



**COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION**

Mt. Murphy Road Bridge

At the South Fork of the American River

FINAL ENVIRONMENTAL IMPACT REPORT (FEIR)



Board of Supervisors Meeting

May 17, 2022



AGENDA

BACKGROUND

- Background, Alternatives,
Proposed Project

EIR HIGHLIGHTS

- Mitigation Measures, Public
Comments

CONCLUSION

- Project “Look Ahead” &
Concluding Remarks





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Background:

- Sufficiency Rating (SR) = 0.00
(2011), 13.5 (2014), 2.0 (2016), 20.6 (2018), one of the Lowest Rating of ALL County Maintained Bridges
- Structurally Deficient (has Fracture Critical Members, FC inspections by Caltrans annually)
- Extensive Maintenance & Repairs (including multiple emergency closures)



Courtesy of Vickie Longo



Background:

- ➔ Ongoing Maintenance
- ➔ Emergency Repair(s)
 - ➔ 2007
 - ➔ 2021



Sept. 2007



July 2018



Fall 2021



Background:

Emergency Repair (2021)

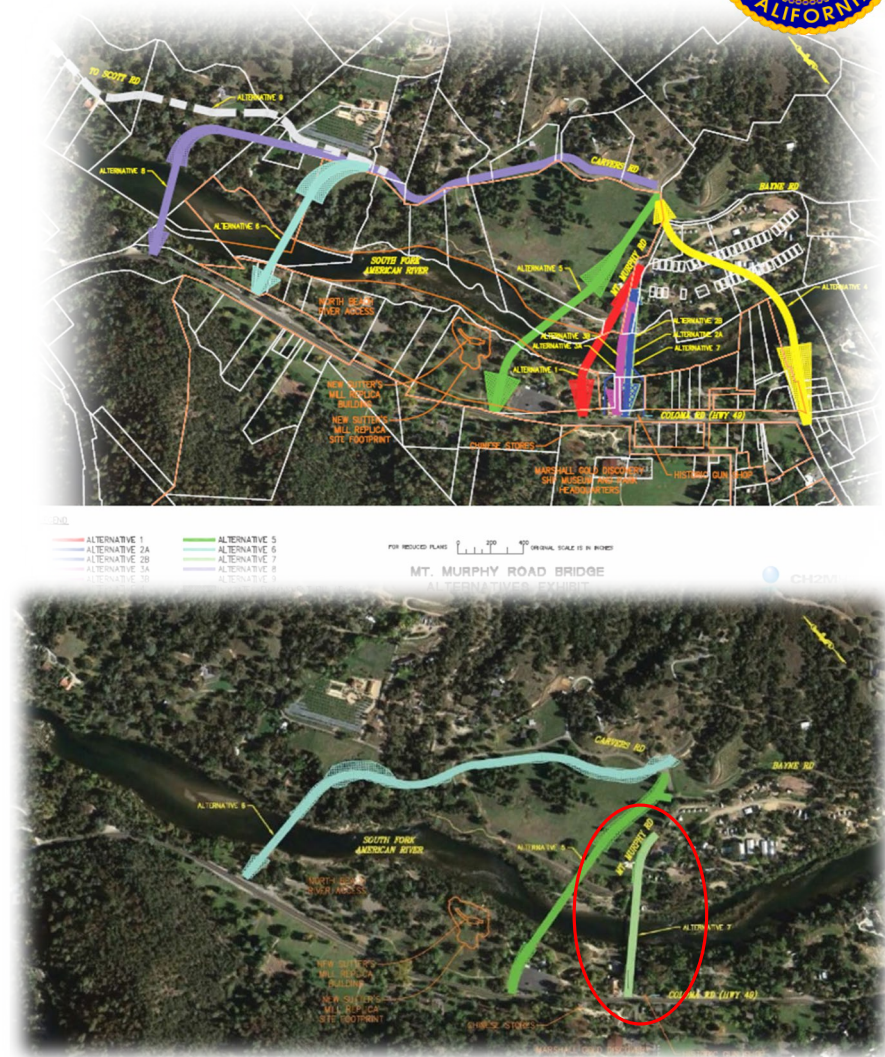
- Accident Sept. 2021
 - Structural Damage to Truss
- Immediate Closure
- Testing of Truss Members
- Unique Challenges & Unique Repair
- Reduced Load Rating Limit
- Importance of Bridge Replacement Project





Alternatives:

