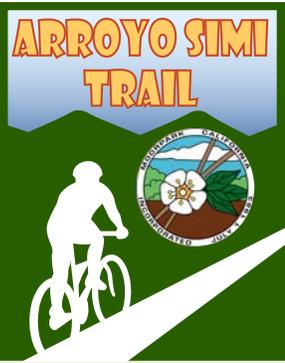


ARROYO SIMI TRAIL



FEASIBILITY STUDY

CITY OF MOORPARK
JUNE 18TH, 2003



ARROYO SIMI TRAIL

FEASIBILITY STUDY

Prepared For:
City of Moorpark



Prepared By:



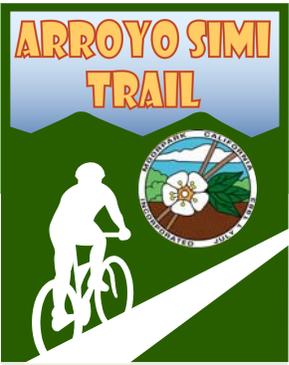
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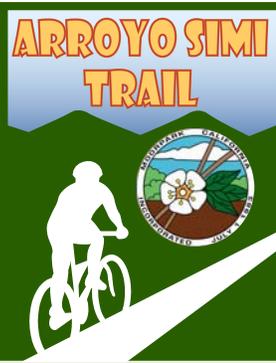
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June 18, 2003





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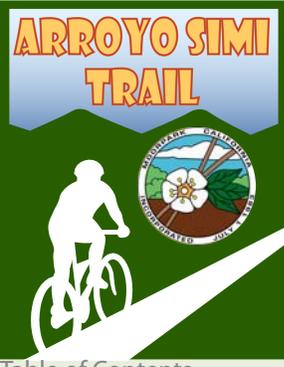


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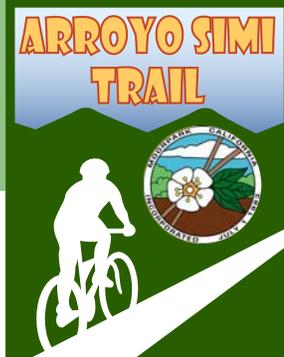
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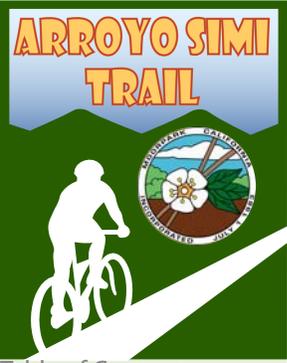
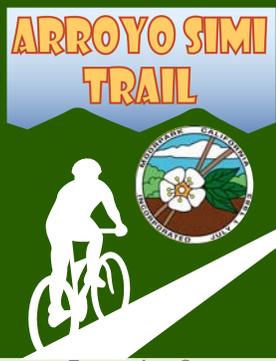
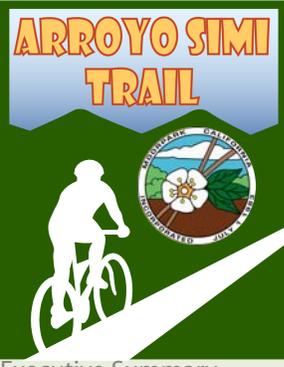


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EXECUTIVE SUMMARY

Executive Summary



Executive Summary

The Arroyo Simi Trail Feasibility Study establishes the most feasible near and long-term route of a multi-use pedestrian and bicycle trail along the Arroyo Simi corridor. The multi-use trail is intended to promote alternative forms of transportation and provide new recreational opportunities consistent with the goals set forth in the City of Moorpark’s General Plan, City of Simi Valley’s Bicycle Master Plan, and Ventura County’s Regional Trails and Pathways Master Plan Report.

The trail corridor is located within the jurisdictional boundaries of the City of Moorpark, County of Ventura and City of Simi Valley. Other agencies with jurisdiction in the project study area include the Ventura County Watershed Protection District, Caltrans, and Southern California Regional Rail Authority (SCRRA). The planning effort for this Feasibility Study has included key stakeholder interviews, field investigation, jurisdictional agency coordination, environmental surveys, and applicable planning document research and review. The resulting routes in the Arroyo Simi Trail Feasibility Study largely reflect the input and advice provided through the planning process.

The proposed trail traverses approximately 9 miles stretching between the westerly Moorpark City Limit and extends easterly through the City of Moorpark and unincorporated Ventura County, to the westerly terminus of the City of Simi Valley’s existing trail system crossing both privately and publicly owned property. The proposed trail route consists of a combination of Class I and Class II facilities with connections to neighborhoods, schools, parks, downtown Moorpark, employment centers and planned regional trail facilities.

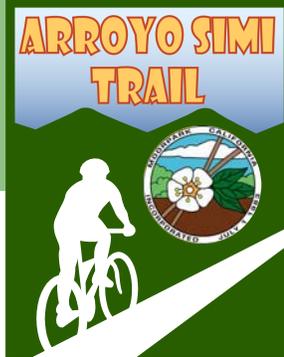
On a regional scale, the Arroyo Simi Trail section is a vital trail corridor within the “Ultimate Loop” of Southern California. The Ultimate Loop is a regional system of planned and constructed trails that will ultimately connect several communities in both Ventura and Los Angeles Counties to each other, major destinations, and neighboring regional trail networks. An assortment of trail sections make up this Ultimate Loop including:

- Simi to the Sea Trail (Simi Valley through Moorpark to the Santa Monica Mountains)
- Saugus to the Sea Trail (Santa Clara River Corridor to the Santa Monica Mountains)
- Backbone Trial (Santa Monica Mountains to Point Mugu,
- Coastal Trail (Point Mugu to the Santa Clara River),
- Santa Paula Branch Line Trail (City of Ventura through the Santa Clara River Corridor),
- Santa Clara River Trail (Ventura County to the City of Santa Clarita).

Ultimately, connections to the Coastal Trail and Pacific Crest Trail via the Arroyo Simi Trail’s link in the Ultimate Loop would provide Moorpark and Simi Valley residents the ability to reach Mexico and Canada.

The Arroyo Simi Trail Feasibility Study provides support for an Arroyo Simi Trail concept and its ability to be developed along a continuous route and constructed within a normal cost range. The City Councils and other regulating authorities should utilize this foundation document to prepare a definitive trail alignment study for adoption. Looking forward toward providing project funding for the trails development and documentation of public support along with business partnerships will be essential.

The development of an economic strategy utilizing an enterprise group for public, private and government grants for the capital improvements should be given a priority. The development of project phasing funding

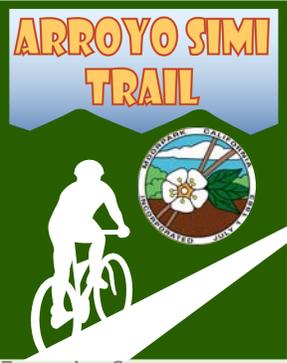


is a one to two year commitment for initial resources to become available. The primary funding source will be through transportation funding opportunities. Transportation funding is essentially provided for bicycle commuting purposes. All future planning and documentation should make an emphasis on bicycle commuting rather than recreational uses.

Recreational trail resources are fewer, lower in overall funding and more competitive than transportation funds. Funding for master planning and preliminary environmental documentation is rarely available through agency grants. Funding for the preliminary work will need to be provided by the regulating agencies and joint venture options.

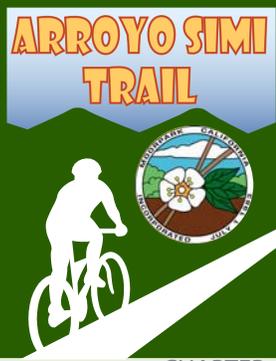
Looking forward to future planning and implementation of the Arroyo Simi Trail, the following actions are recommended:

1. City Council should authorize development of Bicycle Transportation Plan (BTP) to cover Class I, II & III alternate transportation bikeways and multi use trail opportunities. The BTP is the base documentation requested and usually is required when applying for transportation funding.
2. City Council should authorize preparation of updates to Circulation and Park & Recreation Elements to the City General Plan. This will provide consistency in the planning process and give an opportunity for public participation. Timing for the General Plan update should be reviewed with the City Planning Department staff.
3. City Council should authorize at a minimum the starting of environmental impact report (EIR) to determine preferred alternatives for the Arroyo Simi Trail in the City of Moorpark. This could be expanded if the other regulating agencies on the proposed trail alignment were amenable to establishing a Joint Powers Agreement (JPA). This would also be the opportunity to share funding costs for a complete EIR. If the JPA is considered it should include financial planning for the operations and maintenance conditions that will exist after construction.
4. Prepare Public Participation Plan to include all stakeholders of Arroyo Simi Trail. Establish meeting dates and locations for public notice. This is to develop a consensus support group with common interests, benefits and objectives. Through the public participation process a concentration on the development of state legislative support will be instrumental in future funding resources.
5. Concurrent with the development of the EIR, a project engineers cost estimate by phases should be prepared and matched with funding sources for the City of Moorpark section of the Arroyo Simi Trail. City staff should consider requesting City Council to establish a budget line item for matching funds for grant opportunities. A cash commitment and in kind services of staff and consultants will make the project competitive.
6. Planning for the longer term the City or JPA should consider developing an Enterprise Team. This group will identify and utilize a combination of revenue centers with the emphasis of public/private, joint ventures, partnerships or concession agreements to provide both for additional capital improvements and the operation and maintenance of the trail. The early establishment of this group would allow it to also be involved in the grant development program for phasing the Arroyo Simi Trail construction.

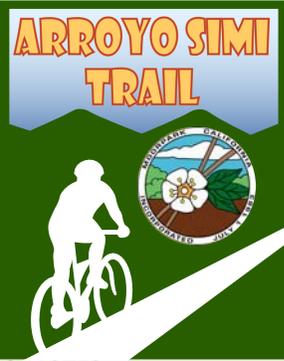


Executive Summary

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1.0 INTRODUCTION



1.0 Introduction

Trails, while meeting the goals of alternative transportation and recreation provide a multiple of additional benefits to the community. Health benefits included through regular exercise are reduced heart disease, hypertension and cholesterol. The economic benefits from trail users, visitors and vacationers provide increased sales tax revenues when they purchase equipment, meals, lodging and transportation from local retailers. Environmental and resource protection benefits should not be overlooked when reviewing the multiple benefits of trails. Well-designed trails mitigate damage by controlling public access when they route users through or around sensitive resource areas. The resource benefit examples would include riparian habitat, archeological sites and endangered species nesting areas. Trail users receive educational benefits by learning of the natural, historical and cultural community resources, and are ideal elementary school field trips and university outdoor classrooms. Trails also provide enjoyable and interesting experiences that support a variety of wildlife viewing, photography and community volunteer activities.

This section describes the Arroyo Simi Trail Feasibility Study's purpose, provides an overview of the Project Study Area, identifies the three trail segments and outlines the Study's goals and objectives. Also included in this section is a discussion of how the Feasibility Study relates to existing documents.

A. Purpose of the Feasibility Study

The purpose of this Feasibility Study is to determine route alternatives, and suggest the most feasible trail routes, within the Arroyo Simi Creek Corridor for the proposed section of the Arroyo Simi Trail that commences at the westerly Moorpark City Limits and extends easterly, through the City of Moorpark and unincorporated Ventura County, to the westerly terminus of the City of Simi Valley's existing trail system. Development of an implementation plan and the future construction of the Arroyo Simi Trail will be contingent upon the City's selection of a final trail route. The proposed Trail is intended to serve commuter and recreational needs while reducing traffic congestion, improving air quality, and providing non-motorized forms of transportation.

This section of the Arroyo Simi Trail is proposed to be a Class I/multi-use pedestrian and bicycle trail located within the Arroyo Simi Creek Corridor. Where environmental, regulatory, physical and/or fiscal constraints make the provision of a Class I/multi-use trail within the Creek Corridor infeasible an alternative route(s) and/or bicycle class system has been provided. Consistent with Section 1000 of the Caltrans Highway Design Manual, this Feasibility Study defines Class I, Class II, and Class III bikeways as described below:

- **Class I Bikeway** – “Bike paths” provided within a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized. Caltrans standards require bike paths to have a minimum paved width of 8 feet and be completely separated from a street.
- **Class II Bikeway** – “Bike lanes” provided within a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted. Caltrans standards require bike lanes to be striped with a 6 inch solid white line that provides a minimum 4 foot exclusive bicycle travel lane.
- **Class III Bikeway** – “Bike routes” provided within the street right-of-way designated

by signs or permanent markings and shared with pedestrians or motorists. Caltrans standards require Class III routes to be marked with the appropriate Bike Route Signs.

Figure 1: Class I Bikeway (Bike Path)

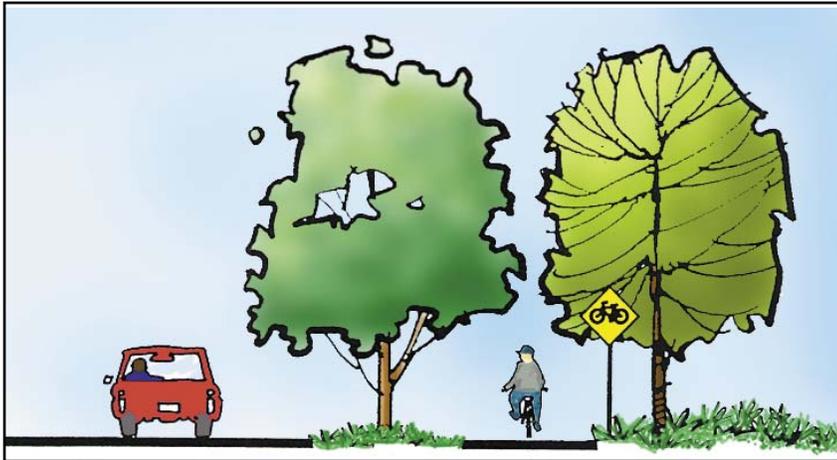


Figure 2: Class II Bikeway (Bike Lane)

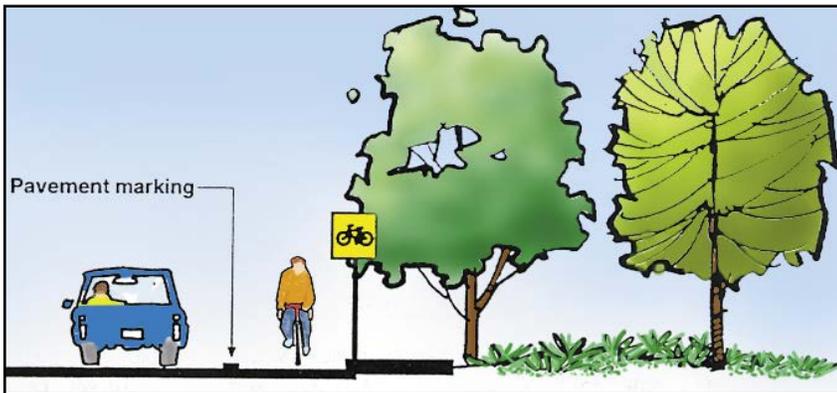
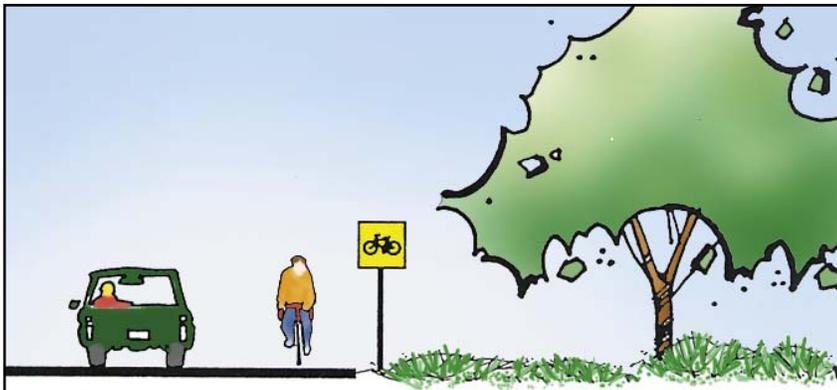
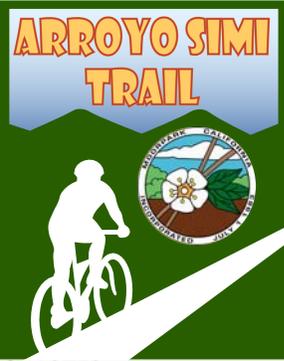


Figure 3: Class III Bikeway (Bike Route)





B. Project Study Area

The Project Study Area includes the proposed section of the Arroyo Simi Trail that extends from the westerly Moorpark City Limits easterly, through the City of Moorpark and unincorporated Ventura County, to the westerly terminus of the City of Simi Valley's existing Arroyo Simi Creek Corridor Trail. This section of the proposed Arroyo Simi Trail crosses three jurisdictional boundaries including the City of Moorpark, City of Simi Valley, and County of Ventura . Other agencies with jurisdiction in the Project Study Area include the Ventura County Watershed Protection District, Caltrans, and Southern California Regional Rail Authority (SCRRA).

For the purpose of this Feasibility Study, the proposed Arroyo Simi Trail has been divided into the following three segments as illustrated in Figure 4:

- **Segment A** – This segment includes the improved portion of the Arroyo Simi Creek Corridor that extends from the Peach Hill Wash confluence near Hitch Boulevard, east to the limits of the existing channel improvements near the rail crossing north of Science Drive.
- **Segment B** – This segment includes the unimproved portion of the Arroyo Simi Creek Corridor that extends from the rail crossing north of Science Drive, east to the Moorpark City Limits just southwest of Oak Park. This segment also includes the northern area of the City of Moorpark that extends south from Campus Park Drive, and west from College Heights Drive east to Campus Road .
- **Segment C** – This segment includes the unimproved portion of the Arroyo Simi Creek Corridor that extends from the eastern Moorpark City Limits just southwest of Oak Park, east to Madera Road and the terminus of the City of Simi Valley's existing trail system.

Arroyo Simi Trail Corridor Segment Map

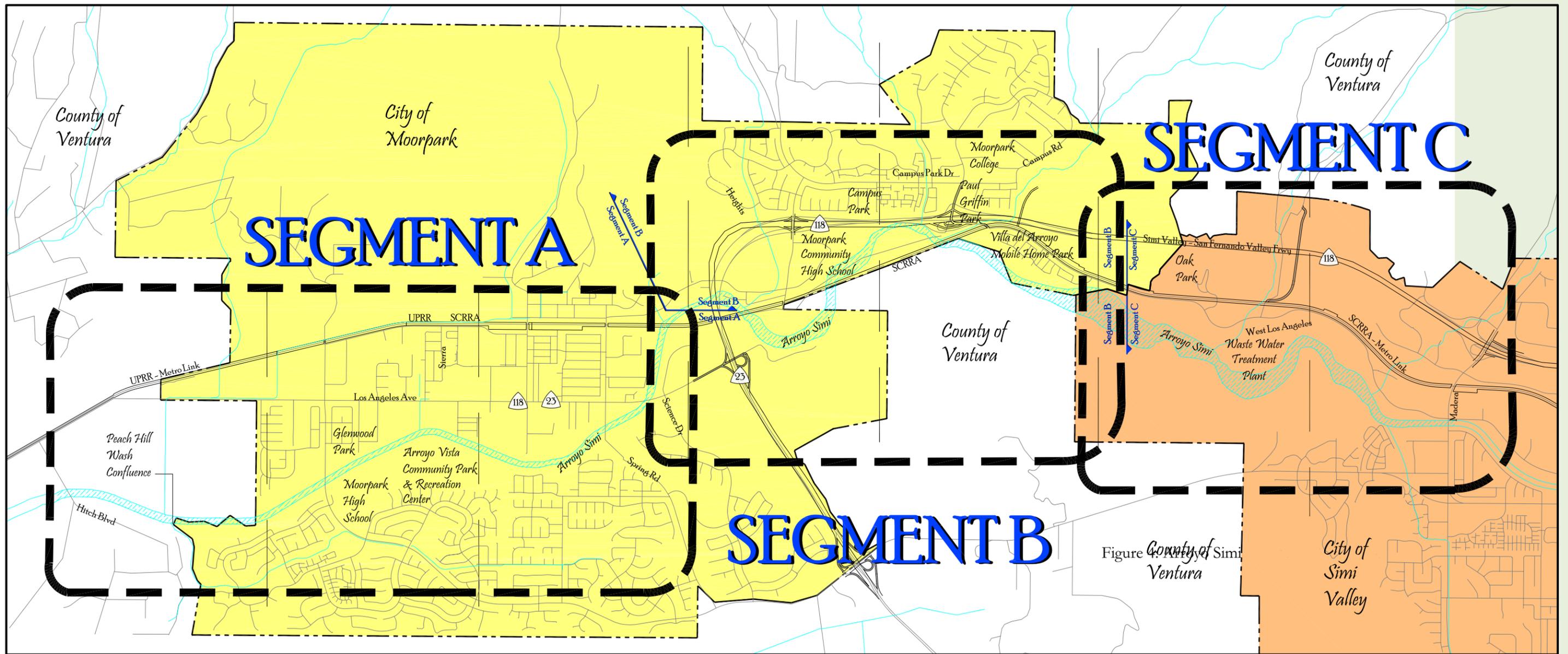
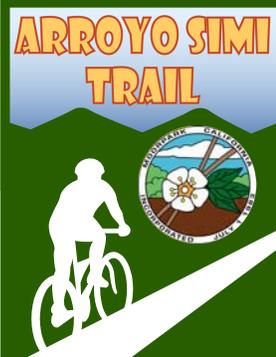


Figure 4: Arroyo Simi Trail Corridor Segment Map





C. Trail Route Goals

For the purpose of this Feasibility Study, the following **goals** have been established:

- Interconnectivity between neighborhoods in the City of Moorpark.
- Access through rural areas of Ventura County with connections to the City of Simi Valley’s regional bike system.
- Opportunities for a future City-to-the-Sea trail west of the City of Moorpark.

Furthermore, when evaluating a potential trail route, the route should:

- Avoid and/or minimize environmental impacts to the greatest extent possible.
- Maximize consistency with existing plans, documents and current planning efforts to the greatest extent possible.
- Provide the greatest compatibility with adjacent land uses.
- Minimize environmental permit requirements to the greatest extent possible.
- Minimize impacts to private property.
- Provide the greatest opportunity to maintain a consistent Class I/Multi-use Bikeway.
- Provide the most direct and consistent route.
- Maximize commuter value to the greatest extent possible.
- Maximize recreational value to the greatest extent possible.
- Minimize construction and maintenance costs to the greatest extent possible.
- Have the greatest potential for near-term construction.

D. Trail Route Objectives

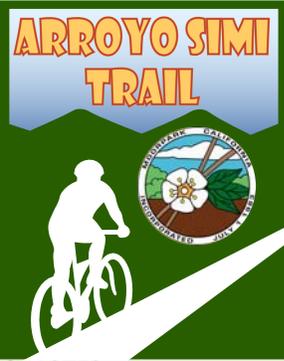
To achieve these goals, the following **objectives** have been established:

- Evaluate the Project Study Area, identify potential opportunities and constraints, and establish the route evaluation criteria for identifying a most feasible trail route.
- Identify trail route alternatives.
- Evaluate and rank alternative trail routes using the established route evaluation criteria.
- Set forth the most feasible Arroyo Simi Trail route for possible future construction.

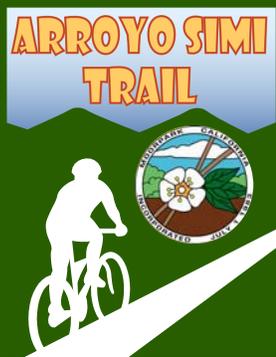
E. Relationship to Other Documents

The section of the proposed Arroyo Simi Trail included in this Feasibility Study crosses three jurisdictional boundaries: the City of Moorpark, City of Simi Valley and County of Ventura (See Title Sheet). Given its cross-jurisdictional nature, this Feasibility Study must ensure any proposed route is compatible with other relevant planning efforts. The documents and planning efforts listed below have been reviewed and consulted during the preparation of this Feasibility Study:

- **City of Moorpark General Plan** – The General Plan contains numerous policies, as well as a Bikeway Plan, that encourage the establishment of a citywide network of bicycle routes for commuter and recreational use. The alternative route(s) presented in this Feasibility Study coincide with the policies and bikeway network set forth in the Circulation Element.

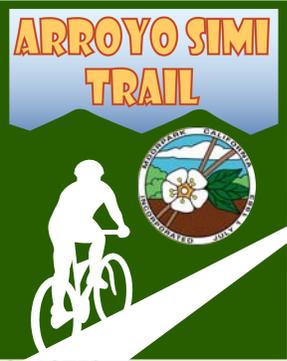


- **Management & Restoration Plan for the Arroyo Simi within Moorpark City Limits** – The Management & Restoration Plan contains goals and policies that encourage the establishment and maintenance of recreation and trails along and adjacent to the Arroyo Simi, in and around Moorpark, in order to connect Simi Valley and Point Mugu. The alternative route(s) presented in this Feasibility Study coincide with the goals and policies set forth in the Management & Restoration Plan.
- **City of Simi Valley General Plan** – The General Plan contains goals and policies that encourage the development of a trails network system for biking, hiking and riding that will link the parks and provide regional connections with adjacent jurisdictions. The alternative route(s) presented in this Feasibility Study coincide with the conceptual recreation trail route shown on the Master Trails System of the General Plan.
- **City of Simi Valley Bicycle Master Plan** – The Bicycle Master Plan contains a detailed inventory of existing bicycle facilities and specific recommendations for the City’s bicycle network. The City’s existing bikeway system terminates at Madera Road; the Master Plan proposes an extension of this system to the westerly City Limits Line. The alternative route(s) presented in this Feasibility Study is largely consistent with the City’s proposed portion; thus facilitating connectivity to the regional bikeway system.
- **Rancho Simi Recreation and Park District Trails Master Plan** – The Trails Master Plan contains the conceptual alignments for multi purpose recreational trail corridors within the City of Simi Valley. The Plan depicts an alignment that extends west from Madera Road to the City Limits Line. The alternative route(s) presented in this Feasibility Study is consistent with the conceptual alignments shown on the Master Plan.
- **Ventura County General Plan** – The General Plan contains goals and policies that encourage the establishment of a Countywide network of trails and promote the use of open space and other physical resources including utility easements and flood control easements. The alternative route(s) presented in this Feasibility Study support joint-use opportunities and utilization of open space, consistent with the General Plan, through the use of existing access roads and flood control easements.
- **Ventura County Regional Trails & Pathways Master Plan Report** – The Regional Trails & Pathways Master Plan Report sets the framework for non-motorized transportation, for both commuting and recreation, in the County of Ventura. The Plan sets forth the Primary Non-motorized Transportation System necessary to create a functioning regional system extending from the Ventura/Los Angeles County line to the Pacific Ocean, which includes the Arroyo Simi Pathway. The alternative route(s) presented in this Feasibility Study coincide with the County’s Master Plan, thus facilitating connectivity to the regional bikeway system.
- **Calleguas Creek Watershed Management Plan** – The Management Plan provides a comprehensive watershed management plan for the sustainable development of the Calleguas Creek watershed and its resources. Included in the Plan goals and policies is the creation of high-quality outdoor recreational opportunities through the use of public agencies creek corridor access roads and right-of-ways. The alternative route(s) presented in this Feasibility Study support joint-use opportunities, consistent with the Management



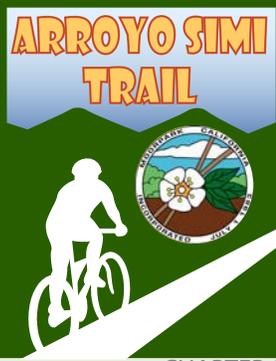
Plan, through the use of existing access roads.

- **Arroyo Simi Preliminary Design Report** – The Preliminary Design Report evaluates deficiencies of the existing Arroyo Simi channel from Tierra Rejada Road to Spring Road in Moorpark. The report also provides recommendations for the preliminary design of channel improvements including the provision of recreational opportunities by permitting use of access roads for hiking and bicycling. The alternative route(s) presented in this Feasibility Study support joint-use opportunities, consistent with the Preliminary Design Report, through the use of existing access roads.
- **The Canyons Project** – The Canyons is a master planned community located in the northwest portion of the City of Simi Valley near the 118 Freeway and city boundary. The project proposes a mix of land uses as well as the preservation of open space, wetland and oak woodland areas that integrate pedestrian and bicycle trails and provide connections to regional trail systems. The alternative route(s) presented in this Feasibility Study coincide with the trail route proposed in the project’s Master Trails Plan with connections at Alamos Canyon Road and Madera Road.

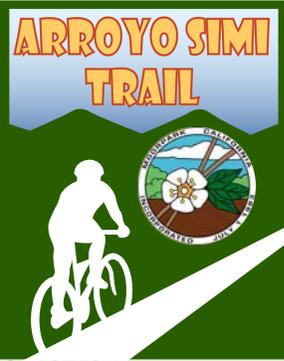


CHAPTER 1
Introduction

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2.0 ROUTE IDENTIFICATION & EVALUATION



2.0 Route Identification & Evaluation

This section describes the route identification process and subsequent evaluation process for each of the potential alternative trail routes identified within the Project Study Area. The information is provided in three key areas of this section. First, a description of the route evaluation criteria is presented. Second, a route evaluation matrix is provided which ranks the feasibility of each trail option. Third, and in support of the summary matrix, an in-depth evaluation of each trail route option is provided, using the evaluation criteria established in this chapter as the basis for evaluation.

A. Route Identification

This Feasibility Study presents several trail routing alternatives, or options, within each of the three trail corridor segments. Each potential trail option was identified through field tours, aerial map resources, stakeholder interviews and document research. These trail options were then numbered and mapped, graphically illustrating their location within the Project Study Area to serve as the basis for the route evaluation process. The trail options have been assigned numbers arbitrarily and do not reflect their ranking or prioritization.

B. Route Evaluation Criteria

One of the first steps in assessing the feasibility of potential trail route alternatives is to carefully establish trail route criteria against which all potential trail routes can be evaluated. The evaluation criteria are based on the spatial requirements of the trail corridor, an understanding of potential funding sources, research of relevant planning documents and permitting requirements, and a baseline assessment of the Arroyo's environmental setting. These criteria have been divided in to four overarching categories: Environmental, Regulatory, Physical and Fiscal.

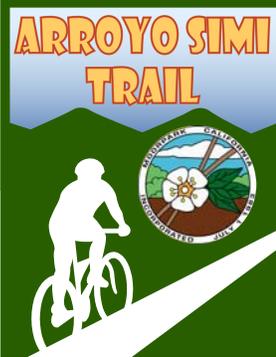
The evaluation criteria described in the following section will be applied to each of the trail segments in order to make a determination as to which trail routes, if any, are most feasible within the Arroyo Simi corridor. Each criterion has been assigned a number which correlates to both the route selections summary matrix and the detailed route evaluation.

Environmental

- (1) **Environmental impacts** – Impacts to biological resources, including existing vegetation and slopes, sensitive plant and animal species, aquatic habitats, water quality, jurisdictional wetlands, and riparian habitat areas. Appendix A contains a detailed baseline report of the Arroyo Simi's Biological Resources.

Regulatory

- (2) **Consistency with existing plans** – City of Moorpark General Plan, Management & Restoration Plan for the Arroyo Simi within Moorpark City Limits, City of Simi Valley General Plan, City of Simi Valley Bicycle Master Plan, Ventura County General Plan, Ventura County Bikeway Plan, Ventura County Regional Trails & Pathways Master Plan Report, Arroyo Simi Preliminary Design Report, Ventura County Transportation



Commission (VCTC), Ventura County Watershed Protection District, Rancho Simi Recreation & Park District, and other current planning efforts.

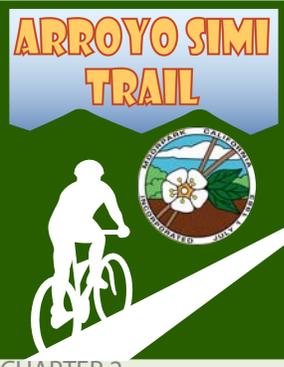
- (3) **Adjacent land uses** – Proximity to urban land uses such as industrial, commercial, residential, open space, and public facilities.
- (4) **Environmental permit requirements** – Environmental permits and regulatory approvals from U.S. Fish & Wildlife Service (USFWS), Department of Fish & Game (DFG), Army Corps of Engineers (ACOE) and the Regional Water Quality Control Board (RWQCB).
- (5) **Private property impacts** – Coordination and easement and/or property acquisition.

Physical

- (6) **Class I/Multi-use bikeway** – Placement within existing maintenance/access roads, utility and access easements, creek corridors, flood control channels, railroad right-of-ways, and/or utility corridors.
- (7) **Direct and consistent route** – Proximity of route to the Arroyo Simi per the intent of the Feasibility Study.
- (8) **Commuter value** – System connectivity, maximum number of destinations, minimum delay, on-street bike lane connections, access and integration into the regional bikeway system.
- (9) **Recreational value** – Trailheads and staging areas, view corridors, noise impacts, odor sources, traffic and road/bikeway conditions, open space, public facilities, park and recreational facilities.

Fiscal

- (10) **Construction and maintenance costs** – Utilization of public land, existing maintenance/access roads, utility and access easements, creek corridors, flood control channels, railroad right-of-ways, and/or utility corridors.
- (11) **Near-term construction** – In conjunction with capital improvement projects, future road improvement projects, development projects and/or redevelopment projects.



C. Route Selection Evaluation Matrix

	Environ.	Regulatory				Physical				Fiscal		
	1	2	3	4	5	6	7	8	9	10	11	
Trail Segment & Route Option	Potential to Minimize/Avoid Environmental Impacts	Potential to Maximize Consistency with Existing Plans	Potential for Compatibility with Adjacent Land Uses	Potential Number of Environmental Permits Required	Potential to Minimize Impacts to Private Property	Potential to Maintain a Consistent Class I Bikeway	Potential for Direct & Consistent Route	Potential to Maximize Commuter Value	Potential to Maximize Recreational Value	Potential to Minimize Construction & Maintenance Costs	Potential for Near-Term Construction	TOTAL
SEGMENT A												
Option 1 (Shts 1-3)	0	2	2	0	1	2	2	2	2	0	2	15
Option 2 (Sht 1)	1	1	2	0	1	2	1	2	2	1	2	15
Option 3 (Shts 2-3)	1	2	1	1	1	2	2	2	1	1	1	15
Option 4 (Sht 3)	2	1	0	2	2	0	0	1	0	2	2	12
SEGMENT B												
Option 1 (Sht 4)	2	2	1	2	0	2	2	1	1	0	0	13
Option 2 (Sht 4)	2	1	1	2	1	0	0	1	0	2	2	12
Option 3 (Sht 4)	1	2	2	0	1	2	2	1	2	1	1	15
Option 4 (Shts 4-5)	1	1	2	0	0	2	2	1	2	1	0	12
Option 5 (Shts 4-5)	1	0	0	1	1	2	1	1	1	1	0	9
Option 6 (Shts 4-5)	2	0	1	2	1	1	0	1	0	2	1	11
Option 7 (Shts 4-5)	1	2	1	0	1	2	1	1	1	0	0	10
Option 8 (Shts 4-5)	1	2	1	2	1	0	0	2	0	1	2	12
Option 9 (Sht 5-6)	2	0	1	2	0	2	0	1	1	1	1	11
Option 10 (Sht 5)	2	1	1	2	0	2	2	1	2	1	1	15
Option 11 (Shts 5-6)	2	1	1	2	2	0	0	1	0	2	1	12
Option 12 (Shts 5-6)	0	1	0	0	1	2	2	2	2	0	0	10
SEGMENT C												
Option 1 (Sht 6)	2	1	1	2	0	2	0	1	1	1	0	11
Option 2 (Shts 6-7)	2	1	1	2	2	0	1	1	1	2	1	14
Option 3 (Sht 6)	1	0	1	1	1	2	1	1	0	1	1	10
Option 4 (Sht 6)	0	2	0	0	1	2	2	2	2	0	0	11
Option 5 (Shts 6-7)	1	2	1	1	0	2	2	2	2	1	1	15

Table 1: Selection Evaluation Matrix

LEGEND
 0 = Low/Poor
 1 = Moderate
 2 = High/Good

D. Route Evaluation

The following section provides an in-depth evaluation of each alternative trail option against the criteria established in this chapter. The evaluation presents a key map, brief trail option description, and detailed listing of trail option attributes relative to the evaluation criteria.

Segment A

This segment (see Figure 5 below), includes the improved portion of the Arroyo Simi Creek Corridor that extends from the Peach Hill Wash confluence near Hitch Boulevard, east to the limits of the existing channel improvements at the rail crossing north of Science Drive (see Figure 4, Arroyo Simi Corridor Trial Segment Map in Chapter 1 for trail segment detail).

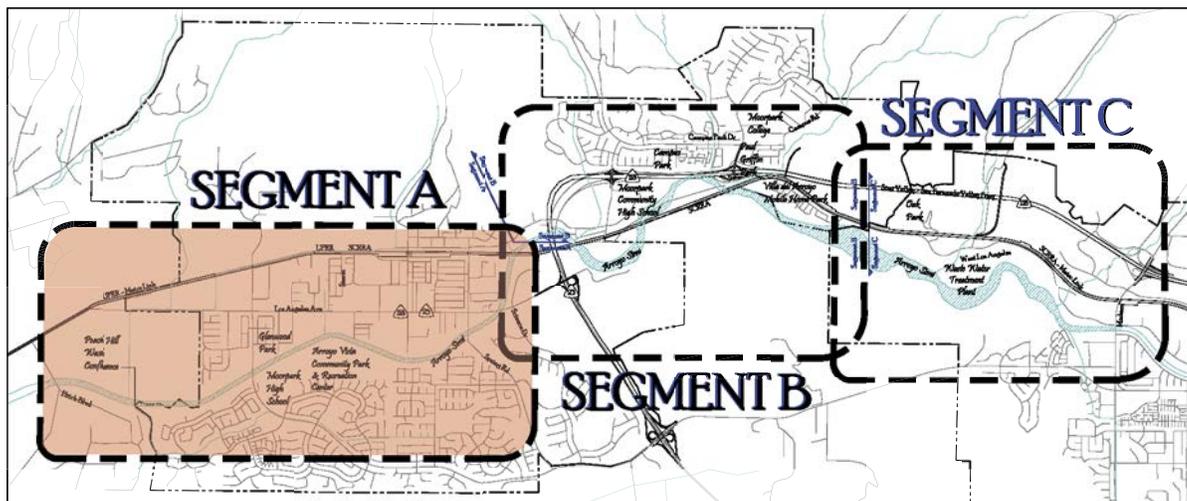
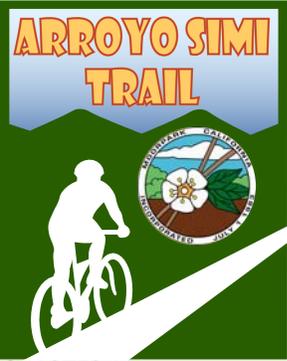


Figure 5: Route Evaluation Segment A

The following alternative route options have been identified in Segment A and are illustrated, along with their associated opportunities and constraints, on the proceeding route evaluation maps, Figures 6-8:

- Option 1A
- Option 2A
- Option 3A
- Option 4A

Detailed evaluations of each trail route option is presented following the route evaluation maps.



