

## 2023 SIDE CHANNEL REACTIVATION PROJECT



- PROJECT LOCATIONS
- SITE PHOTOGRAPHY
- ACCESS MAPS
- PRELIMINARY DESIGN PLANS



FALL 2023

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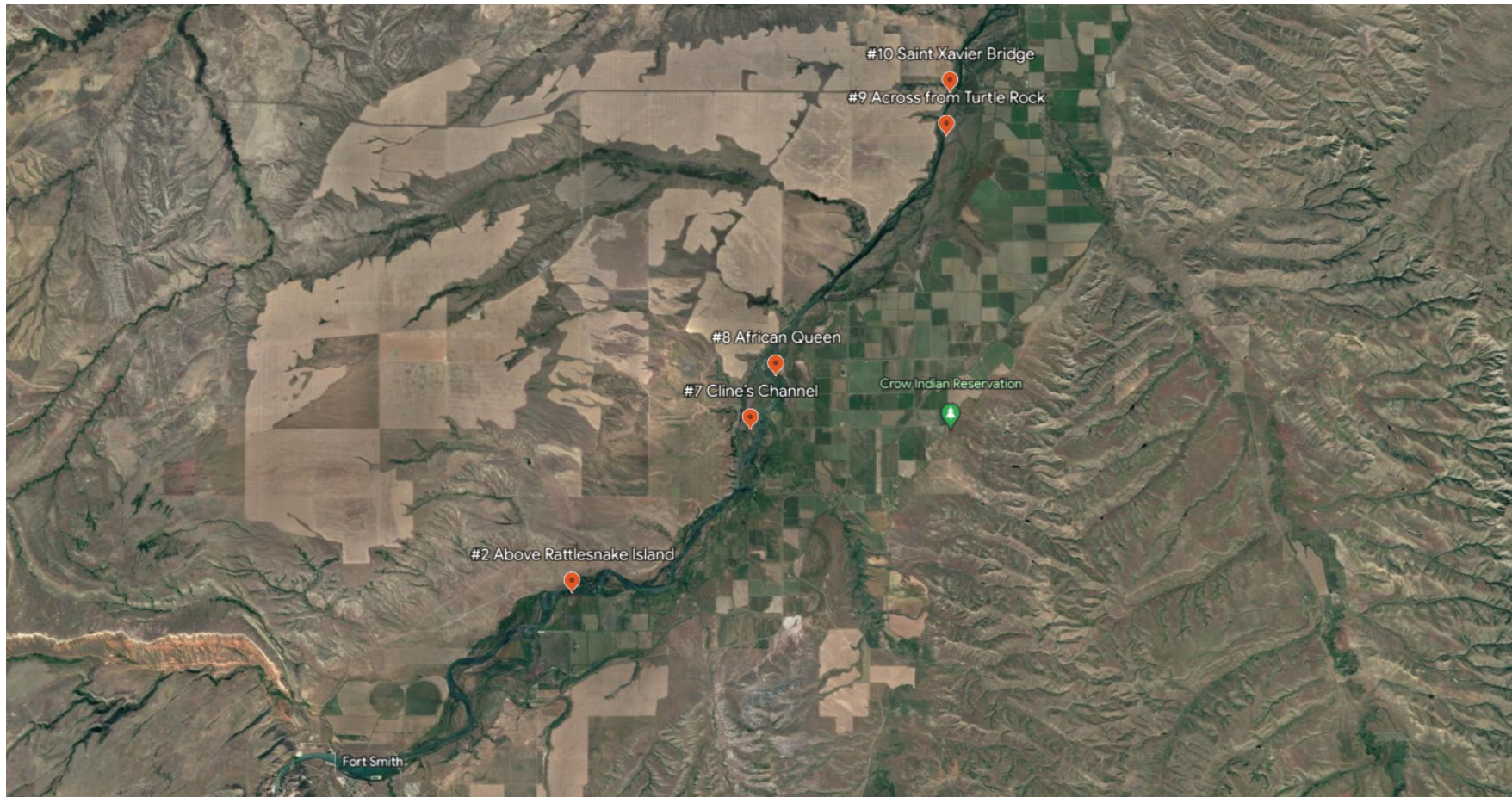
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**BIGHORN**  
RIVER ALLIANCE



## Project Area Map and Channel Lengths



Site map of 2023 reactivation sites.

#	NAME	RIVER MILE	LATITUDE	LONGITUDE	LENGTH IN FT	LENGTH IN MILES
2	Above Rattlesnake Island	79	45.3519	-107.8670	800	0.15
7	Cline's Channel	74.5	45.3872	-107.8122	7,729	1.46
8	African Queen	73.3	45.3988	-107.8044	2,493	0.47
9	Across from Turtle Rock	68.6	45.4506	-107.7518	1,135	0.21
10	Saint Xavier Bridge	67.9	45.4600	-107.7507	3,085	0.58
					<b>15,242</b>	<b>2.87</b>