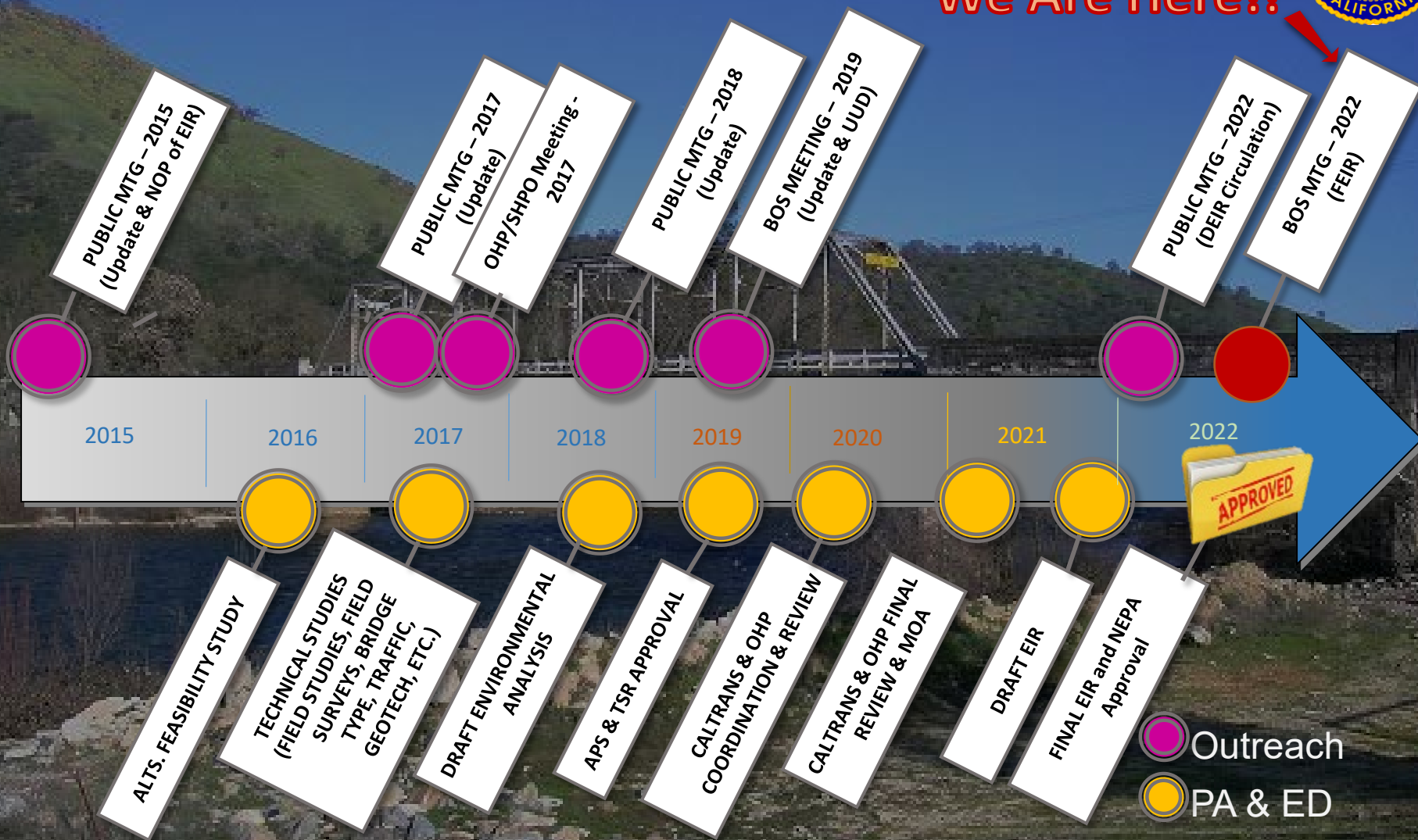
- **Purpose & Need:**
 - To provide safe and reliable passage to the traveling public across Mt. Murphy Bridge
- *Structural Analysis and Rehabilitation Feasibility Study (2014)*
 - Concluded Rehabilitation Infeasible
- *Alternatives Report (2015)*
 - Included three SAC & PDT meetings (2014)
 - Identified nine (9) Alternatives
 - Recommended three (3) Alternatives for Environmental Evaluation
- *Alternatives Feasibility Study (2016)*
 - Evaluated three (3) Alternatives
- **Recommended On-Alignment Alternative**



Environmental Schedule



We Are Here!!





Proposed Project

➤ Technical & Engineering Studies

➤ Structure Advanced Planning Study (APS)

