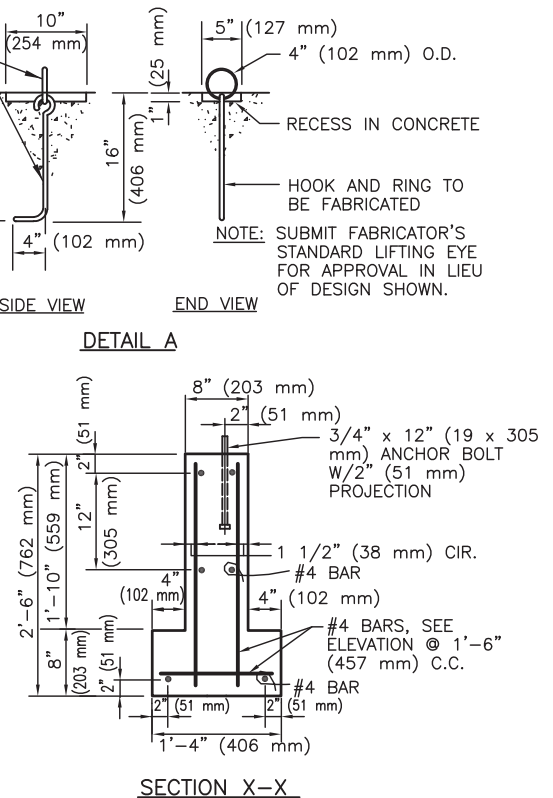
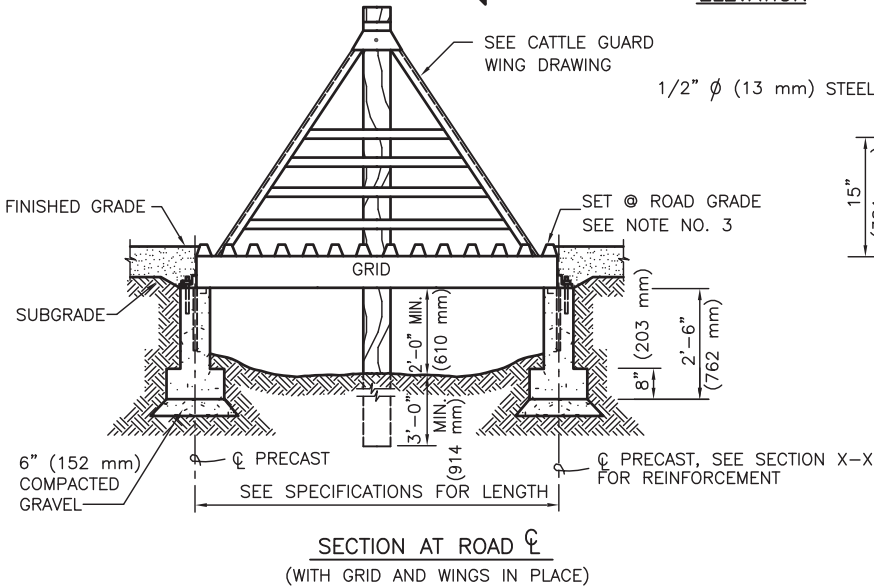
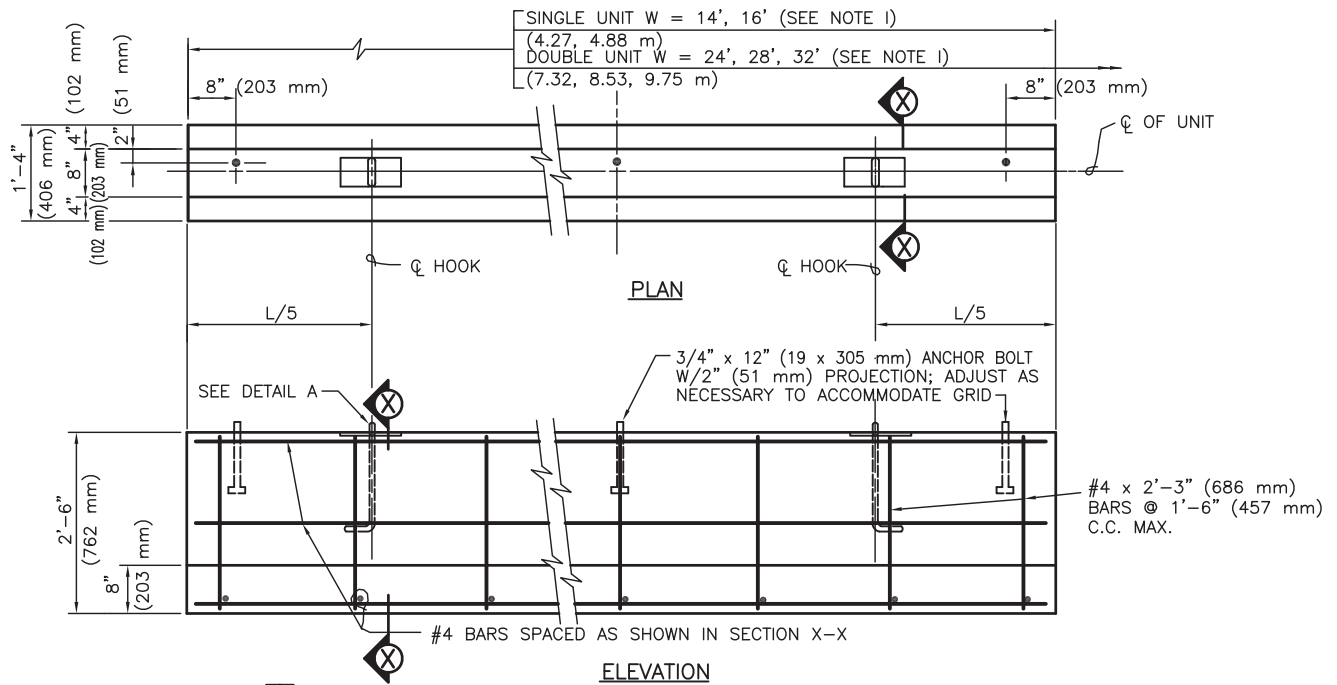


APPENDIX A

SPECIFICATION DRAWINGS

- **Cattle Guards**
- **Precast Concrete Latrines**
- **Barrier Rocks**

Note: The attached product drawings are intended to establish a level of quality for the various products and are not intended to exclude other products of equal quality.



NOTES:

1. SEE SPECIFICATIONS FOR WIDTH (W).
2. STANDARD NUTS & WASHERS SHALL BE FURNISHED WITH EACH FOUNDATION UNIT INCLUDING ANCHOR ANGLES. WELD OR BOLT ANCHOR ANGLES TO CATTLE GUARD.
3. ON EARTH-SURFACED ROADS, SET TOP OF CATTLE GUARD 8" (203 mm) ABOVE SUBGRADE UNLESS PLANS OR STAKES INDICATE ANOTHER ELEVATION. TAPER FILL BACK FROM CATTLE GUARD APPROX. 50' (15.24 m) IN BOTH DIRECTIONS.
4. #4 REINFORCEMENT MAY BE SPLICED WITH 24" (610 mm) LAP UNLESS PROHIBITED.
5. THE METRIC CONVERSIONS ARE PROVIDED IN PARENTHESIS FOLLOWING THE ENGLISH UNITS.

DESCRIPTION	ESTIMATED QUANTITIES FOR FOUNDATION				
	QUANTITIES				
UNIT WIDTHS	14' (4.27 m)	16' (4.88 m)	24' (7.32 m)	28' (8.53 m)	32' (9.75 m)
CONCRETE	2.2 C.Y. (1.68 cu.m.)	2.5 C.Y. (1.91 cu.m.)	3.8 C.Y. (2.91 cu.m.)	4.4 C.Y. (3.36 cu.m.)	5.0 C.Y. (3.82 cu.m.)
#4 REINFORCING STEEL	276 L.F. (84.12 m)	311 L.F. (94.80 m)	471 L.F. (143.56 m)	543 L.F. (165.51 m)	624 L.F. (190.20 m)

DESIGNED BY OTHERS _____
 REVIEWED _____
 APPROVED _____

DRAWN BY: _____ SCALE: NONE
 DATE: CURRENT EDITION SHEET: 1 OF 1

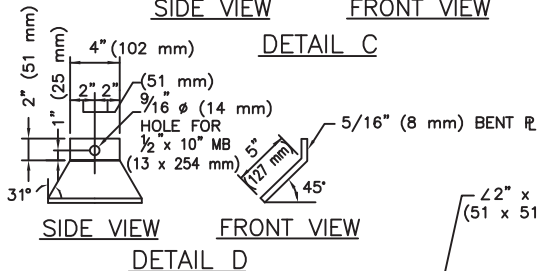
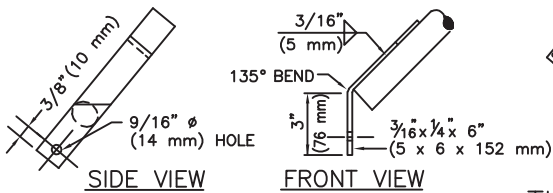
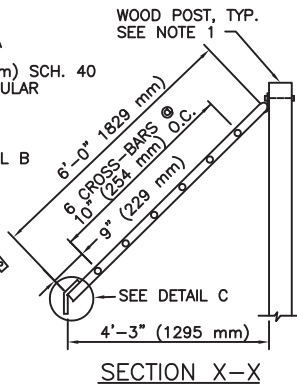
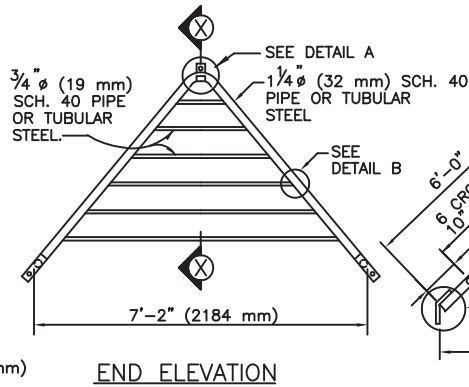
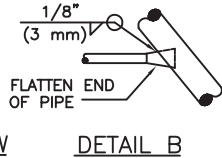
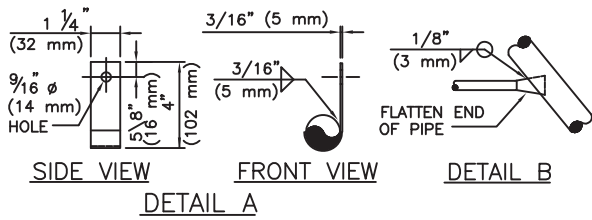
STANDARD DETAIL DRAWING NO. 323153-7

ALWAYS THINK **SAFETY**

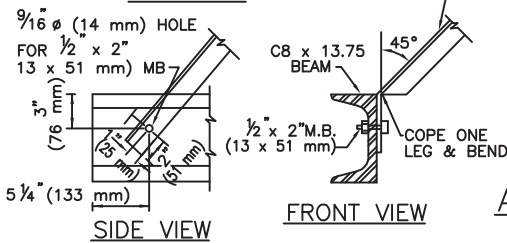
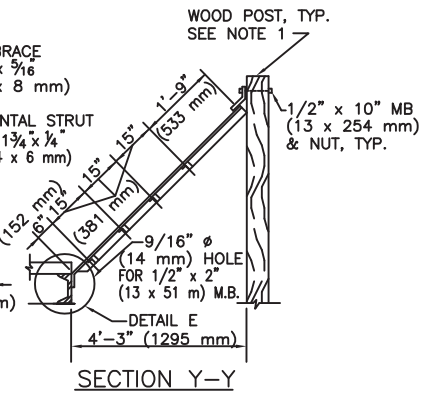
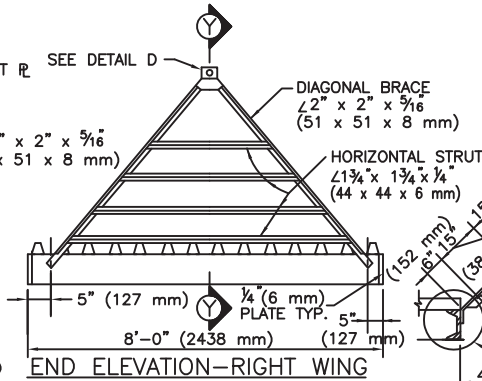
△	METRIC CONVERSION ADDED	9/30/97	LJP
△	FORMAT UPDATE	7/31/09	RTH
△	FORMAT UPDATE	12/2017	
REV. NO.	DESCRIPTION	DATE	APPROVED

UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

**CATTLE GUARD FOUNDATION
 (PRECAST CONCRETE)**



TUBULAR END WING



NOTES:

1. WING SHALL BE FASTENED TO SEPARATE WOOD FENCE POST, 6" ϕ x 6'-0" (152 x 1829 mm) LONG WITH 2'-0" (610 mm) IN THE GROUND.
2. THE SHEEP FENCE MAY BE INSTALLED WITH CATTLE GUARD WINGS USING 6" x 6" (152 x 152 mm) WOVEN WIRE FENCING OR ACCORDING TO SPECIFICATION SECTION 02824 - WIRE FENCES AND GATES.
3. THE METRIC CONVERSIONS ARE PROVIDED IN PARENTHESIS FOLLOWING THE ENGLISH UNITS.

