



VETERANS PARKWAY

City of Manhattan Beach



VETERANS PARKWAY

LANDSCAPE MASTER PLAN GUIDELINES

June 2013

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LANDSCAPE ARCHITECTURE

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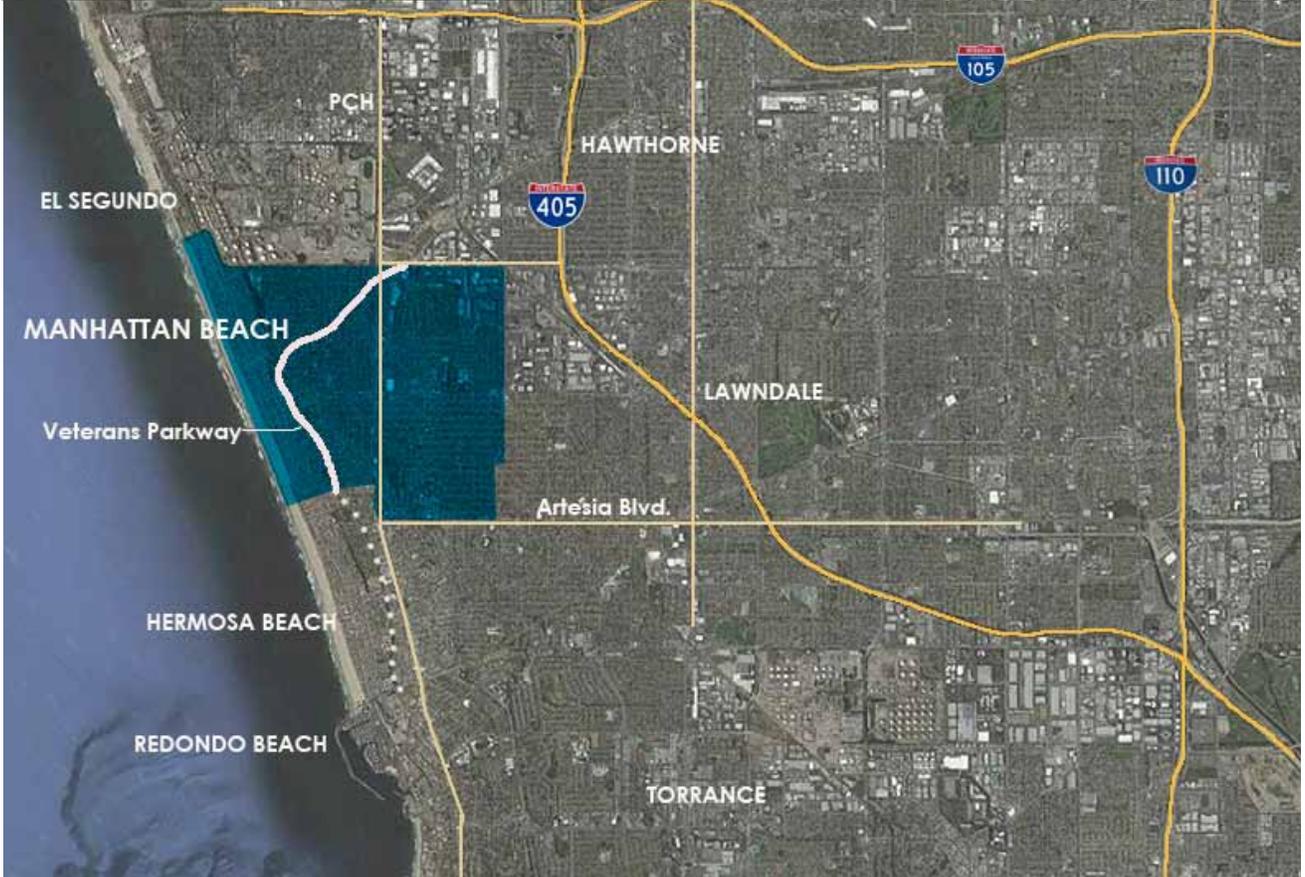
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1 EXECUTIVE SUMMARY

A. PROJECT BACKGROUND

Mia Lehrer + Associates, (ML+A), worked with City of Manhattan Beach, (City), staff and interested residents to develop Landscape Master Plan Guidelines, (LMPG), for the City's Veterans Parkway, (Parkway). The goal of the LMPG is a set of recommendations for current landscape improvements at Veterans Parkway. The LMPG are built upon a preliminary site analysis that serves as the platform for these general recommendations for future development and management of the Parkway.

The recommended next step is the development of a Landscape Master Plan (LMP). A Landscape Master Plan is a planning document prepared by a team of design professionals that include a landscape architect, civil engineer, traffic engineer, soils consultant, and arborist; and may also include a lighting designer. The team of design professionals can study the site and provide overall design that considers each of the major areas of the Parkway as well as the various landscape elements so there is a comprehensive and cohesive approach to the design recommendations. Because Veterans Parkway is a linear park, thoughtful planning for the sequencing of spaces is important in the strategic placement and design of park amenities and specialty gardens. It is advisable to study the Parkway as a whole rather than as separate projects that get implemented intermittently.

While this document deals only with LMPG for Veterans Parkway, the City is concomitantly undertaking a related project: the General Plan Update – Mobility Section, that will provide goals and policies for a balanced, multi-modal transportation system for the movement of people and goods within Manhattan Beach.



There are many facets to designing a Master Plan project of this size at 22 acres or 2.2 miles; therefore a group of design professionals led by a landscape architect is strongly recommended. A Master Plan serves as a living document and long-term blueprint as time passes, City staff changes and the community evolves.

Three Workshops

With the City, ML+A developed a community outreach process, seeking to build resident support for the Veterans Parkway planning project, and soliciting community comment on how the Parkway could be designed to meet the needs of residents and park users. The LMPG reflects public input and community consensus as endorsed by the City and major stakeholders, including adjacent neighbors, the Manhattan Beach Botanical Garden, and the Greenbelt Restoration Project. For a description of the workshops and community input, refer to the publication [Introduction, Site Analysis and Community Outreach](#).

B. HISTORY OF VETERANS PARKWAY

In 1888, the Santa Fe Railroad completed their first railroad spur, a single track line between Valley and Ardmore Ave., connecting Redondo Beach Wharf to downtown Los Angeles. In 1986, the Manhattan Parkway was developed along the former spur track lines and in 1998 was named the Veterans Parkway, a 21-acre park crossing the City of Manhattan Beach from north to south along Valley Drive and Ardmore Avenue from Sepulveda Boulevard to the border of the City of Hermosa Beach.

The Veterans Parkway includes a 1.5 mile trail and a wheelchair-accessible Parcourse between 10th and 11th Streets. Dogs on leashes are allowed on the Veterans Parkway. Park benches, shade trees, and drinking fountains provide resting spots every quarter-mile along the path. The 250-ft. long Mariposa Pathway near 9th St. provides a rest stop for those who enjoy a walk along this park. Seven butterfly totems, a permanent installation of public art, are placed amidst the eucalyptus trees, the natural habitat of the Monarch butterfly that border the trail and path.

photographs: Jan Dennis



1900

1960

1984

Veterans Parkway today is a quiet, passive park where users enjoy walking, jogging, and walking their dogs. Mature trees and some flowering shrubs border a soft mulch path. Some invasive species such as ice plant, which was planted by residents in the 1900s to secure nearby sand dunes, have taken over slopes and understory planting areas, creating an enjoyable but monocultural carpet throughout the length of the Parkway.



Since 1988, landscaping and maintenance for the Veterans Parkway area has moved forward with no formal City guidelines nor Master Plan. Some residents whose property fronts on the Parkway have addressed the land immediately in front of their homes, adding plant material to the landscape and watering by hand, with the intention to improve the view of the parkway in front of their properties. The City and the community as a whole benefits from and appreciates these efforts. Residents have also chosen spots to have trees planted, at times, paying a fee to the City.

Without a master plan and no formal City guidelines, ad hoc improvements are undertaken without a knowledgeable background of plant growth and habit, irrigation requirements, plant communities, and invasive or less-desirable species. At times, there is also a limited understanding of how these efforts might impact maintenance or their integration with other City efforts. The Parkway is public land, shared open space, and improvements using MPLG are designed to improve landscape installations in public spaces.

The Greenbelt Restoration Project

In 2010, a grassroots organization known as the Greenbelt Restoration Project was initiated by a local resident to transform a barren section of Veterans Parkway that had not been attended to by other residents. Citizens were invited to make both financial and labor donations to implement the landscaped designs developed by the Greenbelt Restoration group and transform a portion of the Parkway. This effort was coordinated through the Public Works Department, but was largely self-funded, including provision of most labor. The

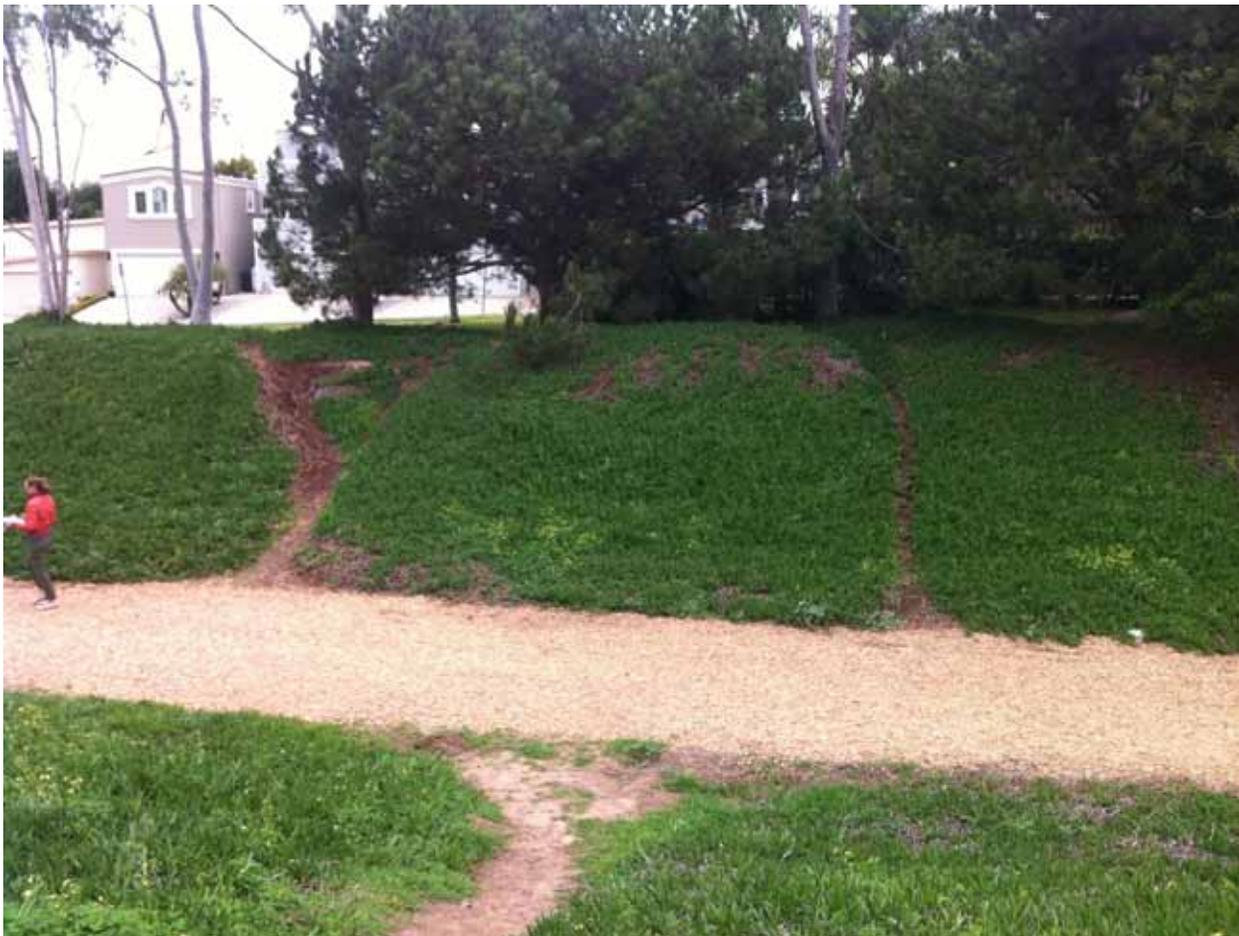


community response has been positive, and the benefits of partnering with these volunteers are valuable. The City looks forward to the development of a Master Plan that will set guidelines for the design, installation and maintenance of Greenbelt improvements that will result in beautiful, coordinated public spaces that are unified in design concept and sustainable in practice.

Coordination

The City of Manhattan Beach Public Works operates in partnership with other municipal agencies and jurisdictional entities and is subject to County of Los Angeles and City codes and restrictions. Improvements to Veterans Parkway may need to be coordinated with various City planning documents such as the General Plan, Mobility Section and the Parks Master Plan.

It is the intent of these Master Plan Guidelines to ensure that any improvements undertaken are in partnership with City agencies and municipal codes where there might be shared interests to put in place a coherent and unified design at Veterans Parkway supporting the City's functionality. The City is responsible for ensuring that new improvements conform to the Master Plan Guidelines, and any new improvements must be presented to and approved through the City's process.





CONTEXT MAP



C. WHAT WE SAW

There are many different sign types. Some are positioned at many levels and some not positioned for the target reader.

For non-regulatory or jurisdictional signage, a new family of signs will create a unified look for the Parkway.

New sign types include:

- Parkway Welcome
- Mileage Markers
- Plant Identification
- Interpretive Information

See Appendix E - Landscape Elements Catalogue

CREATE A FAMILY OF SIGNAGE



Access points and public safety inspired the most comments from the community and will be referred to the Mobility Plan committee for their review.

Additional recommendations include adding railings to stairs and developing temporary fencing for newly-installed projects to limit access, when maintenance is being undertaken especially where there has been slope failure.

Access points with no crosswalks



Temporary fencing

DESIGN FOR PUBLIC SAFETY

Stair Railings





REMOVE

- Plant material that is not thriving or inappropriate for the zone

CLEAN OUT AREAS

- Give specimen plantings room.





SOLVE SLOPE STABILIZATION, DRAINAGE, AND EROSION ISSUES



DEFINE EDGES

- For safety
- For beauty



CARVE OUT PLACES IN SPACES

- Define spaces
- Control encroachment
- Reduce maintenance



STRENGTHEN INTERSECTIONS

- * For safety
- * For beauty



CELEBRATE SUSTAINABILITY

- * Design the area as an infiltration project exhibit
- * Develop interpretive signage
- * Design for safety



D. FIVE GOALS

The LMPG are designed to achieve five goals:



CAPTURE COMMUNITY OPPORTUNITIES

foster CIVIC PRIDE • **engage residents** in the process • **provide** educational opportunities • **celebrate** the cultural heritage of Veterans Parkway



GUIDE FUTURE IMPROVEMENTS

Undertake all future improvements with a unified and coherent design concept built on

- developing continuity through the Parkway;
- creating 'moments' along the path that make it an interesting journey;
- strengthening the civic gateways and civic core;
- emphasizing sustainability, biodiversity, and conservation of resources.
- succession planning to ensure that the beauty of the Parkway endures.



GUIDE MAINTENANCE

Balancing the needs within the city budgetary constraints.



GUIDE DONOR POLICY

The City of Manhattan Beach Parks & Recreation and Public Works Departments welcome bequests for donor trees and gifts for sponsored projects that restore and improve Manhattan Beach's open spaces. These gifts are meaningful both to the donor and beneficiary as well as to a favorite park.

Gifts, bequests, and contributions that enhance, beautify, improve, supplement, support, and benefit the Veterans Parkway are encouraged and facilitated. A policy has been put in place to facilitate the process and covers types of sponsorships available, the term of sponsorship, costs, conditions and the process. See Appendix F for information on the policy.



CREATE VALUE

create long-lasting beauty by ensuring Parkway succession

employ best practices: PLANTS & WILDLIFE

help sustain the local and migrating bird population

provide plants that support habitat for local fauna

ensure biodiversity to strengthen plants against pests and disease

employ best practices: WATER

filtration

storm water treatment/retention

planting zones by plant community

drip irrigation

employ best practices: ENERGY

improve air quality

dampen noise pollution

lower ambient temperature

employ best practices: MATERIALS

art

signage

recycled materials

natural materials

IMPROVE THE QUALITY OF LIFE



E. ECOLOGICAL AND PHYSICAL CONTEXT

The most salient quality of the Parkway is CONTINUITY: this wide, linear parkway and walking path is crossed by few intersections, which poses safety issues but also contributes to the perception of the Parkway as a continuous strip. It serves as one of few places where one can take a long walk in a tranquil, planted urban setting without asphalt, concrete, fencing or gates. Plant material should be selected for its contribution to perceived continuity.

Many factors influence how the Parkway can function optimally in its physical and ecological context. Manhattan Beach has an average precipitation rate of 13.15 inches/year with heaviest rainfall in December through January and average temperature highs range from 65-75 degrees. It is also important to recognize that it is in the path of migratory bird species and is a habitat for many fauna. This linear Parkway runs through residential, civic, and retail neighborhoods.

The Parkway is located in the California coastal sage scrub zone near the ocean and is thus affected by the salt air and alkaline soils as well as stiff ocean breezes. However, it is protected behind dune lines and because of the changes in topography areas that are depressed are mostly protected from these windy conditions.

Plant communities are defined as a complex grouping of plant species with shared environmental requirements that interact with each other and the environment, including fauna and the physical environment. Communities form a relatively uniform vegetation area, influenced by soil type, topography, climate, and human disturbance and may look quite different from adjacent communities. Communities may look different, depending on the particular plants that are present in any given location, but all plants of the same community get along.

Coastal Sage Scrub

Various classification systems have been formulated for plant communities in California. For purposes of this document, we will refer to the classifications of Holland and Keil or Barbour and Major, which are both designed for the academic community and general public. According to these systems, the plant community of Veterans Park is defined as Coastal Sage or Southern Coastal Scrub, one of the habitats that has evolved in the Mediterranean climate belts at 30-40 degrees latitude, typically with heavy winter rains and dry, warm summers. Coastal Sage Scrub is a soft chaparral, usually low-growing, aromatic, and drought-deciduous. The community is drought and fire-adapted, often with extensive root systems that anchor plants and hold soil in place, and reduce runoff during winter and spring rains. They often are dormant in the summer and appear inactive but growth is still occurring.

This community is usually found on xeric sites, steep, south-facing slopes with thin or rocky soils, on exposed sea bluffs, coastal terraces and coastal dunes. There is usually a more open

canopy that permits persistence of this diverse herbaceous plant material. Summer fog overcast is common. Plant material adapted to this ecosystem rarely freezes in winter and only occasionally experiences temperatures over 90 degrees F during dry summers. This community has very diverse soils, from acidic sand on hard pan to alkaline clays. The Coastal Sage Scrub plant community has wildlife and mini-wildlife activity for most of the year. The climate is mild enough that there is something flowering every month of the year.

Originally the dominant ecosystem, Coastal Sage Scrub is now endangered due to urbanization. Threats include fragmentation, invasion of non-native species, altered fire cycle, air pollution.

F. A NEW VISION FOR VETERANS PARKWAY

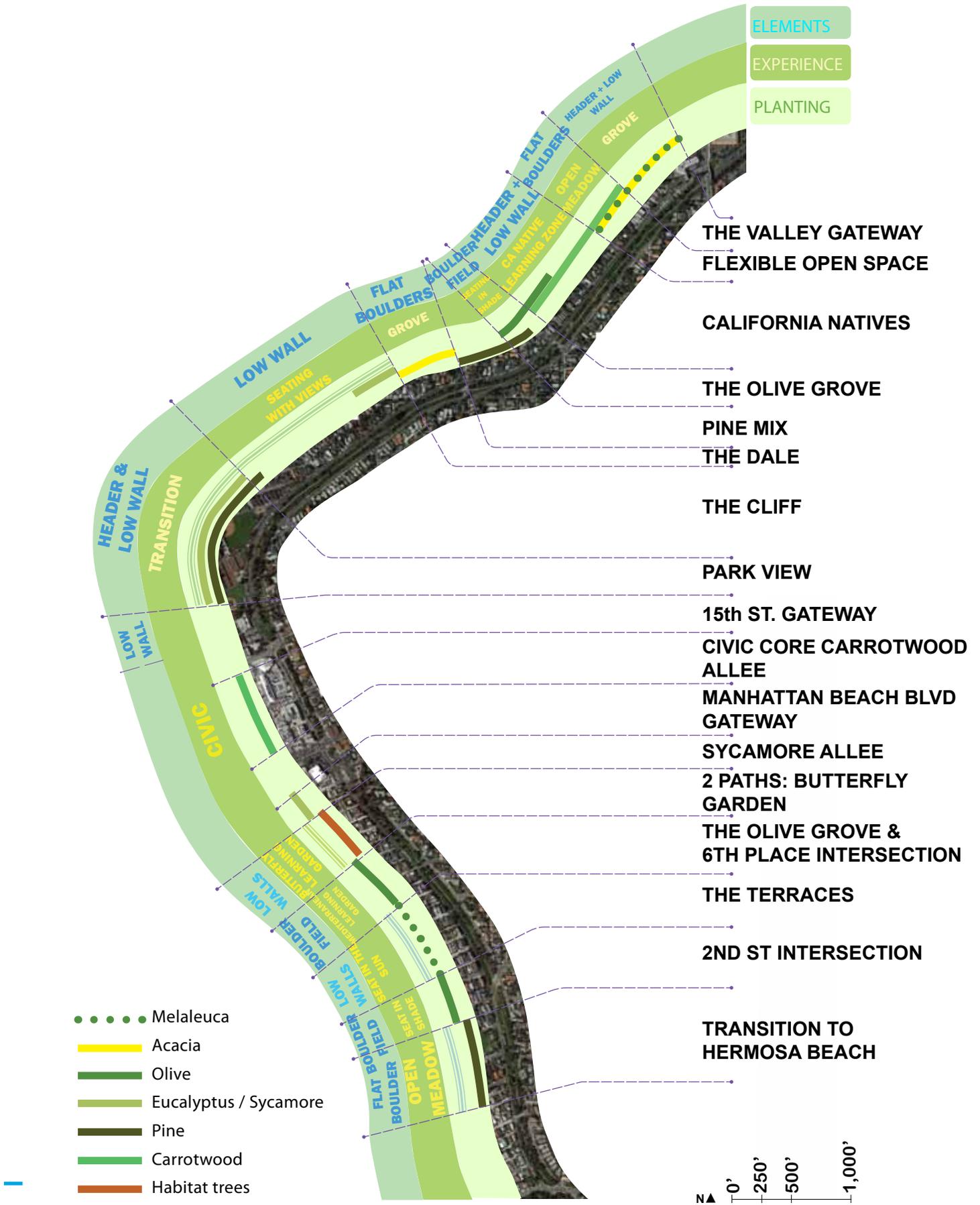
- Maintain/restore/improve the landscaping
- Restore ecology
- Respond to the physical context
- Design for comfort

Basis for Design

The basis for these guidelines supports natural landscapes of the Southern California coastal region that survive and thrive in the Manhattan Beach and the Veterans Parkway area. These natural landscapes demonstrate the benefits of species diversity and succession development into plant communities that are site-specific and locally adapted to their environment. Optimum conditions not only involve plant choice, but also healthy soils biology, appropriate maintenance, and a succession planting strategy.