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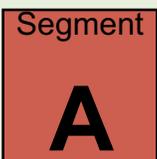
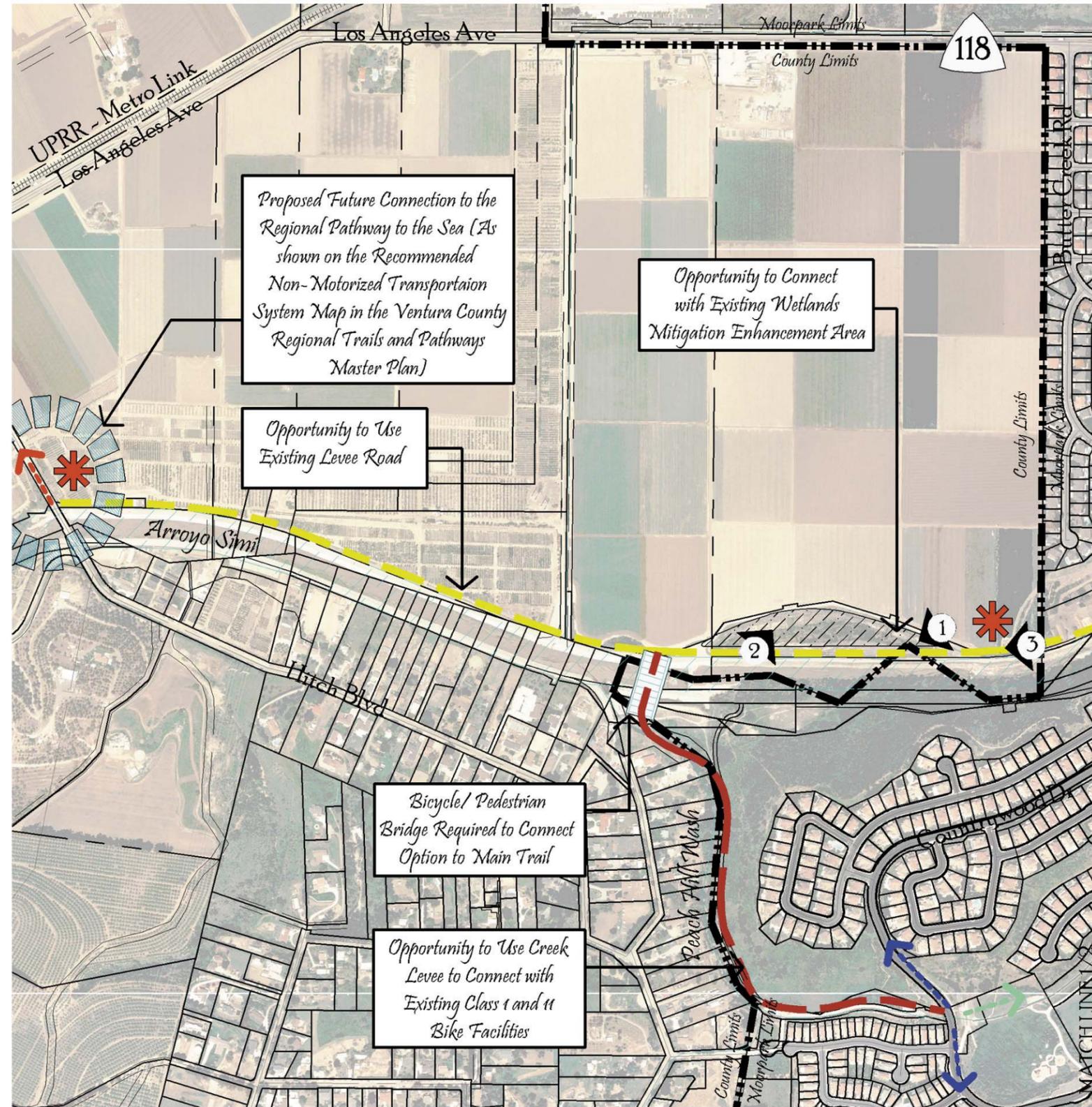


Figure 6: Route Evaluation Map - Segment A, Sheet 1

Legend	
	Existing Class I Connection
	Existing Class II Connection
	Existing Class III Connection
	Proposed Connection to Trail
	Trail Route - Option 1
	Trail Route - Option 2
	Trail Route - Option 3
	Trail Route - Option 4
	Trail Route - Option 5
	Trail Route - Option 6
	Trail Route - Option 7
	Trail Route - Option 8
	Trail Route - Option 9
	Trail Route - Option 10
	Trail Route - Option 11
	Trail Route - Option 12
	Proposed Bridge Under Crossing
	Existing Bridge Under Crossing
	Proposed New Bicycle/Pedestrian Bridge
	Proposed Pier-Supported Deck Structure
	Potential Trail Head/Rest Area/ Staging Facility
	Potential Mid-Block or Controlled Crossing
	Existing Park and Ride
	Existing Signalized Railroad Crossing
	Existing At Grade Railroad Crossing
	Photo Location and Direction
	Connection to Existing Regional Trail or Park
	Proposed Connection to Future Regional Trail



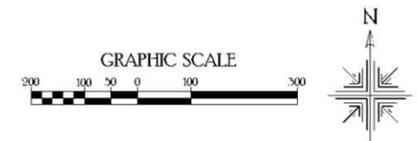
1. View along existing Arroyo Simi maintenance road to the wetlands mitigation area provides opportunity for nature viewing



2. View from existing maintenance road into the wetlands mitigation enhancement area



3. The existing unpaved maintenance road along the Arroyo Simi provides an excellent opportunity for a path

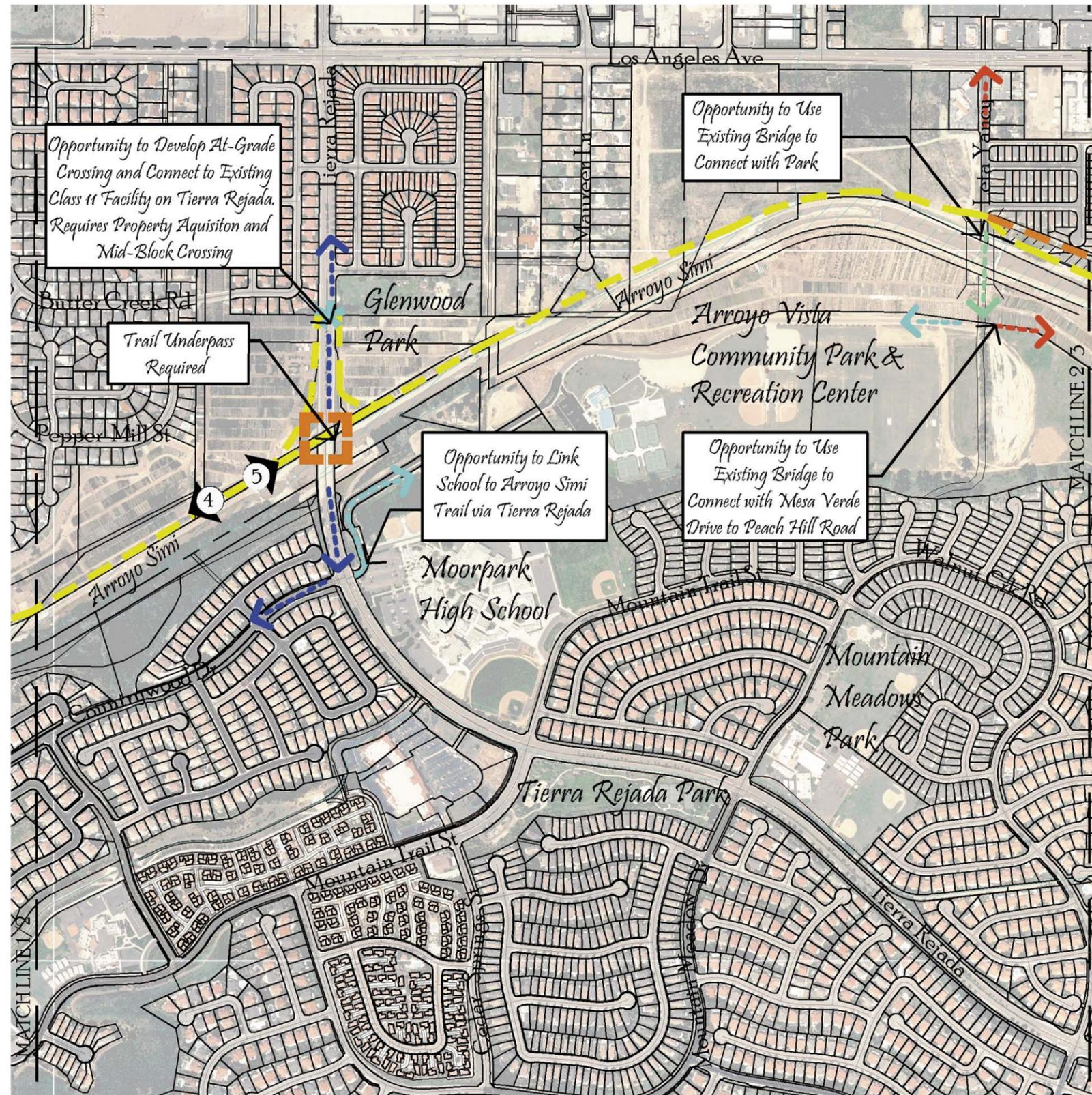
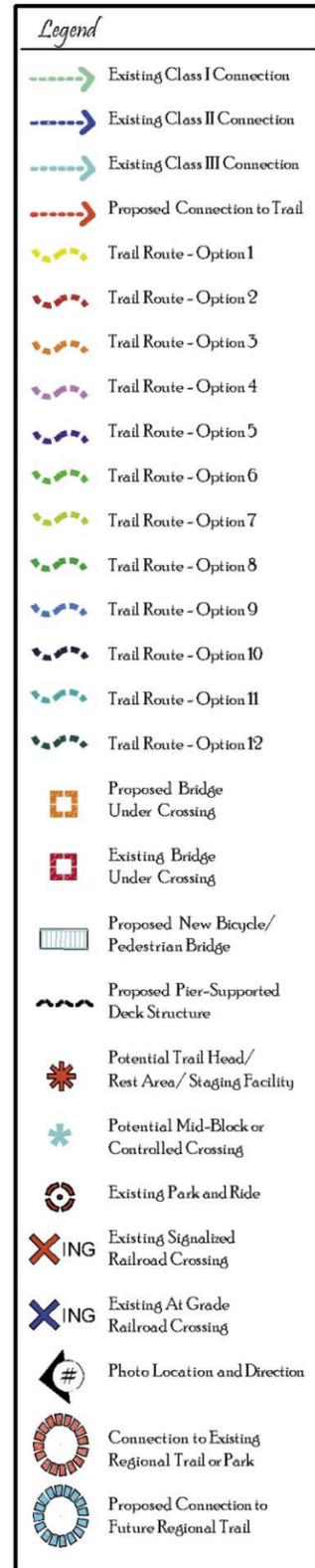


Route Evaluation

Segment A, Sheet 1

Segment
A

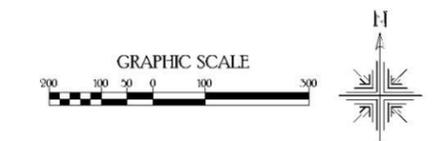
Figure 7: Route Evaluation Map - Segment A, Sheet 2



4. Existing levee maintenance road is already sufficient width for pathway development



5. Looking toward Tierra Rejada Bridge from Arroyo Simi maintenance road. Note limited vertical clearance under bridge.

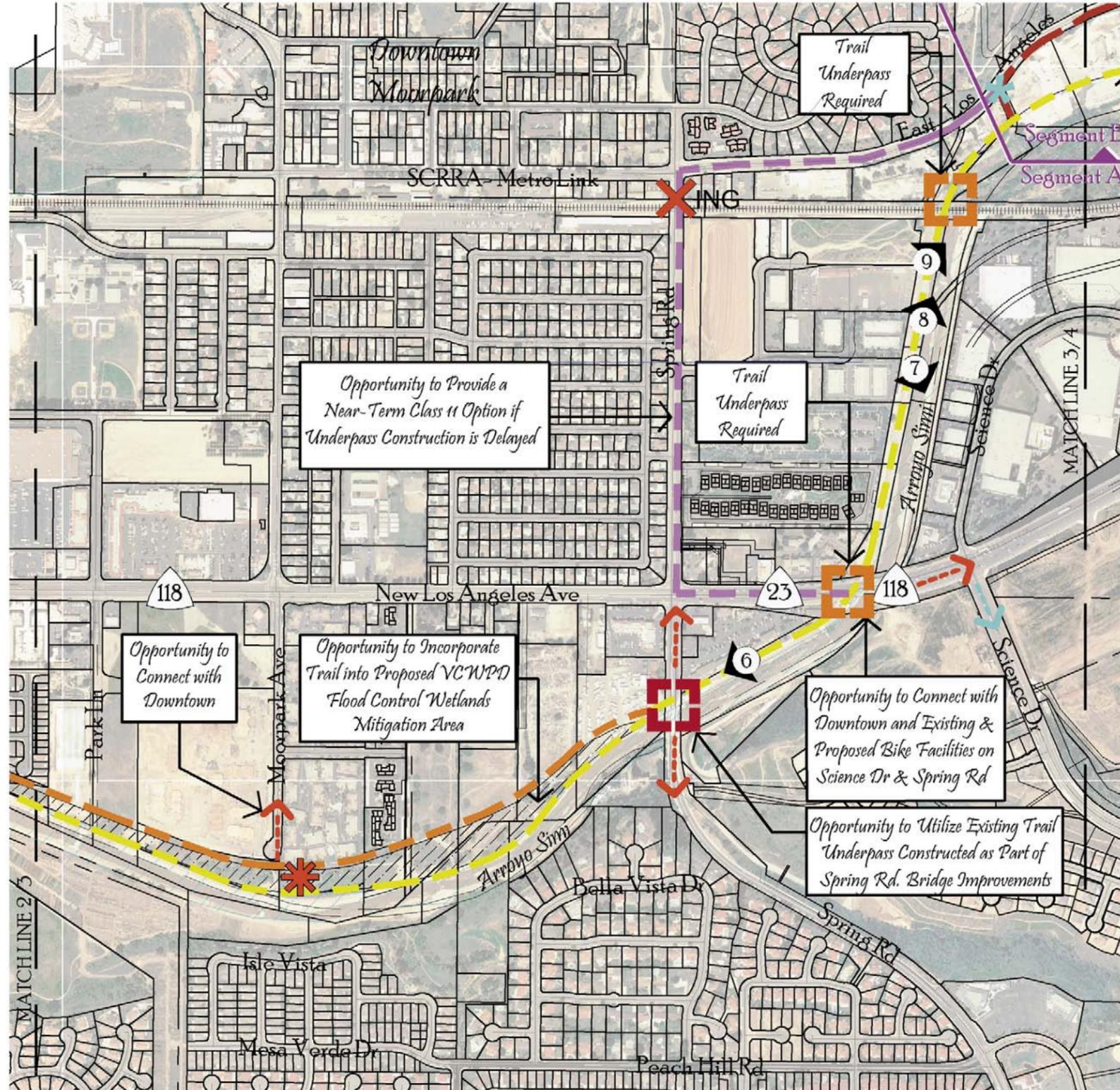


Route Evaluation
Segment A, Sheet 2

Figure 8: Route Evaluation Map - Segment A, Sheet 3

Legend

- Existing Class I Connection
- Existing Class II Connection
- Existing Class III Connection
- Proposed Connection to Trail
- Trail Route - Option 1
- Trail Route - Option 2
- Trail Route - Option 3
- Trail Route - Option 4
- Trail Route - Option 5
- Trail Route - Option 6
- Trail Route - Option 7
- Trail Route - Option 8
- Trail Route - Option 9
- Trail Route - Option 10
- Trail Route - Option 11
- Trail Route - Option 12
- Proposed Bridge Under Crossing
- Existing Bridge Under Crossing
- Proposed New Bicycle/Pedestrian Bridge
- Proposed Pier-Supported Deck Structure
- Potential Trail Head/Rest Area/Staging Facility
- Potential Mid-Block or Controlled Crossing
- Existing Park and Ride
- Existing Signalized Railroad Crossing
- Existing At Grade Railroad Crossing
- Photo Location and Direction
- Connection to Existing Regional Trail or Park
- Proposed Connection to Future Regional Trail



6. View along levee road toward the Spring Road Bridge which has been modified for an under crossing.



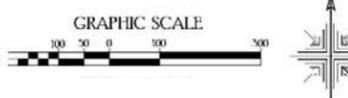
7. View into Arroyo Simi from existing maintenance road



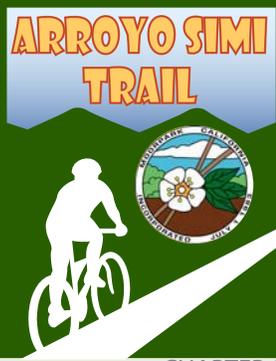
8. Looking toward railroad bridge. Note the adequate vertical clearance to develop an under crossing.



9. The existing railroad bridge requires modification for an under crossing.



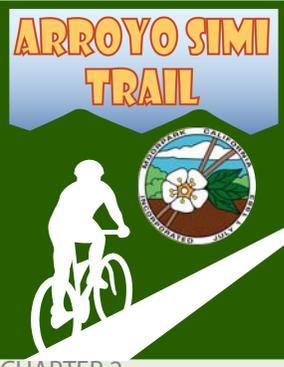
Route Evaluation
Segment A, Sheet 3



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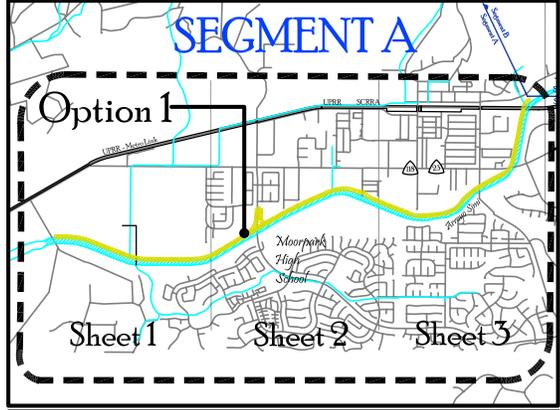
CHAPTER 2
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Segment
A

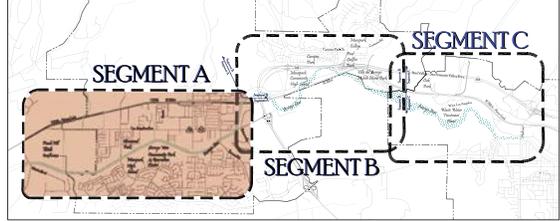


Option 1A - Yellow

This option runs along the north side of the Arroyo Simi primarily along the existing levee roadway. It extends from Hitch Boulevard east to the existing railroad bridge north of Science Drive. This option utilizes an existing bridge under crossing at Spring Road as well as three proposed bridge under crossings at Tierra Rejada, New Los Angeles Avenue and the intersection of the Arroyo Simi and SCRRA railroad. (See Map Sheets 1 through 3).

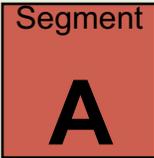


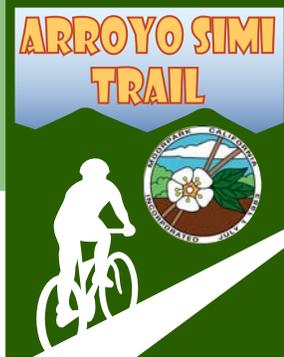
- Facility Class:** I
Length: 21,787 linear feet
Jurisdiction: County of Ventura
 City of Moorpark
 Ventura County Watershed Protection District
 Southern California Regional Rail Authority (SCRRA)
 Caltrans



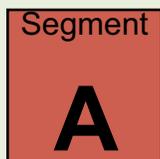
Route Evaluation Criteria:

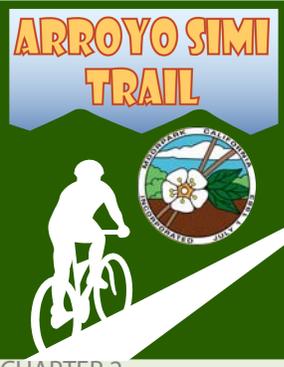
- (1) Potential to minimize and/or avoid environmental impacts**
- Utilizes existing graded Arroyo Simi levee roadway.
 - Requires bridge under crossing construction within creek corridor at Tierra Rejada, New Los Angeles Avenue, and the existing railroad crossing south of New Los Angeles Avenue.
- (2) Potential to maximize consistency with existing plans**
- Option runs adjacent to Arroyo Simi.
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the Management & Restoration Plan for the Arroyo Simi within Moorpark City Limits.
 - Consistent with the Ventura County General Plan.
 - Consistent with the Ventura County Regional Trails & Pathways Master Plan Report.
 - Consistent with the Arroyo Simi Preliminary Design Report.
- (3) Potential for compatibility with adjacent land uses**
- Wetlands Mitigation Enhancement Area buffers trail from adjacent land uses.
- (4) Potential number of environmental permits required**
- Army Corps of Engineers
 - Department of Fish & Game
 - U.S. Fish & Wildlife Service
 - Regional Water Quality Control Board





- (5) Potential to minimize impacts to private property**
 - Requires coordination and easement acquisition with Ventura County Watershed Protection District, SCRRA, and the County of Ventura.
- (6) Potential to maintain a consistent Class I/Multi-use bikeway**
 - Class I facility on Arroyo Simi levee roadway.
- (7) Potential for direct and consistent route**
 - Option runs adjacent to Arroyo Simi.
- (8) Potential to maximize commuter value**
 - Potential connections to Downtown Moorpark and Moorpark High School.
 - Option requires a controlled crossing at the entrance to Glenwood Park on Tierra Rejada.
- (9) Potential to maximize recreational value**
 - Class I facility runs adjacent to Arroyo Simi.
 - Potential connection to Arroyo Vista Community Park and Recreation Center via an existing bridge at Leta Yancy and Glenwood Park.
 - Northern road of existing Wetlands Mitigation Enhancement Area provides additional path and/or overlook area (See Map Sheet 1).
 - Channel modifications and wetlands enhancements proposed from Leta Yancy west to Spring Road (See Map Sheets 2 and 3).
 - Potential Trail Head/Staging Facility areas at Hitch Boulevard, Moorpark Avenue, and west of existing Wetlands Enhancement Area (See Map Sheet 1).
- (10) Potential to minimize construction and maintenance costs**
 - Utilizes existing graded Arroyo Simi levee roadway.
 - Requires bridge under crossing construction within creek corridor at Tierra Rejada, New Los Angeles Avenue, and the existing railroad crossing.
 - Construction could be coordinated with future channel modifications and wetlands mitigation enhancements extending from Leta Yancy west to Spring Road (See Map Sheets 2 and 3).
 - Existing bridge at Tierra Rejada requires significant modifications to accommodate under crossing. Existing ramps could allow for a Class II connection with a safe controlled crossing near Glenwood Park. Class II connection could be utilized until the bridge underpass improvements are completed (See Map Sheet 2).
 - Spring Road underpass is already constructed, and just needs to be cleaned out when Ventura County Watershed Protection District does future improvements.
- (11) Potential for near-term construction**
 - Construction could be coordinated with future channel modifications and wetlands enhancements extending from Leta Yancy west to Spring Road (See Map Sheets 2 and 3). Option 1 could be temporarily constructed in this area with minimum path requirements until the wetlands mitigation enhancement project is complete and Option 3 could be built as the permanent path (See Map Sheets 2 and 3).
 - Requires coordination with SCRRA – Metro Link for under crossing improvements.
 - Potential to coordinate under crossing with proposed SCRRA railroad trestle improvements.

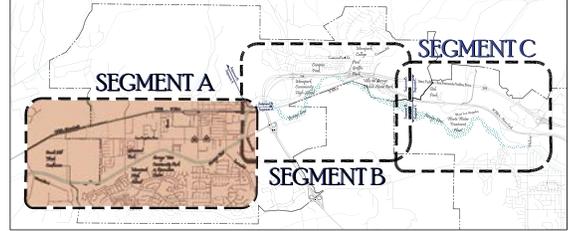
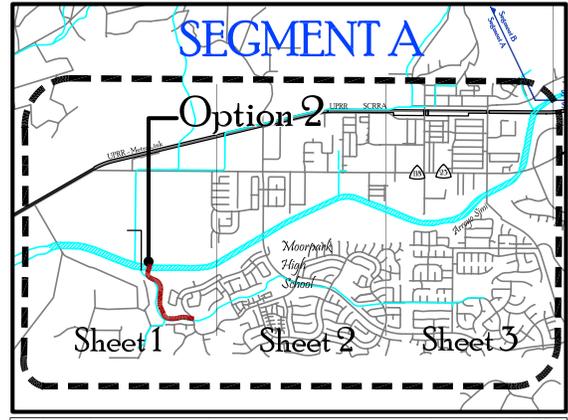




Option 2A - Red

This option crosses the Arroyo Simi via a proposed bridge at the western edge of the existing Wetlands Enhancement Area and runs south along the east side of the existing Peach Hill Wash levee to the limits of the existing Class I and II bikeway connections at Countrywood Drive (See Map Sheet 1).

Facility Class: I
Length: 3,178 linear feet
Jurisdiction: County of Ventura
 City of Moorpark
 Ventura County
 Watershed Protection District



Route Evaluation Criteria:

- (1) **Potential to minimize and/or avoid environmental impacts**
 - Utilizes existing graded Peach Hill Wash levee roadway.
 - Requires bridge construction over Arroyo Simi.

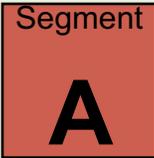
- (2) **Potential to maximize consistency with existing plans**
 - Option runs adjacent to Peach Hill Wash.
 - Potential connection to the City’s Class I and II facilities to the south.
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
 - Consistent with the Ventura County General Plan.

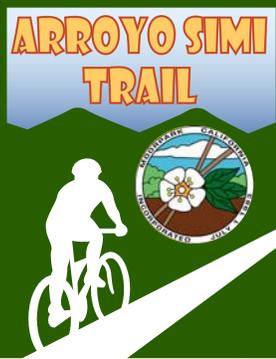
- (3) **Potential for compatibility with adjacent land uses**
 - Potential connection to the City’s Class I and II facility to the south.
 - Provides north/south connection across Arroyo Simi.
 - Open Space buffers trail from adjacent residential land uses.

- (4) **Potential number of environmental permits required**
 - Army Corps of Engineers
 - Department of Fish & Game
 - U.S. Fish & Wildlife Service
 - Regional Water Quality Control Board

- (5) **Potential to minimize impacts to private property**
 - Requires coordination and easement acquisition with Ventura County Watershed Protection District and the County of Ventura.

- (6) **Potential to maintain a consistent Class I/Multi-use bikeway –**
 - Class I facility on Peach Hill Wash levee roadway.
 - Potential to connect Arroyo Simi trail to existing Class I City bikeway.





(7) Potential for direct and consistent route

- Option runs adjacent to Peach Hill Wash.

(8) Potential to maximize commuter value

- Potential connection to the City's Class I and II facilities to the south.

(9) Potential to maximize recreational value

- Class I facility runs adjacent to Peach Hill Wash.

(10) Potential to minimize construction and maintenance costs

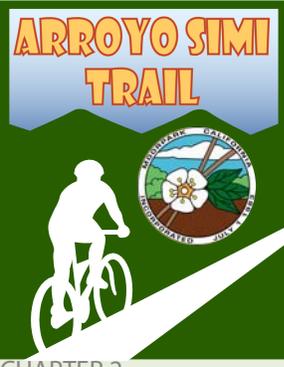
- Utilizes existing graded Peach Hill Wash levee roadway.
- Requires bridge construction over Arroyo Simi.

(11) Potential for near-term construction

- Utilizes existing graded Peach Hill Wash levee roadway.

Segment

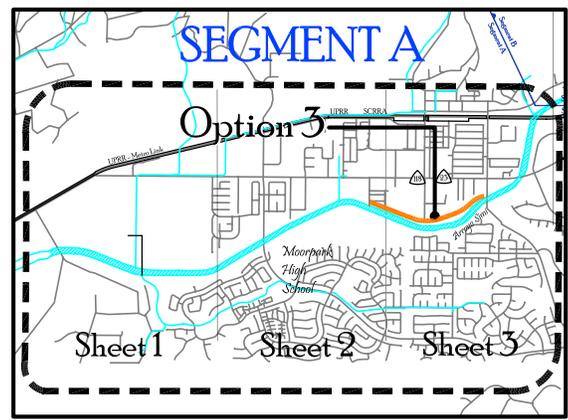
A



Option 3A – Orange

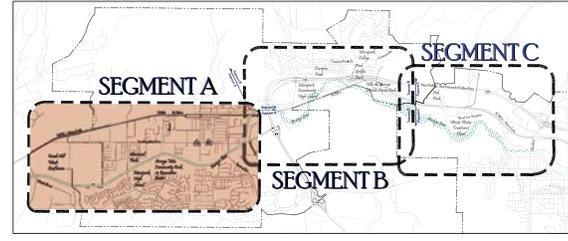
This option runs along the north side of the Proposed Wetlands Mitigation Enhancement Area extending from Leta Yancy east to Spring Road (See Map Sheets 2 and 3).

Facility Class: I
Length: 4,372 linear feet
Jurisdiction: City of Moorpark
 Ventura County
 Watershed Protection
 District



Route Evaluation Criteria:

- (1) Potential to minimize and/or avoid environmental impacts**
- Construction could be coordinated with channel modifications that include a levee roadway and wetlands enhancements.



(2) Potential to maximize consistency with existing plans

- Option runs north of Arroyo Simi adjacent to proposed wetlands enhancement area.
- Consistent with the City of Moorpark General Plan.
- Consistent with the Ventura County General Plan.
- Ventura County Regional Trails & Pathways Master Plan Report
- Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
- Consistent with the Arroyo Simi Preliminary Design Report.

(3) Potential for compatibility with adjacent land uses

- Proposed Wetlands Enhancement Area will buffer the trail to the south.
- Residential uses currently occur north of trail.

(4) Potential number of environmental permits required

- If channel modifications are part of the pathway construction process, permits from all four agencies will be necessary.
- If channel modification is already planned and permitted, no further permits will be needed for path use along existing levee roads.

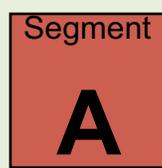
(5) Potential to minimize impacts to private property

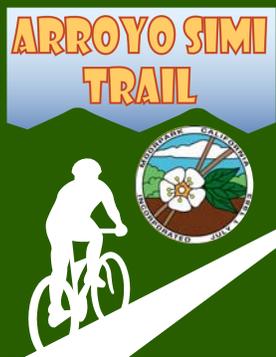
- Requires coordination and easement acquisition with Ventura County Watershed Protection District.

(6) Potential to maintain a consistent Class I/Multi-use bikeway

- Class I facility along the north side of the proposed wetlands enhancement area.

(7) Potential for direct and consistent route





- Option runs north of Arroyo Simi adjacent to proposed wetlands enhancement area.

(8) Potential to maximize commuter value

- Potential connection to Downtown Moorpark at Leta Yancy and Moorpark Avenue.
- Potential connection to Moorpark High School via an existing bridge at Leta Yancy.

(9) Potential to maximize recreational value

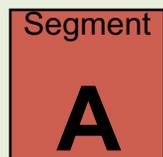
- Proposed wetlands enhancement area provides vista area.
- Potential Trail Head/Staging Facility with overlook area at Moorpark Avenue.
- Potential connection to Arroyo Vista Community Park and Recreation Center via an existing bridge at Leta Yancy.

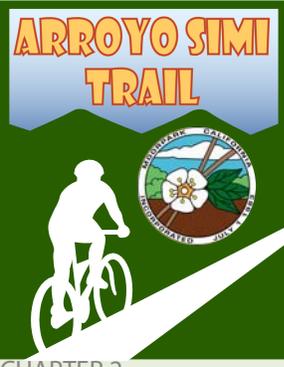
(10) Potential to minimize construction and maintenance costs

- Construction could be coordinated with channel modifications that include a levee roadway and wetlands enhancements extending from Leta Yancy east to Spring Road (See Map Sheets 2 and 3). Option 1 could be temporarily constructed in this area with minimum path requirements until the wetlands enhancement project is complete and Option 3 could be built as the permanent path (See Map Sheets 2 and 3).
- Ventura County Watershed Protection District could coordinate easement and property acquisition with wetlands enhancement.

(11) Potential for near-term construction

- Trail construction could be coordinated with future channel modifications and wetlands enhancements. Option 1 could be temporarily constructed in this area with minimum path requirements until the wetlands enhancement project is complete and Option 3 could be built as the permanent path (See Map Sheets 2 and 3).





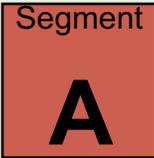
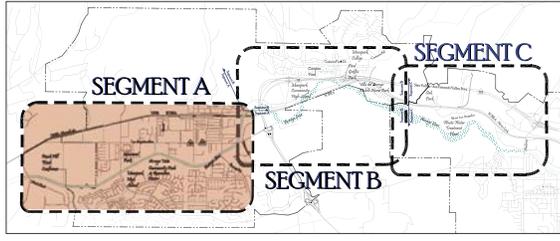
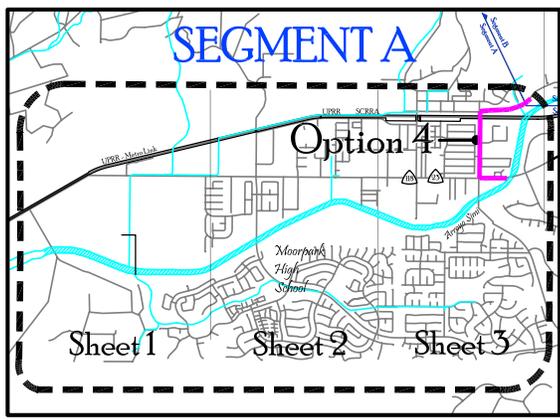
Option 4A – Magenta

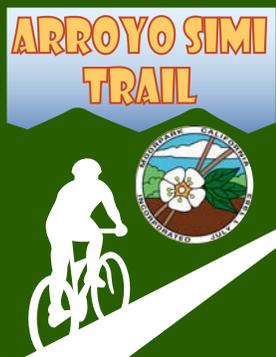
This option begins at the intersection of Spring Road and New Los Angeles Avenue, where it continues north on Spring Road to the intersection of East Los Angeles Avenue. The option then continues east along East Los Angeles Avenue to connect with Option 2B. (See Map Sheet 3).

Facility Class: II
Length: 5,230 linear feet
Jurisdiction: City of Moorpark
 Caltrans

Route Evaluation Criteria:

- (1) **Potential to minimize and/or avoid environmental impacts**
 - Utilizes existing streets.
 - Eliminates bridge under crossing improvements on New Los Angeles Avenue and the railroad bridge on the Arroyo Simi required for Option 1A.
- (2) **Potential to maximize consistency with existing plans**
 - Spring Road widening anticipated July 2004 includes Class II bike lanes.
 - Proposed East Los Angeles Avenue widening includes Class II bike lanes.
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the Ventura County General Plan.
- (3) **Potential for compatibility with adjacent land uses**
 - Potential conflicts with urban uses/streets.
 - Connection to an existing Class III facility on Science Drive.
- (4) **Potential number of environmental permits required**
 - None
- (5) **Potential to minimize impacts to private property**
 - Impacts existing streets.
 - None
- (6) **Potential to maintain a consistent Class I/Multi-use bikeway**
 - Class II facility on Spring Road.
- (7) **Potential for direct and consistent route**
 - Deviates from desired Arroyo Simi route.
- (8) **Potential to maximize commuter value**
 - Potential connection to Downtown Moorpark.
 - Potential connection to an existing Class III facility on Science Drive.





(9) Potential to maximize recreational value

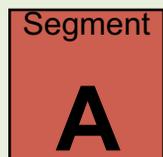
- Potential conflicts with urban uses/streets.

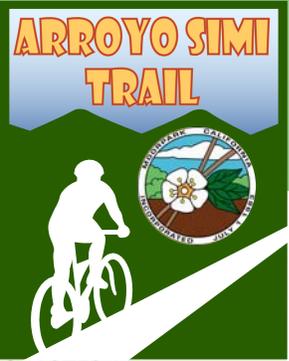
(10) Potential to minimize construction and maintenance costs

- Utilizes existing streets.
- Spring Road widening anticipated July 2004 includes Class II bike lanes.
- Proposed East Los Angeles Avenue widening includes Class II bike lanes.
- Eliminates bridge under crossing improvements on New Los Angeles Avenue and the railroad bridge on the Arroyo Simi (Option 1).

(11) Potential for near-term construction

- Spring Road widening anticipated July 2004 includes Class II bike lanes.
- Proposed East Los Angeles Avenue widening includes Class II bike lanes.
- Eliminates bridge under crossing improvements on New Los Angeles Avenue and the railroad bridge on the Arroyo Simi required for Option 1A.





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Segment
B

Segment B

This segment (See Figure 9 Below) includes the unimproved portion of the Arroyo Simi Creek Corridor that extends from the rail crossing north of Science Drive, east to the Moorpark City Limits just southwest of Oak Park. This segment also includes the northern area of the City of Moorpark that extends south from Campus Park Drive, and west from College Heights Drive east to Campus Road, see Figure 4., Arroyo Simi Corridor Trail Segment Map in Chapter 1.0 for segment trail details.

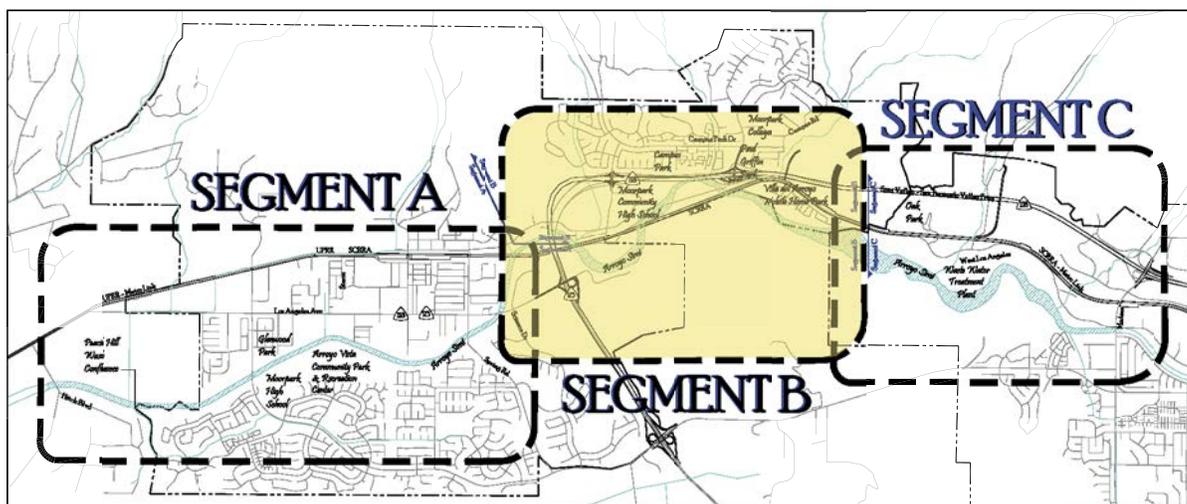
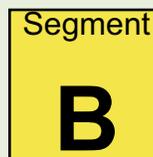


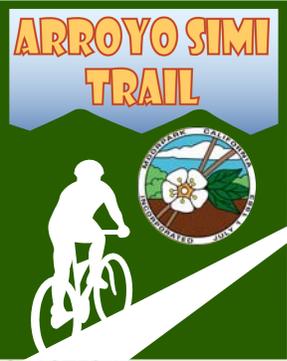
Figure 9: Route Evaluation Segment B

The following alternative route options have been identified in Segment B and are illustrated, along with their associated opportunities and constraints, on the proceeding route evaluation maps, Figures 10 and 11:

- Option 1B
- Option 2B
- Option 3B
- Option 4B
- Option 5B
- Option 6B
- Option 7B
- Option 8B
- Option 9B
- Option 10B
- Option 11B
- Option 12B

Detailed evaluations of each trail route options is presented following the route evaluation maps.





