

#34 Price Co Dalrymple Bridge Rehab

State of Wisconsin
 Department of Natural Resources
 dnr.wi.gov

Motorized Recreation Grant Application

For: (choose all that apply)

Form 8700-159 (R 02/2024)

- ATV/UTV Trail Aid
- Snowmobile Trail Aid

Due Date: April 15

Notice: Completion of this form is required under Wisconsin Statutes 23.09(26) and 23.33. Failure to complete this form will result in denial of financial assistance. Personally identifiable information found on this form is not intended to be used for any other purpose. The Department of Natural Resources (DNR) may provide this information to requesters as required by Wisconsin's Public Records law (ss. 19.31 - 19.39, Wis. Stats.).

Instructions: Applications may combine more than one source of funds. They may be submitted for consideration of traditional ATV, UTV, Snowmobile and Motorized Stewardship funding. Submit one copy of all forms and attachments. See Page 2 for necessary attachments. Send applications to your Community Services Specialist.

| DNR Use Only | |
|--------------|--------|
| Category | Number |
| | |

Section 1: Applicant Information

| | | | | | |
|--|--|--------------------|--|--|----------|
| Applicant / Organization Name | | | Check Recipient: Individual other than authorized individual to act on behalf of the applicant. <input checked="" type="checkbox"/> Select if the same as applicant. | | |
| Price County Snowmobile/Price County ATV Association | | | Check Recipient Name (Name to Appear on Check) | | |
| Individual Authorized to Act on Behalf of Applicant per Resolution | | | Evan Lund/Fred Freeman | | |
| Evan Lund/Fred Freeman | | | Title | | |
| Title | | | Snowmobile Coordinator/ATV Coordinator | | |
| Snowmobile Coordinator/ATV Coordinator | | | Address | | |
| Address | | | 104 S Eyder Ave, Rm 205 | | |
| 104 S Eyder Ave, Rm 205 | | | City | | |
| City | | State | ZIP Code | | City |
| Phillips | | WI | 54555 | | Phillips |
| Telephone Number | | Email Address | | | |
| (715) 339-2550 | | lcd@co.price.wi.us | | | |

Section 2: Project Information Required for all Projects

| | | | | | | |
|--|----------|-------|---------|---------|----------------------|---------------------------|
| Project Title | | | | | Current Funded Miles | New Miles (if applicable) |
| DALRYMPLE ATV/SNOWMOBILE TRAIL OVER SAILOR CR. | | | | | | |
| County | Township | Range | Section | 1/4 1/4 | 1/4 | GPS Coordinates: |
| Price | 39 N | 1 | 14 | NE | SW | Lat. 45.849995 |
| | | | | | | Long. -90.347882 |

Project Description Summary

The Dalrymple bridge is located on Trail 118G-102 which is an ATV/UTV and snowmobile in Price County, on the Medford- Park Falls Ranger District of the Chequamegon-Nicolet National Forest. This bridge was inspected by a professional engineer who recommended that the load rating be posted to two tons following load rating. The bridge has both substructure and superstructure in poor condition (NBI conditions of 3 and 4 respectively).

The proposed bridge would replace the existing bridge to fully reopen this segment of trail. The proposed bridge is a 45' single-span bridge on glulam girders. This bridge provides a long-term site solution which facilitates all trail users. The bridge additionally increases hydraulic capacity dramatically, increases freeboard during flood events, widens the previously pinched stream channel at the bridge location, and improves trail horizontal alignment to prevent groomer strike damage which was previously common.

The County requests that grant funds be split between snowmobile and ATV funds.

USFS has completed H&H study, wetland delineation and engineering. Total Grant request \$191,384 with RTP at 80% and remainder split 50/50 ATV/Snow

I certify that all maintenance land use agreements are on file.

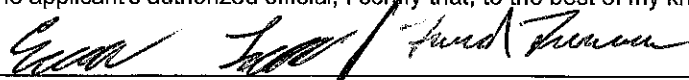
Estimated Cost

| Maintenance | Acquisition | Insurance | Development | Bridge Rehab. | Trail Rehab. | Total Estimated Cost |
|-----------------------------------|-------------|-----------|-------------|-------------------------|--------------|-------------------------|
| | | | | \$115,427.00 | | \$115,427.00 |
| Leave Blank - DNR Use Only | | | | | | |
| | | | | \$191,384.00 | | \$191,384.00 |

Applicant Certification

| | |
|-------------------------------------|-----------------------------|
| Printed Name of Authorized Official | Official's Title |
| Evan Lund/Fred Freeman | Snowmobile/ATV Coordinators |

As the applicant's authorized official, I certify that, to the best of my knowledge, the information in this application is true and correct.


 Signature of Authorized Official

4/11/24
 Date Prepared

Appendix A – Required for Bridge Rehab/Replace, New, or Reroute with New Bridge

Bridge Rehab/Replace New Bridge Reroute with new bridge

| | | | | | | | |
|--|------------------|---------------|---|---|-----------|--|--|
| County Price | Township 39 N | Range 1 | <input checked="" type="radio"/> E <input type="radio"/> W | Section 14 | ¼ ¼ NE | ¼ SW | GPS Coordinates: Lat. 45.849995 Long. -90.347882 |
| Water Body Name Sailor Creek | | | | Bridge Name Dalrymple Bridge | | County Inventory Number Price #17 | |
| Funded Trail Name or Number (SNARS if applicable) Trail 102 | | | | Has this bridge site ever received development or rehabilitation funds in the past? <input type="radio"/> Yes <input checked="" type="radio"/> No Year: _____ \$ _____ | | | |
| Bridge is located on: <input type="radio"/> Private property <input checked="" type="radio"/> Public property | | | | Old Bridge/Culvert Size 32.8' long x 12' wide. New Bridge/Culvert Size 47' total length x 12' clear width. | | | |
| Landowner Where Bridge is Located US Forest Service | | | | Telephone Number (715) 663-1801 | | Length of Trail Use Agreement (5 year minimum) NA - Public Land | |
| Current maximum load 4,000 lbs. | | Age of Bridge | | Bridge Material | | | |
| Proposed maximum load 25,000 lbs. | | 35 | | Log stringer superstructure with a timber deck. | | | |
| Sponsoring Club Name | | | | Club Contact | | Telephone Number | |
| Do you have your trail bridges posted as to maximum load? <input checked="" type="radio"/> Yes <input type="radio"/> No | | | | What is the maximum load of the other bridges on the system if groomed with this bridge? 25,000 lbs. Designed to H-12.5. | | | |
| What is the weight of your puller & drag/grading equipment? | | | | | | | |
| What other recreational trail uses are planned for this bridge? Snowmobile and ATV/UTV traffic are the only planned recreational uses for this bridge | | | | | | | |
| If there are other Recreational uses planned, how much of the bridge cost will be paid for by non-snowmobile or non-ATV users? N/A | | | | | | | |

- Yes No Have you contacted your local DNR Water Management Specialist (WMS) regarding a permit?
- Yes No Is a permit needed? (Please provide any written correspondence from WMS.)
- Yes No Have you contacted your County Zoning Dept. regarding a floodplain determination? USFS is exempt from county zoning
- Yes No Will an H & H (hydrologic and hydraulic) study be required? study has already been completed and will be part of the permit application

Bridge Project Detailed Description
 This project is for the replacement of an existing snowmobile / ATV trail bridge with a new bridge. The current 33' bridge is nearing the end of its life and is in poor condition. A 2022 load rating determined a safe load capacity of 2T for the bridge and closure designation. The bridge was previously posted at 10T. The existing bridge superstructure and substructure are both in poor condition (NBI condition ratings of 3 and 4 respectively).

The proposed replacement bridge is fully designed and engineer-stamped with contract documents fully assembled. A geotechnical investigation & report and an H&H analysis & report have both been completed for the project. The proposed bridge is a 45' single-span bridge with glulam girders and concrete abutments anchored with helical piles. The proposed bridge improves hydraulic capacity dramatically, increases freeboard during flood events, and improves trail horizontal alignment to prevent groomer strike damage which was previously common. Additionally, the current bridge constricts the stream channel, increasing flow velocity. The proposed bridge will excavate the fill which constricts the channel and restore bankfull width at the site. The proposed structure will provide a long term solution (50-75 year lifespan) meeting all needs for ATV and snowmobile users.

The County requests that grant funds be split between snowmobile and ATV funds.

Appendix A (continued)

Summarize Costs in Appropriate Categories:

| Bridge Structure | | | |
|-------------------------|-----------------|---|---|
| | | Quote 1 | Quote 2 |
| | | <input type="radio"/> Steel <input checked="" type="radio"/> Wooden | <input type="radio"/> Steel <input checked="" type="radio"/> Wooden |
| Bridge Dimensions: | | <u>45' span x 12' clear</u> | <u>45' span x 12' clear</u> |
| Bridge Manufacturer: | <u>TBD</u> | <u>Contech</u> | |
| Design Weight Load | | <u>25,000 lbs. (H12.5 loading)</u> | <u>25,000 lbs.</u> |
| Cost of Structure: | 1. Engineering | \$ <u>40,930 (complete)</u> | \$ <u>40,930 complete</u> |
| | 2. Structure | \$ <u>144,000 (installed superstructure,</u> | \$ <u>72,250 (materials only)</u> |
| | Subtotal | <u>\$ 184,930</u> deck, & wearing surface | <u>\$ 113,180</u> |

| | | Quote 1 | Quote 2 | |
|----------------------------|----------------------------------|---|---|-----------------------------|
| | | <input checked="" type="radio"/> Contractor or <input type="radio"/> Sponsor Estimate | <input checked="" type="radio"/> Contractor or <input type="radio"/> Sponsor Estimate | |
| Installation Costs: | 1. Engineering | \$ <u>0 (complete - see above)</u> | \$ | <u> </u> |
| | 2. Site Preparation | \$ <u>68,370</u> | \$ <u>68,370</u> | <u> </u> |
| | 3. Abutments | \$ <u>11,800</u> | \$ <u>11,800</u> | <u> </u> |
| | 4. Pilings/Piers | \$ <u>16,000</u> | \$ <u>16,000</u> | <u> </u> |
| | 5. Approaches | \$ <u>10,964</u> | \$ <u>10,964</u> | <u> </u> |
| | 6. Riprap | \$ <u>12,000</u> | \$ <u>12,000</u> | <u> </u> |
| | 7. Labor | \$ <u>NA - all costs are materials installed</u> | \$ | <u> </u> |
| | 8. Equipment Rental | \$ <u>NA - all costs are materials installed</u> | \$ | <u> </u> |
| | 9. Culverts | \$ <u>0 (none present)</u> | \$ | <u> </u> |
| | 10. H & H Study | \$ <u>3,690 (complete)</u> | \$ <u>3,690</u> | <u> </u> |
| | 11. Wetland Delineation | \$ <u>1,890 (complete)</u> | \$ <u>1,890</u> | <u> </u> |
| | 12. Other 15% Contingency | \$ <u>39,470</u> | \$ <u>39,470</u> | <u> </u> |
| | Subtotal | \$ <u>164,184</u> Please also see attached | \$ <u>164,184</u> | \$ <u>124,714.00</u> |
| | Total Cost | \$ <u>349,114</u> detailed engineer's estimate | \$ <u>277,364</u> | \$ <u>237,894.00</u> |

For the application grant, you must take the lowest of the two quotes.

| | |
|---|---|
| Entire Deck and Railing Projects | <input type="radio"/> Contractor <input type="radio"/> Sponsor <input type="radio"/> Club |
|---|---|

| | |
|--------------------|--|
| Bridge Dimensions: | <u> </u> |
| Design Weight Load | <u> </u> lbs. |
| 1. Materials | \$ <u> </u> |
| 2. Labor | \$ <u> </u> |
| Total | \$ <u> </u> |

Subtracting out the Engineering, H&H, and wetland delineation = \$191,384.00

Split 50/50 = \$95,692 each

Guidelines for Applicant

Complete this form for each bridge structure you are submitting a grant application for. Provide any additional documents not requested on application checklist to substantiate your points, including actual deeded easements.

| Category | | Possible Points | Actual Points |
|--------------------|---|-----------------|---------------|
| 1 | Condition of the Structure (max of 10 points) | | |
| | Has a certified bridge inspection report that supports the project & demonstrates need (see example, must provide copy of report by August 1 for 2024 only) | 10 | 10 |
| 2 | Permits (maximum points 4) | | |
| | Consultation with DNR Water Mgmt Specialist has occurred & permit is likely, if needed | 1 | 1 |
| | Permit in hand / Bridge already permitted | 3 | 3 |
| 3 | Funding (maximum points 2) Are other funds already committed? | | |
| | 50% or greater from other funding source(s)? | 2 | |
| | 11% - 49% from other funding source(s)? | 1 | |
| 4 | Length of Written Easements or Land Use Agreement (max points 5)(ch. 23.09(26)(am)1 WI Stats) | | |
| | On public land (County, State, Federal) | 5 | 5 |
| | 10 or more year deeded easement on private land or other public land, for <u>all portions of that trail to the nearest road on each side of the bridge</u> | 5 | |
| | 3-9 year deeded easement on private land or other public land, for <u>all portions of that trail to the nearest road on each side of the bridge</u> | 4 | |
| | 10 or more year deeded easement on private land or other public land, for <u>just the bridge site</u> | 3 | |
| | 3-9 deeded easement on private land or other public land, for <u>just the bridge site</u> | 2 | |
| | 10 or more year land use agreement (LUA, not deeded) on private land or other public land | 1 | |
| | 3-9 year land use agreement (LUA, not deeded) on private land or other public land | 0 | |
| 5 | Miles Impacted – How many miles will need to rerouted if the structure is not replaced? Measured from nearest intersection on both sides of the bridge. (max 4 points) | | |
| | Less than 20 miles | 1 | 1 |
| | 20 miles or more | 3 | |
| | No other snowmobile trails connect. Explain: | 4 | |
| DEDUCTIONS | | | |
| 6 | County Active Project Deduction (maximum deduction 1 point) A snowmobile active project is one that has exceeded it's initial grant period. | | |
| | Two or more active projects - deduct 1 point | -1 | |
| GRAND TOTAL | | | 20 |

Comments/Notes:



Chequamegon-Nicolet National Forest Medford Park Falls Ranger District
Dalrymple Bridge Project

90°19'19"W 90°19'18"W 90°19'18"W 90°19'17"W 90°19'17"W 90°19'16"W 90°19'16"W 90°19'15"W 90°19'15"W 90°19'14"W 90°19'13"W 90°19'13"W 90°19'12"W



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Map Date: 3/22/2024 - JBB

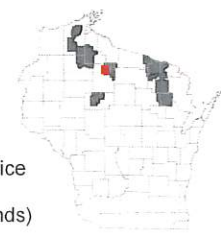
Legend

- Trail
- Dalrymple_Bridge

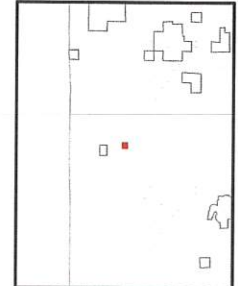
- Water**
- Lakes
 - Marsh
 - Rivers

- Ownership**
- USDA-Forest Service
 - Other (Non-FS Lands)

WISCONSIN



Quad:

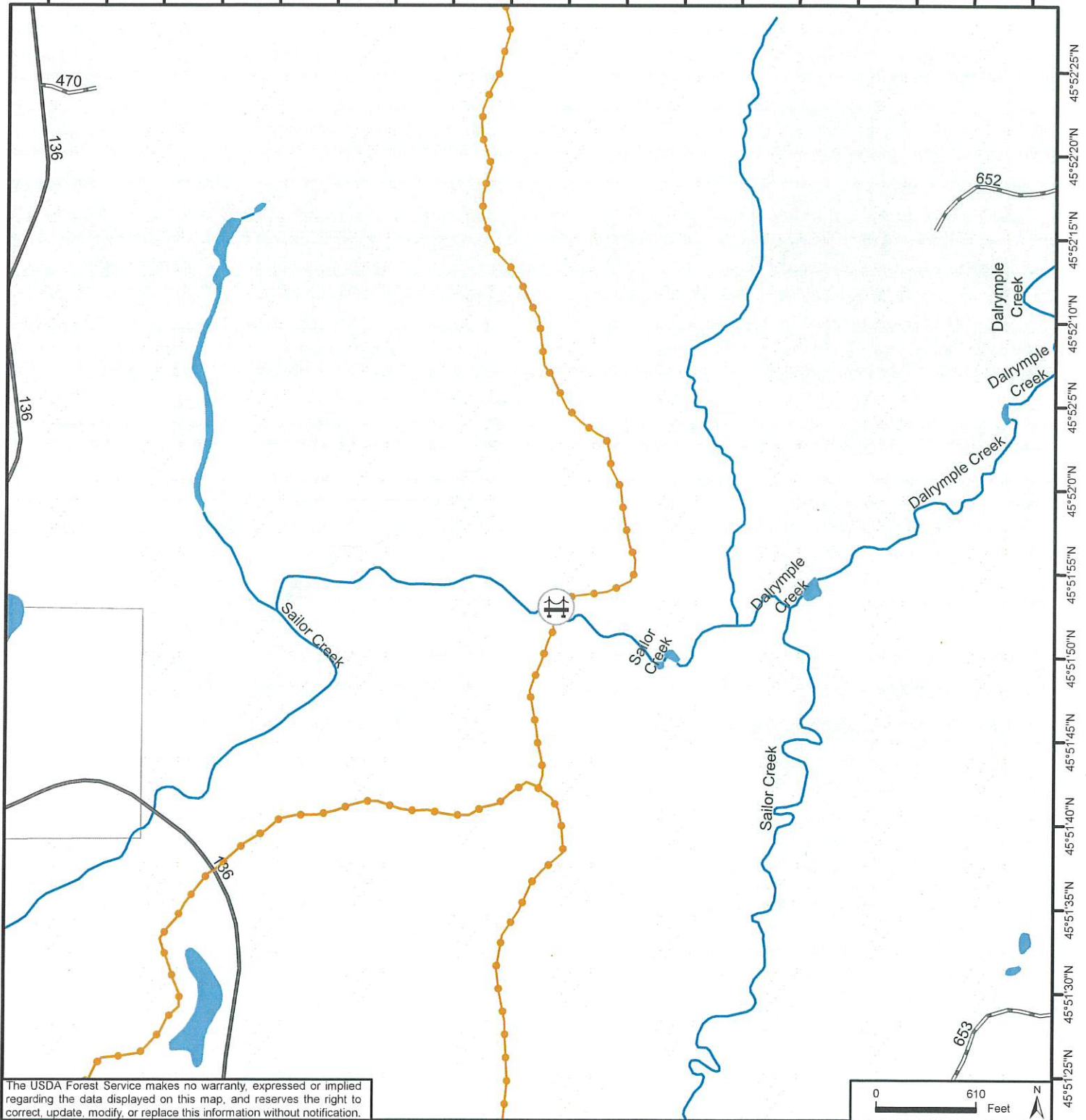




Chequamegon-Nicolet National Forest Medford Park Falls Ranger District

Dalrymple Bridge Project

90°20'0"W 90°19'55"W 90°19'45"W 90°19'35"W 90°19'25"W 90°19'15"W 90°19'5"W 90°19'0"W 90°18'55"W 90°18'45"W 90°18'35"W



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Map Date: 3/22/2024 - JBB

Legend

WI Wetland Inventory
WETCODE

- lowland opening/open water;
- lowland shrub
- lowland forested
- Trail
- Dalrymple_Bridge

Roads and Trails

- Paved
- Dirt

Ownership

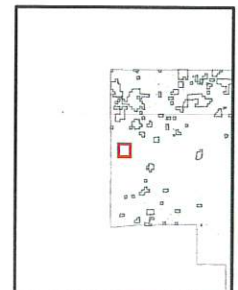
- USDA-Forest Service
- Other (Non-FS Lands)

Water

- Lakes
- Marsh
- Rivers

WISCONSIN

Quad:



1) Example of Bridge Inspection Report

Report Summary

NBI Ratings: 9-7 Good, 6-5 Fair, 4-3 Poor, 2-1 Critical, 0-Closed

| | |
|----------------|-----|
| Deck | # 6 |
| Superstructure | # 6 |
| Substructure | # 4 |
| Channel | # 8 |

Overall Condition Poor

Recommendations/Maintenance Items:

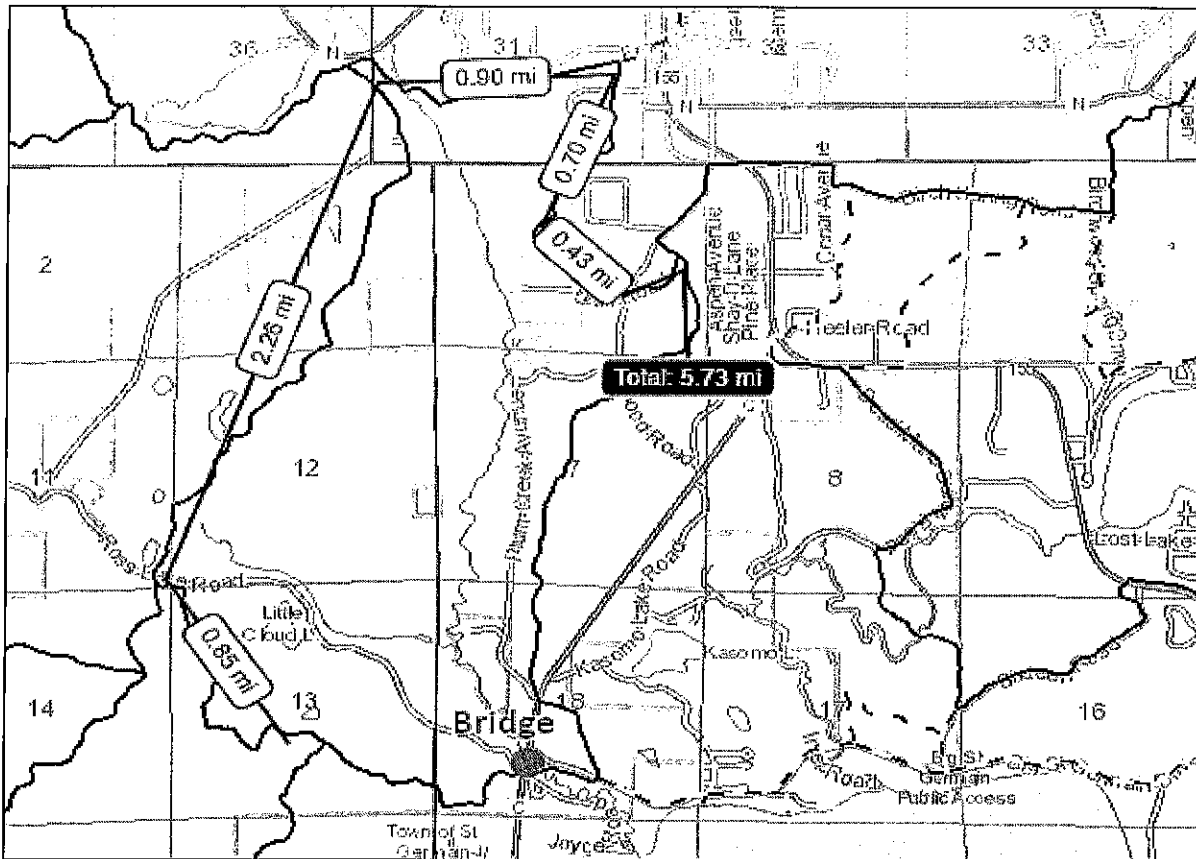
***Keep the deck and superstructure and plan to replace the pier as soon as it can be planned and funded. This bridge should be inspected every 24 months or less. The bent should have diagonal bracing on it.

Fill the approaches in.
Replace West bridge ahead sign.

6) Example of Intersection to Intersection Measurement

If this bridge is closed due to unsafe conditions, how far around would riders need to travel?

In the example below, to bypass the bridge in question, riders would need to travel 5.73 miles on a trail to the NW.



Tr. Bridge Name: DALRYMPLE BRIDGE Feature Crossed: DALRYMPLE CREEK Trail #-MP: 118G-102-2.6780

**TRACS
TRAIL BRIDGE
INSPECTION**

Digitally signed by
PATRICK HAMPSTON
Date: 2022.07.22
07:59:04 -05'00'

| BRIDGE IDENTIFICATION AND LOCATION | | | Category | MAJOR |
|------------------------------------|------------------------|-------------------------|-----------------------|-------|
| Trail Bridge Name: | DALRYMPLE BRIDGE | Trail Number-Bridge MP: | 118G-102-2.6780 | |
| Location: | | Feature Crossed: | DALRYMPLE CREEK | |
| Latitude: | 45.864645 | Longitude: | -90.319377 | |
| Trail Class: | 3 | Designed Use: | 4WD > 50 | |
| Forest/Special Use Unit: | Chequamegon-Nicolet NF | District: | Medford-Park Falls RD | |

STRUCTURE TYPE AND MATERIAL

| | | | | | | |
|---|------------------------------|-----------|---------------------------|-----|------------------------|-----------------------|
| Superstructure | Number of Main Spans: | 1 | Number of Approach Spans: | 2 | | |
| Main Span Type: | DECK GIRDER | Material: | TIMBER, LOG TREATED | | | |
| Quantity and Dimensions (Q x D" x W" x L'): | 6 | x | 15" | x | 15" | 32.3' |
| Approach Span Type: | Choose an item. | Material: | Choose an item. | | | |
| Quantity and Dimensions (Q x D" x W" x L'): | 3 | x | 33" | x | 5 1/8" | 55' |
| Substructure Type: | SPREAD FOOTING | Material: | TIMBER, TREATED | | | |
| Deck Type: | PLANK | Material: | TIMBER, SAWN TREATED | | | |
| Dimensions (D"xW"xL"): | 3" | x | 9.75" | x | 144" | Wearing Surface: NONE |
| User Barrier Rail Type: | POST WITH HORIZONTAL RAILING | | | | | |
| Rail Material: | TIMBER, SAWN TREATED | | Rail Ht: (in) | 37" | Max Rail Opening: (in) | 15" |
| Curb Material: | TIMBER, SAWN TREATED | | Curb (Ht" x W"): | 5" | x | 3.5" |

| Geometry / Design / Rating | | Plan Number: | |
|----------------------------|-------|-------------------------------------|----------|
| Overall Length (ft): | 32.8' | Overall Deck Width (in): | 144" |
| Maximum Span (ft): | 30.2' | Horizontal Clear Width (in): | 136" |
| Clear Span (ft): | 28.9' | Tread Width (in): | 136" |
| Bridge Skew (°): | 0 | Bridge Flare (Y/N): | n |
| | | Service Under Bridge: | WATERWAY |
| | | Vertical Under Bridge Opening (ft): | 5' |
| | | Top of Deck Height (ft): | 6.7' |
| | | Vertical Clear Height (ft): | 99.9' |

Structure Remarks

| Tr. Bridge Name: DALRYMPLE BRIDGE | | Feature Crossed: DALRYMPLE CREEK | | Trail #-MP: 118G-102-2.6780 | |
|-----------------------------------|---|----------------------------------|--|-----------------------------|--|
| Inspection Date: | 7/20/2022 | Inspection Frequency (Months): | 24 | | |
| Inspected by: | Dave Grawwunder, Marc Ankenbauer, Colt Ehrnfeld, Pat Hampston | | | | |
| Description: | Routine | | | | |
| CONDITION CODES and REMARKS | | | | | |
| ITEM | | CODE | REMARKS | | |
| Wearing Surface: | | N | | | |
| 58. DECK: | | 5 | | | |
| Cleanliness | | Good | | | |
| Deck Slab/Panels | | Fair | Generally solid, some wear in wheel paths | | |
| Drains and Drainage | | Good | | | |
| Utilities | | - | | | |
| Deck Joints | | - | | | |
| 36. User Barriers: | | 3 | | | |
| Railing | | Poor | NE corner - two posts broken, one rail broke, curb broken off. Solid elsewhere. Black mold staining throughout. | | |
| Post | | Poor | On west side round posts are loose. | | |
| Curb | | Poor | Missing NE corner. | | |
| 59. SUPERSTRUCTURE (Main Span): | | 4 | | | |
| All | Bearings | - | | | |
| | Paint | - | | | |
| | Bracing | - | | | |
| Flooring | Floor Beams | - | | | |
| | Stringers/Girders | - | | | |
| | Diaphragms/Bracing | - | | | |
| Girder | Stringers/Girders | Poor | Upstream fascia girder has many holes filled with foam. (~15% section loss @ 1/4 span. 3rd girder from upstream is completely rotten at the 1/4 span point. Remaining girders sound punky at surface, assume 1/2" exterior not effective. Metal rods hanging down from fascia girders that can catch debris. | | |
| | | - | | | |
| | | - | | | |
| 59. SUPERSTRUCT (Approach Span): | | NA | | | |
| | NA | - | | | |
| | | - | | | |
| | NA | - | | | |
| | | - | | | |
| | | - | | | |
| | NA | - | | | |
| | | - | | | |
| | | - | | | |
| | | - | | | |

| | | | | |
|--|---------------------------|----------------------------------|---|-----------------------------|
| Tr. Bridge Name: DALRYMPLE BRIDGE | | Feature Crossed: DALRYMPLE CREEK | | Trail #-MP: 118G-102-2.6780 |
| 60. SUBSTRUCTURE: | | 3 | | |
| All | Alignment/Settlement/Skew | Poor | South sill tilted down towards downstream 2.95°. North sill tilted down toward upstream 1.8°. Suspected frost heave or differential settlement. | |
| | Scour/Erosion | Good | Good riprap | |
| Abutments | Backing Plank/Backwall | Fair | | |
| | Gabion/Reinforced Earth | - | | |
| | Sill/Grade Beam | Poor | North sill is completely rotten but not yet crushing. | |
| | | - | | |
| | | - | | |
| | | - | | |
| | | - | | |
| | | - | | |
| Piers | Sill/Grade Beam | - | | |
| | | - | | |
| | | - | | |
| | | - | | |
| | | - | | |
| | | - | | |
| | | - | | |
| | | - | | |
| 61. Channel | | 7 | | |
| Channel Protection | | Good | | |
| Channel Scour/Erosion | | Good | | |
| Vegetation | | Good | | |
| Waterway Obstruction/Drift | | Fair | Remnants of recently removed beaver dam. | |
| TRAIL APPROACHES: | | 7 | | |
| Approach Settlement | | Good | South object markers are too low. All are non-reflective. | |
| Shoulder Embankment | | Good | Needs brushing. | |
| Surfacing | | Good | 10T weight limit signs in place. | |
| 71. WATERWAY ADEQUACY: | | 7 | | |
| Opening/Stream Constraint | | - | | |
| Vertical Underbridge Opening | | - | | |
| Appraisal – Bridge Elements Meet TMO? (Print TMO direct from INFRA Tr. Bridge Module) | | | | |
| COMPONENT | | VALUE | MEET | REMARKS |
| Deck Width | | 144 | Y | |
| User Barrier | | - | N | |
| Bridge Grade | | | Y | |
| Trail Alignment | | | N | |
| Trail Grade | | | Y | |
| Tread Width | | 136 | Y | |
| Other | | | - | |

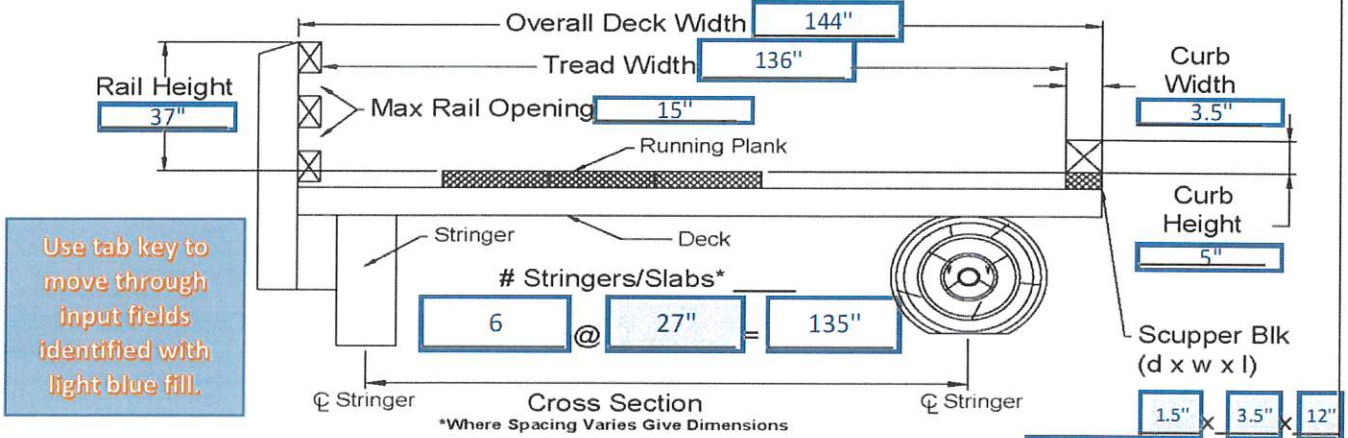
| Tasks | | | | | |
|----------------|---|---------------------------------------|--------------|------------------------------|----------|
| Item Category | Task | | Material | Cost/Unit Severity | Quantity |
| Whole_Bridge | Install new major bridge | | Any material | \$188.58 / SQ FT - Difficult | 520 |
| | Task ID | TB-MAJ-WHL-07A | | | |
| | Comments | | | | |
| Approaches | Restore/improve per bridge | | Any material | \$508.4 / LS | 1 |
| | Task ID | TB-MAJ-APR-DRN-02A | | | |
| | Comments | Heavy brushing around bridge | | | |
| Superstructure | - | | - | - | - |
| | Task ID | - | | | |
| | Comments | Rerate bridge | | | |
| User_Barrier | Repair/replace/install Railing | | Timber | \$44.97 / LN FT | 20 |
| | Task ID | TB-MAJ-RAL-TBR-02A | | | |
| | Comments | Fix NE rail | | | |
| Superstructure | Repair/replace stringers/floor beams/logs | | Any material | - | - |
| | Task ID | #N/A | | | |
| | Comments | Remove metal rods from fascia girders | | | |
| Substructure | Repair/Replace sills or caps | | Timber | \$34.63 / FBM | 1000 |
| | Task ID | TB-MAJ-SUB-TBR-02A | | | |
| | Comments | Level sills and replace north sill. | | | |
| - | - | | - | - | - |
| | Task ID | - | | | |
| | Comments | | | | |
| - | - | | - | - | - |
| | Task ID | - | | | |
| | Comments | | | | |
| - | - | | - | - | - |
| | Task ID | - | | | |
| | Comments | | | | |
| - | - | | - | - | - |
| | Task ID | - | | | |
| | Comments | | | | |
| - | - | | - | - | - |
| | Task ID | - | | | |
| | Comments | | | | |
| - | - | | - | - | - |
| | Task ID | - | | | |
| | Comments | | | | |

| Tasks | | | | |
|---------------|----------|----------|--------------------|----------|
| Item Category | Task | Material | Cost/Unit Severity | Quantity |
| - | - | - | - | - |
| | Task ID | - | | |
| | Comments | | | |
| - | - | - | - | - |
| | Task ID | - | | |
| | Comments | | | |
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| | Task ID | - | | |
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| | Comments | | | |
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| | Task ID | - | | |
| | Comments | | | |

Structure Name: DALRYMPLE BRIDGE Feature Crossed: DALRYMPLE CREEK Trail #-MP: 118G-102-2.6780

Single Span Timber Bridge

All Measurements in Feet and Inches



Superstructure (Pick One): Treated (Y/N) Y

Longitudinal Glulam Slab (Depth to 1/8")

Longitudinal Naillam Slab (Depth to 1/8")

Sawn Stringer (size to nearest 1/8")

Glulam Stringer (size to nearest 1/8")

Log Stringer (Avg diameter in inches) 15" min

Other

Elevation

Deck: Treated (Y/N) Y

Plank (Size) X

Nail-Lam (Depth)

Glulam (Depth)

Other (Size)

User Barrier: Treated (Y/N)

Post HxLxW 51" x 4" x 3.5"

Post Spacing 64

Rail Dims HxW 2" x 5.5"

Rails/Side 2

Scupper Blk/Side 8

Substructure (Pick One)

Piling Crib Other (Describe)

Sill/Grade Beam X Wall

Substructure Material Type (Pick One)

Timber, Treated X Reinforced Concrete

Timber, Untreated Gabion

Steel Other(Describe)

Wearing Surface: Treated (Y/N)

Other None

Steel Running Plank (size)

Timber Running Plank (size)

Aggregate (Depth)

Asphalt (Depth)

Take pictures along bridge surface and underneath to illustrate features ie. wearing surface, railing, stringers/slabs, substructure

** As needed, insert additional pages for photos of structure and/or site.

| | | | |
|-----------------|------------------|------------------|-----------------|
| Structure Name: | DALRYMPLE BRIDGE | Date: | 7/20/2022 |
| Trail #-MP: | 118G-102-2.6780 | Feature Crossed: | DALRYMPLE CREEK |

BRIDGE PHOTOS



South Approach



North Approach

| | | | |
|-----------------|------------------|------------------|-----------------|
| Structure Name: | DALRYMPLE BRIDGE | Date: | 7/20/2022 |
| Trail #-MP: | 118G-102-2.6780 | Feature Crossed: | DALRYMPLE CREEK |

BRIDGE PHOTOS - cont.



