CITY OF ELK GROVE
CITY COUNCIL STAFF REPORT

AGENDA TITLE:	**Receive Report and provide direction on Laguna Boulevard and Elk Grove Boulevard Alternatives to construct a Class I Pedestrian & Bike pathway over the Union Pacific Railroad Tracks**
MEETING DATE:	**July 26, 2017**
PREPARED BY:	**Ryan D. Chapman P.E., Traffic Engineer**
DEPARTMENT HEAD:	**Robert Murdoch, Public Works Director / City Engineer**

RECOMMENDED ACTION:

Staff recommends the City Council receive a report and provide direction on Laguna Boulevard and Elk Grove Boulevard Alternatives to construct a Class I Pedestrian & Bike pathway over the Union Pacific Railroad (UPRR) Tracks.

BACKGROUND INFORMATION:

At the April 26, 2017 City Council meeting, the Council requested that staff evaluate the possibility for mid and long term solutions for adding a Class I facility along Laguna Boulevard and Elk Grove Boulevard at the Union Pacific Railroad Overcrossings.

In response, staff has prepared the attached bridge cross-sections for three alternatives. Each of these alternatives would be applicable to both locations:

Alternative #1: Improvements would combine facilities to provide enough space to accommodate a separated Class I facility. For Laguna Boulevard, bicycle facilities would be combined and located on the north side of the roadway.

For Elk Grove Boulevard, all pedestrian and bicycle facilities would be combined on the south side of the road to create a Class I facility. It should be noted that the Bicycle, Pedestrian, and Trails Master Plan (Master Plan) calls for a Class I facility on the south side of Elk Grove Blvd in this area so this Alternative would be in line with the adopted Master Plan.

In general, modifications to the roadways would include relocating the existing median barrier, adding a barrier to separate the Class I facility from vehicle traffic, and reducing most of the travel lanes to less than 12 feet. Cross sections are attached that illustrate the existing configuration as well as this Alternative for both roadways.

Cost Estimate for Alternative #1

Laguna Boulevard Crossing	Elk Grove Boulevard Crossing
$5.3 million	$2.5 million

Alternative #2: Improvements would include widening the bridge structure to support a separated Class I facility for pedestrian and bicyclists on the north or south side of the bridge. This would support 12 foot travel lanes or wider and a two-foot buffer between the inside travel lane and the median. In both cases this would allow for retaining the class II bike lane and sidewalk on the opposite side of the street.

Cost Estimate for Alternative #2

Laguna Boulevard Crossing	Elk Grove Boulevard Crossing
$8.5 million	$8.5 million

Alternative #3: Improvements would include constructing separate pedestrian and bicycle bridges at both locations. The new bridges would parallel the existing structures. New bridges would support 12 foot travel lanes or wider and a two-foot buffer between the inside travel lane and the median. This Alternative does not preserve the existing Class II bike lanes on the bridges but does retain the existing sidewalks. This proposal would require modification of the signals at the adjacent intersections to accommodate traffic to/from the bikeway.

Cost Estimate for Alternative #3

Laguna Boulevard Crossing	Elk Grove Boulevard Crossing
$8.0 million	$6.3 million

For all three Alternatives at both locations, improvements would need to extend to the nearest intersection on each side of the bridge and include intersection improvements that will transition the Class I facility to the existing Class II bike lanes.

RECOMMENDATION / NEXT STEPS

Given that Alternative #3 provides the same benefits as Alternative #2 at a lower cost, staff can not recommend Alternative #2.

This leaves a choice between two potential projects Alternative #1, which essentially reallocates the existing space on the structures between the competing needs of bikes/pedestrians and vehicles, versus Alternative #3, which resolves these competing needs for the long term by constructing new bridges. While Alternative #1 is less costly, the staff recommendation would be to make Alternative #3 the project because it provides the best solution for the long term.