## #2 Above Rattlesnake Island



Picture Date: 9/11/2021 | River Release: 1900 cfs

See Video Here: <https://youtu.be/oC5FAK1ck2>

## #2 Above Rattlesnake Island

## Access and Land Ownership Map



### ACCESS:

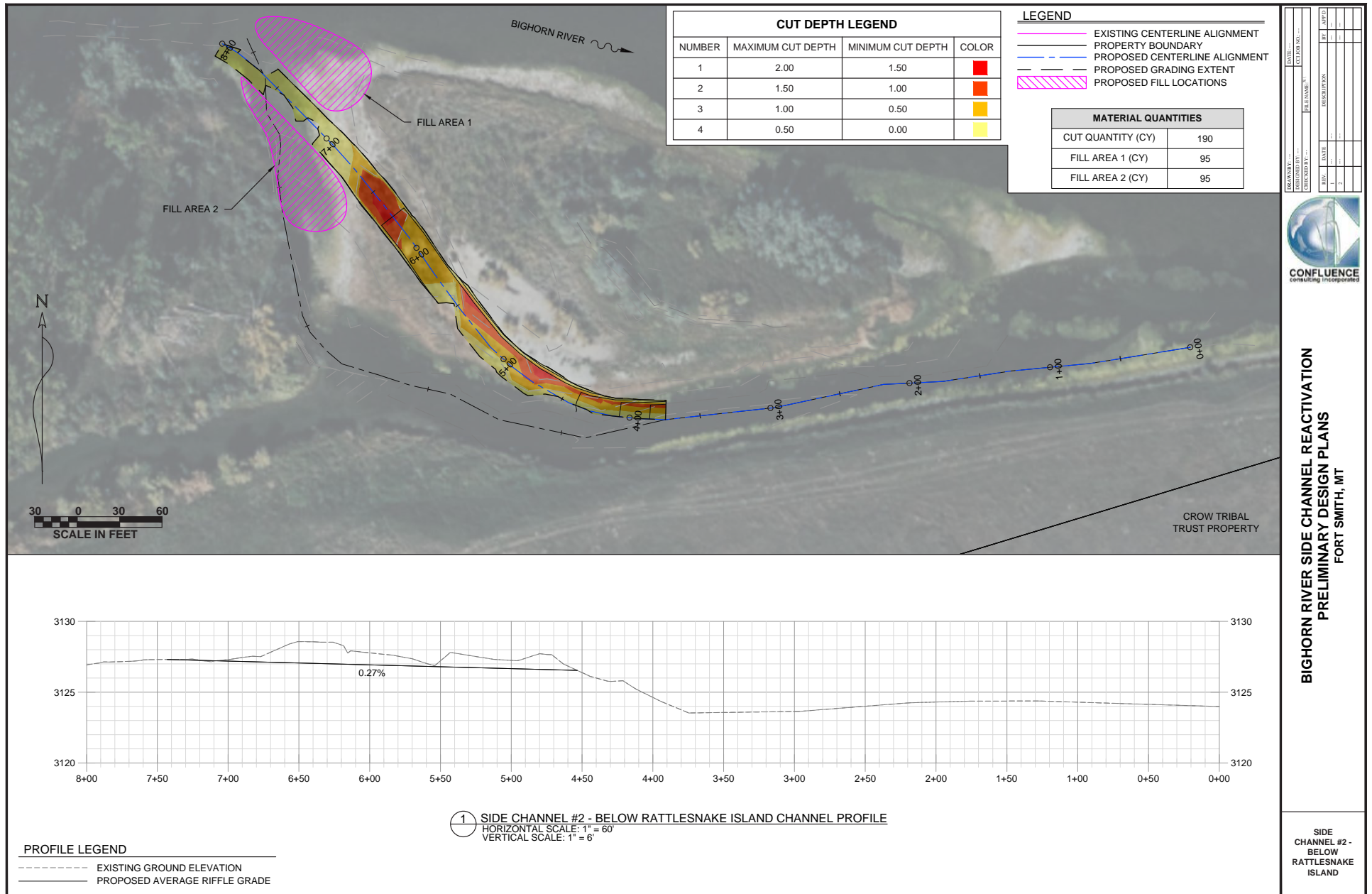
- Kingfisher Easement (letter attached)
- State of Montana



Access Path	-----
Side Channel	—————
