



COLORADO

Department of
Transportation

US 34 Resident, Property and Business Owners Meeting, May 2015

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CDOT Flood Recovery

- Introductions
- US 34 Project Update
 - Project Goals
 - Temporary v. Permanent repairs
 - Funding
 - Contractor Update
 - Timeline
- Q & A
 - Your input
 - Your questions





“Build Back Better Than Before” Project Goals

- Build a safe system that meets the needs of the traveling public and stakeholders
- Build a more resilient roadway in harmony with the river and ecological systems
- Coordinate and collaborate with other agencies and stakeholders to maximize mutual benefits, goals and outcomes and to ensure that corridor improvements that are compatible with one another and don't preclude future investments
- Complete the roadway project by the end of 2017





Project Goals Cont.

- Maximize system improvements within the allotted project budget
- Minimize life cycle maintenance costs and provide a quality product
- Implement an effective public outreach and communication plan
- **Minimize inconvenience to the public and residents along the corridor, and maximize safety for workers, residents and the public**





Temporary Roadway Repairs

- Temporary roadways were not built to normal CDOT Standards or Specifications
 - Shoulders narrower in places
 - Roadways lower in places
- Temp roadways built using good engineering and construction practices





Temporary Roadway Repairs



- Temporary repairs can safely accommodate traffic until permanent repairs completed
- Temporary repairs will be evaluated as part of Permanent Repair projects
- Some temporary repairs may be considered permanent





Permanent Repair Project

Evaluate temporary repairs

Determine if repairs were appropriate

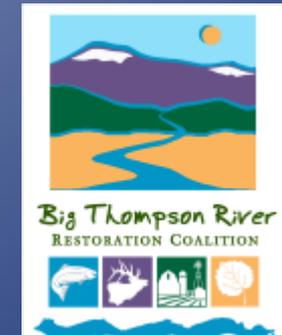
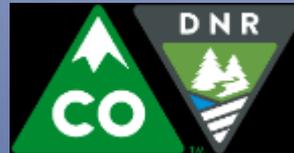
Are other repairs necessary?





US 34 Big Thompson Canyon Permanent Repair Collaboration Partners

- US Federal Highway Administration
- US Forest Service
- US Fish & Wildlife Service
- US Army Corps of Engineers
- US Bureau of Reclamation
- Larimer County
- City of Loveland
- Town of Estes Park
- Big Thompson River Restoration Coalition
- Colorado Parks & Wildlife
- Colorado Department of Natural Resources
- Colorado State Historic Preservation Office





FHWA Funding Considerations

- \$450 M allocation for overall 2013 Flood recovery
- \$34 M spent on US34 temporary repairs

What permanent repairs are needed to restore the highway in-kind to pre-disaster conditions?

\$50.5 M

Where can updated CDOT standards be applied?

\$120 M to \$160 M

What resiliencies can be introduced to minimize damage from future events?



FHWA Emergency Relief Funding

Eligible Uses

- Rebuilding the highway
- Highway protection features
- Roadway resiliency features
- Reconstruct temporary roadway improvements
- Bring roadway to current standards
- Shape the river next to roadway damaged areas





FHWA Emergency Relief Funding

Ineligible Use of Funds

- Protect or reestablish private property
- Improve or reestablish fish and wildlife habitat
- New recreational facilities



Importance of Partnerships!!!





Project Schedule

Fall
2014

- Obtained Design Consultant

March
2015

- Contractor Evaluations

June
2015

- Contractor Selection

Dec.
2015

- Construction begins

Fall
2017

- Construction completed



Work Started for Permanent Repair Project

- Gathering Information
- Environmental Assessments
- Historical Assessments
- Surveying
- Geotech Drilling
- Hydrology/Hydraulics
Analysis
- Meeting with Stakeholders
- Public Meeting