Looking Upstream from the Bridge Deck



Looking Downstream from the Bridge Deck

| | | | |
|-----------------|------------------|------------------|-----------------|
| Structure Name: | DALRYMPLE BRIDGE | Date: | 7/20/2022 |
| Trail #-MP: | 118G-102-2.6780 | Feature Crossed: | DALRYMPLE CREEK |

BRIDGE PHOTOS - cont.



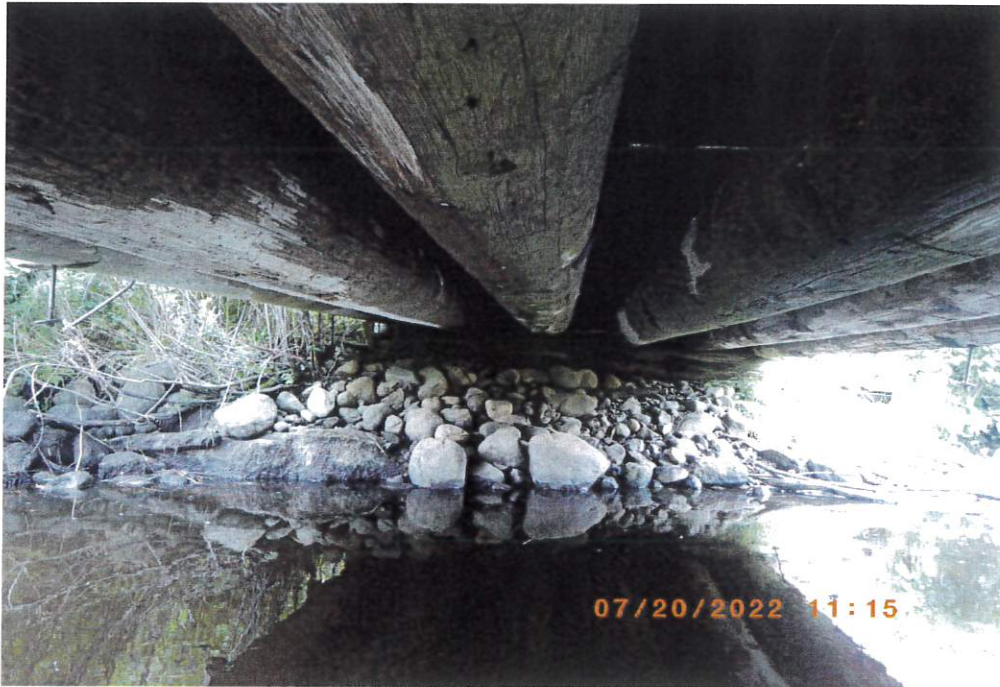
Looking Upstream - Elevation Profile



Looking Downstream - Elevation Profile

| | | | |
|-----------------|------------------|------------------|-----------------|
| Structure Name: | DALRYMPLE BRIDGE | Date: | 7/20/2022 |
| Trail #-MP: | 118G-102-2.6780 | Feature Crossed: | DALRYMPLE CREEK |

BRIDGE PHOTOS - cont.



North Abutment



South Abutment

| | | | |
|-----------------|------------------|------------------|-----------------|
| Structure Name: | DALRYMPLE BRIDGE | Date: | 7/20/2022 |
| Trail #-MP: | 118G-102-2.6780 | Feature Crossed: | DALRYMPLE CREEK |

BRIDGE PHOTOS - cont.



View of Superstructure



View of Deck and Rails

| | | | |
|-----------------|------------------|------------------|-----------------|
| Structure Name: | DALRYMPLE BRIDGE | Date: | 7/20/2022 |
| Trail #-MP: | 118G-102-2.6780 | Feature Crossed: | DALRYMPLE CREEK |

BRIDGE PHOTOS - cont.



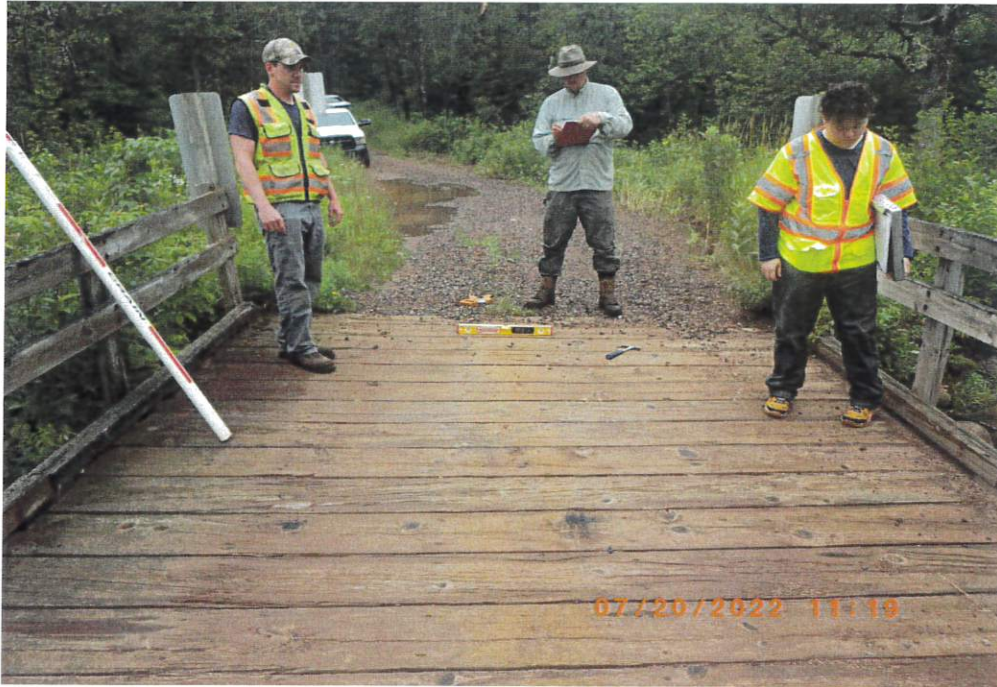
East end of north sill, rotten and delaminated



3rd girder from upstream completely rotten at 1/4 point.

| | | | |
|-----------------|------------------|------------------|-----------------|
| Structure Name: | DALRYMPLE BRIDGE | Date: | 7/20/2022 |
| Trail #-MP: | 118G-102-2.6780 | Feature Crossed: | DALRYMPLE CREEK |

BRIDGE PHOTOS - cont.



Bridge end tilt measurement location (typ)



NE rail section destroyed from groomer impact

FINAL OPINION OF PROBABLE CONSTRUCTION COST - DALRYMPLE TRAIL BRIDGE

Chequamegon-Nicolet National Forest Trail Bridge Design

Chequamegon-Nicolet National Forest

2/16/2024

USDA, Forest Service, Eastern Region - Region 9

Estimate based on Summer 2024 bid.

| ITEM | DESCRIPTION | QUANTITIES | UNIT | UNIT COST | COST |
|---------------------------------|---|------------|-------------|--------------|---------------------|
| 15101 | Mobilization | 1 | Lump Sum | \$10,000.00 | \$10,000.00 |
| 15201 | Construction survey and staking, method II, tolerance class A | 1 | Lump Sum | \$1,700.00 | \$1,700.00 |
| 15205 | Bridge survey and staking | 1 | Lump Sum | \$500.00 | \$500.00 |
| 15212 | Slope, reference, and clearing and grubbing stakes; method II, tolerance class A | 1 | Lump Sum | \$3,400.00 | \$3,400.00 |
| 15217 | Centerline reestablishment, Precision 0.06' | 1 | Each | \$400.00 | \$400.00 |
| 15401 | Contractor testing | 1 | Lump Sum | \$4,050.00 | \$4,050.00 |
| 15713 | Soil erosion and pollution control | 1 | Lump Sum | \$8,300.00 | \$8,300.00 |
| 20158 | Clearing and Grubbing | 1 | Lump Sum | \$2,700.00 | \$2,700.00 |
| 20301 | Removal of bridge, disposal method A | 1 | Lump Sum | \$5,000.00 | \$5,000.00 |
| 20407 | Roadway excavation | 67 | Cubic Yard | \$32.00 | \$2,144.00 |
| 20411 | Unclassified borrow excavation | 136 | Cubic Yard | \$53.00 | \$7,208.00 |
| 20414 | Conserved Top Soil | 1 | Lump Sum | \$1,200.00 | \$1,200.00 |
| 20417 | Embankment construction, compaction placement method A | 164 | Cubic Yard | \$40.00 | \$6,560.00 |
| 20701A | Earthwork geosynthetics, type geotextile, class 1, type A | 230 | Square Yard | \$12.00 | \$2,760.00 |
| 20701B | Earthwork geosynthetics, type geogrid, type IV | 90 | Square Yard | \$4.00 | \$360.00 |
| 20801 | Structure excavation, type bridge | 152 | Cubic Yard | \$50.00 | \$7,600.00 |
| 20803 | Structural backfill, type bridge | 70 | Cubic Yard | \$90.00 | \$6,300.00 |
| 25103 | Placed riprap, class 3 | 150 | Square Yard | \$80.00 | \$12,000.00 |
| 30208 | Aggregate surface course, method 2 | 115 | Ton | \$53.00 | \$6,095.00 |
| 55105 | Helical pile, in place | 80 | Foot | \$200.00 | \$16,000.00 |
| 55201 | Structural concrete, Class AE, Type IA | 9.4 | Cubic Yard | \$1,000.00 | \$9,400.00 |
| 55402 | Reinforcing steel, 60ksi | 1 | Lump Sum | \$2,400.00 | \$2,400.00 |
| 55704 | Structural Timber and Lumber, Glue Laminated Timber and Treated Timber and Lumber | 1 | Lump Sum | \$144,000.00 | \$144,000.00 |
| 62404 | Placing conserved topsoil, 4 inch depth | 22 | Square Yard | \$6.00 | \$132.00 |
| 62550 | Turf establishment | 1 | Lump Sum | \$600.00 | \$600.00 |
| 63305 | Sign, aluminum panel, type engineer grade sheeting | 23.6 | Square Foot | \$22.00 | \$519.20 |
| 63306 | Post, wood 4"x4" | 72 | Foot | \$6.00 | \$432.00 |
| 63307 | Object marker, type 3 | 4 | Each | \$51.00 | \$204.00 |
| 63312 | Remove signs and posts | 1 | Lump Sum | \$390.00 | \$390.00 |
| 63501 | Temporary traffic control | 1 | Lump Sum | \$780.00 | \$780.00 |
| SUBTOTAL | | | | | \$263,134.20 |
| CONSTRUCTION CONTINGENCY | | | | 15% | \$39,470.13 |
| CONSTRUCTION COST TOTAL | | | | | \$302,604.33 |

PROJECT: Dalrymple Trail
Price County, Wisconsin



Wheeler Lumber LLC
Jake Silkey
jsilkey@wheeler1892.com
262.229.4068

BID DATE:

Stringer Recreation Bridge Kit

| | | |
|-------------------------------|---------------------------------------|---------------------------------|
| Bridge Size: 45' x 12' | | |
| Live Load: 90 psf | Vehicle Load: H12.5 | Design Code: AASHTO LRFD |
| Stringers: Glulam | Species: DF | Treatment: QNAP |
| Decking: Wood plank | Species: DF | Treatment: QNAP |
| Railing: Wood | Species: DF | Treatment: QNAP |
| | Safety Railing: 42" Horizontal | Rail Spacing: FS Design |

Item Lump Sum... \$72,250.00

Additional Notes:

- Douglas Fir timber to be pressure treated with Copper Naphthenate (QNAP) in Type A Hydrocarbon Solvent in accordance with AWPA P-36-22 and HSA-23 to meet AWPA UC4B & UC4C.
- All practical pre-framing to be done prior to treatment. Some field cutting and drilling may be required.
- All Douglas Fir to be graded per WCLIB Standard Grading Rules.
- Includes associated hardware. Hardware to be hot-dipped galvanized or coated to meet ICC AC-257.
- Material certification may not be available for all hardware. Some items may not meet Buy America requirements.
- Bridge to be shipped in pieces as a field assembled kit.
- Substructures to be designed and supplied by others.
- Does not include the cost of unloading and installation.
- The method and sequence of erection shall be the responsibility of others.
- Wheeler will include bridge superstructure plans sealed by a Professional Engineer registered in the state of the bridge location. Wheeler will not assume responsibility as Engineer of Record for the project.

PRICE COUNTY SNOWMOBILE TRAILS ASSOC., INC.



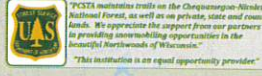
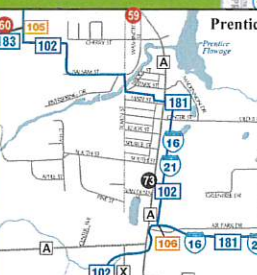
- | | | | | | |
|---------------------------------------|--|------------------------------|--------------------------------------|--|--|
| 1. MIDWAY BAR | 13. JACK'S CORNER BAR | 25. KOUNTRY KAFE & BAR | 37. BADGER'S SPORTS BAR & GRILL | 50. COMFORT COVE RESORT | 63. JOHN & HEIDI'S HAPPY DAZE BAR & RESTAURANT |
| 2. MT POCKETS | 14. ROUND UP BAR & GRILL | 26. 9 MILE TAVERN | 38. THE 173 | 51. KWIK TRIP PHILLIPS | 64. SQR SERVICE STATION #721 |
| 3. BOBBER'S ON THE LAKE | 15. SUGARBUSH BAR | 27. BIG BEAR LODGE, INC. | 39. RED PINES RESORT & SUITES | 52. SUNSET BAY ON SOLBERG LAKE | 65. RAB'S EXTRA INNINGS |
| 4. SIEG'S outhouse BAR | 16. FRONTIER INN | 28. FLAMBEAU FOREST INN | 40. BURGERS BAR & GRILL | 53. SUNSET HAVEN RESORT/ POLISH PALACE BAR | 66. THE RAIL TRAIL CAFE |
| 5. BUTTERNUT LAKE LODGE | 17. A&J'S SPRINGSTEAD TRADING POST THE BIRCHES | 29. GOEBEL'S SOUTH FORK | 41. A&W | 54. TIMBER'S ROADHOUSE BAR & GRILL | 67. SASSY & WISCO'S IRON COACH |
| 6. RIDGE RUNNERS BAR & GRILL | 18. THE BIRCHES | 30. CRANE CRAB BAR & GRILL | 42. TIMBER INN MOTEL | 55. BUCKSHOT RESORT BAR & GRILL | 68. HARBOR VIEW PUB & CATERY |
| 7. LUGERVILLE CHASERS SNOWMOBILE CLUB | 19. MOOSE JAW/WOODS EDGE | 31. SDO LAKE BAR & GRILL | 43. PRICE COUNTY POWERSPORTS | 56. PHILLIPS CAFE | 69. NORTHWOODS SUPPER CLUB |
| 8. THE BIG DIPPER | 20. THE BIG DIPPER | 32. OXBO RESORT | 44. PHILLIPS CAFE | 57. PUSAK'S TAVERN | 70. ZONDLO'S BAR, LLC |
| 9. DOUBLE D'S PUB & PIZZA, LLC | 21. IDLE HOUR RESORT, LLC | 33. CORNER CONNECTION BAR | 45. MEDFORD COOPERATIVE-CENEX | 58. CHUCK'S LITTLE STATION LLC | 71. PENINSULA PINES RESORT & CAMPGROUND |
| 10. THE LANES/NORTHERN LIGHTS INN | 22. MUSTY JACK'S | 34. RASMUSSEN SERVICE CENTER | 46. SUPER 8 | 59. CROSSING POINT CAFE | 72. SALOR'S II |
| 11. OK CORRAL | 23. WINTERGREEN LAKE RESORT | 35. FLYWAY RESORT | 47. PHILLIPS LANES | 60. APE HANGERS SALOON & GRUB | |
| 12. J&A SERVICES | 24. MERRI CASSIDY'S SALOON | 36. HIDDEN COVE RESORT | 48. JOHN'S 3 MILE CORNER BAR & GRILL | 61. CATAWBA FEED & FOOD SUPPLY | |



The represented clubs request your patronizing of our sponsors. Watch for our sign on their establishments.

Snowmobile operators. Be Safe, never travel alone. The Price County Snowmobile Trails Association and private land owners assume no liability as to trails, machines or individuals. Please respect private and no trespassing signs. Do not operate snowmobiles on highways. Use extreme caution on lakes and streams. Obey all state laws and local ordinances. Speeding on the trail is extremely dangerous to you and to others. Remember to travel the trails in a safe and sane manner. Be prepared to stop. Happy Snowmobiling.

Thank Our Volunteers & Sponsors.



NOTICE
STAY ON TRAILS
\$100 REWARD
FOR INFORMATION LEADING TO THE ARREST AND CONVICTION OF ANYONE OWNING OR USING A SNOWMOBILE ON THESE TRAILS INCLUDING DESTRUCTION OF SIGNS, ETC.

Price County Snowmobile Trails Assn., Inc.



- THE PRICE COUNTY SNOWMOBILE TRAILS ASSN. PROMOTES SAFE SNOWMOBILING AND ENCOURAGES SNOWMOBILERS TO:
1. NOT EXCEED 55 MPH. ON WOODED TRAILS
 2. NOT EXCEED 55 MPH. ON OPEN TRAILS
 3. REDUCE SPEED AT CURVES, BLIND SPOTS AND CROSS TRAILS.
 4. REDUCE SPEED FOR POOR TRAIL CONDITIONS IN BAD WEATHER AND
 5. NOT DRIVE AT ALL WHILE INTOXICATED

Price County Snowmobile Trails Assn., Inc.
P.O. Box 26 | Phillips, WI 54555
<https://lawsc.org/Clubs/Club-Listing?county=Price#list>

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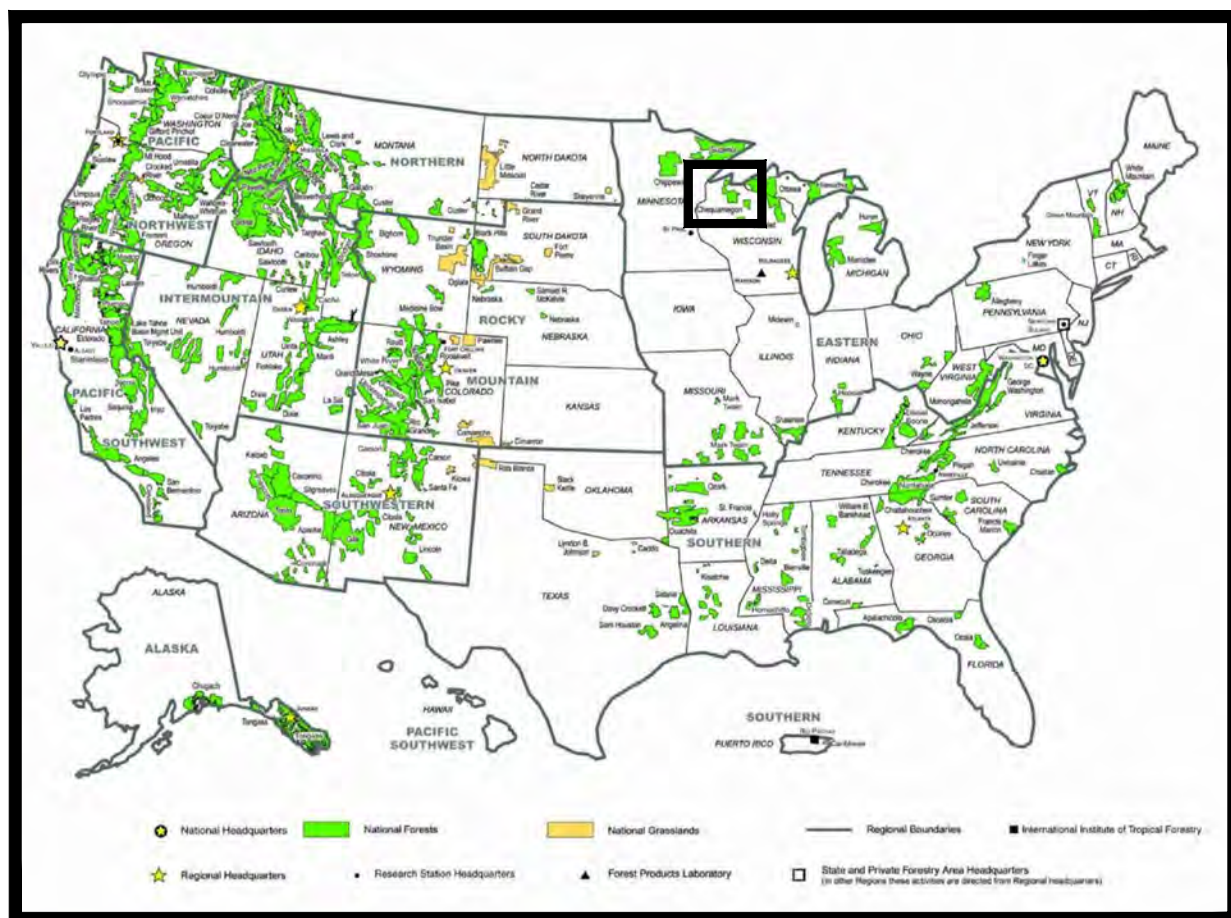


United States Department of Agriculture
Forest Service

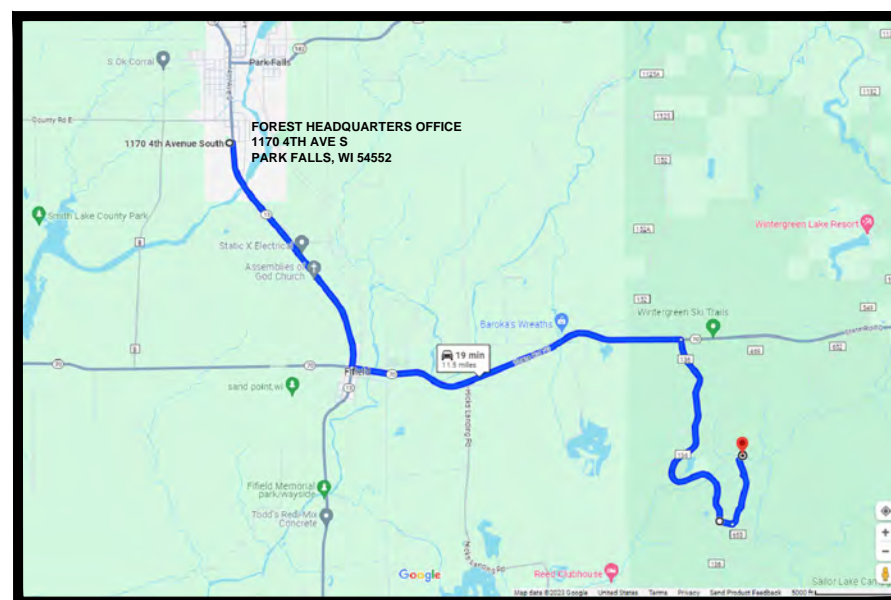
WISCONSIN
PRICE COUNTY
(R09) EASTERN REGION
CHEQUAMEGON-NICOLET NATIONAL FOREST
MEDFORD - PARK FALLS RANGER DISTRICT

STRUCTURE NO. 091301-118G-102-0.0 DALRYMPLE ATV/SNOWMOBILE TRAIL OVER SAILOR CR.

| INDEX OF SHEETS | | |
|-----------------|--|-----------|
| SHEET | SHEET TITLE | DATE |
| G-01 | COVERSHEET | 2/26/2024 |
| C-01 | GENERAL NOTES, CONTROL POINTS, AND QUANTITIES | 2/16/2024 |
| C-02 | QUANTITIES AND ITEM TABLES | 2/16/2024 |
| C-03-04 | ITEM TABLES | 2/16/2024 |
| C-05 | TEMPORARY TRAFFIC CONTROL AND OVERVIEW | 2/16/2024 |
| C-06 | EROSION CONTROL PLAN AND TRAIL TYPICAL SECTION | 2/16/2024 |
| C-07-09 | PLAN AND PROFILE | 2/16/2024 |
| C-10-13 | DETAILS | 2/26/2024 |
| C-14-17 | CROSS SECTIONS | 2/16/2024 |
| S-01 | STRUCTURE GENERAL PLAN | 2/26/2024 |
| S-02 | STRUCTURE GENERAL NOTES | 2/26/2024 |
| S-03 | GEOTECHNICAL BORINGS | 2/16/2024 |
| S-04-05 | ABUTMENTS | 2/26/2024 |
| S-06 | SUPERSTRUCTURE AND DECK | 2/26/2024 |
| S-07 | TYPICAL SECTION AND RAILING | 2/26/2024 |

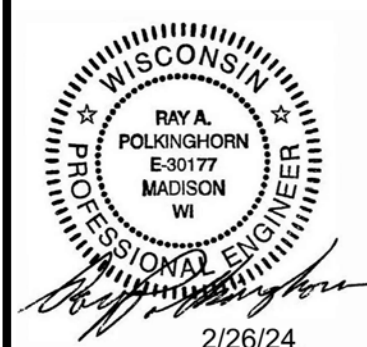


FOREST LOCATION MAP



PROJECT LOCATION MAP

TRAVEL DIRECTIONS:
FROM THE FOREST HEADQUARTERS OFFICE, TRAVEL FROM PARK FALLS, HEAD SOUTH ON STATE HIGHWAY 13 FOR 3.2 MILES, TURN LEFT ONTO STATE HIGHWAY 70 AND TRAVEL EAST FOR 4.2 MILE, TURN RIGHT ONTO NORTH GATES LAKE ROAD AND TRAVEL FOR 3.0 MILES, TURN LEFT (EAST) ONTO FOREST ROAD 653 AND TRAVEL 500-FEET, TURN LEFT (NORTH) ONTO SNOWMOBILE TRAIL 121A AND TRAVEL 0.9 MILE, FIFIELD, WI 54524. LATITUDE 45.849995 AND LONGITUDE -90.347882.



STAMP FOR SHEETS C-01 THROUGH C-17.

CEDP, Inc.
Consulting Engineers & Design Professionals
6426 Offshore Drive
Madison, WI 53705
608-467-4900 | www.CEDP.us



STAMP FOR SHEETS S-01 THROUGH S-07.

ART JOHNSTON, LLC
37 N. 93RD AVE. W
DULUTH, MN 55808
715-360-6629

RECOMMENDED BY:

FOREST ENGINEER _____
DISTRICT RANGER _____
FOREST SUPERVISOR _____
RO BRIDGE PROGRAM MANAGER _____

DATE _____
DATE _____
DATE _____
DATE _____

APPROVED:

DIRECTOR OF ENGINEERING _____

DATE _____

LEGEND

| | | | |
|------------------------------|-------------|-------------------------|-----------|
| ELECTRIC PEDESTAL | ⊞ | LIGHT POLE | * * * * * |
| TELEPHONE PEDESTAL | ✕ | SINGLE POLE SIGN | * * * * * |
| BOLLARD | • | MARK CMK | * * * * * |
| CLEAN OUT | ⊙ CO | GAS VALVE | * * * * * |
| WATER VALVE | • WV | CONTROL POINT | ⊙ SAN |
| MAIL BOX | ⊞ | SANITARY MANHOLE | ⊙ SAN |
| STORM SEWER MANHOLE | ⊙ SS | INLET FLOOD DRAIN | ⊙ SAN |
| FIRE HYDRANT | ⊙ | YARD LIGHT | ⊙ SAN |
| POWER POLE | ⊞ | SATELLITE DISH | ⊙ SAN |
| FLAG POLE | • FLAG | WITNESS CORNER MONUMENT | ⊙ SAN |
| BENCHMARK | ⊙ | LIGHT POLE MAST ARM | ⊙ SAN |
| LAND CONIFEROUS SHRUB | ⊙ | ELECTRIC/GAS METER | ⊙ SAN |
| LAND DECIDUOUS TREE | ⊙ | | |
| EXISTING SANITARY SEWER LINE | — SAN — SAN | | |
| BURIED GAS LINE | — G — G | | |
| BURIED ELECTRIC LINE | — E — E | | |
| EXISTING STORM SEWER LINE | — SS — SS | | |
| BURIED WATER SERVICE | — W — W | | |
| OVERHEAD UTILITY | — OH — OH | | |
| UNDERGROUND TELEPHONE LINE | — T — T | | |
| UNDERGROUND FIBER OPTIC | — FO — FO | | |
| SECTION LINE | --- | | |
| PROPERTY LINE | --- | | |

ABBREVIATIONS

| | |
|-------|-----------------------|
| AGG. | AGGREGATE |
| ASPH. | ASPHALT |
| BM | BENCHMARK |
| CP | CONTROL POINT |
| DIA. | DIAMETER |
| EX. | EXISTING |
| FT | FOOT |
| IN | INCH |
| LHF | LEFT HAND FORWARD |
| MAX. | MAXIMUM |
| MIN. | MINIMUM |
| NOR. | NORMAL |
| RHF | RIGHT HAND FORWARD |
| SHLD | SHOULDER |
| STA. | STATION |
| TYP. | TYPICAL |
| PC | POINT OF CURVATURE |
| PI | POINT OF INTERSECTION |
| PT | POINT OF TANGENT |
| VAR. | VARIES |
| W/ | WITH |

UTILITIES

THERE ARE NO KNOWN BURIED UTILITIES AT THE SITE. BEFORE THE START OF ANY EXCAVATION, A COMPLETE LOCATE OF ALL UTILITIES WITH THE CONSTRUCTION AREA SHOULD BE COMPLETED.

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN.