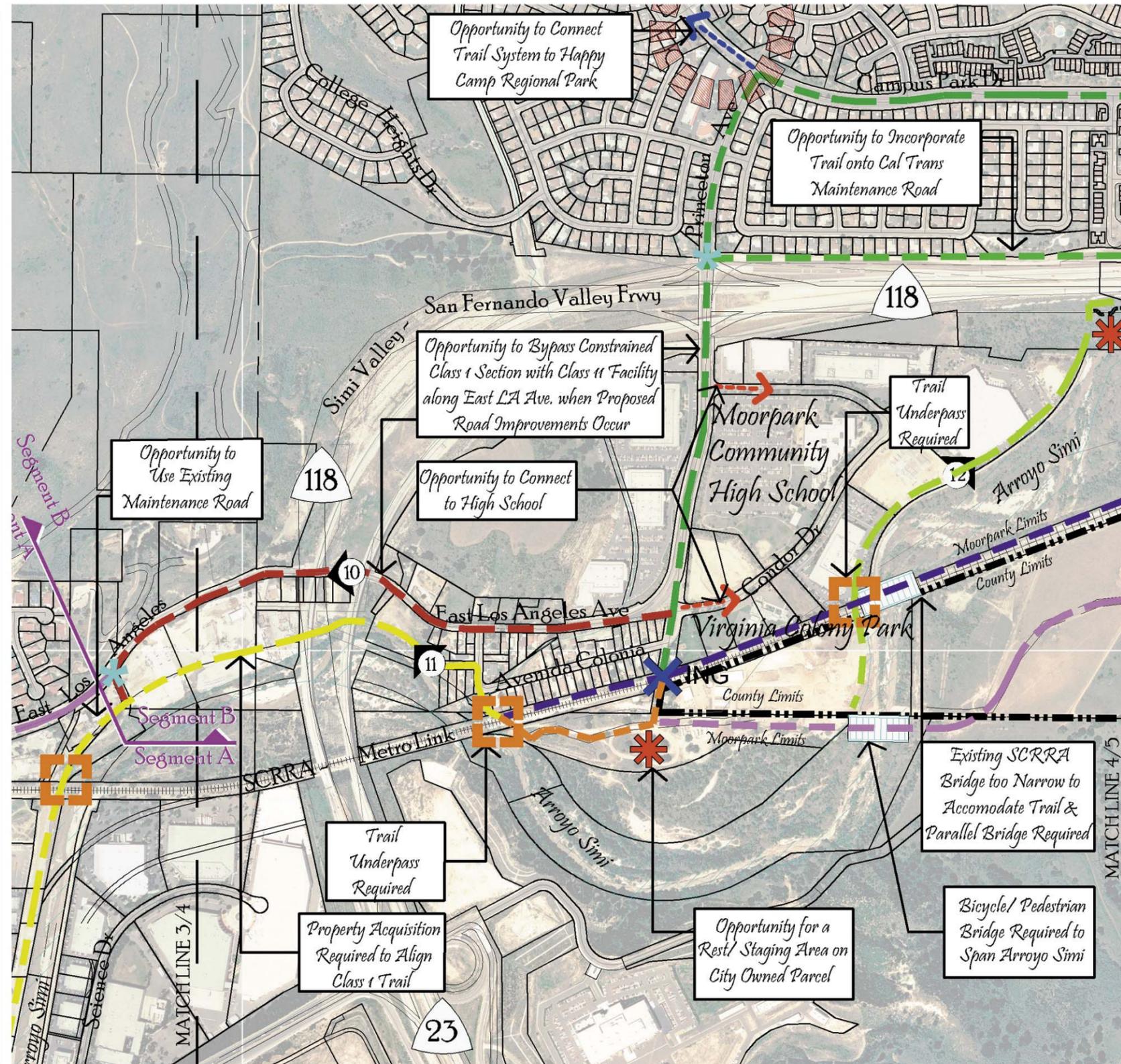
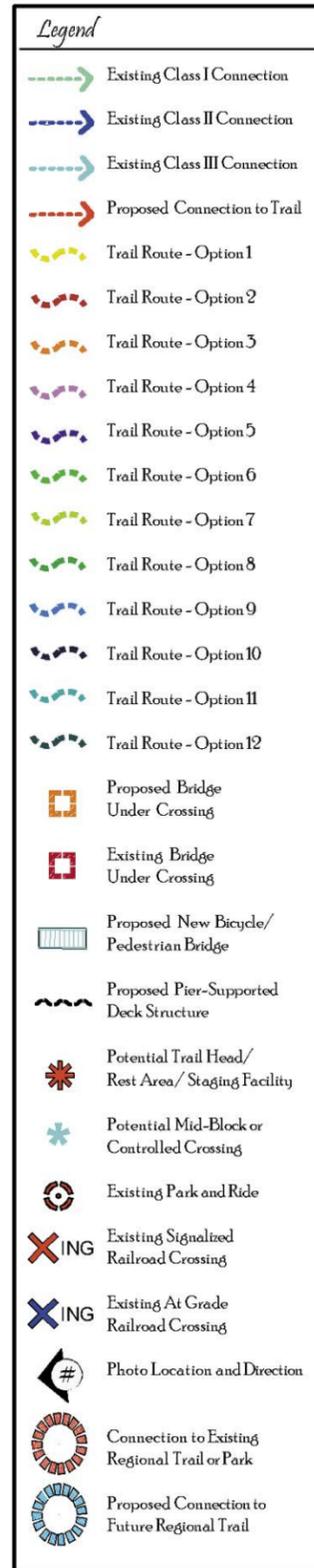
CHAPTER 2
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Evaluation

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Segment

B

Figure 10: Route Evaluation Map - Segment B, Sheet 4



10. View along East Los Angeles Avenue toward Highway 118 Bridge



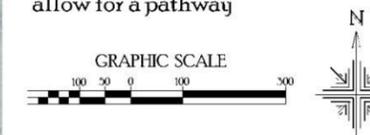
11. Private parcel adjacent to the Arroyo Simi



12. The existing levee road provides an opportunity for a Class I facility

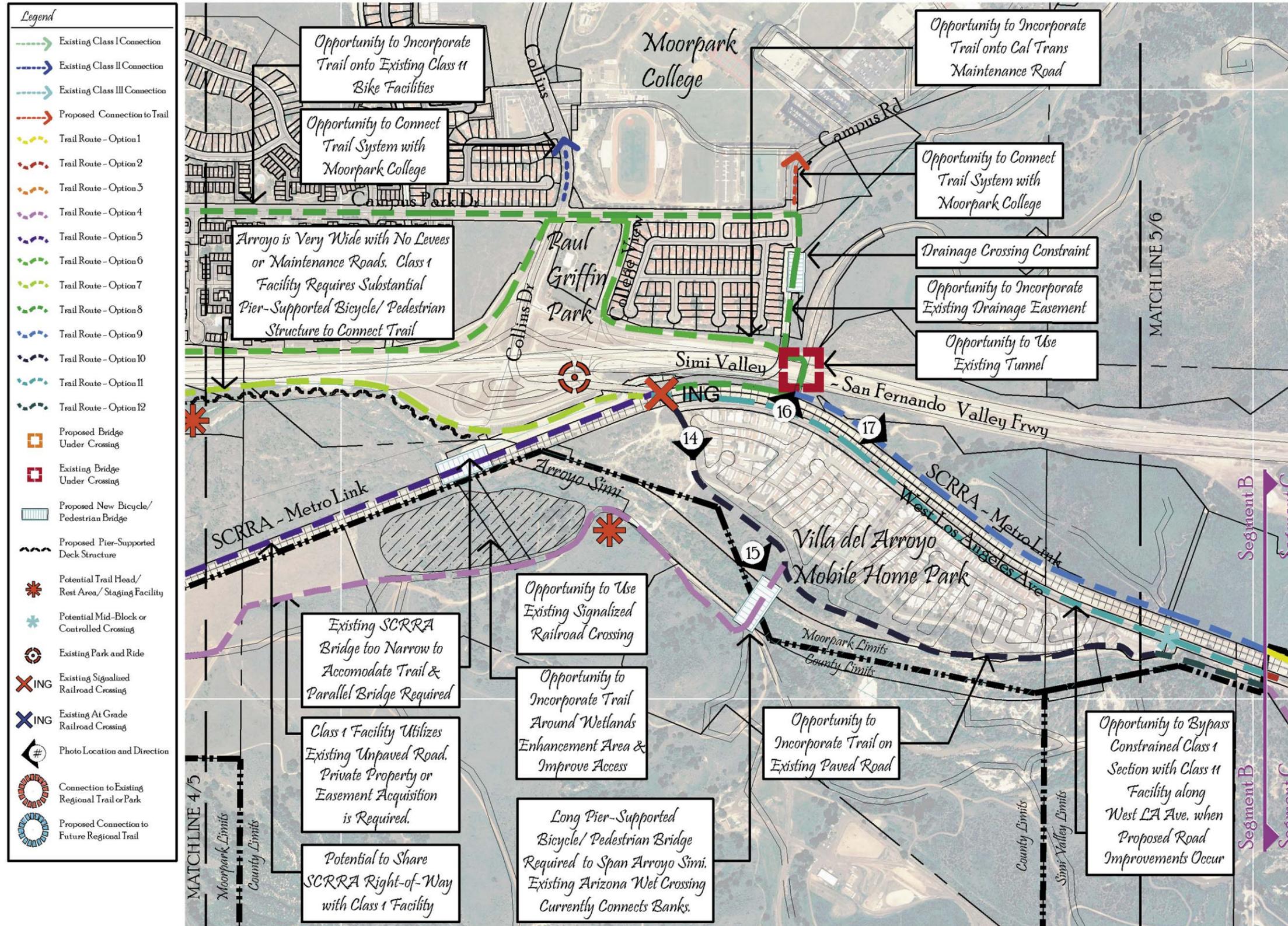


13. The existing SCRRRA railroad right-of-way is wide enough to allow for a pathway



Route Evaluation
Segment B, Sheet 4

Figure 11: Route Evaluation Map - Segment B, Sheet 5



14. Existing paved road provides an opportunity for a pathway



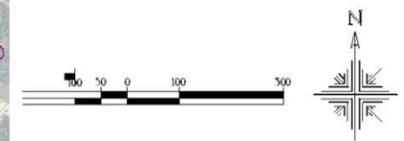
15. The existing Arizona crossing near the mobile home park



16. Existing tunnel under the 118 Freeway was originally built as an equestrian facility, and provides for a safe crossing point

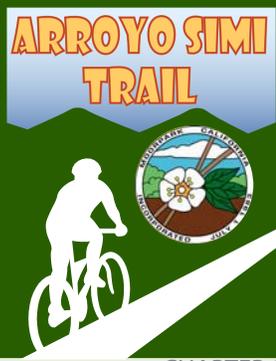


17. SCRRR railroad right-of-way could serve a dual use as a maintenance road and Class I path



Route Evaluation
Segment B, Sheet 5

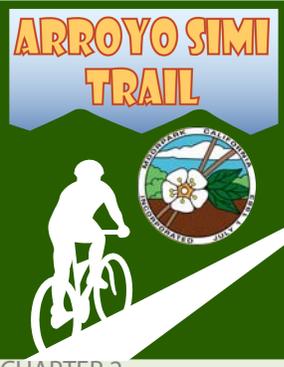
Segment
B



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CHAPTER 2
Route Identification &
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Segment
B



Option 1B - Yellow

This option runs along the north side of the Arroyo Simi from the existing railroad bridge north of Science Drive to Avenida Colonia (Class I). The western portion follows an existing Caltrans maintenance road and continues east running along southern property lines and the Arroyo Simi (Class I) to the alley off Avenida Colonia and then south on Avenida Colonia to the railroad (Class III, See Map Sheet 4).

Facility Class:	I & III
Length:	3,175 linear feet
Jurisdiction:	City of Moorpark Ventura County Watershed Protection District Caltrans

Route Evaluation Criteria:

- (1) Potential to minimize and/or avoid environmental impacts**
 - Utilizes existing Caltrans maintenance road, an alley, and streets.

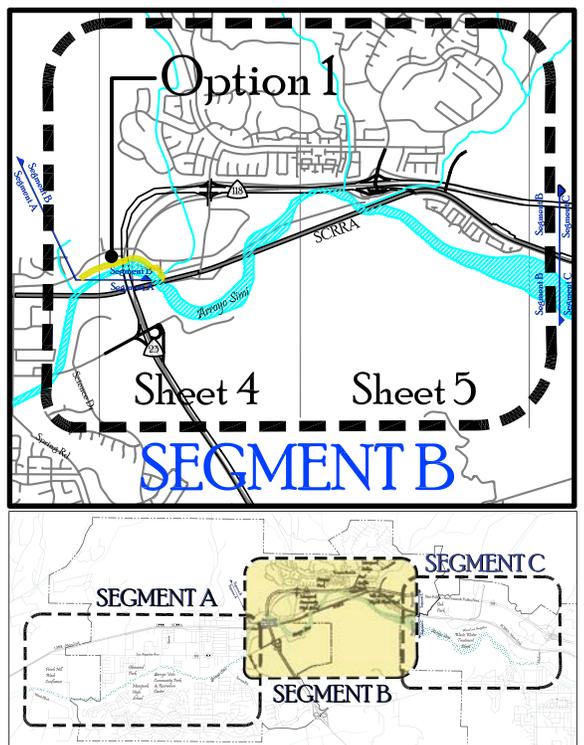
- (2) Potential to maximize consistency with existing plans**
 - Portion of option runs adjacent to Arroyo Simi.
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the Ventura County General Plan.
 - Consistent with the Ventura County Regional Trails & Pathways Master Plan Report.
 - Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
 - Consistent with the Arroyo Simi Preliminary Design Report.

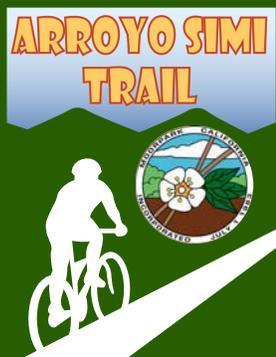
- (3) Potential for compatibility with adjacent land uses**
 - Potential conflicts with urban/industrial land uses.

- (4) Potential number of environmental permits required**
 - None

- (5) Potential to minimize impacts to private property**
 - Requires coordination and easement acquisition with Caltrans and Ventura County Watershed Protection District.
 - Requires coordination and easement and/ or property acquisition with private landowners.
 - Tentative agreement with Caltrans on a shared use of maintenance roads.

- (6) Potential to maintain a consistent Class I/Multi-use bikeway**
 - Majority of trail is a Class I facility on existing Caltrans maintenance road.





- Class III facility on existing streets and alley.

(7) Potential for direct and consistent route

- Majority of option runs adjacent to Arroyo Simi.
- Deviates temporarily from desired Arroyo Simi route.

(8) Potential to maximize commuter value

- Option is a direct pathway with a minimum number of delays.

(9) Potential to maximize recreational value

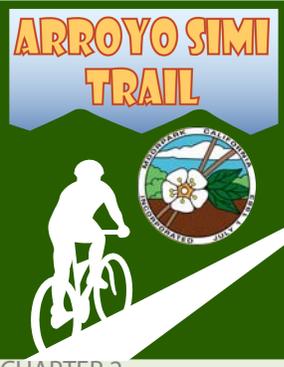
- Potential conflicts with urban/industrial land uses.
- Class I facility runs on existing Caltrans maintenance road and adjacent to the Arroyo Simi.

(10) Potential to minimize construction and maintenance costs

- Construct on existing Caltrans maintenance road.
- Requires coordination and easement and/ or property acquisition with private land owners.
- Construction could be coordinated with future channel modifications.

(11) Potential for near-term construction

- Construction could be coordinated with future channel modifications and wetlands enhancements.
- Requires coordination and easement and/ or property acquisition with private landowners, Ventura County Watershed Protection District, and Caltrans.



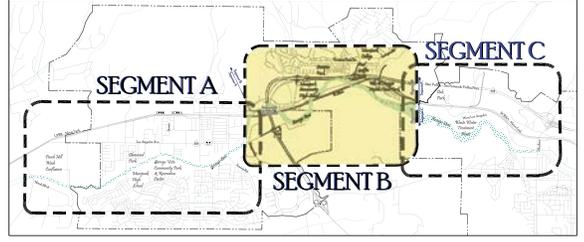
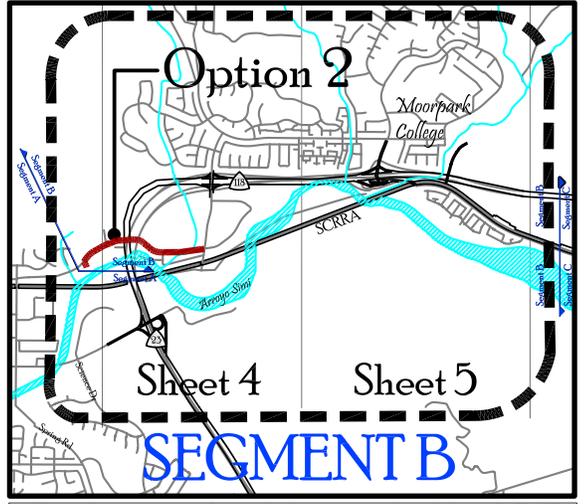
Option 2B - Red

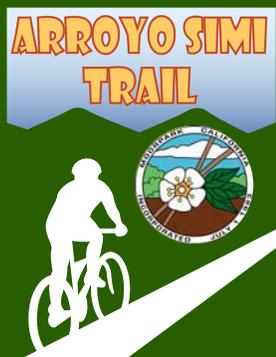
This option runs north along an existing Caltrans maintenance road (Class I) to East Los Angeles Avenue (Class II) where it heads east to Condor Drive (See Map Sheet 4).

Facility Class: I & II
Length: 3,710 linear feet
Jurisdiction: City of Moorpark
 Caltrans

Route Evaluation Criteria:

- (1) **Potential to minimize and/or avoid environmental impacts**
 - Utilizes existing Caltrans maintenance road and existing streets.
- (2) **Potential to maximize consistency with existing plans**
 - Proposed East Los Angeles Avenue widening includes Class II bike lanes.
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the Ventura County General Plan.
- (3) **Potential for compatibility with adjacent land uses**
 - Potential conflicts with urban/industrial uses.
- (4) **Potential number of environmental permits required**
 - None
- (5) **Potential to minimize impacts to private property**
 - Requires coordination and easement acquisition with Caltrans.
 - Tentative agreement with Caltrans on a shared use of maintenance roads
- (6) **Potential to maintain a consistent Class I/Multi-use bikeway**
 - Majority of trail is a Class II facility on East Los Angeles Avenue.
 - Class I facility on existing Caltrans maintenance road.
- (7) **Potential for direct and consistent route**
 - Deviates from desired Arroyo Simi route.
- (8) **Potential to maximize commuter value**
 - Potential connection to Moorpark Community High School.
 - Option requires a controlled crossing at the intersection of the Caltrans maintenance road and East Los Angeles Avenue.
- (9) **Potential to maximize recreational value**





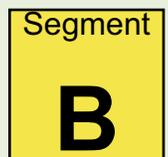
- Potential connection to Virginia Colony Park.
- Potential conflicts with urban uses/streets.
- Portion of trail is a Class I facility on existing Caltrans maintenance road.

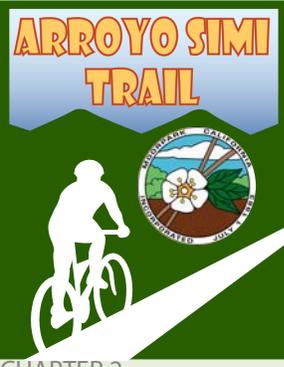
(10) Potential to minimize construction and maintenance costs

- Proposed East Los Angeles Avenue widening includes Class II bike lanes.
- Utilizes existing graded Caltrans maintenance road.

(11) Potential for near-term construction

- Proposed East Los Angeles Avenue widening includes Class II bike lanes.

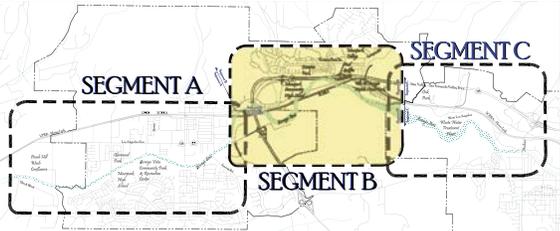
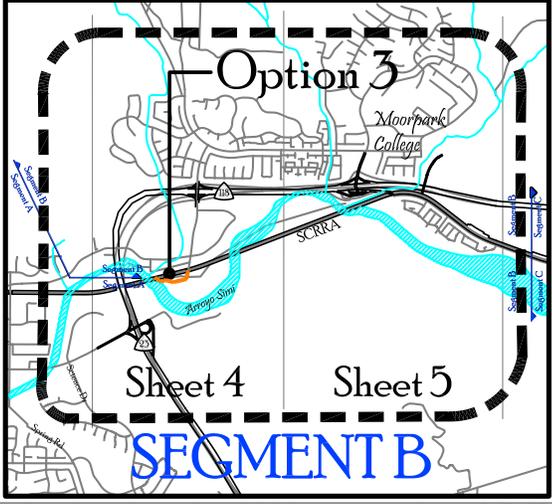




Option 3B – Orange

This option crosses under the existing railroad bridge south of Avenida Colonia, runs east along an existing dirt road and connects to the railroad crossing at the southern terminus of Princeton Avenue (See Map Sheet 4).

Facility Class: I
Length: 1,211 linear feet
Jurisdiction: City of Moorpark
 Ventura County
 Watershed Protection District
 Southern California Regional Rail Authority (SCRRA)



Route Evaluation Criteria:

(1) Potential to minimize and/or avoid environmental impacts

- Utilizes an existing dirt road.
- Requires modification of existing railroad bridge under crossing.

(2) Potential to maximize consistency with existing plans

- Option runs close to Arroyo Simi.
- Option utilizes City owned property.
- Consistent with the City of Moorpark General Plan.
- Consistent with the Ventura County General Plan.
- Consistent with the Ventura County Regional Trails & Pathways Master Plan Report.
- Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
- Consistent with the Arroyo Simi Preliminary Design Report.

(3) Potential for compatibility with adjacent land uses

- Utilizes City land designated as Open Space.

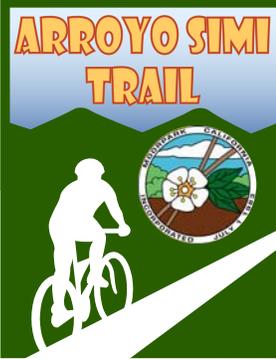
(4) Potential number of environmental permits required

- Army Corps of Engineers
- Department of Fish & Game
- U.S. Fish & Wildlife Service
- Regional Water Quality Control Board

(5) Potential to minimize impacts to private property

- Requires coordination and easement acquisition with Ventura County Watershed Protection District and Southern California Regional Rail Authority (SCRRA).
- Majority of trail is on City owned public property.





(6) Potential to maintain a consistent Class I/Multi-use bikeway

- Class I facility on existing dirt road.

(7) Potential for direct and consistent route

- Option runs close to Arroyo Simi.

(8) Potential to maximize commuter value

- Potential connection to Moorpark Community High School.

(9) Potential to maximize recreational value

- Potential connection Virginia Colony Park.
- Potential trailhead/staging facility on City owned property south of Avenida Colonia.
- Class I facility on existing dirt road.

(10) Potential to minimize construction and maintenance costs

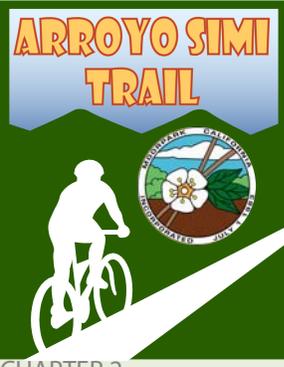
- Class I facility on existing dirt road.
- Requires modification of existing railroad bridge under crossing.
- Potential to coordinate under crossing with proposed SCRRA railroad trestle improvements.

(11) Potential for near-term construction

- Requires modification of existing railroad bridge under crossing.
- Construction could be coordinated with future channel modifications.
- Requires coordination with SCRRA – Metro Link for under crossing improvements.
- Potential to coordinate under crossing with proposed SCRRA railroad trestle improvements.
- Option utilizes City owned property.

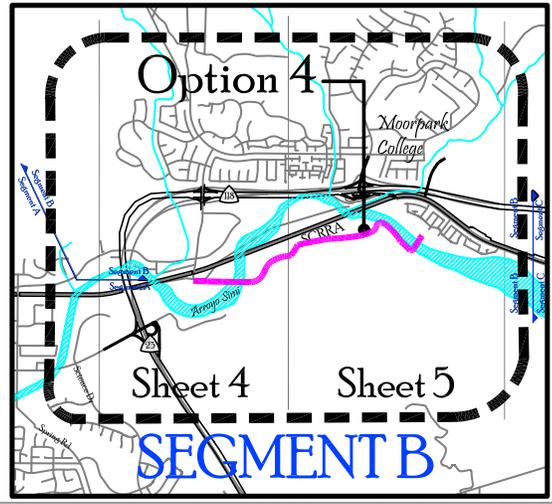
Segment

B

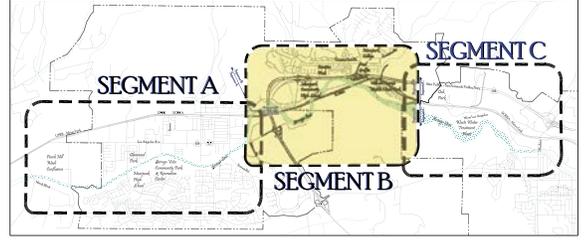


Option 4 B- Magenta

This option begins where the City Limit Line intersects the southern terminus of Princeton Avenue, south of the existing at grade railroad crossing. The option heads east crossing the Arroyo Simi via a proposed bridge, follows the City Limits Line to an existing dirt road on private property in the County of Ventura. The option continues east running south of the existing Wetlands Enhancement Area and railroad, until it crosses the Arroyo Simi via a proposed bridge and connects with the Villa del Arroyo Mobile Home Park (See Map Sheets 4 and 5).



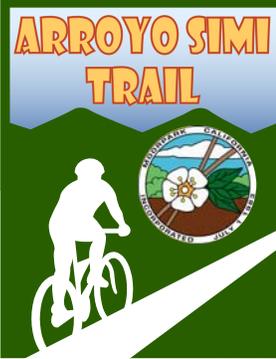
Facility Class:	I
Length:	7,712 linear feet
Jurisdiction:	City of Moorpark County of Ventura Ventura County Watershed Protection District



Route Evaluation Criteria:

- (1) **Potential to minimize and/or avoid environmental impacts**
 - Utilizes an existing dirt road.
 - Requires construction of two bridges over the Arroyo Simi.
- (2) **Potential to maximize consistency with existing plans**
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the Ventura County General Plan.
 - Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
- (3) **Potential for compatibility with adjacent land uses**
 - Option is located on privately owned property currently zoned as open space.
- (4) **Potential number of environmental permits required**
 - Army Corps of Engineers
 - Department of Fish & Game
 - U.S. Fish & Wildlife Service
 - Regional Water Quality Control Board
- (5) **Potential to minimize impacts to private property**
 - Requires coordination and easement acquisition with Ventura County Watershed Protection District, Ventura County and private property owners.
- (6) **Potential to maintain a consistent Class I/Multi-use bikeway**
 - Class I facility south of the Arroyo Simi.





(7) Potential for direct and consistent route

- Class I facility south of the Arroyo Simi.

(8) Potential to maximize commuter value

- Requires connection to Option 10B south of the Villa del Arroyo Mobile Home Park.
- Potential connection to existing Wetlands Enhancement Area.

(9) Potential to maximize recreational value

- Potential Trail Head/Staging Facility southeast of the existing Wetlands Enhancement Area.
- Class I facility south of the Arroyo Simi on open space parcel.
- Option provides additional access, path and/or overlook area to the existing Wetlands Enhancement Area.

(10) Potential to minimize construction and maintenance costs

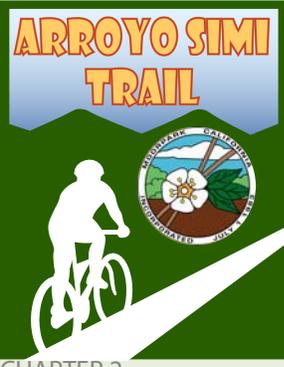
- Requires construction of two bridges over the Arroyo Simi.
- Construction could be coordinated with future channel modifications.
- Potential for a shared use agreement with City and County along with Ventura County Watershed Protection District for a combination of pathway and maintenance road.
- Requires property and/ or easement acquisition with private property owners.

(11) Potential for near-term construction

- Requires construction of two bridges.
- Requires coordination and easement acquisition with County of Ventura and private property owners.

Segment

B



Option 5B – Purple

This option begins at the existing railroad bridge south of Avenida Colonia and runs east along the north side of the existing railroad. It crosses the Arroyo Simi via a bridge proposed east of Virginia Colony Park and again north of the Wetlands Enhancement Area. The option terminates at the existing at-grade railroad crossing northwest of the Villa del Arroyo Mobile Home Park. (See Map Sheets 4 and 5).

Facility Class: I
Length: 6,977 linear feet
Jurisdiction: City of Moorpark
 Southern California Regional Rail Authority (SCRRA)

Route Evaluation Criteria:

(1) Potential to minimize and/or avoid environmental impacts

- Utilizes existing roadway along the SCRRA – Metro Link.
- Requires construction of two parallel bridge structures over the Arroyo Simi.
- Existing railroad suffers seasonal flooding.

(2) Potential to maximize consistency with existing plans

- Deviates from desired Arroyo Simi route.
- Consistent with the Ventura County General Plan.

(3) Potential for compatibility with adjacent land uses

- Potential conflicts with railroad operations.
- Potential conflicts with railroad right of way.

(4) Potential number of environmental permits required

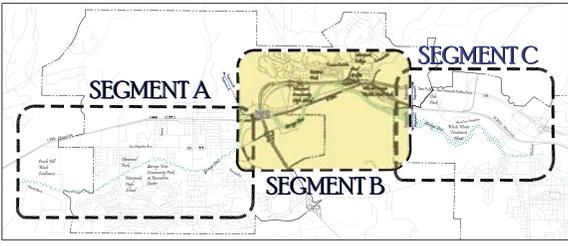
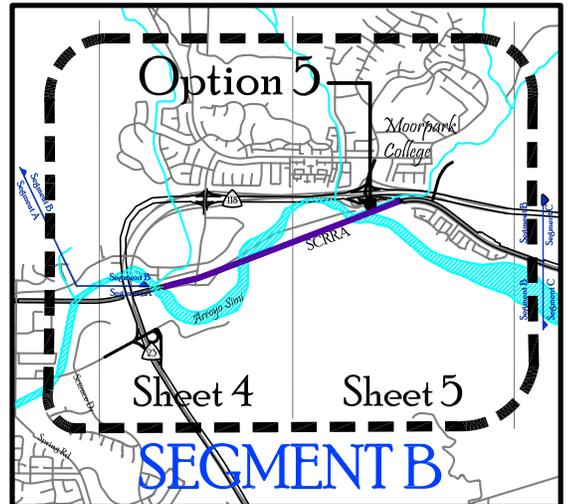
- If impacts to jurisdictional areas are required as part of the bikeway bridge construction process, permits from all four agencies will be necessary.
- If bridge construction is already planned and permitted as part of proposed railroad improvements, or if the pathway can be placed on an existing bridge out of jurisdiction, no further permits will be needed for path use.

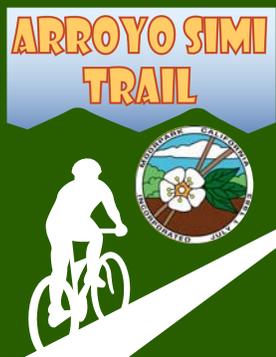
(5) Potential to minimize impacts to private property

- Requires lengthy coordination and easement acquisition process with SCRRA – Metro Link.

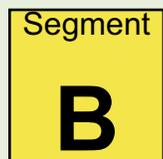
(6) Potential to maintain a consistent Class I/Multi-use bikeway

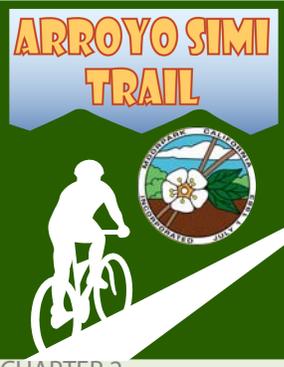
- Class I facility along existing SCRRA – Metro Link.





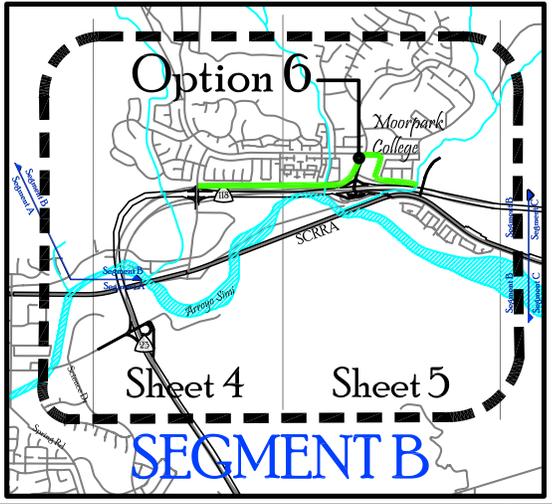
- Option utilizes the “Rails-with-Trails” concept.
- (7) Potential for direct and consistent route**
 - Deviates from desired Arroyo Simi route.
- (8) Potential to maximize commuter value**
 - Potential connections to on-street bike lanes at existing at grade railroad crossings.
- (9) Potential to maximize recreational value**
 - Class I facility along existing SCRRA – Metro Link.
- (10) Potential to minimize construction and maintenance costs**
 - Utilizes existing roadway along the SCRRA – Metro Link.
 - Requires construction of two parallel bridge structures.
- (11) Potential for near-term construction**
 - Potentially conflicts with railroad future expansion plans.
 - Requires construction of two parallel bridge structures.
 - Requires coordination with SCRRA – Metro Link



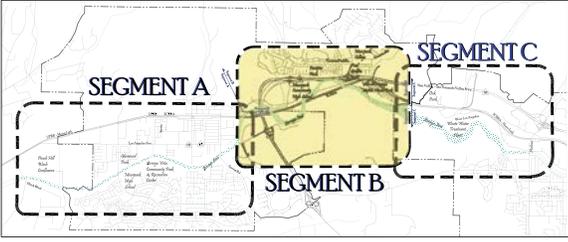


Option 6B – Green

This option begins where Princeton Avenue intersects with an existing Caltrans maintenance road north of the 118 Freeway. The option follows the maintenance road east to Collins Drive, then heads north to Campus Park Drive (Class I) and follows Campus Park Drive east to Paul Griffin Park (Class II). It continues south along College View Avenue to its terminus (Class III) where it follows another Caltrans Maintenance Road east to an existing drainage easement (Class I, See Map Sheets 4 and 5).



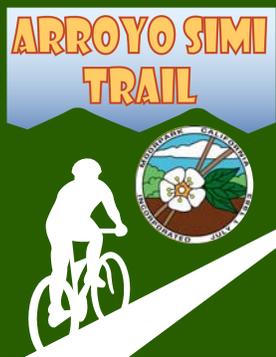
Facility Class: I, II & III
Length: 7,502 linear feet
Jurisdiction: City of Moorpark
 Caltrans



Route Evaluation Criteria:

- (1) **Potential to minimize and/or avoid environmental impacts**
 - Utilizes existing Caltrans maintenance road, existing drainage easement and existing streets.
- (2) **Potential to maximize consistency with existing plans**
 - Deviates from desired Arroyo Simi route.
 - Consistent with the Ventura County General Plan.
- (3) **Potential for compatibility with adjacent land uses**
 - Potential conflicts with urban uses/streets.
- (4) **Potential number of environmental permits required**
 - None
- (5) **Potential to minimize impacts to private property**
 - Requires coordination and easement acquisition with Caltrans.
 - Tentative agreement with Caltrans on a shared use of maintenance roads.
- (6) **Potential to maintain a consistent Class I/Multi-use bikeway**
 - Majority of trail is a Class I facility on existing Caltrans maintenance roads.
 - Class II and III facilities on existing roads.
- (7) **Potential for direct and consistent route**
 - Deviates from desired Arroyo Simi route.
- (8) **Potential to maximize commuter value**
 - Option requires a controlled crossing at the intersection of the Caltrans maintenance road





and Princeton Avenue.

- Option is a direct pathway with a minimum number of delays, and connections to on-street bike lanes.

(9) Potential to maximize recreational value

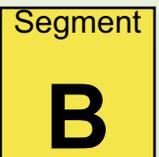
- Potential connection to Paul Griffin Park.
- Class II and III facilities on existing roads.
- Majority of trail is a Class I facility on existing Caltrans maintenance roads adjacent to the 118 Freeway.

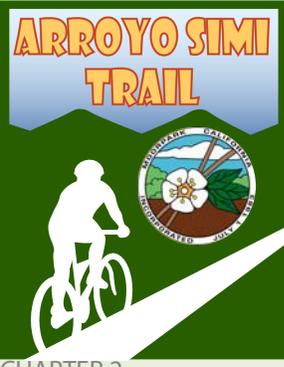
(10) Potential to minimize construction and maintenance costs

- Utilizes existing Caltrans maintenance roads.
- Utilizes Class II and III facilities on existing roads.

(11) Potential for near-term construction

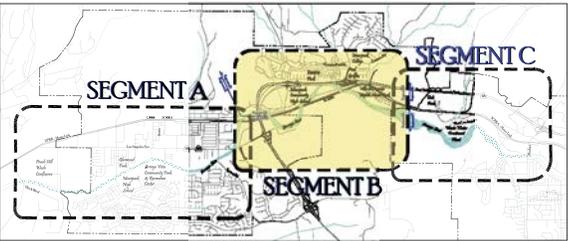
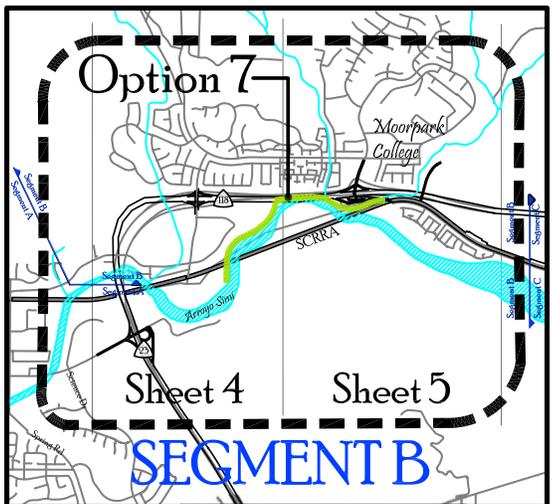
- Requires coordination and easement acquisition with Caltrans.
- Utilizes Class II and III facilities on existing roads.





