

RESILIENT ST. VRAIN PROJECT

Planning, Design and Construction
to Reduce Future Flood Risk

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City of Longmont, Colorado



RSVP Master Plan



Resilient St. Vrain Project

Master Plan

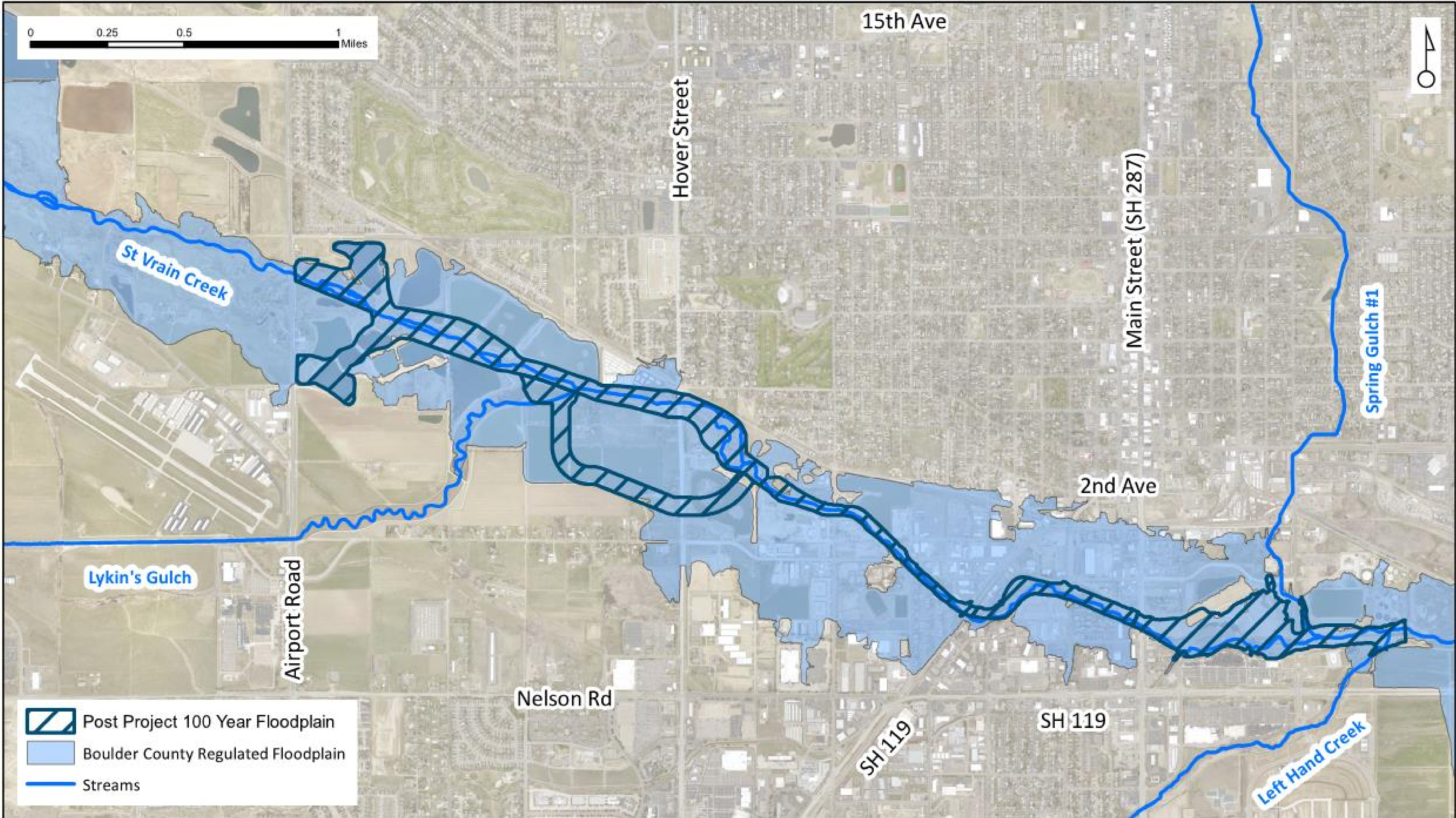
- 8 river miles of St Vrain Creek
- 10 years to complete

