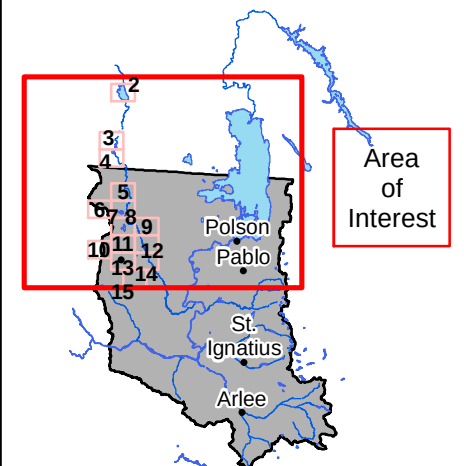


Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052930** **Exhibit 1**



Flathead Indian Reservation

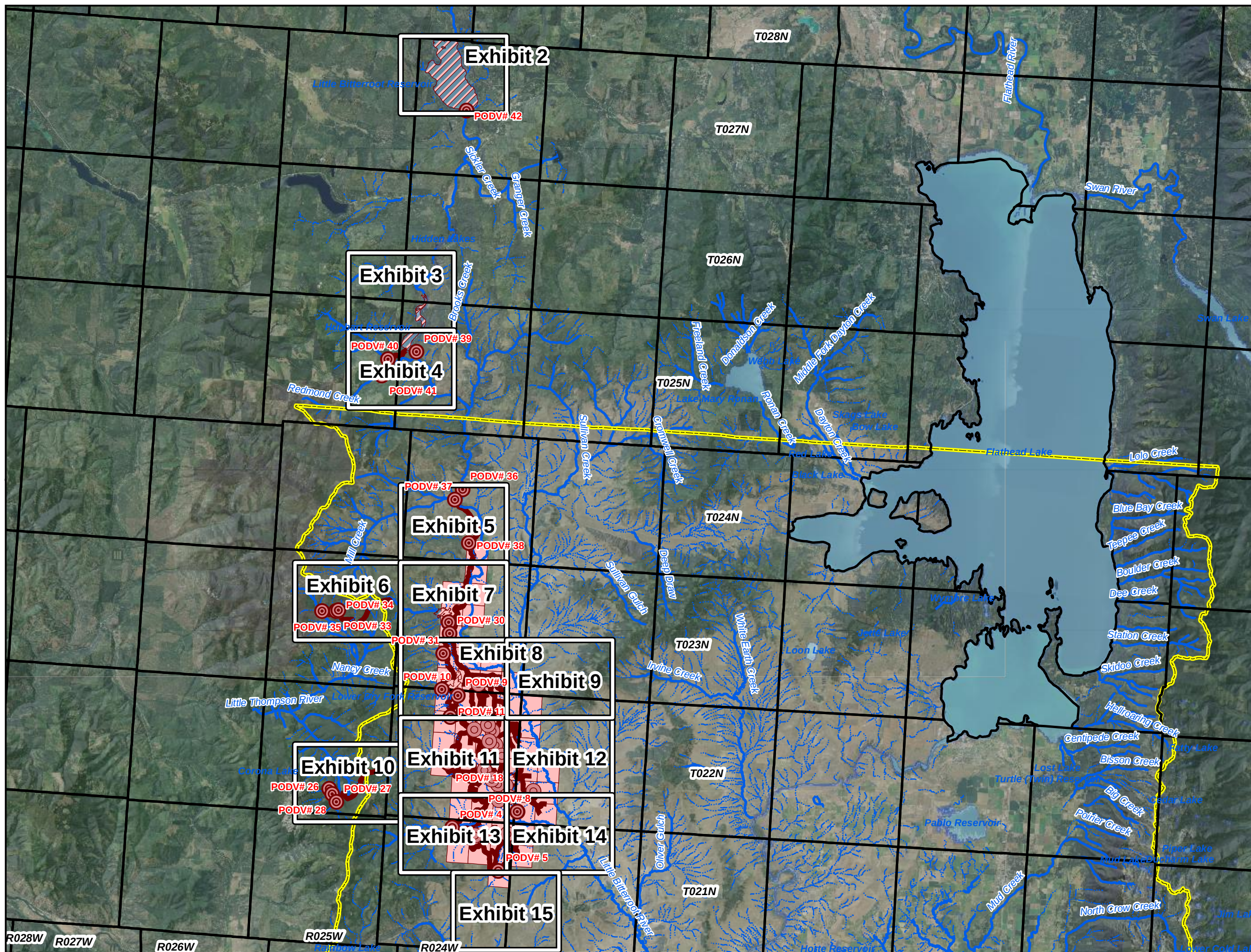
Legend

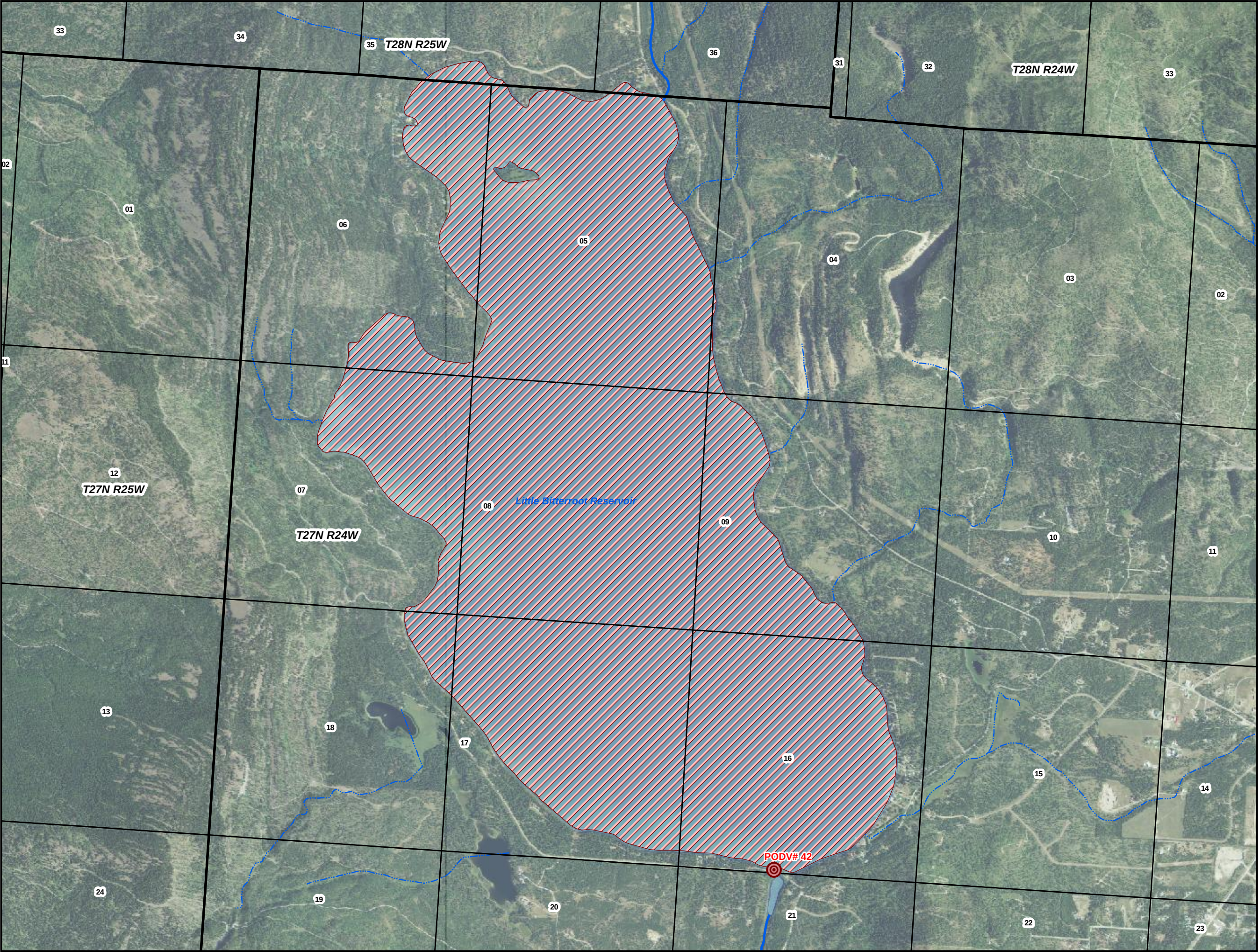
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 2.75 5.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)





Place of Use
and Point of
Diversion

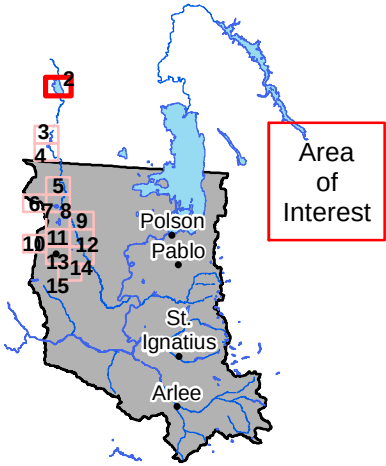
FIIP

Water Use

76L

30052930

Exhibit 2



Flathead Indian Reservation

Legend

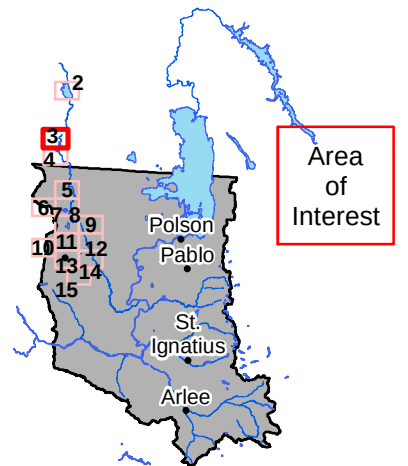
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052930** **Exhibit 3**



Flathead Indian Reservation

Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

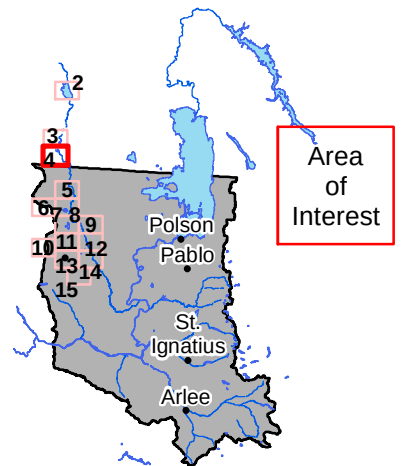
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052930** Exhibit 4



Flathead Indian Reservation

Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

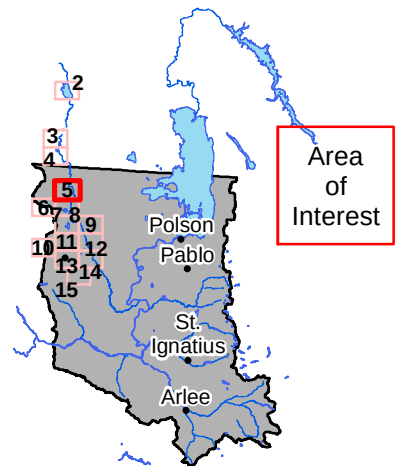
0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052930** Exhibit 5



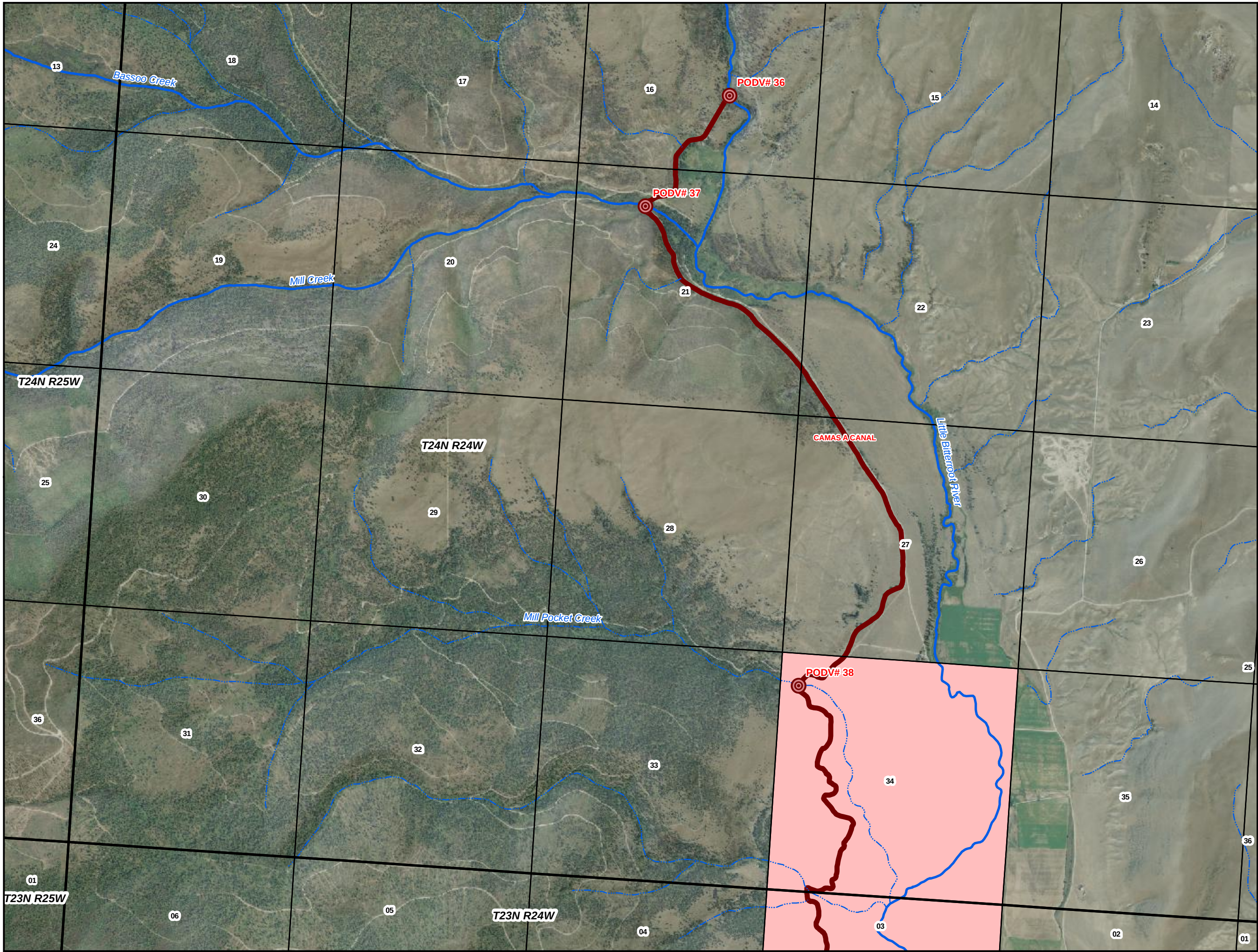
Flathead Indian Reservation

Legend

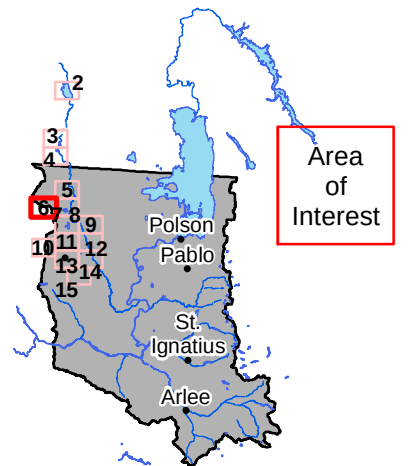
- Place of Use
- ⊙ Primary Point(s) of Diversion
- ⊙ Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052930** Exhibit 6