CALL DIGGERS HOTLINE 1-800-242-8511 TOLL FREE WI STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

HORIZONTAL AND VERTICAL CONTROL

| POINT | LOCATION | | | ELEV. | DESCRIPTION | |
|-------|-----------|---------|-----------|-----------|-------------|-------------------------|
| | STA./OFF. | N | E | | | |
| CP-01 | 9+99.97 | 7.52 | 477214.78 | 790728.64 | 1490.68 | CP |
| BM-02 | 10+65.93 | 15.26' | 477277.19 | 790751.35 | 1488.68 | BM LAG BOLT 12" W BIRCH |
| BM-03 | 11+09.70 | 27.93' | 477318.68 | 790772.36 | 1485.79 | BM LAG BOLT 16" POPPLE |
| CP-04 | 11+34.80 | 10.12' | 477346.12 | 790759.31 | 1485.89 | CP |
| BM-05 | 11+50.95 | -32.06' | 477375.70 | 790724.48 | 1484.71 | BM LAG BOLT 15" MAPLE |
| CP-06 | 11+78.68 | 5.60' | 477384.42 | 790772.47 | 1486.58 | CP |
| CP-07 | 11+75.65 | -10.81' | 477391.66 | 790757.42 | 1486.12 | CP |
| CP-08 | 11+96.87 | -5.49' | 477405.63 | 790774.31 | 1486.38 | CP |
| CP-09 | 12+24.69 | -1.66' | 477425.79 | 790793.91 | 1485.98 | CP |
| CP-10 | 12+48.05 | -17.10' | 477454.80 | 790800.52 | 1485.51 | CP |
| BM-11 | 12+61.39 | -24.82' | 477470.45 | 790809.14 | 1486.12 | BM 1/2" IRON REBAR |
| CP-12 | 12+96.85 | 10.13' | 477452.44 | 790857.02 | 1485.16 | CP |
| CP-13 | 13+20.59 | 5.47' | 477460.60 | 790879.27 | 1485.99 | CP |
| CP-14 | 13+63.06 | 11.72' | 477460.39 | 790922.05 | 1483.95 | CP |
| CP-15 | 14+24.37 | 9.63' | 477471.27 | 790982.61 | 1484.54 | CP |
| CP-16 | 14+56.90 | -0.48' | 477486.09 | 791013.28 | 1486.30 | CP |

SEE SHEET C-05 FOR CP AND BM LOCATIONS.
 COORDINATE SYSTEM: WisCORS, PRICE COUNTY HORIZONTAL DATUM: NAD83(2011)
 VERTICAL DATUM: NAVD88(2012): US SURVEY FOOT

GENERAL NOTES

- THE GOVERNING SPECIFICATIONS SHALL BE THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS, FP-14, THE LATEST EDITION PUBLISHED BY THE US DEPT. OF TRANSPORTATION.
- THE WORK COVERED BY THESE PLANS INCLUDES TIMBER BRIDGE REMOVAL, CONSTRUCT A GLULAM TIMBER GIRDER BRIDGE AND ABUTMENTS, SIGN REMOVAL, SIGN INSTALLATION, TREE REMOVAL AND CLEARING AND GRUBBING, EARTHWORK, RIPRAP, AGGREGATE SURFACE, LANDSCAPING, AND PLACEMENT OF EROSION CONTROL AND SLOPE PROTECTION.
- THE CONTRACTOR SHALL CONTACT DIGGERS HOTLINE A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL CONDUCT OPERATIONS IN SUCH A MANNER AS TO INSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
- SNOWMOBILE TRAIL 102/121A WILL BE CLOSED TO THRU TRAFFIC AT THE JUNCTION OF TRAIL 102 AND 121A TO THE SOUTH AND AT THE JUNCTION OF TRAIL 102/121A AND FOREST ROAD (FR) 469 DURING CONSTRUCTION. THE CONTRACTING OFFICER SHALL BE NOTIFIED IN WRITING 3 WEEKS PRIOR TO ANY PROPOSED CLOSURE. DURATION OF CLOSURE SHALL NOT EXCEED 60 CONSECUTIVE DAYS. ROAD CLOSURE SIGNING SHALL BE IN PLACE PRIOR TO MOBILIZING EQUIPMENT OR MATERIALS.
- NO MATERIAL SHALL BE CLEANED OR ALLOWED TO ERODE INTO THE WETLANDS, OR STREAM NOR SHALL MATERIAL BE PLACED INTO THE WATER OR WETLANDS EXCEPT AS SHOWN ON THE PLANS.
- ALL DISTURBED GROUND SHALL BE PREPARED, SEEDED AND MULCHED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL IMMEDIATELY STOP WORK AND NOTIFY THE CONTRACTING OFFICER IF HERITAGE RESOURCES OR HUMAN REMAINS ARE ENCOUNTERED.
- ANY HAUL ROADS USED SHALL BE MAINTAINED BY THE CONTRACTOR AS NEEDED AND AS DIRECTED BY THE CONTRACTING OFFICER.
- NO WORK SHALL BE PERFORMED ON FEDERAL HOLIDAYS OR WEEKENDS WITHOUT PRIOR APPROVAL FROM THE CONTRACTING OFFICER.
- THE CONTRACTOR MAY NOT DAMAGE EXISTING LIVE TREES UNLESS INDICATED IN THE PLANS FOR REMOVAL, PRUNING, OR TRIMMING.
- EXCESS EARTHWORK WASTE MATERIAL NOT SUITABLE FOR CONSTRUCTION SHALL BE REMOVED FROM THE PROJECT SITE. NO FILL OR STOCKPILING OF MATERIALS SHALL BE PLACED IN DRAINAGE WAYS THAT LEAD TO LAKES, STREAMS, OR WETLANDS.
- THERE IS NO MERCHANTABLE TIMBER IDENTIFIED FOR THE PROJECT. CLEAR AND GRUB ALL TREES AND BRUSH WITHIN THE LIMITS SHOWN IN THE TYPICAL SECTIONS, PLANS, AND DETAILS, AND AS IDENTIFIED BY THE CONTRACTING OFFICER. REMOVE AND PROPERLY DISPOSE OF SLASH, BRUSH, AND STUMPS OFF OF NATIONAL FOREST PROPERTY.
- REMOVE ALL CONSTRUCTION WASTE FROM THE SITE AND DISPOSE OF PROPERLY OFF OF FOREST SERVICE PROPERTY.
- THE PROPOSED IMPROVEMENTS COVERED BY THESE PLANS ARE IN ACCORDANCE WITH FOREST SERVICE TRAILS MANAGEMENT HANDBOOK #FSH 2309.18, PRECONSTRUCTION HANDBOOK #FSH7709.56, AND TRANSPORTATION STRUCTURES HANDBOOK #FSH 7709.56B WHERE APPLICABLE.
- ALL BACKFILL MATERIAL SHALL BE COMPACTED ACCORDING TO FP-14 SUBSECTION 209.10.
- PROVIDE 100% BIODEGRADABLE EROSION MAT WHEN EROSION MAT IS SHOWN IN THE PLANS.
- IN-STREAM WORK IS RESTRICTED BETWEEN MARCH 1 AND JUNE 15 FOR FISH SPAWNING.



United States Department of Agriculture
Forest Service

(R9)
EASTERN REGION

STAMPS, LOGOS, AND SEALS



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| NO. | REVISION / ISSUE | DATE |

PROJECT NAME

**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE

**GENERAL NOTES AND
CONTROL POINTS**

| | |
|----------------------------|-------------------|
| DATE 2/16/2024 | ARCHIVE NO. |
| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. |
| DRAWN R. POLKINGHORN | C-01 |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 2 OF 25 |

QUANTITIES

| ITEM | DESCRIPTION | QUANTITIES | UNIT |
|--------|---|------------|-------------|
| 15101 | Mobilization | 1 | Lump Sum |
| 15201 | Construction survey and staking, method II, tolerance class A | 1 | Lump Sum |
| 15205 | Bridge survey and staking | 1 | Lump Sum |
| 15212 | Slope, reference, and clearing and grubbing stakes; method II, tolerance class A | 1 | Lump Sum |
| 15217 | Centerline reestablishment, Precision 0.06' | 1 | Each |
| 15401 | Contractor testing | 1 | Lump Sum |
| 15713 | Soil erosion and pollution control | 1 | Lump Sum |
| 20158 | Clearing and Grubbing | 1 | Lump Sum |
| 20301 | Removal of bridge, disposal method A | 1 | Lump Sum |
| 20407 | Roadway excavation | 67 | Cubic Yard |
| 20411 | Unclassified borrow excavation | 136 | Cubic Yard |
| 20414 | Conserved Top Soil | 1 | Lump Sum |
| 20417 | Embankment construction, compaction placement method A | 164 | Cubic Yard |
| 20701A | Earthwork geosynthetics, type geotextile, class 1, type A | 230 | Square Yard |
| 20701B | Earthwork geosynthetics, type geogrid, type IV | 90 | Square Yard |
| 20801 | Structure excavation, type bridge | 152 | Cubic Yard |
| 20803 | Structural backfill, type bridge | 70 | Cubic Yard |
| 25103 | Placed riprap, class 3 | 150 | Square Yard |
| 30208 | Aggregate surface course, method 2 | 115 | Ton |
| 55105 | Helical pile, in place | 80 | Foot |
| 55201 | Structural concrete, Class AE, Type IA | 9.4 | Cubic Yard |
| 55402 | Reinforcing steel, 60ksi | 1 | Lump Sum |
| 55704 | Structural Timber and Lumber, Glue Laminated Timber and Treated Timber and Lumber | 1 | Lump Sum |
| 62404 | Placing conserved topsoil, 4 inch depth | 22 | Square Yard |
| 62550 | Turf establishment | 1 | Lump Sum |
| 63305 | Sign, aluminum panel, type engineer grade sheeting | 23.6 | Square Foot |
| 63306 | Post, wood 4"x4" | 72 | Foot |
| 63307 | Object marker, type 3 | 4 | Each |
| 63312 | Remove signs and posts | 1 | Lump Sum |
| 63501 | Temporary traffic control | 1 | Lump Sum |

CLEARING AND GRUBBING SUMMARY

| LOCATION | STA. | NO. TREES => 5" DIA. (EACH) |
|--|------|-----------------------------|
| STA. 11+10 TO 11+90, LT/RT | 0.8 | 0 |
| STA. 12+10 TO 13+10, LT/RT | 1 | 0 |
| NO. 20158, CLEARING AND GRUBBING TOTAL | 1.8 | 0 |

1) CLEARING AND GRUBBING IS MEASURED BY THE LUMP SUM AND INCLUDES TREES OF ALL SIZES. THE QUANTITIES SHOWN IN THE TABLE ABOVE ARE ESTIMATED QUANTITY AMOUNTS TO COMPLETE THE PROJECT AND ARE FOR INFORMATION ONLY.
 2) TREES EQUAL TO OR GREATER THAN 5" DIAMETER WILL NOT BE CONSIDERED MARKETABLE TIMBER.

EARTHWORK AND STRUCTURE BACKFILL SUMMARY

| EXPANSION FACTOR | | 1.2 | | | | |
|---|------------------------|--|--------------------|-------------------------------------|------------|-------------------------|
| LOCATION | ACCUM. CUT VOLUME (CY) | (1) ACCUM. EMBANKMENT FILL VOLUME (CY) | ADJUSTED FILL (CY) | UNCLASSIFIED BORROW EXCAVATION (CY) | WASTE (CY) | STRUCTURE BACKFILL (CY) |
| NO. 20801, STRUCTURE EXCAVATION, BRIDGE | | | | | | |
| STA. 11+70 TO 11+84 | 79.4 | 0.0 | | 0.0 | 79.4 | 47 |
| STA. 11+84 TO 11+96 (2) | 15.1 | 0.0 | | 0.0 | 0.1 | |
| STA. 12+07 TO 12+17.5 (2) | 35.2 | 0.0 | | 0.0 | 26.2 | |
| STA. 12+17.5 TO 12+27 | 22.3 | 0.0 | | 0.0 | 22.3 | 23 |
| SUBTOTAL | 152.0 | 0.0 | | 0.0 | 128.0 | 70 |
| NO. 20801, STRUCTURE EXCAVATION, BRIDGE TOTAL | | 152.0 | | -128.0 | | |
| TRAIL APPROACH EARTHWORK (SOUTH) | | | | | | |
| STA. 11+10 TO 11+95 | 33.9 | 141.2 | 169.4 | 135.5 | 0.0 | |
| SUBTOTAL | 33.9 | 141.2 | 169.4 | 135.5 | 0.0 | |
| TRAIL APPROACH EARTHWORK (NORTH) | | | | | | |
| STA. 12+07 TO 13+10 | 32.4 | 134.0 | 160.8 | 128.4 | 0.0 | |
| SUBTOTAL | 32.4 | 134.0 | 160.8 | 128.4 | 0.0 | |
| MISCELLANEOUS | | | | | | |
| | 0.7 | | 0.8 | 0.1 | | |
| NO. 20407, ROADWAY EXCAVATION TOTAL | 67.0 | | | | | |
| NO. 20411, UNCLASSIFIED BORROW EXCAVATION | | | | 136.0 | | |
| NO. 20417, EMBANKMENT CONSTRUCTION, COMPACTION PLACEMENT METHOD A | | 331.0 | | | | |
| PROJECT BORROW/WASTE TOTAL | | 112.0 | | | | |

RIPRAP AND GEOTEXTILE FABRIC

| LOCATION | | | | (1) SALVAGED RIPRAP | DELIVERED RIPRAP, CLASS 3 | PLACED RIPRAP, CLASS 3 | EARTHWORK GEOSYNTHETICS, TYPE GEOTEXTILE, CLASS 1, TYPE A | COMMENTS |
|-------------------|-------|------------|-------|---------------------|---------------------------|------------------------|---|----------|
| START | SIDE | END | SIDE | C.Y. | C.Y. | C.Y. | S.Y. | SY |
| STA. 11+65 | LT/RT | STA. 11+90 | LT/RT | 15.0 | 34.2 | 49.2 | 73.8 | 111 |
| STA. 12+10 | LT | STA. 12+30 | LT | 9.0 | 8.5 | 17.5 | 26.3 | 44 |
| STA. 12+10 | RT | STA. 12+40 | RT | | | 29.3 | 43.9 | 67 |
| MISC. (IF NEEDED) | | | | | | 4.0 | 6.0 | 8 |
| TOTAL | | | | 24.0 | 42.7 | 100.0 | 150.0 | 230 |

RIPRAP PLACED DEPTH WILL BE 2-FEET. TABLE IS FOR INFORMATION ONLY. SEE THE SCHEDULE OF QUANTITIES.
 (1) MEASURED UNDER STRUCTURE EXCAVATION, SEE EARTHWORK TABLE. REDUCES AMOUNT OF CLASS 3 RIPRAP MATERIAL DELIVERED TO THE SITE. EXISTING RIPRAP SIZE VARIES BETWEEN ABOUT 6 TO 18-INCH DIAMETER, IS GLACIAL BOULDERS, AND ASSUMED TO BE 18-INCHES THICK.



United States Department of Agriculture
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EASTERN REGION

STAMPS, LOGOS, AND SEALS



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PROJECT NAME

**STRUCTURE NO.
091301-130-0.0
SAILOR CREEK
TRIBUTARY
BRIDGE
CHEQUAMEGON-NICOLET
NATIONAL FOREST**

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE

**QUANTITIES AND
ITEM TABLES**

| | |
|----------------|-------------------|
| DATE | ARCHIVE NO. |
| 2/16/2024 | |
| DESIGNER | DRAWING SHEET NO. |
| R. POLKINGHORN | C-02 |
| DRAWN | |
| R. POLKINGHORN | |
| CHECKED | |
| A. JOHNSTON | |
| PROJECT NO. | SHEET 3 OF 25 |

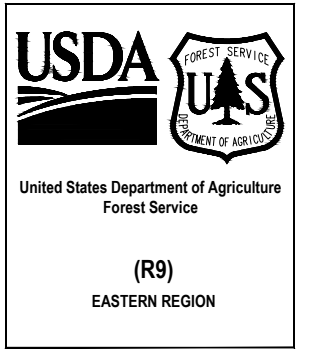
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| AGGREGATES | | | | | | |
|--------------------------------------|-------|------------|-------|-------------------------------|-----|----------|
| LOCATION | | | | AGG. SURFACE COURSE, METHOD 2 | | COMMENTS |
| START | SIDE | END | SIDE | C.Y. | TON | |
| STA. 11+10 | RT/LT | STA. 11+76 | RT/LT | 18.5 | 37 | |
| STA. 12+23 | RT/LT | STA. 13+10 | RT/LT | 24.2 | 49 | |
| MISC. (IF NEEDED) | | | | 3.5 | 7 | |
| TRAIL ACCESS MAINTENANCE (IF NEEDED) | | | | 10.8 | 22 | |
| TOTAL | | | | 57.0 | 115 | |

TABLE IS FOR INFORMATION ONLY. SEE THE SCHEDULE OF QUANTITIES.

| TOPSOIL, TURF ESTABLISHMENT, AND SOIL EROSION AND POLLUTION CONTROL SUMMARY | | | | | | |
|---|---------------|-------------|----------------|--------------------|------------------|-------------------|
| ITEM | 4" DEPTH (SF) | VOLUME (CY) | MIN. AREA (SY) | MIN. WEIGHT (LBS.) | MIN. LENGTH (LF) | MIN. COUNT (EACH) |
| NO. 20414, CONSERVED TOP SOIL | 3240 | 40 | | | | |
| NO. 62406, PLACING CONSERVED TOPSOIL, 4" DEPTH | 1710 | 22 | 190 | | | |
| NO. 62550, TURF ESTABLISHMENT | | | 190 | | | |
| PERMANENT SEEDING | | | | 1.8 | | |
| FERTILIZER | | | | 7.9 | | |
| NO. 15713, SOIL EROSION AND POLLUTION CONTROL | | | | | | |
| ROLLED E.C. PRODUCT, TYPE 2C JUTE | | | 190 | | | |
| SILT FENCE | | | | | 420 | |
| TURBIDITY CURTAIN | | | | | 120 | |

1) TURF ESTABLISHMENT IS MEASURED BY THE LUMP SUM AND INCLUDES PERMANENT SEEDING AND FERTILIZER. THE QUANTITIES SHOWN IN THE TABLE ABOVE ARE MINIMUM ESTIMATED QUANTITY AMOUNTS REQUIRED TO COMPLETE THE PROJECT AND ARE FOR INFORMATION ONLY.
2) MOW VEGETATION PRIOR TO CONSERVING TOP SOIL.
3) CONSERVED TOP SOIL ESTIMATED QUANTITY IS BASED ON SALVAGING APPROXIMATELY 4" DEPTH.
4) USE DRY METHOD APPLICATIONS.
5) PERMANENT SEEDING SHALL BE FESCUE AND RYEGRASS BLEND PER THE SUPPLEMENTAL SPECIFICATIONS AND APPLIED AT A RATE OF 45 POUNDS PER ACRE.
6) FERTILIZER SHALL BE 10-20-10 WITH APPLICATION RATE OF 200 POUNDS PER ACRE.
7) SOIL EROSION AND POLLUTION CONTROL IS MEASURED BY THE LUMP SUM AND INCLUDES ROLLED EROSION CONTROL PRODUCT, TYPE 2C JUTE FABRIC AND SILT FENCE. THE QUANTITIES SHOWN IN THE TABLE ABOVE ARE MINIMUM ESTIMATED QUANTITY AMOUNTS REQUIRED TO COMPLETE THE PROJECT AND ARE FOR INFORMATION ONLY.



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| NO. | REVISION / ISSUE | DATE |

PROJECT NAME
**STRUCTURE NO.
091301-130-0.0
SAILOR CREEK
TRIBUTARY
BRIDGE**
CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE
ITEM TABLES

| | |
|----------------------------|----------------------------------|
| DATE 2/16/2024 | ARCHIVE NO. |
| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-03 |
| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 4 OF 25 |

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SIGNS AND OBJECT MARKERS TABLE

| NO. | LOCATION | | REMOVE (LUMP SUM) | SIGN TYPE | | | SIGN SIZE | | MATERIAL AREA (SF) | | OBJECT MARKERS | | | BOTTOM HEIGHT | POSTS | | COMMENT |
|------------------|--------------|--------|-------------------|-----------|---------------------------------|----------|-----------|--------|--------------------|------|----------------|---------------|---------------|---------------|-------|---|---------|
| | | | | SIGN CODE | MESSAGE | MATERIAL | WIDTH | HEIGHT | ALUM. | HDPE | TYPE 2 (EACH) | TYPE 3 (EACH) | TYPE 4 (EACH) | (IN.) | WOOD | | |
| | | | | | | | (IN.) | (IN.) | | | | | | | 4"X4" | 8"X8" | |
| S-01 | STA. 9+70.0 | 8.0' | | | ONE LANE BRIDGE | | | | | | | | | | | REMAIN IN PLACE | |
| S-02 | STA. 10+25.0 | 8.0' | | R12-1 | WEIGHT LIMIT 12 TONS | ALUM. | 24 | 30 | 5 | | | | 60 | 11' | | FACING SOUTH, WHITE W/ BLACK LETTERING | |
| S-03 | STA. 11+35.0 | 10.0' | | TB-1 | ORANGE TRAIL REASSURANCE MARKER | ALUM. | 5 | 7 | 0.2 | | | | 70 | 10' | | FLORESCENT ORANGE DIAMOND, FACING SOUTH | |
| S-03 | STA. 11+35.0 | 10.0' | | TB-1 | ORANGE TRAIL REASSURANCE MARKER | ALUM. | 5 | 7 | 0.2 | | | | | | | FLORESCENT ORANGE DIAMOND, FACING NORTH | |
| S-04 | STA. 11+35.0 | -10.0' | | TB-1 | ORANGE TRAIL REASSURANCE MARKER | ALUM. | 5 | 7 | 0.2 | | | | 70 | 10' | | FLORESCENT ORANGE DIAMOND, FACING SOUTH | |
| S-04 | STA. 11+35.0 | -10.0' | | TB-1 | ORANGE TRAIL REASSURANCE MARKER | ALUM. | 5 | 7 | 0.2 | | | | | | | FLORESCENT ORANGE DIAMOND, FACING NORTH | |
| S-05 | STA. 11+75.0 | 6.5' | 1 | OM3-R | OBJECT MARKER, TYPE 3 | ALUM. | 12 | 36 | 3 | | 1 | | 48 | | | YELLOW W/ BLACK, MOUNT ON BRIDGE POST, FACING SOUTH | |
| S-06 | STA. 11+75.0 | -6.5' | 1 | OM3-L | OBJECT MARKER, TYPE 3 | ALUM. | 12 | 36 | 3 | | 1 | | 48 | | | YELLOW W/ BLACK, MOUNT ON BRIDGE POST, FACING SOUTH | |
| S-07 | STA. 12+21.0 | -17.1' | 1 | | | | | | | | | | | | | POST WITHOUT SIGN | |
| S-08 | STA. 12+24.0 | 6.5' | 1 | OM3-R | OBJECT MARKER, TYPE 3 | ALUM. | 12 | 36 | 3 | | 1 | | 48 | | | YELLOW W/ BLACK, MOUNT ON BRIDGE POST, FACING NORTH | |
| S-09 | STA. 12+24.0 | -6.5' | 1 | OM3-L | OBJECT MARKER, TYPE 3 | ALUM. | 12 | 36 | 3 | | 1 | | 48 | | | YELLOW W/ BLACK, MOUNT ON BRIDGE POST, FACING NORTH | |
| S-10 | STA. 12+29.0 | -3.0' | 1 | | | | | | | | | | | | | SALVAGE FLEXIBLE MARKER | |
| S-11 | STA. 12+29.0 | -17.0' | 1 | | | | | | | | | | | | | SALVAGE FLEXIBLE MARKER | |
| S-12 | STA. 12+40.0 | -17.6' | 1 | | | | | | | | | | | | | SALVAGE FLEXIBLE MARKER | |
| S-13 | STA. 12+44.0 | -3.0' | 1 | | | | | | | | | | | | | SALVAGE FLEXIBLE MARKER | |
| S-14 | STA. 12+45.0 | -23.7' | 1 | | | | | | | | | | | | | TRAIL MARKER W/ ARROW | |
| S-15 | STA. 12+53.0 | -16.0' | 1 | | | | | | | | | | | | | SALVAGE FLEXIBLE MARKER | |
| S-16 | STA. 12+53.0 | -1.3' | 1 | | | | | | | | | | | | | SALVAGE FLEXIBLE MARKER | |
| S-17 | STA. 12+63.0 | 10.0' | | TB-1 | ORANGE TRAIL REASSURANCE MARKER | ALUM. | 5 | 7 | 0.2 | | | | 70 | 10' | | FLORESCENT ORANGE DIAMOND, FACING SW | |
| S-17 | STA. 12+63.0 | 10.0' | | TB-1 | ORANGE TRAIL REASSURANCE MARKER | ALUM. | 5 | 7 | 0.2 | | | | | | | FLORESCENT ORANGE DIAMOND, FACING NE | |
| S-18 | STA. 12+63.0 | -10.0' | | TB-1 | ORANGE TRAIL REASSURANCE MARKER | ALUM. | 5 | 7 | 0.2 | | | | 70 | 10' | | FLORESCENT ORANGE DIAMOND, FACING SW | |
| S-18 | STA. 12+63.0 | -10.0' | | TB-1 | ORANGE TRAIL REASSURANCE MARKER | ALUM. | 5 | 7 | 0.2 | | | | | | | FLORESCENT ORANGE DIAMOND, FACING NE | |
| S-19 | STA. 13+75.0 | -10.0' | | R12-1 | WEIGHT LIMIT 12 TONS | ALUM. | 24 | 30 | 5 | | | | 60 | 11' | | FACING NE; WHITE W/ BLACK LETTERING | |
| S-20 | STA. 14+25.0 | -10.0' | 1 | | ONE LANE BRIDGE | | | 24 | | | | | 60 | 10' | | MOVE SIGN FROM 13+50, LT | |
| QUANTITY SUMMARY | | | 13 | | | | | | 23.6 | 0 | 0 | 4 | 0 | | 72 | 0 | |

STANDARD FEDERAL COLORS INCLUDE BROWN (#20059), YELLOW-CREAM (#23695), AND WHITE (#37875).
 ALUM. - ALUMINUM SIGNS, 0.125" THICK WITH 3M 3290 ENGINEER GRADE SHEETING. ORDER METAL SIGNS WITH PREDRILLED HOLES.
 HDPE - HIGH DENSITY POLYETHYLENE PLASTIC, YELLOW CORE, BROWN SURFACE, 3/4-INCH THICKNESS OR AS INDICATED.
 WOOD - DOUGLAS FIR NO. 2 OR BETTER, OR SOUTHERN YELLOW PINE STAINED BROWN (#20059).
 WPC - WOOD PLASTIC COMPOSITE.
 ALL WOOD POSTS, WOOD SIGNS, AND CAMPSITE MARKERS SHALL BE STAINED BROWN (#20059).

- WOOD POSTS AND CAMPSITE MARKER POSTS SHALL HAVE A 30 DEGREE BEVELED TOP, STAINED, AND BE MEASURED AND PAID AS WOOD POST, 4"X4", 4"X6", OR 6"X6". POST DRIVEN/PLACED HEIGHT WILL BE 2" ABOVE TOP OF SIGN EXCEPT SITE IDENTIFICATION SIGN.
- SITE IDENTIFICATION SIGN LETTERING WILL BE ASA SERIES AND NATIONAL FOREST LOGOTYPE, SEE USDA FOREST SERVICE "SIGN AND POSTER GUIDELINES FOR THE FOREST SERVICE", EM7100-15 FOR LETTER SIZE. SPECIAL SIGN MESSAGE LETTERING WILL BE SERIES D, 2" UPPER CASE UNLESS INDICATED.
- MOUNT SIGNS TO WOOD POSTS WITH ZINC COATED LAG SCREWS OR BOLTS. MOUNT OBJECT MARKERS TO GATES AND POSTS WITH ZINC COATED AND PAINTED BROWN (#20059) BRACKETS AS NEEDED AND STAINLESS STEEL NUTS, BOLTS, AND WASHERS.
- PLACE INSTALLATION DATE AND VANDAL WARNING DECALS TO THE CORNER OF THE SIGN CLOSEST TO THE ROAD. THE VANDAL WARNING DECAL GOES ON THE BACK OF STOP OR YIELD SIGNS, BUT ON THE FRONT OF ALL OTHER SIGNS. THE INSTALLATION DATE DECAL GOES ON THE BACK OF ALL SIGNS. BOTH DECALS MAY BE OBTAINED FROM THE FOREST SERVICE THROUGH UNICOR. CONTACT REBECCA HICKEY OF FOREST SERVICE 715-762-5133, REBECCA.HICKEY@USDA.GOV.
- PROVIDE SIGN PROOFS TO REBECCA HICKEY OF FOREST SERVICE 715-762-5133, REBECCA.HICKEY@USDA.GOV FOR APPROVAL PRIOR TO ORDERING.
- SIGNS AND POSTS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
- SIGN CODES ARE BASED ON USDA FOREST SERVICE "SIGN AND POSTER GUIDELINES FOR THE FOREST SERVICE", PUBLICATION EM7100-15 AND U.S. FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- SIGNS ARE INDICATED WITH THEIR STANDARD CODE AND DIMENSION. FOREST ROAD DESTINATION (FRD) NON-STANDARD RECTANGULAR SIGN ARE INDICATED BY "FRD" AND DIMENSION.
- REMOVAL OF SIGNS AND MARKERS SHALL INCLUDE THE POST IT IS MOUNTED TO.
- SIGN POST OFFSETS ARE TYPICALLY 4-FT FROM TRAIL EDGE, 6-FT FROM SITE ROADWAY EDGES, AND 13-FT FROM HIGHWAY PAVEMENT EDGE.
- BOTTOM OF SIGN MOUNTING HEIGHT IS TYPICALLY 60-INCHES ALONG TRAILS, 48-INCHES ALONG INTERNAL ROADWAYS, AND 60-INCHES ALONG HIGHWAYS UNLESS NOTED ON THE SIGN TABLE. SNOWMBILE TRAIL REASSURANCE MARKERS ARE MOUNTED 40-INCHES ABOVE AVERAGE MAXIMUM SNOWFALL.
- SALVAGE FLEXIBLE MARKERS AND SET ASIDE IN A LOCATION DESIGNATED BY THE CO.