Plant communities are also defined as a complex grouping of plant species with shared environmental requirements that interact with each other and the environment, including fauna and the physical environment. Communities form a relatively uniform vegetation area, influenced by soil type, topography, climate, and human disturbance and may look quite different from adjacent communities. Communities may look different, depending on the particular plants that are present in any given location, but all plants of the same community co-exist.

Although the Parkway is highly urbanized and may be distant from its native configuration, it is important that the new landscapes meet aesthetic and management criteria for long-term viability, and that one provides the foundation for healthy plant development. These guidelines are built upon knowledge and understanding of these natural landscapes and how they perform in urban environments. There is research to support these strategies, and practices are designed to assist in the development of a successful, sustainable, and beautiful Parkway.



2 A BRAIDED PARKWAY

The Parkway is thought of as an attractive and comfortable place, loved by the community and associated with cherished moments in their lives. It is a unique community asset. When one goes to the Parkway one arrives at a special place and where one feels part of the community. We see, hear and smell many things that enrich the present moment or evoke moments of remembrance.

Those responsible for maintaining the Parkway understand these things and how important the Parkway is to the community. Public landscapes that are built are managed by cities and maintained with limited funds. These managed landscapes require plants that are hardy, need low maintenance, and thrive on little irrigation. It is challenging to manage a landscape with budgeted public funds on going for material replacement and labor. The City staff takes pride in creating and maintaining beautiful places for the community.

The responses to the Parkway are our responses to physical things one sees, hears, smells and moves through. Some of these responses become emotional: “We feel safe,” “We feel we are part of a community,” “We like the Parkway.” In these LMPG, these concrete things are defined and organized in an objective manner so that they can be included in planning the management, maintenance, and change.

The 3 Braided Strands - Experience, Planting, Landscape Elements



THE BRAIDED STRANDS

1. Experiences

The Parkway presents various conditions due to its length that offer a variety of experiences. It is important to recognize these natural conditions and build upon existing areas to create experiences for the users. The Braided Parkway concept proposes an emphasis on the continuity of experiences along the path while identifying a few special places for users. These “nodes” include places to rest, places for flexible use, and places to learn.



2. Plant Material/Ecology

The LMPG for the Parkway propose to strengthen the existing plant palette by carefully managing the site, introducing a succession planting strategy to prepare for the future, and to clean out undesirable and unhealthy planting material. The proposed plan also seeks to support habitat by introducing new plant species that support biodiversity and cleanses the palette to recreate planting communities that function both as an ecological strategy and ease of maintenance.

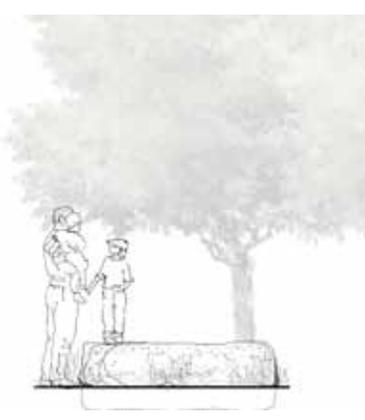


3. Landscape Elements: Places within Spaces

The LMPG also propose to replace and introduce Landscape Elements to help define spaces, create places within spaces, and create continuity on the braided Parkway. These landscape elements include:

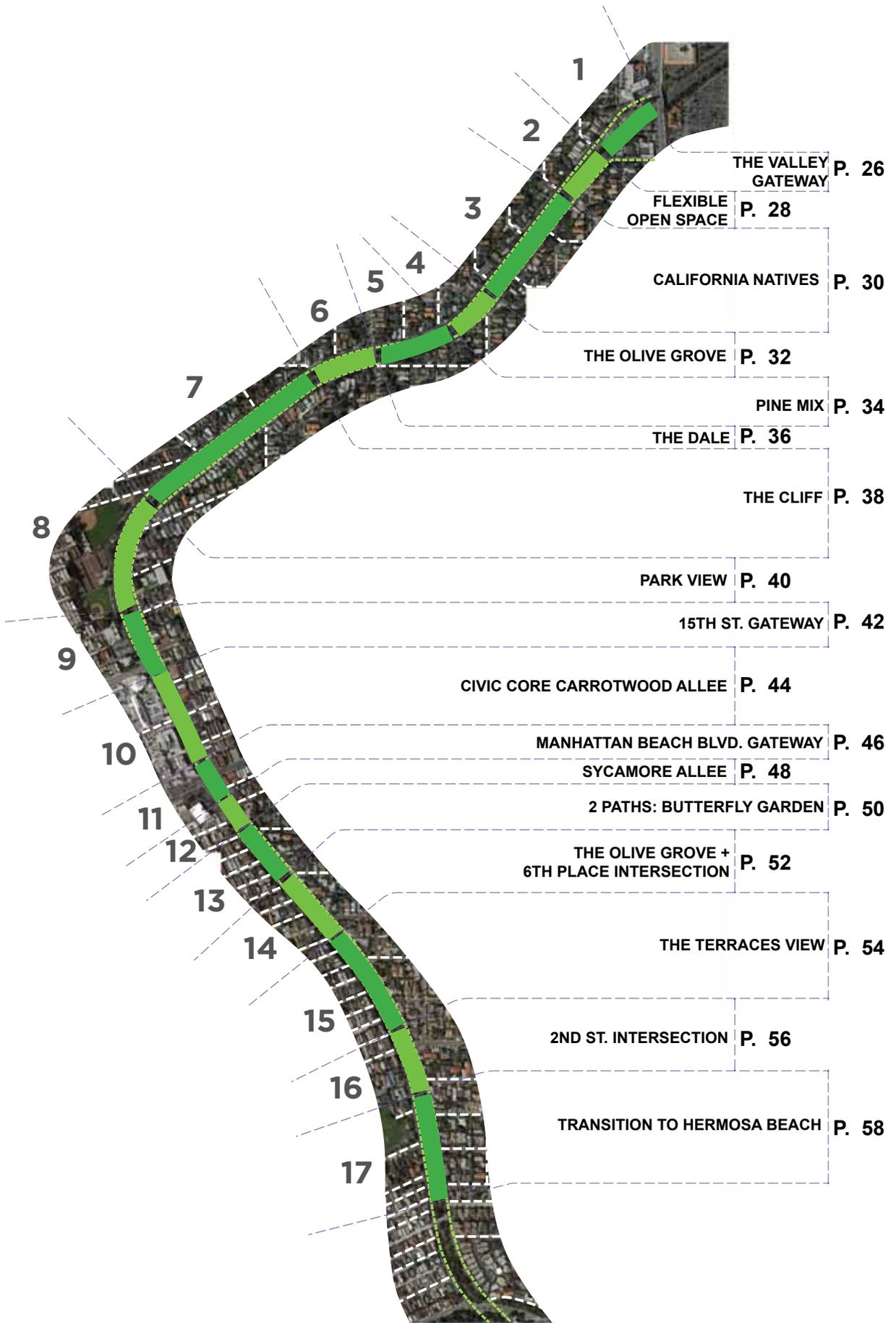
- **Seating Opportunities**
Replace benches with seat wall, group of boulders and flat boulder
- **Planting Accessories**
Planting stakes, curb walls and headers, vine supports, tree armrests
- **Learning and Orientation Signage**
Parkway signs, mile signs, interpretive signage, plant identification
- **Safety and Management Amenities**
Temporary fencing, boulder bollards, railings for stairs

(See Appendix E for Landscape Elements Catalogue.)



create
**PLACES
WITHIN
SPACES**





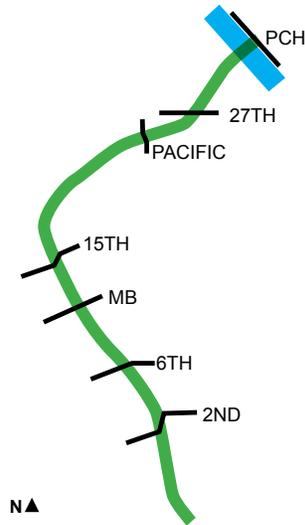
3 RECOMMENDATIONS BY ZONE

The following recommendations are organized by zones that reflect existing site conditions and planting palette. These site-specific recommendations help define the overall character for each zone or area of the Parkway and propose Parkway amenities and enhance the identity of the Coastal Sage Scrub planting community.

These recommendations incorporate concepts of sustainability, creative design, and sound ecological concepts that are based on the conditions presented by the various sites along the Parkway. Careful locations for grading and building of bioswales will increase the capture and retention of rainfall to help sustain growth of plantings. Water infiltration can be enhanced with the use of perforated pipes within the dripline of larger shrubs. Periodically drains need to be monitored during heavy storms or checked for clogged systems.



1: The Valley Gateway



This zone marks the northern terminus of Veterans Parkway, a major Gateway, that should make a stronger statement. The topography is dramatic but suffers from erosion and drainage issues. There is a feeling enclosure and anticipation as one moves from the north to the south.

PLANT MATERIAL / ECOLOGY

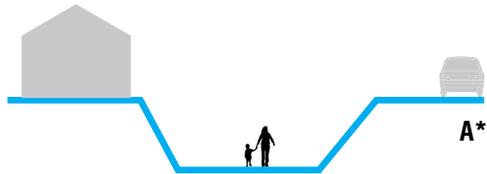
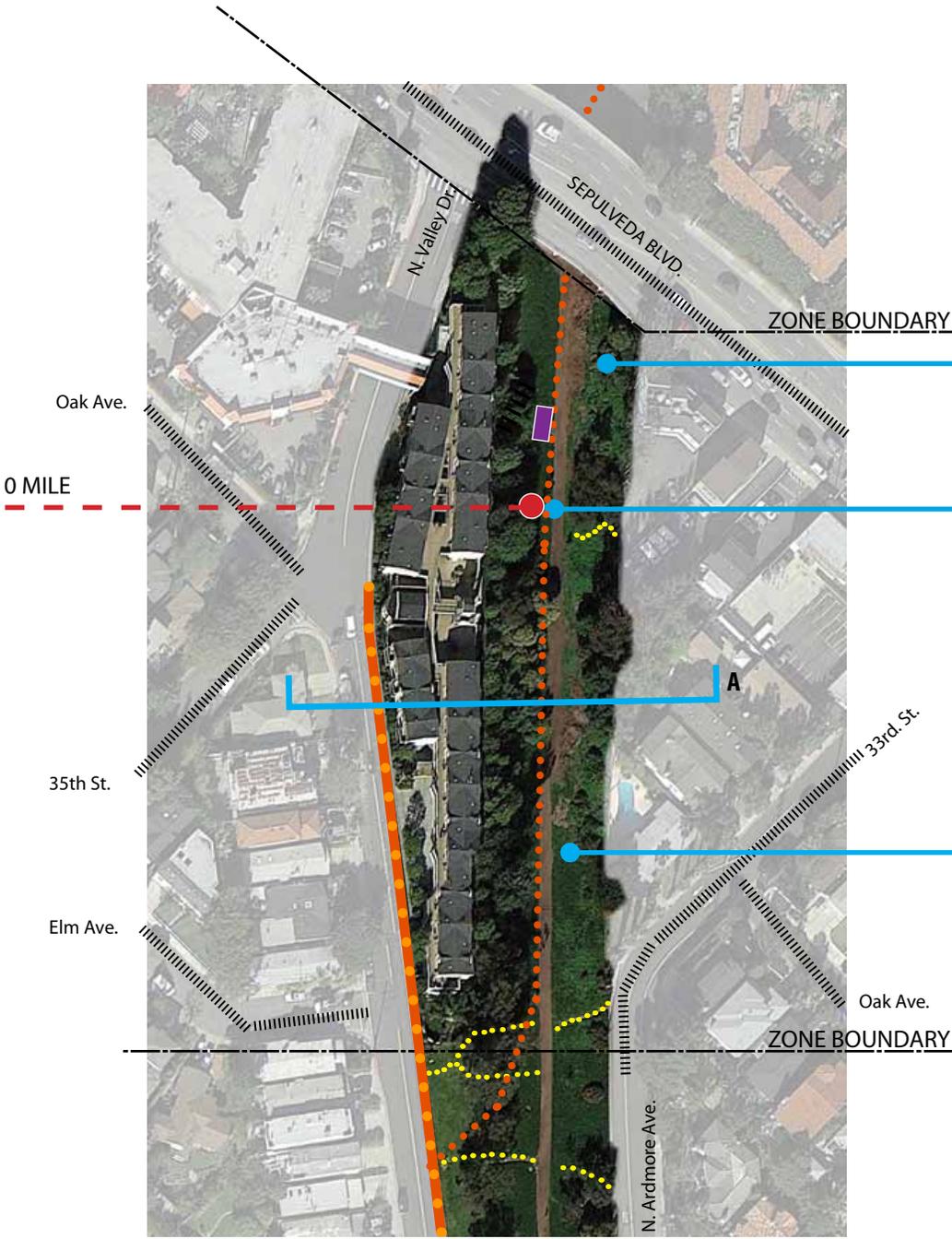
- Keep Acacias for dramatic seasonal color.
- Infill with additional Acacias.
- Keep Melaleucas and infill with additional plant material.
- Remove Algerian Ivy and Ice Plant and plant understory that will stabilize slopes. Refer to plant palette for foundation understory material that tolerates public traffic, stabilizes slopes, tolerates shade, and is part of the Coastal Sage Scrub plant community.
- Conceal large drainage pipes and outlets with plant material.
- Plant trees as buffers to address privacy from buildings on east side.

AMENITIES AND LANDSCAPE ELEMENTS

- Consolidate preferred desire paths on southwest end of the senior housing complex.
- Consider terracing for erosion control.
- Develop a family of signage. Install a Parkway welcome sign and replace mileage signage.
- Explore development of a transition bikeway from the existing bike route on N. Valley Drive under the Sepulveda Blvd. bridge to the mall on the east side of the bridge.

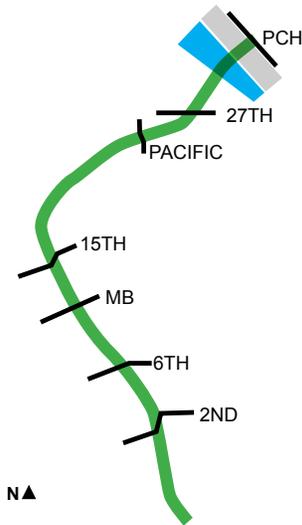
	TRASH CONTAINER		STREETS THAT CROSS VETERANS PARKWAY
	MUTT MITT		ADJACENT STREETS THAT DO NOT CROSS THE PARKWAY
	DRINKING FOUNTAIN		DESIRE PATH
	BENCH		STAIRS
	MEMORIAL BENCH		MILEAGE SIGN
	VETERANS PARKWAY SIGN		PATHS CROSSING PARKWAY
	EXISTING BIKE ROUTE		PROPOSED BIKE CONNECTION TO MALL

* diagrammatic section for purposes of expressing the general feeling of that zone



ELEMENTS	WELCOME SIGN	MILEAGE SIGN	LOW TERRACING
PLANTING	MELALEUCA ACACIA		
EXPERIENCE	THE VALLEY GATEWAY		

2: Open Flexible Space



This zone is open and flexible. The transition from the The Valley Gateway is dramatic as the topography flattens and opens up. Adjacent roads are at grade where there are open views and in places where there is recreational activity at the street; errant balls often roll out into traffic at this unsafe section of the Parkway. This is an opportunity for a bioswale to capture and clean street water runoff, designed also to buffer these open areas from street traffic.

PLANT MATERIAL / ECOLOGY

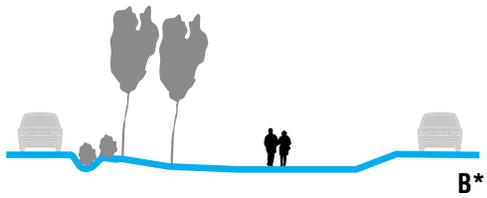
- Have a certified arborist check the health of any Eucalyptus trees.
- Consider succession planting. Replace turf with meadow grasses and flowers that can be either mowed down or left to grow taller. Areas could be mowed down with transition bands left to grow. This meadow will take visitor traffic.
- Develop an erosion strategy for slopes. Consult plant palette for materials that tolerate public traffic, require minimum maintenance, and can stabilize slopes. Also check for sun/shade conditions.

AMENITIES AND LANDSCAPE ELEMENTS

- Build bioswales that collect and clean street runoff and also create an edge for safety and controlled access.
- Install three large, flat boulders as a natural element that is beautiful, fun to climb or sit on, and serves as a connecting landscape element. (Consult Appendix E.)

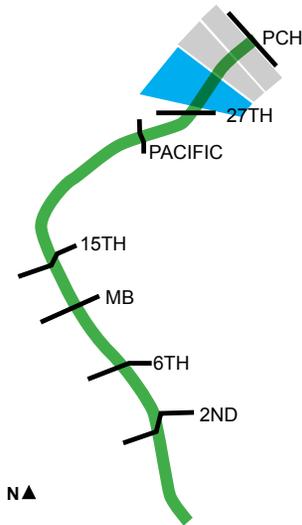
	TRASH CONTAINER		STREETS THAT CROSS VETERANS PARKWAY
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	DRINKING FOUNTAIN		DESIRE PATH
	BENCH		STAIRS
	MEMORIAL BENCH		MILEAGE SIGN
	VETERANS PARKWAY SIGN		PATHS CROSSING PARKWAY

* diagrammatic section for purposes of expressing the general feeling of that zone



EXPERIENCE	OPEN AND FLEXIBLE - A PLACE TO RELAX
PLANTING	 MELALEUCA ACACIA EUCALYPTUS / SYCAMORE
ELEMENTS	 FLAT BOULDERS

3: California Natives



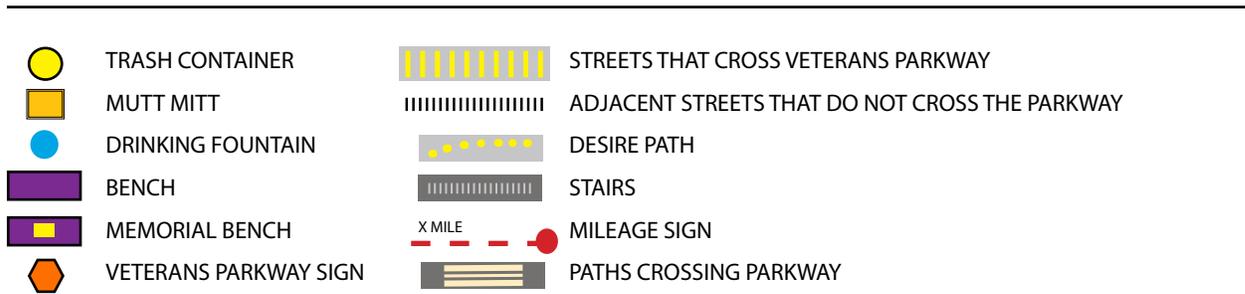
There has already been a lot of community work in this zone, replacing the ice plant with native and Mediterranean-adaptive plant material. This area is open, sunny and perfect for creating a special place: a learning opportunity for a plant material community that is appropriate for the location and local conditions of the Parkway.

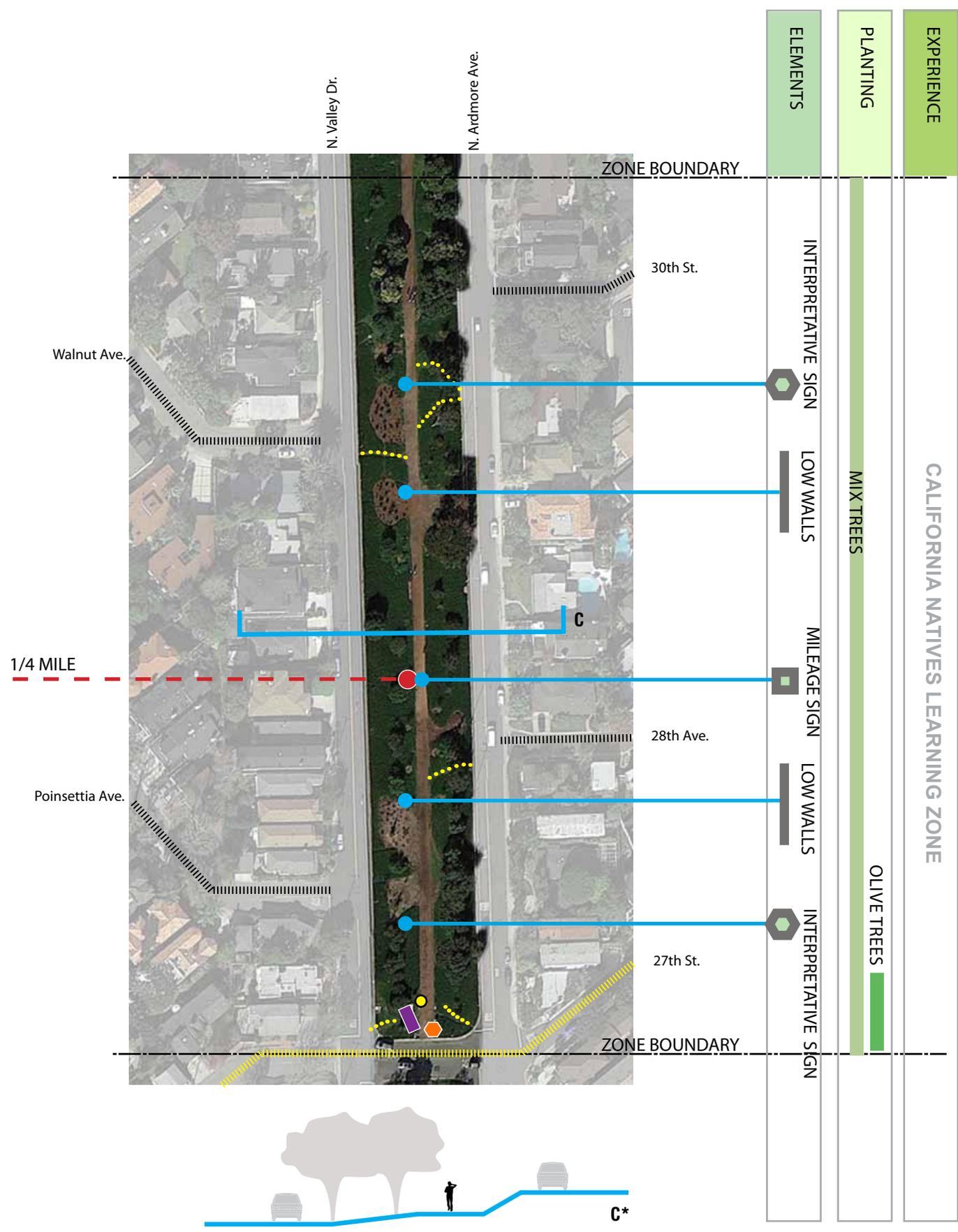
PLANT MATERIAL / ECOLOGY

- Build upon the areas that have already been created by the community.
- Keep open, light canopy.
- Clean around the yuccas - highlight them as specimen plantings.
- Strengthen the intersection at 6th: the existing olives are great. Plant additional olives.

AMENITIES AND LANDSCAPE ELEMENTS

- Install headers or low walls to create Places in Spaces for community projects: define space, contain ice plant encroachment and ease maintenance.
- Refer to the family of signage, and install interpretive signage, plant ID signage, and any temporary signage on new installations that describe project to park visitors.





1/4 MILE

ZONE BOUNDARY

ZONE BOUNDARY

N. Valley Dr.

N. Ardmore Ave.

30th St.

