



Coal Creek Flood Mitigation & 2nd Avenue Bridge Design Summary

Presented by
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And Dave Skuodas



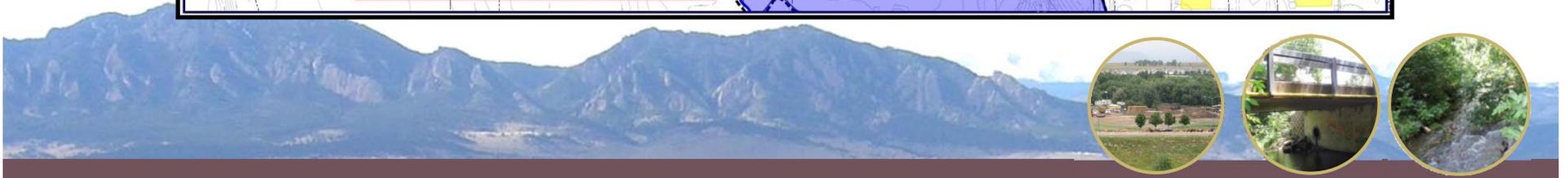
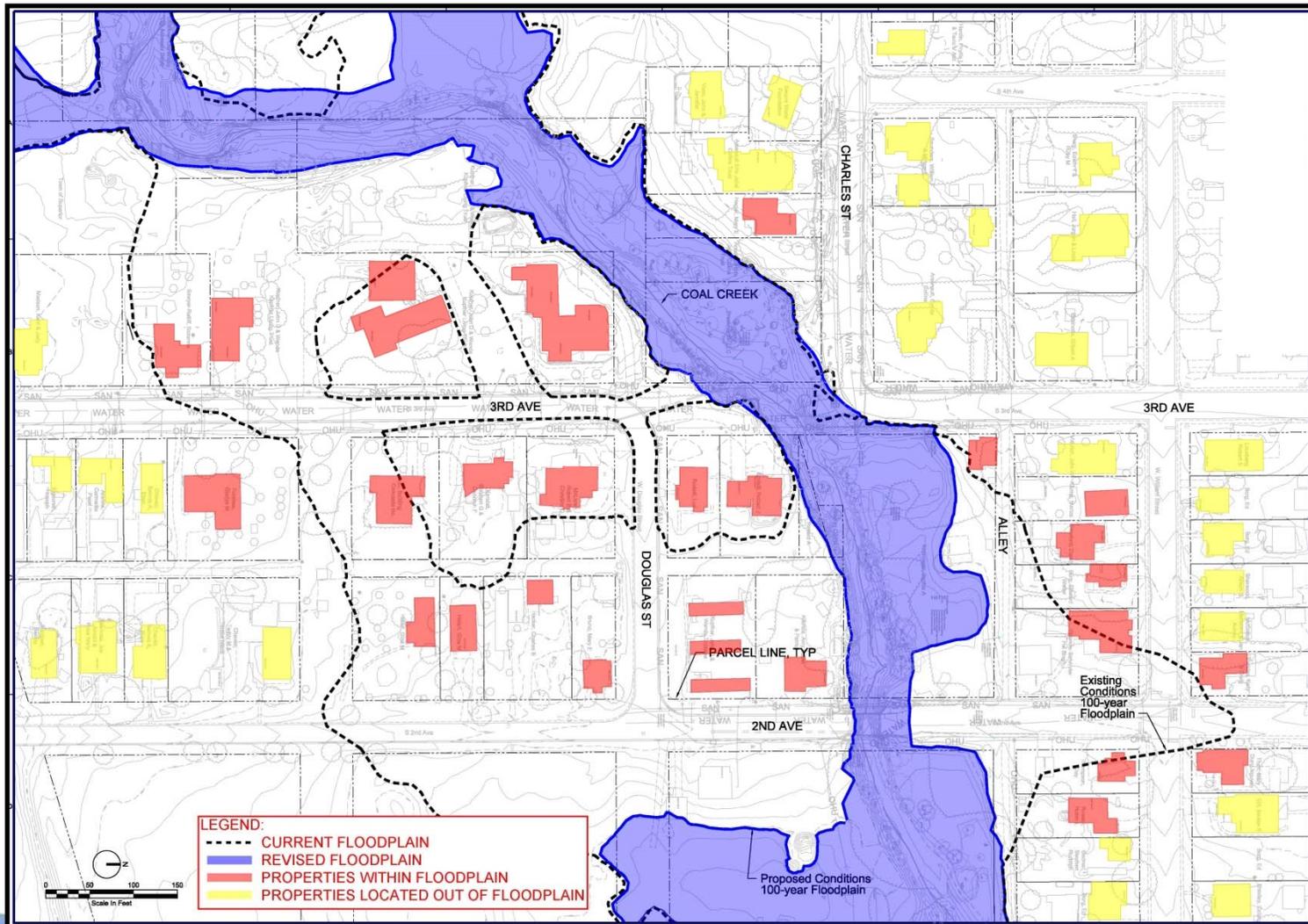
July 28, 2014
Town Board Meeting

