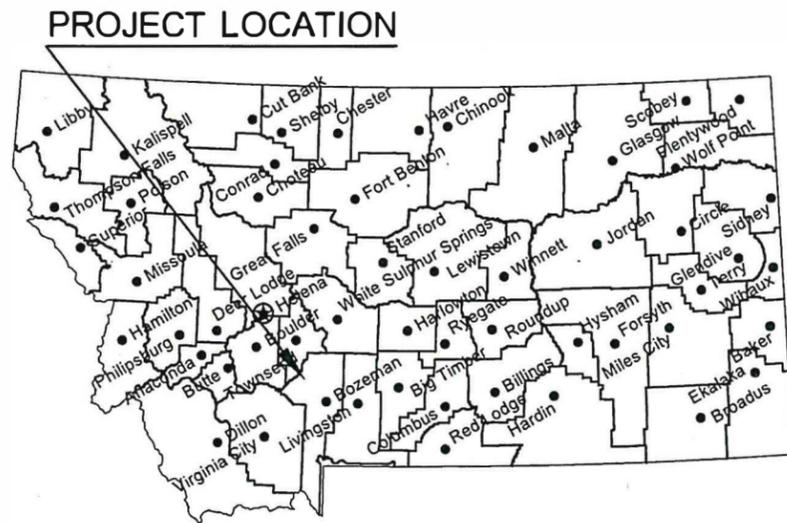


SITE DEVELOPMENT BUD LILLY FISHING ACCESS SITE

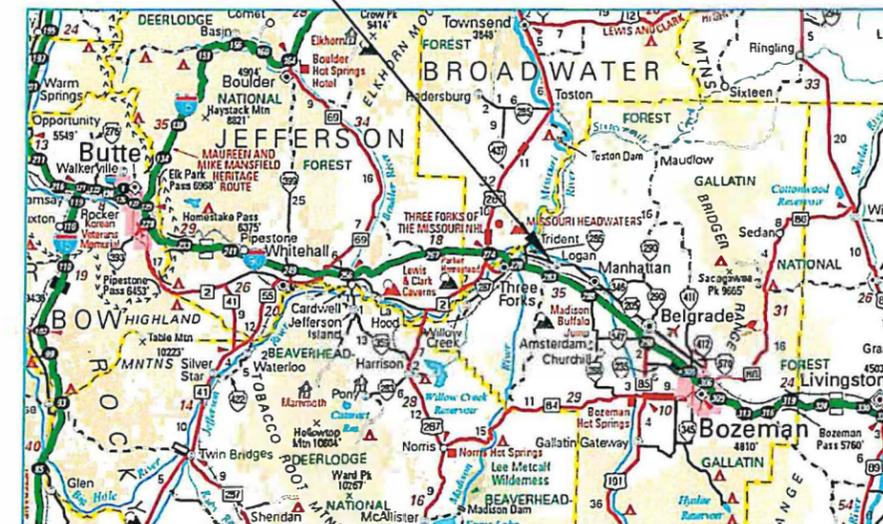
LOGAN, MT

FWP # 7113709



Location Map

No Scale



Vicinity Map

No Scale

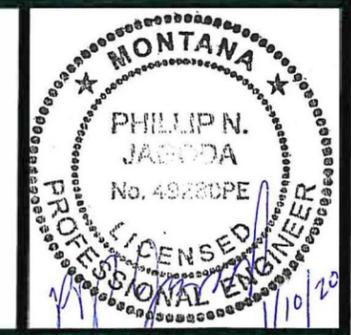
**MONTANA FISH, WILDLIFE AND PARKS
DESIGN AND CONSTRUCTION BUREAU**

MAILING ADDRESS:
PO BOX 200701
HELENA, MT 59620-0701
TEL 406.841.4000
FAX 406.841.4004
fwp.mt.gov/Doing Business/Design&Construction

PHYSICAL ADDRESS:
1522 9th AVENUE
HELENA, MT 59601

DRAWING INDEX

- SHEET 1 : COVER
- SHEET 2 : SITE PLAN
- SHEET 3 : PLAN AND PROFILE I
- SHEET 4 : PLAN AND PROFILE II
- SHEET 5 : CROSS SECTIONS
- SHEET 6 : TYPICAL SECTIONS
- SHEET 7 : FENCE DETAILS