28th Ave.

27th St.

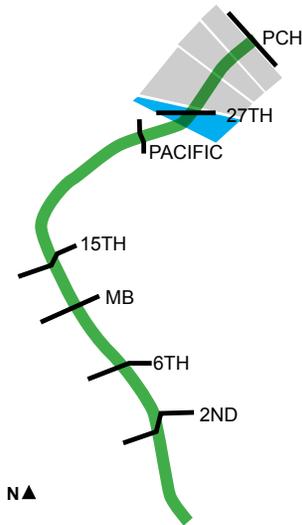
Walnut Ave.

Poinsettia Ave.

C

C*

4: The Olive Grove



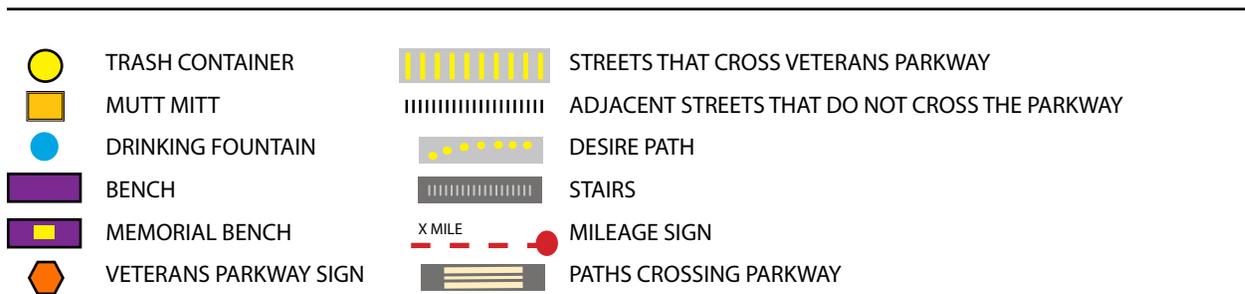
There are beautiful specimen Olive trees in this area. The intersection at 27th St. can be strengthened by planting additional Olives as a grove and extending it to the south.

PLANT MATERIAL / ECOLOGY

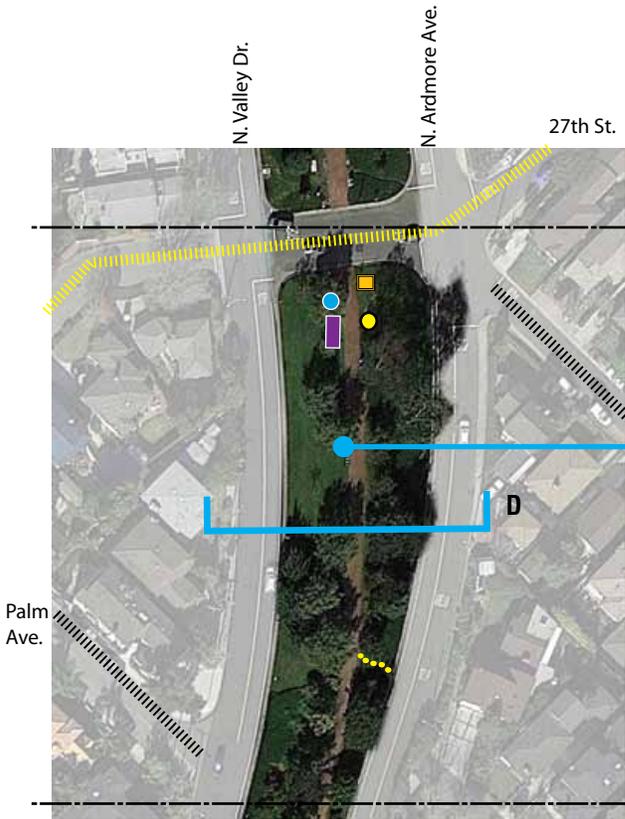
- Plant additional Olive trees both to strengthen the intersection and for long-term succession.
- Change lawn for meadow planting that can be mowed or left to grow.

AMENITIES AND LANDSCAPE ELEMENTS

- Install group of boulders.
- Remove concrete pads with no benches.



* diagrammatic section for purposes of expressing the general feeling of that zone

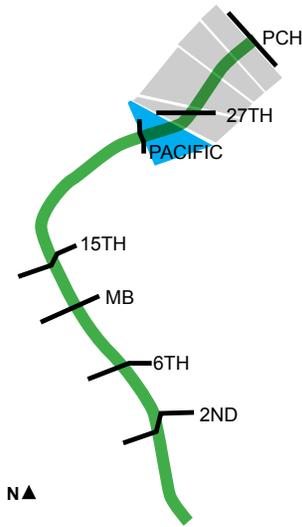


ZONE BOUNDARY

ZONE BOUNDARY

ELEMENTS	BOULDER GROUP	
EXPERIENCE	MEET ME AT 27!	
PLANTING	OLIVE TREES PINE TREES	

5: Pine Mix



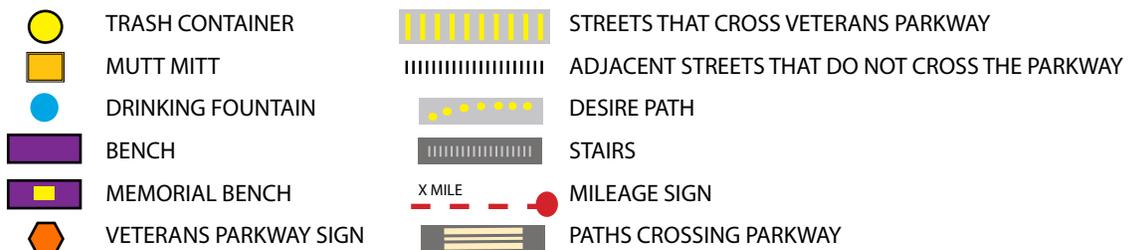
This area has interesting topography and a lot of Pine trees creating shade. It's a 'multi-sensorial' zone with horizontal and vertical interest.

PLANT MATERIAL / ECOLOGY

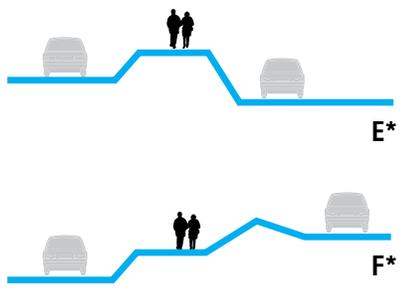
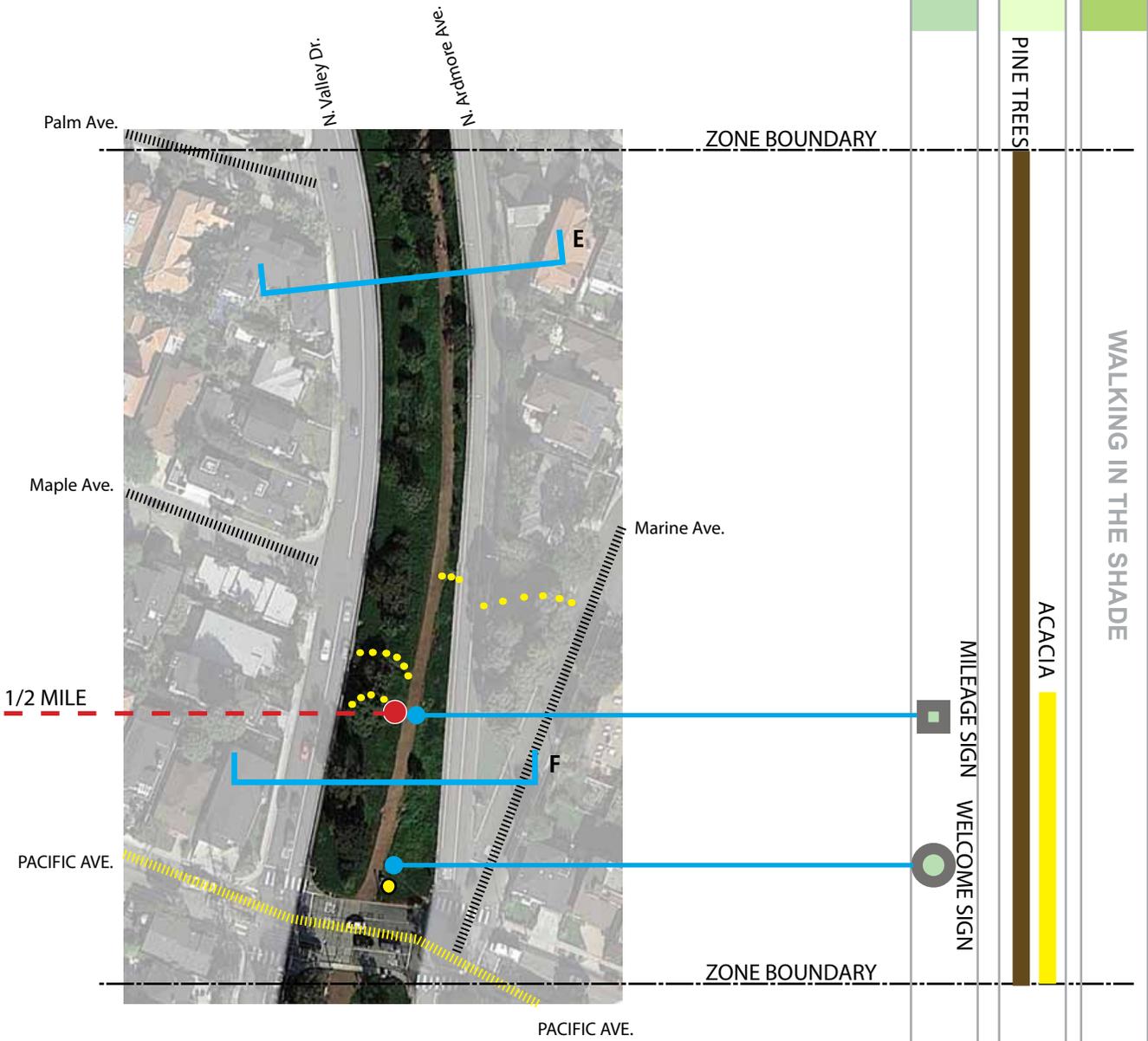
- Clean up the planting areas to highlight existing Pine trees.
- Undertake erosion control planting on east slopes.
- Check health of Eucalyptus trees and plan for succession.
- Remove and replace Oleander; replace with mid-height shrubs from the plant community.
- Remove Plum trees.
- Clean out growth around Yuccas.
- Plant Pines at intersection.

AMENITIES AND LANDSCAPE ELEMENTS

- Address 'paver' steps at desire paths for safety. If this path is not used frequently, it should be removed.
- Install Parkway signage from the sign family.

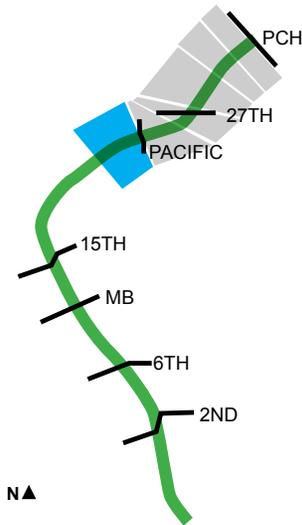


* diagrammatic section for purposes of expressing the general feeling of that zone



ELEMENTS	PLANTING	EXPERIENCE
	PINE TREES	
	ACACIA	WALKING IN THE SHADE
	MILEAGE SIGN	
	WELCOME SIGN	

6: The Dale



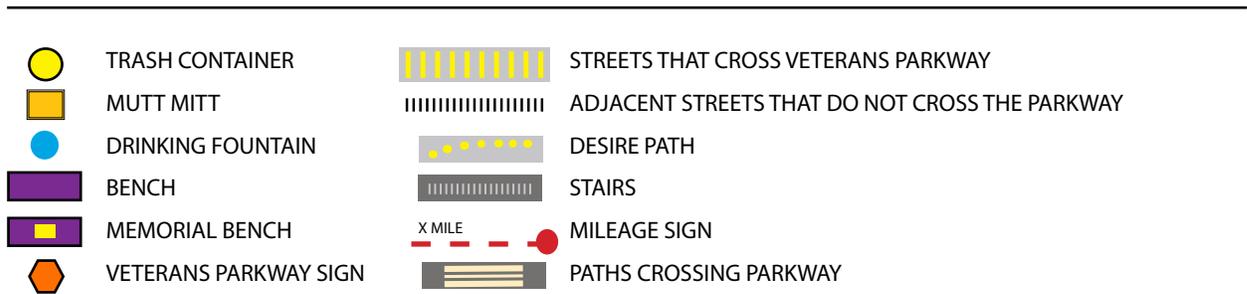
The land in this zone is depressed and has less of an 'urban' feeling. It is insulated with potential for sound containment. As the Parkway visitor moves through this zone, there is a perception of leaving the city behind and finding oneself in an open valley with seasonal color.

PLANT MATERIAL / ECOLOGY

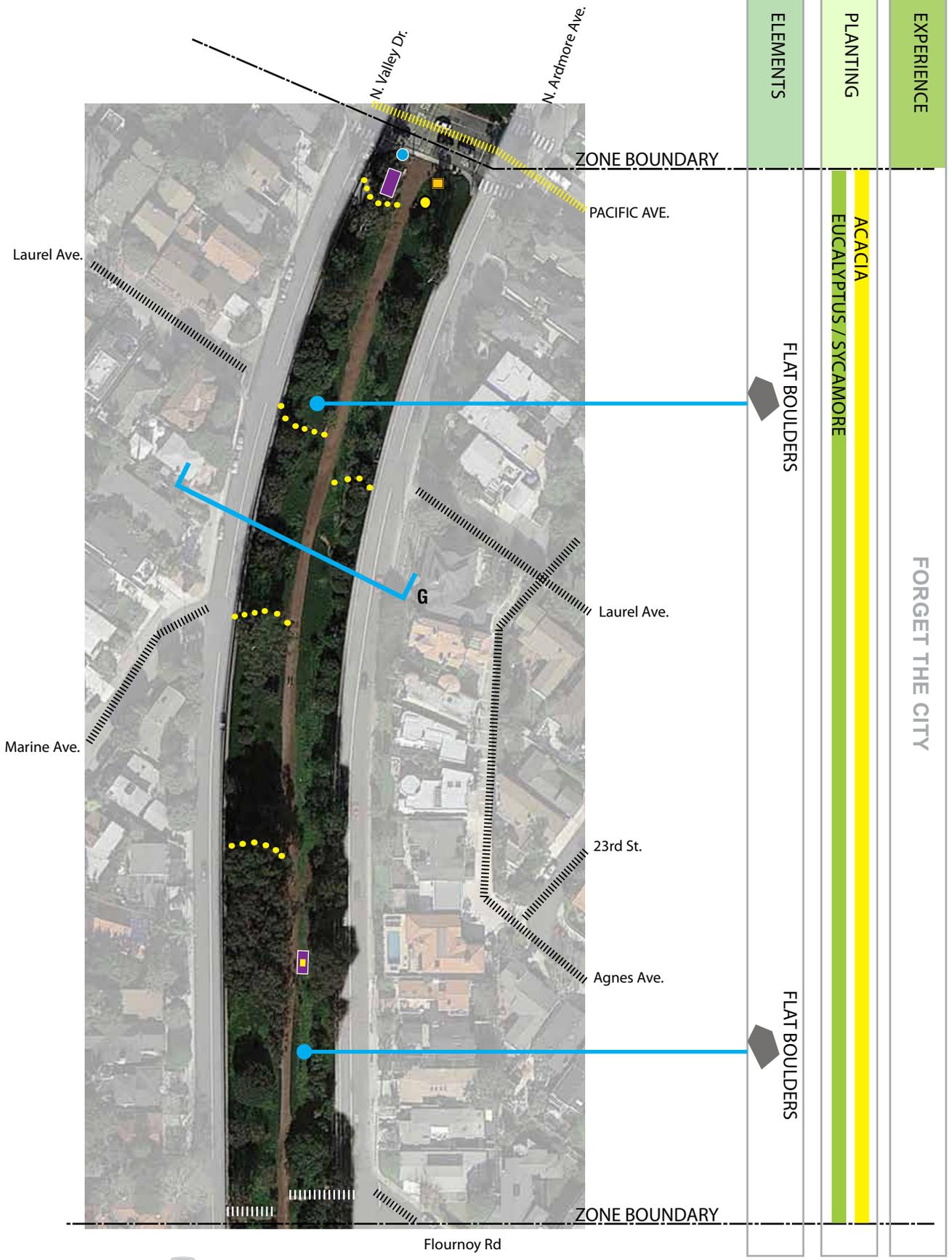
- Address erosion.
- Clean up tree palette.
- Introduce more Acacias for color and to establish a repetitive rhythm.
- Consider adding shade with a grove of trees.

AMENITIES AND LANDSCAPE ELEMENTS

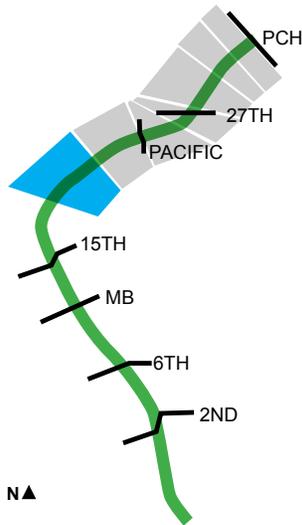
- Install flat boulders for seating in the shade.



* diagrammatic section for purposes of expressing the general feeling of that zone



7: The Cliff



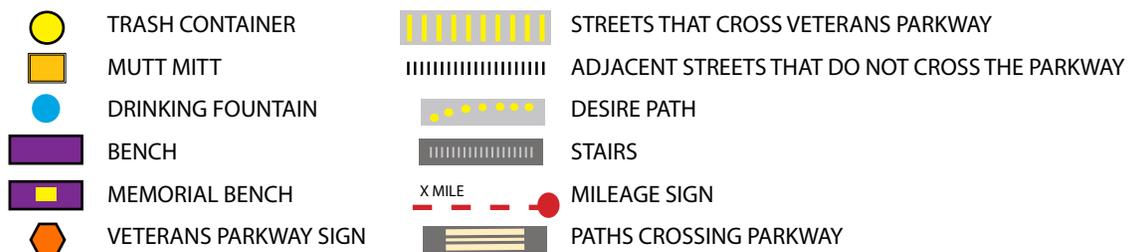
This zone has a Eucalyptus grove creating a porous feeling. Although plentiful and canopy coverage, there is also transparency in areas and views to be preserved. It also features specimen Yuccas. There are views to the west, a feeling of openness and an interesting relationship with the road. Sound is an issue where slopes on the eastern edge open to the western edge, which exacerbates this condition.

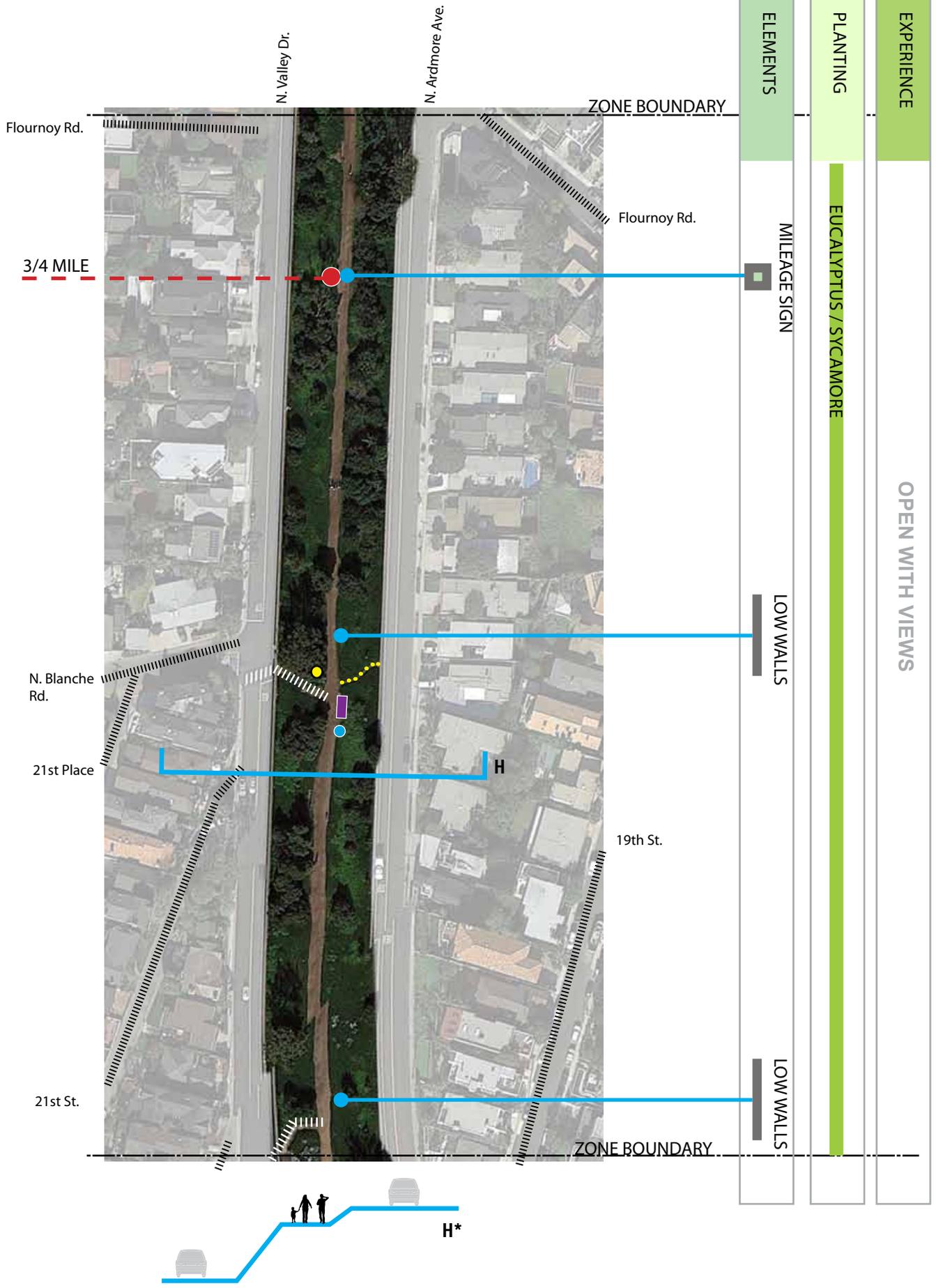
PLANT MATERIAL / ECOLOGY

- Create and announce stair access points.
- Control erosion with planting.
- Clean out areas with yuccas; clean out odd/random plant material.
- Remove and replace oleander.
- Keep views open to the west.

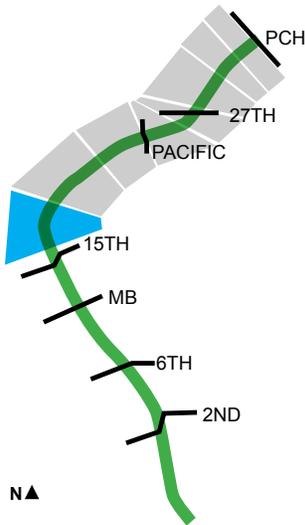
AMENITIES AND LANDSCAPE ELEMENTS

- Install seatwalls on eastern edge of path with views to the west.
- Replace mileage signage with signs from the family of signs. (See Appendix E.)





