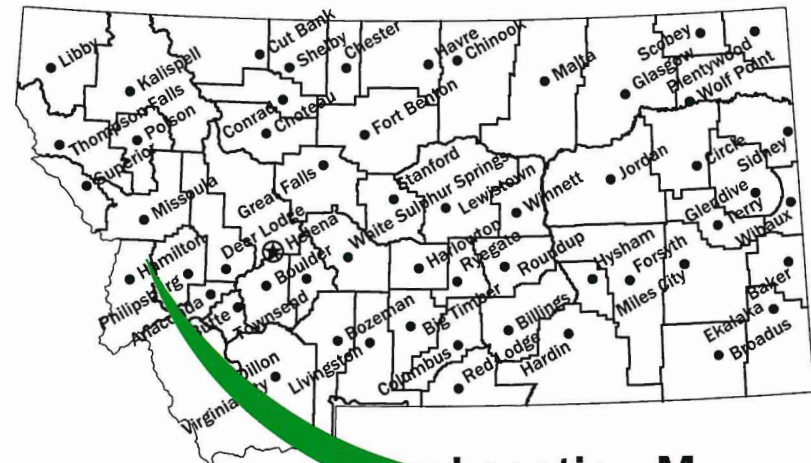


MONTANA FISH, WILDLIFE & PARKS

THREE MILE WMA WHEEL BARROW CREEK BRIDGE REPLACEMENT

near FLORENCE, MT

FWP # 23-03

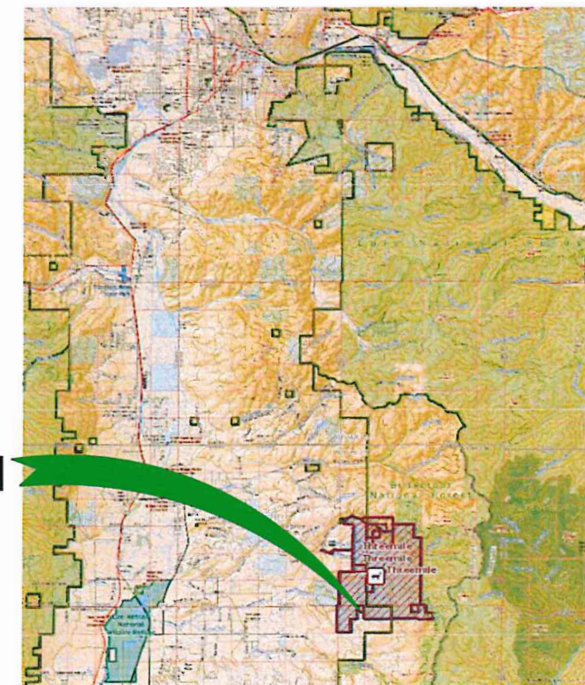


Location Map

No Scale

PROJECT LOCATION

North



Vicinity Map

No Scale

**MONTANA FISH, WILDLIFE AND PARKS
DESIGN AND CONSTRUCTION**

MAILING ADDRESS:
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HELENA, MT 59620-0701
TEL 406.841.4000
FAX 406.841.4004
fwp.mt.gov/Doing Business/Design&Construction

PHYSICAL ADDRESS:
1522 9th AVENUE
HELENA, MT 59601

DRAWING INDEX

- 1 COVER
- 2 SUMMARY
- 3 FULL SITE PLAN
- 4 BRIDGE PLAN
- 5 BRIDGE PLAN



J.MONGOVEN 2022
DRAWN BY: DATE:
JCM 2022
CHECKED BY: DATE:

APPROVED BY: DATE:
APPROVED BY: DATE:

APPROVED BY: DATE:
APPROVED BY: DATE:



MONTANA FISH,
WILDLIFE & PARKS

COVER

Threemile WMA Wheelbarrow Creek Bridge Replacement

SHEET: **1**
of **5**

SUMMARY

ITEM	LOCATION		UNITS	DESCRIPTION
	NORTHING	EASTING		
1	46°34'16.10"N	113°54'1.50"W	1	BRIDGE
2	46°34'33.75"N	113°54'0.36"W	1	18" CULVERT 20'
3	See map			ROAD GRADING

NOTES:

1. ACCESS FOR EQUIPMENT IS DIFFICULT NARROW AND WINDING DIRT ROADS.
2. CONTRACTOR MAY NOT BEGIN WORK AFTER SEPTEMBER 15.
3. THE CONTRACTOR IS REQUIRED TO NOTIFY AND COORDINATE ALL WORK WITH FWP PROJECT MANAGER.
4. SUBMITTALS ARE REQUIRED FOR ALL MATERIALS USED ON THE PROJECT
5. ALL EXTRANEIOUS WORK/COSTS TO COMPLETE THE WORK SHALL BE INCLUDED AND BE CONSIDERED TO FULL PAYMENT AS PER COST PROPOSAL.
6. CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE FWP PROPERTY OR NEIGHBORS. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR TO SATISFACTION OF PROJECT MANAGER.
7. EQUIPMENT USED SHALL NOT LEAK FLUIDS. IT SHALL BE POWER WASHED BEFORE HAULING TO SITE AND EXAMINED BY PROJECT MANAGER
8. EQUIPMENT AND MATERIALS SHALL BE STAGED IN AREAS APPROVED BY THE PROJECT MANGER.
9. CONTRACTOR SHOULD ATTEMPT TO LIMIT TRAVEL OFF OF DESIGNATED ACCESS ROADS.
10. UNLESS OTHERWISE NOTED, CONTRACTOR SHOULD INSTALL BRIDGE AND CULVERT IN PREVIOUS FENCE LOCATION.

J. RENENGER 3/2/2022
 DRAWN BY: DATE:
 P. JAGODA 3/20/2022
 CHECKED BY: DATE:

REVISED BY: DATE:
 APPROVED BY: DATE:

APPROVED BY: DATE:
 APPROVED BY: DATE:



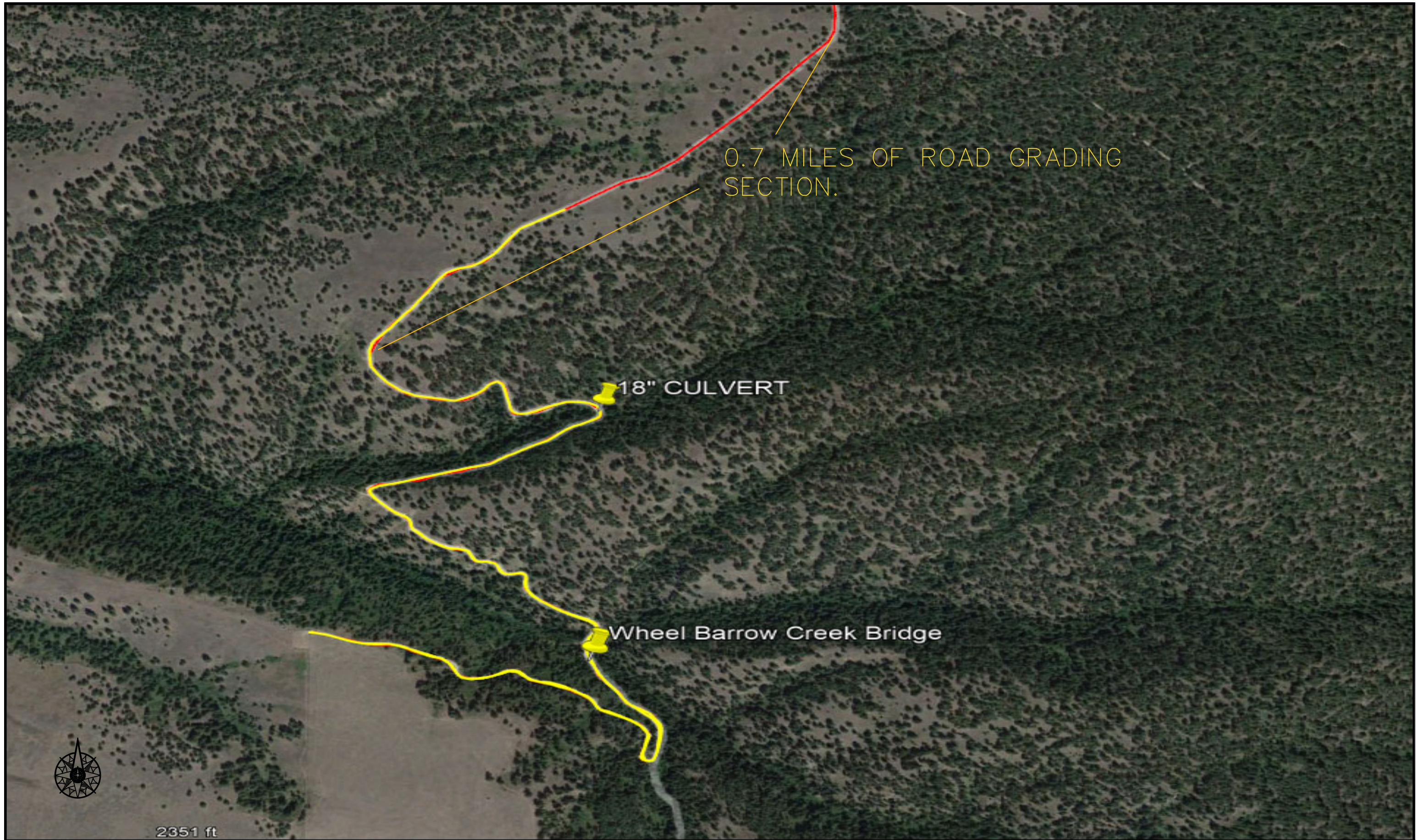
MONTANA FISH,
 WILDLIFE & PARKS

132

SUMMARY

Threemile WMA Wheelbarrow Creek Bridge Replacement

SHEET: 2
 of
 5



0.7 MILES OF ROAD GRADING SECTION.

18" CULVERT

Wheel Barrow Creek Bridge



2351 ft

J. MONGOVEN	2022
