

Design and Environmental Study For



ARLINGTON AVENUE BRIDGES REPLACEMENT



Design Review Committee Meeting #9 | January 10, 2023

Purpose of Today's DRC Meeting:

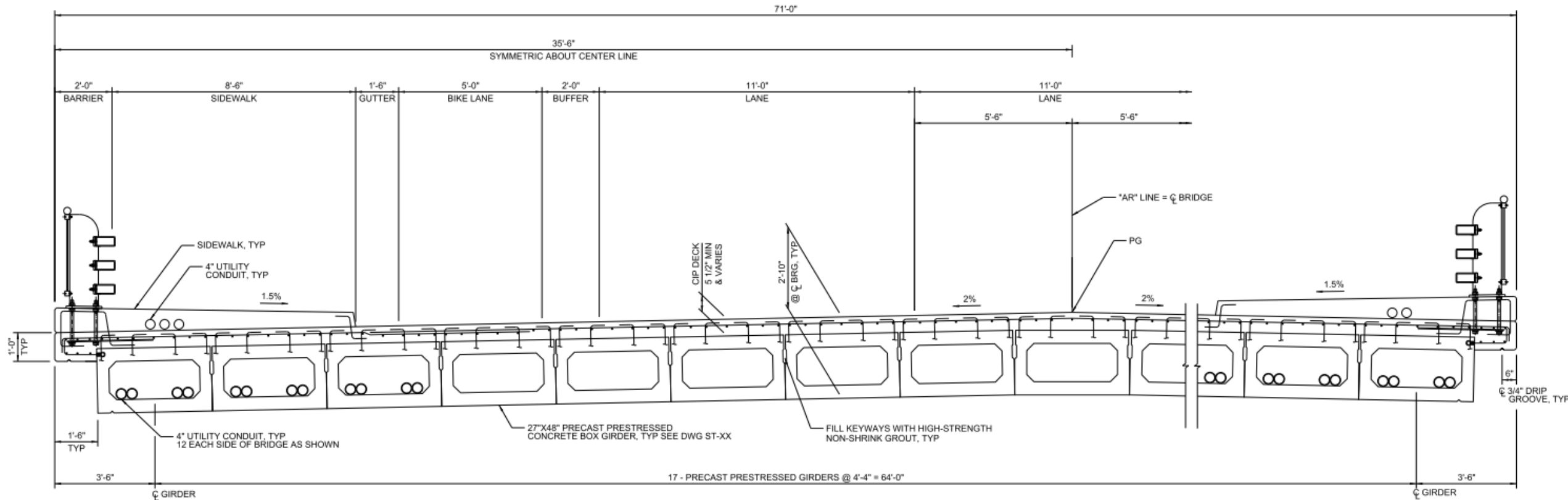
- ✓ Utility Updates
- ✓ Environmental Updates
- ✓ Aesthetics Design Updates
- ✓ Roadway Design Updates
- ✓ Schedule
- ✓ Open Questions/Discussion



Utilities



Bridge Typical Section



8-NVE and 4-‘Future’ along East side (main transmission line across north bridge)

12 - Communication Conduits along west side (2 Zayo, 2 Charter, 8 AT&T)

City of Reno facilities w/in Sidewalk West: 1 Dom H₂O, 1 IRR H₂O, 1 Comm; East: 1 Dom H₂O, 1 IRR H₂O

Environmental Update



Environmental Update

NEPA Clearance

- ▶ FHWA agreed to provide NEPA clearance ahead of permits
- ▶ All technical memos supporting the CE being revised to reflect:
 - ▶ Recreational river access maintained during construction
 - ▶ Sediment removal and channel recontouring near the north bridge
- ▶ **Section 106:** addressing NDOT comments on Historic Report
- ▶ **Section 4(f):** preparing de minimis and temporary occupancy letters for City of Reno concurrence
- ▶ **Section 7:** responding to USFWS questions on BA

USACE Permits

- ▶ Geotechnical Work
 - ▶ Section 408 permit currently being reviewed by USACE
 - ▶ Section 404 permit to be submitted when Section 7 is complete
- ▶ Project
 - ▶ Section 408 permit preapplication mtg with USACE and CTWCD on Jan 26
 - ▶ USACE clarified that review can proceed ahead of NEPA clearance
 - ▶ Section 404 permit to be submitted later in design process.

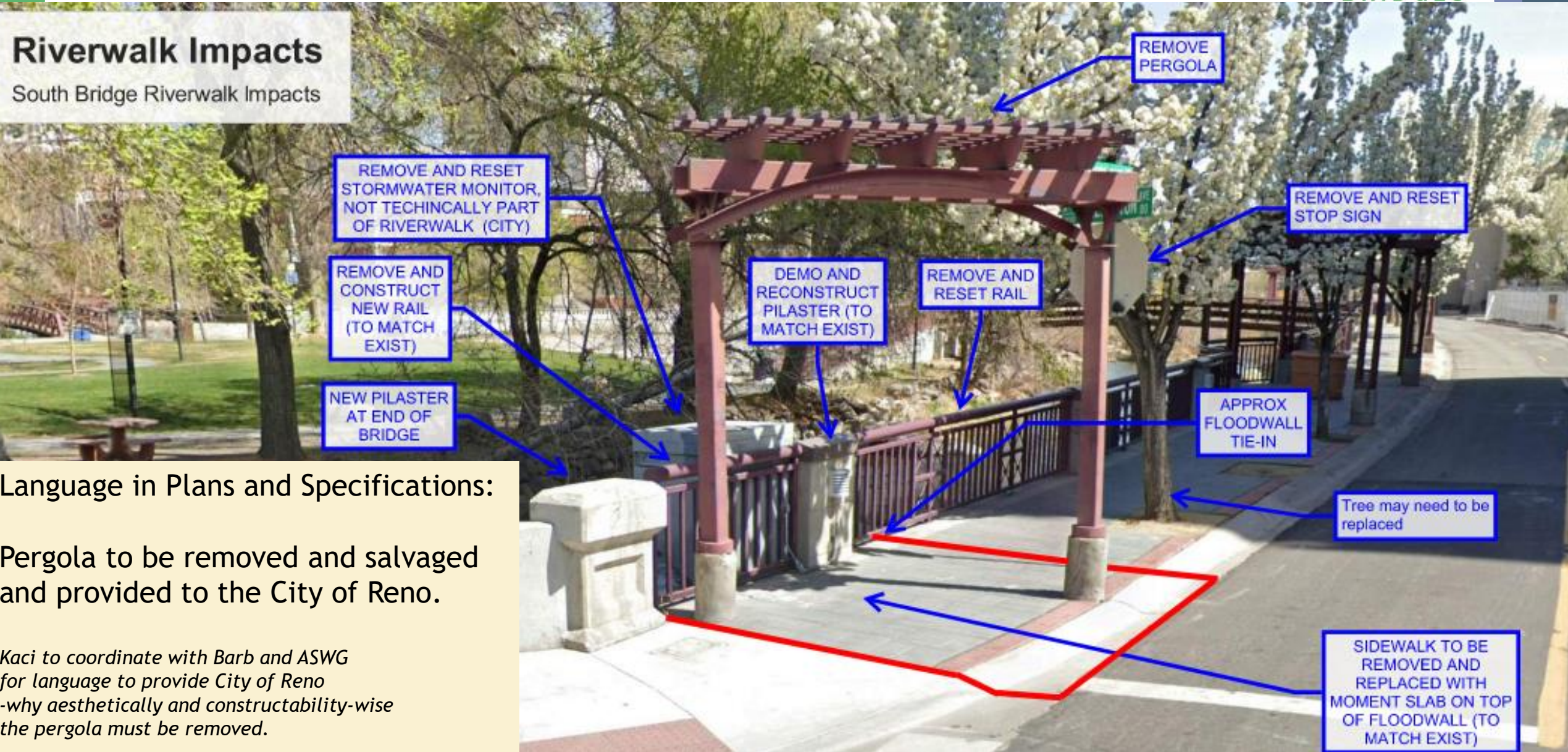
Aesthetic Updates



Riverwalk Impacts

Riverwalk Impacts

South Bridge Riverwalk Impacts



Language in Plans and Specifications:

Pergola to be removed and salvaged and provided to the City of Reno.

Kaci to coordinate with Barb and ASWG for language to provide City of Reno -why aesthetically and constructability-wise the pergola must be removed.

Pylon / Custom Lighting Design Progress

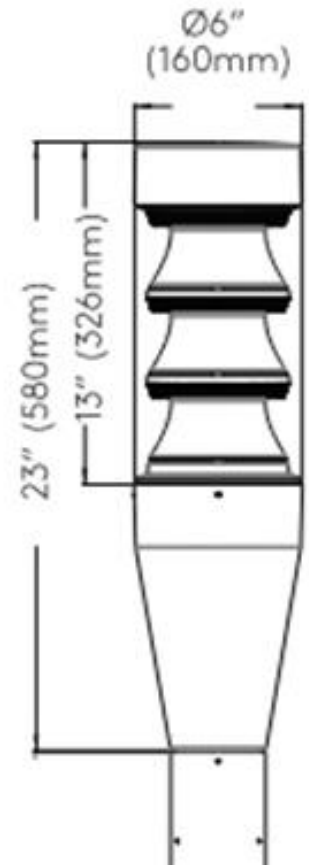


Lighting/Aesthetic Update

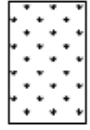

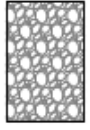






Pedestrian Scaled / Post Top Light
Selux ELO Post Top, 3-stack option

Fits into the custom column light housing for bridges

Use w/Fixture used in S. Virginia MidTown - but at 14' mounting height
along Arlington~ 30' spacing alternating with trees



KEY

-  TURF AND IRRIGATION
-  GROUNDCOVER/ PERENNIALS AND IRRIGATION
-  GROUDED ROUNDED BOULDERS
-  EXISTING TREE TO BE PRESERVED
-  NEW MAJOR TREE
-  NEW SHRUB
-  NEW SHRUB MASS
-  NEW PYLON LIGHT
-  NEW POST TOP LIGHT

ISLAND AVENUE

Truckee River

LIMIT, TURF AND IRRIGATION REPLACEMENT (TYP.)

LIMIT, MULCHED PLANTING BED (TYP.)

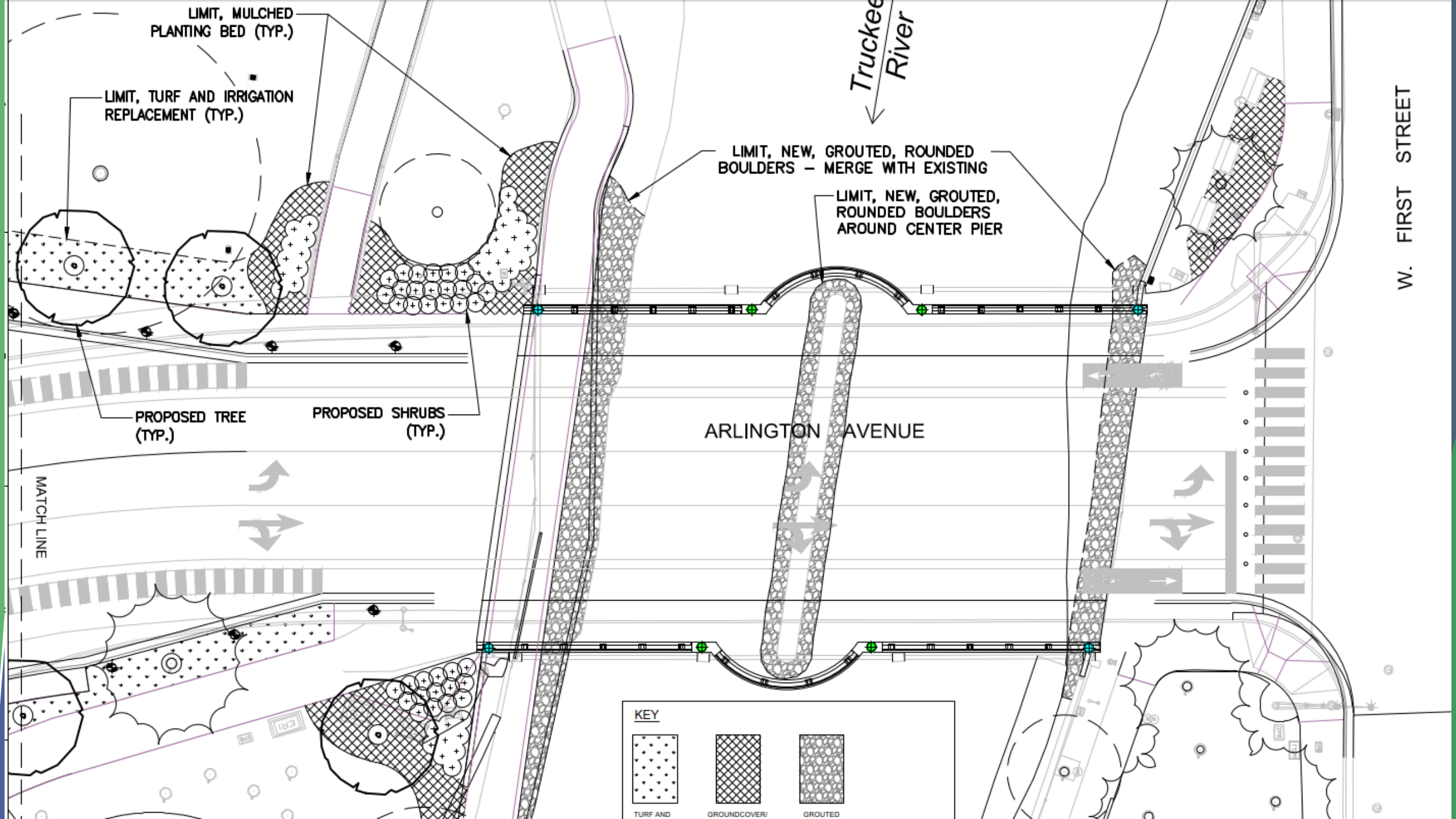
LIMIT, NEW, GROUDED, ROUNDED BOULDERS - MERGE WITH EXISTING

PROPOSED TREE (TYP.)