Ownership Boundary	—————
Crow Tribal Trust	highlighted areas



# #2 Above Rattlesnake Island



**BIGHORN RIVER SIDE CHANNEL REACTIVATION  
 PRELIMINARY DESIGN PLANS  
 FORT SMITH, MT**

SIDE CHANNEL #2 -  
 BELOW RATTLESNAKE ISLAND

## #7 Cline's Channel

Current Conditions



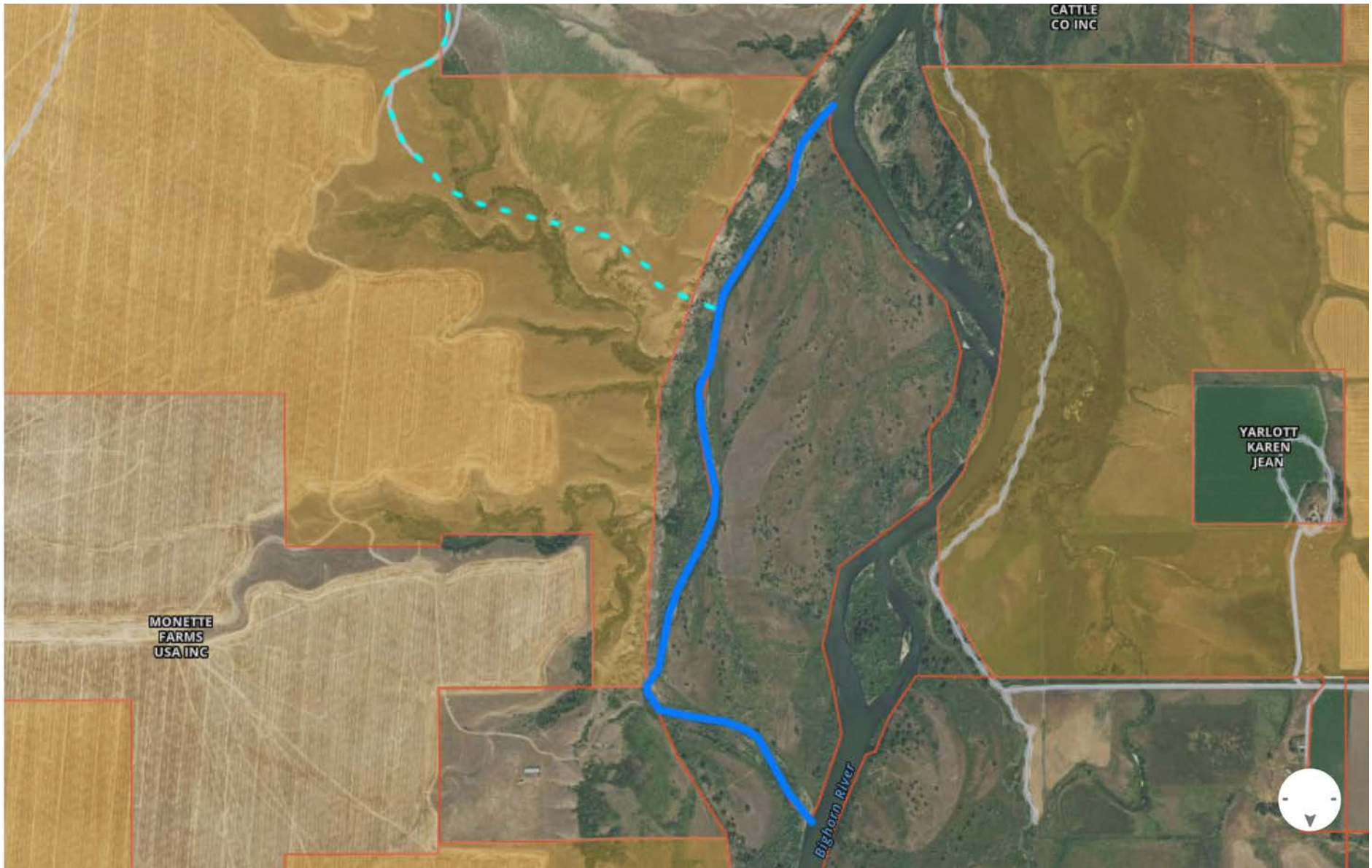
Picture Date: 9/11/2021 | River Release: 1900 cfs