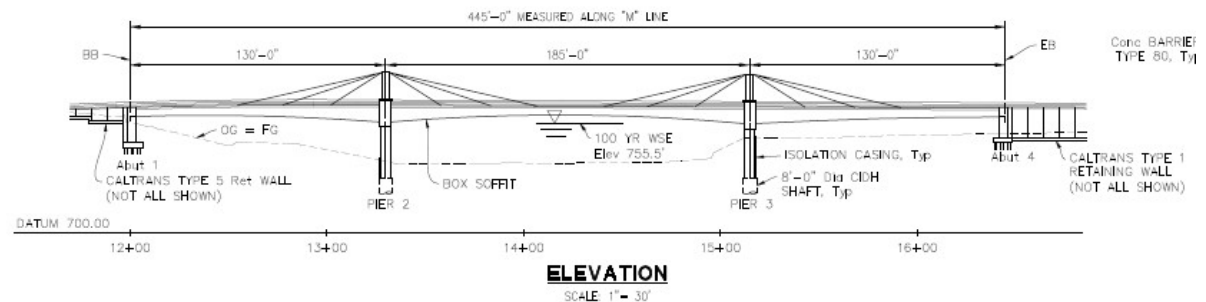
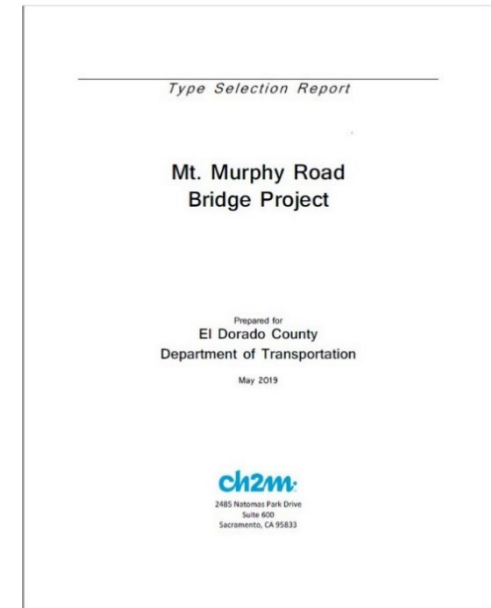
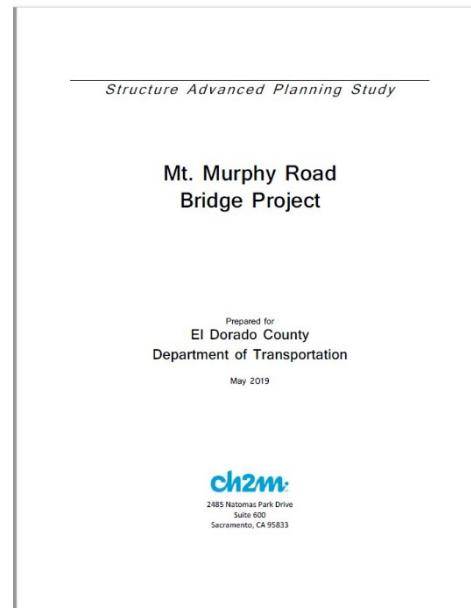
➤ Type Selection Report (TSR)

➤ Geotechnical Study

➤ Vibration Considerations

➤ Noise Study

➤ Traffic Study

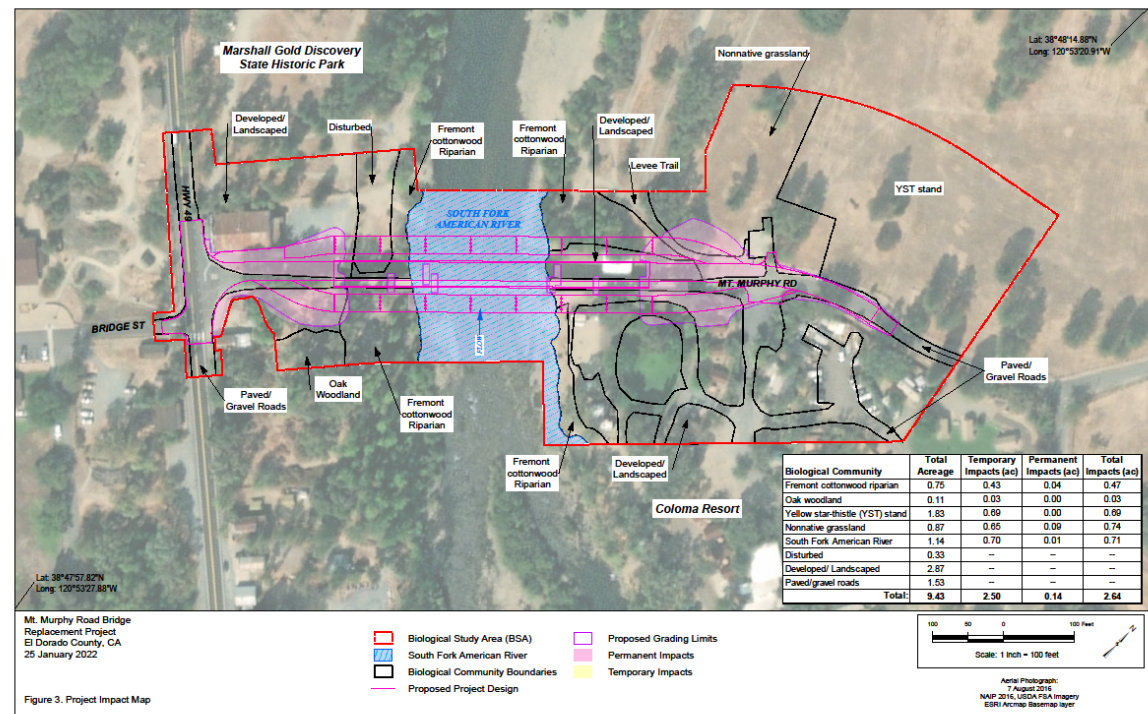




Proposed Project

Alternative 1 (Corridor 1) – “On Alignment”