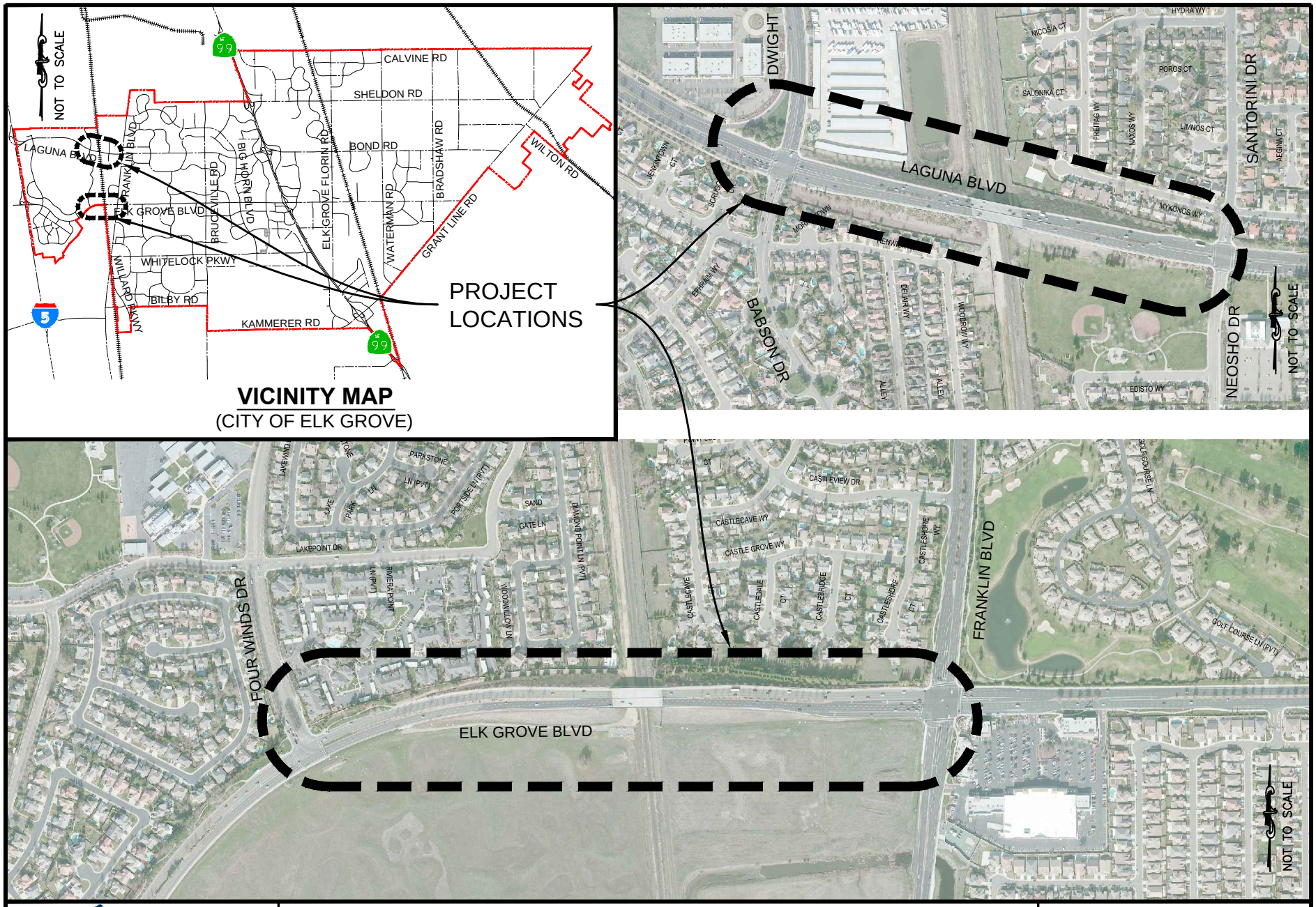
As for the ability to move forward with any of the alternatives, there are no funding sources available at this time to take the next steps beyond revising the Trails Master Plan to recognize the selected alternative. It is anticipated that the Master Plan will be revised subsequent to the General Plan Amendment being adopted and proper environmental review having taken place.

