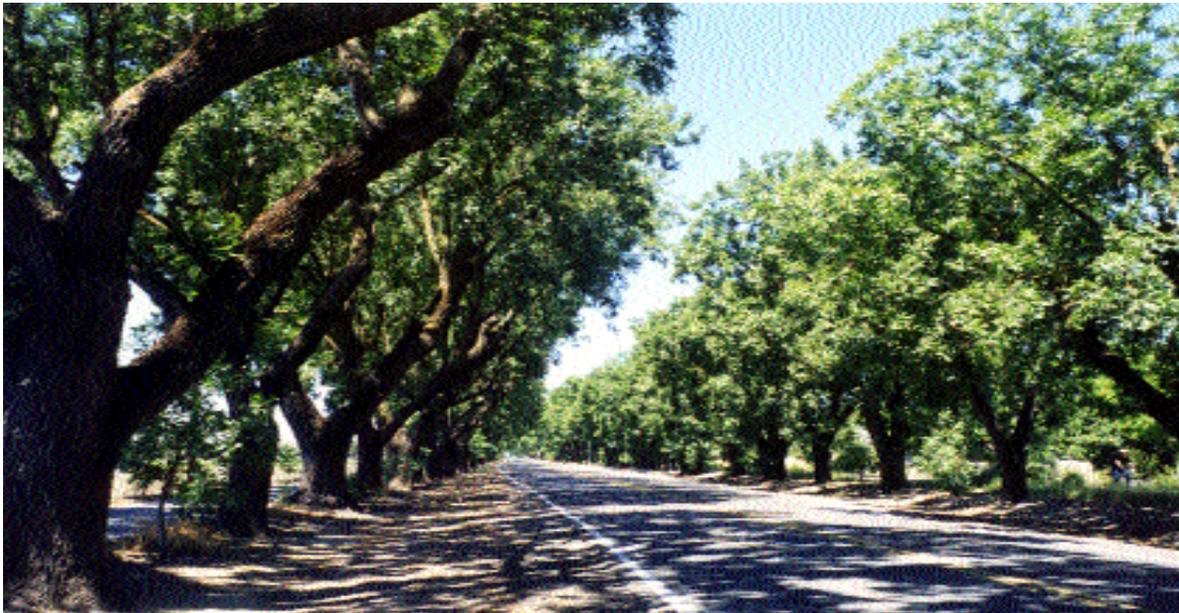


5. LANDSCAPE ELEMENT

INTRODUCTION

The Landscape Element uses complementary streetscape design features to provide an attractive and inviting route for a variety of users. The 12-mile Parkway has several distinct environments that vary by segment. The landscape design recognizes these variations in the visual and land use character of the corridor.



The landscape component of the project is designed to achieve the following specific objectives:

- Provide ample landscaping, using low maintenance, low water use native plantings that evoke the surrounding landscapes.
- Maintain the visual character of the open grasslands and agricultural landscape in the rural County areas.
- Provide rest areas, landmarks, and consistent signage at key locations to help unify the Parkway.
- Provide noise mitigation and wide landscape buffers to mitigate impacts to established and planned residential areas.
- Provide for strategic acquisition of open space lands in the designated Fairfield-Vacaville greenbelt area to serve as a community separator.

LANDSCAPE ELEMENT

Landscaping and buffer areas offer many benefits for the Jepson Parkway. First and foremost, landscape treatment provides visual relief along a major arterial roadway for vehicle passengers, bicyclists and pedestrians. Tree canopies and understory offer attractive close-in views to frame distant views of hillsides, Mt. Diablo and the grasslands. Landscaping can visually highlight certain areas such as intersections or staging areas and screen undesirable views such as industrial structures. Tree canopies in particular provide shade and cooling, while wind rows or hedgerows provide some measure of wind and dust protection. Landscaping also can provide habitat for birds and other wildlife species. Landscaping provides a measure of erosion control at the roadside and a buffer for roadway drainage. And, perhaps most importantly at established housing areas, a large buffer with landscaping and sound walls can mitigate the noise and visual intrusion from auto and truck traffic.

During the public workshops, landscaping and buffering emerged as a favored amenity, given its capacity to mitigate roadway impacts and improve aesthetics. When community members were asked to identify “great roads,” every example included significant amounts of roadside landscaping.

These benefits must be weighed against the costs of installing and maintaining the landscape areas. The concepts developed for this Plan rely on relatively low maintenance, native plantings and durable features such as masonry sound walls. However, landscape maintenance and management will need to be factored into operational cost estimates.

LANDSCAPE CONCEPT

The Parkway’s distinct environments can be generally characterized as mixed urban, rural, and commercial/industrial. The landscape design has been geared to respond to these varied environments. Figure 7 indicates how these different landscape types are applied to the corridor.

Urban Landscape Concept: This design treatment is intended for an urban environment with a mix of residential, commercial, recreational and institutional uses. The landscaping is relatively formal using street trees placed close together with accent trees and ground cover/shrubs to highlight intersections, and staging areas. Native grasses are used as understory. In places where residential uses are already built or planned in Vacaville’s General Plan such as along Leisure Town Road, a wide greenway is used to buffer housing from traffic.

Rural Landscape Concept: In the County portions of the parkway, along Vanden Road, the environment changes to open grasslands with sweeping views and a rural landscape. Here the landscape concept is informal and in keeping with the “prairie” environment. Trees are planted in informal clusters periodically as opposed to formal rows. The tree clusters are designed to mimic the windrows and occasional homestead tree clusters characteristic of the agricultural landscape. Native understory shrubs, and grasses are used sparingly to reduce maintenance needs and avoid a manicured appearance.

Urban Industrial Landscape Concept: This type of landscape design is geared for a light industrial, business park-type environment. Although similar to the formal design of the residential segments, the industrial parkway is not as densely planted nor does it contain as wide a landscaped area. Trees are used to provide color and to mark the median and street edge. Trees can also soften the view from the roadway into adjacent parking lots or industrial buildings.