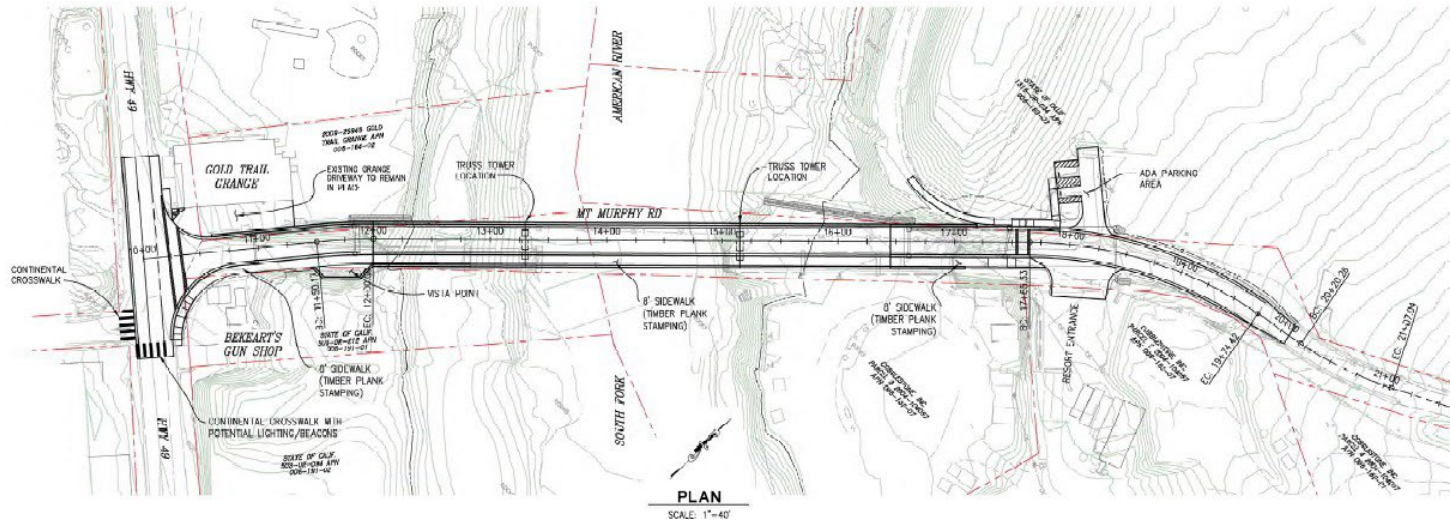
- Avoidance & Minimizing Impacts
 - Cultural & Historic Resources
 - Biological Resources
 - Visual Impacts, etc.





Proposed Project

➔ Alternative 1 (Corridor 1) – “On Alignment”

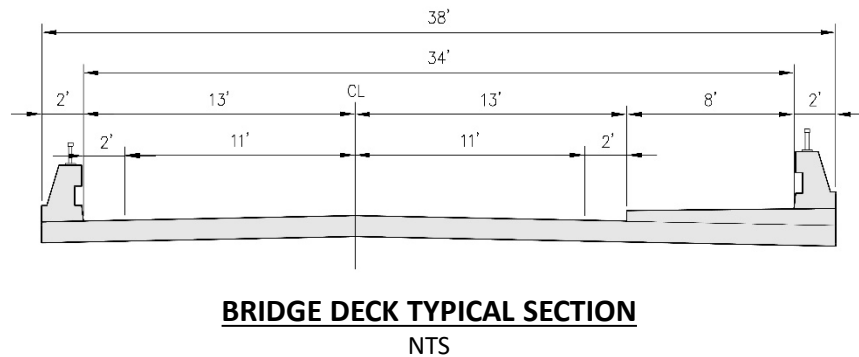


PRELIMINARY CONCEPT

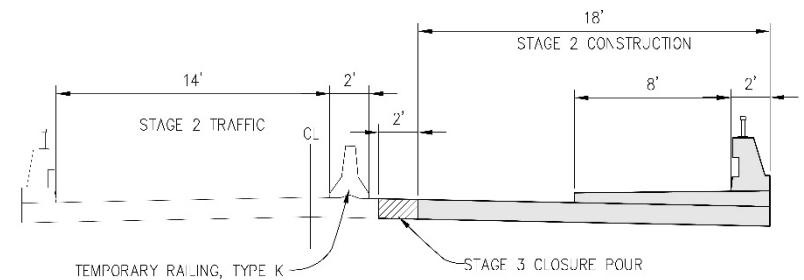
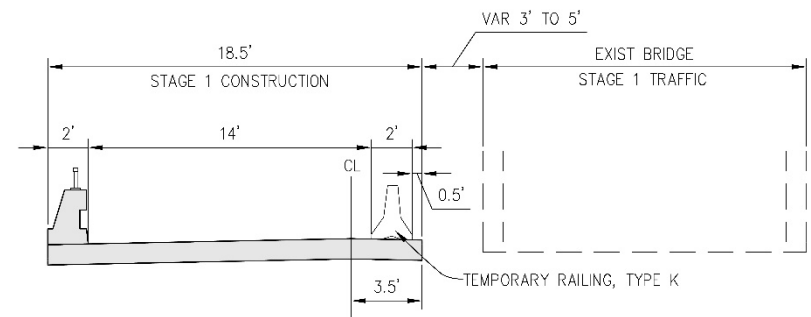


Proposed Project

➔ Alternative 1 (Corridor 1) – “On Alignment”