Project Goals

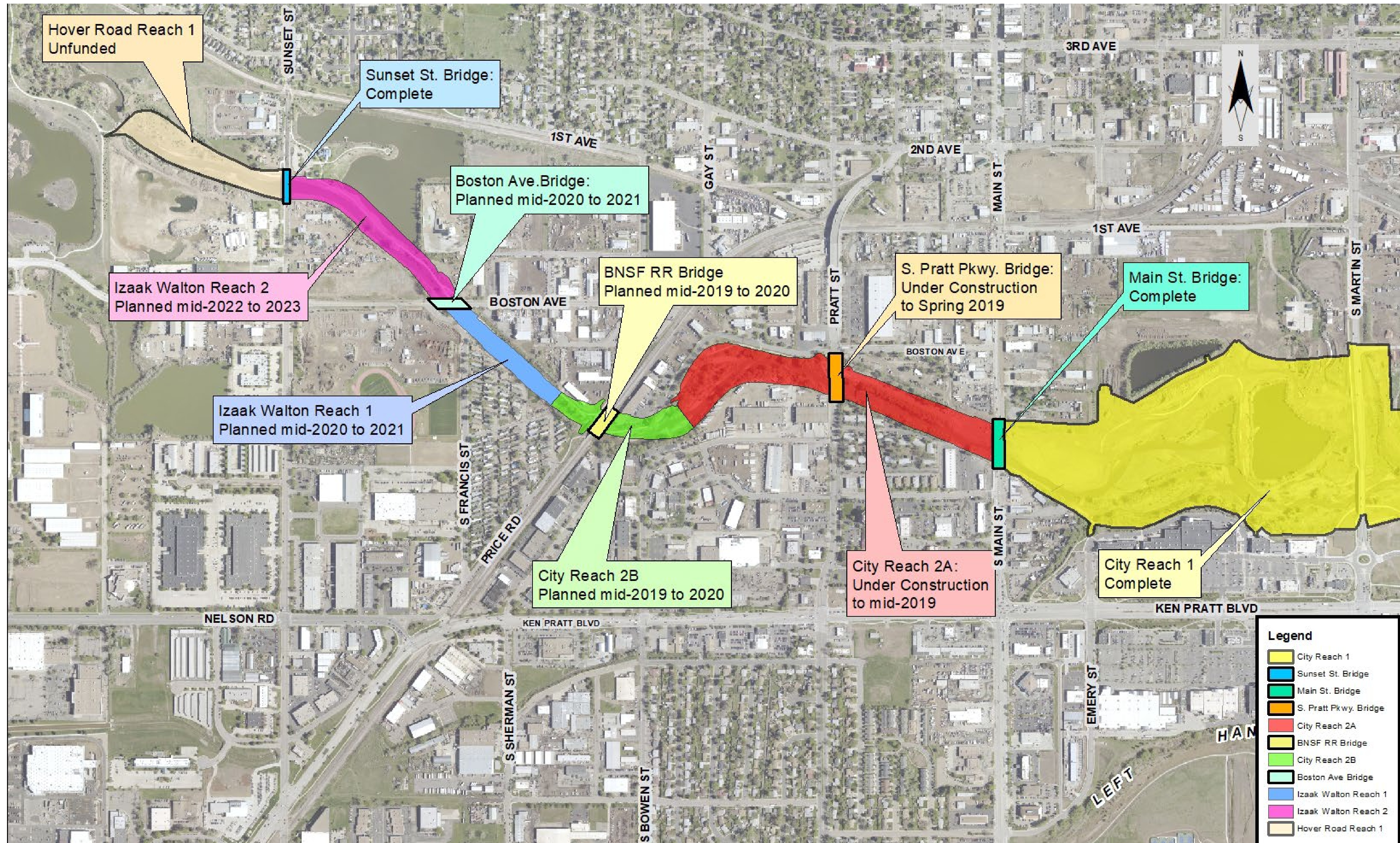
- Protect people, property and infrastructure
- Reduce future flood risk and safely convey 100-year flood flows
 - Remove 818 acres and 526 structures from the floodplain
- Restore St. Vrain Greenway trail
- Maintain or improve natural environment
 - Incorporate natural channel design features
- Recognize previous planning efforts