In addition, the selected alternative can be added to the Future Needs list of the Capital Improvement Program which will identify it as a City priority and provide guidance to staff to seek funding. However, due to the project's expense and complexity, it is anticipated that it will take a number of years to identify funding to move into the first phases of project development, let alone construction.

ATTACHMENTS:

1. Vicinity Map
2. Cross Sections

ATTACHMENT 1



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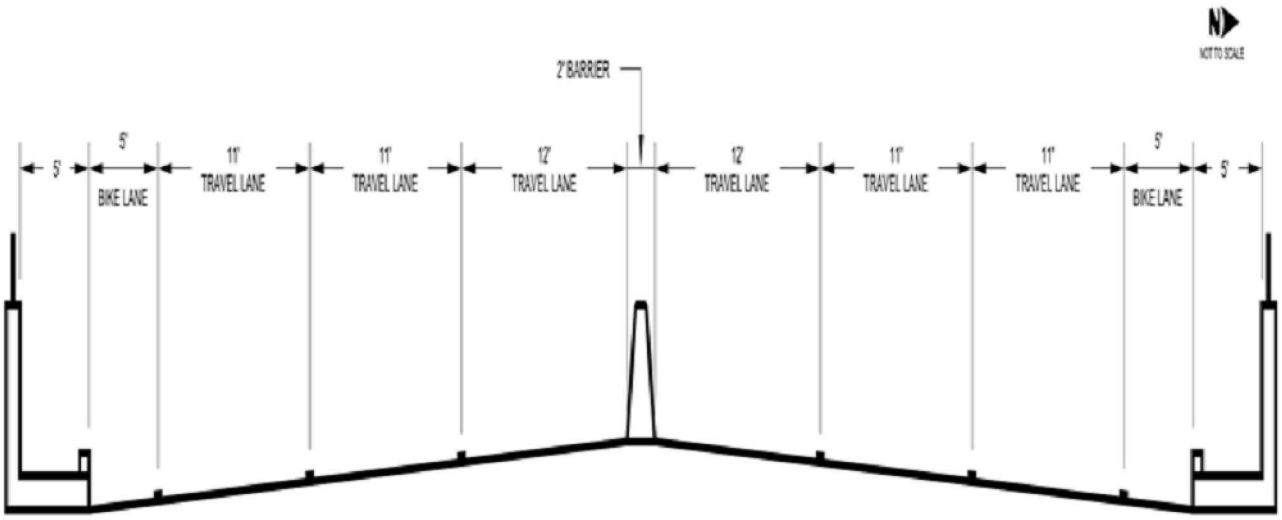
PROJECT LOCATION MAP

LAGUNA BLVD AND ELK GROVE BLVD

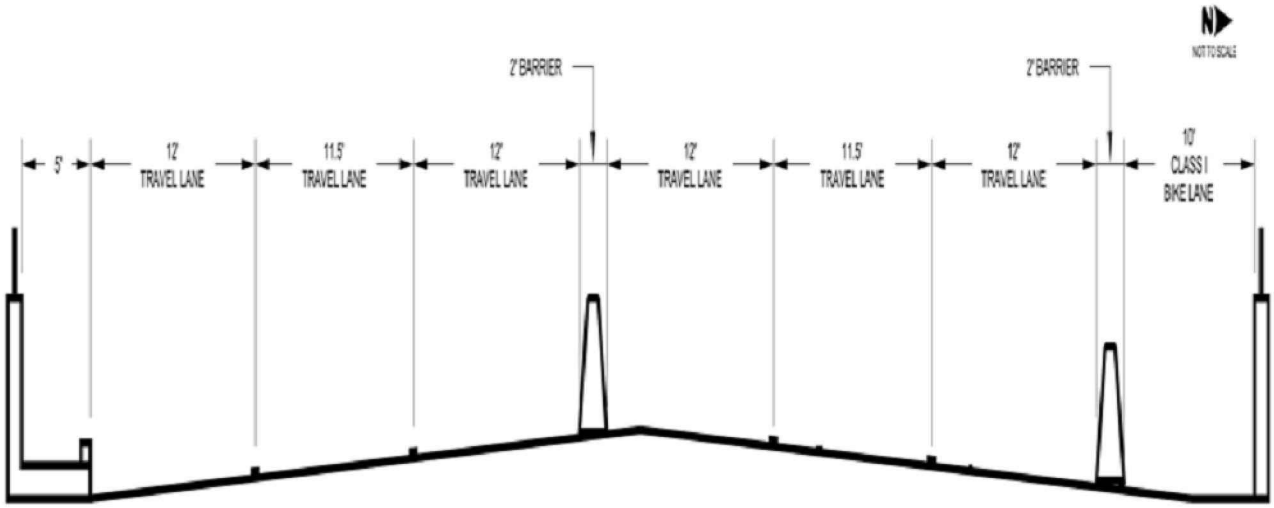
CITY OF ELK GROVE
PUBLIC WORKS DEPARTMENT
8401 LAGUNA PALMS WAY
ELK GROVE, CALIFORNIA 95758



