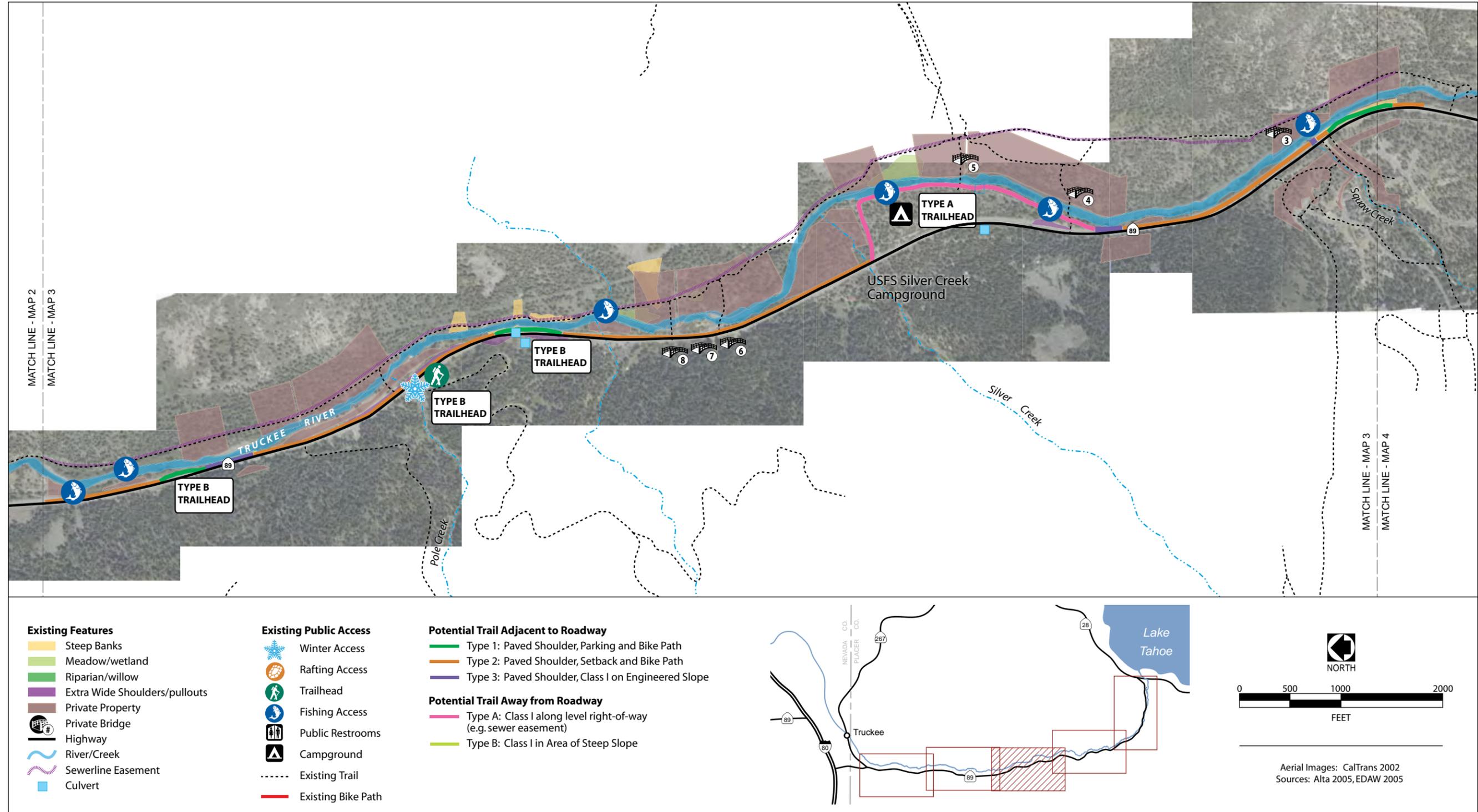


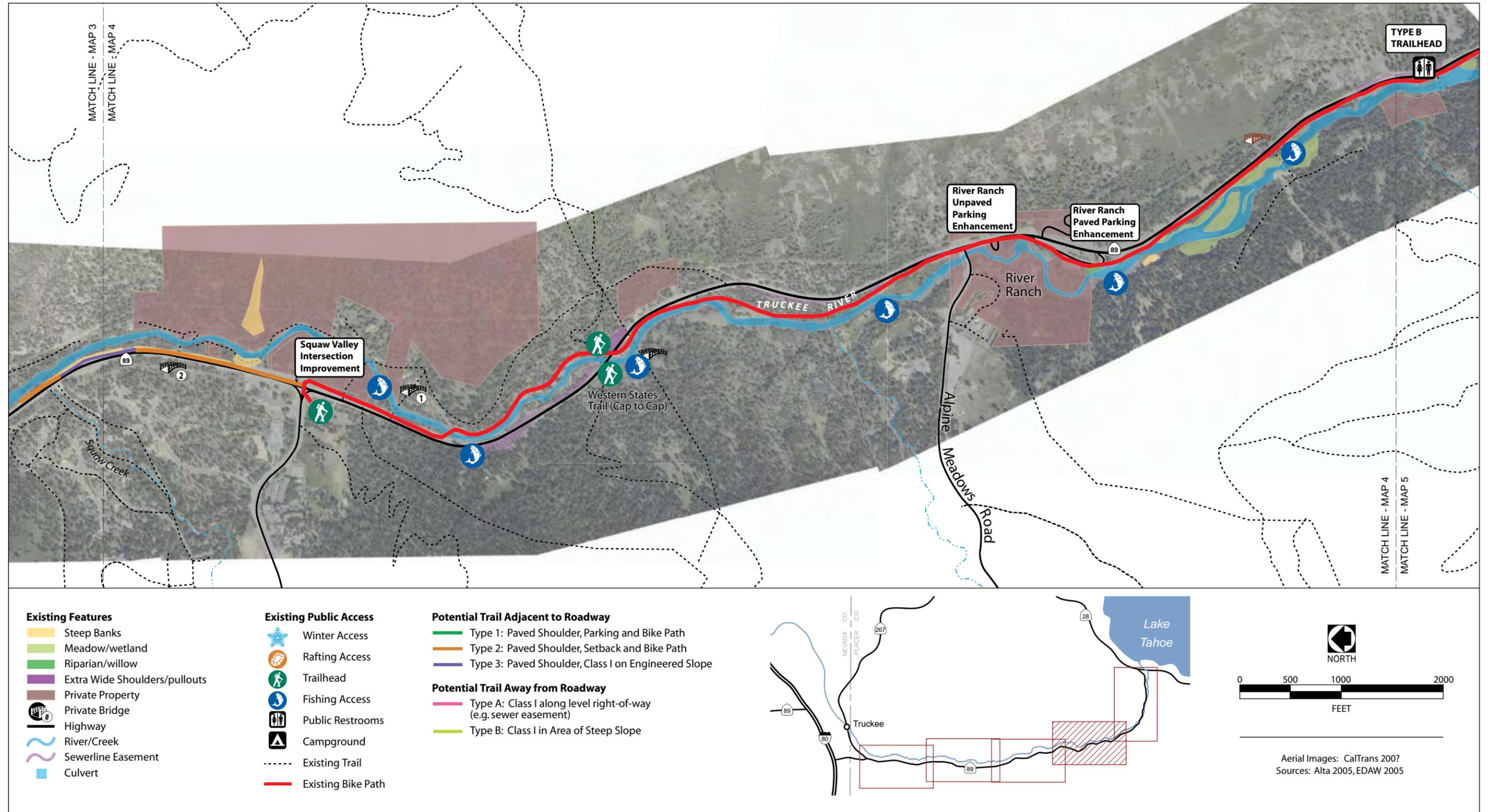
# Truckee River Corridor Access Plan

EXHIBIT 4-22 Access Project Location Map 3, Reach 1



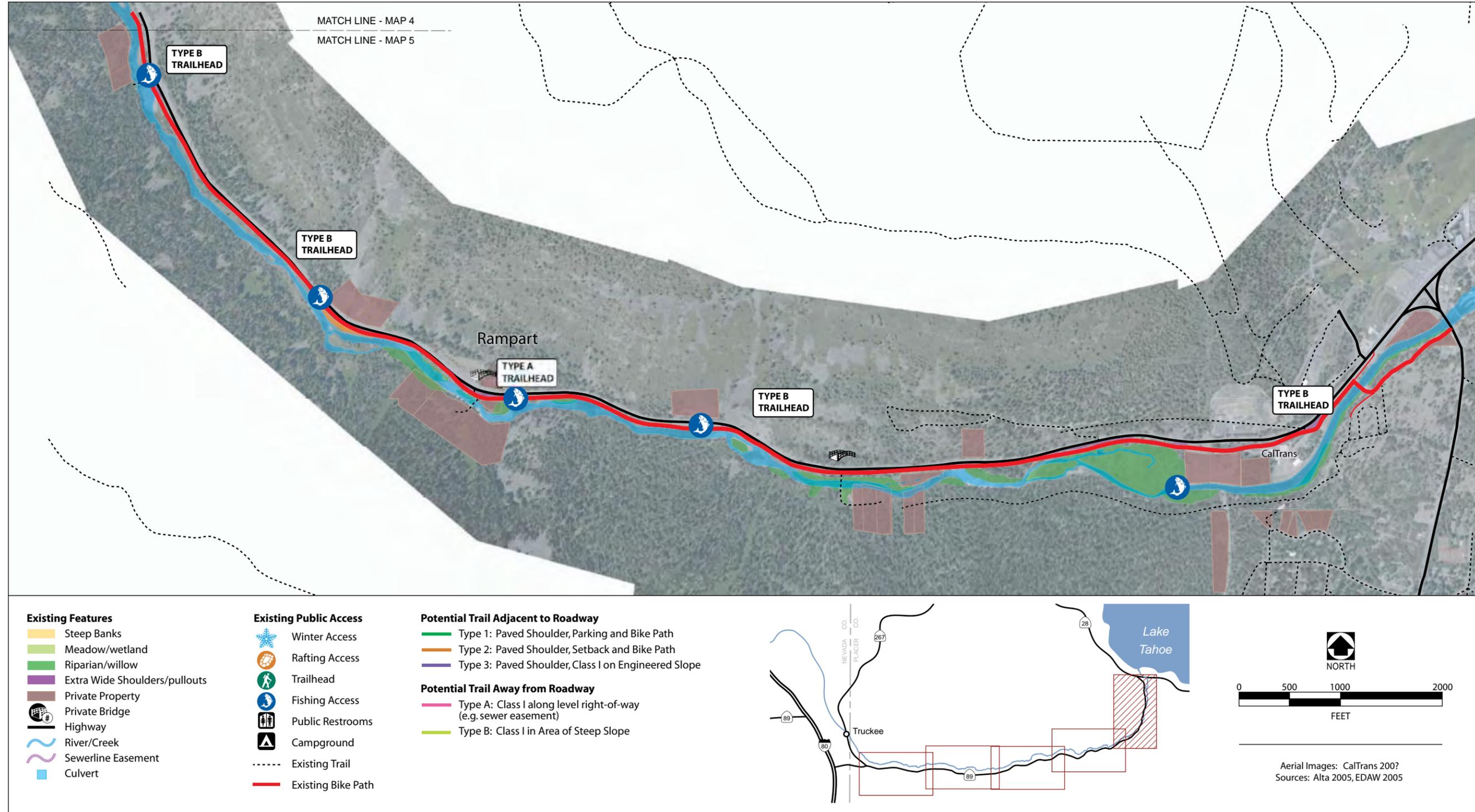
# Truckee River Corridor Access Plan

EXHIBIT 4-23 Access Project Location Map 4, Reaches 2 & 3



# Truckee River Corridor Access Plan

EXHIBIT 4-24 Access Project Location Map 5, Reach 3



## 4.7 MULTIUSE TRAIL

### CLASS I TRAIL — TYPICAL CROSS SECTION

The preferred alignment for the Truckee River bike path would be to route it away from the highway, in an area that offers a scenic, shaded place for people to ride near the river. Based on Caltrans design standards, the minimum width for a Class I bike path is 8 feet of paved width, with 2-foot unpaved shoulders on either side. Where sufficient width is available, the paved trail width should be increased to 10 or 12 feet given the expected high usage of the trail in this area. Areas of the corridor that may be suitable to accommodate this trail cross section include areas above the sewer line easement on public lands, such as the USFS campground areas. (Establishment of a Class I path is not proposed on private land, unless willing property owners engage with Placer County to allow private property crossings on their parcels.)

#### KEY ISSUES

- Need for sufficiently level area between highway and river to provide Class I trail with appropriate setbacks from both highway and river
- Private property—level sewer easement runs through private property in many locations along the river
- Environmental impacts:
  - Vegetation/tree clearing for trail alignment
  - Increased public access to river if trail extends near river bank