WELDING SYMBOLS LEGEND:

- FILLET WELD THIS SIDE
- FILLET WELD BOTH SIDES
- FILLET WELD ALL AROUND

SHEET 2 OF 2

AUTOCAD NAME: 02879-1	MARK	REVISION	DATE	APPROVED
DESIGN OFFICE: LEWISTOWN				
DESIGNED BY: JLH			DATE: 6/19/2013	
DRAWN BY: JLH			DATE: 6/19/2013	
CHECKED BY:			DATE:	
APPROVED BY:			DATE:	

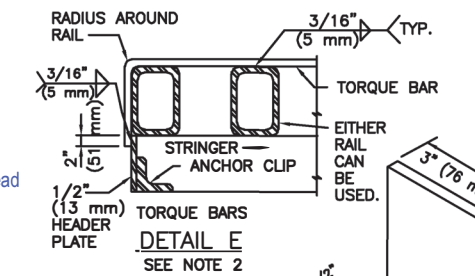
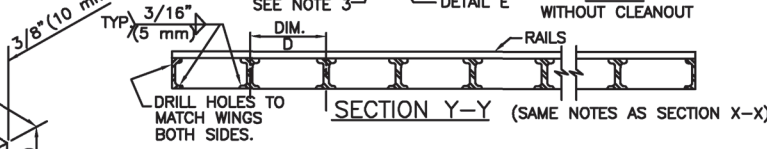
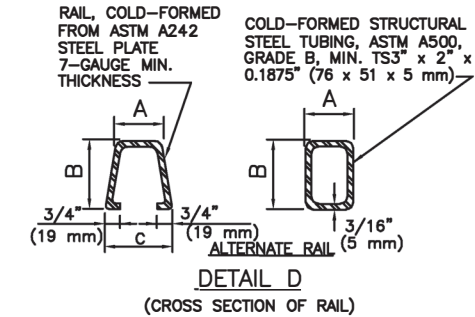
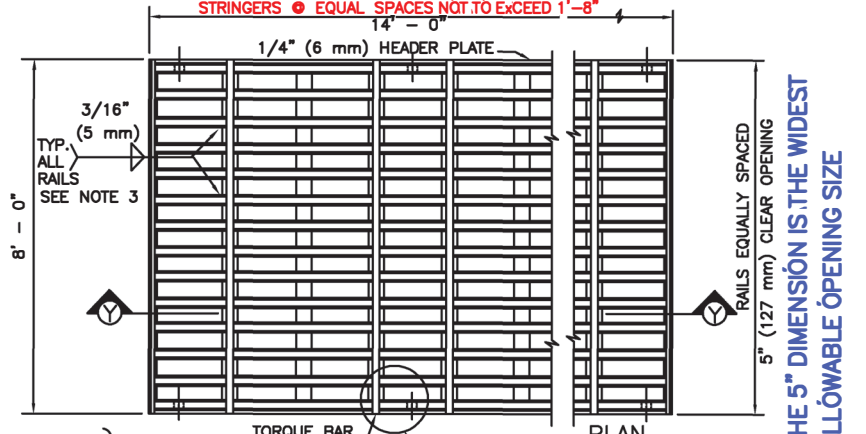
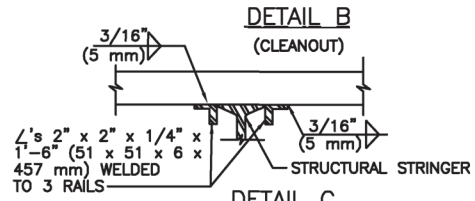
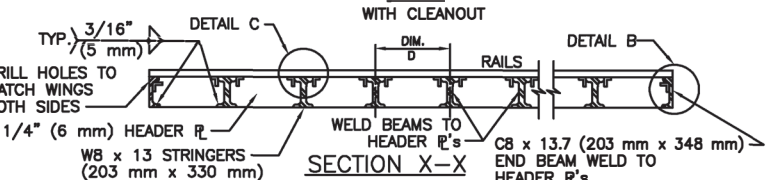
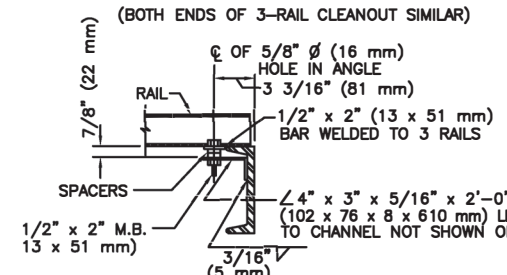
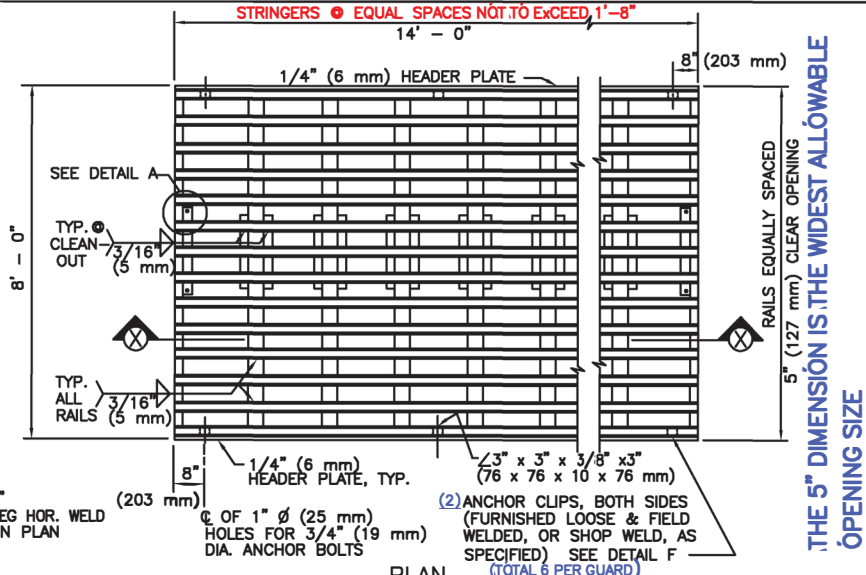
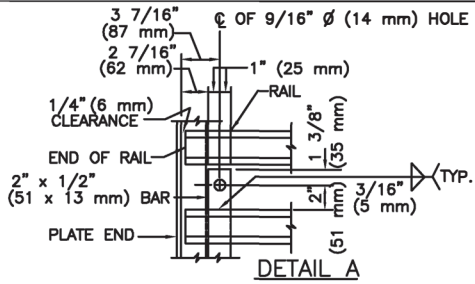
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CATTLE GUARD WINGS

ORDER LEWISTOWN MT.

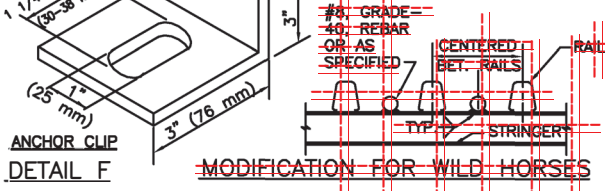
LEWISTOWN FIELD OFFICE MT





This should read 1/4" thk HEADER PLATE

WELDING SYMBOLS LEGEND:
 - FILLET WELD BOTH SIDES



THE DETAIL FOR WILD HORSES IS NOT INCLUDED IN THIS PURCHASE

THIS PURCHASE IS FOR CATTLE GUARDS W/O CLEAN OUTS

DRAWING MUST BE PRINTED IN COLOR

- NOTES:
- DESIGN LOADING OF GRID CONFORMS TO AASHTO H-20-44.
 - PROVIDE 4 - 2" x 1/4" (51 mm x 6 mm) TORQUE BARS ON GRIDS WITHOUT CLEANOUT, FULL LENGTH, SPACED AS SHOWN, & WELDED WITH 3/16" (5 mm) FILLET WELDS TO TOP OF AS SHOWN, RAILS AS REQUIRED AND AS DESCRIBED IN THE SPECIFICATIONS. SEE DETAIL E.
 - END PLATE FLUSH WITH, AND WELDED TO, RAILS EXCEPT CLEANOUT PANEL.
 - THE METRIC CONVERSIONS ARE PROVIDED IN PARENTHESIS FOLLOWING THE ENGLISH UNITS.