BRIDGE CROSS SECTION

LAGUNA BLVD

EXISTING CONDITION



BRIDGE CROSS SECTION

LAGUNA BLVD

MID-TERM

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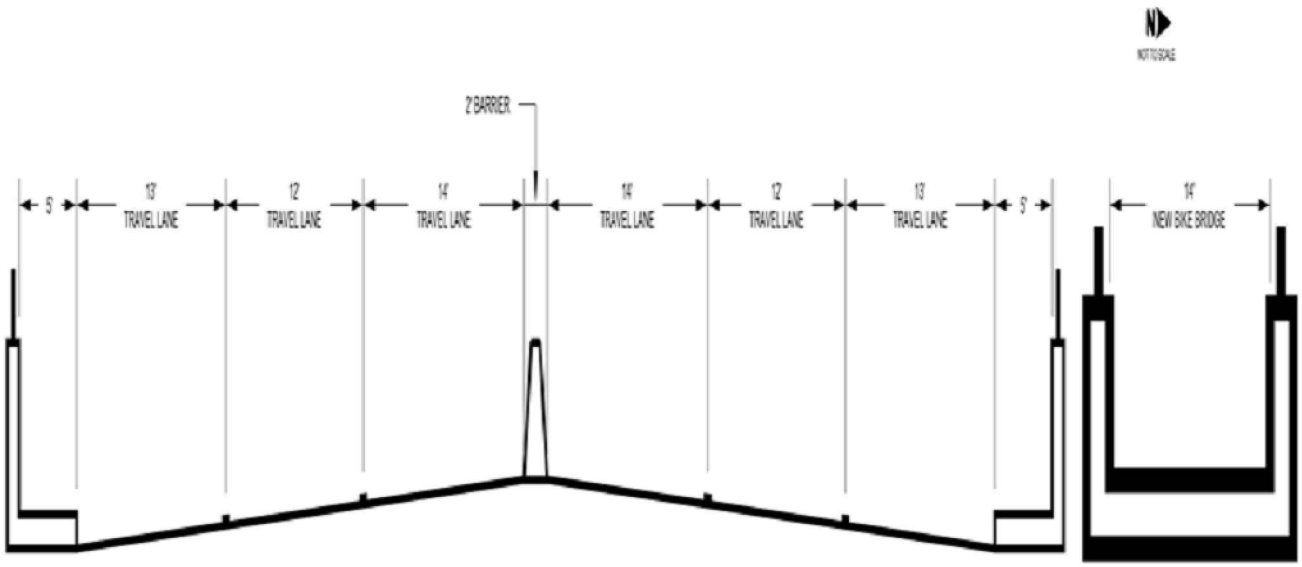
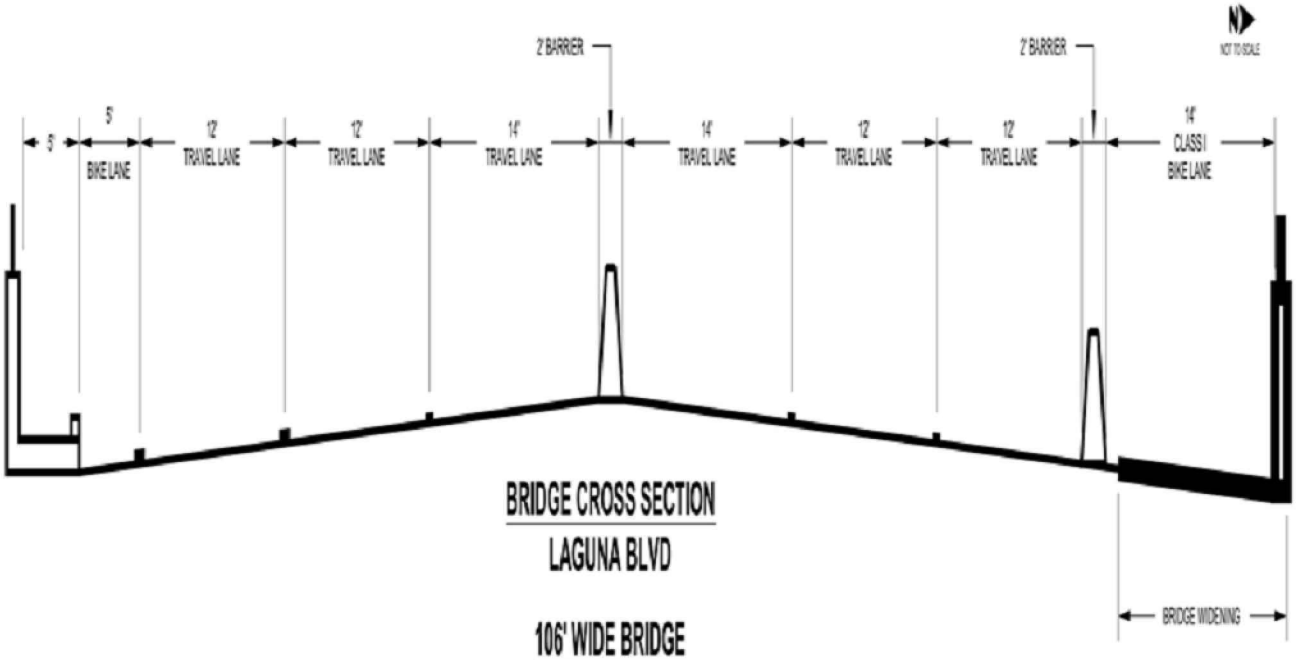