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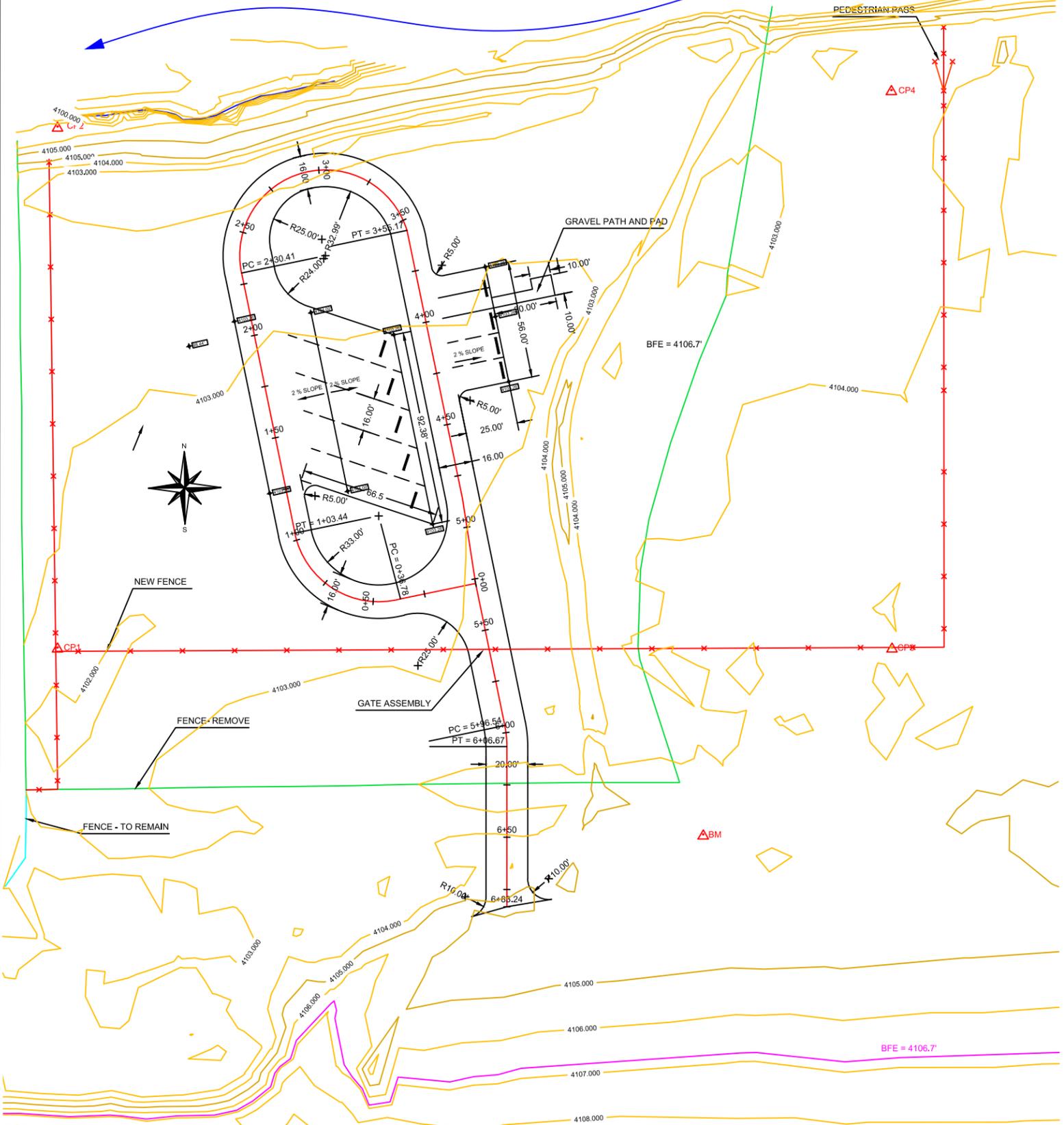


**Montana Fish,
Wildlife & Parks**

COVER
Bud Lilly FAS near Logan, MT



GALLATIN RIVER



LEGEND	
	MAJOR CONTOUR (5 FOOT INTERVAL)
	MINOR CONTOUR (1 FOOT INTERVAL)
	ROADS AND PARKING- EXISTING
	NEW ROADS AND PARKING AREAS
	NEW ROAD CENTERLINE
	CONCRETE
	PARKING BLOCK
	WATERLINE
	CONTROL POINT
	FENCE - EXISTING
	FENCE - NEW



CONTROL POINTS	
	CONTROL POINT 1- 10,000.00, 5000.00, 4102.438
	CONTROL POINT 2- 10,249.08, 5000.00, 4103.448
	CONTROL POINT 3- 10,000.00, 5400.00, 4105.018
	CONTROL POINT 4- 10,266.51, 5399.69, 4103.815

Notes:

- 1) The FWP Engineer will stake fence location, radius points, parking corners, centerline stations of alignments and provide reference elevations.
- 2) Reclaim all areas disturbed during construction, level to match natural grades, and seeded. Refer to Section 02936. Excess material generated from stripping top soil shall be removed from the site and disposed of in a safe and legal manner.
- 3) The contractor is to safely remove the existing fence after the installation of the new fence is sufficient to contain livestock on the adjoining property. All material removed from the site shall be disposed of in a safe and legal manner.
- 4) Transitions from new graveled areas to vegetated areas shall be uniform, well defined, and follow the alignment of the roads and parking layouts.
- 5) The Contractor shall use best management practices to prevent silt, soil and debris from entering the water. This may include straw, gravel or fabric. Temporary dikes to divert rainwater may be used, provided they are removed and the gravel or soil returned to the original condition. Exposed soil may require straw or similar cover to minimize erosion caused by rain. Other appropriate methods may be used at the Contractors' discretion or as directed by the owner.
- 6) Equipment used in or near water shall not leak fluids. It shall be power washed before use on the site and examined by the engineer.
- 7) Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
- 8) The contractor is responsible for locating and protecting utilities within the construction area including access routes to the construction area.
- 9) The contractor is required to notify and coordinate all work activities with the FWP Project Engineer.
- 10) Submittals are required on all products used in the project. Refer to specifications for submittal requirements.
- 11) Provide all temporary signing, personnel and traffic control devises as required by federal, state and local regulations.
- 12) Geotechnical Information: The soils at the site are sandy loams stratified with coarse sand and gravel. The depth to a restrictive feature is over 80 inches.
- 13) The Owner is responsible for obtaining all necessary permits.