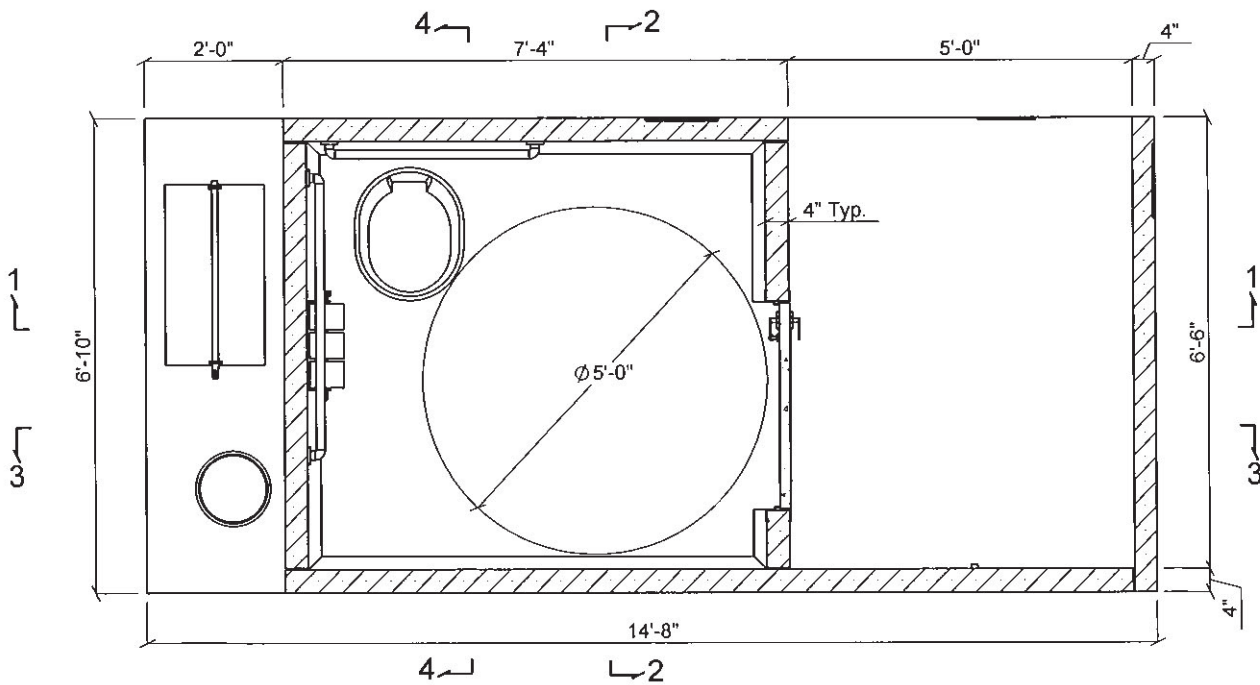
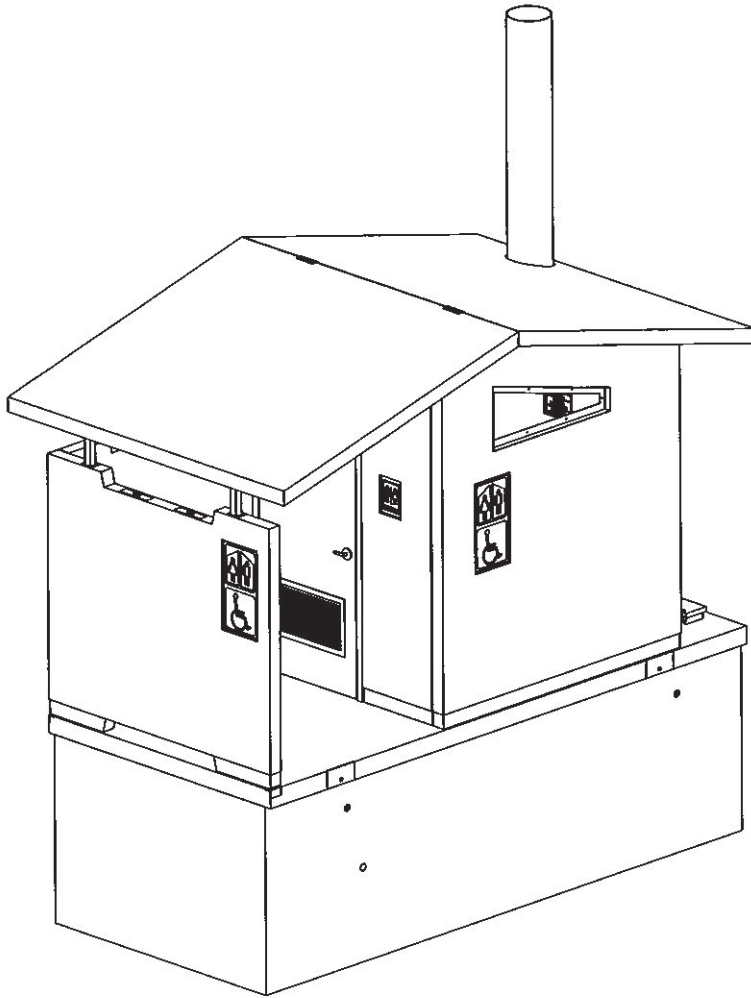
SHEET 1 OF 2

AUTOCAD NAME: 02879-1	MARK	REVISION	DATE	APPROVED
DESIGN OFFICE: LEWISTOWN	RED	STRINGER SPACING	06/25/20	JLH
DESIGNED BY: JLH	DATE: 6/19/2013	BLUE	MISC CHANGES	07/01/20
DRAWN BY: JLH	DATE: 6/19/2013			JLH
CHECKED BY:	DATE:			164
APPROVED BY:	DATE:			

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT
CATTLE GUARD
ORDER LEWISTOWN MT.
LEWISTOWN FIELD OFFICE

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT
CATTLE GUARD
ORDER LEWISTOWN MT.
LEWISTOWN FIELD OFFICE



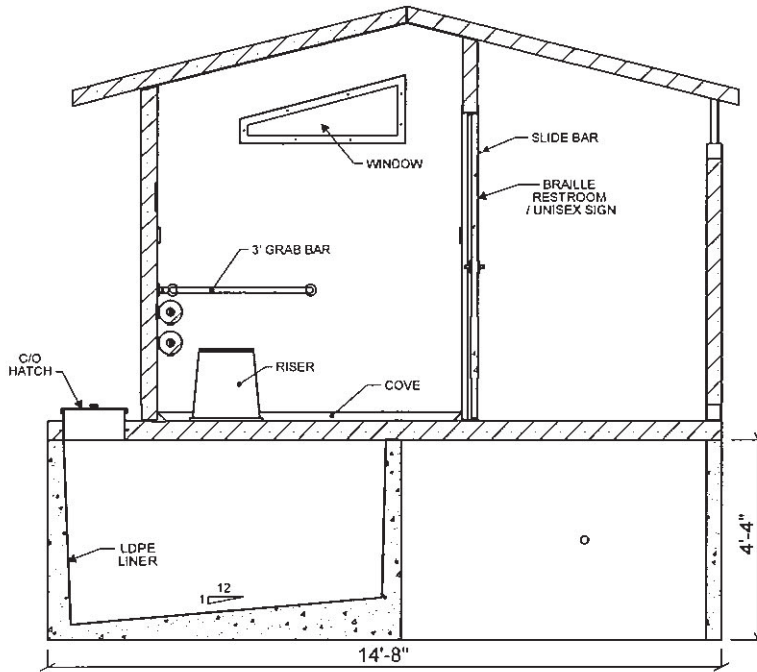


MISSOULA CONCRETE
construction

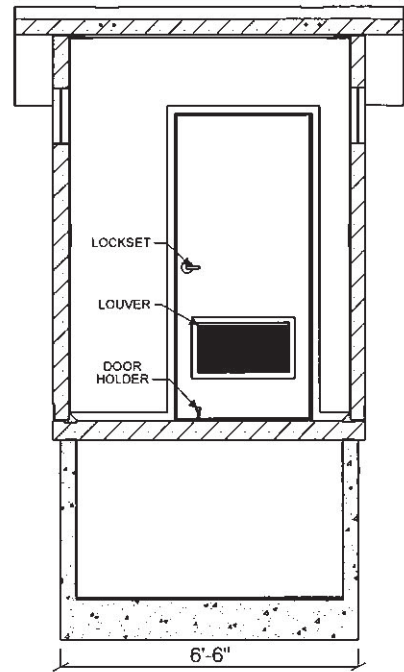
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165