United States Department of Agriculture
Forest Service

(R9)
EASTERN REGION

STAMPS, LOGOS, AND SEALS

CEDP, Inc.
 Consulting Engineers & Design Professionals
 6426 Offshore Drive
 Madison, WI 53705
 608-467-4900 | www.CEDP.us

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| NO. | REVISION / ISSUE | DATE |

PROJECT NAME

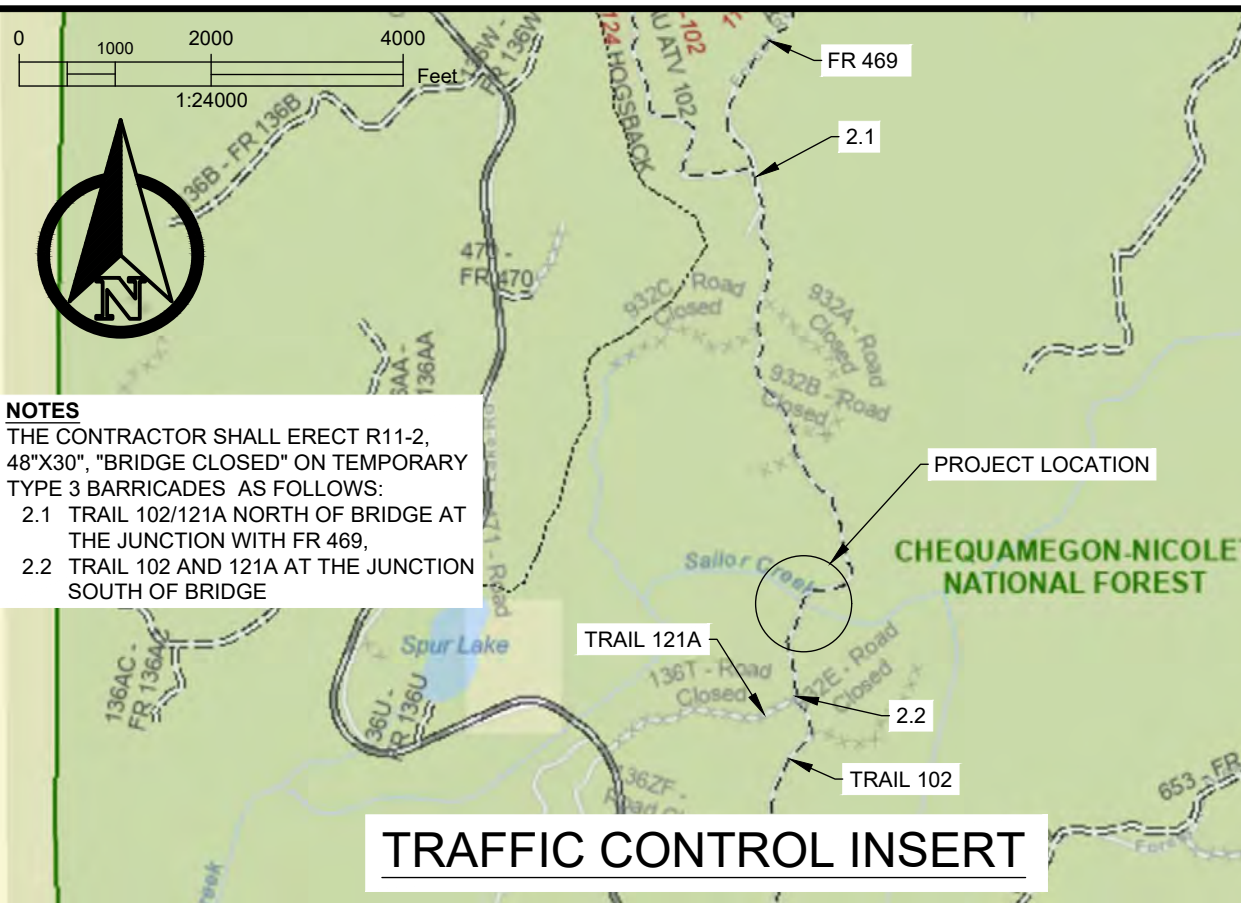
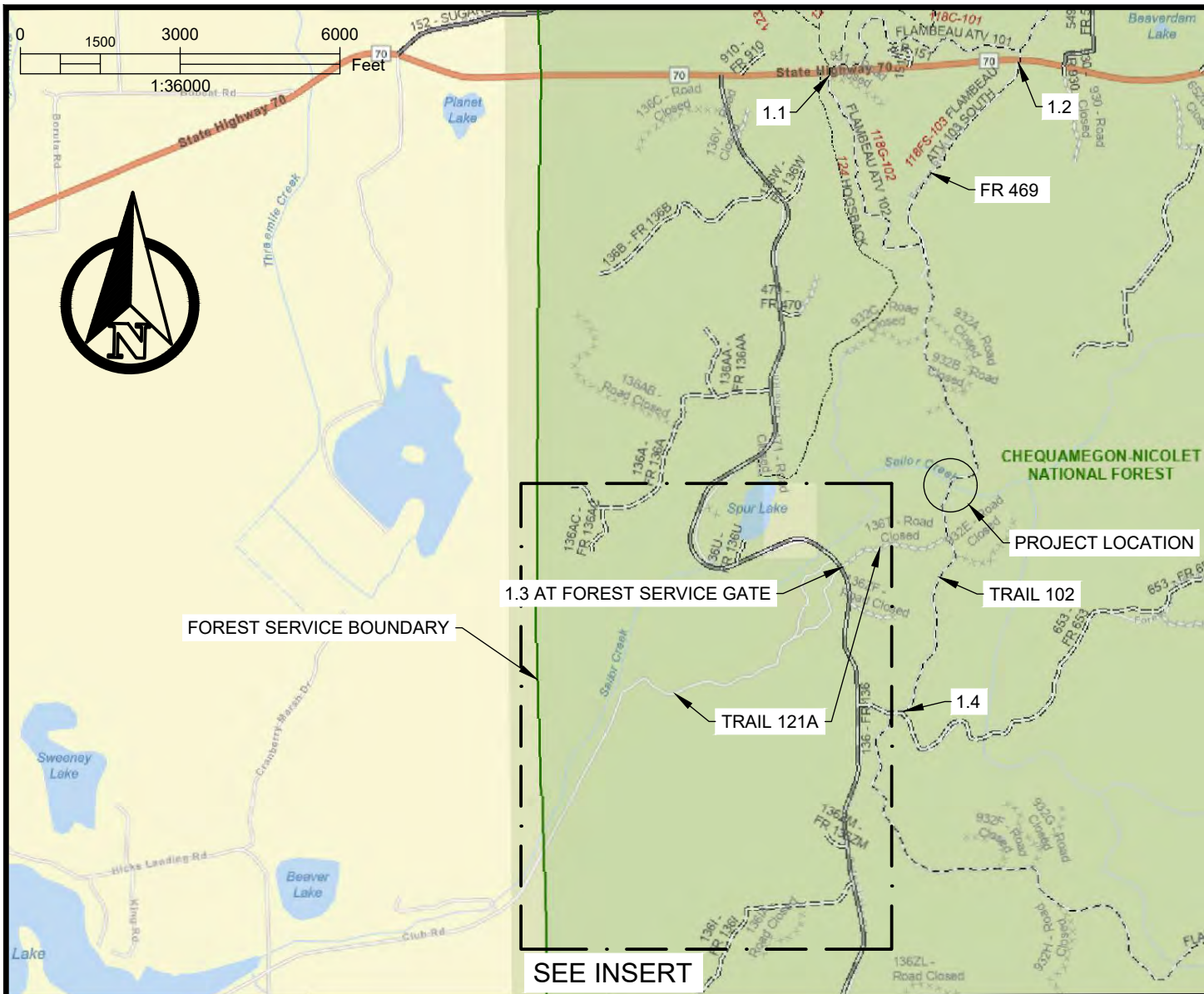
**STRUCTURE NO.
091301-130-0.0
SAILOR CREEK
TRIBUTARY
BRIDGE
CHEQUAMEGON-NICOLET
NATIONAL FOREST**

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE

ITEM TABLES

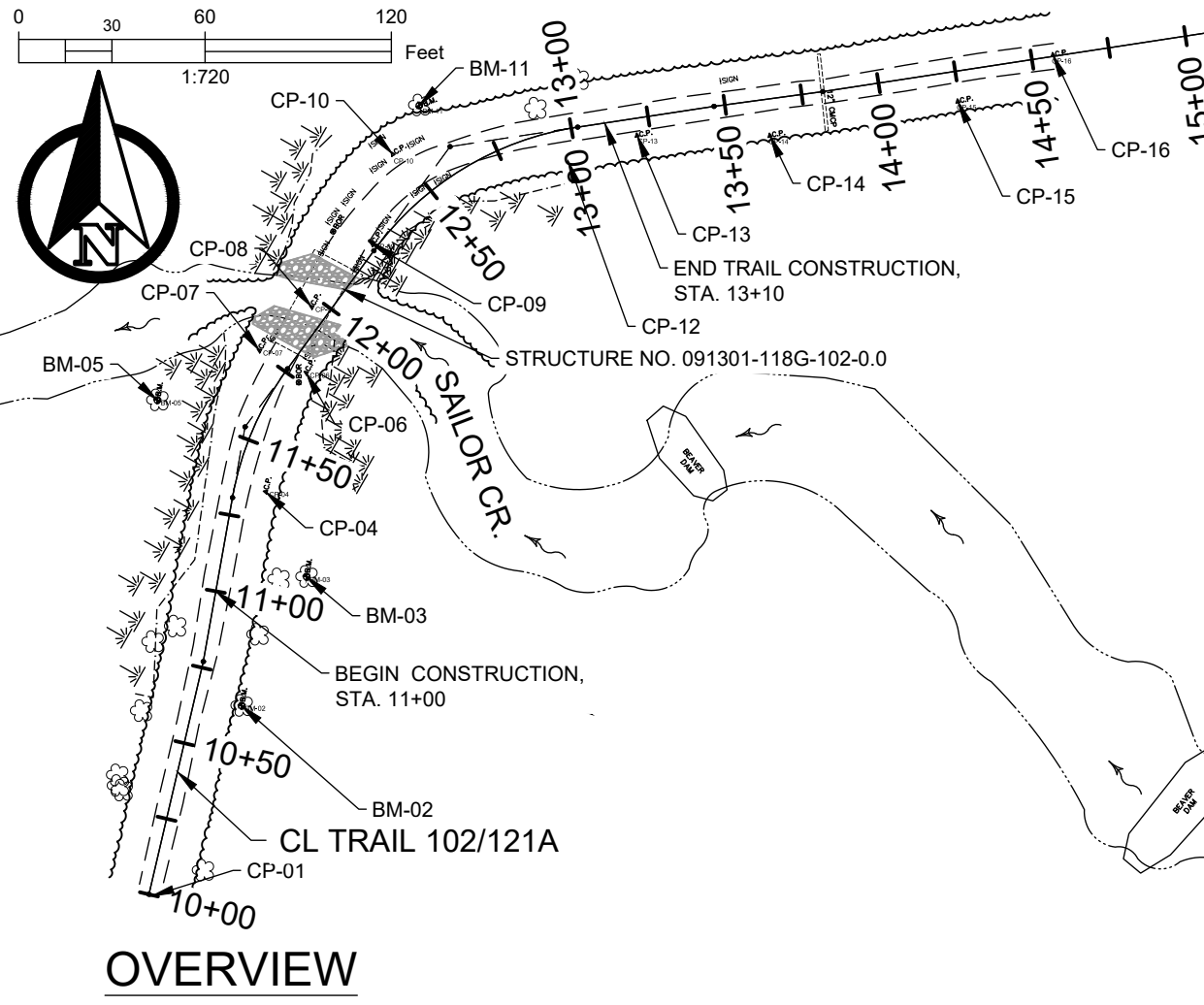
| | |
|----------------------------|----------------------------------|
| DATE 2/16/2024 | ARCHIVE NO. |
| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-04 |
| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 5 OF 25 |



NOTES
 THE CONTRACTOR SHALL ERECT R11-2, 48"X30", "BRIDGE CLOSED" ON TEMPORARY TYPE 3 BARRICADES AS FOLLOWS:
 2.1 TRAIL 102/121A NORTH OF BRIDGE AT THE JUNCTION WITH FR 469,
 2.2 TRAIL 102 AND 121A AT THE JUNCTION SOUTH OF BRIDGE

NOTES
 THE CONTRACTOR SHALL ERECT R11-3b, 48"X30", "BRIDGE OUT XX MILES AHEAD LOCAL TRAFFIC ONLY" ON TEMPORARY TYPE 3 BARRICADES AT ROAD AND TRAIL JUNCTIONS AND CROSSINGS AS FOLLOWS:
 1.1 TRAIL 121A AND STATE HWY. 77 JUNCTION, 1.8 MILES AHEAD,
 1.2 FOREST ROAD 469 AND STATE HWY. 77 JUNCTION, 1.8 MILES AHEAD,
 1.3 TRAIL 121A AND FOREST ROAD (FR) 136 (N. GATES LAKE ROAD) JUNCTION, 0.6 MILES AHEAD
 1.4 TRAIL 102 AND FR 653 JUNCTION, 0.9 MILES AHEAD.

TRAFFIC CONTROL



OVERVIEW

USDA **FOREST SERVICE**
 UNITED STATES DEPARTMENT OF AGRICULTURE
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 (R9)
 EASTERN REGION

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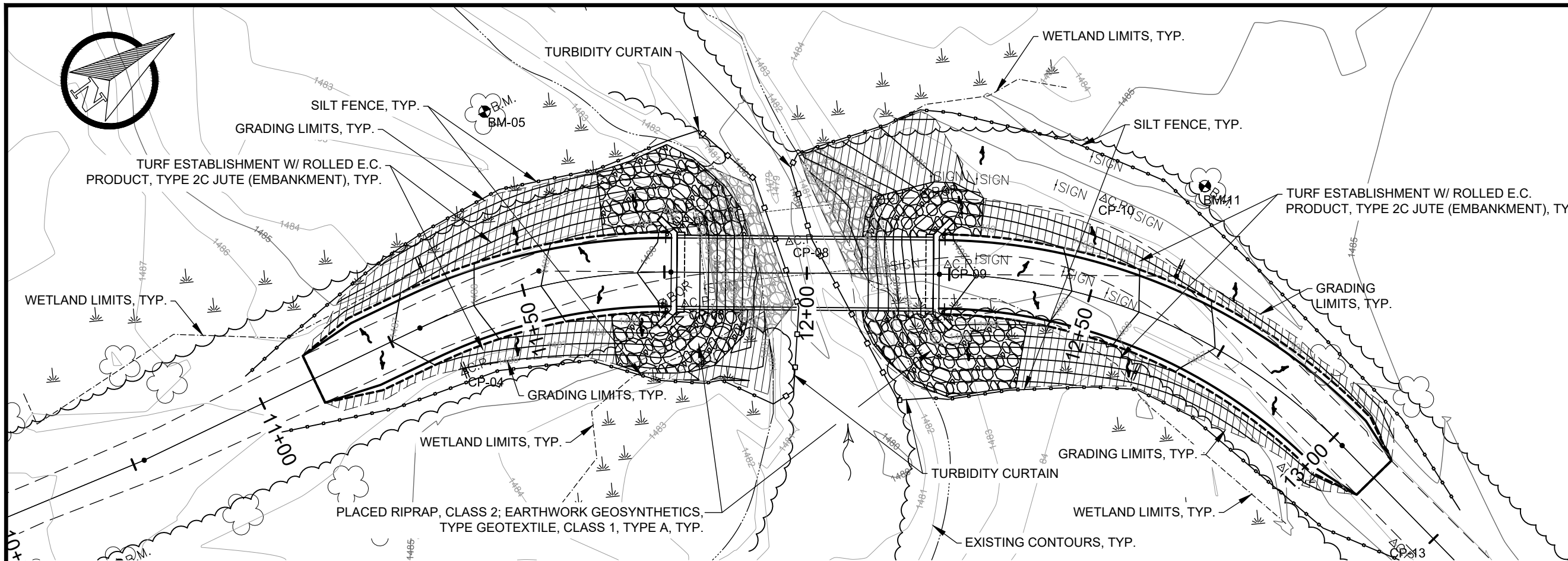
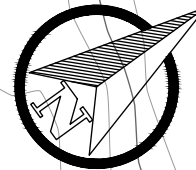
| NO. | REVISION / ISSUE | DATE |
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PROJECT NAME
STRUCTURE NO. 091301-118G-102-0.0
DALRYMPLE BRIDGE
 CHEQUAMEGON-NICOLET NATIONAL FOREST
 MEDFORD-PARK FALLS RANGER DISTRICT

DRAWING TITLE
TEMPORARY TRAFFIC CONTROL AND OVERVIEW

| | |
|----------------------------|----------------------------------|
| DATE 2/16/2024 | ARCHIVE NO. |
| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-05 |
| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 5 OF 26 |

21124-19-25 CEDP - OWNER X:\PROJECTS\23847_ST_USFS_FD_3 TRAIL BR DESIGNS\90_CADD\901_PLANS\901.4_FRD_06-TC.DWG;

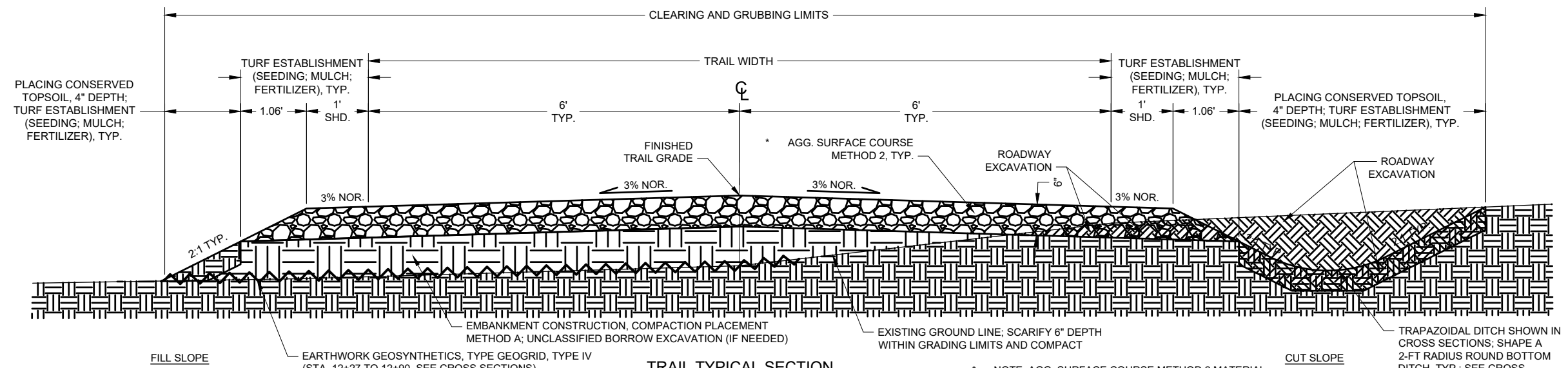


LEGEND

- TURF ESTABLISHMENT W/ ROLLED E.C. PRODUCT, TYPE 2C JUTE (EMBANKMENT)
- SILT FENCE
- TURBIDITY CURTAIN
- BALES, STRAW
- RUNOFF DIRECTION

NOTES

1. TURF ESTABLISHMENT INCLUDES SOIL PREPARATION, SEED, AND FERTILIZER.
2. INSTALL SILT FENCE AT EDGE OF WETLANDS OR GRADING LIMITS AS SHOWN.
3. SEE SUPPLEMENTAL SPECIFICATIONS SECTION 107 FOR WATER WORK RESTRICTED DATES.



TRAIL TYPICAL SECTION

STA. 11+10 TO STA. 11+77
 STA. 12+22 TO STA. 13+10
 (NTS)

* NOTE: AGG. SURFACE COURSE METHOD 2 MATERIAL MAY BE GRADING DESIGNATION "U" AS INDICATED IN THE SUPPLEMENTAL SPECIFICATIONS, TABLE 703-3, OR WisDOT BASE AGGREGATE DENSE 3/4-INCH



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| 2 | | |
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| NO. | REVISION / ISSUE | DATE |

PROJECT NAME
STRUCTURE NO. 091301-118G-102-0.0
DALRYMPLE BRIDGE
 CHEQUAMEGON-NICOLET NATIONAL FOREST

MEDFORD-PARK FALLS RANGER DISTRICT

DRAWING TITLE
EROSION CONTROL PLAN AND TRAIL TYPICAL SECTION

| | |
|----------------------------|----------------------------------|
| DATE 2/16/2024 | ARCHIVE NO. |
| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-06 |
| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 7 OF 25 |

2/12/24 22:44 CEDP - OWNER X:\PROJECTS\2326427_ST_USFS_FD_3 TRAIL BR DESIGNS\90_CADD\901_PLANS\901.4_FRD_07.EC & TYPICAL.DWG



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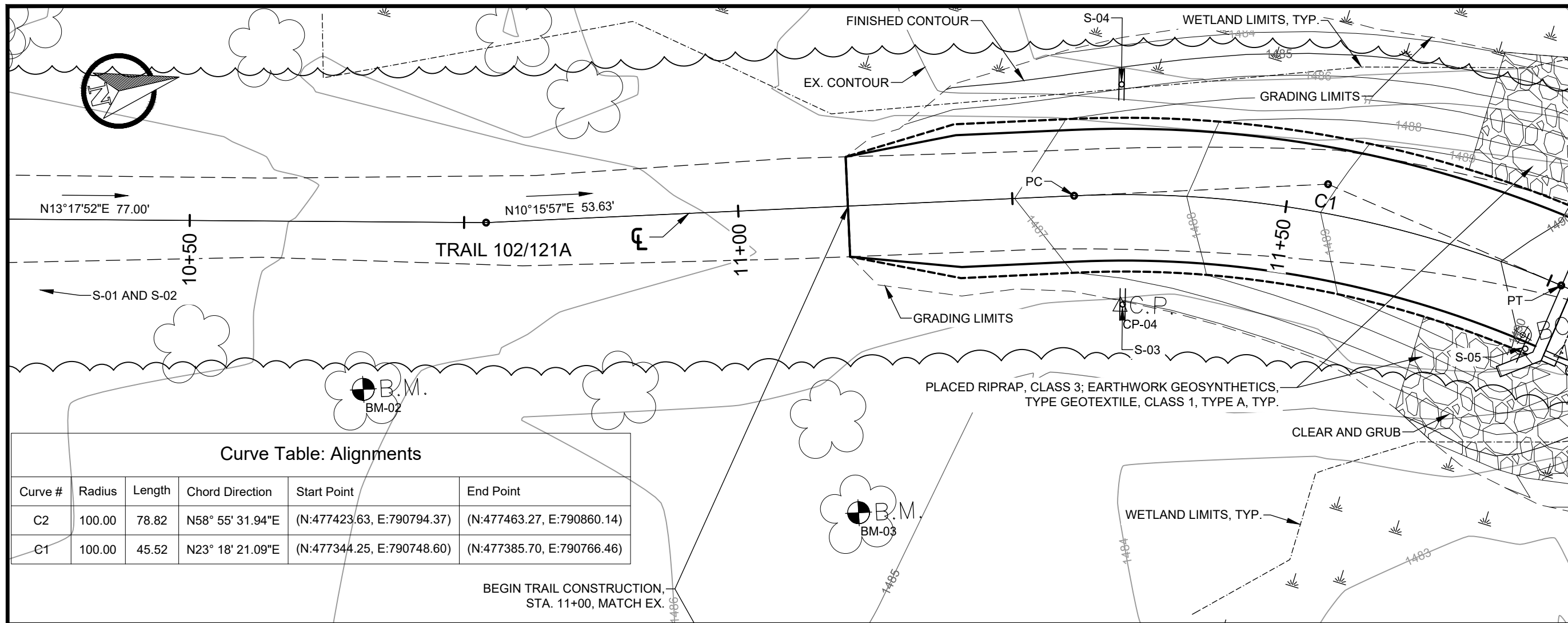


| NO. | REVISION / ISSUE | DATE |
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PROJECT NAME
STRUCTURE NO. 091301-118G-102-0.0 DALRYMPLE BRIDGE
CHEQUAMEGON-NICOLET NATIONAL FOREST
MEDFORD-PARK FALLS RANGER DISTRICT

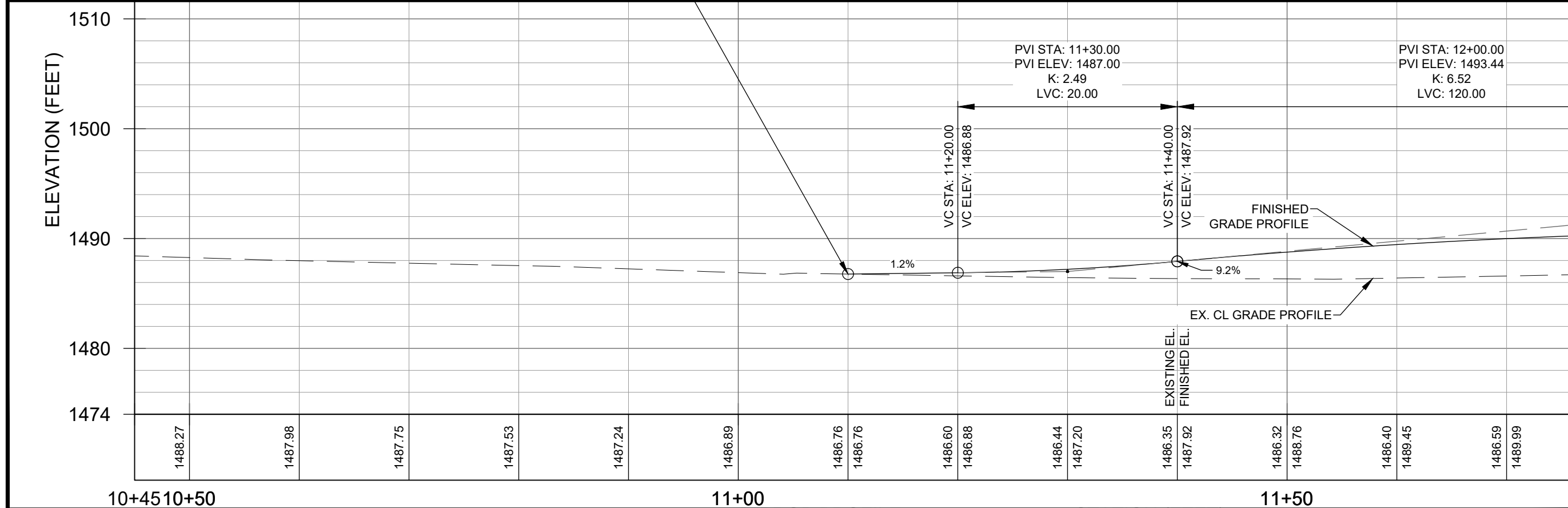
DRAWING TITLE
PLAN AND PROFILE

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| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 8 OF 25 |

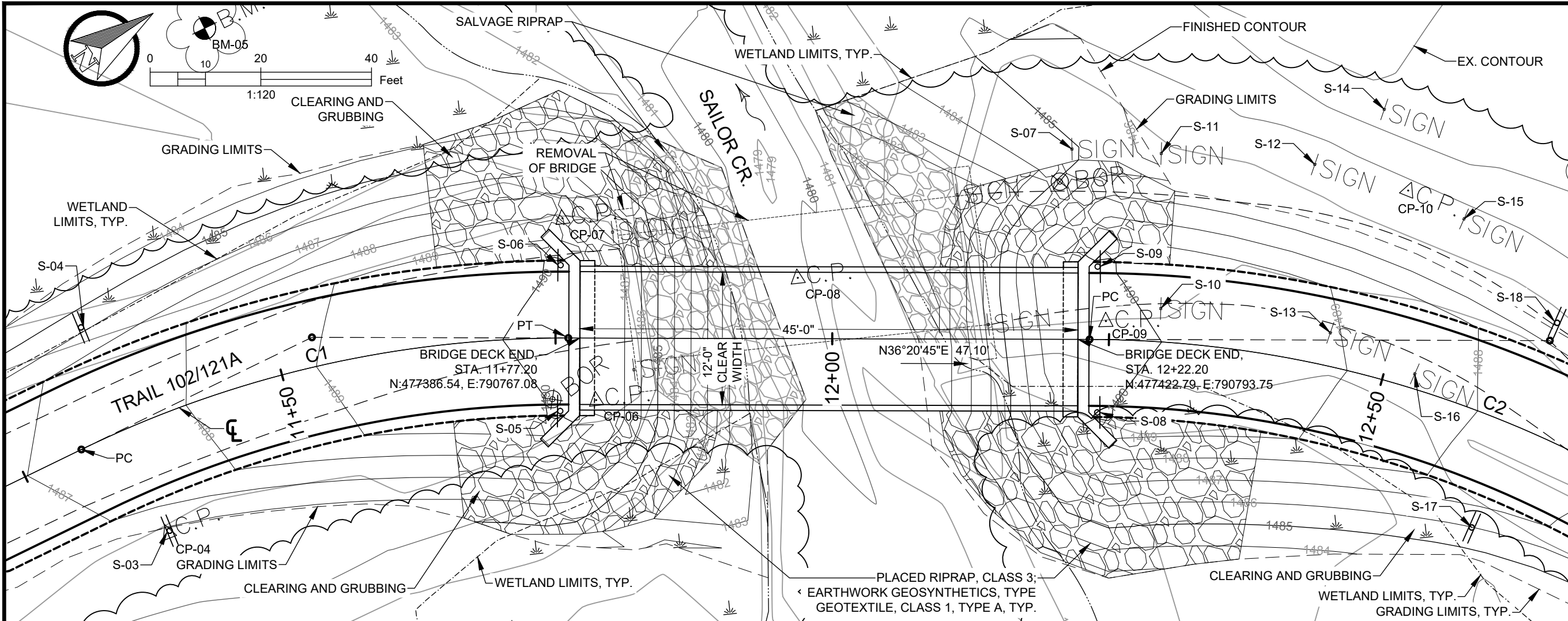
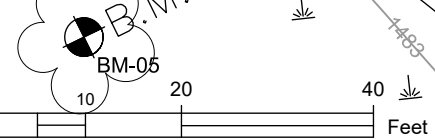
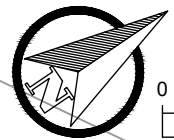


Curve Table: Alignments

| Curve # | Radius | Length | Chord Direction | Start Point | End Point |
|---------|--------|--------|------------------|----------------------------|----------------------------|
| C2 | 100.00 | 78.82 | N58° 55' 31.94"E | (N:477423.63, E:790794.37) | (N:477463.27, E:790860.14) |
| C1 | 100.00 | 45.52 | N23° 18' 21.09"E | (N:477344.25, E:790748.60) | (N:477385.70, E:790766.46) |



2/15/24 2:10 CEDP - OWNER X:\PROJECTS\232427_ST_USFS_FD_3 TRAIL BR DESIGNS\90_CADD\501_PLANS\501.4_FRD_08_P&P.DWG.



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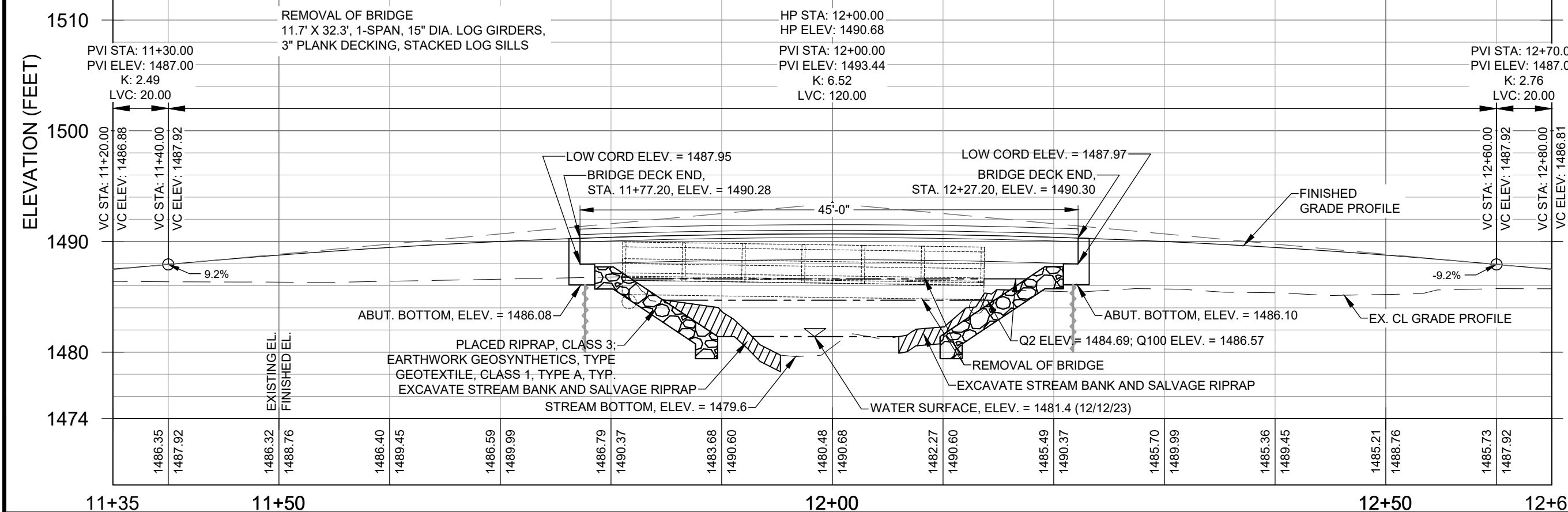
PROJECT NAME

STRUCTURE NO. 091301-118G-102-0.0

DALRYMPLE BRIDGE

CHEQUAMEGON-NICOLET NATIONAL FOREST

MEDFORD-PARK FALLS RANGER DISTRICT

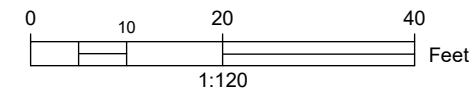
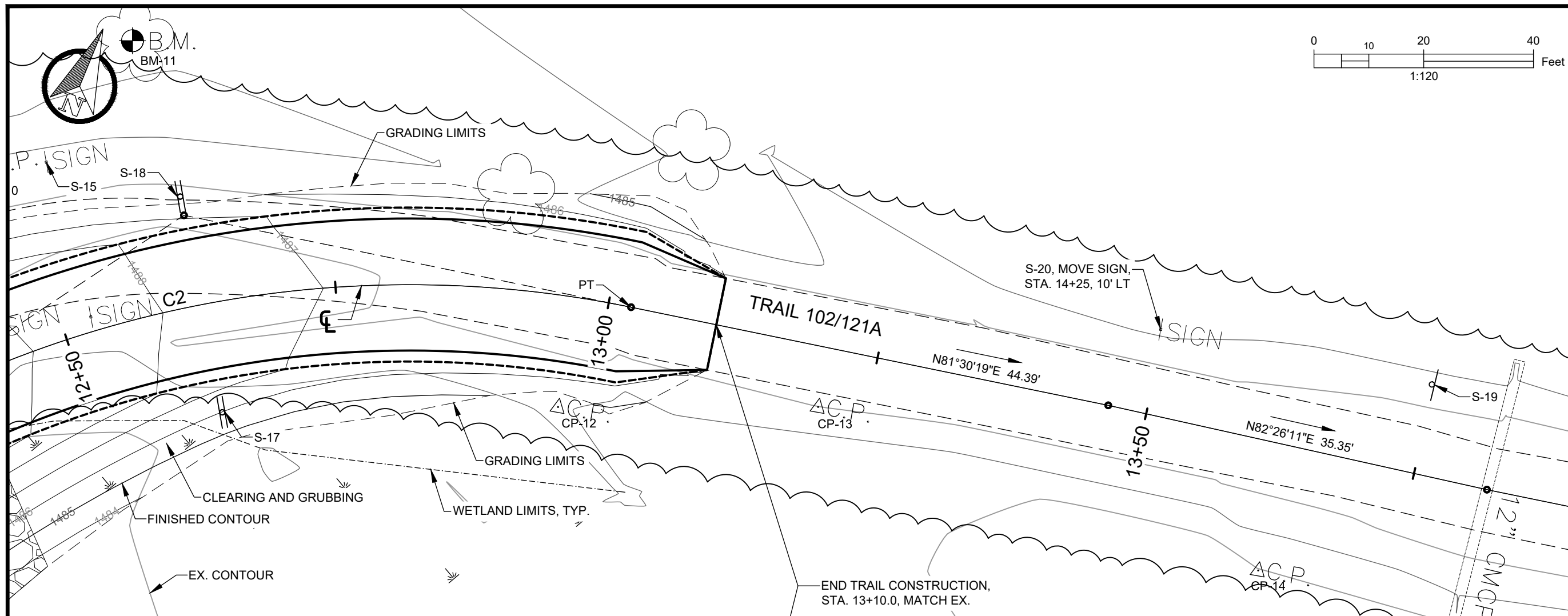


DRAWING TITLE

PLAN AND PROFILE

| | |
|----------------------------|----------------------------------|
| DATE 2/26/2024 | ARCHIVE NO. |
| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-08 |
| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 9 OF 25 |

2/15/24 2:10:07 CEDP - OWNER X:\PROJECTS\232647_ST_USFS_FD_3 TRAIL BR DESIGNS\60_CADD\501_PLANS\501.4_FRD_08_P&P.DWG.