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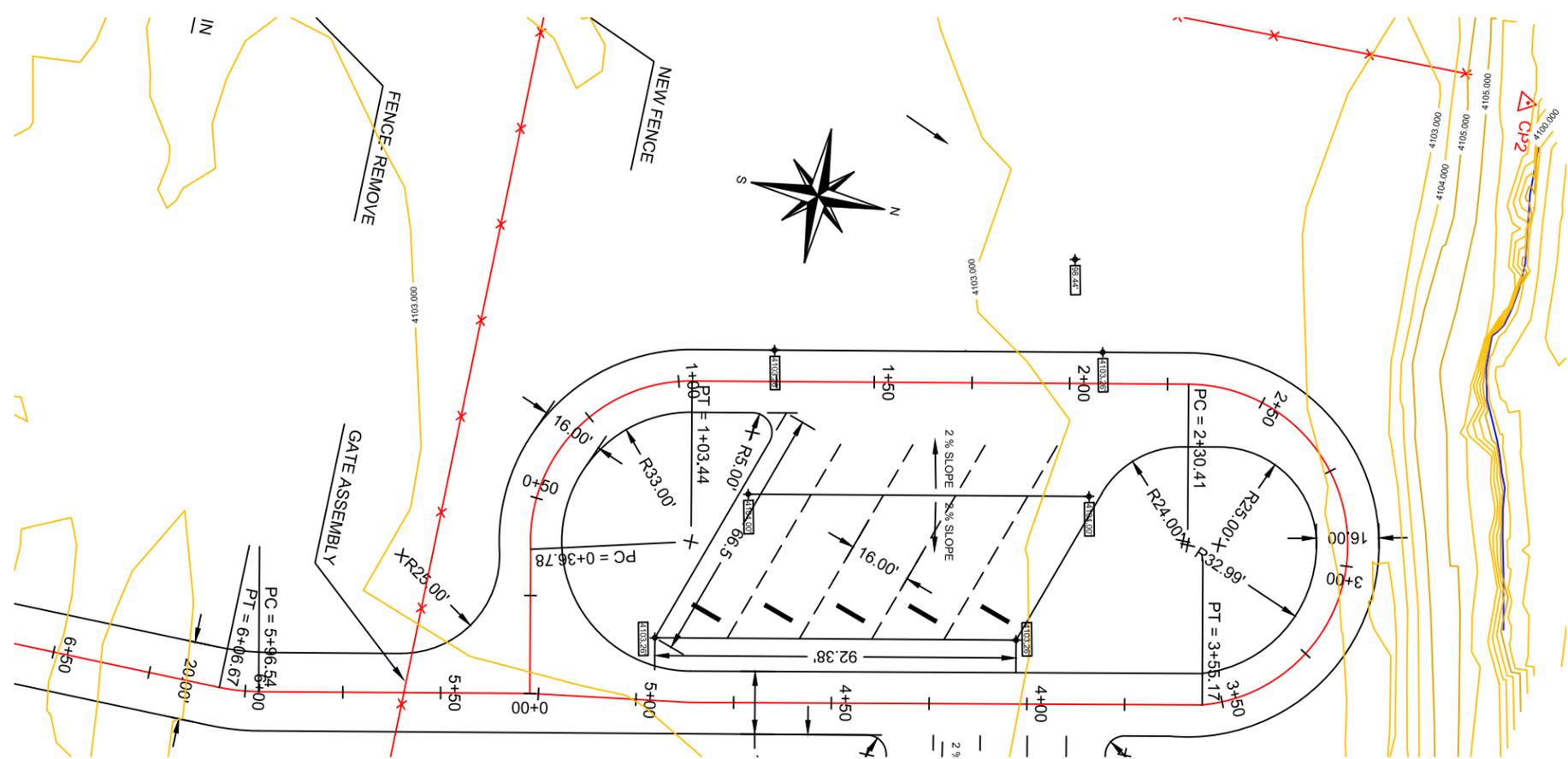