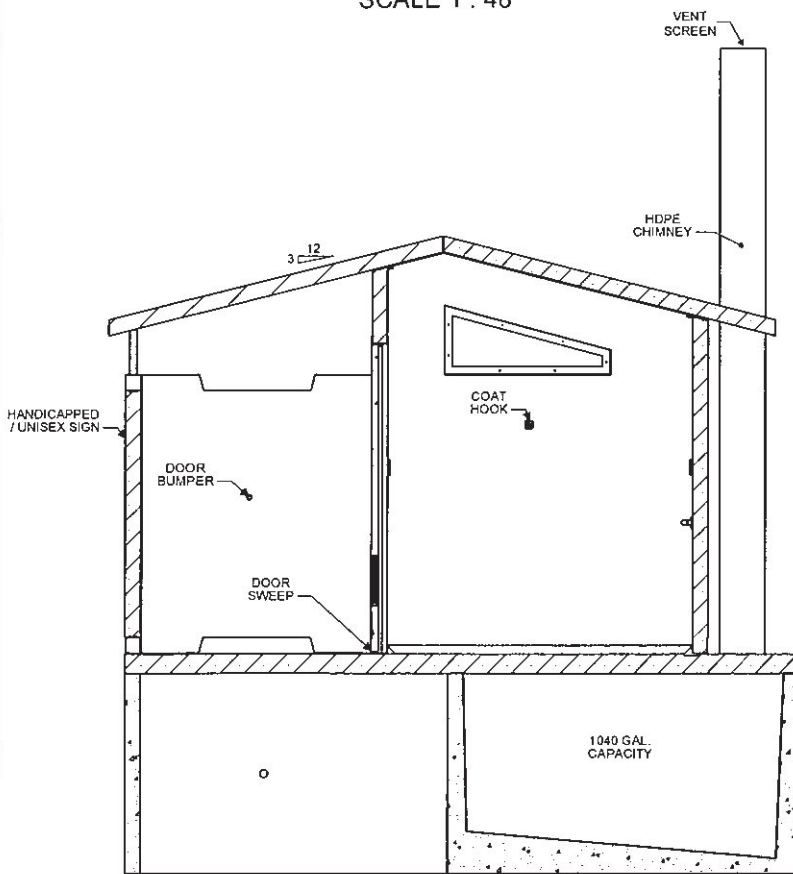
FWP		SHEET
ASPEN VAULT TOILET		1
LEFT HAND		4
FULL SCREEN		OF
3/2017		



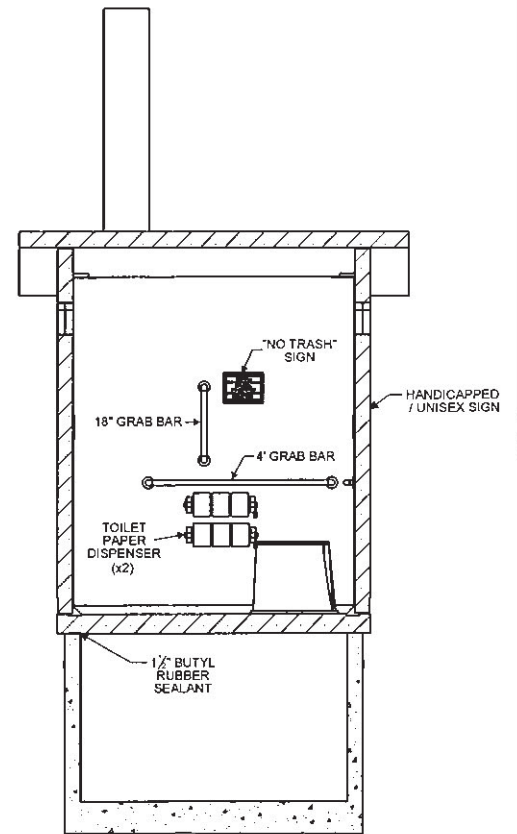
SECTION 1-1
SCALE 1 : 48



SECTION 2-2
SCALE 1 : 48

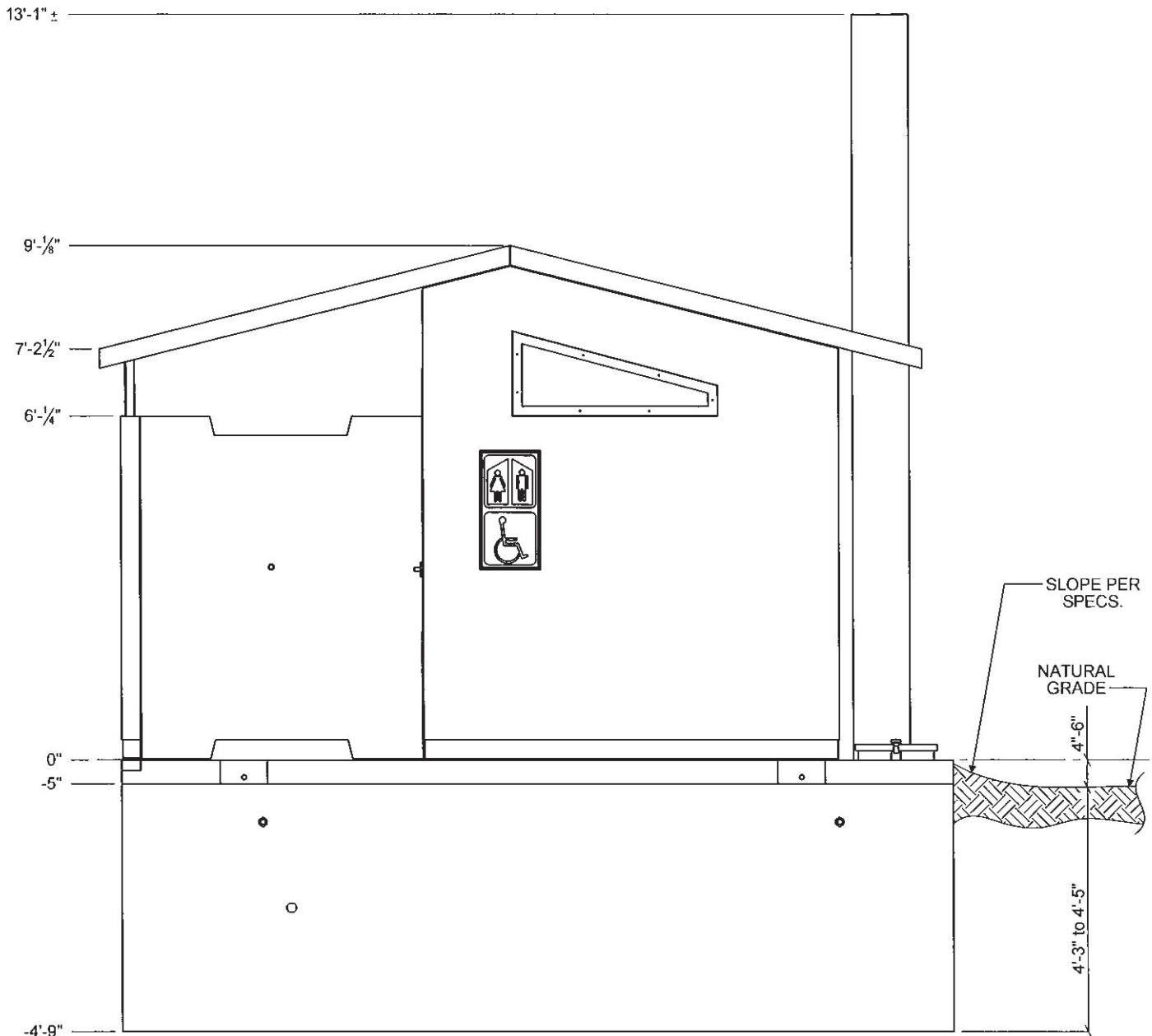


SECTION 3-3
SCALE 1 : 48



SECTION 4-4
SCALE 1 : 48





WEIGHT:

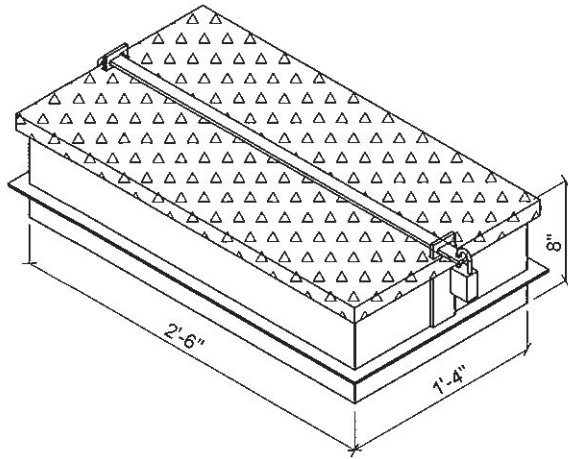
- Building - 24,000 lbs.
- Vault - 16,000 lbs.

EXCAVATION:

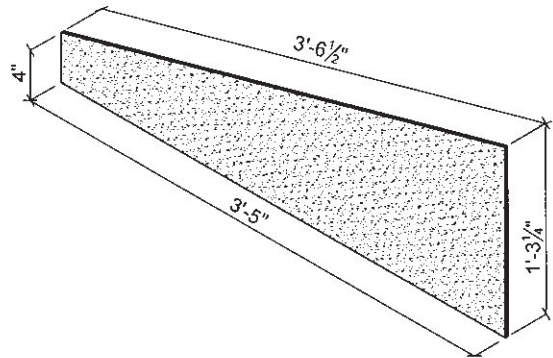
- Vault Hole - 8' wide x 16' long x 4'-9" below desired finish floor elevation
- See specifications for additional requirements.



FWP		SHEET
ASPEN VAULT TOILET		3 4
LEFT HAND		
FULL SCREEN		
3/2017		
		OF



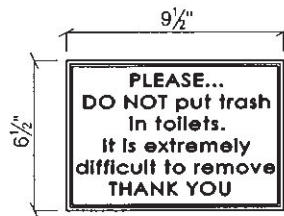
CLEANOUT HATCH



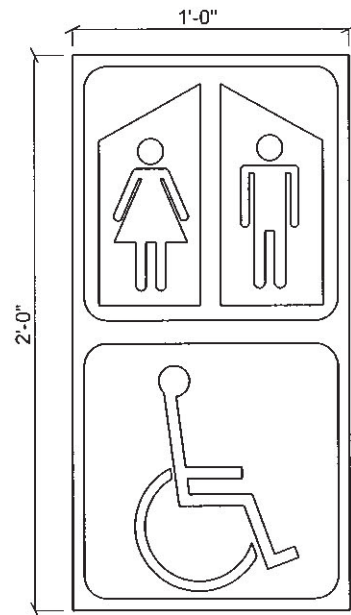
POLYCARBONATE WINDOW



BRaille
RESTROOM
SIGN

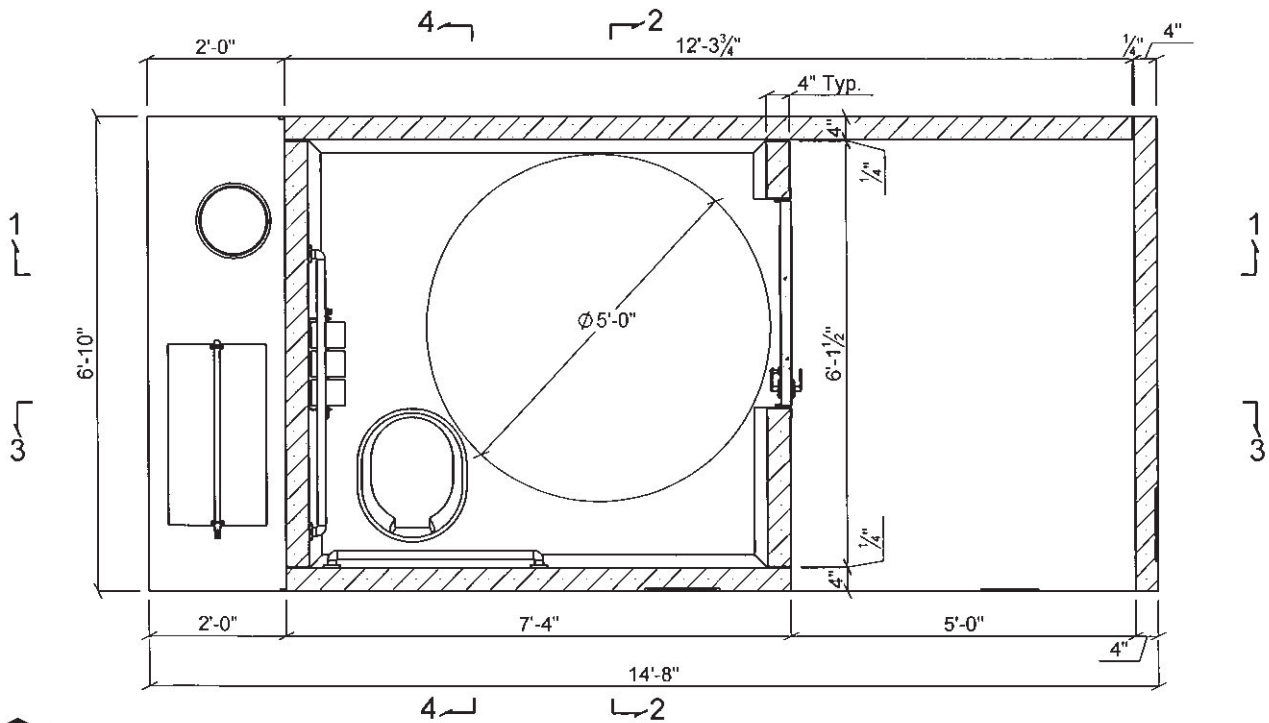
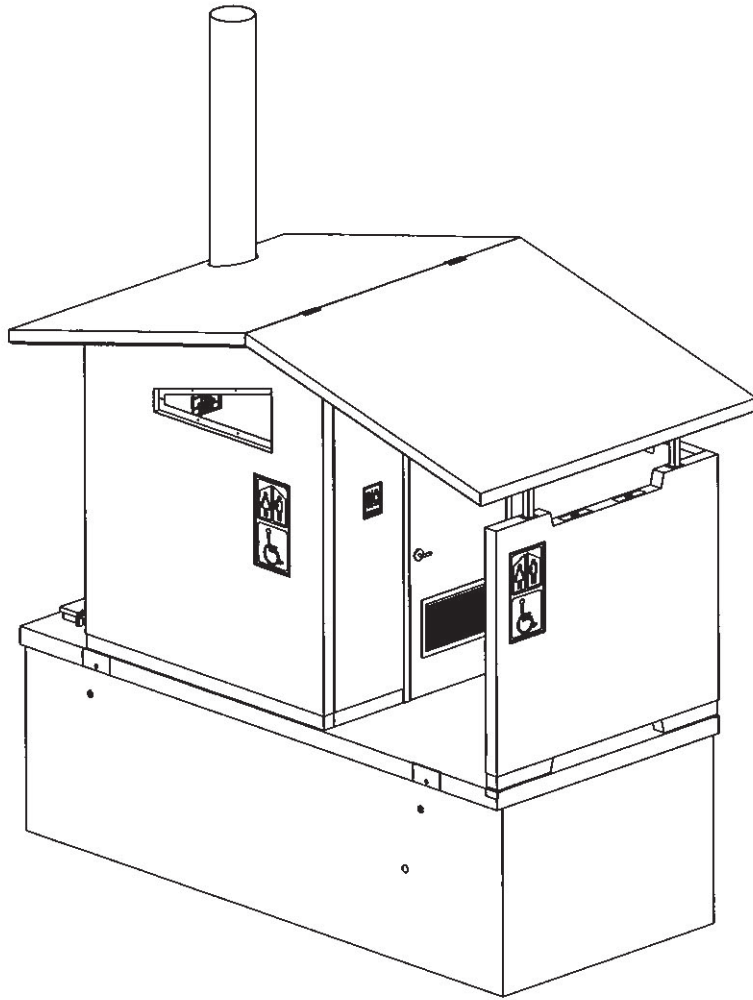