Flathead Indian Reservation

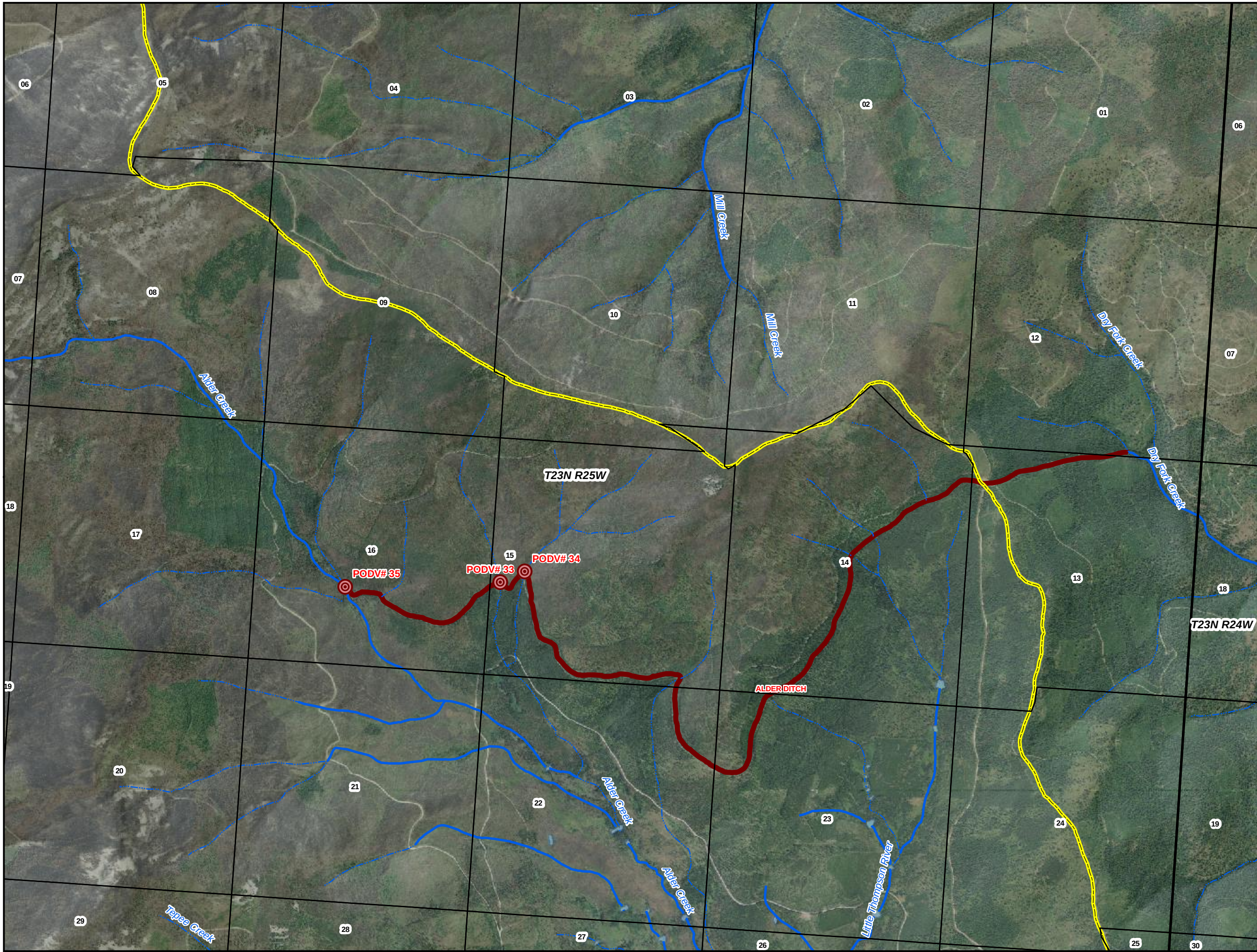
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

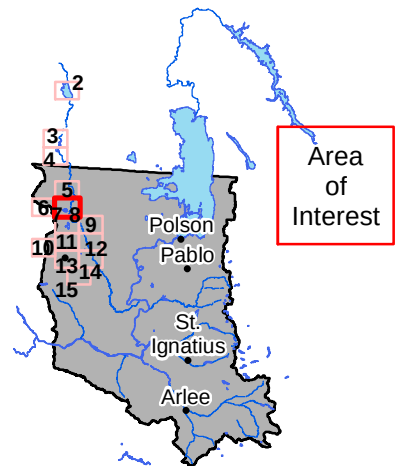
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



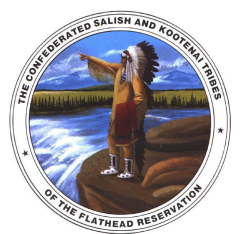
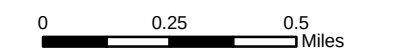
Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052930** Exhibit 7



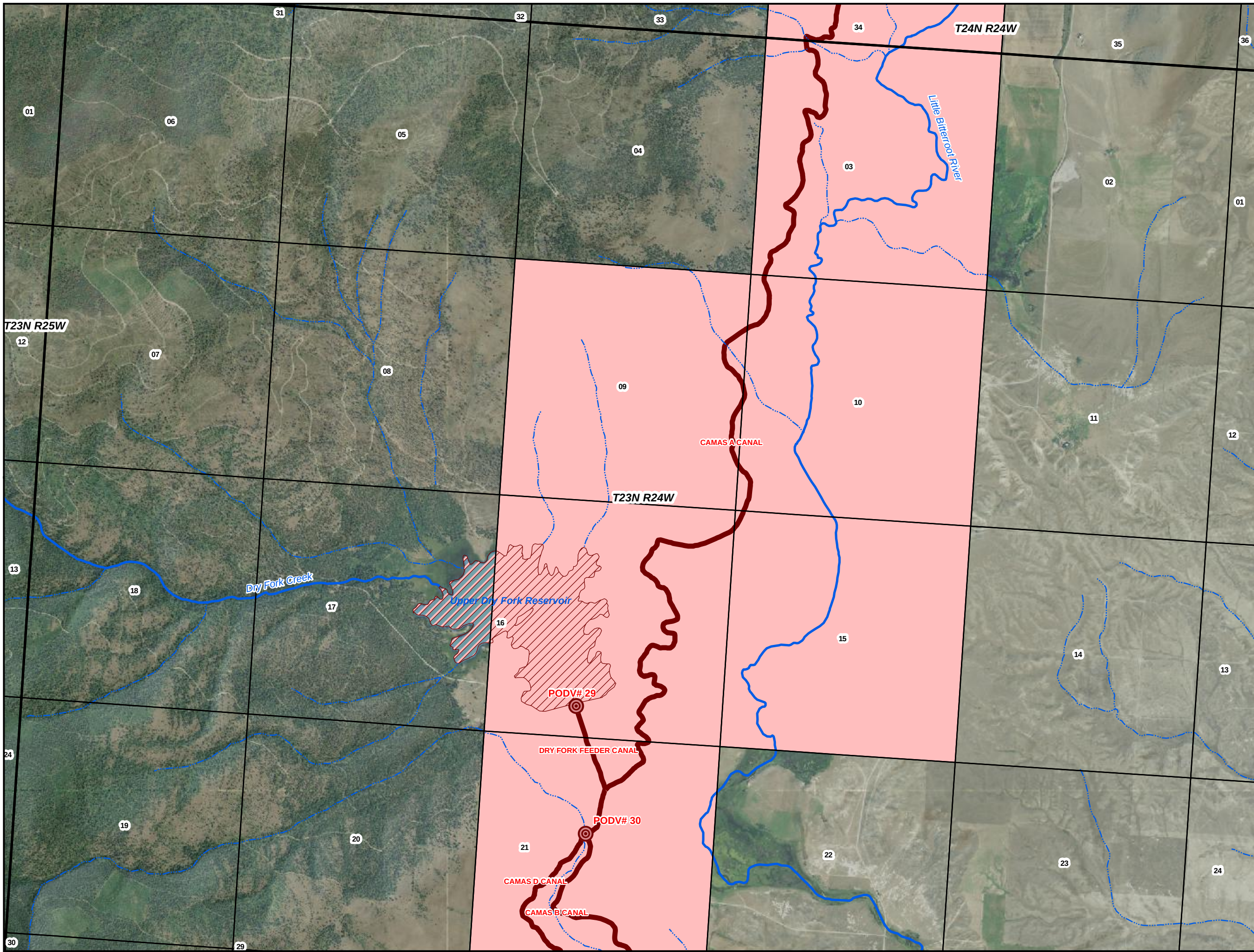
Flathead Indian Reservation

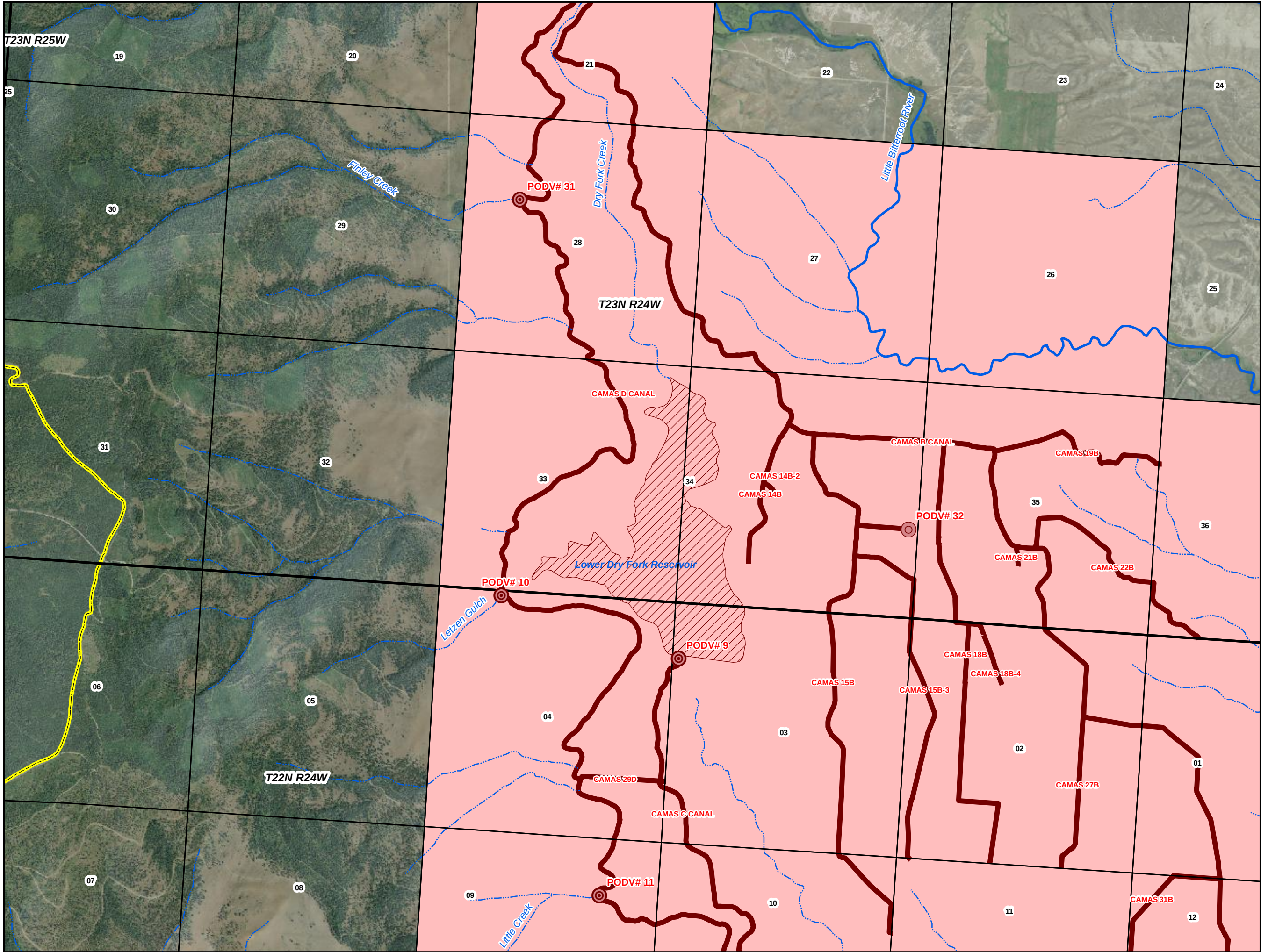
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

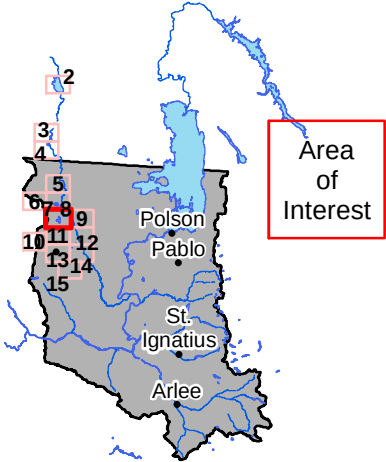


POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)





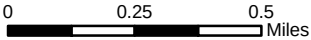
Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052930
Exhibit 8



Flathead Indian Reservation

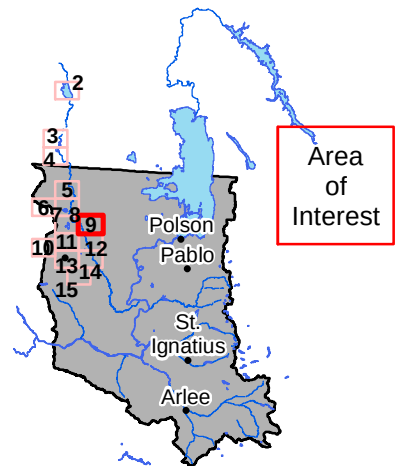
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052930
Exhibit 9



Flathead Indian Reservation

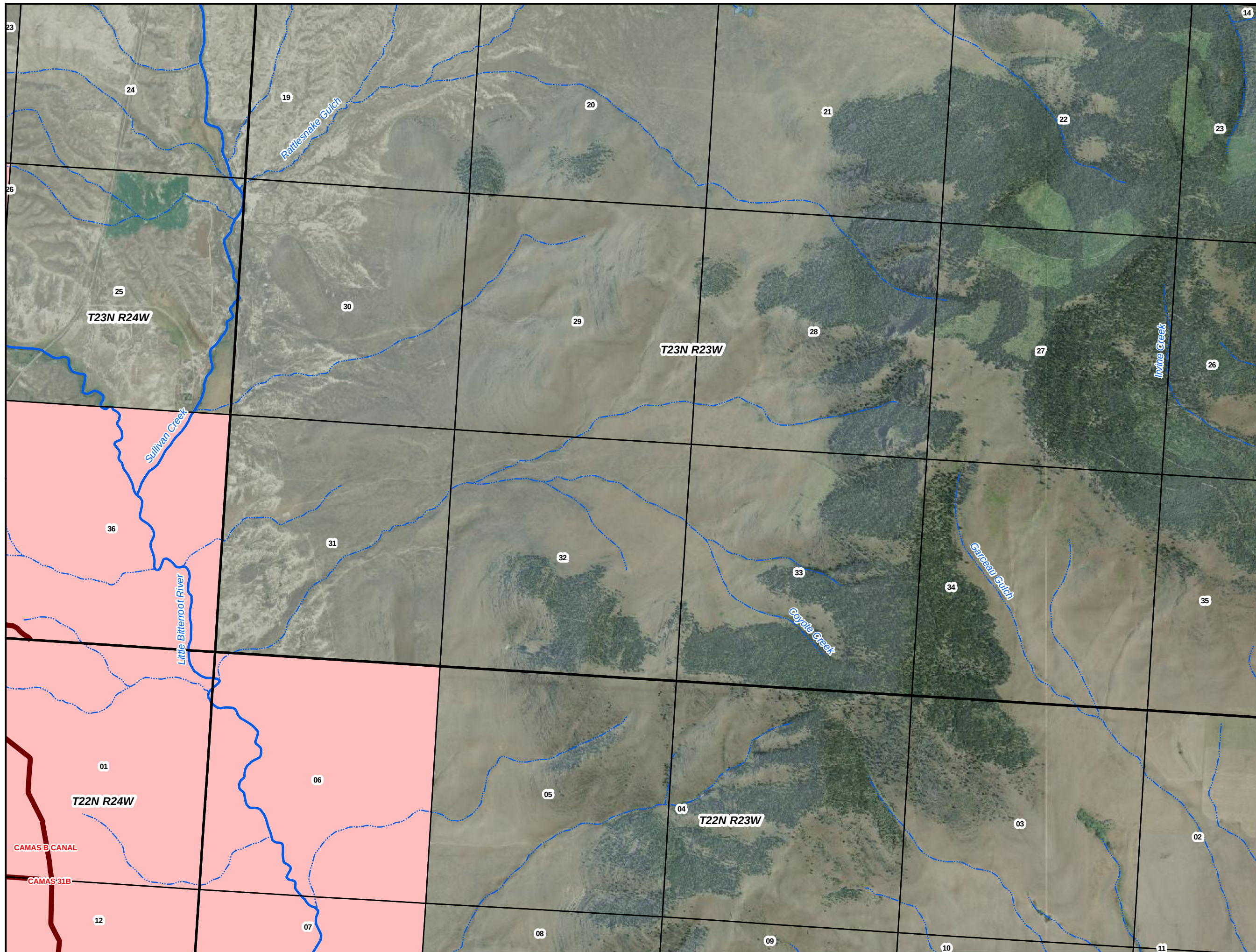
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use and Point of Diversion