#### ADDITIONAL STUDIES

- Detailed alignment planning
- Environmental review
- Design and engineering

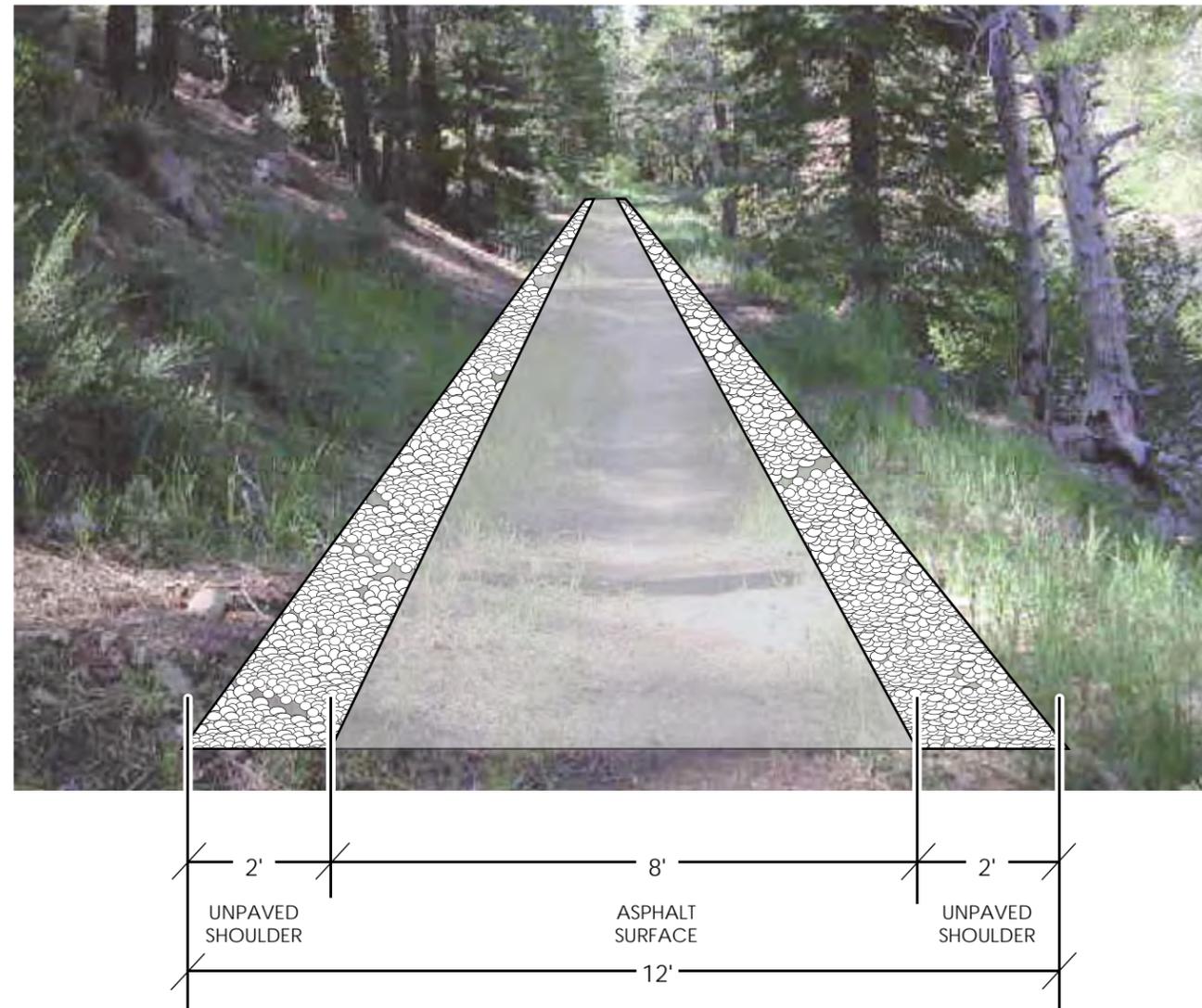
#### PARTNER AGENCIES

USFS, Placer