need greater spacing and smaller diameter mature trunks to maintain a clear view of oncoming traffic.

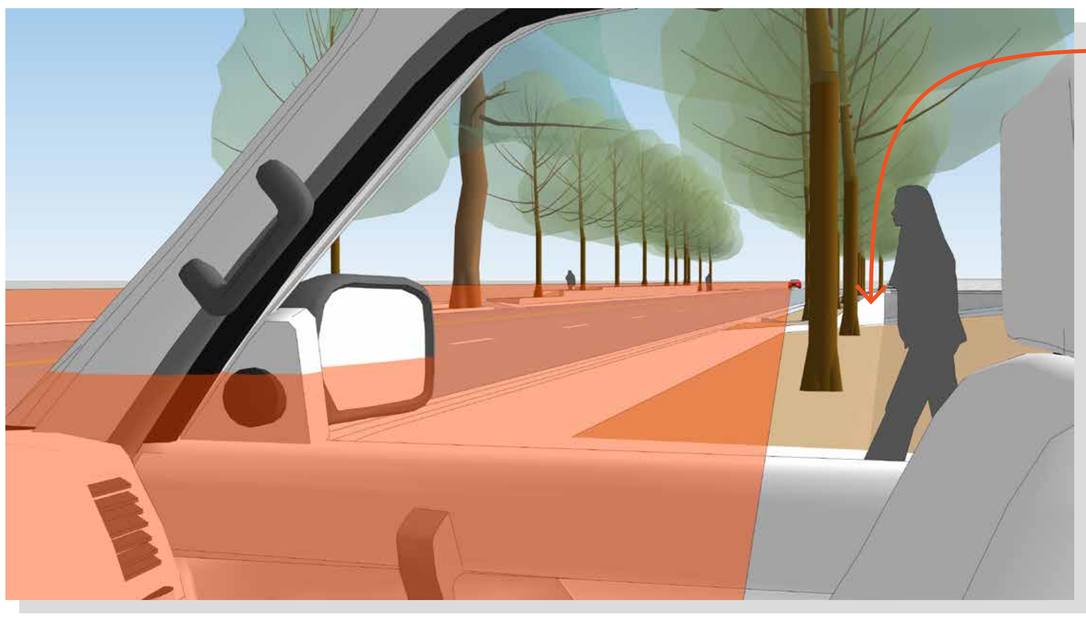
VISIBILITY WITH TREES FURTHER FROM CURB



Trees located outside the sight triangle can be more closely spaced and have larger-diameter mature trunks without obstructing the view of oncoming traffic.

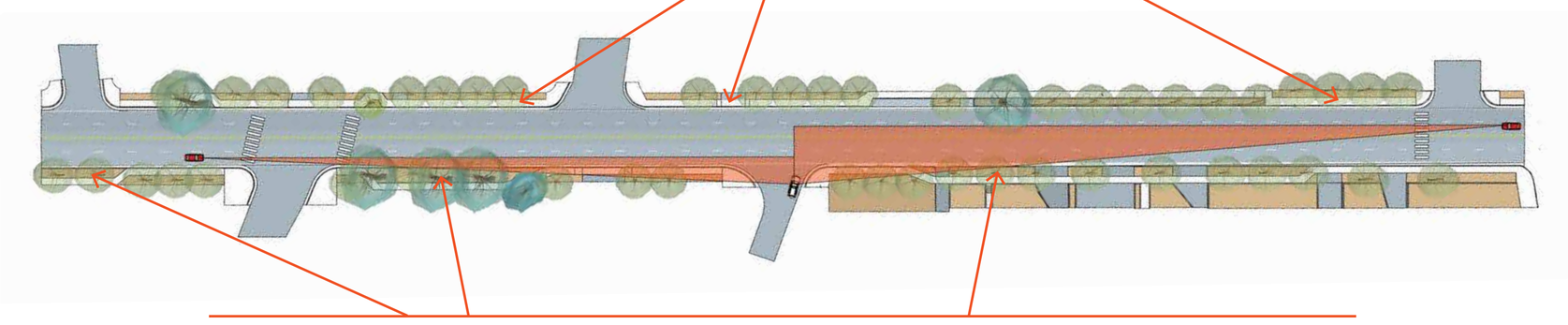
How Can We Plant Trees Close to Street Corners?