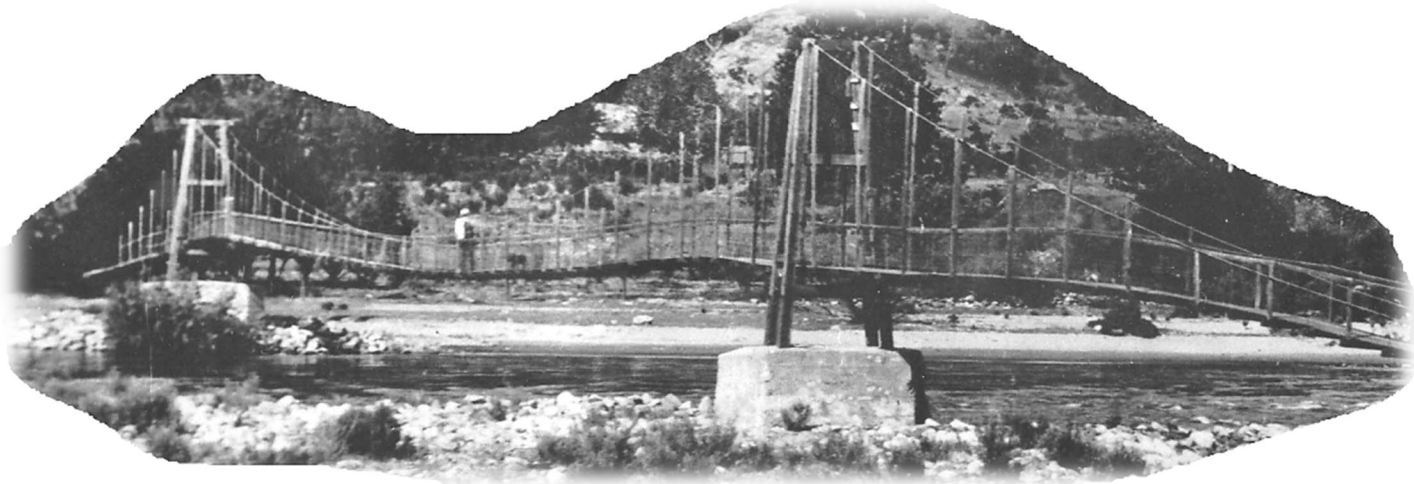
PRELIMINARY CONCEPT





Proposed Project

- Integrating the Past
- Continuity
- Minimize Impacts



PRELIMINARY CONCEPT

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Proposed Project

↳ “Truss Tower Portals” with Cables



PRELIMINARY CONCEPT

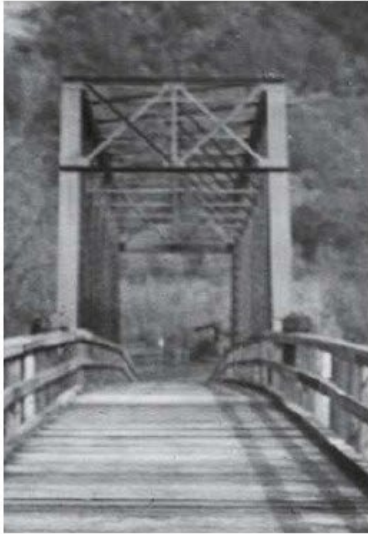

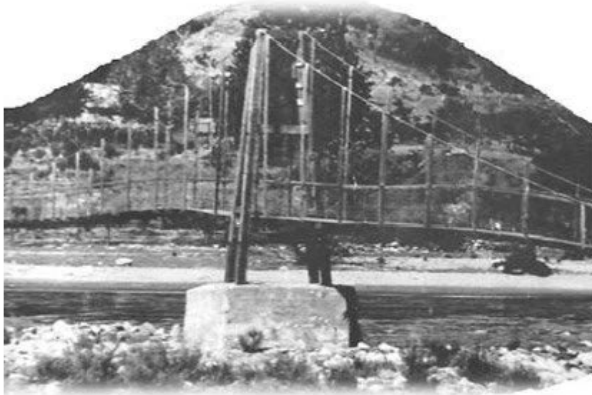

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Proposed Project

➔ **Alternative 1**
(Corridor 1) – “On
Alignment”

Table 3-1. Bridge Design Elements Compared Against Historic Bridge Elements

Feature	Historic Bridge Reference Image	Proposed Bridge Detail Simulation
Truss crossbars		
Cables		


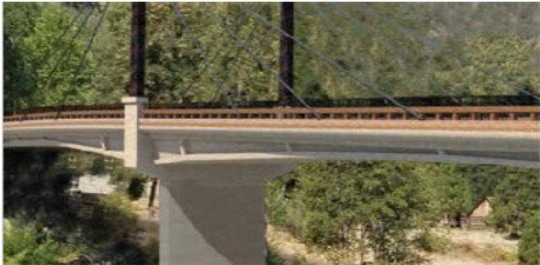

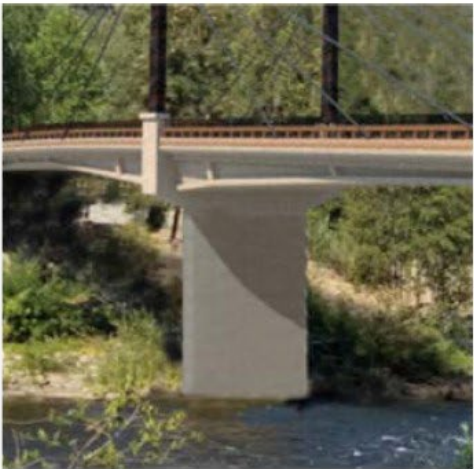
PRELIMINARY CONCEPT



Proposed Project

➔ **Alternative 1**
(Corridor 1) – “On
Alignment”