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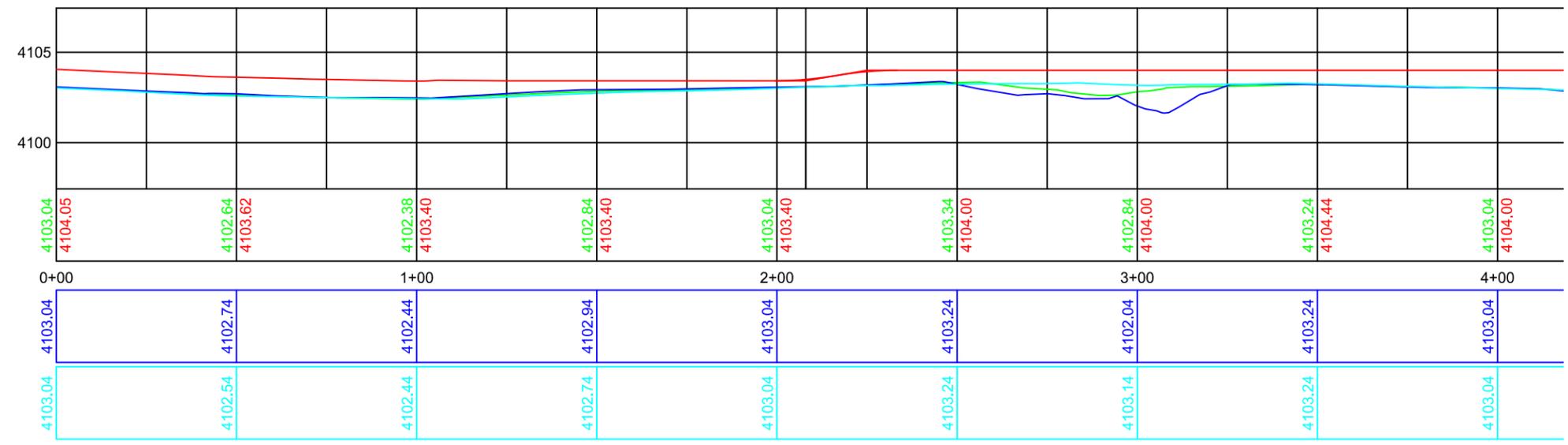
SITE PLAN
Bud Lilly FAS near Logan, MT



SHEET: 2 of 7



PROFILE LEGEND	
—	FINISH GRADE - CENTERLINE
—	EXISTING GRADE - CENTERLINE
—	EXISTING GRADE - 8' LEFT OF CENTERLINE