A meandering sidewalk design maintains corner sight distance while still allowing tree planting closer to corners. Trees are set back from the road near corners where visibility is crucial. Beyond the corners, trees can be placed between the sidewalk and the street. Caltrans is looking to implement this hybrid approach where feasible.



SIDEWALK "MEANDERS" AWAY FROM THE CURB, AS IT MOVES FURTHER FROM THE CORNER

AT CORNERS, TREES ARE LOCATED BEHIND THE SIDEWALK

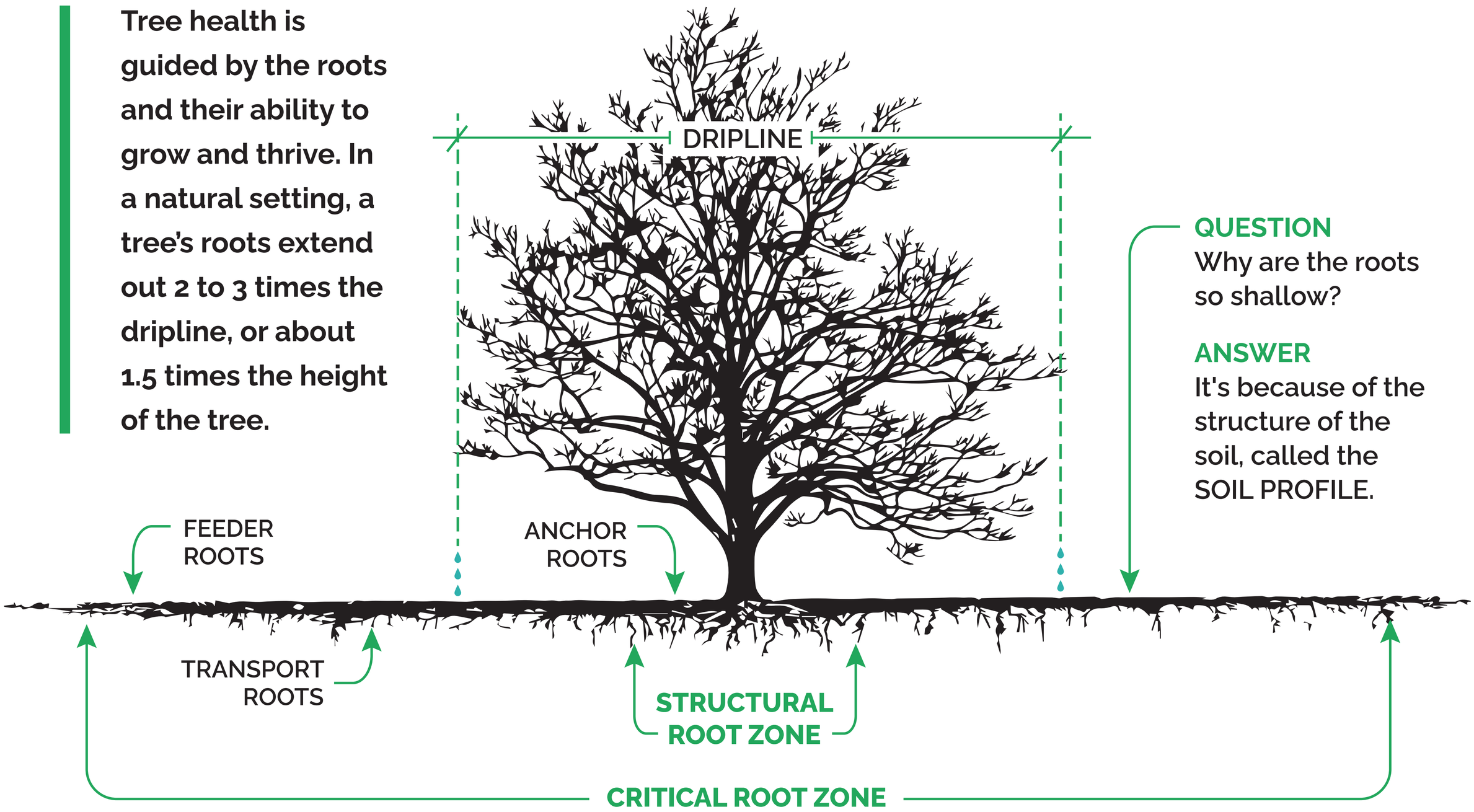


BEYOND CORNERS, TREES ARE LOCATED BETWEEN SIDEWALK AND ROAD

HOW TREES GROW

Roots in a Natural Setting

Tree health is guided by the roots and their ability to grow and thrive. In a natural setting, a tree's roots extend out 2 to 3 times the dripline, or about 1.5 times the height of the tree.