Table 3-1. Bridge Design Elements Compared Against Historic Bridge Elements

Feature	Historic Bridge Reference Image	Proposed Bridge Detail Simulation
Box relief and arched curves in concrete girders		
Mono slab pier walls with flared pedestals and trim accents		



Proposed Project

➔ **Alternative 1**
(Corridor 1) – “On
Alignment”

Table 3-1. Bridge Design Elements Compared Against Historic Bridge Elements

Wood texture and color tones	 A photograph of a historic wooden grange building. The building is made of dark wood and has a sign that says "GRANGE". It is surrounded by a wooden fence and is set against a backdrop of hills.	 A 3D rendering of a bridge railing. The railing is made of wood and has a curved design. It is shown in a perspective view, with a road and a river in the background.
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PRELIMINARY CONCEPT



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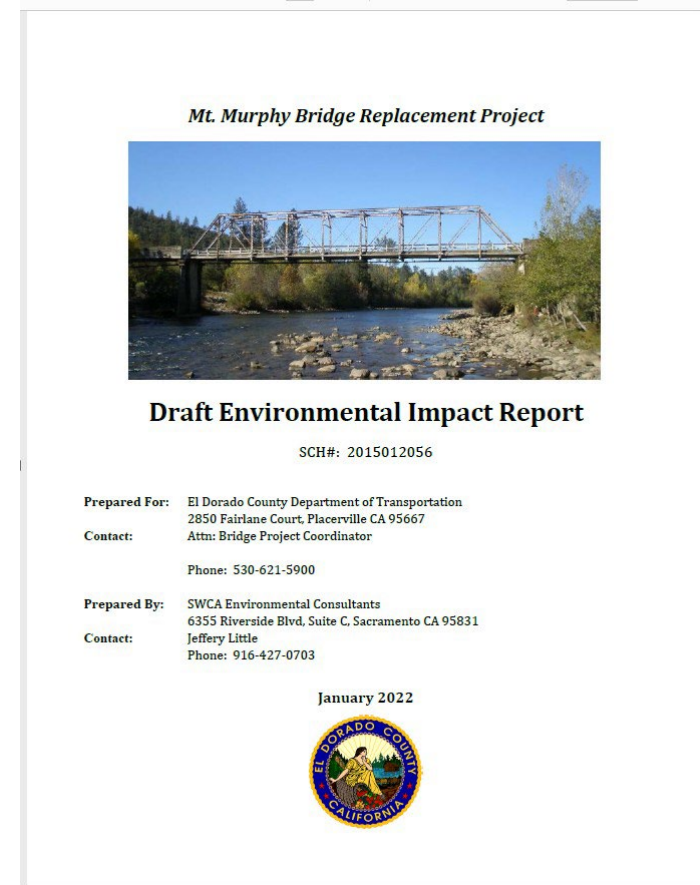
- Project “Look Ahead” &
Concluding Remarks





EIR Highlights:

- Comments on Draft EIR
 - Notice of Availability (NOA) & Public Meeting (1/26/22)
 - Public Review Period:
1/10/22 – 2/25/22
- Draft EIR Highlights
 - Summary of Mitigation Measures





EIR Highlights:

Table 5-1: Summary of Significant Impacts and Mitigation Measures

Impact:

Mitigation Measures:

➔ Aesthetics:	BIO-5 (Riparian), BIO-6 (Oak Trees), BIO-7 (SF American River)
➔ Air Quality:	HAZ-2 (Lead)
➔ Biological Resources:	BIO-1 (FYLF), BIO-2 (Migratory Birds), BIO-3 (Bats), BIO-4 (Balsamroot, Sedge), BIO-5 (Riparian), BIO-6 (Oak Trees), BIO-7 (SF American River)
➔ Geology & Soils:	NOI-1 (Vibration)
➔ Hazardous Materials:	HAZ-1 (Arsenic), HAZ-2 (Lead), HAZ-3 (Treated Wood), WILD-1 (Fire Protection)
➔ WQ & Water Resources:	Bio-1 (FYLF), Bio-7 (SF American River)
➔ Noise:	NOI-1 (Vibration)
➔ Recreation:	REC-1 (Relocate Park Uses), REC-2 (Whitewater Boaters), REC-3 (SR-49 & Mt Murphy Park Character), REC-4 (Traffic Delays)
➔ Wildfire:	WILD-1 (Fire Protection)



EIR Highlights:

Table 5-1: Summary of Significant Impacts and Mitigation Measures

Impact:

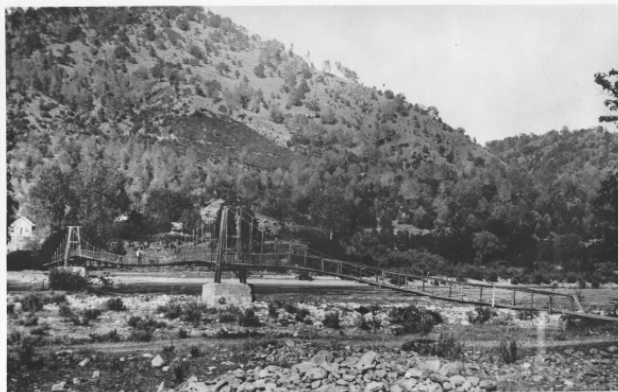
Mitigation Measures:

→ *Cultural Resources:

CULT-1 (Design Features), CULT-2 (HAER), CULT-3 (Interpretive Exhibits), CULT-4 (Revised National Register Nomination), CULT-5 (Reporting), CULT-6 (Post Review Plan), CULT-7 (ESA Action Plan)

→ Tribal Cultural Resources:

CULT-8 (Native American Monitoring)



Completed April 29 1899 3 ft wide with netting
built by Fred Smeder of Georgetown

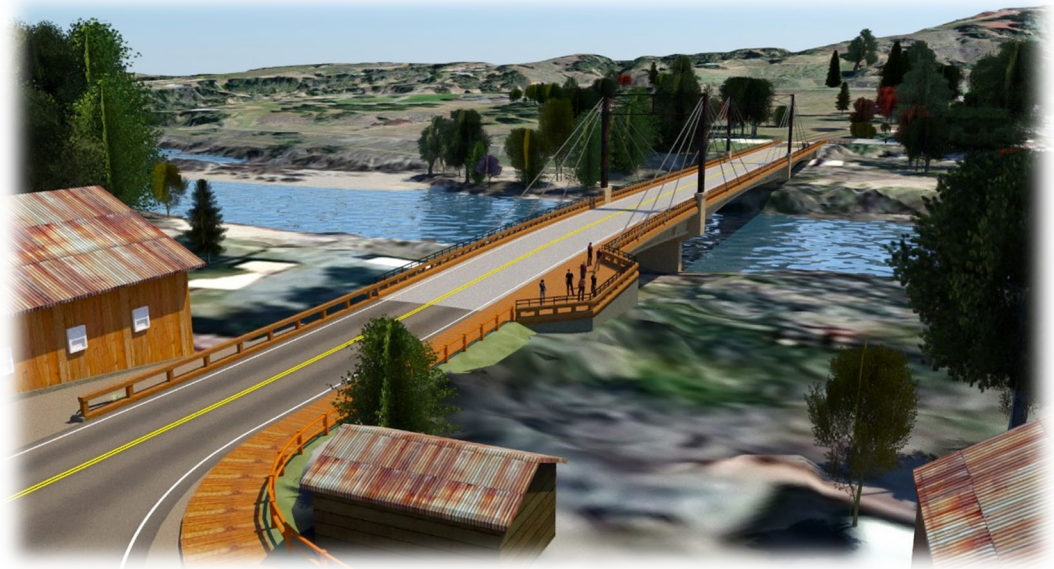




EIR Highlights

Coordinated Efforts

- **Extensive Coordination Efforts**
 - County Of El Dorado, State Parks, Caltrans, FHWA, Tribes, OHP, Public, etc.
- **Design Features**
 - Evolution of Proposed Project
- **Interpretive Exhibits**
 - Integrating Efforts & Uses

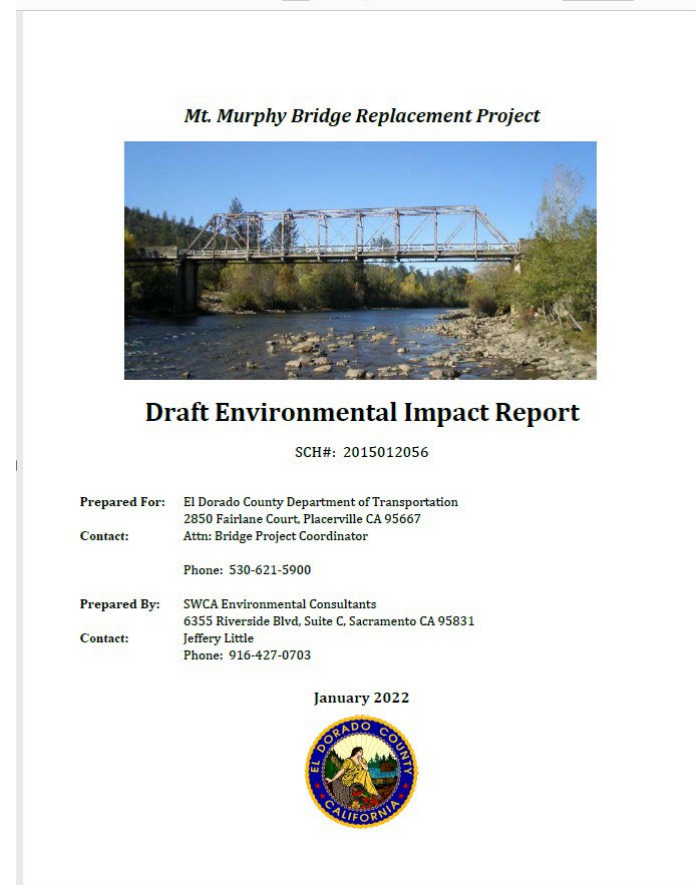


PRELIMINARY CONCEPT



Public Comments

- ➔ Need for Road Improvements
- ➔ Impacts associated with neighboring activities
- ➔ Proposed Bridge Design Features