BRIDGE CROSS SECTION

LAGUNA BLVD

ULTIMATE NEW BRIDGE



BRIDGE CROSS SECTION

LAGUNA BLVD

106' WIDE BRIDGE

14' WIDENING ALONG NORTH SIDE

(CONSISTENT WITH TRAILS PLAN)

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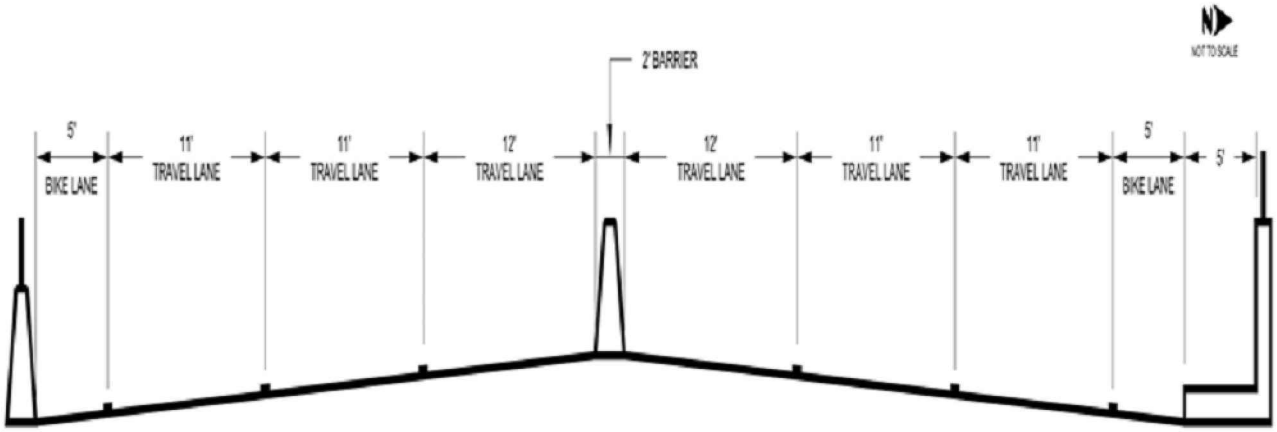
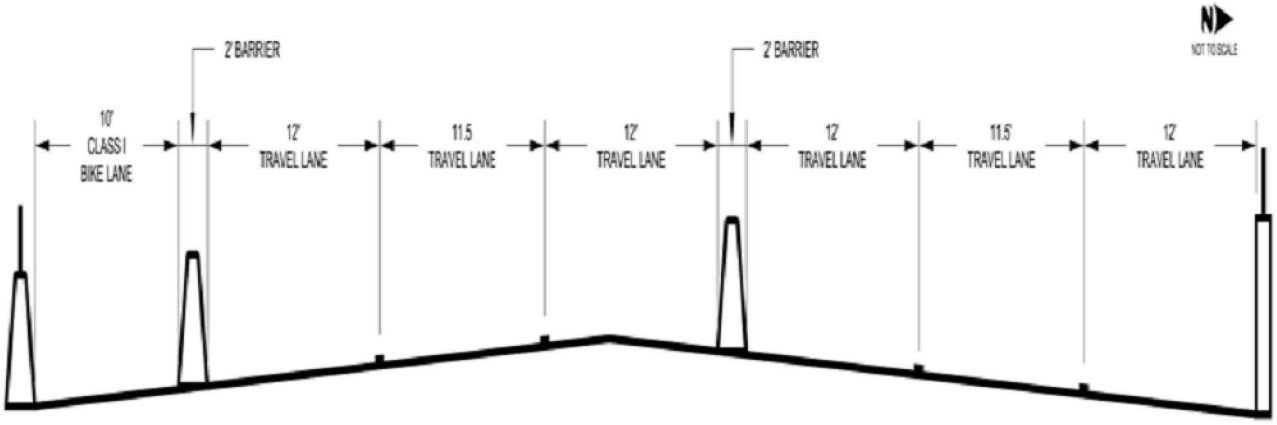