8: Park View



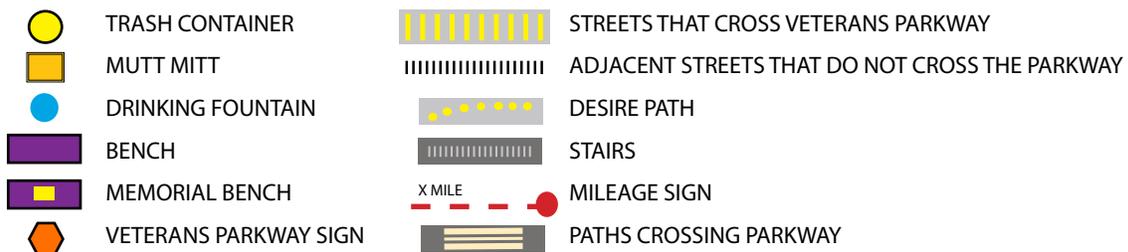
This area faces Live Oak Park, which is a transition area from the more natural Parkway to the Civic Core: “nature-to-city.” While it is important to keep and enhance the connection to the north with a natural landscape, the approach to the Gateway intersection and Civic Core near Joslyn Community Center is an area that could be more urbanized. This is a complex zone that would benefit from professional design services.

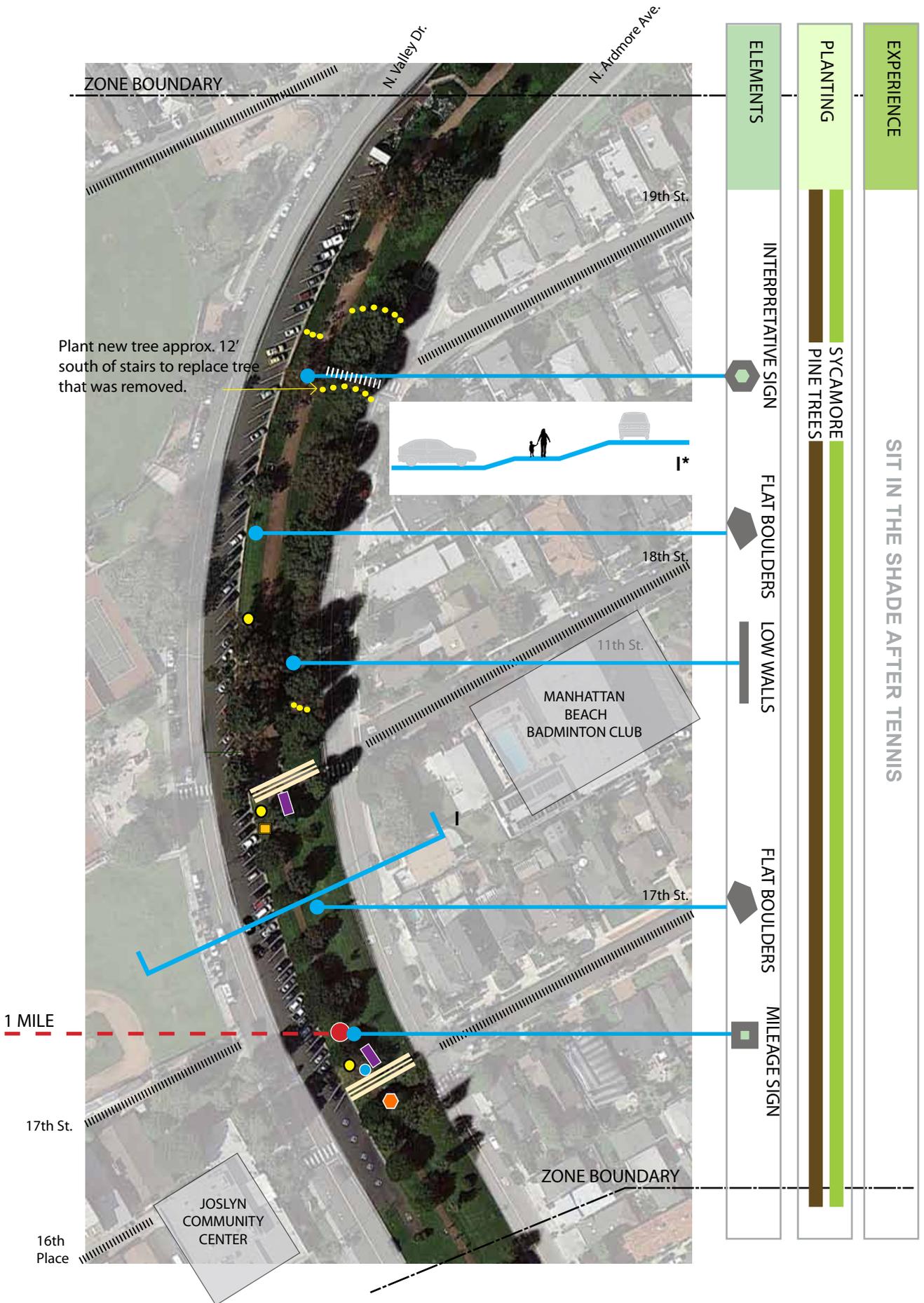
PLANT MATERIAL / ECOLOGY

- Address erosion.
- Check health Eucalyptus and plan for succession.
- Install gateway planting at stairs to signal access points.
- Remove turf on west side of the path adjacent to parking.
- Replace with low shrub massings and open mulch paths to facilitate movement from parked cars into the Parkway.
- Carve out areas for shrub massings and slab boulders as succession for turf and to lower maintenance on the east side of the Parkway.
- Plant tree approximately 12’ south of stairs at 19th St. to replace tree that was removed.

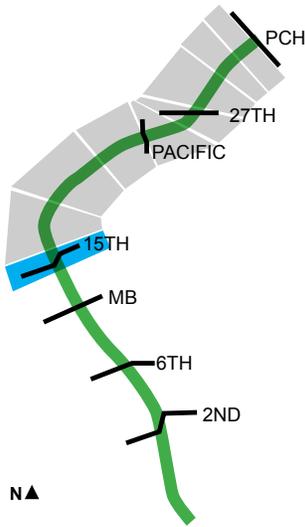
AMENITIES AND LANDSCAPE ELEMENTS

- Develop interpretive signage for the weather station.
- Replace mileage signage with new signage from the family of signs (See Appendix E.)
- Install seatwalls/low walls/slab boulders to create and define Places in Spaces.





9: 15th Street Gateway



The majority of comments received from the community relate to safety issues, primarily at access points. This zone announces the civic core and recognizes veterans at the memorial.

This zone can be strengthened to reflect Manhattan Beach's commitment to the development of beautiful and sustainable civic spaces using design materials and plant palette appropriate to this climate zone and local conditions. This is a complex zone that would benefit from professional design services.

PLANT MATERIAL / ECOLOGY

- Replace lawn with shrub massings in designed spaces.
- Introduce and feature the Beach Primrose.
- Clean up plant palette - consolidate.

AMENITIES AND LANDSCAPE ELEMENTS

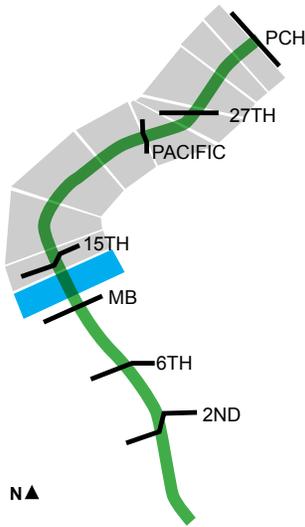
- Design gateway signage to match the family of signs. (See Appendix E.)
- Group boulders.

	TRASH CONTAINER		STREETS THAT CROSS VETERANS PARKWAY
	MUTT MITT		ADJACENT STREETS THAT DO NOT CROSS THE PARKWAY
	DRINKING FOUNTAIN		DESIRE PATH
	BENCH		STAIRS
	MEMORIAL BENCH		MILEAGE SIGN
	VETERANS PARKWAY SIGN		PATHS CROSSING PARKWAY



ELEMENTS	
PLANTING	
EXPERIENCE	CIVIC GATEWAY

10: Civic Core | Carrotwood Allee



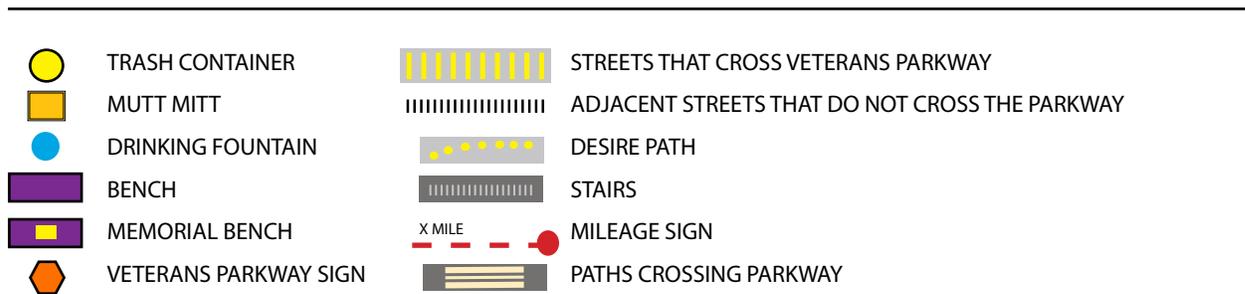
This zone provides continuity through the Parkway, although it is more a stitch than a space. The Carrotwood allee is regular and pleasant, with a good canopy.

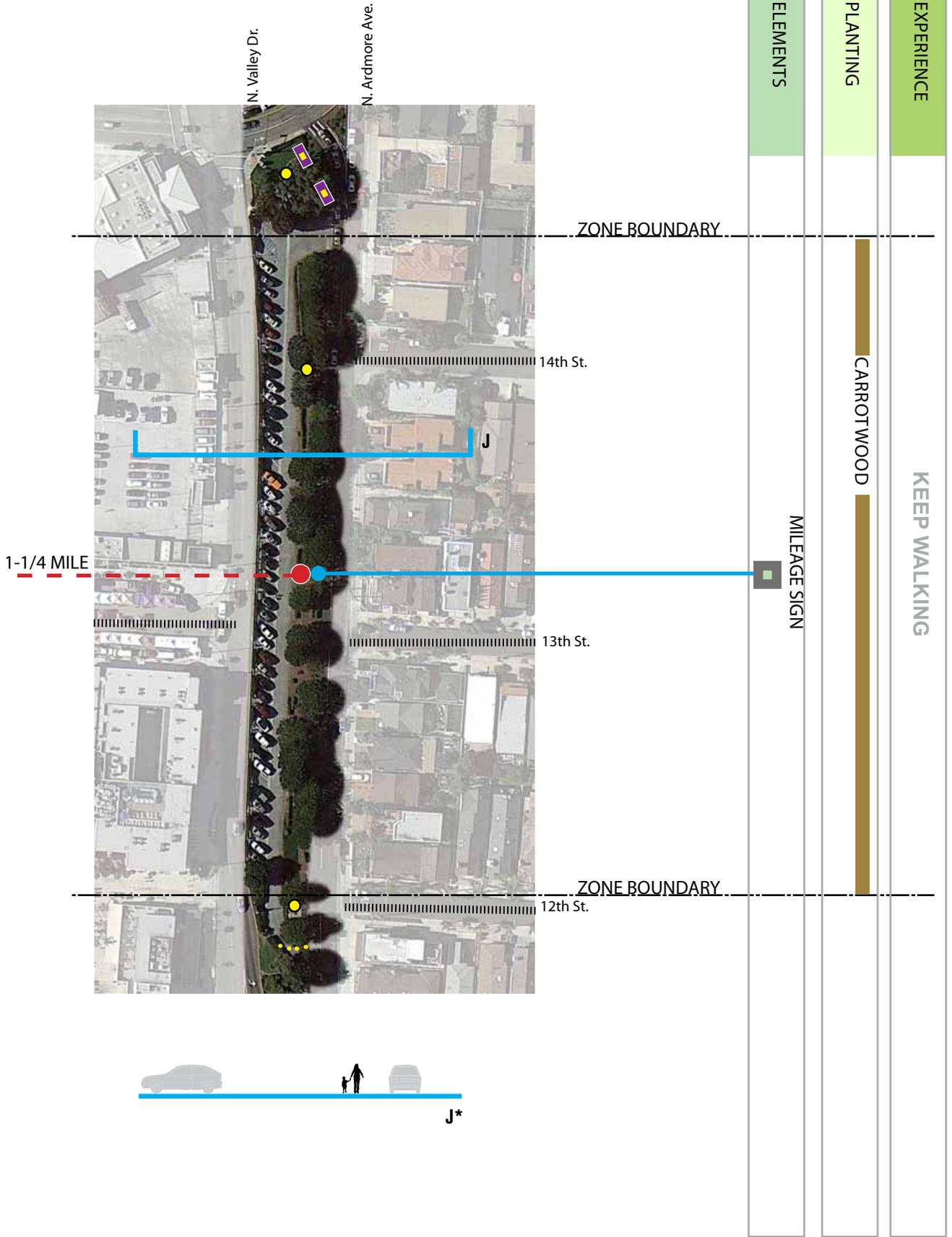
PLANT MATERIAL / ECOLOGY

- Consider a bioswale on the eastern edge to help define the edge and capture stormwater runoff.
- Replace shrub material with Coastal Sage Scrub palette. Coordinate plant material with shrub material in the Civic Core.

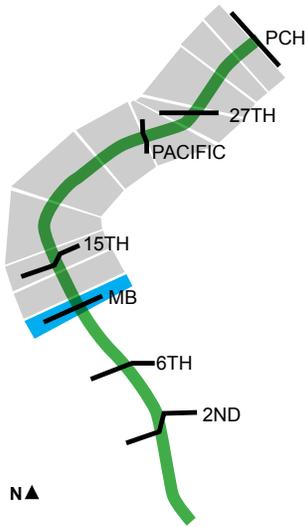
AMENITIES AND LANDSCAPE ELEMENTS

- Evaluate conditions for possible universal access, which could be a decomposed granite path. Circulation at the southern end is problematic where the path narrows considerably. There is a vault in the ground and poles that impede the path of travel.





11: Manhattan Beach Blvd. Gateway



This intersection marks the southern edge of the Civic Core and should be coordinated with the 15th St. intersection as Gateway elements, reflecting the City’s commitment to the development of sustainable civic spaces. Safety issues at street intersections and access points continue to be a concern in this zone. This is a complex zone that would benefit from professional design services.

PLANT MATERIAL / ECOLOGY

- Introduce and feature the Beach Primrose.
- Keep and feature pines.
- Remove lawn in traffic island and replace with shrubs.

AMENITIES AND LANDSCAPE ELEMENTS

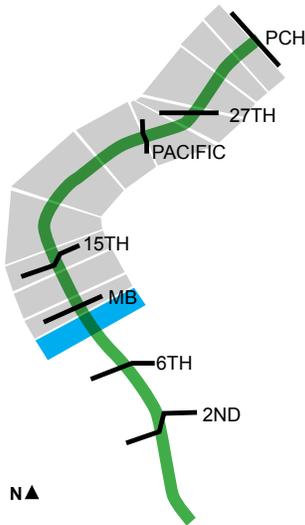
- Develop signage from family of signs. (See Appendix E.)

	TRASH CONTAINER		STREETS THAT CROSS VETERANS PARKWAY
	MUTT MITT		ADJACENT STREETS THAT DO NOT CROSS THE PARKWAY
	DRINKING FOUNTAIN		DESIRE PATH
	BENCH		STAIRS
	MEMORIAL BENCH		MILEAGE SIGN
	VETERANS PARKWAY SIGN		PATHS CROSSING PARKWAY



ELEMENTS			
PLANTING			
EXPERIENCE		CIVIC GATEWAY	

12: Sycamore Allee



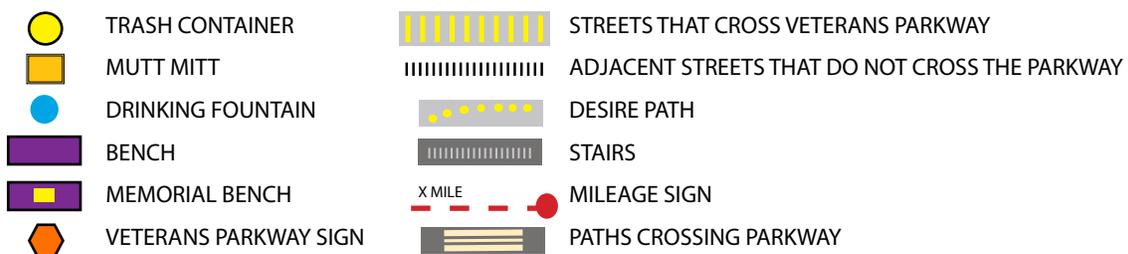
There is a nice, clean allee of Sycamore trees planted very close to the street curb and are pruned up for vehicular traffic. This section of the Parkway is quite narrow so it is important to keep the rhythm of the wide chip path while buffering the path from the parking and street for safety.

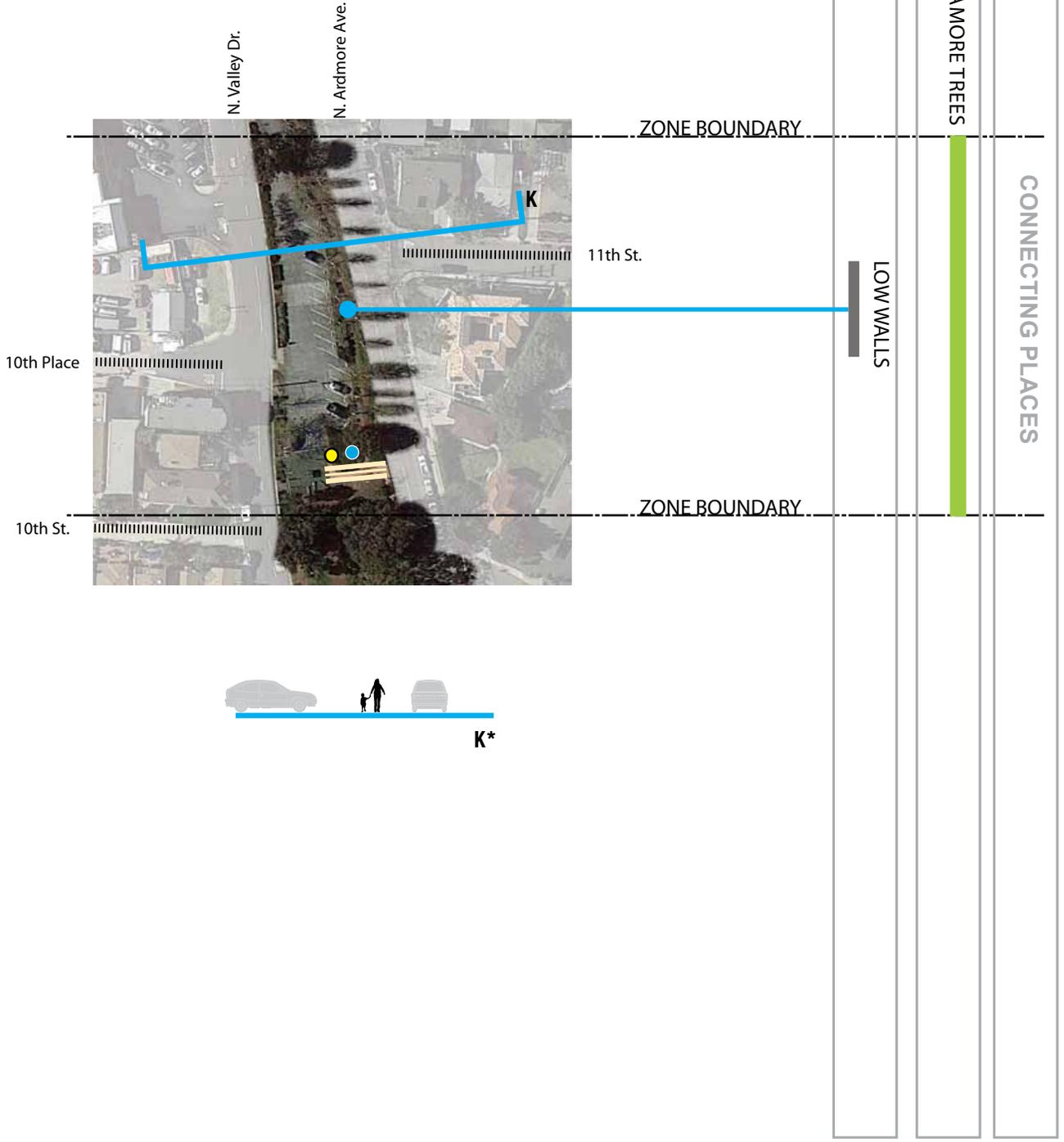
PLANT MATERIAL / ECOLOGY

- Keep the Sycamore trees.
- Replace shrubs to buffer parking.
- Consider bioswales.

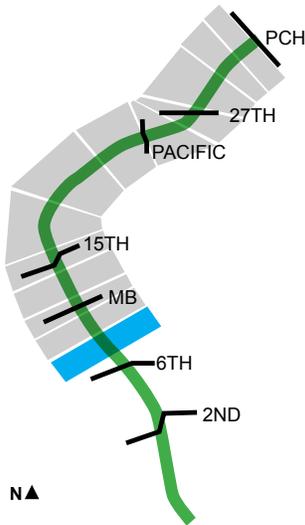
AMENITIES AND LANDSCAPE ELEMENTS

- Address safety along the street curb and road edge. Although there is not a lot of room a low wall or grid with vines would enhance this zone.





13: Two Paths: The Butterfly Garden



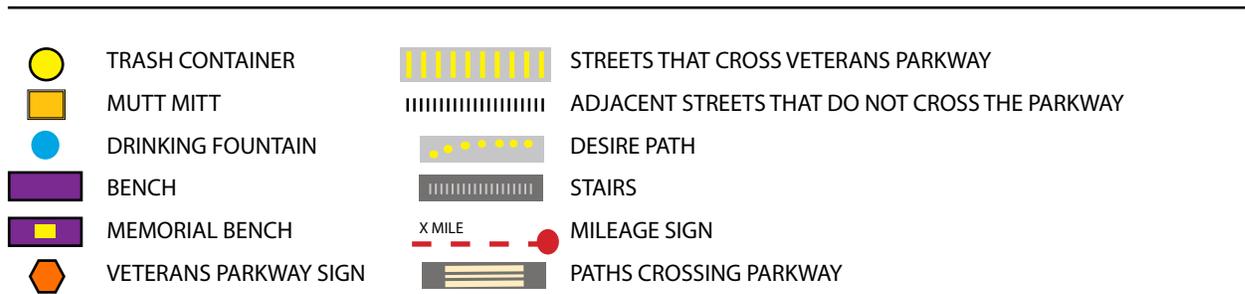
This zone is interesting because it is the only sector with two paths. The main path is wide; however, the secondary path is not well defined. Trees are located along the edge, which opens up at the middle for light. This could be a learning zone for butterfly habitat and could be reconfigured for universal access, with a secondary decomposed granite path. As a butterfly garden, this could be a destination zone with interpretive signage and seating.

