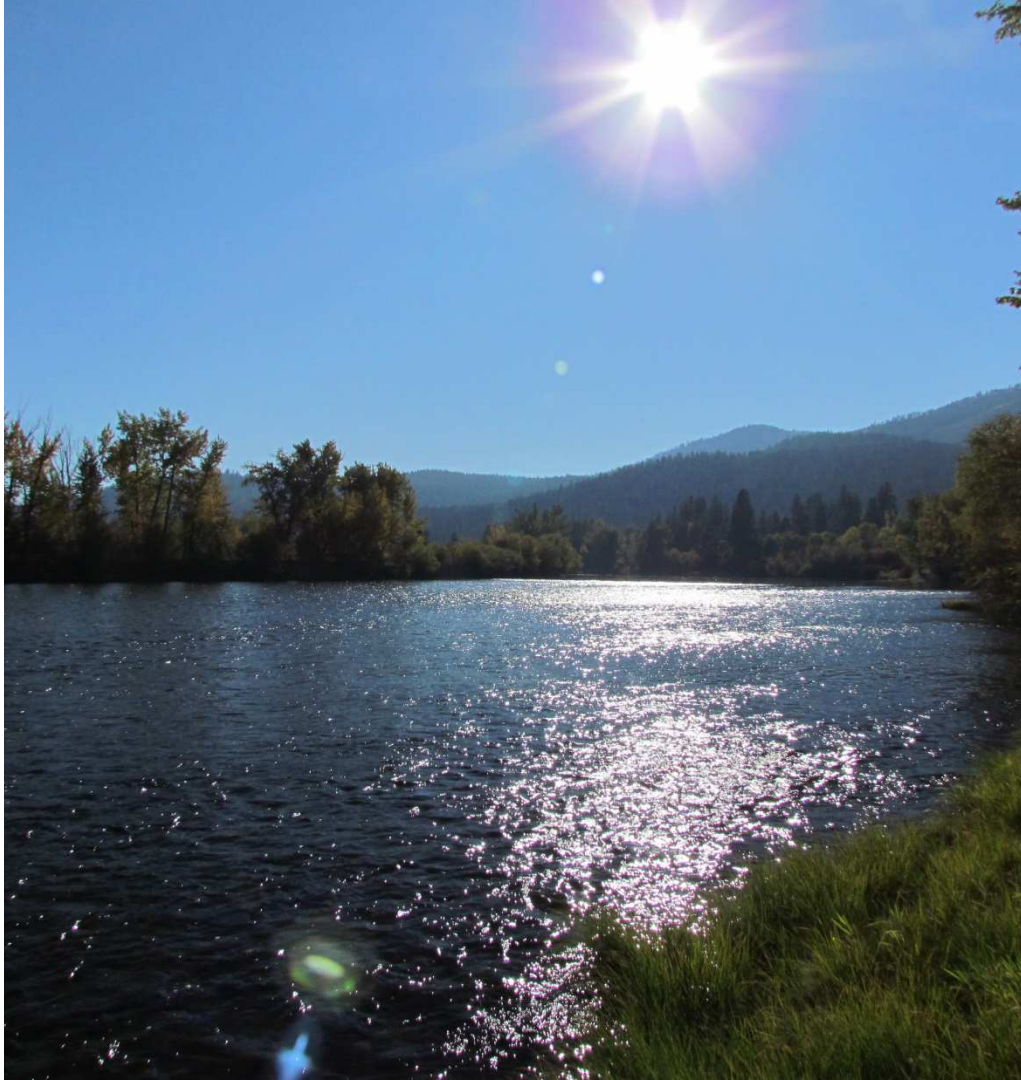
South Avenue Bridge

Preliminary Resource Agency Meeting
August 18, 2016

AGENDA

- Introductions
- Project Status & Updates
- Resource Topics and Considerations



Project Schedule

As of August 2016

- Field surveys completed
- Technical reports completed and under review:
  - Geotechnical Report
  - Bridge Type, Size and Location Study
  - Preliminary Roadway and Traffic Report
  - Hydraulics and Hydrology Report
- Environmental review ongoing