"NO TRASH"
SIGN



"HANDICAPPED
/ UNISEX" SIGN



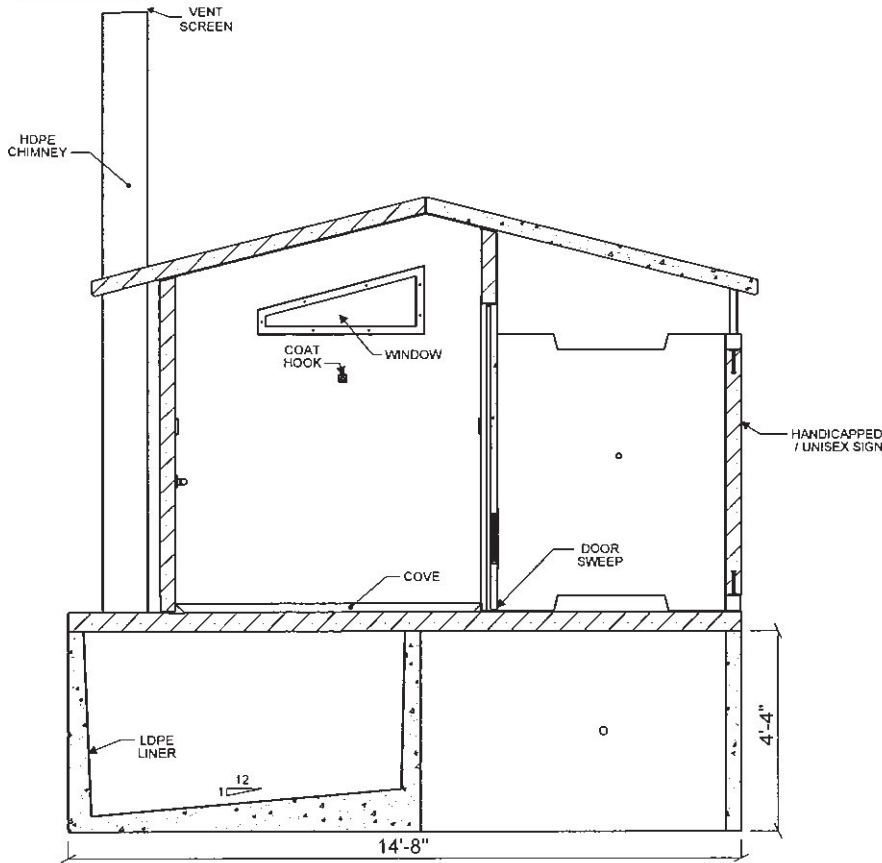


MISSOULA CONCRETE
construction

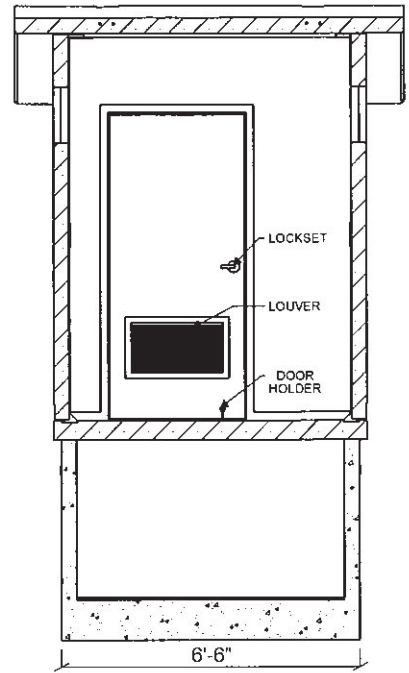
file:fwp_right full_3_17

169

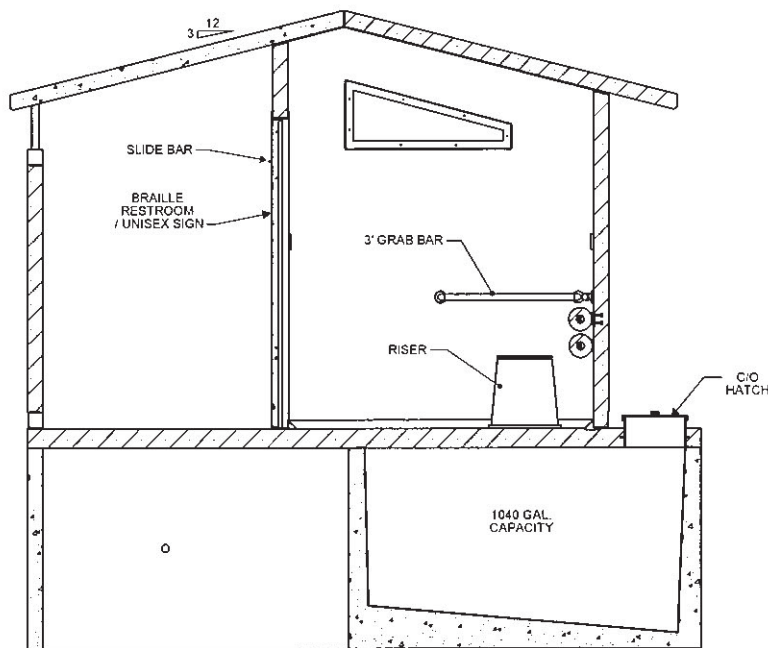
FWP		SHEET
ASPEN VAULT TOILET		1
RIGHT HAND		4
FULL SCREEN		OF
3/2017		



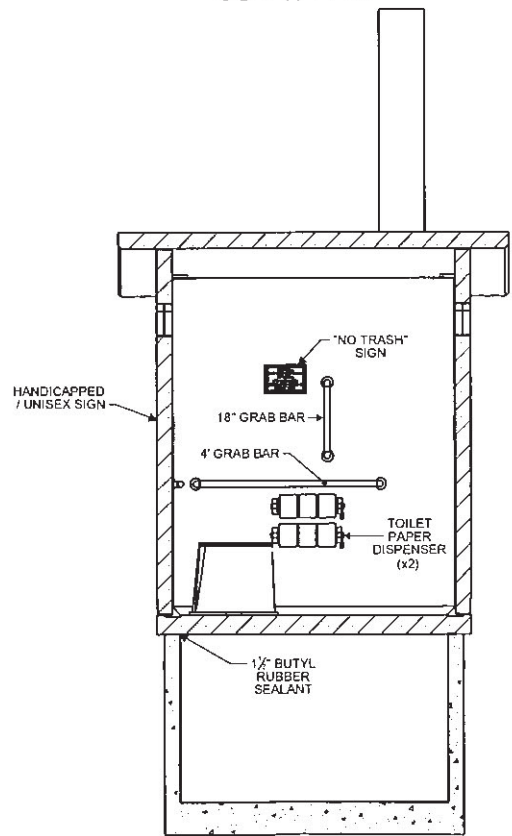
SECTION 1-1
SCALE 1 : 48



SECTION 2-2
SCALE 1 : 48

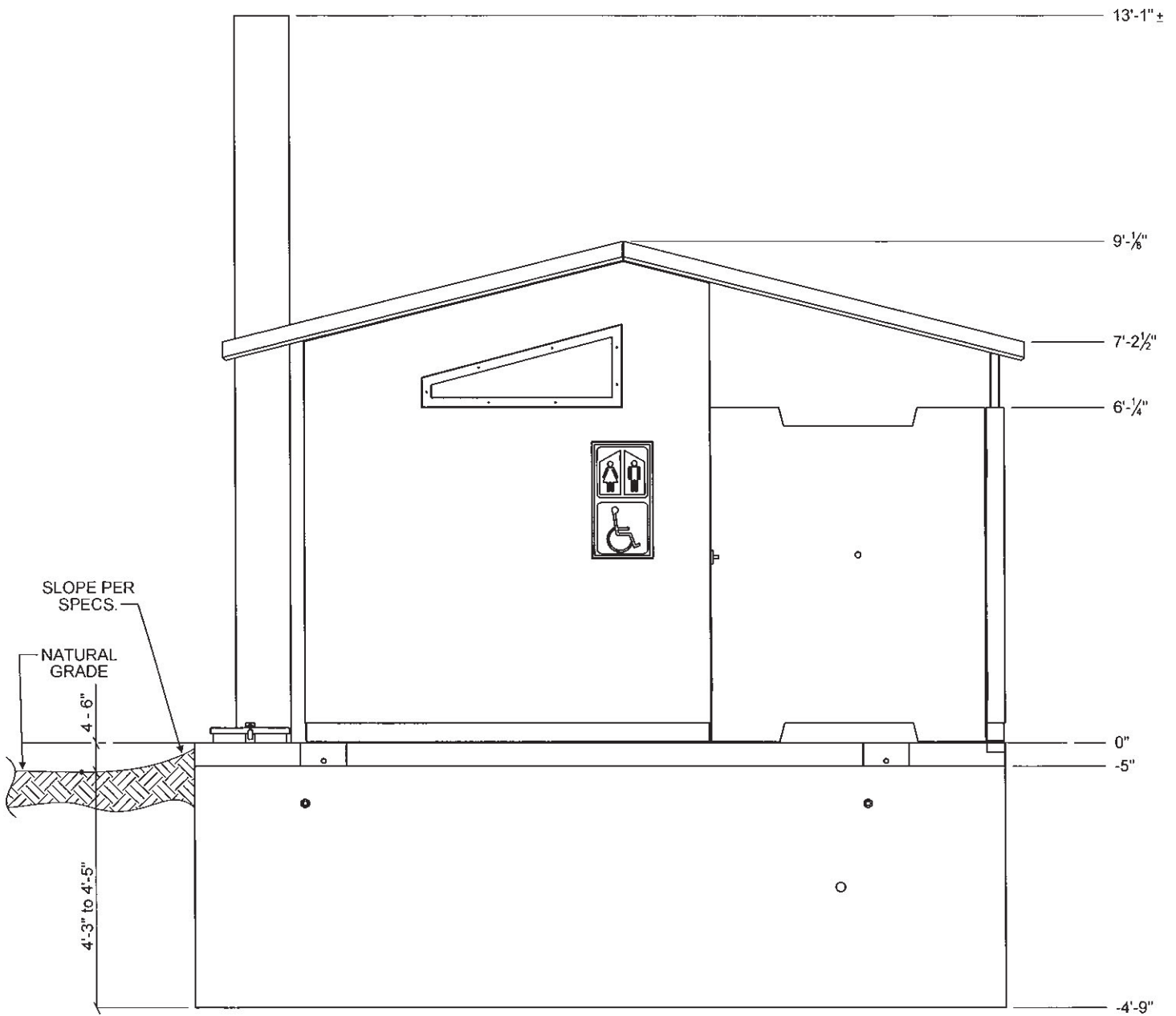


SECTION 3-3
SCALE 1 : 48



SECTION 4-4
SCALE 1 : 48





WEIGHT:

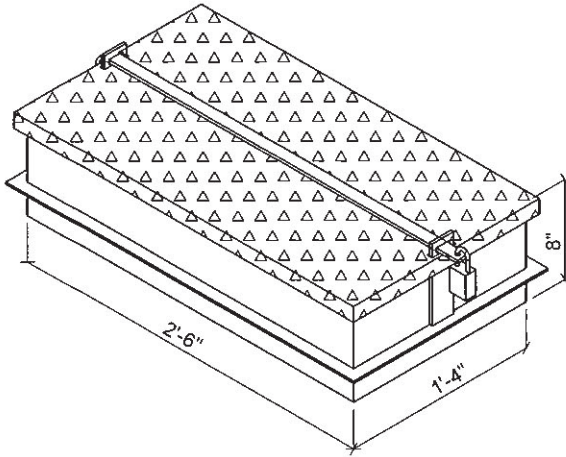
- Building - 24,000 lbs.
- Vault - 16,000 lbs.

EXCAVATION:

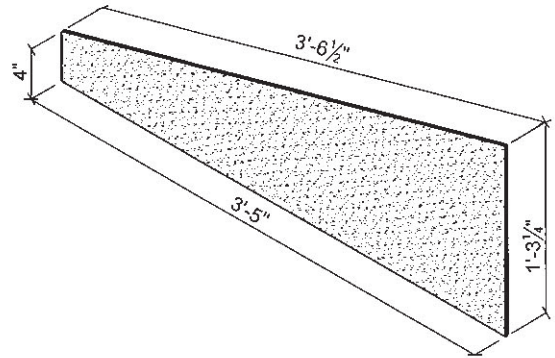
- Vault Hole - 8' wide x 16' long x 4'-9" below desired finish floor elevation
- See specifications for additional requirements.