JEPSON PARKWAY CONCEPT PLAN

LANDSCAPE ELEMENT

LEGEND

-  STAGING AREAS
-  SCHOOL
-  PARK-N-RIDE LOT
-  GATEWAY OPPORTUNITY
-  FUTURE MULTI-MODAL STATION
-  BIKE/PEDESTRIAN CONNECTION OPPORTUNITY
-  PROPOSED FAIRFIELD/VACAVILLE GREENBELT
-  URBAN/ RESIDENTIAL PARKWAY
-  RURAL PARKWAY
-  INDUSTRIAL PARKWAY
-  PROPOSED RECREATION AREAS
-  WIDENED BRIDGES

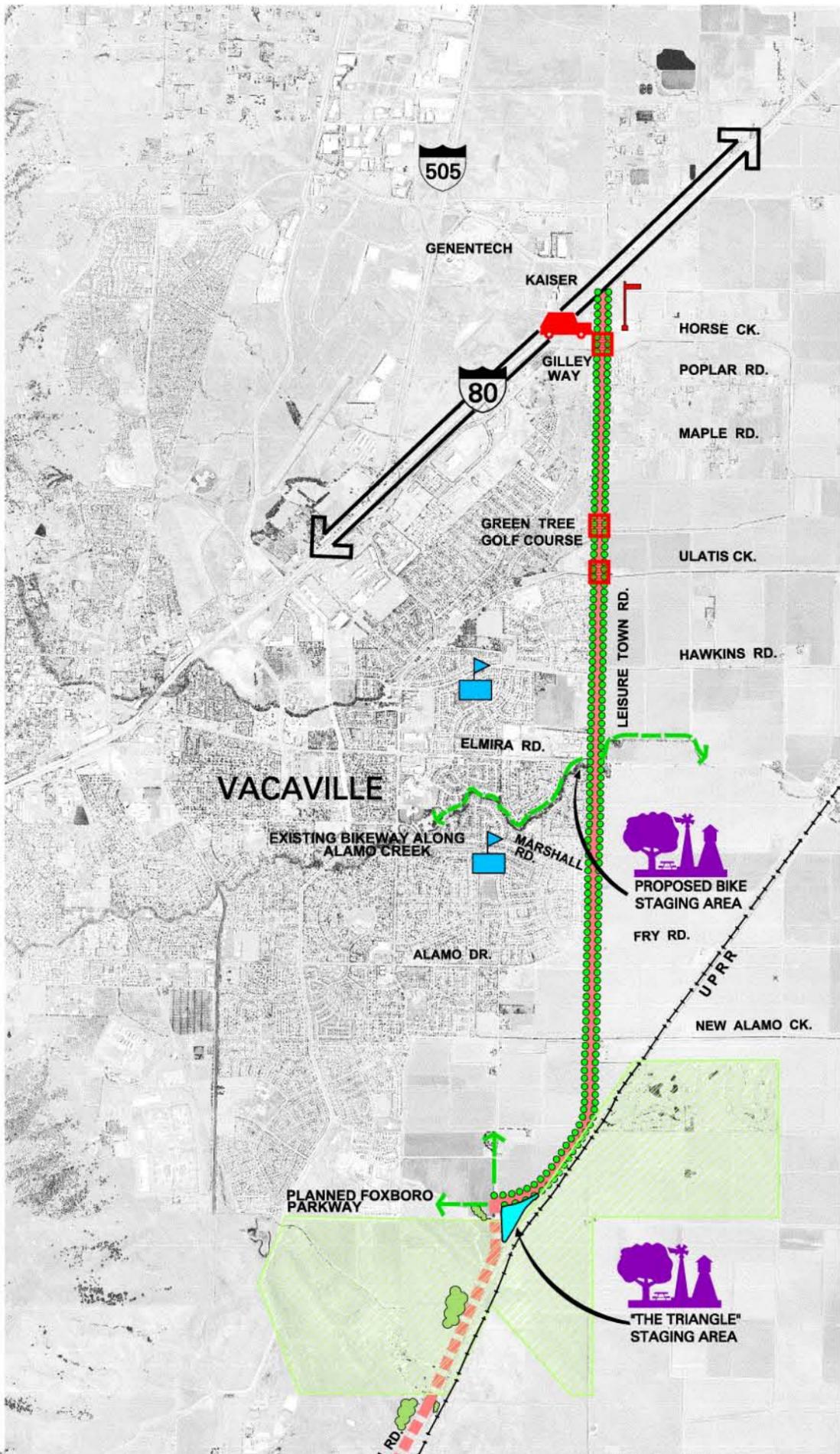
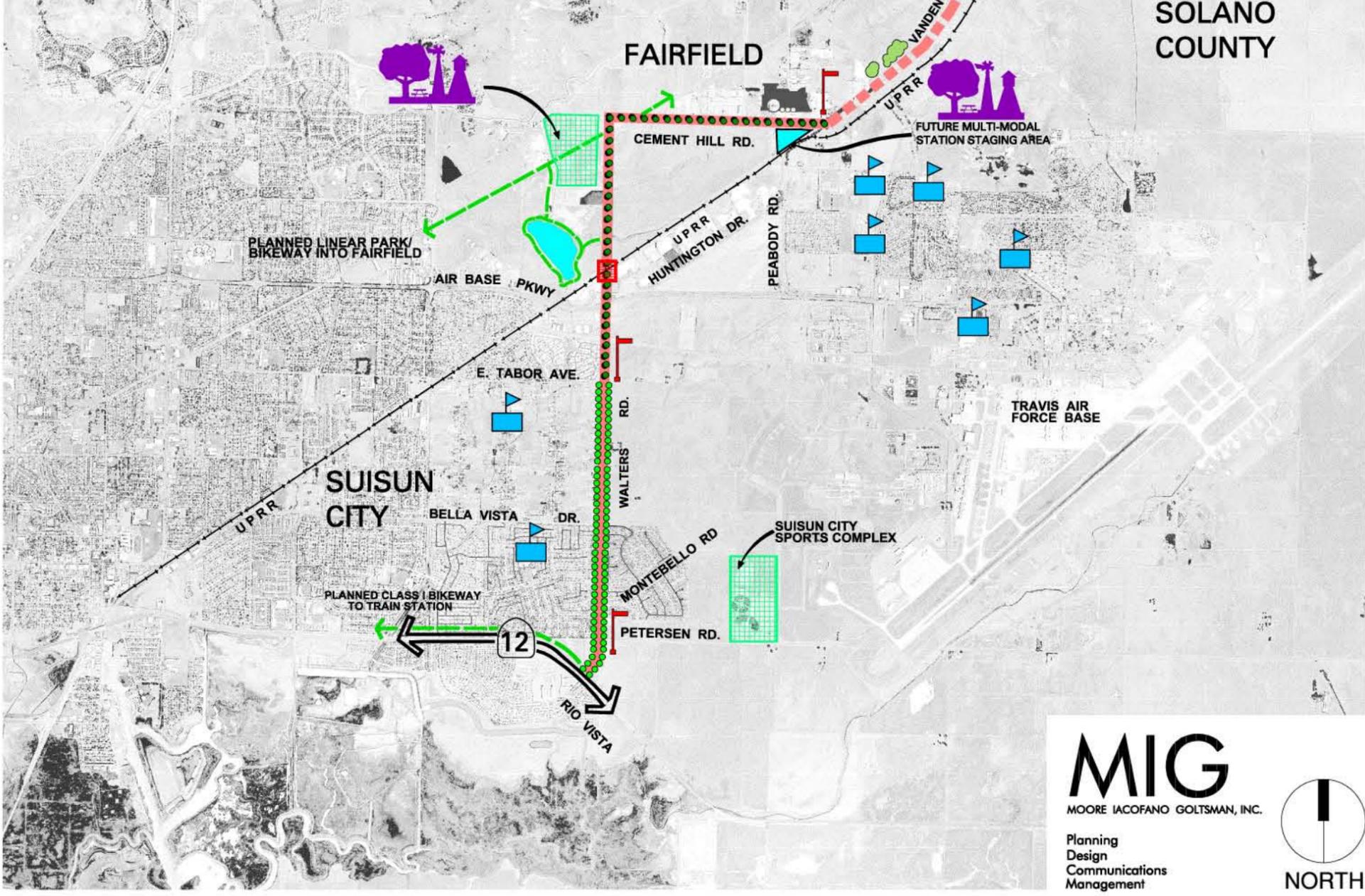