Field Survey

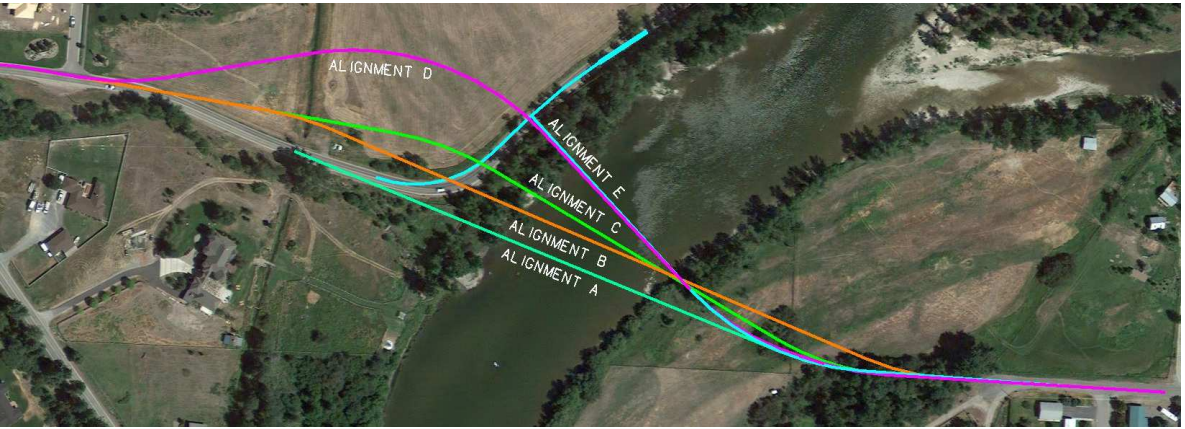
Activities completed within legal rights-of-way:

- Aerial (LiDAR via helicopter) survey and on-ground cadastral survey
- Cross-sections of river using bathymetric surveying conducted by boat
- Geotech borings at approximate bridge abutments
  - Additional borings anticipated to provide final geotechnical recommendations
- Historical resources reconnaissance
- Environmental field investigation
- Ambient noise monitoring

Preliminary Bridge Design

- Preferred Bridge Type determined
- Items considered:
  - Design criteria
  - Roadway alignment
  - Hydraulics/Floodplain/ Environmental impacts
- Public input requested at Aug. 16th Public Meeting:
  - Bike/pedestrian accommodations
  - Aesthetics: Arched or straight girder profile

Alignment Development



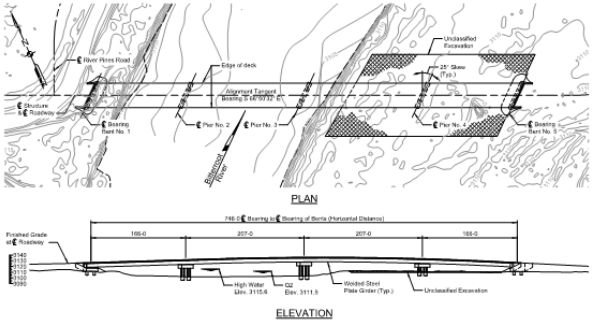
- Multiple potential alignments considered
- Alignments refined/eliminated based on:
  - Design criteria
  - Environmental impacts (avoidance of O'Brien Creek)
  - Right-of-way
  - Overall costs
  - Bridge length
  - Safety
- Alignments B and C carried forward (becoming Alignments 1 and 2, respectively)