—	EXISTING GRADE - 8' RIGHT OF CENTERLINE



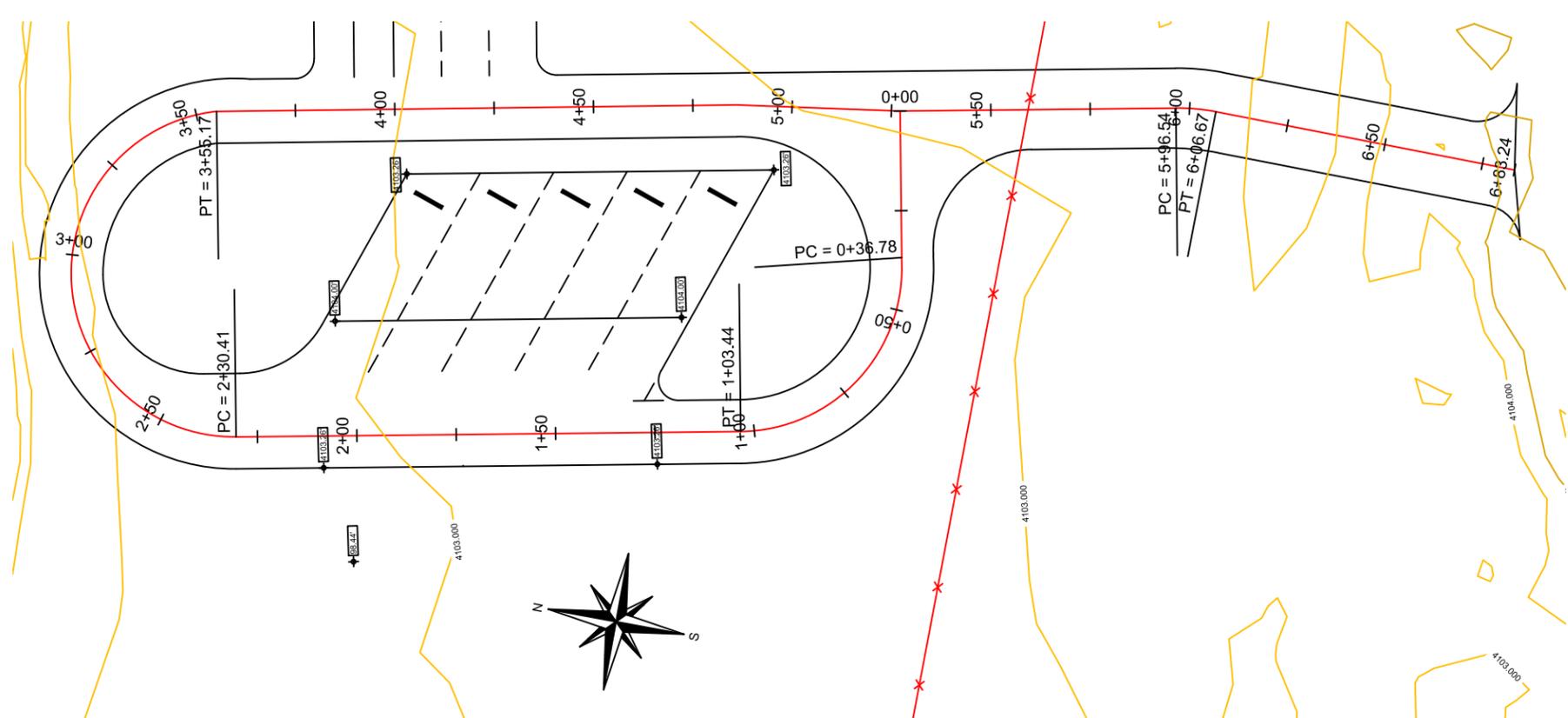
J. Kevin McDonnell	3.2019				
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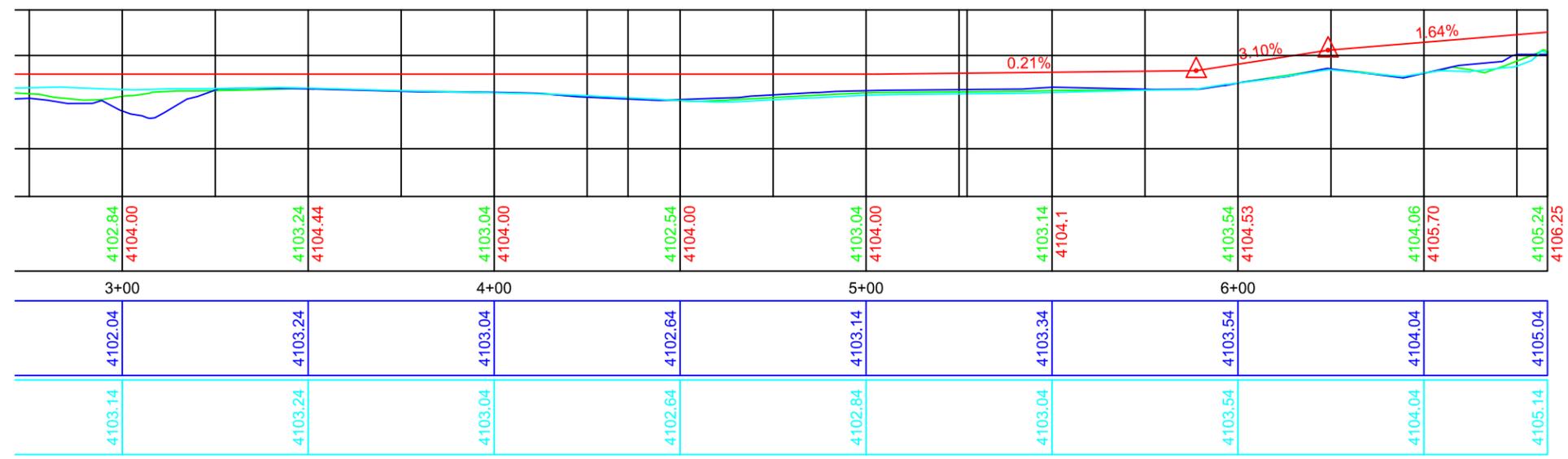
Montana Fish, Wildlife & Parks 133