RSVP Master Plan



RSVP Phasing



Permitting

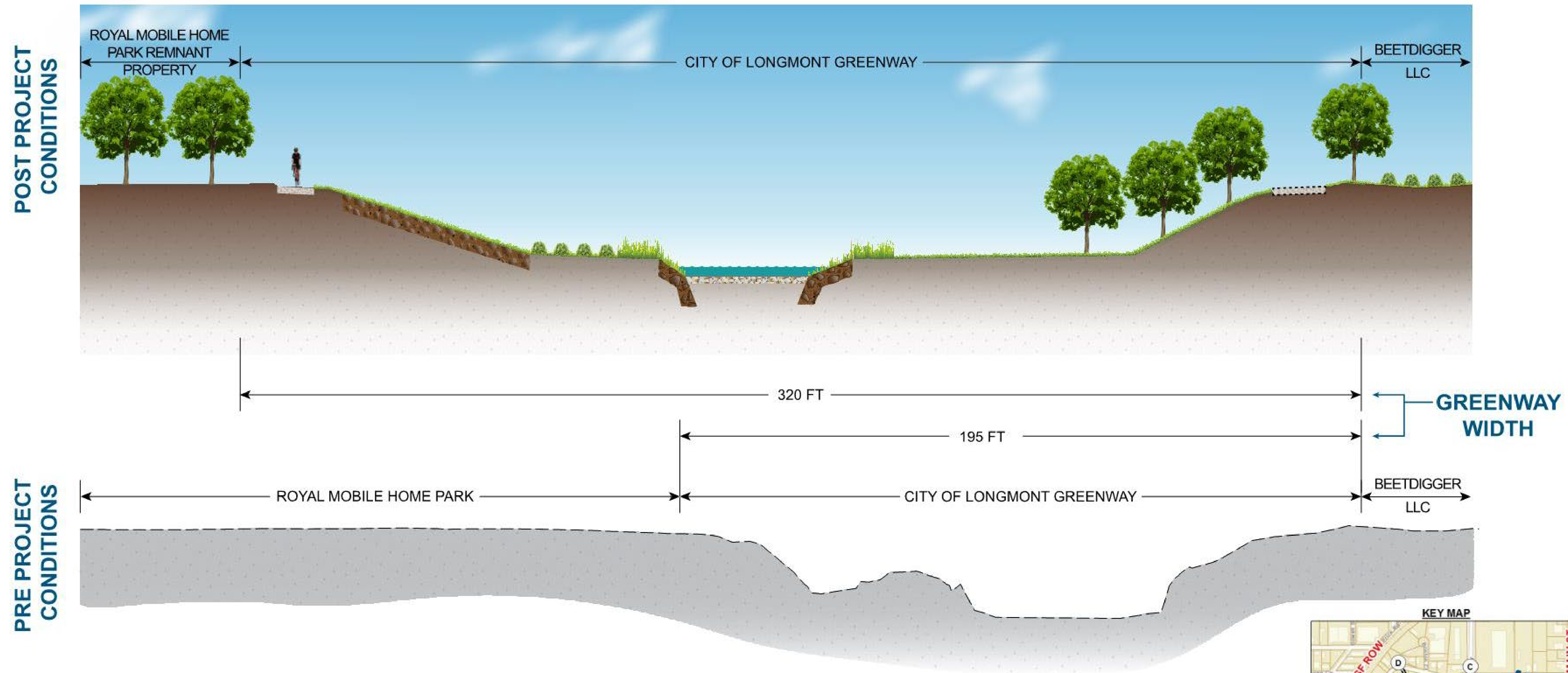
- NEPA EA– FONSI
 - Section 7 Biological Assessment (USFWS)
 - Section 106 Cultural Resources (SHPO)
 - Section 401 Certification (CDPHE)
- Avian Protection Plan (CPW)
- Colorado SB 40 Certification (CPW)
- USACE 404 Permits
- Floodplain Permitting