County, Sacramento Area Coalition of Governments, Truckee River Watershed Council

#### COST ESTIMATE

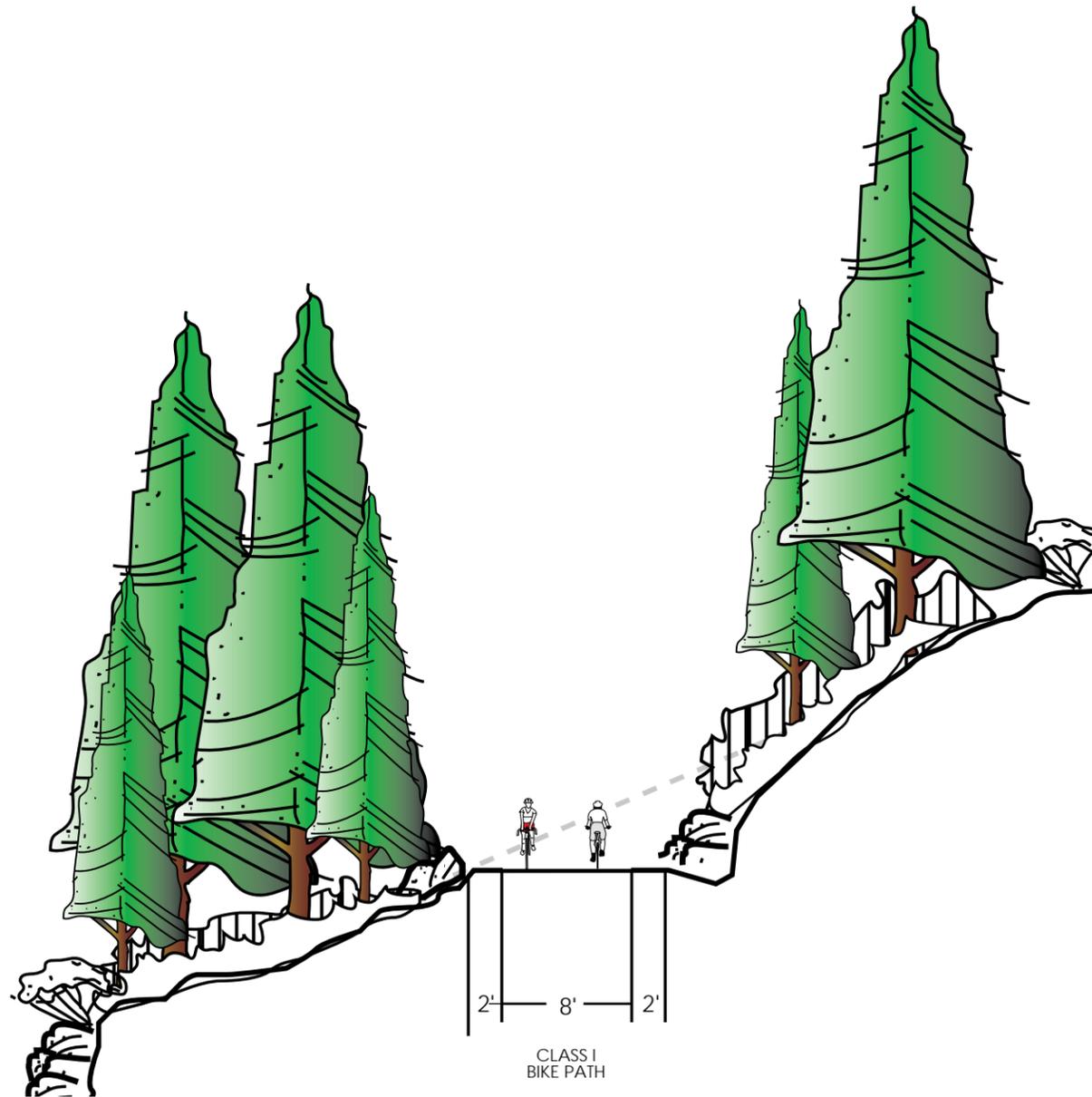
Total estimated cost: \$\$ (per mile)