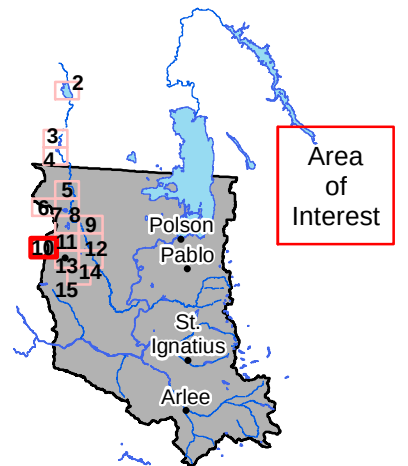
FIIP

Water Use

76L

30052930

Exhibit 10



Flathead Indian Reservation

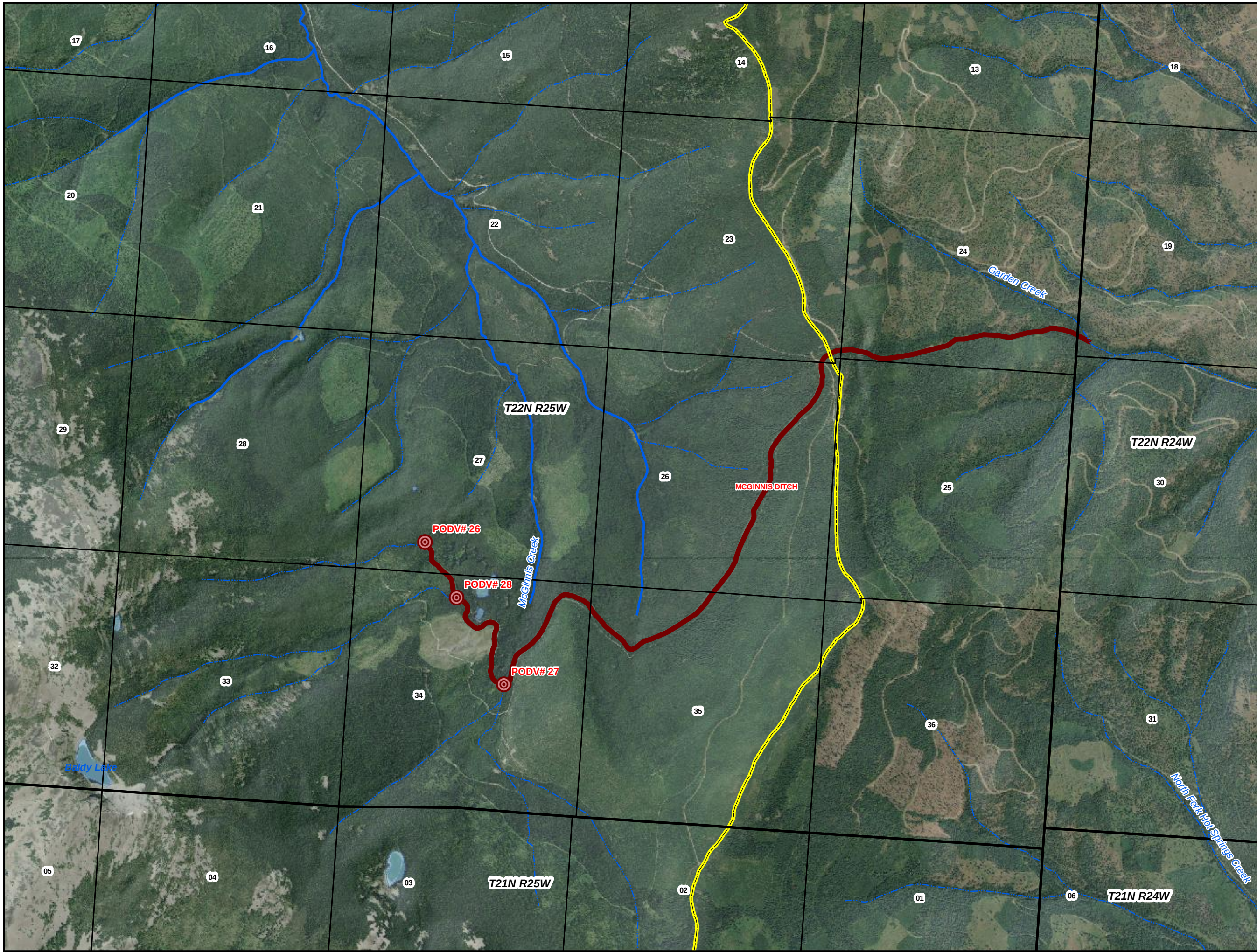
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

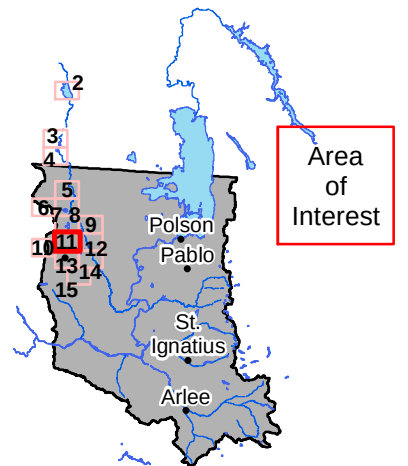
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052930
Exhibit 11



Flathead Indian Reservation

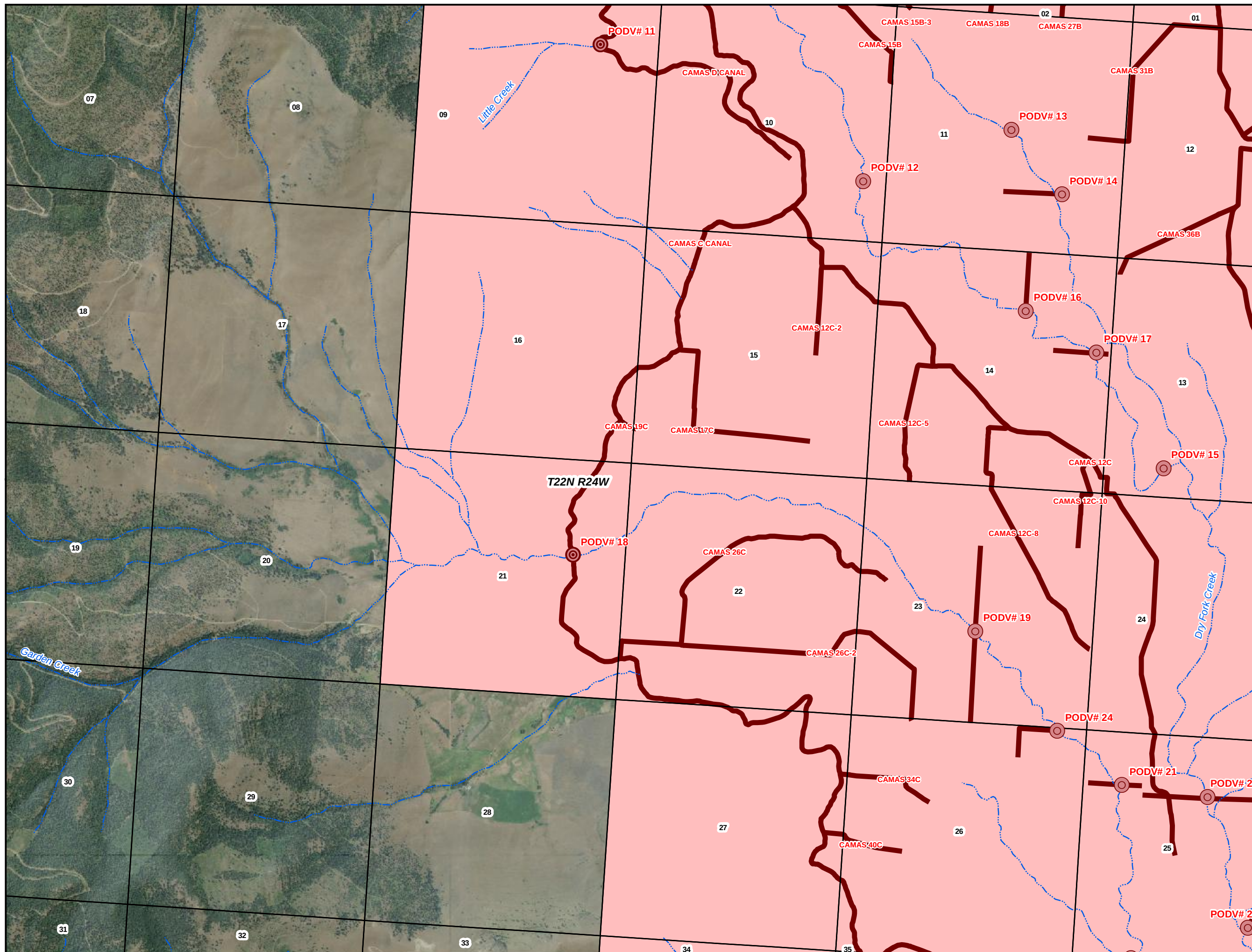
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

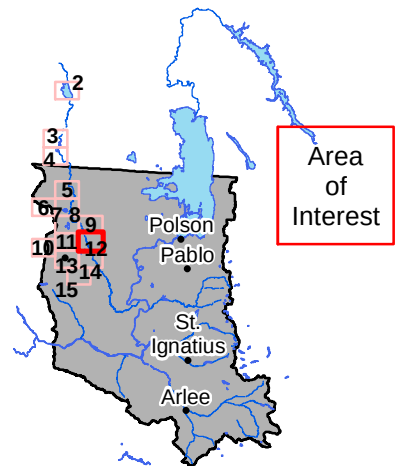
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



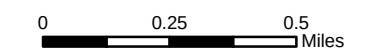
Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052930
Exhibit 12



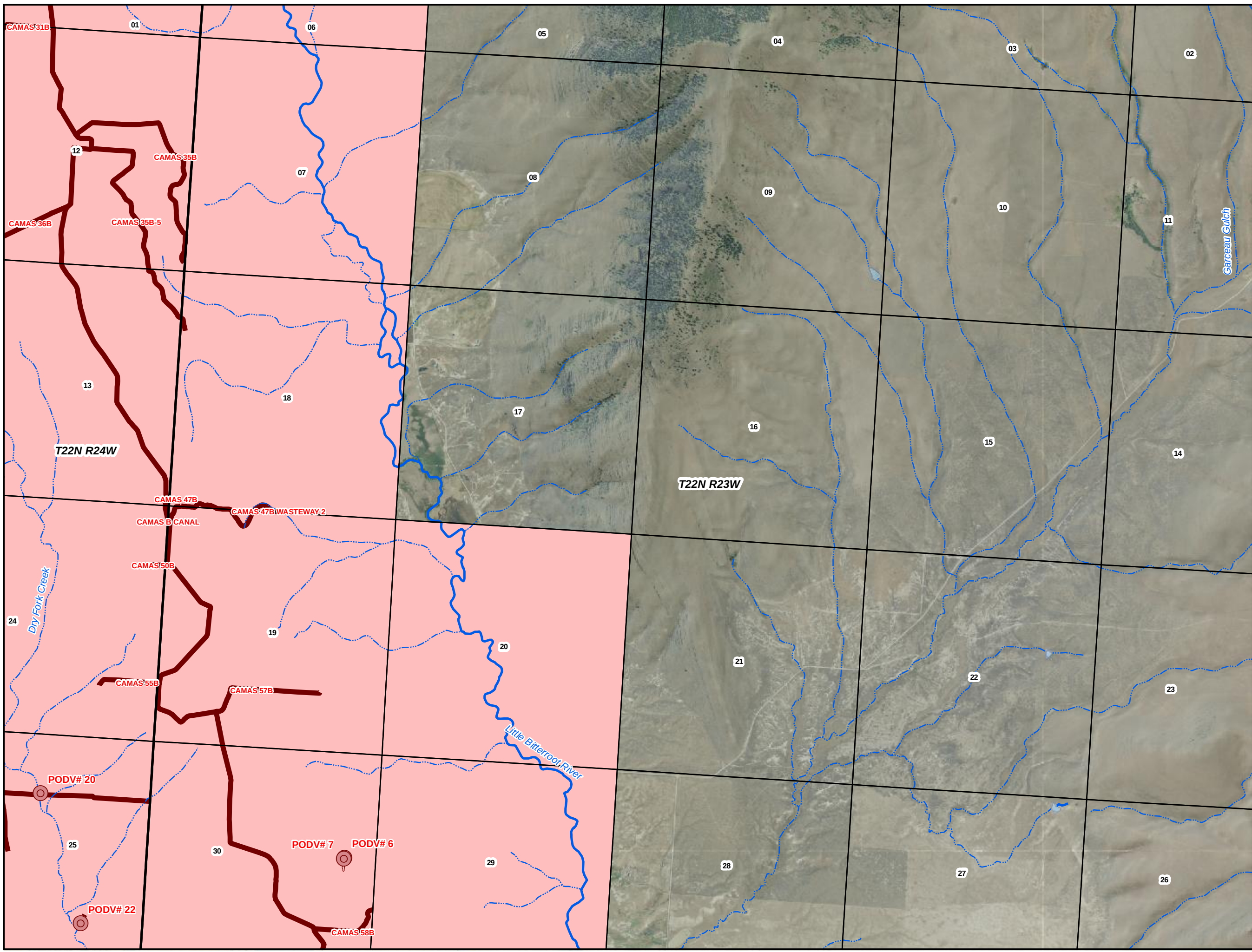
Flathead Indian Reservation

Legend

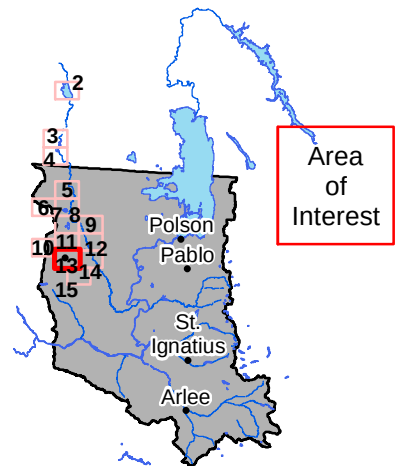
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052930
Exhibit 13



Flathead Indian Reservation

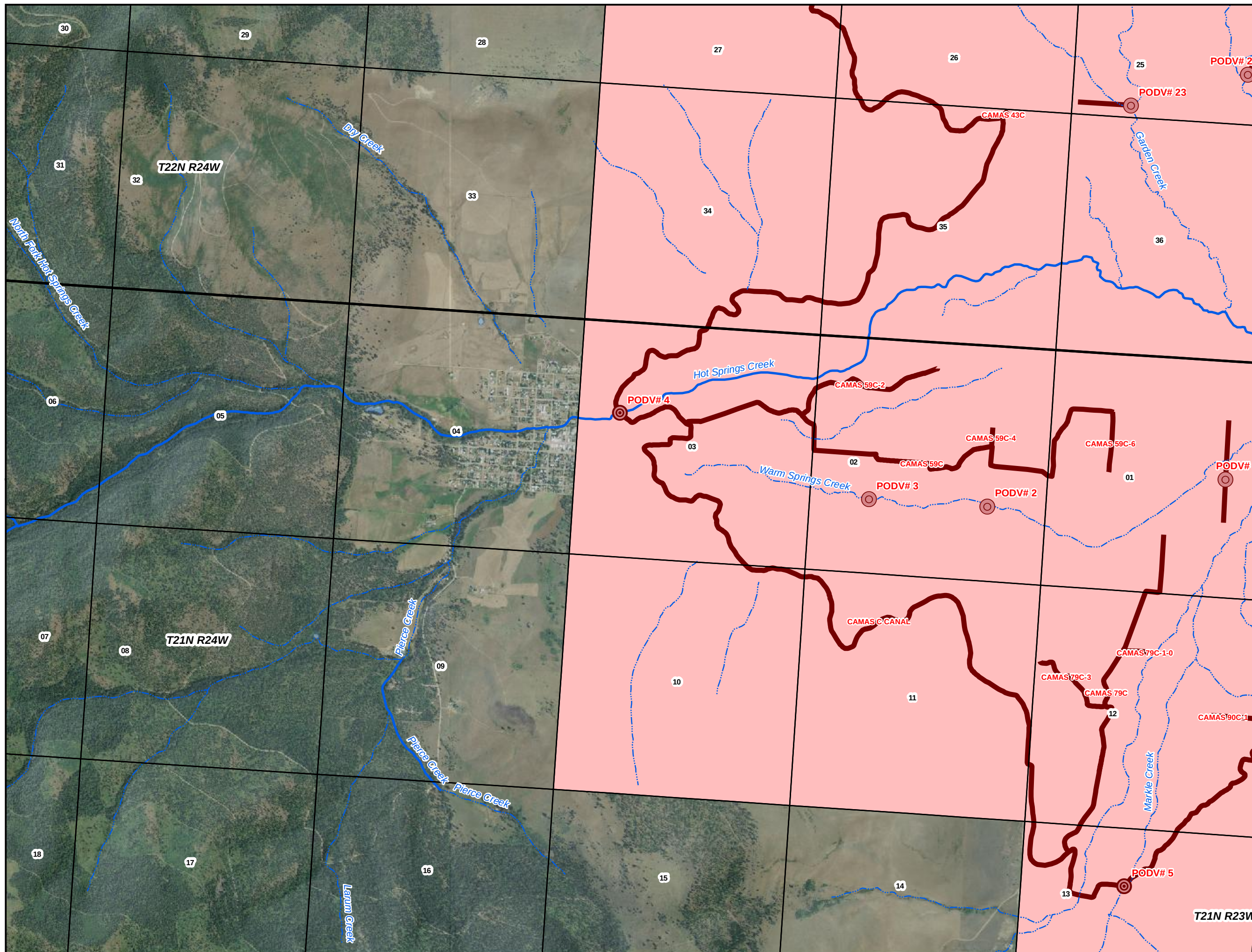
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

