Chapter 2 Project Alternatives

This chapter describes the build alternatives that were developed by the multi-disciplinary project team and the NEPA/404 group to achieve the project purpose and need while avoiding or minimizing environmental impacts.

2.1 Alternative Development Process

The *Jepson Parkway Concept Plan* (Concept Plan) was developed by STA, Fairfield, Suisun City, Vacaville, and Solano County to improve local traffic in central Solano County and to encourage the linkage between transportation and land use. Dialogue was facilitated between various stakeholders of the project, including developers; neighborhood groups; STA; the Cities of Fairfield, Suisun City, and Vacaville; Solano County; MTC; and community representatives, to ensure that the Concept Plan reflected community feedback and priorities.

In addition to the alternative described in the Concept Plan, additional project alternatives were suggested by community members at a public scoping meeting conducted in August 2000. In September 2000, STA, Caltrans, FHWA, the Corps, USFWS, NOAA Fisheries, and EPA began the NEPA/404 integration process. Pursuant to the NEPA/404 integration MOU, the NEPA/404 group considered a full range of alternatives using existing information sources and limited field surveys. This effort included baseline analyses of several action alternatives, including the project identified in the Concept Plan. The NEPA/404 group conducted a screening process that considered 39 factors under six headings. These headings included natural environmental effects, physical environmental effects, community effects, transportation effectiveness, engineering feasibility, and financial feasibility. The alternatives were rated for each factor using a qualitative range of + + + (*very positive effect*) to – – – (*very negative effect*). The matrix ratings reflected the group's understanding of the potential effects of the different alternatives based on readily available information. As a result of this consultation process, 6 of 11 alternatives that were taken into consideration during the screening process were recommended for detailed analysis in the EIR/EIS. After further detailed field reviews, the list of six alternatives was eventually narrowed to five, including a no-build alternative and four build alternatives. This section describes the proposed action and the design alternatives that were developed to achieve the project purpose and need while avoiding or minimizing environmental impacts. The alternatives are described below.

The project is in Solano County between Interstate 80 (I-80) in Vacaville in the north and State Route (SR) 12 in Suisun City in the south. The approximately 12-mile corridor, referred to as the Jepson Corridor, is located within the jurisdictions of the Cities of Suisun City, Fairfield, and Vacaville, and unincorporated portions of central Solano County. The Jepson Parkway Project would upgrade and link a series of existing local two- and four-lane roadways (as well as construct an extension of an existing roadway under one alternative) to provide a four- to six-lane north-south travel route for residents who face increasing congestion when traveling between jurisdictions in central Solano County.

The purpose of the proposed action is to provide roadway improvements that create a safe, environmentally-conscious route for local traffic through central Solano County. The project is designed to meet objectives of the *Jepson Parkway Concept Plan* (Concept Plan), prepared by STA. In accomplishing the project purpose, the Jepson Parkway Project would overcome a number of shortcomings and deficiencies in the existing patchwork of road segments. The project purpose and need is described in detail in Chapter 1, Purpose and Need.

2.2 Project Alternatives

The five project alternatives evaluated in this EIR/EIS include the following:

- Alternative A: No Build (No Action)
- Alternative B: Leisure Town Road (Segments B1 to B5)–Vanden Road (Segment B6)–Cement Hill Road (Segment B7)–Walters Road Extension (Segment B8)–Walters Road (Segments B9 and B10)
- Alternative C: Leisure Town Road (Segment C1 to C5)–Vanden Road (Segment C6)–Peabody Road (Segment C7)–Air Base Parkway (Segment C8)–Walters Road (Segments C9 and C10)
- Alternative D: Leisure Town Road (Segment D1 to D5)–Vanden Road (Segment D6)–Peabody Road (Segment D7)–Huntington Drive (Segment D8)–Walters Road (Segments D9 and D10)
- Alternative E: Peabody Road (Segments E1 to E5)–Air Base Parkway (Segment E6)–Walters Road (Segment E7 and E8)

Figures 2-1 to 2-5 show the locations of the four build alternatives, the roadway segments that make up each alternative, the number of proposed lanes on these roadway segments, and typical cross sections for each of the project segments. The segments represent the portions of the corridor as they were identified in the Concept Plan and on subsequent engineering/design drawings. The segments consist of the following (from north to south).

- Alternative B
  - Segment B1, Leisure Town Road from Orange Drive to south of Poplar Road
  - Segment B2, Leisure Town Road from south of Poplar Road to Sequoia Drive
  - Segment B3, Leisure Town Road from Sequoia Drive to New Ulatis Creek
  - Segment B4, Leisure Town Road from New Ulatis Creek to Alamo Drive
  - Segment B5, Leisure Town Road from Alamo Drive to Vanden Road
  - Segment B6, Vanden Road from Leisure Town Road to Peabody Road
  - Segment B7, Cement Hill Road from Peabody Road to Walters Road Extension
  - Segment B8, Walters Road Extension from Cement Hill Road to Air Base Parkway
  - Segment B9, Walters Road from Air Base Parkway to East Tabor Avenue
  - Segment B10, Walters Road from East Tabor Avenue to SR 12