Option 7B - Chartreuse

This option begins at the intersection of the City Limit Line and the Arroyo Simi. The option crosses the City Limits Line and follows the Arroyo Simi north intersecting with the railroad east of Condor Drive at a proposed bridge under crossing. It crosses under the railroad tracks and follows the existing Arroyo Simi levee roadway to the 118 Freeway. The option runs east along the Freeway and across steep terrain requiring construction of a pier-supported deck structure to an existing maintenance road south of Collins Drive. The option continues along the maintenance road to the existing railroad crossing northwest of Villa del Arroyo Mobile Home Park (See Map Sheets 4 and 5).



Facility Class:	I
Length:	6,169 linear feet
Jurisdiction:	City of Moorpark County of Ventura Ventura County Watershed Protection District Southern California Regional Rail Authority (SCRRA) Caltrans

Route Evaluation Criteria:

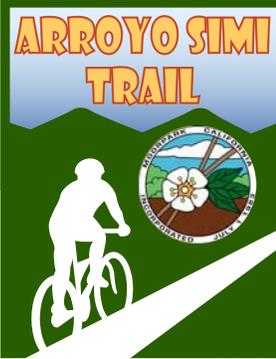
- (1) **Potential to minimize and/or avoid environmental impacts**
 - Utilizes existing graded Arroyo Simi levee roadway.
 - Requires bridge under crossing under the railroad tracks at the existing railroad bridge.
 - Requires pier-supported deck structure across steep terrain along the Freeway.

- (2) **Potential to maximize consistency with existing plans**
 - Option runs adjacent to Arroyo Simi.
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the Ventura County General Plan.
 - Consistent with the Ventura County Regional Trails & Pathways Master Plan Report.
 - Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
 - Consistent with the Arroyo Simi Preliminary Design Report.

- (3) **Potential for compatibility with adjacent land uses**
 - Potential conflicts with urban uses/Freeway 118.

- (4) **Potential number of environmental permits required**
 - Army Corps of Engineers
 - Department of Fish & Game
 - U.S. Fish & Wildlife Service

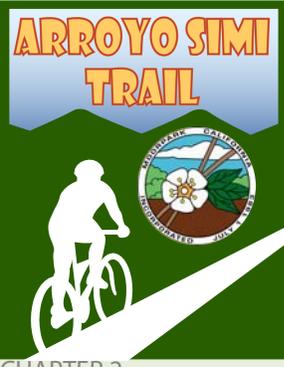




- Regional Water Quality Control Board
- (5) Potential to minimize impacts to private property**
- Requires coordination and easement acquisition with Caltrans, Ventura County Watershed Protection District, Southern California Regional Rail Authority (SCRRA), and the County of Ventura.
- (6) Potential to maintain a consistent Class I/Multi-use bikeway**
- Class I facility adjacent to the Arroyo Simi.
- (7) Potential for direct and consistent route**
- Potential connection to on-street bike lanes at existing at grade railroad crossing.
- (8) Potential to maximize commuter value**
- Option runs adjacent to the Arroyo Simi.
- (9) Potential to maximize recreational value**
- Potential Trail Head/Staging Facility area northeast of Moorpark Community High School (See Map Sheet 4).
 - Potential conflicts with urban uses/Freeway 118.
- (10) Potential to minimize construction and maintenance costs**
- Portion of the trail utilizes existing graded Arroyo Simi levee roadway.
 - Construction could be coordinated with future channel modifications and wetlands enhancements.
 - Requires pier-supported deck structure across steep terrain along the Freeway.
 - Requires modification of existing railroad bridge under crossing.
 - Potential to coordinate under crossing with proposed SCRRA railroad trestle improvements.
- (11) Potential for near-term construction**
- Construction could be coordinated with future channel modifications and wetlands enhancements.
 - Requires pier-supported deck structure across steep terrain along the Freeway.
 - Requires modification of existing railroad bridge under crossing.
 - Requires coordination with SCRRA – Metro Link for under crossing improvements.
 - Potential to coordinate under crossing with proposed SCRRA railroad trestle improvements.

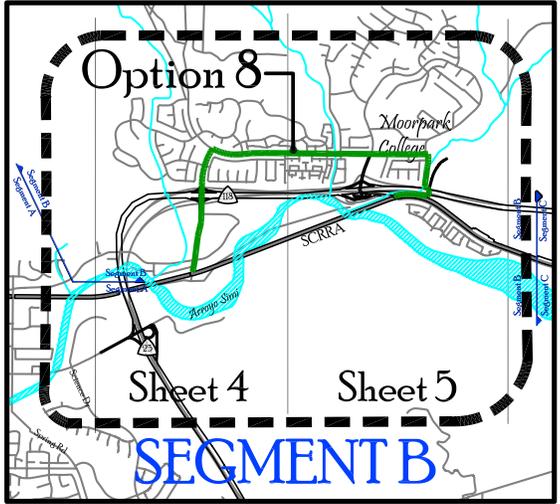
Segment

B

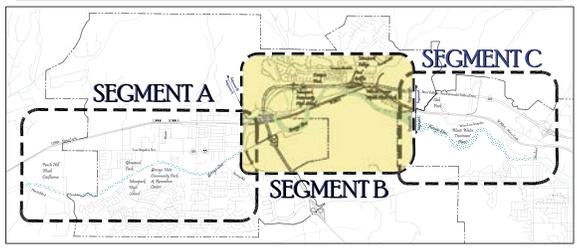


Option 8B – Dark Green

This option begins at the intersection of Princeton Avenue and the SCRRA - Metro Link. It extends north along Princeton Avenue to Campus Park Drive utilizing existing Class II bike facilities and extending east to Campus Road. At Campus Road, the option heads south along an existing drainage easement to an existing Caltrans tunnel that crosses under the 118 Freeway and runs west along the SCRRA – Metro Link to an existing at grade railroad crossing (Class I, See Map Sheets 4 and 5).



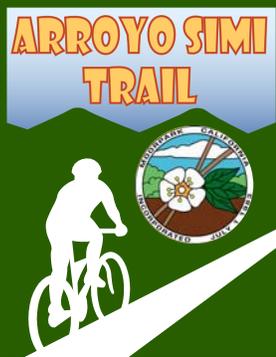
- Facility Class:** I & II
- Length:** 11,814 linear feet (5,767 linear feet proposed; 6,047 linear feet existing)
- Jurisdiction:** City of Moorpark
Southern California Regional Rail Authority (SCRRA)
Ventura County Watershed Protection District Caltrans



Route Evaluation Criteria:

- (1) Potential to minimize and/or avoid environmental impacts**
 - Utilizes existing Ventura County Watershed Protection District drainage easement, Caltrans tunnel and existing streets.
 - Requires bridge construction over drainage channel.
- (2) Potential to maximize consistency with existing plans**
 - Utilizes existing Class II bike facilities on Campus Park Drive.
 - Deviates from Arroyo Simi route.
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the Ventura County General Plan.
- (3) Potential for compatibility with adjacent land uses**
 - Potential conflicts with urban uses/streets.
 - Potential conflicts with railroad right of way.
- (4) Potential number of environmental permits required**
 - None, if no bridge is required.
 - If a bridge is required, a clear span bridge is proposed to avoid potentially jurisdictional areas.
- (5) Potential to minimize impacts to private property**
 - Requires lengthy coordination and easement acquisition process with SCRRA – Metro





Link, Caltrans, and Ventura County Watershed Protection District.

(6) Potential to maintain a consistent Class I/Multi-use bikeway

- Majority of trail is a Class II facility on existing roads.
- Small portion of trail is a Class I facility on the existing drainage easement.
- Utilizes existing Class I Caltrans tunnel for a freeway under crossing.
- Small portion of trail utilizes the “Rails-to-Trails” concept.

(7) Potential for direct and consistent route

- Deviates from desired Arroyo Simi route.

(8) Potential to maximize commuter value

- Potential connections to Moorpark College, and Moorpark Community High School.
- On-street bike lane connections.

(9) Potential to maximize recreational value

- Class II facility on existing roads.
- Class I facility on existing drainage easement.
- Potential connections to Happy Camp Regional Park, Virginia Colony Park, and Paul Griffin Park.

(10) Potential to minimize construction and maintenance costs

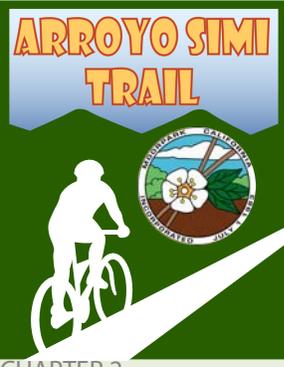
- Proposed Class II facility on existing roads.
- Utilizes existing Class II bike facilities on Campus Park Drive.
- Proposed East Los Angeles Avenue widening includes Class II bike lanes.
- Requires bridge construction across existing drainage way.
- Tunnel under the 118 Freeway would require improvements in order for Caltrans to approve bicycle and pedestrian uses.

(11) Potential for near-term construction

- Potential conflicts with railroad future expansion plans.
- Utilizes existing roads.
- Proposed East Los Angeles Avenue widening includes Class II bike lanes.
- Requires construction of a bridge across existing drainage way.
- Potential conflicts with railroad future expansion plans.
- Requires lengthy coordination and easement acquisition process with SCRRA – Metro Link, Caltrans, and Ventura County Watershed Protection District.

Segment

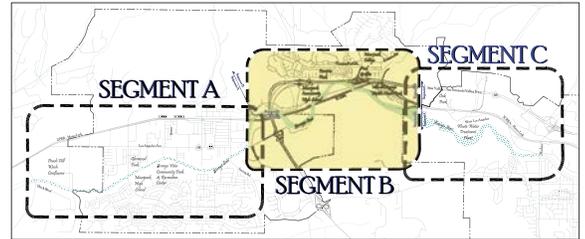
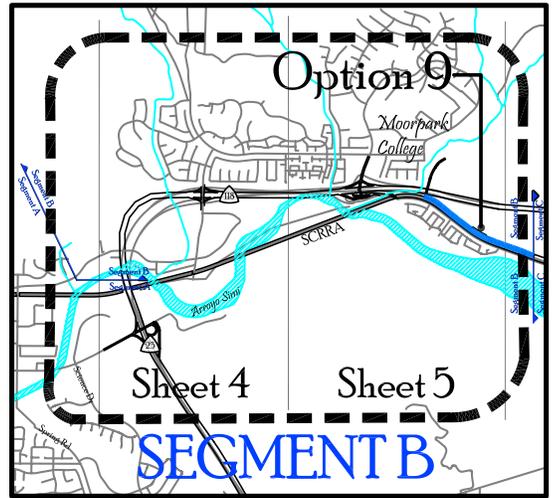
B



Option 9B – Blue

This option extends east along the north side of the railroad from the existing Caltrans tunnel under the 118 Freeway north of the Villa del Arroyo Mobile Home Park to the Moorpark/Simi Valley City Limits Line (Beginning of Option 1, Segment C). (See Map Sheets 5 and 6).

Facility Class: I
Length: 3,555 linear feet
Jurisdiction: City of Moorpark
 Southern California
 Regional Rail Authority (SCRRA)



Route Evaluation Criteria:

(1) Potential to minimize and/or avoid environmental impacts

- Utilizes existing maintenance road along the SCRRA – Metro Link.

(2) Potential to maximize consistency with existing plans

- Deviates from desired Arroyo Simi route.
- Consistent with the Ventura County General Plan.

(3) Potential for compatibility with adjacent land uses

- Potential conflicts with railroad operations.
- Undeveloped, vacant Open Space adjacent to railroad/proposed Class I.
- Potential conflicts with railroad right of way.

(4) Potential number of environmental permits required

- None

(5) Potential to minimize impacts to private property

- Requires lengthy coordination and easement acquisition process with SCRRA – Metro Link.

(6) Potential to maintain a consistent Class I/Multi-use bikeway

- Class I facility on existing SCRRA – Metro Link.
- Option utilizes the “Rails-with-Trails” concept.

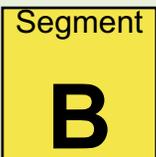
(7) Potential for direct and consistent route

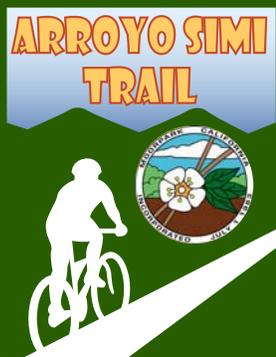
- Deviates from Arroyo Simi.

(8) Potential to maximize commuter value

- Potential connections to on-street bike lanes at existing at grade railroad crossings.

(9) Potential to maximize recreational value





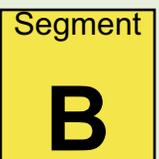
- Class I facility on existing SCRRA – Metro Link.
- Undeveloped, vacant Open Space adjacent to railroad/proposed Class I.

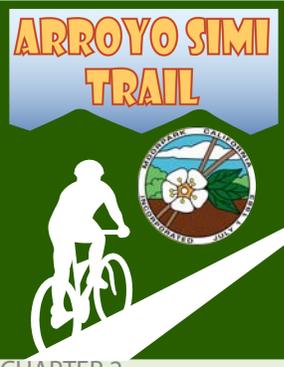
(10) Potential to minimize construction and maintenance costs

- Utilizes existing roadway along the SCRRA – Metro Link.

(11) Potential for near-term construction

- Potential conflicts with railroad future expansion plans.
- Requires lengthy coordination and easement acquisition process with SCRRA – Metro Link





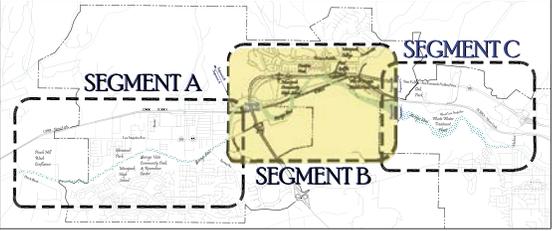
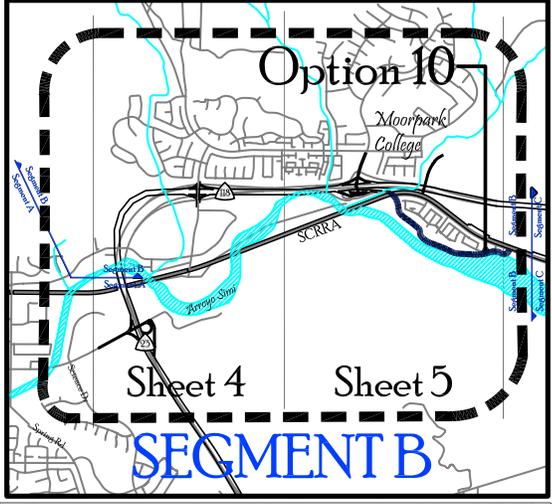
Option 10B – Dark Blue

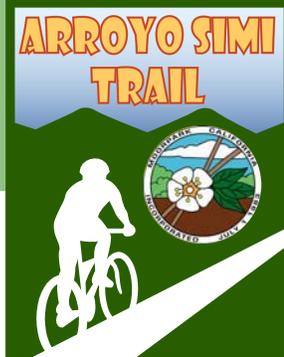
This option runs southeast from the existing at grade crossing northeast of Villa del Arroyo Mobile Home Park and follows an existing paved roadway south of the Mobile Home Park to West Los Angeles Avenue (See Map Sheet 5).

Facility Class: I
Length: 4,283 linear feet
Jurisdiction: City of Moorpark

Route Evaluation Criteria:

- (1) Potential to minimize and/or avoid environmental impacts**
 - Utilizes an existing paved road located above the floodplain.
- (2) Potential to maximize consistency with existing plans**
 - Option runs adjacent to the Arroyo Simi.
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the Ventura County General Plan.
 - Consistent with the Ventura County Regional Trails & Pathways Master Plan Report.
 - Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
 - Consistent with the Arroyo Simi Preliminary Design Report.
- (3) Potential for compatibility with adjacent land uses**
 - Option runs adjacent to Villa del Arroyo Mobile Home Park.
- (4) Potential number of environmental permits required**
 - None
- (5) Potential to minimize impacts to private property**
 - Requires coordination and easement acquisition with Villa del Arroyo Mobile Home Park.
- (6) Potential to maintain a consistent Class I/Multi-use bikeway**
 - Class I facility on an existing paved road.
- (7) Potential for direct and consistent route**
 - Option runs adjacent to the Arroyo Simi.
- (8) Potential to maximize commuter value**
 - Option requires a controlled crossing at the intersection of the existing paved road and





West Los Angeles Avenue.

(9) Potential to maximize recreational value

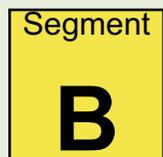
- Class I facility runs adjacent to the Arroyo Simi.

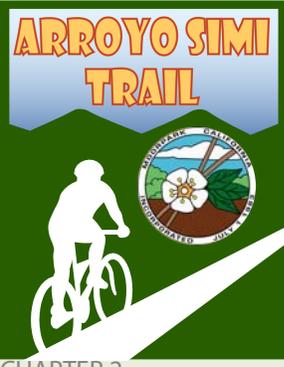
(10) Potential to minimize construction and maintenance costs

- Class I facility on an existing paved road.
- Requires coordination and easement acquisition with Villa del Arroyo Mobile Home Park.

(11) Potential for near-term construction

- Class I facility on an existing paved road.
- Requires coordination and easement acquisition with Villa del Arroyo Mobile Home Park.





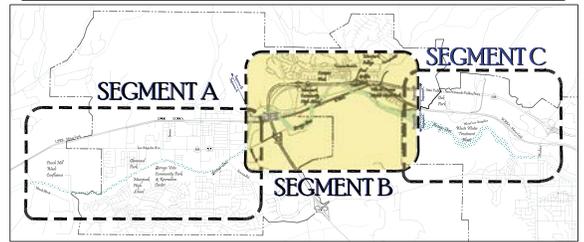
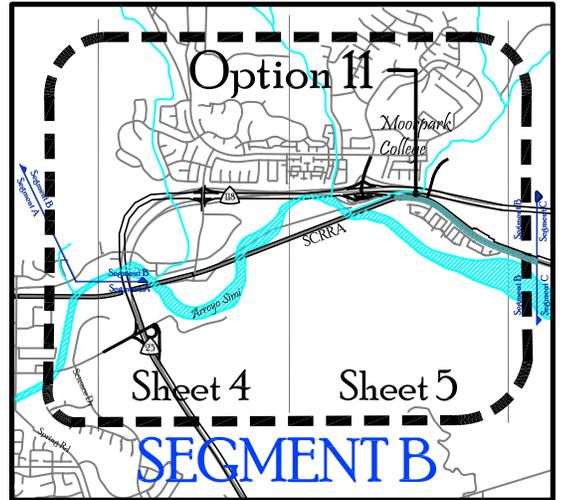
Option 11B– Sea Green

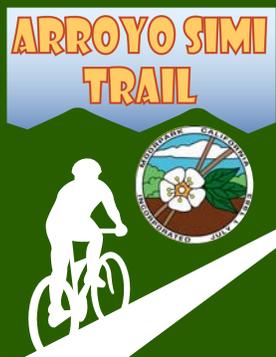
This option runs east from the existing at grade crossing northeast of Villa del Arroyo Mobile Home Park on West Los Angeles Avenue to the Moorpark/Simi Valley City Limits Line (where it requires connection to Option 2C). (See Map Sheets 5 and 6).

Facility Class: II
Length: 4,528 linear feet
Jurisdiction: City of Moorpark

Route Evaluation Criteria:

- (1) **Potential to minimize and/or avoid environmental impacts**
 - Utilizes existing streets.
- (2) **Potential to maximize consistency with existing plans**
 - Deviates from desired Arroyo Simi route.
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the City of Simi Valley General Plan.
 - Consistent with the City of Simi Valley Bicycle Master Plan.
 - Consistent with the Ventura County General Plan.
- (3) **Potential for compatibility with adjacent land uses**
 - Potential conflicts with urban uses/streets.
- (4) **Potential number of environmental permits required**
 - None
- (5) **Potential to minimize impacts to private property**
 - Utilizes existing streets.
- (6) **Potential to maintain a consistent Class I/Multi-use bikeway**
 - Class II facility along existing roadway.
- (7) **Potential for direct and consistent route**
 - Deviates from desired Arroyo Simi route.
- (8) **Potential to maximize commuter value**
 - Proposed Class II facility with minimum delays.
- (9) **Potential to maximize recreational value**
 - Class II facility along the existing roadway.



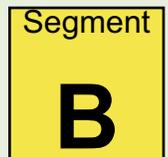


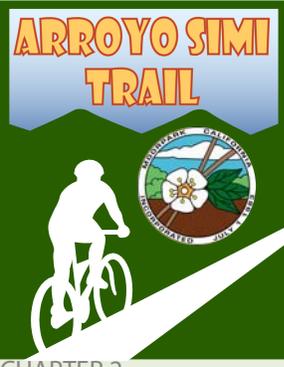
(10) Potential to minimize construction and maintenance costs

- Class II facility along the existing roadway.
- West Los Angeles Avenue is proposed to be widened in the future as new development occurs, and Class II bike lanes could be incorporated

(11) Potential for near-term construction

- Class II facility along the existing roadway.
- West Los Angeles Avenue is proposed to be widened in the future as new development occurs, and Class II bike lanes could be incorporated

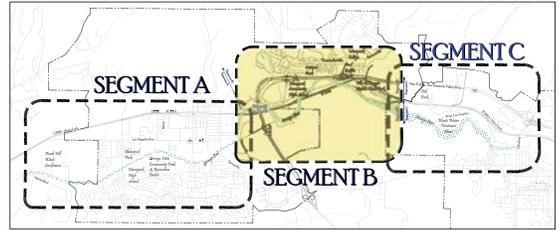
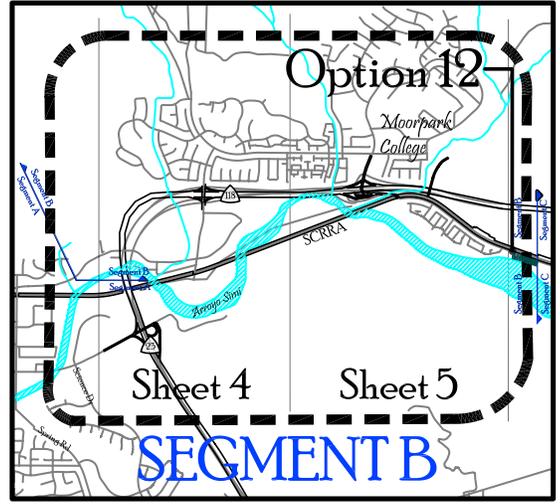




Option 12B– Turquoise

This option runs east from the southeast terminus of Option 10B (near the Mobile Home Park and West Los Angeles Avenue) between West Los Angeles Avenue and the Arroyo Simi, to the Moorpark/Simi Valley City Limits Line, where it requires connection to Option 4C (See Map Sheet 5).

Facility Class: I
Length: 755 linear feet
Jurisdiction: City of Moorpark
 Ventura County
 Watershed Protection District



Route Evaluation Criteria:

(1) Potential to minimize and/or avoid environmental impacts

- Utilizes heavily vegetated property within the Arroyo Simi floodplain area.
- Requires new construction immediately adjacent to the Arroyo.

(2) Potential to maximize consistency with existing plans

- Option runs adjacent to the Arroyo Simi.
- Consistent with the City of Moorpark General Plan.
- Consistent with the City of Simi Valley General Plan.
- Consistent with the City of Simi Valley Bicycle Master Plan.
- Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
- Consistent with the Rancho Simi Recreation and Park District Trails Master Plan.
- Consistent with the Ventura County General Plan.

(3) Potential for compatibility with adjacent land uses

- Option runs between West Los Angeles Avenue and the Arroyo Simi.
- Area is heavily vegetated within the floodplain.

(4) Potential number of environmental permits required

- If impacts to jurisdictional areas are required as part of the bikeway construction process, permits from all four agencies will be necessary.

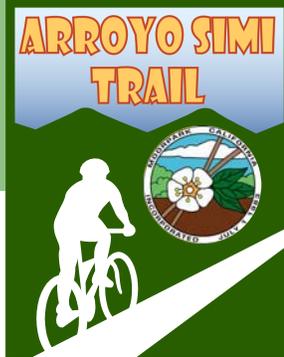
(5) Potential to minimize impacts to private property

- Utilizes existing streets.

(6) Potential to maintain a consistent Class I/Multi-use bikeway

- Class I facility north of the Arroyo Simi.





- (7) Potential for direct and consistent route**
 - Class I facility north of the Arroyo Simi.

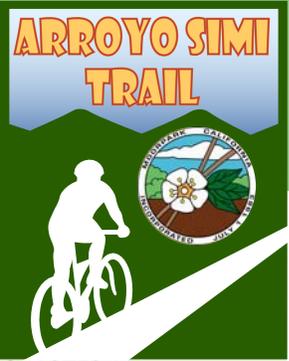
- (8) Potential to maximize commuter value**
 - Option runs adjacent to the Arroyo Simi.

- (9) Potential to maximize recreational value**
 - Class I facility north of the Arroyo Simi.

- (10) Potential to minimize construction and maintenance costs**
 - Areas of heavy vegetation may require special construction standards.

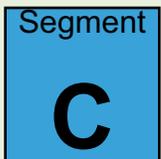
- (11) Potential for near-term construction**
 - Areas of heavy vegetation may require special construction standards.

Segment
B



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Segment C

This segment (See Figure 12 Below) includes the unimproved portion of the Arroyo Simi Creek Corridor that extends from the eastern Moorpark City Limits just southwest of Oak Park, east to Madera Road and the terminus of the City Simi Valley’s existing trail system. See Figure 4., Arroyo Simi Corridor Trail Segment Map in Chapter 1.0 for segment trail details.

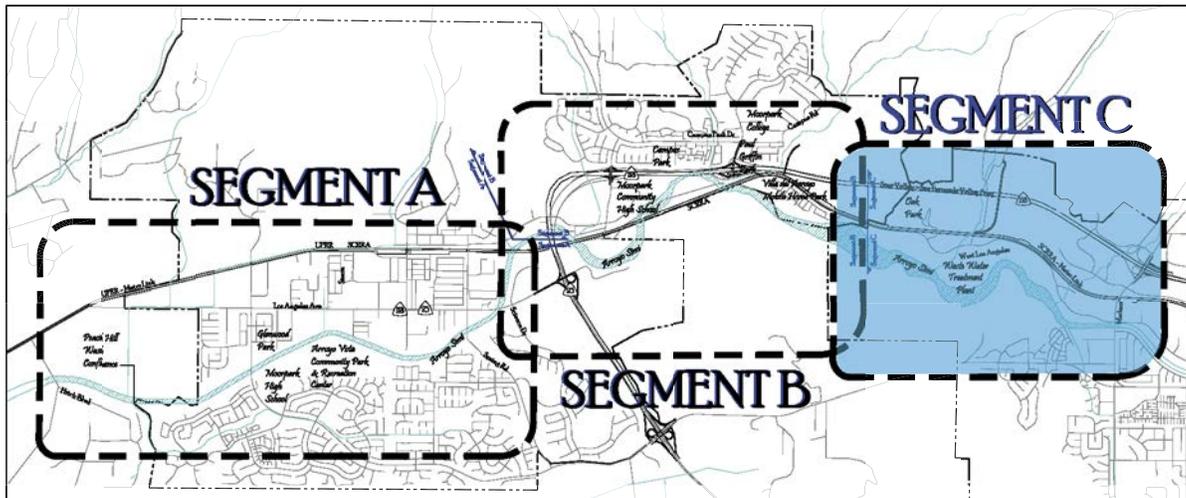
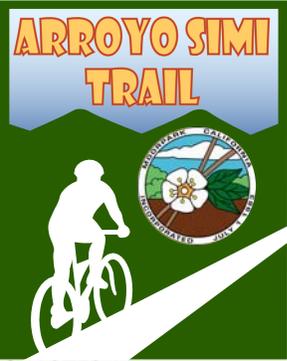


Figure 12: Route Evaluation Segment C

The following alternative route options have been identified in Segment C and are illustrated, along with their associated opportunities and constraints, on the proceeding route evaluation maps, Figures 13 and 14:

- Option 1C
- Option 2C
- Option 3C
- Option 4C
- Option 5C

Detailed evaluations of each trail route options is presented following the route evaluation maps.



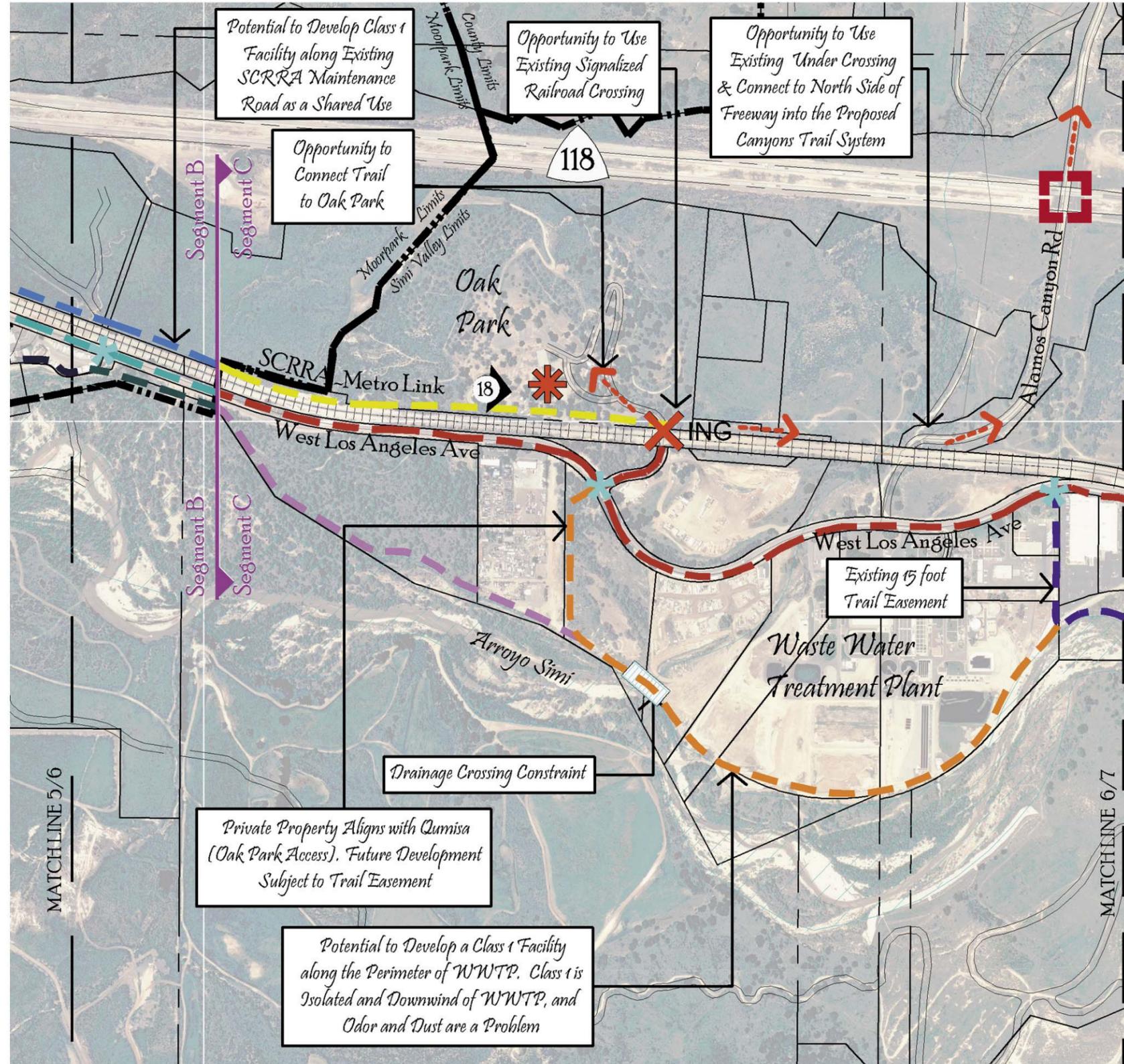
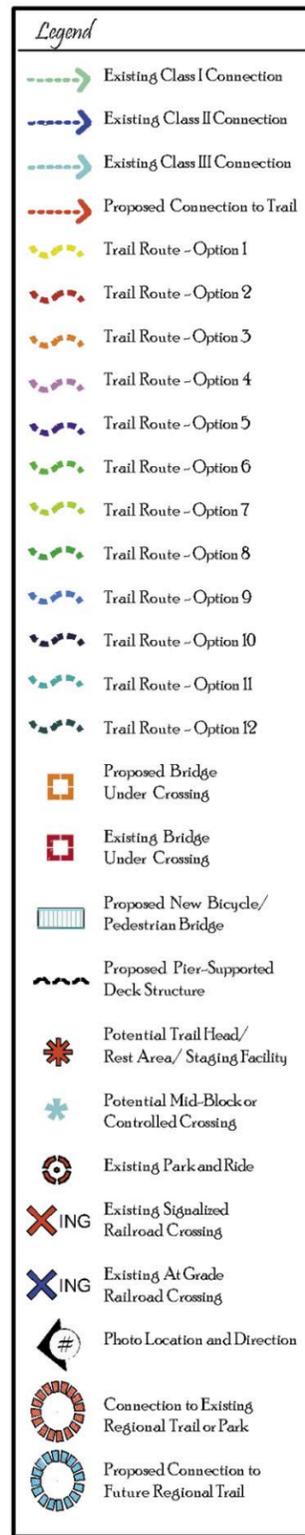
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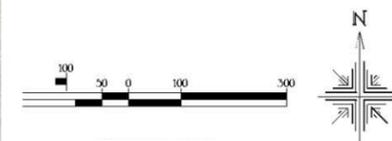
Segment

C

Figure 13 : Route Evaluation Map - Segment C, Sheet 6



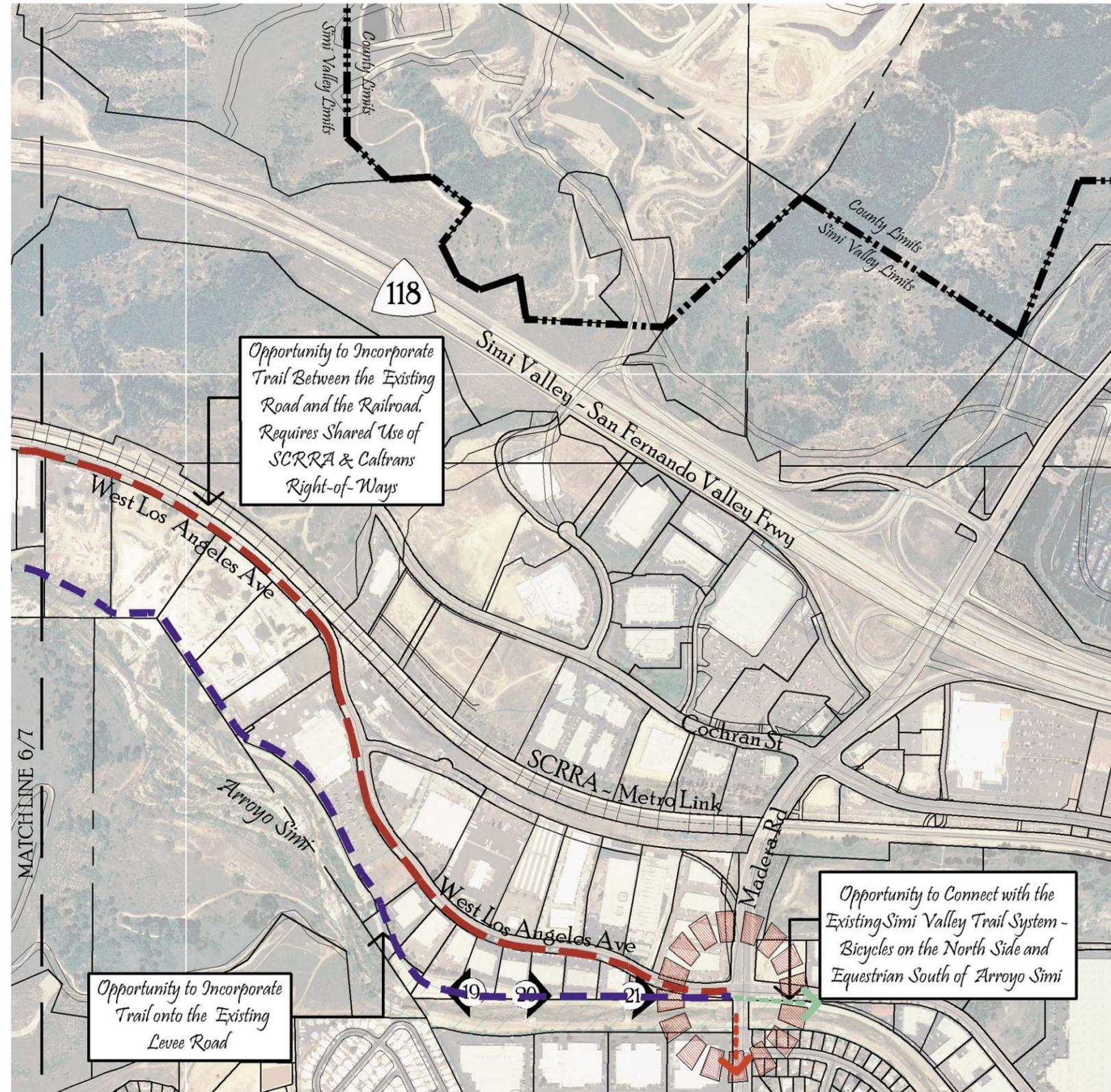
18. Existing SCRRA railroad maintenance road could provide an opportunity for a Class I pathway



Route Evaluation
Segment C, Sheet 6

Figure 14: Route Evaluation Map - Segment C, Sheet 7

- Legend*
- Existing Class I Connection
 - Existing Class II Connection
 - Existing Class III Connection
 - Proposed Connection to Trail
 - Trail Route - Option 1
 - Trail Route - Option 2
 - Trail Route - Option 3
 - Trail Route - Option 4
 - Trail Route - Option 5
 - Trail Route - Option 6
 - Trail Route - Option 7
 - Trail Route - Option 8
 - Trail Route - Option 9
 - Trail Route - Option 10
 - Trail Route - Option 11
 - Trail Route - Option 12
 - Proposed Bridge Under Crossing
 - Existing Bridge Under Crossing
 - Proposed New Bicycle/ Pedestrian Bridge
 - Proposed Pier-Supported Deck Structure
 - Potential Trail Head/ Rest Area/ Staging Facility
 - Potential Mid-Block or Controlled Crossing
 - Existing Park and Ride
 - Existing Signalized Railroad Crossing
 - Existing At Grade Railroad Crossing
 - Photo Location and Direction
 - Connection to Existing Regional Trail or Park
 - Proposed Connection to Future Regional Trail



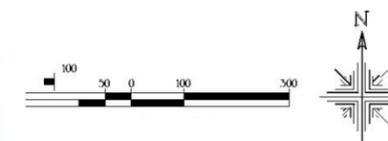
19. Existing levee road provides an opportunity for a Class I path



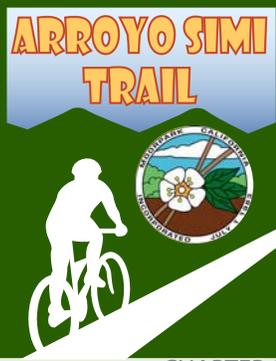
20. The levee road runs along existing businesses, and allows for commuter connections for employees



21. Existing levee road provides an direct connection to the existing Simi Valley Trail System

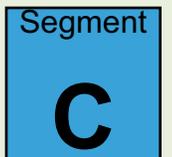


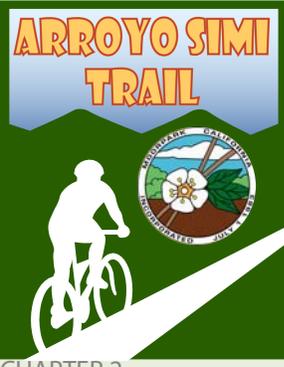
Route Evaluation
Segment C, Sheet 7



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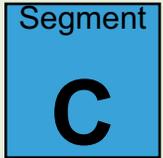
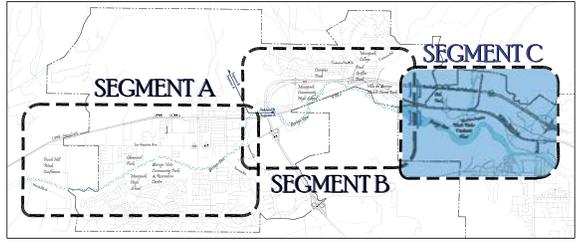
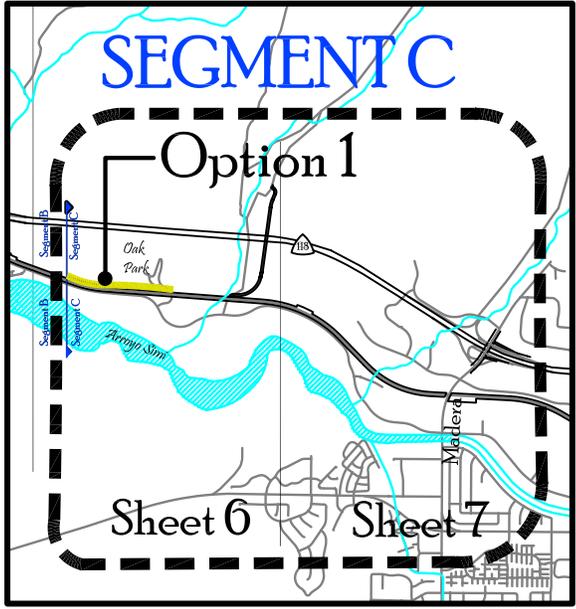
Option 1C – Yellow

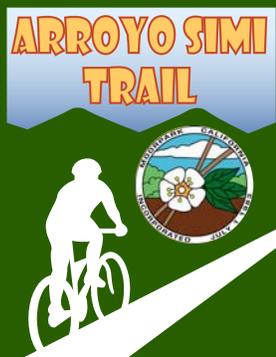
This option runs east from the City Limits Line and follows the north side of the railroad to the existing at grade railroad crossing at Oak Park (Continued from Option 9, Segment B). (See Map Sheet 6).