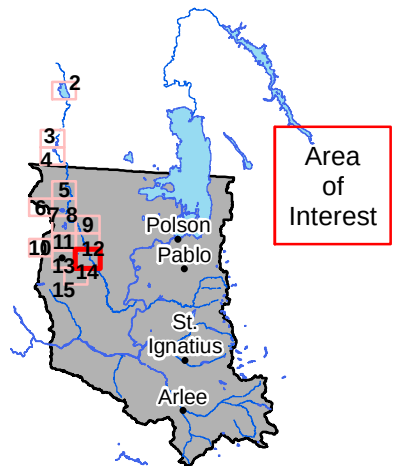
0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052930
Exhibit 14



Flathead Indian Reservation

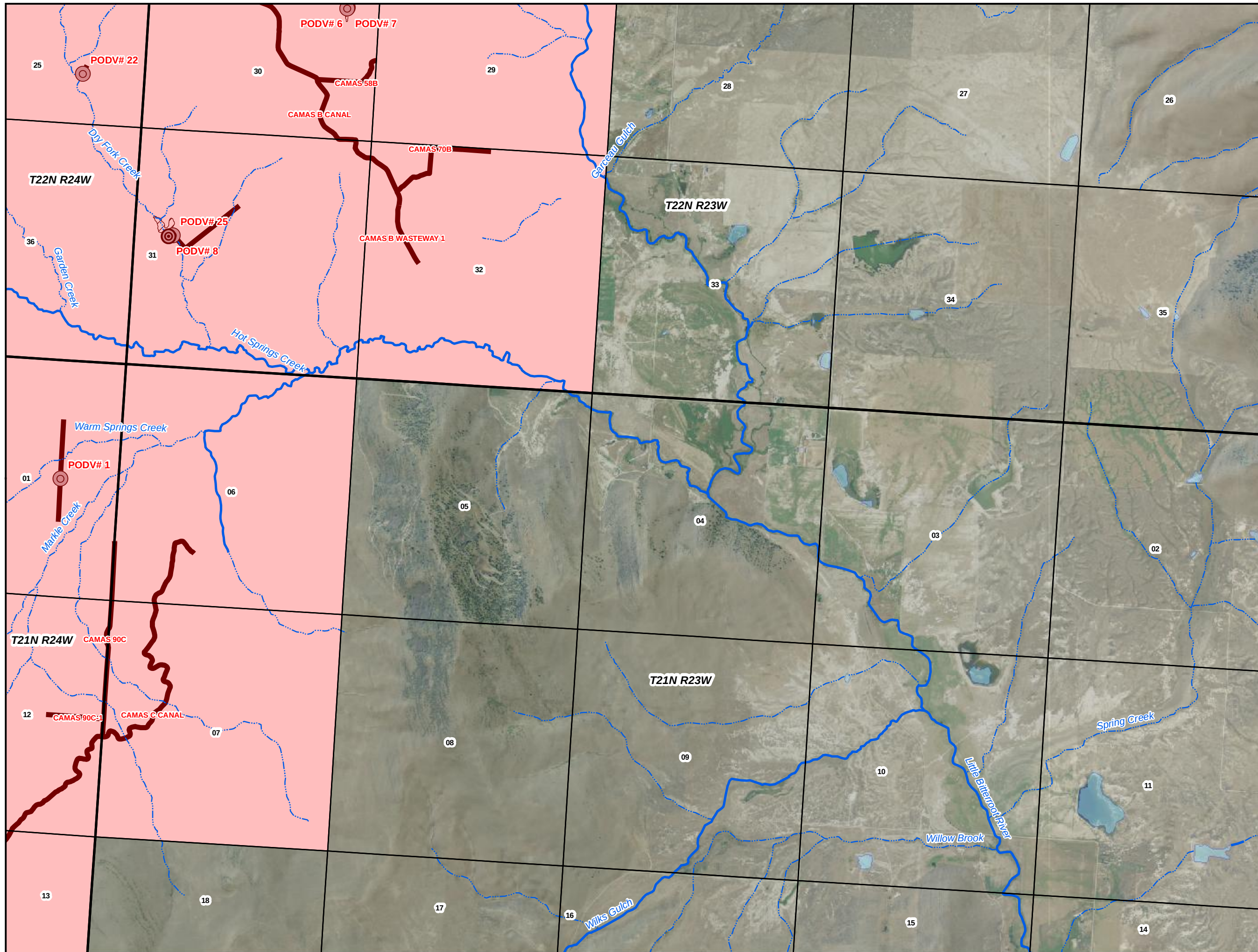
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

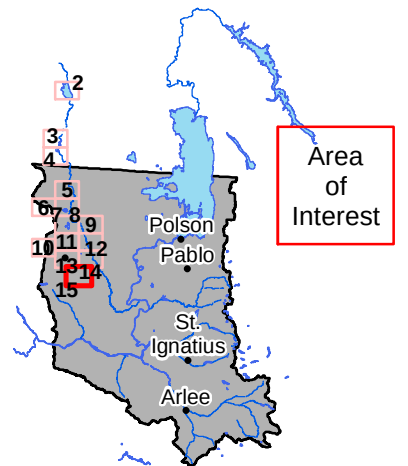
0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052930
Exhibit 15



Flathead Indian Reservation

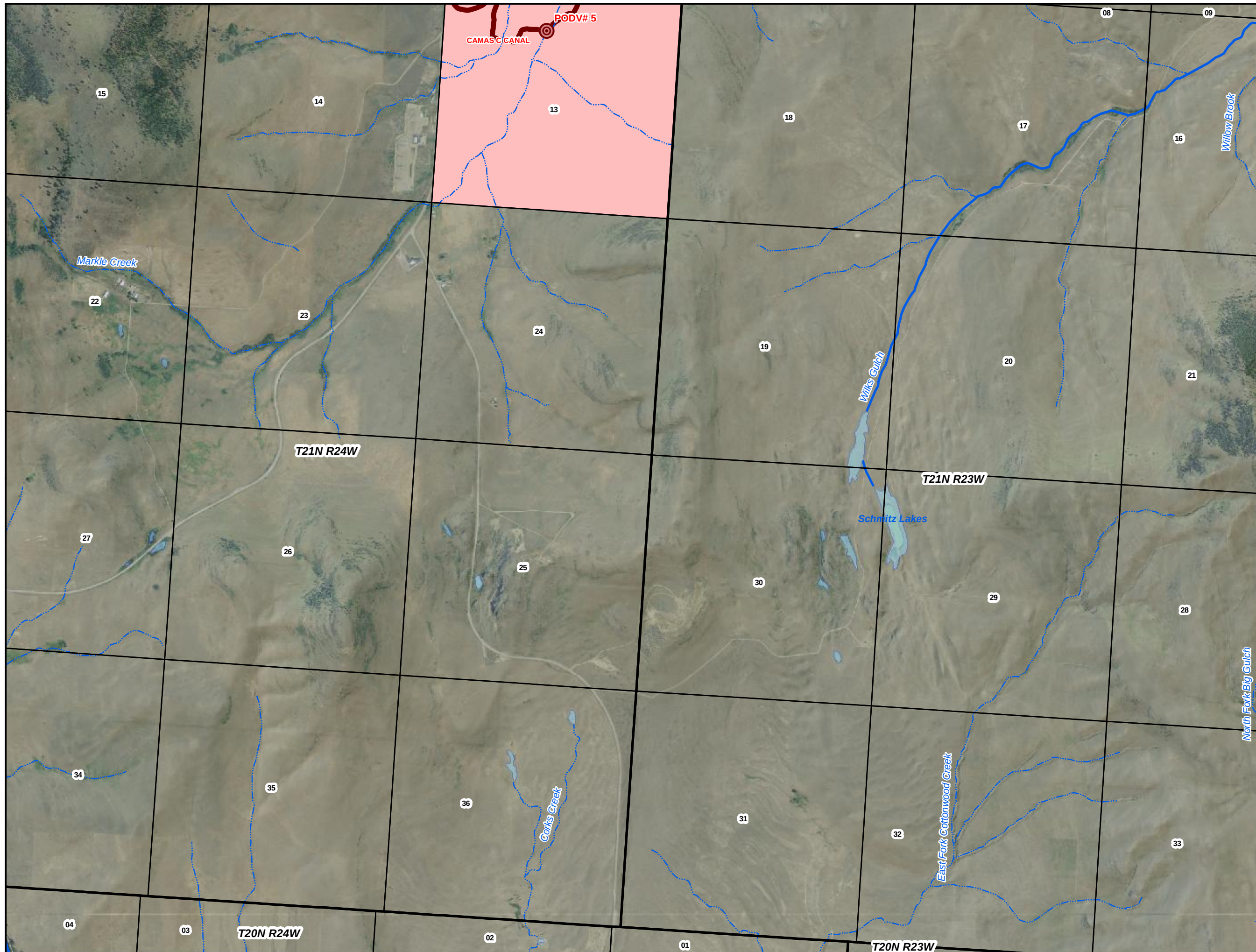
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles

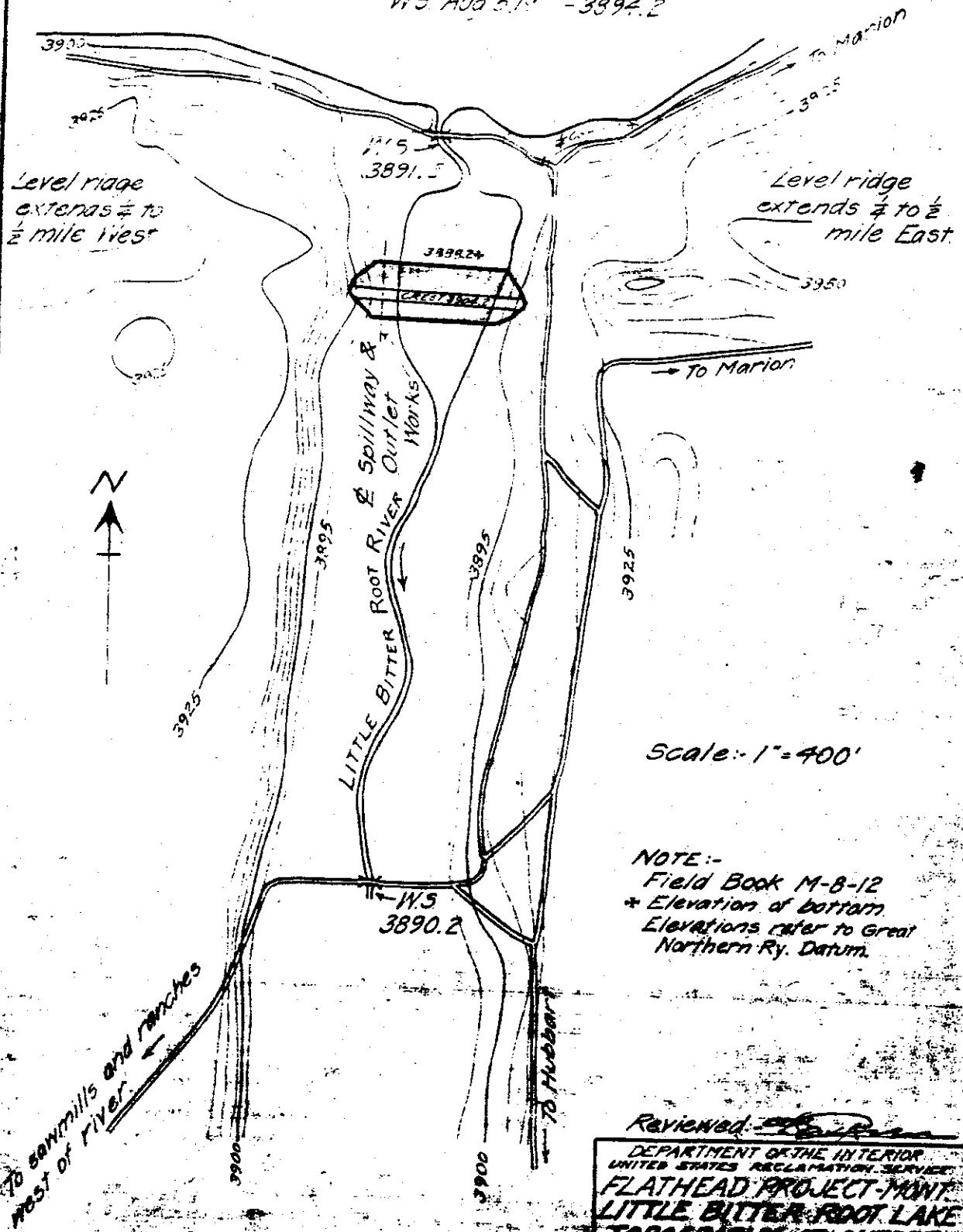


POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Little Bitterroot Reservoir

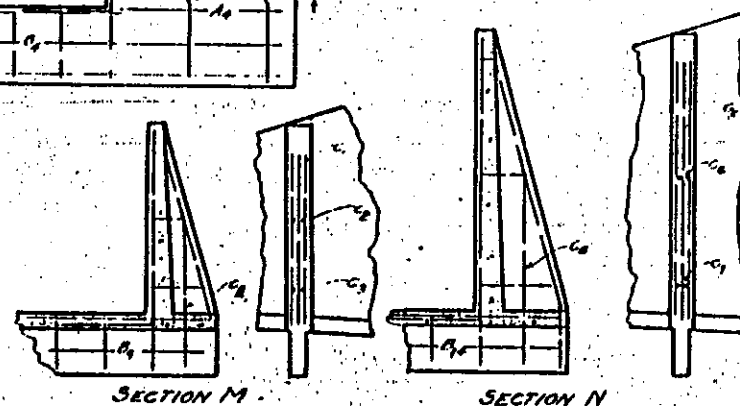
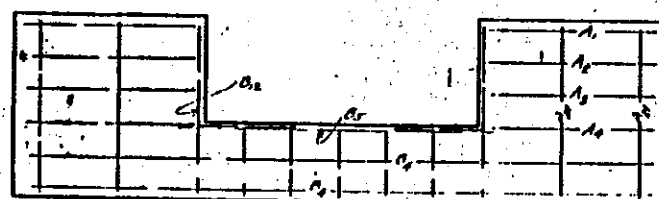
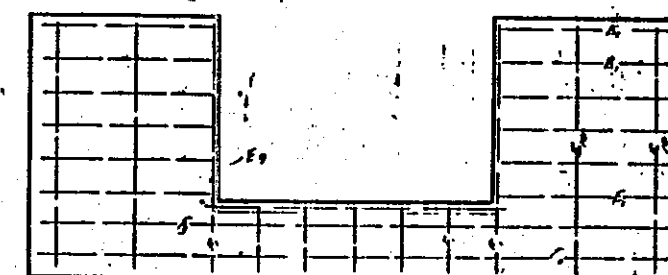
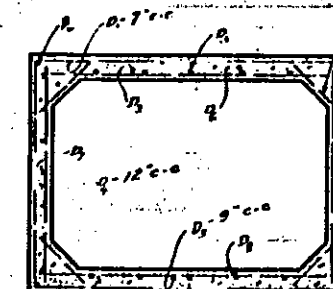
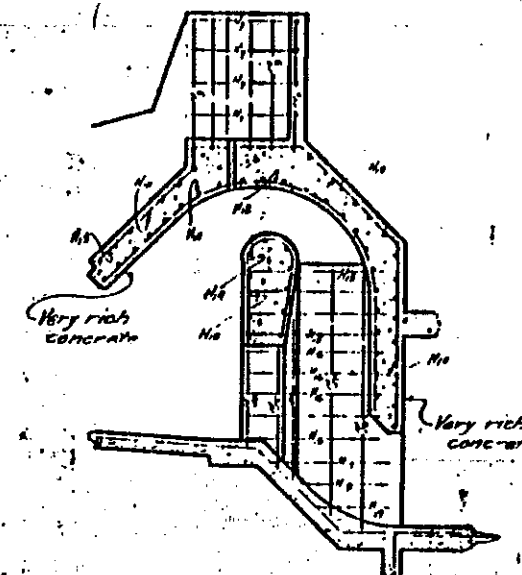
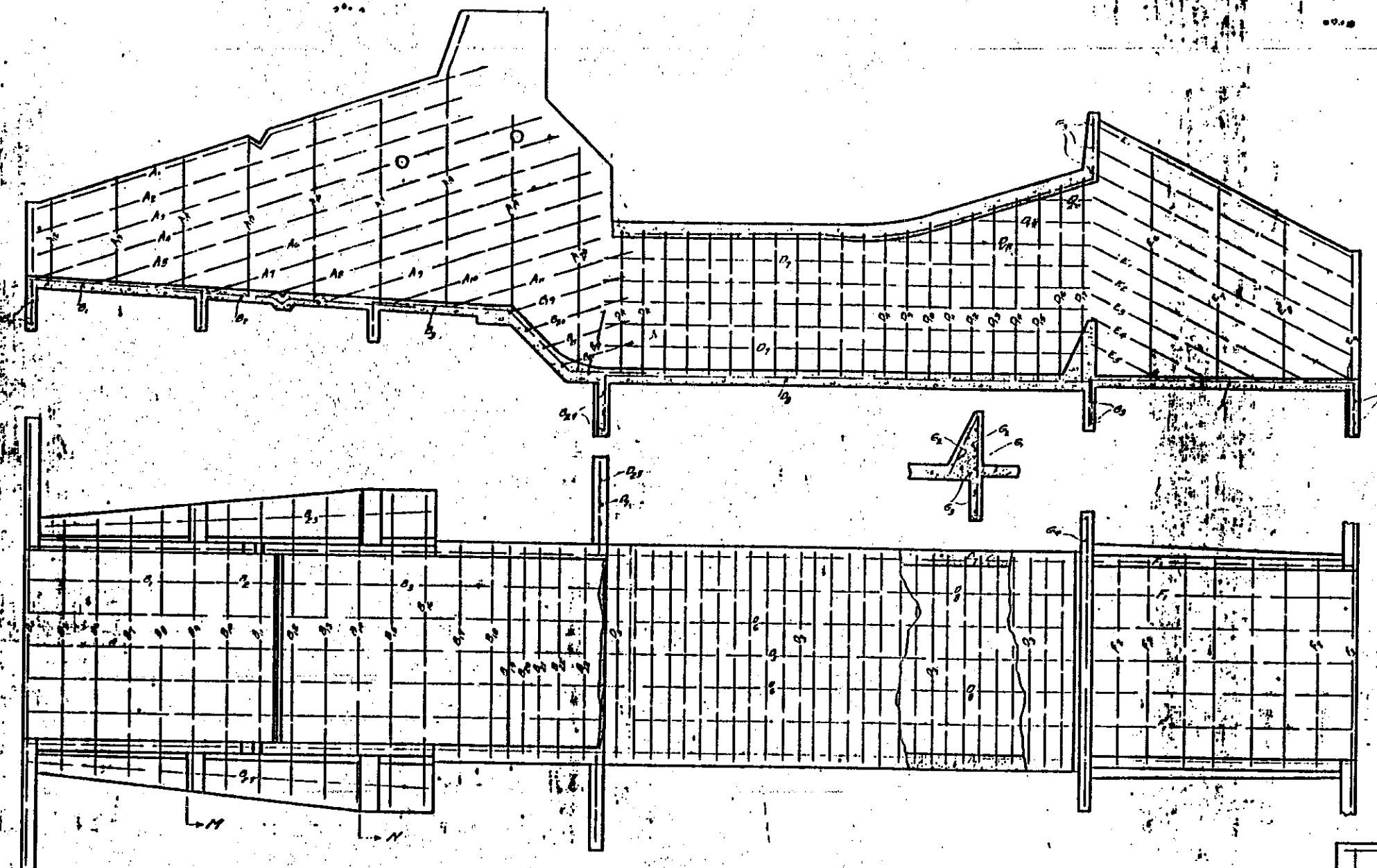
LITTLE BITTER ROOT LAKE
WS AUG 5/19 - 3894.2