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PROJECT NAME

STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE

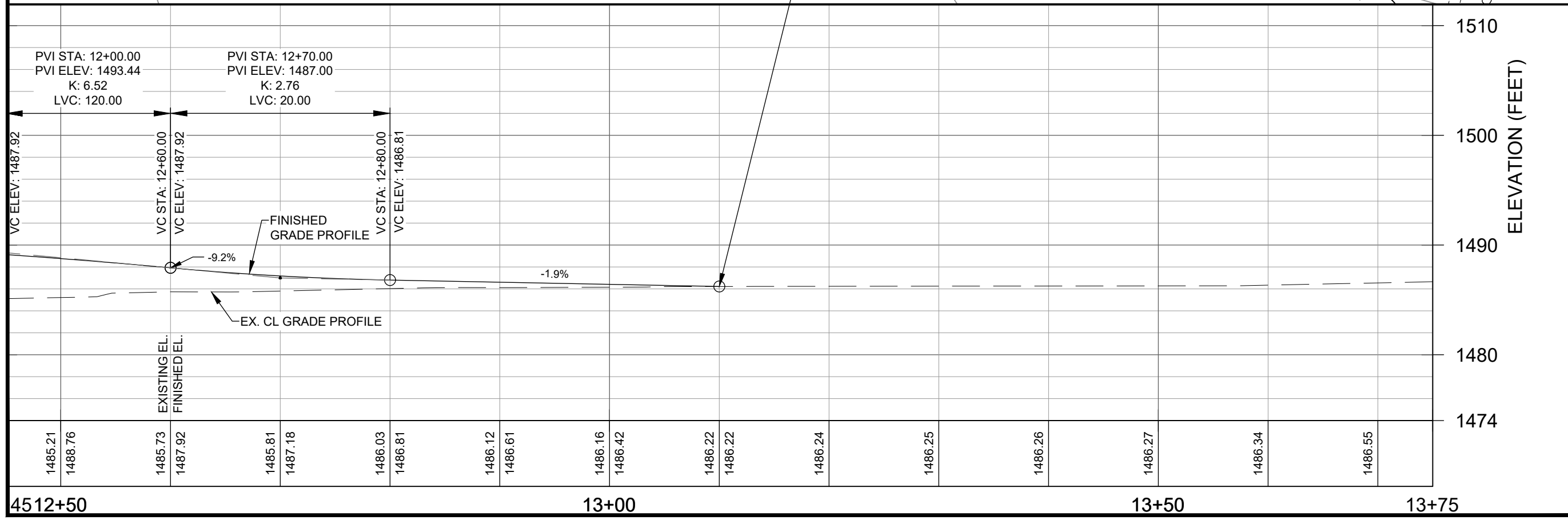
CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
 RANGER DISTRICT

DRAWING TITLE

PLAN AND PROFILE

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|----------------------------|----------------------------------|
| DATE 2/26/2024 | ARCHIVE NO. |
| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-09 |
| DRAWN R. POLKINGHORN | CHECKED A. JOHNSTON |
| PROJECT NO. | SHEET 10 OF 25 |



2/15/24 2:10:07 CEDP - OWNER X:\PROJECTS\232427_ST_USFS_FD_3 TRAIL BR DESIGNS\90_CADD\501_PLANS\501.4_FRD_08_P&P.DWG.



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| NO. | REVISION / ISSUE | DATE |

PROJECT NAME
**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

CHEQUAMEGON-NICOLET
NATIONAL FOREST

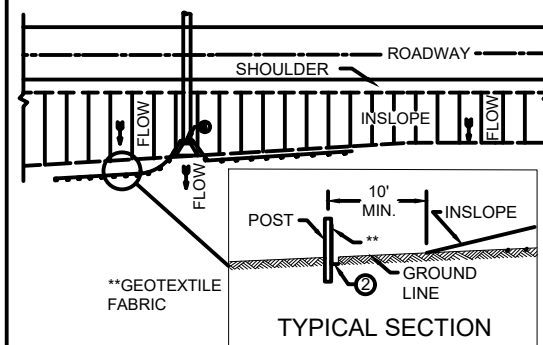
MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE
DETAILS

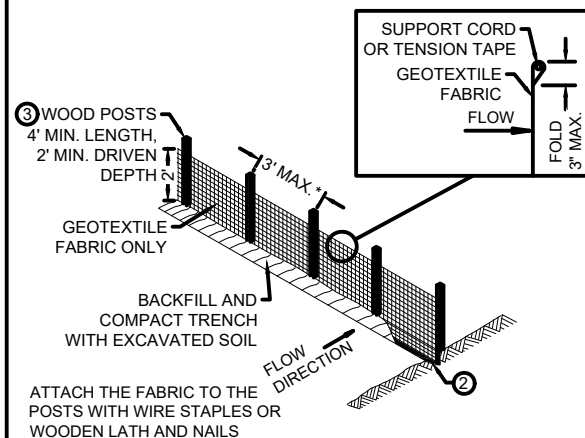
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| DATE 2/26/2024 | ARCHIVE NO. |
| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-10 |
| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 11 OF 25 |

GENERAL NOTES

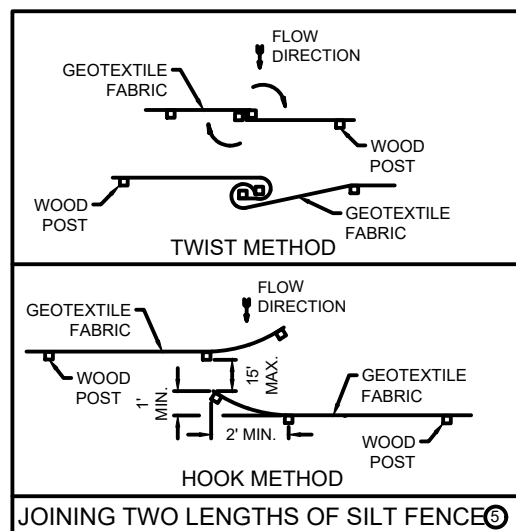
- DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
*8' POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.
ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS.
- HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
 - FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
 - WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/2" X 1 1/2" OF OAK OR HICKORY.
 - SILT FENCE TO EXTEND ACROSS THE TOP OF PIPES.
 - CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY, USE ONE OF THE TWO FOLLOWING METHODS: A) OVERLAP THE END POSTS AND TWIST OR ROTATE AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



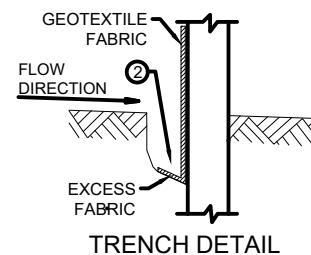
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



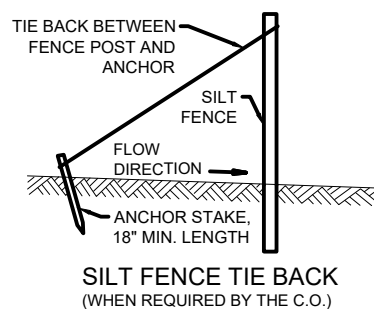
SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE



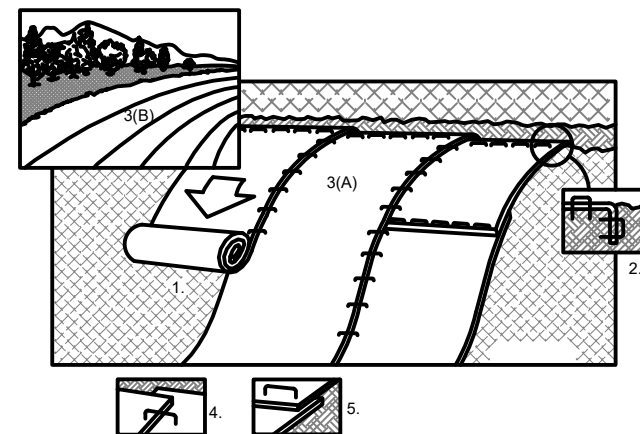
TRENCH DETAIL



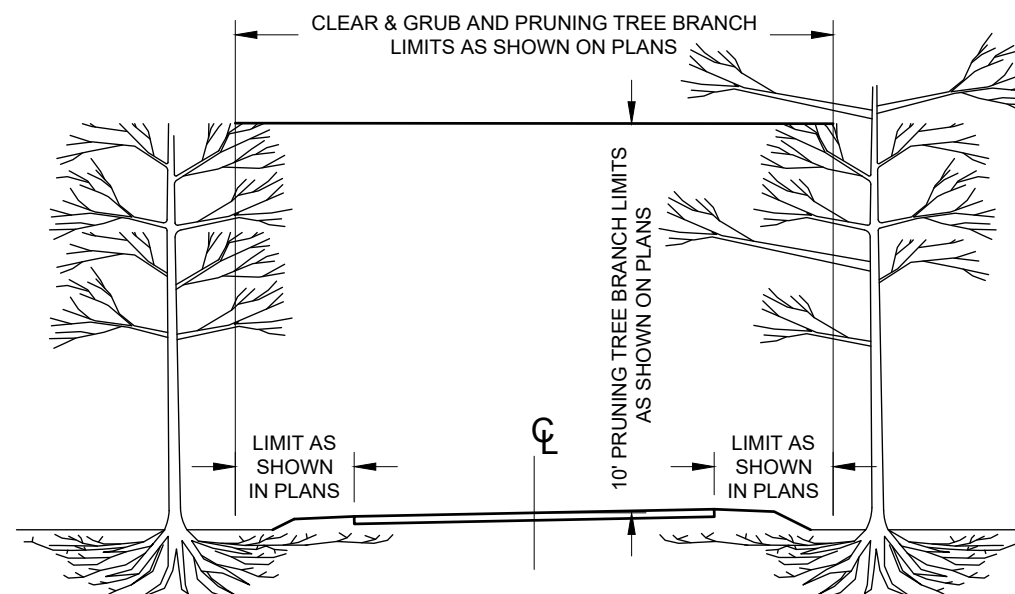
SILT FENCE TIE BACK
(WHEN REQUIRED BY THE C.O.)

GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCT, INCLUDE SEED.
 - BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE ROLLED PRODUCT IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
 - ROLL THE ROLLED PRODUCT (3A.) DOWN OR (3B.) HORIZONTALLY ACROSS THE SLOPE.
 - THE EDGES OF PARALLEL ROLLED PRODUCT SHALL BE STAPLED WITH 4" OVERLAP.
 - WHEN ROLLED PRODUCT MUST BE SPICED DOWN THE SLOPE, PLACE ROLLED PRODUCT END OVER END (SHINGLE STYLE) WITH 6" OVERLAP. STAPLE APPROXIMATELY 12" APART.
 - ALL ROLLED PRODUCT MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/ STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER. ALL STAPLES/S TAKES SHALL BE BIODEGRADABLE.
 - ROLLED EROSION CONTROL PRODUCT SHALL CONFORM TO THE TYPE SHOWN IN THE PLANS.



ROLLED EROSION CONTROL PRODUCT

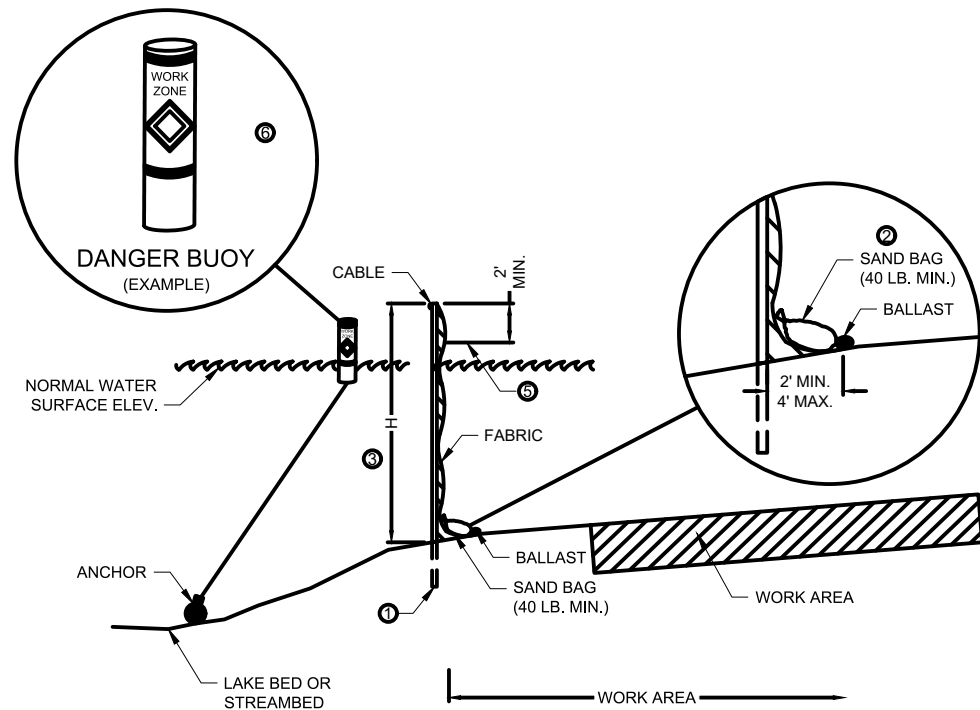


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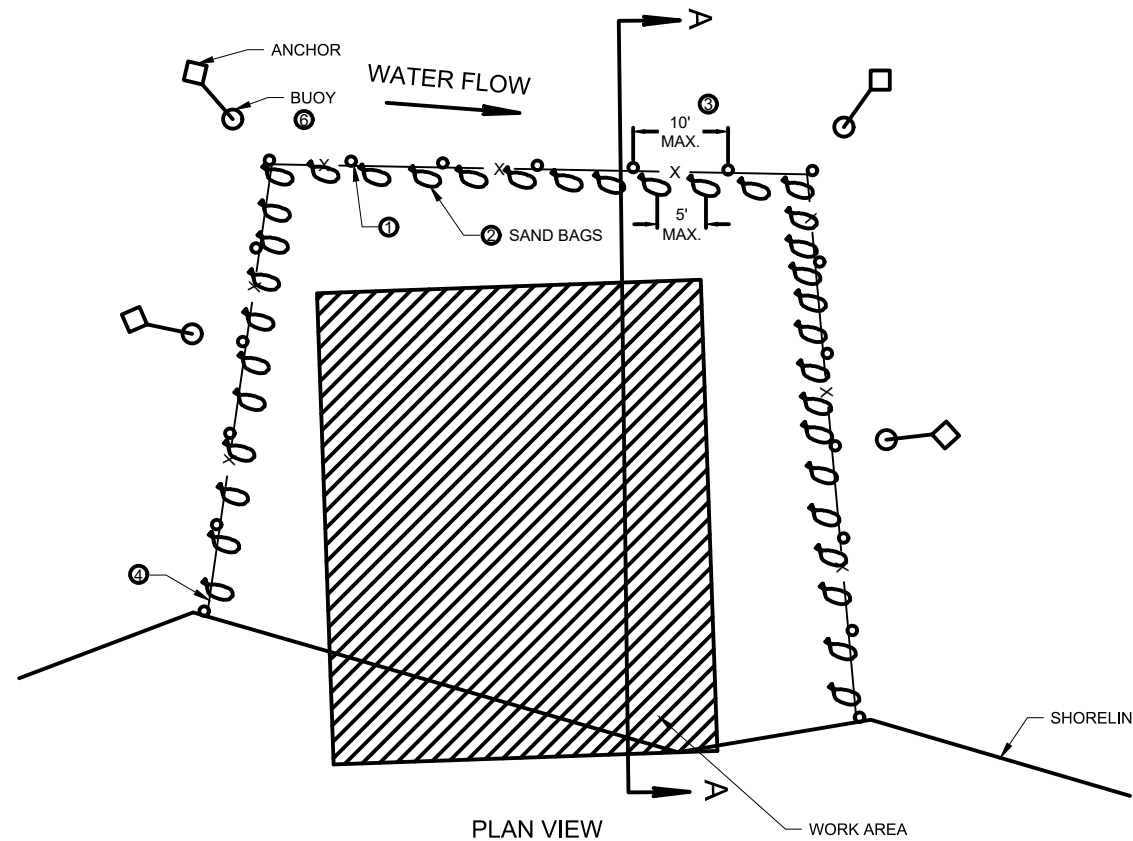
- PRUNE BRANCHES BACK TO THE NEAREST BOUGH OUTSIDE OF THE REMOVAL LIMITS OR FLUSH WITH TRUNK.
- PRUNE ROOTS GREATER THAN 1" DIAMETER WITH A CUTTING TOOL THAT CAN MAKE CLEAN STRAIGHT CUTS. DO NOT USE A TRENCHER OR EXCAVATOR TO MAKE CUTS. DO NOT PRUNE ROOTS WITHIN DISTANCE OF LESS THAN 3X TREE DIAMETER WITHOUT APPROVAL OF THE ENGINEER.
- PROPERLY DISPOSE OF TRIMMINGS AND STUMPS OFF OF NATIONAL FOREST PROPERTY.

CLEARING, GRUBBING, AND PRUNING DETAIL (NTS)

2/27/24 10:03 CEDP - OWNER X:\PROJECTS\232497_ST_USFS_FD_3 TRAIL BR DESIGNS\90_CADD\901_PLANS\901.4_FRD_11-DETAILS.DWG;



SECTION A - A



PLAN VIEW

FLOATING TURBIDITY CURTAIN DETAIL (NTS)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE APPLICABLE SPECIAL PROVISIONS.

TURBIDITY CURTAIN MAY BE REMOVED AT THE C.O.'S DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- ① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- ② SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN NEEDED OR ORDERED BY THE C.O. TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- ③ WHEN CURTAIN HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.
- ④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE CURTAIN. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE CURTAIN OPEN ON THE UPSTREAM END.
- ⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM CURTAIN HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- ⑥ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



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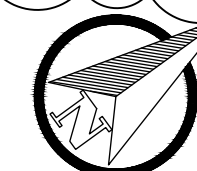
PROJECT NAME
**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE
DETAILS

| | |
|----------------------------|----------------------------------|
| DATE 2/26/2024 | ARCHIVE NO. |
| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-11 |
| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 12 OF 25 |



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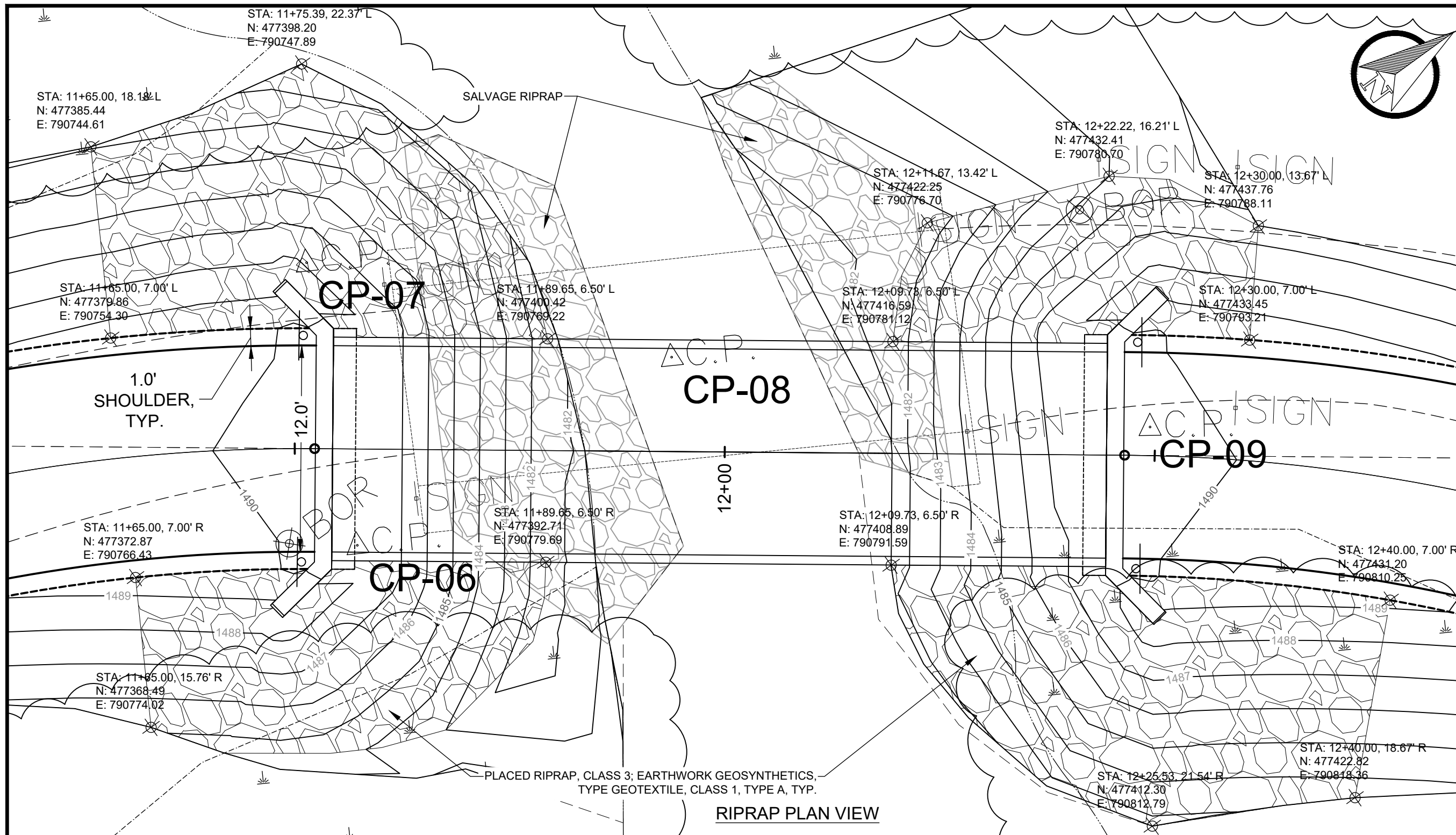
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CHEQUAMEGON-NICOLET NATIONAL FOREST

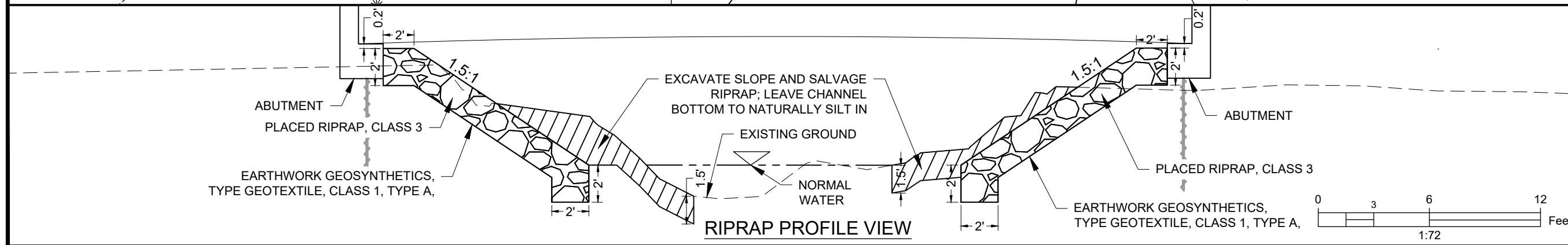
MEDFORD-PARK FALLS RANGER DISTRICT

DRAWING TITLE
DETAILS

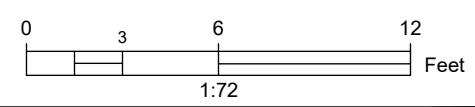
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| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-12 |
| DRAWN R. POLKINGHORN | CHECKED A. JOHNSTON |
| PROJECT NO. | SHEET 13 OF 25 |



RIPRAP PLAN VIEW



RIPRAP PROFILE VIEW



2/15/24 16:37 CEDP - OWNER X:\PROJECTS\232427_ST_USFS_PD_3 TRAIL BR DESIGNS\90_CADD\501_PLANS\501.4_FRD_11-DETAILS.DWG;



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| NO. | REVISION / ISSUE | DATE |

PROJECT NAME
**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

**CHEQUAMEGON-NICOLET
NATIONAL FOREST**

MEDFORD-PARK FALLS
RANGER DISTRICT

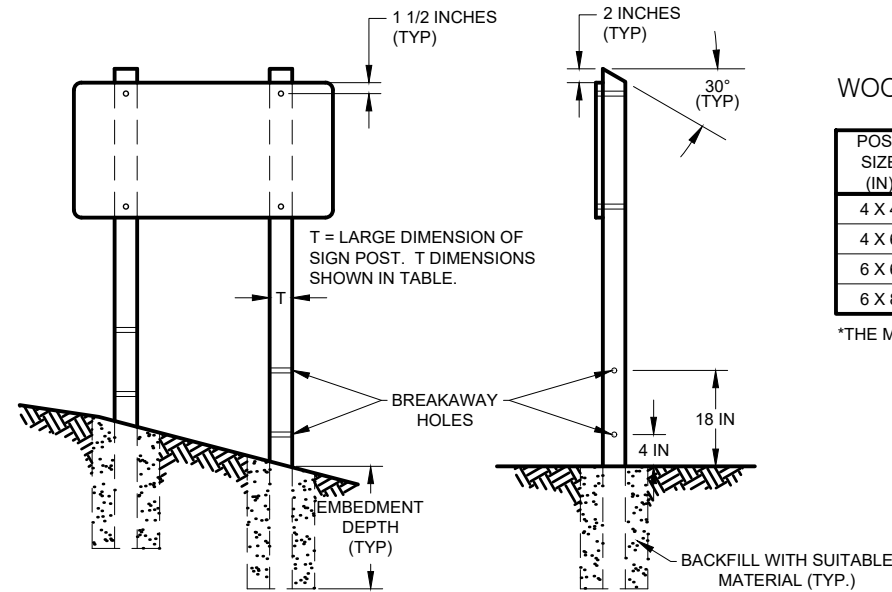
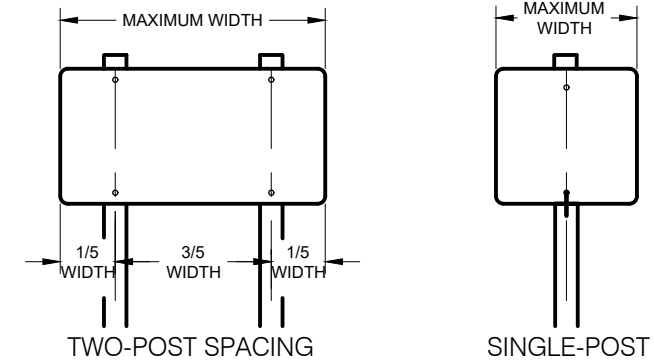
DRAWING TITLE
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| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-13 |
| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 14 OF 25 |

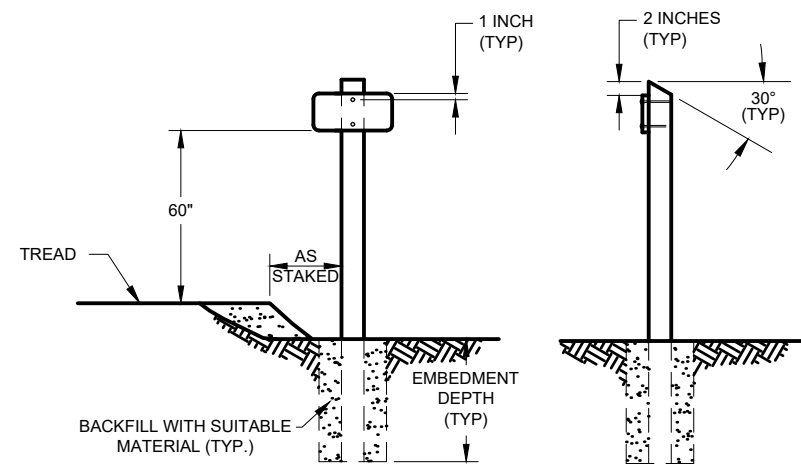
WOOD SIGN POST SPACING AND SIZE REQUIREMENTS

| POST SIZE (IN) | SINGLE POST | | TWO-POST | | MINIMUM EMBEDMENT DEPTH (FT) | HOLE DIAMETER (IN) |
|----------------|---------------------|-----------------------|---------------------|-----------------------|------------------------------|--------------------|
| | MAX SIGN WIDTH (IN) | MAX SIGN AREA (SQ.FT) | MAX SIGN WIDTH (IN) | MAX SIGN AREA (SQ.FT) | | |
| 4 X 4 | *47 | 10 | 72 | 20 | 3 | -- |
| 4 X 6 | 48 | 20 | 72 | 50 | 4 | 1.5 |
| 6 X 6 | 48 | 20 | 96 | 95 | 4 | 2 |
| 6 X 8 | -- | -- | -- | -- | 4 | 3 |

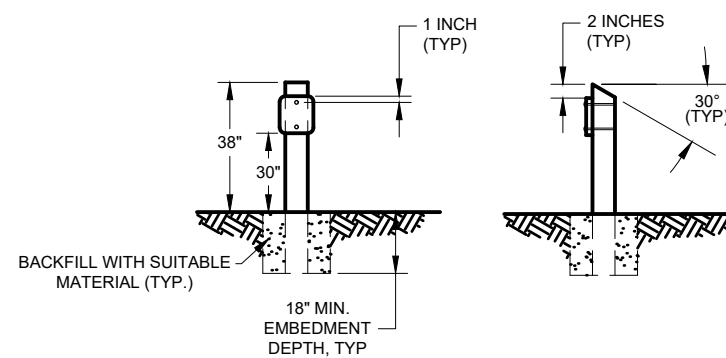
*THE MAXIMUM WIDTH IS 36 INCHES FOR DIAMOND-SHAPED SIGNS.