See Video Here: <https://youtu.be/fmx7druuPP8>



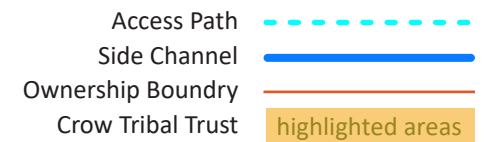
# #7 Cline's Channel

## Access and Land Ownership Map



### ACCESS:

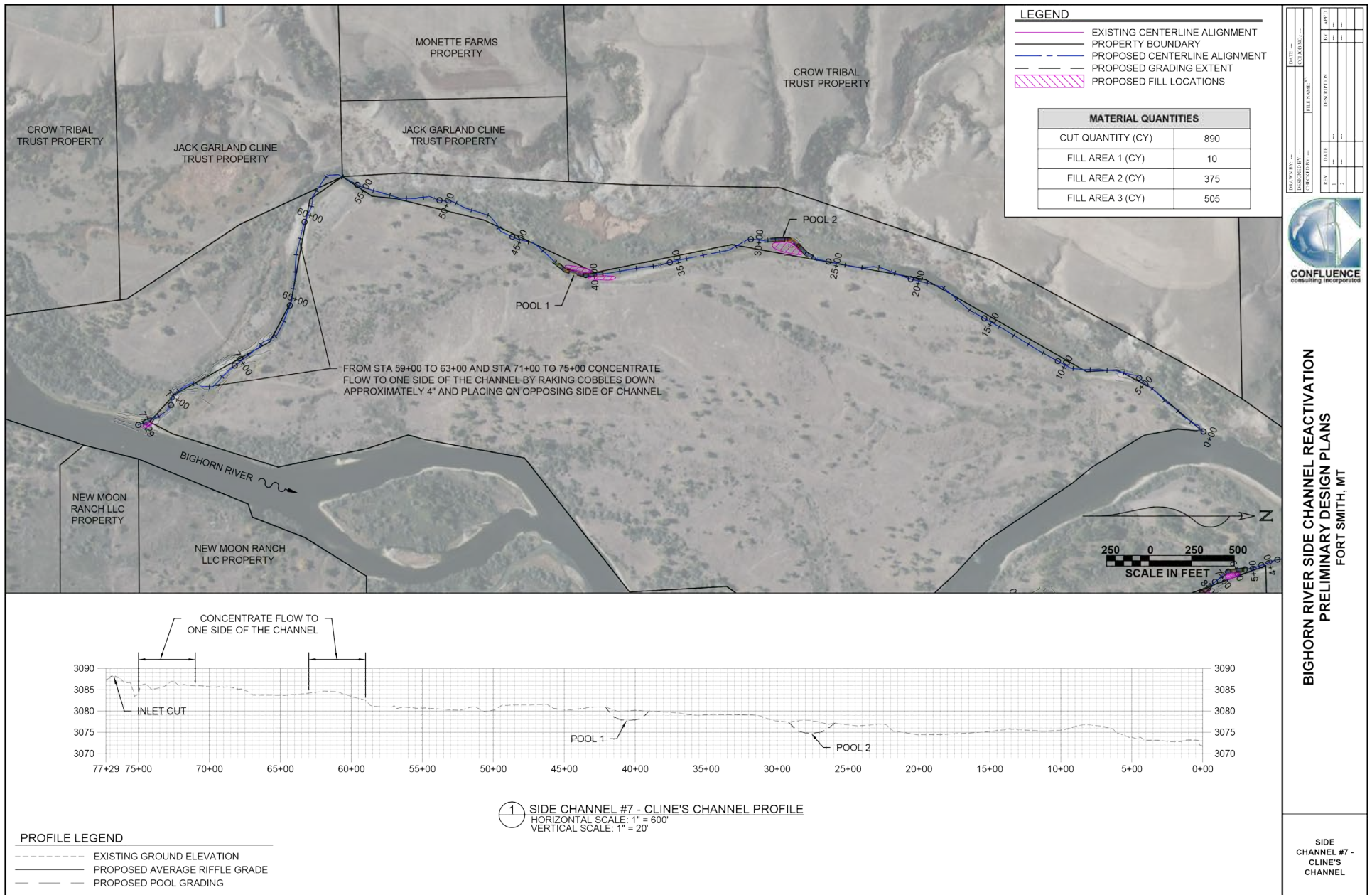
1. Crow Tribal
2. State of Montana





# #7 Cline's Channel

# Preliminary Design Plan





## #8 African Queen

Current Conditions



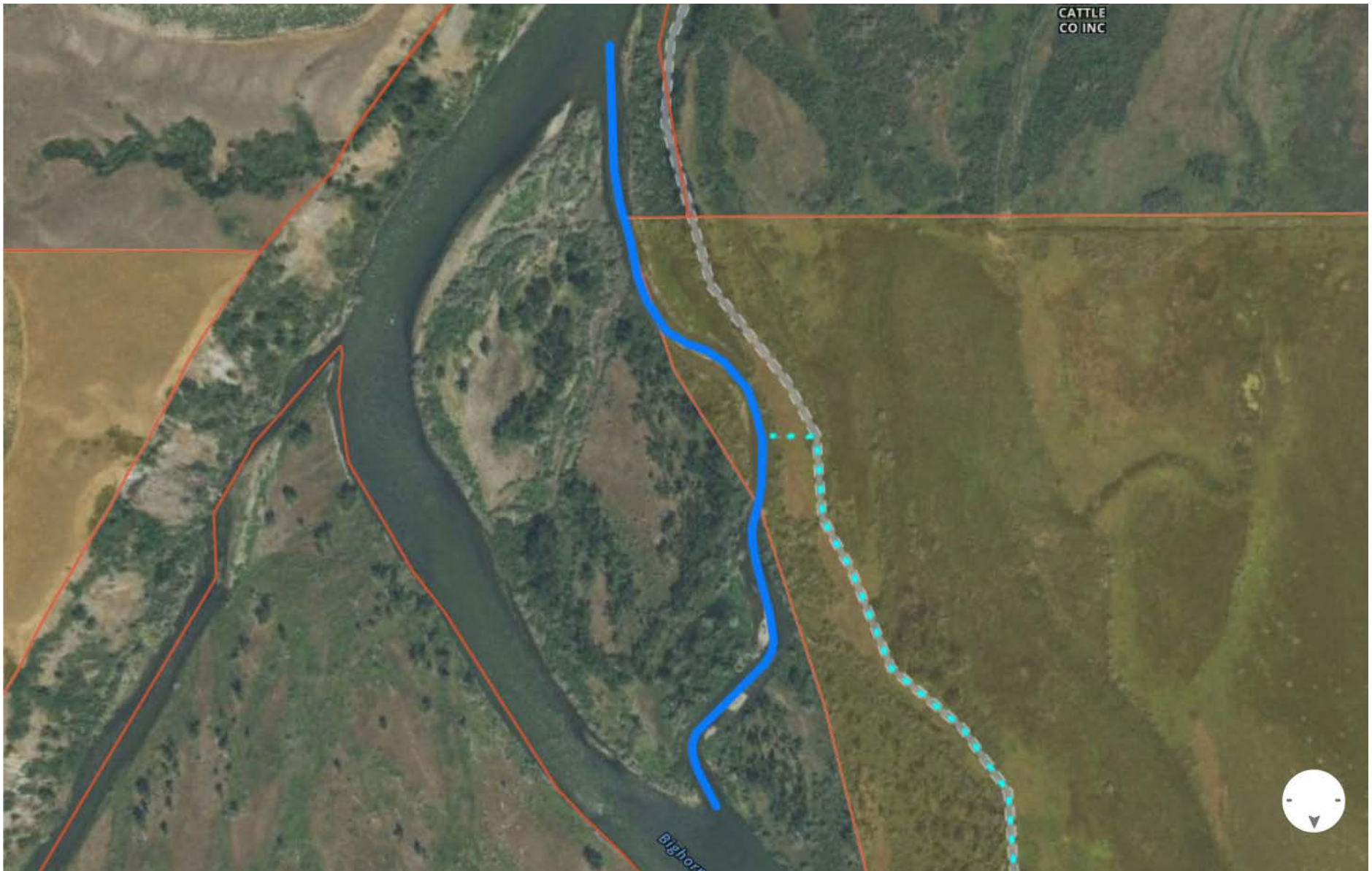
Picture Date: 9/11/2021 | River Release: 1900 cfs