Reviewed: *[Signature]*

DEPARTMENT OF THE INTERIOR
UNITED STATES RECLAMATION SERVICE
FLATHEAD PROJECT-MONT.
LITTLE BITTER ROOT LAKE
TOPOGRAPHY AT OUTLET

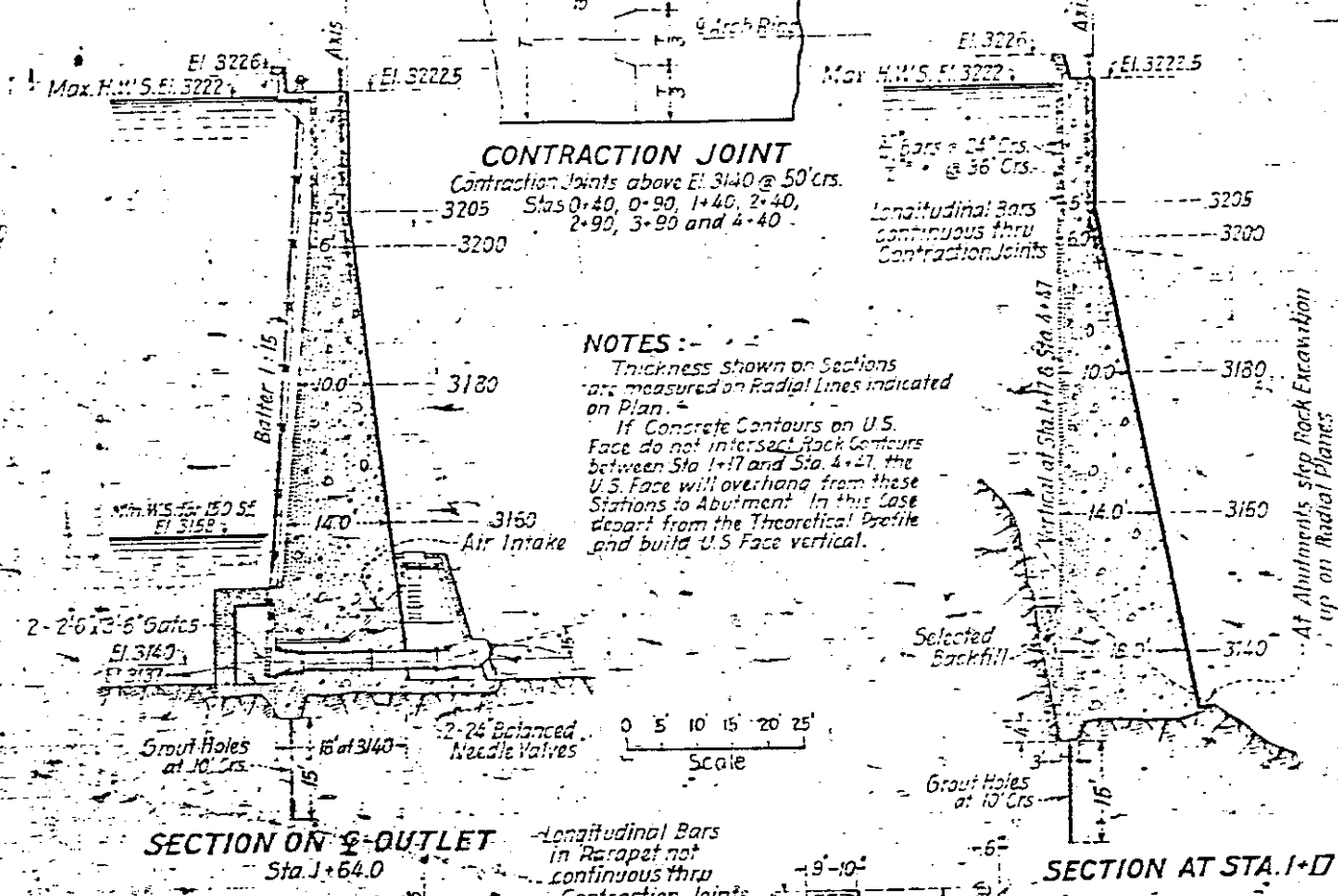
Drawn: J. E. [unclear]
Checked: [unclear]
F-2334



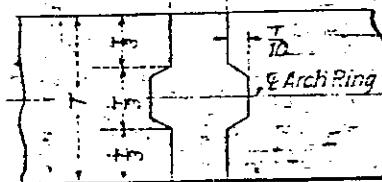
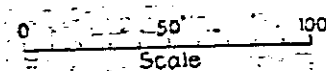
Scale: $\frac{1}{4}'' = 1'-0''$

NOTE:
This Dwg. is supplemental to Dwg. F-2353.
For lengths of steel, see Dwg. F-2353 B.

DEPARTMENT OF THE INTERIOR UNITED STATES RECLAMATION SERVICE	
FLATHEAD PROJECT-MONT.	
LITTLE BITTER ROOT RESERVOIR	
OUTLET WORKS-STEEL DETAILS	
Drawn: W.G.	Recommended: _____
Checked: W.G.	Approved: _____
F-2353 A	
SHEET 1 OF 2	



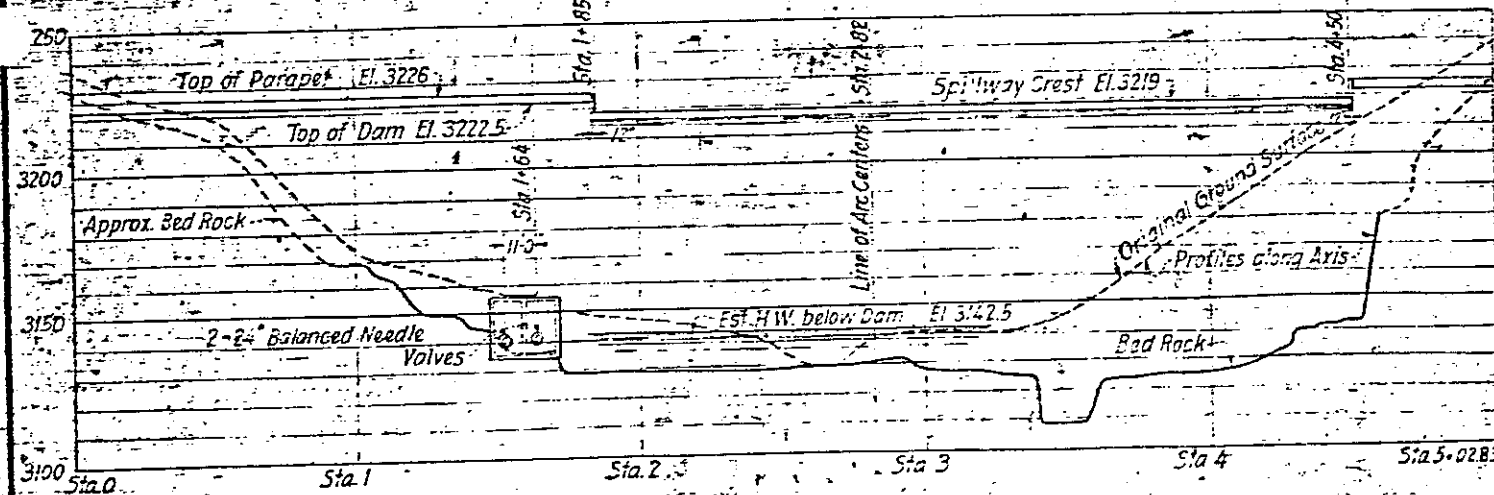
Stationing on D.S. Face of Dam at El. 3222.5 - Axis



CLOSING PLUG

5+9's 1+90 and 3+70

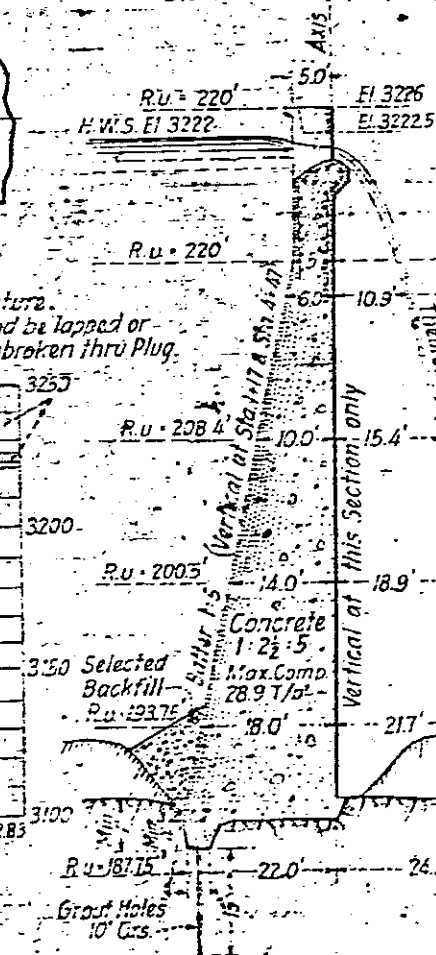
To be Concrete'd at Low Temperature.
Longitudinal Bars to pass thru Joints and be lapped or
spliced within Plug, but must not pass unbroken thru Plug.



DEVELOPED PROFILES AND D.S. ELEVATION OF DAM

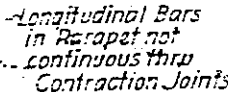


Sta. J+64.0

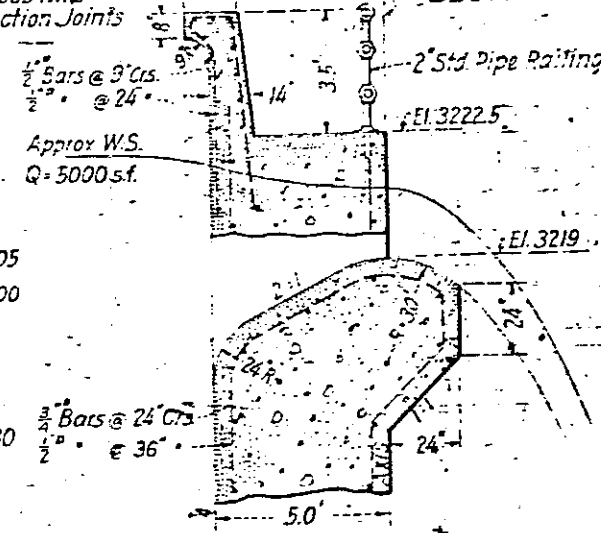


SECTION ON LINE OF ARC CENTERS

Sta. 2+82.0



SECTION AT STA. 1+77



TOP DETAILS

A horizontal scale bar with markings at 0, 1, 2, 3, 4, and 5. The word "Scale" is written below the bar.

Revised January 15, 1924

DEPARTMENT OF THE INTERIOR.
UNITED STATES RECLAMATION SERVICE.
FLATHEAD PROJECT-MONTANA
UPPER HUBBART DAM
VARIABLE RADIUS ARCH

DRAWN W. R. Y. A. C. L. R. M. C. C. RECOMMENDED

CHECKED: C.H.H.

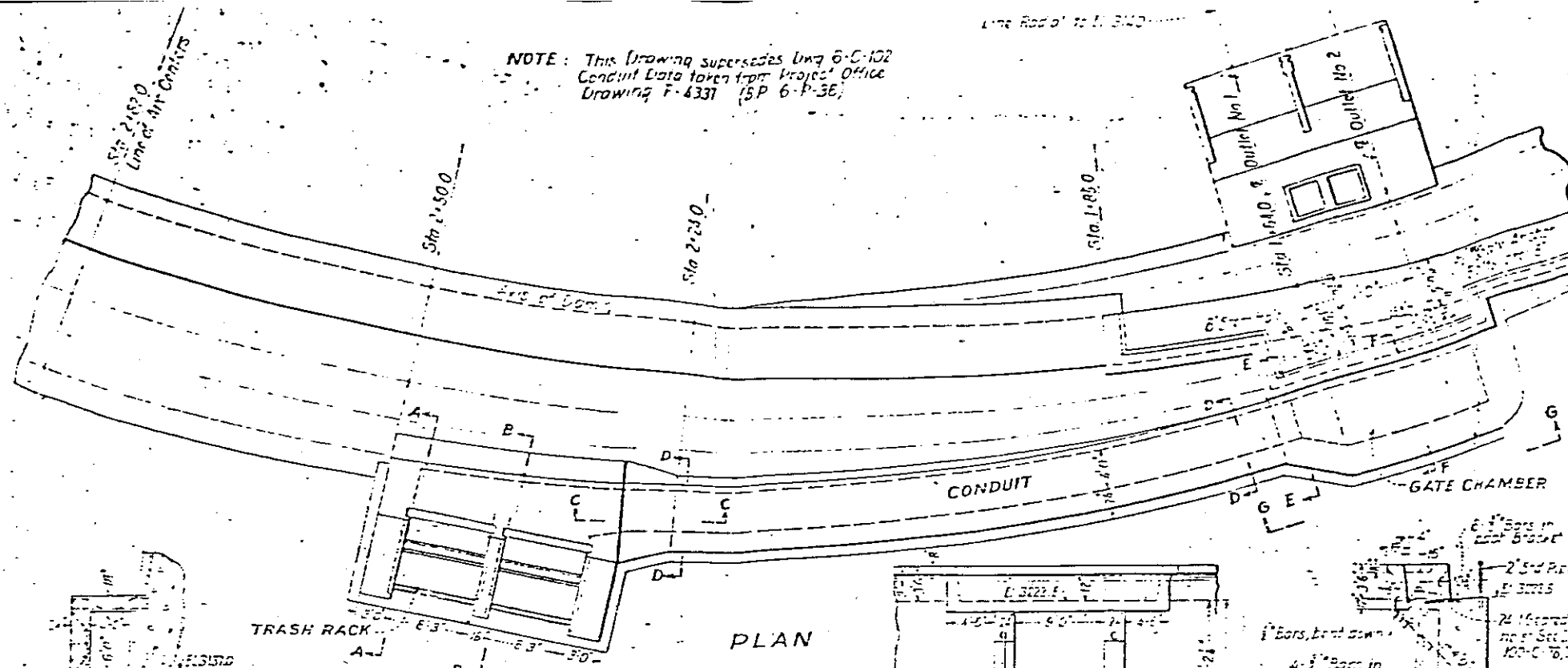
APPROVED:

F-4763

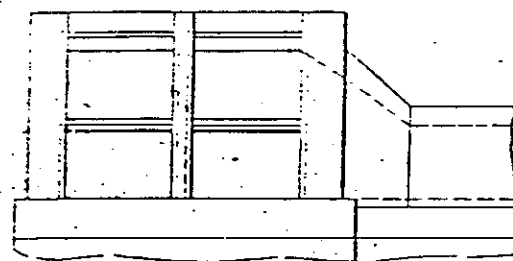
Denver, Co'a., Jan. 25, 1923 | 6-C-101

This Drawing supersedes Draw 6-C-504

NOTE: This drawing supersedes Dwg 6-C-102
Conduit Data taken from Project Office
Drawing F-4331 (SP 6-P-36)

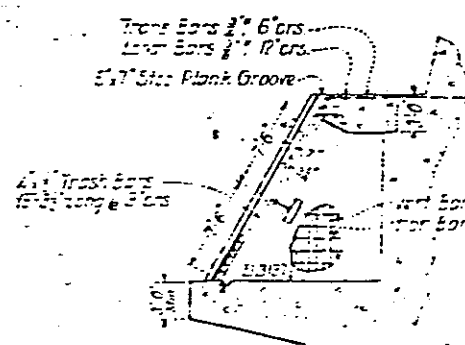
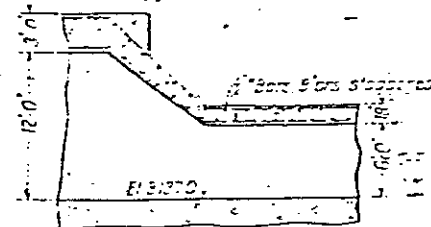


SECTION D-D

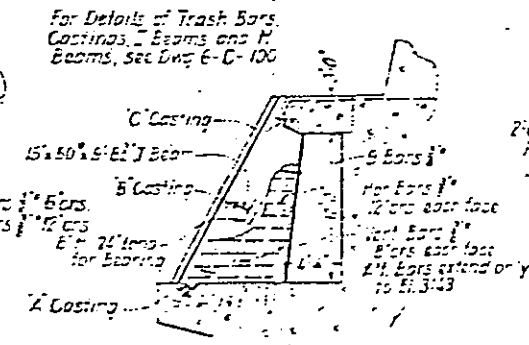


ELEVATION OF TRASH RACK

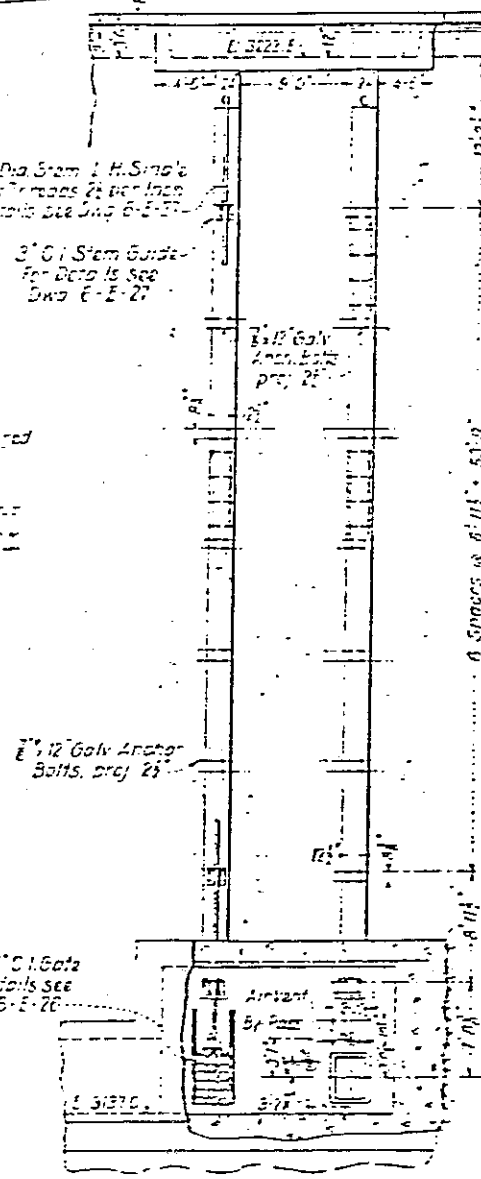
SECTION C-C



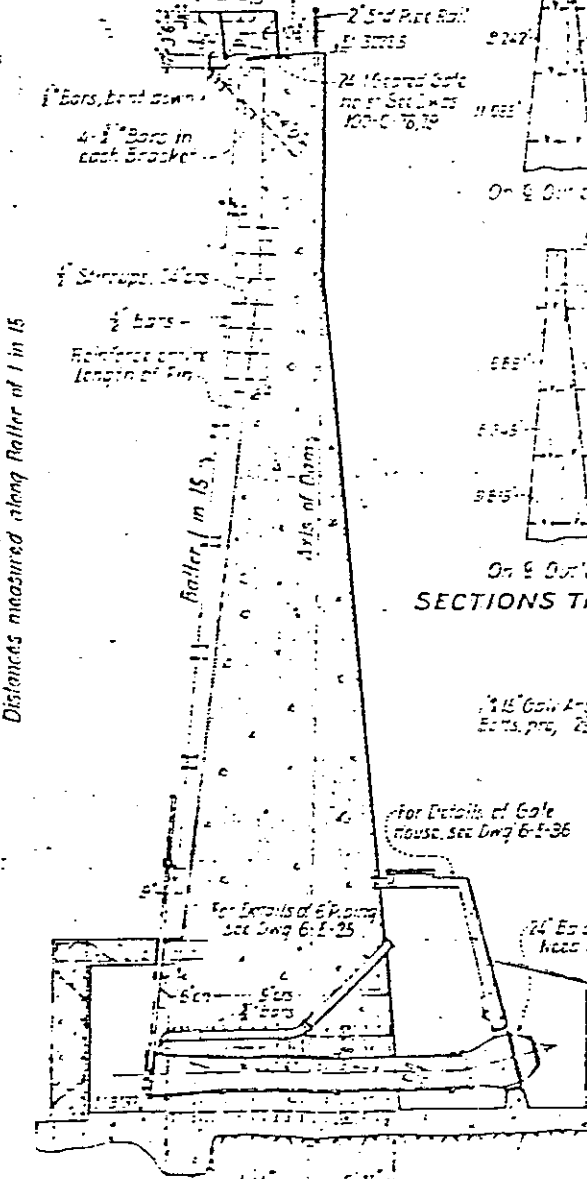
SECTION A-A



SECTION B-B



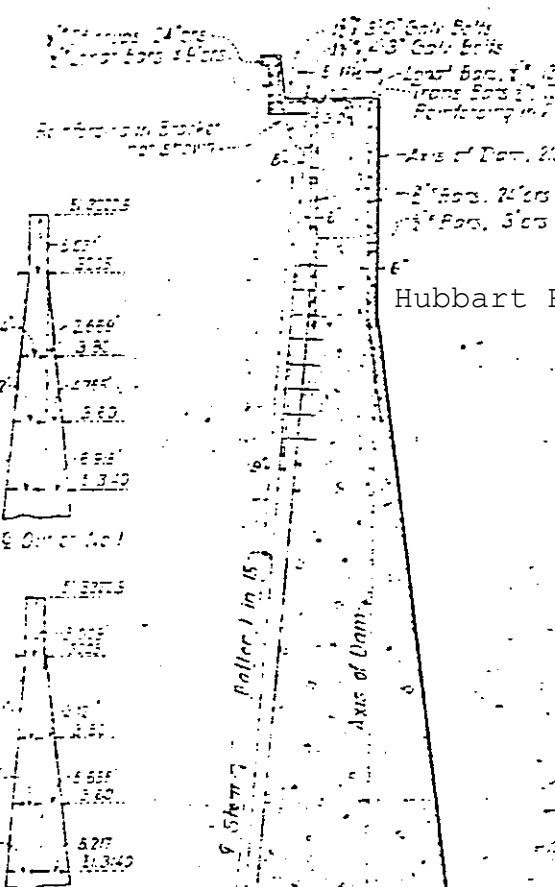
ELEVATION G-G



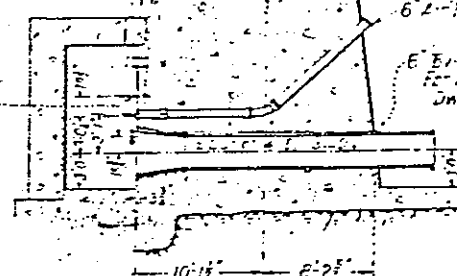
SECTION ON E OUTLET NO. 1

SECTION E-E

SECTION F-F



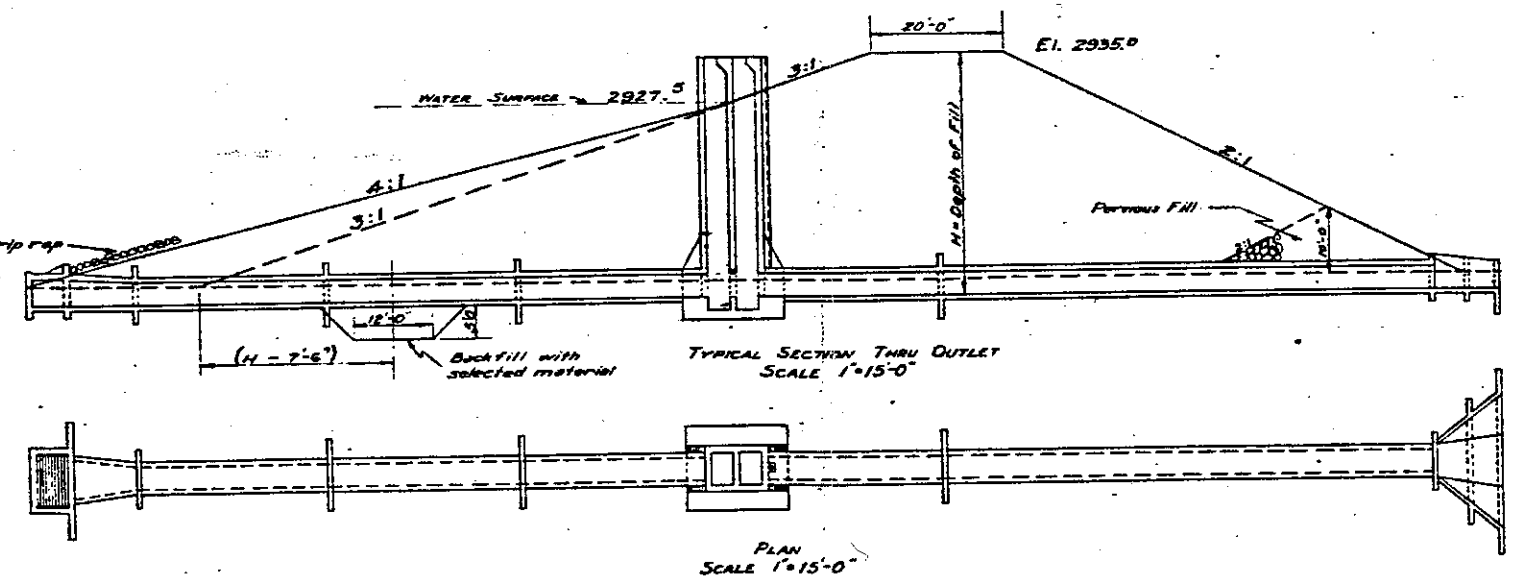
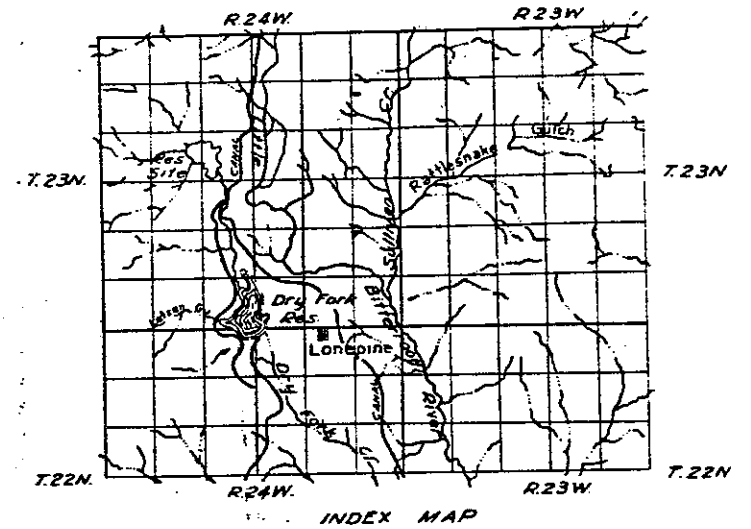
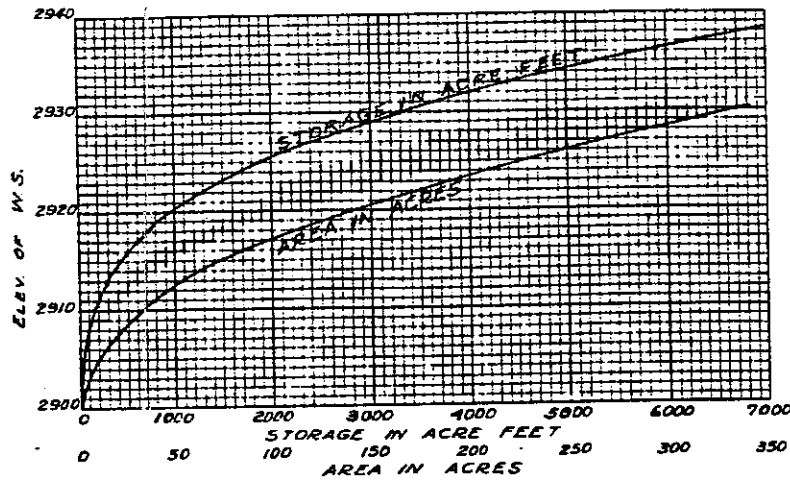
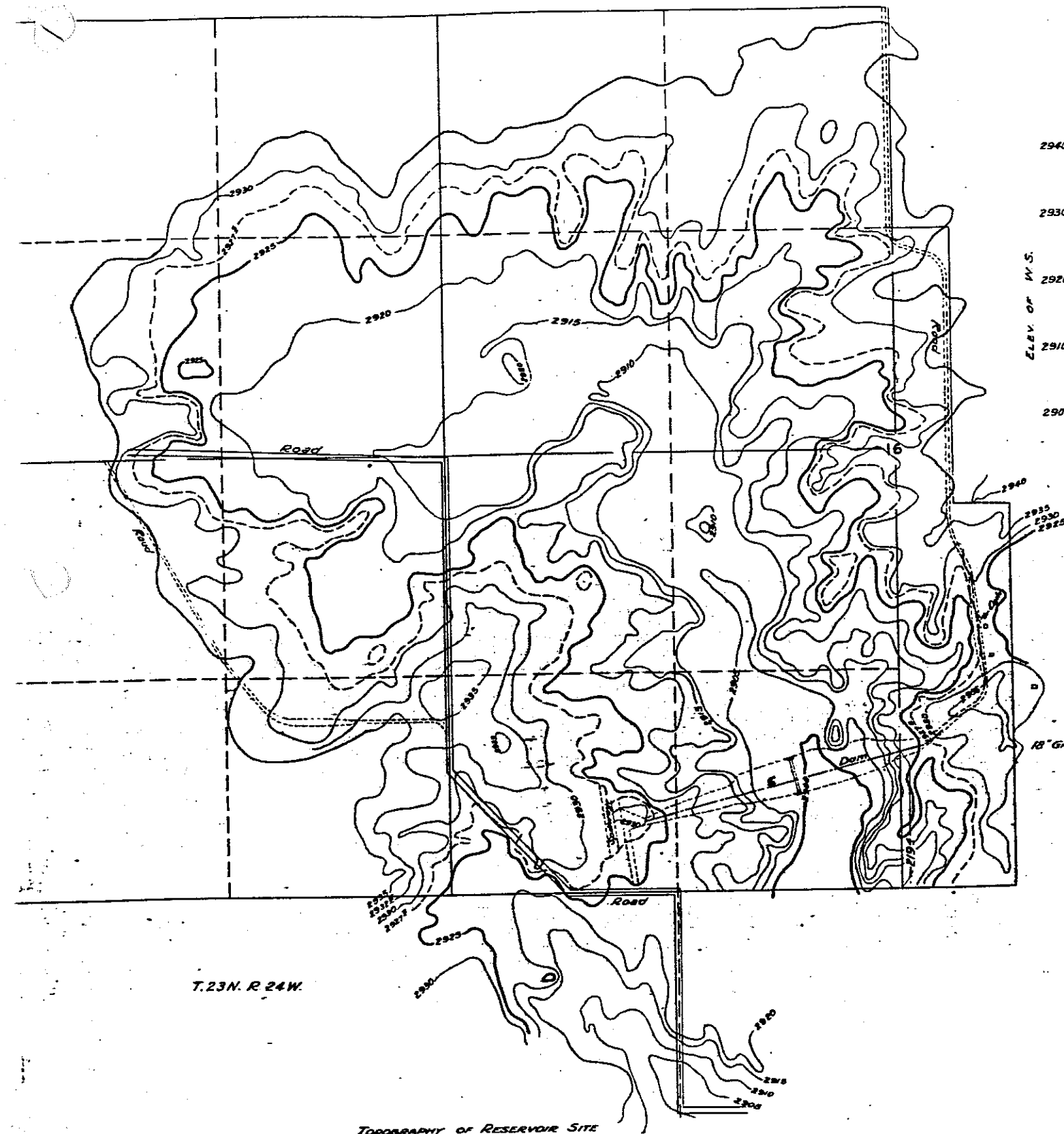
SECTIONS THRU DAM