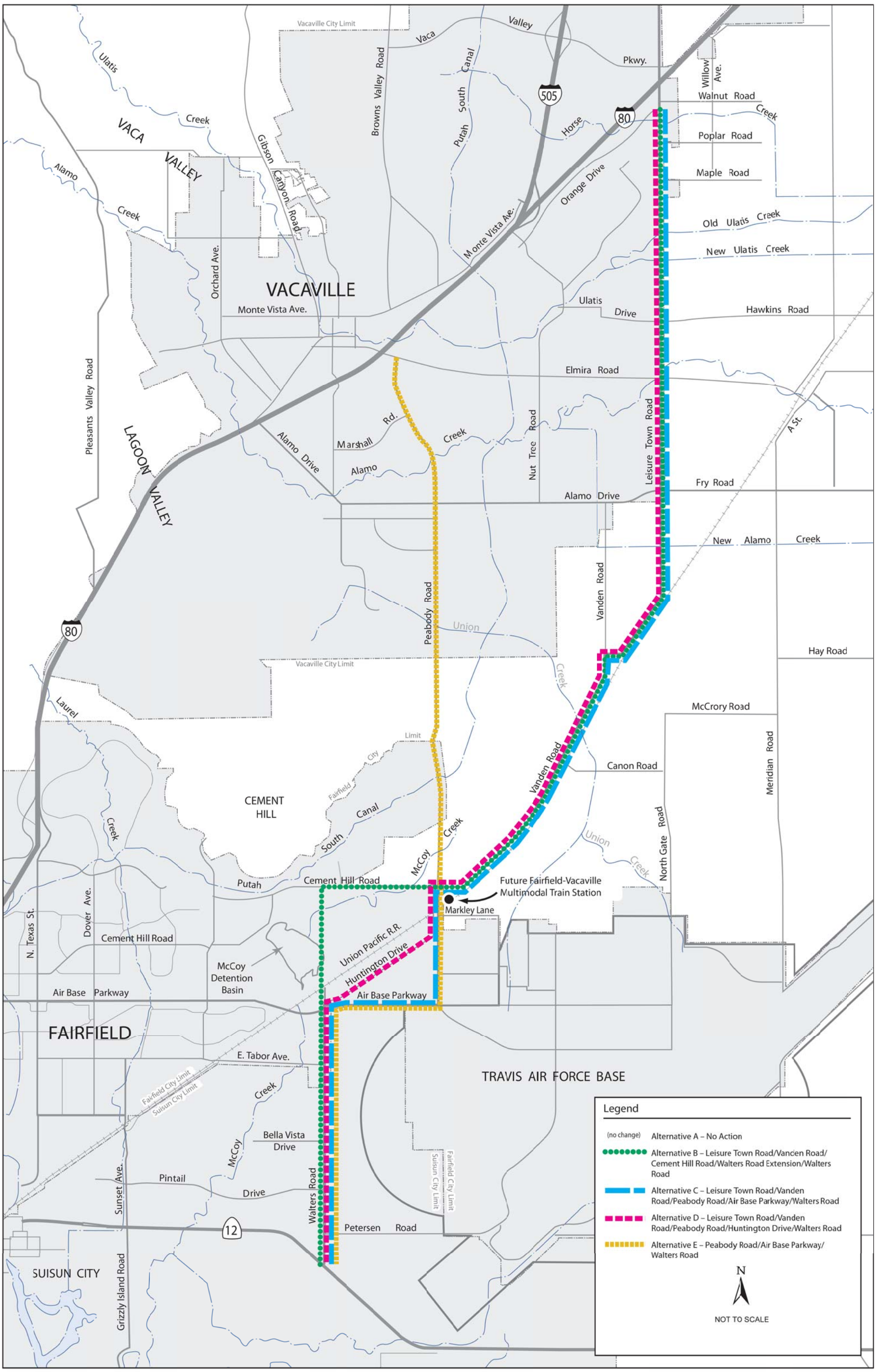

Figure 2-1
Jepson Parkway Project Location

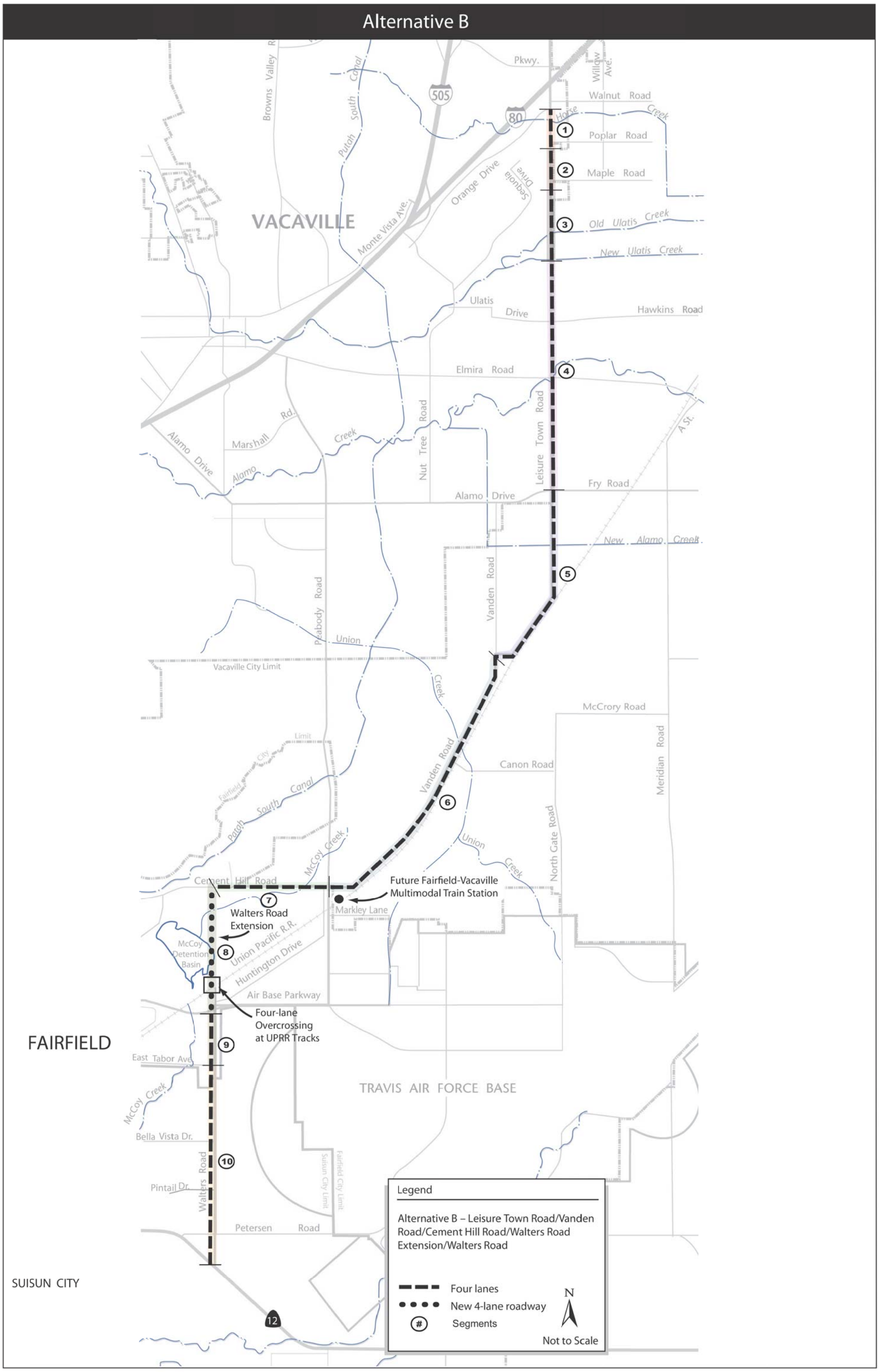

Figure 2-2
Jepson Parkway Project Alternative B

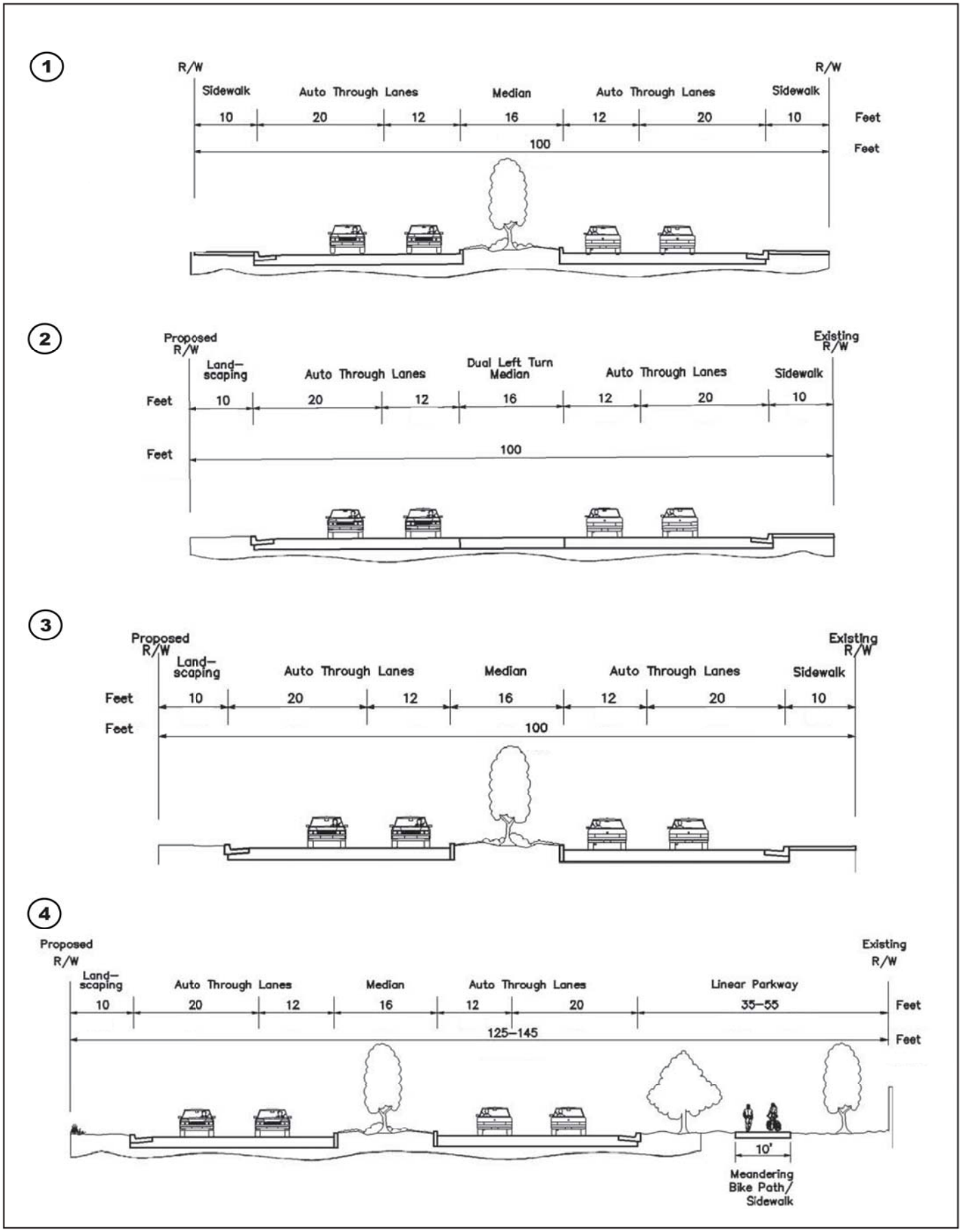

Figure 2-2A
Alternative B - Road Segments 1 to 4

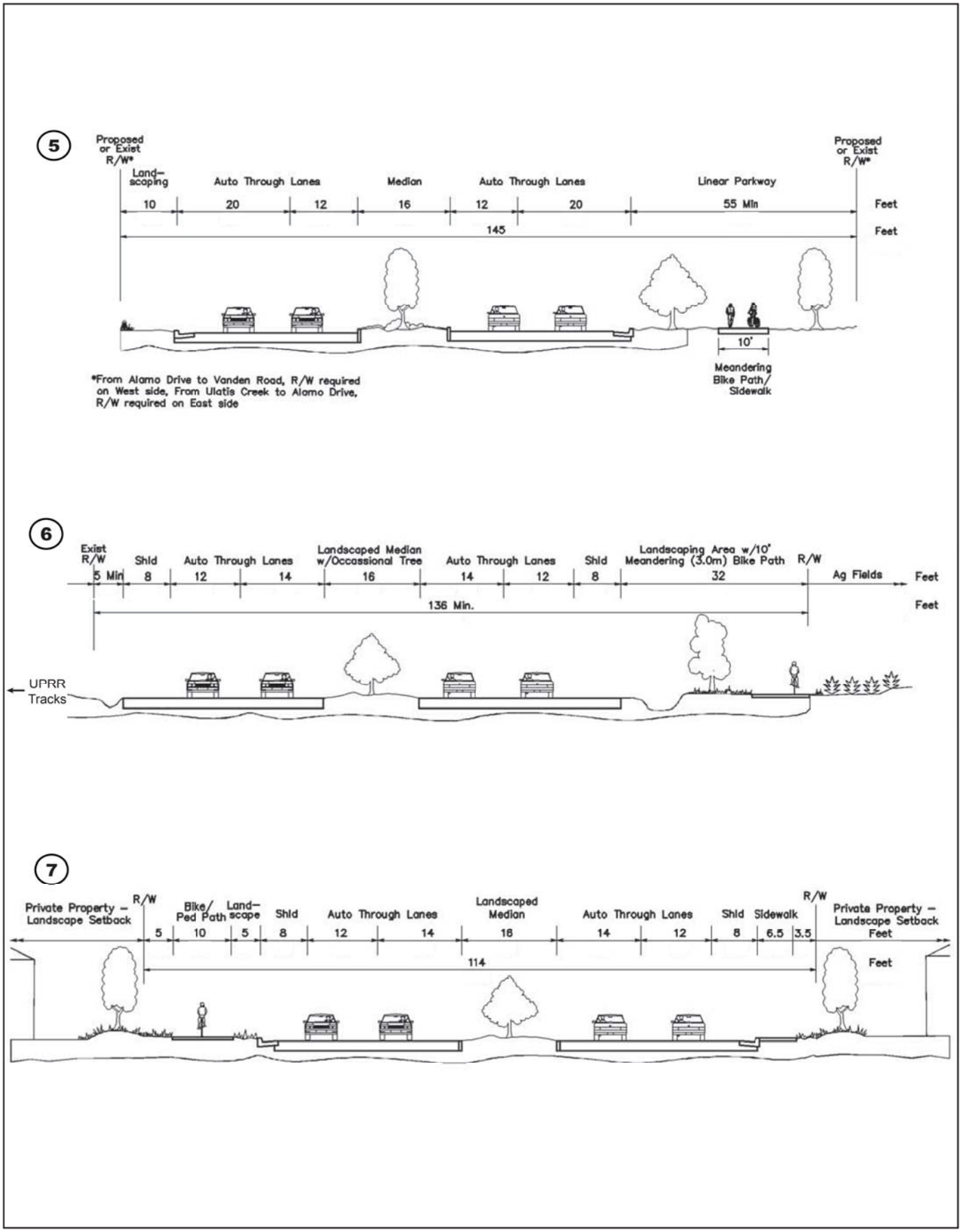

Figure 2-2B
Alternative B - Road Segments 5 to 7

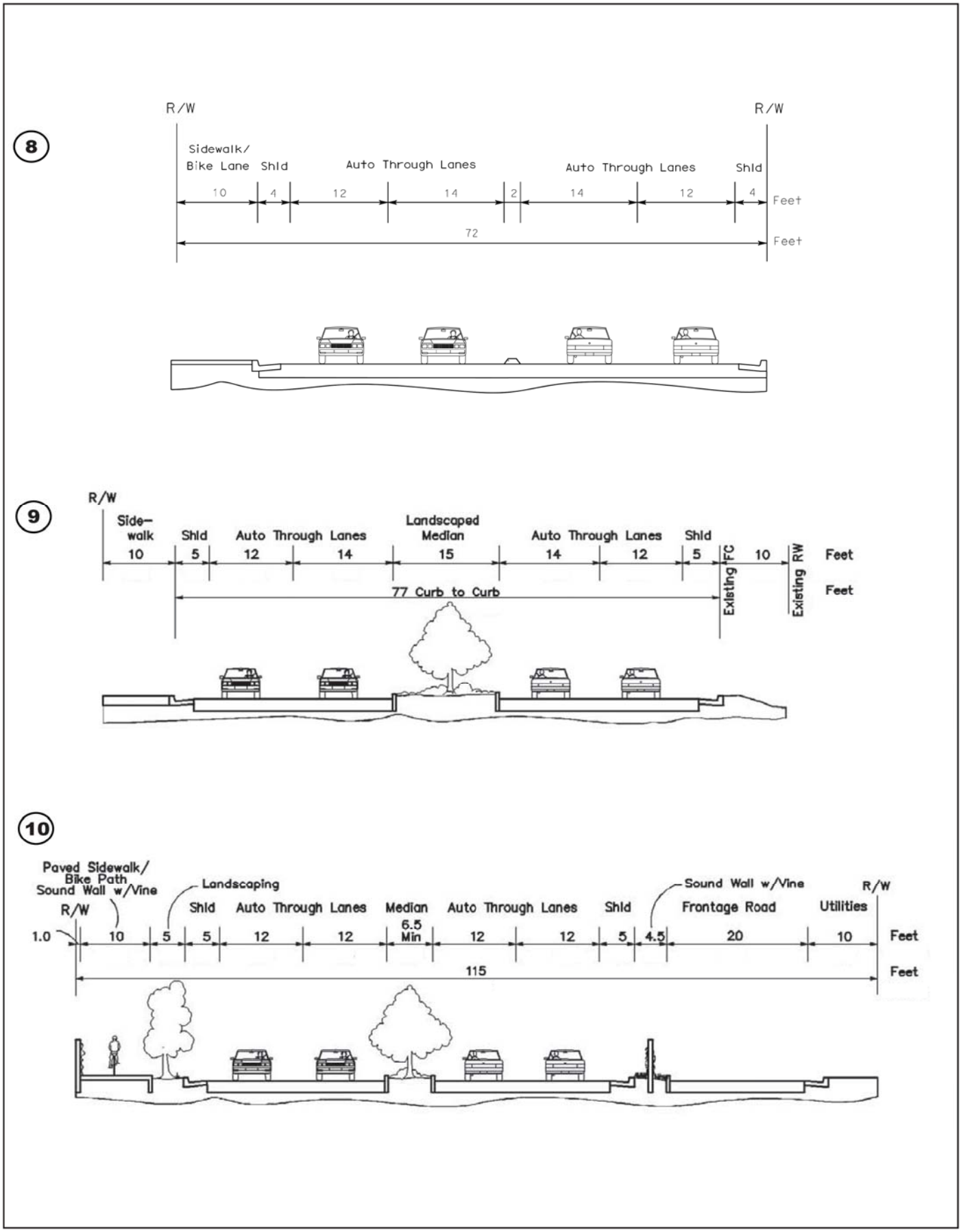

Figure 2-2C
Alternative B - Road Segments 8 to 10

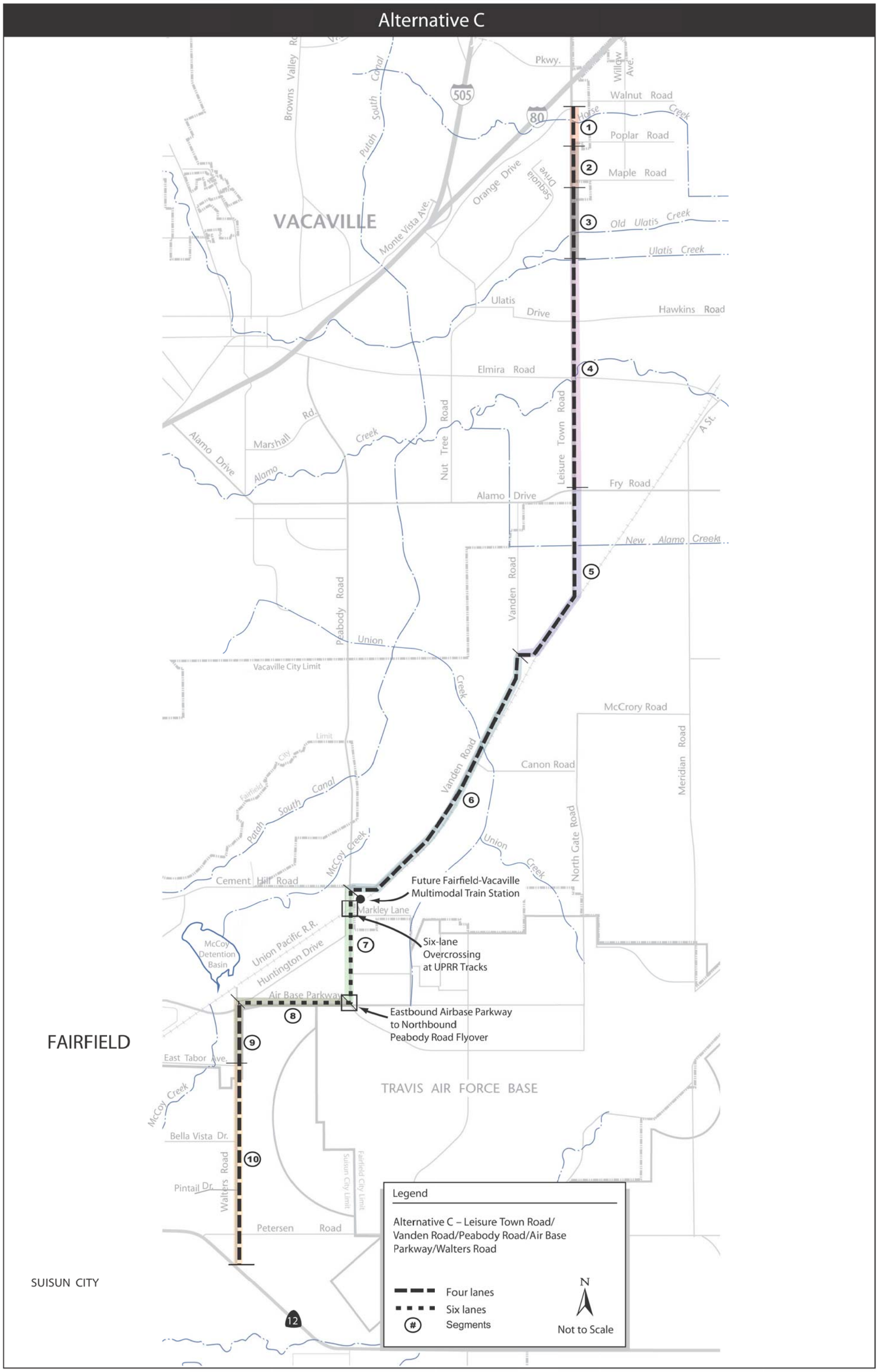

Figure 2-3
Jepson Parkway Project Alternative C

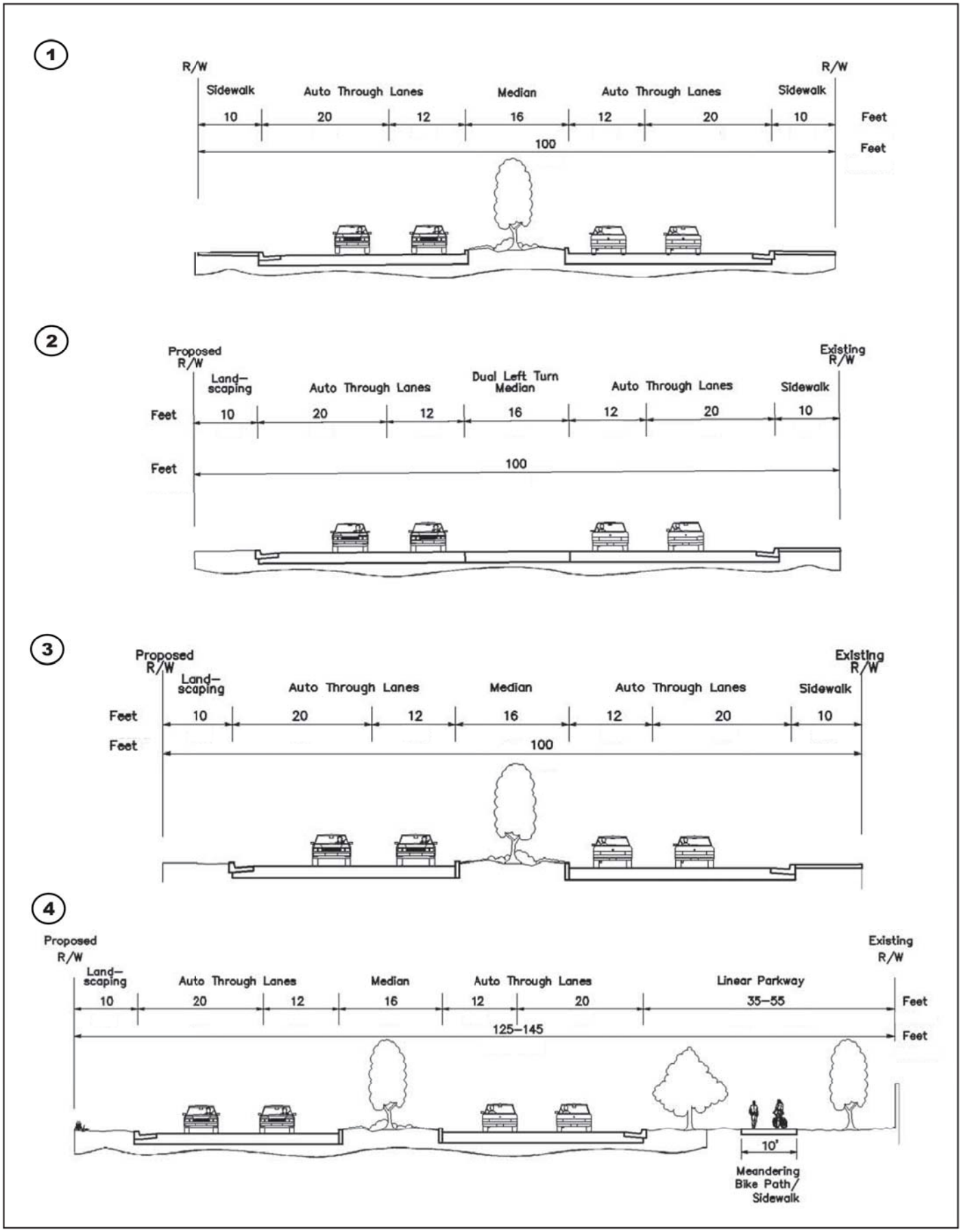

Figure 2-3A
Alternative C - Road Segments 1 to 4

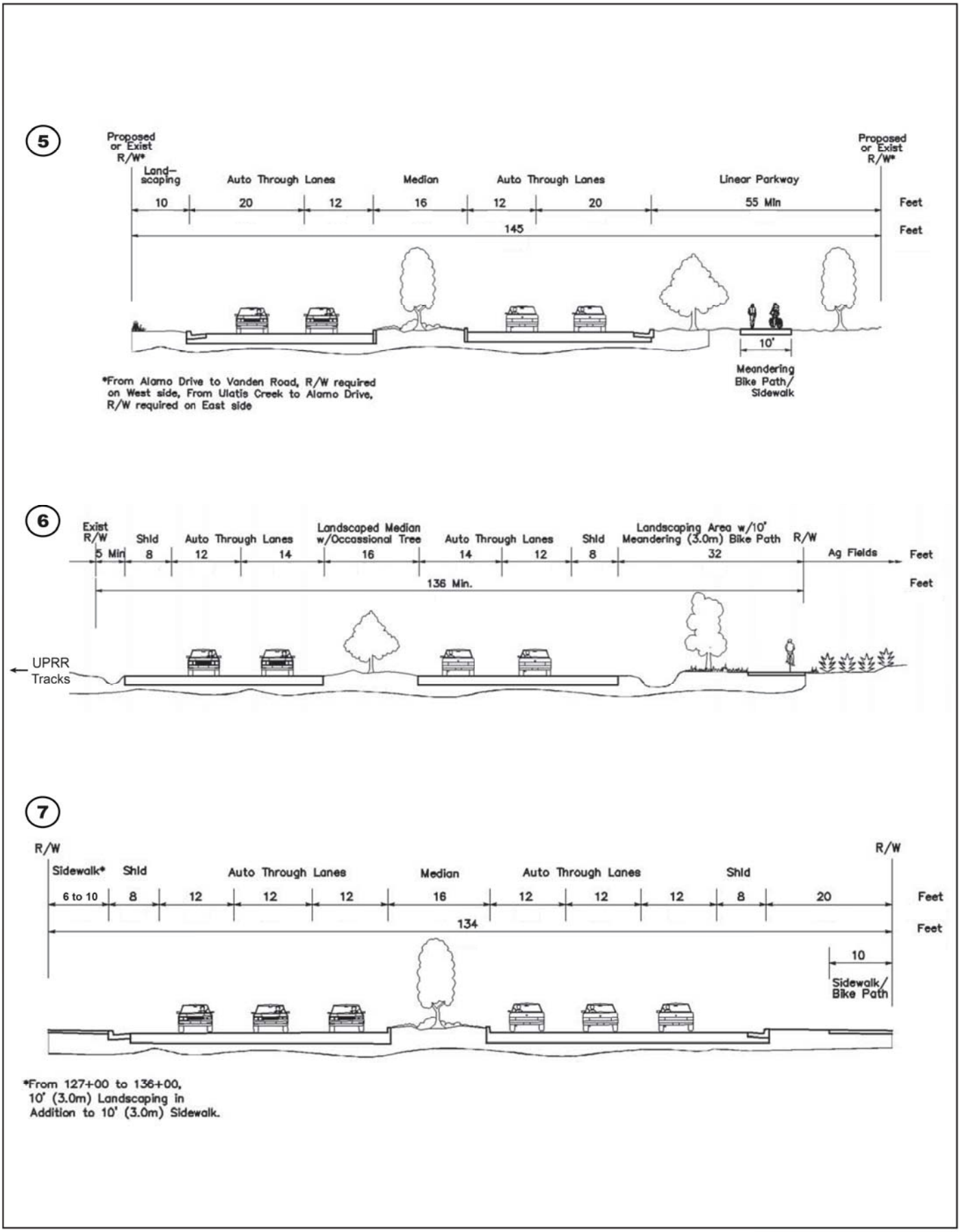

Figure 2-3B
Alternative C - Road Segments 5 to 7

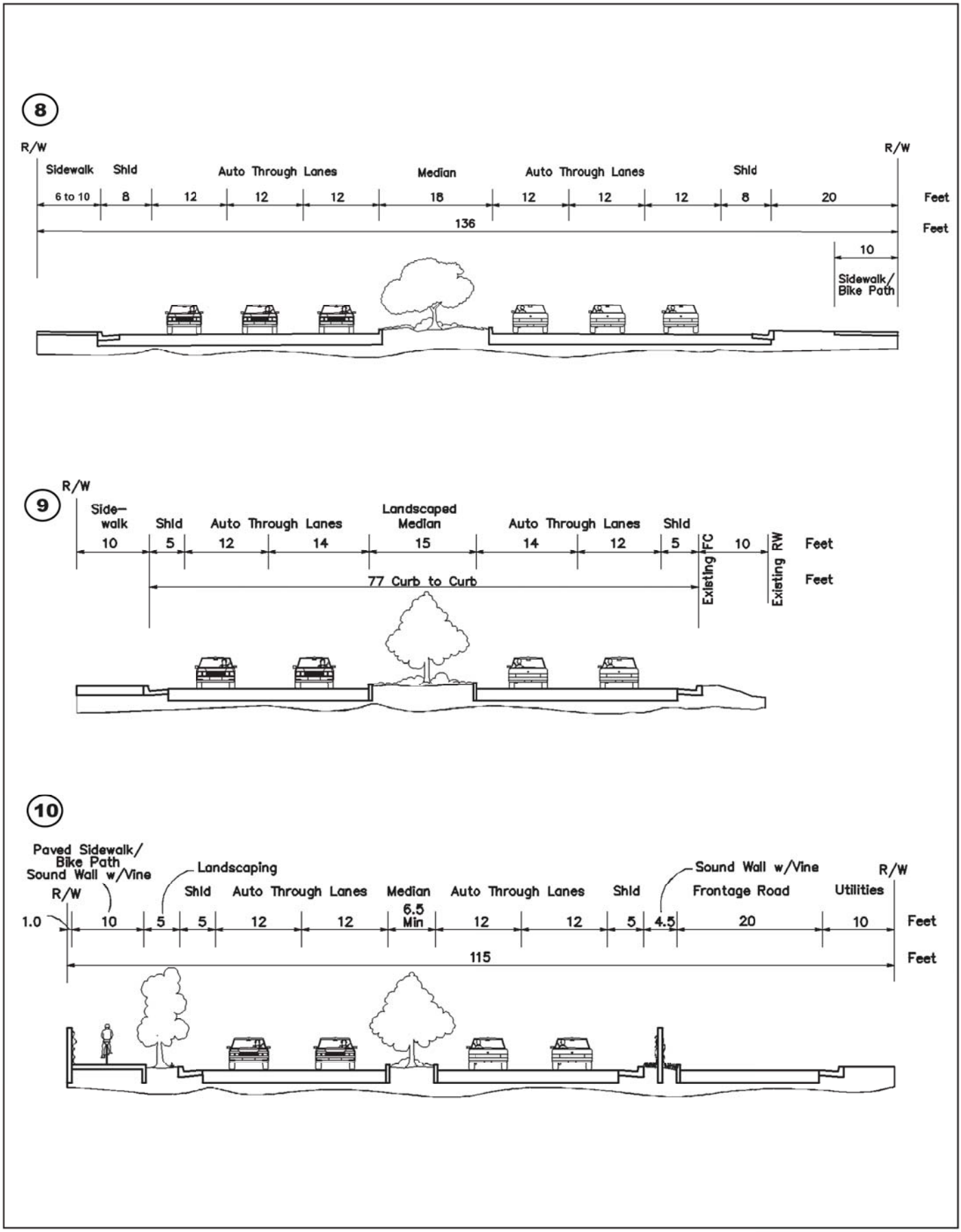

Figure 2-3C
Alternative C - Road Segments 8 to 10

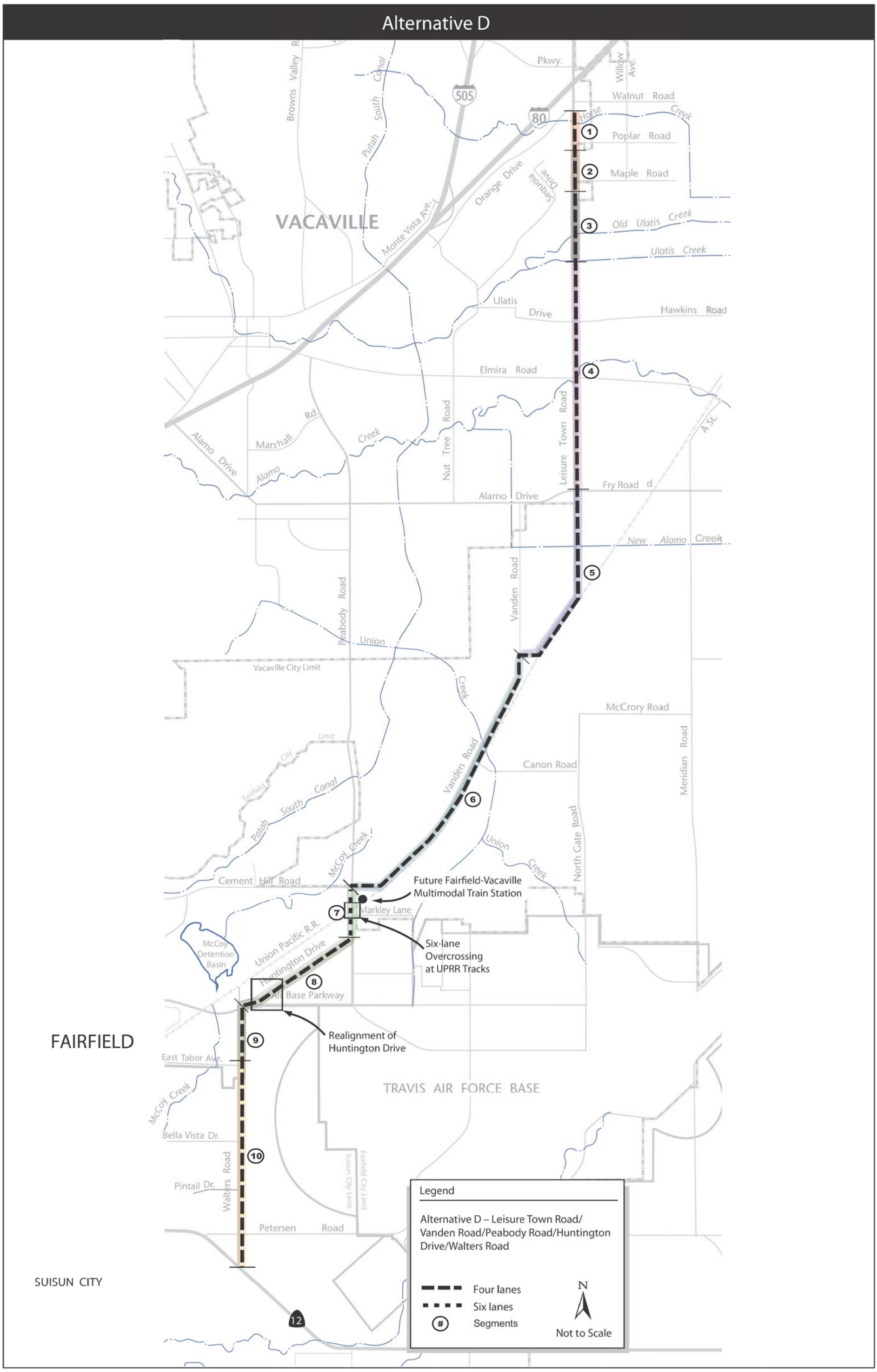

Figure 2-4
Jepson Parkway Project Alternative D

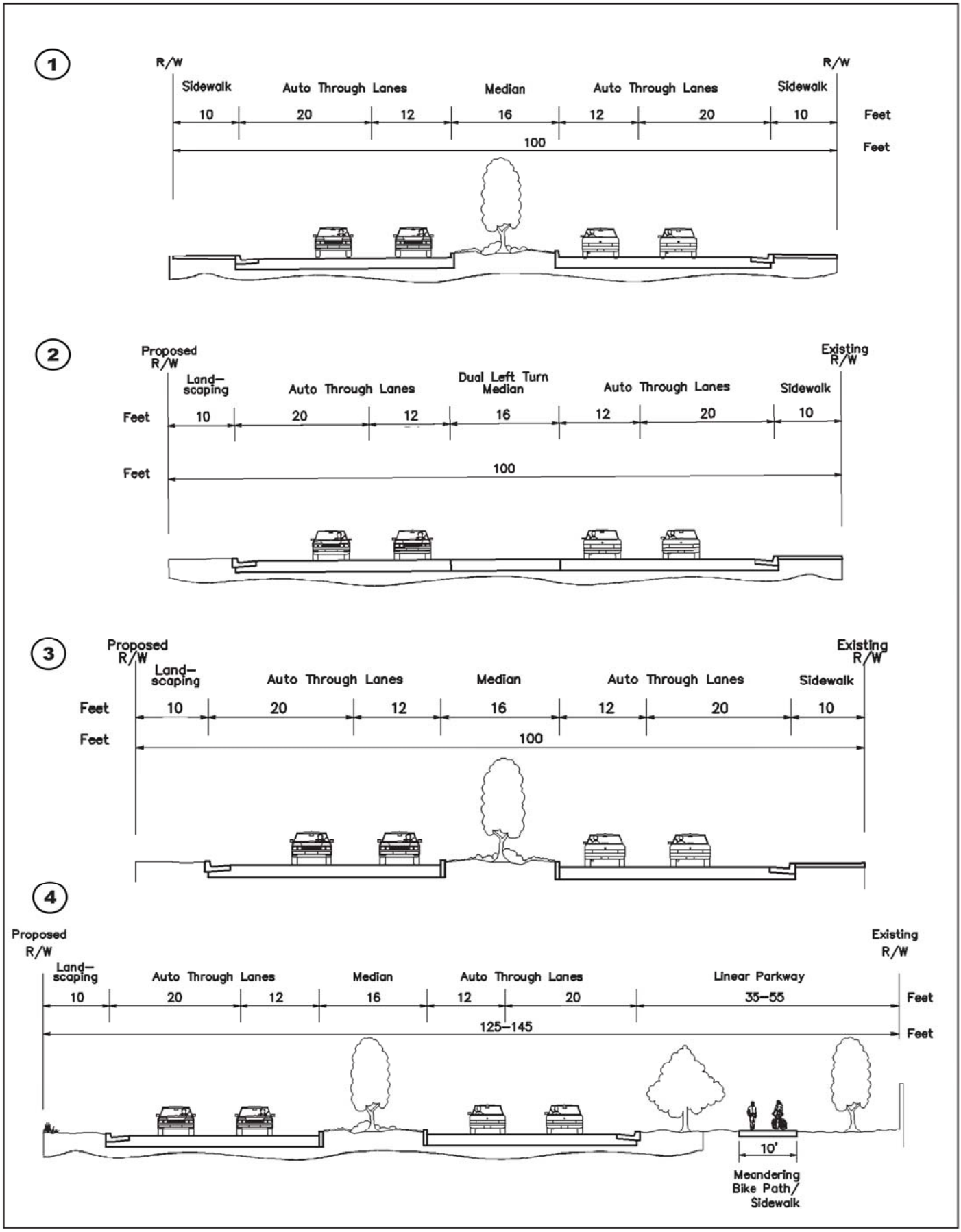

Figure 2-4A
Alternative D - Road Segments 1 to 4

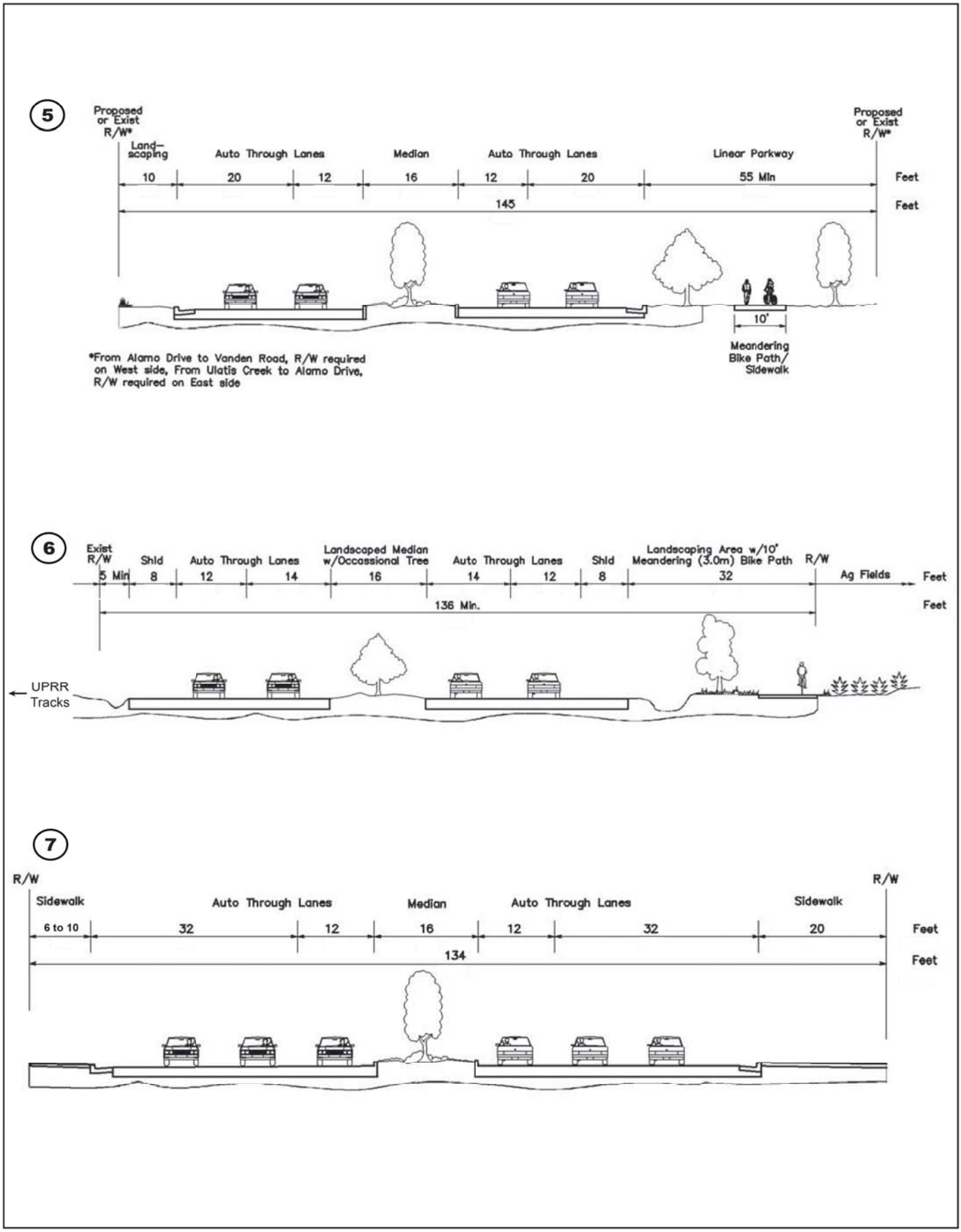

Figure 2-4B
Alternative D - Road Segments 5 to 7

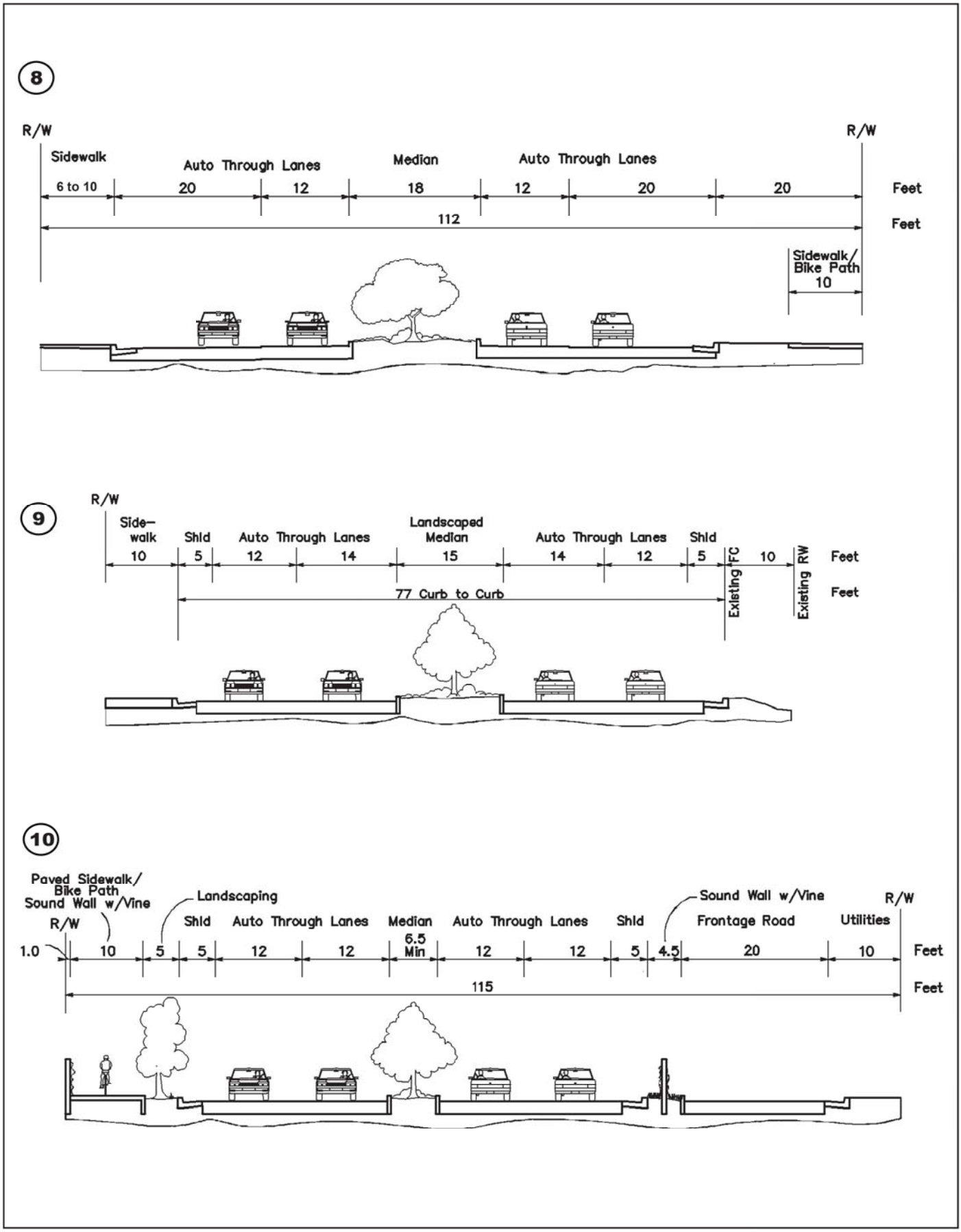

Figure 2-4C
Alternative D - Road Segments 8 to 10

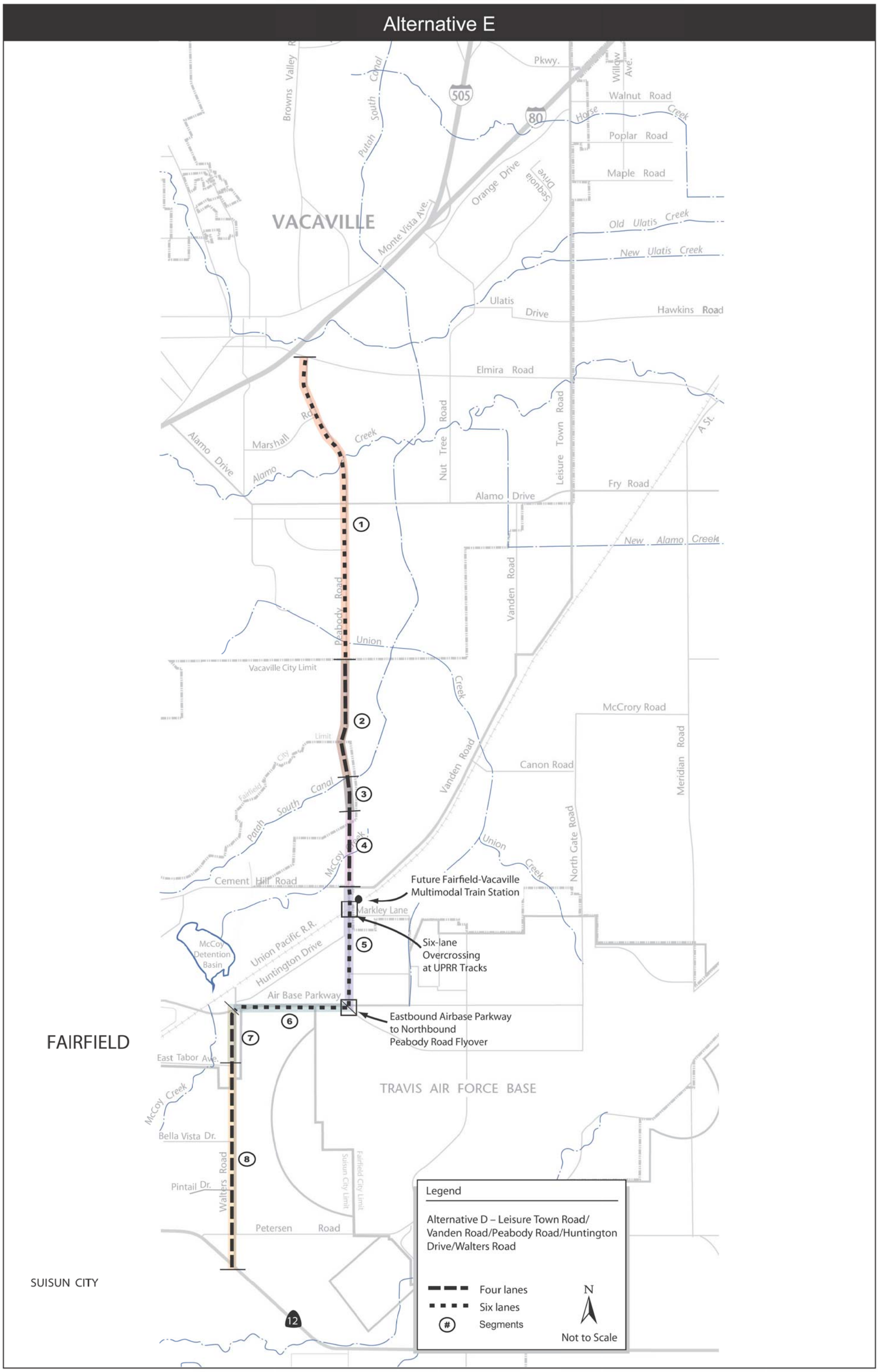

Figure 2-5
Jepson Parkway Project Alternative E

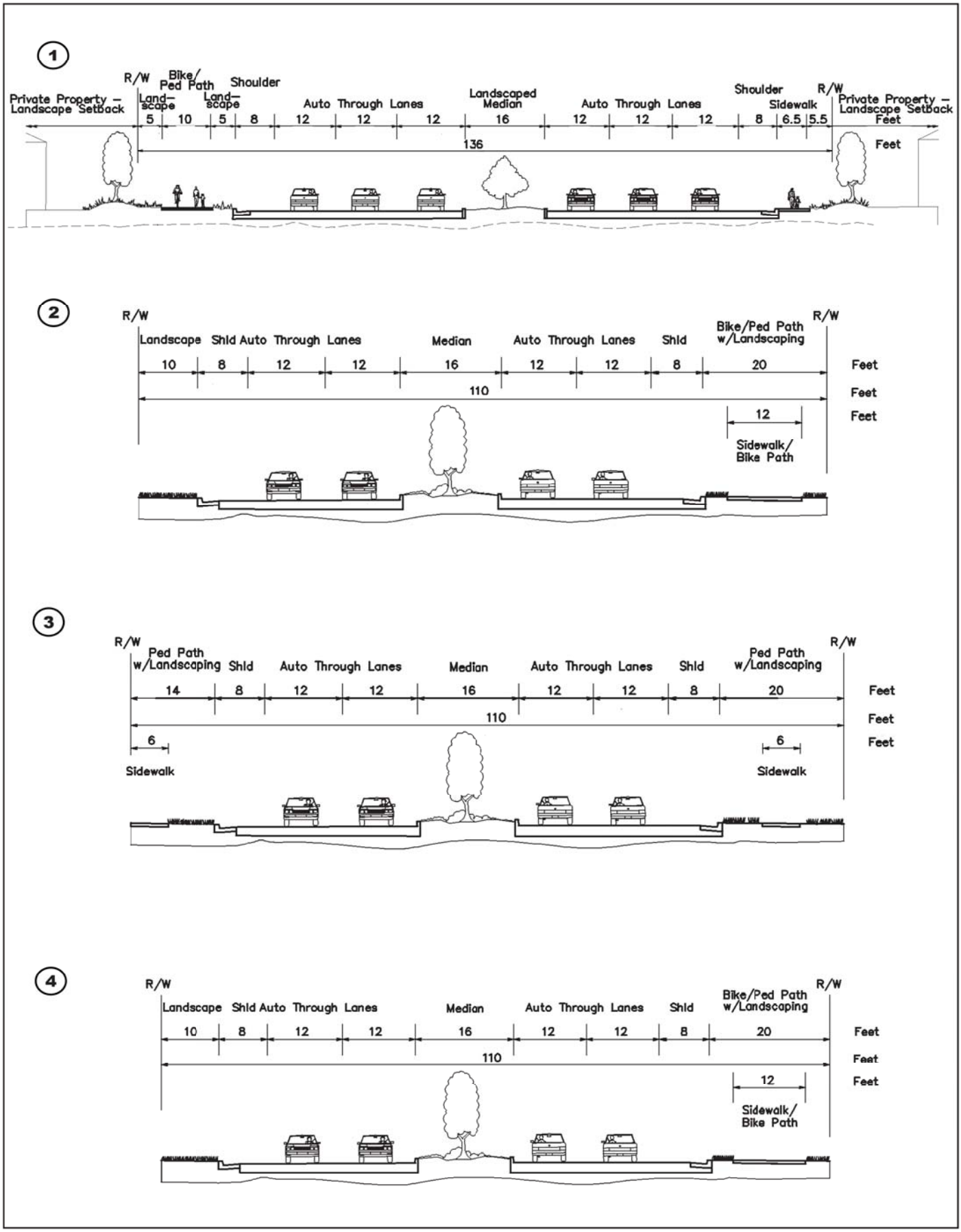

Figure 2-5A
Alternative E - Road Segments 1 to 4

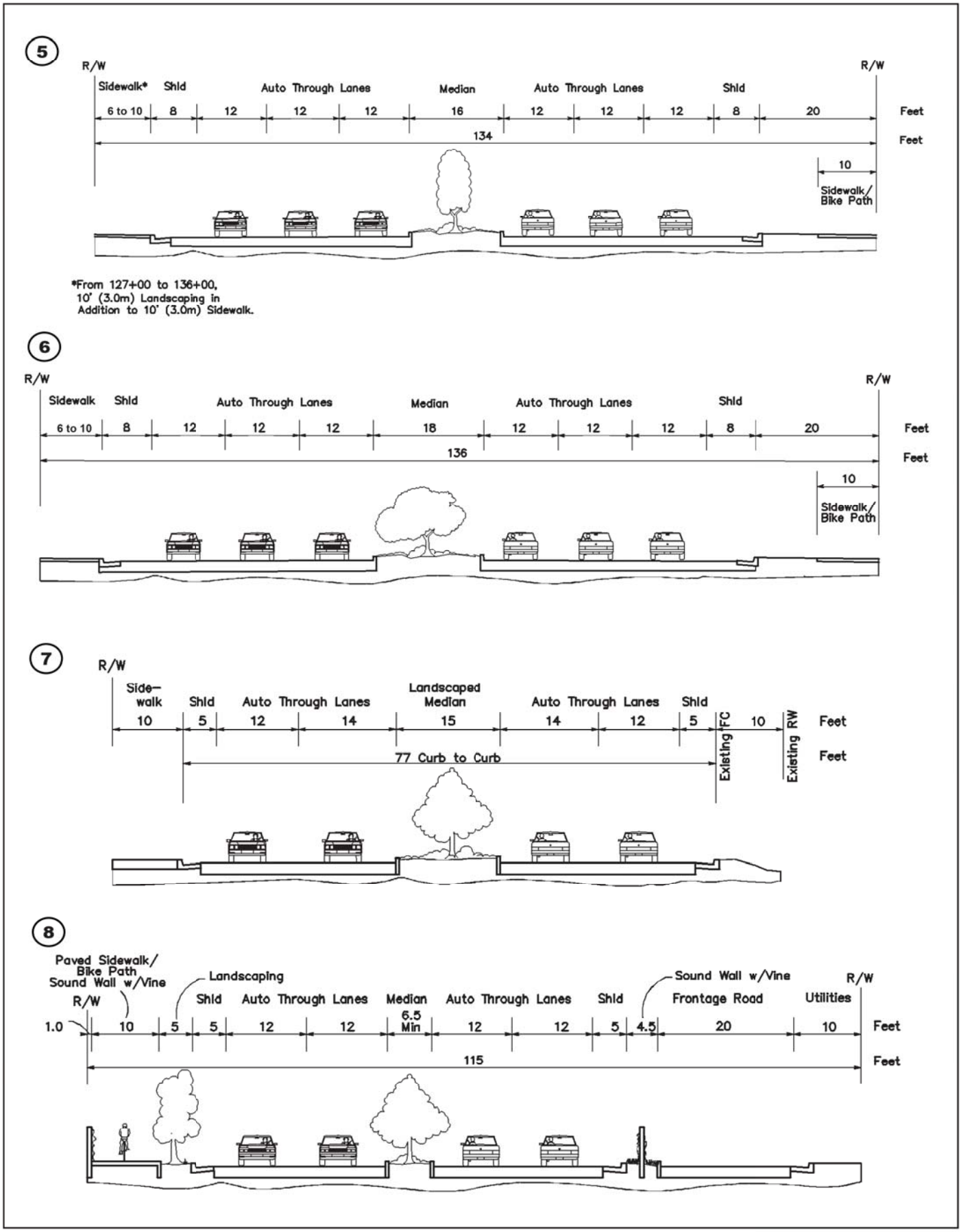

Figure 2-5B
Alternative E - Road Segments 5 to 8

- Alternative C
  - Segment C1, Leisure Town Road from Orange Drive to south of Poplar Road