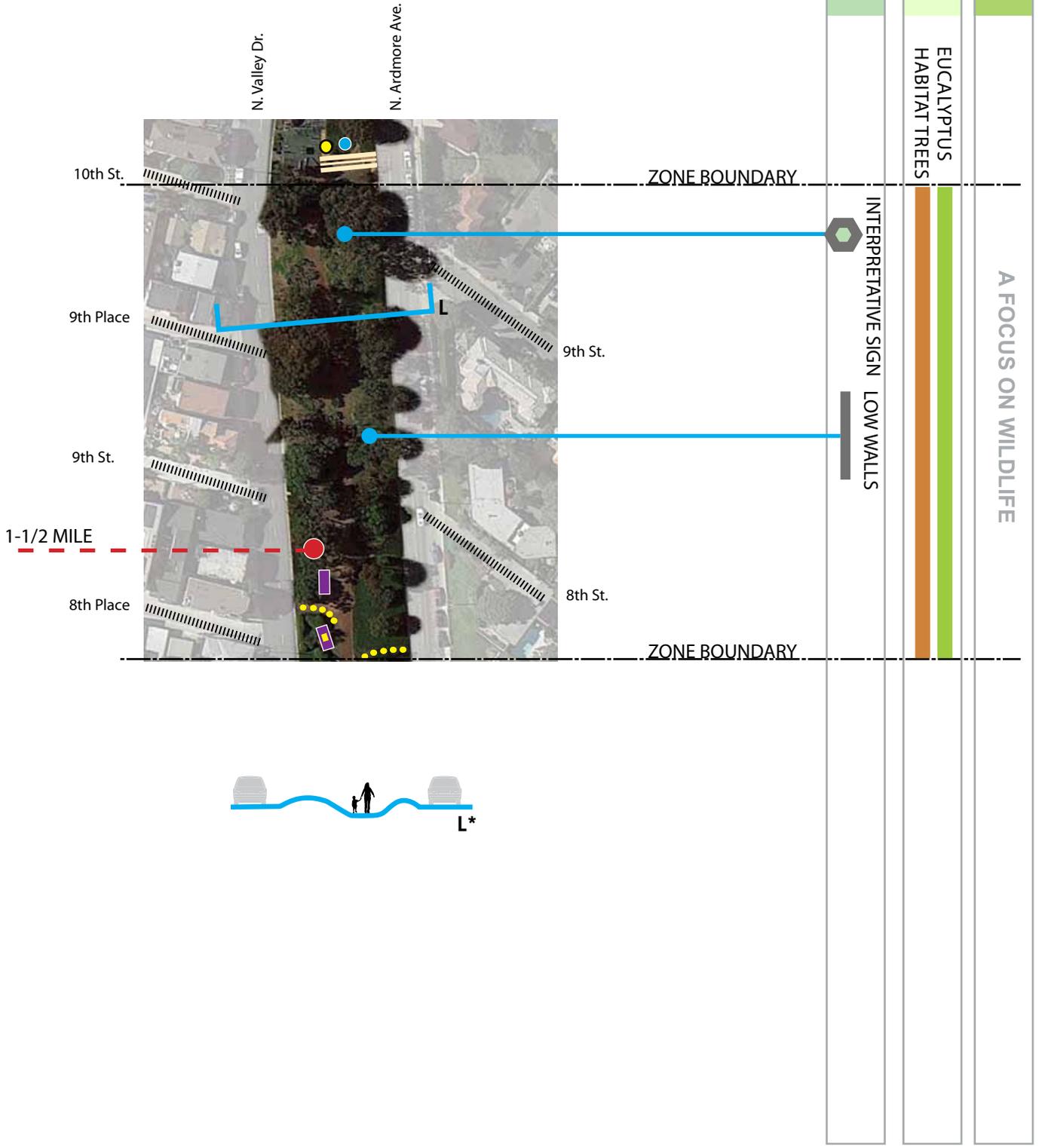
PLANT MATERIAL / ECOLOGY

- Coordinate shrub material with the Manhattan Beach Botanical Garden staff to develop a palette that will attract wildlife, including butterflies.

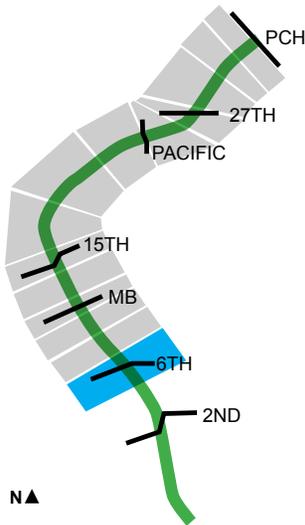
AMENITIES AND LANDSCAPE ELEMENTS

- Define path with edging - boulders and curb walls. The layout and design for the path should be done by landscape architect or other design professional.
- Explore a possible decomposed granite secondary path.
- Install seatwalls.
- Develop educational signage from the family of signs (See Appendix E.)





14: The Olive Grove & 6th Place Intersection



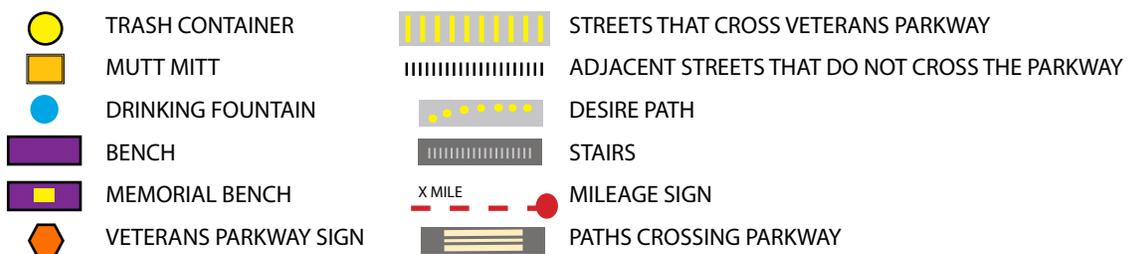
Beautiful specimen Olive trees and a gentle slope on the eastern edge mark this zone. There are opportunities for seating in the shade and the developing this area into a Learning Garden based on the Mediterranean plant palette.

PLANT MATERIAL / ECOLOGY

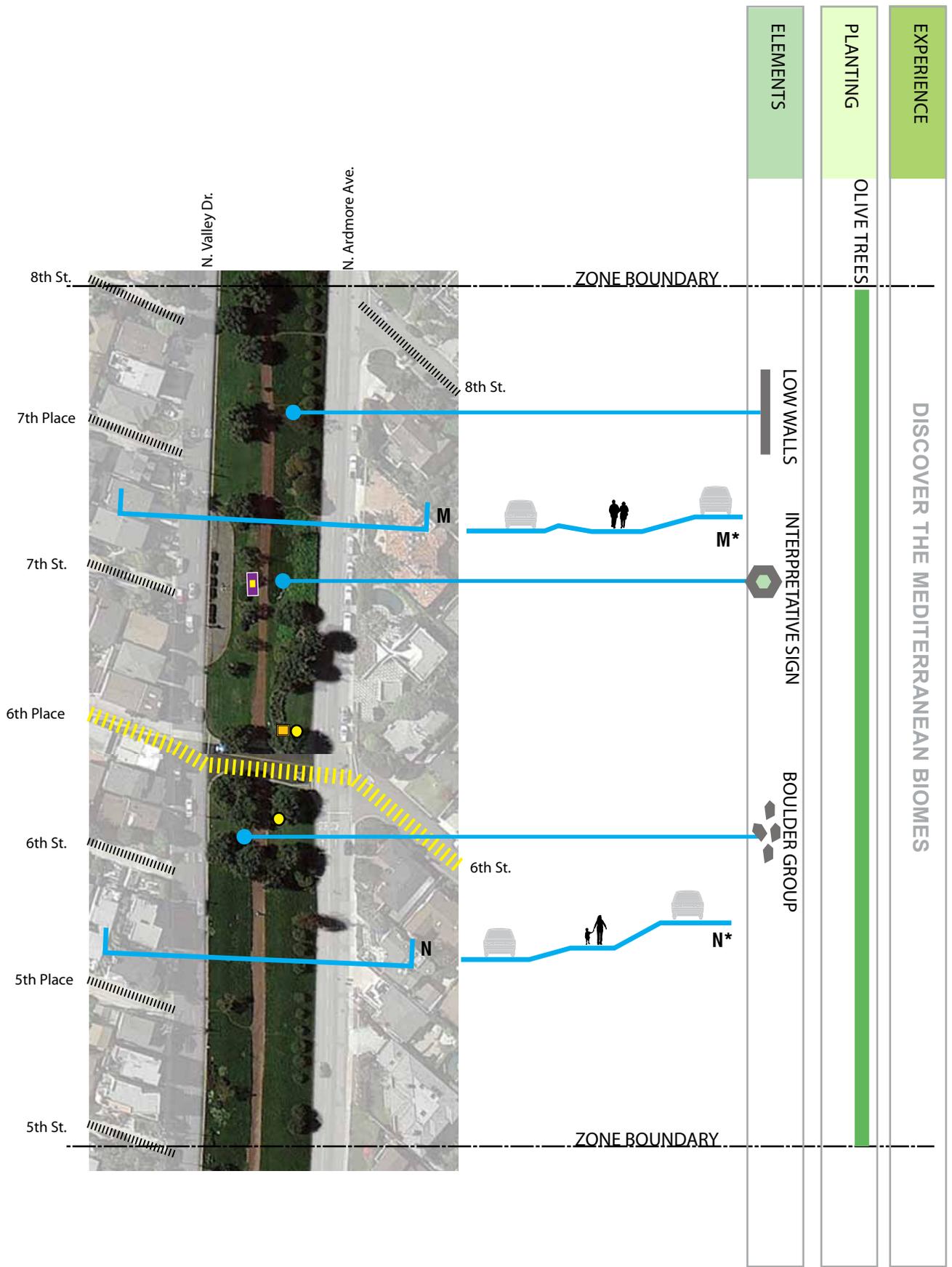
- Remove non-Olive trees.
- Plant Olive trees on east side of path, closer to path, to create a grove/alley of trees and ensure succession.
- Replace Oleander with mid-to-tall natives or Mediterranean-adaptive shrubs.
- Replace lawn for meadow on west side of the path.
- Create a learning garden, in collaboration with the Manhattan Beach Botanical Garden staff and the community.

AMENITIES AND LANDSCAPE ELEMENTS

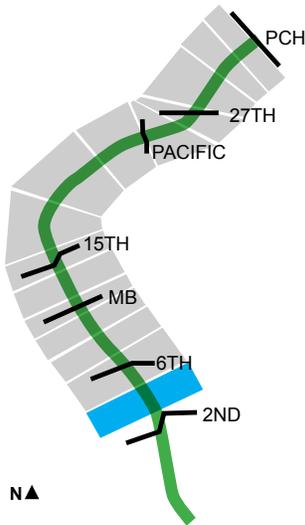
- Consolidate paths of desire.
- Install low walls to create Places in Spaces and to define edges of the new planting areas. This will also ease maintenance.
- Develop interpretive signage from family of signs (See Appendix E.)
- Install a field of boulders south of the intersection.



* diagrammatic section for purposes of expressing the general feeling of that zone



15: The Terraces



This zone is open, sunny, and has little tree canopy. Ice Plant thrives here. There are nice Agaves and Yuccas, succulents that could anchor the planting area but there is too much Ice Plant.

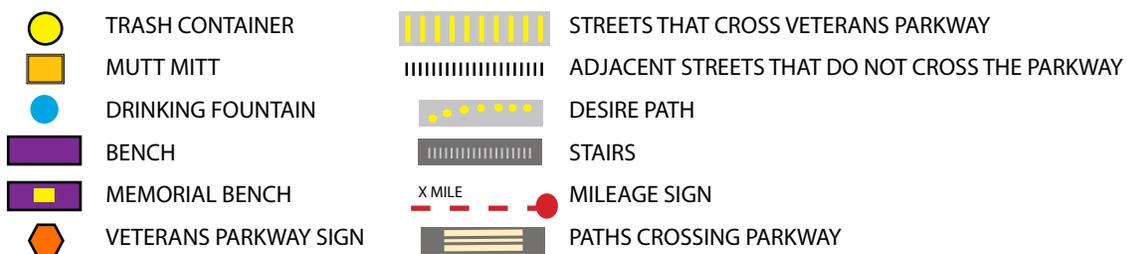
The beach climate can often be cool. One needs spaces along the Parkway that are shaded for relief from the sun on hot days, but there are also times when one wants to sit in the sun!

PLANT MATERIAL / ECOLOGY

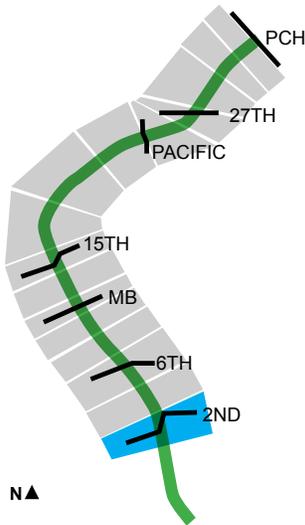
- Remove and replace Oleander.
- Observe the Arbutus and consult with an arborist and transplant if necessary.
- Install gateway planting at the stairs to mark as an access point.
- Control erosion.
- Clean around the Agaves and Yuccas.
- Remove Ice Plant and possibly replace with senecio as understory. Care must be taken when removing ice plant in slope conditions as to not aggravate the condition. It will take time for any new plant material to establish itself. Avoid rainy season removal.
- Infill with additional Agaves, Aloes and other succulents.

AMENITIES AND LANDSCAPE ELEMENTS

- Carve Places in Spaces for new planting with curb walls/seatwalls.
- Add railing to stairs for safety.



16: 2nd Street Intersection



One passes through Melaleuca trees and an Olive grove to reach the intersection. This zone benefits from great shade by the infiltration project. However, planting is sparse on the south side of the 2nd Street intersection. The scale in this zone can be minimized with a denser tree canopy and low shrub massings at the traffic island.

PLANT MATERIAL / ECOLOGY

- Feature the infiltration project with signage and a planting palette that highlights its function.
- Replace turf with meadow that can be mowed back or left to grow.
- Highlight Olive trees and plant more trees to reduce scale of street and strengthen the intersection.

AMENITIES AND LANDSCAPE ELEMENTS

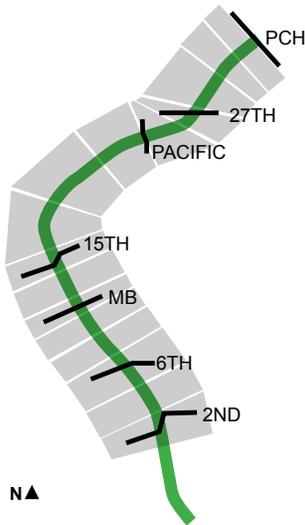
- Feature the infiltration project by adding interpretive signage from the family of signs. (See Appendix E.)
- Install Veterans Parkway signage.
- Install a field of boulders for seating in the shade at the Olive grove.
- Install boulders and planting in the small traffic island.

	TRASH CONTAINER		STREETS THAT CROSS VETERANS PARKWAY
	MUTT MITT		ADJACENT STREETS THAT DO NOT CROSS THE PARKWAY
	DRINKING FOUNTAIN		DESIRE PATH
	BENCH		STAIRS
	MEMORIAL BENCH		MILEAGE SIGN
	VETERANS PARKWAY SIGN		PATHS CROSSING PARKWAY



ELEMENTS	BOULDER GROUP INTERPRETATIVE SIGN	
PLANTING	OLIVE TREES	PLEASANT CROSSING
EXPERIENCE		

17: Transition to Hermosa Beach



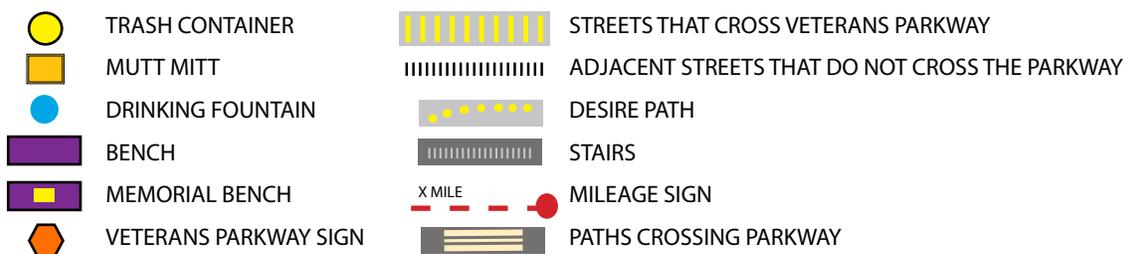
The transition from Manhattan Beach to Hermosa Beach occurs mid-block and should look seamless and contiguous. Planting Pine trees will help connect Veterans Parkway in Manhattan Beach as it continues into Hermosa Beach. Interweaving Pine trees in this zone and a selective plant palette will provide continuity. The soils in this area feel sandy and dune-like.

PLANT MATERIAL / ECOLOGY

- Conduct a soils test.
- Control the erosion.
- Plant pines as the featured tree.

AMENITIES AND LANDSCAPE ELEMENTS

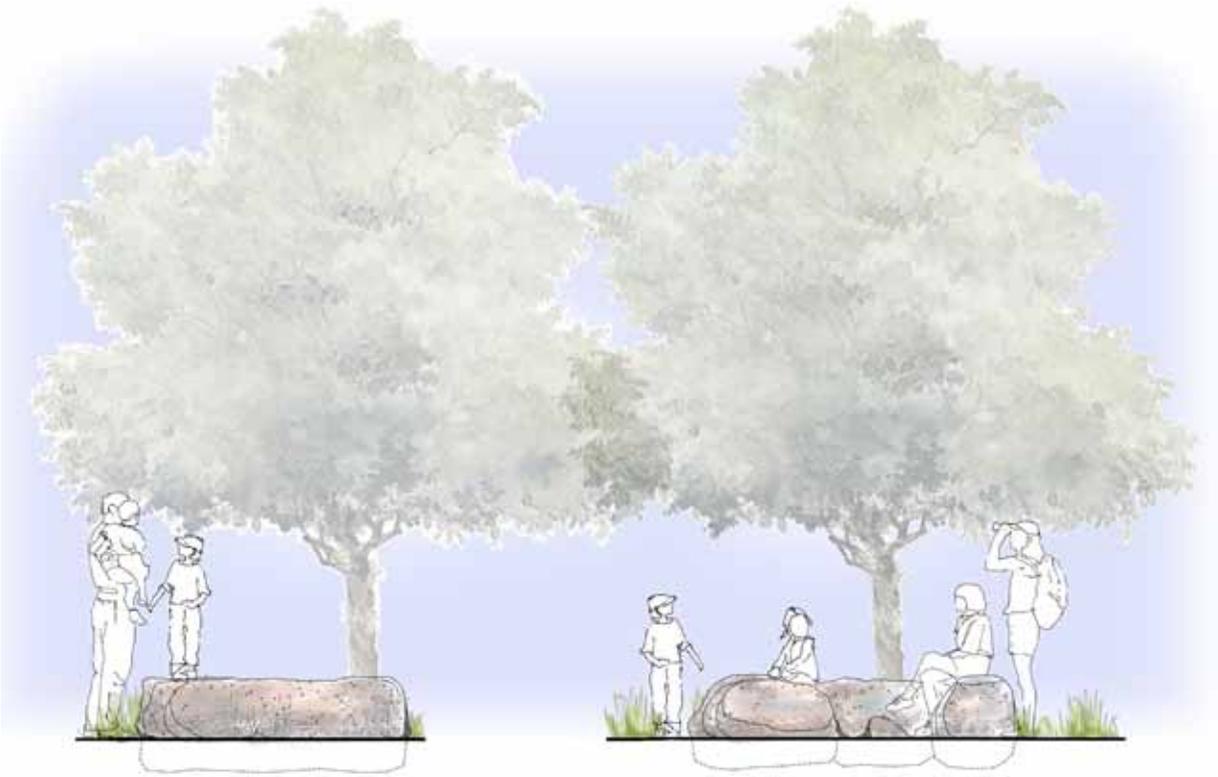
- Consider stormwater retention and infiltration along the east curb.
- Install typical Welcome signage from family of signs. (See Appendix E.)





ELEMENTS		TRANSITION IN A PINE GROVE AND AN OPEN MEADOW
PLANTING	PINE TREES	
EXPERIENCE		

FLAT BOULDERS



4 LANDSCAPE GUIDELINES

INTRODUCTION

Veterans Parkway is an important landscape corridor for the City of Manhattan Beach, both ecologically and for the community that should be managed under a planned, long-term vision. These Guidelines propose strategies to manage its existing landscape, seek support, and direct future improvements. All future improvements are to be based on the concept of a Braided Parkway and should conform with City-approved guidelines and procedures for the design and installation of projects. Additionally, a phasing plan identifies areas of the Parkway that would benefit from immediate attention. These guidelines are intended as a starting point for future improvements, including those projects presented by individual donations or volunteer groups.

Priorities: Begin Here

1. Examine pests on the site. Pest management is important and should be addressed strategically.
2. Evaluate the current irrigation system. Test for efficacy and capacity. Replacement costs of plant material in the first 3-4 years often related to irrigation and proper site preparation.
3. Review the trees on the site. Undertake a survey and have an arborist evaluate the health, structure and longevity of all trees. This will be used as the basis for a Succession Plan.
4. Design and manage for safety.
5. Design and manage for fire and erosion control.

Four Guideline Areas

This document is a resource for agencies, planners, engineers, landscape architects, and community groups interested in proposing improvements for Veterans Parkway. The Guidelines are divided into four sections:

1. Process & Permitting Guidelines
2. Planning & Design Guidelines
3. Site Preparation & Installation Guidelines
4. Maintenance Guidelines

1. PROCESS AND PERMITTING GUIDELINES

CONSULT RECOMMENDATIONS FOR THE ZONE YOU WANT TO IMPROVE

- Consult the Recommendations by Zone in Section 3 of the LMPG.

Review the characteristics of the zone, proposed tree species, any amenities and landscape elements to be installed, and the abbreviated plant palette for foundation planting including groundcover plants that are part of the plant community and can thrive in the specific conditions of the zone. (For example, shade, slope stabilization).

COORDINATE WITH THE CITY

- Discuss with the City the proposed project for approval to proceed.
- Draft a project statement of the project location and goals to discuss feasibility with the City and get their approval to proceed. Include a scope of work description.

The City is responsible for coordinating all work to Veterans Parkway with other City agencies and other City planning efforts. The City will oversee all projects at Veterans Parkway to ensure that they are aligned with long-term City goals. They will also evaluate the impact on the landscape budget, maintenance requirements, the existing irrigation system, as well as negotiate any issues that might arise.

Information gleaned from evaluations such as soils tests, arborist evaluations and site surveys is important but costs may be incurred; costs may be negotiated with the City or paid for through grants and gifts.

GATHER INFORMATION

- Measure the size of the project area.
- Conduct soils tests.
- Check soils percolation.
- Conduct a tree survey of the site. Locate and name all species. Record caliper at breast height.
- Consult an arborist to evaluate the health and structural integrity of the trees.
- Evaluate potential impact of existing irrigation system.

To ensure a successful and long-lasting project, it is important to understand the site and its specific characteristics. Existing planting failures may be due to many factors, including inappropriate irrigation or lack of maintenance, non-optimum percolation, issues of sun/shade, ability to tolerate abuse in the public right-of-way, or slope conditions. These guidelines request that entities starting work on the Parkway perform a series of surveys and assessments to understand site conditions to ensure the selection of plants can tolerate local conditions. Adjustments can be made to the soils. Choosing the right plant palette to ensure that material thrives is critical.