SECTION ON E OUTLET NO. 2

DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
FLATHEAD PROJECT-MONTANA
UPPER HUBBART DAM
TRASH RACKS AND OUTLETS AS BUILT

DRAWN BY: RMC RECOMMENDED
CHECKED BY: JWC APPROVED
Denver, Colo., May 15, 1934 E-D-115



FOR DETAILS OF OUTLET
SEE F-5221

DEPARTMENT OF THE INTERIOR
U.S. INDIAN IRRIGATION SERVICE
A.L. WATSON - DIRECTOR OF IRRIGATION
H.V. CLOTTIS - ASST. DIRECTOR - W.S. HANNA - SUPERVISING
G.L. SPERRY - PROJECT ENGINEER
FLATHEAD PROJECT - MONTANA
UPPER DRY FORK RESERVOIR
GENERAL PLAN & SECTIONS
SCALE - AS NOTED
DRAWN _____ SUBMITTED _____
TRACED R.H.W. APPROVED _____

RESERVOIR

9'-0"

2'-0"

10'-0"

18'-0"

2:1

PLAN
SCALE 1/4" = 1'-0"

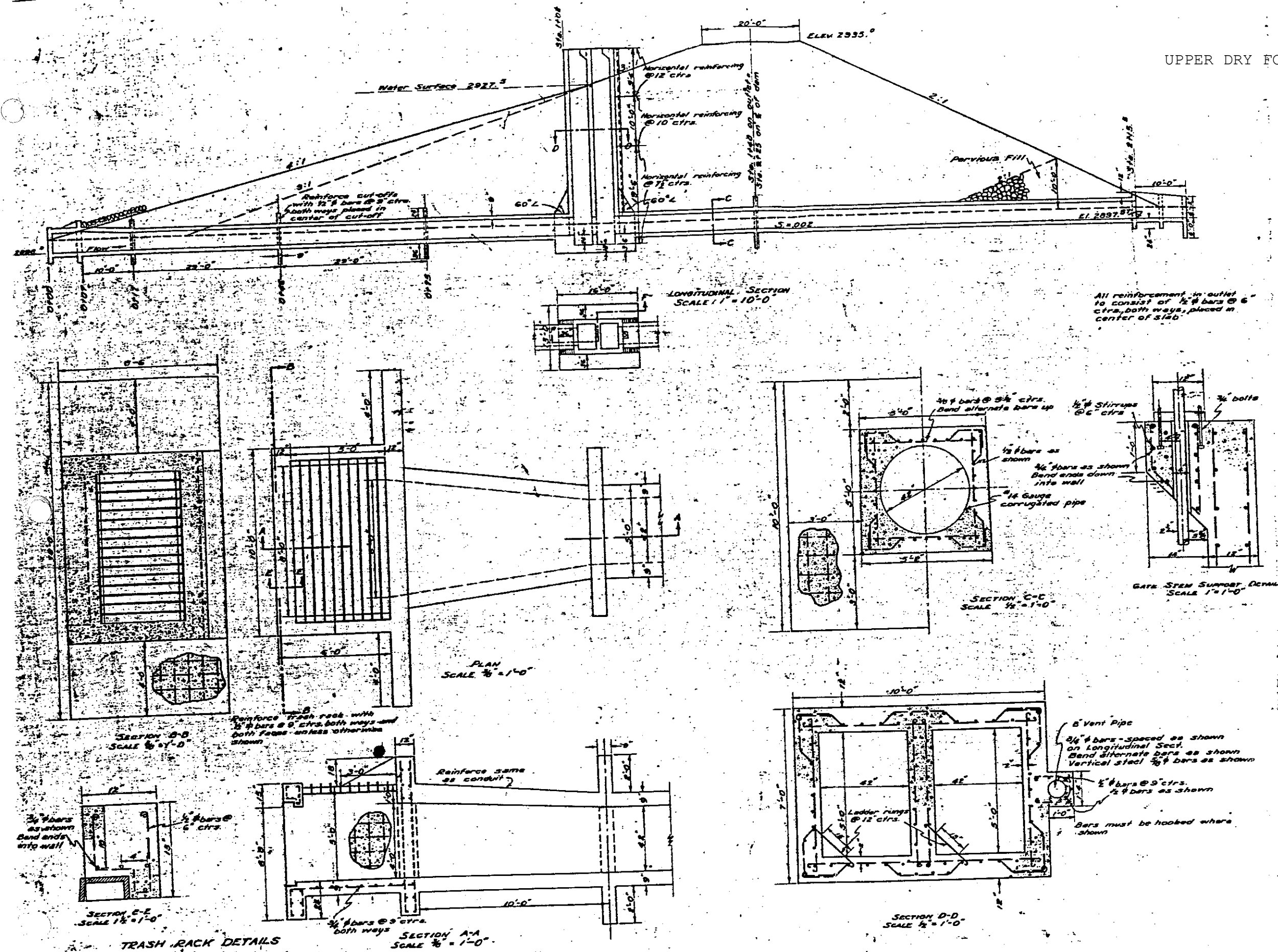
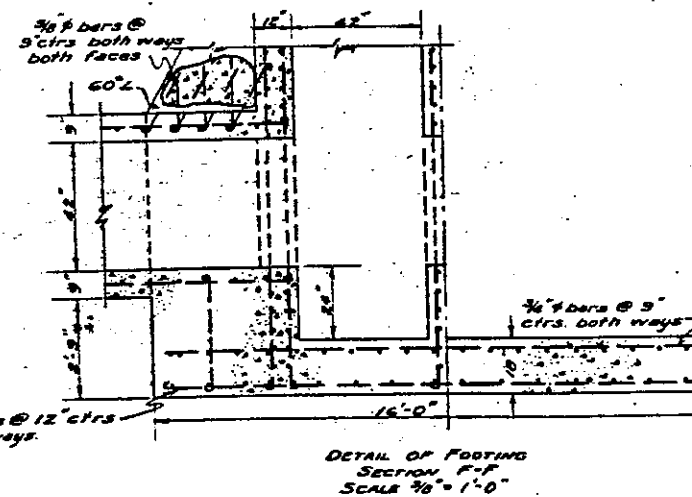
9'-0"

20'-0"

10'-0"

2:1

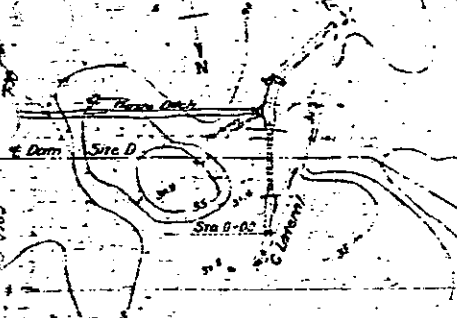
4'-0"



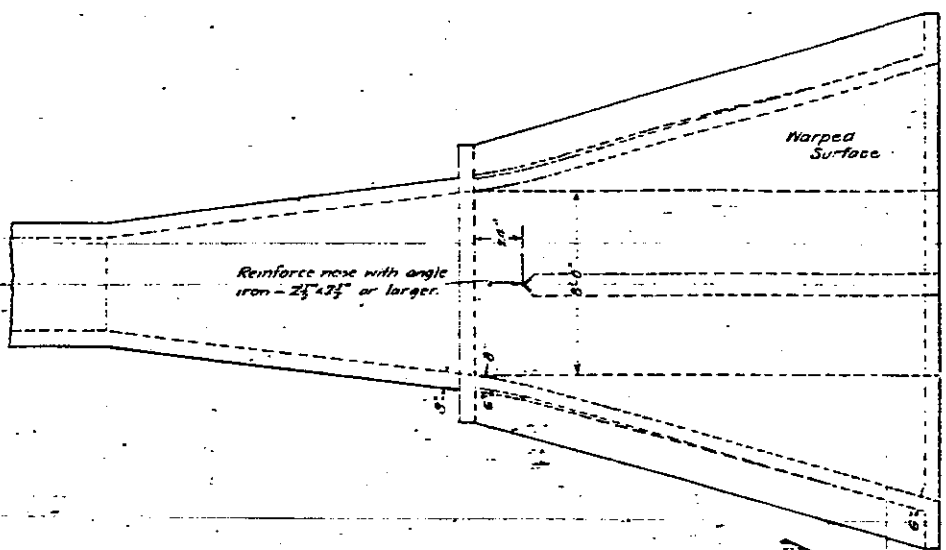
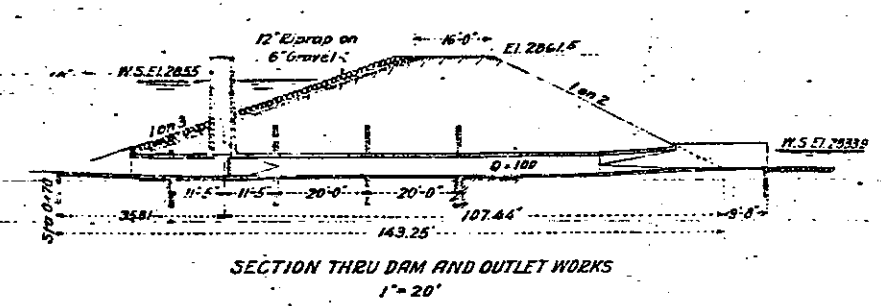
DEPARTMENT OF THE INTERIOR
U.S. INDIAN IRRIGATION SERVICE
A.L. WAYNE - DIRECTOR OF IRRIGATION
N.Y. CLOTT - ASST. DIRECTOR - W.S. NANNIA - Supt.
G.L. SPERRY - PROJECT ENGR.
FLATHEAD PROJECT - MON.
UPPER DRY FORK RESE.
OUTLET DETAILS

SCALE - AS NOTED

DRAWN GERA BNY SUBMITTED _____
 TRACED BNY APPROVED _____

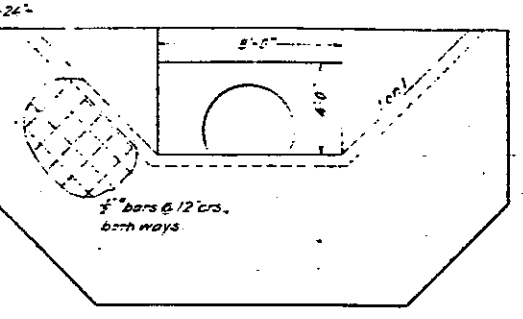
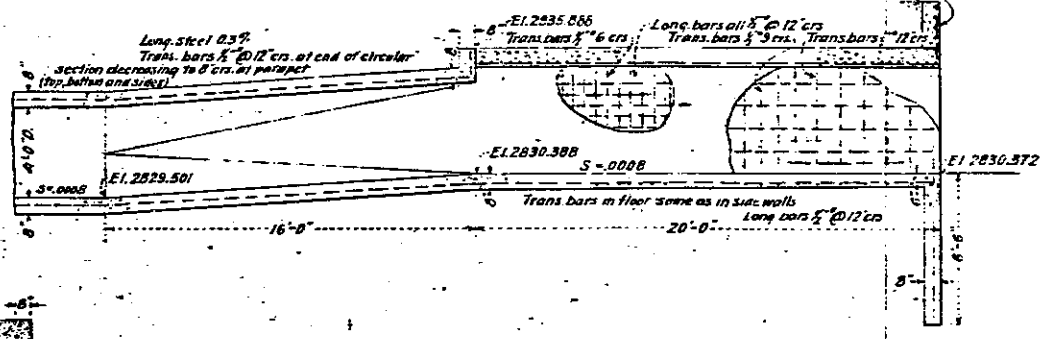
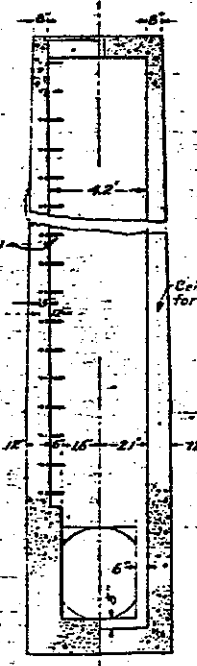
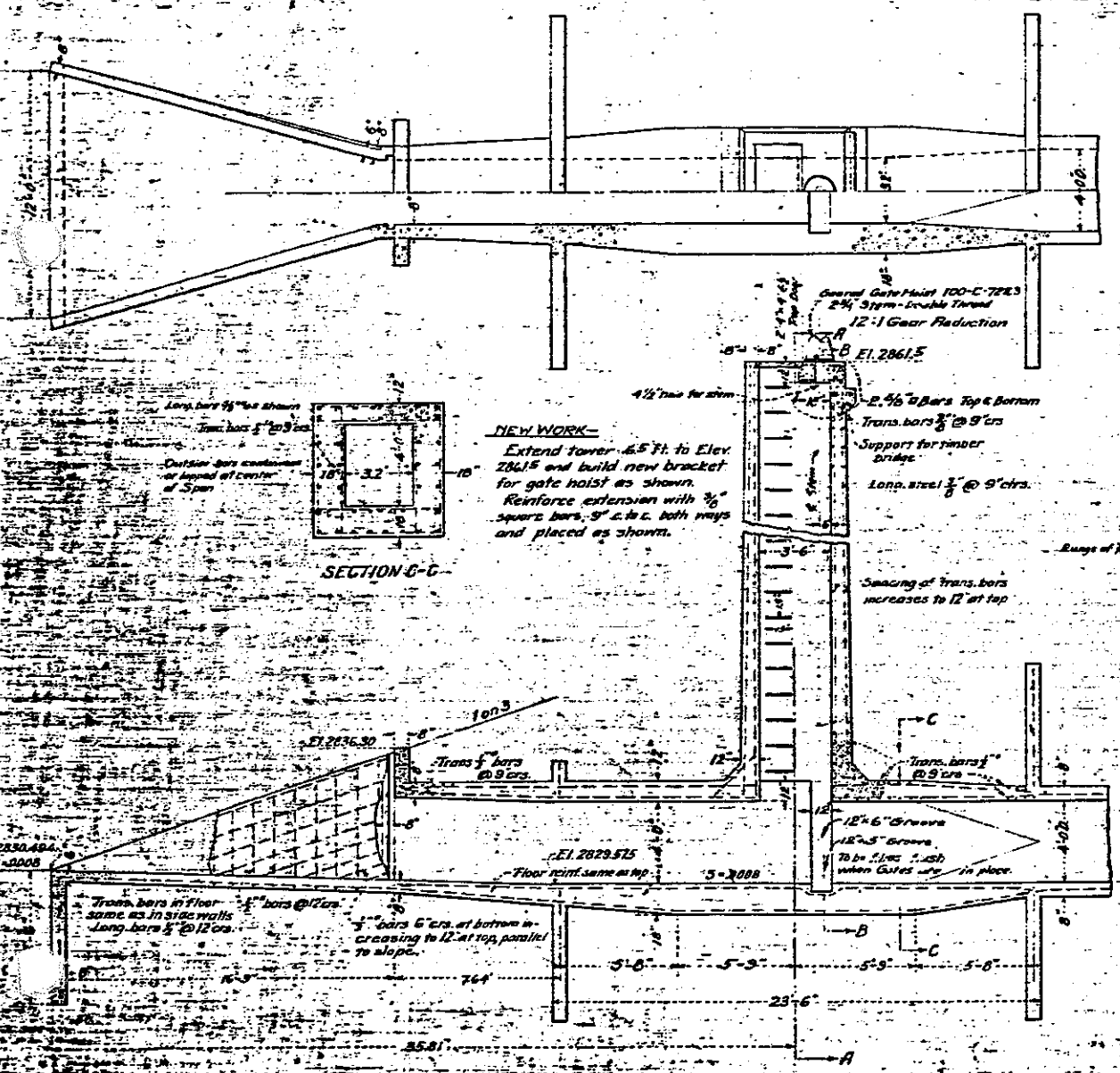


LAYOUT
1" = 200'



Grouted paving, transition to 1 on 1 1/2 side slopes
To C Lateral

Reinforce with 3/4" square bars, spaced 4' c/c to c both ways, and placed 18" from bottom of slab.
Reinforce with 3/4" square bars, spaced 4' c/c to c both ways, and placed 18" from bottom of slab.
The reinforcing is used to prevent steel and build such additional footings as may be necessary to provide support for slab.



NOTES
Sizes of steel specified are those now on hand.
Bottom width of C Lateral is 6'-0". Side slopes are 1 on 1 1/2.