DRAWN BY:	DATE:
JCM	2022
CHECKED BY:	DATE:

REVISED BY:	DATE:
APPROVED BY:	DATE:

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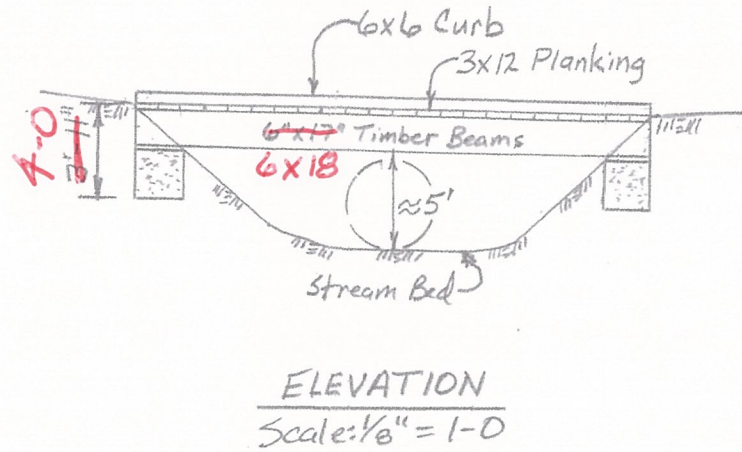
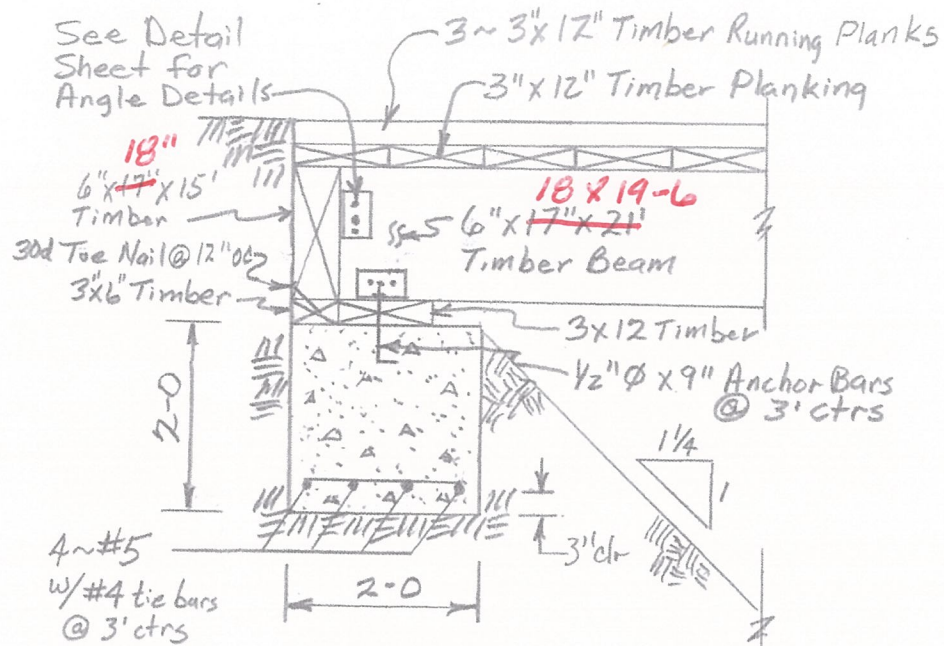
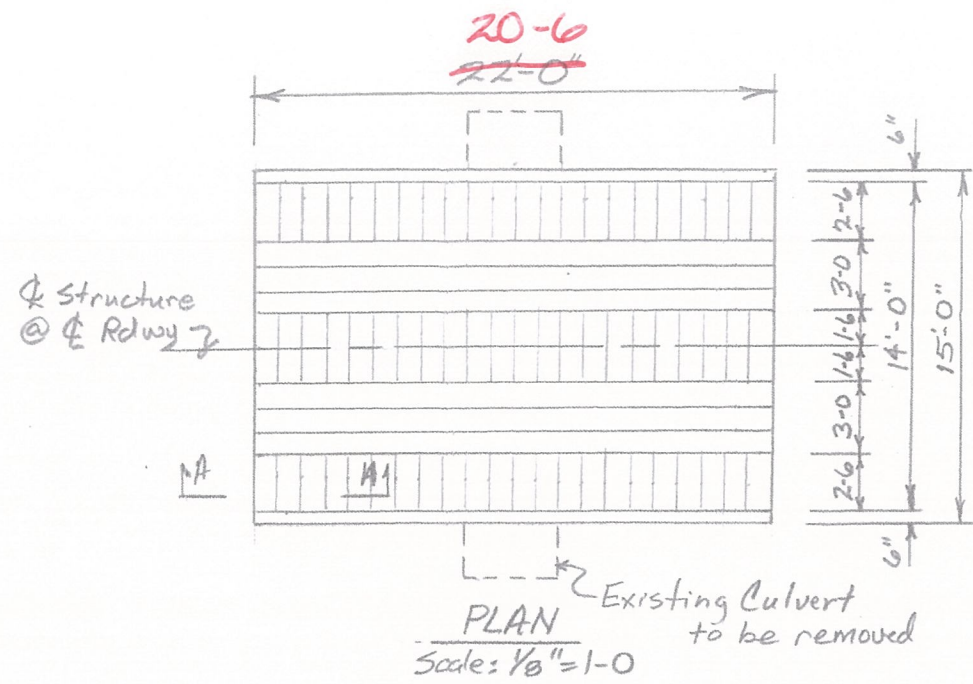