Coal Creek Upstream of McCaslin Milestones

Milestone	Date
Project initiated between Town of Superior & Urban Drainage & Flood Control District.	2011 - 2012
Town Board gives approval to focus on 2 nd Avenue bridge replacement first. 3 rd Avenue bridge replacement could be budgeted in the future.	February 11, 2013
Community Meeting 1 held at Town Hall.	April 4, 2013
Town Board gives approval to move project into preliminary design.	April 22, 2013
Community Meeting 2 held at Town Hall. Focused on September flood event and recovery.	October 1, 2013
Presentation of 2 nd Avenue Bridge replacement alternatives analysis to Town Board (bridge, multi-cell box culvert, three sided superbox culvert)	February 10, 2014
Presentation of Overbank Culvert design option to Town Board.	April 14, 2014
Community Project Walk conducted onsite with local residents.	May 1, 2014
Project Summary and Bridge Alternatives presented to Planning Commission. Unanimous approval of Overbank Culvert bridge option.	July 22, 2014



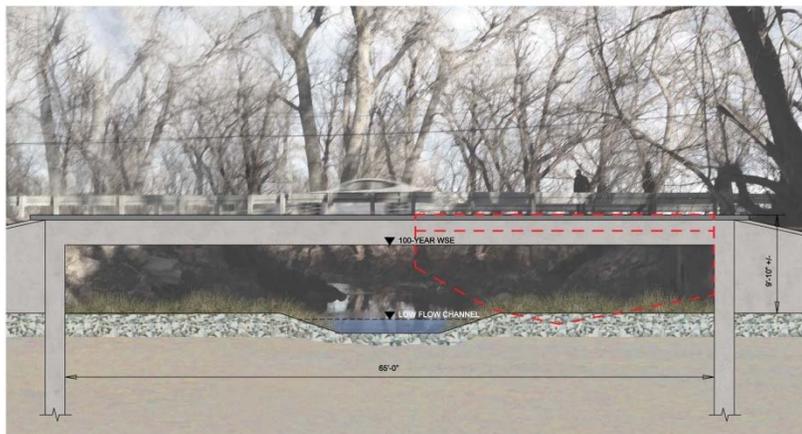
Project Floodplain Reductions



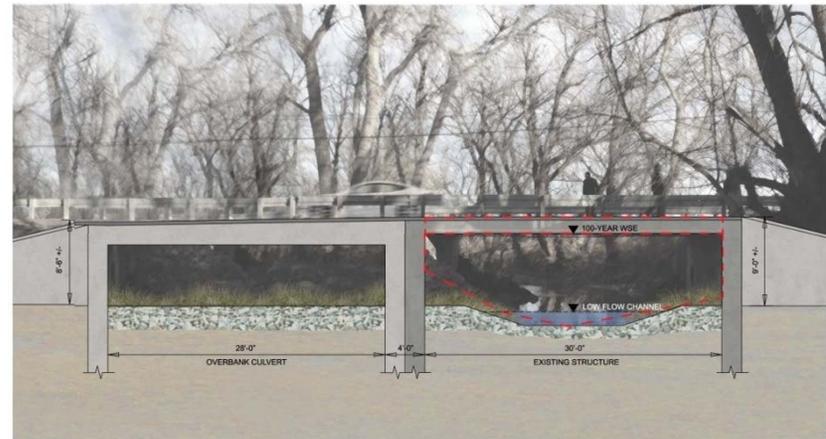
2nd Avenue Structure Options Overview



Existing Conditions



Three-Sided Superbox
(Revised)