Facility Class: I
Length: 2,592 linear feet
Jurisdiction: City of Simi Valley
 Southern California Regional Rail Authority (SCRRA)

Route Evaluation Criteria:

- (1) **Potential to minimize and/or avoid environmental impacts**
 - Utilizes existing maintenance road along the SCRRA – Metro Link.
- (2) **Potential to maximize consistency with existing plans**
 - Deviates from desired Arroyo Simi route.
 - Consistent with the Ventura County General Plan.
- (3) **Potential for compatibility with adjacent land uses**
 - Potential conflicts with railroad operations.
 - Potential conflicts with railroad right of way.
- (4) **Potential number of environmental permits required**
 - None
- (5) **Potential to minimize impacts to private property**
 - Requires lengthy coordination and easement acquisition process with SCRRA – Metro Link.
- (6) **Potential to maintain a consistent Class I/Multi-use bikeway**
 - Class I facility on existing SCRRA – Metro Link.
 - Option utilizes the “Rails-with-Trails” concept.
- (7) **Potential for direct and consistent route**
 - Deviates from desired Arroyo Simi route.
- (8) **Potential to maximize commuter value**
 - Potential connections to on-street bike lanes at existing at grade railroad crossings.





(9) Potential to maximize recreational value

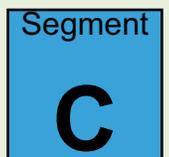
- Class I facility on existing SCRRA – Metro Link.
- Potential connection to Oak Park.
- Potential Trail Head/Staging Facility areas at Oak Park.

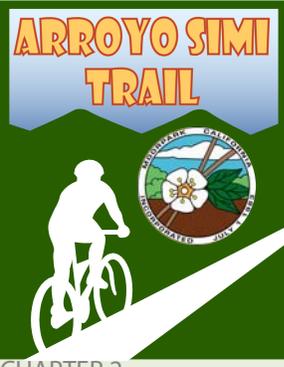
(10) Potential to minimize construction and maintenance costs

- Class I facility on existing SCRRA – Metro Link graded maintenance road.

(11) Potential for near-term construction

- Potential conflicts with railroad future expansion plans.
- Requires lengthy coordination and easement acquisition process with SCRRA – Metro Link





Option 2C – Red

This option runs east from the City Limits Line on West Los Angeles Avenue to Madera Road (Continuation of Option 11, Segment B; See Map Sheets 5, 6 and 7).

Facility Class: II
Length: 11,327 linear feet
Jurisdiction: City of Simi Valley

Route Evaluation Criteria:

(1) Potential to minimize and/or avoid environmental impacts

- Utilizes existing streets.

(2) Potential to maximize consistency with existing plans

- Deviates from desired Arroyo Simi route.
- Consistent with the City of Simi Valley General Plan.
- Consistent with the City of Simi Valley Bicycle Master Plan.
- Consistent with the Ventura County General Plan.

(3) Potential for compatibility with adjacent land uses

- Potential conflicts with urban uses/streets.
- Provides connection to existing Simi Valley Trail system.

(4) Potential number of environmental permits required

- None

(5) Potential to minimize impacts to private property

- Utilizes existing roadway.

(6) Potential to maintain a consistent Class I/Multi-use bikeway

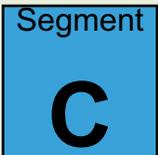
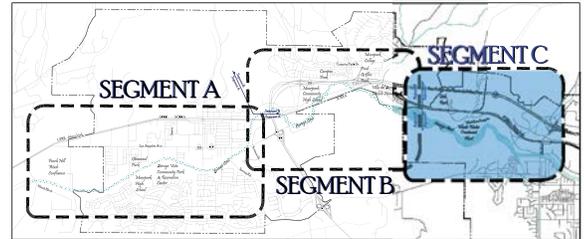
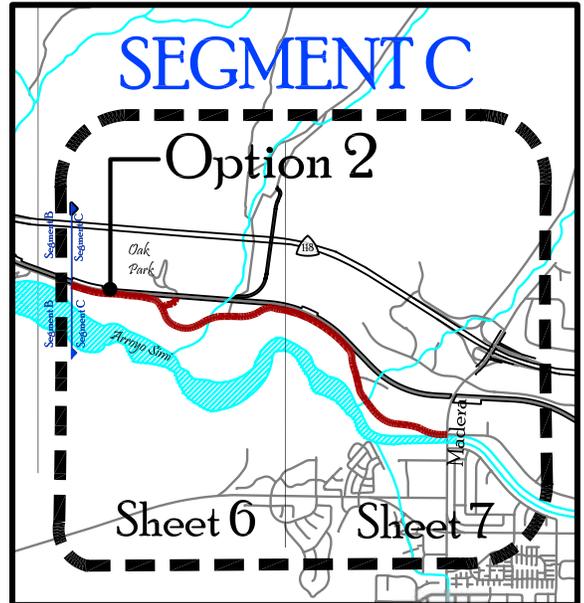
- Class II facility along the existing roadway.

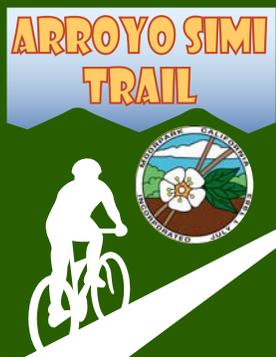
(7) Potential for direct and consistent route

- Deviates from desired Arroyo Simi route.

(8) Potential to maximize commuter value

- Proposed on-street bike lane with minimum delays and access to a regional bikeway system.
- Option requires a controlled crossing at the entry road into Oak Park at West Los Angeles Avenue.





(9) Potential to maximize recreational value

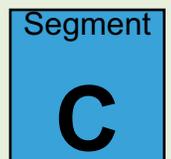
- Class II facility along the existing roadway.
- Potential connection to Oak Park at existing at grade railroad crossing and Alamos Canyon Road.
- Potential Trail Head/Staging Facility areas at Oak Park.

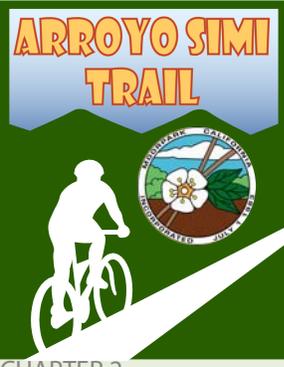
(10) Potential to minimize construction and maintenance costs

- Class II facility along the existing roadway.
- West Los Angeles Avenue is proposed to be widened in the future as new development occurs, and Class II bike lanes could be incorporated

(11) Potential for near-term construction

- Class II facility along the existing roadway.
- West Los Angeles Avenue is proposed to be widened in the future as new development occurs, and Class II bike lanes could be incorporated.

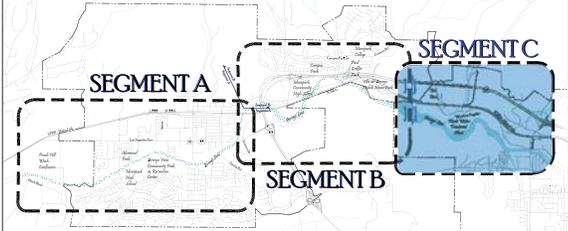
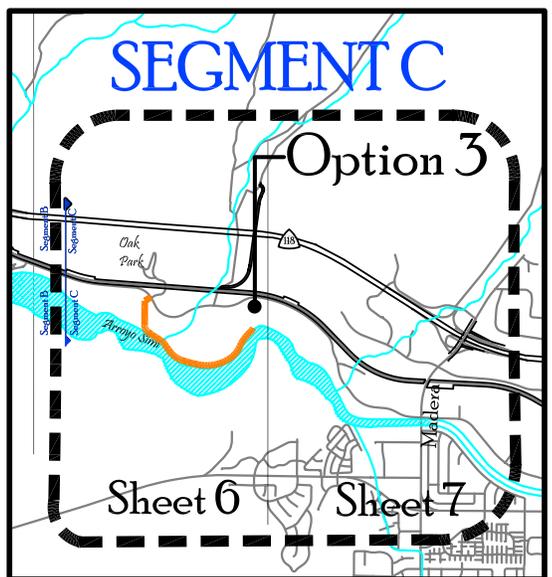




Option 3C – Orange

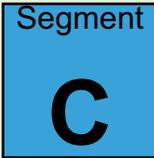
This option runs south from West Los Angeles Avenue (near the intersection of Quimisa Road) to the Arroyo Simi. It continues east along the north side of the Arroyo Simi on Waste Water Treatment Plant property where it terminates at the southeast corner of the plant, and requires connection to Option 5C. (See Map Sheet 6).

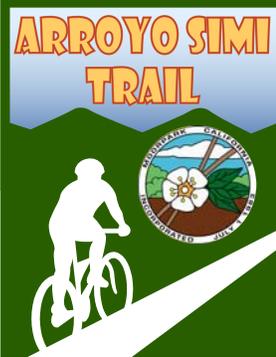
- Facility Class:** I
- Length:** 4,402 linear feet
- Jurisdiction:** City of Simi Valley
City of Simi Valley
Waste Water Treatment Plant
Ventura County
Watershed Protection District
Rancho Simi
Recreation and Parks District



Route Evaluation Criteria:

- (1) Potential to minimize and/or avoid environmental impacts**
- Utilizes publicly owned property adjacent to the Arroyo Simi.
 - Requires new bridge construction.
 - Requires new construction immediately adjacent to the Arroyo.
- (2) Potential to maximize consistency with existing plans**
- Majority of option runs adjacent to the Arroyo Simi.
 - Option provides a connection from the Arroyo Simi to West Los Angeles Avenue.
 - Consistent with the City of Moorpark General Plan.
 - Consistent with the City of Simi Valley General Plan.
 - Consistent with the City of Simi Valley Bicycle Master Plan.
 - Consistent with the Ventura County General Plan.
 - Consistent with the Ventura County Regional Trails & Pathways Master Plan Report.
 - Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
 - Consistent with the Arroyo Simi Preliminary Design Report.
 - Consistent with the Rancho Simi Recreation and Park District Trails Master Plan.
- (3) Potential for compatibility with adjacent land uses**
- Utilizes privately owned undeveloped property.
 - Utilizes publicly owned/Waste Water Treatment Plant property.
 - Adjacent to Waster Water Treatment Plant, and pathway could be impacted by odor and dust from plant operations.





(4) Potential number of environmental permits required

- If impacts to jurisdictional areas are required as part of the bikeway construction process, permits from all four agencies will be necessary.

(5) Potential to minimize impacts to private property

- Utilizes privately owned undeveloped property; any future development request will require a trail easement.
- Utilizes publicly owned/Waste Water Treatment Plant property.
- Could require coordination and easement acquisition with private property owners, Ventura County Watershed Protection District, City of Simi Valley, and the Waste Water Treatment Plant.
- Additional security needed to deter public from entering the Treatment Plant.

(6) Potential to maintain a consistent Class I/Multi-use bikeway

- Class I facility on publicly/privately owned land.

(7) Potential for direct and consistent route

- Majority of option runs adjacent to the Arroyo Simi.
- Option provides a connection from the Arroyo Simi to West Los Angeles Avenue.

(8) Potential to maximize commuter value

- Option requires a controlled crossing at the trail intersection with West Los Angeles Avenue near Quimisa Road.
- Requires connections to Class II facility on West Los Angeles Avenue (Option 2C).

(9) Potential to maximize recreational value

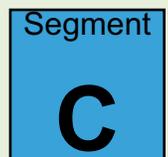
- Class I facility adjacent to the Arroyo Simi.
- Adjacent to Waster Water Treatment Plant; pathway could be impacted by odor and dust from plant operations.

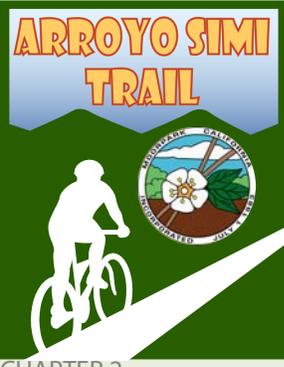
(10) Potential to minimize construction and maintenance costs

- Class I facility on publicly/privately owned land.
- Construction could be coordinated with future channel modifications.
- Construction could be coordinated with future development requests.
- Additional security needed to deter public from entering the Treatment Plant.

(11) Potential for near-term construction

- Construction could be coordinated with future channel modifications.
- Construction could be coordinated with future development requests.
- Majority proposed on publicly owned property.

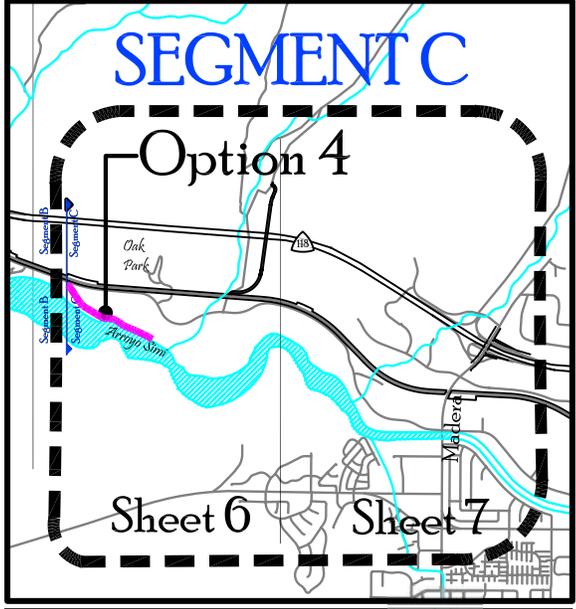




Option 4C – Magenta

This option runs east from the southeast terminus of Option 12B (near the Moorpark/Simi Valley Limits Line) between West Los Angeles Avenue and the Arroyo Simi. It follows the Arroyo Simi until it connects with Option 3C. (See Map Sheet 6).

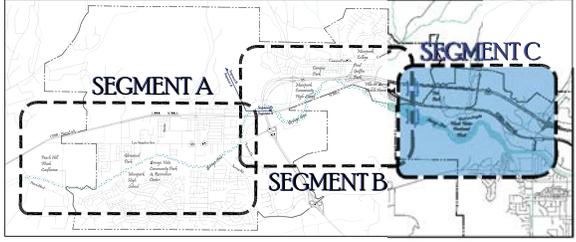
- Facility Class:** I
- Length:** 2,506 linear feet
- Jurisdiction:** City of Simi Valley
Ventura County
Watershed Protection District
Rancho Simi
Recreation and Parks District



Route Evaluation Criteria:

(1) Potential to minimize and/or avoid environmental impacts

- Requires new construction immediately adjacent to the Arroyo.



(2) Potential to maximize consistency with existing plans

- Option runs adjacent to Arroyo Simi.
- Consistent with the City of Moorpark General Plan.
- Consistent with the Ventura County General Plan.
- Consistent with the City of Simi Valley Bicycle Master Plan.
- Consistent with the Ventura County Regional Trails & Pathways Master Plan Report.
- Consistent with the City of Simi Valley General Plan.
- Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
- Consistent with the Rancho Simi Recreation and Park District Trails Master Plan.

(3) Potential for compatibility with adjacent land uses

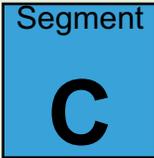
- Utilizes undeveloped property within Arroyo Simi floodplain.
- Potential conflicts with urban/industrial land uses.

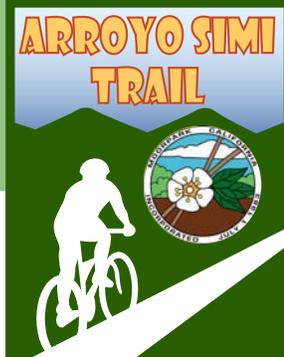
(4) Potential number of environmental permits required

- If impacts to jurisdictional areas are required as part of the bikeway construction process, permits from all four agencies will be necessary.

(5) Potential to minimize impacts to private property

- Requires coordination and easement acquisition with Ventura County Watershed Protection District and Rancho Simi Recreation and Parks District.





(6) Potential to maintain a consistent Class I/Multi-use bikeway

- Class I facility proximate to the Arroyo Simi.

(7) Potential for direct and consistent route

- Option runs adjacent to the Arroyo Simi.

(8) Potential to maximize commuter value

- Proposed Class I facility adjacent to the Arroyo Simi with minimum delays.

(9) Potential to maximize recreational value

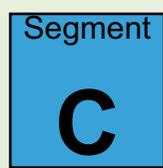
- Class I facility adjacent to the Arroyo Simi.

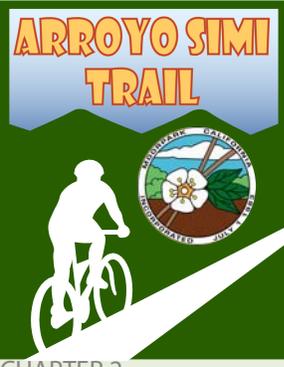
(10) Potential to minimize construction and maintenance costs

- Class I facility utilizes undeveloped property within Arroyo Simi floodplain.
- Areas of heavy vegetation may require special construction standards.

(11) Potential for near-term construction

- Construction could be coordinated with future development requests.
- Areas of heavy vegetation may require special construction standards.

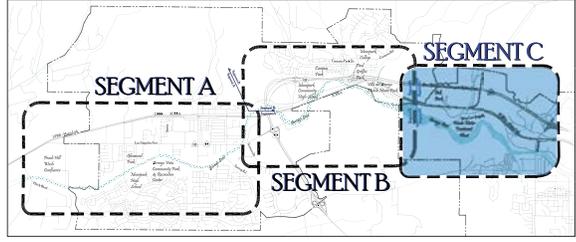
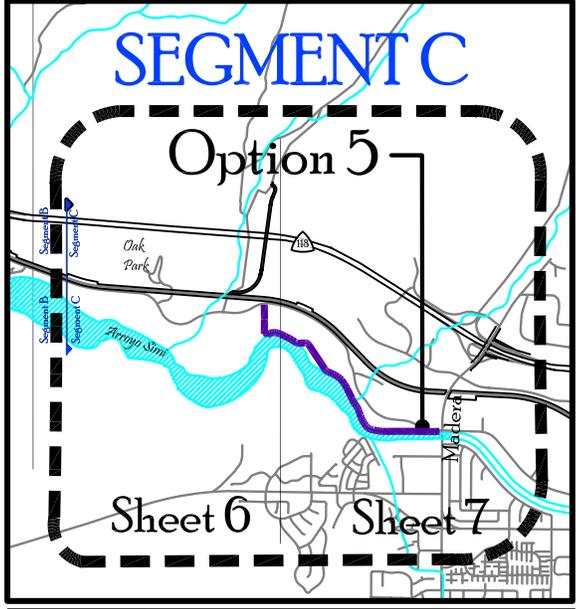




Option 5C – Purple

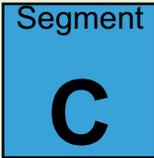
This option runs south along the Waste Water Treatment Plant’s eastern property line from West Los Angeles Avenue to the Arroyo Simi. It continues east along the Arroyo Simi where it joins an existing levee road adjacent to the Arroyo Simi to connect with the existing Simi Valley Trail System at Madera Road. (See Map Sheets 6 and 7).

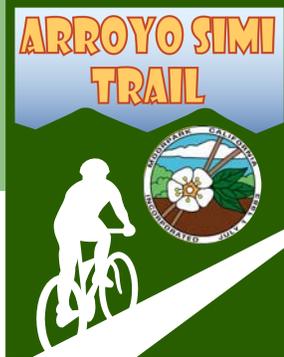
- Facility Class:** I
Length: 6,135 linear feet
Jurisdiction: City of Simi Valley
 Ventura County Watershed Protection District
 Rancho Simi Recreation and Parks District



Route Evaluation Criteria:

- (1) Potential to minimize and/or avoid environmental impacts**
- Portion of Class I facility utilizes existing graded levee roadway on privately owned property.
 - Portion of Class I facility requires new construction immediately adjacent to the Arroyo.
- (2) Potential to maximize consistency with existing plans**
- Option runs adjacent to the Arroyo Simi.
 - Requires connections to Class II facility on West Los Angeles Avenue (Option 2).
 - Consistent with the City of Simi Valley General Plan.
 - Consistent with the City of Simi Valley Bicycle Master Plan.
 - Consistent with the Ventura County General Plan
 - Consistent with the Ventura County Regional Trails & Pathways Master Plan Report
 - Consistent with the Management and Restoration Plan for the Arroyo Simi within Moorpark City Limits.
 - Consistent with the Arroyo Simi Preliminary Design Report.
 - Consistent with the Rancho Simi Recreation and Park District Trails Master Plan
- (3) Potential for compatibility with adjacent land uses**
- Utilizes existing 15’ foot trail easement along the Waste Water Treatment Plant’s eastern property line from West Los Angeles Avenue to the Arroyo Simi.
 - Utilizes privately owned commercial property.
 - Portion of Class I facility utilizes existing graded levee roadway on privately owned property.
- (4) Potential number of environmental permits required**





- If impacts to jurisdictional areas are required as part of the bikeway construction process, permits from all four agencies will be necessary.

(5) Potential to minimize impacts to private property

- Requires coordination and easement acquisition with Ventura County Watershed Protection District, City of Simi Valley, and private property owners.
- Utilizes existing 15' foot trail easement along the Waste Water Treatment Plant's eastern property line from West Los Angeles Avenue to the Arroyo Simi.

(6) Potential to maintain a consistent Class I/Multi-use bikeway

- Class I facility on existing trail easement and levee road adjacent to the Arroyo Simi.

(7) Potential for direct and consistent route

- Option runs adjacent to the Arroyo Simi.
- Option provides a connection from the Arroyo Simi to West Los Angeles Avenue.

(8) Potential to maximize commuter value

- Requires connections to Class II facility on West Los Angeles Avenue (Option 2C).
- Option requires a controlled crossing at the trail intersection with West Los Angeles Avenue.
- Provides connection to the existing Simi Valley Trail system.

(9) Potential to maximize recreational value

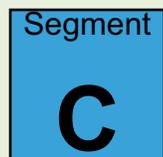
- Class I facility adjacent to the Arroyo Simi.
- Provides connection to existing Simi Valley Trail system.

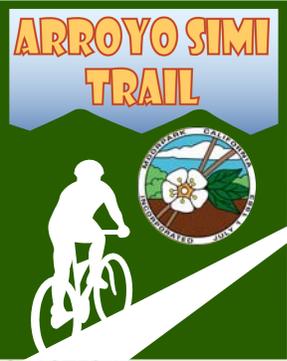
(10) Potential to minimize construction and maintenance costs

- Utilizes existing 15' foot trail easement along the Waste Water Treatment Plant's eastern property line from West Los Angeles Avenue to the Arroyo Simi.
- Portion of Class I facility utilizes existing graded levee roadway on privately owned property.
- Option requires coordination and easement acquisition with private property owners and Ventura County Watershed Protection District.

(11) Potential for near-term construction

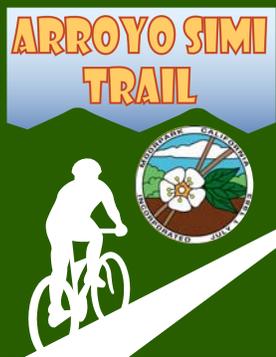
- Option requires coordination and easement acquisition with private property owners and Ventura County Watershed Protection District.
- Portion of Class I facility utilizes existing graded levee roadway on privately owned property.



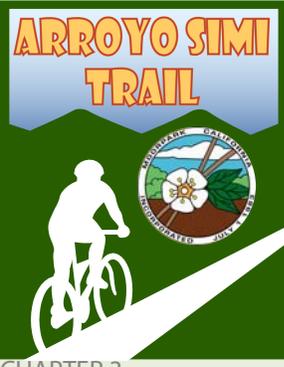


CHAPTER 2
Route Identification &
Evaluation

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3.0 TRAIL FEASIBILITY SUMMARY & RECOMMENDATIONS



3.0 Trail Feasibility Summary & Recommendations

Using the results of the Route Identification and Evaluation, this section describes the most feasible trail routes, sets forth the near- and long-term routes for the proposed Arroyo Simi Trail and recommends actions the City of Moorpark should undertake to identify specific trail projects and potential funding strategies. The near- and long-term routes are a compilation of the routes with the highest cumulative total studied in the Route Identification and Evaluation Analysis in Chapter 2.0. The near- and long-term routes have been identified using a 5-10 year and 10+ year implementation timeframe, respectively.

It should be anticipated that the routes may change or be adjusted as conditions change or better information becomes available through additional fieldwork, further environmental analysis, or more detailed planning. It is anticipated that implementation of the trail system will occur through the project design of public projects, design review of private projects, dedication through the subdivision approval process, and public purchases. Ownership and development patterns, as well as zoning conflicts, may present obstacles in the implementation of the trail. Development of a final implementation plan and the future construction of the Arroyo Simi Trail will be contingent upon the City’s selection of a final trail route.

A. Route Selection Summary Map

The following Route Selection Summary Map (Figure 15) sets forth the most feasible trail routes as determined by the Route Identification and Evaluation process. This map is the basis for determining the near and long-term trail routes.

Figure 15: Route Selection Summary Map

Route Selection Summary Map

Segment A:

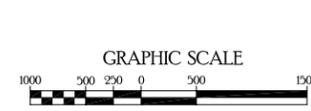
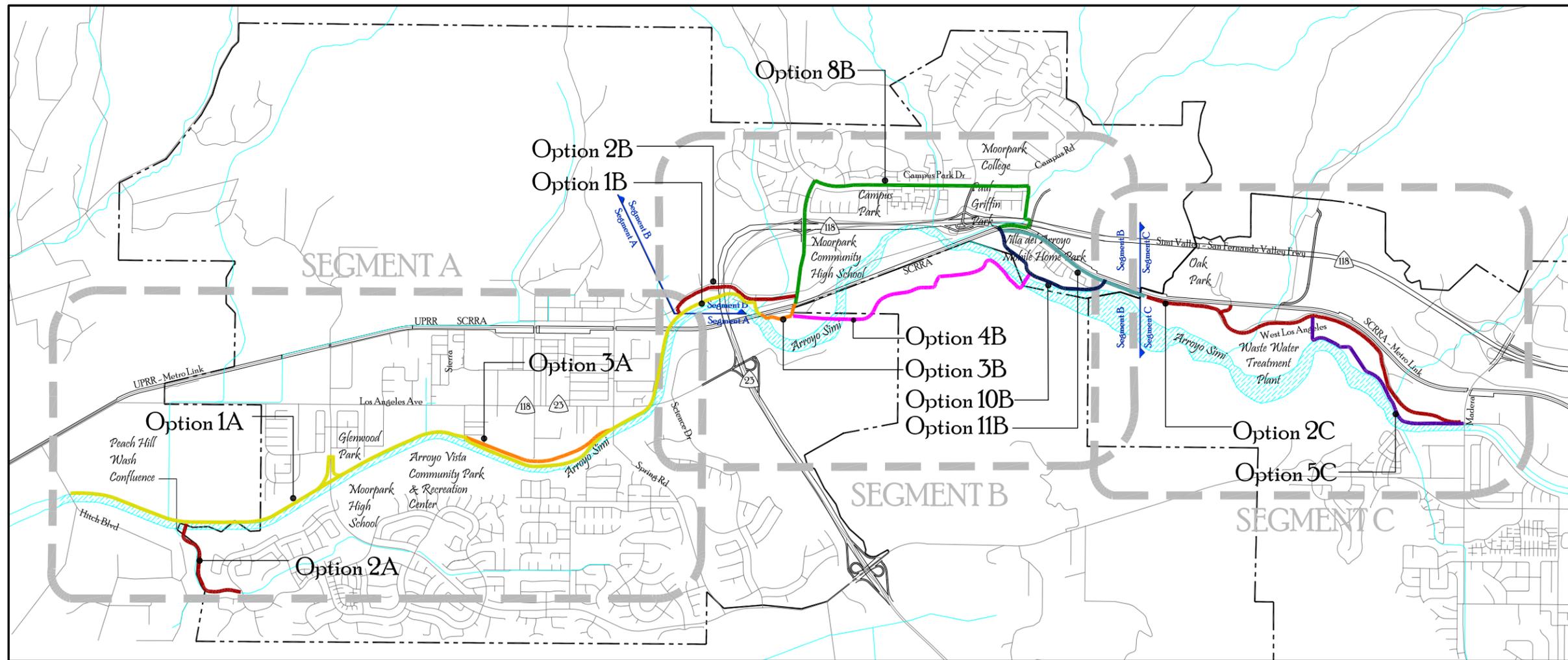
This segment incorporates Options 1A, 2A and 3A as Class I facilities (As shown on Sheets 1 to 3).

Segment B:

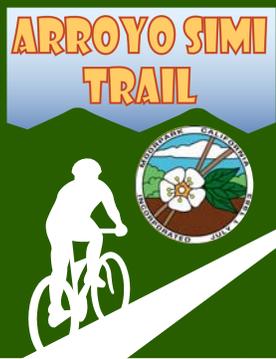
This segment incorporates Options 1B, 3B, and 4B as Class I facilities; and 2B, 8B, 10B and 11 B as Class II facilities (As shown on Sheets 4 and 5)

Segment C:

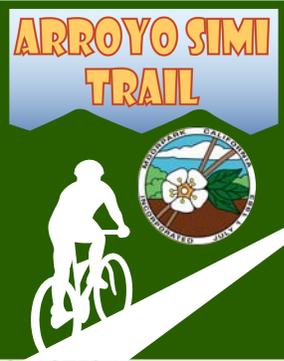
This segment incorporates Option 2C as a Class II facility; and 5C as a Class I facility (As shown on sheets 6 and 7)



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CHAPTER 3
Trail Feasibility Study &
Recommendations



B. Near-Term Trail Route

The most feasible near-term route utilizes the existing Arroyo Simi Creek Corridor levee roadway as well as existing roads and existing Class II facilities on Campus Park Drive. Specifically, the most feasible near-term route consists of the following trail routes:

- Originating near Hitch Boulevard and extending east to the existing railroad bridge north of Science Drive running along the north side of the Arroyo Simi primarily along the existing levee roadway (Option 1A; See Map Sheets 1 through 3).
- Near the western edge of the existing Wetlands Enhancement Area, it crosses the Arroyo Simi via a proposed bridge and runs south along the east side of the existing Peach Hill Wash levee to the limits of the existing Class I and II bikeway connections at Countrywood Drive (Option 2A; See Map Sheet 1).
- From the existing railroad bridge north of Science Drive it runs north along an existing Caltrans maintenance road to East Los Angeles Avenue where it heads east to Condor Drive (Option 2B; See Map Sheet 4).
- At the intersection of Princeton Avenue, Condor Drive and the SCRRA - Metro Link, it extends north along Princeton Avenue to Campus Park Drive utilizing existing Class II bike facilities and extending east to Campus Road. At Campus Road it heads south along an existing drainage easement to an existing Caltrans tunnel that crosses under the 118 Freeway and runs along the SCRRA – Metro Link to an existing at grade railroad crossing (Option 8B; See Map Sheets 4 and 5).
- From the existing at grade crossing northeast of Villa del Arroyo Mobile Home Park it runs on West Los Angeles Avenue to the Moorpark/Simi Valley City Limits Line (Option 11B; See Map Sheets 5 and 6).
- From the City Limits Line, it continues east on West Los Angeles Avenue terminating at Madera Road (Option 2C; See Map Sheets 6 and 7).

Figure 16 : Near-Term Trail Route Map

Near-Term Trail Route

Segment A:

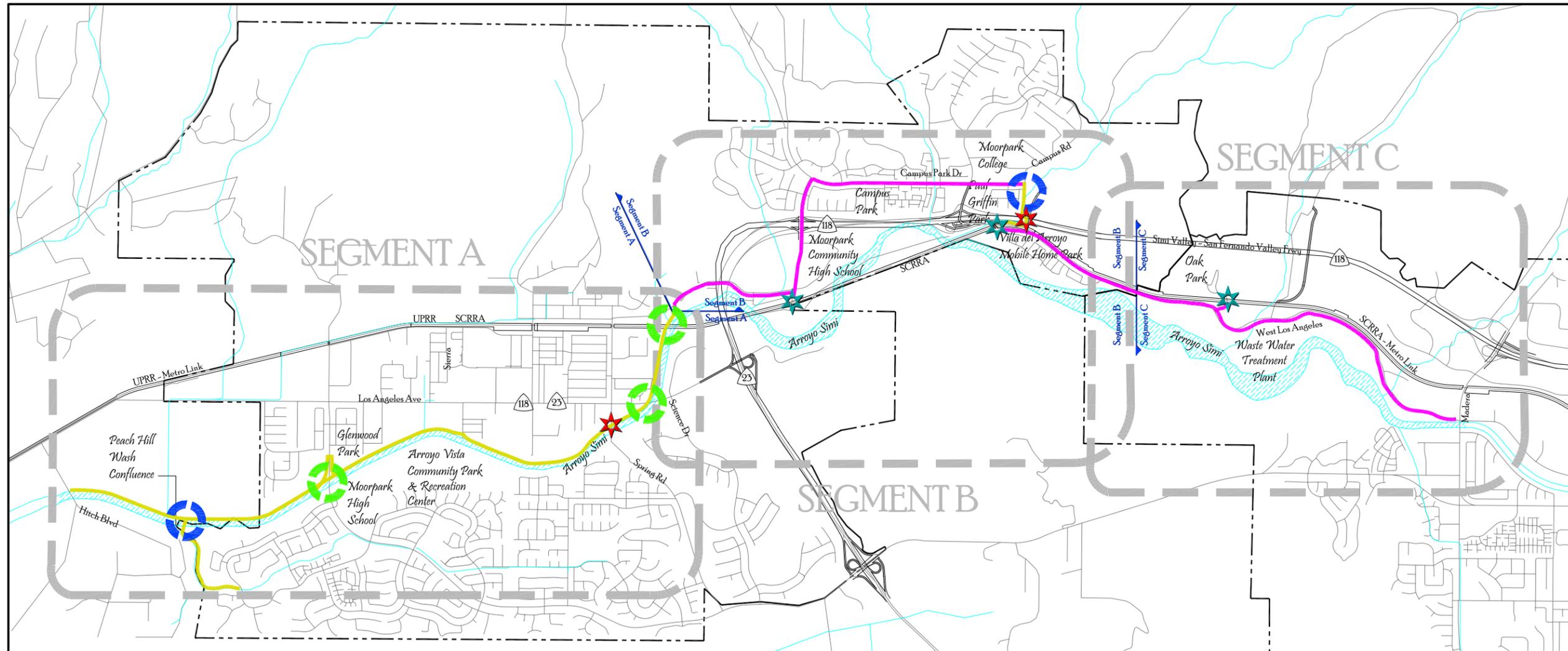
This segment incorporates Options 1A and 2A as Class I facilities. (As shown on Sheets 1 to 3)

Segment B:

This segment incorporates Options 2B, 8B, and 11 B as Class II facilities (As shown on Sheets 4 and 5).