GUIDELINES FOR WOOD SIGN POSTS



SIGN AND POST INSTALLATION

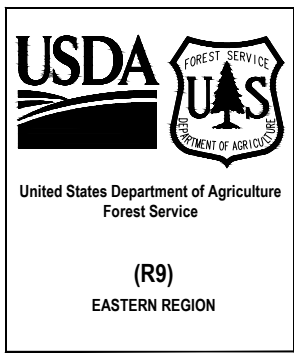
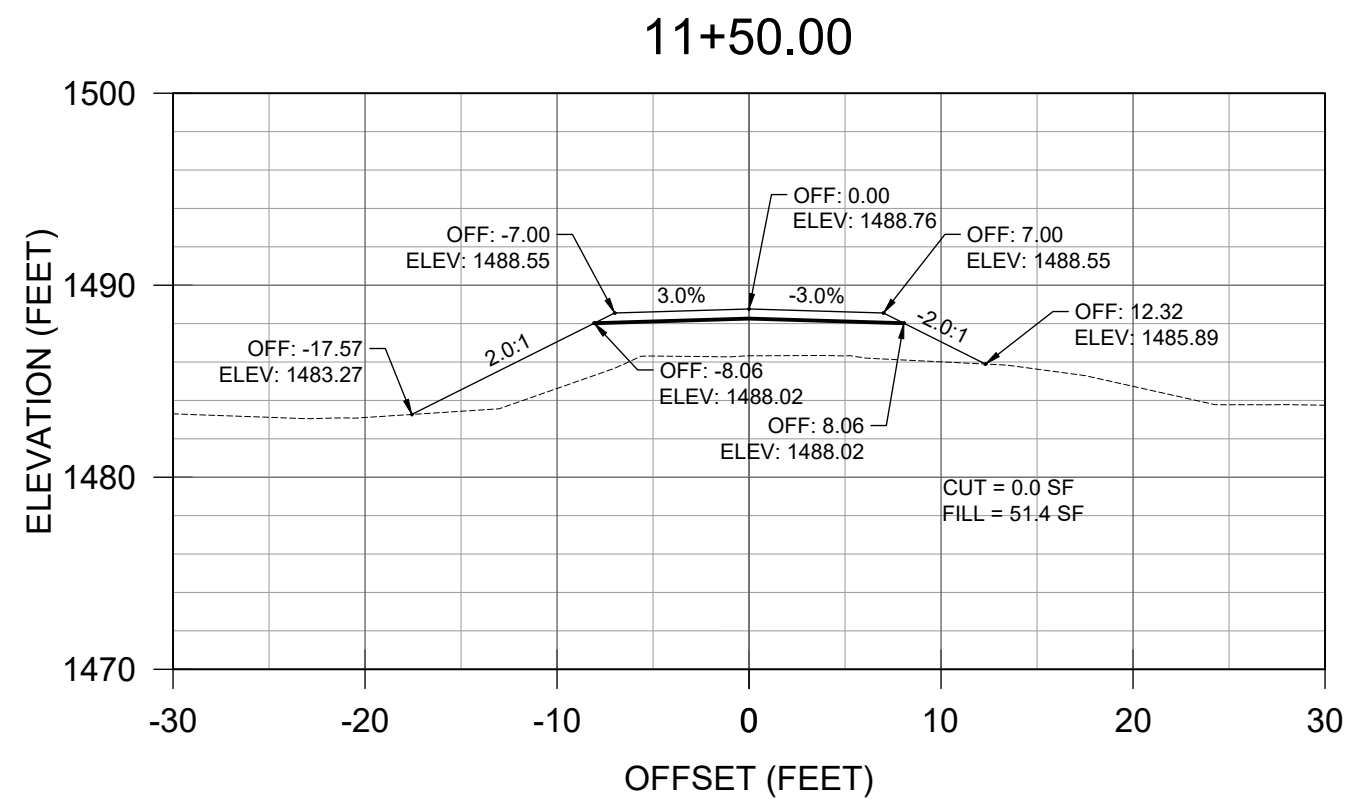
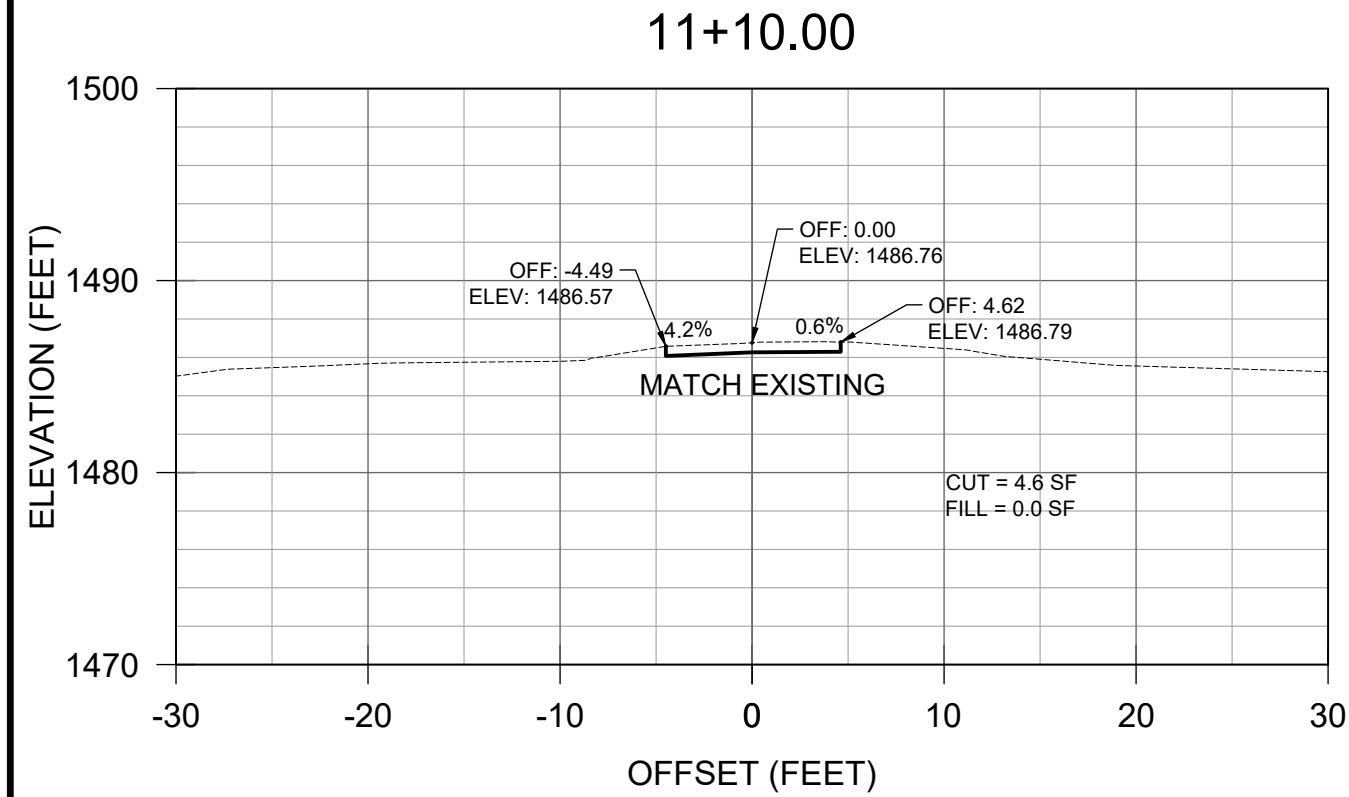
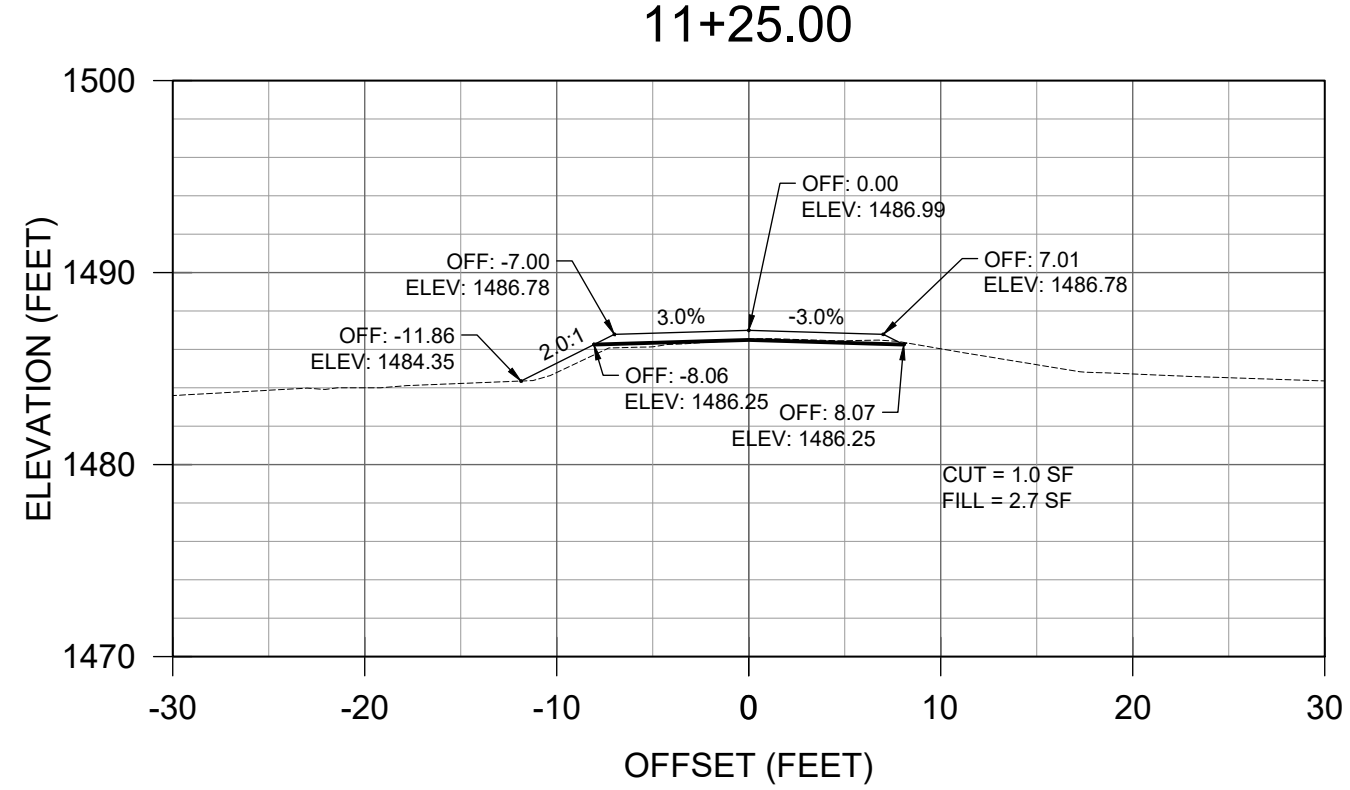
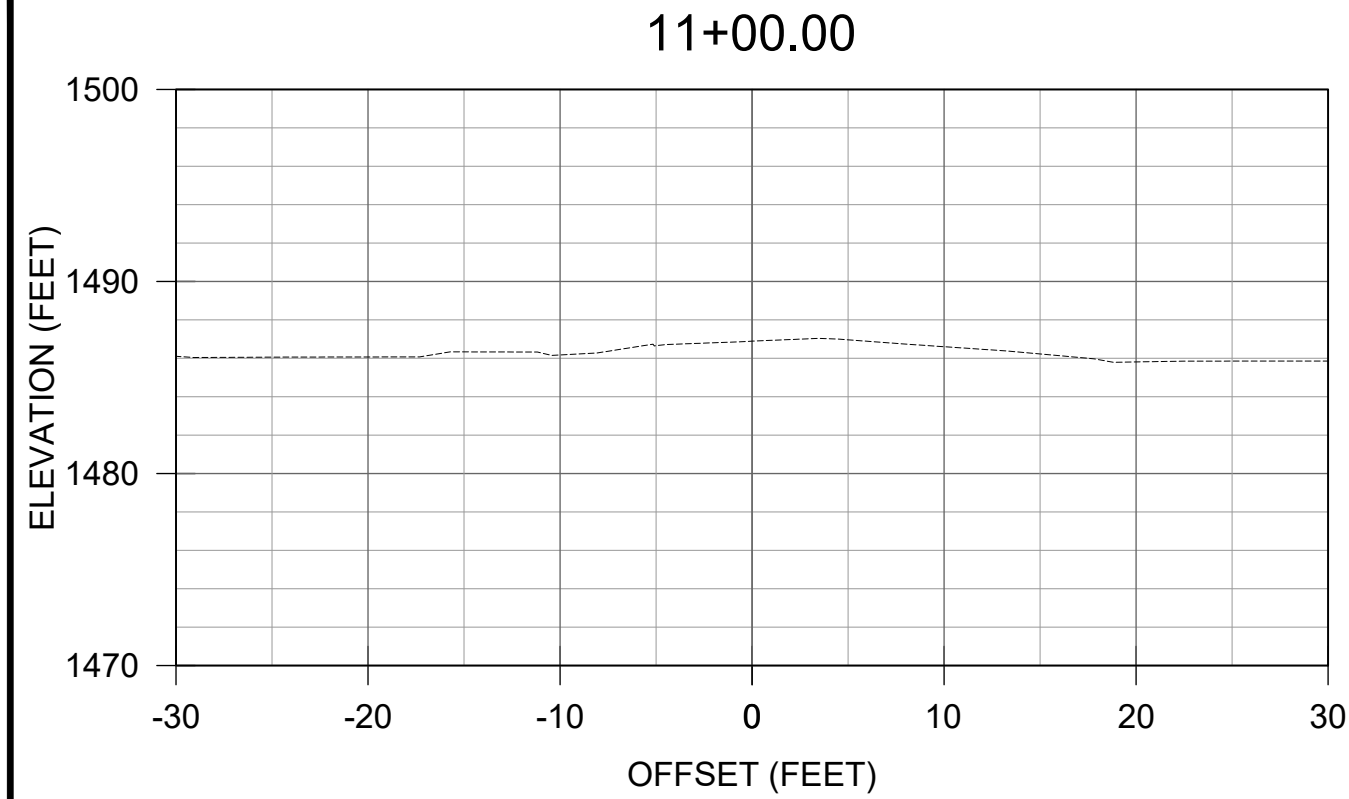


CAMPSITE SIGN AND MARKER POST INSTALLATION

NOTES:

- REFER TO "EM-7100-15 SIGN AND POSTER GUIDELINES FOR THE FS" FOR SIGN SPECIFICATIONS, MATERIALS, AND PLACEMENT.
- POST SPACING APPLIES TO BOTH WOOD AND STEEL POSTS.
- FOR SIZES OF STEEL POSTS, REFER TO EM 7100-15.
- ALL HARDWARE SHALL BE ALUMINUM OR GALVANIZED.
- LAG SCREW FASTENERS REQUIRE LEAD HOLES IN POSTS AND SHALL BE DRILLED PRIOR TO INSTALLATION.
- BOLT HOLES IN POSTS TO BE 1/16 INCH LARGER (MAXIMUM) THAN THE BOLT HOLE REQUIREMENT.
- SIGN AND MARKER POSTS ONLY SHALL BE TREATED WITH CCA (CHROMATED COPPER ARSENATE) FOR UC4A GROUND CONTACT FOR GENERAL USE.
- WOOD POSTS AND MARKERS SHALL BE DOUGLAS FIR NO. 2 OR BETTER, OR YELLOW SOUTHERN PINE, STAINED BROWN FEDERAL STANDARD COLOR 20059.
- COMPACT BACKFILL IN 6 INCH LIFTS UNTIL NO VISUAL DISPLACEMENT.
- BREAKAWAY HOLES MUST BE PERPENDICULAR TO THE DIRECTION OF VEHICLE TRAVEL.
- AFTER INSTALLING THE SIGN POST, DRILL THE BREAKAWAY HOLES AND TREAT HOLES WITH PRESERVATIVE.

2/12/24 2:20 CEDP - OWNER X:\PROJECTS\232347_ST_USFS_PD_3 TRAIL BR DESIGNS\90_CADD\901_PLANS\91.4_FRD_15-X-SECTIONS.DWG;



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PROJECT NAME

**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

CHEQUAMEGON-NICOLET
NATIONAL FOREST

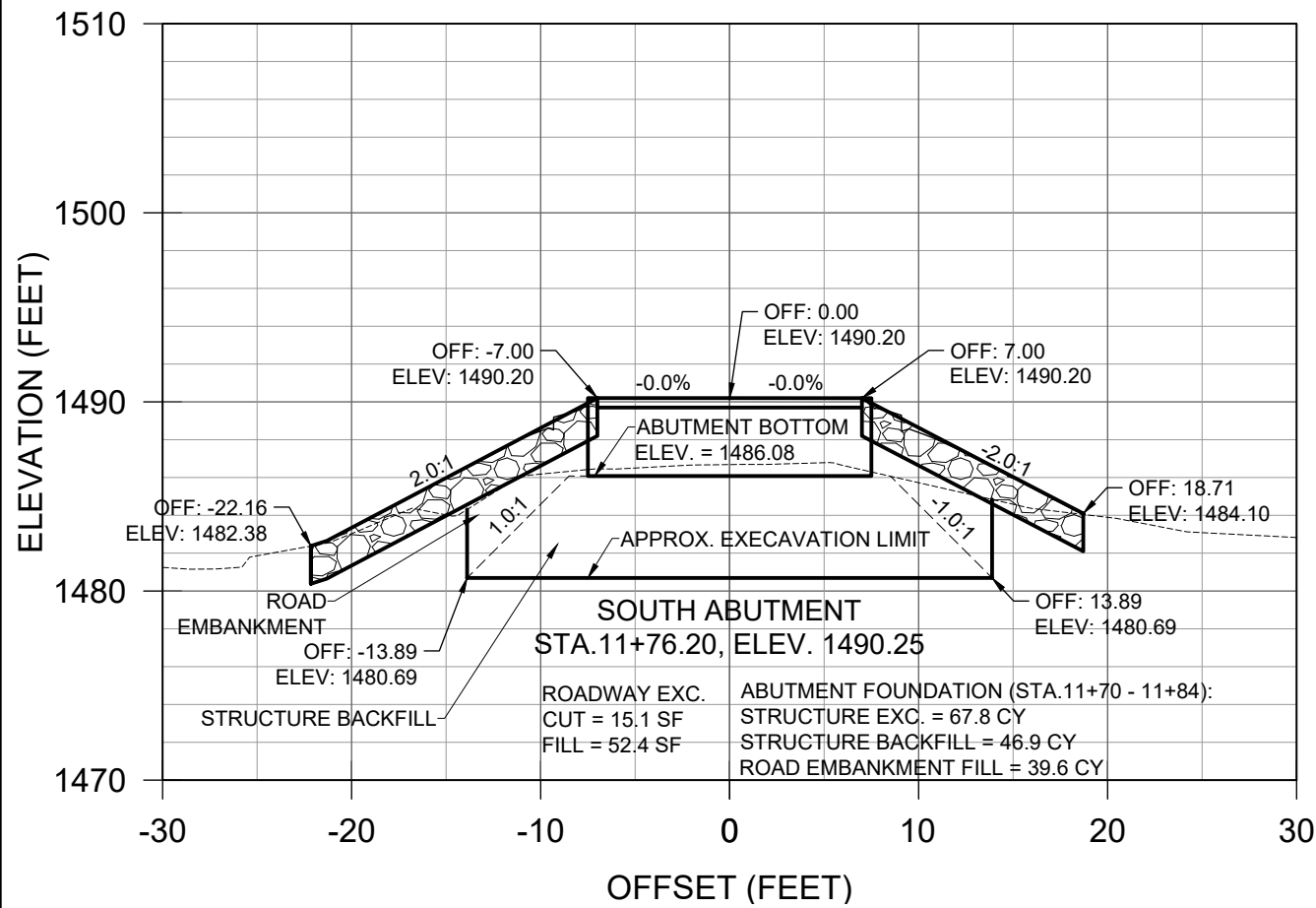
MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE

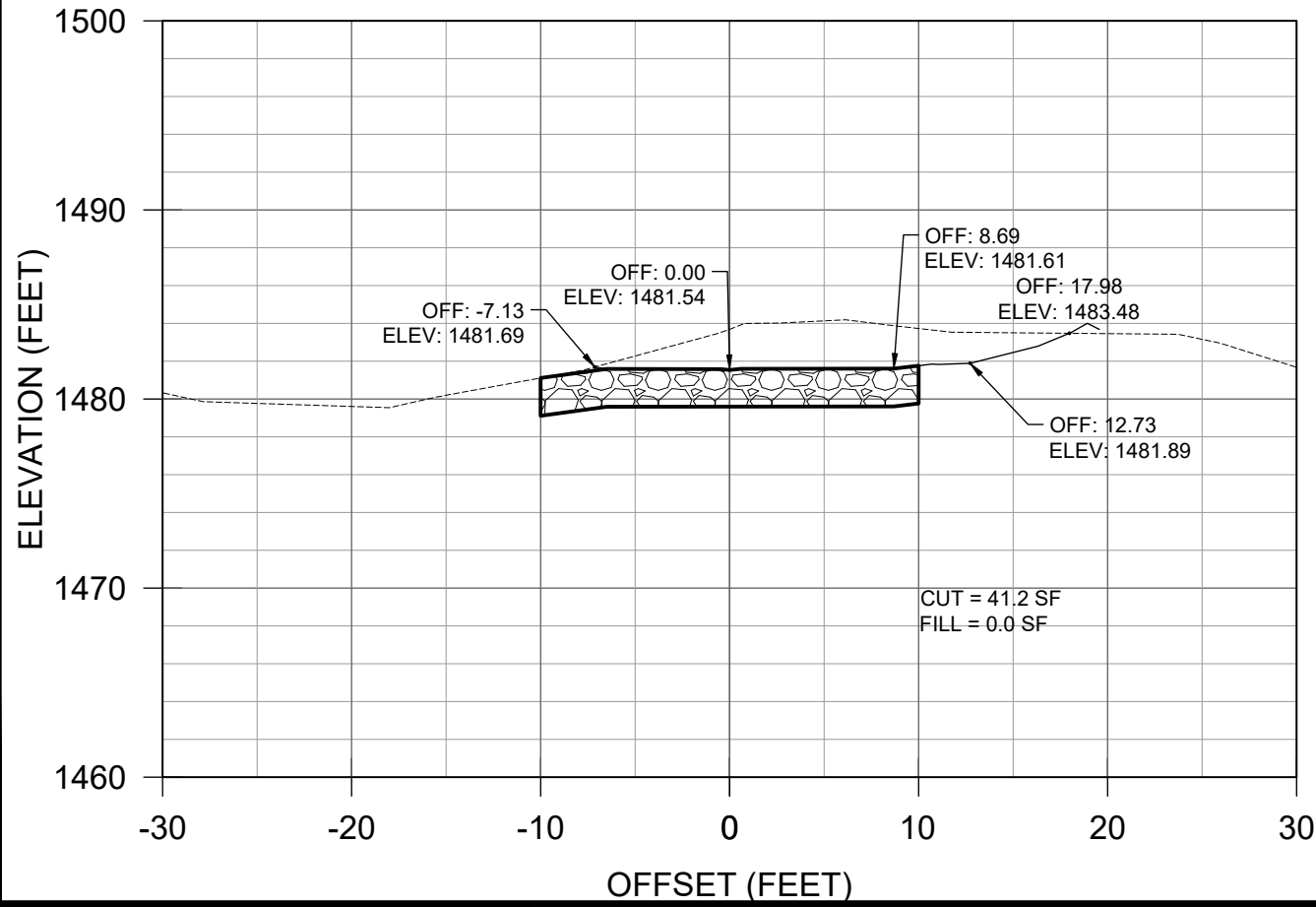
CROSS SECTIONS

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| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 15 OF 25 |

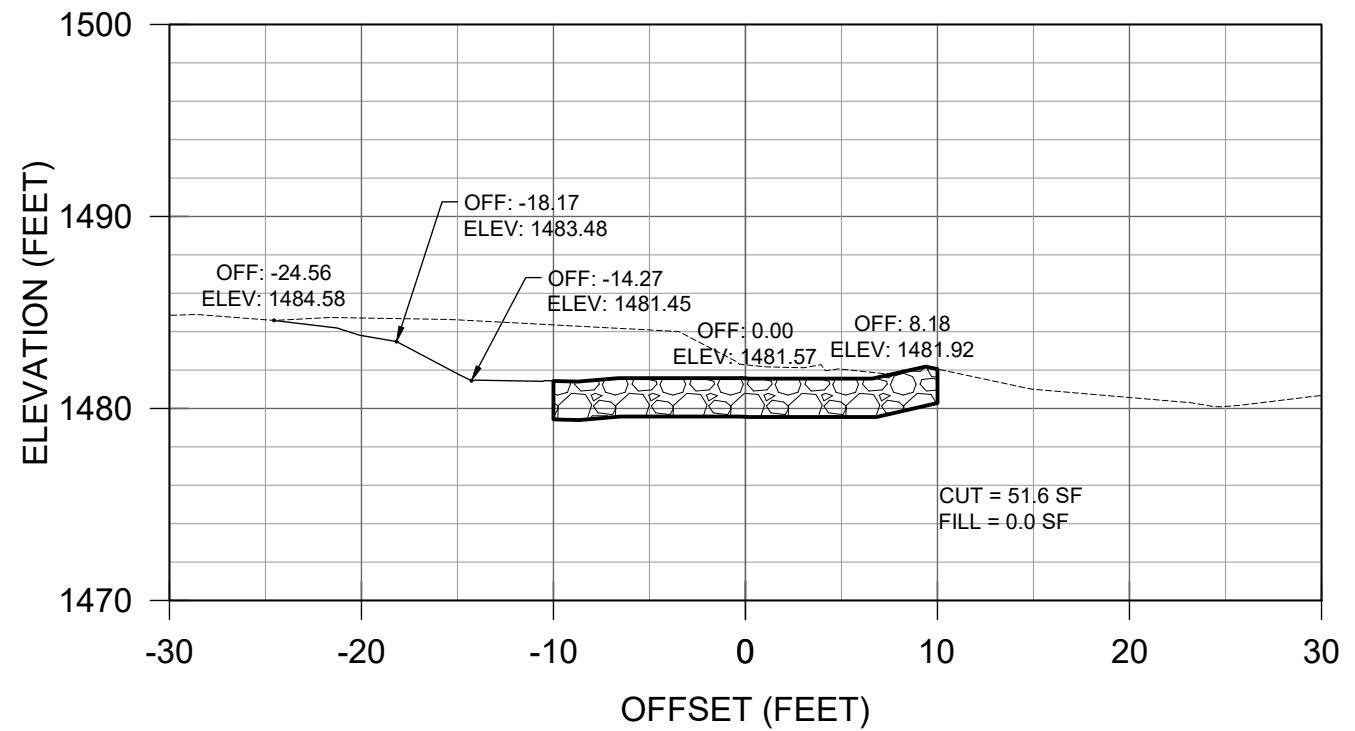
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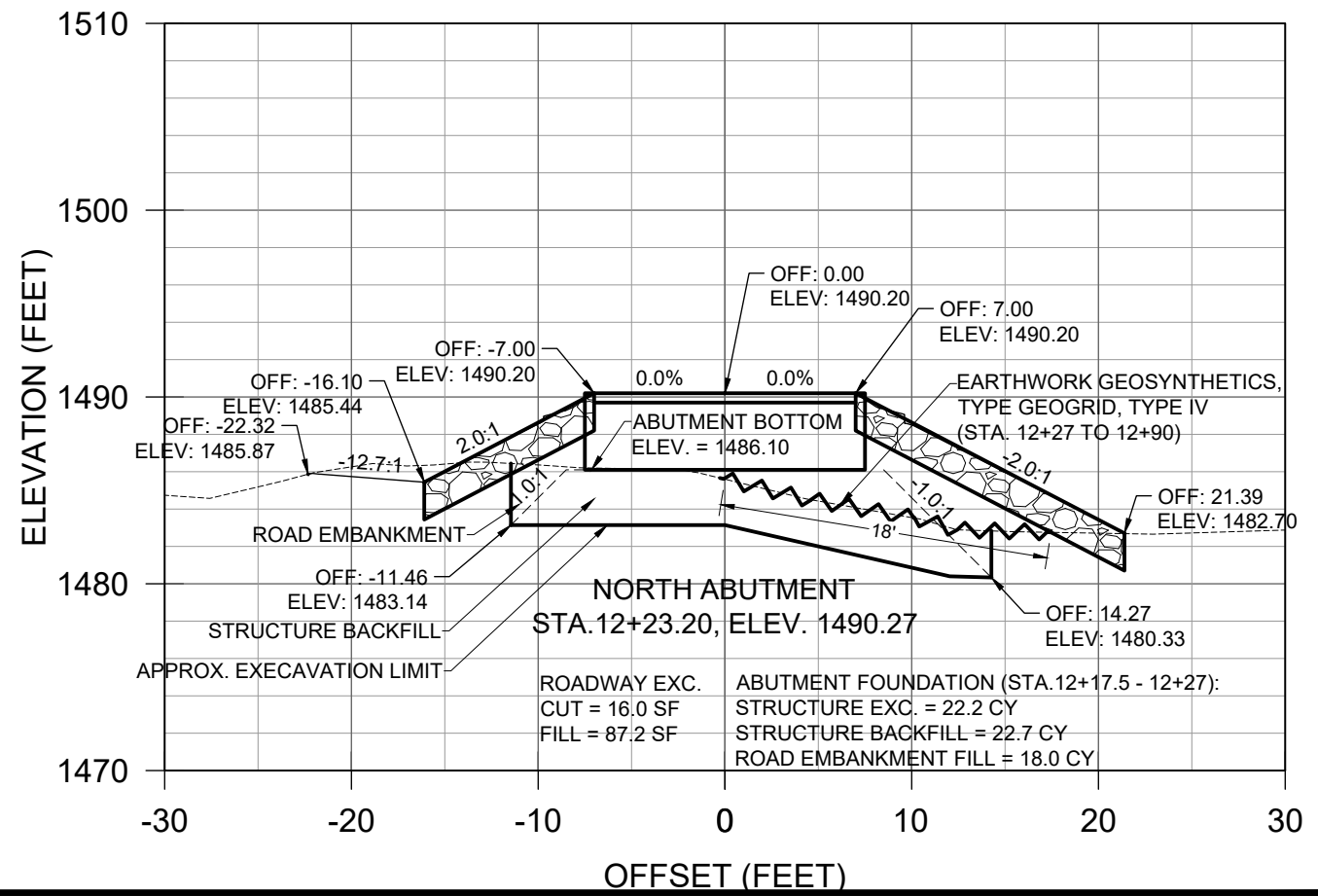
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12+10.00



12+25.00



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EASTERN REGION

STAMPS, LOGOS, AND SEALS



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PROJECT NAME

STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE

CHEQUAMEGON-NICOLET
NATIONAL FOREST

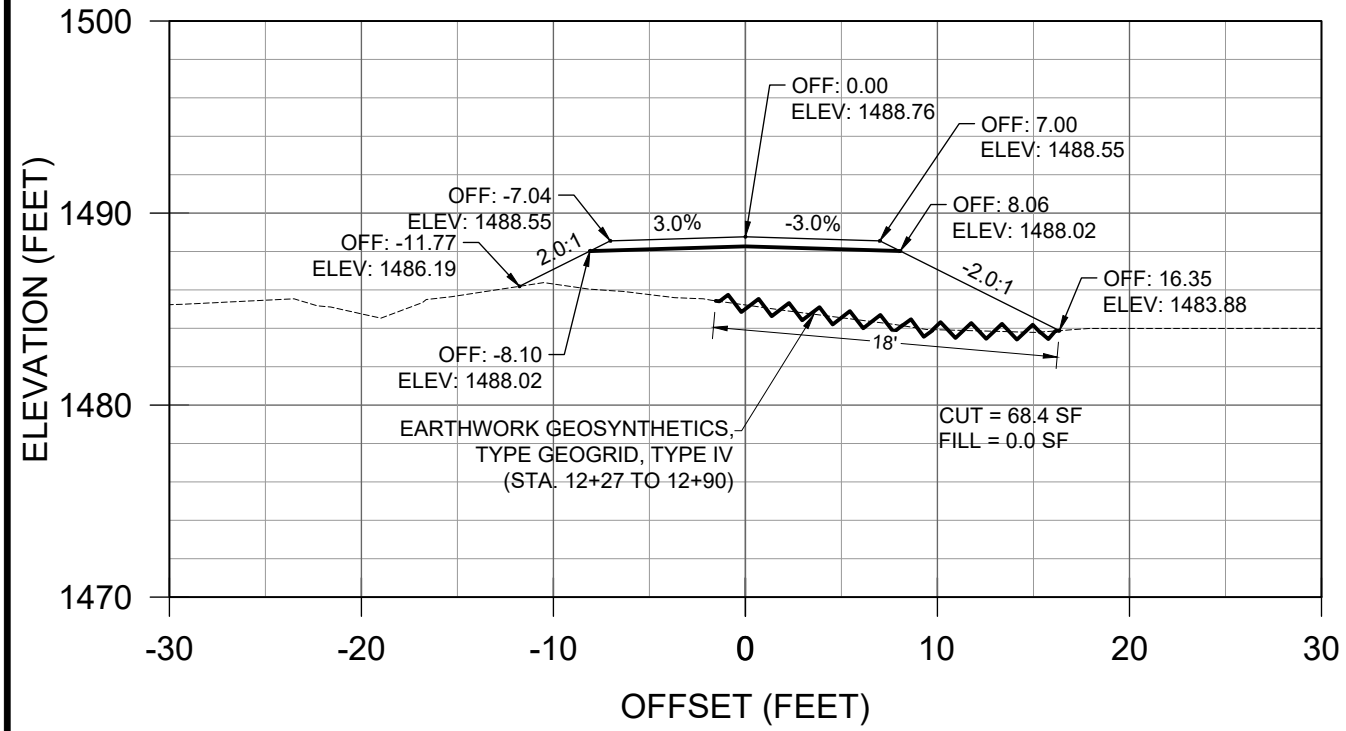
MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE

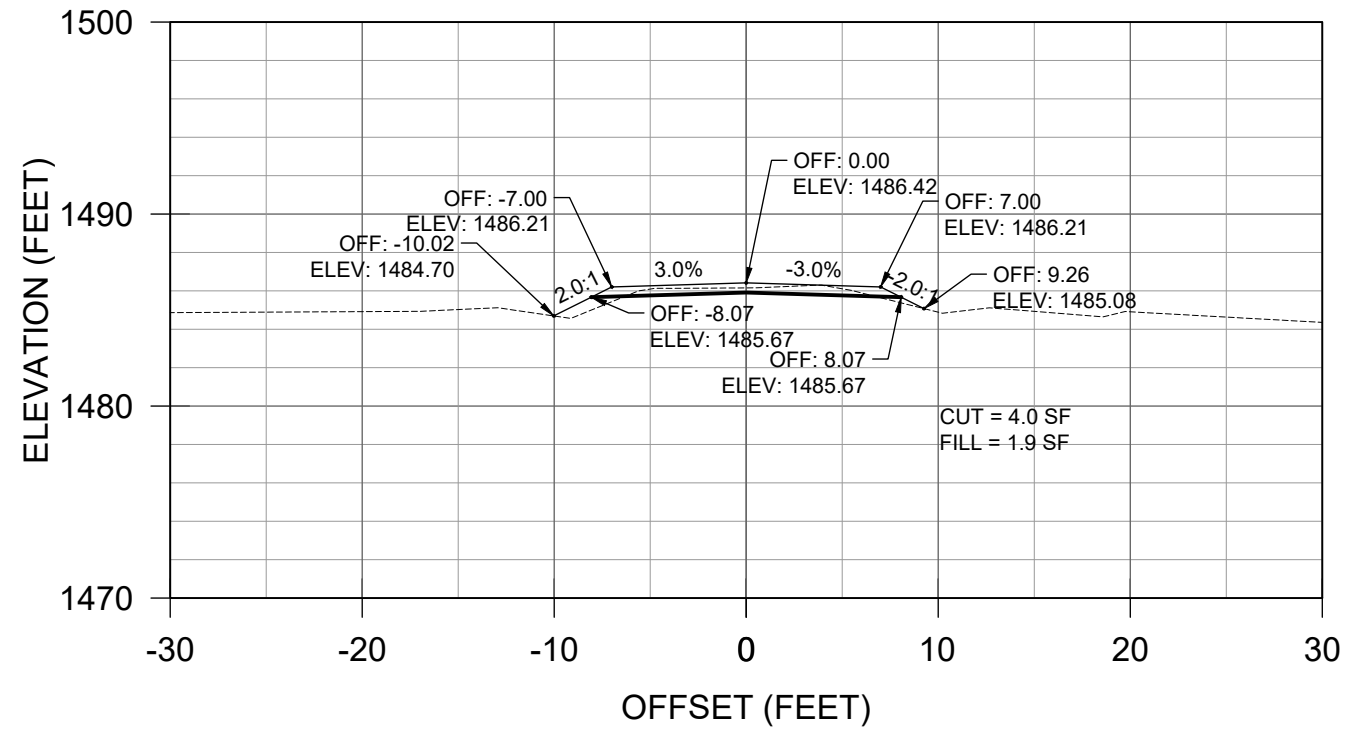
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| DATE | ARCHIVE NO. |
| 2/16/2024 | |
| DESIGNER | DRAWING SHEET NO. |
| R. POLKINGHORN | C-15 |
| DRAWN | |
| CHECKED | SHEET 16 OF 25 |
| A. JOHNSTON | |
| PROJECT NO. | |