  - Segment C2, Leisure Town Road from south of Poplar Road to Sequoia Drive
  - Segment C3, Leisure Town Road from Sequoia Drive to New Ulatis Creek
  - Segment C4, Leisure Town Road from New Ulatis Creek to Alamo Drive
  - Segment C5, Leisure Town Road from Alamo Drive to Vanden Road
  - Segment C6, Vanden Road from Leisure Town Road to Peabody Road
  - Segment C7, Peabody Road from Cement Hill Road/Vanden Road to Airbase Parkway
  - Segment C8, Airbase Parkway from Peabody Road to Walters Road
  - Segment C9, Walters Road from Air Base Parkway to East Tabor Avenue
  - Segment C10, Walters Road from East Tabor Avenue to SR 12
- Alternative D
  - Segment D1, Leisure Town Road from Orange Drive to south of Poplar Road
  - Segment D2, Leisure Town Road from south of Poplar Road to Sequoia Drive
  - Segment D3, Leisure Town Road from Sequoia Drive to New Ulatis Creek
  - Segment D4, Leisure Town Road from New Ulatis Creek to Alamo Drive
  - Segment D5, Leisure Town Road from Alamo Drive to Vanden Road
  - Segment D6, Vanden Road from Leisure Town Road to Peabody Road
  - Segment D7, Peabody Road from Cement Hill Road/Vanden Road to Huntington Drive
  - Segment D8, Huntington Drive from Peabody Road to Walters Road
  - Segment D9, Walters Road from Air Base Parkway to East Tabor Avenue
  - Segment D10, Walters Road from East Tabor Avenue to SR 12
- Alternative E
  - Segment E1, Peabody Road from Elmira Road to the Vacaville city limits
  - Segment E2, Peabody Road, Fairfield from the Vacaville city limits to Putah South Canal