BRIDGE CROSS SECTION

ELK GROVE BLVD

EXISTING CONDITION



BRIDGE CROSS SECTION

ELK GROVE BLVD

MID-TERM

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CITY OF ELK GROVE
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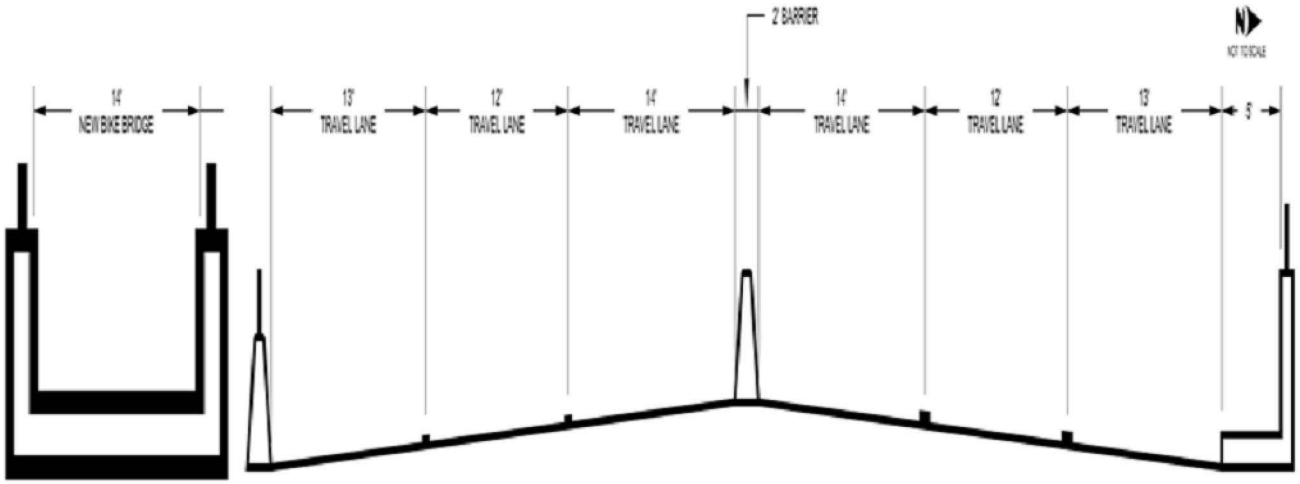
8401 LAGUNA PALMS WAY
ELK GROVE, CALIFORNIA 95758