See Video Here: <https://youtu.be/gl4xTDSp01Q>



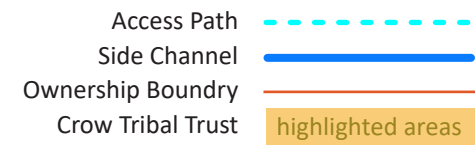
# #8 African Queen

## Access and Land Ownership Map



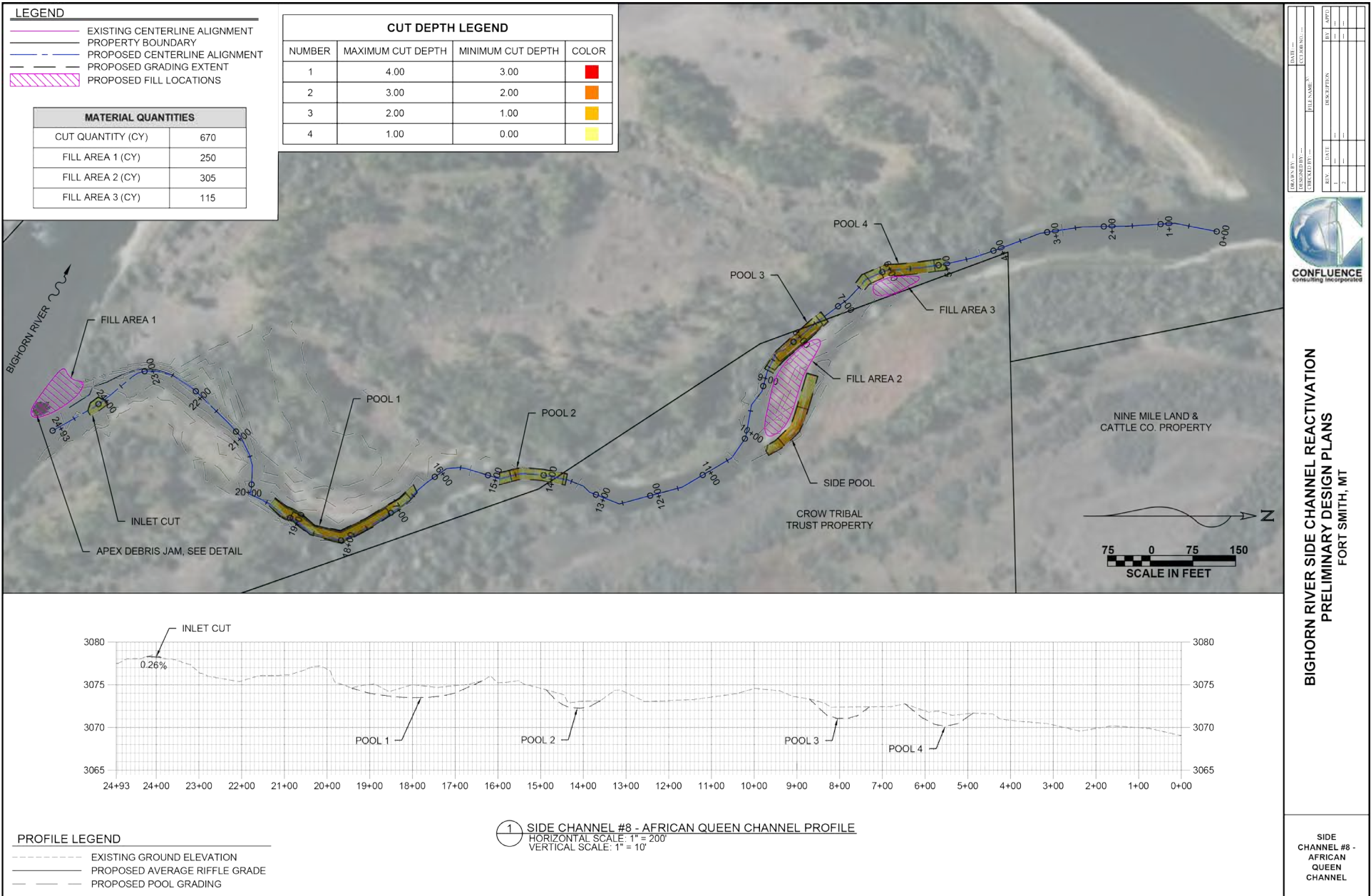
### ACCESS:

1. Crow Tribal
2. State of Montana



# #8 African Queen

# Preliminary Design Plan





## #9 Across from Turtle Rock

Current Conditions



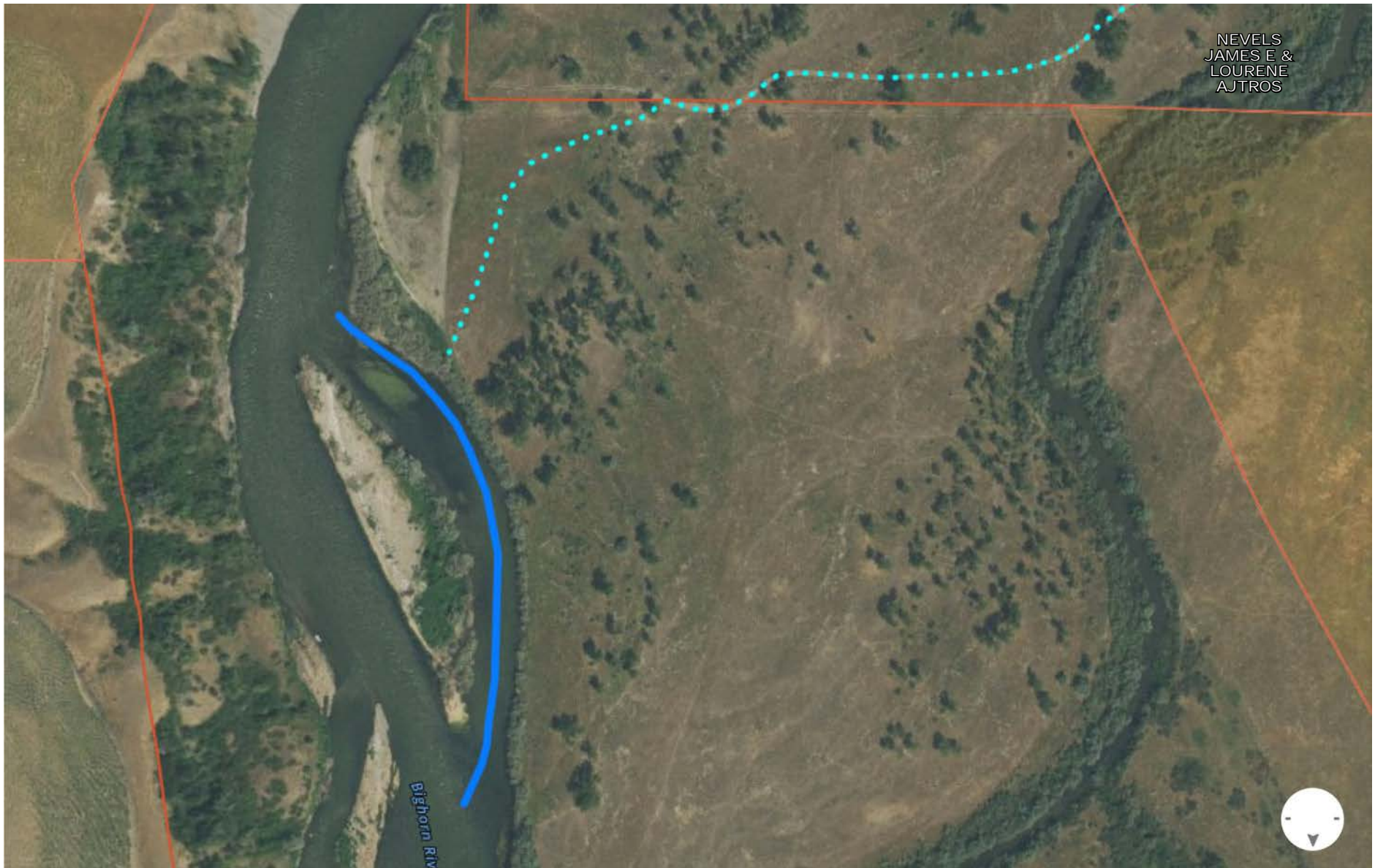
Picture Date: 9/27/2021 | River Release: ?