FWP		SHEET 3 OF 4
ASPEN VAULT TOILET		
RIGHT HAND		
FULL SCREEN		
3/2017		



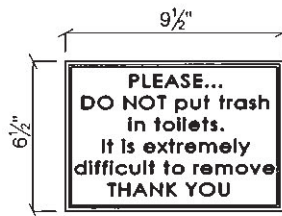
CLEANOUT HATCH



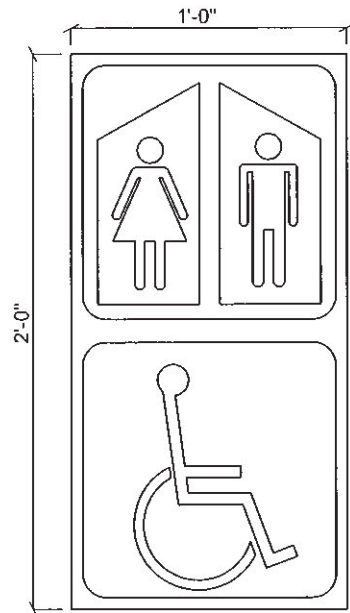
POLYCARBONATE WINDOW



BRILLE RESTROOM SIGN



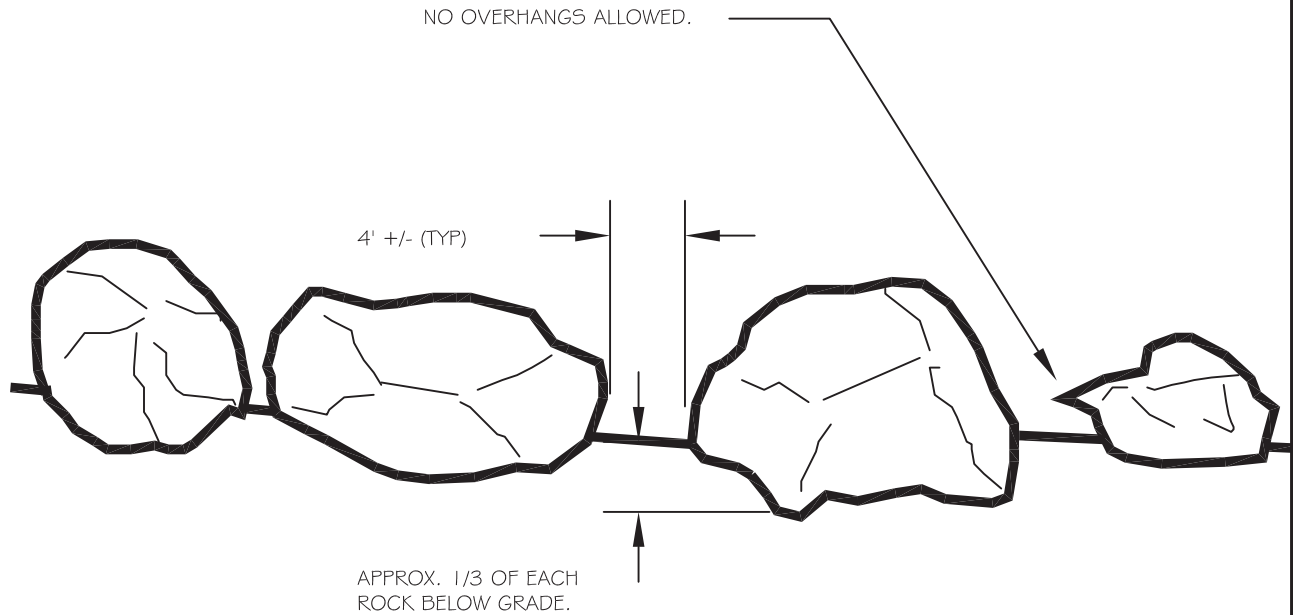
"NO TRASH" SIGN



"HANDICAPPED / UNISEX" SIGN



BARRIER ROCK DETAIL



Notes:

LANDSCAPE & BARRIER ROCK WILL BE PLACED IN NATURAL ARRANGEMENTS
 MINIMUM SIZE SHALL BE 6 CF. NO DIMENSION SHALL BE LESS THAN 1/3 OF
 THE LONGEST DIMENSION. ROCK SHALL BE HARD, DURABLE w/NO MAJOR
 MACHINE MARKS OR BLEMISHES
 BARRIER ROCKS SHALL BE SET SO THAT THEIR LONG AXIS IS PARALLEL TO
 THE GROUND AND ROAD SURFACING. THERE SHALL BE NO ACUTE ANGLES AT
 THE GROUND LINE. APPROXIMATELY 1/3 OF EACH ROCK SHALL BE PLACED
 BELOW GRADE. PLACE ROCK SO THAT ANY MOSS SHALL BE ON THE TOP.
 ALL EXCESS MATERIAL SHALL USED ON SITE AS DIRECTED BY THE PROJECT
 MANAGER OR IF UNSUITABLE, REMOVED FROM THE SITE.
 ADJACENT ROCKS SHALL NOT BE THE SAME SIZE NOR BE SET SO THE TOP
 OF THE ROCKS ARE THE SAME HEIGHT.
 UNLESS OTHERWISE DIRECTED BARRIERS SHALL BE PLACED
 APPROXIMATELY 5' APART FROM EDGE TO EDGE.
 A SUBSTANTIAL SUB-GRADE WILL BE PROVIDED TO ELIMINATE SETTLEMENT
 THE PROPER FINISHED GRADE WILL BE ESTABLISHED AROUND EACH ROCK.

*Montana Fish,
 Wildlife & Parks*

TITLE:

BARRIER ROCK DETAIL

SHEET:

DETAIL D-1

FILE NAME: BarrierR.dwg

DRAWN BY: R. RICE **DATE:** 05 DEC 00

NO SCALE

APPENDIX B
SIGNAGE INFORMATION

April 11, 2024



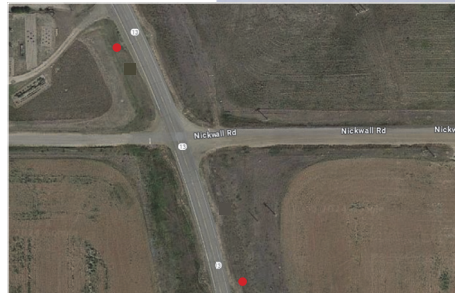
A
003 Highway Directional
mounted back to back,
72" x 40"(2)

B
004 Icon Addendum
12" x 12"
(2 each of 2)

C
002 Custom Highway
3-sign assembly (2)

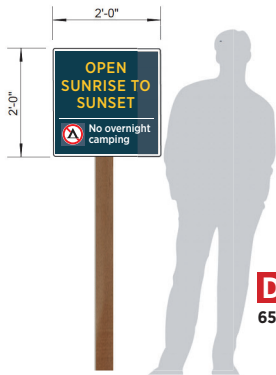
Upper Logo Sign, 26" x 26"
Site Designation, 26" x 12"
Directional Sign, 21" x 15"

All have 2 holes, upper and
lower center.



Guidance: When used in high-speed areas, Destination signs should be located 60 m (200 ft) or more in advance of the intersection, and following any Junction or Advance Route Turn assemblies that may be required. See MUTCD specifications for more installation details.

April 11, 2024



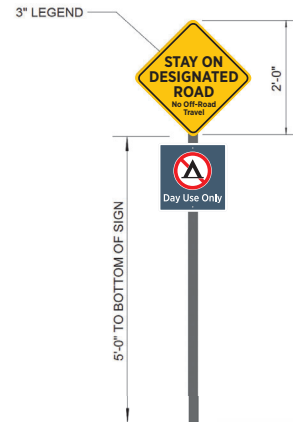
D
652 Ped Regs Large (1)



E
050 Standard Road Sign from MDT Catalog (#52111103) 36" (1)



F
050 Standard Road Sign from MDT Catalog (Off-road Travel) (1)

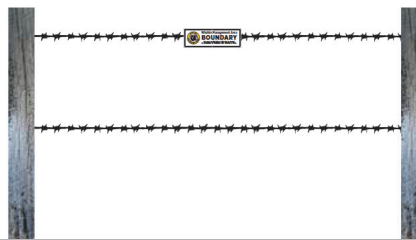


G
380 Road Restrictions (2)

H
450 Visitor Information X-Small (2)



I 440 Visitor Information (1)

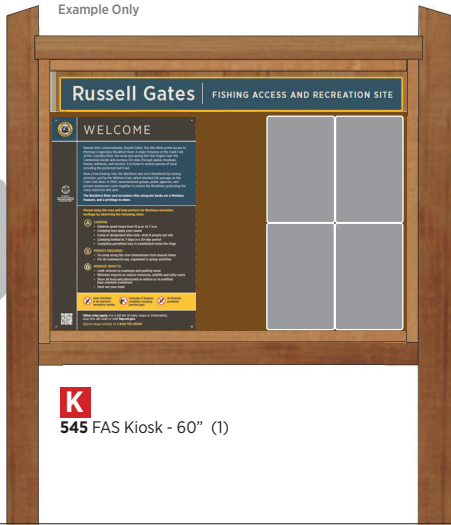


J
629 Small 2-sided FAS Boundary Approx. (10)



April 11, 2024

Example Only



K 545 FAS Kiosk - 60" (1)