Figure 7



LANDSCAPE ELEMENT

Plant Selection

The plants chosen for the Jepson Parkway provide an opportunity for variety, while still maintaining a consistent, identifiable corridor. The use of California native plants is strongly encouraged for several reasons. Appropriate native plants are best suited to the climactic conditions of high wind, lower water requirements, fire resistance, lower maintenance, less pesticide usage, higher survival rate, and an opportunity to provide plants with a higher habitat value. At no time should exotic (non-native) invasive plants, such as Pampas Grass, Eucalyptus, Tamarisk, and Giant Reed be used as part of any plantings along this route.

The following native plant list should form the backbone for the Jepson Parkway landscaping, especially in the rural and industrial areas:

Trees and Shrubs:

- Interior Live Oak (*Quercus wislezenii*)
- Valley Oak (*Quercus lobata*)
- Coast Live Oak (*Quercus agrifolia*)
- California Sycamore (*Platanus racemosa*)
- Western Redbud (*Cercis occidentalis*)
- Gray Pine (*Pinus sabiniana*)
- White Alder (*Alnus rhombifolia*)
- Fremont Cottonwood (*Populus fremontii*)
- Toyon (*Heteromeles arbutifolia*)
- Blue Blossom (*Ceanothus thrysiflorus*)

Understory grasses and forbes:

- Purple Needle Grass (*Nassella pulchra*)
- Meadow Barley (*Hordeum brachyantherum*)
- Blue Wild Rye (*Elymus glaucus*)
- California Brome (*Bromus carinatus*)
- Northern Bush Monkey Flower (*Mimulus aurantiacus*)
- California Poppy (*Eschscholzia californica*)

LANDSCAPE ELEMENT

In addition to the native plants listed, the following trees could be used in urban settings as accent species or to integrate with established plantings:

- Chinese Pistache (*Pistacia chinensis*)
- London Plane Tree (*Platanus acerifolia* ‘Yarwood’)
- Calabrian Pine (*Pinus brutia*)
- Crape Myrtle (*Lagerstroemia fauriei*)
- Ornamental Pear (*Pyrus calleryana*)

Ornamental shrubs and ground covers should be selected for their ability to meet the climatic conditions, low maintenance requirements and pest resistance.



LANDSCAPE ELEMENT



SIGNAGE CONCEPT

In addition to landscape planting, the Jepson Parkway can be unified through complementary directional and identification signs using a series of common elements. A single identifying logo should be designed and used throughout the Parkway. Community signage directing visitors to the Parkway could use this design. Signage for the staging areas and bikeway could also adopt the logo design. At the boundary of each jurisdiction, a low-scale, monument sign could identify the city or County. These signs need not be the same, but should be designed with complementary materials, scale, lettering and style to enhance the corridor concept.

Regulation of private signage is under the auspices of each local jurisdiction. To preserve the visual quality of the Parkway, this Plan encourages each jurisdiction to maintain high quality signage standards for all adjacent land uses. Pole signs should not be allowed. Modest-scale monument signs at the entrances to residential projects, offices, or business parks can be integrated with the roadside landscaping.

GATEWAYS

Figure 7 indicates several opportunity areas for visual gateways along the Parkway. These may take a variety of forms. They may be a modest monument sign indicating the entry point to one of the cities or they may include additional accent landscaping, lighting or interpretive signage. They could, if the community desired, incorporate public art or a landscape feature (rock wall, sculpture, etc.). To tie the Parkway together, these gateways should use a complementary design style, similar lettering and signage approach and the Jepson Parkway logo.



LANDSCAPE ELEMENT

STREETSCAPE AND UTILITIES

As part of the landscape element for each roadway segment, existing infrastructure should be modernized and made part of the overall Parkway concept. As each segment is constructed, remaining overhead utility lines would be undergrounded, existing canals and ditches would be improved, placed in culverts or integrated into the landscape, and street lighting would be installed. In addition, a conduit capable of supporting fiber optic infrastructure would be installed along the entire length of the corridor.



The street lighting concept should be compatible with the landscape design of each road segment. For example, in the residential portions of the Parkway, lighting should provide for safe vehicle, bicycle and pedestrian movement without producing glare into adjacent homes. Street light design should complement the landscape design and the lighting standards of the adjacent residential community. For each segment, the major roadway light standard and the spacing of light poles shall reflect the approved standard of the local community. In the industrial and rural segments, street lighting should be less intensive in keeping with reduced activity. For the Class I bikeway, safe, durable and attractive, low-level light standards are needed. Bikeway light poles in urban areas would be typically spaced about 100-120 feet apart and 12-14 feet in height. The example to the left illustrates an appropriate light standard. There would be no lighting of the bikeway in the rural, County portions of the Parkway, except at staging areas.

NOISE MITIGATION

In the rural and industrial segments of the Parkway, noise attenuation measures such as berms or sound walls are not recommended. This will maintain the open views to the hills and beyond and not increase project costs. Where the Jepson Parkway passes through existing or proposed residential areas, special attention is needed to mitigate the negative impacts of noise on adjacent homes and yards. In most instances, a masonry sound wall imbedded within the landscape buffer will be the preferred treatment. Currently wooden fences separate the homes from the road. These will be upgraded to masonry walls.

In all cases, sound walls should be designed to attenuate as much noise as possible, while blending into the surrounding landscaping. Shrubs, trees and vines will be used to soften the view of the walls. Sound wall design should be consistent along the Parkway, but there should be variation by segment to create visual interest and avoid monotony. A more aggressive approach to noise mitigation is needed in two specific areas: Leisure Town Road in Vacaville and along the Tolenas neighborhood in Solano County. Along Leisure Town Road, a 35-55 foot landscaped buffer will separate houses from the road edge. Sound walls will be placed within the buffer in locations where they can be the most effective and screened from view with shrubs, trees and vines. Along the Tolenas neighborhood, a frontage road will remain between the existing housing and the Parkway. Sound walls will be constructed next to the frontage road. The cross-sections for each of the roadway segments illustrate the sound wall placement. Sound wall design and construction has not been factored into project cost estimates. They will be installed as roadway or residential development occurs and the costs will be determined on a case by case basis.