See Video Here: <https://youtu.be/rohJA5maVq0>



# #9 Across from Turtle Rock

## Access and Land Ownership Map



### ACCESS:

1. Nevels (currently for sale, letter pending)
2. State of Montana

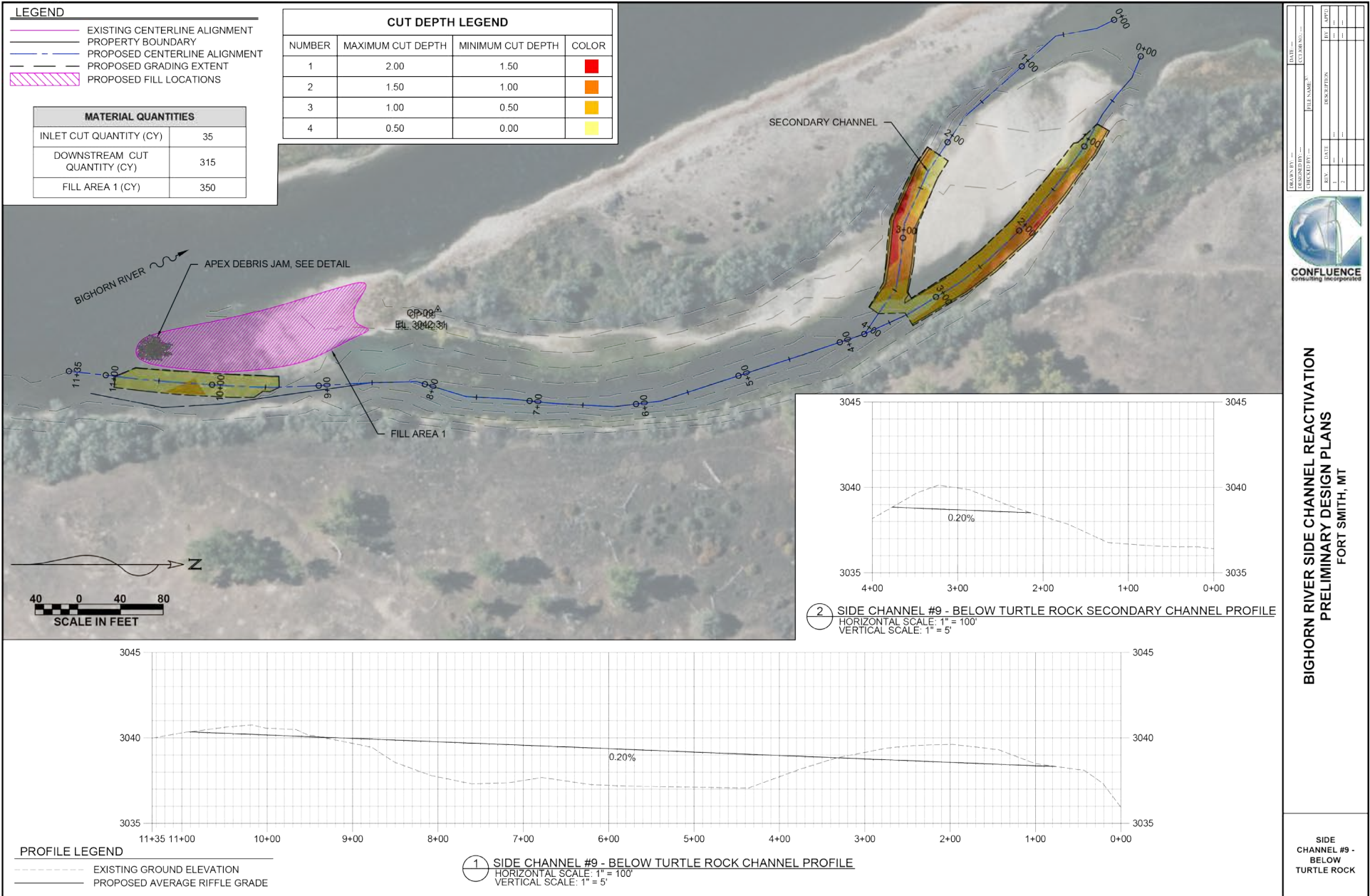


Access Path	
Side Channel	
Ownership Boundry	
Crow Tribal Trust	



# #9 Across from Turtle Rock

# Preliminary Design Plan





## #10 Saint Xavier Bridge

Current Conditions



Picture Date: 9/8/2021 | River Release: 1801 cfs

See Video Here: [https://youtu.be/afRDI\\_3YQcs](https://youtu.be/afRDI_3YQcs)