Channel Design



**RESILIENT ST. VRAIN PROJECT
DOWNSTREAM END CITY REACH 2A - CROSS SECTION B
LOOKING DOWNSTREAM**



LEGEND

--- Existing Grade Prior to Project Completion



BI0917181140LVD SectionB_Downstream_EndCityReach_2A.ai

JACOBS ch2m



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RESILIENT ST. VRAIN PROJECT

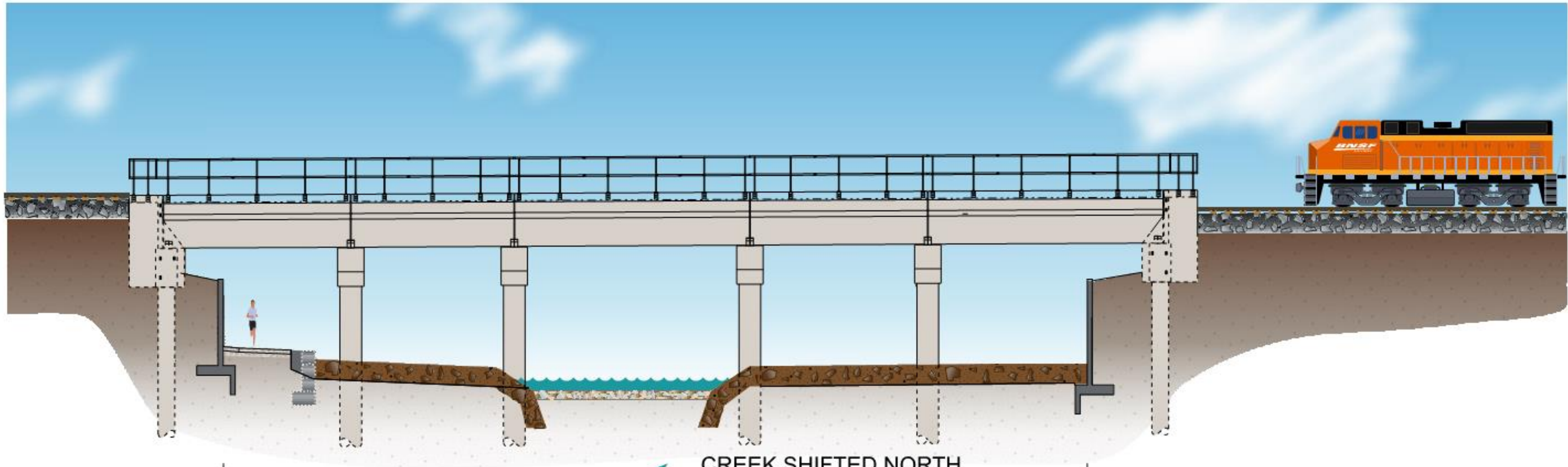


Channel Design



RESILIENT ST. VRAIN PROJECT
 BNSF RAILROAD BRIDGE REPLACEMENT PROJECT - CROSS SECTION E
 LOOKING DOWNSTREAM

POST PROJECT
 CONDITIONS



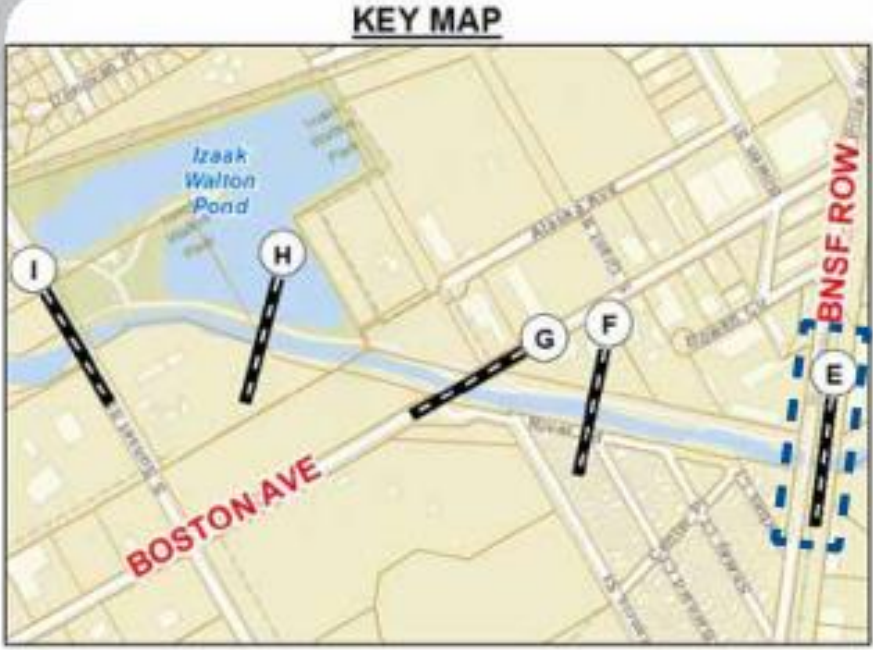
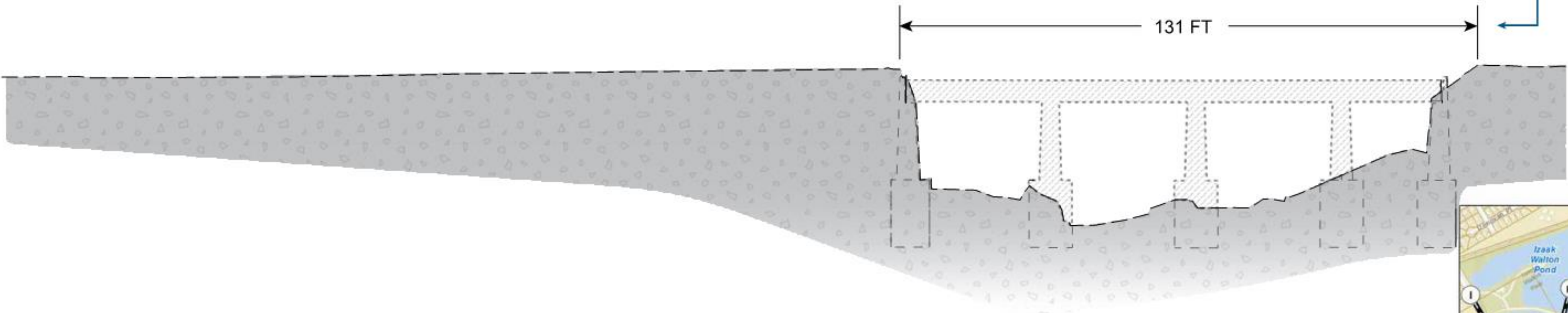
CREEK SHIFTED NORTH
 AFTER CONSTRUCTION