LANDSCAPE ELEMENT



The Environmental Impact Report/Statement will analyze specific noise impacts along the roadway at a greater level of detail. The EIR/EIS may recommend additional mitigation measures to further attenuate roadway noise.

DESCRIPTION OF PROPOSED LANDSCAPE TREATMENT BY SEGMENT

The following text describes in detail on how the landscape design concepts are integrated into each Parkway segment. Figure 8 is a key to each cross-section. The cross-sections are noted as Figures 9-18. The cross-sections are not intended to be precise engineering drawings. Modifications to these conceptual cross-sections may be needed to meet specific site constraints, and would be made in the detailed design phases. In addition, landscaped medians shown may be removed at intersections or segments where separate left turn lanes or pockets are required.

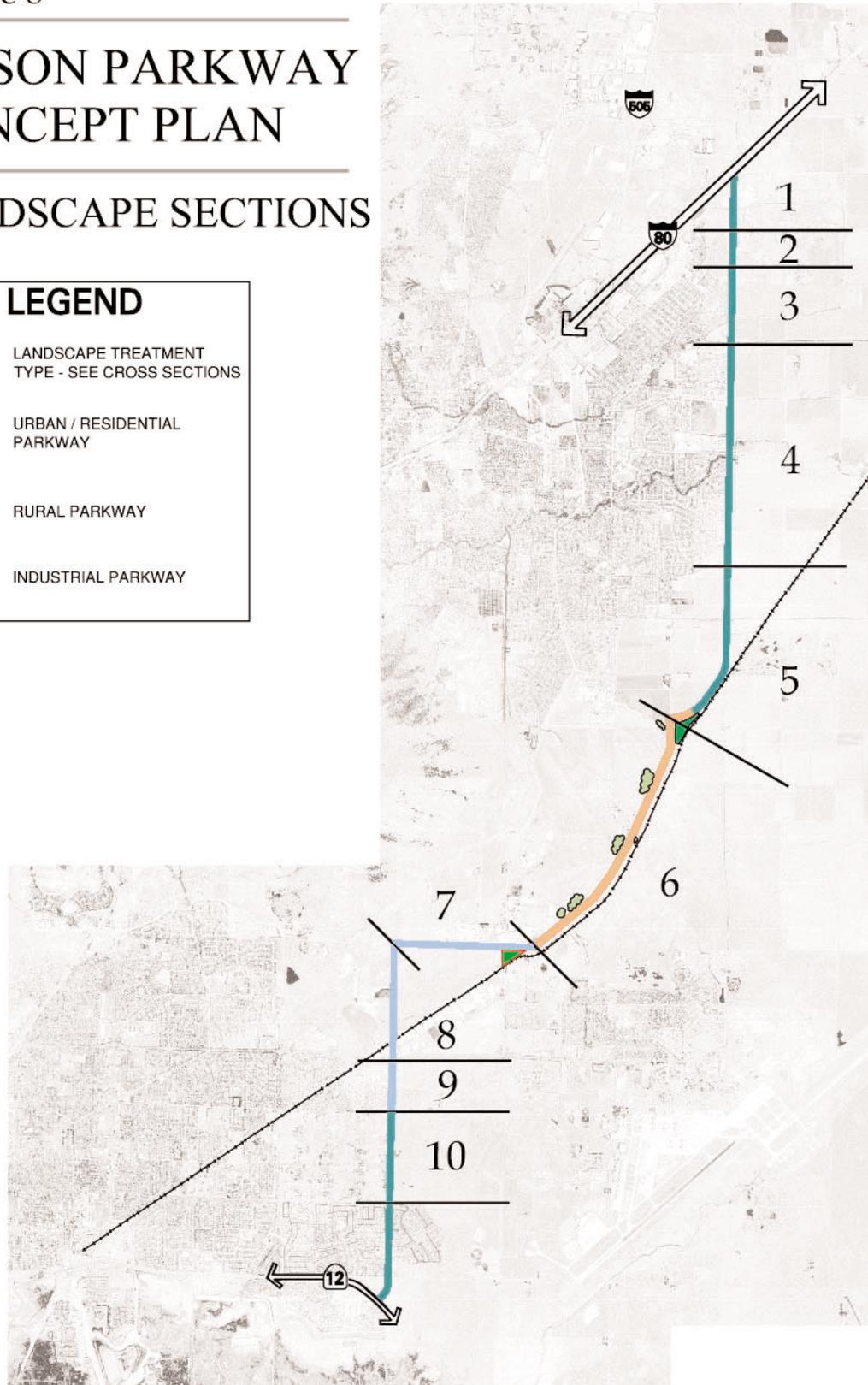
Figure 8

JEPSON PARKWAY CONCEPT PLAN

LANDSCAPE SECTIONS

LEGEND

- 1 LANDSCAPE TREATMENT TYPE - SEE CROSS SECTIONS
-  URBAN / RESIDENTIAL PARKWAY
-  RURAL PARKWAY
-  INDUSTRIAL PARKWAY



LANDSCAPE ELEMENT

Vacaville: Leisure Town Road from I-80 to Orange Drive

This segment is different than the rest of the Parkway because there will be six lanes of travel to make the transition from the freeway interchange to the city street. The landscape concept in this segment begins the urban boulevard treatment. Most of the landscaping in this segment is confined to the median consisting of native trees, understory and accent plantings. A ten-foot wide multi-use path will occur on either side of the road allowing for pedestrians and bicyclists. A class I bike path requires a minimum of five feet of landscaping between the travel lane and the path. We are describing this path as a “modified Class I pathway.”

Vacaville: Leisure Town Road from Orange Drive to Poplar Drive (Cross-Section Type 1)

This segment transitions from six through lanes at the freeway interchange to four through lanes. Most of the landscaping in this segment is confined to the median with future development providing landscaped edges for the Parkway; A ten foot-wide multi-use path will occur on either side of the road allowing for pedestrians and bicyclists. Sound walls may be constructed on the east side if noise studies indicate the need.