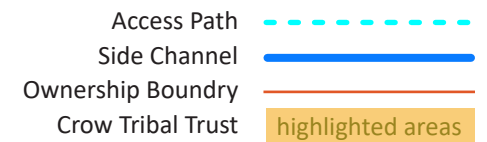
# #10 Saint Xavier Bridge

## Access and Land Ownership Map



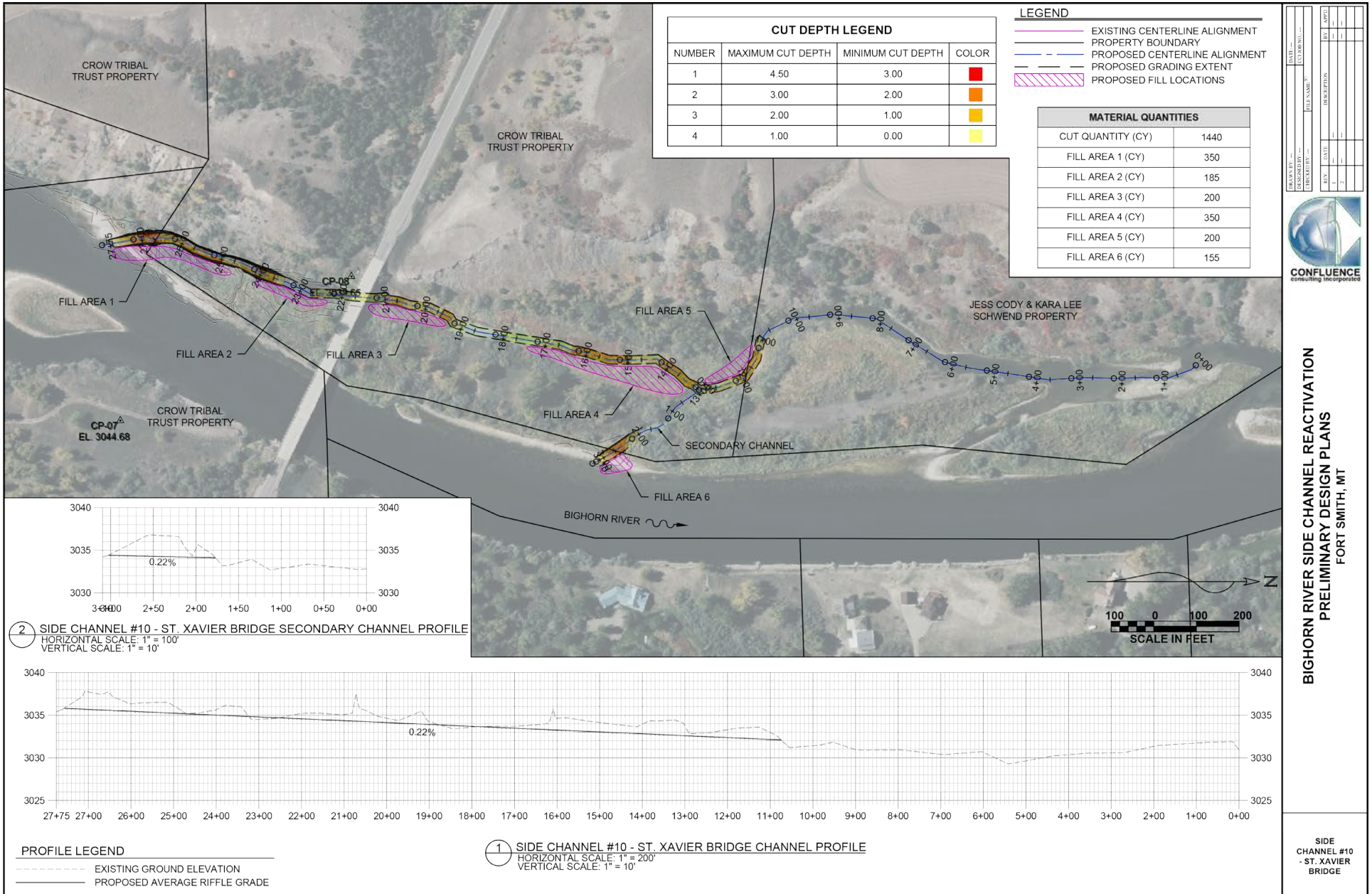
### ACCESS:

1. Crow Tribal



# #10 Saint Xavier Bridge

# Preliminary Design Plan

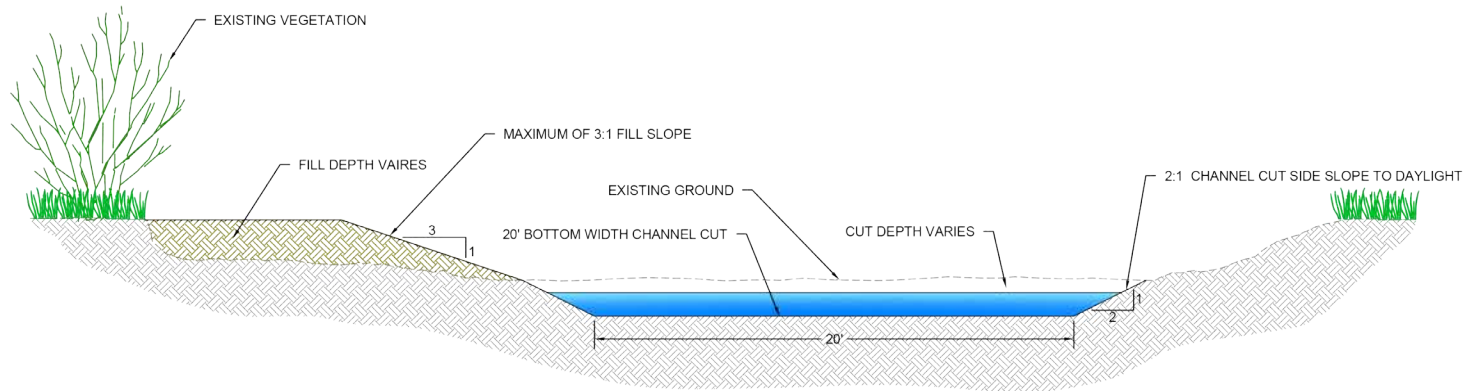


**BIGHORN RIVER SIDE CHANNEL REACTIVATION  
 PRELIMINARY DESIGN PLANS  
 FORT SMITH, MT**

SIDE CHANNEL #10  
 - ST. XAVIER  
 BRIDGE



# Typical Side Channel Cross Section



1 TYPICAL SIDE CHANNEL CROSS SECTION  
NOT TO SCALE

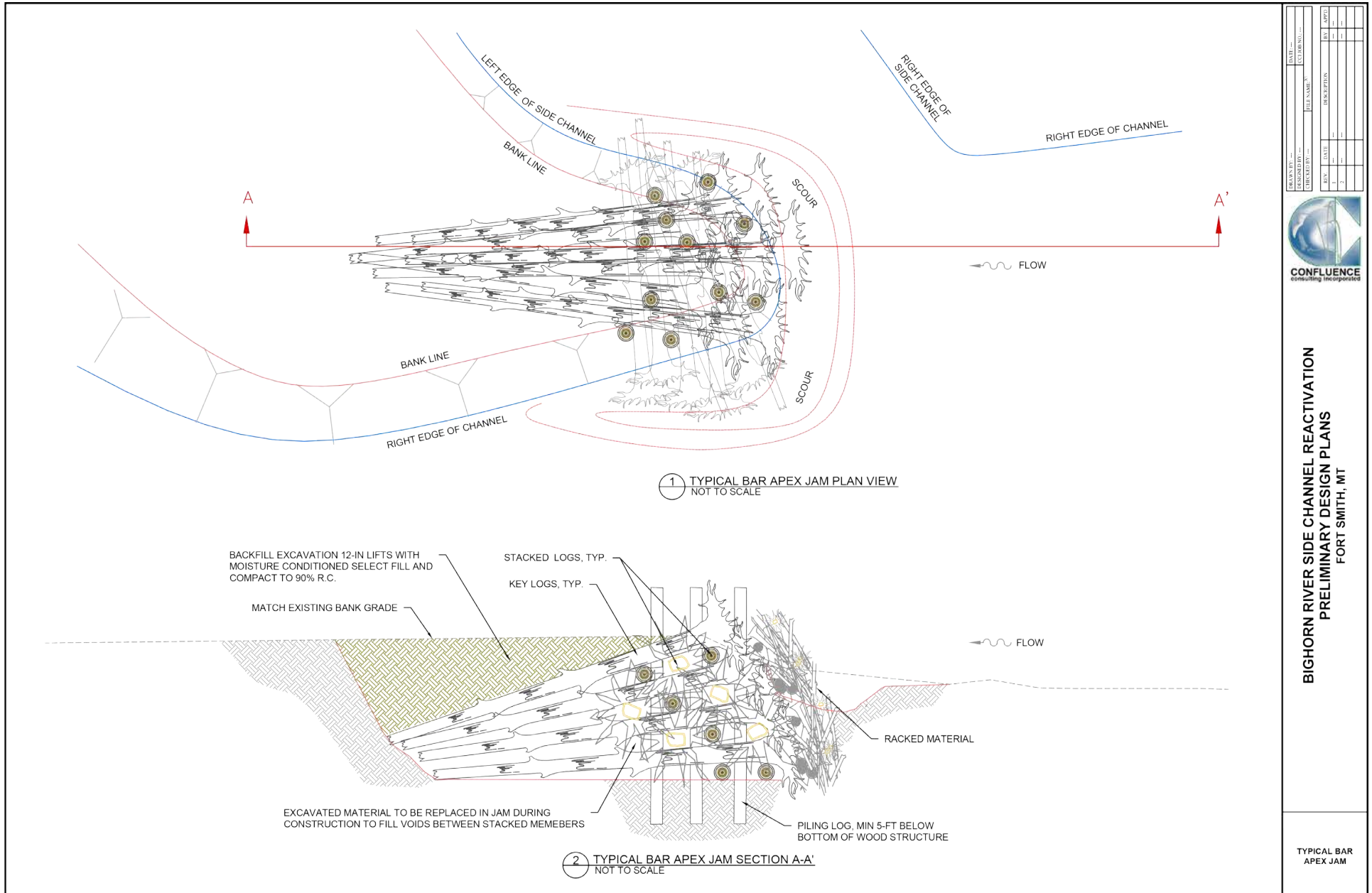
REV.	DATE	DESCRIPTION	BY	APP'D



BIGHORN RIVER SIDE CHANNEL REACTIVATION  
PRELIMINARY DESIGN PLANS  
FORT SMITH, MT

TYPICAL SIDE  
CHANNEL  
CROSS  
SECTION

# Typical Bar Apex Jam



PROJECT NO.	DATE		
DESIGNED BY	DRAWN BY		
CHECKED BY	DATE		
FILE NAME	DESCRIPTION		
REV.	DATE	BY	APP'D



BIGHORN RIVER SIDE CHANNEL REACTIVATION  
 PRELIMINARY DESIGN PLANS  
 FORT SMITH, MT

TYPICAL BAR  
 APEX JAM