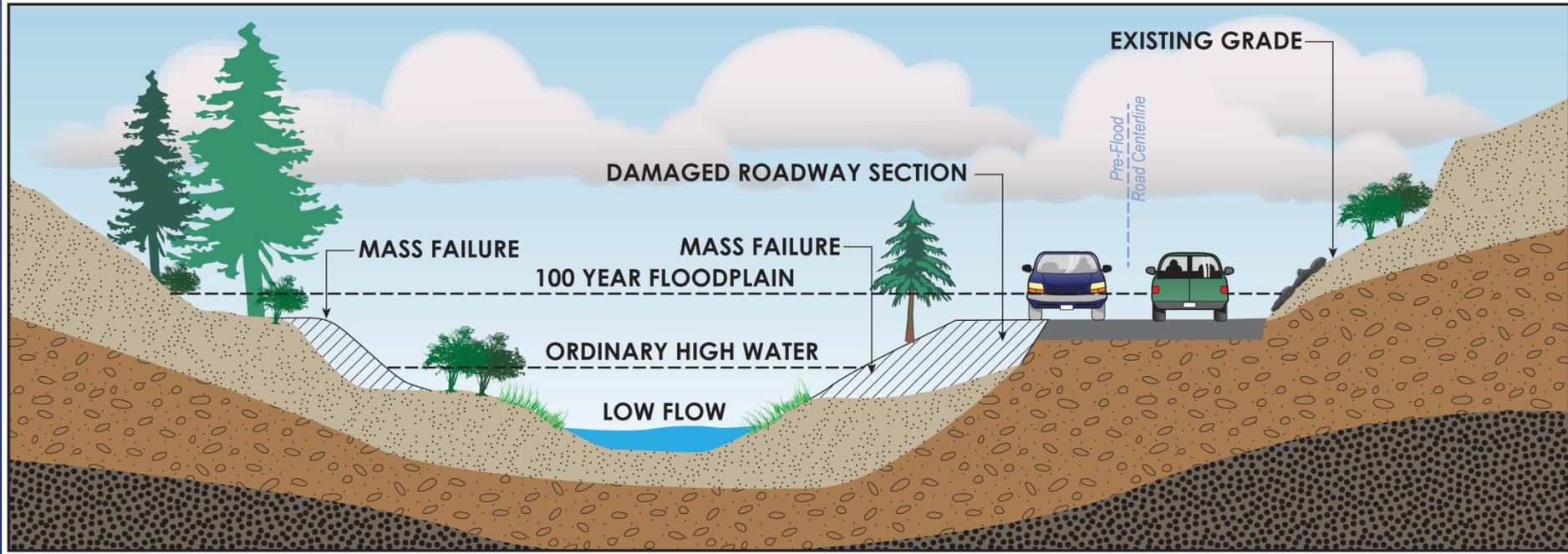
The permanent repair project will also involve:

- Repairing bridges and retaining walls
- Moving the road to bedrock where feasible
- Elevating the roadway if necessary
- Armoring banks with riprap to protect the roadway
- Restoring the roadway with full width travel lanes and 6' shoulders wherever possible
- Replacing guardrails
- Re-vegetating areas
- Removing and replacing temporary asphalt, embankment fill and temporary channel protection