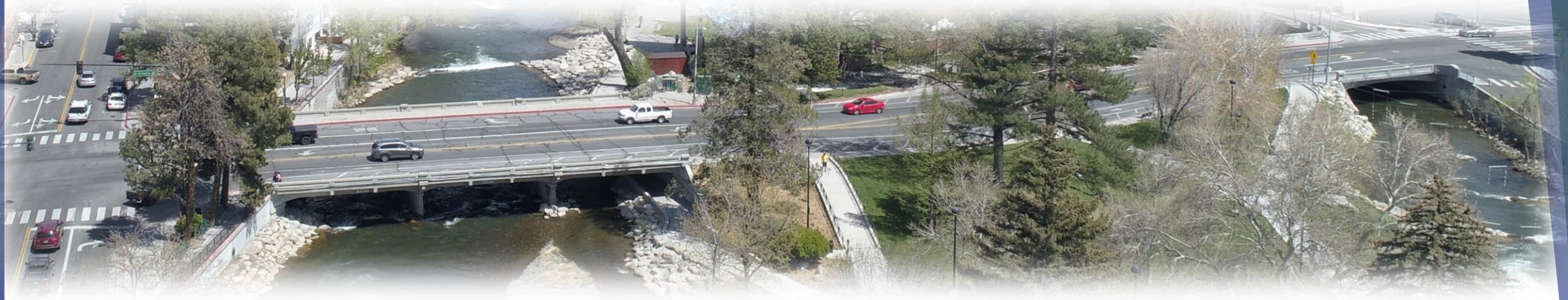
ARLINGTON AVENUE

MATCH LINE

LIMIT, TURF AND IRRIGATION REPLACEMENT (TYP.)



Roadway Updates

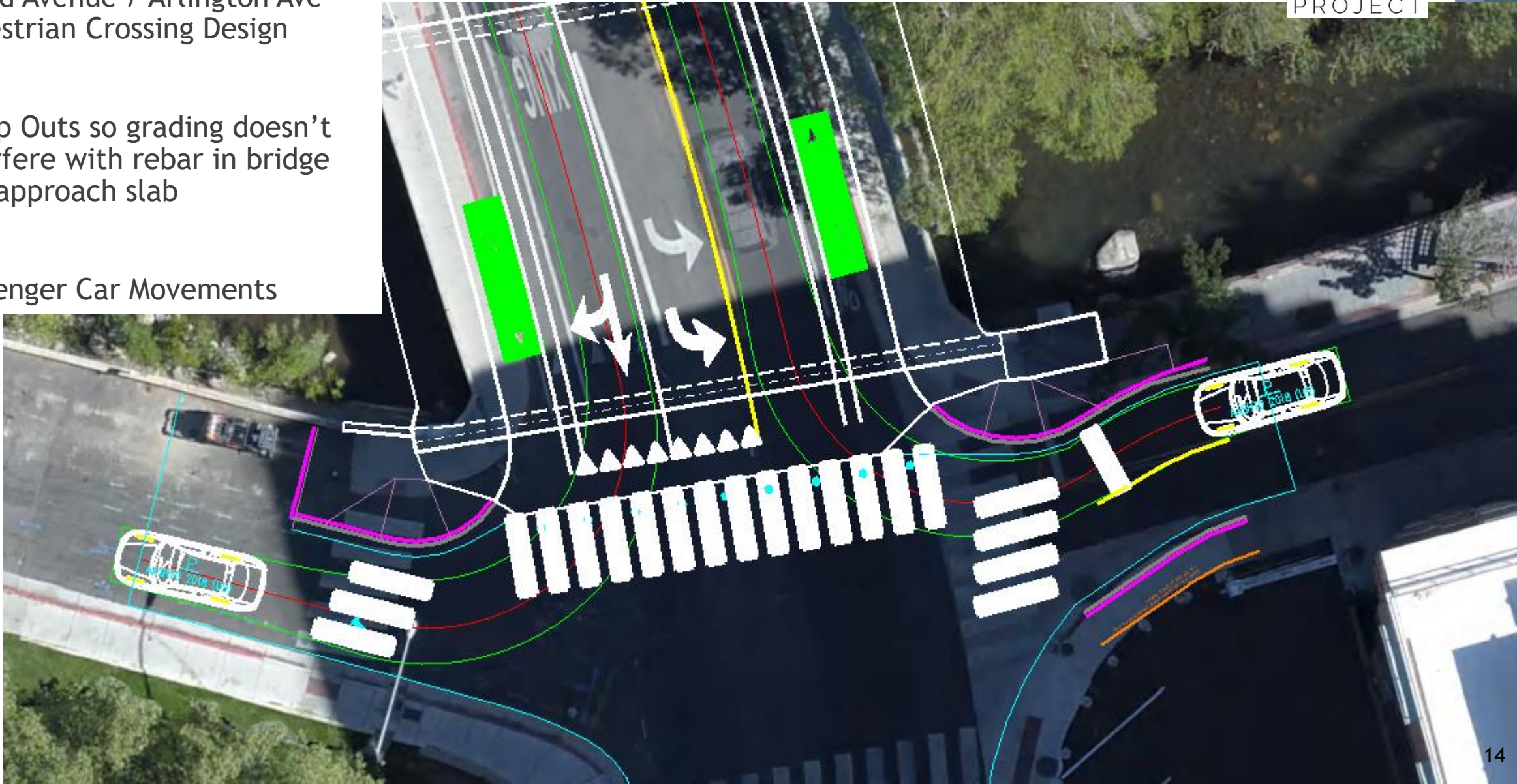


Roadway Design Updates

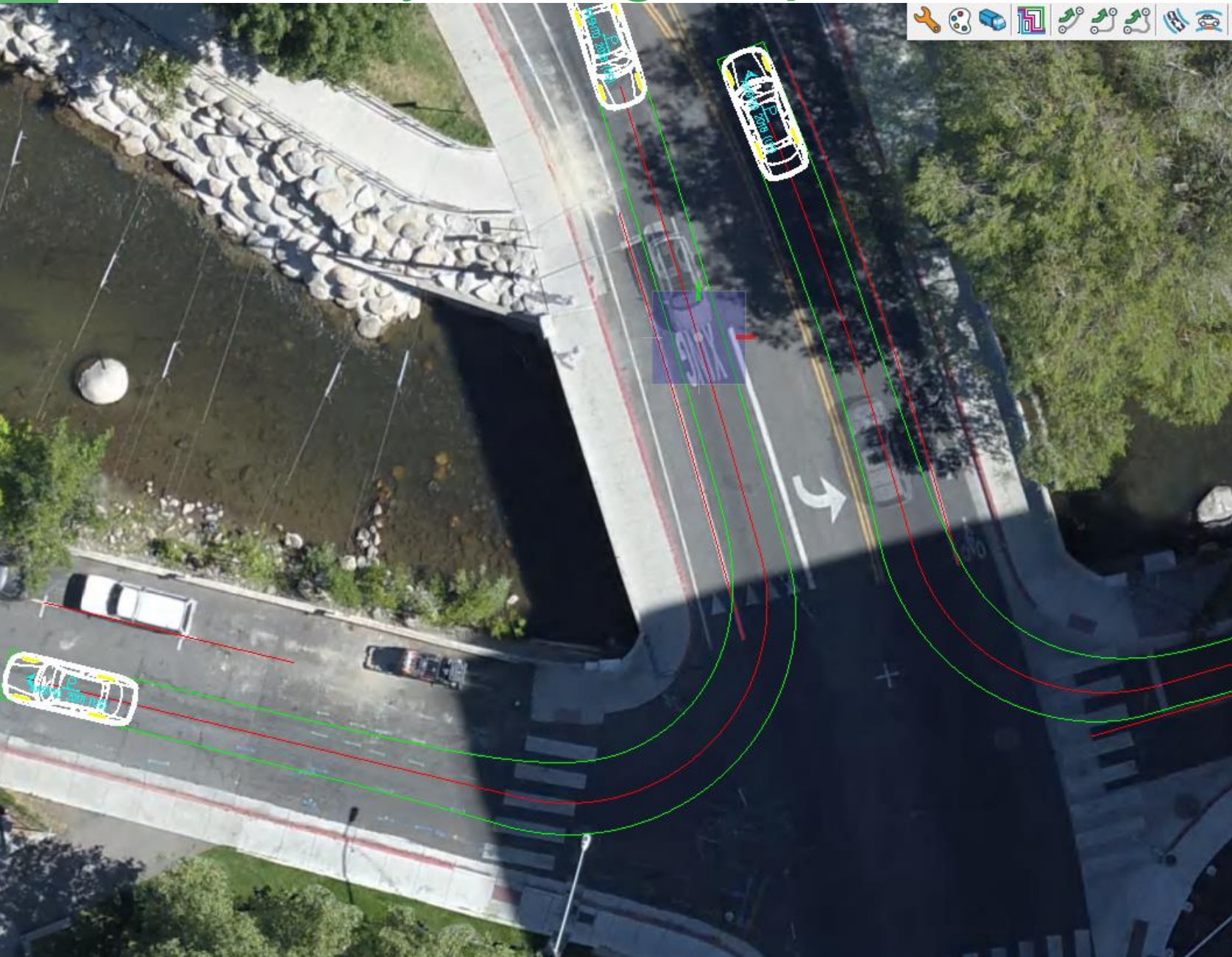
Island Avenue / Arlington Ave
Pedestrian Crossing Design