  - Segment E3, Peabody Road, Fairfield from Putah South Canal to North Bay Aqueduct
  - Segment E4, Peabody Road from North Bay Aqueduct to Cement Hill Road/Vanden Road
  - Segment E5, Peabody Road from Cement Hill Road/Vanden Road to Air Base Parkway
  - Segment E6, Air Base Parkway from Peabody Road to Walters Road
  - Segment E7, Walters Road from Air Base Parkway to East Tabor Avenue
  - Segment E8, Walters Road from East Tabor Avenue to SR 12

It should be noted that there is a great deal of commonality among the various alternatives. For example, the two segments along existing Walters Road are common to all the build alternatives. Alternatives B, C, and D share the six segments along Leisure Town Road and Vanden Road. Alternatives C and E share both the segment along Peabody Road from Cement Hill Road/Vanden Road to Airbase Parkway and the segment along Air Base Parkway from Peabody Road to Walters Road. The five alternatives, along with preliminary widths proposed for roadway lanes, shoulders, sidewalks, and bicycle lanes, are further described below.

2.2.1 Alternative A: No Build

Alternative A is the no-build alternative. Under Alternative A, none of the proposed roadway improvements would be constructed. However, ongoing maintenance of existing roads and facilities would continue. Without the project, the need to reduce existing and future traffic congestion, improve roadway safety, accommodate planned growth, and support future multimodal transit options and bicycle and pedestrian use in Solano County would be unmet.