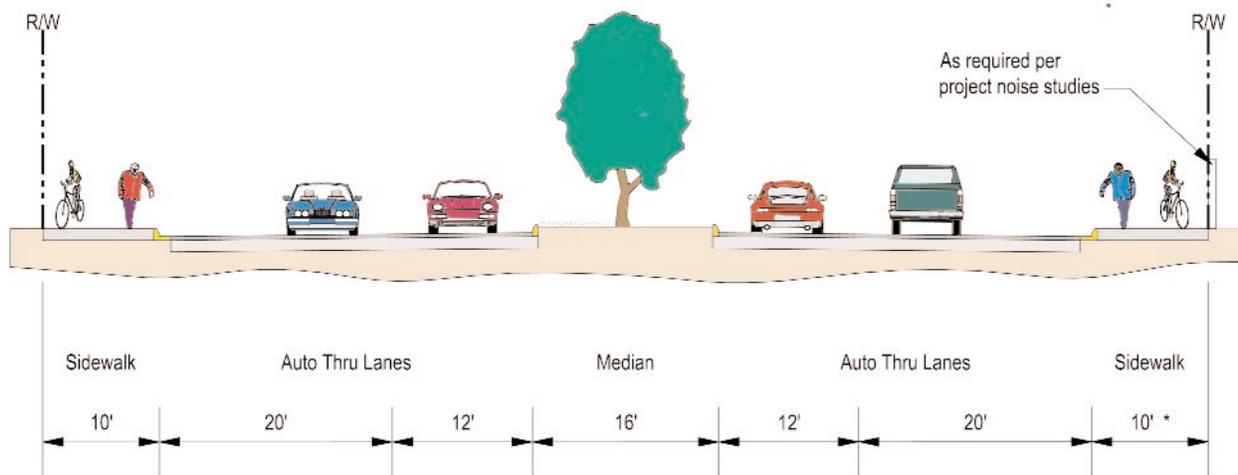


Figure 9: Cross Section Type 1

LANDSCAPE ELEMENT

Vacaville: Leisure Town Road from Poplar Drive to Sequoia Drive (Cross-Section Type 2)

This segment is identical to the previous one except the east side of the road may provide additional space for up to 10 feet of landscaped area. The amount and configuration of the path and landscaping will depend on the type, design and timing of future development in this area. On the west side of Leisure Town Road, a golf course provides a landscaped edge.

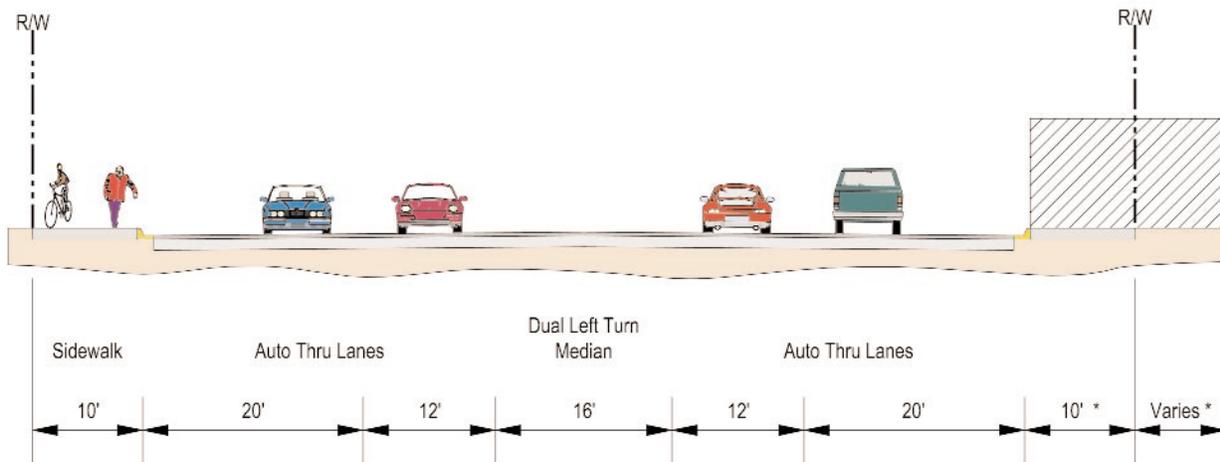


Figure 10: Cross Section Type 2

Vacaville: Leisure Town Road from Sequoia Drive to Ulatis Creek (Cross-Section Type 3)

This segment is also similar to types 1 and 2, except the east side of the road may be able to accommodate a 35 foot landscaped buffer with a meandering Class I bike path. The landscape buffer and path would only occur in connection with future residential development if it were approved and annexed into the City. The development would be required to dedicate additional right-of-way and construct these improvements based on City of Vacaville Public Works approval.

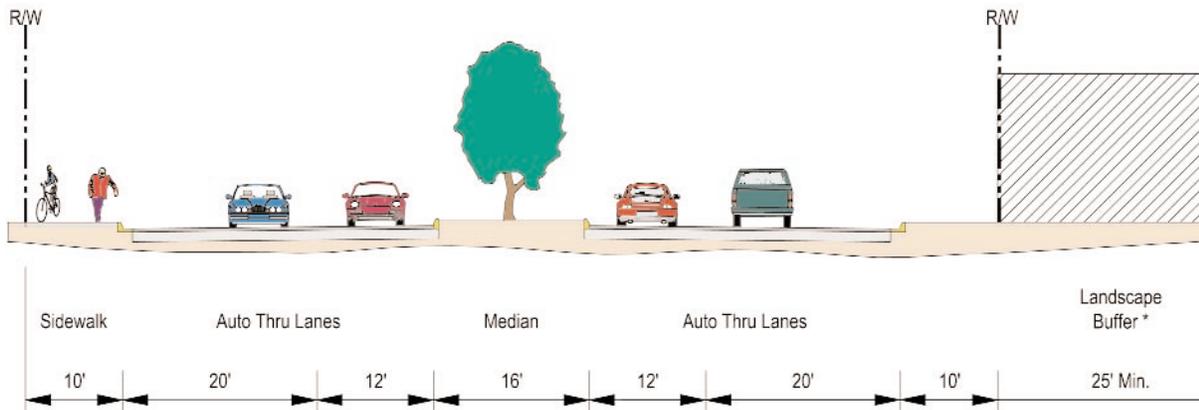


Figure 11: Cross Section Type 3

LANDSCAPE ELEMENT

Vacaville: Leisure Town Road, Ulatis Creek to Alamo Drive (Cross-Section Type 4)

This segment provides ample right-of-way to have formal tree-lined boulevards on both sides of the road and a landscaped median. This area will feature a broad greenway or landscape buffer on both sides of the road with a ten-foot meandering path. On the east side, which is currently undeveloped, the landscape buffer and path will only occur if residential development is approved. The landscaping and path would be funded by the development project based on City of Vacaville Public Works approval.

On the west side of the road adjacent to existing neighborhoods, the wide greenway will be built at the time when road widenings or improvements are completed. The landscape concept along this segment of Leisure Town Road provides a 35-55 foot landscaped greenway outside of a sound wall to protect adjacent residents. Trees provide shade and demarcation of the median and the street edge. Deciduous trees provide shade; evergreen and seasonal color trees mark intersections. More extensive use of evergreen trees in this segment provide year-round buffering effects. Shrubs and ground cover provide seasonal color. Many of the key elements are designed to mitigate noise and other impacts from the parkway on nearby homes and characterize this segment of the corridor. The key difference in this area compared to the rest of Leisure Town Road is as follows:

The City of Vacaville has committed to further consultation with area residents regarding the specific design and density of the landscaping buffer. It is anticipated that this landscaping buffer will be significantly more dense and lush than other portions of the Jepson Parkway corridor. Providing a buffer of adequate density that is effective year-round may require the use of non-native landscaping material. When the City and residents have selected a design and density of the buffer, that selection will be made a part of this document. The multi-use path would meander within this greenway area.