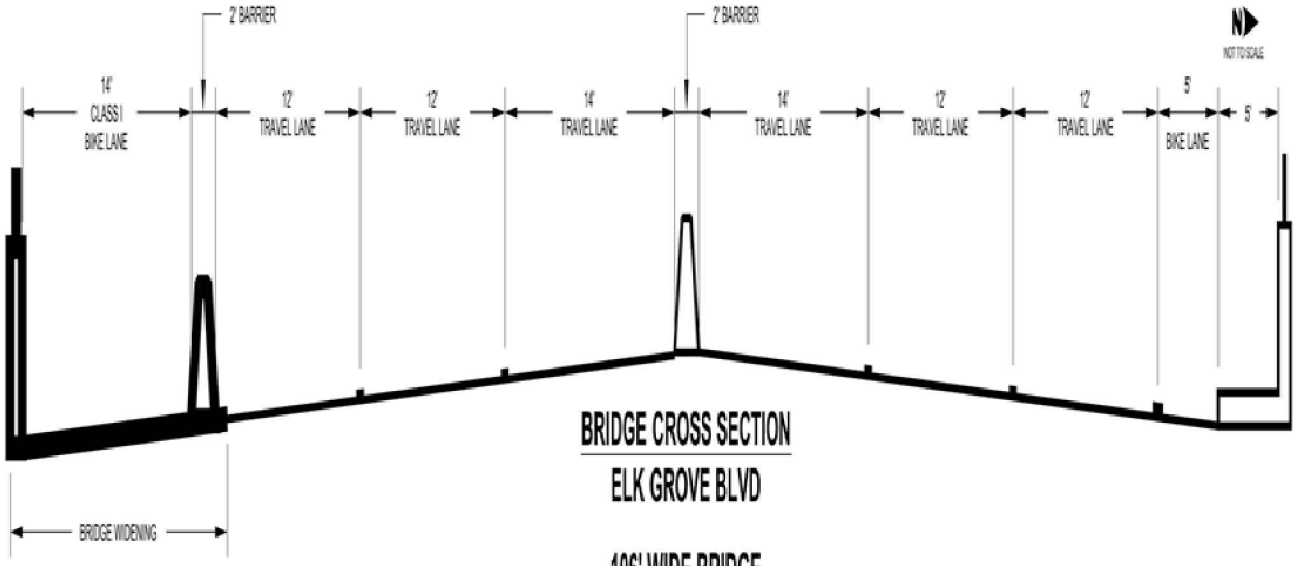
CROSS SECTION EXHIBIT
ELK GROVE BOULEVARD
SHEET 1 OF 2



BRIDGE CROSS SECTION

ELK GROVE BLVD

ULTIMATE NEW BRIDGE



BRIDGE CROSS SECTION

ELK GROVE BLVD

106' WIDE BRIDGE

18' WIDENING ALONG SOUTH SIDE

(CONSISTENT WITH TRAILS PLAN)

WILLDAN Engineering 9281 Office Park Circle ~ Suite 100 Elk Grove, CA 95758 (916) 478-6002	CITY OF ELK GROVE PUBLIC WORKS DEPARTMENT 8401 LAGUNA PALMS WAY ELK GROVE, CALIFORNIA 95758	CROSS SECTION EXHIBIT **ELK GROVE BOULEVARD** SHEET 2 OF 2