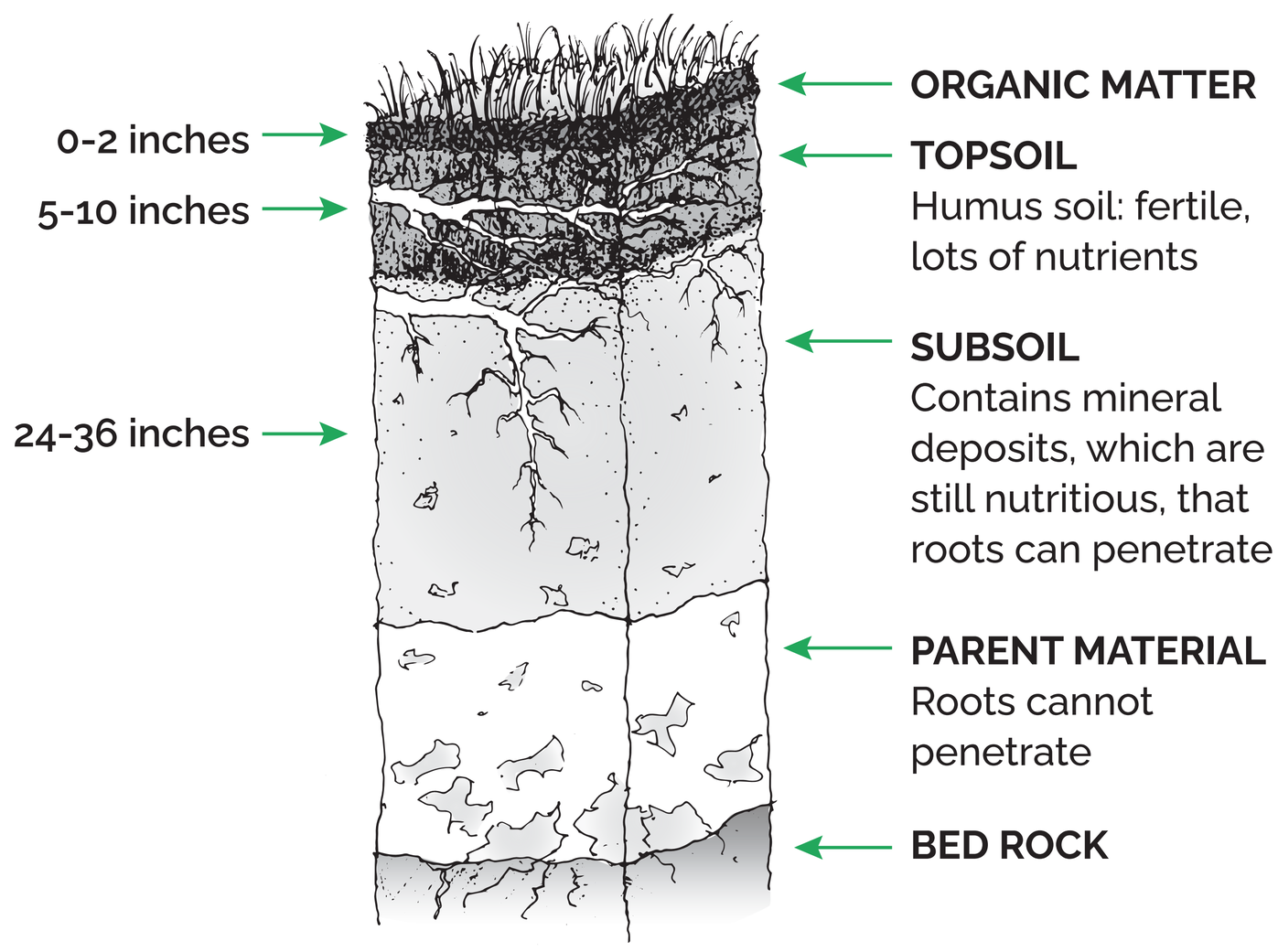


QUESTION
Why are the roots so shallow?