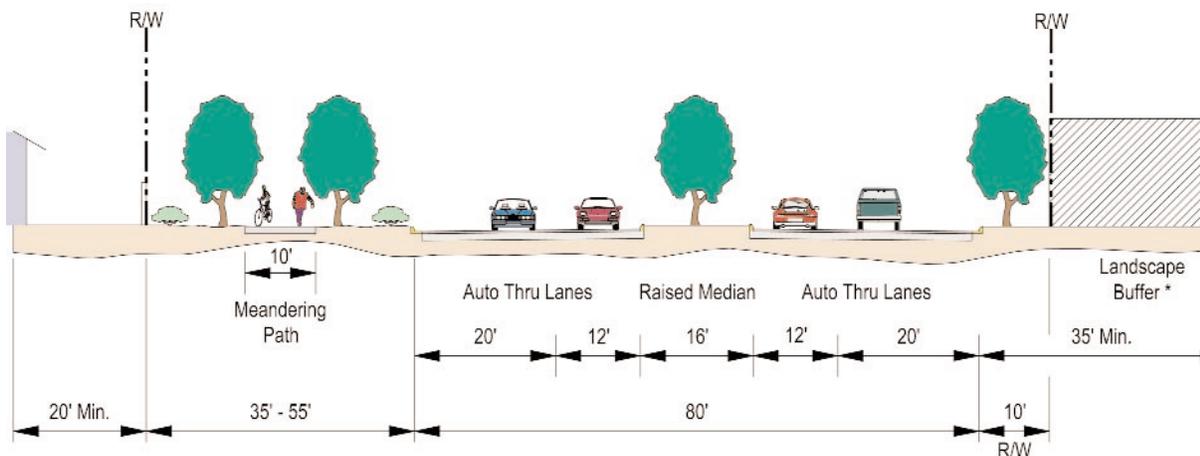


Figure 12: Cross Section Type 4

LANDSCAPE ELEMENT

Vacaville: Leisure Town Road, Alamo Drive to Vanden Road/Foxboro Parkway (Cross-Section Type 5)

This segment is the same as segment 4 on the previous page with two notable exceptions. The landscape buffer on the west side may not extend out up to 55-feet in width, but would be at least 35 feet-wide. The other difference is where Jepson Parkway parallels the railroad tracks, the landscape buffer on the east side would be reduced in width. Again, as with the other Vacaville segments, if future residential development occurs on the east side of the road, those projects would be required to dedicate additional right-of way and construct the 35-foot landscape greenway and multi-use pathway.

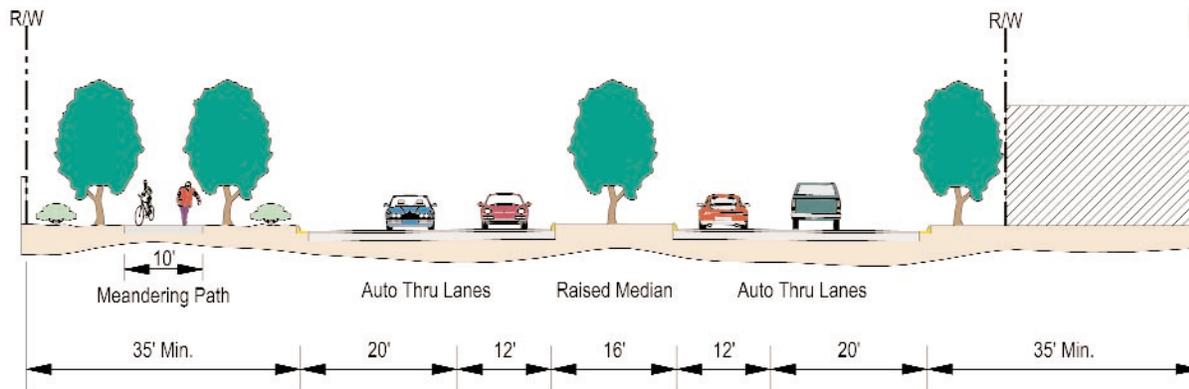


Figure 13: Cross Section Type 5

LANDSCAPE ELEMENT

Solano County: Vanden Road Rural Segment (Cross-Section Type 6)

Having left the urban area and entered the unincorporated area of Solano County, the landscape concept changes to an open, native grassland with clusters of trees scattered along the route. Existing trees can be retained where feasible, but all new plantings are to be native species. Key elements of this segment are: (1) landscaping on both sides of the road, and (2) a planted median.

- On both sides of the road, trees are planted at irregular intervals (300' to 500') and clustered (minimum of five per cluster) with native grasses as the understory. The trees are also used to mark intersections and drainages. In the drainage areas trees are more densely planted, as might occur naturally in the surrounding prairie landscape. New trees will be planted to augment existing windrows, hedgerows and clusters. The bikeway on the east side of the Parkway may meander somewhat within the landscaped area.
- The median is also characterized by irregularly spaced clusters of closely grouped trees with native grasses and shrubs as understory. It is important that understory maintenance is kept to a minimum in this segment. Irrigation would only be temporary until the understory and trees are established.

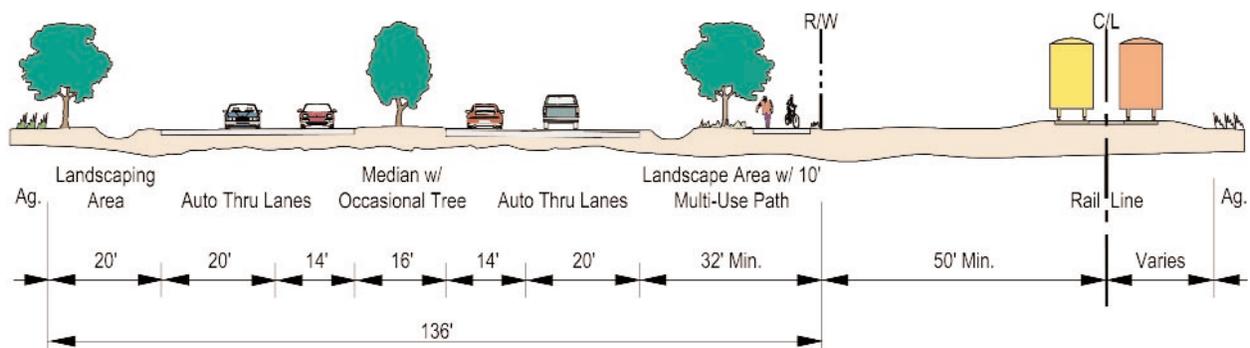


Figure 14: Cross Section Type 6

LANDSCAPE ELEMENT

Fairfield: Cement Hill Road Between Walters Road and Peabody Road (Cross-Section Type 7)

The landscape concept in this segment is more of a commercial or industrial boulevard. Trees provide color and demarcation of the median and the street edge. Trees will also soften the view from the roadway toward large structures or parking lots. Shrubs and ground covers provide seasonal color. Native plants are to be used where possible. The three key elements of this segment are: (1) landscaping on private property, (2) a center planted median strip, and (3) a narrow planting strip between the street and bike/pedestrian path.