Segment C:

This segment incorporates Option 2C as a Class II facility (As shown on sheets 6 and 7)

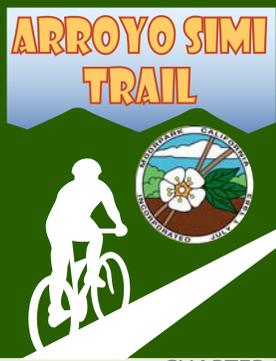


Map Legend:

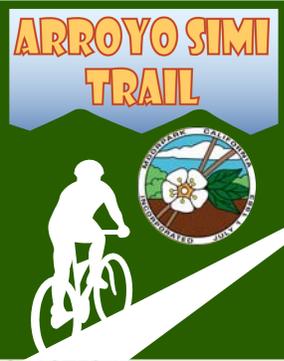
-  Proposed Trail Under Crossing
-  Proposed Trail Bridge
-  Existing Under Crossing
-  Proposed Near-Term Alignment (Class I)
-  Proposed Near-Term Alignment (Class II)
-  Existing Railroad Crossing



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CHAPTER 3
Trail Feasibility Study &
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C. Long-Term Trail Route

The long-term trail route (Figure 17) is intended to supplement the near term route with additional Class I facilities. These Class I facilities are categorized as long-term since the property over which these trail segments cross are currently privately held. The City, in coordination with the County of Ventura, should work with property owners when new development or redevelopment is proposed to secure easements or real property for the trail as described in this study. The most feasible long term route consists of the near term route with the addition of the following supplemental sections:

- Near the western edge of the existing Wetlands Enhancement Area, it runs along the north side of the Proposed Wetlands Enhancement Area extending from Leta Yancy east to Spring Road (Option 3A; See Map Sheets 2 and 3).
- From the existing railroad bridge north of Science Drive it runs along the north side of the Arroyo Simi following an existing Caltrans maintenance road and continues east running along southern property lines and the Arroyo Simi to the alley off Avenida Colonia and then south on Avenida Colonia to the railroad (Option 1B; See Map Sheet 4).
- It then crosses under the existing railroad bridge south of Avenida Colonia, and runs east along an existing dirt road to connect to the railroad crossing at the southern terminus of Princeton Avenue (Option 3B; See Map Sheet 4).
- At the southern terminus of Princeton Avenue, on the south side of the existing railroad, it continues east along the City Limit Line crossing the Arroyo Simi via a proposed bridge, and follows the City Limits Line to an existing dirt road on private property in the County of Ventura. It continues east running south of the existing Wetlands Enhancement Area and Arroyo Simi, until it crosses the Arroyo Simi via a proposed bridge and connects with the Villa del Arroyo Mobile Home Park (Option 4B; See Map Sheets 4 and 5).
- At the Villa del Arroyo Mobile Home Park, it runs northwest to the existing at grade railroad crossing and southeast following an existing paved roadway south of the Mobile Home Park to West Los Angeles Avenue (Option 10B; See Map Sheet 5).
- It runs south along the Waste Water Treatment Plant's eastern property line from West Los Angeles Avenue to the Arroyo Simi. It continues east along the Arroyo Simi where it joins an existing levee road adjacent to the Arroyo Simi to connect with the existing Simi Valley Trail System at Madera Road. (Option 5C; See Map Sheets 6 and 7).

Figure 17: Long-Term Trail Route Map

Long-Term Trail Route

Segment A:

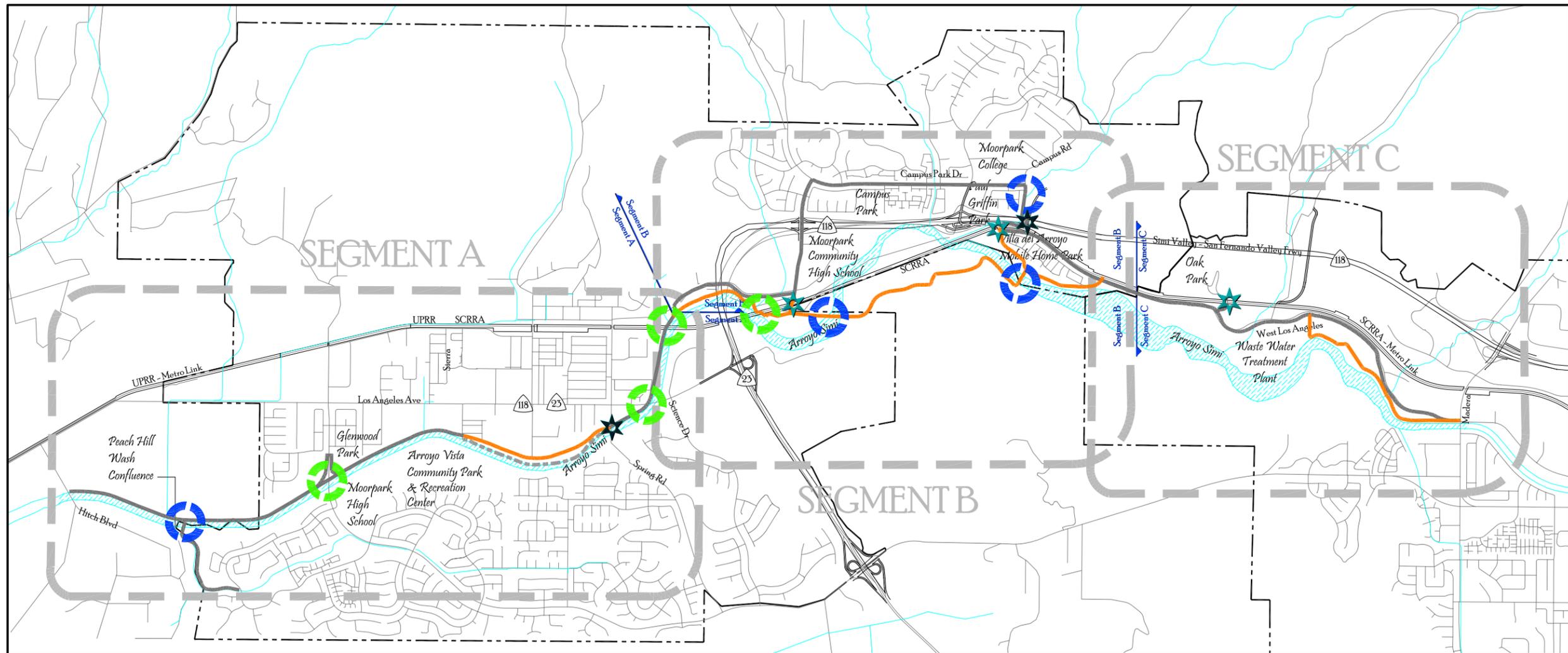
This segment incorporates Options 1A and 2A from the Near-Term Alignment as remaining Class I facilities, and adds 3A as a Class I Long-Term Alignment. (As shown on Sheets 1 to 3)

Segment B:

This segment incorporates Options 2B, 8B, 11 B from the Near-Term Alignment as remaining Class II facilities. Options 1B, 3B, 4B, 10B, are added as a Class I Long-Term Alignment. (As shown on Sheets 4 and 5)

Segment C:

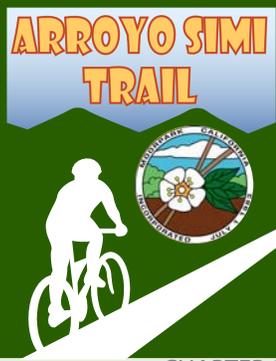
This segment incorporates Option 2C from the Near-Term Alignment as a remaining Class II facility, and adds Option 5C as a Class I Long-Term Alignment. (As shown on sheets 6 and 7)



Map Legend:

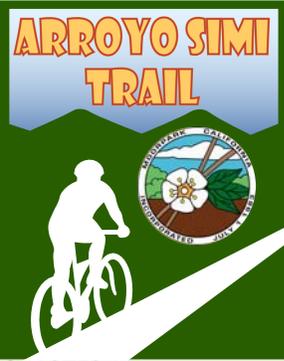
-  Proposed Trail Under Crossing
-  Proposed Trail Bridge
-  Existing Railroad Crossing
-  Existing Under Crossing
-  Proposed Long-Term Alignment (Class I Facilities)
-  Proposed Near-Term Alignment to Remain
-  Abandoned Near-Term Alignment





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CHAPTER 3
Trail Feasibility Study &
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D. Next-Step Recommendations

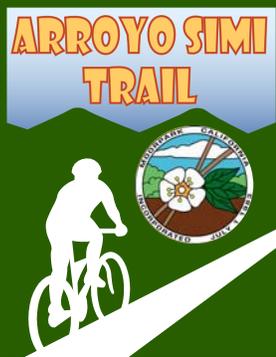
The feasibility study provides support for an Arroyo Simi Trail concept and its ability to be developed along a continuous route and constructed within a normal cost range. The City Councils and other regulating authorities should utilize this foundation document to prepare a definitive trail alignment study for adoption. Looking forward toward providing project funding for the trails development and documentation of public support along with business partnerships will be essential.

The development of an economic strategy utilizing an enterprise group for public, private and government grants for the capital improvements should be given a priority. The development of project phasing funding is a one to two year commitment for initial resources to become available. The primary funding source will be through transportation funding opportunities. Transportation funding is essentially provided for bicycle commuting purposes. All future planning and documentation should make an emphasis on bicycle commuting rather than recreational uses.

Recreational trail resources are fewer, lower in overall funding and more competitive than transportation funds. Funding for master planning and preliminary environmental documentation is rarely available through agency grants. Funding for the preliminary work will need to be provided by the regulating agencies and joint venture options.

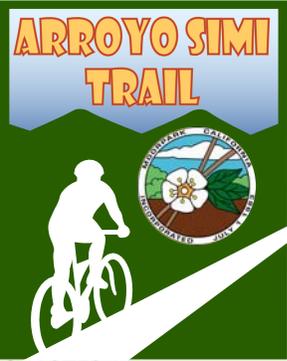
Action Items:

1. City staff should consider preparing a recommendation to City Council to authorize development of Bicycle Transportation Plan (BTP) to cover Class 1, 2 & 3 alternate transportation bikeways and multi use trail opportunities. The BTP is the base documentation requested and usually is required when applying for transportation funding.
2. City staff should consider preparing a recommendation to City Council to authorize preparation of updates to Circulation and Park & Recreation Elements to the City General Plan. This will provide consistency in the planning process and give an opportunity for public participation. Timing for the General Plan update should be reviewed with the City Planning Department staff.
3. City staff should consider preparing a recommendation to City Council to authorize at a minimum the starting of environmental impact report (EIR) to determine preferred alternatives for Arroyo Simi Trail in Moorpark. This could be expanded if the other regulating agencies on the proposed trail alignment were amenable to establishing a Joint Powers Agreement (JPA). This would also be the opportunity to share funding costs for a complete EIR. If the JPA is considered it should include financial planning for the operations and maintenance conditions that will exist after construction.
4. Prepare Public Participation Plan to include all stakeholders of Arroyo Simi Trail. Establish meeting dates and locations for public notice. This is to develop a consensus support group with common interests, benefits and objectives. Through the public participation process a concentration on the development of state legislative support will be instrumental in future funding resources.



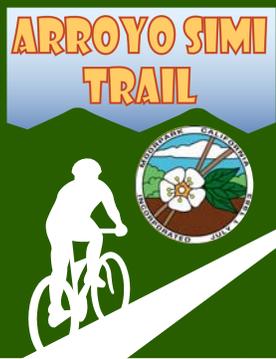
5. Concurrent with the development of the EIR a project engineers cost estimate by phases should be prepared and matched with funding sources for the Moorpark section of the Arroyo Simi trail. City staff should consider requesting City Council to establish a budget line item for matching funds for grant opportunities. A cash commitment and in kind services of staff and consultants will make the project competitive.

6. Planning for the longer term the City or JPA should consider developing an Enterprise Team. This group will identify and utilize a combination of revenue centers with the emphasis of public/private, joint ventures, partnerships or concession agreements to provide both for additional capital improvements and the operation and maintenance of the trail. The early establishment of this group would allow it to also be involved in the grant development program for phasing the Arroyo Simi Trail construction.



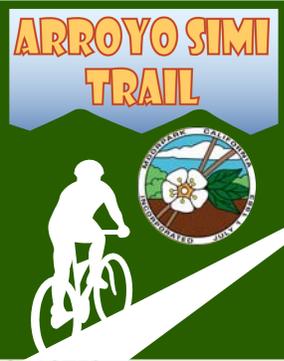
CHAPTER 3
Trail Feasibility Study &
Recommendations

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4 .0 PRELIMINARY CONSTRUCTION & DESIGN COST ANALYSIS

CHAPTER 4
Preliminary Construction
& Design Cost Analysis



4.0 Preliminary Construction & Design Cost Analysis

This section outlines the preliminary construction and design costs for the proposed Arroyo Simi Trail as shown in the most feasible near and long-term routes set forth in Chapter 3. These costs are preliminary only; more detailed Opinion of Construction Costs should be prepared at the final design phase.

A. Cost Assumptions

All costs are planning-level opinions of probable cost for constructing the Arroyo Simi Trail. These costs are based upon the trail description contained in this Feasibility Study for the near- and long-term trail routes. Costs are provided for specific design and construction related components of five types of trail improvements: design, trail construction, crossing construction, trail amenities, and environmental permitting.

Design

Design costs include final PS&E, environmental and legal processing, surveying and plan check/inspection fees. The cost of these services is estimated based upon a percentage of the cost of the trail construction, crossing construction, trail amenities, environmental permitting and construction contingency. The total design cost is provided in the Opinion of Construction Cost.

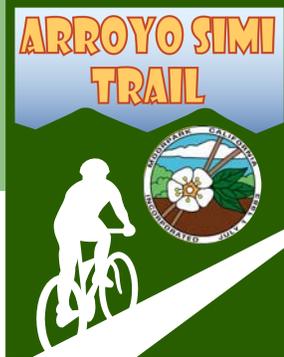
Trail Construction

Trail construction costs include grading the trail area at an average width of 16' and construction of a 12' wide asphalt base and paved trail to accommodate bicycle, pedestrian, and maintenance vehicles. Costs for pavement markings, striping to divide the trail lanes, and location signage are included in the cost. The total trail construction cost is provided in the Opinion of Construction Cost.

- All Class I facilities would require new construction of 12-foot path with two 2-foot shoulders.
- All bridge under-crossings include 16-foot path and fencing.
- All bridge over-crossings include 100 linear-foot bridge, bridge abutments and footings.
- Cost includes demolition, landscaping and trail amenities.
- No streetlight, traffic signal or power pole relocation costs are included in any of the facility cost numbers.
- No utility relocation costs are included in any of the facility cost numbers.
- No right-of-way values or cost are included in any of the facility cost numbers.
- No environmental permitting or mitigation costs are included in any of the facility cost numbers.

Cost assumptions for the Class II facility are as follows:

- 4" AC on 12" AB section
- No existing curb & gutter, no dry utilities, no storm drains.
- No relocation of any dry utilities, above ground cabinets, or streetlights.
- No power poles or traffic signal relocation.



- No guardrail removal/replacement.
- No environmental permitting or mitigation costs are included in any of the facility cost numbers.

Crossing Construction

Typical pre-fabricated bridge structures and trail under-crossing designs are assumed for locations where the trail crosses the Arroyo Simi Creek Corridor or crosses under existing roads or rail beds. The costs for construction of these crossings includes all structural elements, and items not considered in construction of the typical trail sections (paving, striping, signage, etc.). The total cost of all crossings is provided in the Opinion of Construction Cost.

Trail Amenities

The trail amenities cost includes comfort and safety features for the trail user. This includes directional signage located at ½ mile intervals. Landscaping (ground cover and trees) would be provided in the urban areas, with trees only provided in the rural areas of the trail. The trail amenities costs also include staging areas at locations identified in the plan for trail users to park their vehicles, unload their bikes or prepare for walking different sections of the trail. Bike racks would be provided only at the staging area locations and at trail access points with other trails, as identified in the trail plan segment descriptions. The cost for trail amenities is provided for each trail segment. The total cost of all trail amenities is provided in the Opinion of Construction Cost.

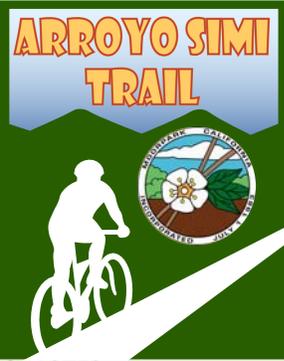
Environmental Permitting

Environmental Permitting for the most feasible near- and long-term routes may include the following:

- **404 Nationwide Permit Authorization/Individual Permit** – The Army Corps of Engineers regulates Section 404 of the Clean Water Act and requires the issuance of an Individual Permit (IP) or Nationwide Permit (NWP) authorization for activities that result in a discharge of dredge or fill material with their jurisdiction. Under Section 404 of the Clean Water Act, the ACOE has jurisdiction over all waters of the United States, including wetlands and other special aquatic sites.

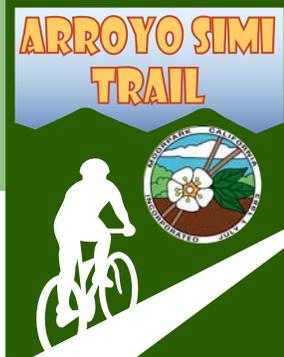
Implementation of the project will require issuance of a NWP authorization or an IP. It is possible that the project may be able to utilize the NWP Program and obtain an Authorization to use NWP #14: Linear Transportation Crossing, and NWP #33: Temporary Construction, Access, and Dewatering. However, if implementation of the project exceeds the thresholds of the NWP Program, the ACOE may require issuance of an IP.

- **401 Water Quality Certification** – The Regional Water Quality Control Board regulates Section 401 of the Clean Water Act and requires the issuance of a Water Quality Certification in order to uphold state water quality standards for projects that require a 404



permit from the ACOE for discharge of dredge or fill material. Implementation of the project will require issuance of a Water Quality Certification.

- **1601 Streambed Alteration Agreement** – The California Department of Fish and Game regulates Section 1600-1607 of the Fish and Game Code and requires the issuance of a 1601 (Public) or 1603 (Private) Streambed Alteration Agreement for projects that result in an impact to the bed and/or bank of a river, stream, or lake. Implementation of the project will require issuance of a 1601 Streambed Alteration Agreement.
- **USFWS Consultation** – Potential impacts to listed species resulting from portions of the proposed project would require the ACOE to consult with the USFWS pursuant to Section 7 of the Endangered Species Act (ESA), with the USFWS then making a determination of the impact to a particular species. If the USFWS determines that impacts to a species would likely occur, alternatives and measures to avoid or reduce impacts must be identified. The proposed project will require that the ACOE consult with the USFWS due to the potential presence of federally protected Arroyo southwestern toad and California red-legged frog in the project area. A Biological Opinion (BO) is usually issued by the USFWS stating the results of their project review and recommending mitigation measures to ensure protection of species under the ESA.



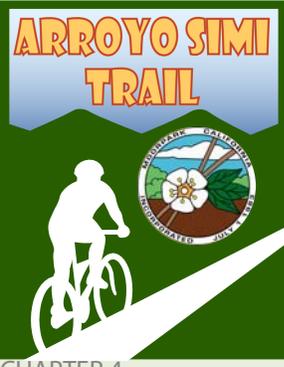
B. Opinion of Construction Cost

The following Opinion of Construction Cost (Table 2) summarizes the near and long-term costs associated with construction of the proposed Arroyo Simi Trail.

Near-Term Trail Route Costs

SEGMENT A					
Option Number	Segment Description	Quantity	Units	Cost/ Unit	Extension
1A	Hitch Blvd to Railroad crossing north of Science Dr				
	Trail Construction - Class 1 & Trail Amenities	4.1	Miles	500,000	\$ 2,050,000
	Crossing Construction - Trail Under Crossing	3	EA	250,000	\$ 750,000
	Crossing Construction - Trail Bridge	1	EA	175,000	\$ 175,000
					\$ 2,975,000
2A	West of wetlands along Peach Hill Wash to Countrywood Dr				
	Trail Construction - Class 1 & Trail Amenities	0.6	Miles	500,000	\$ 300,000
	Crossing Construction - Trail Bridge	1	EA	175,000	\$ 175,000
					\$ 475,000
	Total Direct Costs				\$ 3,450,000
	Design Contingency (20%)				\$ 690,000
	Environmental Permit Processing (10%)				\$ 517,500
	Planning and Design (15%)				\$ 345,000
SEGMENT A - PROJECT TOTAL					\$ 5,002,500
SEGMENT B					
Option Number	Segment Description	Quantity	Units	Cost/ Unit	Extension
2B	Existing Railroad Bridge to East LA Ave, east to Condor Dr				
	Trail Construction - Class 2	0.7	Miles	150,000	\$ 105,000
					\$ 105,000
8B	Princeton north to Campus Park Dr, under 118 tunnel to RR crossing at West LA Ave				
	Trail Construction - Class 1 & Trail Amenities	0.4	Miles	1,050,000	\$ 420,000
	Trail Construction - Class 2	1.1	Miles	150,000	\$ 165,000
	Crossing Construction - Trail Bridge	1	EA	175,000	\$ 175,000
					\$ 760,000
11B	RR crossing at West LA Ave along West LA Ave to Moorpark/ Simi Valley City Limits				
	Trail Construction - Class 2	0.9	Miles	150,000	\$ 135,000
					\$ 135,000
	Total Direct Costs				\$ 1,000,000
	Design Contingency (20%)				\$ 200,000
	Environmental Permit Processing (10%)				\$ 150,000
	Planning and Design (15%)				\$ 100,000
SEGMENT B - PROJECT TOTAL					\$ 1,450,000
SEGMENT C					
Option Number	Segment Description	Quantity	Units	Cost/ Unit	Extension
2C	Moorpark/ Simi Valley City Limits along West LA Ave to Madera Rd				
	Trail Construction - Class 2	2.1	Miles	150,000	\$ 315,000
					\$ 315,000
	Total Direct Costs				\$ 315,000
	Design Contingency (20%)				\$ 63,000
	Environmental Permit Processing (10%)				\$ 47,250
	Planning and Design (15%)				\$ 31,500
SEGMENT C - PROJECT TOTAL					\$ 456,750
TOTAL NEAR-TERM TRAIL ROUTE COSTS - SEGMENTS A, B AND C					\$ 6,909,250

Table 2: Opinion of Construction Cost



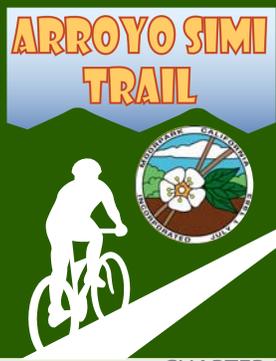
Long-Term Trail Route Costs

SEGMENT A					
<u>Option Number</u>	<u>Segment Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Cost/ Unit</u>	<u>Extension</u>
1A	Hitch Blvd to Railroad crossing north of Science Dr				
	Trail Construction - Class 1 & Trail Amenities	4.1	Miles	500,000	\$ 2,050,000
	Crossing Construction - Trail Under Crossing	3	EA	250,000	\$ 750,000
	Crossing Construction - Trail Bridge	1	EA	175,000	\$ 175,000
					\$ 2,975,000
2A	West of wetlands along Peach Hill Wash to Countrywood Dr				
	Trail Construction - Class 1 & Trail Amenities	0.6	Miles	500,000	\$ 300,000
	Crossing Construction - Trail Bridge	1	EA	175,000	\$ 175,000
					\$ 475,000
3A	Leta Yancy to Spring Rd along north side of proposed wetlands				
	Trail Construction - Class 1 & Trail Amenities	0.8	Miles	1,050,000	\$ 840,000
					\$ 840,000
	Total Direct Costs				\$ 4,290,000
	Design Contingency (20%)				\$ 858,000
	Environmental Permit Processing (10%)				\$ 429,000
	Planning and Design (15%)				\$ 643,500
					\$ 6,220,500
SEGMENT A - PROJECT TOTAL					\$ 6,220,500

SEGMENT B					
<u>Option Number</u>	<u>Segment Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Cost/ Unit</u>	<u>Extension</u>
1B	Existing Railroad Bridge north of Science Dr. to Avenida Colonia				
	Trail Construction - Class 1 & Trail Amenities	0.4	Miles	500,000	\$ 200,000
					\$ 200,000
2B	Existing Railroad Bridge to East LA Ave, east to Condor Dr				
	Trail Construction - Class 2	0.7	Miles	150,000	\$ 105,000
					\$ 105,000
3B	Existing RR Bridge so. of Avenida Colonia to RR crossing at Princeton				
	Trail Construction - Class 1 & Trail Amenities	0.2	Miles	500,000	\$ 100,000
	Crossing Construction - Trail Under Crossing	1	EA	250,000	\$ 250,000
					\$ 350,000
4B	SE of Virginia Colony Park to Villa del Arroyo Mobile Home Park				
	Trail Construction - Class 1 & Trail Amenities	1.5	Miles	500,000	\$ 750,000
	Crossing Construction - Trail Bridge	2	EA	175,000	\$ 350,000
					\$ 1,100,000
8B	Princeton north to Campus Park Dr, under 118 tunnel to RR crossing at West LA Ave				
	Trail Construction - Class 1 & Trail Amenities	0.4	Miles	500,000	\$ 200,000
	Trail Construction - Class 2	1.1	Miles	150,000	\$ 165,000
	Crossing Construction - Trail Bridge	1	EA	175,000	\$ 175,000
					\$ 540,000
10B	RR crossing at West LA Ave along Mobile Home Park paved road to West LA Ave				
	Trail Construction - Class 1 & Trail Amenities	0.81	Miles	500,000	\$ 405,000
					\$ 405,000
11B	RR crossing at West LA Ave along West LA Ave to Moorpark/ Simi Valley City Limits				
	Trail Construction - Class 2	0.9	Miles	150,000	\$ 135,000
					\$ 135,000
	Total Direct Costs				\$ 2,835,000
	Design Contingency (20%)				\$ 567,000
	Environmental Permit Processing (10%)				\$ 283,500
	Planning and Design (15%)				\$ 425,250
					\$ 4,110,750
SEGMENT B - PROJECT TOTAL					\$ 4,110,750

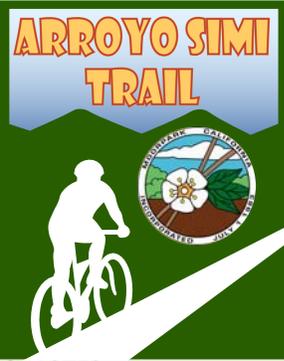
SEGMENT C					
<u>Option Number</u>	<u>Segment Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Cost/ Unit</u>	<u>Extension</u>
2C	Moorpark/ Simi Valley City Limits along West LA Ave to Madera Rd				
	Trail Construction - Class 2	2.1	Miles	150,000	\$ 315,000
					\$ 315,000
5C	Mid-Block crossing south of Cochran St along Arroyo Simi to Madera Road				
	Trail Construction - Class 1 & Trail Amenities	1.2	Miles	500,000	\$ 600,000
					\$ 600,000
	Total Direct Costs				\$ 915,000
	Design Contingency (20%)				\$ 183,000
	Environmental Permit Processing (10%)				\$ 91,500
	Planning and Design (15%)				\$ 137,250
					\$ 1,326,750
SEGMENT C - PROJECT TOTAL					\$ 1,326,750

TOTAL LONG-TERM TRAIL ROUTE COSTS - SEGMENTS A, B AND C					\$ 11,658,000
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5.0 TRAIL MANAGEMENT, OPERATION & MAINTENANCE

CHAPTER 5
Trail Management,
Operation &
Maintenance



5.0 Trail Management, Operation & Maintenance

This section describes future considerations for the implementation and management of the proposed trail. Specifically, this section offers ownership, administration, funding, liability, operation and maintenance, maintenance needs and maintenance cost suggestions.

A. Ownership

Consistent with the following goals and policies of the City of Moorpark General Plan, the City should pursue ownership and/or entitlement procurement for the most feasible trail route.

Provide a citywide system of safe, efficient and attractive bicycle and pedestrian routes for commuter, school and recreational use (Goal 5, Circulation Element Adopted May 13, 1992).

New development and redevelopment projects shall be required to include safe, separate, and convenient paths for bicycles and pedestrians so as to encourage these alternate forms of non-polluting transportation (Policy 5.1, Circulation Element Adopted May 13, 1992).

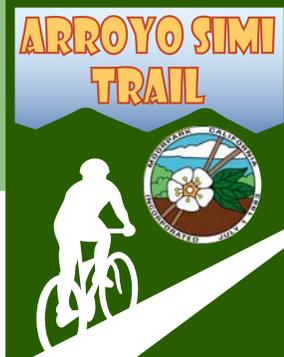
Development projects shall be required to participate in the funding of planned bikeways that would allow employees to utilize bicycles as an alternative to automobiles (Policy 5.4, Circulation Element Adopted May 13, 1992).

In order to implement the trail system proposed in the City's adopted Circulation Element, and as presented in this element, the city must recognize that: (1) each proposal for land development must be carefully evaluated for relationships to the planned system of trails; and (2) the trails system must be systematically implemented and, moreover, linked to county and/or regional trails. In order to take full advantage of the city's resources, the city needs to immediately evaluate site specific alignments in order to keep pace with development proposals and to identify a financing and phasing program (Trails & Scenic Roadways, Open Space, Conservation & Recreation Element Adopted August 1986).

The most feasible trail route has the potential to occur on properties held both privately and publicly. The ownership and/or entitlement procurement process may include land use permit approval, easement acquisition with a public entity, and offer of dedication for easement with a private entity. Identification of the actual properties to be affected by the trail and the exact ownership and/or entitlement procurement process will not occur until the City has identified a most feasible final trail route.

B. Administration

Administration of the Arroyo Simi Trail will primarily involve the City of Moorpark, County of Ventura, City of Simi Valley, and Rancho Simi Recreation and Park District. Coordination



with other agencies will be required including the Ventura County Watershed Protection District, Caltrans, and Southern California Regional Rail Authority (SCRRA).

C. Funding

Funding for the proposed trail is anticipated from two primary sources: (1) by way of exactions placed on private development, and (2) through public funding programs. Exactions on private development for the construction of trails and obtaining trail easements can be applied through design review of private projects and dedication through the subdivision approval process. A standard condition can be applied to new projects containing the potential route, requiring an irrevocable offer of dedication for a trail easement. The trail route would be reviewed as part of the overall project, helping to produce a well-integrated design. Environmental review and any outside permitting for the trail, such as wildlife agency permits, would be obtained as part of the overall project. The project developer would bear the cost of constructing the trail.

Where completion of the trail necessitates construction of trail segments across some publicly owned properties and privately owned open space parcels, the City may need to bear the cost of construction of the trail, as well as the environmental analysis and any necessary permitting. There are a variety of potential public funding sources available to the City including local, state, regional, federal, foundation and corporate funding programs.

Appendix B contains a Funding Sources Matrix which provides a summary of the primary federal, state and local/regional funding sources that may be available to this project. The matrix includes a description of the available funding and project eligibility requirements as well as contact information. Additional trail funding information can be found in the available on the *Guide to Bicycle Project and Program Funding in California*, available on the internet at <http://www.calbike.org/pdfs/guide2.pdf>. The guide outlines additional program funding sources and identifies key bicycle-related contacts to help obtain federal, state, local and private monies.

D. Liability

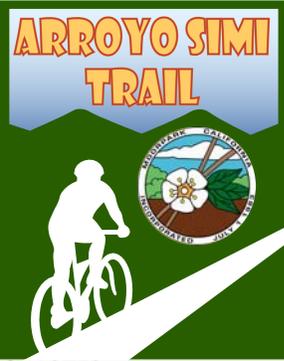
The proposed trail should be constructed using generally accepted design standards consistent with the required and recommended standards developed by Caltrans in Chapter 1000 of the Highway Design Manual and the AASHTO Guide for the Development of Bicycle Facilities. Any non-standard areas will be the result of physical constraints that cannot be avoided.

The proposed trail presents liability issues for both the trail managing/owning entity(ies) and private land owners. Through Recreational Use Statutes and the California Tort Claims Act, the state has greatly limited the liability and burden of responsibility placed on private landowners and public land managers. This section provides recommendations aimed at limiting liability.

Private Landowners

Private landowners affected by the proposed trail may include those who have provided an easement for a trail over their land and those who own land adjacent to a trail corridor.

People owning land adjacent to a trail are generally concerned that trail users may be endangered



by a condition on their land. However, private landowners are afforded a level of protection from potential injury claims by trail users who might enter their property under California's Recreational Use Statute Section 846 (See Appendix C). In conjunction with the provisions contained in Section 846, the landowner may reduce their liability by taking the following actions:

- Disclosing known hazards and working with trail designers to have the trail located away from hazards that cannot be corrected.
- Making it clear that trail users are not invited onto the adjoining land through the use of signs, vegetative screening, and/or fencing.
- If a hazardous condition does exist near the trail, signs should be developed to warn trail users of the hazard if it cannot be mitigated.

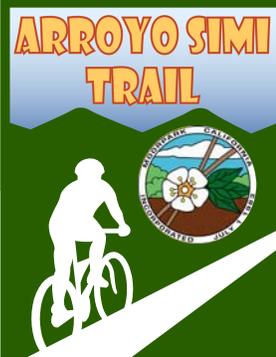
Private property located directly adjacent to the trail also presents concerns about increased crime, vandalism, noise, and fire. A well planned, designed, operated, maintained, and used trail will decrease the likelihood of such a crime occurring. Wherever possible, the path should be located as far away as possible to protect the privacy of adjacent property owners.

When a private landowner provides an easement for a public-use trail over their land, the easement contract should specify that the managing agency will carry liability insurance, will design the trail to recognized standards, and will develop and carryout a maintenance plan. The landowner may also request that an indemnification agreement be created in their favor.

Trail Managing & Owning Entities

Careful compliance to applicable laws, regulations and design standards should greatly reduce the risk of injury and provide strong evidence that the trail managing and/or owning agency used reasonable care. Showing that an agency had been acting in a responsible manner can help to limit liability and serve as an excellent defense in the event that a lawsuit develops. The following is a list of suggested precautions a jurisdiction can take to help minimize liability:

- **Use of Accepted Design Standards** – Adhere to widely accepted standards governing the design and construction of the trail including the Uniform Building Code, Caltrans Design Manual, and AASHTO Guide for the Development of Bicycle Facilities.
- **Traffic Signals & Warning Devices** – Adhere to California law requiring the installation and maintenance of traffic signals and warning devices required under certain circumstances.
- **Develop Operations & Maintenance Plan** – Develop a plan identifying specific responsibilities, tasks, and procedures, as well as rules and regulations for the management and use of the trail.
- **Enforce Trail Regulations** – Enforce and post the rules and regulations for trail use established in the Operations and Maintenance Plan.
- **Adhere to Maintenance Standards** – Adhere to the recognized maintenance standards and procedures established in the Operations and Maintenance Plan.
- **Monitor & Record Conditions** – Designate a Trail Manager responsible for monitoring the condition of the trail, ensuring on-going maintenance, keeping accurate maintenance records, and recording field observations and incidents.
- **Warn of, Inspect & Correct Hazards** – Inspect for and correct known hazards in a timely fashion and post signs warning of hazards on and around the trail.
- **Insurance** – Obtain proper and adequate insurance coverage to cover potential liability.



- **Understand the Limits of the Liability** – California has legislation related to civil lawsuits that establish the limits of government liability for injuries to persons or damage to property resulting from the acts or omissions of government officials.

While certain measures can be taken to limit liability, these measures cannot prevent accidents from occurring nor can they prevent anyone from filing a suit against the City in the event of an injury.

E. Operations & Maintenance

Given the cross-jurisdictional nature of the proposed trail, it is recommended that the City commission the development of a comprehensive Operations and Maintenance Plan for the proposed Arroyo Simi Trail. The Plan should be established prior to construction of the trail and should identify a recommended management approach to be adopted by the City of Moorpark, City of Simi Valley, and County of Ventura. Each jurisdiction should independently perform their own operations and maintenance on their section of the Arroyo Simi Trail.

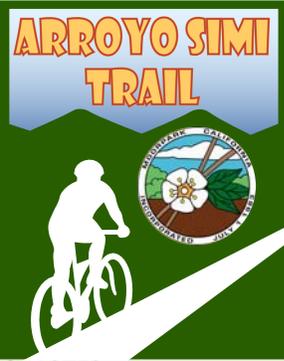
The Operations and Maintenance Plan should identify specific responsibilities, tasks, procedures, and other aspects related to the management of the proposed trail to help ensure it is operated in an efficient and safe manner. At a minimum, the Plan should include:

- Specific rules and regulations for trail use.
- Methods for documenting and monitoring trail accidents.
- Security measures aimed at reducing negative activities.
- Access plan for emergency response vehicles.
- Regular maintenance activities and inspection schedules with responsible departments and agencies.

Since the majority of the proposed trail lies within the City of Moorpark's jurisdiction, Moorpark will be the primary agency responsible for the operation and maintenance of the majority of the trail and should provide regional coordination. However, a Trail Manager should be appointed from each of the three jurisdictions to respond to general public inquiries and for emergency purposes. Duties of the Trail Manager may include:

- Creating a database of the parcels known to contain the final trail route.
- Monitoring development requests to ensure trail exactions are placed on those parcels known to contain the final trail route.
- Coordinating the funding, construction, operation and maintenance of the trail with the City of Simi Valley and County of Ventura.
- Developing and implementing a trail Operations and Maintenance Plan in conjunction with the City of Simi Valley and County of Ventura.
- Acquiring adequate public funding sources for trail construction and maintenance.
- Establishing a work program and assigning a responsible entity for the periodic maintenance and improvement of the trail.
- Monitoring and recording security and safety of the trail.
- Coordinating with adjacent landowners, the general public and other interested parties.

The duties suggested above may help ensure the efficient and safe maintenance and operation of the trail, and may also help limit liability.



Actual operation activities on the Arroyo Simi Trail will consist primarily of maintenance, monitoring and security. Monitoring accidents including identifying the primary cause and rectifying any physical deficiencies must be accomplished by each jurisdiction. The local police department typically has the responsibility for collecting accident information and identifying fault, while the public works department has the responsibility for identifying and improving physical or operational conditions that have contributed to the accident. The public works department typically also has the responsibility for making the determination to warn trail users of problems and to close the trail when conditions warrant.

F. Maintenance Needs

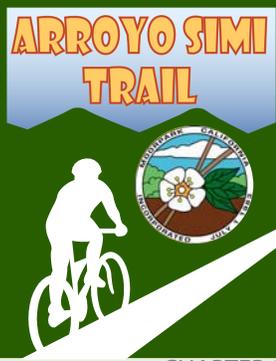
Maintenance of the Arroyo Simi Trail will include the following regular activities:

<u>Item</u>	<u>Frequency</u>
Sign replacement/repair	1-3 years
Pavement marking replacement	1-3 years
Tree, Shrub, & grass trimming/fertilization	5 months- 1 year
Pavement sealing/potholes	5-15 years
Pavement sweeping	Monthly - annually as needed
Shoulder and grass mowing	As needed
Trash disposal	As needed
Graffiti removal	Weekly - monthly as needed
Maintain furniture	1 year
Pruning	1-4 years
Bridge/tunnel inspection	1 year
Remove fallen trees	As needed
Weed control	Monthly - as needed
Irrigate/water plants	Weekly - monthly as needed

Many of these maintenance items are dependent on the type and amount of landscaping and supporting infrastructure that is developed along the trail. As noted in Section 6.6 above, it is recommended that a consistent maintenance procedure be developed for each jurisdiction along the Arroyo Simi Trail to ensure, at a minimum, that the facility is safe for trail users. Each jurisdiction should have a mechanism to identify, record, and respond to maintenance problems, and to keep written records of such actions.

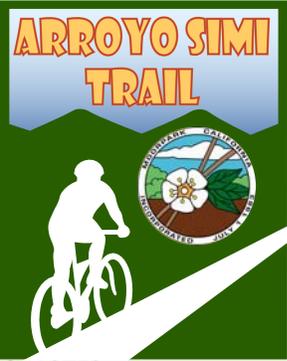
Special maintenance equipment such as a sweeper may be purchased jointly by all local jurisdictions, thereby reducing costs. Typical maintenance vehicles for the trail will be light pick up trucks and occasionally heavy dump trucks and tractors. Care should be taken when operating heavier equipment on the Arroyo Simi Trail to warn trail users and to avoid breaking the edge of the trail surface.