EXHIBIT 4-26 Typical Class I Path



# Truckee River Corridor Access Plan

EXHIBIT 4-27 Class I Path with Steep Slope Cut



## CLASS I TRAIL ON STEEP CROSS-SLOPE

Along the east side of the Truckee River, the potential trail alignment is noted in several areas of steep cross-slope, where the hillside slopes down directly to the river with no level area to provide a trail. In these areas, a Class I bike path can still be accommodated, but may require extensive cut/fill and retaining structures to provide a level area to construct the trail. While it is possible to engineer a trail through these locations, there is an increased cost due to the engineering and a greater amount of environmental impact due to the earthwork and vegetation clearing.

### KEY ISSUES

- Environmental impacts
- Cut and fill
- Drainage
- Vegetation/tree clearing
- Cost
- Bridge Construction

### ADDITIONAL STUDIES

- Detailed alignment planning
- Environmental review
- Design and engineering

### PARTNER AGENCIES

USFS, Placer County, Caltrans, Truckee River Watershed Council

### COST ESTIMATE

Total estimated cost: \$\$\$\$ (per mile)

# Truckee River Corridor Access Plan

## TYPE A CROSS SECTION — BIKE PATH WITH ADJACENT PARKING

Type A bike path cross sections are locations where there may be sufficient width to accommodate both a bike path and a lane of parallel parking within the existing unpaved shoulder area, in addition to maintaining a paved shoulder area for on-street cyclists. The Type A cross section would require substantial width outside the edge of the paved shoulder—18 feet for parallel parking/access lanes, and 12 feet for the Class I bike path—for a total of about 30 feet of width. Given the few locations along SR 89 where this much width is available as unpaved shoulder, potential Type A bike path locations along the route would likely be very limited.

### KEY ISSUES

- Need for sufficient unpaved shoulder width along road to accommodate both parallel parking and bike path
- Need for sufficient width in parallel parking area so that vehicles would not block roadway travel lanes or shoulder while maneuvering into spaces
- Need for sufficient setback or barrier between parallel parking and bike path to ensure that parking vehicles would not encroach on bike path, and to prevent “dooring” conflicts
- Maintenance of paved shoulder (or upgrading to bike lane, if feasible) on northbound side for use by cyclists who prefer to ride on the road

### ADDITIONAL STUDIES

- Detailed trail alignment planning
- Traffic study
- Environmental review
- Design and engineering