PLAN AND PROFILE I
Bud Lilly FAS near Logan, MT





PROFILE LEGEND	
—	FINISH GRADE - CENTERLINE
—	EXISTING GRADE - CENTERLINE
—	EXISTING GRADE - 8' LEFT OF CENTERLINE
—	EXISTING GRADE - 8' RIGHT OF CENTERLINE



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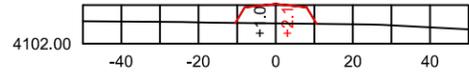


Montana Fish & Wildlife

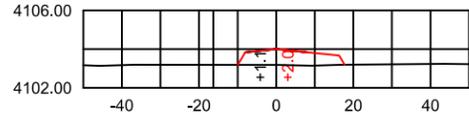
PLAN AND PROFILE II
Bud Lilly FAS near Logan, MT



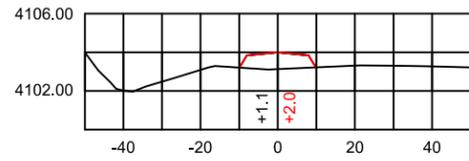
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2+25



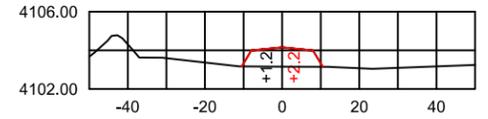
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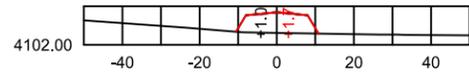
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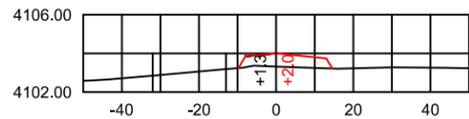
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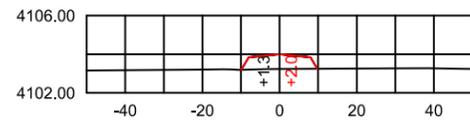
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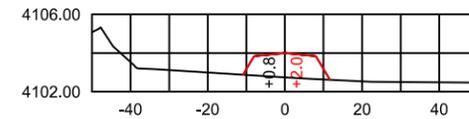
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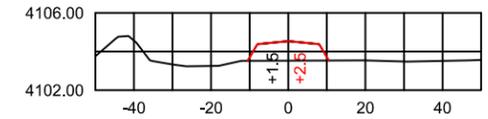
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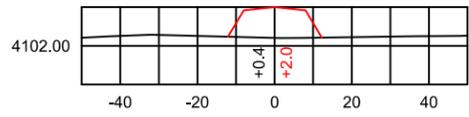
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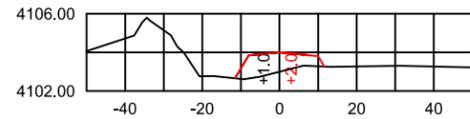
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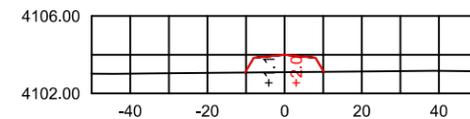
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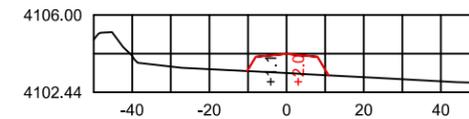
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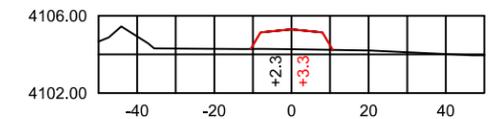
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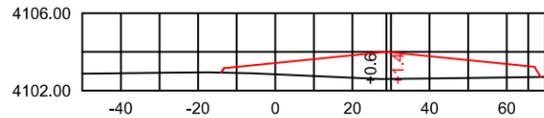
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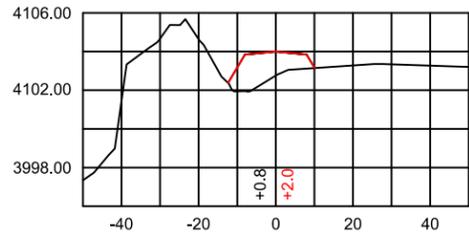
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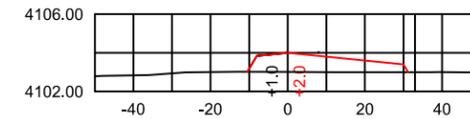
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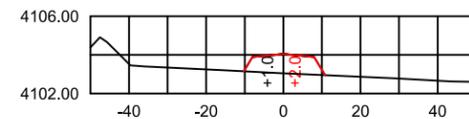
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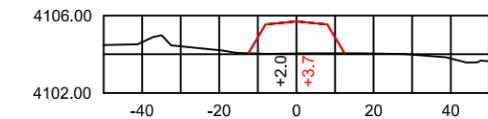
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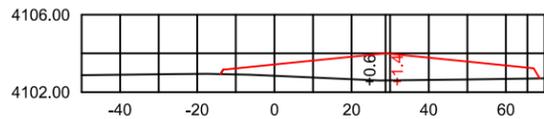
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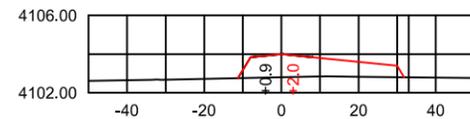
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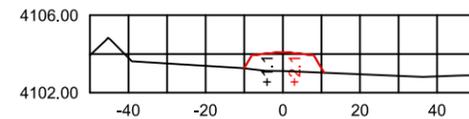
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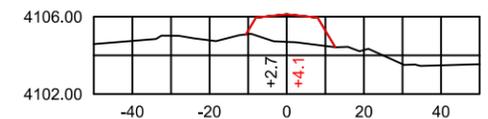
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5+50



6+75



CROSS SECTION LEGEND

- FINISH GRADE - CENTERLINE
- EXISTING GRADE - CENTERLINE



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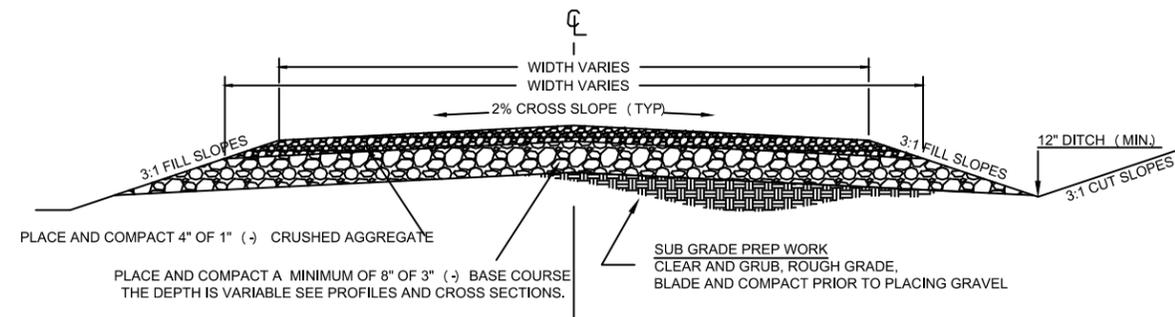