2.2.2 Alternative B: Leisure Town Road–Vanden Road–Cement Hill Road–Walters Road Extension–Walters Road

Alternative B would provide a four-lane divided arterial for the entire length of the corridor and includes improvements to (from north to south) Leisure Town Road, Vanden Road, Cement Hill Road, and Walters Road (Figure 2-2). The project components for Alternative B include the widening of existing roadways along the alternative; construction of a northern extension of Walters Road between Cement Hill Road and the intersection of Air Base Parkway; a grade separation (overpass) of the Union Pacific Railroad (UPRR) mainline tracks as part of the Walters Road Extension; improvements at the Leisure Town Road crossings of Alamo Creek and New Alamo Creek; a new crossing of McCoy Creek; bicycle and pedestrian paths; landscaping; and utilities relocation.

The alignment for Alternative B begins in Vacaville on Leisure Town Road at Orange Drive. It extends south along Leisure Town Road to the intersection of Leisure Town Road and Vanden Road in unincorporated Solano County. It then extends southwest along Vanden Road to the intersection of Cement Hill Road/Vanden Road and Peabody Road in Fairfield. From here, the alignment continues west along Cement Hill Road to the intersection of Cement Hill Road and the north end of the Walters Road Extension, extends south along the Walters Road Extension to the intersection of Walters Road and Air Base Parkway, and then continues south along Walters Road in Fairfield and Suisun City to the Walters Road/SR 12 intersection.