PLAN & DESIGN

- Understand the general character and goals of the zone.
- Identify areas suitable for succession replacement of existing plant material.
- Consult the Recommendations by Zone Section 3 of the LMPG.
- Include in your planning contingencies for plant replacement for failures within the first year after installation.

Plant material not identified as part of the plant community or that is invasive should be replaced with more appropriate species. Plants that provide the habitat needs for wildlife both on the horizontal and vertical planes should be considered. Projects should realistically reflect the amount of maintenance the City is able to undertake.

SEEK CITY APPROVAL

- Draft a project statement about the proposed work to be done. Include
 - a plant list
 - any landscape elements to be installed
 - proposed irrigation/impacts on existing irrigation system
 - maintenance requirements/12-month maintenance plan
- Draft a 12-mo. maintenance plan for review by the City.

Before starting site preparation and installation of any new landscape, volunteer groups and community members are to discuss the project with the City so that no coordination is overlooked and the project reflects the goals of the LMPG.

PREPARE THE SITE

Site preparation is a critical step for successful projects. Preparation includes tilling of the soil to remove compacted layers, weed abatement, soil amendment when necessary, and temporary fencing of the site area. Soil removal may be warranted pending soil test.

INSTALL

All work to be performed in the Parkway is to be installed following the site preparation and installation guidelines of this chapter to insure project longevity.

GET CITY SIGN-OFF

Walk the installed project with City's representative for comment and sign-off of project at project completion.

ENSURE MAINTENANCE FOR YOUR PROJECT

If you are part of the agreed-upon 12-month maintenance plan, be sure your commitment is kept. Check periodically to assess irrigation/ and plant health.

2. PLANNING & DESIGN GUIDELINES

Planning and Design Guidelines are based on natural landscapes of the Southern California coastal region that survive and thrive in the Manhattan Beach and Veterans Parkway area. These natural landscapes demonstrate the benefits of species diversity and succession development into plant communities that are site specific, and locally adapted to their environment. Optimum conditions not only involve plant choice, but also healthy soils biology, appropriate maintenance and a succession planting strategy.

Guidelines are also built on plant communities, defined as a complex grouping of plant species with shared environmental requirements that interact with each other and the environment, including fauna and the physical environment. Communities form a relatively uniform vegetation area, influenced by soil type, topography, climate, and human disturbance and may look quite different from adjacent communities, depending on the particular plants that are present in any given location.

Although the Parkway is highly urbanized and may be distant from a native configuration, it is important that the new landscapes meet aesthetic and management criteria for long-term viability, and that a foundation for healthy plant development be provided. These Guidelines are built upon our knowledge and understanding of these natural landscapes and how they perform in urban environments. Research supports these strategies, and practices are designed to assist in the development of a successful, sustainable, and beautiful Parkway.

EVALUATE EXISTING PLANTS

Some plant material may need to be removed. Criteria for removal includes plant material that is unhealthy, structurally unsound, difficult to maintain, has high water requirements, is invasive, competes aggressively with co-existing material, or is not identified as part of the local plant community. Consult an arborist for evaluation of trees. Removal can occur through phasing.

DESIGN FOLLOWING INFORMATION AND RECOMMENDATIONS FROM SOIL TESTS

Soil tests provide information that will help to understand if plant material can thrive. Often there are suggestions for amendments to the soil that will help plant growth.

DESIGN USING THE APPROVED PLANT LIST AND THE PLANT SELECTION DESIGN MATRIX

The approved plant list and the Plant Selection Design Matrix were developed to ensure that selections meet aesthetic and management criteria for long-term viability, based on our knowledge and understanding of local conditions and in concert with City goals for a sustainable and beautiful environment.

DESIGN FOR VERTICAL AND HORIZONTAL STRUCTURE

Design from tree canopy through mid-layer to groundcover or understory. The diversity of bird species that may occupy a landscape is closely related to the structural diversity on the site. When designing habitats for particular species, research appropriate plant material and consult specialists such as a wildlife or restoration ecologist.

GROUP PLANT MATERIAL BY WATER NEEDS

Plants are grouped by water requirements in order to design, install and maintain an irrigation system that is efficient and effective.

CHECK SUN EXPOSURE

Plant health depends on many factors, including the condition of the soils, whether or not their water requirements are met, and on their exposure to sun. Some require full sun, some partial sun, and some shade. Make sure that plant selection is appropriate for its location. You may be planting shade-tolerant plants in conditions where there is already shade, a good match; however, if you plant an understory of shade-loving plants next to newly-installed plant material that has not matured, you will need to monitor the plants until they are established and the adjacent material is mature enough to provide shade.

CHECK HEIGHT/SPREAD

Plant selection should be based on the natural 'habit' of the plant, its characteristic growth, and not pruned or manipulated to fit an area. Match the width or spread of the *mature* plant to the area where it is planted - make sure there is enough room - and consider the height of the *mature* plant with the need to buffer or conceal, or to keep sight lines open for safety or aesthetic appeal. Make sure you understand the natural habit or growth of a plant and its size at maturity: don't be fooled or seduced by its size at planting!

CHECK SETBACK REQUIREMENTS

There may be City requirements that impact where a plant can be planted. You may not be able to plant anything within a determined distance from a utility line, a power pole, a driveway or alleyway entrance. Check City code to make sure that the locations of your elements and plant material do not violate these requirements. In addition, there may be 'good practice' setbacks (see the Plant Selection Design Matrix column on Setback): it is good practice to not plant trees up against curbs, walkways, walls or other hardscape elements, it is good practice to plant shrubs on a setback from walkways or curbs so that as they mature they have room and don't need to be pruned back from the street or walkway. Consider the spread of plant material at maturity and give it room to grow.

REFER TO AMENITIES/LANDSCAPE ELEMENTS TO BE INSTALLED (See Appendix E)

Landscape elements provide inspiration and foster a unique character for a place. To establish a meaningful identity to the Veterans Parkway a catalog of landscape elements has been developed to promote a sense of visual character that is in keeping with the Parkway environment. These basic landscape elements address safety, comfort, information, and ease of maintenance.

IRRIGATION

It is anticipated that any new planting development would not require a major overhaul of the existing irrigation system that has already been installed. The designer must review irrigation as-built plans at the city and determine the project limits in regards to the irrigation zones.

A field survey should be conducted to locate and test existing irrigation system components as a visual indication of the limits of the project. The irrigation design should fit into the existing irrigation system. New valves are discouraged as they will not be able to be connected to the existing irrigation controller.

It is the City's desire to convert as much of the existing irrigation system as it feasibly can to drip irrigation. It is recommended that drip irrigation be introduced into new projects along the Parkway in areas with less than a 3:1 slope. Drip irrigation components on slopes should have pressure compensating mechanisms for proper distribution. As technology improves with drip systems, it is encouraged that it be used under turf areas. It is recommended that irrigation along the slopes of 3:1 or greater remain rotors or be changed to rotator type heads.

GATEWAYS

The Veterans Parkway civic gateways are recognized as special situations. Plant material outside the native California Coastal Scrub palette and Mediterranean-adapted palette may be introduced at Gateway locations on a plant-by-plant basis; however, the total number of square feet of plants cannot exceed 10% of the identified Gateway area. Gateway plants are to be installed at 1 gal. min. size.

3. SITE PREPARATION AND INSTALLATION GUIDELINES

SITE PREPARATION

DIG ALERT

California State Law Government Code 4216 requires that anyone digging must call Dig Alert 2 full working days before any digging is undertaken. The number is toll free and the service is also free. Dig Alert ensures damage prevention for any underground services and penalties for violation are high.

Consult the Dig Alert for more information:

811 (1-800-227-2600)

<http://www.digalert.org/index.asp>



WEED ABATEMENT

All weeds are to be removed by hand or mechanical means. All weeds need to be removed to discourage resprouting or delayed seed dispersal. Mulch can also be used to cover exposed soil to inhibit growth of weeds. EPA-approved systemic herbicides such as Roundup can be applied per manufacturer's guidelines.

Solarizing uses plastic, newspaper or cardboard to kill plant material by increasing the temperature and blocking light, eventually killing plant material. This method retains and builds organic matter and doesn't disrupt soil structure but it does take up to several months to be effective. Plastic is not biodegradable but it does increase temperature more than paper; any material used that isn't biodegradable should be removed before planting. Cover plastic, newspaper or cardboard with clippings, leaves, mulch or compost to hold it in place. Start this process at least one growing season prior to planting.

SOIL AMENDMENT

Soil tests are to be used to guide soil amending and conditioning. Use organic and biological strategies for soil improvement.

EROSION/GRADING

- Identify areas where slope stabilization and erosion control need to be addressed.

TEMPORARY FENCING AND INFORMATION SIGNAGE

- Place temporary fencing around project area with signage:
 - to inform public of Parkway improvements that are being undertaken
 - to demarcate the improvement zone to keep foot/dog traffic out of the area during period of establishment
 - to ensure public safety in the zone where improvements are being made

PLANTING INSTALLATION

PLANT SOURCES

- Procure plant material through sources approved by the City.

The City may require confirmation that any native plant material was grown from plants indigenous to the region. Substitutions or changes to the planting program are not permitted without written approval from the City.

CONTAINER SIZE

- Trees, shrub and groundcover plant material is to be installed at the largest container size possible.

When shrub and groundcover plant material is planted at small sizes - flats or 4" containers - it requires higher attention and maintenance (weeding) and there are high attrition rates.

INSTALLATION SCHEDULE

- Consult with the City regarding your installation schedule.

Some plant material does better when installed during certain times of the year. The City may also need to coordinate installation with other City activities, with budget considerations, or with impacts on existing irrigation.

SUN EXPOSURE

- Check for sun exposure protection for newly-planted material that is planted for shade.

Understory plant material is adapted to shade or partial shade once established. If the plant installation of all plant material occurs at the same time, the shade-adapted plant material may need protection in order to survive the establishment period. Strategies include locating plants on the north side of boulders or installing temporary shade structures. Check for vandalism and efficacy.

CONTRACT GROWING

- If any plant material needs to be contract grown, manage the project with enough lead time.

All indigenous plant material is to be secured through reputable seed companies and nurseries. If material needs to be contract grown, it often takes time for seed collection and plant establishment. Plan accordingly.

SEED PLANTING

Seed planting is generally not dependable, although plantings can be successfully established through techniques such as hydroseeding. For this reason, seed planting is not recommended unless approved by the City. For any seed planted areas, the City may request confirmation that the material was collected from the region and by reputable sources and have been tested for purity and germination. Seeds treated with mercury compounds will not be permitted. Seeds are to be packaged with supplier's guaranteed analysis for percentages of mixture, purity, germination, seed content and inert material, and weed seed shall not exceed 1% by weight of total mixture.

GENERAL PLANTING GUIDELINES

- Plant in swaths, clusters or groupings. For smaller demonstration areas, do not plant an area with less than 25 square feet of the same plant material. The shape of the area may vary. For longer understory replacement, plant in rational sectors, with a minimum of 2,500 sq. ft.
- Unless the design relies on numerical symmetry, plant in odd numbers: 5 or 7 rather than 2 or 4.
- Use 24" linear root barriers for all trees planted within 6' of any hardscape (e.g., curbs, walkways, concrete or asphalt parking, concrete pads).
- Stage plant installation: lay out plant material to ensure correct location and spacing.
 - Water plants before staging.
 - Start at fence or wall.
 - If the area is open on all sides, start in the middle and work out to avoid damaging plant material.

IRRIGATION

If drip is to be used, the entire valved zone must be converted to drip. Attaching a drip system to one of the existing rotor head laterals without changing the rest of the laterals to drip is not acceptable. This creates an uneven distribution condition that will not support the planting areas.

An irrigation plan must be submitted to the City for review. A watering schedule using the city's adaptation of Model Water Efficient Landscape Ordinance Assembly Bill 1881-California Water Conservation Act must be submitted with the plans. Upon completion of the installation of the retrofitted irrigation system, the installer must meet with a City representative to adjust the watering times in the controller. Adjacent irrigation zone heads must be adjusted so that overspray is eliminated.

LANDSCAPE ELEMENTS INSTALLATION

GROUPS OF BOULDERS (See Appendix E.)

- Boulders are to be installed insets of 5, 7, or 9 (never just 1, 2 or 3).
- Boulders are to be approximately 3' H x 3' W x 4' D each in size.
- Boulders are to be buried to 1/3 of their depth min.
- Sizes and shapes should vary but will be with the dimension limits shown on diagram.
- Boulder shape will be angular and craggy, not rounded river rock, with a flat surface that served as a seat.
- Boulder color range: red/pink/gold. NO gray.

FLAT SLAB BOULDERS (See Appendix E.)

- One large slab. See Recommendations by Zone for locations.
- To be buried to 1/3 of depth min. See diagram.
- Sizes and shapes should vary but will be within the dimension limits shown on diagram.
- Slabs are to be craggy, interesting with flat area large enough for sunbathing or reading.
- Slab color range: red/pink/gold NO gray

RETAINING WALLS, CURB WALLS AND HEADERS

FENCING

- Temporary or permanent fencing may be required for safety or maintenance.
- Situations requiring temporary fencing might include
 - newly-planted areas
 - areas of soil slippage or erosion problems awaiting correction
 - drainage problems that cause wet or soggy areas
- Permanent fencing might be needed
 - to keep unauthorized vehicles off the Parkway
 - where there is no direct path of travel
 - along top of slopes greater than 2:1
- Materials: Boulders can be placed as permanent fencing where appropriate

LIGHTING

Coordinate with City practices.

LANDSCAPE ACCESSORIES

Trash Receptacles

Coordinate with City practices.

Drinking Fountains

Coordinate with City practices.

Bicycle Racks

May be installed at strategic access points (Civic Core Zone).

Coordinate with Mobility Plan.

Signage

- Parkway Signage
 - Parkway signage includes No Smoking, Mileage, Welcome, Interpretive signage, plant ID signage and any ordinance or restrictions such as No Dogs Off Leash, hours, or emergency numbers.
 - See Recommendations by Zone for locations.
- Planting ID and Interpretive Signage
 - All new planting shall be identified by signage to provide learning opportunities for users and help with maintenance.



4. LANDSCAPE MAINTENANCE GUIDELINES

INTRODUCTION

The Veterans Parkway Landscape Maintenance Guidelines' main objective is to provide the City of Manhattan Beach with a set of general guidelines that will manage the design aesthetic of the park while addressing maintenance, planting and other related items.

Regular plant maintenance promotes plant health and vigor for years to come. A maintenance program including regular inspections and necessary follow up care of mulching, fertilizing and pruning will allow problems to be detected and treated early on.

SOILS

Soils testing should be done by an independent agronomics soils testing laboratory. The laboratory will provide instructions for sample selection to ensure valid results or they can come and collect the samples themselves. A written report including recommendations for applications, plant fertilizations and soil amendments for agricultural applications will be provided by the lab.

Soils testing prior to major new installations within the park should occur to identify specific soils conditions and amendments or remediation necessary.

ESTABLISHMENT MAINTENANCE

For all transplanted or planted shrubs and trees the primary maintenance during establishment is water management. Maintain adequate water to the roots and soil immediately around the plant. Inspect and probe soil regularly to monitor the amount of water being applied to the plant. Increase or decrease water application as necessary. Understand the water needs of the plant species and adjust watering times and frequency as necessary.

STAKING AND GUYING

Stakes and guys are important to support trees during their establishment period. Stake trees immediately after planting. (See Appendix D.)

Repair stakes and guys as necessary as part of the ongoing routing park maintenance. Loosen guys as necessary to prevent girdling of trunks or branches and to prevent bark wounds.

Stakes and guys should be removed as soon as they are no longer needed for tree stabilization. Trees should be staked for a minimum of one year. A certified arborist should be consulted prior to removal of stakes and guys.

EDGING AND TRIMMING

Planted areas should be edged and trimmed to control ground covers and shrubs from overreaching onto paths, sidewalks and street edges.

Caution should be exercised when edging to stay away from tree trunks to avoid damage.

MULCH

Mulching provides plants with a stable root environment that is cooler and contains more moisture than the surrounding soil. Mulch reduces competition from surrounding plants and weeds.

Mulch all planted tree and shrub areas to reduce weed establishment and to keep the soil moist for longer periods of time.

Mulch should be place 2 to 4 inches deep and should cover the root system. If the area around the tree does not permit the entire root system to be mulched, it is recommended that the area extending to the drip line of the tree be mulched. Mulch should not cover the actual trunk of the tree and should be kept off the trunk by 2" at the base.

Mulch to be organic, free from deleterious materials and suitable as a top dressing for trees and shrubs.

Pathway mulch to be per City.

IRRIGATION

The irrigation system should be audited once every 2 years minimum to help maintain the efficiency of the system and to save water and achieve cost savings.

The park should be inspected weekly for sprinkler coverage, broken heads, misaligned heads, leaking valves and other irrigation system maintenance needs.

The irrigation schedule should be modified minimum 2 times per year as irrigation requirements will vary with climate and rainfall conditions. At the time the irrigation schedules are modified the controllers should be serviced as necessary. Updating controllers to SMART controllers as soon as possible will automate this process.

IRRIGATION CONSIDERATIONS FOR CALIFORNIA NATIVE PLANT MATERIAL

For California native plant material, consult Plant List or WUCOLS for water requirements. Supplemental watering may be applied between late November and early March to complement seasonal rainfall to aid in plant establishment and dry spells. Avoid summer watering in established landscapes; deep watering on a monthly schedule may be appropriate by project plant.

INVASIVE SPECIES REMOVAL

The best method for keeping invasive plants out of your project area is early detection and immediate removal. Hand pulling and/or mowing may be enough but other control methods include solarizing before planting, or chemical spraying. If you are hand pulling, remove the entire plant, both above and below ground prior to the plant going to seed.

Note that the ice plant propagates through cuttings, so if you are hand pulling this plant, be sure to remove from the site all pieces of the plant. Otherwise, you aren't weeding...you are planting!

TREES

Tree inspection is a tool to call attention to any change in the tree's health before the problem becomes too serious. By providing regular inspections of mature trees at least twice a year you can prevent or reduce the severity of insect or environmental problems and disease. Tree inspection should examine the vigor of the tree by looking at leaf growth, leaf size, twig growth, trunk decay and crown die back. Trunk decay or crown die back are symptoms that indicate problems have started years prior. Loose bark or deformed bark growth are signs of stem decay.

Any abnormalities found during inspection should be noted and watched closely. The advice and services of a certified arborist should be sought.

FERTILIZATION

Trees require certain nutrients to function and grow properly. Trees in a built environment can often be growing in soils that do not contain sufficient available nutrients for satisfactory growth and development.

Fertilizing a tree can improve growth but it is critical that the fertilizer be applied properly or it could adversely affect the tree. When using fertilizers it is important to know what nutrients are needed and when and how to apply them. Soil conditions can vary greatly which makes the fertilizer selection a complex process. Soil should be tested for nutrient content to best determine what type of fertilizer is best for each tree. Application rates and timing as well as the best fertilizer for the tree can be recommended by the testing lab.

Mature trees root systems can extend two to three times the size of the tree canopy. A major portion of the actively growing root system is located outside the drip line of the tree. Many fertilizers contain weed and feed formulations that can be harmful to trees. Caution should be exercised when fertilizing adjacent shrubs to make sure that the fertilizers used will not harm the tree roots.

PRUNING

Pruning should be done to remove dead, diseased or insect-infested branches and to improve the tree structure. Pruning should be done with an understanding of how the tree responds to

each cut. Improper pruning can cause damage that will last for the life of the tree. No branch should be removed without a reason as each cut has the potential to change the growth of a tree or cause damage to that tree.

The best time to prune trees and shrubs is during the dormant season. However, there are exceptions to dormant season pruning. Always check pruning resources for each plant species before cutting. Younger trees should be pruned more often to gradually achieve the desired form as the tree matures. All branches over a walkway or path should have a 7" clearance.

All pruning should be supervised by a certified arborist.

SUCCESSION: TREE REPLACEMENT STRATEGY

The trees within Veterans Parkway are much loved and highly valued by the community.

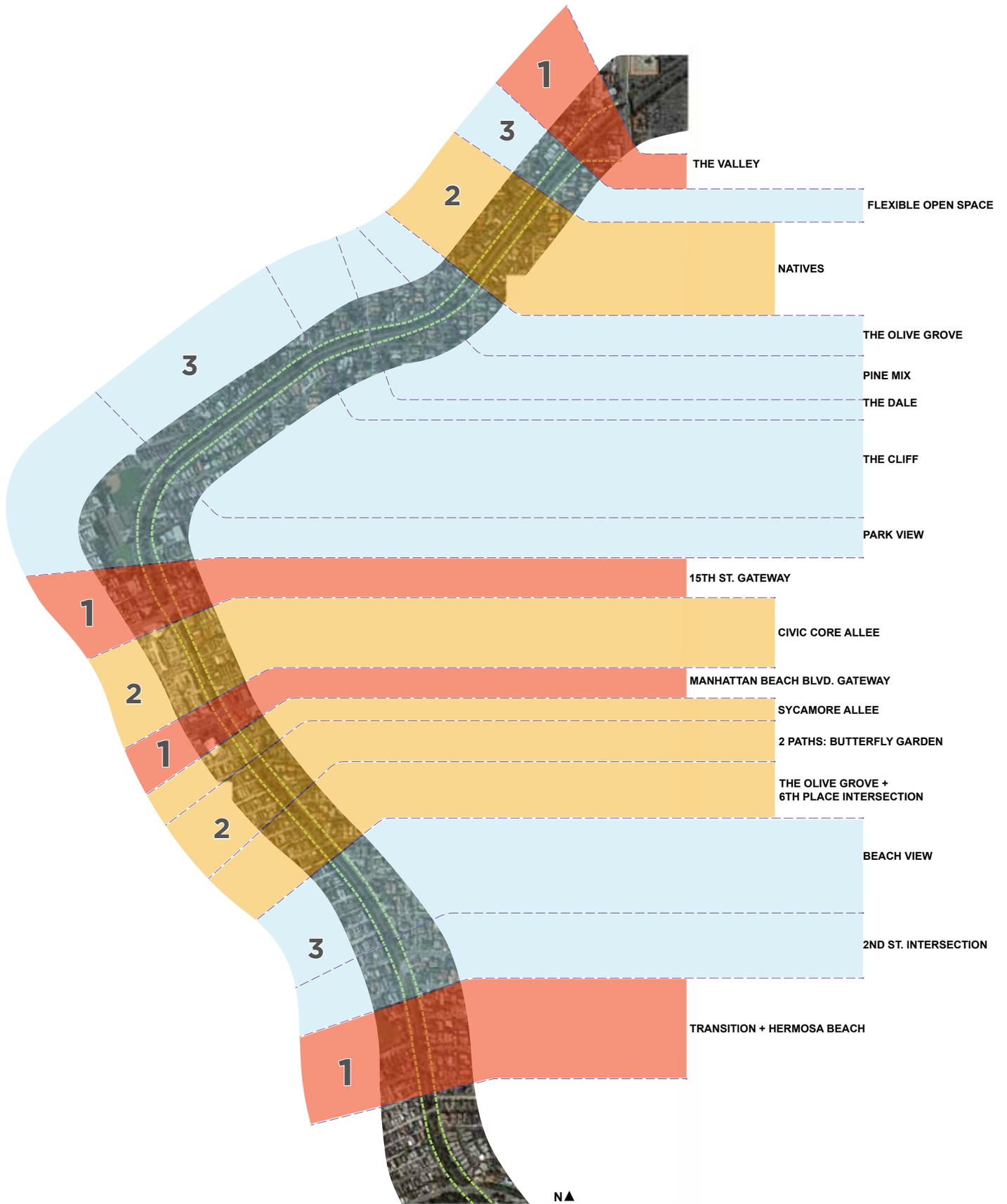
As trees within the Veterans Parkway mature and eventually decline, a strategy for guiding the management and replacement of the trees within the park is needed.