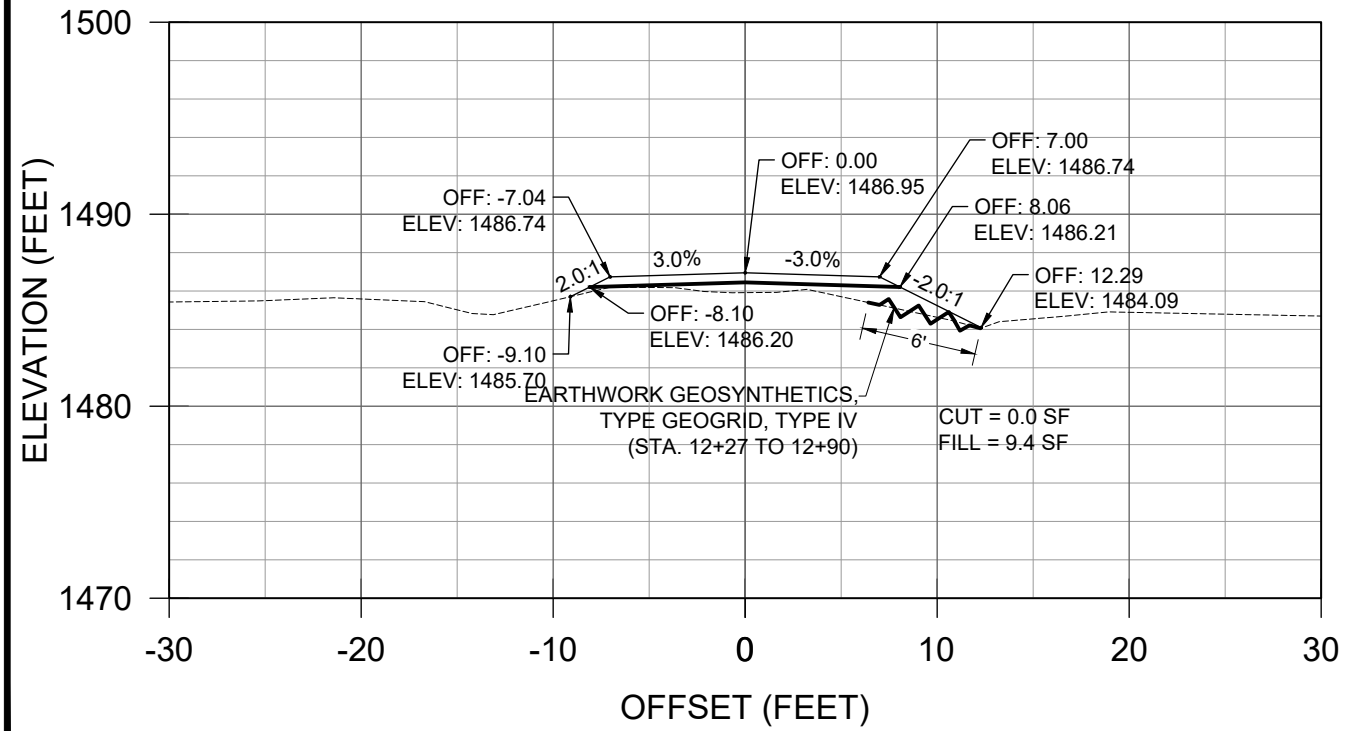
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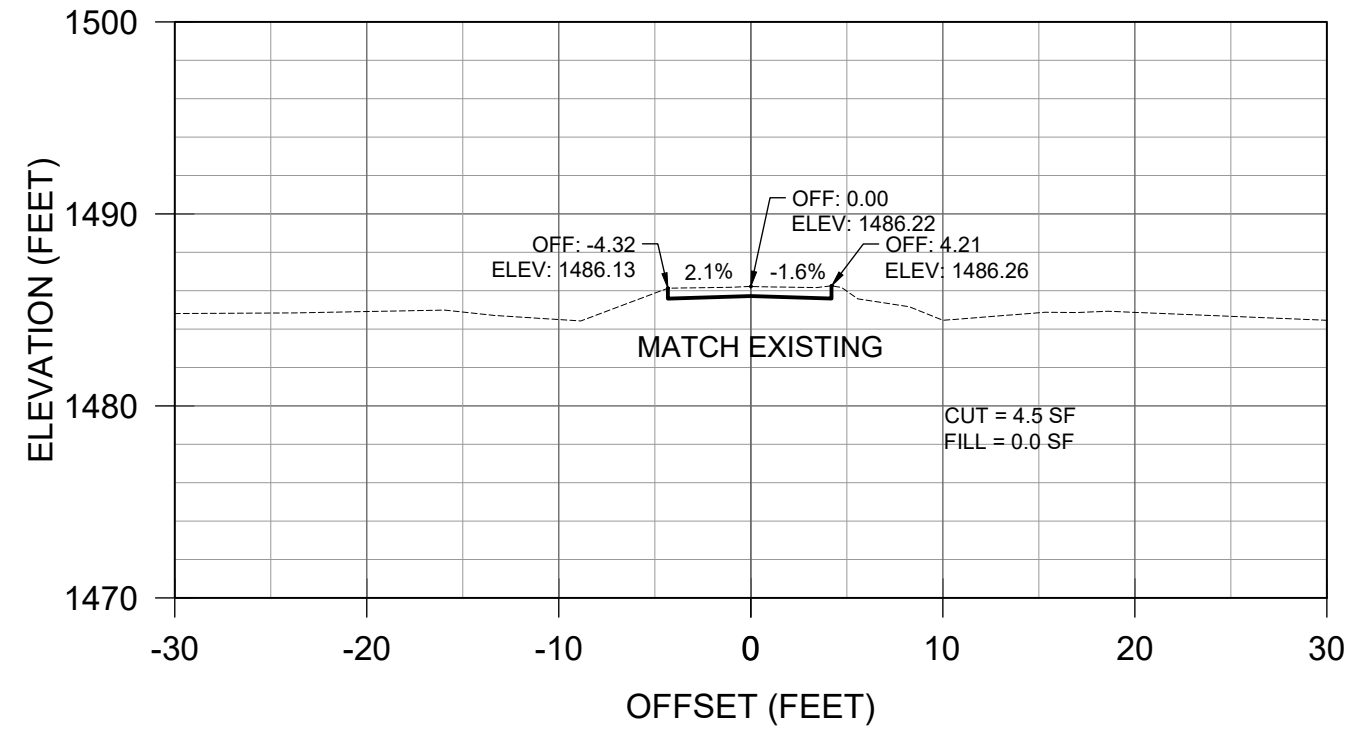
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13+10.00



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CEDP, Inc.
Consulting Engineers & Design Professionals
6426 Offshore Drive
Madison, WI 53705
608-467-4900 | www.CEDP.us

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PROJECT NAME

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DALRYMPLE
BRIDGE**

CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
RANGER DISTRICT

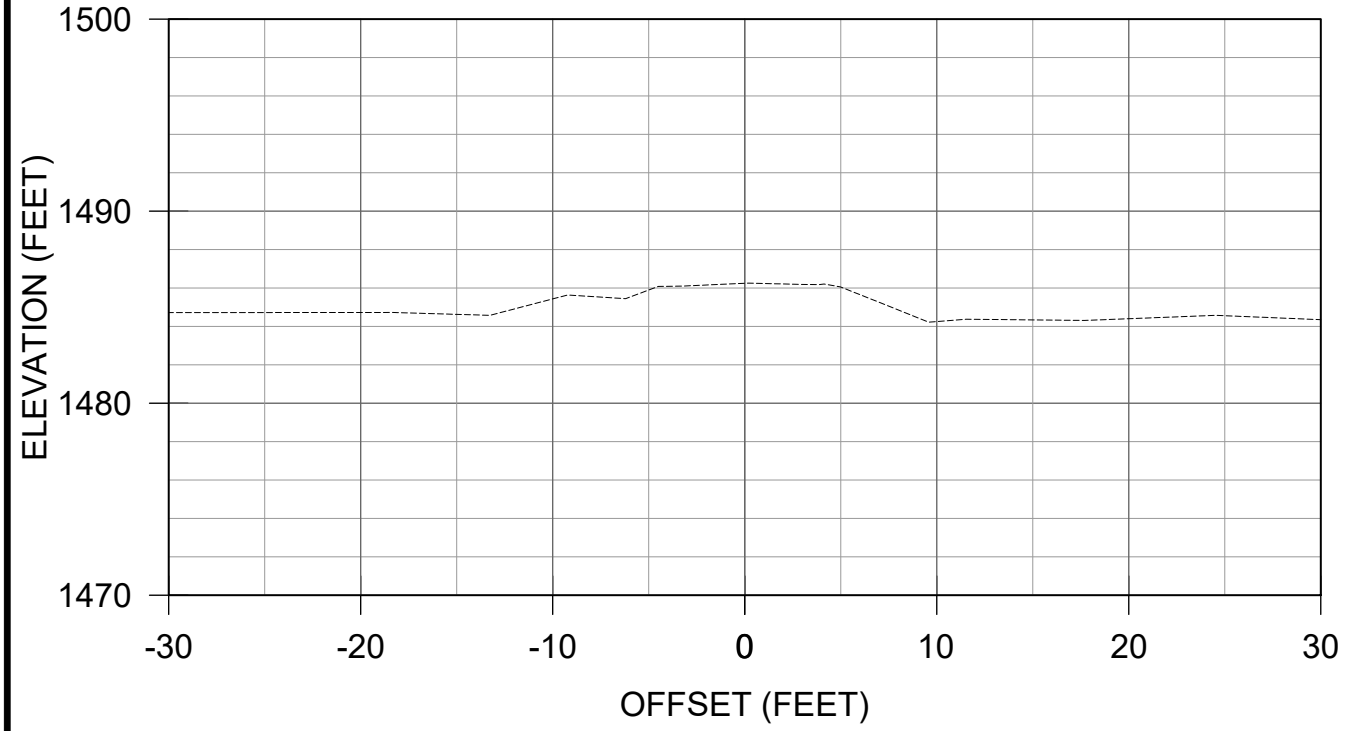
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| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 17 OF 25 |

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13+25.00



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PROJECT NAME

**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

**CHEQUAMEGON-NICOLET
NATIONAL FOREST**

**MEDFORD-PARK FALLS
RANGER DISTRICT**

DRAWING TITLE

CROSS SECTIONS

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| DATE 2/16/2024 | ARCHIVE NO. |
| DESIGNER R. POLKINGHORN | DRAWING SHEET NO. C-17 |
| DRAWN R. POLKINGHORN | |
| CHECKED A. JOHNSTON | |
| PROJECT NO. | SHEET 18 OF 25 |



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715-360-6629

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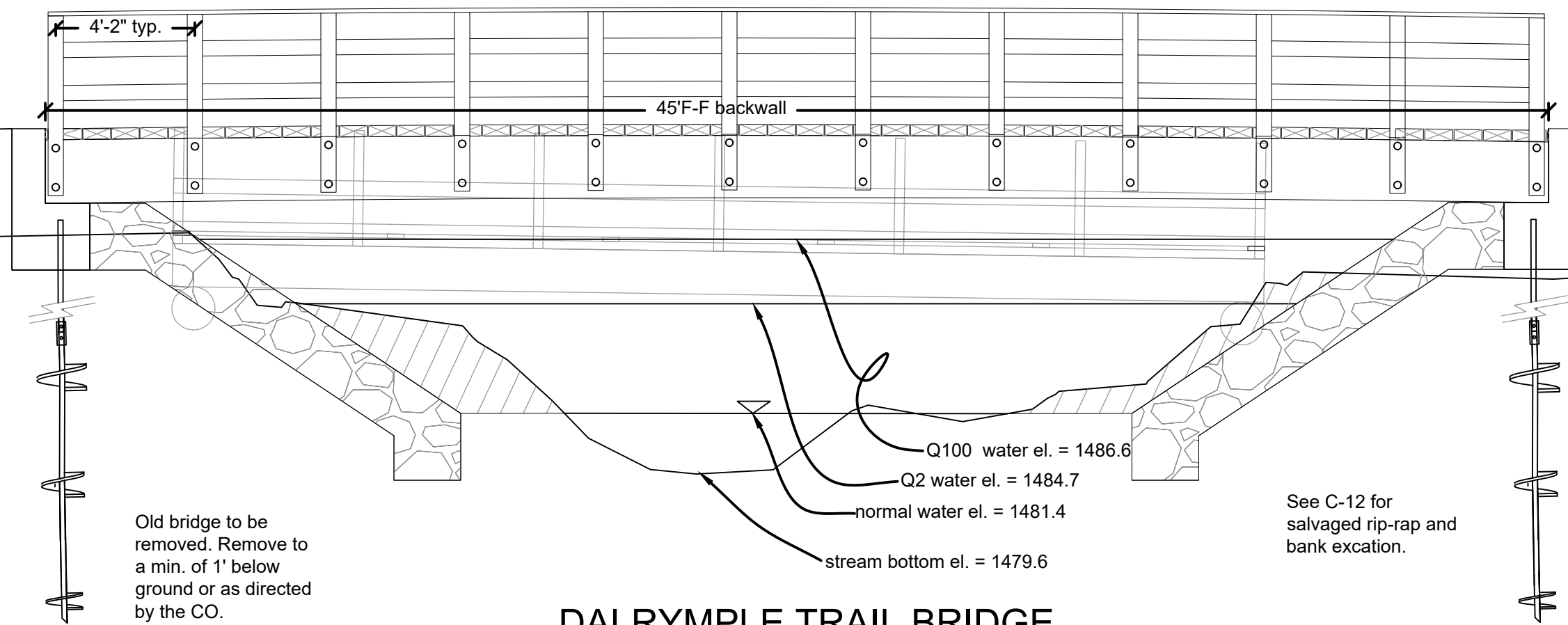
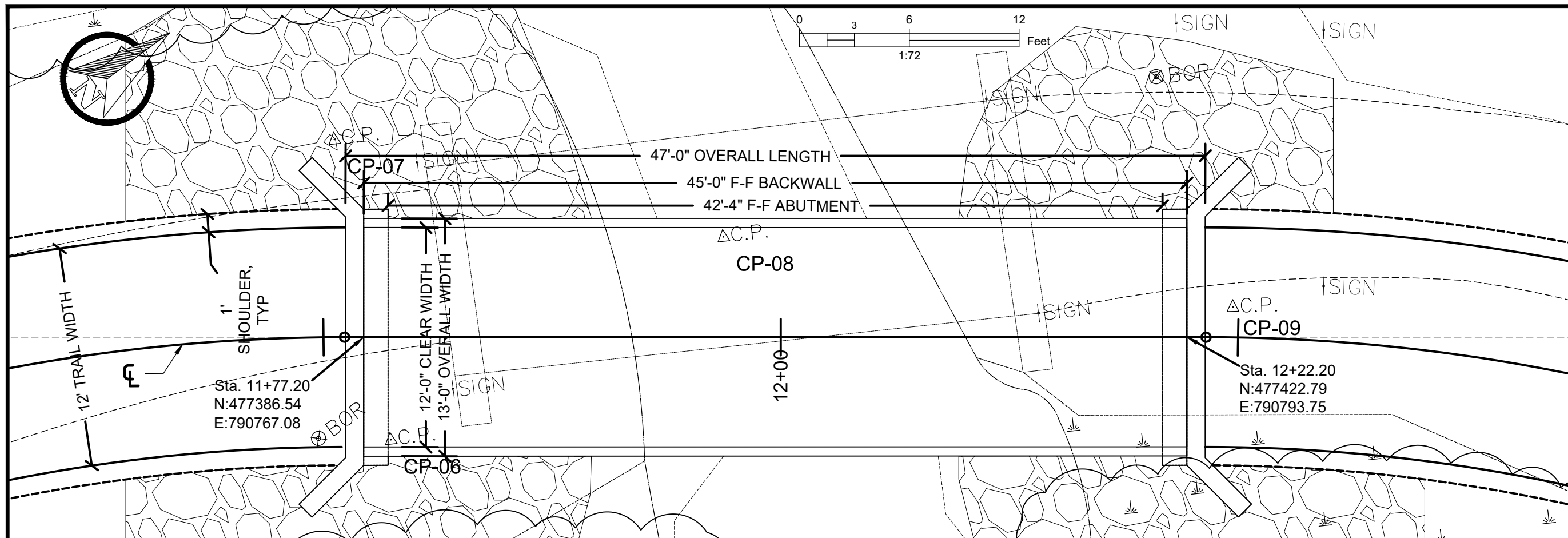
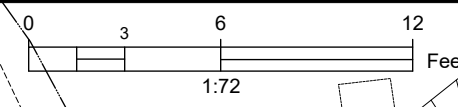
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**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE
**STRUCTURE GENERAL
PLAN**
print on 11 x 17
1"

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|--------------------------|----------------------------------|
| DATE 2/26/2024 | ARCHIVE NO. |
| DESIGNER A.JOHNSTON | DRAWING SHEET NO. S-01 |
| DRAWN A.JOHNSTON | |
| CHECKED R.POLKINGHORN | |
| PROJECT NO. | SHEET 19 OF 25 |



Old bridge to be removed. Remove to a min. of 1' below ground or as directed by the CO.

See C-12 for salvaged rip-rap and bank excitation.

DALRYMPLE TRAIL BRIDGE
scale: 1/4" = 1'

2/27/24 08:34 CECP - OWNER X:\PROJECTS\232847_ST_USFS_FD_3 TRAIL BR DESIGNS\00_COMM\220_TRANSFERS\240226_ART_REVISED PLANS-CAD\DALRYMPLE MATHCAD\DALRYMPLE_ART-240207 2.DWG;

General Notes:

This project consists of installing a 45' x 12' glulam girder/deck trail bridge, constructing concrete abutments with helical piles, road construction, cut and fill, erosion control, rip-rap placement, and the removal of the existing old bridge.

Specifications:

- LRFD Bridge Design Specification, 9th Ed. AASHTO
- LRFD Guide Specifications for Design of Pedestrian Bridges, 2009, AASHTO
- Building Code Requirements for Structural Concrete, ACI 318-19(22).
- Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-14; FHWA.
- Forest Service Handbook FSH 7709.56b.
- Minimum Design Loads and Associated Criteria for Buildings, ASCE 7-22
- Best Management Practices for Erosion and Sediment Control (FHWA).
- National Design Specifications For Wood Construction, 2018
- Standard for Wood Products-Structural Glued Laminated Timber, ANSI A190.1-2012,
- Standard Specification for Structural Glued Laminated Timber of Softwood Species, ANSI 117-2020.

Design Loads:

Live load; H12.5 truck and snow load of pg = 65 psf, strength I limit state. Deflection: $L/360$, truck service I limit state.

Soil Design:

SPT soil borings were done by GESTRA. The bearing capacity is given as allowable 2500 psf and allowable 25 kip for the helical piles..

Sawn Lumber:

- Grades are as per SPIB or WWPA and are minimums. Deck is #1 grade full sawn.
- All lumber is S4S except for the deck and shall be Douglas Fir or Southern Pine.
- Species and dimensions can be substituted with CO approval.

Glulams:

- Meeting ANSI-117-2020. ANSI-109-2007; ANSI A190.1-2012; Industrial Appearance Grade; Adhesives and manufacturing meeting AITC 405 and A190.1 for wet use adhesives; Glulam girders treated with Copper Napthanate to AWPA UC4C and AITC109-2007.
- Certification of Conformance per AITC A190.1 shall be submitted for approval for all glulams.
- Species and dimensions can be substituted with CO approval.
- Structural lumber and glulams shall be protected during storage, and transit with a minimum of load or bundle wrappings per AITC 111.
- All indicated holes shall be predrilled before treatment unless indicated otherwise.
- Glulam girders will be manufactured with 2" camber.

Timber Preservative Treatment--

- All lumber treated with Copper Napthanate to AWPA UC4C,
- All field drilled holes will be treated with three coats of Copper Napthanate , 2% copper solution.
- Certification of Conformance per plant, manufacturing, adhesives, timber, and preservative treatment. shall be submitted for approval prior to delivery,

Adhesive Anchor Systems--

- Hilti HY150 MAX Adhesive w/Hilti HAS galvanized rods as indicated. Installed per manufacturer instructions, incidental to Pay Item 55704.

Concrete:

- Type IA cement, 6% air content, measured with ASTM C231
- Exposure category F2
- Min. 4500 psi, f'c, concrete, per ASTM C39 at 28 days.
- Max. .45 w/c ratio, w/cm;
- Min 564 lbs. Portland per cy.
- 5" max slump per ASTM C172.
- 3/4" coarse aggregate.
- Do 2 test cylinders, for testing @28 days on each abutment per ASTM C172 and C39.
- Reinforcing steel shall have tensile strength of 60ksi meeting ASTM A615.
- Min. splice length on #5's is 24", #4's is 19".
- Min. hook diameter: #5:4"; #4:3". Splices can be substituted for hooks.
- Min. hook extension: #5:3"; #4: 3".
- Min. 2" concrete cover on bars, 3" on bottom.
- Chamfer all exposed edges 3/4"x3/4".
- Slope all tops, including seat, 1/8"/1' for drainage.
- Submit mix design per FHWA 1608.
- If the contractor plans to use any cold joints, their use, details, and locations will be submitted for approve by the CO.
- Abutment will require removal of organic and filling with structure fill meeting FP-14 704.04 and compacting to 95% standard proctor.

Abutments:

The abutments are concrete pile caps combined with helical piles. The concrete spread footing is above the frost depth and is stabilized and enhanced with the helical piles. See supplemental specs 551. Plans show minimum depth, and the minimum torque will be based on the manufacturer's specification to meet the geotech report bearing requirements.

Pilot drilling:

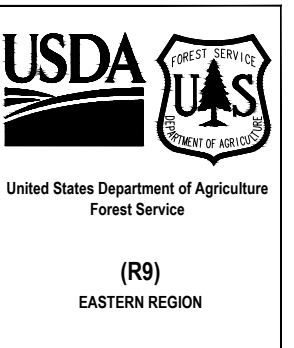
- All lag screws will be installed and have pilot holes drilled per NDS 11.1.4, summarized by: pilot for the shank will have the same diameter and depth as the shank; the threads' pilot will be 70% of the shank diameter.
- The flat washer head screws do not need pilot drilling unless splitting occurs.

Steel:

- All steel connectors are hot dipped galvanized after fabrication per ASTM A123 and A153, except for the flat washer head screws which can be stainless steel or other exterior grade with prior approval by the CO.
- All steel is A36 and connectors are A307 unless otherwise specified.
- All helical anchor material will be per the manufacture's specifications.
- Timber bolts will have dome heads of 3.5 times the shank diameter. Malleable washers will be 4 times the shank diameter.
- Flat head washer screws are Simpson or equal with a shank of >.25" on the deck and >.19" on the rails.

Abbreviations:

- CO: Contracting Officer
- NDS: National Design Specifications
- T.B: Timber Bolt, dome head 3.5 times shaft diameter
- FWH: Flat washer head screws
- L.S.: Lag Screws
- M.W.: Malleable Washer, 4 times shaft diameter
- c.s. or C.S.: cross section
- pc: pieces
- min.: minimum
- glulam: glue laminated
- eq: equivalent
- HDG: hot dipped galvanized
- Ø: diameter



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PROJECT NAME

**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE

**STRUCTURE GENERAL
NOTES**

print on 11 x 17
1"

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|--------------------------|----------------------------------|
| DATE 2/26/2024 | ARCHIVE NO. |
| DESIGNER A.JOHNSTON | DRAWING SHEET NO. S-02 |
| DRAWN A.JOHNSTON | |
| CHECKED R.POLKINGHORN | |
| PROJECT NO. | SHEET 20 OF 25 |

BORING D-1
STA. 12+20.5, 14.2' LT.

SOIL BORING LOG

PAGE NUMBER
1 of 1

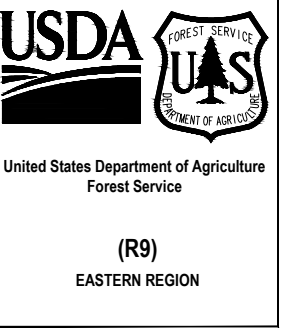
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|---|------------------------------------|-------------------------------|
| PROJECT NAME CNNF Trail Bridge, Dalrymple | DATE DRILLING STARTED 8/17/2023 | BORING NUMBER D-1 |
| PROJECT LOCATION Town of Fifield, Price County, Wisconsin | DATE DRILLING ENDED 8/17/2023 | PROJECT NUMBER 23241-10 |
| GESTRA Engineering Inc. 191 W Edgerton Avenue Milwaukee, WI 53207 Phone: 414-933-7444, Fax: 414-933-7844 | | DRILLING RIG LC-55 |
| BORING DRILLED BY FIRM: GESTRA CREW CHIEF: A. Woerpel | FIELD LOG C. Ray | LATITUDE |
| LAB LOG / QC C. Senechalle | LONGITUDE | DRILLING METHOD 3 1/4" HSA |
| | | SURFACE ELEVATION 99.9 ft |

BORING D-2
STA. 11+74.6, 5.5' RT.

SOIL BORING LOG

PAGE NUMBER
1 of 1

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|---|------------------------------------|-------------------------------|
| PROJECT NAME CNNF Trail Bridge, Dalrymple | DATE DRILLING STARTED 8/16/2023 | BORING NUMBER D-2 |
| PROJECT LOCATION Town of Fifield, Price County, Wisconsin | DATE DRILLING ENDED 8/16/2023 | PROJECT NUMBER 23241-10 |
| GESTRA Engineering Inc. 191 W Edgerton Avenue Milwaukee, WI 53207 Phone: 414-933-7444, Fax: 414-933-7844 | | DRILLING RIG LC-55 |
| BORING DRILLED BY FIRM: GESTRA CREW CHIEF: A. Woerpel | FIELD LOG C. Ray | LATITUDE |
| LAB LOG / QC C. Senechalle | LONGITUDE | DRILLING METHOD 3 1/4" HSA |
| | | SURFACE ELEVATION 100.1 ft |



| Number and Type | Recovery (in) | Blow Counts | N - Value | Depth (ft) Elevation | Soil Description and Geological Origin for Each Major Unit | USCS Classification | Graphic | Well Diagram | Unconfined Comp. Strength (Qu or qp) (tsf) | Liquid Limit | Plasticity Index | Moisture Content (%) | Comments |
|-----------------|---------------|-------------------|-----------|-------------------------|---|---------------------|---------|--------------|--|--------------|------------------|----------------------|--|
| SS-1 | 12 | 1 2 2 | 4 | | TOPSOIL, sandy silt, brown to dark brown, moist, trace root hairs, trace gravel | | | | | | | | |
| SS-2 | 5 | 1 1 6 | 7 | | | | | 3.4 (96.5) | | | | | |
| SS-3 | 5 | 2 4 11 | 15 | 95.0 | SILTY SAND, brown to dark gray, moist to wet, medium dense, trace gravel | SM | | | | | | | |
| SS-4 | 10 | 4 10 8 | 18 | | | | | 8.6 (91.3) | | | | | |
| SS-5 | 12 | 7 12 6 | 18 | 90.0 | SILTY SAND WITH GRAVEL, grayish brown, moist, medium dense | SM | | | | | | | Driller noted possible cobbles from 7-12 ft. |
| SS-6 | 18 | 4 5 6 | 11 | | SILTY SAND, grayish brown, moist to wet, medium dense to very dense, trace gravel | | | | | | | | P200 = 28.2% |
| SS-7 | 16 | 4 7 8 | 15 | 85.0 | | | | | | | | | |
| SS-8 | 18 | 7 8 10 | 18 | | | SM | | | | | | | with gravel in SS-8 |
| SS-9 | 16 | 23 40 50/5" | R | 80.0 | | | | | | | | | |
| SS-10 | 14 | 26 36 42 | 78 | | some reddish brown, possible weathered granite from 22-26 ft | | | | | | | | |
| SS-11 | 15 | 28 42 46 | 88 | 75.0 | | | | | | | | | |
| SS-12 | 3 | 50/5" | R | | SILTY SAND, dark gray, very moist, very dense, (possible weathered BEDROCK) | SM | | | | | | | |
| SS-13 | 3 | 50/3" | R | 70.0 | | | | | | | | | gray |
| | | | | | End of Boring at 31.0 ft. | | | | | | | | |

| Number and Type | Recovery (in) | Blow Counts | N - Value | Depth (ft) Elevation | Soil Description and Geological Origin for Each Major Unit | USCS Classification | Graphic | Well Diagram | Unconfined Comp. Strength (Qu or qp) (tsf) | Liquid Limit | Plasticity Index | Moisture Content (%) | Comments |
|-----------------|---------------|----------------|-----------|-------------------------|--|---------------------|---------|--------------|--|--------------|------------------|----------------------|------------------------------------|
| SS-1 | 12 | 2 2 2 | 4 | | TOPSOIL, silty sand, brown, moist, trace root hairs, trace gravel, (possible FILL) | | | | | | | | |
| SS-2 | 6 | 3 5 4 | 9 | | | | | | 3.5 (96.6) | | | | |
| SS-3 | 8 | 2 1 1 | 2 | 95.0 | TOPSOIL, silty clayey sand, dark brown, wet, very loose, trace gravel | | | | | | | | |
| SS-4 | 10 | 3 5 4 | 9 | | SANDY LEAN CLAY WITH SILT, dark brown and reddish brown, wet, stiff | CL | | | 6.1 (94) | | | | |
| SS-5 | 12 | 2 8 8 | 16 | 90.0 | SILTY SAND, dark brown to grayish brown, wet, loose to very dense, trace gravel | | | | | | | | |
| SS-6 | 14 | 3 3 5 | 8 | | | | | | | | | | |
| SS-7 | 18 | 6 10 14 | 24 | 85.0 | | | | | | | | | |
| SS-8 | 16 | 14 19 22 | 41 | | | | | | | 1.50 | | 13.6 | LOI = 0.4% |
| SS-9 | 18 | 15 20 23 | 43 | 80.0 | | SM | | | | | | | |
| SS-10 | 16 | 17 32 42 | 74 | | trace clay pieces in SS-10 | | | | | | | | |
| SS-11 | 16 | 16 34 45 | 79 | 75.0 | | | | | | | | | |
| SS-12 | 14 | 18 36 48 | 84 | | | | | | | | | | |
| SS-13 | 1 | 50/1" | R | 70.0 | | | | | | | | | Driller noted rock chips in SS-13. |
| | | | | | End of Boring at 31.0 ft. | | | | | | | | |

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PROJECT NAME
**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

**CHEQUAMEGON-NICOLET
NATIONAL FOREST**

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE
**GEOTECHNICAL
BORINGS**

WATER & CAVE-IN OBSERVATION DATA

| | | |
|--|-------------------------------|------------------------------|
| WATER ENCOUNTERED DURING DRILLING: 5 ft. | CAVE DEPTH AT COMPLETION: NMR | WET <input type="checkbox"/> |
| WATER LEVEL AT COMPLETION: 9 ft. | CAVE DEPTH AFTER 0 HOURS: NMR | DRY <input type="checkbox"/> |
| WATER LEVEL AFTER 0 HOURS: NMR | | WET <input type="checkbox"/> |
| | | DRY <input type="checkbox"/> |

WATER & CAVE-IN OBSERVATION DATA

| | | |
|--|-------------------------------|------------------------------|
| WATER ENCOUNTERED DURING DRILLING: 5 ft. | CAVE DEPTH AT COMPLETION: NMR | WET <input type="checkbox"/> |
| WATER LEVEL AT COMPLETION: 8 ft. | CAVE DEPTH AFTER 0 HOURS: NMR | DRY <input type="checkbox"/> |
| WATER LEVEL AFTER 0 HOURS: NMR | | WET <input type="checkbox"/> |
| | | DRY <input type="checkbox"/> |

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

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| DATE 2/16/2024 | ARCHIVE NO. |
| DESIGNER A. JOHNSTON | DRAWING SHEET NO. S-03 |
| DRAWN A. JOHNSTON | |
| CHECKED R. POLKINGHORN | |
| PROJECT NO. | SHEET 21 OF 25 |



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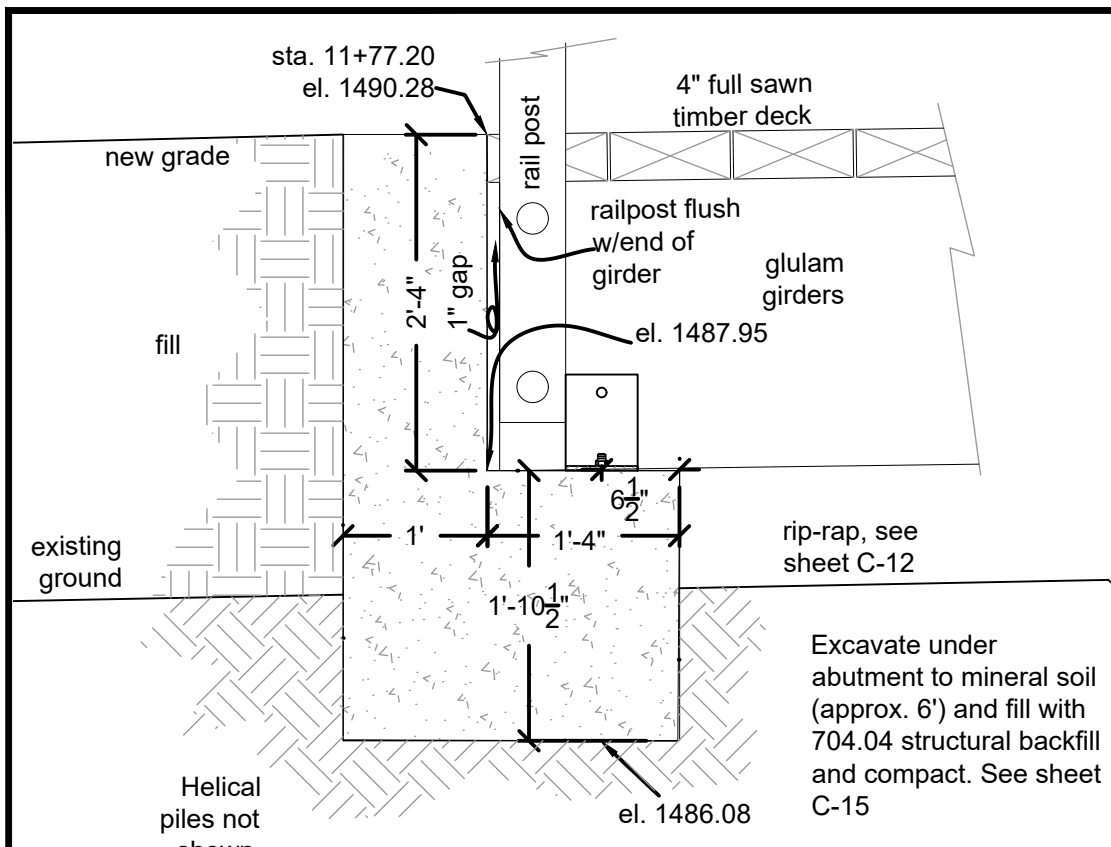
PROJECT NAME
**STRUCTURE NO.
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DALRYMPLE
BRIDGE**

CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
RANGER DISTRICT

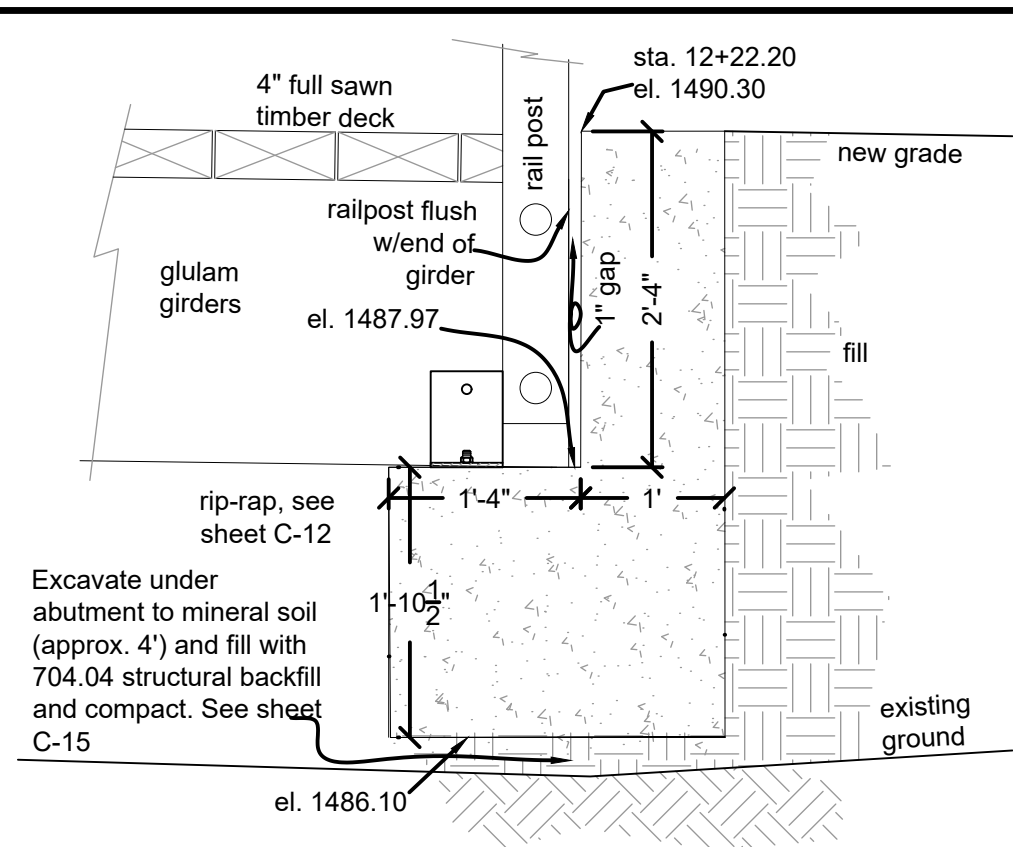
DRAWING TITLE
ABUTMENTS
print on 11 x 17
1"

| | |
|---------------------------|----------------------------------|
| DATE 2/26/2024 | ARCHIVE NO. |
| DESIGNER A. JOHNSTON | DRAWING SHEET NO. S-04 |
| DRAWN A. JOHNSTON | |
| CHECKED R. POLKINGHORN | |
| PROJECT NO. | SHEET 22 OF 25 |



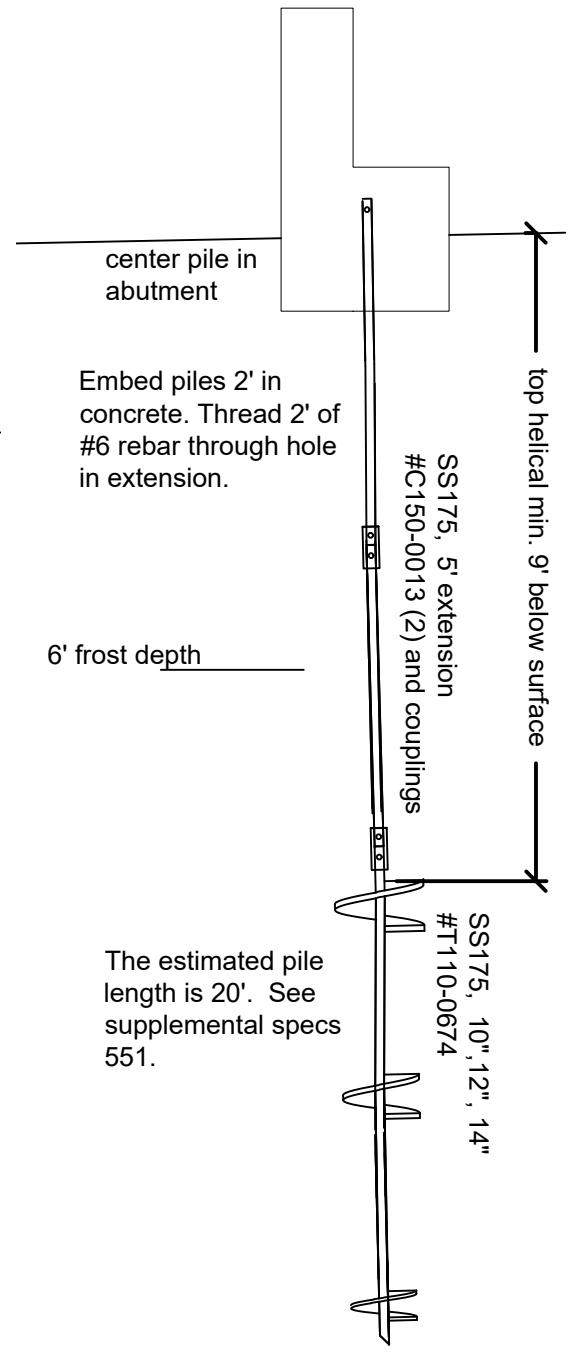
SOUTH ABUTMENT C.S.

scale 3/4" = 1'



NORTH ABUTMENT C.S.

scale 3/4" = 1'

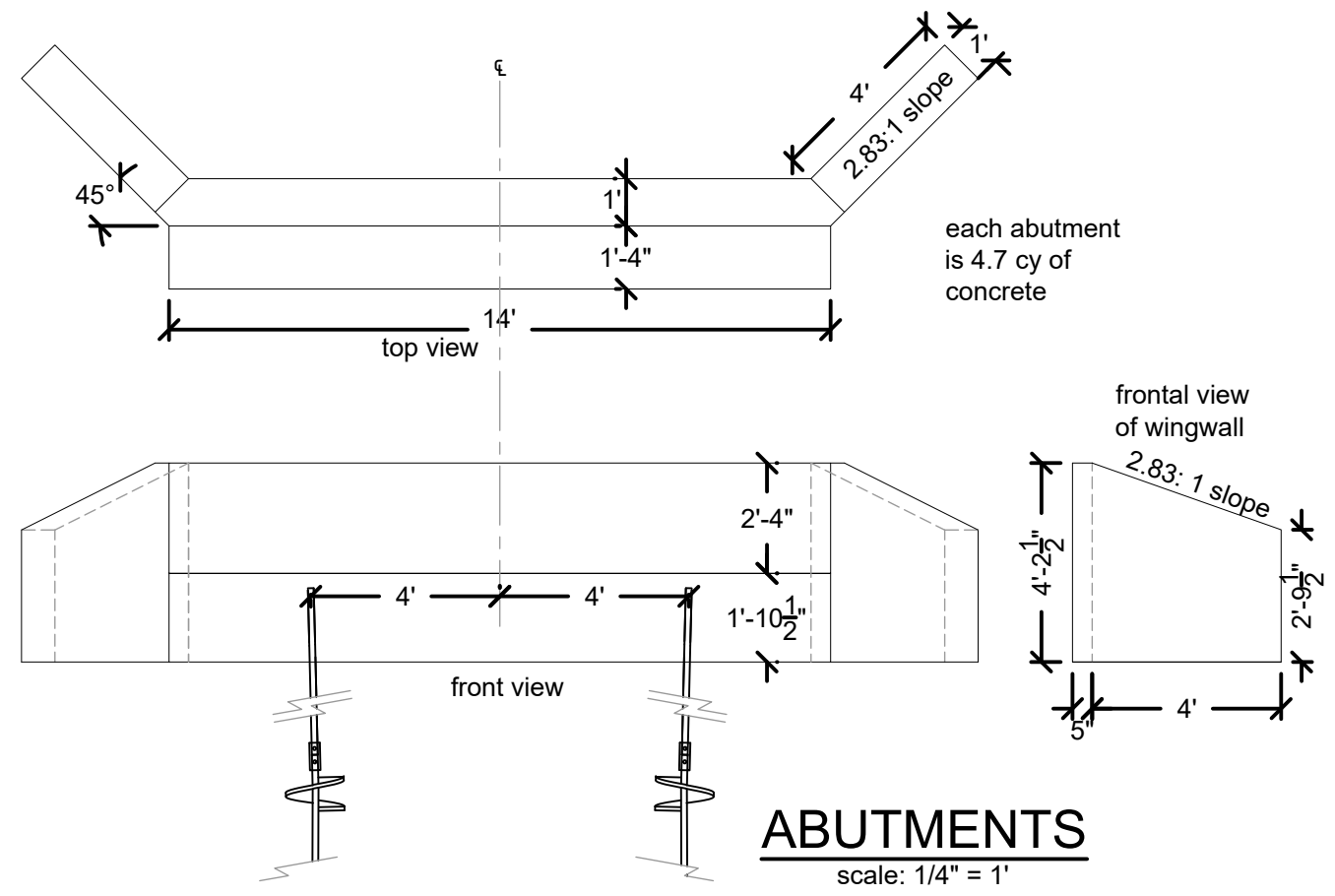


HELICAL PILES

scale: 3/8" = 1'

Embed piles 2' in concrete. Thread 2' of #6 rebar through hole in extension.

The estimated pile length is 20'. See supplemental specs 551.



ABUTMENTS

scale: 1/4" = 1'

2/27/24 09:48 CEDP - OWNER X:\PROJECTS\230421_ST_USFS_FD_3 TRAIL BR DESIGN\1700_DELIVERABLES\1703_BDDALRYMPLE_STR PLANS_240226.DWG



United States Department of Agriculture
Forest Service

(R9)
EASTERN REGION

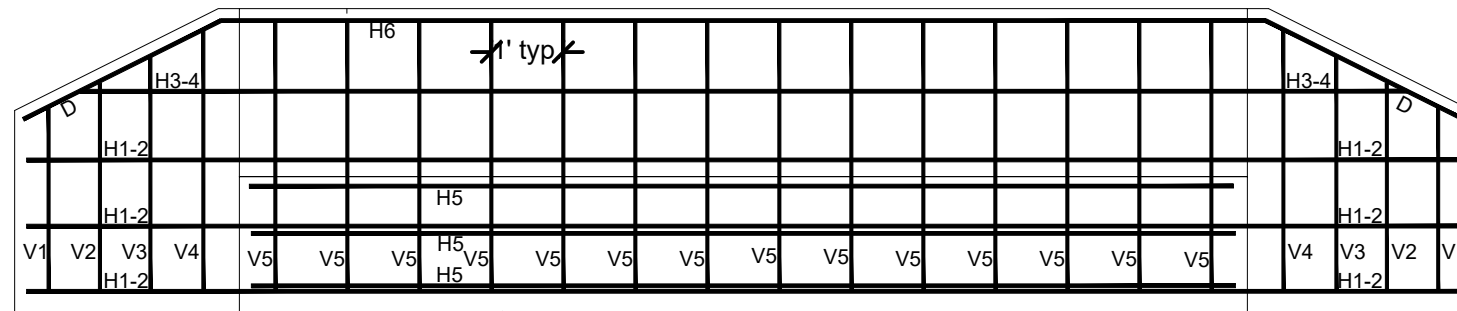
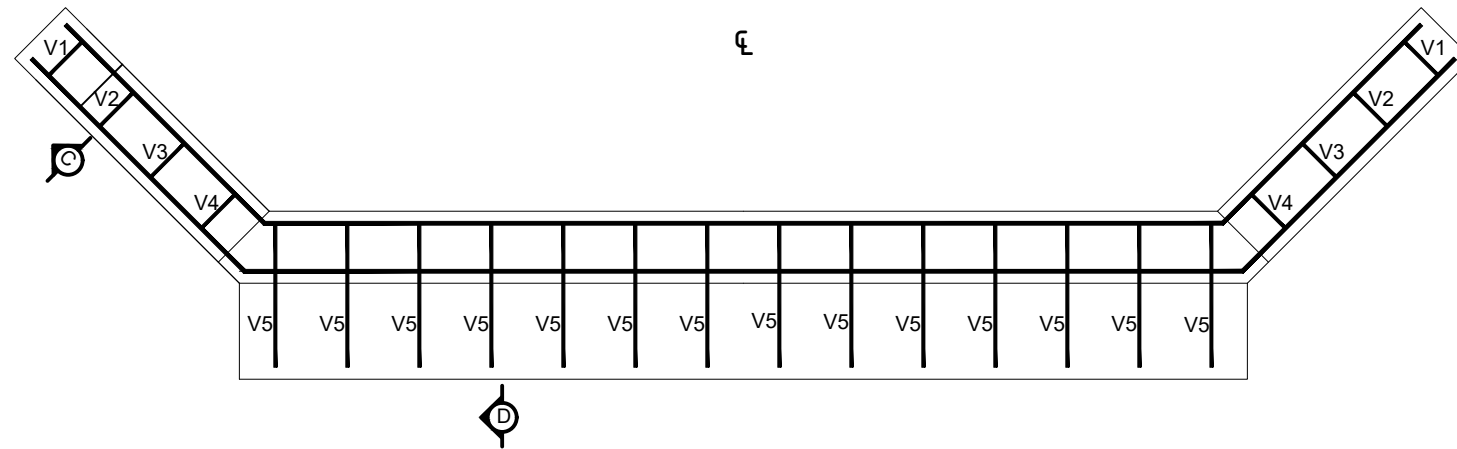
STAMPS, LOGOS, AND SEALS
ART JOHNSTON, LLC
37 N. 93rd AVE. W
DULUTH, MN 55808
715-360-6629

PROJECT NAME
**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**
CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE
ABUTMENTS
print on 11 x 17
1"

| | |
|---------------------------|----------------------------------|
| DATE 2/26/2024 | ARCHIVE NO. |
| DESIGNER A. JOHNSTON | DRAWING SHEET NO. S-05 |
| DRAWN A. JOHNSTON | |
| CHECKED R. POLKINGHORN | |
| PROJECT NO. | SHEET 23 OF 25 |



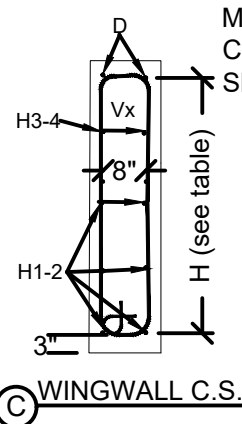
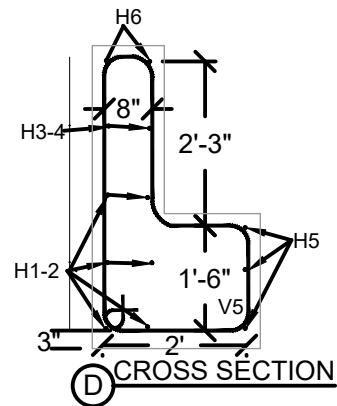
ABUTMENT (2) REBARS
scale: 3/8" = 1'

Total concrete = 9.0 c.y.
Each abutment = 4.5 c.y.

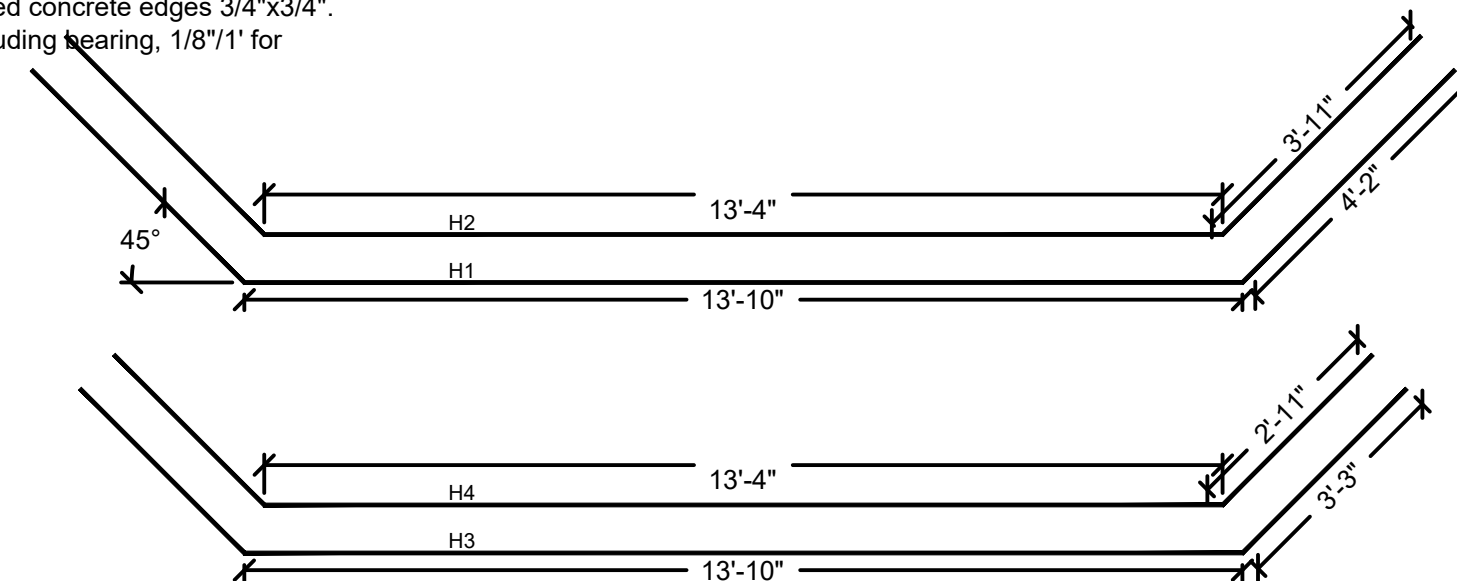
Contractor shall verify
all quantities

Rebar schedule (2 abutments)

| Mark | Size | Quantity | Lengths | Weight | |
|------|-------|----------|---------|--------|-----|
| D | # 5 | 8 | 4'6" | 38 | |
| H1 | # 5 | 6 | 22'3" | 140 | |
| H2 | # 5 | 6 | 21'2" | 133 | |
| H3 | # 5 | 2 | 20'4" | 42 | |
| H4 | # 5 | 2 | 19'3" | 40 | |
| H5 | # 5 | 6 | 13'8" | 86 | |
| H6 | # 5 | 4 | 14'6" | 60 | |
| V1 | H=31" | # 4 | 4 | 7'4" | 20 |
| V2 | H=35" | # 4 | 4 | 8'0" | 21 |
| V3 | H=39" | # 4 | 4 | 8'8" | 23 |
| V4 | H=43" | # 4 | 4 | 9'4" | 25 |
| V5 | | # 4 | 28 | 12'2" | 228 |



Min. concrete cover: 3" on bottom, 2" elsewhere.
Chamfer all exposed concrete edges 3/4"x3/4".
Slope all tops, including bearing, 1/8"/1' for drainage.





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EASTERN REGION

ART JOHNSTON, LLC
37 N. 93rd AVE. W
DULUTH, MN 55808
715-360-6629

| 4 | | |
|-----|------------------|------|
| 3 | | |
| 2 | | |
| 1 | | |
| NO. | REVISION / ISSUE | DATE |

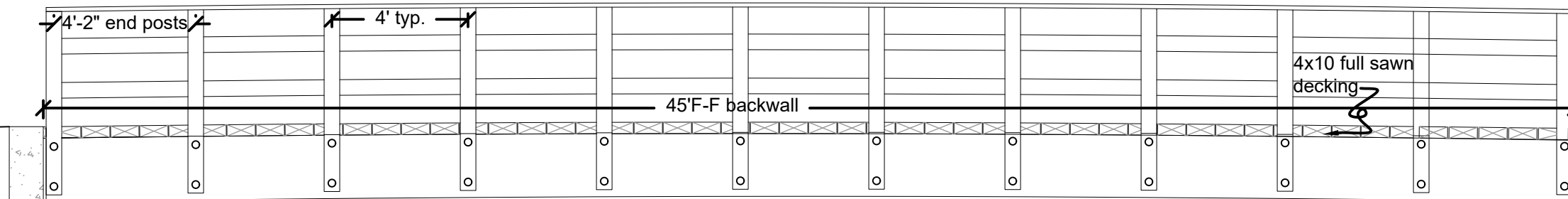
PROJECT NAME
**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE
**SUPERSTRUCTURE
AND DECK**
print on 11 x 17
1"
1"

| | |
|--------------------------|----------------------------------|
| DATE 2/26/2024 | ARCHIVE NO. |
| DESIGNER A.JOHNSTON | DRAWING SHEET NO. S-06 |
| DRAWN A.JOHNSTON | |
| CHECKED R.POLKINGHORN | |
| PROJECT NO. | SHEET 24 OF 25 |



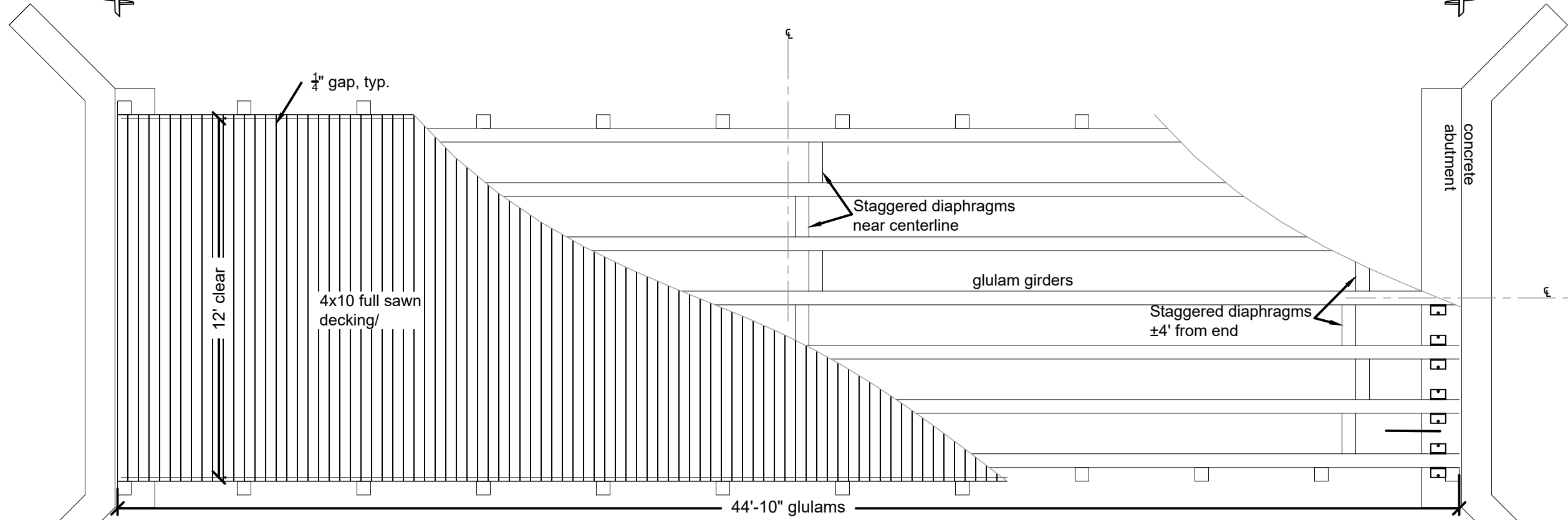
ELEVATION VIEW
scale: 1/4" = 1'

(7) glulams girders, 24F-V4
24"x5.5"x44'-10"
2" camber

el. 1490.28,
finish grade @
deck

existing grade

See C-12 for
salvaged rip-rap and
bank excitation.



CUT-AWAY VIEW
scale: 1/4" = 1'

Diaphragm locations are staggered to facilitate installation. It is expected that the diaphragms, and adjacent screws, will be attached to the girder before placement and before fastening girder bearings.

2/28/24 08:20 CEPP - OWNER X:\PROJECTS\231847_ST_USFS_FD_3 TRAIL BR DESIGNS\90_CADD\902_STRUCTURES\DALRYMPLE_STR PLANS_240226.DWG;



United States Department of Agriculture
Forest Service

(R9)
EASTERN REGION

STAMPS, LOGOS, AND SEALS
ART JOHNSTON, LLC
37 N. 93rd AVE. W
DULUTH, MN 55808
715-360-6629

| 4 | | |
|-----|------------------|------|
| 3 | | |
| 2 | | |
| 1 | | |
| NO. | REVISION / ISSUE | DATE |

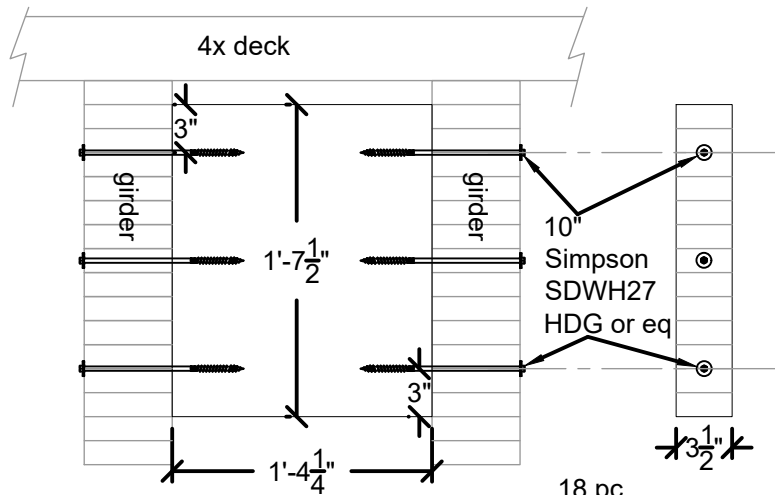
PROJECT NAME
**STRUCTURE NO.
091301-118G-102-0.0
DALRYMPLE
BRIDGE**

CHEQUAMEGON-NICOLET
NATIONAL FOREST

MEDFORD-PARK FALLS
RANGER DISTRICT

DRAWING TITLE
**TYPICAL SECTION
AND RAILING**
print on 11 x 17
1"

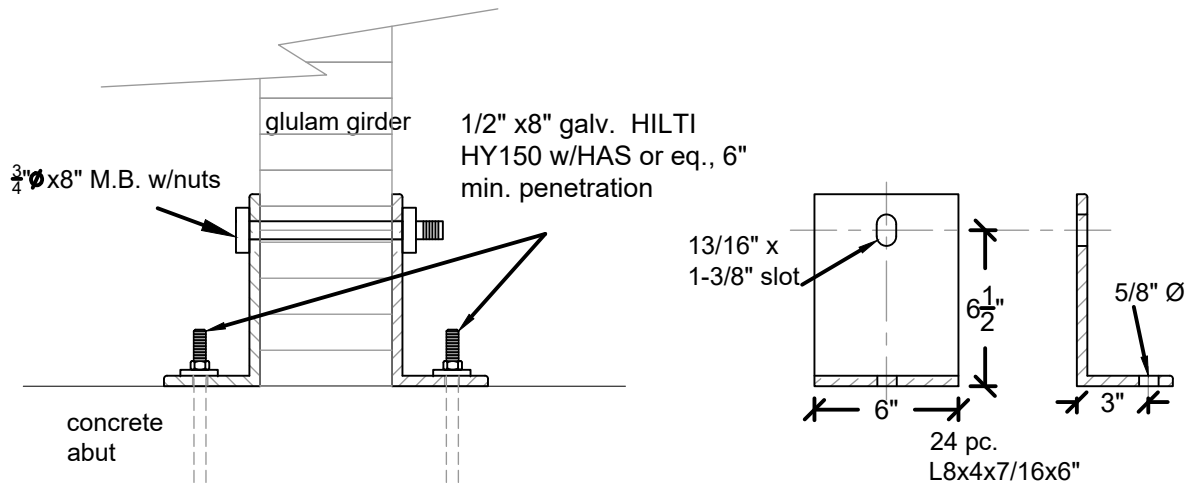
| | |
|---------------------------|----------------------------------|
| DATE 2/26/2024 | ARCHIVE NO. |
| DESIGNER A. JOHNSTON | DRAWING SHEET NO. S-07 |
| DRAWN A. JOHNSTON | |
| CHECKED R. POLKINGHORN | |
| PROJECT NO. | SHEET 25 OF 25 |



DIAPHRAGMS

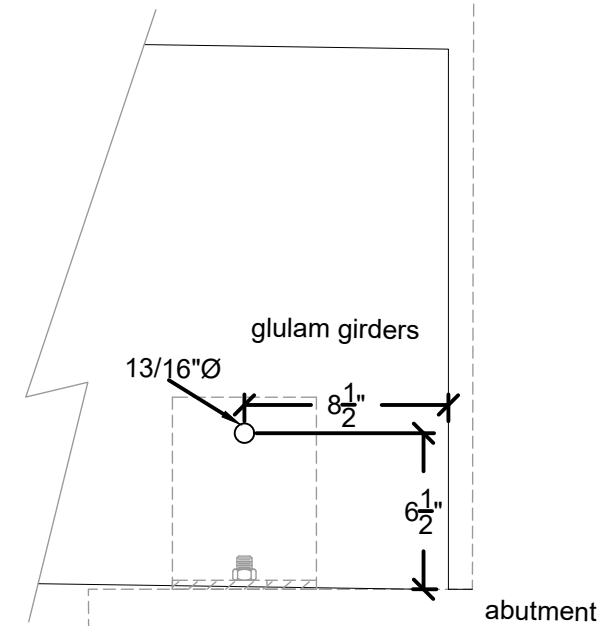
scale 1" = 1'

18 pc.
No. 1 glulam
3.5"x19.5"x16.25"



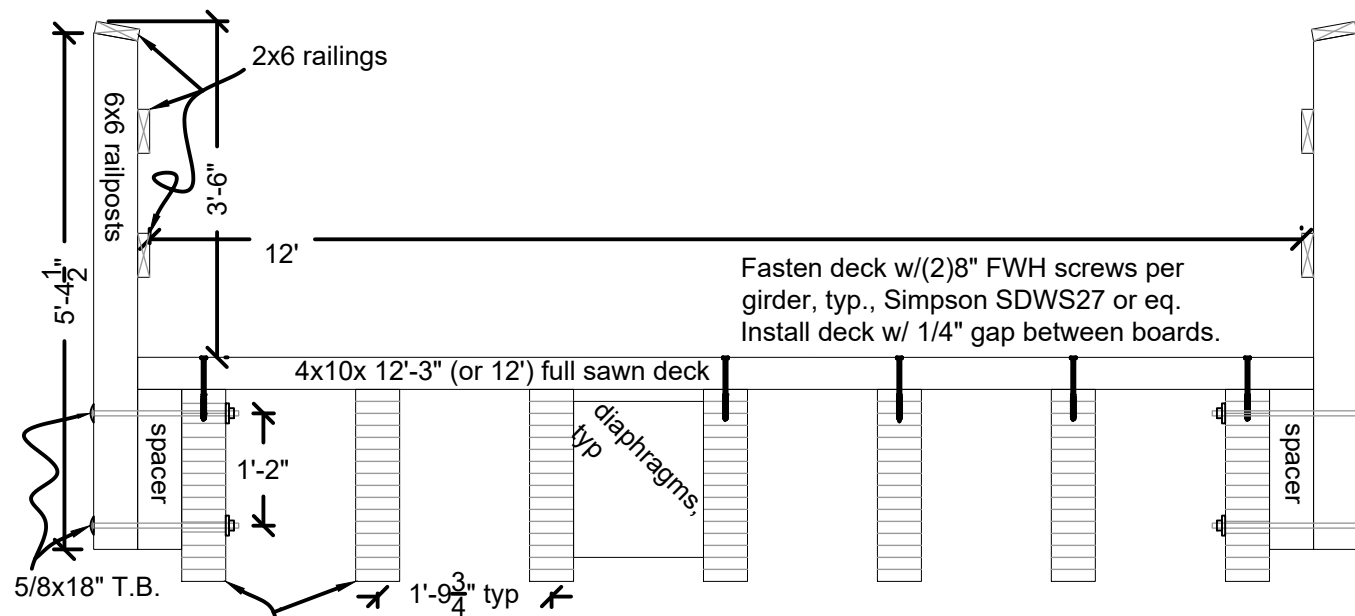
BEARING/BRACKET DETAIL

scale: 1 1/2" = 1'



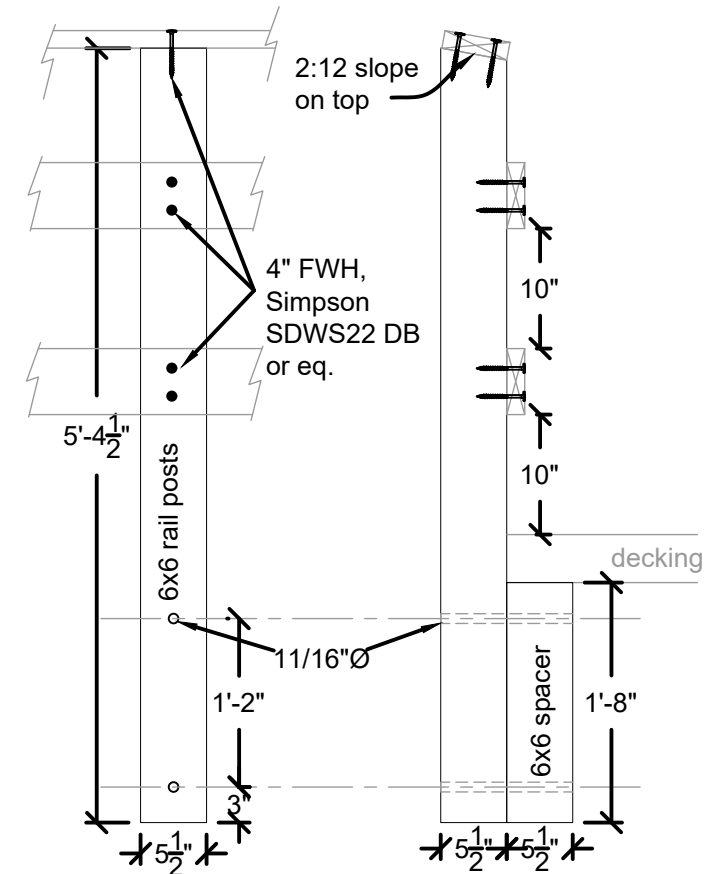
HOLE LOCATION

on girder ends, drill before treating



CROSS SECTION

scale: 1/2" = 1'



RAIL POSTS

scale 3/4" = 1'

24 pc.
rail post, #1 grade,
spacers, #2 grade

2/27/24 08:34 OWNER X:PROJECTS\30427_ST_USFS_FD_3 TRAIL BR DESIGNS\200_COMM\220_TRANSFERS\240226_ART_REVISED PLANS-CAD-DALRYMPLE.MXD\CAD\DALRYMPLE.DWG