ANSWER
It's because of the structure of the soil, called the SOIL PROFILE.

CRITICAL ROOT ZONE
The area in which loss, disturbance, or damage to any roots will adversely affect the tree's LONG-TERM health and stability.

STRUCTURAL ROOT ZONE
The minimum distance any disruption should occur during construction. There is significant risk of catastrophic tree failure in the SHORT TERM if structural roots are destroyed or severely damaged.



TYPICAL SOIL PROFILE

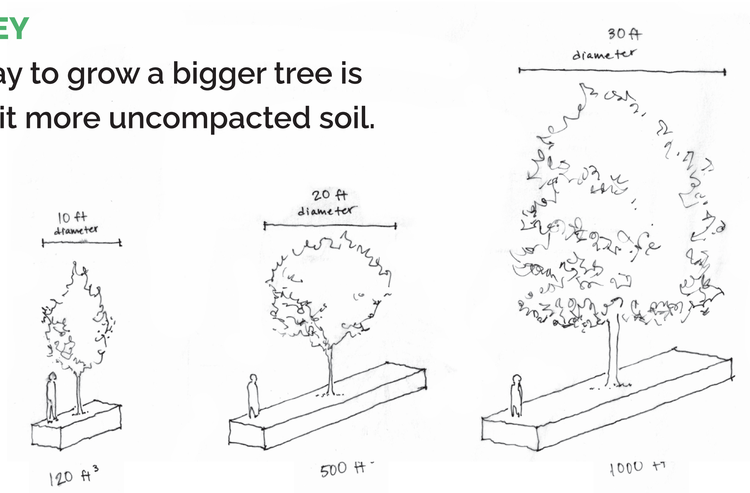
Nearly all of a tree's roots are found in the top 3 feet of soil, and most of those are in the top 1 foot!

LANDSCAPE IMPROVEMENT TOOLS

Invest in the Soil

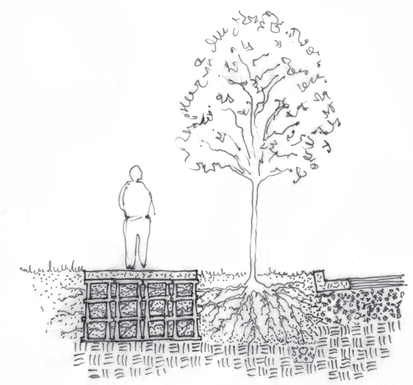
THE KEY

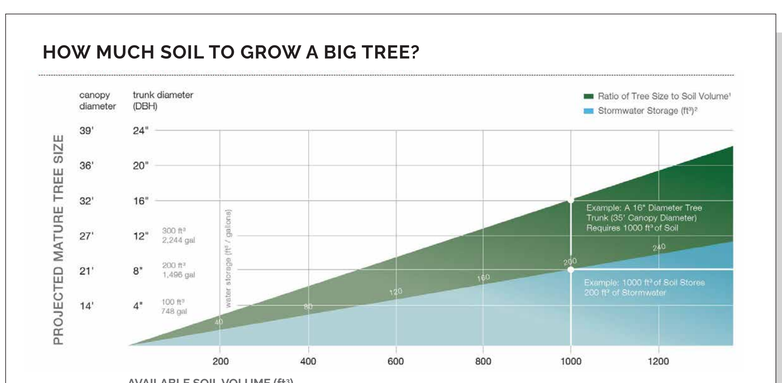
The way to grow a bigger tree is giving it more uncompacted soil.



SUSPENDED PAVEMENT

Suspended pavement is supported by a modular cagelike structure underground. This keeps the pavement from settling, but lets roots move through uncompacted soil.