196 FT

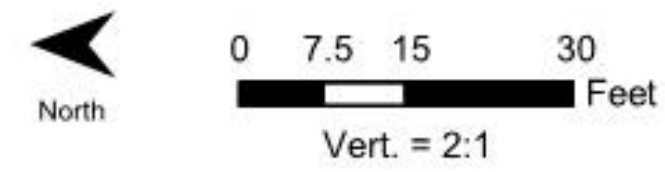
131 FT

GREENWAY
 WIDTH

PRE PROJECT
 CONDITIONS



LEGEND
 --- Existing Grade Prior to Project Completion
 Old Bridge



JACOBS ch2m

BI0917181140LVD SectionE_BNSF_RR_Bridge_Replacement.ai



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RESILIENT ST. VRAIN PROJECT

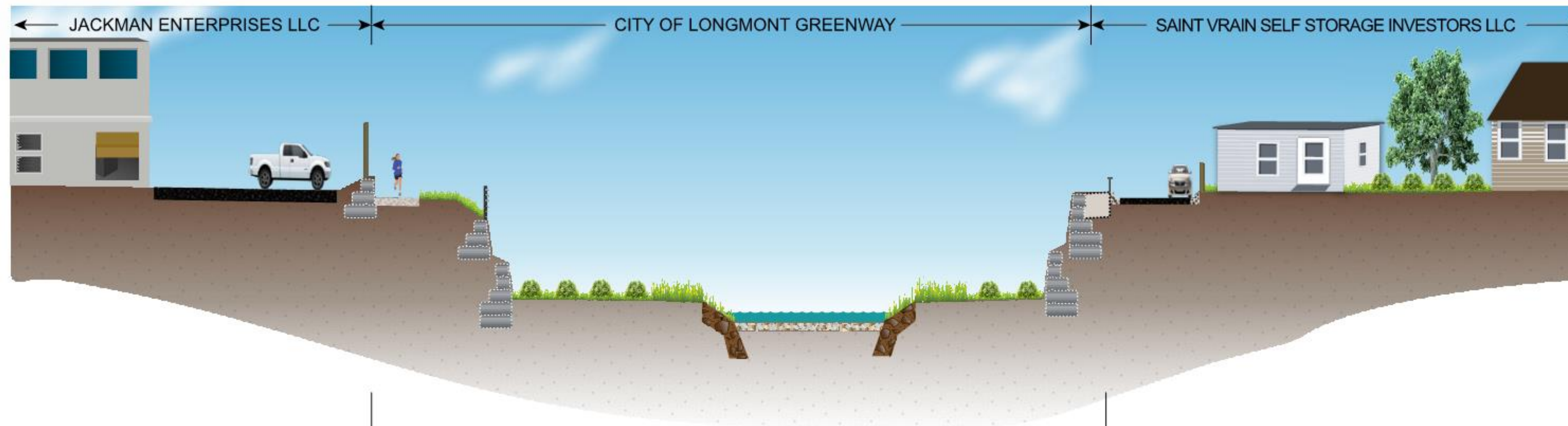


Channel Design

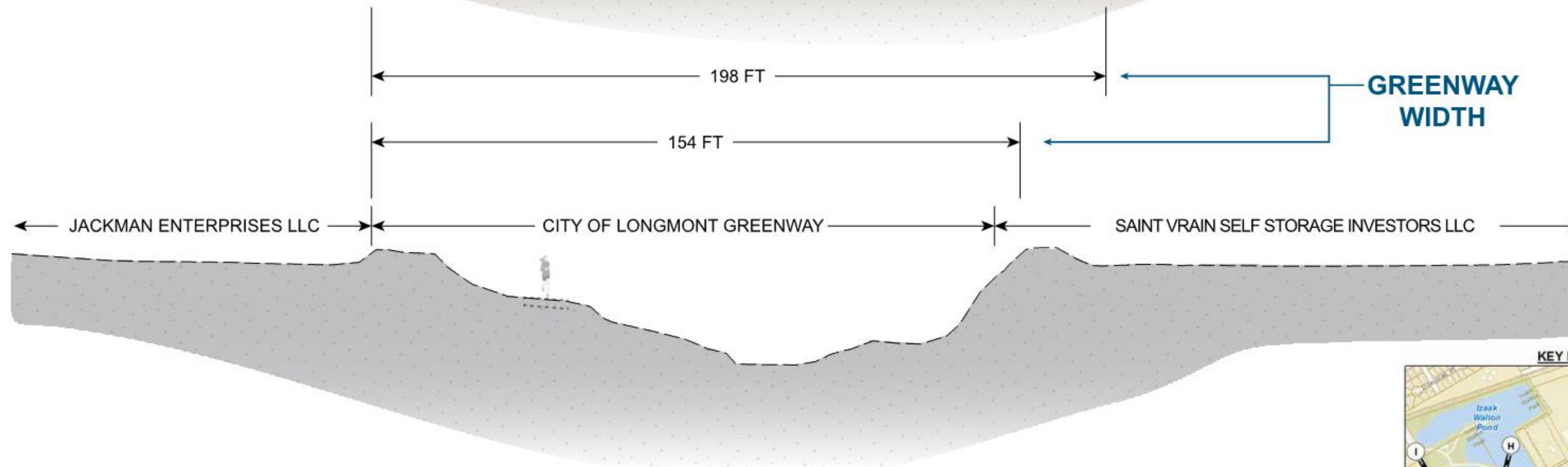


RESILIENT ST. VRAIN PROJECT
 IZAAK WALTON REACH - CROSS SECTION F
 LOOKING DOWNSTREAM

POST PROJECT
 CONDITIONS

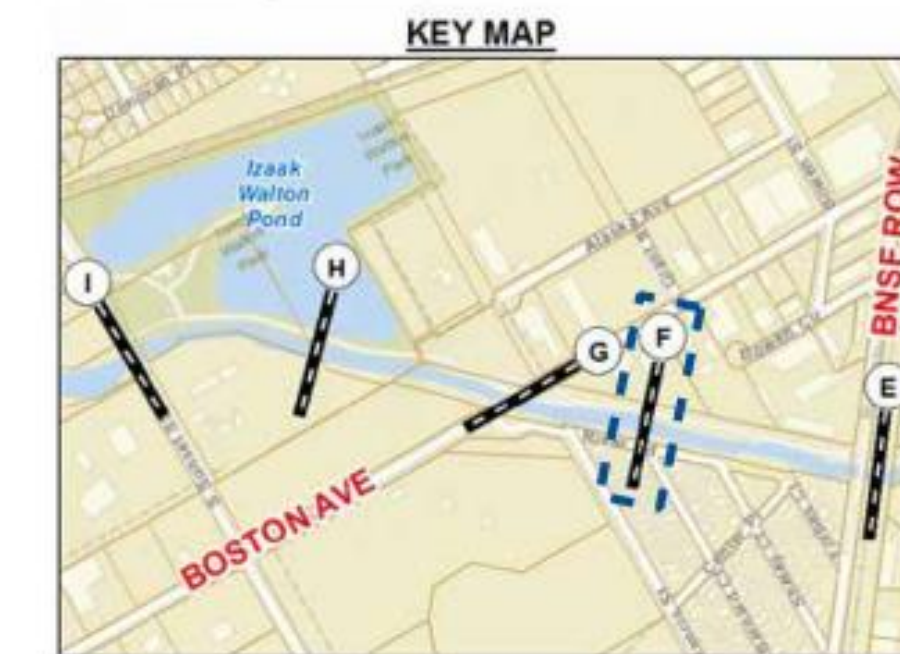
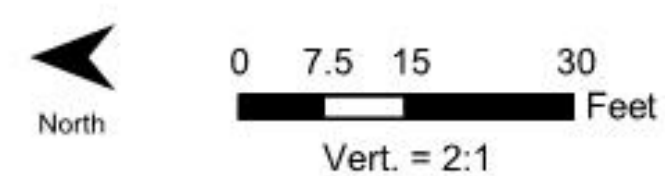