If the Arroyo Simi Trail will serve as a maintenance access road for the railroad, the trail width and pavement section should reflect the anticipated weight and frequency of vehicles.



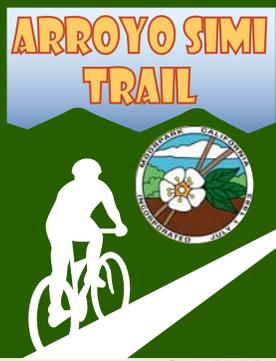
G. Maintenance Costs

The total estimated annual maintenance cost for the Arroyo Simi Trail long-term route is approximately \$81,000. This is based on an industry standard of \$9,000 per mile of bike path annually. There are likely to be economies of scale when the trail is 100% complete, based on the length of the facility and the likelihood of shared maintenance agreements between agencies.



CHAPTER 5
Trail Management,
Operation &
Maintenance

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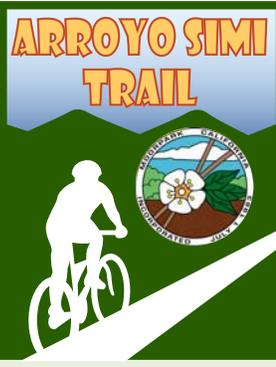


6.0 WORKS CITED

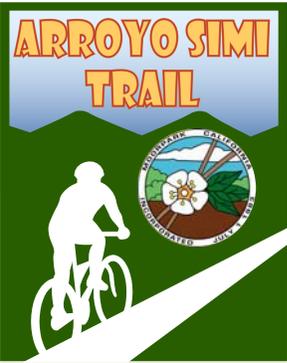


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APPENDICES

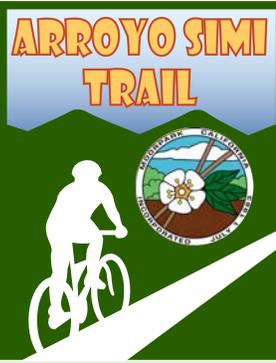


Appendices

A. Environmental Base Line Study

B. Funding Sources Matrix

C. Recreational Land Use Statute



APPENDIX A

Environmental Base Line Study

**City of Moorpark
Arroyo Simi Trail Feasibility Study**

**BIOLOGICAL CONSTRAINTS
ANALYSIS**

Prepared for:

**City of Moorpark
799 Moorpark Avenue
Moorpark, CA 93021**

Prepared by:



In association with

RRM Design Group

June 18, 2003

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I. INTRODUCTION

This Biological Resources Constraints Analysis has been prepared by Morro Group, Inc. for the City of Moorpark, and is intended for use as a reference document to assist in the project planning process. The objective of this report is to document the condition and sensitivity of the existing natural resources at and near the proposed Arroyo Simi Trail Feasibility Study routes, and to identify potential impacts of the proposed project on these resources. The assessment will focus on sensitive communities and special-status species, and identify any constraints associated with development along the proposed routes. The information presented in this report is based on review of pertinent literature, previous studies in the area, and on-site investigations of the proposed routes.

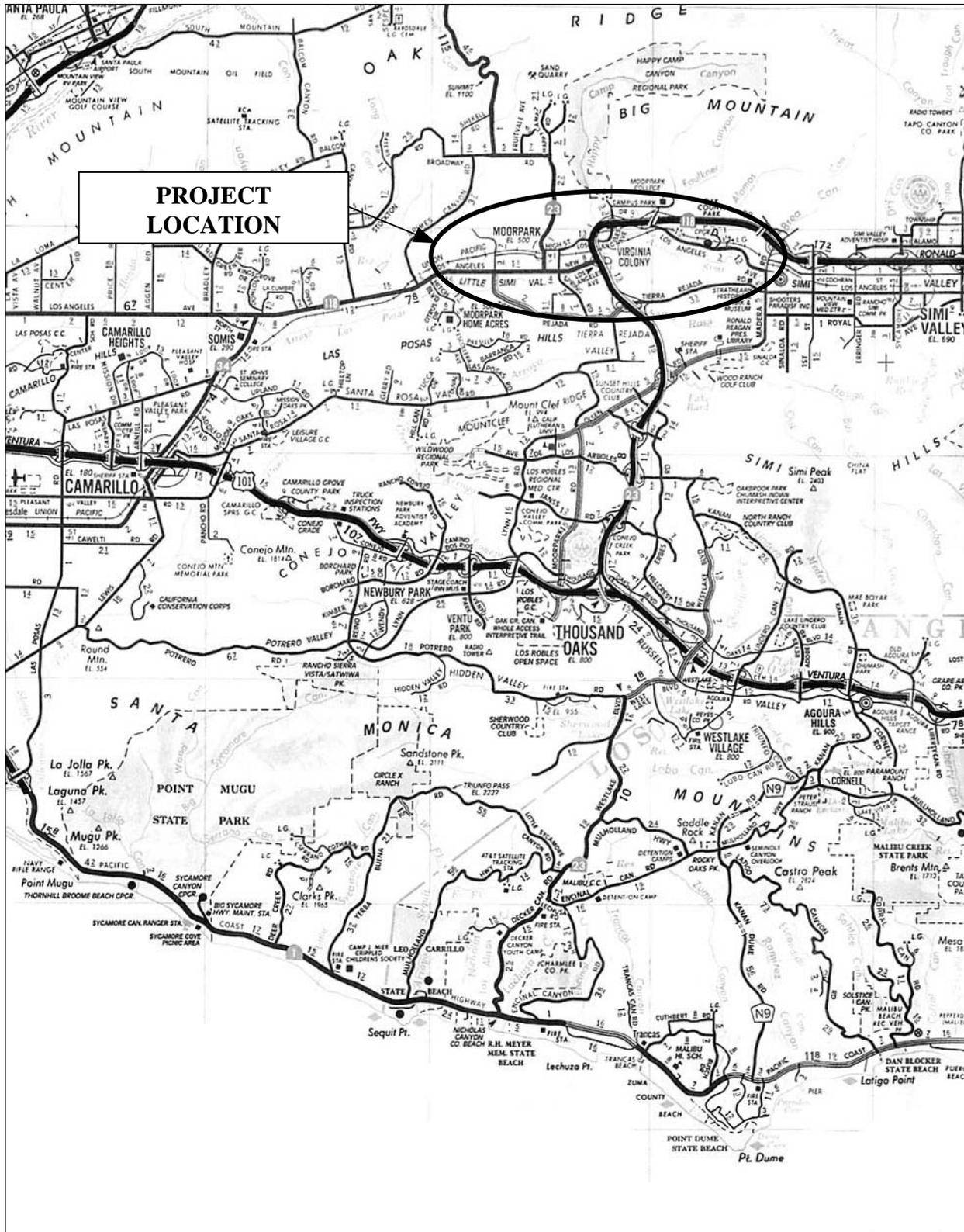
II. PROJECT DESCRIPTION

The City of Moorpark is studying the feasibility of establishing a Class 1 multi-use pedestrian and bicycle trail within and adjacent to the Arroyo Simi Creek Corridor. The multi-use trail is intended to promote alternative forms of transportation and provide new recreational opportunities consistent with the goals set forth in the City of Moorpark's General Plan, the City of Simi Valley's Bicycle Master Plan, and Ventura County's Regional Trails and Pathways Master Plan Report.

The proposed trail corridor is located within the jurisdictional boundaries of the City of Moorpark, County of Ventura and City of Simi Valley (refer to Figures 1 and 2). Other local agencies with jurisdiction in the project study area include the Ventura County Watershed Protection District, Caltrans, and the Southern California Regional Rail Authority (SCRRA). Resource agencies with jurisdiction over habitat types and special-status species present in the area include the California Department of Fish and Game (CDFG), the U.S. Army Corps of Engineers (Corps), and the U. S. Fish & Wildlife Service (USFWS).

The proposed trail traverses a distance of approximately 9 miles, beginning at the westerly Moorpark City Limit and extending easterly through the City of Moorpark and unincorporated Ventura County, to the westerly terminus of the City of Simi Valley's existing trail system. The proposed routes cross both privately and publicly owned property. The trail routes will consist of a combination of Class I and Class II facilities with connections to neighborhoods, schools, parks, downtown Moorpark, employment centers, and planned regional trail facilities.

Two routes are under consideration: a near-term route that utilizes mainly existing roads, creek levees, and crossing points, and a long-term route that will require additional road, railroad, and creek crossings, property acquisition, and new path construction. The routes traverse a mixture of natural and man-made habitats associated with various land uses within the City and County areas. Both routes have been designed to avoid or minimize encroachment upon sensitive resources and habitats along the proposed alignments, however, some impacts to such areas will be necessary to achieve the stated project goals. The two proposed routes are discussed in greater detail below, and are detailed on Figures 3 and 4.

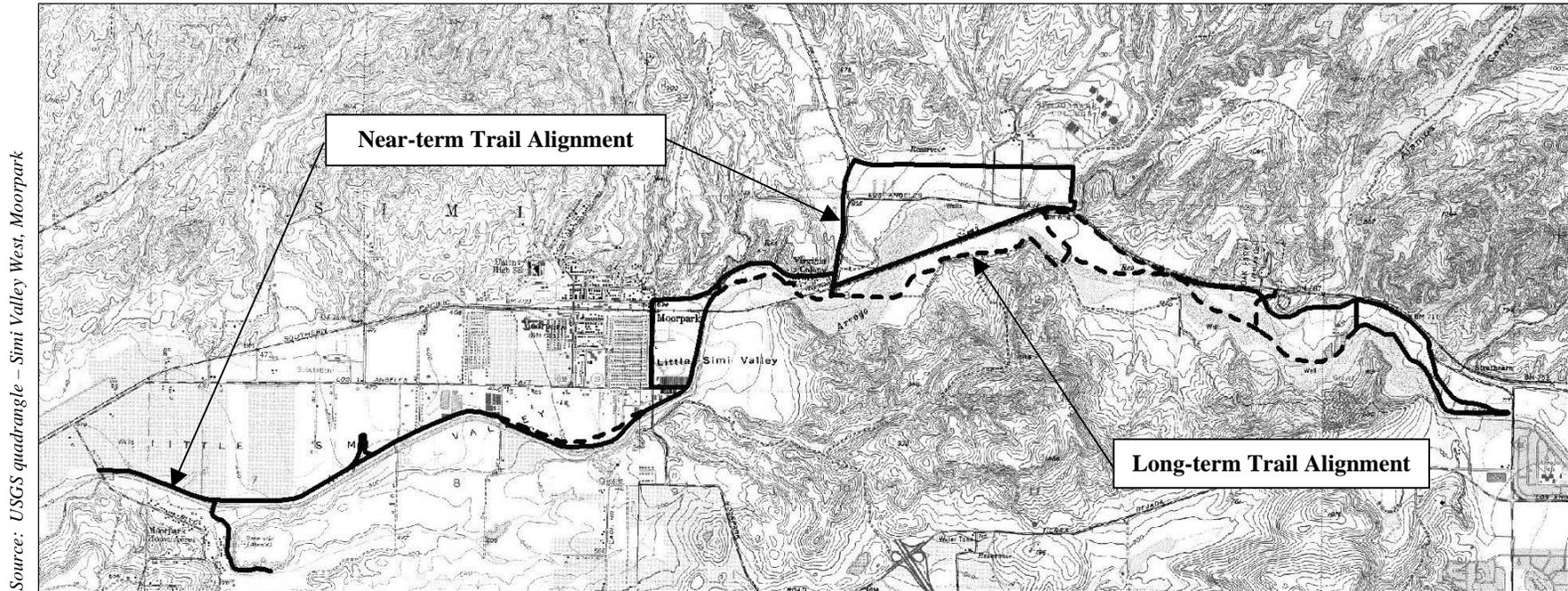


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NORTH
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VICINITY MAP
FIGURE 1

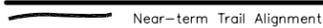


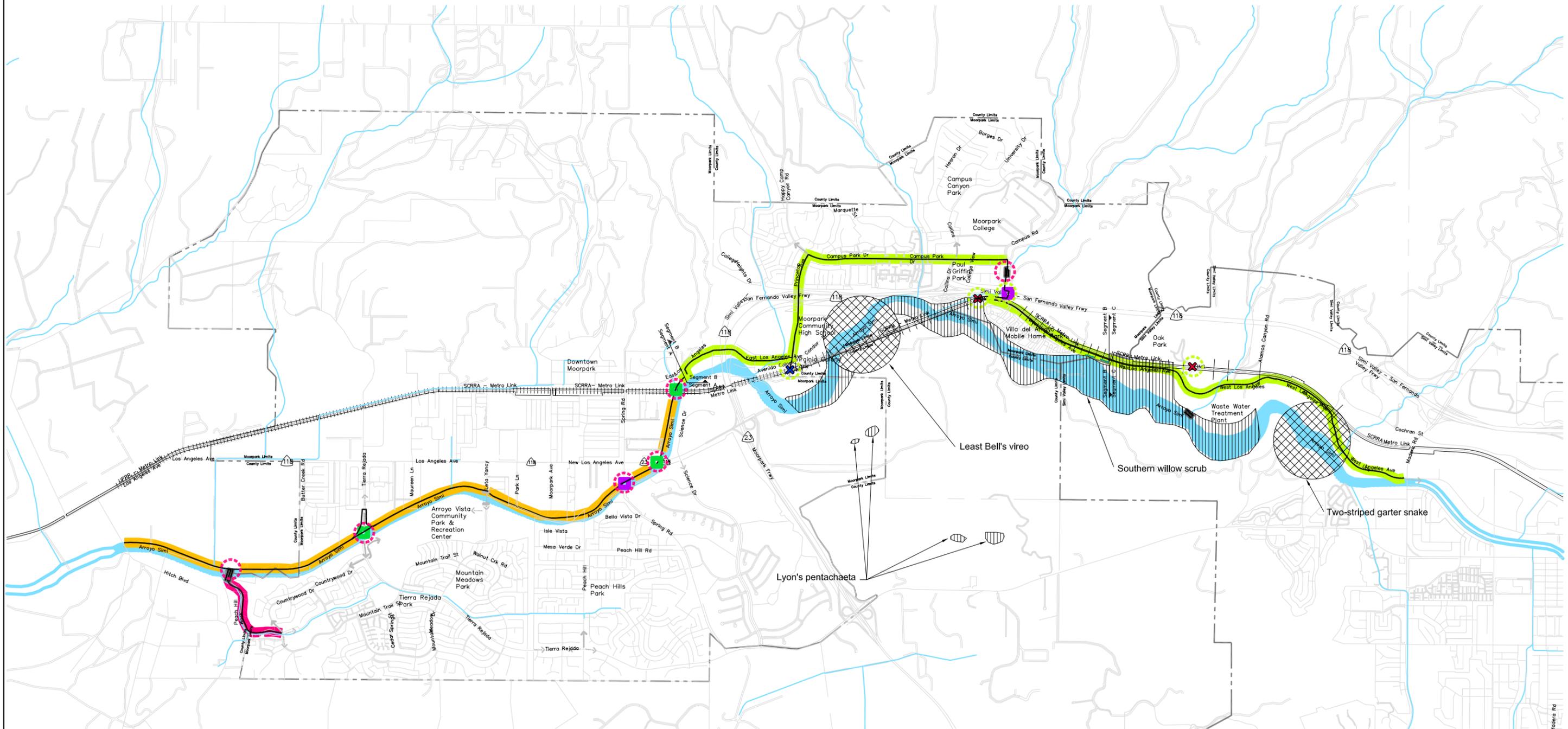
NORTH
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PROJECT LOCATION MAP
FIGURE 2

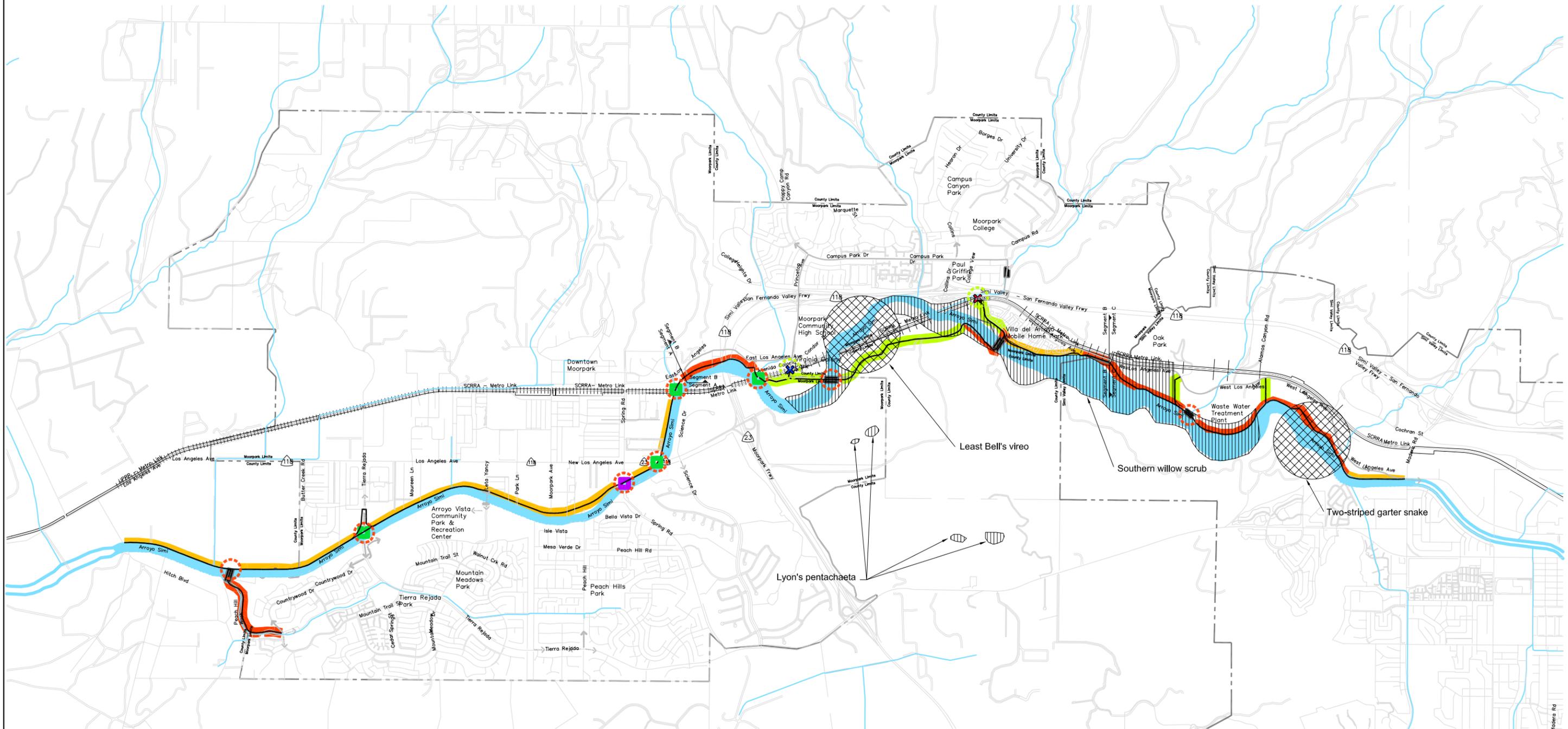
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Legend

-  Near-term Trail Alignment
-  High Potential for environmental impacts
-  Moderate Potential for environmental impacts
-  Low Potential for environmental impacts
-  Proposed Bridge Under Crossing
-  Existing Bridge Under Crossing
-  Existing Signalized Railroad Crossing
-  Existing At Grade Railroad Crossing
-  Special-status Plants
-  Special-status Wildlife



- Legend**
- Near-term Trail Alignment
 - Long-term Trail Alignment
 - High Potential for environmental impacts
 - Moderate Potential for environmental impacts
 - Low Potential for environmental impacts
 - Proposed Bridge Under Crossing
 - Existing Bridge Under Crossing
 - Existing Signalized Railroad Crossing
 - Existing At Grade Railroad Crossing
 - Special-status Plants
 - Special-status Wildlife



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A. NEAR-TERM ROUTE

The identified most feasible near-term route utilizes existing Arroyo Simi Creek Corridor levee pathways, as well as existing roads and existing Class II bike path facilities on Campus Park Drive and West Los Angeles Avenue. The near-term route consists of the following trail routes as shown on Figure 3.

- 1A: Hitch Boulevard east to the existing railroad bridge north of Science Drive, running along the north side of Arroyo Simi Creek primarily along the existing levee roadway.
- 2A: After crossing Arroyo Simi Creek on a new bridge near the western edge of the existing Wetlands Enhancement Area, the route runs south along the east side of the existing Peach Hill Wash levee to the limits of the existing Class I and II bikeway connections at Countrywood Drive.
- 2B: From the existing railroad bridge north of Science Drive the route travels north along an existing Caltrans maintenance road to East Los Angeles Avenue, and then heads east to Condor Drive.
- 8B: From the intersection of Princeton Avenue, Condor Drive and the SCRRA - Metro Link, the route travels north along Princeton Avenue to Campus Park Drive and east to Campus Road utilizing existing Class II bike facilities. At Campus Road the route heads south along an existing drainage easement to an existing Caltrans tunnel that crosses under the 118 Freeway, and then runs along the SCRRA – Metro Link to an existing at-grade railroad crossing.
- 11B: From the existing at grade railroad crossing northeast of Villa del Arroyo Mobile Home Park the route travels east on West Los Angeles Avenue to the Moorpark/Simi Valley City Limits Line. From the City Limits Line, it continues east on West Los Angeles Avenue terminating at Madera Road.

B. LONG-TERM ROUTE

The long-term trail route is intended to supplement the near-term route with additional Class I facilities. These proposed Class I facilities are categorized as long-term since the property over which these trail segments cross are currently privately held. The City, in coordination with the County of Ventura, propose to secure easements or real property for the trail as described in the feasibility study. The most feasible long-term route consists of portions of the near-term route described above, with the addition of the following supplemental sections as shown on Figure 4:

- 3A: From the western edge of the existing Wetlands Enhancement Area, the route travels along the north side of the Proposed Wetlands Enhancement Area extending from Leta Yancy east to Spring Road.
- 1B: From the existing railroad bridge north of Science Drive the route travels along the north side of Arroyo Simi Creek, following an existing Caltrans maintenance road, and then

continues east along private property lines to an alley off Avenida Colonia, and then south on Avenida Colonia to the railroad.

- 3B: It then crosses under the existing railroad bridge south of Avenida Colonia, and runs east along an existing dirt road and connects to the railroad crossing at the southern terminus of Princeton Avenue.
- 4B: From the southern terminus of Princeton Avenue, on the south side of the existing railroad, the route continues east along the City Limit Line crossing the Arroyo Simi via a proposed bridge, and follows the City Limits Line to an existing dirt road on private property in the County of Ventura. The route continues east on the south side of the existing Wetlands Enhancement Area and Arroyo Simi Creek, crosses the Creek via a proposed bridge, and connects with the Villa del Arroyo Mobile Home Park road system.
- 10B: From the Villa del Arroyo Mobile Home Park, the route runs northwest to the existing at-grade railroad crossing, and then follows an existing paved roadway south of the Mobile Home Park to West Los Angeles Avenue.
- 5C: The route runs south along the Waste Water Treatment Plant's eastern property line from West Los Angeles Avenue to Arroyo Simi Creek. The route continues east along Arroyo Simi Creek and joins an existing levee road before connecting with the existing Simi Valley Trail System at Madera Road.

III. ENVIRONMENTAL ANALYSIS

A. METHODS

During the literature review portion of this study, a search of the California Department of Fish and Game (CDFG) Natural Diversity Data Base (NDDB) was conducted to verify reported occurrences of special-status plant and animal species and sensitive habitats within the Moorpark and Simi Valley West U.S. Geological Survey (USGS) 7.5-minute quadrangle areas. The results of the NDDB search were reviewed to determine reported occurrences of various special-status species in the general vicinity of the proposed project site. The CNPS 2001 *Inventory of Rare and Endangered Plants of California* (Tibor, 2001), was also reviewed to provide additional information on rare plants that are potentially present in the area. Vegetation/habitat types were classified based on CDFG's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland, 1986). The AT&T Fiber Optic Cable Project San Luis Obispo to Los Angeles Environmental Impact Report (Morro Group, Inc. June 2002) was also reviewed and utilized during analysis of biological constraints.

In addition to the review of pertinent literature, Morro Group biologists conducted site visits and surveys on October 25, 2002, and May 28, 2003, to determine the location and extent of sensitive habitats and the potential for occurrence of special-status plant and wildlife species.

B. SENSITIVE HABITATS

Eight major plant communities and habitat types were identified within the proposed project area, and include riverine, southern willow scrub, freshwater marsh, coastal scrub, annual grassland, landscaped/turf areas, windrow, and ruderal/disturbed areas. Of these habitat types, riverine, southern willow scrub, and freshwater marsh habitats are considered sensitive by various state and federal agencies due to their limited distribution, ecological sensitivity, or potential for providing important habitat for special-status species. Riverine, southern willow scrub, and freshwater marsh habitats are described below.

1. Riverine

Riverine habitat consists of the unvegetated flowing channel areas of Arroyo Simi Creek, and using the nomenclature of Cowardin et al. (1979), this habitat type would be classified as riverine, lower perennial, unconsolidated bottom/shore. This habitat type is spatially and seasonally variable, and includes open water components (active, flowing channel), unvegetated sandbars (riverwash, active floodplain), and seasonally emergent wetlands. The stream gradient of this habitat type is low, water velocities are slow, and floodplains are typically well developed. Substrate within this habitat type is variable and consists of consolidated sand, cobble, and gravel.

Riverine habitat within the project area consists of broad, flat, mostly channelized areas confined by levees from the western project boundary near Hitch Boulevard to the 118/23 freeway crossing near the center of Moorpark. To the east the channel is less disturbed, and contains more natural bank structure until levees begin again just west of Madera Road. Riverine habitats are considered waters of the U.S. and are regulated by the Corps and CDFG. Riverine habitat associated with Arroyo Simi Creek has potential to support a number of aquatic species, including bluegill (*Lepomis macrochirus*), the Arroyo chub (*Gila orcutti*), and the federally threatened Santa Ana sucker (*Catostomus santaanae*).

2. Southern Willow Scrub

Southern willow scrub is characterized as a dense, broadleaved winter deciduous riparian thickets dominated by several *Salix* species, with scattered occurrences of cottonwoods and sycamore (Holland, 1986). Most stands are too dense to allow significant development of understory species. This community is found on loose, sandy or fine gravelly alluvial soils deposited within stream channels during flood flows. Southern willow scrub was formerly extensive along major southern California rivers and streams, but has been significantly reduced by urban expansion and associated flood control efforts. This community is considered sensitive by the CDFG, and frequently qualifies as wetland under CDFG/Corps delineation methodologies. Within the project area, this habitat type is dominated by arroyo willow (*Salix lasiolepis*), with some areas densely infested with the highly invasive exotic arundo (*Arundo donax*). Species such as poison hemlock (*Conium maculatum*), wild blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), black nightshade (*Solanum douglasii*), mulefat (*Baccharis viminea*), mugwort (*Artemisia douglasiana*), and stinging nettle (*Urtica holosericea*) are also present.

Southern willow scrub extends from just east of the 118/23 freeway crossing upstream past the wastewater treatment plant as mapped by the CNDDDB (refer to Figure 4). Southern willow scrub areas along the proposed routes are expected to provide suitable habitat for a diverse assemblage of semi-aquatic and terrestrial wildlife species. A variety of amphibian and reptile species, including those identified as having potential to occur in association with freshwater marsh communities, are expected to occur in association with southern willow scrub areas. Other vertebrate species expected to occur in or frequent this habitat include ensatina (*Ensatina eschscholtzi*), gopher snake (*Pituophis melanoleucus*), common garter snake (*Thamnophis sirtalis*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), California quail (*Callipepla californica*), American goldfinch (*Carduelis tristis*), black phoebe (*Sayornis nigricans*), as well as numerous other birds. Dense willow vegetation is also expected to provide important nesting, roosting, and foraging habitat for a variety of migratory songbirds and various raptors.

3. Freshwater Marsh

Freshwater marsh communities usually occur in nutrient-rich mineral soils that are saturated or inundated on a seasonal or permanent basis. These communities can occur in areas of slow-moving or stagnant shallow water along streams, or in areas where the low permeability of existing soils results in the prolonged presence of surface water or saturated soils. These habitat types also occur along the persistent, moist areas of existing drainages, around the perimeters of ponds, and in low topographic areas that contain standing water or moist soils due to retention of rainfall/runoff (Cowardin et al., 1979). Freshwater marsh areas are considered to be wetlands under state and federal guidelines.

Freshwater marsh vegetation is present throughout the project area in channel/floodplain areas of Arroyo Simi Creek. These areas contain a mixture of annual grass and weed species, and wetland plants, including Arroyo willow, blackberry (*Rubus ursinus*), mugwort (*Artemisia douglasiana*), California bulrush (*Scirpus californicus*), cattail (*Typha* spp.), spikerush (*Eleocharis macrostachya*), mulefat (*Baccharis salicifolia*), annual ryegrass (*Lolium multiflorum*), curly dock (*Rumex crispus*), prickly ox-tongue (*Picris echioides*), bermuda grass (*Cynodon dactylon*), English plantain (*Plantago lanceolata*), brass buttons (*Cotula coronopifolia*), and saltgrass (*Distichlis spicata*).

Due to the extent of wetland habitat along the creek, large areas of dense vegetative cover, and permanent water availability, freshwater marsh habitat associated with Arroyo Simi Creek is expected to support a wide variety of wildlife species. Species expected to occur in or frequent freshwater marsh habitats within the project areas would include Pacific treefrog (*Hyla regilla*), bullfrog (*Rana catesbiana*), western toad (*Bufo boreas*), and the federally threatened California red-legged frog (*Rana aurora draytonii*). Great blue heron (*Ardea herodias*), great egret (*Casmerodias albus*), and snowy egret (*Egretta thula*), are also expected to be present in marsh areas.

4. Important Natural Communities

a. Riparian Corridors

Riparian corridors are considered sensitive and important habitats by the CDFG and other public and private resource agencies. Along the proposed routes, the riparian corridor of Arroyo Simi Creek includes Riverine, Southern Willow Scrub, and Freshwater Marsh habitat types. Southern Willow Scrub, a subcategory of Riparian Scrub habitat, is considered a “high priority” and “rare” community type by the CDFG (Holland, 1986). The diversity of wildlife species occurring within riparian habitats is typically very high and these habitats are sensitive to disturbance. Riparian vegetation provides important roosting and foraging habitat for many migratory bird species. Riparian vegetation regulates water temperatures and provides, directly or indirectly, food sources for aquatic organisms. Riparian habitats serve as migratory corridors for wildlife, and as such, are important in linking non-contiguous or fragmented wildlife habitats. Riparian corridors, such as the Arroyo Simi Creek corridor within the project site, are regulated by the CDFG and the ACOE.

5. Jurisdictional Definitions

Areas of riverine, southern willow scrub, and freshwater marsh habitats, and all other areas within the bed or banks of Arroyo Simi Creek are subject to regulation by the CDFG and the Corps. Impacts to these areas may also require authorization from the USFWS due to the potential presence of special-status plant and animal species.

The CDFG defines a “stream” (including creeks and rivers) as

“a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.”

The habitats listed above potentially qualify as wetland or other waters of the U. S. under Section 404 of the Clean Water Act. Wetlands are defined in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987) as:

“Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.”

Corps-defined wetlands are determined to be present if evidence of the following three criteria are observed: dominance by hydrophytic vegetation, presence of hydric soils, and, evidence of wetland hydrology.

Areas that do not meet all three criteria above (such as unvegetated levee banks) may still be regulated as jurisdictional waters by the Corps, and still fall under the jurisdiction of the CDFG.

C. SPECIAL-STATUS SPECIES

Special-status species are plants and animals that are either listed as endangered or threatened under the Federal or California Endangered Species Acts, rare under the California Native Plant Protection Act, or considered to be rare (but not formally listed) by resource agencies, professional organizations (e.g., Audubon Society, CNPS, The Wildlife Society), and the scientific community.

Prior to visiting the site, Morro Group, Inc. biologists reviewed the NDDB for the Moorpark and Simi Valley West U.S. Geological Survey (USGS) quadrangle areas, the Cal Flora Occurrence Database (www.calflora.org), and the CNPS electronic inventory. A total of 24 state/federal/CNPS listed plants and animals were reported as occurring within the general vicinity of the proposed route. These species and potential suitability of observed habitat types are identified below in Tables 1 and 2.

1. Special-status Plants

A general-level botanical survey was conducted along accessible areas of the proposed routes in May, 2003. None of the nine sensitive plant species listed in Table 1 were observed during the survey. Private property areas south of Arroyo Simi Creek opposite the Villa Del Arroyo Mobile Home Park (Section 4B of the long-term route) were not accessible, therefore, these areas and associated habitats were assessed for their potential to contain special-status plant species known to be present in the project area. One species, Lyon's pentachaeta, is known to be present on the hillside above Arroyo Simi Creek opposite the Mobile Home Park, and could potentially be present along this section of the proposed long-term route.

Table 1
Sensitive Plant Species
Potentially Occurring Within or Near the Project Corridor

Special Status Species	Habitat and Distribution	Flower Season	Status Designation	Suitable Habitat Within or Adjacent to Project Corridor
<i>Calochortus plummerae</i> Plummer's mariposa lily	Perennial bulbiferous herb. Occurs in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, on rocky/sandy sites, usually of granitic or alluvial material. Elevation 90-1,700 feet.	MAY - JULY	Fed: None Calif: None CNPS: List 1B R-E-D: 2-2-3	Areas of potentially suitable habitat occur along sections of the long-term route. This species was not observed.
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i> dune larkspur	Perennial herb. Occurs in chaparral and coastal dunes, rocky areas. Elevation 0 - 1,230 feet.	APRIL - MAY	Fed: None Calif: None CNPS: List 1B R-E-D: 3-2-3	Areas of potentially suitable habitat occur along sections of the long-term route. This species was not observed.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	Perennial herb. Coastal bluff scrub, chaparral, coastal scrub, valley and foothill grassland, rocky, often clay or serpentinite. Elevation 1 - 1,476 feet.	APRIL - JUNE	Fed: None Calif: None CNPS: List 1B R-E-D: 2-3-2	Areas of potentially suitable habitat occur along sections of the long-term route. This species was not observed.
<i>Dudleya parva</i> Conejo dudleya	Perennial herb. Coastal scrub, valley and foothill grassland. Endemic to Ventura county in clayey or volcanic soils on rocky slopes and grassy hillsides. Elevation 213 - 1,476 feet.	MAY - JUNE	Fed: Threatened Calif: None CNPS: List 1B R-E-D: 3-2-3	Areas of potentially suitable habitat occur along sections of the long-term route. This species was not observed.
<i>Dudleya verityi</i> Verity's dudleya	Perennial herb. Chaparral, cismontane woodland, coastal scrub. Endemic to Ventura County. Found on volcanic rock outcrops in the Santa Monica mountains. Elevation 213 - 395 feet.	MAY - JUNE	Fed: Threatened Calif: None CNPS: List 1B R-E-D: 3-2-3	Areas of potentially suitable habitat occur along sections of the long-term route. This species was not observed.
<i>Eriogonum crocatum</i> Conejo buckwheat	Perennial herb. Occurs in chaparral, coastal scrub, and valley and foothill grassland. Endemic to Ventura county on Conejo volcanic outcrops and rocky sites. Elevation 164 - 1,900 feet.	APRIL - JUNE	Fed: None Calif: Rare CNPS: List 1B R-E-D: 2-2-3	Areas of potentially suitable habitat occur along sections of the long-term route. This species was not observed.
<i>Erodium macrophyllum</i> round-leaved filaree	Annual herb. Occurs in cismontane woodland and valley and foothill grassland, on clay soils. Elevation 45 - 3,600 feet.	MARCH - MAY	Fed: None Calif: None CNPS: List 2 R-E-D: 2-3-1	Areas of potentially suitable habitat occur along sections of the long-term route. This species was not observed.
<i>Orcuttia californica</i> California Orcutt grass	Annual herb. Occurs in vernal pools known only from southern California and Baja. Elevation 50 - 2,165 feet.	APRIL - AUGUST	Fed: Endangered Calif: Endangered CNPS: List 1B R-E-D: 3-3-2	No suitable habitat occurs within the Project corridor. This species was not observed.
<i>Pentachaeta lyonii</i> Lyon's pentachaeta	Annual herb. Edges of clearings in chaparral usually at the ecotone between valley and foothill grassland, coastal scrub, and chaparral or edges of firebreaks. Elevation 100 - 2,067 feet.	MARCH - AUGUST	Fed: Endangered Calif: Endangered CNPS: List 1B R-E-D: 3-3-3	This species is known to occur on hillsides along the southern side of Arroyo Simi Creek, near proposed Section 4B of the long-term route. This species was not observed.
<i>Senecio aphanactis</i> rayless ragwort	Annual herb. Cismontane woodland, coastal scrub, and chaparral on drying alkaline flats. Elevation 50 - 1,886 feet.	JANUARY - APRIL	Fed: None Calif: None CNPS: List 2 R-E-D: 3-2-1	Areas of potentially suitable habitat occur along sections of the long-term route. This species was not observed.

General references: CDFG 1999, Hickman (ed.) 1993, Munz 1974, CNDDDB 2003, Tibor, 2001.

Status Codes

--= No status

Federal:

FE = Federal Endangered

FT=Federal Threatened

SE=State Endangered

California Native Plant Society (CNPS):

List 1B = rare, threatened, or endangered in California and elsewhere.

List 2=Plants rare, threatened, or endangered in California but more common elsewhere.

CNPS Rare-Endangerment-Distribution:

Rare: 1) rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time; 2) distributed in a limited number of occurrences, occasionally more if each occurrence is small; 3) distributed in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported.

Endangerment: 1) not endangered; 2) endangered in a portion of its range; 3) endangered throughout a portion of its range.

Distribution: 1) more or less widespread outside California; 2) rare outside California; 3) endemic to California.

2. Special-status Wildlife

Focused surveys for the wildlife species listed above were not conducted as part of this analysis. These special-status wildlife species are considered to have the potential to occur in the vicinity of the proposed project due to the presence of suitable habitats. Additional survey work will be necessary to determine presence or absence of these species prior to construction of the project.

In addition to the species listed below, areas in the vicinity of the project corridor provide suitable foraging and nesting habitat for several raptor species, including Cooper's hawk (*Accipiter cooperii*), white-tailed kite (*Elanus leucurus*), American peregrine falcon (*Falco peregrinus anatum*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), and American kestrel (*Falco sparverius*). Raptor species that may be present only during winter months include the sharp-shinned hawk (*Accipiter striatus*), the ferruginous hawk (*Buteo regalis*), and bald eagle (*Haliaeetus leucocephalus*).