In addition to the desire to maintain the current aesthetic of the park, the health, safety and welfare of the park users need to be a primary consideration.

Trees have a life span and will at times need to be removed. Replacement planting should be adopted to minimize loss of tree canopy, aesthetic value and site amenities. Replacement planting should be planned to take place prior to tree removal.

The tree replacement strategy should provide for a mixed age population as well as mixed species. A palette of trees suitable for replacement within Veterans Parkway has been developed as part of the Master Plan. This palette includes species of trees currently in the park and doing well as well as additional proposed species. The palette identifies tree size and characteristics to help determine the best tree species for any particular area. Diagrams outlining priority areas have also been developed to assist in determining locations for near term and long term replacement.





5 PHASING STRATEGY

PHASING

A preliminary phasing strategy will help the City of Manhattan Beach with the steps to implement the LMPG. Four key issues have been identified and outlined in order of priority.



- A. Below is a list of landscape issues to address for all zones:
 - address soils stabilization for public safety
 - evaluate pests on site for pest management control
 - evaluate the irrigation system
 - evaluate fire risk
 - address safety issues (i.e., handrails on stairs)

- B. The gateway zones should be strengthened at the Civic Core and used to anchor the north and south access points.

- C. Civic allees and learning zones can be developed into Places in Spaces and to lower the amount of landscape maintenance. Learning zones include The Butterfly Garden, The California Natives and The Mediterranean Garden.

- D. In areas where long-term interventions are required, these should be carefully reviewed. This includes succession planting for longevity or where change of plant material can occur over time.

6 CONCLUSION

CONCLUSION

Veterans Parkway is loved by the community. ML+A affirms that it is a community asset and that the appeal and value of the Parkway lies in its function as a passive, tranquil parkway and that the basic nature of the park should remain intact.

However, in order to KEEP these qualities and values, Veterans Parkway must improve how it is managed. There must be an orderly succession plan to ensure that as plant material matures, dies and is replaced, it is done in a seamless way. This type of landscape management is built on a survey of the area, an inventory of trees, an evaluation of pests on site, a working knowledge of the existing irrigation system and the plant communities appropriate to this area, and an understanding of the effects that any future improvements may have. It is also recommended that landscape elements be introduced to carve out Places within Spaces and to reinforce continuity in this Braided Parkway of plant material, ecology, and experiences.



7 APPENDICES

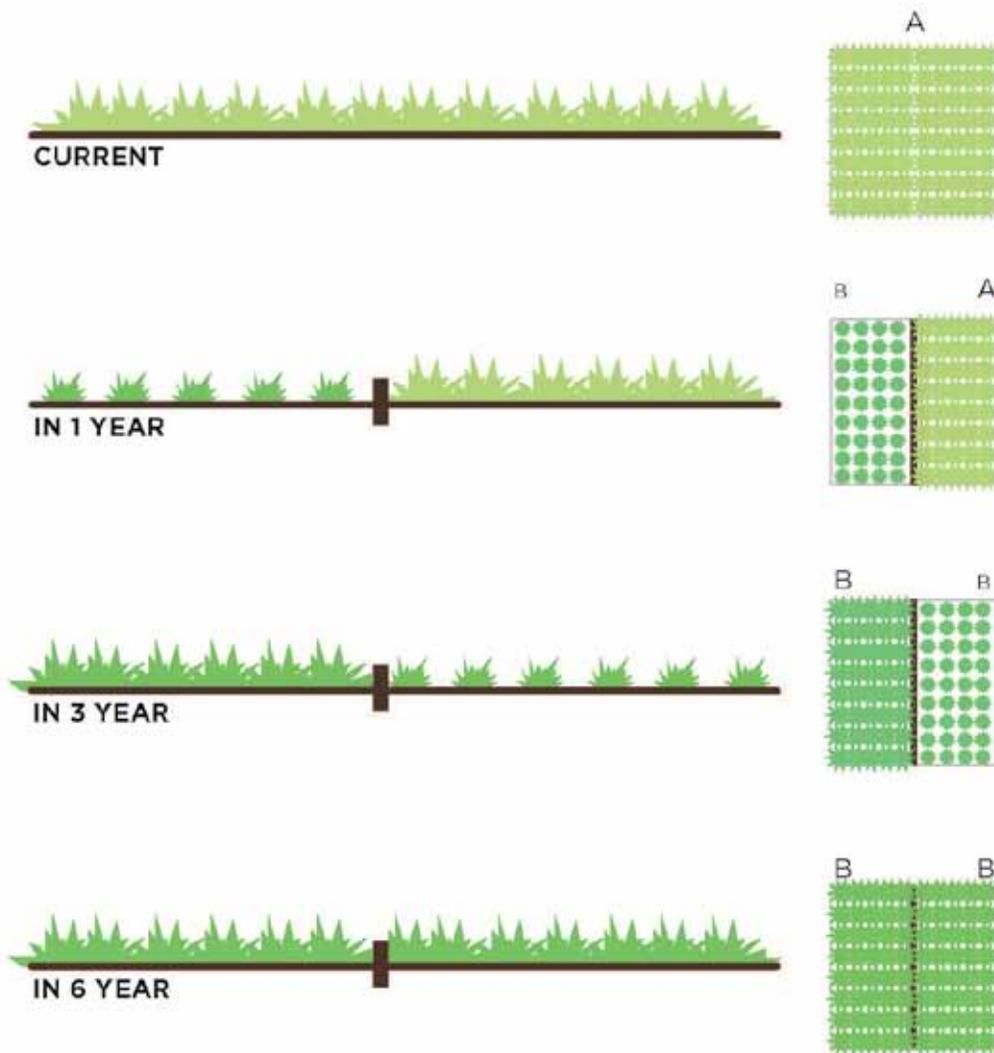
- A** SUCCESSION PLAN
- B** PLANT SELECTION DECISION MATRIX
- C** FOUNDATION PLANT LIST
- D** PLANTING INSTALLATION
- E** LANDSCAPE ELEMENTS CATALOGUE
- F** DONOR AND VOLUNTEER POLICY
- G** SOILS TEST



A SUCCESSION PLAN

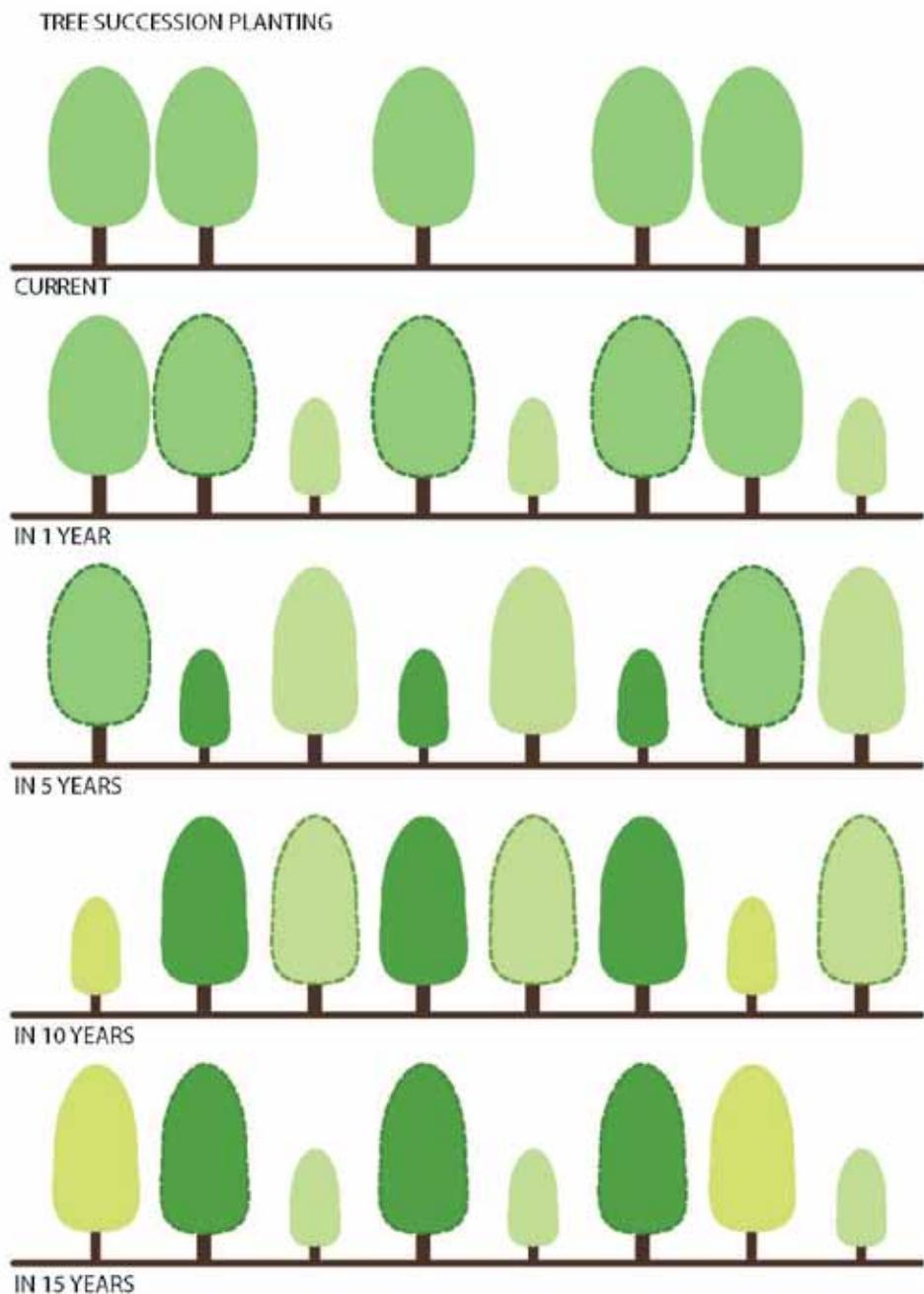
Many Parkway trees were planted a long time ago. Today these deciduous and evergreen trees have matured and many will reach the end of their lifespan at the same time. These trees require higher levels of maintenance. They also pose a risk to public safety. Older trees often succumb to disease pathogens at an alarming rate.

SHRUB SUCCESSION PLANTING



SUCCESSION PLAN: START HERE

1. Undertake a plant assessment study to serve as the basis for a succession plan. Locate all trees. Have arborist evaluate health, structure and longevity of trees.
2. Do not remove existing plant material that is healthy.
3. Plan a schedule that will replace existing material as it reaches the end of its lifespan.
4. Plan a schedule that will migrate to different plant material if certain species are invasive or problematic.



B PLANT SELECTION DECISION MATRIX

The most salient quality of the Parkway is CONTINUITY: this wide, linear parkway and walking path is crossed by few intersections, which poses safety issues but also contributes to the perception of the Parkway as a continuous strip. This Parkway is of few places where one can take a long walk in a tranquil, private, planted urban setting with no asphalt, concrete, fencing or gates. Plant material is to be selected for its contribution to this perceived continuity.

#1 Identify, select and protect existing plant material

- Identify the planting zone on the LMPG.
- Understand the general existing palette, identify key species and their ecological, social and physical value to Veterans Parkway
- Conduct a tree survey to identify all existing species and locations
- Have an arborist review all trees before any work is done in a specific zone. Arborist should review:
 - Tree health and expected longevity
 - Structural integrity
 - Water requirements/maintenance schedule
- Use the plant material selection decision matrix to evaluate existing plant material

#2 Use the Decision Criteria Matrix for selection of Plant Material

- Is plant material on an invasive list?
- Tolerates reclaimed water
- Water requirements per WUCOLS (South Coastal Region 3)
- Tolerates salt air/salty soils
- Is it a CA native? Is it on the Mediterranean plant palette?
- Height x width
- Does plant material require moderate to heavy maintenance?
- Can the plant be grouped with others with similar water requirements?
- Tolerates heat and sun

- Tolerates shade
- Promotes habitat (birds, butterflies, hummingbirds, etc.)
- Life span
- Has environmental benefits
 - filters pollution and dust
 - provides shade and reduces heat build-up
 - reduces soil erosion
 - reduces surface water runoff
- Does well in local soil conditions (acidic, high in zinc, etc.)
- Tolerates public traffic
 - Tolerates vehicular exhaust
 - Tolerates parking conditions
- Bloom season
- Bloom color
- Does the material go dormant?
- What is the impact on the existing irrigation system?
- Other (i.e., good under oaks, can be seed or sod, can let go for meadow look, etc.)

C FOUNDATION PLANT LIST

This plant list is not exhaustive but represents material that can be used for understory where slope stabilization needs to be addressed and in shade conditions. These plants have demonstrated they can thrive in these conditions and in the public right of way.

FOUNDATION PLANTING PALETTE

GROUND COVER	Common name	groundcover/ shrub/tree	setback from landscape [ft.]
<i>Acacia redolens</i>	Prostrate Acacia	g/s	12
ARCTOSTAPHYLOS - MANZANITA			
<i>Arctostaphylos edmundsii</i> 'Carmel Sur'	Carmel Sur Manzanita	g	4
<i>Arctostaphylos</i> 'Emerald Carpet'	Emerald Carpet Manzanita	g	4
<i>Arctostaphylos</i> 'John Dourley'	John Dourley Manzanita	g/s	4
<i>Arctostaphylos uva-ursi</i> 'Green Supreme'	Green Supreme Manzanita	g	4
<i>Arctostaphylos uva-ursi</i> 'Pacific Mist'	Pacific Mist Manzanita	g	5
<i>Arctostaphylos uva-ursi</i> 'Point Reyes'	Point Reyes Manzanita	g	4
BACCHARIS - COYOTE BUSH			
<i>Baccharis</i> 'Stam'	Stam Baccharis	g	3
<i>Baccharis pilularis</i> 'Pigeon Point'	Prostrate Coyote Bush	s/gc	3
<i>Baccharis salicifolia</i>	Mulefat	s	3
<i>Berberis aquifolium</i> var. <i>repens</i>	Oregon Grape	s	4
<i>Berberis aquifolium</i> 'Compacta'	Compact Oregon Grape	g	1.5
CEANOETHUS - CA LILAC			
<i>Ceanothus</i> 'Concha'	Concha Ceanothus	s	6
<i>Ceanothus cuneatus</i> vs. <i>rigidus</i> 'Snowball'			
<i>Ceanothus</i> 'Dark Star'	Dark Star Ceanothus	s	8
<i>Ceanothus gloriosus</i>	Point Reyes Ceanothus	g	12
<i>Ceanothus gloriosus</i> 'Heart's Desire'	Heart's Desire Ceanothus	g	6
<i>Ceanothus griseus horizontalis</i>	Carmel Creeper	g	7
<i>Cotoneaster horizontalis congestus</i>	Rock Cotoneaster	g	
<i>Heteromeles arbutifolia</i>	Toyon	s/t	6
<i>Ribes aureum gracillimum</i> (dec.)	Golden Currant	s-d	3
<i>Ribes viburnifolium</i>	Evergreen Currant	g	6
<i>Rosmarinus officinalis</i> spp.	Rosemary species	g/s	variable
<i>Paspalum vaginatum</i>	Seashore Paspalum	g	
<i>Westringia fruticosa</i>	Coast Rosemary	s	5

water req. (WUCOLS)	sun	shade	part shade	Avg. Height (ft.)	Avg. Spread (ft.)	Maintenance
L	x			3-12	15-30	Fast-growing, becomes large, judiciously locate
						Do not cut into bare wood - Will not regrow, can be pinched back at tips. Does not require regular pruning and needs excellent drainage.
L	x		x	1.5	7-10	Good form and more tolerant of summer watering
L	x		x	1-2	4-6	Needs acidic soils and deep watering
L	x		x	2-4	4-8	Good tolerance for clay soil and summer watering
L	x		x	1	10-12	Needs partial shade in Southern CA - needs acidic soil
L	x		x	2-3	6-15	Needs pinching to force branching as groundcover
L	x		x	1	10-12	Needs acidic soils
						Needs shearing in early spring before new growth starts - Feed with Nitrogen after shearing - cut out old arching branches
L	x			2-3	4-6	Male plant - No messy flowering usually related with Baccharis
L	x			1-3	6-8	
L	x			4-8	6-10	
M		x	x	5-6	4-5	Edible fruit
L		x	x	1.5-2	3	Excellent understory ground cover in moist areas
						Wait to prune until flowers have faded - Control growth by pinching back - Family of plants live 5-10 years on average
L	x		x	6-7	6-8	
L	x			5-6	8-10	
L	x		x	1.5	12-16	
L	x		x	1	6-8	
L	x			1.5-2.5	5-15	
M	x		x	2-3	15	briefly deciduous, needs room to grow - Does not look good when cut back
L	x		x	8-15	15	
VL/L	x		x	6-8	6-8	
L	x	x	x	3-6	5-10	
L	x			var.	var.	
M	x					
L	x			3-6	5-10	

ALOE/AGAVE/SU	Common name	groundcover/ shrub/tree	setback from landscape [ft.]
AGAVE			
<i>Agave americana</i>	Century Plant	s	15-20
<i>Agave attenuata</i>	Footail Agave	s	8
<i>Agave shawii</i>	Shaw's Agave	s	8
<i>Agave americana</i> 'Medio Picta Alba'	Medio Picta Alba Century Plant	s	15-20
<i>Agave viviparica</i>	Octopus Agave	s	5
<i>Aloe arborescens</i>	Torch Aloe	s	8
<i>Aloe 'Blue Elf'</i>	Blue Elf Aloe	g	1.5
<i>Aloe ciliaris</i>	Climbing Aloe	v/g	variable
<i>Aloe nobilis</i>	Gold Tooth Aloe	g	2
<i>Aloe vera</i>	Medicinal Aloe	s	2

ZINC TOLERANT

<i>Festuca rubra</i> 'Patrick's Point'	Patrick's Point Fescue	g	1
<i>Sesleria autumnalis</i>	Autumn Moor Grass	g	1.5

ACCENT PLANTS

<i>Eschscholzia californica</i>	California Poppy	g	1
<i>Fremontodendron cult.</i>	Flannel Bush	s	variable
<i>Kniphofia uvaria</i>	Red Hot Poker		
<i>Mahonia</i> 'Golden Abundance'	Golden Abundance Mahonia	s	5
<i>Romneya coulteri</i>	Matilija Poppy	p	3

LEGEND

- t tree
- d deciduous
- s shrub
- sc succulent
- g grass
- G groundcover
- p perennial
- a annual
- v vine

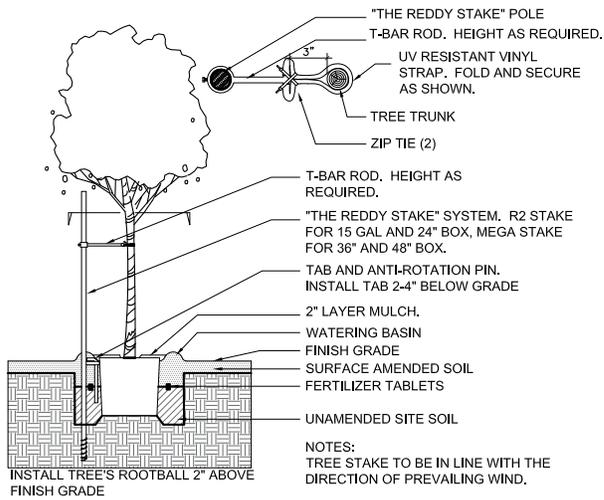
- VL No supplemental water
- L Supplemental water, 3-5"
- M Moderate supplemental water, 5-10"
- H High supplemental water, 10-16"

water req. (WASCALS)	sun	shade	part shade	Avg. Height ft. l	Avg. Spread ft. l	Maintenance
						Needs good drainage - Monocarpic species rosette dies after flower - Polycarpic spp. Flower annually
L	x			8-10	10-12	Monocarpic - Let pups develop
L	x			3-5	3-5	Monocarpic - Let pups develop SPINELESS
L	x			2-3	3-4	
L	x			8-10	10-12	Sharp spines on tips and along leaf edges
L	x			3-5	5-6	Monocarpic - Let pups develop SPINELESS
L	x			10	10	
L	x			1.5	2	
L	x					Stems can grow to 10' long
L	x			1	2-3	
L	x			2	2	

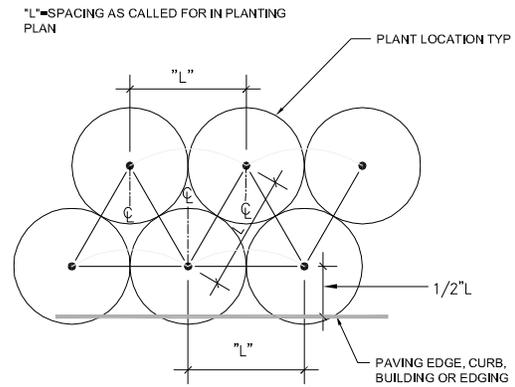
M	x		x	1	2	Needs water 2x/wk to stay green through summer
M	x		x	1.5	1.5	

L	x			1	1.5	Self seeding perennial
						Leaf undersides covered with bristly hairs - Wear gloves when pruning and use caution locating near paths - Stake when young to prevent these shallow-rooted plants from blowing over in windy areas - Pinch young growth to encourage branching
VL	x			to 20	to 15	Require adequate moisture to bloom - Remove ratty looking leaves in
L	x			2-3	2-3	Fall - Do not over-water in winter
L	x			6	5	
VL	x			6-8		Spreads by rhizomes - Withhold summer irrigation to control growth - Needs cutting near to ground in late Fall

D PLANTING INSTALLATION



#1 TREE STAKE



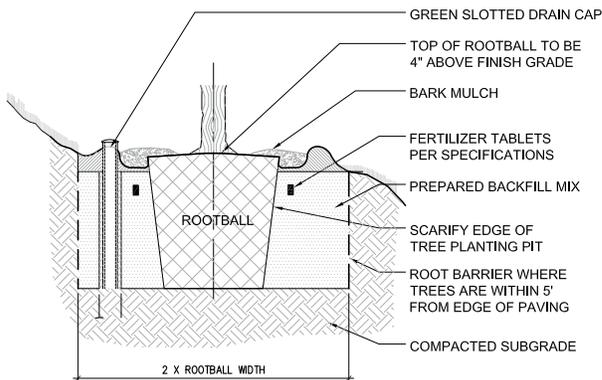
1 TRIANGULAR SPACING

1 1/2" = 1'-0"

529313-04

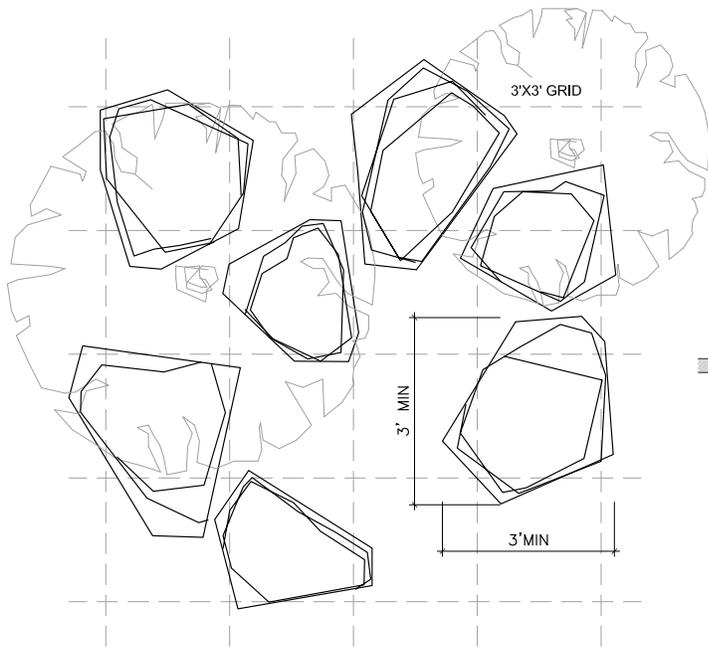
#2 TRIANGULAR SHRUB/GROUNDCOVER SPACING

- NOTE:
1. TREE TO BE DOUBLE STAKED. SET STAKE 1/3 MIN. INTO COMPACTED SUBGRADE (SEE STAKING DETAIL)
 2. WHERE 2 X ROOTBALL WIDTH IS NOT AVAILABLE IN ALL DIRECTIONS, PROVIDE EQUIVALENT TREE WELL AREA



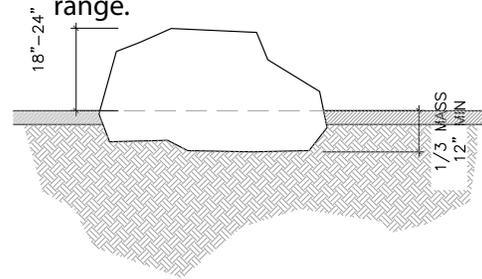
#3 TREE PLANTING ON SLOPE

E LANDSCAPE ELEMENTS CATALOGUE

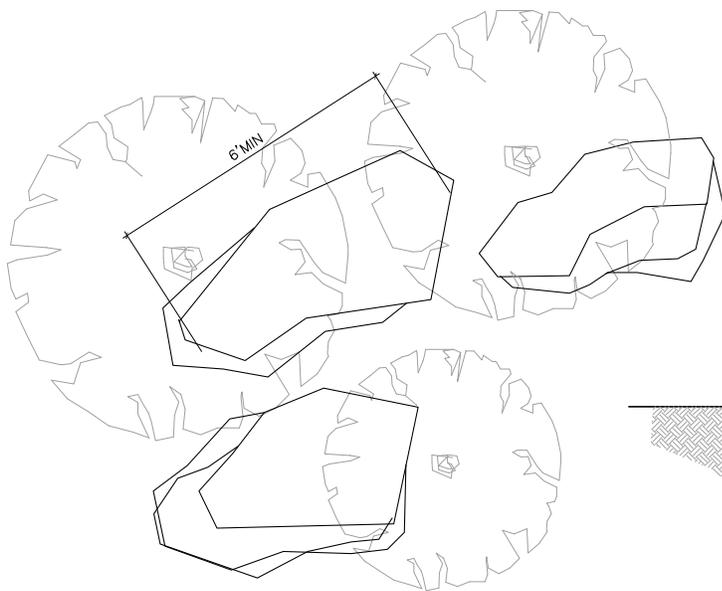


NOTE:

Boulder grouping should always include a minimum of 5 boulders and should be laid out and placed on site by a professional designer. Rock type to be Desert Gold, Baja Cresta or Malibu or approved equal of similar color range.