PRE PROJECT
 CONDITIONS



LEGEND

--- Existing Grade Prior to Project Completion



JACOBS ch2m

BI0917181140LVD SectionF_Izaak_Walton_Reach.ai

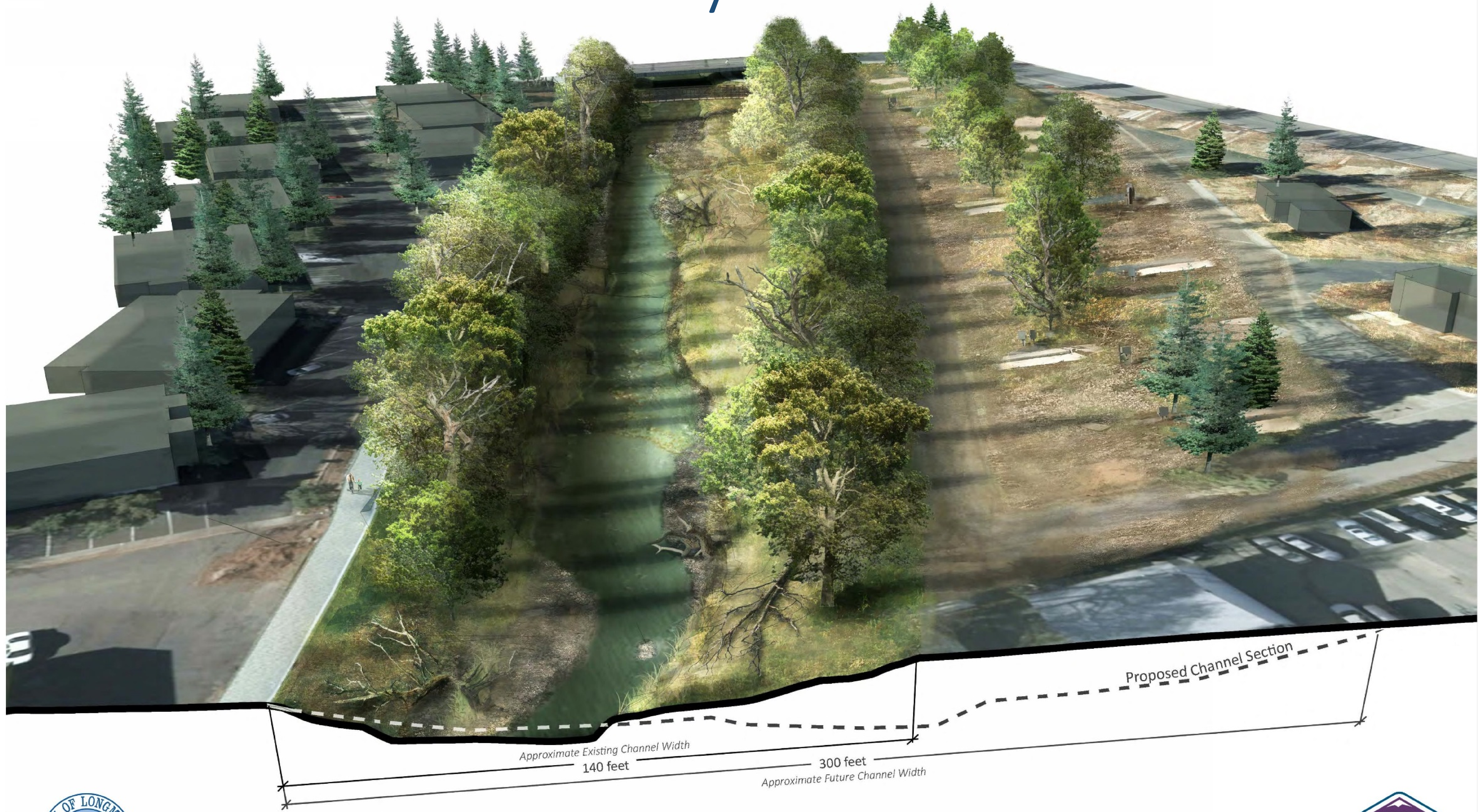


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RESILIENT ST. VRAIN PROJECT



RSVP City Reach 2A

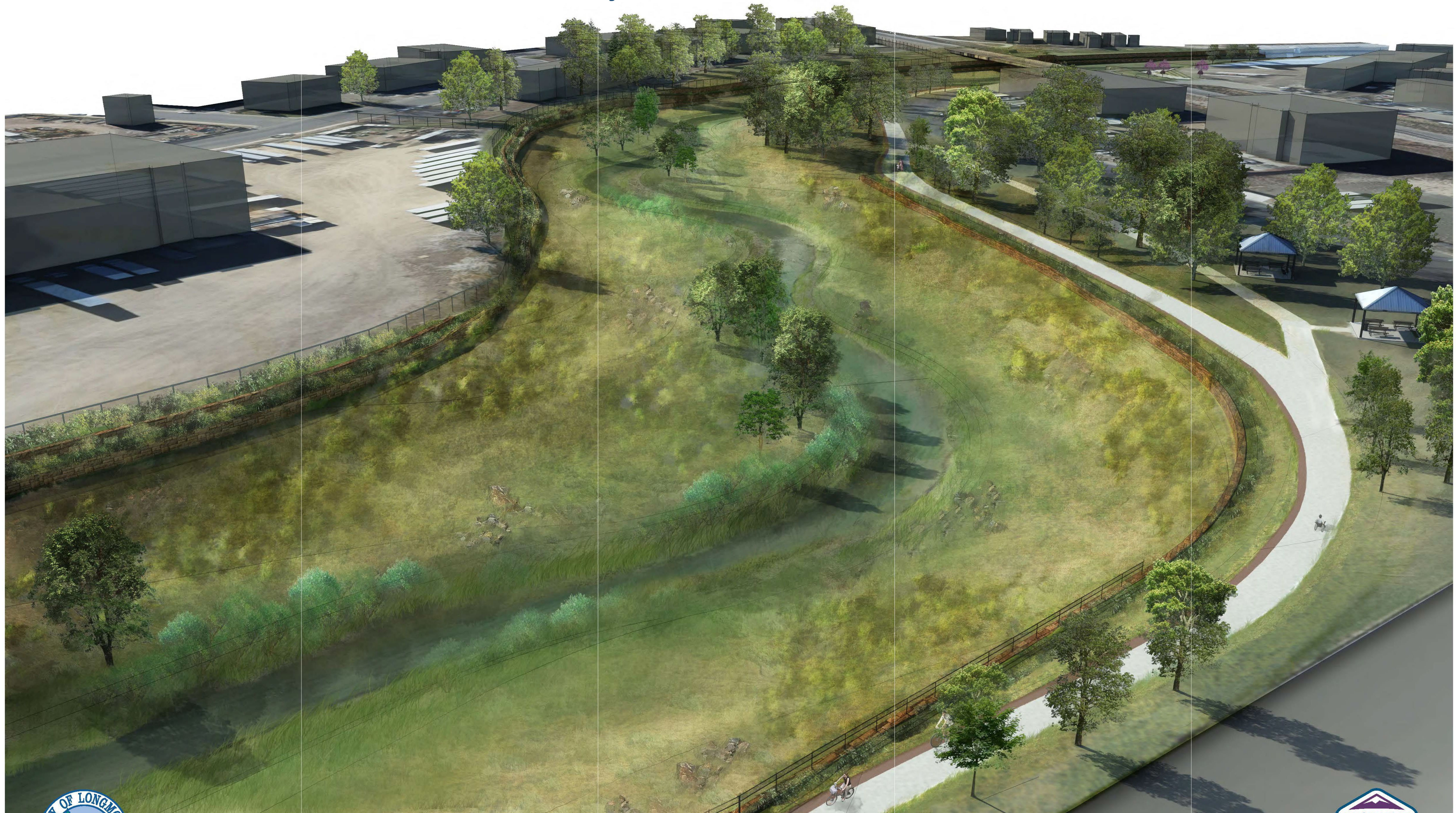


LONGMONT, COLORADO
MARCH 2017

RESILIENT ST. VRAIN PROJECT
CITY REACH 2A - EXISTING CONDITIONS
MAIN STREET to SOUTH PRATT PARKWAY



RSVP City Reach 2A & 2B



LONGMONT, COLORADO
MARCH 2017

CITY REACH 2B - POST CONSTRUCTION MATURE VEGETATION CONDITIONS

SOUTH PRATT PARKWAY to THE BNSF RAILROAD BRIDGE

RESILIENT ST. VRAIN PROJECT



Project Costs

Design & Permitting	\$ 15.0M