Alignments Carried Forward

Alignment 1

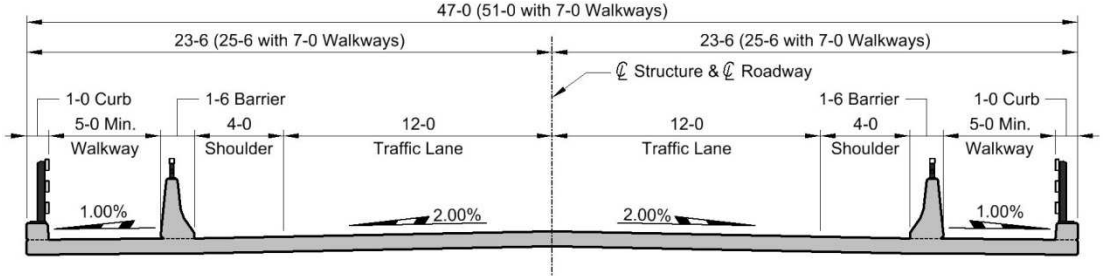
Alignment 2

Preferred Alternate: Alignment 1B

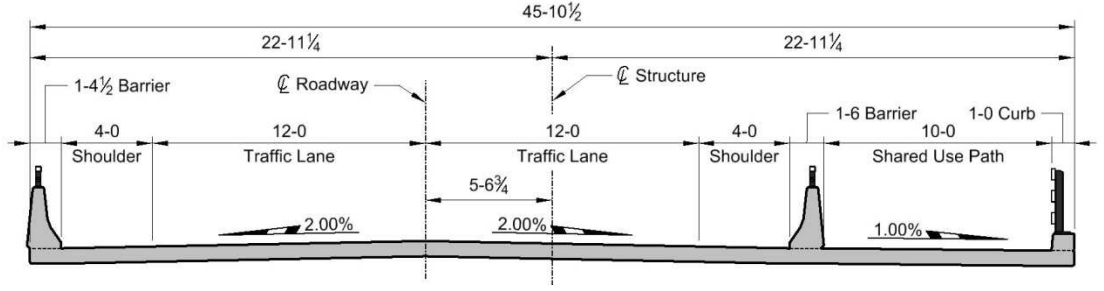


- Earliest availability for construction funding would be in year 2020
- Missoula County to coordinate with City to determine long-term corridor needs on South Avenue
- Future roadway improvements will be phased using County maintenance budget prior to bridge construction

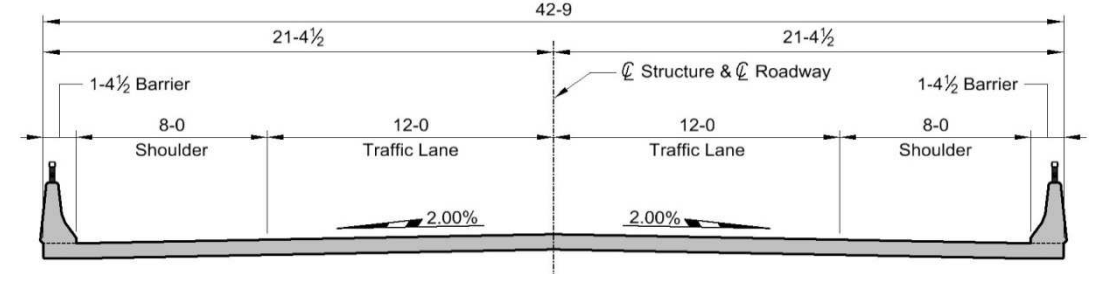
Possible Bridge Typical Sections & Walkway Options



- Separated walkways on either side. Bikes use the shoulders
- 12-ft lanes, 4-ft shoulders



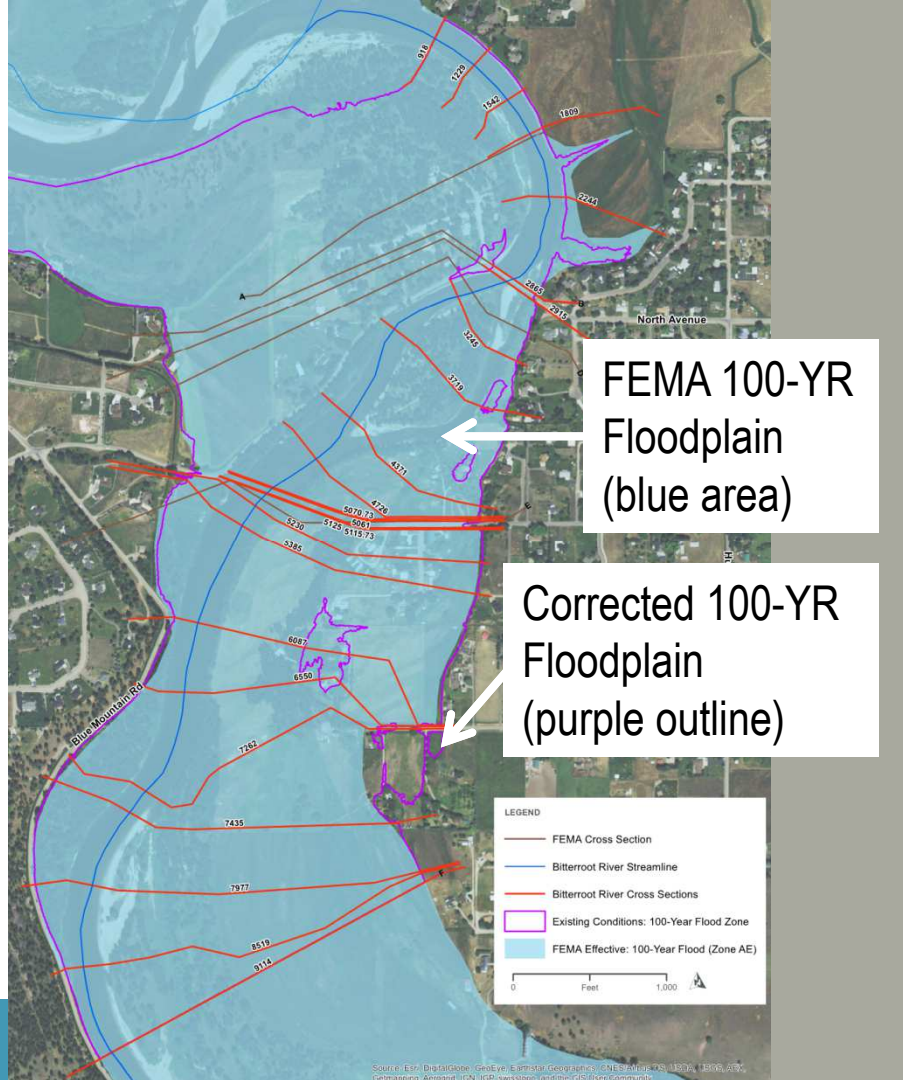
- Shared-use path for bikes and pedestrians on one side only
- 12-ft lanes and 4-ft shoulders