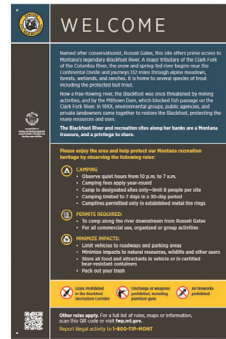
? Program Signs by Region

L Example Only

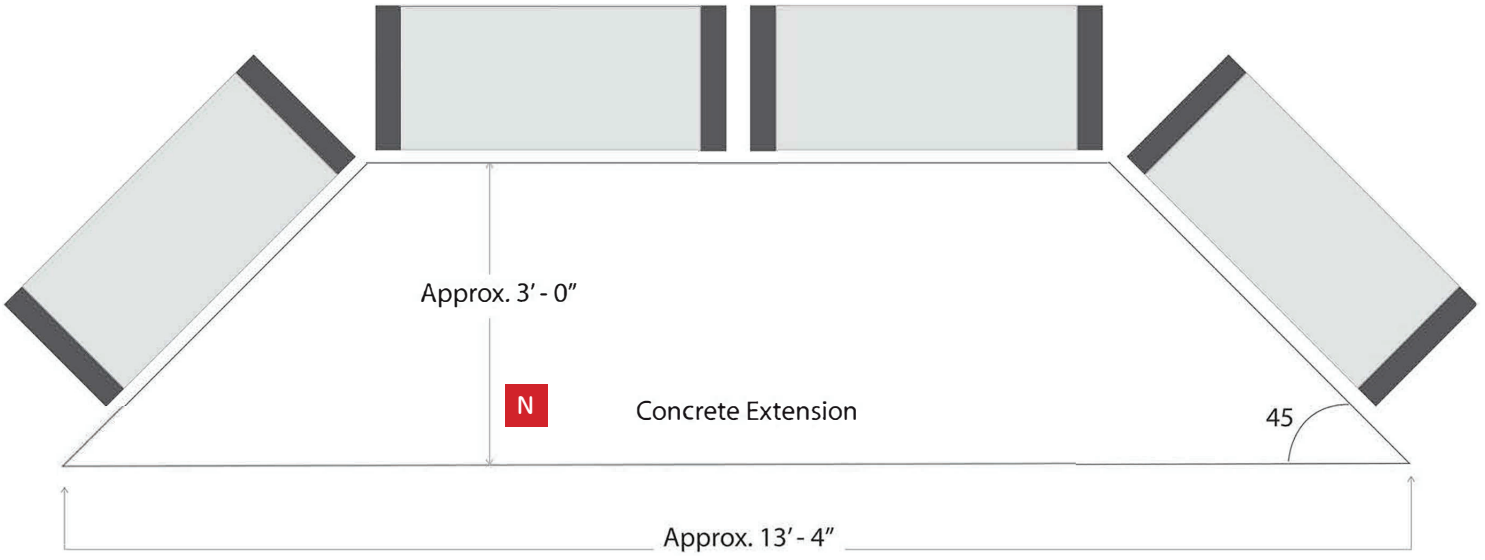


585 FAS Kiosk - header panel - 60" (1)

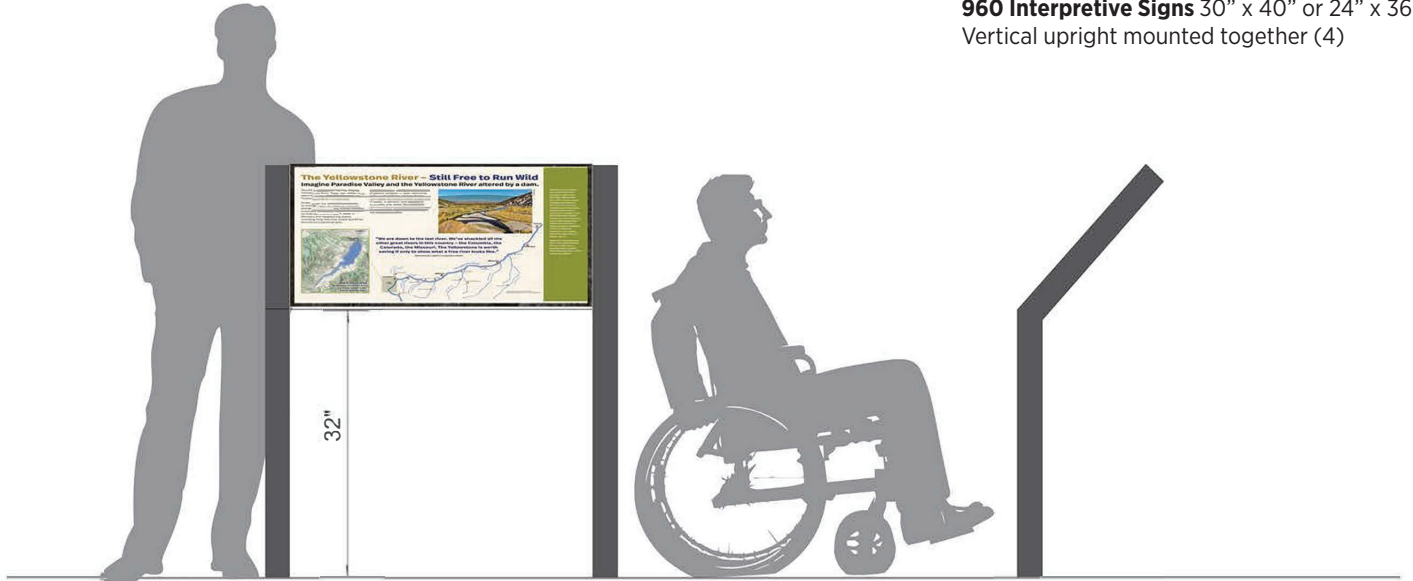
Example Only



M 581 FAS Welcome-Regs Panel (1)



960 Interpretive Signs 30" x 40" or 24" x 36"
 Vertical upright mounted together (4)



Redwater Option 1

Cantilever Pedestal - Bracketed

In-Ground Mount and Surface Mount All Aluminum Construction

> Standard Posts 3" x 3"

In-Ground Mount: 54" long

Surface Mount: 32" long

Custom post sizes available:

- ✓ 2" x 3" ✓ 2" x 6" ✓ 4" x 4"
- ✓ 2" x 4" ✓ 3" x 5"

* Custom post lengths available

* Standard and custom color options available

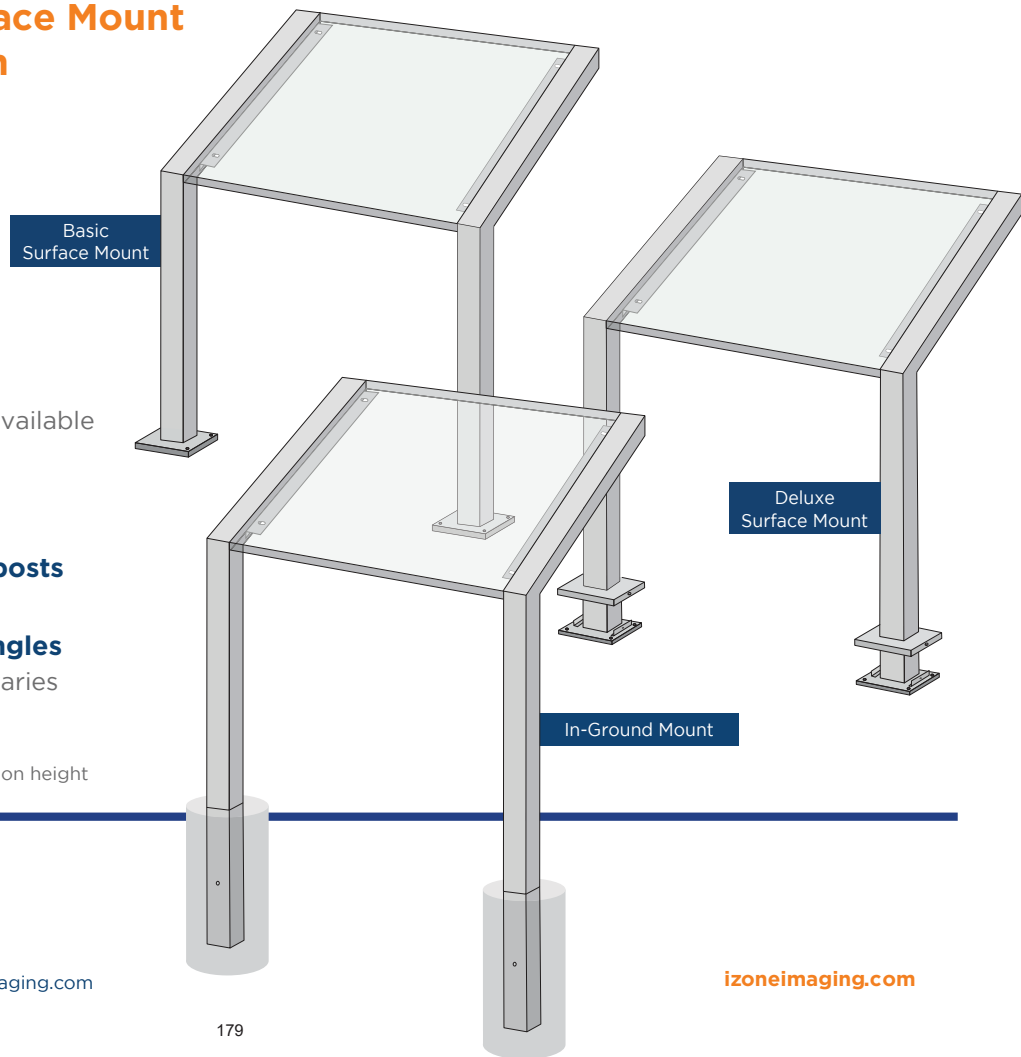
> Standard panel height 24"

> Panel will be flush with top of the posts

> Panel attaches to welded mount angles

Length of mount angle and post arm varies by panel height.

* Post length is determined by panel height, installation height and burial depth

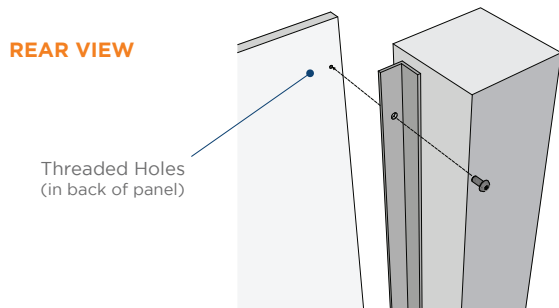
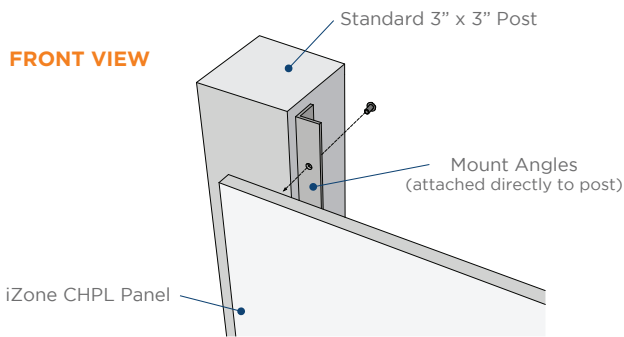


Toll Free 888.464.9663
Local 254.778.0722
Fax 254.778.0938
Email info@izoneimaging.com