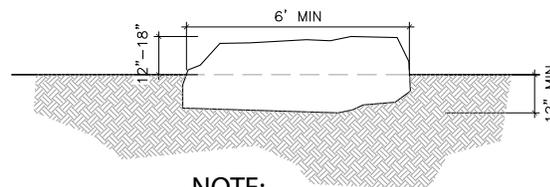


#1 BOULDER GROUPING



NOTE:

Flat boulder grouping should always include a minimum of 3 large boulders and should be laid out and placed on site by a professional designer. Rock type to be Desert Gold, Baja Cresta or Malibu or approved equal of similar color range.



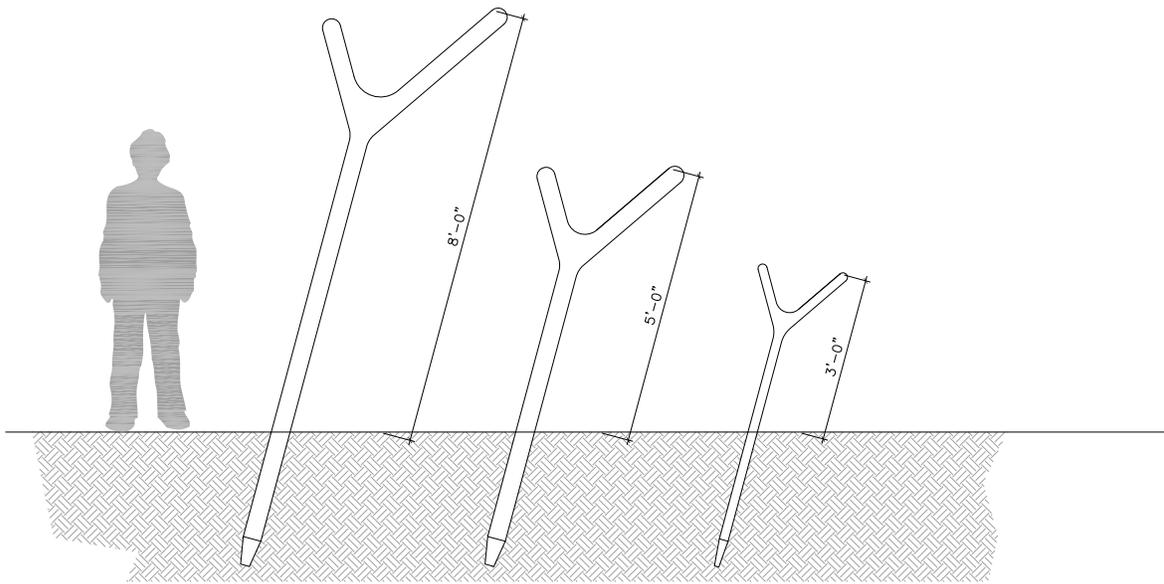
#2 FLAT BOULDER GROUPING

NOTE:

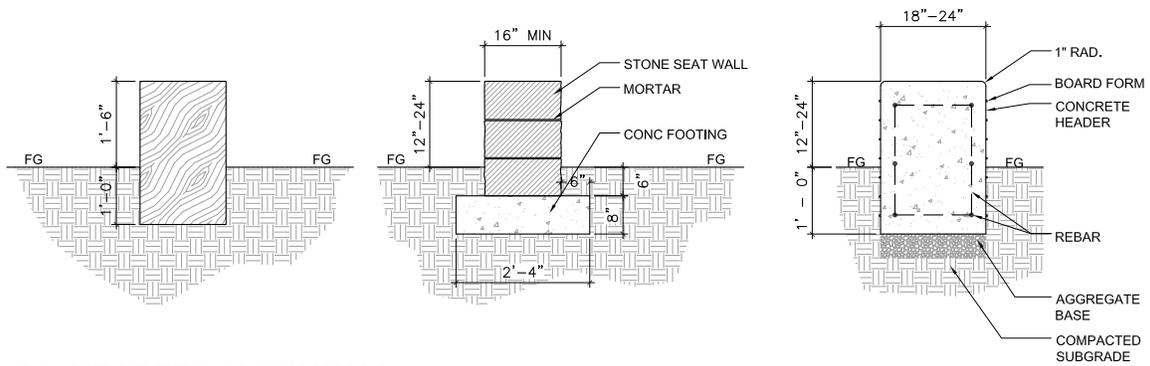
Design, exact location and placement to be determined by consulting landscape architect or design professional.

- 1. Desert Gold
- 2. Baja Cresta
- 3. Malibu

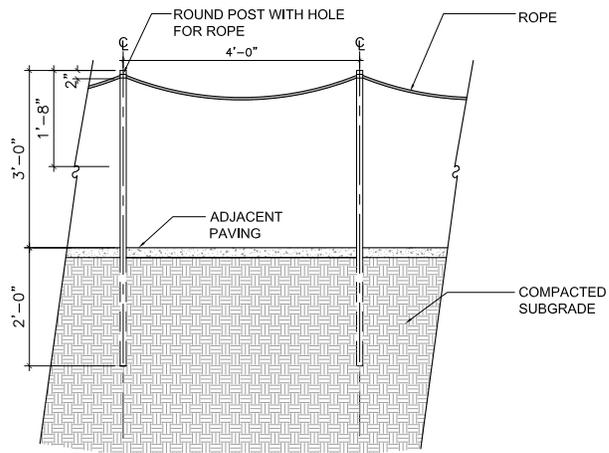




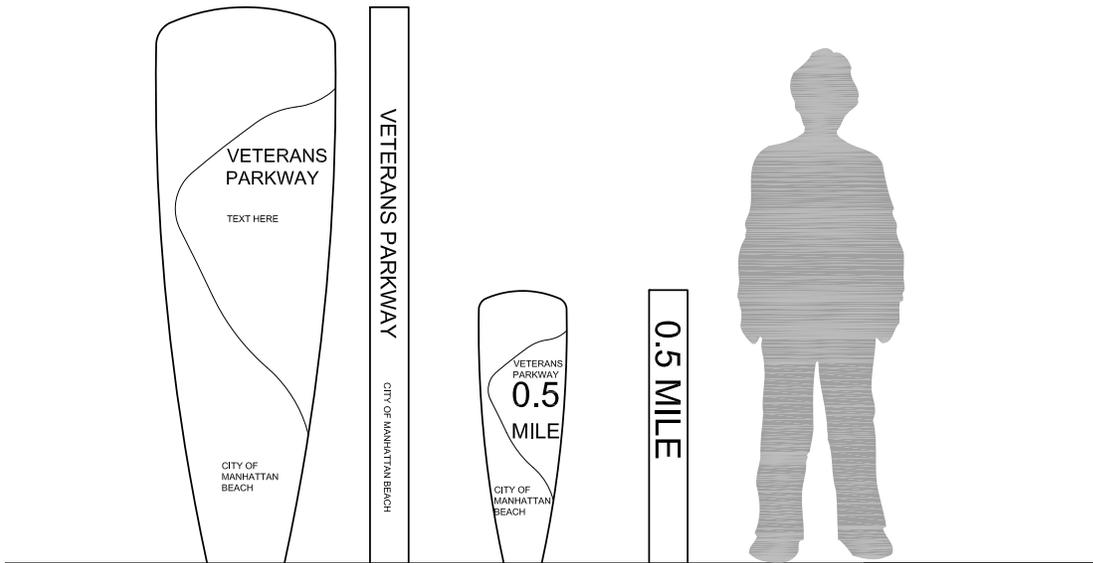
#3 TREE ARMREST



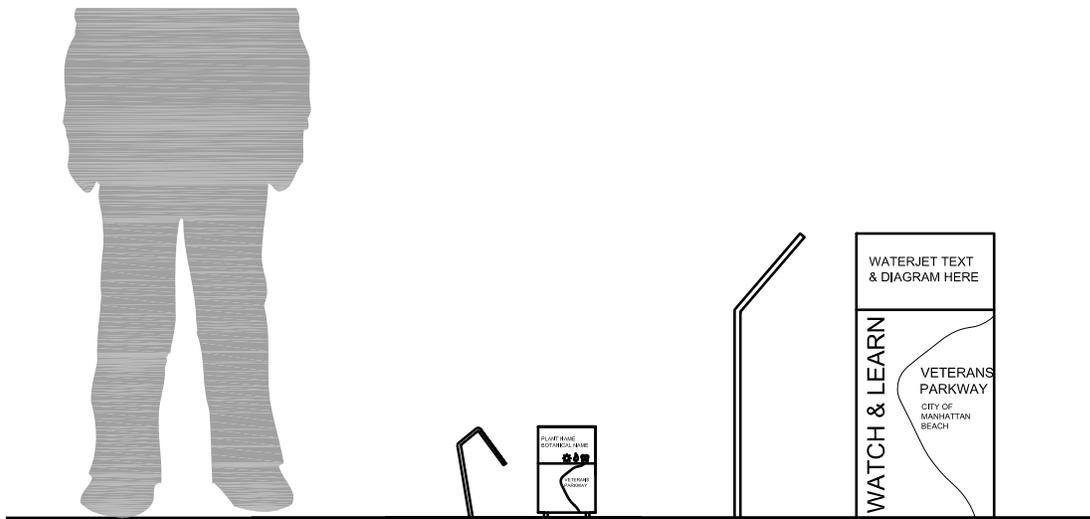
#4 HEADERS / LOW WALL



#5 TEMPORARY FENCING



#6 ORIENTATION SIGNAGE



#7 INTERPRETIVE SIGNAGE

Other landscape amenities such as lighting, trash receptacles, drinking fountains and bike racks should follow City of Manhattan Beach practices.

F DONOR AND VOLUNTEER POLICY

The City of Manhattan Beach welcomes bequests for donor trees and gifts for Sponsored Projects that restore and improve Manhattan Beach's open spaces. These gifts are meaningful both to a beneficiary and favorite park.

The City encourages and facilitates gifts, bequests, and contributions that will enhance, beautify, improve, supplement, support, and benefit the Veterans Parkway. This policy has been put in place to facilitate the process and covers types of sponsorship available, the term of sponsorship, costs, conditions and process.

TYPES OF SPONSORSHIP and VOLUNTEER OPPORTUNITIES

The City of Manhattan Beach Veterans Parkway has two forms of donations:

1. Donor Trees

Cost: Basic cost: Cost of tree plus installation labor of a 24" box tree. Cost is to be determined at time of request and installation, depending on market pricing of specimen and prevailing wage for installation.

2. Sponsored Projects

The City has currently approved Sponsored Projects that support the goals of the Veterans Parkway Master Plan Guidelines. This list will be updated periodically as projects are completed and new development is approved.

Sponsored Projects must conform to the City's mission and Master Plan Guidelines of Veterans Parkway in theme and design. The design, installation and maintenance of Sponsored Projects must be within the existing maintenance budgets and available personnel or the Sponsored Project funding must include the additional funds.

The cost of purchase and installation of a Sponsored Project will be determined on a project-by-project basis. Contributions in any amount in support of a Sponsored Project are welcome. Examples of Sponsored Projects:

- boulder fields
- boulder seating clusters (3-5 boulders)
- large, flat signature stones/boulders
- seatwalls, planting bed curbs or low planting bed retaining walls
- signage

3. Volunteer Participation

The City of Manhattan Beach welcomes and relies upon volunteer support for projects along the Parkway. The community has contributed time, labor and funding for many projects.

In an effort to ensure that all future work is done in compliance with the Master Plan Guidelines, all volunteer participation is to be reviewed and approved by the City. The City can appoint and work with a community liaison to identify and coordinate volunteer opportunities and activate participation for approved projects and events.

Ad hoc volunteer opportunities can include weeding, maintenance, help with installations, organizing and participating in regular City-sponsored Parkway Clean-Up Days, and fundraising.

The City is open to any ideas the community might offer. Contact the City to begin conversations!

CONDITIONS AND PROCESS

1. **PURPOSE** This policy is enables residents and park users to support Manhattan Beach parks through a tax-deductible contribution. If the gift is in recognition of an individual, a letter and Certificate of Appreciation is signed by the Mayor and City Council will be sent to the donor to recognize the individual and identify the site location where the contribution will me made.
2. **OWNERSHIP** The contribution does not entitle the donor to ownership of any donated item. Donations are accepted with the full understanding that they become the property of the City of Manhattan Beach and are subject to the laws, policies and procedures that govern Manhattan Beach parks and open spaces.
3. **POLICY** Only Tree and Sponsored Donations are covered by this policy. A donor requesting any other type of donation must apply separately to the City.
4. **APPLICATION AND INSTALLATION** The City will oversee the acceptance of donations in accordance with the City's Donation Policy. If the donation creates any of the following conditions, a Staff Report must be submitted to the City asking for acceptance:
 - A. Does it create an immediate or initial City expenditure of \$500 or more which has not been included in the approved City budget? This pertains both to a direct outlay of City funds or the use of City staff, resources and materials.
 - B. Does it create an annual City maintenance obligation of \$1,000 or more which has not

been included in the approved City budget?

C. Does it materially affect or change any aspect of City operations?

D. Unless otherwise stated in a contract, the donor shall give up ownership rights; right to alter, move or remove said donations without reservation, and maintenance obligation rights.

Donation applications are welcomed and reviewed throughout the year; installation of projects and plantings occurs as determined by the City. Specific types of trees may thrive best when planted at certain times of the year, or installations may occur in coordination with other City agencies and programs. The City will ensure that the donor be kept abreast of the installation schedule.

Anyone wishing to commemorate an event or recognize a loved one may purchase a tree from the City's approved tree list by filling out an application form and returning it with a check.

5. **FUNDING** Complete funding for the donation must be processed before any work takes place. Costs include the cost to purchase, install, and maintain the donated item for a period not to exceed 8 years. The donor tree cost may be adjusted periodically.
6. **LIFE CYCLE AND REPLACEMENT** Donated items are maintained for the expected life cycle of the item. Because park furnishings and plant material require replacement, or portions of the Veterans Parkway Landscape Master Plan Guidelines require phasing, donations may become available for renewal with preference given to the original donor. If current information is on file, the donor will be given the opportunity to take further action at the expiration of the original life cycle of the donated item. If the City is unable to contact the donor or the donor chooses not to renew, the opportunity will be offered to a new donor.
7. **MAINTENANCE AND REPLACEMENT** Maintenance and watering of donor trees is undertaken under the direction of the City. The City guarantees survival of the tree for the first year. Should something happen to the tree within the first year, the City will replace the tree at no cost to the donor. The City will not accept any responsibility for the maintenance, vigor, or sustainability of the donated tree after one year, and accepts no liability for damage of the tree from vandals, third parties, disease, or natural disasters (e.g. tree fall, flooding). However, the City will give the donor the option of replacing the tree at cost should something happen to the integrity of the tree after the first year.
8. **DONOR TREE SELECTION AND LOCATION** In order to maintain a balance in the placement of trees and amenities, all requests for a specific site must be approved by the City or

Commissions with jurisdiction over the site. Recognition plaques are not provided by the City and are not permitted at tree sites. Trees must be selected from the approved list and no plant material that is considered invasive will be accepted for any location.

DONOR TREE LIST

Agonis Flexuosa - Peppermint Tree
 Brachychiton Acerifolius - Australian Flame Tree
 Brachychiton Populneus - Australian Bottle Tree
 Callistemon Citrinus - Lemon Bottlebrush
 Eucalyptus Ficifolia - Red Flowering Gum
 Ficus Macropylla - Moreton Bay Fig
 Ficus Rubiginosa - Rusty Leaf Fig
 Melaleuca Nesophylla - Pink Melaleuca
 Melaleuca Quinquenervia - Cajeput Tree
 Metrosideros Excelsus - New Zealand Christmas Tree
 Leptospermum Laevigatum - Australian Tea Tree
 Lophostemon Confertus (Tristania Conferta) - Brisbane Box
 Olea Europaea - Olive
 Pinus Torreyana - Torrey Pine

Other drought-tolerant species may be considered after review and dependent upon availability.

- 9. RELOCATION** The City must approve the location of any relocated item. The City retains the right to relocate a donated item at any time. If a donated item needs to be relocated, the City contact the donor to discuss alternative locations. The City will make the final determination.
- 10. STANDARDS AND QUALITY** All sponsored donations will conform to the standards, design and quality set forth in the Landscape Master Plan Guidelines and approved by the City.
- 11. DONOR PRIVACY** The City of Manhattan Beach is committed to respecting the privacy of donors. They do not lend, sell, or rent mailing lists of donors or participants or any personal information to a third party. The name, address, phone or other information will not be used outside the Department of Parks and Recreation. A donor may choose to remain anonymous at any time. Personal information to acknowledge the donation and provide a receipt, to respond to questions, for internal marketing purposes and as a part of our donor database.
- 12.** This policy does not supersede the bylaws and/or regulations of the City of Manhattan Beach or any other regulating authority within the City

E SOIL TESTS

WALLACE LABORATORIES

365 Coral Circle
El Segundo, CA 90245
phone (310) 615-0116 fax (310) 640-6863

March 1, 2013

Mia Lehrer + Associates

3780 Wilshire Boulevard, Suite 250
Los Angeles, CA 90010

RE: Veterans Pkwy, Manhattan Beach

1) *27th St* – The soil is highly acidic with a pH of 5.93. Salinity is modestly high at 2.93 millimho/cm. Chloride is high at 411 parts per million in the saturation extract. Salt-sensitive plants need chloride below about 150 parts per million. The fertility is high. Zinc is higher than desired at 49 parts per million. Aluminum is moderate. Soluble boron is high at 1.3 parts per million in the saturation extract. Total available sodium is high. SAR (sodium adsorption ratio) is 6.2. Soil moisture is moderate at about 77% of field capacity.

2) *Camphor* – The pH is moderately acidic at 6.20. Salinity is moderate at 1.23 millimho/cm. Chloride is slightly high. Potassium is low. Nitrogen is moderate. Phosphorus is modest. Zinc is high at 38 parts per million. Soluble boron is high at 1.0 part per million in the saturation extract. Sodium is moderately high. SAR is 4.5. Soil moisture is low at about 54% of field capacity.

3) *Hill at Floor [SIC] #4* – The soil has modest alkalinity with a pH of 7.36. Salinity is moderate at 1.41 millimho/cm. Chloride is slightly high. Nitrogen is well supplied. Phosphorus, potassium and sulfur are modest. Total available sodium is moderate. SAR is 4.8. Soil moisture is low at about 51% of field capacity.

Evaluations

The optimum level for zinc is several parts per million. Sensitive plants such as woody plants need plant available zinc below about 30 parts per million. Herbaceous plants need plant available zinc below about 50 parts per million. Excessive zinc causes poor growth, stunting, dieback and discoloration. It interferes with root functions. High zinc restricts the uptake of potassium and other micronutrients. Grasses are fairly tolerant of high zinc. Since heavy metals do not normally migrate through the soil profile, deeper soil is expected to be more suitable. Over time growth may improve as the plant root into deeper soil with lower levels of heavy metals. High acidity increases the toxicity of zinc. High application rates of nitrogen over acidify soils.

Recommendations

Apply gypsum at 10 pounds per 1,000 square feet for No. 2 and No. 3. Irrigate all three areas deeply. Normally, irrigate deeply but not frequently to increase the efficiency of leaching. Lower the chloride, boron and sodium. Lower the SAR to less than 3.0. Balance soil aeration with soil moisture.

Apply gypsum at 10 pounds per 1,000 square feet several times a year to help reduce sodium. Recycled water contains elevated sodium, chloride and boron.

When nitrogen is needed, apply calcium nitrate (15.5-0-0) at 6 pounds per 1,000 square feet for areas 1 and 2. The application frequency is 3 to 4 times a year. If not over applied, it will help to increase the pH.

For Area 3, apply a pH neutral nitrogen such as Yara or Simplot calcium ammonium nitrate (27-0-0), blood meal, ureaformaldehyde (38-0-0), feather meal, urea (46-0-0), coated urea, etc.

Continue to monitor the site with periodic testing.

If growth cannot be improved due to the high levels of zinc, partial soil replacement in the active rooting zone is needed.

Garn A. Wallace, Ph. D.
GAW:n