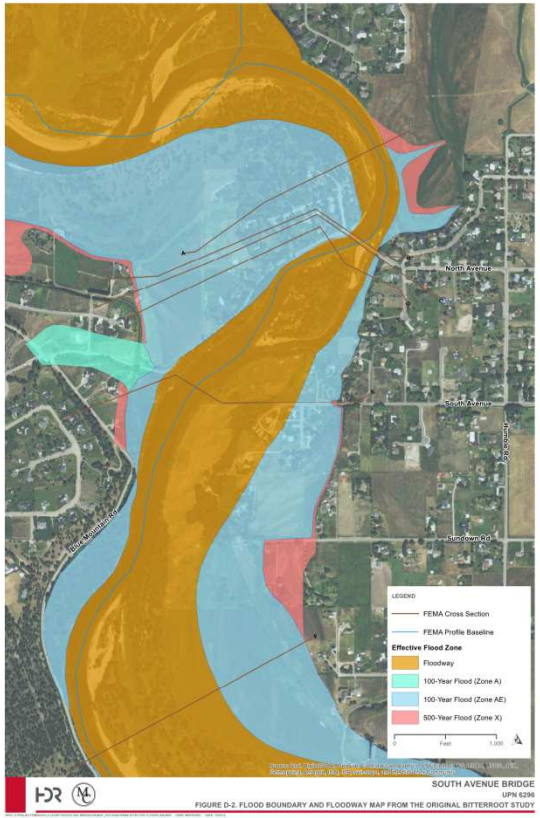
- No dedicated walkways. Increased shoulder widths
- 12-ft lanes, 8-ft shoulders

Hydraulics & Hydrology Evaluation

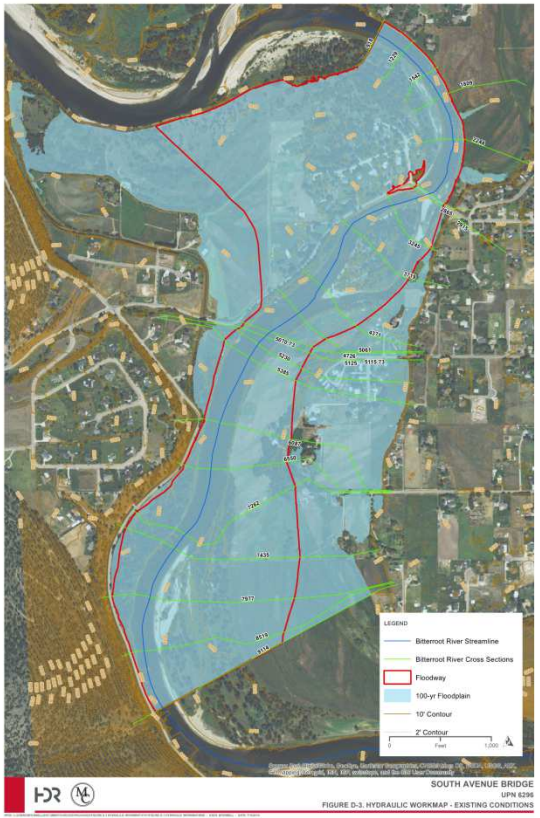
- A corrected hydraulic model is being used to analyze the proposed bridge alternatives
- No net rise anticipated on the Bitterroot River due to the proposed bridge
- Minor grading in the overbank and possible need for occasional low maintenance
- Preliminary report to be posted to website once review is completed