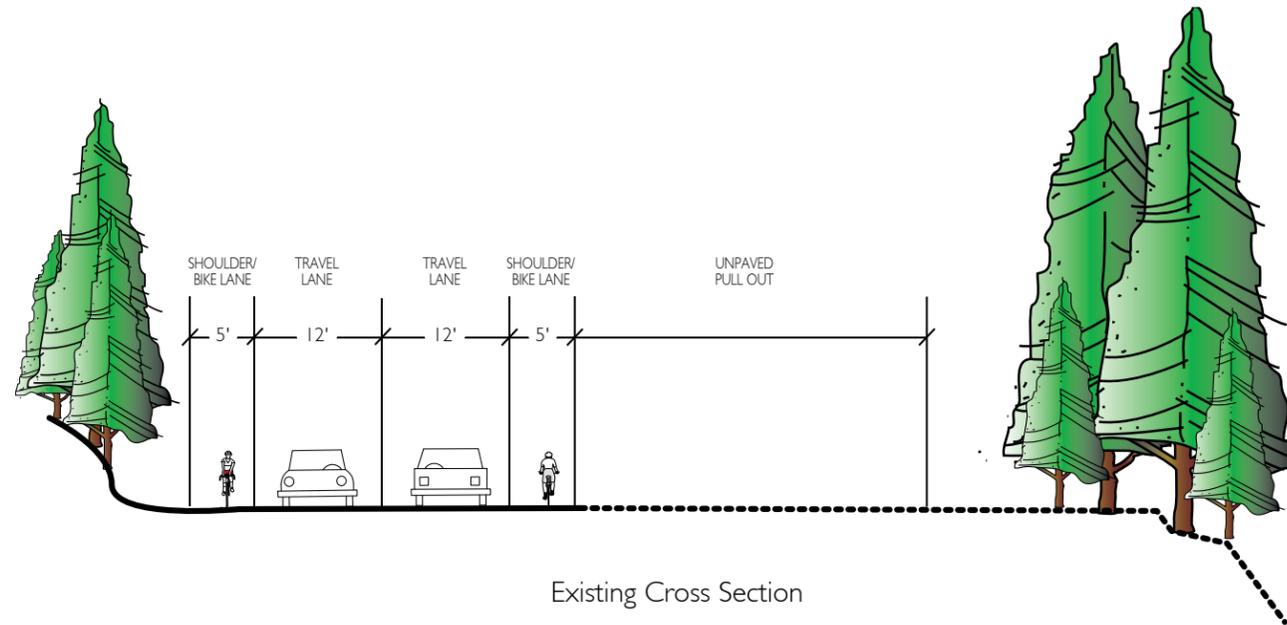
### PARTNER AGENCIES

USFS, Placer County, Caltrans, Truckee River Watershed Council, Sacramento Area Coalition of Governments

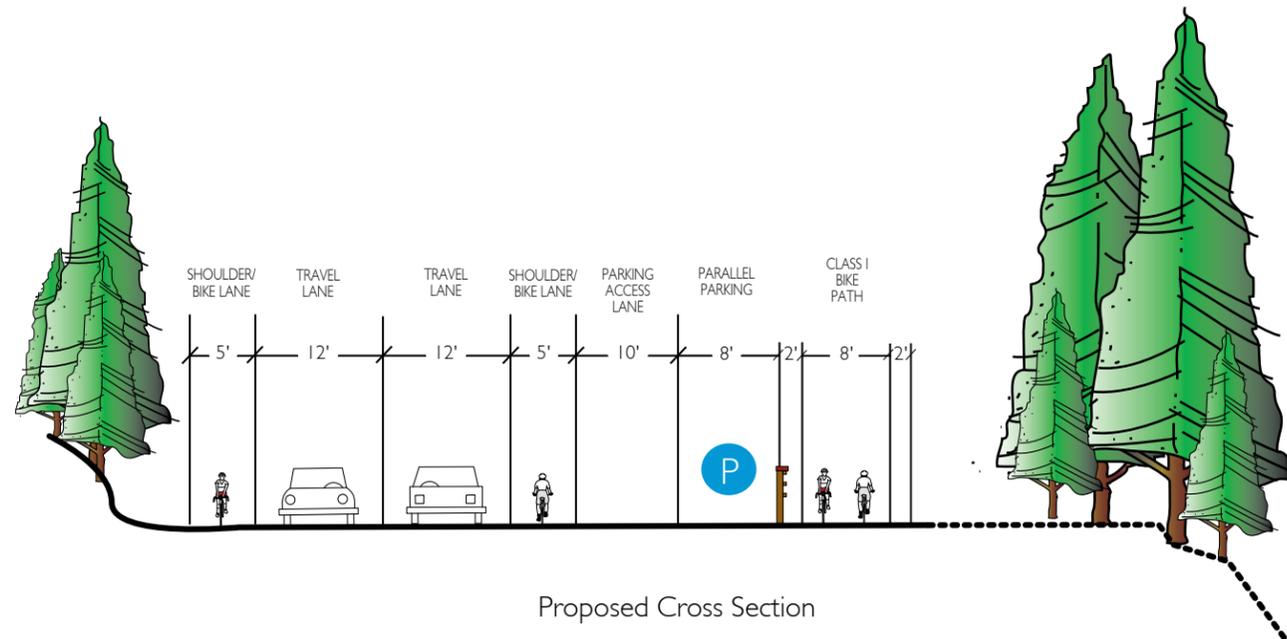
### COST ESTIMATE

Total estimated cost: \$\$\$ (per location)