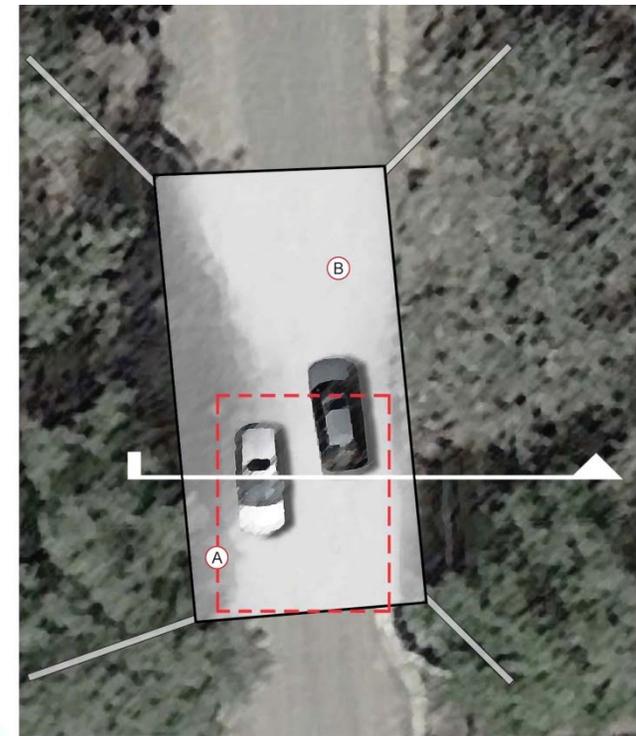
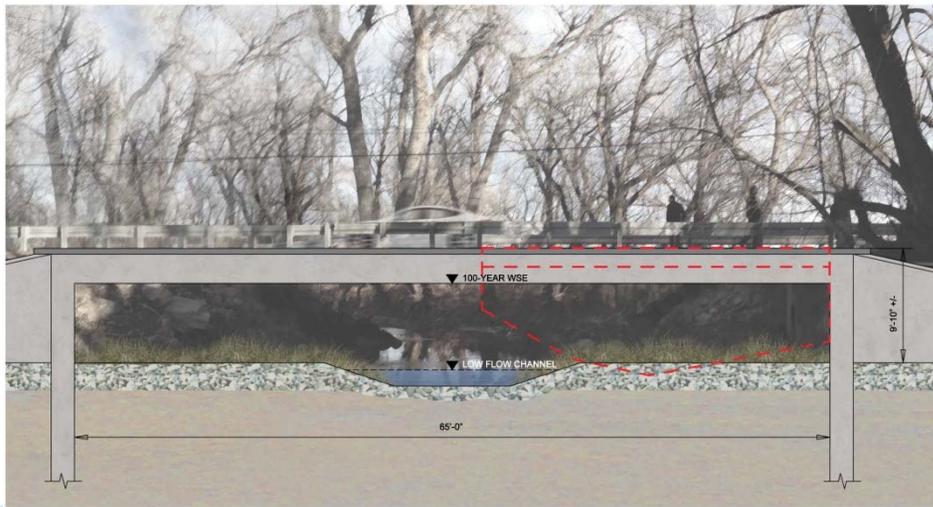
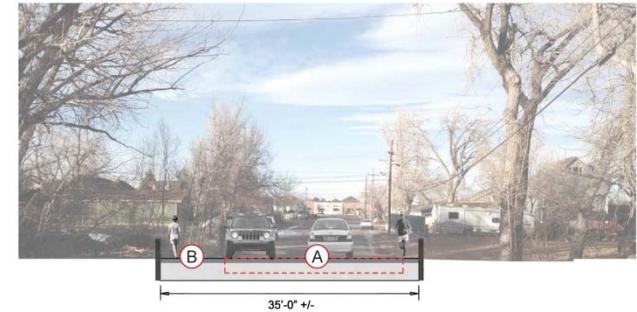