- ❑ Trees and understory plantings would follow Fairfield’s landscape guidelines for private industrial development. At a minimum, trees should provide shading for the bike/pedestrian path and screening for buildings and parking lots.
- ❑ In the center median trees are to be spaced at regular intervals (30’ on center) with an understory of low shrubs, grasses and decomposed granite.
- ❑ On the east side of the roadway, the landscaped strip between the street and the bikeway/pedestrian path is to be planted with native shrubs and ground cover to act as a barrier between the street and the pathway.

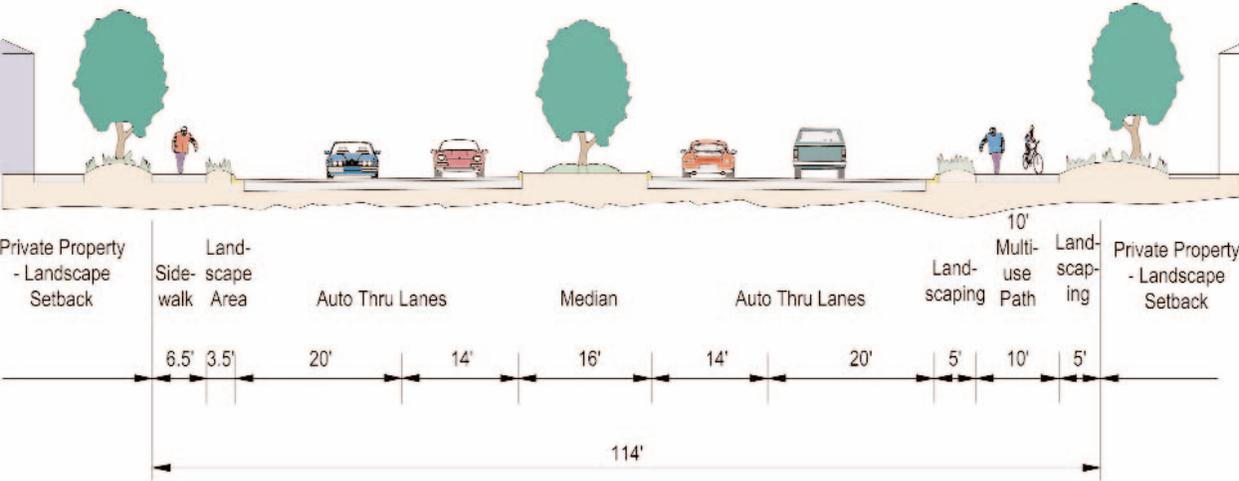


Figure 15: Cross Section Type 7

LANDSCAPE ELEMENT

Fairfield: Walters Road North of Air Base Parkway (Cross-Section Type 8)

This segment is very similar to the industrial segment along Cement Hill Road (Cross Section Type 7). The only difference is a slightly reduced width on the west side because of potential environmental constraints due to sensitive species. Additional landscaping or a wider pathway may be possible pending further environmental analysis. If private commercial or industrial development proceeds in this area, the development project would provide edge landscape treatment to enhance the Parkway.

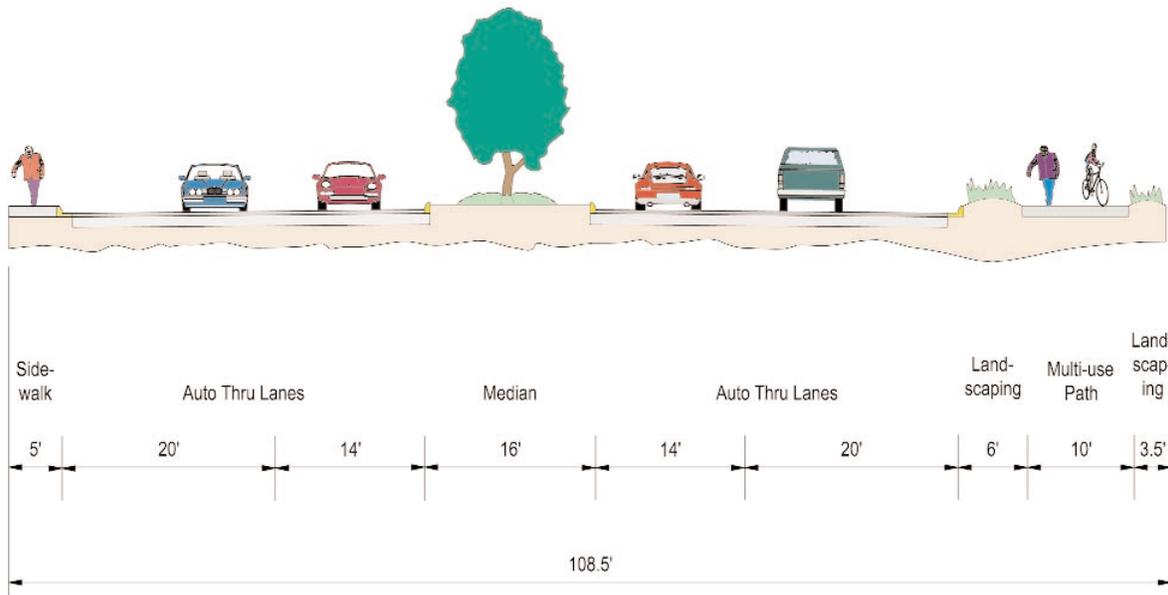


Figure 16: Cross-Section Type 8

LANDSCAPE ELEMENT

Fairfield: Walters Road South of Air Base Parkway (Figure 17: Cross Section Type 9)

This segment is constrained by existing development on the west and sensitive vegetation and habitat on the east. There are two primary elements in this section: (1) a planted center median, and (2) a multi-use pathway directly adjacent to the roadway on the east side of the road.

- ❑ The center would include native trees in a regular spacing (50' on center) with native grasses on ground cover as understory. When a left turn lane is needed, the median would be too narrow for trees and may have native grasses or decomposed granite.
- ❑ Depending on the results of more detailed biological analysis, it may be possible to plant native trees on either side of the road to enhance the corridor.