Montana Fish Wildlife & Parks

CROSS SECTIONS Bud Lilly FAS near Logan, MT



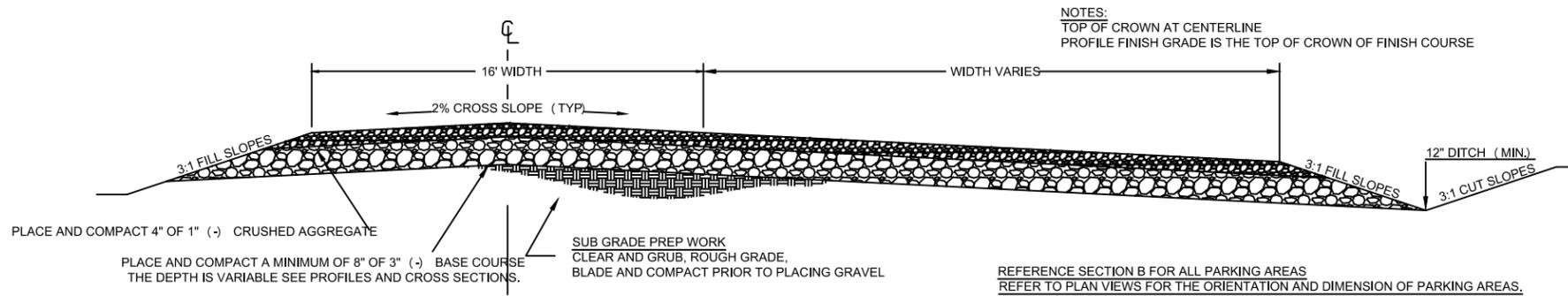
SHEET: 5 of 7



TYPICAL SECTION A : ROAD
NOT TO SCALE

NOTES:

1. CLEAR AND GRUB AREAS DESIGNATED FOR NEW ROADS AND PARKING. TOP SOIL DEPTH IS VARIABLE.
2. RETAIN STRIPPED TOP SOIL FOR USE IN SEEDING AREAS DISTURBED BY CONSTRUCTION. REMAINING MATERIAL TO BE REMOVED FROM SITE AND DISPOSED OF IN A SAFE AND LEGAL MANNER.
3. COMPACT EXISTING ROUGH GRADED SURFACE PRIOR TO PLACING NEW GRAVEL BASE COURSE.
4. PLACE AND COMPACT A MINIMUM OF 8" OF 3" (-) BASE COURSE.
5. PLACE AND COMPACT 4" OF 1" 1/2 (-) CRUSHED TOP SURFACING ON BASE COURSE.
6. ROADS SHALL BE CROSS SLOPED AT A MINIMUM GRADE OF 2%



NOTES:

1. CLEAR AND GRUB AREAS DESIGNATED FOR NEW ROADS AND PARKING. TOP SOIL DEPTH IS VARIABLE.
2. RETAIN STRIPPED TOP SOIL FOR USE IN SEEDING AREAS DISTURBED BY CONSTRUCTION. REMAINING MATERIAL TO BE REMOVED FROM SITE AND DISPOSED OF IN A SAFE AND LEGAL MANNER.
3. COMPACT EXISTING ROUGH GRADED SURFACE PRIOR TO PLACING NEW GRAVEL BASE COURSE.
4. PLACE AND COMPACT A MINIMUM OF 8" OF 3" (-) BASE COURSE.
5. PLACE AND COMPACT 4" OF 1" 1/2 (-) CRUSHED TOP SURFACING ON BASE COURSE.
6. ROADS AND PARKING AREAS SHALL BE CROSS SLOPED AT A MINIMUM GRADE OF 2%

TYPICAL SECTION B : ROAD WITH PARKING AREAS
NOT TO SCALE

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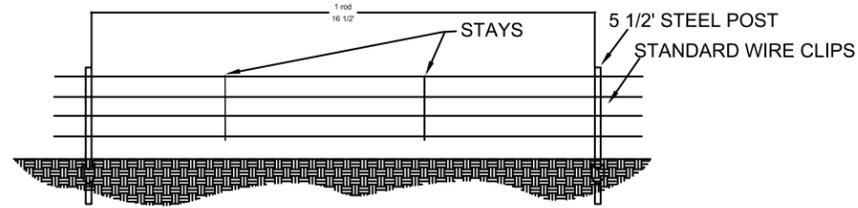