EXHIBIT 4-28 Paved Shoulder, River Access Parking and Class I Bike Path



Existing Cross Section



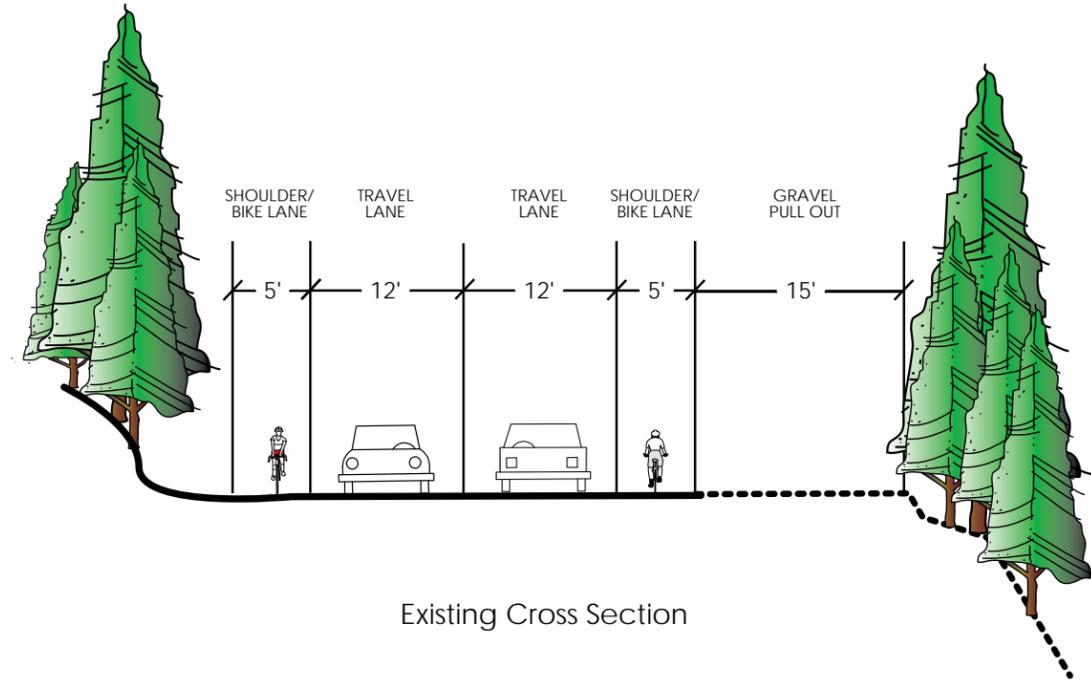
Proposed Cross Section



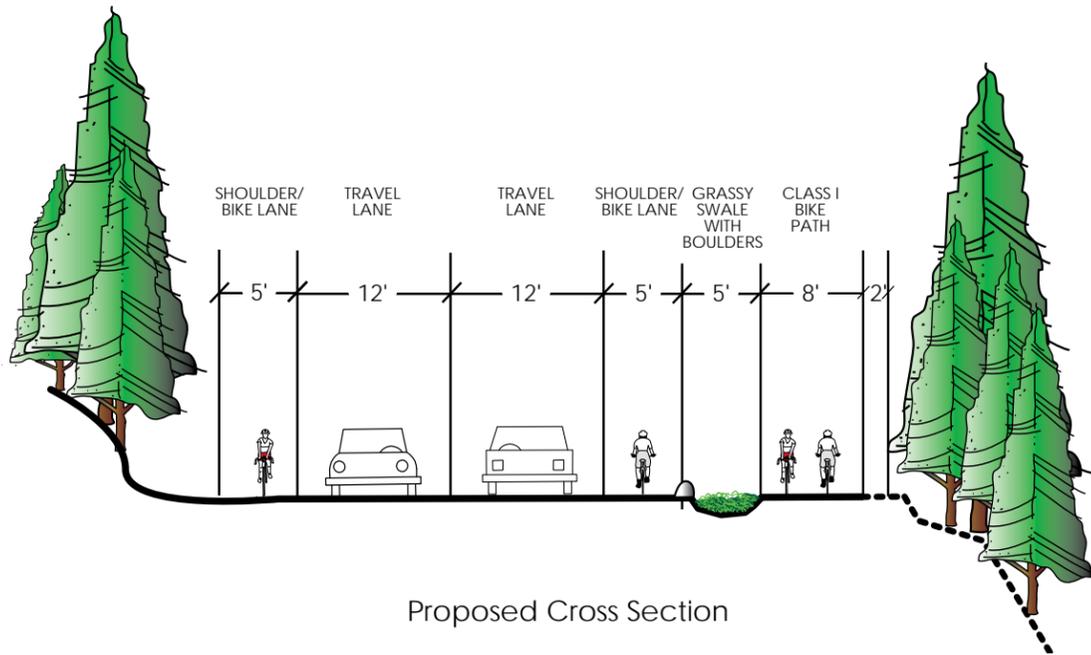
Existing shoulder bike lane adjacent to roadway, 2005

# Truckee River Corridor Access Plan

EXHIBIT 4-29 Type B Bike Path with Setback



Existing Cross Section



Proposed Cross Section

## TYPE B CROSS SECTION — BIKE PATH WITH SETBACK

Type B bike path locations are those where there is sufficient width to develop a Class I trail parallel to the roadway within the existing unpaved shoulder area, while still maintaining the on-highway Class II bike lane area. Under this configuration, there would not be enough width for parallel parking, so any existing parking in the unpaved shoulder would need to be restricted. The Type B cross section would require a minimum of 15 feet from the edge of the paved shoulder to provide a 5-foot landscaped setback and minimum Class I bike path width of 8 feet. No-parking restrictions would need to be strictly enforced to ensure that vehicles would not attempt to park in the bike lane area/landscape buffer.