Bump Outs so grading doesn't
interfere with rebar in bridge
and approach slab

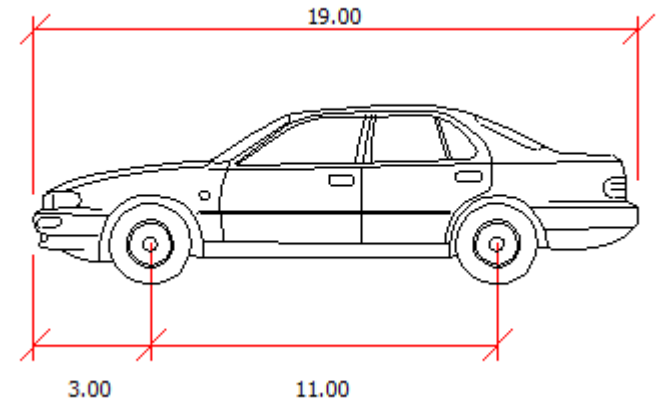
Passenger Car Movements



Roadway Design Updates



Units: feet



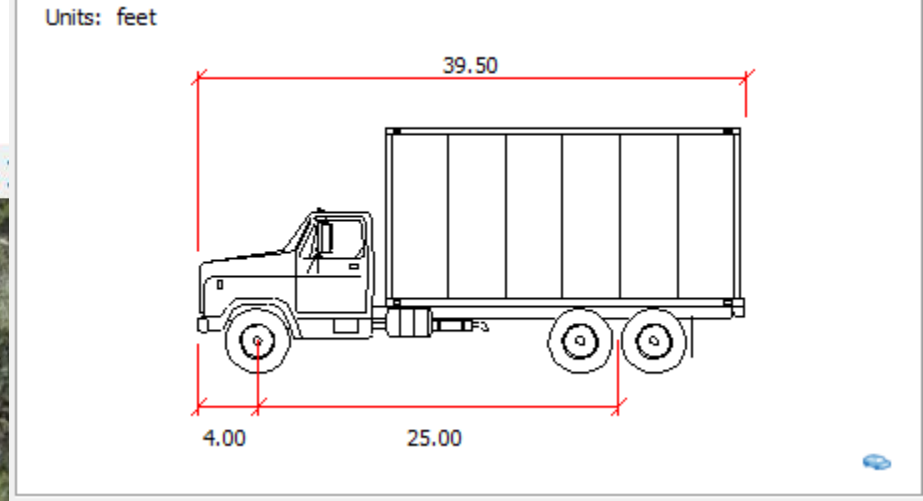
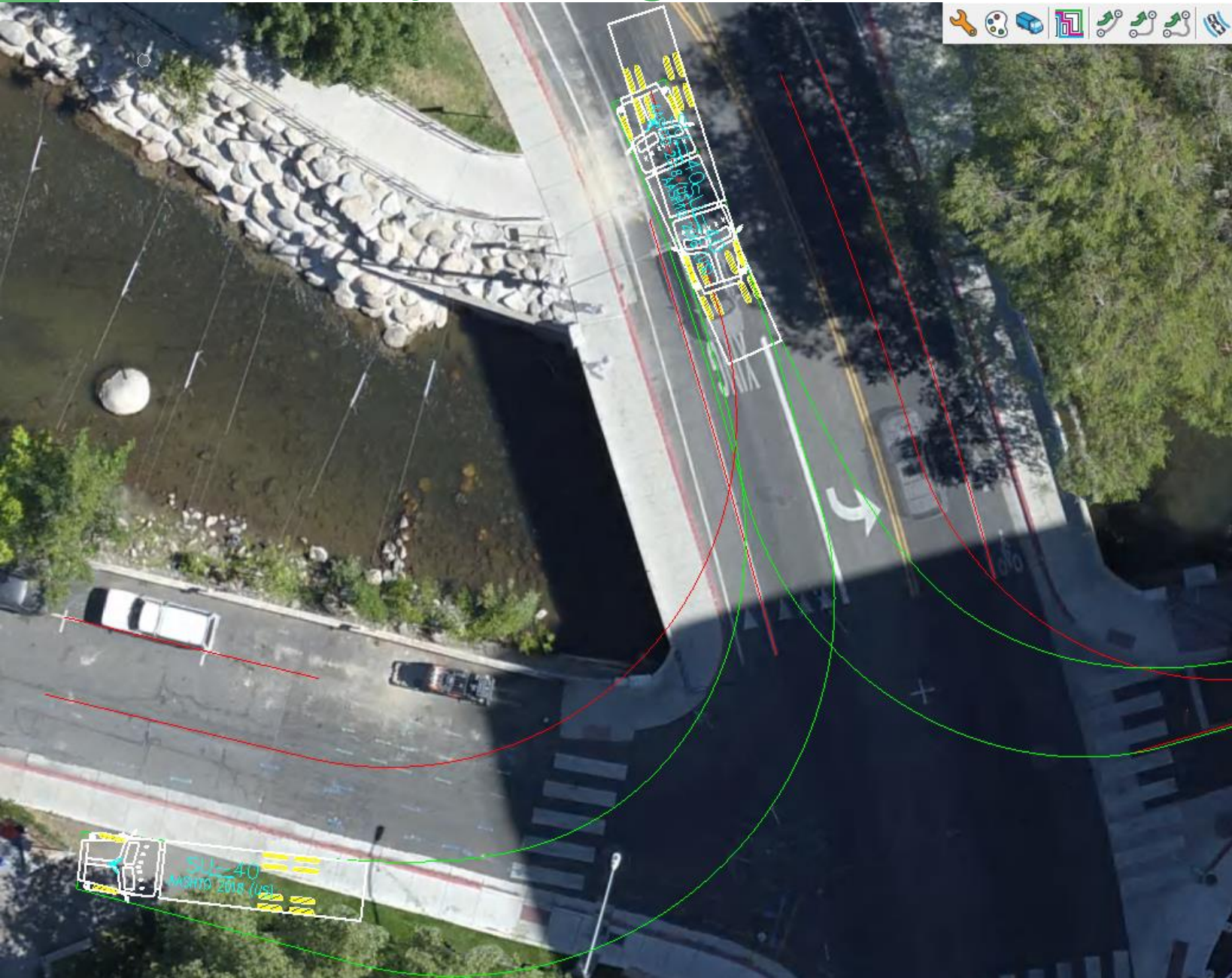
Create Compl...