STRUCTURAL SOIL

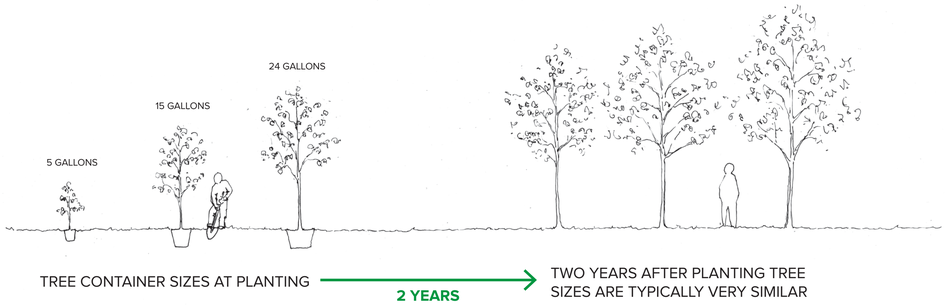
Coarse structural soils can be compacted to support pavement, while still retaining the oxygen roots need in the pore spaces between the aggregate.

LANDSCAPE IMPROVEMENT TOOLS

Right-sizing New Trees

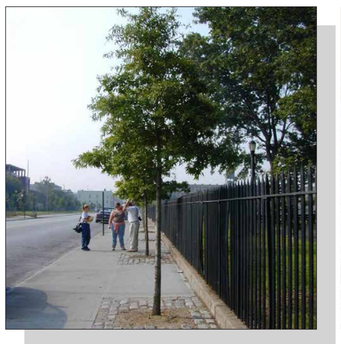
Zelkovas were planted on Burlingame Avenue in 2014.

Today their canopy contributes to the street's inviting feel.

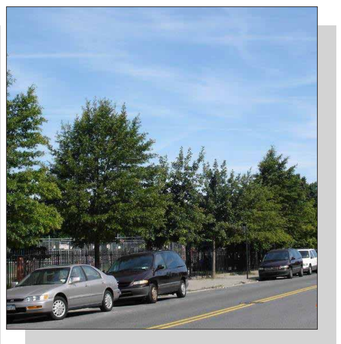


Younger trees often adapt better to their new surroundings when they are planted. You'll often find that within a couple of years, small-container trees have caught up with large-container trees that were planted at the same time.

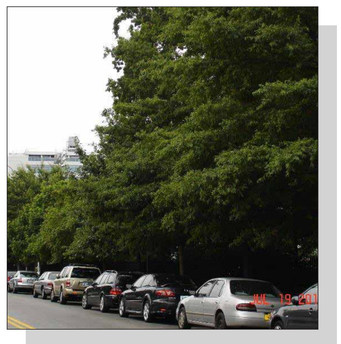
Street trees planted in structural soil in Brooklyn, New York in 1997.



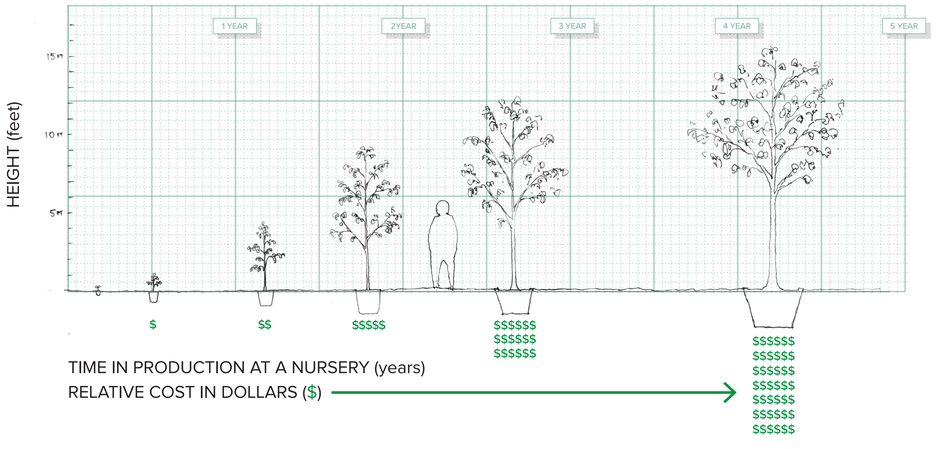
3 years after planting



10 years after planting



15 years after planting



The longer a nursery cares for a tree, the more expensive it will be to buy.