izoneimaging.com

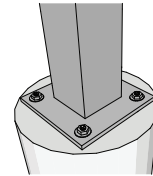
Cantilever Pedestal - Bracketed

In-Ground Mount and Surface Mount
All Aluminum Construction

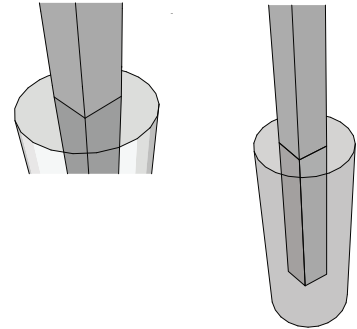


> Post Mounting Options

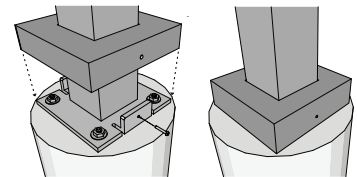
Surface Mount



In-Ground Mount



Deluxe Surface Mount

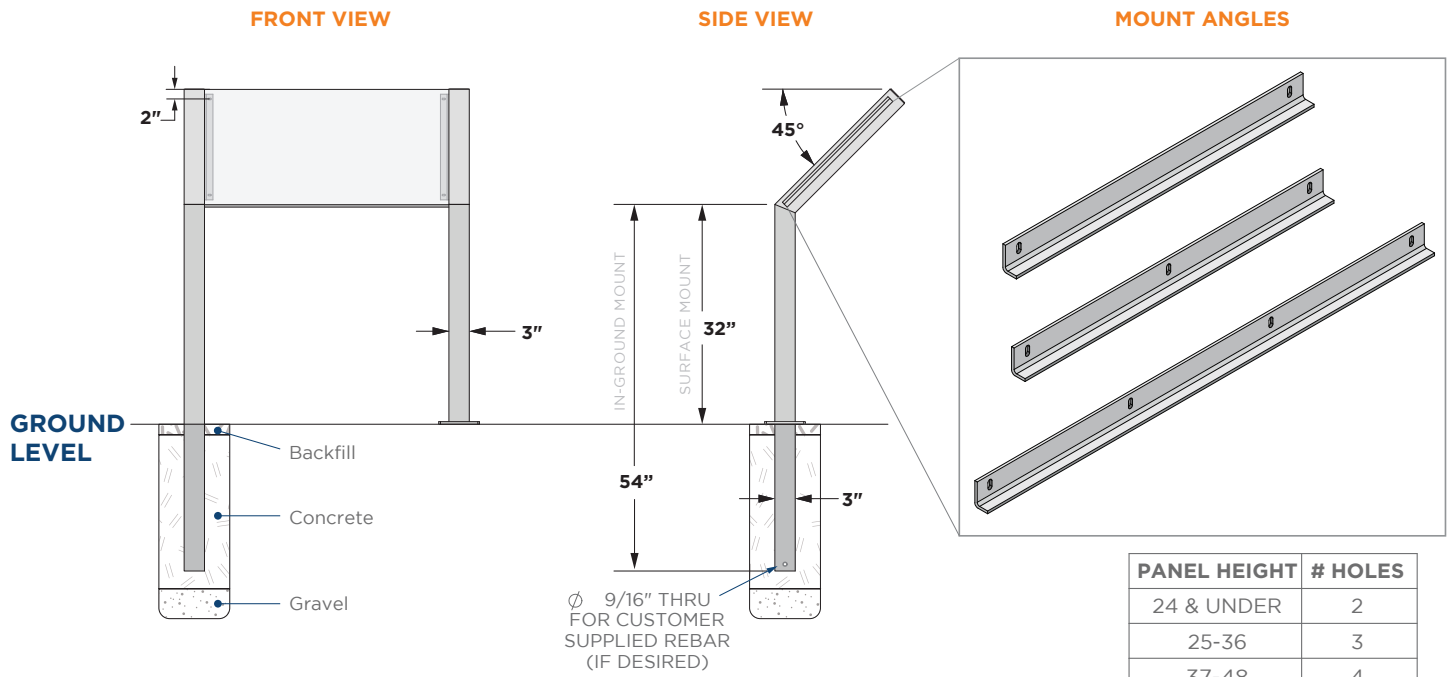


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Cantilever Pedestal - Bracketed

In-Ground Mount and Surface Mount
All Aluminum Construction

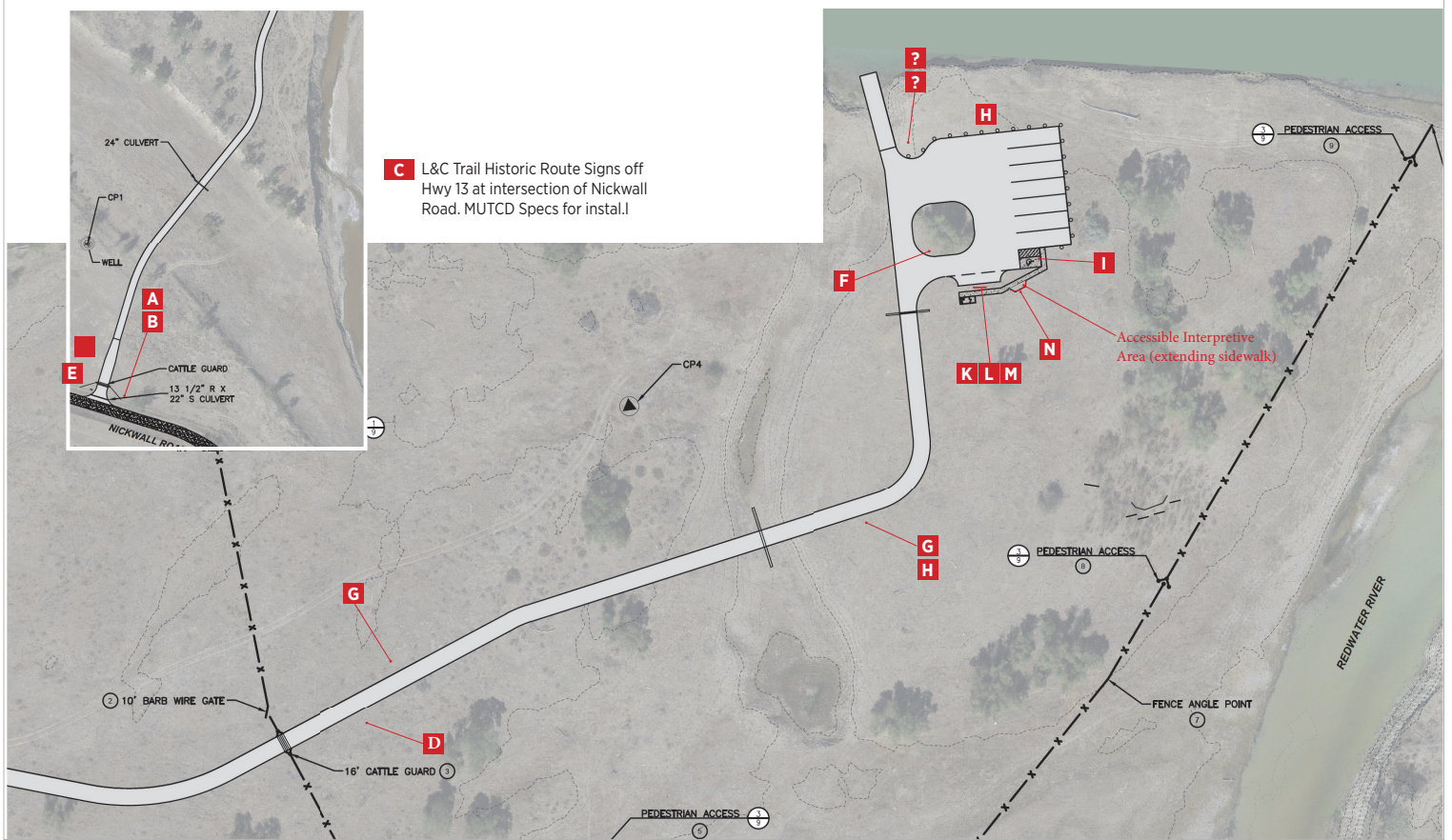


Project details pertaining to below grade installation depths, ADA requirements, wind loads, or other specifications, should be discussed with your Sales Representative at estimating.



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Stream Projection Act (SPA 124) Permit Review

January 28, 2025

Applicant name: Montana Fish Wildlife & Parks Region, Design & Construction
1522 9th Avenue
Helena, MT. 59620

Permit No.: SPA-0128-25-R7

Waterbody: Missouri River near Red Water Confluence South of Poplar MT. in McCone County.

Project Name: Installation of a gravel aggregate boat ramp on the southern streambank of the Missouri River approximately 700 feet upstream of the confluence of the Missouri-Red Water rivers.

Description of Project: The overall project consists of developing a new fishing access site including a gravel access road, cattle guards, fencing, drainage culverts, parking area, vault latrine, and a gravel aggregate boat ramp. Installation of the boat ramp is the only activities of the proposed project requiring a 124 Permit and 318 Authorization. Construction of the boat ramp includes minor excavation of the riverbank and some streambed to create the correct slope and room to install underlayment materials consisting of a geotextile fabric, 6 inches of 2.5 inch minus coarse road ballast, and 4 inches of ¾ inch minus base coarse rock. The gravel aggregate boat ramp will be 16 feet wide by 73 feet long by 10 inches thick and extend 25 feet into the water with 2 feet of water over the end of the boat ramp (as measured during normal base river flows).

For awareness, the Missouri River includes the endangered pallid sturgeon. This includes seasonal presence of adult pallid sturgeon during spawning migrations (April-July) and year-round residence by juvenile pallid sturgeon. Any construction project that impacts the streambed or streambanks of the river need to acknowledge this fish presence and plan projects accordingly.

In accordance with the Montana Stream Protection Act (SPA), Montana Fish, Wildlife & Parks has reviewed the project based on information provided in the joint application. Authorization for this work is approved provided work is carried out as presented in the application, meets the following stipulations, and adheres to the attached general conditions.

1. Construction conducted during low flow periods and all in-river work completed expeditiously to minimize potential impacts to the stream and water quality.

2. No in-river work from May 15-July 15 to minimize impacts to adult pallid sturgeon spawning migrations and drifting larvae as noted in Note #15 on page 2 of 16 drawing sheets.
3. All work shall be conducted in a manner that minimizes turbidity and that minimizes unplanned disturbances to the streambed or streambanks.
4. Work executed as outlined in the application.
5. To prevent the inadvertent introduction of petroleum products to the waterway, no defective or leaking equipment shall be operated in the stream or in adjacent areas capable of contributing surface flow to the local drainage.

Term of Permit: 2.5 years

Timing Restrictions: No in-river work May 15-July 15.

318 Authorization Review: The above project has also been reviewed on behalf of the Montana Department of Environmental Quality (DEQ) pursuant to the Montana Water Quality Act Short-term Water Quality Standards for Turbidity 75-5-318 MCA. Based on review of the project application, turbidity generated from this project is expected to be short-term and have only temporary and minor impacts on the physical and biological environment. Therefore, compliance with the conditions stated in the attached letter outlining *DEQ's Short Term Water Quality Standard for Turbidity Related to Construction Activity*, as well as other conditions listed in the 124 Permit, are appropriate for this project. Please review, sign, and return a signed copy for the files.

This project may also require review for a Section 404 Permit from the U.S. Army Corps of Engineers. Please contact the Corps office in Helena (406) 441-1363 for further information.

Please call or email if you have questions or concerns regarding this permit or other aspects of the project.

Issuing Biologist: Kenneth M Backes, Region 7 Fisheries Manager
PO Box 1630
Miles City, MT. 59301
406-234-0925
mibacke@mt.gov

Signature: 

Cc: Corps of Engineers Montana.Reg@usace.army.mil

Keenan Storrar, Department of Environmental Quality Keenan.Storrar@mt.gov

Stream Protection Act 124 Permit General Conditions

1. Complete work affecting a streambed or streambank in an expeditious manner to avoid unnecessary impacts to the stream.
2. Limit the clearing of vegetation to that which is necessary for construction of the project. Take precautions to preserve existing riparian vegetation. Salvage and reuse native vegetation where possible.
3. Install and maintain erosion control measures where appropriate to protect aquatic resources. Do not clear and grub land adjacent to streams prior to installing proper erosion and sedimentation controls. Conduct all work in a manner that minimizes turbidity and other disturbances to aquatic resources.
4. Plan temporary construction facilities to:
 - a. Minimize disturbance to streambank, streambank vegetation, and the streambed by locating staging or storage facilities at least 50' horizontally from the highest anticipated water level during construction.
 - b. Not restrict or impede fish passage in streams.
 - c. Not restrict stream flow during use.
5. Provide sediment controls for drainage from topsoil stockpiles, staging areas, access roads, channel changes, and instream excavations.
6. Isolate work zones from flowing and standing waters to prevent turbid water and sediments from being discharged into streams or other drainages that flow directly into the stream. Divert flowing waters around the work zone.
7. Do not spill or dump material into streams. Store and handle petroleum products, chemicals, and other deleterious materials in a manner that will prevent their entering streams.
8. Do not permit wash water from cleaning related equipment to enter streams.
9. Do not operate mechanized equipment in any stream or flowing water unless special authorization is obtained. If special authorization is granted, the following conditions apply:
 - a. Power wash all equipment allowed in a stream prior to entering the stream channel.
 - b. Clean and maintain all equipment so that petroleum-based products and hydraulic fluids do not leak or spill into the waterway.
10. Reclaim streambeds and stream banks as closely as possible to their pre-disturbed condition.
11. Restore disturbed stream banks to their natural or pre-disturbed configuration to match adjacent ground contours or as specified in the project plans. Stabilize, reseed, and re-vegetate disturbed areas. Install and maintain long-term biodegradable erosion-control measures to protect these areas until adequate vegetation has been established.
12. Restore temporary access routes and any temporarily disturbed areas to original conditions, including original contours and vegetation.
13. Dispose of any excess material generated from the project above the ordinary high-water mark and in an area not classified as a wetland.