Table 2
Sensitive Wildlife Species
Potentially Occurring Within or Near the Project Corridor

Scientific Name	Common Name	Status	Habitat and Distribution	Suitable Habitat Within or Adjacent to Project Corridor
CLASS BRANCHIOPODA	BRINE AND FAIRY SHRIMPS			
<i>Streptocephalus wootoni</i>	Riverside fairy shrimp	FE	Endemic to western Riverside and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage. Inhabits seasonally astatic pools filled by winter/spring rains.	No suitable habitat occurs within the Project corridor. This species was not observed.
CLASS OSTEICHTHYES	FISH			
<i>Catostomus santaanae</i>	Santa Ana sucker	FT, CSC	Found in several southern California streams that retain pools and natural bank structure. Primarily feeds on algal material.	Suitable habitat occurs within Arroyo Simi Creek. This species was not observed.
<i>Gila orcutti</i>	Arroyo chub	CSC	Generally found in slow water stream sections with mud or sand bottoms. Feeds on aquatic vegetation and associated invertebrates. Introduced in regions north of Ventura County.	Suitable habitat occurs within Arroyo Simi Creek, and the species is mapped as present in the eastern portion of the project area by the CNDDB. This species was not observed.
CLASS AMPHIBIA	AMPHIBIANS			
<i>Bufo microscaphus</i>	Arroyo southwestern toad	FE	Found in semi-arid regions near washes or intermittent drainages.	Suitable habitat occurs along the Arroyo Simi Creek riparian corridor. This species was not observed
<i>Rana aurora draytonii</i>	California red-legged Frog	FT, CSC	Found in lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development and must have access to estivation habitat.	Suitable habitat occurs along the Arroyo Simi Creek riparian corridor. This species was not observed

Scientific Name	Common Name	Status	Habitat and Distribution	Suitable Habitat Within or Adjacent to Project Corridor
CLASS REPTILIA	REPTILES			
<i>Clemmys marmorata pallida</i>	southwestern pond turtle	CSC	Inhabits permanent or nearly permanent bodies of water below 600 ft. Require basking sites such as partially submerged logs, vegetation mats or open mud banks.	Suitable habitat occurs along the Arroyo Simi Creek riparian corridor. This species was not observed
<i>Cnemidophorus tigris multiscutatus</i>	Coastal western whiptail	CSC	Inhabits a wide variety of habitat types including coastal sage scrub, chaparral, and sandy wash areas.. Prefers densely vegetated areas.	Suitable habitat occurs along the Arroyo Simi Creek riparian corridor. This species was not observed
<i>Thamnophis hammondi</i>	two-striped garter snake	CSC	Inhabits highly aquatic areas from Salinas to northwest Baja California. Found in or near permanent fresh water often along streams with rocky beds and riparian growth.	Suitable habitat occurs along the Arroyo Simi Creek riparian corridor. This species was not observed.
CLASS AVES	BIRDS			
<i>Athene cucularia</i>	burrowing owl (burrow sites)	CSC	Found in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester dependent upon burrowing mammals.	Suitable habitat occurs within the Project corridor in open grassland areas along Arroyo Simi Creek. This species was not observed.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo (nesting)	SE	Nests in riparian areas of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Suitable habitat occurs along portions of Arroyo Simi Creek that contain dense willow cover. This species was not observed.
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher (nesting)	FE, SE	Inhabit extensive thickets of low, dense willows. Often found along the edge of wet meadows, ponds, or backwaters. Require dense willow thickets for nesting and roosting.	Suitable habitat occurs along portions of Arroyo Simi Creek that contain dense willow cover. This species was not observed.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT, CSC	Requires low, coastal sage scrub in arid washes, on mesas and slopes.	Suitable habitat occurs within the Project corridor in open coastal scrub areas along Arroyo Simi Creek. This species was not observed.
<i>Vireo bellii pusillus</i>	least Bell's vireo (nesting)	FE SE	Summer resident of southern California. Inhabits low riparian growth in view of water or in dry river bottoms; below 2,000 feet in elevation.	Suitable habitat occurs along portions of Arroyo Simi Creek that contain dense willow cover. This species was not observed.
CLASS MAMMALIA	MAMMALS			
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	CSC	Inhabits coastal southern California from San Diego county to San Luis Obispo county. Abundant in rock outcrops, rocky cliffs and slopes with moderate to dense canopies preferred.	Suitable habitat occurs within the Project corridor in open coastal scrub areas along Arroyo Simi Creek. This species was not observed.
LEGEND				
Status Codes			State	
Federal (FED)			ST = State listed; Threatened	
FE = Federally listed, Endangered			SE = State listed; Endangered	
FE = Federally listed, Threatened			CSC = California Species of Special Concern	
FSC = Federal Species of Concern				
Source: California Department of Fish and Game Natural Diversity Database of California, 2003.				

IV. REGULATORY SETTING

A. SECTIONS 404 AND 401 OF THE CLEAN WATER ACT OF 1977

Regulatory protection for water resources throughout the United States is under the jurisdiction of the Army Corps of Engineers. Section 404 of the Clean Water Act prohibits the discharge of dredged or fill material into waters of the United States without formal consent from the Corps. Waters of the U.S. include marine waters, tidal areas, stream channels, and associated wetlands. Wetlands include freshwater marshes, vernal pools, freshwater seeps, and riparian areas. Impacts to biological resources associated with riparian and wetland areas are assessed as part of the 404 permitting process through consultation with the U.S. Fish and Wildlife Service. Policies relating to the loss of wetlands generally stress the need to compensate for wetland acreage losses by replacing wetland habitats on at least an acre-for-acre (1:1 mitigation ratio) basis.

Under Section 404, activities in Waters of the U.S. may be subject to either an individual permit or a general permit, or may be exempt from regulatory requirements. Some activities have been given blanket authorization under the provisions of a general permit through the Nationwide Permit system. Individual Permits require the applicant to prepare and submit an alternatives analysis of the project. The Corps distribution and review period typically takes 6 to 10 months from application to Individual Permit issuance.

Section 401 of the Clean Water Act and its provisions ensure that federally permitted activities comply with the federal Clean Water Act and state water quality laws. Section 401 is implemented through a review process conducted by the Regional Water Quality Control Board (RWQCB), and is usually triggered by the 404 permitting process. Specifically, the RWQCB certifies via section 401 that the proposed project complies with applicable effluent limitations, water quality standards, and other conditions of California law. If the RWQCB denies certification, the lead federal agency must deny the federal permit application.

Construction of portions of the project have potential to impact existing wetland and riparian habitats associated with Arroyo Simi Creek. Potential impacts will result from new bridge construction, underpass construction, renovation of existing levee roads, and grading and construction of new trail sections adjacent to the creek.

B. SECTION 7 AND SECTION 10 OF THE UNITED STATES ENDANGERED SPECIES ACT OF 1973

The Federal Endangered Species Act (FESA) of 1973 (50 CFR 17) provides legal protection for plant and animal taxa that are in danger of extinction, and classified as either threatened or endangered. The FESA requires Federal agencies to make a finding on all Federal actions, including the approval by an agency of a public or private action, such as the issuance of an Corps permit, as to the potential to jeopardize the continued existence of any listed species potentially impacted by the action. Impacts to listed species resulting from the implementation of a project would require the responsible agency to consult the United States Fish and Wildlife Service (USFWS).

Formal consultations must take place with the USFWS pursuant to Sections 7 and 10 of the Endangered Species Act, with the USFWS then making a determination as to the extent of impact to a particular species. If the USFWS determines that impacts to a species would likely occur, alternatives and measures to avoid or reduce impacts must be identified. A Biological Opinion (BO) is usually issued by the USFWS stating the results of their project review, and recommending mitigation measures to ensure protection of species under the ESA. USFWS requirements within the BO are often incorporated into Corps permit conditions.

The proposed project could require a Section 7/Section 10 consultation with the USFWS due to the potential presence of federally listed plant and animal species within the vicinity of the project area. Additional focused surveys will be necessary to determine actual presence/absence of federally listed plant and animal species within or adjacent to the proposed pathway, and project plans must be developed to a level of completion that allows impacts to be quantified.

C. CALIFORNIA ENDANGERED SPECIES ACT/CALIFORNIA NATIVE PLANT PROTECTION ACT

California has a parallel mandate to the FESA, which is embodied in the California Endangered Species Act (CESA) of 1984 and the California Native Plant Protection Act of 1977. These laws regulate the listing and take of plant and animal species designated as endangered, threatened, or rare. The State of California also lists Species of Special Concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under State law, the California Department of Fish and Game is empowered to review projects for their potential to impact listed species and their habitats.

The CDFG must review project plans and any proposed mitigation measures for impacts to special-status species.

D. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA), was enacted by the California Legislature in 1970 to provide a system of checks and balances for land use, development, and management decisions for projects approved by public agencies. CEQA applies to all California government agencies, and requires a lead agency to analyze the potential environmental effects of proposed projects under its jurisdiction. CEQA grants public agencies the authority to require feasible changes in proposed projects to lessen or avoid significant environmental impacts. CEQA also provides a regulatory basis for protection of sensitive species and habitats not addressed under the State and Federal Endangered Species Acts, and establishes a framework for impact assessment and mitigation requirement determination by the lead agency for a proposed project.

The presence of wetland and riparian habitats, and the potential for presence of special-status plant and animal species in and adjacent to the proposed project areas must be addressed under CEQA.

E. CALIFORNIA DEPARTMENT OF FISH AND GAME

The Department of Fish and Game (CDFG) is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. California law requires any person, agency, or public utility proposing a project that may impact a river, stream, or lake to notify the CDFG before beginning the project. If the CDFG determines that the project may adversely affect existing fish and wildlife resources, a Lake or Streambed Alteration Agreement is required. This Agreement lists the CDFG conditions of approval for the proposed project, and serves as an agreement between applicants and the CDFG for a term of not more than five years for the performance of activities subject to this section.

A Lake or Streambed Alteration Agreement will be required for any project activities within the bed or bank of Arroyo Simi Creek, including bridge and undercrossing construction.

V. IMPACT ASSESSMENT

The impact assessment process focuses on identifying potential impacts associated with implementation of both the near-term and long-term phases of the proposed project. The emphasis of the assessment is on effects of the proposed project on sensitive communities and special-status species known from the project area. Adverse impacts are expected to occur where proposed construction or development activities would result in temporary or permanent modification of sensitive communities or habitats occupied by special-status species.

A. SENSITIVE COMMUNITIES AND HABITAT TYPES

1. Direct Disturbance of Jurisdictional Areas

New bridge construction, underpass construction, and grading and construction of new pathway sections adjacent to Arroyo Simi Creek could result in direct impacts to and degradation of riverine, southern willow scrub and freshwater marsh habitats if equipment, construction materials, or spoils enter or are placed within or adjacent to the creek during construction. Impacts could include placement of footings, riprap or other structures within the creek channel, disturbance of streambed and streambank vegetation and soils, and release of sediment, construction materials, or gas/oil into the creek.

a. Near-term Route

The near-term route proposes to construct two new bridges, and three new undercrossings associated with existing road and railway bridges. All impacts described above could occur during construction of the near-term route. Permit authorization and implementation of mitigation strategies would be required.

b. Long-term Route

The long-term route proposes to construct two additional new bridges, one additional new undercrossing associated with an existing railway bridge, and several new trail segments immediately adjacent to Arroyo Simi Creek. All impacts described above could occur during

construction of the long-term route. Permit authorization and implementation of mitigation strategies would be required.

2. Indirect Disturbance of Jurisdictional Areas

Indirect disturbance of riverine, southern willow scrub and freshwater marsh habitat areas could occur along both near-term and long-term routes as a result of proposed construction activities adjacent to and within Arroyo Simi Creek. Riverine, southern willow scrub and freshwater marsh habitat areas adjacent to proposed construction areas could be impacted by erosion and sedimentation, fuel or construction material spills, equipment wash residues, or dust, during or after construction of all phases of the project. After project completion, normal uses of the pathway have potential to indirectly impact adjacent habitat areas through increased noise, lighting, bicycle and foot traffic density, and water quality issues.

B. SPECIAL-STATUS PLANTS

The majority of the proposed routes will occupy existing streets, levee roads, and urban disturbed areas that have very low potential to impact special-status plant species. Proposed long-term trail routes on undeveloped private property adjacent to and south of Arroyo Simi Creek have potential to contain special-status plants.

a. Near-term Route

The near-term route would mostly occupy existing road and levee paths, and has little likelihood of impacting special-status plant species.

b. Long-term Route

The long-term route proposes to construct several new segments of pathway immediately adjacent to Arroyo Simi Creek, and a segment through undeveloped property south of the creek. Construction activities in these areas could potentially impact any special-status plants present. Prior to construction of these segments, a botanical survey should be performed during the normal spring flowering period to determine presence/absence of special-status plants with potential to be present in the vicinity.

C. SPECIAL-STATUS WILDLIFE

While no sensitive wildlife species were observed during surveys of the proposed routes, several species have been identified as potentially present along the route (refer to Table 2). Impacts to wildlife species are most likely to occur during construction in and adjacent to Arroyo Simi Creek, in undisturbed grassland areas, and during activities involving tree pruning or removal.

a. Near-term Route

The near-term route would occupy existing road and levee paths, however, construction of new bridges and undercrossings could result in impacts to special-status wildlife species associated with riverine, southern willow scrub and freshwater marsh habitats of Arroyo Simi Creek.

b. Long-term Route

The long-term route proposes to construct several new bridges, undercrossings, new segments of pathway immediately adjacent to Arroyo Simi Creek, and a segment through undeveloped property south of the creek. Construction activities in these areas could potentially impact special-status wildlife species associated with Arroyo Simi Creek and adjacent undeveloped areas.

D. RECOMMENDED MITIGATION MEASURES

To minimize the potential for direct and indirect impacts to the sensitive habitats and species of Arroyo Simi Creek adjacent to the proposed project area, implementation of the following general measures is recommended:

MM-1: Prior to construction, the applicant should retain an agency-approved biological monitor to ensure compliance with conditions of approval within the project environmental document. The monitor should be qualified to perform or supervise any required special-status species surveys, document project-related construction impacts, and direct mitigation efforts. Monitoring shall be at a frequency and duration determined by the affected natural resource agencies (e.g., USFWS, Corps and CDFG).

MM-2: Prior to construction, the applicant should prepare a stormwater pollution prevention plan (SWPPP) that addresses surface water management during construction, and specifies measures for erosion control following development activities.

MM-3: Prior to and during construction, clearly mark the boundaries of construction areas, and restrict all vehicles and equipment to within the defined work area. Avoid the use of heavy equipment in and immediately adjacent to Arroyo Simi Creek.

MM-4: During construction, implement appropriate erosion control measures and limit ground disturbance activities to dry weather to avoid increased surface water runoff and erosion on site, and to avoid sedimentation of the creek. Install appropriate erosion control devices (i.e., hay bales, silt fences) around the perimeter of all construction zones and areas experiencing disturbance of the ground surface. Erosion control devices should be checked on a daily basis to ensure proper function.

MM-5: During construction, prohibit stockpiling of any soil in areas located in the vicinity of the creek, or in areas that have potential to experience significant runoff during the rainy season.

MM-6: Following completion of construction-related activities, immediately revegetate all disturbed and barren areas with appropriate vegetation to reduce the risk of erosion from the site and sedimentation into the creek and downstream aquatic habitats. Areas experiencing only temporary disturbance should be replanted with species that are characteristic of grassland and riparian habitats of the project area.

MM-7: Installation of filtration devices, designed to remove oil, grease, and other potential pollutants from stormwater runoff should be required for all project site storm drains leading to Arroyo Simi Creek.

MM-8: To avoid take or disturbance of nesting birds, any necessary tree removals should be conducted between mid-September and mid-February, outside of the typical breeding season. If tree removals are determined to be necessary during the typical breeding season, a nesting bird survey should be conducted by a qualified biologist prior to proposed development activities. If the biologist determines that a tree planned for removal is being used for nesting at that time, disturbance shall be avoided until after the young have fledged from the nest and achieved independence. If no nesting is found to occur, necessary tree removal could then proceed. If the survey detects the presence of active nests within trees to remain on-site, noise-producing construction activities within 100 feet of the identified nest should be delayed until the young birds have fledged and left the nest.

MM-9: Prior to construction of the proposed project, a qualified botanist should be retained to conduct focused surveys for special-status plants within the project site, focusing on natural areas that will be disturbed by new construction. Surveys should be conducted during the appropriate flowering period for species as listed in Table 1. In the event that special-status plants are found in areas proposed for disturbance, the project should be redesigned (to the extent feasible) to avoid disturbance or loss of identified plants. All verified occurrences of sensitive plant species revealed during the survey work should be reported to the NDDDB by the qualified botanist within 30 days of the observation.

MM-10: If disturbance of special-status plants cannot be avoided through design modification, a qualified botanist or restoration specialist should be retained to implement appropriate conservation measures, which may include transplanting of individual plants to unaffected suitable habitats located on site, or plant propagation and revegetation within appropriate on-site habitats.

MM-11: If identified rare plants can be avoided through project design, a biological monitor shall be retained to ensure that remaining plants are not inadvertently disturbed during construction activities. Prior to any project-related ground disturbance, all contractors associated with the construction phases of the proposed project shall be trained by the biological monitor on the identification and biology of sensitive species known in the vicinity of the project area. Work areas should also be clearly delineated and flagged to limit vehicular and foot access to only those areas necessary for project completion. These areas should be designated by the biological monitor to avoid/discourage unnecessary damage to sensitive species and habitats within and near the project area.

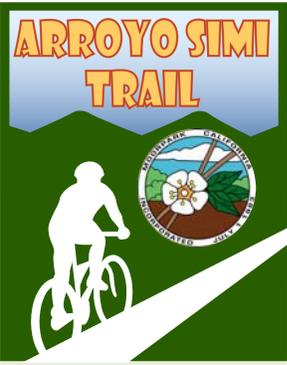
VI. SUMMARY

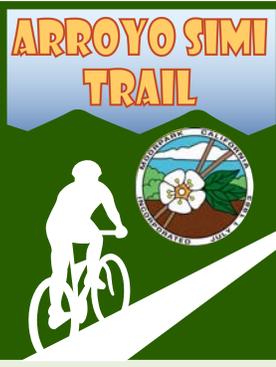
General construction activities associated with all phases of project implementation have potential to impact terrestrial and aquatic resources present along the proposed routes. As expected, construction of segments on existing roadway or levee path areas have lesser potential to impact sensitive resources, with impacts resulting primarily from indirect causes such as sedimentation or materials spills. Construction of bridge, undercrossing, and new trail segments of the route have greater potential to impact sensitive resources, from both direct and indirect causes. Normal uses of the pathway after construction have potential to affect wildlife activity in adjacent creek areas through increased noise from foot and bicycle traffic, lighting, and water quality issues.

Construction of the proposed near-term route would require coordination with and permit approval from state and federal agencies for bridge and undercrossing construction, and may also require implementation of mitigation efforts for impacts to jurisdictional habitats. Construction of the long-term route would require similar permit approval and mitigation efforts, and would likely also require completion of focused special-status plant and animal surveys on undeveloped portions of the proposed route.

VII. REFERENCES

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APPENDIX B

Funding Sources Matrix

PRIMARY FEDERAL FUNDING RESOURCES

Category	Description	Target Project Components
<p>Congestion Mitigation and Air Quality Improvement Program (CMAQ)</p> <p>www.dot.ca.gov/hq/transprog/reports/Official_CMAQ_Web_Page.htm</p> <p>Ventura County Transportation Commission (VCTC)</p> <p>Caltrans District 7 Fernando Castro, 213-897-1905, Fernando_castro@dot.ca.gov</p>	<p>Provides funds aimed at projects that help improve air quality in regions that are designated as non-attainment or maintenance areas as defined by air quality standards. Major emphasis is placed upon projects that support alternative modes of transportation, provide congestion relief measures, provide non-polluting transit vehicles and equipment, pedestrian and bicycling facilities, and new or improved technologies geared toward providing a more efficient and safer transportation system.</p> <p>Call for projects is anticipated July 2003 for budget years 2003-2004 and 2004-2005. Applications will be available on-line at www.goventura.org. Upon approval of the reauthorization act by the federal government a subsequent call for projects will be made.</p>	<p>Bicycle and pedestrian facilities, traffic flow improvement programs.</p>
<p>Transportation Enhancement Activities (TEA)</p> <p>www.dot.ca.gov/hq/TransEnhAct</p> <p>Caltrans Local Programs 916-654-2477</p> <p>VCTC Peter DeHahn 805-642-1591 ext 106 pdehaan@goventura.org</p>	<p>Funds environmental and alternative transportation projects which enhance the transportation system. Projects should creatively and sensitively integrate multi-modal transportation facilities into their surrounding communities. TEA projects must have a direct relationship, by function, proximity or impact, to surface transportation (streets, roads, highways). Allocated to the local councils of governments for allocation to local projects on a competitive basis.</p> <p>Upon approval of the reauthorization act by the federal government a call for projects will be made.</p>	<p>Trail construction, benches, bike racks, interpretive exhibits, directional and safety signage, trailside rest facilities, staging nodes.</p>
<p>Regional Surface Transportation Program</p> <p>www.dot.ca.gov/hq/transprog/cmaqtrsp.htm</p> <p>VCTC Peter DeHahn 805-642-1591 ext 106 pdehaan@goventura.org</p> <p>Caltrans District 7 Fernando Castro, 213-897-1905, Fernando_castro@dot.ca.gov</p>	<p>Programs and projects that facilitate non-automobile travel and generally reduce the need for single occupant vehicle travel. In addition, programs for new construction and major reconstructions of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest. STP funds may be used for either the construction of bicycle transportation facilities and pedestrian walkways, or non-construction projects (such as maps, brochures, and public service announcements) related to safe bicycle use and walking. Allocations are made on the basis of priorities developed in the RTP by the MPO in cooperation with local jurisdictions.</p>	<p>Trail construction, bike lanes, trail connections, traffic signals.</p>

Category	Description	Target Project Components
<p>Recreational Trails Program</p> <p>California Department of Parks and Recreation (DPR). State Parks Staff for Ventura County: Joshua Brady, 651-8459 jbrady@parks.ca.gov</p>	<p>Provides federal funding for recreational trails and trails-related projects to public agencies and non-profit organizations that manage public lands. Funding is available on a competitive basis to these agencies and may be used for maintenance and restoration of existing trails; development and rehabilitation of trailside and trailhead facilities, and trail linkages; construction of new recreational trails; acquisition of easements and fee simple title to property for recreational trails or corridors; and operation of educational or safety programs relating to the use of the recreational trails. A 20% minimum match is required.</p>	<p>Trail acquisitions, trail construction, restoration and maintenance, trailside rest facilities, educational programs, and directional and safety signage.</p>
<p>Safe Routes to School (SR2S)</p> <p>Cal Trans District Office 7 Fernando Castro, 213-897-1905, Fernando_castro@dot.ca.gov</p>	<p>Enhance pedestrian and bicycle safety facilities and related infrastructure. To be eligible for these funds, the project must be located on any state highway or on any local road. Projects must correct an identified safety hazard or problem on a route that students use for trips to and from school. Federal reimbursement rate is 90%.</p>	<p>Trail segments proximate to schools and /or that provide safe connections to school campuses.</p>
<p>Land and Water Conservation Fund (LWCF)</p> <p>www.parks.ca.gov/grants/lwcf/lwcf.htm</p> <p>Department of Parks and Recreation Local Services Section 916-653-8758,</p>	<p>Acquisition or development of neighborhood, community, and regional parks that include top priority recreation projects or acquisitions of wetlands. (Combination acquisition and development projects are not eligible.) Property acquired or developed under the program must be retained in perpetuity for public outdoor recreation use. This is a reimbursement program. Applicants are expected to finance the entire project. Fifty percent of the actual expenditures up to the support ceiling of the grant will be refunded when the project has been completed.</p>	<p>Trail acquisition, construction, maintenance, interpretive exhibits.</p>
<p>Rivers, Trails, and Conservation Assistance</p> <p>www.nps.gov/pwro/rtca</p> <p>So CA Field Office 323-441-2117</p>	<p>National Park Service program provides technical assistance at the request of citizens, community groups, and government to establish and restore greenways, rivers, trails, watersheds and open space. Not all applicants are able to be assisted. Projects that rank the highest focus on conservation and community partnerships.</p>	<p>Grant writing, funding proposals, lobbying consultation.</p>

PRIMARY STATE FUNDING RESOURCES

Category	Description	Target Project Components
<p>Bicycle Transportation Account (BTA)</p> <p>www.dot.ca.gov/hq/LocalPrograms/</p> <p>Caltrans District 7 Fernando Castro, 213-897-1905, Fernando_castro@dot.ca.gov</p>	<p>Provides grant funds for new bike paths, bike lanes, and bike routes, bicycle parking facilities, bike racks on buses, and traffic control devices to improve the safety and convenience of bicycle commuting. To be eligible for BTA funding, cities and counties must have an adopted Bicycle Transportation Plan that complies with Streets and Highways Code §891.2 and has been approved by the appropriate regional transportation agency and Caltrans. Local match is ten percent of the total project cost.</p>	<p>New bike segments that serve major transportation corridors, secure bicycle parking, bicycle-carrying facilities on transit vehicles, installation of traffic control devices, bike trail/lane improvements, maintenance, and hazard eliminations.</p>
<p>Environmental Enhancement and Mitigation Program (EEMP)</p> <p>www.dot.ca.gov/hq/LandArch/eem/eemframe.htm</p> <p>State Resources Agency Carolyn Dudley, 916-653-5656</p>	<p>Offers grants to local state and federal agencies and non-profit organizations for projects to mitigate the environmental impacts caused by new or modified state transportation facilities. These are not stand-alone grants. EEMP projects must piggyback or add onto other mitigation projects. Grants are awarded in three categories: Highway Landscape and Urban Forestry; Resource Lands; Roadside Recreational. Transportation mitigation projects are ineligible.</p>	<p>Depends on timing and availability of transportation mitigation projects that could provide additional mitigation through this program.</p>
<p>Habitat Conservation Fund (HCF)</p> <p>http://www.parks.ca.gov/grants/hcf/hcf.htm</p> <p>Joshua Brady, 916-651-8459, CA Department of Parks and Recreation, (916) 653-7423, jbrady@parks.ca.gov</p>	<p>Provides a competitive grant program for trail projects, land acquisition, and wildlife corridor restoration. Projects must employ CA Conservation Corps, when feasible, or local conservation corps. Trails, programs and urban access projects evaluated according to benefit, long-term commitment of applicant, coordination with larger project, existing adopted plans or programs, and matching funds that are already budgeted.</p>	<p>Trail segments that attract urban residents to park and wildlife areas and programs that educate them about state wildlife resources.</p> <p>Creek crossings, creek side trails near natural or proposed restored habitat areas, coastal trail connections.</p>
<p>Safe Routes to School (SR2S)</p> <p>Cal Trans District Office 7 Fernando Castro, 213-897-1905, Fernando_castro@dot.ca.gov</p>	<p>Competitive grant program to enhance pedestrian and bicycle safety facilities and related infrastructure that correct an identified safety hazard or problem on a route that students use for trips to and from school. Projects must be located on any state highway or on any local road. Federal reimbursement rate is 90%; local match 10%.</p>	<p>Trail segments and facilities that are proximate to schools and /or that provide safe connections to school campuses such as bikeways, signals, signs, traffic calming measures.</p>
<p>State Transportation Improvement Program (STIP)</p> <p>Ventura County Transportation Commission (VCTC) Peter DeHahn 805-642-1591 ext 106 pdehaan@goventura.org</p>	<p>State funding for a variety of transportation projects including bicycle and pedestrian facilities. The Regional Transportation Planning Agency (Ventura County Transportation Commission is the RTPA for Moorpark) includes projects on the long-term Regional Transportation Improvement Plan (RTIP). Evaluation criteria determined by the RTPA.</p>	<p>Permits and environmental studies, design, right-of-way acquisition, and construction.</p>

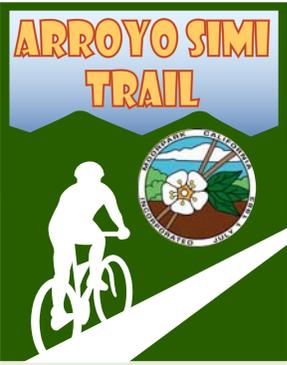
Category	Description	Target Project Components
<p>Community Based Transportation Planning Demonstration Grant Program www.dot.ca.gov/hq/tpp/offices/ocp/cbtpg.htm</p> <p>Caltrans Contact: Leigh Levine 916-651-6012</p>	<p>Caltrans program supports demonstration planning projects that project an example of livable community concepts. CBTP grants assist local agencies to better integrate land use and transportation planning, to develop alternatives for addressing growth and to assess efficient infrastructure investments that meet community needs, including those that expand transportation choices and provide pedestrian / bicycle/ transit linkages.</p>	<p>Trail connections to high volume pedestrian / transit usage or residential neighborhoods.</p>
<p>Petroleum Violation Escrow Account (PVEA)</p> <p>Local CA Legislature Representative, and Caltrans Federal Resources Office, Budgets Program 916-654-7287</p>	<p>Funds projects that conserve energy and that benefit directly or indirectly consumers of petroleum products in the state.</p>	<p>Bicycle facilities with high commuter benefits.</p>
<p>CA Conservation Corps</p> <p>Margaret Behan, www.ccc.ca.gov 916-341-3155</p>	<p>Not a grants program, but a free source of volunteer labor and potential project partner. Projects must provide a natural resource or other public benefit, and provide corps members with education and training in employable skills. Project sites must be public land or publicly accessible. Regular maintenance is not eligible for CCC projects, however restoration and major repairs considered.</p>	<p>Can assist with grant writing. Trail construction, installation of bike facilities such as bike racks, staging areas, etc.</p>
<p>Roberti-Z'berg-Harris Program (RZH)</p> <p>Joshua Brady, 916-651-8459, CA Department of Parks and Recreation, (916) 653-7423, jbrady@parks.ca.gov</p>	<p>Available for the acquisition, development, or special major maintenance of recreational lands and facilities; and innovative recreation programs that respond to unique and other wise unmet recreation needs of special urban populations. This program consists of block grants and competitive grants to special districts, cities, counties, and regional districts. Eligible projects include:</p> <ul style="list-style-type: none"> ▪ Acquisition of park and recreation lands and facilities ▪ Development/rehabilitation of park and recreation lands and facilities ▪ Special Major Maintenance of park and recreation lands and facilities ▪ Innovative Recreation Programs 	<p>Trail acquisition, trail construction.</p>

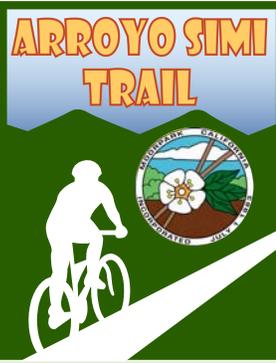
PRIMARY LOCAL FUNDING RESOURCES

Category	Description	Target Project Components
<p>Transportation Development Act (TDA) Article 3</p> <p>VCTC Peter DeHahn 805-642-1591 ext 106 pdehaan@goventura.org</p>	<p>One quarter cent of retail sales tax is returned to the county of origin in order to fund transportation improvements in that county. Article 3 allows RTPAs to earmark 2% of the Local Transportation Fund (LTF) towards bicycle and pedestrian facilities, including safety programs and planning projects. TDS monies can be used as a local match for federal and state grants within one year of their allocation. May be a competitive process within the County.</p>	<p>General bicycle and pedestrian facilities.</p>
<p>Local Air District Funding for Vehicle Registration Fees</p> <p>Ventura County APCD Chuck Thomas, Supervisor 805/645-1427 chuck@vcapcd.org</p>	<p>Various state legislation have authorized air districts in California to impose a two to four dollar motor vehicle registration fee to provide funds for air districts to meet CA Clean Air Act mandates. The funds can be used to support programs and projects that reduce air pollution from motor vehicles and to implement Transportation Control Measures (TCM) contained in local Air Quality Attainment Plans. Proposals need to show the project's anticipated air quality benefits through vehicle trip reduction predictions and other data.</p>	<p>Project components with measurable commuter benefits and related facilities such as transit bike racks, bike lanes that connect to commuter routes.</p>
<p>Developer Impact Fees</p>	<p>Local government charge to developers to offset the public costs required to accommodate new development with public infrastructure. The fee must have a direct relationship between the need for facilities and the growth from new development. Generally used for local rather than regional improvements such as water and sewer. The amount of the fee must equal the cost of the proposed project or service. Sometimes these fees are known as traffic mitigation fees.</p>	<p>Trail and facility segments proximate to new development areas that will generate traffic increases.</p>

OTHER FUNDING RESOURCES

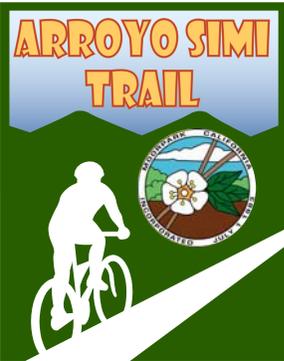
Category	Description	Target Project Components
Gifts and Endowments	General contributions from private individuals or businesses are an attractive source of financing. Although fundraising through donations is unpredictable, it could help supplement other more reliable sources.	Trail amenities (benches, lights, staging areas, trees, etc.).
Adopt a Trail / Adopt a Trail Feature	Donated monies may be earmarked to pay for trail construction or trail fixtures is to provide name recognition to donors or those who helped pay for specific features. A small plaque or sign could be fastened to the appropriate fixture or at trail heads of appropriate trail segments. This program would have to either be developed by the city or a local community group willing to assume responsibility for coordinating donors with projects.	Interpretive kiosks, lighting, or benches, trail segments.
CA ReLeaf Tree Planting Grant	Funds available to community-based groups throughout California for projects that plan large-crowning environmentally tolerant trees on public property to provide shade and other benefits. The City could collaborate with a group such as Urban Tree Foundation to acquire ReLeaf grant funding.	Creekside trail enhancement / revegetation projects.
California Department of Forestry & Fire Protection. CA ReLeaf 949-642-0127 or 916-557-1673, ext. 12.		
Bikes Belong Coalition, Ltd.	Grants for facility project objective: To connect existing facilities or create new opportunities; leverage federal, state and private funds; influence policy; and generate economic activity. <u>Eligible projects include:</u> · Bike paths, trails, routes, lanes, parking, and transit · Innovative and unique high profile projects Proposals must include a specific program or project that is measurable. Applicants are also strongly encouraged, but not required, to contact Bikes Belong to ensure the proposal's eligibility.	Trail connections, construction, and programs that include measurable benefits. May be beneficial to combine with APCD project components for corresponding measurable benefits.
Tim Baldwin, Grants Administrator tim@bikesbelong.org or 617-734-2111		





APPENDIX C

Recreational Land Use Statute



**State of California
Recreational Use Statute**

846. An owner of any estate or any other interest in real property, whether possessory or nonpossessory, owes no duty of care to keep the premises safe for entry or **use** by others for any **recreational** purpose or to give any warning of hazardous conditions, uses of, structures, or activities on such premises to persons entering for such purpose, except as provided in this section.

A "**recreational** purpose," as used in this section, includes such activities as fishing, hunting, camping, water sports, hiking, spelunking, sport parachuting, riding, including animal riding, snowmobiling, and all other types of vehicular riding, rock collecting, sightseeing, picnicking, nature study, nature contacting, **recreational** gardening, gleaning, hang gliding, winter sports, and viewing or enjoying historical, archaeological, scenic, natural, or scientific sites.

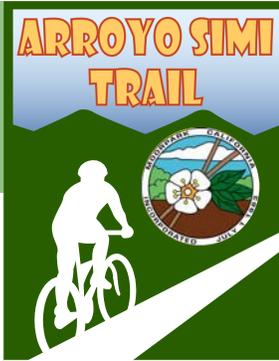
An owner of any estate or any other interest in real property, whether possessory or nonpossessory, who gives permission to another for entry or **use** for the above purpose upon the premises does not thereby (a) extend any assurance that the premises are safe for such purpose, or (b) constitute the person to whom permission has been granted the legal status of an invitee or licensee to whom a duty of care is owed, or (c) assume responsibility for or incur liability for any injury to person or property caused by any act of such person to whom permission has been granted except as provided in this section.

This section does not limit the liability which otherwise exists (a) for willful or malicious failure to guard or warn against a dangerous condition, **use**, structure or activity; or (b) for injury suffered in any case where permission to enter for the above purpose was granted for a consideration other than the consideration, if any, paid to said landowner by the state, or where consideration has been received from others for the same purpose; or (c) to any persons who are expressly invited rather than merely permitted to come upon the premises by the landowner.

Nothing in this section creates a duty of care or ground of liability for injury to person or property.

846.1. (a) Except as provided in subdivision (c), an owner of any estate or interest in real property, whether possessory or nonpossessory, who gives permission to the public for entry on or **use** of the real property pursuant to an agreement with a public or nonprofit agency for purposes of **recreational** trail **use**, and is a defendant in a **civil** action brought by, or on behalf of, a person who is allegedly injured or allegedly suffers damages on the real property, may present a claim to the State Board of Control for reasonable attorney's fees incurred in this **civil** action if any of the following occurs:

(1) The court has dismissed the **civil** action upon a demurrer or



motion for summary judgment made by the owner or upon its own motion for lack of prosecution.

(2) The action was dismissed by the plaintiff without any payment from the owner.

(3) The owner prevails in the **civil** action.

(b) Except as provided in subdivision (c), a public entity, as defined in Section 831.5 of the Government **Code**, that gives permission to the public for entry on or **use** of real property for a **recreational** purpose, as defined in Section 846, and is a defendant in a **civil** action brought by, or on behalf of, a person who is allegedly injured or allegedly suffers damages on the real property, may present a claim to the State Board of Control for reasonable attorney's fees incurred in this **civil** action if any of the following occurs:

(1) The court has dismissed the **civil** action upon a demurrer or motion for summary judgment made by this public entity or upon its own motion for lack of prosecution.

(2) The action was dismissed by the plaintiff without any payment from the public entity.

(3) The public entity prevails in the **civil** action.

(c) An owner of any estate or interest in real property, whether possessory or nonpossessory, or a public entity, as defined in Section 831.5 of the Government **Code**, that gives permission to the public for entry on, or **use** of, the real property for a **recreational** purpose, as defined in Section 846, pursuant to an agreement with a public or nonprofit agency, and is a defendant in a **civil** action brought by, or on behalf of, a person who seeks to restrict, prevent, or delay public **use** of that property, may present a claim to the State Board of Control for reasonable attorney's fees incurred in the **civil** action if any of the following occurs:

(1) The court has dismissed the **civil** action upon a demurrer or motion for summary judgment made by the owner or public entity or upon its own motion for lack of prosecution.

(2) The action was dismissed by the plaintiff without any payment from the owner or public entity.

(3) The owner or public entity prevails in the **civil** action.

(d) The State Board of Control shall allow the claim if the requirements of this section are met. The claim shall be paid from an appropriation to be made for that purpose. Reasonable attorneys' fees, for purposes of this section, may not exceed an hourly rate greater than the rate charged by the Attorney General at the time the award is made, and may not exceed an aggregate amount of twenty-five thousand dollars (\$25,000). This subdivision shall not apply if a public entity has provided for the defense of this **civil** action pursuant to Section 995 of the Government **Code**. This subdivision shall also not apply if an owner or public entity has been provided a legal defense by the state pursuant to any contract or other legal obligation.

(e) The total of claims allowed by the board pursuant to this section shall not exceed two hundred thousand dollars (\$200,000) per fiscal year.