TREE MATRIX (1 of 2)

Tree Species Selection Criteria

Numerous factors are considered in the selection of street trees, from size and character to climate adaptability and compatibility with infrastructure. These tables represent the variety of species under consideration for planting along El Camino Real. Species shown on this board in **green** are in the Eucalypt family. Species shown on the next board in **brown** are in the Elm family.

Species	Common Name	Height		Spread		Seasonal Interest		Climate Adaptability	Water Usage	Growth Rate (inches/year)	Branch Strength	CA Native	Habitat Value	Invasive	Salt Tolerance	Fire Resistance	Root Damage Potential	Recommended Street Tree	Expert Recs	ECR Task Force Recommended Species	
		Min	Max	Min	Max	Deciduous/ Evergreen	Fall Color	Bay Area Now & Future Zones (Sunset Zones 15, 17, 20-23)	WUCOLS Region 1 North Central Coast	S(1"-12") S-M(12"-24") M(24") M-F(24"-36") F(36") (source: UFEI)	Weak Med-Weak Medium Med-Strong Strong (source: UFEI)		Low Medium High	Cal-IPC Invasive List	Salinity Tolerance (source: UFEI)	(sources: UFEI, UC Forest Products Lab, firefree.org)	Low Medium High (source: UFEI)	Listed by Bay Area Cities	Expert-Preferred Elm + Eucalypt Varieties	Recommended: 70% 'Contributing'	Recommended: 30% 'Other'
Acer buergeranum	Trident Maple	20	25	20	25			Likely	M	M-F	M		L	NotListed	No Data		L	☑	☐	☐	☐
Acer negundo 'Sensation'	Sensation Box Elder	40	50	35	40			Yes	M	F	W		H	NotListed	No Data	Favorable	M	☐	☐	☐	☐
Acer rubrum 'Armstrong'	Armstrong Red Maple	50	60	15	25			Unlikely	M	F	MW		M	NotListed	Moderate	Favorable	M	☑	☐	☐	☐
Angophora costata	Sydney Red Gum	50	65	30	50			Likely	L	M	M		M	NotListed	No Data		M	☐	☑	☐	☐
Carpinus betulus 'Fastigiata' or 'Frans Fontaine'	European Hornbeam	40	50	40	40			Unlikely	M	M	S		M	NotListed	Moderate		L	☑	☐	☐	☐
Carpinus caroliniana	American Hornbeam	35	40	20	30			Unlikely	M	S	S		M	NotListed	No Data		L	☐	☐	☐	☑
Corymbia aparrerinja (Eucalyptus papuana)	Ghost Gum	30	50	20	35			Yes	N/A	F	M		L	NotListed	No Data		M	☐	☑	☐	☐
Corymbia citriodora (Eucalyptus citriodora)	Lemon-scented Gum	80	160	50	100			Yes	L	F	M		M	NotListed	No Data	Favorable	M	☐	☑	☑	☐
Corymbia maculata (Eucalyptus maculata)	Spotted Gum	60	100	30	40			Yes	L	F	MS		M	NotListed	No Data		M	☐	☑	☐	☐
Eucalyptus botryoides	Southern Mahogany	80	120	30	75			Yes	Unknown	F	S		M	NotListed	Good		M	☐	☐	☐	☐
Eucalyptus coolabah (Eucalyptus microtheca)	Coolabah	35	50	25	25			Yes	L	F	M		L	NotListed	Good		M	☐	☑	☐	☐
Eucalyptus dalrympleana	Mountain Gum	50	100	25	50			Yes	L	F	M		M	NotListed	No Data		M	☐	☑	☐	☐
Eucalyptus diversicolor	Karri	80	200	20	50			Yes	L	F	M		M	NotListed	Moderate		M	☐	☐	☐	☐
Eucalyptus rudis	Flooded Gum	30	60	25	40			Yes	L	F	M		M	NotListed	Good	Unfavorable	M	☐	☑	☐	☐
Eucalyptus saligna	Sydney Blue Gum	70	150	20	50			Yes	L	F	M		M	NotListed	No Data		M	☐	☑	☐	☐
Eucalyptus spathulata	Swamp Mallet	20	40	20	20			Yes	L	M-F	M		M	NotListed	Good		L	☐	☑	☐	☐
Eucalyptus viminalis	Manna Gum	30	150	25	50			Yes	L	F	M		M	NotListed	No Data	Unfavorable	M	☐	☑	☐	☐
Fraxinus americana 'Autumn Purple'	White Ash, American Ash	60	80	40	50			Unlikely	M	F	MS		M	NotListed	No Data	Favorable	M	☐	☐	☐	☐
Fraxinus dipetala	Foothill Ash	20	25	15	20			Yes	L	M	MS		H	NotListed	No Data	Favorable	L	☐	☐	☐	☐
Gymnocladus dioica (G. dioicus)	Kentucky Coffee Tree	60	100	40	50			Likely	L	M-F	S		M	NotListed	No Data	Favorable	M	☑	☐	☐	☐
Laurus nobilis	Sweet Bay	30	45	15	30			Yes	L	S-M	M		M	NotListed	Moderate	Favorable	M	☑	☐	☐	☐
Lyonothamnus floribundus asplenifolius	Catalina Ironwood	20	40	15	25			Yes	L	M	S		H	NotListed	Moderate		M	☑	☐	☐	☐