Overbank Culvert



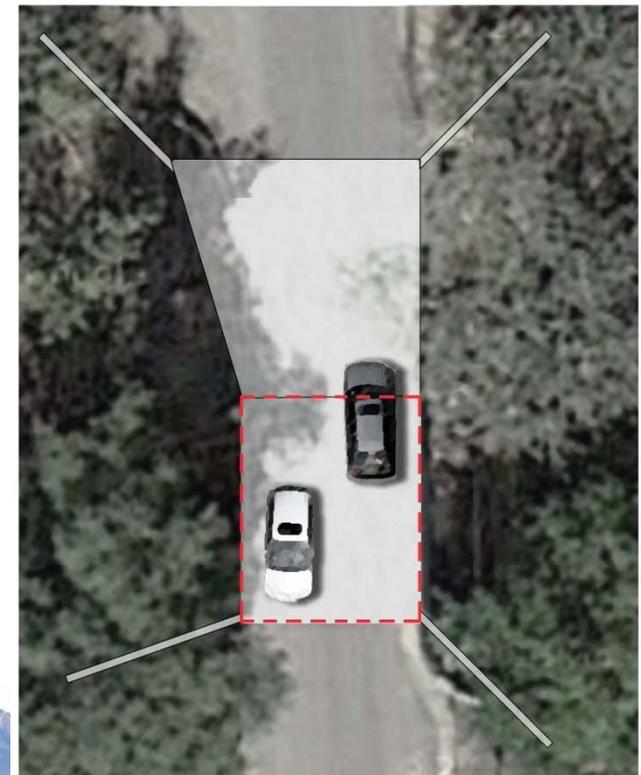
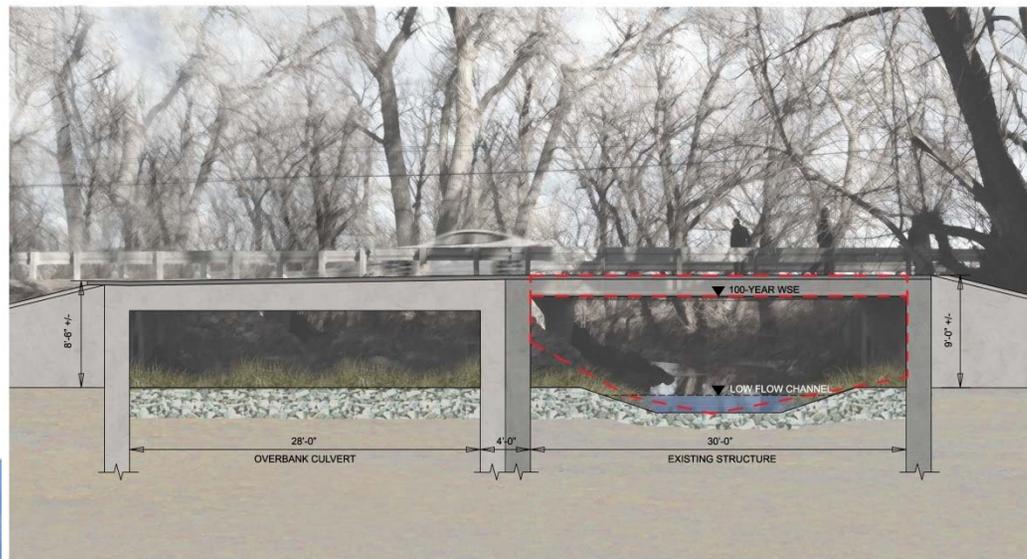
Three Sided Superbox Summary

- ◆ Demolish Existing Structure
- ◆ Construct new 65 ft wide cast-in-place box culvert
- ◆ Total Project Costs: \$1,600,000