Method: **Manual**

Max Gap: 0.0002

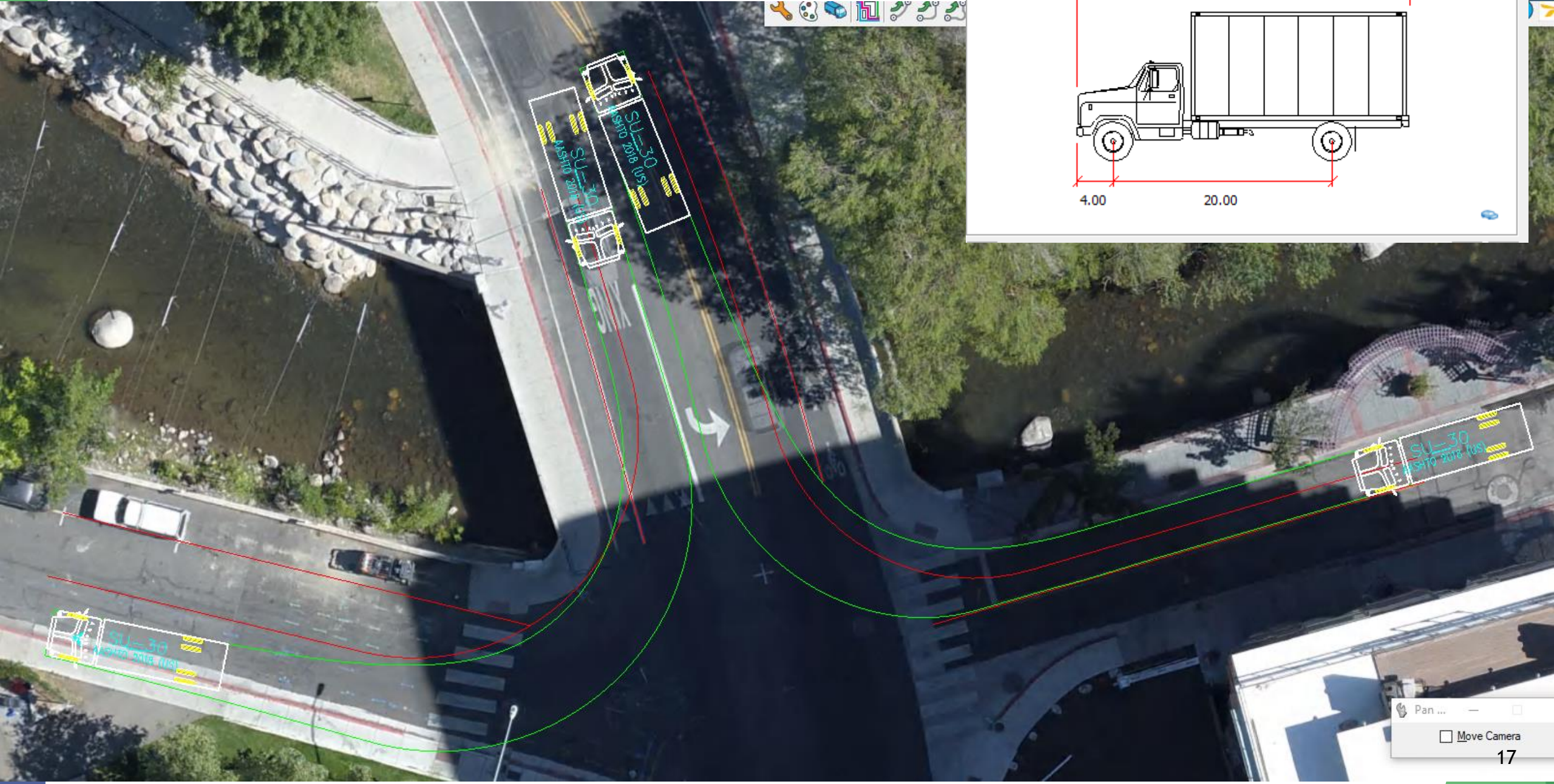
Simplify geometry

Roadway Design Updates

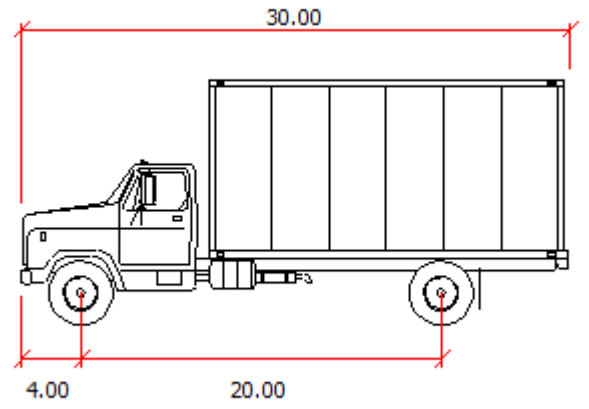


Mov...
 Use Fence: Inside

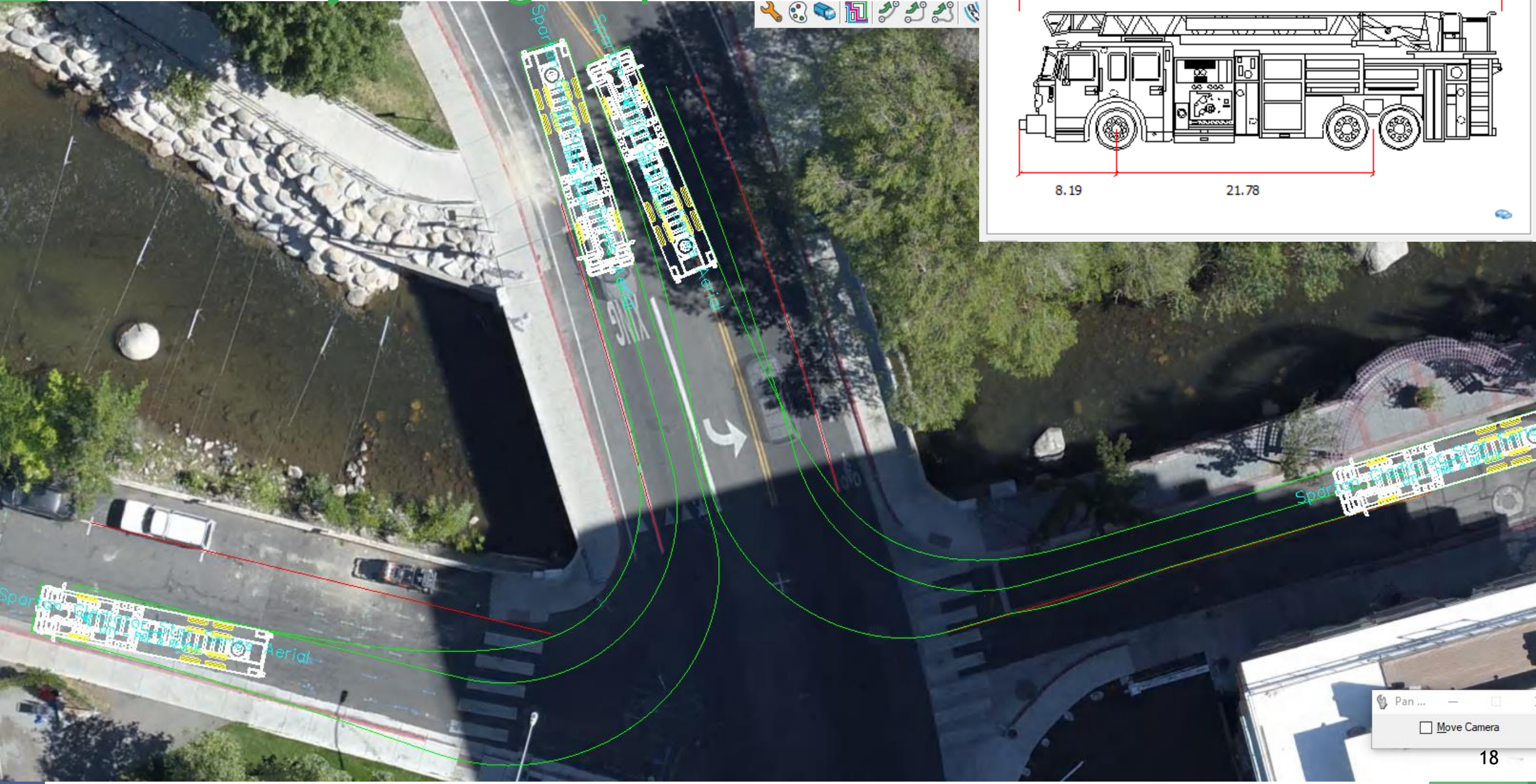
Roadway Design Updates



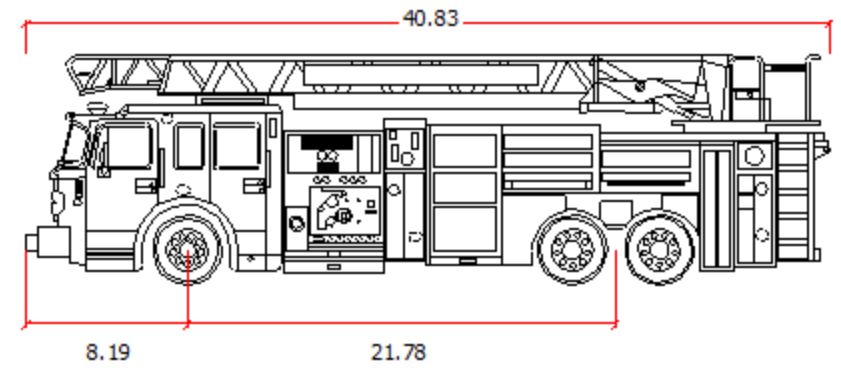
Units: feet



Roadway Design Updates



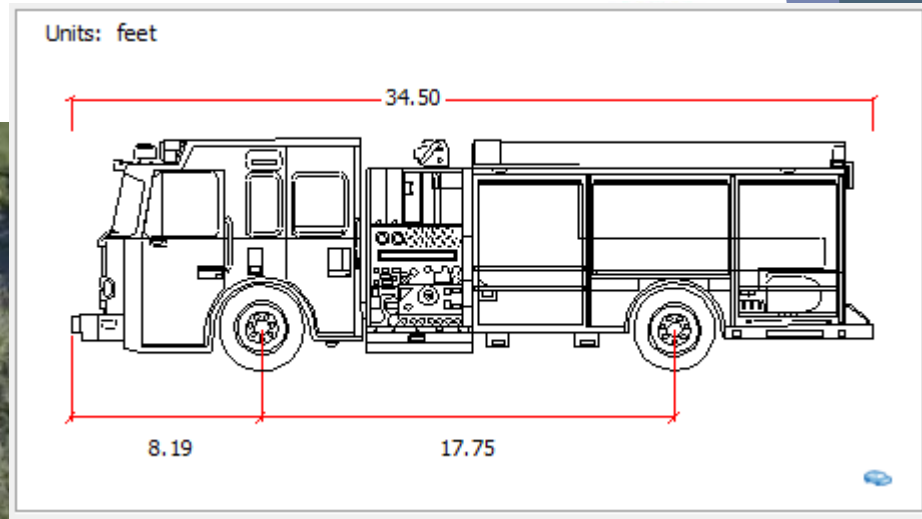
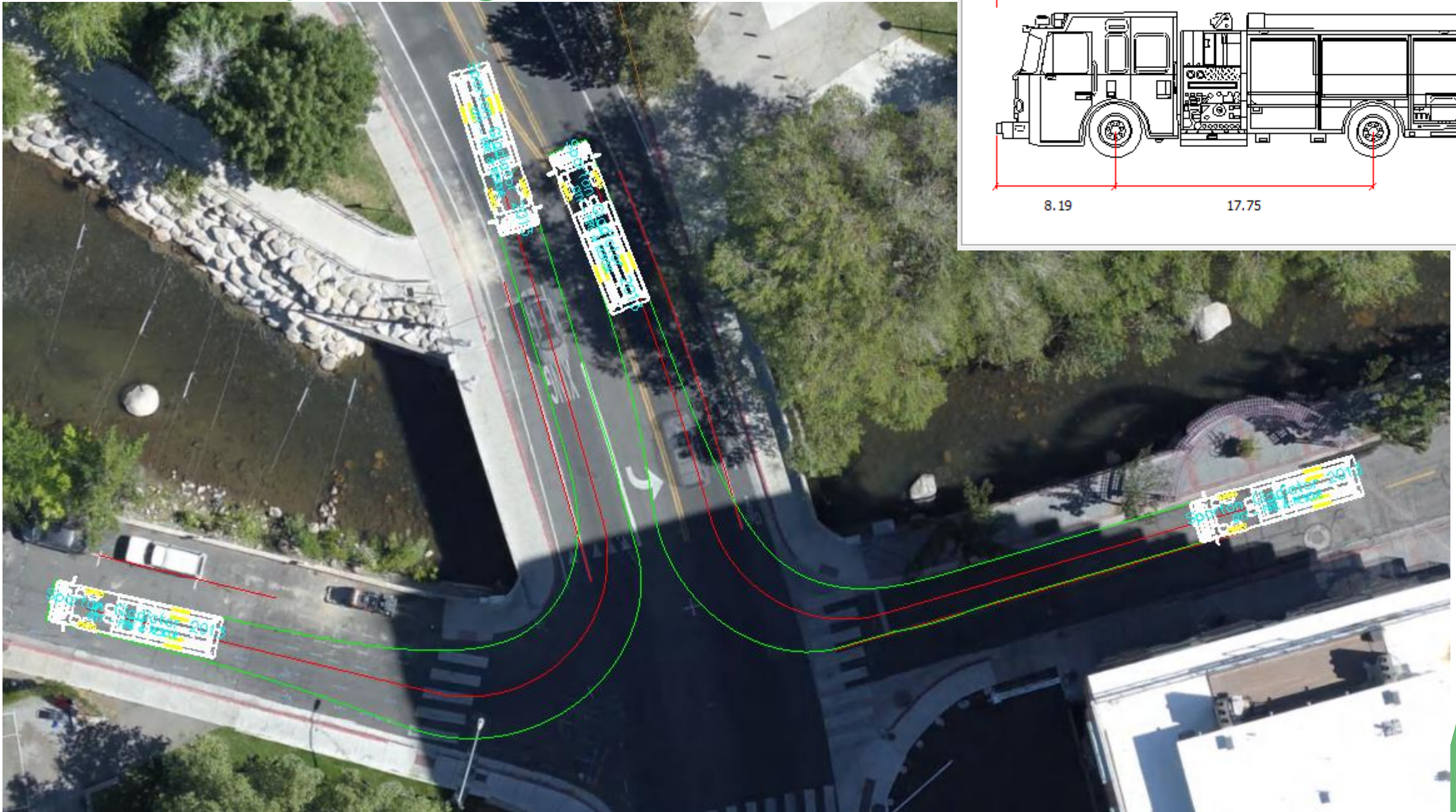
Units: feet



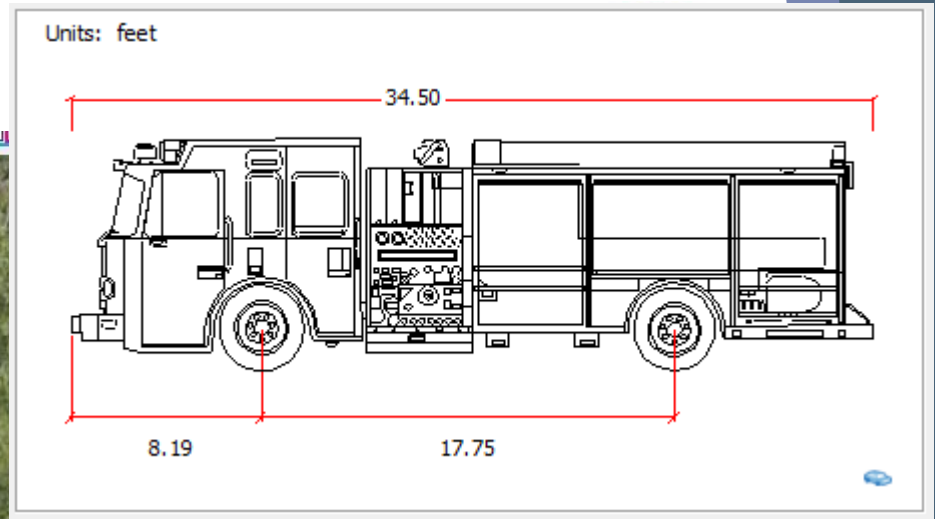
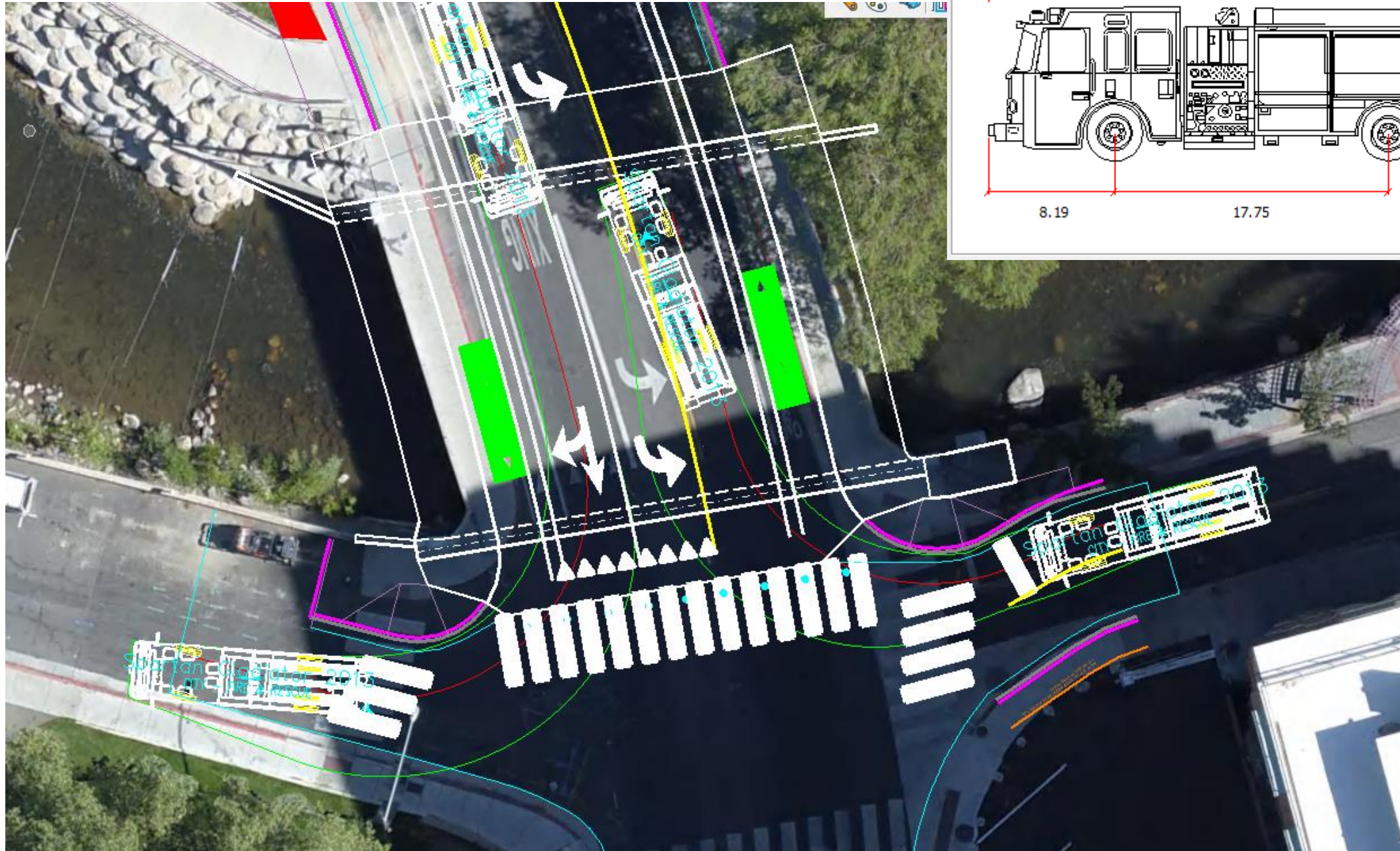
Pan ...

Move Camera

Roadway Design Updates



Roadway Design Updates



Roadway Design Updates



Layers and Tools

Map Layers

Layers Legend List

Additional Layer Settings

Layer Search

fire

Fire Districts

Fire Response

Fire Stations

Active or Recent Fires

Fire Risk Rating

Quick Map:

Restricted Areas for Firearms

Quick Map:

Fire Hazard

reset

Districts & Zones

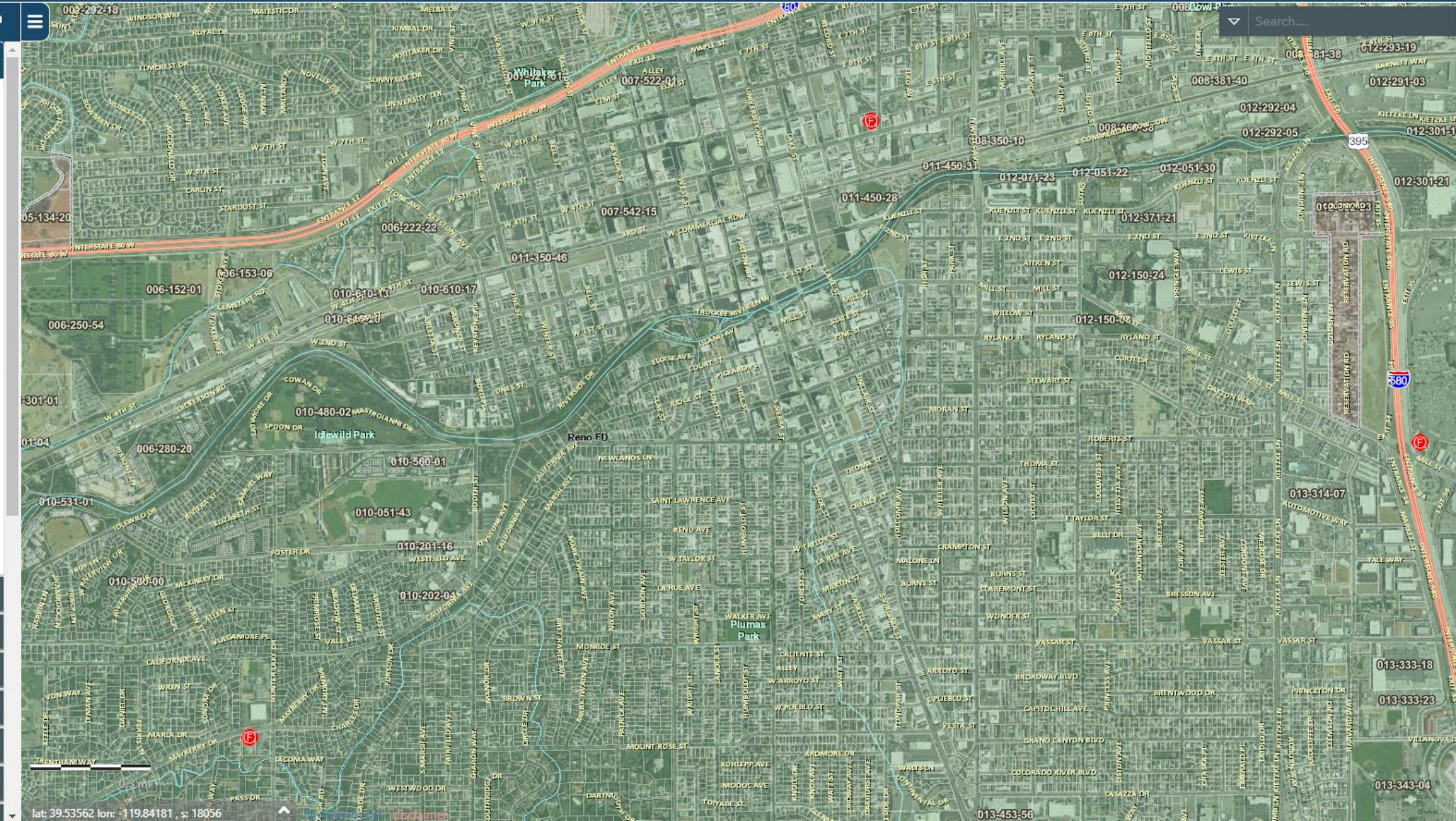
Facilities

FEMA - Flood Data

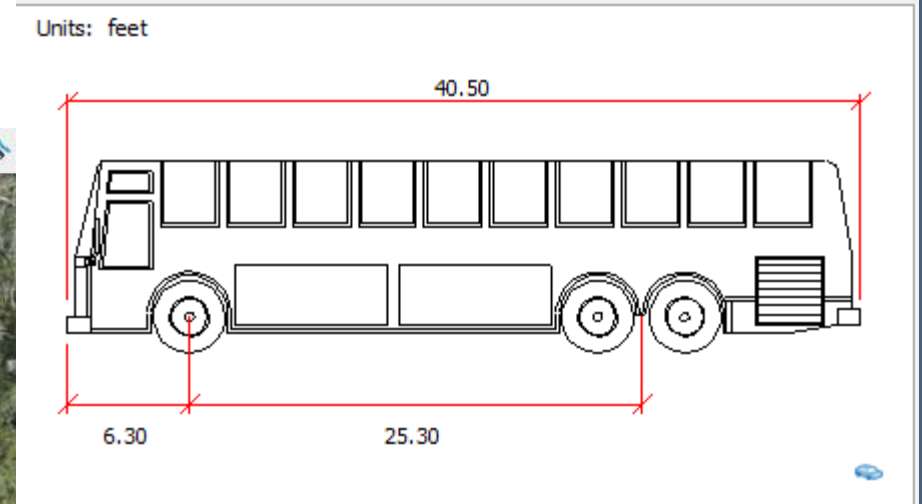
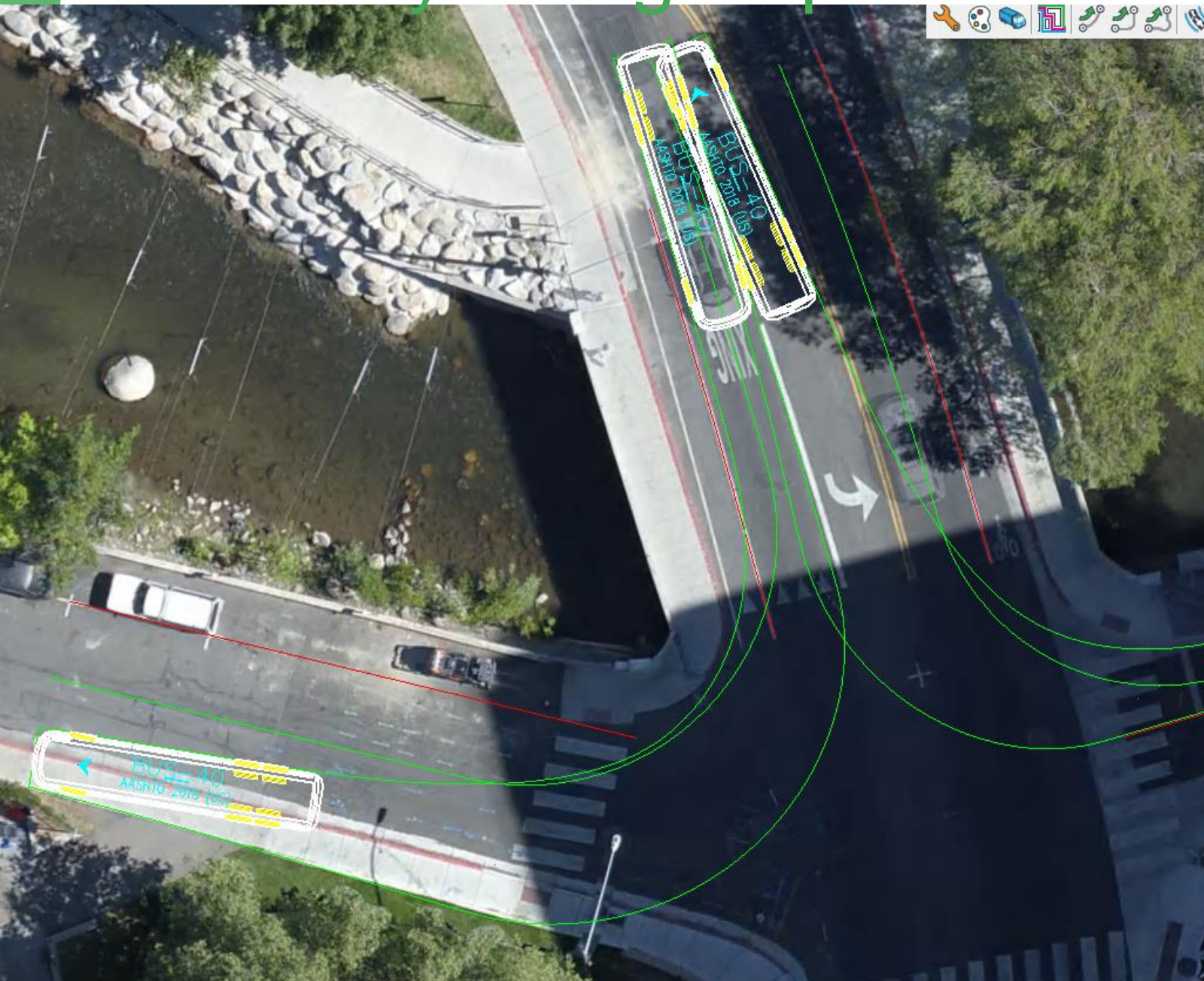
Fire Perimeters

Imagery

Planning & Development



Roadway Design Updates



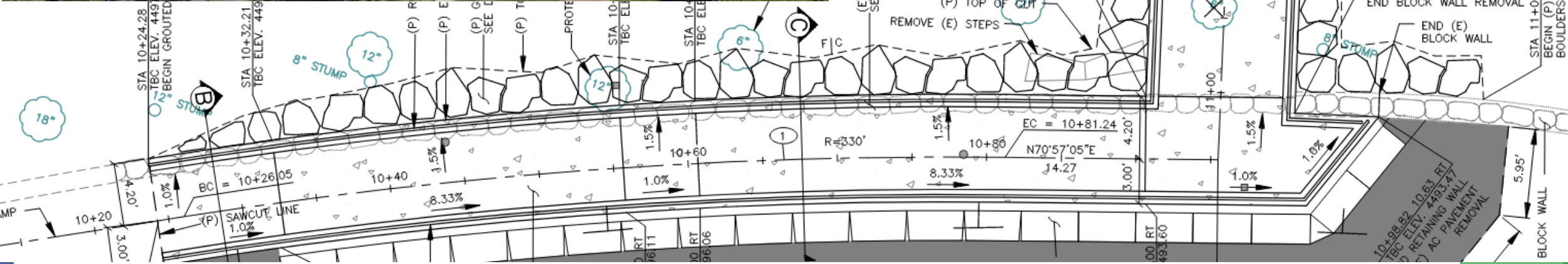
Pan ...
 Move Camera

Roadway Design Updates

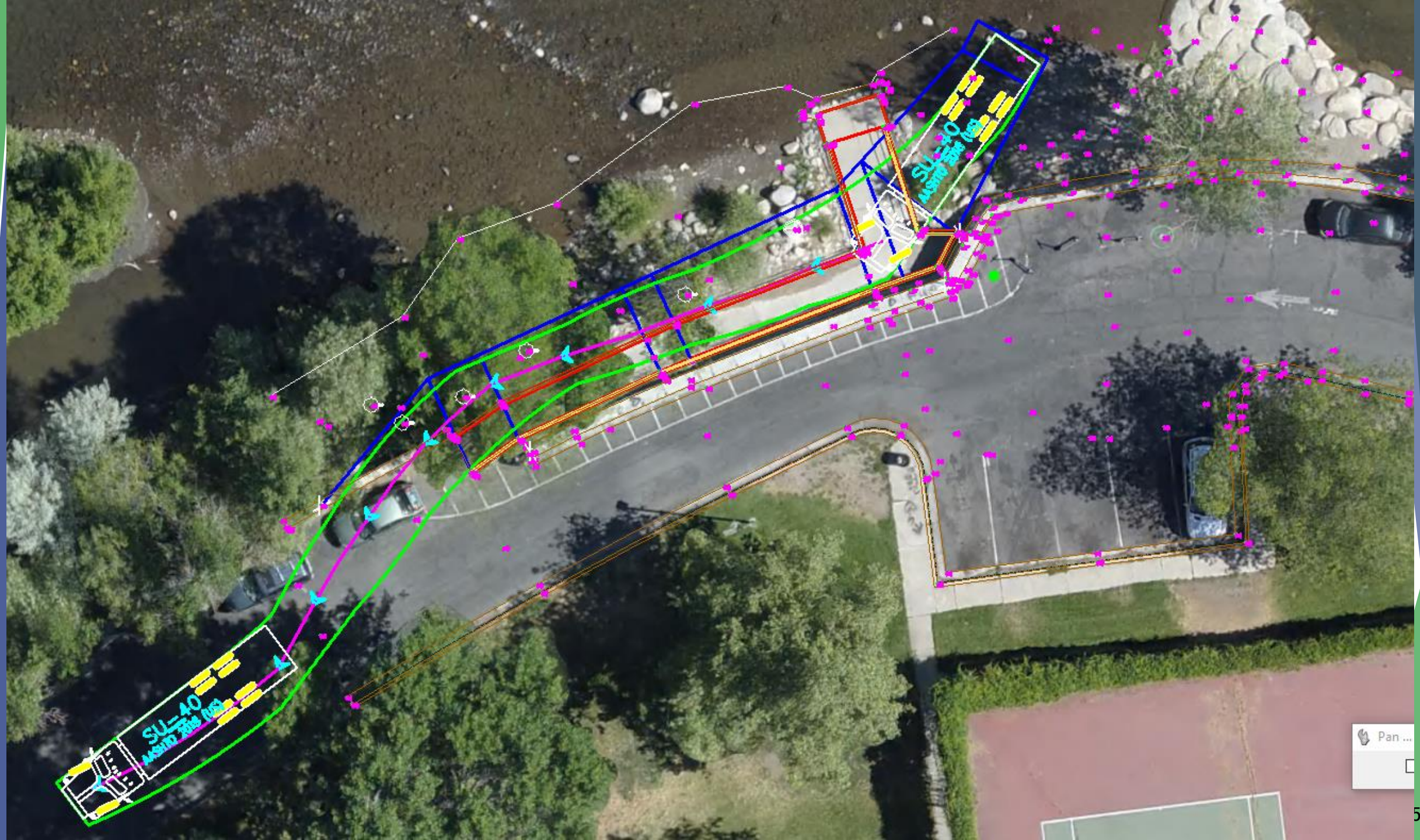


Maintenance/Access Ramp

Existing Ramp Constructed in 2004 (predating the 2010 ADA code)