Alternative B is supported by the City of Fairfield because it would provide an additional north/south crossing of the UPRR mainline tracks in eastern Fairfield. The proposed Walters Road Extension is approximately one mile southwest of the Peabody Road crossing. This distance is the ideal spacing for arterials. The city desires an additional crossing of the UPRR mainline tracks, as provided by Alternative B because:

- The additional crossing would provide an alternative crossing in the event the main entrance to Travis Air Force Base (AFB) is closed for security reasons and the closure backs up traffic into the adjacent Air Base Parkway/Peabody Road intersection; and
- The additional crossing and the Walters Road extension alignment would provide a valuable transportation network improvement. This would provide important redundant connections that would ease future congestion on the already heavily traveled Air Base Parkway and Peabody Road segments.
- The wider six-lane UPRR overpass needed for the other build alternatives, and the partial interchange at the Peabody Road/Vanden Road intersection, also substantially reduce the amount of land available for the Fairfield/Vacaville train station that Fairfield is planning to locate at the southeast corner of the intersection of Cement Hill Road/Peabody Road and Vanden Road.

The cost estimate for Alternative B is $125,135,000. Roadway improvements associated with Alternative B are further described below.

2.2.2.1 Leisure Town Road[1]

Segments B1, B2, and B3

Under Alternative B, Leisure Town Road would be widened to four lanes from Orange Drive south to the New Ulatis Creek bridge, a distance of approximately 1.3 miles. The road would be widened to the east to retain the westerly right-of-way line of Leisure Town Road. This portion of the roadway would consist of curb and gutter, a 8-foot outside shoulder, and two 12-foot lanes in each direction (for a total of four lanes) separated by a 16-foot-wide median. Left-turn lanes would be provided at all local street intersections by reducing the 16-foot-wide median width. A 10-foot-wide sidewalk would be constructed on both the east and west sides of Leisure Town Road, except for the east side of Leisure Town Road between Sequoia Drive and Maple Road. Because of constrained right-of-way, sidewalks in these segments would not be separated from the roadway by a landscaped area. The median would be raised and landscaped, except near Poplar Road, where the median would be paved and striped to allow dual left-turn lanes. The right-of-way width for this section of Leisure Town Road would be approximately 100 feet.

Segment B4

South from the New Ulatis Creek bridge to Alamo Drive, a distance of approximately two miles, Leisure Town Road would continue to be widened to four lanes under Alternative B. The roadway would continue to be widened to the east to retain the westerly right-of-way line. This portion of the roadway would consist of curb and gutter, a 8-foot outside shoulder, two 12-foot lanes in each direction (for a total of four lanes) separated by a 16-foot-wide raised, and landscaped median. Left-turn lanes would be provided at all local street intersections by reducing the 16-foot-wide median width.

A 10-foot-wide landscaped area would be provided on the east side of Leisure Town Road in this segment. On the west side, the existing southbound lane and shoulder would be removed and reconstructed as a part of a linear park to buffer existing residential uses. The 35- to 55-foot-wide linear park would consist of landscaping and a 10-foot-wide meandering bicycle and pedestrian path that would link to the existing Alamo Creek bicycle path just south of the intersection of Leisure Town and Elmira Roads. The bicycle and pedestrian path would be separated from the roadway by at least five feet and from the back of the right-of-way line by at least two feet. The right-of-way width for this section of Leisure Town Road would be 125 feet to 145 feet.

Roadway improvements in this segment would include the widening of approximately 300 feet of Elmira Road east of Leisure Town Road to conform to the reconfigured Leisure Town Road/Elmira Road intersection.

Segment B5

From the signalized intersection at Alamo Drive southwest to the New Alamo Creek the roadway widening would be to the east, similar to segment B4. From New Alamo Creek southwest to the Vanden Road intersection, a distance of approximately 1.7 miles, Leisure Town Road would be widened to the west approximately 85 feet to retain the existing southeasterly right-of-way. The alignment shifts to the east 650 feet south of Alamo Drive to align with the existing westerly right-of-way north of Alamo Drive. This portion of the segment would consist of curb and gutter, a 8-foot outside shoulder, a 12-foot outside lane, and a 12-foot inside lane in each direction (for a total of four lanes) separated by a 16-foot-wide raised, landscaped median. A 10-foot-wide landscaped area would be provided on the southeasterly side of Leisure Town Road, and a minimum 55-foot-wide linear park would be provided on the northwesterly side. The linear park would consist of a 10-foot-wide meandering bicycle and pedestrian path and 45 feet of landscaped area. The bicycle and pedestrian path would be separated from the roadway by at least five feet and from the back of the right-of-way line by at least two feet. The right-of-way width for this section of Leisure Town Road would be 145 feet.

Leisure Town Road crosses Horse Creek, Old Ulatis Creek, New Ulatis Creek, Alamo Creek, and New Alamo Creek. Existing bridges crossing Horse Creek, Old Ulatis Creek, and New Ulatis Creek have recently been upgraded and would not need additional work to accommodate implementation of Alternative B. However, the roadway crossings of Alamo Creek and New Alamo Creek would be widened as part of Alternative B. The bridge over New Alamo Creek would be widened approximately 50 feet to the west and the existing box culvert at Alamo Creek would either be extended or replaced with large culverts.

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[1] Roadway improvements described for Leisure Town Road under Alternative B would be similar under Alternative C and Alternative D.

2.2.2.2 Vanden Road[2]

Segment B6

From the intersection of Leisure Town Road and Vanden Road, the alignment of Alternative B continues southwest on Vanden Road to the intersection of Peabody Road. Under Alternative B, Vanden Road between Leisure Town Road and the beginning of the Vanden Road realignment portion (to the old railroad grade approximately one half mile northeast of the Peabody Road intersection) would be widened to the west of the existing roadway right-of-way to include a combination 10-foot-wide bicycle and pedestrian path and landscaped strip. At the signalized intersection of Vanden and Leisure Town Roads, the improvements would be extended 500 feet north of the intersection to conform to the existing two-lane Vanden Road section. This portion of Vanden Road would consist of an 8-foot outside shoulder, two 12-foot lanes (for a total of four lanes), and a 2-foot-wide shoulder inside lane in each direction separated by a 16-foot-wide landscaped median. No outside curb and gutter or median curb would be constructed except within approximately 400 feet of the Vanden Road/Leisure Town Road and Vanden Road/Canon Road intersections, and within approximately 2,500 feet of intersection of Cement Hill Road/Vanden Road and Peabody Road on each side. The median would be paved adjacent to the residential units south of Leisure Town Road to provide left-turn access to and from Vanden Road. A 20-foot-wide landscaped area would be provided on the southeasterly side of Vanden Road, and a minimum 32-foot-wide area would be provided on the northwesterly side, consisting of a 10-foot-wide meandering bicycle and pedestrian path and landscaped area. The bicycle and pedestrian path would be separated from the roadway by at least 15 feet and from the back of the right-of-way line by at least two feet. The right-of-way width for this section of Vanden Road would be 136 feet.

The intersection of Vanden and Canon Roads would be improved to accommodate turn lanes, northbound acceleration and deceleration lanes, and the bicycle and pedestrian path connection. A traffic signal would also be installed at this intersection. The new traffic signal would be interconnected with the railroad crossing arms. Minor improvements at the railroad crossing on Cannon Road would be completed. The west approach of the intersection of Vanden Road and Leisure Town Road would be constructed to allow for a connection to the future Foxboro Parkway[3] (opposite Leisure Town Road). Vanden Road would be raised near Union Creek and a new series of concrete box culverts or short bridge would be constructed to remove the roadway from the floodplain.

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[2] Roadway improvements described for Vanden Road under Alternative B would be similar under Alternative C and Alternative D.

[3] The City of Vacaville General Plan calls for the extension of Foxboro Parkway between Nut Tree Road and Vanden Road (Vacaville General Plan Policy 2.3-I13). The extension is intended to support development of the South Vanden Area as defined in the General Plan, and would occur independent of the Jepson Parkway Project, subject to its own separate environmental evaluation.

2.2.2.3 Cement Hill Road

Segment B7

The Alternative B alignment turns west onto Cement Hill Road at the intersection of Cement Hill Road/Vanden Road and Peabody Road. Cement Hill Road would be widened from the existing two lanes to four lanes from 600 feet west of its intersection with Peabody Road west to the proposed intersection with the Walters Road Extension, a distance of approximately 0.75 mile. Under Alternative B, the widening would be accomplished by widening Cement Hill Road to the south approximately 34 feet and retaining the existing right-of-way on the north side. This portion of Cement Hill Road would consist of a 8-foot outside shoulder, a 12-foot outside lane, and a 14-foot inside lane in each direction (for a total of four lanes) separated by a 16-foot-wide raised, landscaped median. A 6.5-foot-wide sidewalk would be constructed adjacent to the back of the curb on the north side of Cement Hill Road, with a 3.5-foot landscaped strip between the sidewalk and the right-of-way line. A 10-foot-wide concrete bicycle and pedestrian path would be constructed on the south side of Cement Hill Road, separated from the face of curb by a 5-foot landscaped strip. An additional 5-foot-wide landscaped strip would be located between the bicycle and pedestrian path and the southerly right-of-way line. Driveways would be provided for all existing properties on the north side of Cement Hill Road. Access from north-side businesses or unsignalized local roads to eastbound Cement Hill Road would be restricted to right-turn movements only. The right-of-way width on this portion of Cement Hill Road would be 114 feet.

2.2.2.4 Walters Road Extension

Segment B8

Approximately 0.75 miles west of the intersection of Cement Hill Road/Vanden Road and Peabody Road, the Alternative B alignment turns south at a point just east of the former Sacramento Northern Railroad right-of-way. The former Sacramento Northern Railroad right-of-way is designated as a future linear park in the City of Fairfield's *Peabody-Walters Master Plan*.[4] The northerly portion of this alignment is located adjacent to the originally planned Fairfield sports complex, shown in the *Peabody-Walters Master Plan*. The new roadway, referred to as the Walters Road Extension in the Fairfield General Plan, would be a four-lane roadway (two lanes in each direction with a median) and would connect Cement Hill Road with the existing Walters Road south of Huntington Drive. Under Alternative B, the Walters Road Extension would extend south from Cement Hill Road, traversing an undeveloped, privately owned area and crossing over the UPRR tracks, to the intersection of Walters Road and Huntington Drive, for a distance of 1.06 miles. A new traffic signal has been installed for the three existing legs at the intersection of Walters Road and Cement Hill Road.

The proposed four-lane Walters Road Extension would consist of a curb and gutter, a 5-foot outside shoulder, a 12-foot outside lane, and a 14-foot inside lane in each direction separated by a 2-foot-wide raised median. A 10-foot-wide bicycle and pedestrian sidewalk would be constructed on the east side of

Walters Road. The northerly 1,600 feet of sidewalk on the east side of Walters Road would be separated from the curb by a 5-foot-wide landscaped strip on either side and the bicycle and pedestrian sidewalk. The right-of-way width in this section of Walters Road would generally be approximately 72 feet, except at the northerly limits, where Walters Road would be widened an additional 10 feet to the east to accommodate the two 5-foot-wide landscaped strips.

The Walters Road Extension would include a grade separation (overpass) at the UPRR tracks and would span both McCoy Creek and a man-made detention basin with bridges to minimize impacts to biological resources. The profile would conform to the existing grade at Air Base Parkway and rise approximately 30 feet to cross over the UPRR tracks. The approaches to the structure over the UPRR tracks would be constructed on fill with retaining walls on both sides of the rail crossing.

Under Alternative B, the existing Walters Road in this segment would be widened a small amount on each side to create four lanes from Huntington Drive south to Air Base Parkway, for a distance of 200 feet, with left-turn lanes provided at each intersection. Approximately 300 feet of Huntington Drive on either side of its intersection with Walters Road would be reconstructed to conform to the proposed Walters Road alignment.

2.2.2.5 Existing Walters Road[5]

Segment B9

From Air Base Parkway south to East Tabor Avenue, a distance of approximately 2,300 feet, Walters Road would be widened approximately 40 feet to the east. The existing Walters Road (four-lane undivided roadway and right-of-way) would be retained as a part of the new Walters Road. The new roadway would consist of curb and gutter, a 5-foot outside shoulder, a 12-foot outside lane, and a 14-foot inside lane in each direction separated by a raised, landscaped median that would vary in width from 5 to 16 feet. Northbound left-turn lanes would be provided at the mobile home park entrance, Walters Court, and Air Base Parkway (double left-turn lane). A 10-foot-wide bicycle and pedestrian concrete sidewalk would be constructed immediately behind the back of curb on the east side. The right-of-way width along Walters Road would generally be 97 feet, including the existing right-of-way width, except at the northerly limits by Air Base Parkway, where Walters Road would be widened to the east to accommodate a right-turn lane and the second left-turn lane.

Segment B10

Most of Walters Road in this segment has been widened under previously-approved projects. In this segment, Walters Road consists of a 5-foot outside shoulder and two 12-foot lanes in each direction separated by a minimum 6.5-foot-wide raised, landscaped median. Improvements along the east side of Walters Road included a 5-foot-wide landscaped strip separating the roadway from a 10-foot-wide

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4 City of Fairfield. 1994. Peabody-Walters Master Plan, prepared by Creegan & D'Angelo Consulting Engineers, September 6, 1994.

5 Roadway improvements described for Walters Road south of Air Base Parkway under Alternative B would be similar under Alternative C, Alternative D, and Alternative E.

paved bicycle and pedestrian path. A soundwall was built between the bicycle path and the approved Petersen Ranch development east of Walters Road, with a 1-foot separation from the bicycle path.

Between Tabor Avenue and SR 12, the existing Walters Road has been improved to a four-lane roadway, including soundwalls, a 10-foot-wide sidewalk on the east side of Walters Road from Bella Vista Drive to Petersen Road, and traffic signals at the intersections of Walters Road at Tabor Avenue, Petersen Drive, and SR 12. Under Alternative B, some improvements to Walters Road between Bella Vista Drive and SR 12 are proposed, including: restriping Walters Road at SR 12 for an additional left-turn lane; constructing a median along Walters Road from Petersen Road north approximately 600 feet; and installing signal-interconnect cable from Bella Vista Drive to SR 12.