Sandstone Ranch Reach	\$ 8.5M
City Reach 1	\$ 12.5M
City Reach 2A	\$ 7.5M
City Reach 2B	\$ 7.5M
BNSF RR Bridge	\$ 5.5M
Izaak Walton Reach	\$ 20.0M
<u>City Reach 3</u>	<u>\$ 60.0M</u>
RSVP TOTAL	\$136.5M
Sunset Street Bridge	\$ 3.4M
Main Street Bridge	\$ 6.0M
South Pratt Parkway Bridge	\$ 6.5M
Boston Avenue Bridge	\$ 4.5M



Funding Partners



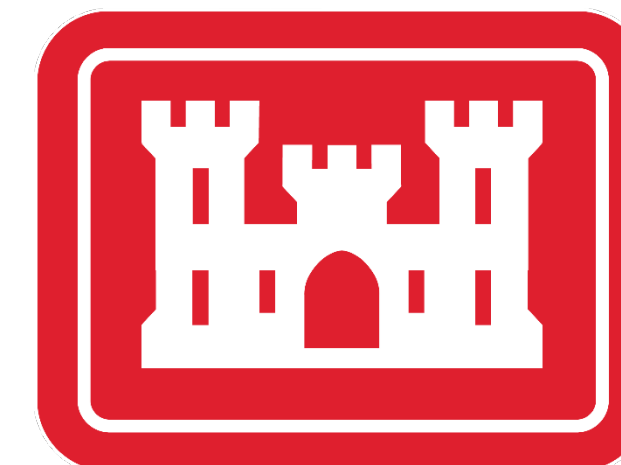
FEMA



COLORADO

Division of Homeland Security
& Emergency Management

Department of Public Safety



US Army Corps of Engineers®



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Department of Local Affairs



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QUESTIONS?



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