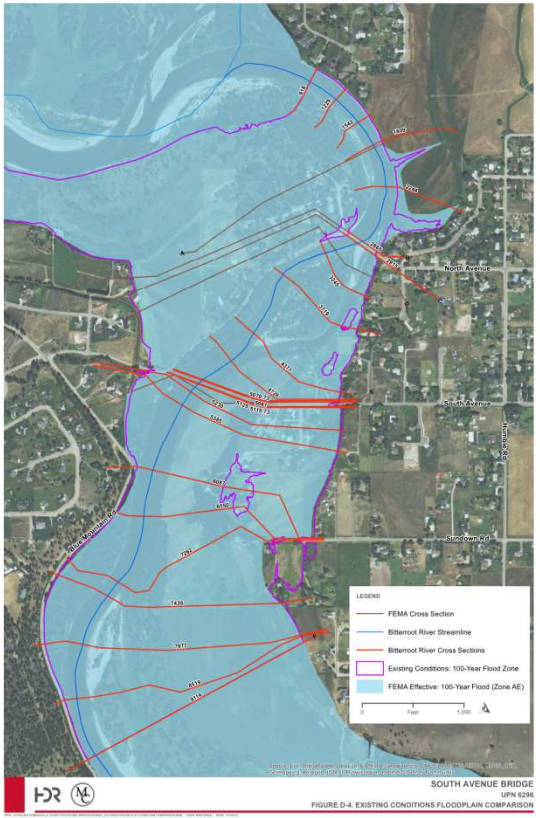
Hydraulic Model and Revised Floodplain



Current FEMA Effective Model

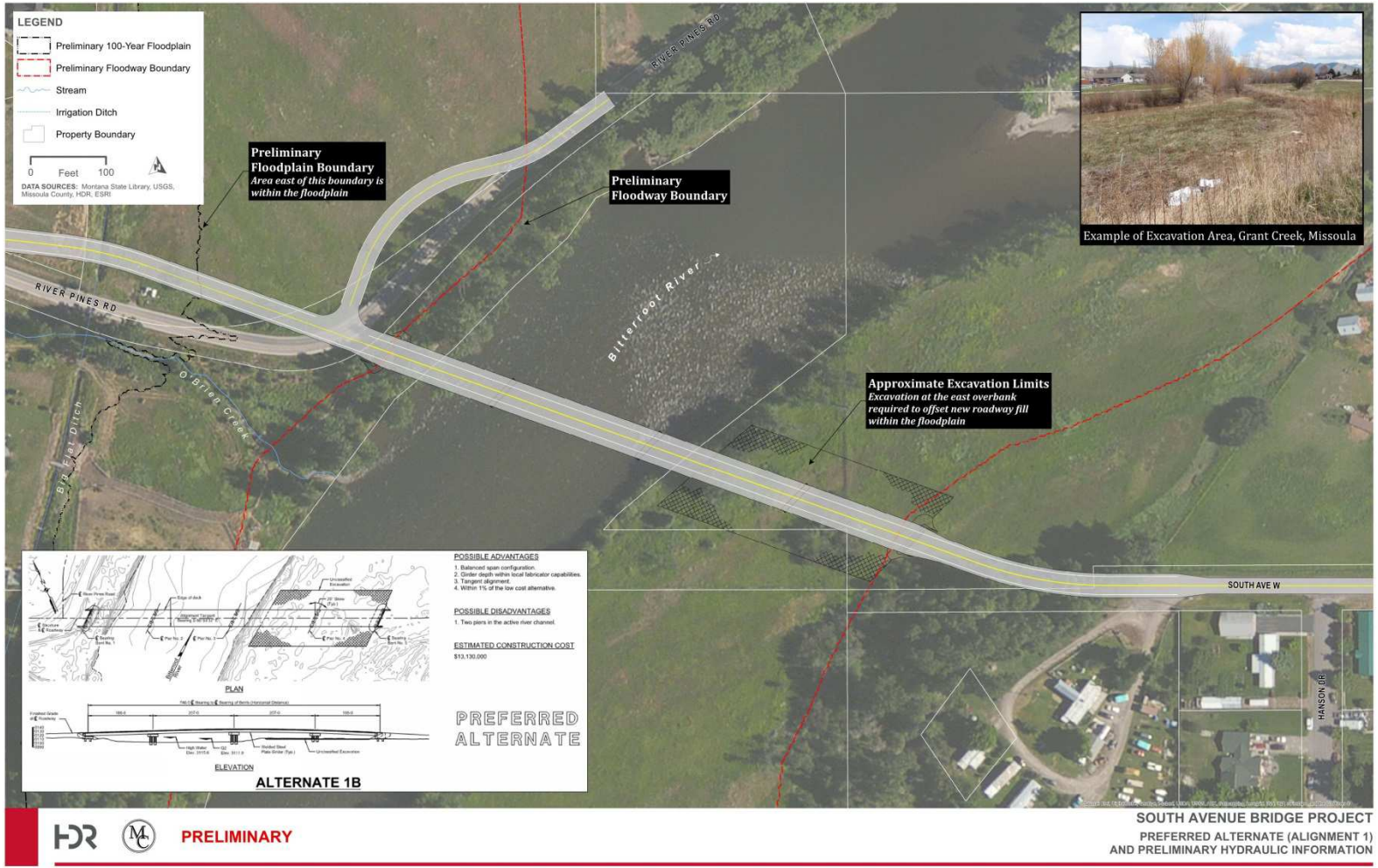


Corrected Hydraulic Model used to analyze proposed bridge alternatives



Existing Conditions Floodplains Comparison

Alignment 1B



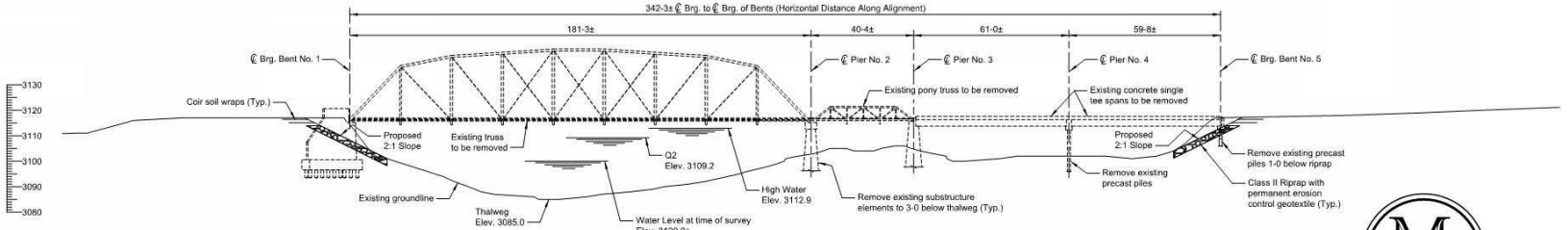
PRELIMINARY

SOUTH AVENUE BRIDGE PROJECT

PREFERRED ALTERNATE (ALIGNMENT 1)
AND PRELIMINARY HYDRAULIC INFORMATION

Maclay Bridge Removal

PLAN



ELEVATION

HDR

PRELIMINARY

MACLAY BRIDGE REMOVAL AND RIVER BANK RESTORATION

JULY 2016

Scale 1" = 40'-0"

Environmental Documentation and Process

Environmental documentation is underway as design progresses.

Major NEPA/MEPA analyses include:

- Cultural Resources
- Hydraulic and Hydrology Evaluation (floodplains)
- Biological Resource Report / Biological Assessment
- Noise Analysis
- Section 4(f) Evaluation
- Environmental Document (Categorical Exclusion, narrative format)

Public Involvement Process and TDC

- Three (3) Public Informational Meetings scoped
  - Meeting #1 – Sep. 22, 2015 (COMPLETE)
  - Meeting #2 – August 16, 2016 (COMPLETE)
  - Meeting #3 – Fall 2016
- Stakeholder/Neighborhood Meetings
  - Up to 12 meetings scoped
- Technical Design Committee (TDC) Meetings
  - Advisory Committee comprised of diverse constituents
  - Up to 8 TDC meetings
- Preliminary Resource Agency Meeting
- Newsletters, Mailings, and Project Website
  - www.southavenuebridge.com

Resource Topics and Design Considerations

- See Agenda for discussion topics