2.2.2.6 Proposed Landscaping

In urban areas of the Alternative B alignment, landscaping on both sides of the roadway and a landscaped median would be provided wherever feasible. Trees would be planted in the center median, with an understory of low shrubs, native grasses, and groundcover or decomposed granite. Per the Concept Plan at no time would exotic (non-native) invasive plants, such as Pampas Grass, Eucalyptus, Tamarisk, or Giant Reed be used as part of any plantings along the corridor. Trees in the center median would be planted at regularly spaced intervals 30 to 50 feet. Where left-turn lanes are provided, the median would be too narrow for tree plantings. Vines would be planted at regular intervals along the soundwall.

Within its jurisdiction, the City of Vacaville has committed to consult further with its citizens regarding the specific density and design of the landscaping within the linear park. It is anticipated that the landscaped buffer within the City of Vacaville would be more dense and lush than in other portions of the Alternative B alignment to buffer existing residential neighborhoods from the effects of the traffic on the roadway. The landscaped buffers would be funded by development proposed for this area.

In rural areas of the alignment, native trees would be planted on both sides of the roadway at irregular intervals (300 to 500 feet) in clusters, with at least five trees per cluster and native grasses as understory. Trees would also be used to mark intersections and drainages. In drainage areas, trees would be more densely planted to mimic what might occur naturally. New trees would be planted to augment existing vegetation. The median would be planted with native grasses and shrubs.

In industrial areas of the alignment, trees would be planted in the median and spaced approximately 30 feet apart, with an understory of low shrubs, grasses, and decomposed granite. The landscaped strips would be planted with native shrubs and groundcover.

2.2.2.7 Proposed Utility Improvements

Major drainage courses in the alignment of Alternative B would be crossed using concrete box culverts or pipe culverts. The existing 5-foot by 10-foot box culvert for Alamo Creek would be extended or replaced with a series of large culverts underneath the widened Leisure Town Road and Elmira Road. New Alamo Creek would be spanned by widening the existing bridge to the west. Vanden Road would be raised near Union Creek and a new series of concrete box culverts or a short bridge would be

constructed. McCoy Creek and the existing man made detention basin would be spanned with bridges on the Walters Road Extension.

Irrigation facilities would be maintained and extended or reconstructed as required. A storm drain system would be constructed to collect and convey drainage along Leisure Town Road where necessary, connecting to Vacaville's existing storm drain lines where possible.

The existing joint pole line (Pacific Gas & Electric Company [PG&E], telephone, and cable) would be relocated in areas where it is within the project right-of-way. Conduit for future fiber-optic communication cable would be installed along the length of the Alternative B alignment.

A sewer trunk line extending north along the proposed alignment, between the City of Fairfield pump station north of the UPRR tracks and Huntington Drive, is being abandoned by the Villages project and would not need to be relocated.

2.2.3 Alternative C: Leisure Town Road–Vanden Road–Peabody Road–Air Base Parkway–Walters Road

Alternative C would provide a four- to six-lane divided arterial for the entire length of the roadway (Figure 2-3). The Alternative C alignment begins on Leisure Town Road at Orange Drive and is identical to Alternative B until it reaches the intersection of Cement Hill Road/Vanden Road and Peabody Road. Unlike Alternative B, Alternative C does not include improvements to Cement Hill Road or the construction of a northern extension of Walters Road. Instead, Alternative C continues south on Peabody Road from the Cement Hill Road/Vanden Road intersection to the intersection with Air Base Parkway. Alternative C continues west along Air Base Parkway to Walters Road. From the intersection of Air Base Parkway and Walters Road, Alternative C would continue south on Walters Road to SR 12, following the same alignment as Alternative B. The project components for Alternative C include roadway widening, improvements at the crossings of Alamo Creek, New Alamo Creek, and Union Creek, bicycle and pedestrian paths, landscaping, and utilities relocation.

The cost estimate for Alternative C is $136,752,000. For a description of improvements to Leisure Town Road and Vanden Road included in Alternative C, please refer above to Section 2.2.2.1 and 2.2.2.2, respectively on pages 2-21 to 2-23. For a description of improvements to existing Walters Road, please refer above to Section 2.2.2.5 on page 2-25. Roadway segments unique to Alternative C are described below.

2.2.3.1 Peabody Road[6]

Segment C7

From the intersection of Peabody Road and Cement Hill Road/Vanden Road to the intersection of Peabody Road and Air Base Parkway, a distance of approximately 0.9 miles, Peabody Road would be widened towards the east to just south of the UPRR crossing, at which point widening would take place

[6] Roadway improvements described for Peabody Road under Alternative C would be similar under Alternative E.

to the west. Peabody Road would be widened to six lanes, consisting of curb and gutter, 8-foot outside shoulders, and three 12-foot lanes in each direction (for a total of six lanes) separated by a 16-foot-wide raised, landscaped median. A 10-foot-wide sidewalk would be provided on the east and a 10-foot-wide shared bicycle/pedestrian path on the west, separated by a 5-foot landscaped area on each side. The width of the right-of-way of this portion of Peabody Road under Alternative C would be 134 feet. Under Alternative C, left-turn lanes would be provided on Peabody Road at all local street intersections by reducing the width of the 16-foot-wide median.

Markeley Lane, which intersects Peabody Road to the east, south of the UPRR tracks, would be realigned approximately 328 feet south of the existing alignment to a new intersection with Peabody Road, and would extend approximately 246 feet east and then 328 feet north to intersect the existing Markeley Lane. The portion of existing Markeley Lane, no longer needed north of this new intersection, would be reconstructed as a cul-de-sac. The realigned Markeley Lane would avoid the wetland mitigation ponds located south of the proposed Markeley Lane realignment, along the east side of Peabody Road, and would accommodate the Peabody Road overcrossing.

Access would be restricted to full-access intersections every 0.25 to 0.5 miles. All existing signals along the roadway in this segment would be maintained, with new signals at the intersection of Peabody Road and (realigned) Markeley Lane and at the intersection of Peabody Road and Dobe Road.

Alternative C would include an overcrossing that carries the Peabody Road and the bicycle/pedestrian facilities over the UPRR tracks just south of the intersection of Peabody and Cement Hill/Vanden Roads. The future Fairfield-Vacaville Multimodal Train Station would be constructed at this location as part of a separate project. The overcrossing would be designed to facilitate automobile, pedestrian, and bicycle access to the station.

2.2.3.2 Air Base Parkway[7]

Segment C8

The intersection of Air Base Parkway and Peabody Road would be reconstructed as a partial interchange. A flyover ramp overcrossing would be constructed for eastbound Air Base Parkway traffic continuing left onto northbound Peabody Road. The ramp would have a design speed of 30 to 35 miles per hour (mph).

From the intersection of Peabody Road and Air Base Parkway to the intersection of Walters Road and Air Base Parkway, a distance of approximately one mile, the alignment of Alternative C veers to the west, down Air Base Parkway. The roadway would be widened to the north and south. The roadway would be six lanes, consisting of curb and gutter, a 20-foot outside lane, and two 12-foot inside lanes in each direction separated by a 18-foot-wide landscaped median. A 6- to 10-foot-wide sidewalk would be constructed behind the back of curb on the south, and a 10-foot-wide shared pedestrian/bicycle path separated by a 5-foot landscaped area on each side would be constructed on the north.

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[7] Roadway improvements described for Air Base Parkway under Alternative C would be similar under Alternative E.

From the intersection of Walters Road and Air Base Parkway, Alternative C would continue south on Walters Road to SR 12, identical to Alternative B.

2.2.3.3 Proposed Landscaping

The landscaping under Alternative C would be similar to that described for Alternative B. For urban areas, landscaping on both sides of the roadway and a landscaped median would be provided wherever feasible. Trees would be planted in the center median, with grasses or groundcover as understory. Native species would be used where feasible. In rural areas, native trees would be planted at irregular intervals in clusters, with native grasses as understory on both sides of the roadway. Trees would also be used to mark intersections and drainages. The median would be planted with native grasses and shrubs. In industrial areas, trees would be planted in the median, with an understory of low shrubs, grasses, and decomposed granite. The landscaped strips would be planted with native shrubs and groundcover.

2.2.3.4 Proposed Utility Improvements

Major drainage courses would be maintained and spanned using concrete box culverts or pipe culverts. The existing ditches along Air Base Parkway, Peabody Road, and Vanden Road would be maintained or relocated as required. The existing storm drain system along the east side of Peabody Road, from Air Base Parkway to Huntington Drive, would be maintained.

The existing 5-foot by 10-foot box culvert for Alamo Creek would be extended or replaced with a series of large culverts underneath the widened Leisure Town Road and Elmira Road. New Alamo Creek would be spanned by widening the existing bridge to the west. Vanden Road would be raised near Union Creek and a new series of concrete box culvert or a short bridge would be constructed. The existing ditches along Air Base Parkway and Peabody Road would be maintained or relocated as required. A storm drain system would be constructed to collect and convey drainage along Leisure Town Road, where necessary, connecting to Vacaville's existing storm drains where possible. Irrigation facilities would be maintained and extended or reconstructed as required.

The project sponsors would relocate existing joint pole lines (PG&E, telephone, and cable) as required. The PG&E electric substation on the west side of Peabody Road, just south of Vanden Road, would not be affected by the project. Poles carrying overhead electric lines to and from the substation would be modified and relocated as required. Conduit for future fiber-optic communication would be installed along the length of Alternative C.

Underground utilities (water and sewer) along Peabody Road, between Air Base Parkway and Huntington Drive, would be relocated wherever they are in conflict with the project. Water and sewer manholes would be modified as required.

The UPRR crossing on Peabody Road would be replaced with a new six-lane overcrossing.

2.2.4 Alternative D: Leisure Town Road–Vanden Road–Peabody Road–Huntington Drive–Walters Road

Alternative D would provide a four- to six-lane divided arterial (Figure 2-4) in the corridor. Alternative D is identical to Alternatives B and C, except that it does not include Cement Hill Road, improvements to Air Base Parkway, or the construction of a northern extension of Walters Road. The Alternative D alignment continues south on Peabody Road from the intersection of Cement Hill Road/Vanden Road and Peabody Road to the intersection of Huntington Drive and Peabody Road. As with Alternative C, this alternative would require construction of an overcrossing at the UPRR tracks just south of the intersection of Cement Hill Road/Vanden Road and Peabody Road and the realignment of Markeley Lane.

The cost estimate for Alternative D is $134,785,000. For a description of improvements to Leisure Town Road and Vanden Road included in Alternative D, please refer above to Section 2.2.2.1 and 2.2.2.2, respectively on pages 2-21 to 2-23. For a description of improvements to existing Walters Road included in Alternative D, please refer above to Section 2.2.2.5 on page 2-25. Roadway segments unique to Alternative D are described below.

2.2.4.1 Peabody Road

Segment D7

South of the intersection of Peabody Road and Cement Hill Road/Vanden Road to the intersection of Peabody Road and Huntington Drive, Peabody Road would be widened to six lanes as described above for Alternative C. An overcrossing that carries the Peabody Road and the bicycle/pedestrian facilities over the UPRR tracks would be constructed and Markeley Lane would be realigned. However, under Alternative C, Peabody Road would conform to the existing roadway south of Huntington Drive.

Segment D8

At the intersection of Huntington Drive and Peabody Road, the Alternative D alignment turns west and follows Huntington Drive southwest to Walters Road. The Peabody Road/Huntington Drive intersection would include a right-turn only ramp for southbound Peabody Road traffic continuing on westbound Huntington Avenue. The roadway in this segment would be four lanes, consisting of curb and gutter, 20-foot outside lanes, and 12-foot inside lanes in each direction separated by a 18-foot-wide landscaped median. A 10-foot-wide sidewalk would be provided on the south and a 10-foot-wide shared pedestrian/bicycle path separated by a 5-foot landscaped area on each side would be provided on the north. To minimize the displacement of existing businesses, a portion of new roadway would be elevated over the railroad spur with a new overcrossing.

From the intersection of Walters Road and Huntington Road, Alternative D would continue south on Walters Road to SR 12, identical to Alternative B (see Section 2.2.2.5 on page 2-25).

2.2.4.2 Proposed Landscaping

The landscaping under Alternative D would be similar to that described for Alternative B. For urban areas, landscaping on both sides of the roadway and a landscaped median would be provided wherever feasible. Trees would be planted in the center median, with grasses or groundcover as understory. Native species would be used where feasible. In rural areas, native trees would be planted at irregular intervals in clusters, with native grasses as understory on both sides of the roadway. Trees would also be used to mark intersections and drainages. Rural medians would be planted with native grasses and shrubs. In industrial areas, trees would be planted in the median, with an understory of low shrubs, grasses, and decomposed granite. The landscaped strips in industrial areas would be planted with native shrubs and groundcover.

2.2.4.3 Proposed Utility Improvements

Major drainage courses would be maintained and spanned using concrete box culverts or pipe culverts. The existing ditches along Peabody Road and Vanden Road would be maintained or relocated as required. The existing storm drain system along Huntington Road would be reconstructed as required.

The existing 5-foot by 10-foot box culvert for Alamo Creek would be extended or replaced with a series of large culverts underneath the widened Leisure Town Road and Elmira Road. New Alamo Creek would be spanned by widening the existing bridge to the west. Vanden Road would be raised near Union Creek and a new concrete box culvert or a short bridge would be constructed. A storm drain system would be constructed to collect and convey drainage along Leisure Town Road where necessary, connecting to Vacaville's existing storm drains where possible. Irrigation facilities would be maintained and extended or reconstructed as required.

The existing joint pole lines (PG&E, telephone, and cable) would be relocated as required. The PG&E electric substation on the west side of Peabody Road, just south of Vanden Road, would not be affected by the project. Poles carrying overhead electric lines to and from the substation would be modified and relocated as required. Conduit for future fiber-optic communication would be installed along the length of Alternative D.

Underground utilities (water and sewer) along Huntington Road would be relocated where they are in conflict with the project. Water and sewer access holes would be modified as required.

The UPRR crossing on Peabody Road would be replaced with a new six-lane overcrossing. The railroad spur crossing on Huntington Road would be replaced with a four-lane grade separation.