TREE MATRIX (2 of 2)

Tree Species Selection Criteria

Numerous factors are considered in the selection of street trees, from size and character to climate adaptability and compatibility with infrastructure. These tables represent the variety of species under consideration for planting along El Camino Real. Species shown on this board in **brown** are in the Elm family. Species shown on the next board in **green** are in the Eucalypt family.

Species	Common Name	Height		Spread		Seasonal Interest		Climate Adaptability	Water Usage	Growth Rate (inches/year)	Branch Strength	CA Native	Habitat Value	Invasive	Salt Tolerance	Fire Resistance	Root Damage Potential	Recommended Street Tree	Expert Recs	ECR Task Force Recommended Species	
						Deciduous/	Fall	Bay Area Now & Future Zones (Sunset Zones	WUCOLS Region 1 North Central	S(1"-12") S-M(12"-24") M(24") M-F(24"-36") F(36")	Weak Med-Weak Medium Med-Strong Strong		Low Medium	Cal-IPC	Salinity Tolerance	(sources: UFEI, UC Forest Products Lab,	Low Medium High (source:	Listed by Bay Area Cities	Expert-Preferred Elm + Eucalypt Varieties	Recommended: 'Contributing'	Recommended: 30% 'Other'
Nyssa sylvatica	Sour Gum, Tupelo	30	50	20	30			Likely	M	S-M	S		M	NotListed	Moderate		L	☑	☐	☐	☐
Pistacia chinensis	Chinese Pistache	30	60	25	45			Yes	L	M	S		M	NotListed	No Data	Conflicting	L	☑	☐	☐	☐
Platanus acerifolia 'Columbia' or 'Bloodgood'	London Plane Tree 'Columbia'	40	80	30	40			Yes	M	F	M		M	NotListed	No Data		M	☑	☐	☐	☑
Platanus racemosa 'Roberts'	California Sycamore 'Roberts'	50	90	30	50			Yes	M	F	M		H	NotListed	Good	Favorable	M	☐	☐	☐	☐
Quercus buckleyi (Q. texana, Q. nuttallii)	Texas Red Oak	30	50	30	50			Unlikely	M	M-F	S		H	NotListed	No Data		L	☐	☐	☐	☐
Quercus canbyi	Chisos Oak, Canby's Oak	40	50	30	50			Yes	Unknown	M	S		H	NotListed	Good		L	☐	☐	☐	☐
Quercus coccinea	Scarlet Oak	40	70	40	60			Yes	M	M-F	S		H	NotListed	No Data		M	☑	☐	☐	☐
Quercus engelmannii	Engelmann Oak, Mesa Oak	50	65	50	100			Likely	L	S-M	S		H	NotListed	No Data	Favorable	M	☑	☐	☐	☐
Quercus frainetto 'Forest Green' or 'Schmidt'	Hungarian Oak, Italian Oak	30	60	20	40			Likely	Unknown	F	MS		H	NotListed	Moderate	Favorable	M	☑	☐	☐	☐
Quercus hypoleucoides	Silverleaf Oak	30	80	15	40			Yes	Unknown	F	S		H	NotListed	Moderate	Favorable	M	☐	☐	☐	☐
Quercus macrocarpa	Bur Oak	60	80	20	30			Yes	M	M-F	S		H	NotListed	No Data		M	☑	☐	☐	☐
Quercus rugosa	Netleaf Oak	50	70	15	40			Yes	Unknown	F	S		H	NotListed	No Data	Favorable	M	☐	☐	☐	☐
Quercus suber	Cork Oak	50	70	50	70			Likely	L	M-F	S		H	NotListed	No Data	Favorable	M	☑	☐	☐	☑
Rhus lancea (Searsia lancea)	African Sumac	25	30	20	35			Yes	L	M	M		M	NotListed	Moderate		L	☑	☐	☐	☐
Tilia tomentosa	Silver Linden	40	50	20	30			Likely	L	S-M	M		H	NotListed	No Data		M	☑	☐	☐	☐
Tristaniopsis laurina	Water Gum	20	35	15	30			Yes	M	S	MW		L	NotListed	No Data		L	☑	☐	☐	☐
Ulmus 'Emerald Sunshine' (U. propinqua)	Emerald Sunshine Elm	25	35	15	25			Yes	L	F	MW		H	NotListed	No Data		No Data	☑	☑	☐	☐
Ulmus 'Patriot'	Patriot Elm	40	50	30	40			Likely	M	F	No Data		M	NotListed	No Data		No Data	☐	☑	☑	☐
Ulmus wilsoniana 'Prospector'	Prospector Elm	30	40	20	30			Likely	L	M-F	No Data		M	NotListed	No Data		No Data	☑	☑	☐	☐
Ulmus x 'Frontier'	Frontier Elm	30	40	20	30			Likely	L	F	No Data		No Data	NotListed	No Data		No Data	☑	☑	☐	☐
Ulmus x 'Triumph'	Triumph Elm	40	60	25	40			Likely	L	M	No Data		No Data	NotListed	No Data		No Data	☑	☑	☐	☐
Zelkova serrata 'Green Vase' or 'Village Green'	Zelkova Cultivars	50	70	45	65			Likely	M	M-F	MW		L	NotListed	No Data		L	☐	☑	☑	☐
Zelkova serrata 'City Sprite'	Dwarf Zelkova	20	25	15	18			Likely	M	M-F	M		L	NotListed	No Data		M	☐	☐	☐	☑