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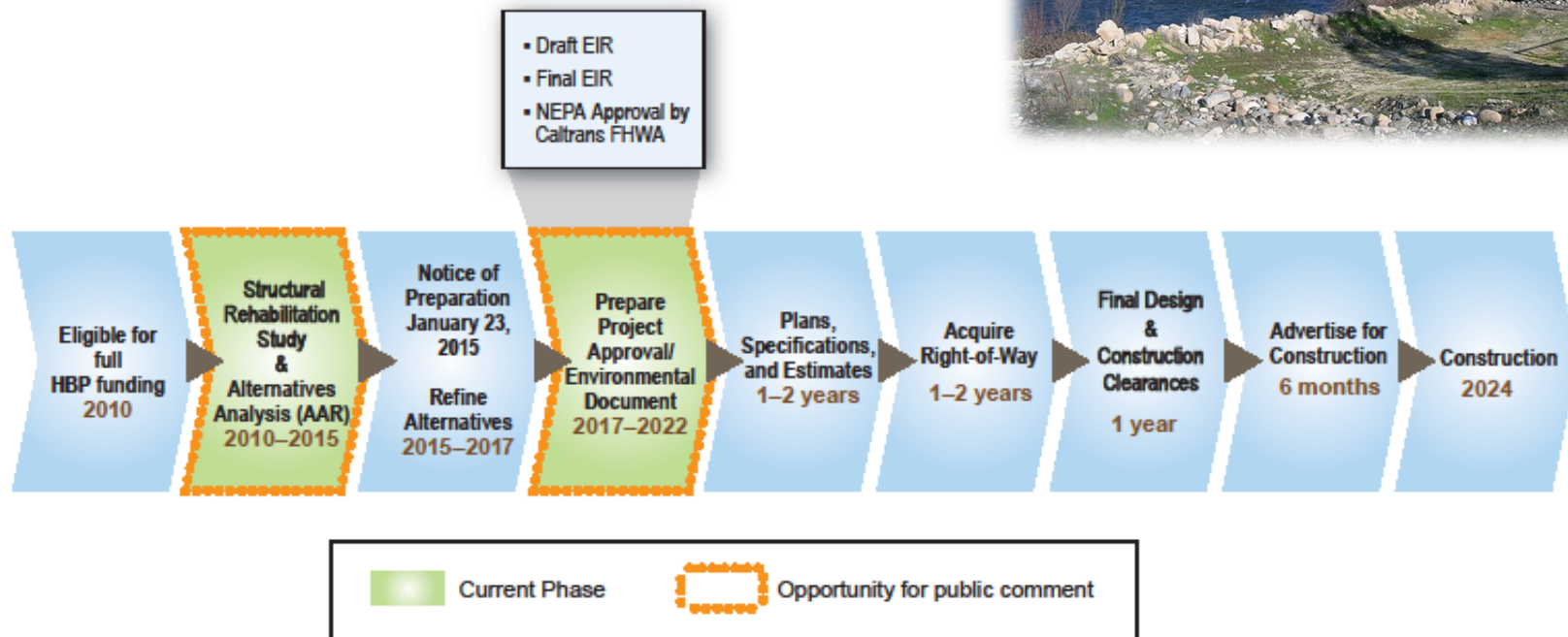
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Project “Look Ahead”

- Anticipated Schedule & Development Process



PRELIMINARY

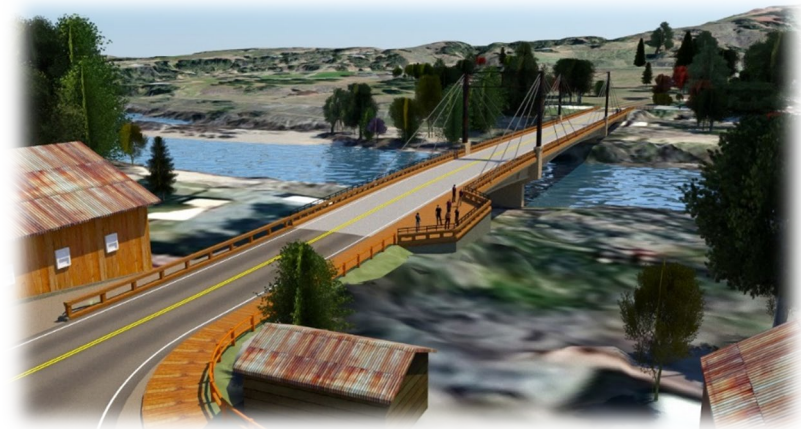
**Opportunities for Overlap (ROW, Design, PS&E)*

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Concluding Remarks

- Project best meets all Project Objectives
- Extensive collaboration & coordination efforts
- DOT recommends BOS to:
 - 1) Certify EIR
 - 2) Adopt Findings of Fact and MMRP
 - 3) Approve Mt Murphy Bridge Project



PRELIMINARY CONCEPT