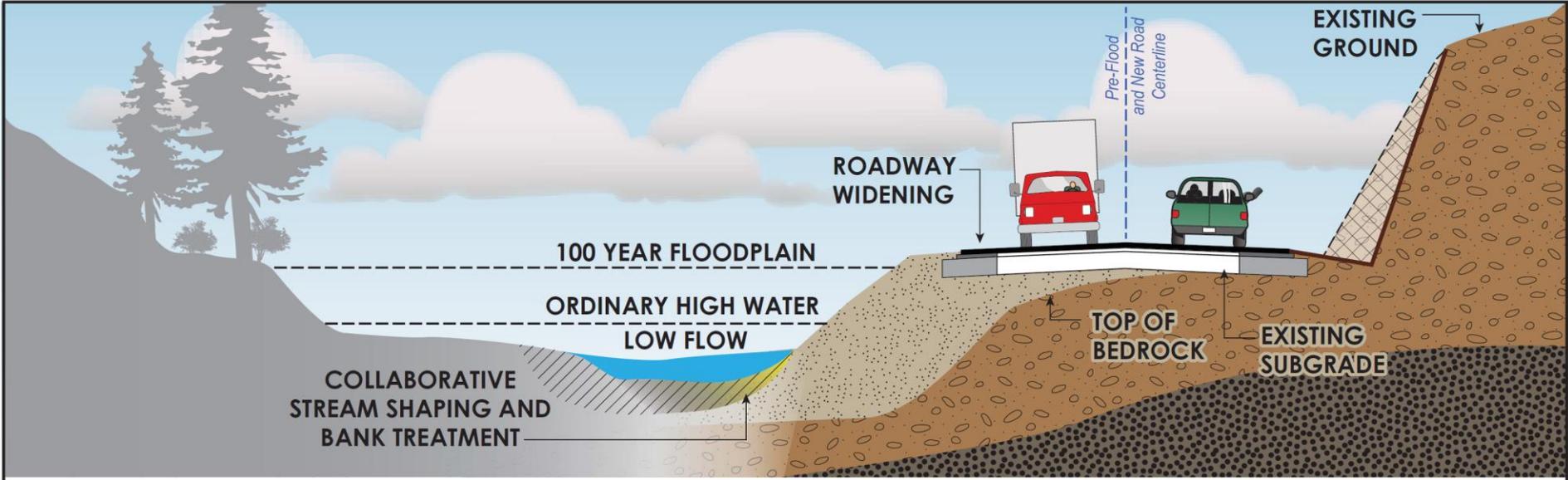


ORIGINAL & DAMAGED TYPICAL SECTION



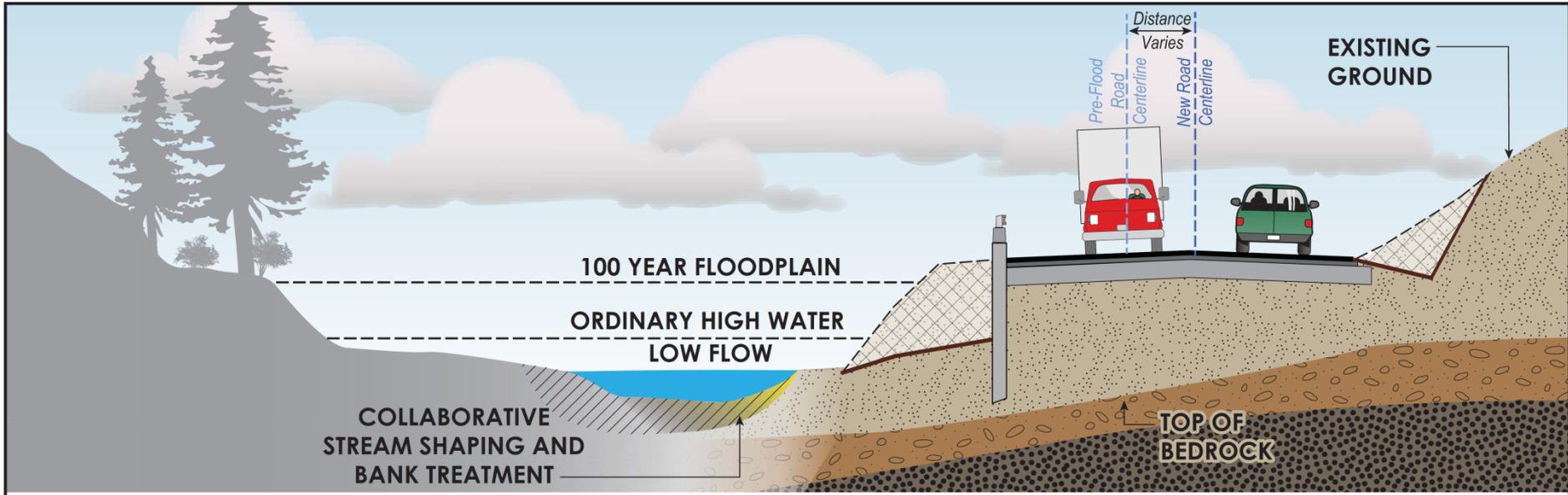


PERMANENT ROADWAY DESIGN CONCEPT #1



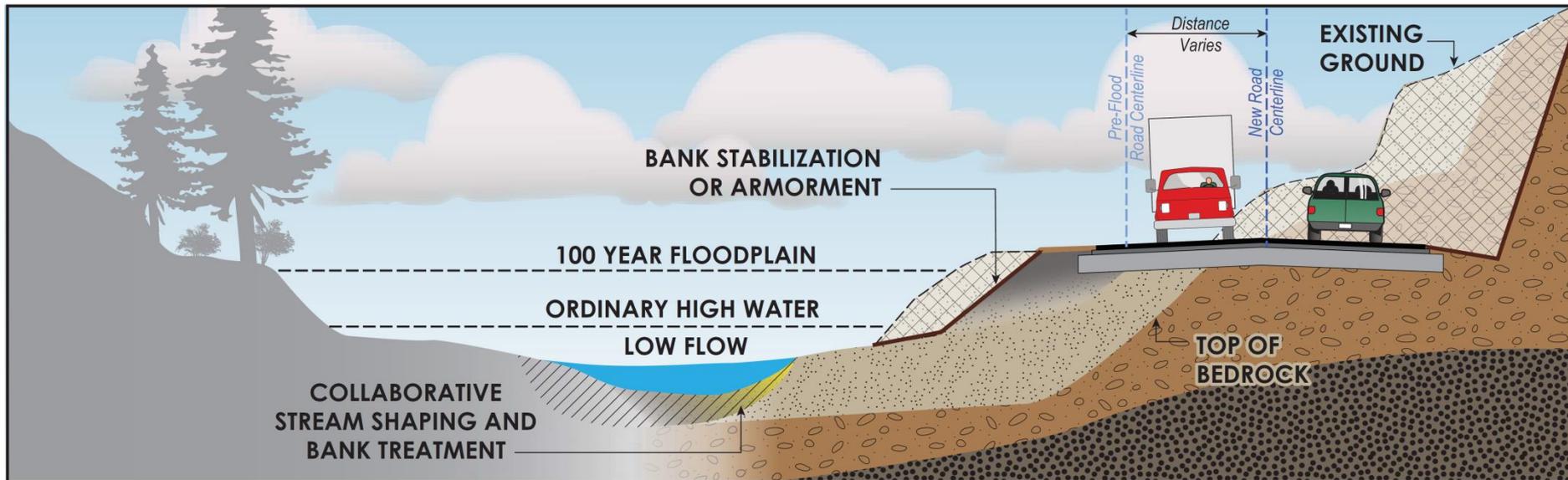


PERMANENT ROADWAY DESIGN CONCEPT #2