MONTANA FISH,
WILDLIFE & PARKS

LAYOUT

Threemile WMA Wheelbarrow Creek Bridge Replacement

SHEET: 3 of 5



NOTES:

- Loading: HS20-44
- Reinforcing Steel: 60 ksi yield str.
- Concrete: 3500 psi min comp. str.
- Timber: Rough cut #2 Douglas Fir
- Timber Beams, 6" x 17" x 21" backing boards, 6" x 18" x 15" to be furnished by MT DFWP.
- Existing culvert to be removed + properly disposed of by Contractor. Cost of removing + disposing of existing culvert to be included with the channel excavation.
- Precast concrete footings may be substituted for cast in place.
- Structural Steel Quantity include 4x4 Angles, Bolts, + washers.

ESTIMATED PLAN QUANTITIES *								
	Structure Excavation	Concrete	Reinforcing Steel	6x6 Timber Curb	3x12 Timber Planks	3x6 Timber Boards	Structural Steel	Channel Excavation
End Bents	27.8 yd ³	4.4 yd ³	134 lbs					
Superstructure				41 #1nft	438 #2nft	30 nft	538 lbs	
Channel								193 yd ³

*Note: Contractor to verify exact quantities for bidding purposes.

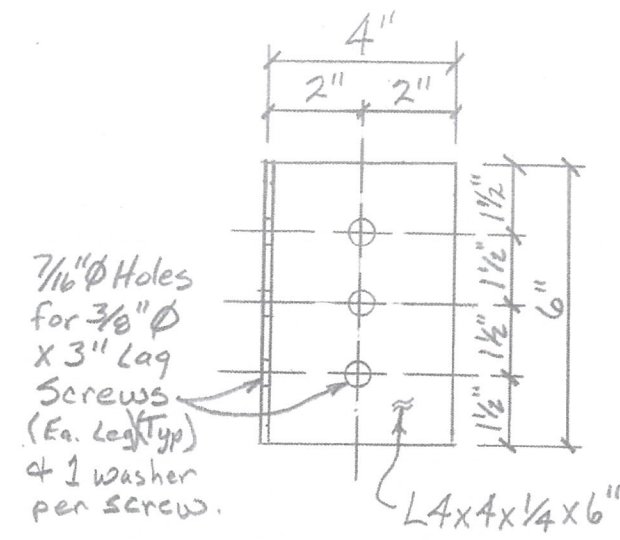
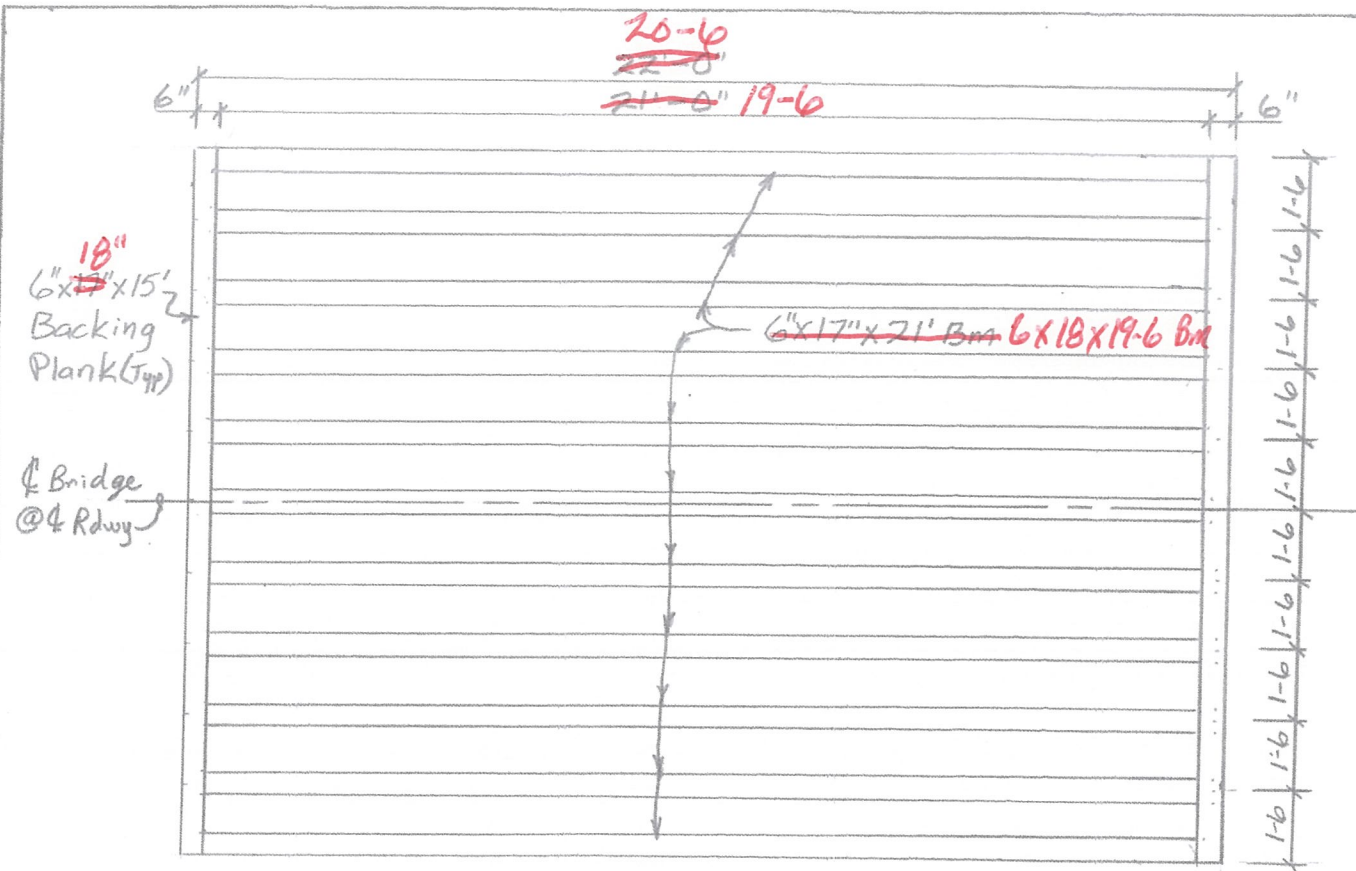
Revised 10/3/22 CDF