**Montana Fish,
Wildlife & Parks** 136

TYPICAL SECTIONS
Bud Lilly FAS near Logan, MT

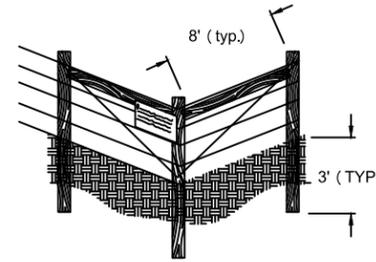


SHEET:
6
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7



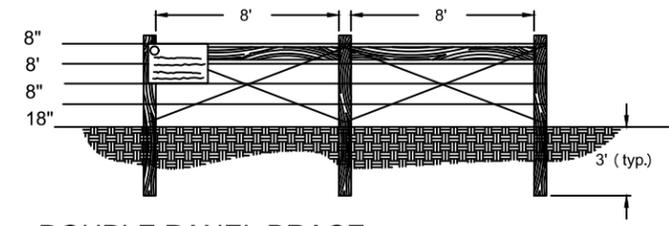
TYPICAL STEEL POST FENCE

* Top and Bottom Wire to be Smooth, Bottom Wire 18" Above the Ground



CORNER BRACE

NOT TO SCALE



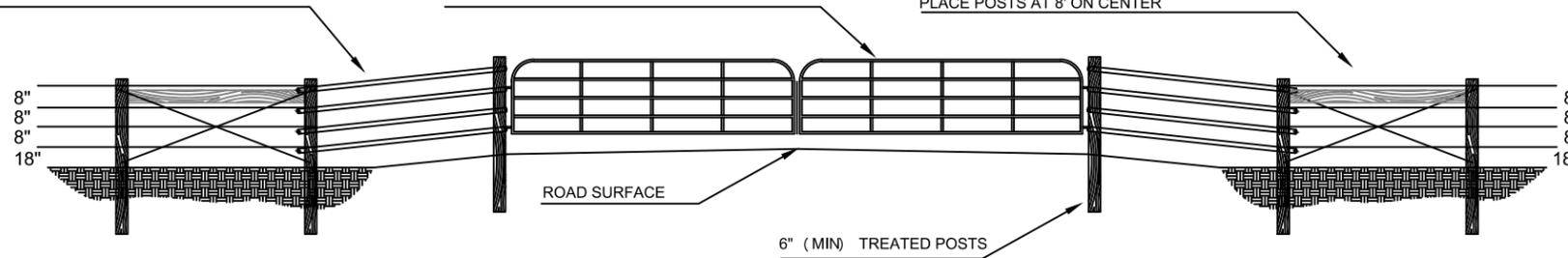
DOUBLE PANEL BRACE

NOT TO SCALE

PROVIDE 4" MIN RAILS BETWEEN BRACE PANEL AND GATEPOST. FASTEN TO POSTS WITH RING SHANK NAIL AND WASHER OR LAG SCREW. COPE RAIL TO POST.

HEAVY DUTY, 16 GA, 12' METAL STOCK GATES WITH CHAIN KEEPER, HINGE GATE TO SWING BACK TO FENCE, PROVIDE HOOK ON THE BRACE RAIL TO TIE GATE BACK.

SINGLE PANEL BRACE PLACED IN LINE WITH EXISTING FENCE. TIGHTEN AND SECURE EXISTING FENCE WIRE. PROVIDE 6" MIN WOOD BRACE AND TWO TWIST - TIGHTENED 9 GA WIRE CROSS BRACES OR PEDESTRIAN PASS. SET BOTTOM OF POSTS AT 3' BELOW GRADE AND COMPACT. PLACE POSTS AT 8' ON CENTER

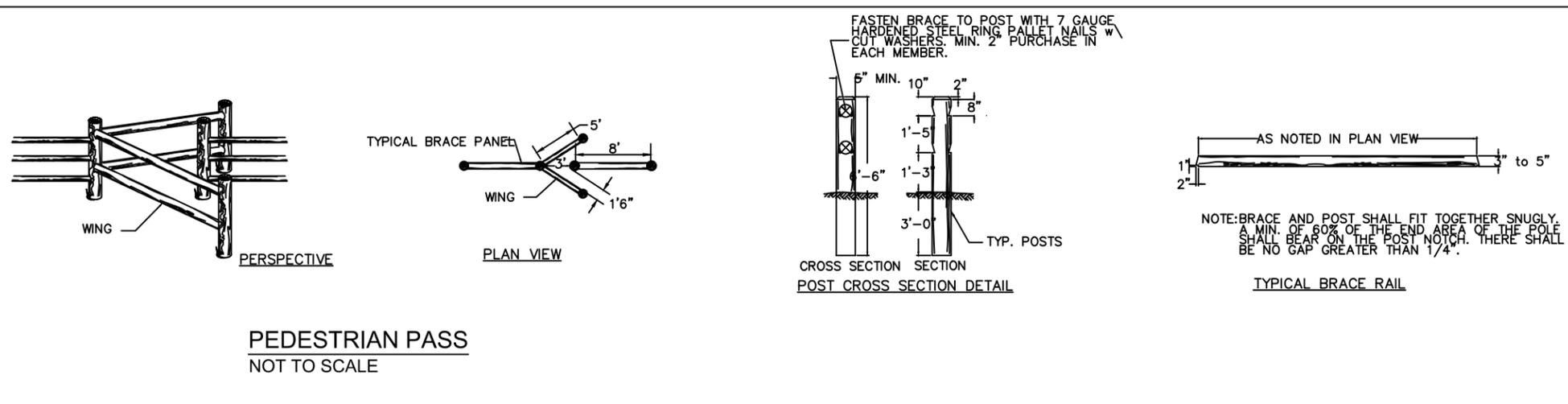


METAL GATE ASSEMBLY

NOT TO SCALE

ESTIMATED QUANTITIES:

- 1. DOUBLE PANEL BRACE - 2
- 2. METAL GATE ASSEMBLY - 1
- 3. PEDESTRIAN PASS - 1
- 4. CORNER BRACE - 2
- 5. TOTAL LENGTH OF FENCE - 1040 FT
- 6. FENCE REMOVAL - 1000 FT



PEDESTRIAN PASS

NOT TO SCALE

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Montana Fish, Wildlife & Parks

FENCE DETAILS
Bud Lilly FAS near Logan, MT