PERMANENT ROADWAY DESIGN CONCEPT #3



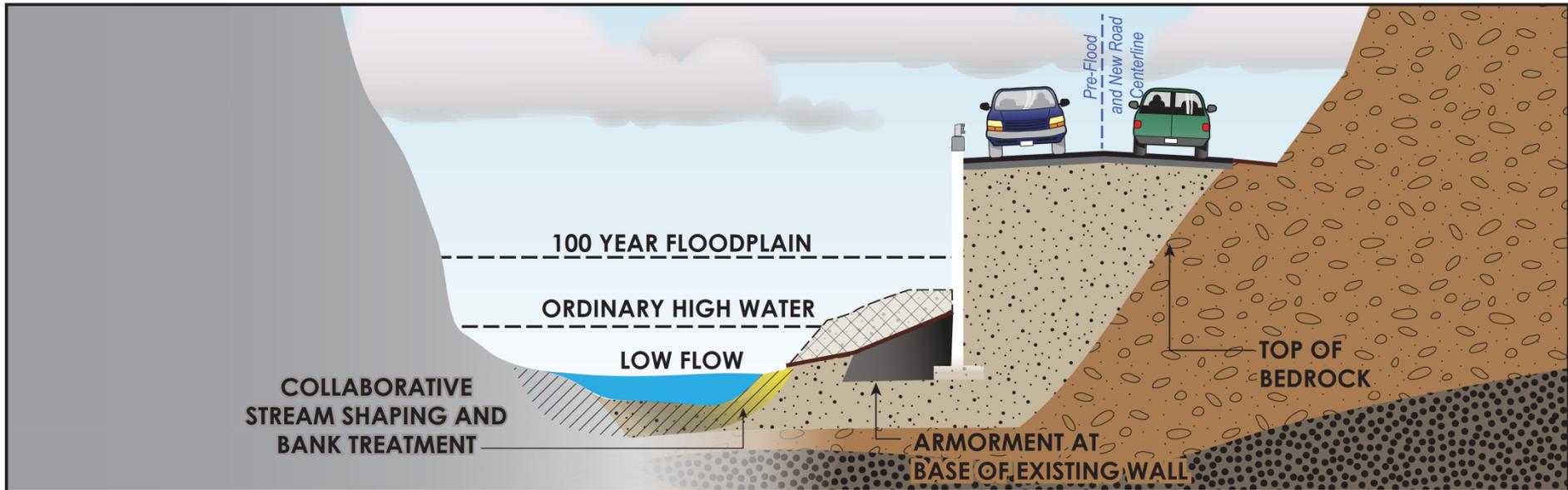


MP 73.1





PERMANENT ROADWAY DESIGN CONCEPT #4





US 34 Canyon Narrows





US 34 Canyon at Drake





Contact Information

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QUESTIONS