Bridge over Wheelbarrow Creek
Threemile Wildlife Management Area
Montana Dept of Fish, Wildlife, & Parks

General Layout
Sheet #1 of 2
Scale: As Noted

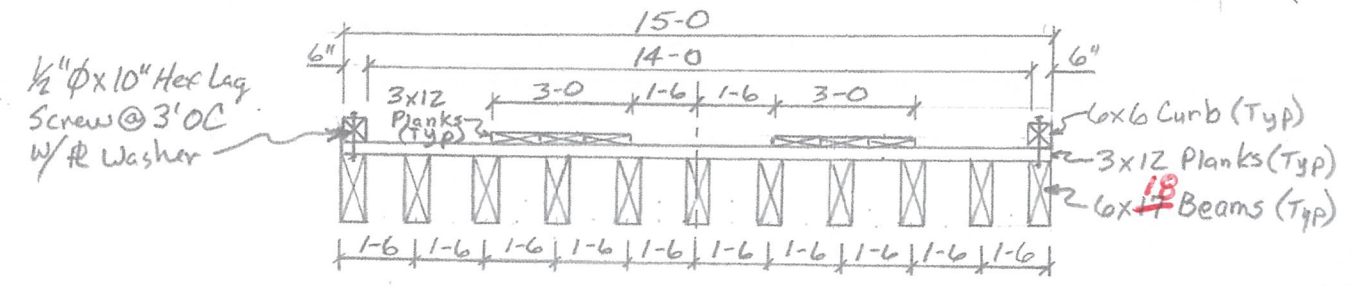
Calvin D. Frank, PE
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Buffalo, MT 59418
(406) 490-2579





Angle Detail
Scale: 3" = 1'-0"

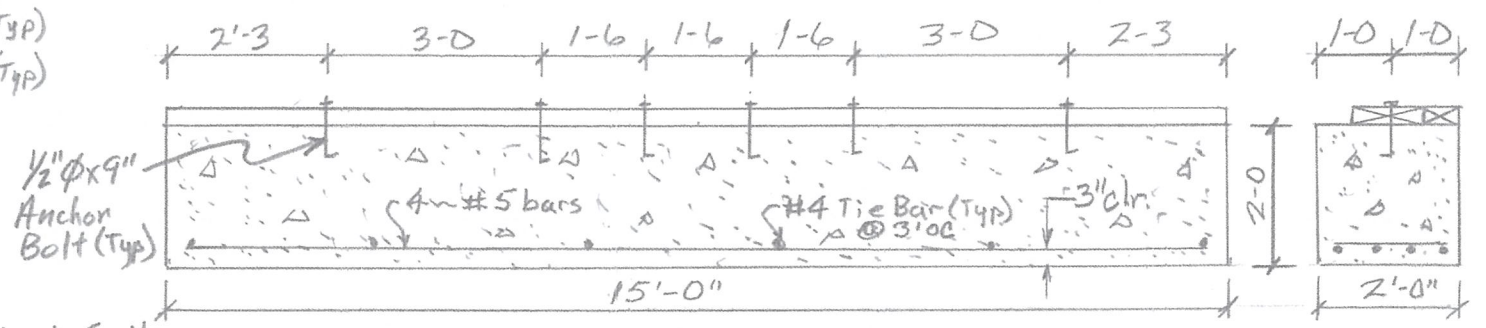
- NOTES:
- Verify exact location for the bridge with DFWP Representative.
 - Use A36 Steel for angles.
 - Use SAE J429 Grade 5 bolts, screws, washers & nuts.
 - Include cost of angles, bolts, screws, washers, & nut in other items.



Bridge Framing Plan & Cross Section
Scale: 1/4" = 1'-0"

Note: Use 6" Ring Shank Spikes (2 ~ 1/6" OC per Plank) to secure Running Planks to Deck Planks.

Note: Use 9" Ring Shank Spikes (2 per plank per beam) to secure deck planks to beams.



Footings Detail
Scale: 3/8" = 1'-0"

Revised 10/3/22 Cal O Jul

Bridge over Wheelbarrow Creek
Threemile Wildlife Management Area
Montana Dept. of Fish, Wildlife & Parks

Miscellaneous Details
Sheet # 2 of 2

Scale: As Noted

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