### KEY ISSUES

- Need for sufficient unpaved shoulder width to accommodate Class I bike path and buffer area
- Maintenance of paved shoulder (or upgrading to bike lane, if feasible) on northbound side for use by cyclists who prefer to ride on the road
- Enforcement of no-parking area; providing a barrier within the landscaped area so that vehicles do not use these areas for parking

### ADDITIONAL STUDIES

- Detailed trail alignment planning
- Traffic study
- Environmental review
- Design and engineering

### PARTNER AGENCIES

USFS, Placer County, Caltrans, Truckee River Watershed Council, Sacramento Area Coalition of Governments

### COST ESTIMATE

Total estimated cost: \$\$\$ (per mile)



Existing shoulder bike lane with gravel pull-out adjacent to roadway, 2005

# Truckee River Corridor Access Plan

## TYPE C CROSS SECTION—BIKE PATH ON STEEP SLOPE

Type C bike paths are those in areas where the roadway extends immediately adjacent to the west bank of the river, and there is not sufficient roadway shoulder area available to construct a bike path and still maintain an on-highway paved shoulder (or bike lanes). Under this scenario, a bike path could be accommodated only by engineering the trail out over the slope of the river bank. This could be accomplished either by cantilevering a trail over the river, or by building up the riverbank with retaining structure such as gabions. Either approach would require substantial engineering and cost, and would alter vegetation and other features of the river bank.

### KEY ISSUES

- Required engineering approach to build trail over slope of riverbank
- Environmental impacts:
  - Modification of stream bank features
  - Vegetation/tree clearing
  - Increase in impervious surface
- Maintenance of paved shoulder (or upgrading to bike lane, if feasible) on northbound side for use by cyclists who prefer to ride on the road
- Cost



Existing shoulder bike lane adjacent to roadway, 2005

### ADDITIONAL STUDIES

- Detailed trail alignment planning
- Environmental review
- Design and engineering

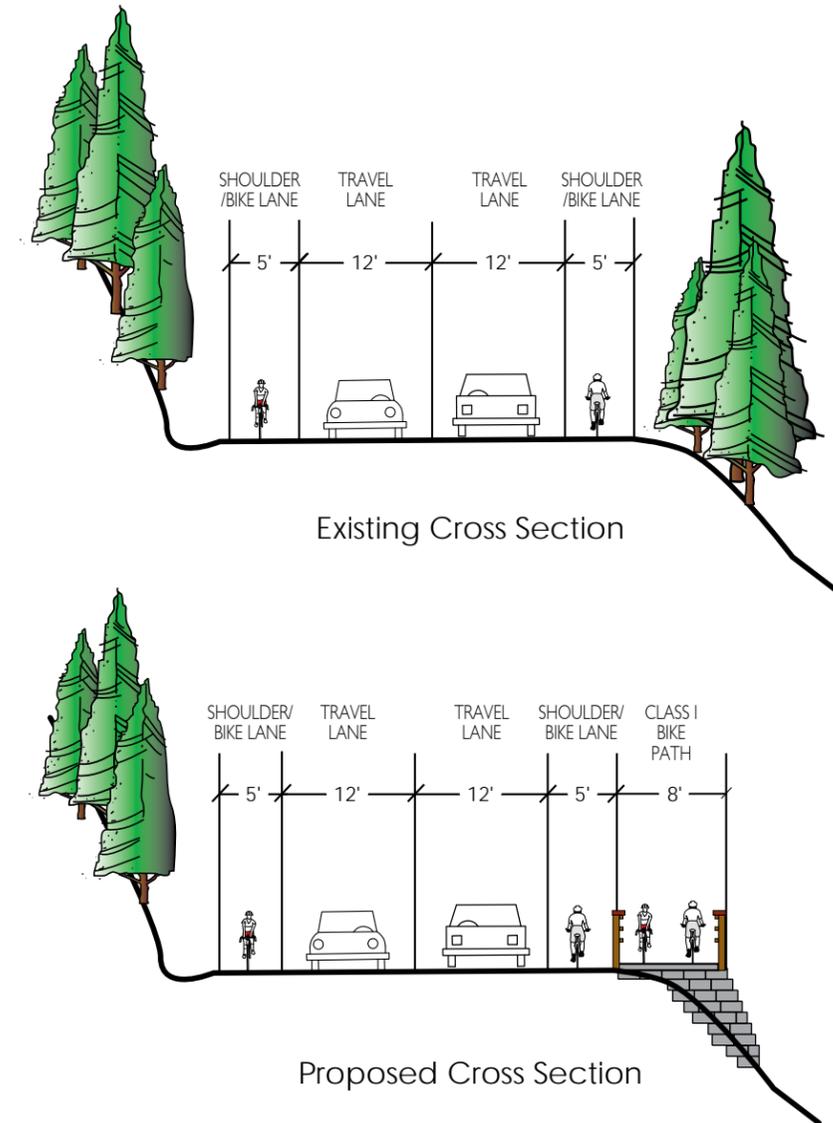
### PARTNER AGENCIES

Caltrans, USFS, Placer County, USACE, Truckee River Watershed Council, Sacramento Area Coalition of Governments

### COST ESTIMATE

Total estimated cost: \$\$\$\$\$ (per location)

EXHIBIT 4-30 Type C Bike Path on Steep Slope



# *Truckee River Corridor Access Plan*

**This Page Intentionally Left Blank**