Overbank Culvert Summary

- ◆ Retain Existing Structure
- ◆ Construct Adjacent Culvert to the north (28 ft x 6.13 ft)
- ◆ Total Project Costs: \$1,200,000
 - Pedestrian bridge costs would be extra



Structure Comparison

Structure Type	Pros	Cons
3-sided super box culvert (\$1.6M)	<ul style="list-style-type: none"> • Greater design flexibility • No center support 	<ul style="list-style-type: none"> • Most expensive • Longer construction time
Overbank Culvert (\$1.2M)	<ul style="list-style-type: none"> • Least expensive • Could enable the whole project be built in one phase • Existing structure remains in place • Faster construction time 	<ul style="list-style-type: none"> • Less design flexibility • Center support • Two structures with different ages • No provision for sidewalks (could be added later with a separate structure)



Summary of Planning Commission Comments

- ◆ Unanimous approval of the Overbank Culvert structure option
 - Flood mitigation is the highest priority and this option allows for the whole project to be completed with one phase
- ◆ A pedestrian bridge can be coordinated with the future development of the Rogers property and installed at a later time.
- ◆ A standard metal guardrail should be installed to keep costs low, but allow for possible future aesthetic upgrades to the structure if future funding allows

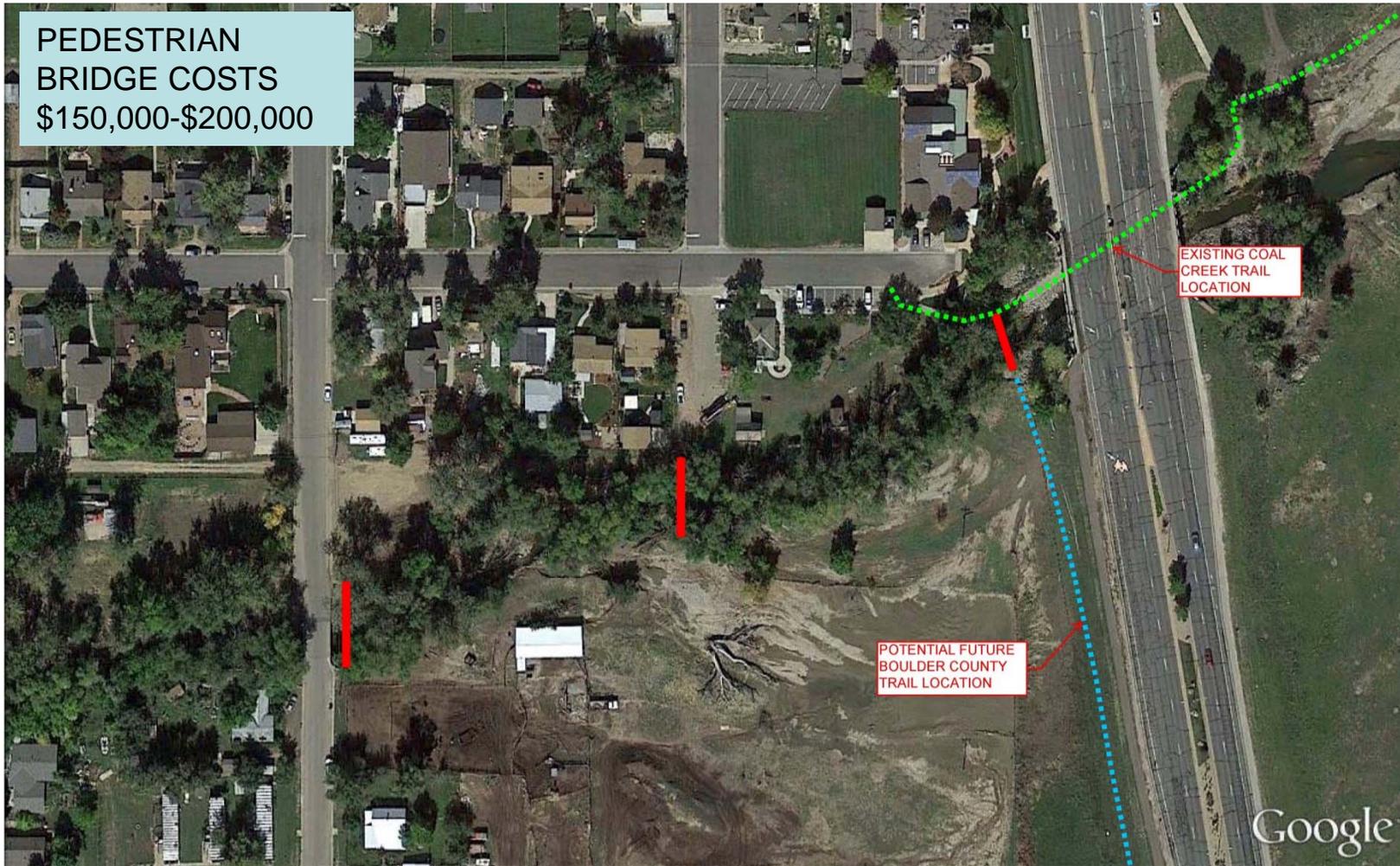


Summary of Public Comment

- ◆ Complete all phases of the project as soon as possible
- ◆ Sidewalks along the 2nd Avenue structure are not wanted, but a future pedestrian bridge with Rogers development would be acceptable
- ◆ A center pier/support structure is not preferred due to debris blockage concerns
- ◆ Aesthetics –residents prefer to keep the 2nd Avenue structure simple to keep with the character of Original Town
- ◆ Limiting impact to private property is important
- ◆ Save mature trees



Secondary Pedestrian Crossing Locations



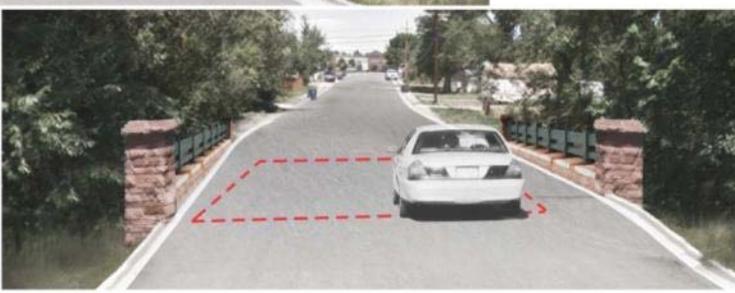
2nd Avenue Structure Aesthetics Rendering



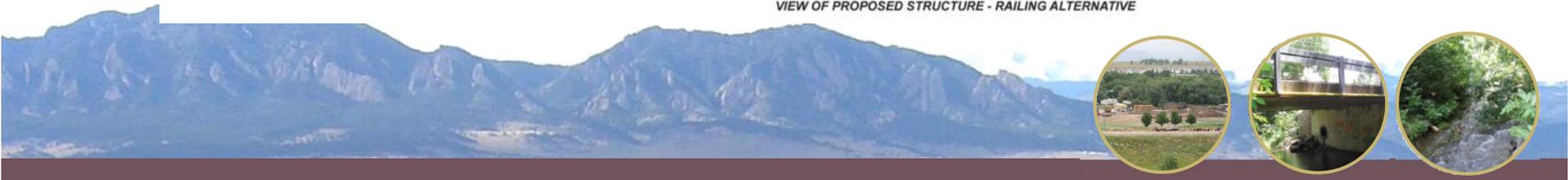
VIEW OF PROPOSED STRUCTURE FROM SECOND AVENUE LOOKING NORTH



EXISTING STRUCTURE



VIEW OF PROPOSED STRUCTURE - RAILING ALTERNATIVE



Next Steps

- ◆ **Town Board Approval of Bridge Option**
 - **July 2014**
- ◆ **Continue to Meet with Individual Property Owners**
 - **July and August 2014**
- ◆ **Complete Preliminary Design For All Phases**
 - **August and September 2014**
- ◆ **Final Design/Environmental Clearance**
 - **September 2014 thru September 2015**
- ◆ **Town Board Approval of 2nd Avenue Structure Construction**
 - **August 2015**
- ◆ **Construction**
 - **September 2015 to March, 2016**