IMPORTANT TREE TYPES

Deciduous Elms and Evergreen Eucalypts

LONG DEFINED BY TREES

A century ago, El Camino was framed by broad, arching elm trees and fast-growing eucalyptus planted by Master Gardener John McLaren. But as Dutch elm disease spread to California, many elms succumbed, leaving behind the tall, blue gum eucalyptus we recognize today. The El Camino Real Task Force, Burlingame Historical Society, Burlingame city staff, Caltrans architectural historians and landscape architects, and independent arborists have been studying dozens of varieties of trees in the elm family (Ulmaceae) and the eucalyptus family (Myrtaceae) for use along the corridor. Pictured here are some key species that we hope will replicate the grandeur of the American elms and Tasmanian blue gums without repeating past problems of damage and disease.

Elm Family

Long loved for their spreading, graceful, vase-shaped form, elms make excellent shade trees in the summer, turn gold or red in the fall, and lose their leaves to let in winter sunshine. Many newer varieties have been developed to be resistant to Dutch elm disease.

EMERALD SUNSHINE ELM
Ulmus propinqua 'Emerald Sunshine'

FRONTIER ELM
Ulmus x 'Frontier'

JAPANESE ZELKOVA
Zelkova serrata

PROSPECTOR ELM
Ulmus wilsoniana 'Prospector'

PATRIOT ELM
Ulmus 'Patriot'

Eucalyptus Family

Newer varieties of eucalyptus are proving useful for their drought resistance and do not have the same problems of shredding bark and oversize trunks common to the Tasmanan blue gum that have contributed to infrastructure damage on El Camino Real.

LEMON-SCENTED GUM
Corymbia citriodora

SPOTTED GUM
Corymbia maculata

MOUNTAIN GUM
Eucalyptus dalrympleana

KARRI
Eucalyptus diversicolor

GHOST GUM
Corymbia aparrerinja

FLOODED GUM
Eucalyptus rudis