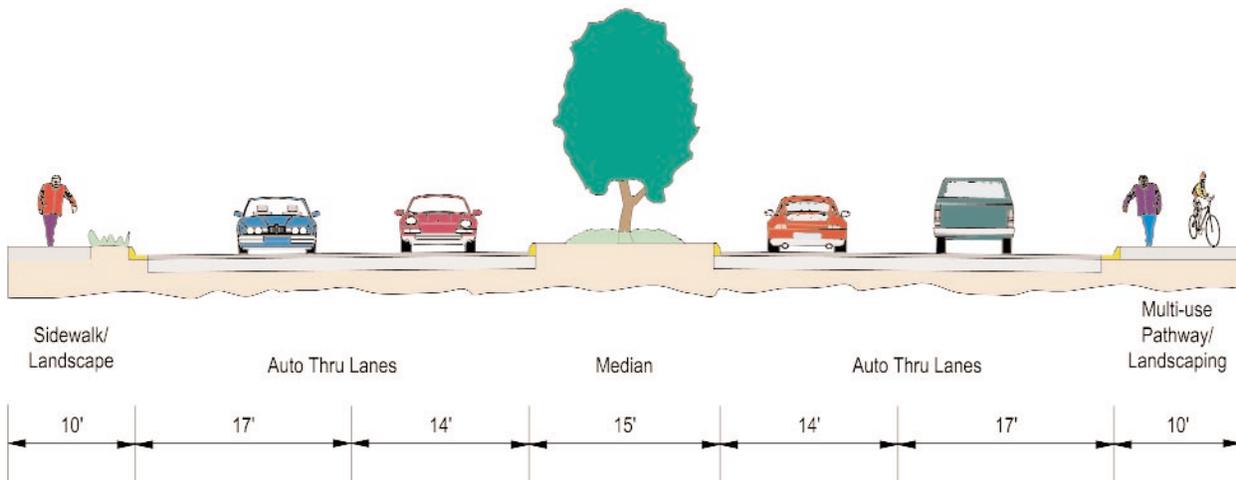


Figure 17: Cross Section Type 9

LANDSCAPE ELEMENT

Suisun City: Tolenas from East Tabor to Bella Vista (Cross-Section Type 10)

In the Tolenas area of the County, the landscape theme is that of an urban residential, tree-lined boulevard. There are three key elements: (1) a sound wall along the frontage road, (2) a center median, and (3) a landscape strip and multi-use path.

- ❑ Vines should be planted at regular intervals along both sides of the frontage road sound wall to reduce its visual impact.
- ❑ In the center median, trees will be planted at regularly spaced intervals (30' to 50') on center with an understory of low shrubs, native grasses, and ground cover or decomposed granite.
- ❑ In the landscape area next to the bike path, trees will be spaced at regular intervals (30' to 50' on center) with an understory of low shrubs, native grasses or ground cover. Vines and shrubs will also be planted at regular intervals along wall at bike path.

Suisun City: Bella Vista to Highway 12

Most of this segment has already been completed as a four-lane segment with trees, a wide sidewalk/bike path and striped bike lanes. Improvements planned for this segment include additional raised median, landscaping, and a traffic signal at Peterson Road.

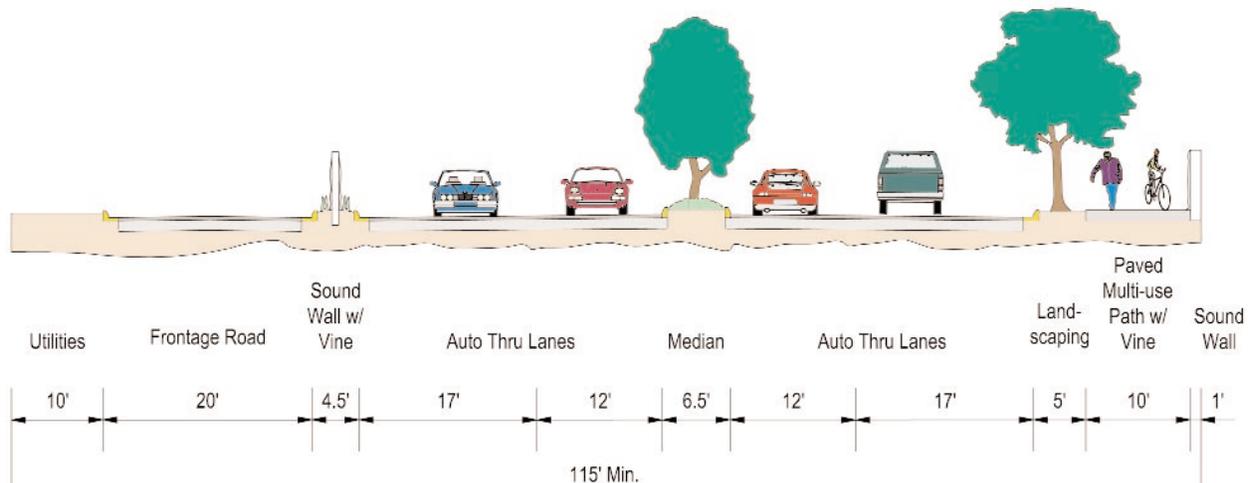


Figure 18: Cross Section Type 10

LANDSCAPE ELEMENT

OPEN SPACE ACQUISITION OPTIONS

During the public outreach process, the community expressed a desire to preserve the rural character of the middle portion of the corridor. Protecting this area from urban development will enable the local communities to maintain a distinct, community separator between the cities of Vacaville and Fairfield. The area identified for open space acquisition is south and east of the planned Foxboro Parkway and encompasses the Triangle Staging Area which extends both south, east and northeast of that point (See Figure 7). This area currently is designated on the general plans of both Vacaville and Fairfield as greenbelt/community separator. However, there are no formal mechanisms in place such as conservation easements to ensure long-term protection. Funding from the Parkway project could provide for that open space protection.

There is a second area where open space acquisition may be appropriate. In the Walters Road extension portion of the Parkway, various special biological habitats (wetlands, Contra Costa Goldfields, other sensitive plants) provide constraints to potential urban development and road expansion. Selective acquisition of critical habitat or open space areas may be an appropriate use of environmental mitigation funds associated with the Parkway project.

Developing a feasible approach for obtaining the funds needed for open space acquisition will require considerably more information than is presently available. Given available data, there are two potential scenarios for open space projects:

- (1) Consider acquisition of conservation easements from willing sellers along one or both sides of the Parkway within the Vacaville/Fairfield Community Separator/Greenbelt along the Vanden Road segment. This land is designated as greenbelt in Vacaville and Fairfield's general plans, but does not have any additional open space preservation mechanism at this time. Conservation easements will allow the land to continue to be used for agricultural purposes and owned and managed by private land owners. Any acquisitions here should be large enough (over 160 acres) to allow for continued viable grazing.
- (2) Consider acquisition of fee title or conservation easements in the area around the Walters Road extension portion of the Jepson Parkway to protect endangered plant species, seasonal wetlands and vernal pools and/or to provide additional space for restoration of wetlands lost by the project. The advantage of this approach is that it is focused on an attractive and biologically significant segment, however it may be necessary to secure environmental clearance for mitigation purposes.