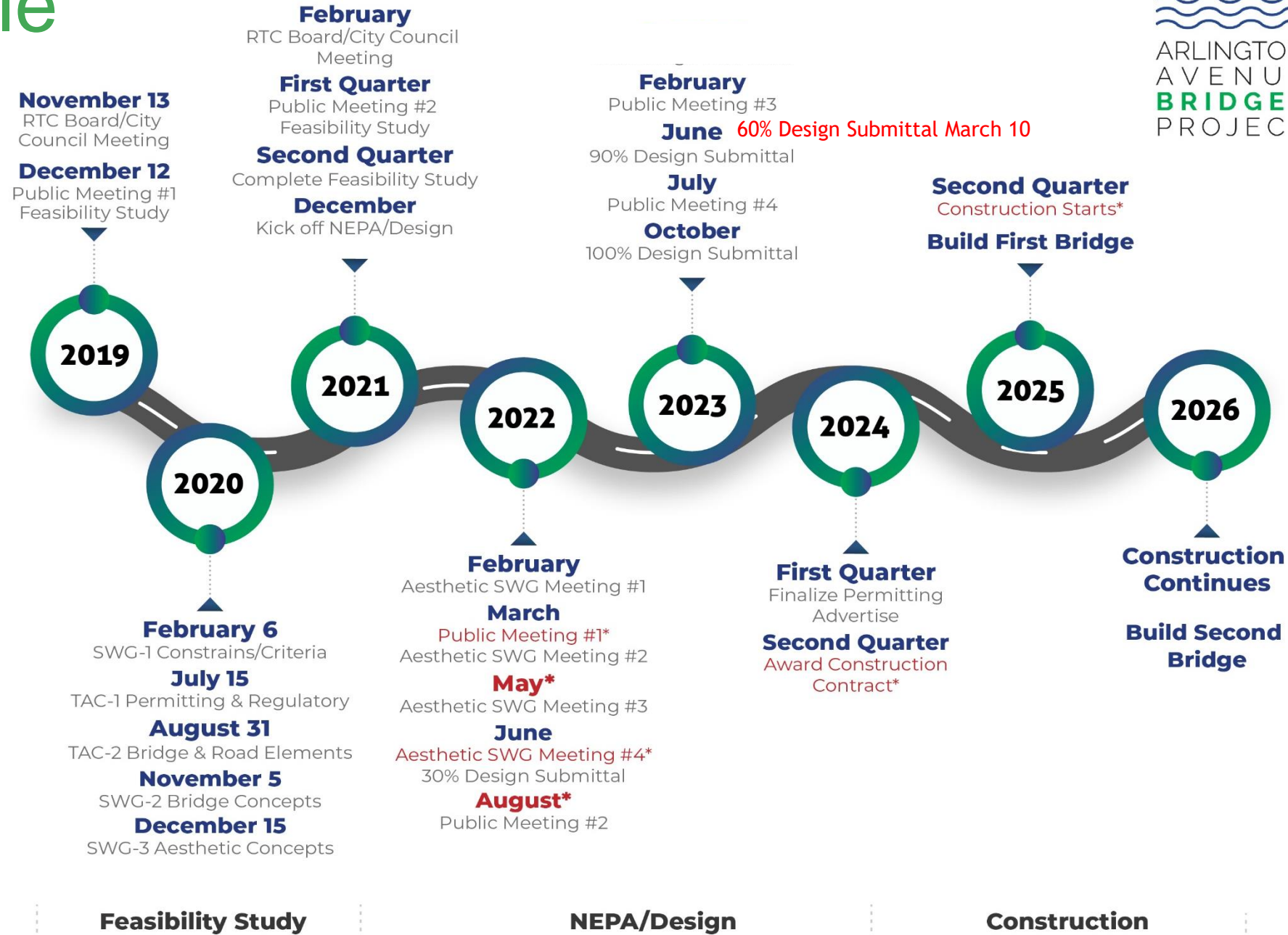




Roadway



Schedule

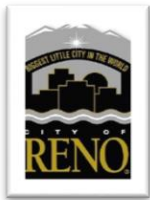


* Schedule changes highlighted in red

Thank You for Participating!



jtortelli@rtcwashoe.com



*Building A Better Community
Through Quality Transportation.*
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PK Electrical, Inc.



Extra Slides For Reference As Needed

Pylon / Custom Lighting Design Progress



North End

TMWA (Thomas Speer, Steve Volk)

- 8-in Cast Iron within W. 1st Street intersection
- TMWA to replace/realign prior to construction; currently under design
- Protect in Place During Construction - Specification Requirements
- West of Intersection:
8-in Ductile Iron
w/ 2-in HDPE lateral
- East of Intersection:
8-in Transite
- North of Intersection:
8-in Cast Iron along west side
- Assume Park Irrigation Line from this 2-in HDPE lateral



South End

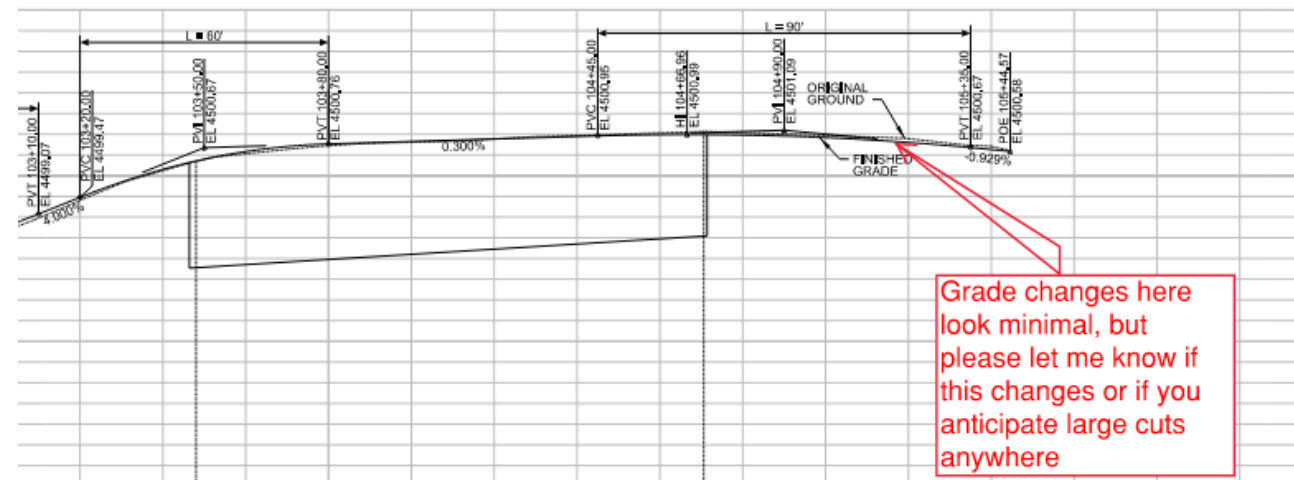
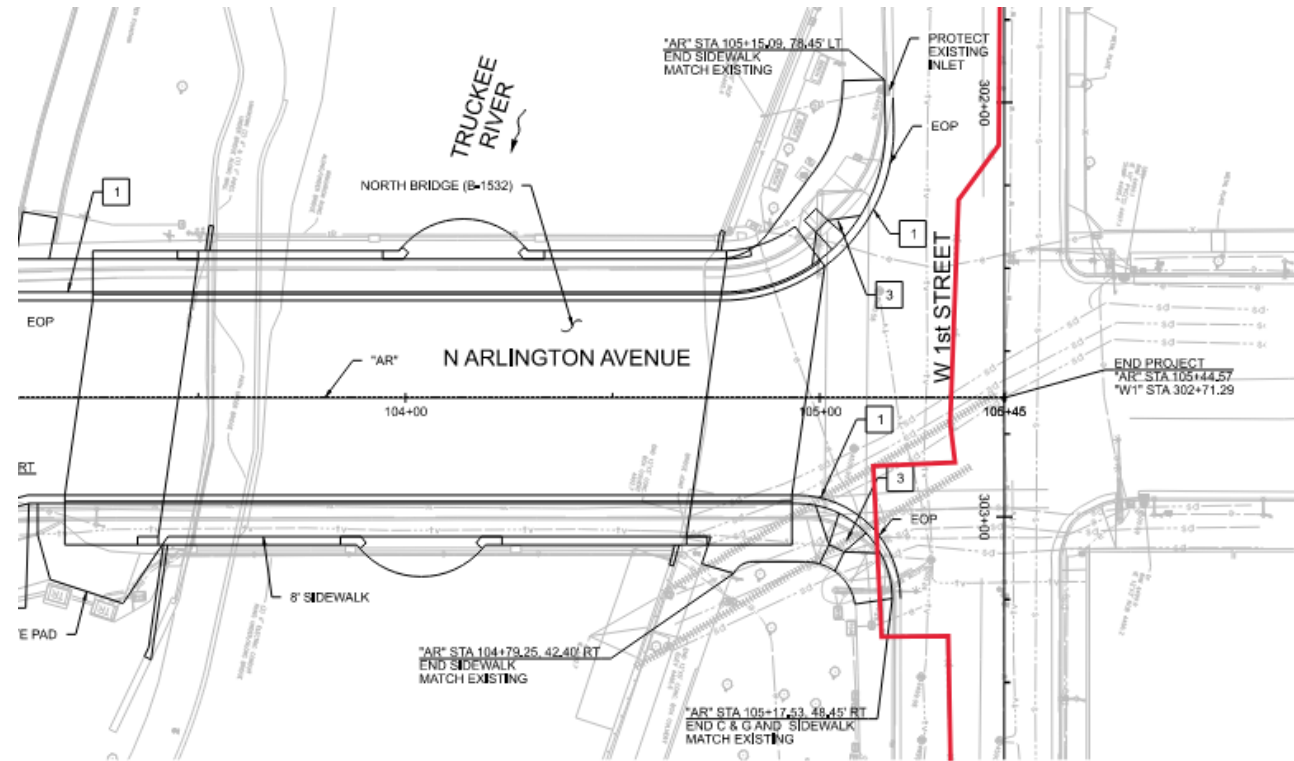
TMWA

- 8-in C900 Retired in Place within Island Ave intersection - Contractor Allowed to Remove During Construction of South Abutment
- 8-in Ductile Iron Across Intersection
- West of Intersection- 2 Lines: 6-in Transite & 8-in C900
- East of Intersection- 1 Line: 8-in C900
- South of Intersection: 6-in Cast Iron and 6-in Transite Retired in Place
- Along Arlington: 6-in Cast Iron retired in place; 8-in C900 along western side



NVE - GAS (Becca Epstein)

- ✓ Existing along W. 1st St.
- ✓ Protect in Place w/ Excavation for Bridge Abutment - Requirements for specifications



Grade changes here look minimal, but please let me know if this changes or if you anticipate large cuts anywhere

North Bridge

NVE - ELECTRIC (Benjamin Eide-Hughes)

- Underground the OH-E
- Remove/Replace UG Primary from Vault to Transformer Through New Bridge (2-4" Conduits)
- Streetlights and Services in this area directly serve the customer - Apply for Formal Electrical Project: info@nvenergy.com

PROTECT IN PLACE	
LIMITS OF REMOVAL OF CURB AND GUTTER	
SAWCUT (NO DIRECT PAVEMENT)	
REMOVE AND REPLACE BOLLARD, IN-KIND	
REMOVE OVERHEAD PEDESTRIAN WARNING SYSTEM	
SEE BRIDGE PLANS FOR BRIDGE REMOVALS	
REMOVE AND RESET BENCH	
GEND	
	LIMITS OF REMOVAL OF COMPOSITE SURFACE (APPROX 24" DEPTH)
	LIMITS OF REMOVAL OF P,C,C,P, AND BASE (APPROX 16" DEPTH)
	LIMITS OF REMOVAL OF COMPOSITE SURFACE (DEPTH VARIES) (SIDEWALK AND PATHS)

NVE ELECTRIC COMMENTS:
SEE COMMENTS BELOW FOR STREET LIGHT POLES AND OH SERVICE WIRE AND PRIMARY CABLE.

PROTECT IN PLACE SL L311604 OR REMOVE/REPLACE FOR CONSTRUCTION?

REMOVE/REPLACE PRIMARY CABLE.