2.2.5 Alternative E: Peabody Road–Air Base Parkway–Walters Road

Alternative E would provide a four- to six-lane divided arterial along the entire roadway (Figure 2-5). Two lanes would be added to the existing two- to four-lane facility. The alignment differs from Alternatives B to D in the northern portion, between I-80 and Vanden Road in Vacaville. Instead of starting at the I-80/Leisure Town Road interchange, this alternative alignment begins at the intersection

of Peabody Road and Elmira Road in Vacaville and travels south along Peabody Road until it meets the Alternative C alignment at the intersection of Peabody Road and Cement Hill Road/Vanden Road.

The cost estimate for Alternative E is $122,558,000. For a description of improvements to Peabody Road south of Cement Hill Road/Vanden Road and to Air Base Parkway included in Alternative E, please refer above to Section 2.2.3.1 and Section 2.2.3.2, respectively on pages 2-27 to 2-28. For a description of improvements to existing Walters Road included in Alternative E, please refer above to Section 2.2.2.5 on page 2-25. Roadway segments unique to Alternative E are described below.

2.2.5.1 Peabody Road

Segment E1

Between Elmira Road and the Vacaville city limits, Peabody Road would be widened from four lanes to six lanes. Generally, the roadway would consist of 8-foot outside shoulders and three 12-foot lanes in each direction separated by a 16-foot-wide landscaped median. On the west, a 10-foot-wide bicycle and pedestrian path would be separated from the street and from residential properties by 5-foot-wide landscaped areas. On the east, a 6.5-foot-wide pedestrian sidewalk would be bordered on the residential side by a 5.5-foot-wide landscaped area. Private property landscaped setbacks would be located on both sides of the street. In areas with constrained right-of-way, the shoulder width would be reduced to four feet. The width of the right-of-way would vary from 128 to 136 feet, depending on the amount of existing development.

Segments E2, E3, and E4

South of the Vacaville city limits to the intersection of Peabody Road and Cement Hill Road/Vanden Road, the existing two-lane roadway would be widened to four lanes, consisting of curb and gutter, a 8-foot outside shoulder, two 12-foot lanes, and a 2-foot-wide inside shoulder in each direction separated by a 16-foot-wide landscaped median. A 10-foot-wide shared bicycle/pedestrian path with a 5-foot landscaped area on each side would be constructed on the west side of the roadway. The width of right-of-way on this portion of Peabody Road would be 110 feet, which would require widening the existing bridges over Alamo Creek and the Putah South Canal.

At the intersection of Peabody Road and Cement Hill Road/Vanden Road, the alignment of Alternative E follows the same alignment as Alternative C; Peabody Road South to Air Base Parkway and then west onto Air Base Parkway to Walters Road (see Section 2.2.3.1 and Section 2.2.3.2 on pages 2-27 to 2-28). From the intersection of Walters Road and Air Base Parkway, the route continues south on Walters Road to SR 12, following the same alignment as Alternative B (see Section 2.2.2.5 on page 2-25).

2.2.5.2 Proposed Landscaping

The landscaping under Alternative E would be similar to that described for Alternative B. For urban areas, landscaping on both sides of the roadway and a landscaped median would be provided wherever feasible. Trees would be planted in the center median, with grasses or groundcover as understory.

Native species would be used where feasible. In rural areas, native trees would be planted at irregular intervals in clusters, with native grasses as understory on both sides of the roadway. Trees would also be used to mark intersections and drainages. Rural medians would be planted with native grasses and shrubs. In industrial areas, trees would be planted in the median, with an understory of low shrubs, grasses, and decomposed granite. The landscaped strips in industrial areas would be planted with native shrubs and groundcover.

2.2.5.3 Proposed Utility Improvements

Major drainage courses, including McCoy Creek and Union Creek, would be maintained and spanned using concrete box culverts or pipe culverts. The existing ditches along Air Base Parkway and Peabody Road would be maintained or relocated as required. The existing storm drain system along the east side of Peabody Road, from Air Base Parkway to Huntington Drive, would be maintained. The existing storm drain system along the west side of Peabody Road, from approximately 0.4 to 1.0 mile north of Vanden Road, along the residential subdivision frontage in Fairfield, would be maintained. The existing storm drain system along Peabody Road, in the Vacaville city limits, would be reconstructed as required. The existing bridge crossings of Alamo Creek and the Putah South Canal would be widened as required. Irrigation facilities would be maintained and extended or reconstructed as required.

The existing joint pole lines (PG&E, telephone, and cable) would be relocated as required. The PG&E electric substation on the west side of Peabody Road, just south of Vanden Road, would not be affected by the project. Poles carrying overhead electric lines to and from the substation would be modified and relocated as required. Conduit for future fiber-optic communication would be installed along the length of Alternative E.

Underground utilities (water and sewer) along Peabody Road would be relocated wherever they are in conflict with the project. Water and sewer manholes would be modified as required.

2.2.6 Summary of Project Features by Alternative

Table 2-1 is a summary comparison of the major project features by alternative, which identifies both the common and unique design features of the four build alternatives.

2.3 Construction Schedule

When preparation of the EIR/EIS commenced in 2000, it was initially assumed that all or portions of the Jepson Parkway would be fully operational between 2005 and 2009. Funding is currently being provided by segment with funds programmed for the construction of the rural roadway segments. If funding is constrained, the project would be constructed by segment until completion beginning in 2010. Assuming availability of funding, project construction would last 12 to 24 months on each segment, over a total duration of approximately 48 to 60 months. It is possible that construction on some segments would overlap. Construction would be limited to Monday through Friday, between 7:00 a.m. and 5:00 p.m., including equipment activity for deliveries, earthwork, paving, structural

fabrication, and similar tasks. Maintenance and daily staging before equipment use may occur before 7:00 a.m. or after 5:00 p.m.

Table 2-1
Summary of Features of the Build Alternatives

Feature	Alternative B	Alternative C	Alternative D	Alternative E
Roadway Widening				
Leisure Town Road	Yes	Yes	Yes	No
Vanden Road	Yes	Yes	Yes	No
Cement Hill Road	Yes	No	No	No
Huntington Drive	No	No	Yes	No
Peabody Road	No	Yes	Yes	Yes
Air Base Parkway	No	Yes	No	Yes
Walters Road	Yes	Yes	Yes	Yes
Number of Lanes	4	4–6	4–6	4–6
Roadway Extension on New Alignment				
Walters Road	Yes	No	No	No
UPRR Tracks Crossing				
Grade-Separated	Walters Road	Peabody Road	2 - Peabody Road and Huntington Drive	Peabody Road
Partial Interchange				
Air Base Parkway and Peabody Road	No	Yes	No	Yes
Drainage Crossing Improvements				
Alamo Creek	Yes	Yes	Yes	No
New Alamo Creek	Yes	Yes	Yes	No
Union Creek	Yes	Yes	Yes	Yes
McCoy Creek	Yes	No	No	No
Putah South Canal	No	No	No	Yes
Bicycle/Pedestrian Trail	Yes	Yes	Yes	Yes
Landscaping	Yes	Yes	Yes	Yes
Utility Improvements				
Irrigation	Yes	Yes	Yes	Yes
Water, Sewer, Storm Drain Infrastructure	Yes	Yes	Yes	Yes
Electrical, Cable, Telephone Line Relocation	Yes	Yes	Yes	Yes

2.4 Alternatives Considered but Eliminated from Further Discussion

2.4.1 Transportation Systems Management Alternative

The NEPA/404 group's alternatives screening process, pursuant to the NEPA/404 integration MOU, considered a transportation system management alternative. This alternative would consist of low-cost capital improvements to improve the function of the existing roadway and transit systems. Improvements would include extension of pedestrian/bicycle facilities along existing roadways within the Jepson Parkway corridor and provision of additional bus transit services within the corridor. The transportation system management alternative could apply to several different alignments using existing roadways, including (from north to south) Leisure Town Road, Vanden Road, Peabody Road, Cement Hill Road, Air Base Parkway, and Walters Road.

This alternative, as a stand-alone alternative, was initially considered but subsequently dropped from further consideration because it did not meet the project purpose and need. Implementation of this alternative would not meet the roadway capacity needs projected for the corridor and would likely lead to a decline in the level of service of corridor intersections. It would have relatively low potential for environmental and community effects, but it would provide limited transportation benefits.

Although Transportation System Management measures alone could not satisfy the purpose and need of the project, the following Transportation System Management measures have been incorporated into the build alternatives for this project:

- Provision of a continuous bicycle and pedestrian path in the corridor.
- Accommodation for the proposed Fairfield/Vacaville train station.
- Provision of additional bus transit services within the corridor.

2.4.2 Modal Alternatives

2.4.2.1 Mass Transit Alternative

The NEPA/404 group's alternatives screening process considered a mass transit alternative. This alternative would construct an arterial roadway within the Jepson Parkway corridor. This would be accomplished by construction of new two-lane roadways, widening existing roadways to four or six lanes, or a combination of new construction and improvements to existing roadways. It would dedicate one lane in each direction to exclusive HOV (bus, vanpool, and carpool) use during peak commute periods.

This alternative was eliminated because it did not meet the project purpose and need. The Mass Transit Alternative was withdrawn from further consideration in favor of the alternatives in the Jepson Parkway corridor that contain multimodal features. This alternative would meet most of the project purposes, but it would not address project needs to address existing and future traffic congestion, accommodate traffic associated with planned growth, or support future multimodal options, including

pedestrian/nonmotorized transportation. The alternative was defined to include most of the features of the Jepson Parkway Concept Plan Alternative; notable differences included designation of the additional traffic lane for HOV use during morning and evening peak traffic periods and elimination of the pedestrian/bicycle path. However, comparison of the alternatives concluded that a mass transit–only alternative would provide few, if any, benefits beyond those provided by the multimodal Jepson Parkway Concept Plan Alternative, which includes features such as a continuous pedestrian/nonmotorized path and linkages to transit routes and the proposed rail transit station.

Although a mass transit alternative alone was not carried forward, the design of Jepson Parkway is intended to provide a multimodal corridor that enhances opportunities for transit use and alternative travel modes, including bicycle and pedestrian travel. The future Fairfield-Vacaville Multimodal Train Station is planned to be located in the corridor.

2.4.3 Other Alternatives Considered

The NEPA/404 group's alternatives screening process considered the following alternatives but did not recommend them for further analysis in the environmental document.

2.4.3.1 Limited Access Expressway Alternative

This alternative would construct an expressway along the length of the Jepson Parkway corridor. The expressway would maximize traffic-carrying capacity within the corridor by limiting the number of access points along a four-lane roadway. The number of existing driveways and cross streets would be consolidated by constructing access roads parallel to the expressway or by constructing grade separations at high-volume intersections. This alternative could apply to several different alignments using existing roadways, including (from north to south) Leisure Town Road, Vanden Road, Peabody Road, Cement Hill Road, Air Base Parkway, and Walters Road. This alternative was eliminated because it did not meet the project purpose and need, although certain portions of the project (depending on which alternative is selected) would be designed with limited access points.

Although it would address most components of the project purpose and need, the Limited Access Expressway Alternative was eliminated from further consideration because it was considered inconsistent with the concept plan goals to provide a continuous arterial roadway that could be integrated into the central Solano County communities without creating a physical barrier. In addition, it would have considerable negative environmental and community effects, and would be expensive to construct.

2.4.3.2 North of Interstate 80 Alternative

This alternative would construct a new two- or four-lane divided arterial roadway between Vacaville in the vicinity of the I-80/Leisure Town Road interchange to Fairfield in the vicinity of the I-80/SR 12 interchange. This new connection would essentially parallel I-80 on its north side and use existing roads where feasible. This alternative would include a continuous pedestrian/bicycle path, linkages to existing and planned transit services, landscaping, and parallel access roads along portions of the alignments to serve existing residential development. This alternative was eliminated because it did not

meet the project purpose and need because it would not address transportation issues in the central Solano County corridor. The alternative was also determined to have negative environmental and community effects and was rated negative for transportation effectiveness, engineering feasibility, and funding feasibility.

2.4.3.3 East of Leisure Town Road Alternative

This alternative would construct a divided arterial roadway the length of the Jepson Parkway corridor. In Vacaville between I-80 and the Leisure Town Road/Alamo Drive intersection, this alternative would follow either of these two directions:

- The route would begin as a four-lane arterial roadway at the I-80/Leisure Town Road interchange and travel south on Leisure Town Road to approximately Ulatis Creek. At this point, the route would extend east, and a new two-lane arterial roadway would parallel Leisure Town Road approximately 1,250 feet from the existing roadway. The new roadway would connect back to Leisure Town Road just south of Alamo Drive.
- The route would begin at the I-80/Midway Road/Weber Road interchange and continue south on a new two-lane roadway that parallels the UPRR tracks. Portions of Meridian Road, a discontinuous road that extends south from the interchange, would be used as appropriate. This new roadway would be approximately 5,280 feet east of Leisure Town Road. The new roadway would connect back to Leisure Town Road just south of Alamo Drive.

Either option would include a continuous pedestrian/bicycle path, linkages to existing and planned transit services, landscaping, and parallel access roads along portions of the alignments to serve existing residential development. Transportation effectiveness and engineering feasibility were rated as generally positive with this alternative. However, since the alternative would be located east of the communities proposed to be served, the alternative would not meet the project purpose and need. It was also determined to have negative environmental and community effects because it would place new roadway segments in undeveloped areas of the County.

2.5 Permits and Approvals Needed

In addition to complying with NEPA and CEQA, the project may require the following permits and agency approvals and authorizations:

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service	Consultation for Federally Listed Threatened and Endangered Species under Section 7 of the Endangered Species Act.	Informal consultation currently ongoing. Formal consultation and request for Biological Opinion would be initiated after Draft EIR/EIS circulation.
U.S. Army Corps of Engineers	Individual Permit under Section 404 of the Clean Water Act for filling or dredging waters of the United States.	Informal consultation currently ongoing. Section 404 permit would be obtained prior to construction.

Agency	Permit/Approval	Status
California Department of Fish and Game	Streambed Alteration Agreement under California Fish and Game Code Section 1602.	Informal consultation currently ongoing. Section 1602 permit would be obtained prior to construction.
	Section 2080 Agreement or Concurrence for State-Listed Threatened and Endangered Species.	Section 2080 permit would be obtained prior to construction.
San Francisco Bay and Central Valley Regional Water Quality Control Board	Water Quality Certification under Section 401 of the Clean Water Act.	Informal consultation currently ongoing. Section 401 certification would be completed prior to construction.