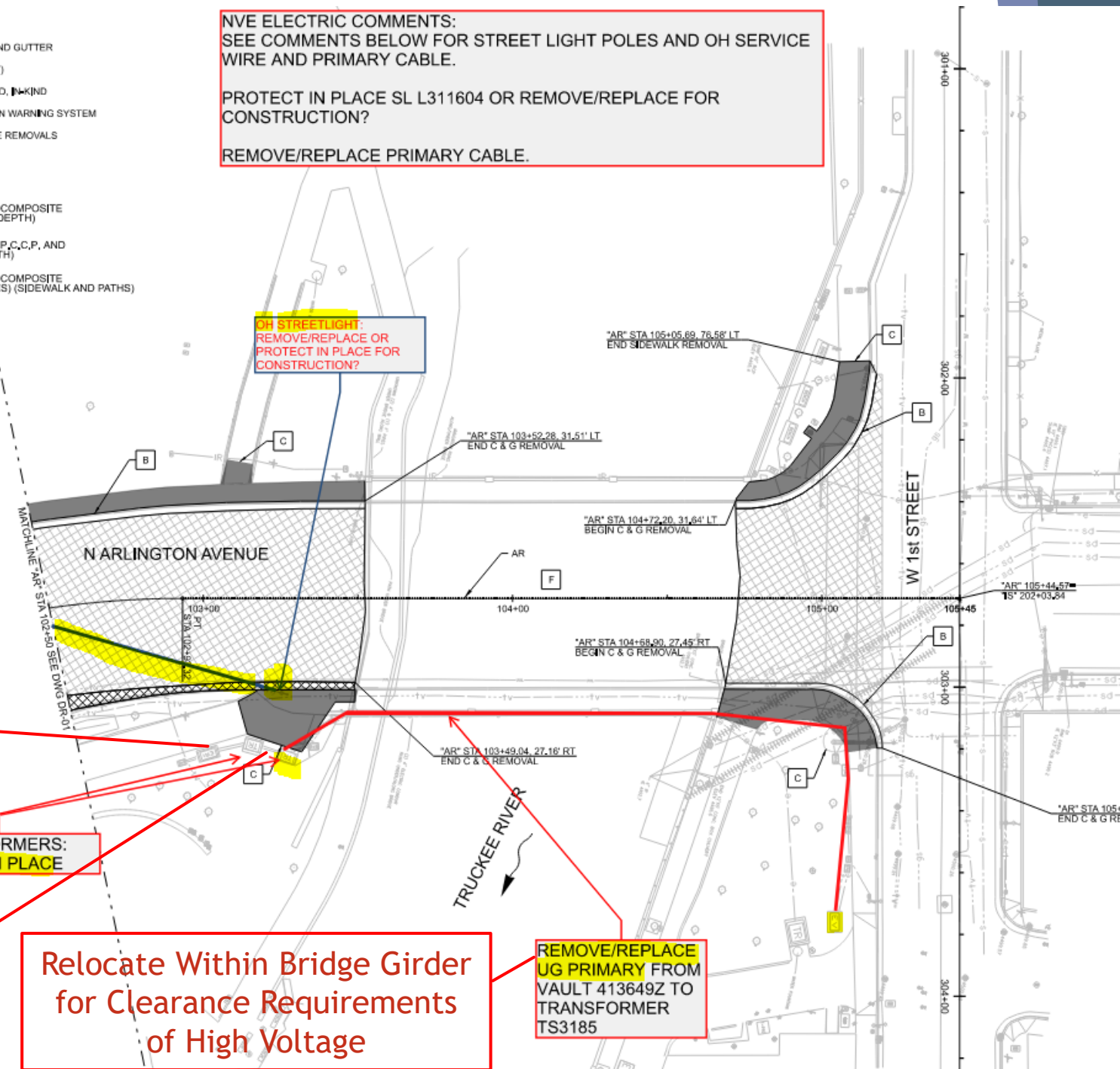
Houses City of Reno Meter(s)

2-TRANSFORMERS:
PROTECT IN PLACE

NVE Transformers (2)
Middle One is Empty - Can be removed or repurposed

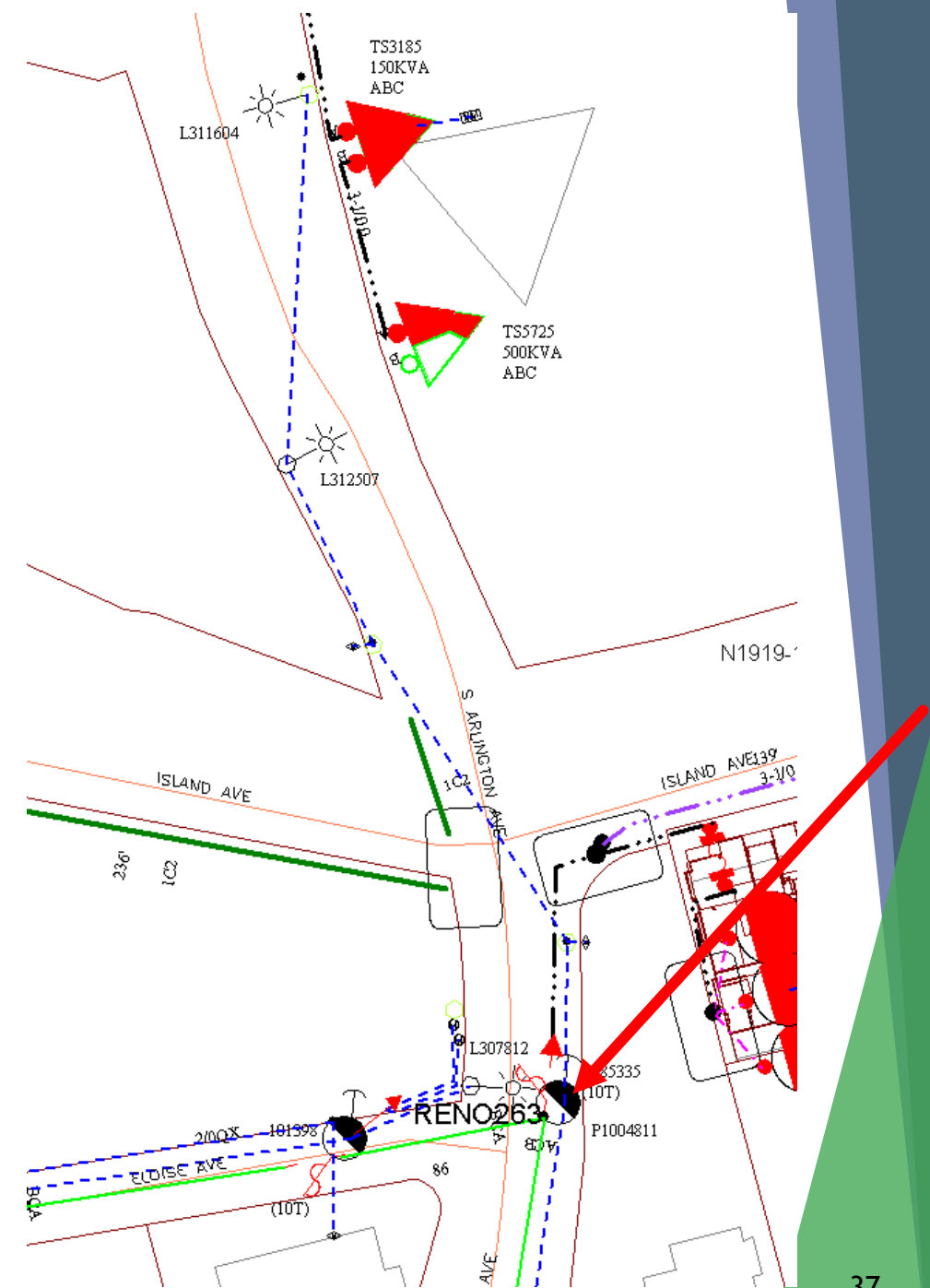
Relocate Within Bridge Girder for Clearance Requirements of High Voltage

REMOVE/REPLACE UG PRIMARY FROM VAULT 413649Z TO TRANSFORMER TS3185



NVE - ELECTRIC

- Underground the existing Overhead
- Pole - P1004811 at end of Elsie Ave.



CHARTER (Jason Mortensen)

Confirmed Existing:

Existing Fiber and Coax - Across South Bridge, north along Arlington Avenue to Amphitheater

No Existing Vault as shown at Island intersection (runs from riser pole at Eloise to Amphitheater)

No Existing facilities across north bridge

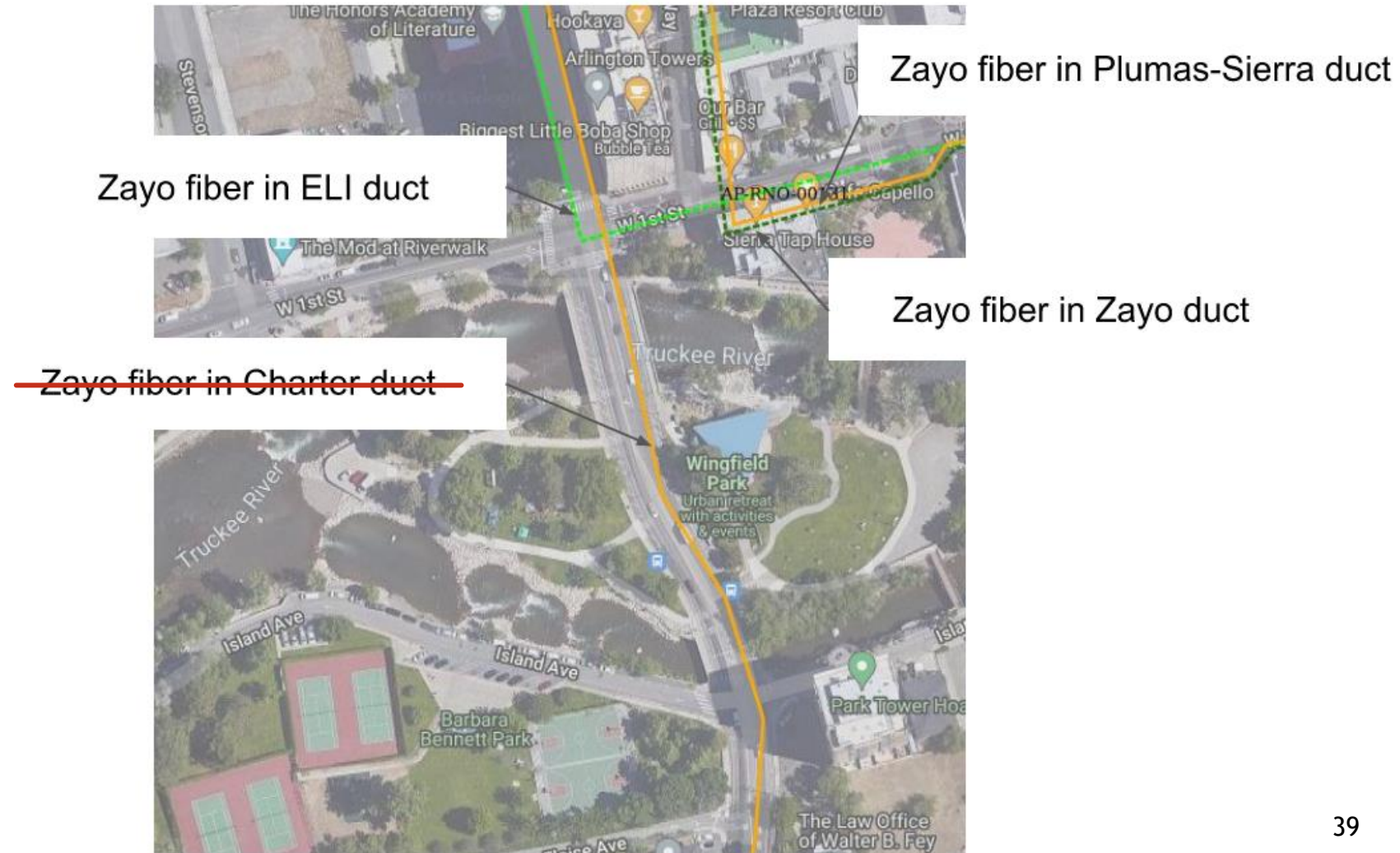
Design:

2-2" Conduits requested across both bridges and along Arlington



ZAYO (Gary Getchell, Robert Alford)

- * No Zayo Fiber in Charter Duct across South Bridge to Amphitheater
- * Zayo would like to have conduit across both bridges and along Arlington between bridges; 2-2" min



AT&T (Steve Lewis, Clifford Cooper)

Confirmed Existing:

Bank of 9 conduits across both north and south bridges

Design:

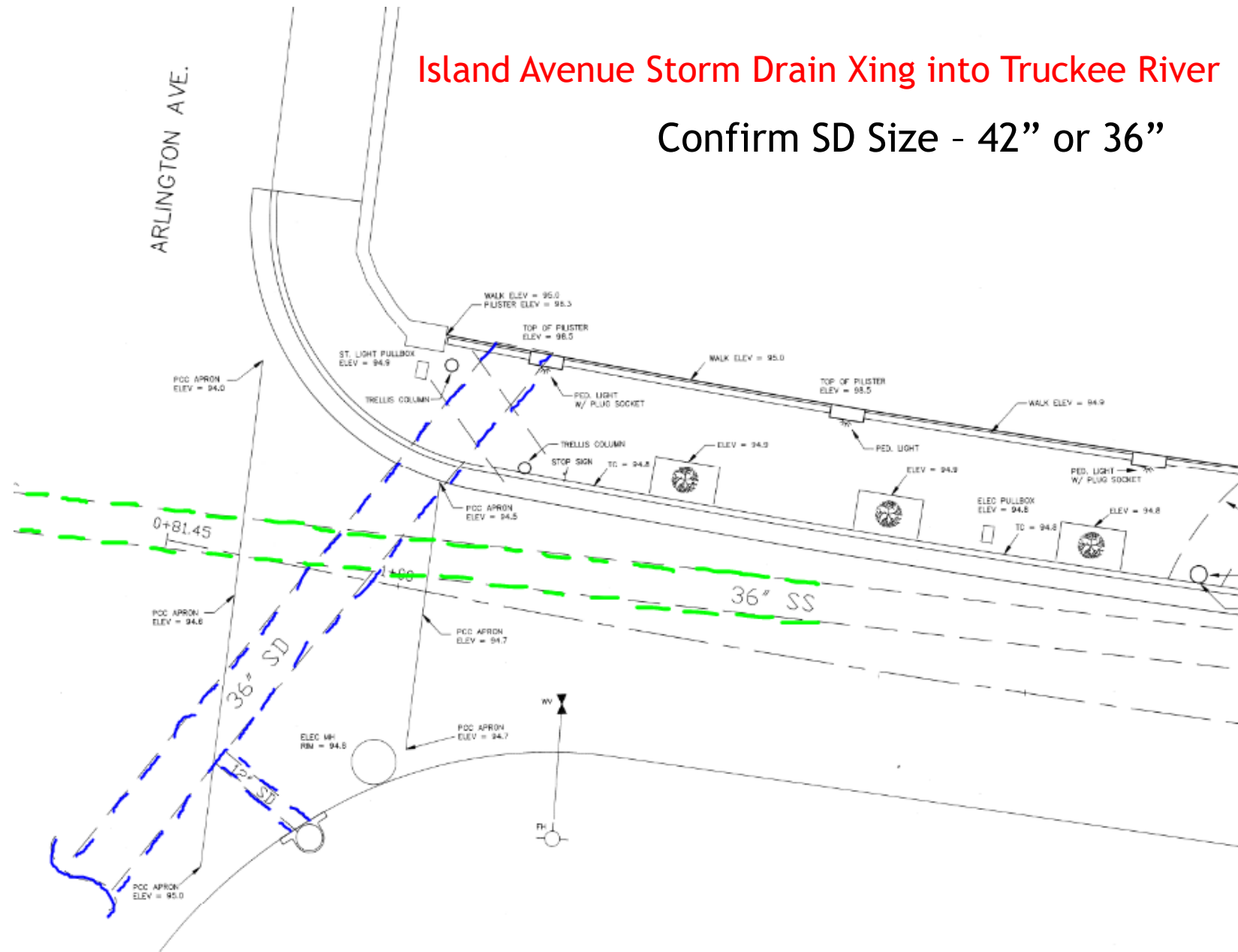
7-4" Conduits requested across both bridges and along Arlington



South Bridge / Floodwall

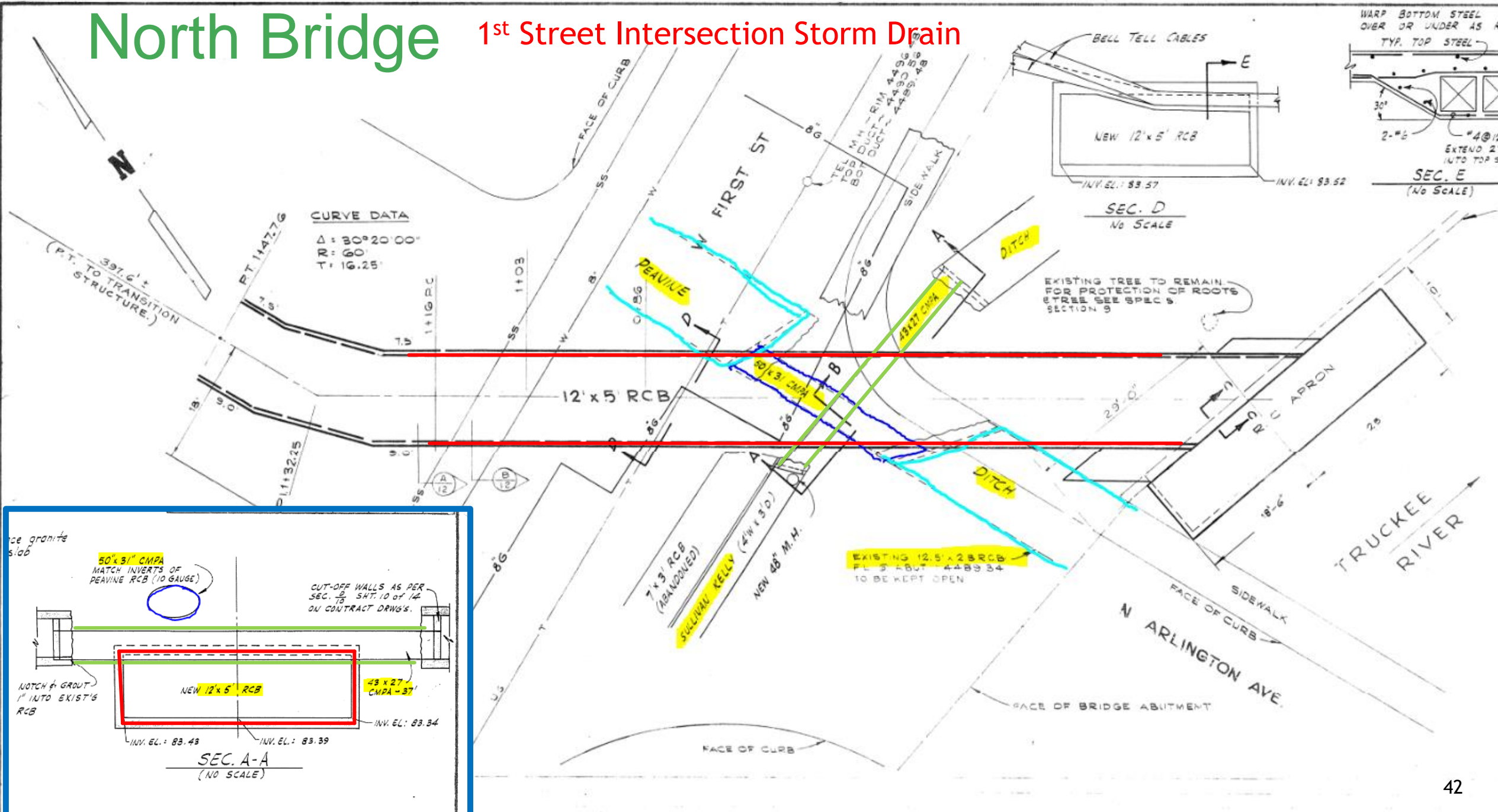
Island Avenue Storm Drain Xing into Truckee River

Confirm SD Size - 42" or 36"



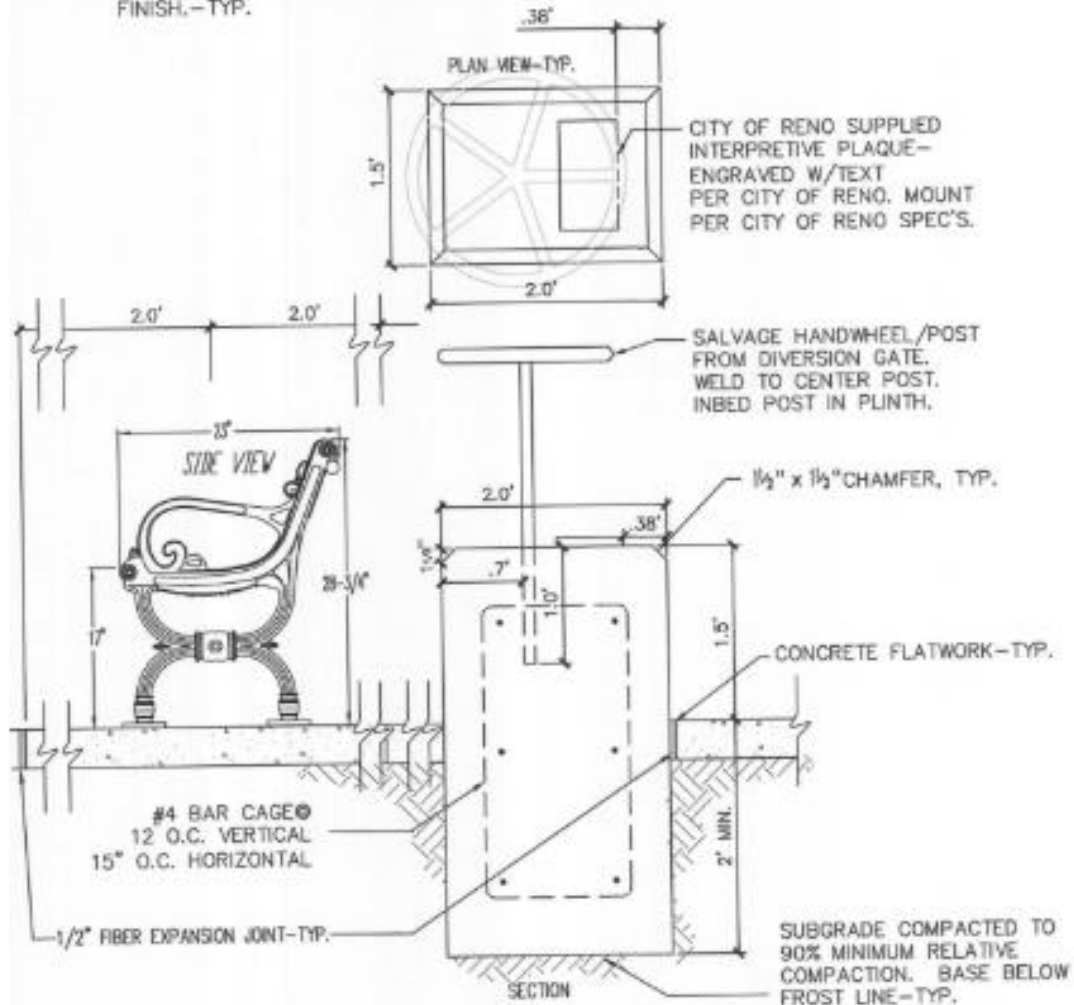
North Bridge

1st Street Intersection Storm Drain

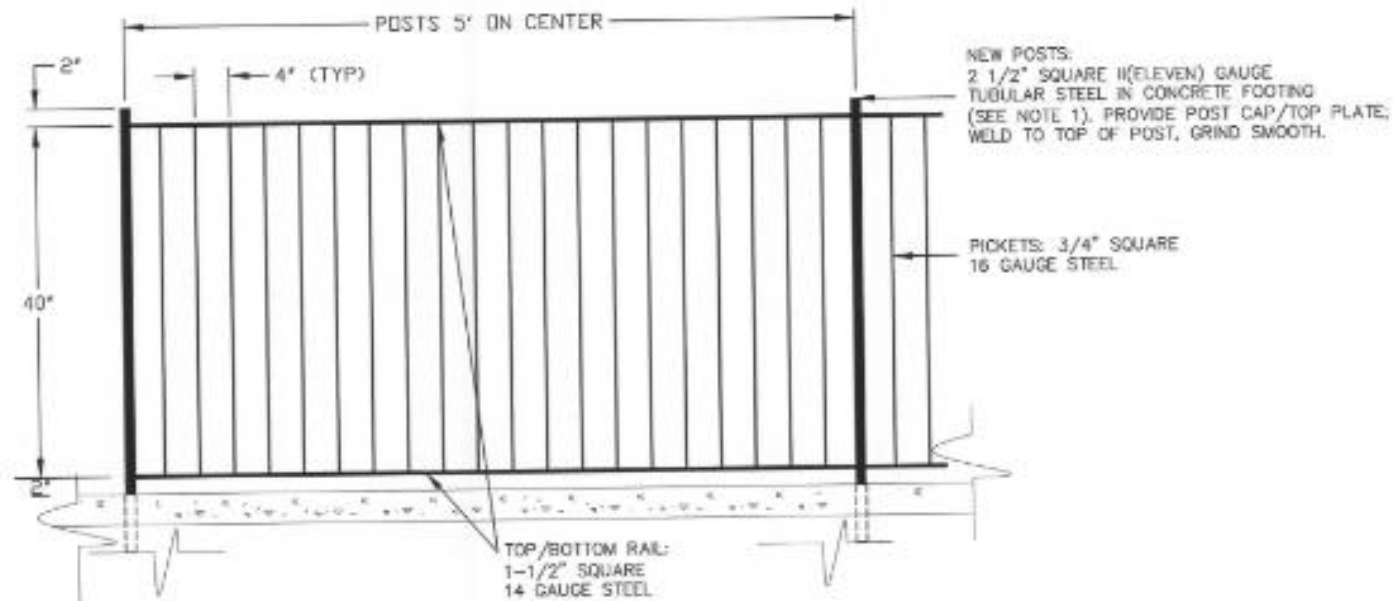


CONCRETE NOTES:

1. CONCRETE REINFORCING SHALL CONSIST OF COLLATED, FIBRILLATED POLYPROPYLENE FIBERS AS MFD. BY FIBERMESH OR APPROVED EQUAL. ADD 1 1/2 LBS. FIBERMESH PER CUBIC YARD OF CONCRETE.
2. CONCRETE SHALL BE NATURAL COLOR W/MEDIUM SANDBLAST FINISH.-TYP.



C BENCH BASE/PLINTH DETAIL
SCALE: 1"=1'



- NOTE:
1. ALL STEEL TO HAVE POWDERCOAT BLACK FINISH. FOOTING CONDITIONS PER STRUCTURAL ENGINEER'S DRAWINGS, SEE $\frac{5}{S2}$ $\frac{6}{S2}$
 2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL.

D REPLACEMENT DETAIL, PAGE L4
NOT TO SCALE

Roadway Design Updates

- ▶ North Bridge
 - ▶ Path Under North Bridge - Existing Trench Drain



Roadway Design Updates

- ▶ North Bridge
 - ▶ Path Under North Bridge - Existing Trench Drain Outlet Pipe with Flap