NEW WORK

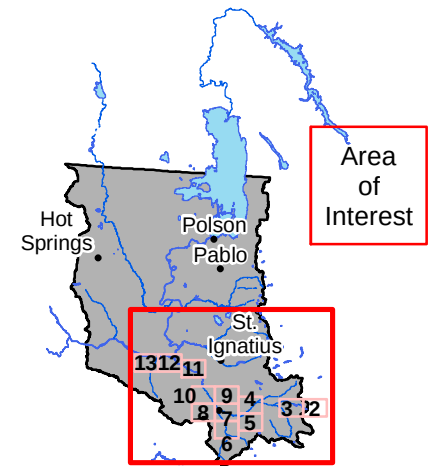
Outlet Tower	Concrete	175 cu yd	Steel	1250#
		30		300#

DEPARTMENT OF THE INTERIOR
UNITED STATES RECLAMATION SERVICE
FLATHEAD PROJECT - MONTANA
DRY FORK DAM
OUTLET WORKS

DESIGNED BY H. A. H. R. C. F. A. RECOMMENDED BY
CHECKED BY *[Signature]* APPROVED BY *[Signature]*
F-3587 St Ignace, Mont., JUN 26 1920

Revised - Sept. 19, 1933
Revised - Jan 27 1921
Revised - Sept. 10, 1920

Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052931** **Exhibit 1**



Flathead Indian Reservation

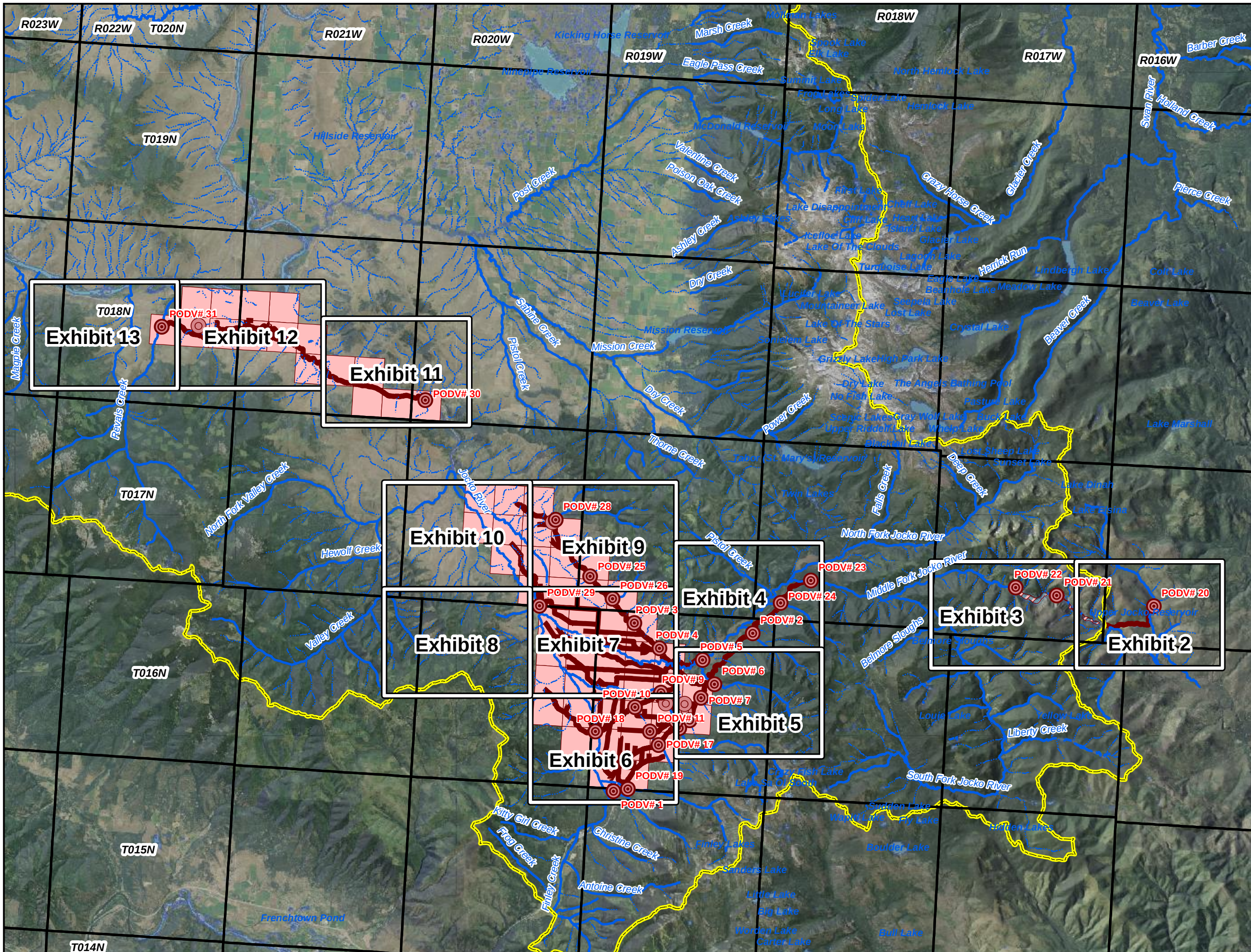
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 2 4 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use and Point of Diversion

FIIP

Water Use

76L

30052931

Exhibit 2



Flathead Indian Reservation

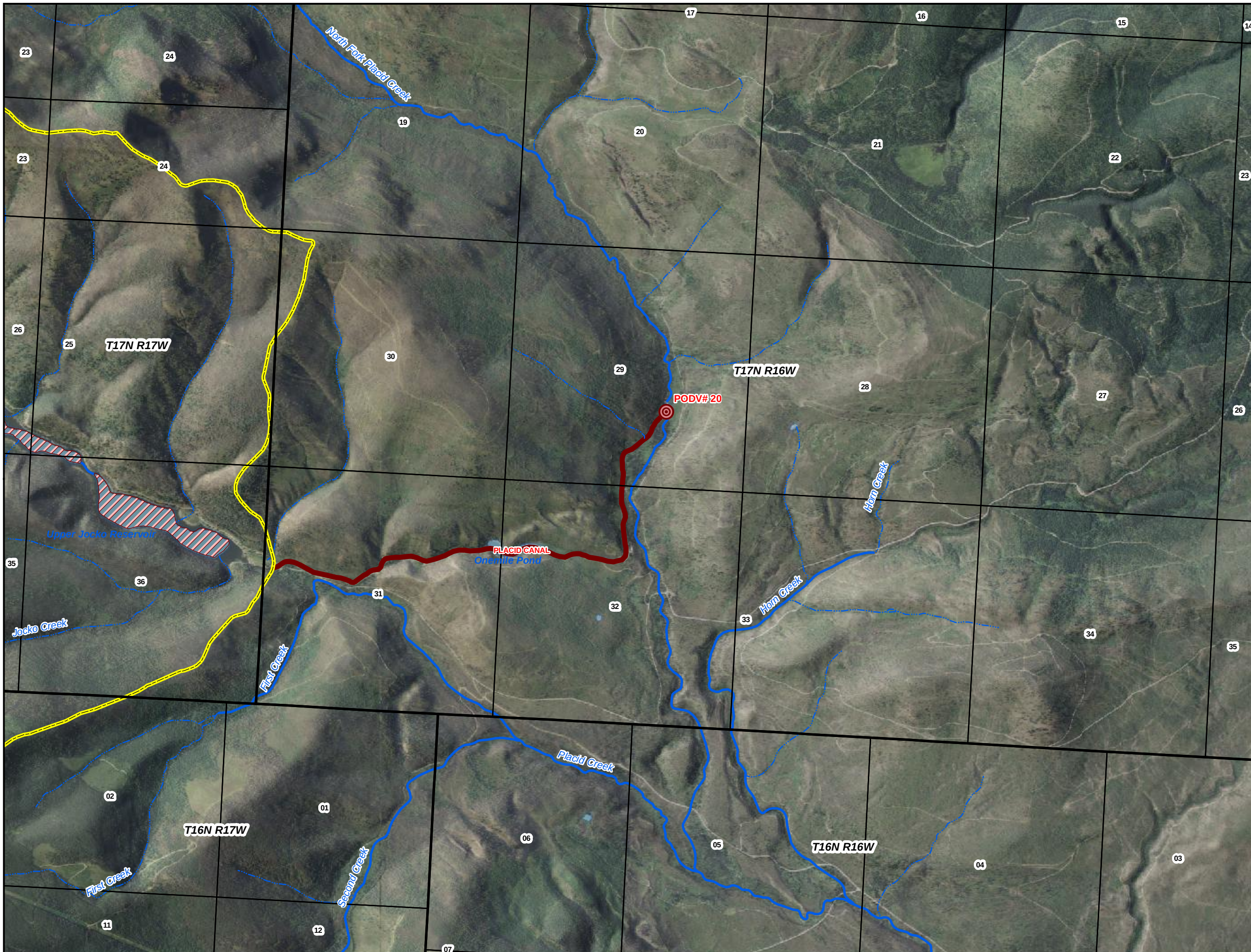
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052931** Exhibit 3



Flathead Indian Reservation

Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052931
Exhibit 4



Flathead Indian Reservation

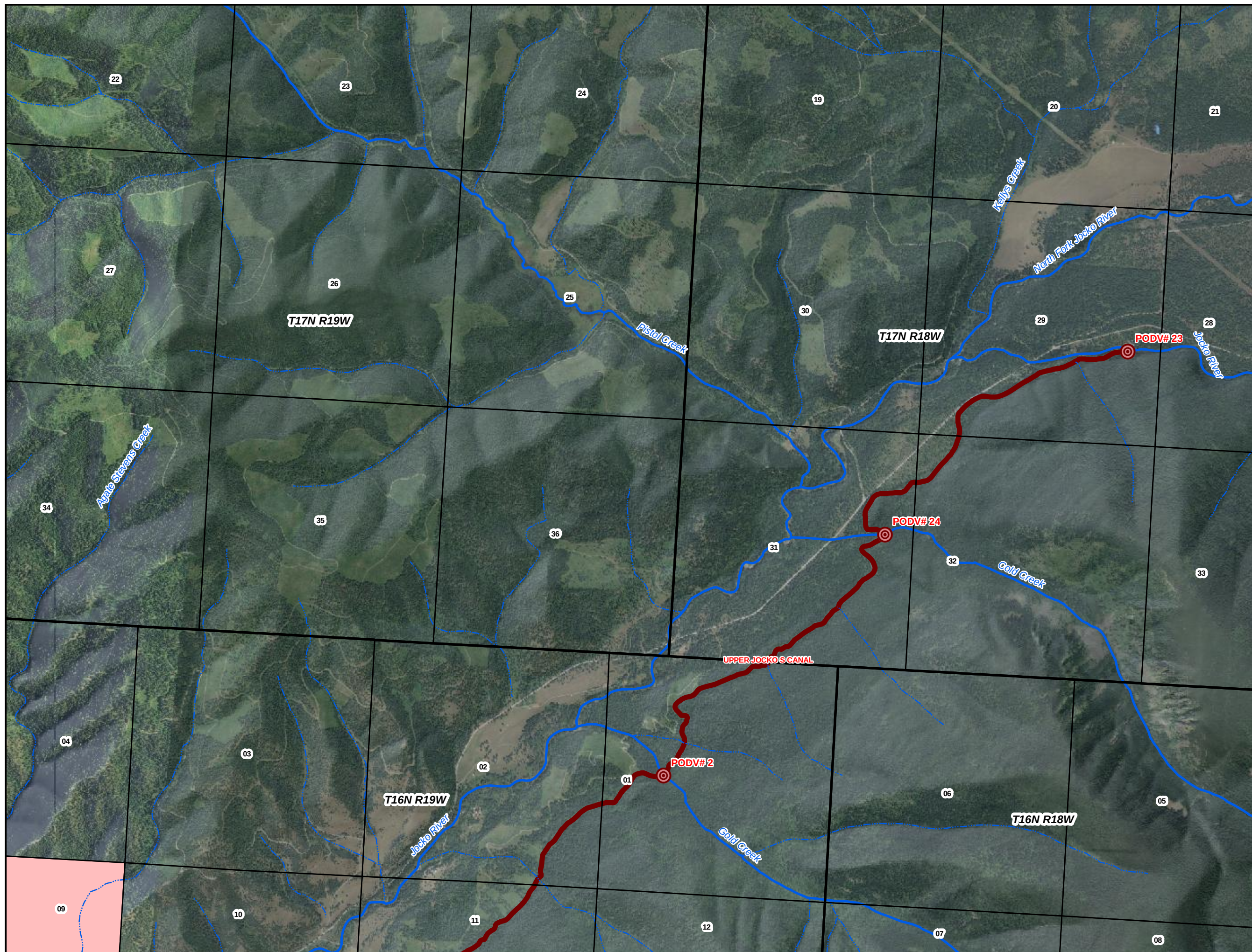
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

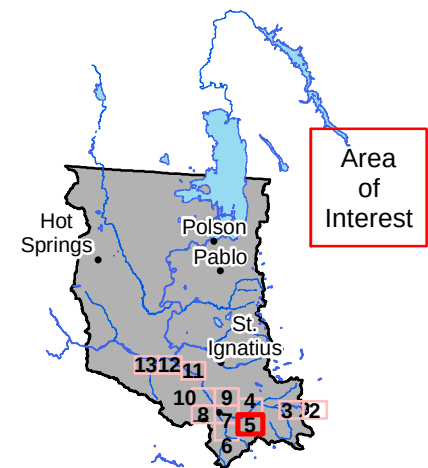
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052931** Exhibit 5



Flathead Indian Reservation

Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052931
Exhibit 6



Flathead Indian Reservation

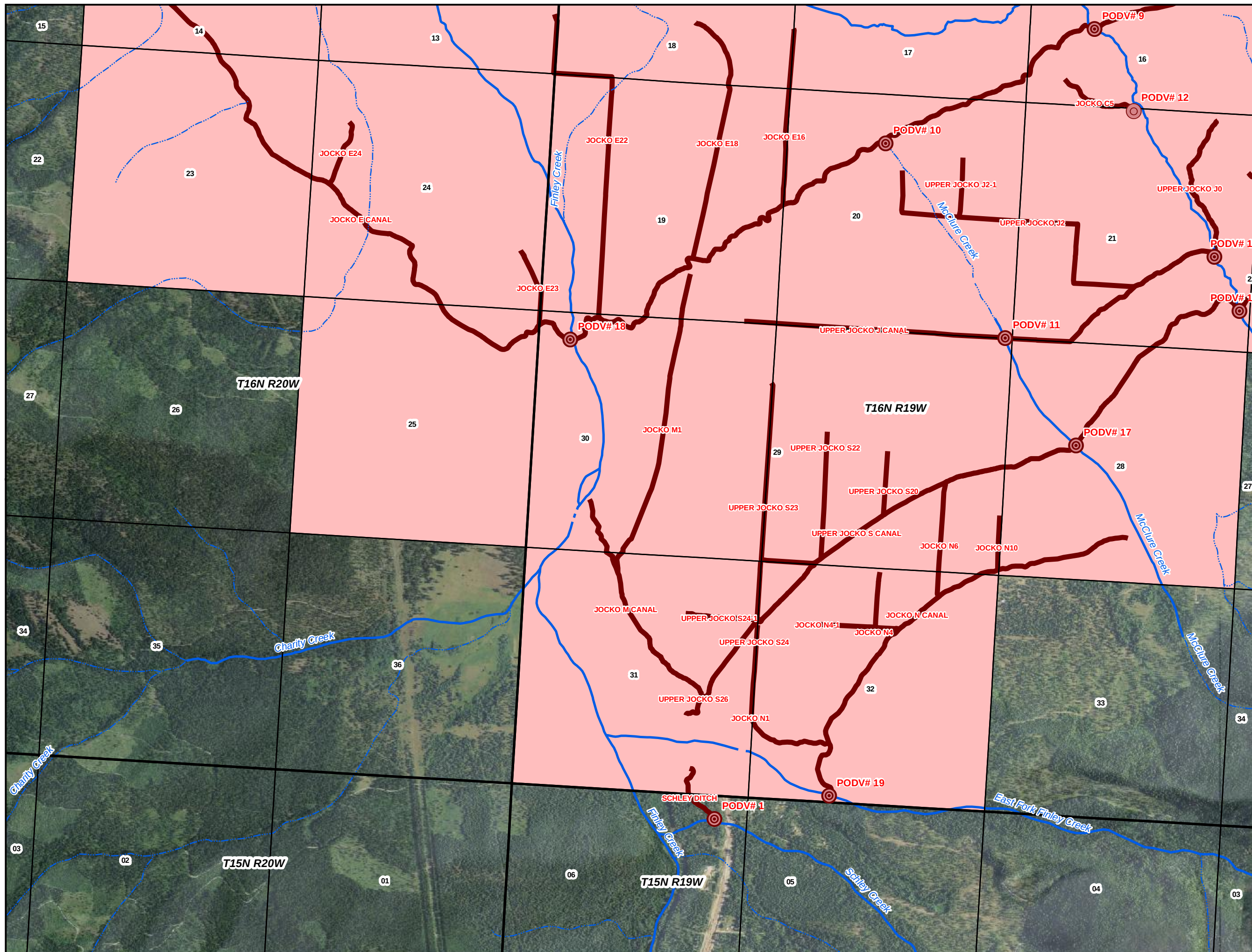
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052931** Exhibit 7



Flathead Indian Reservation

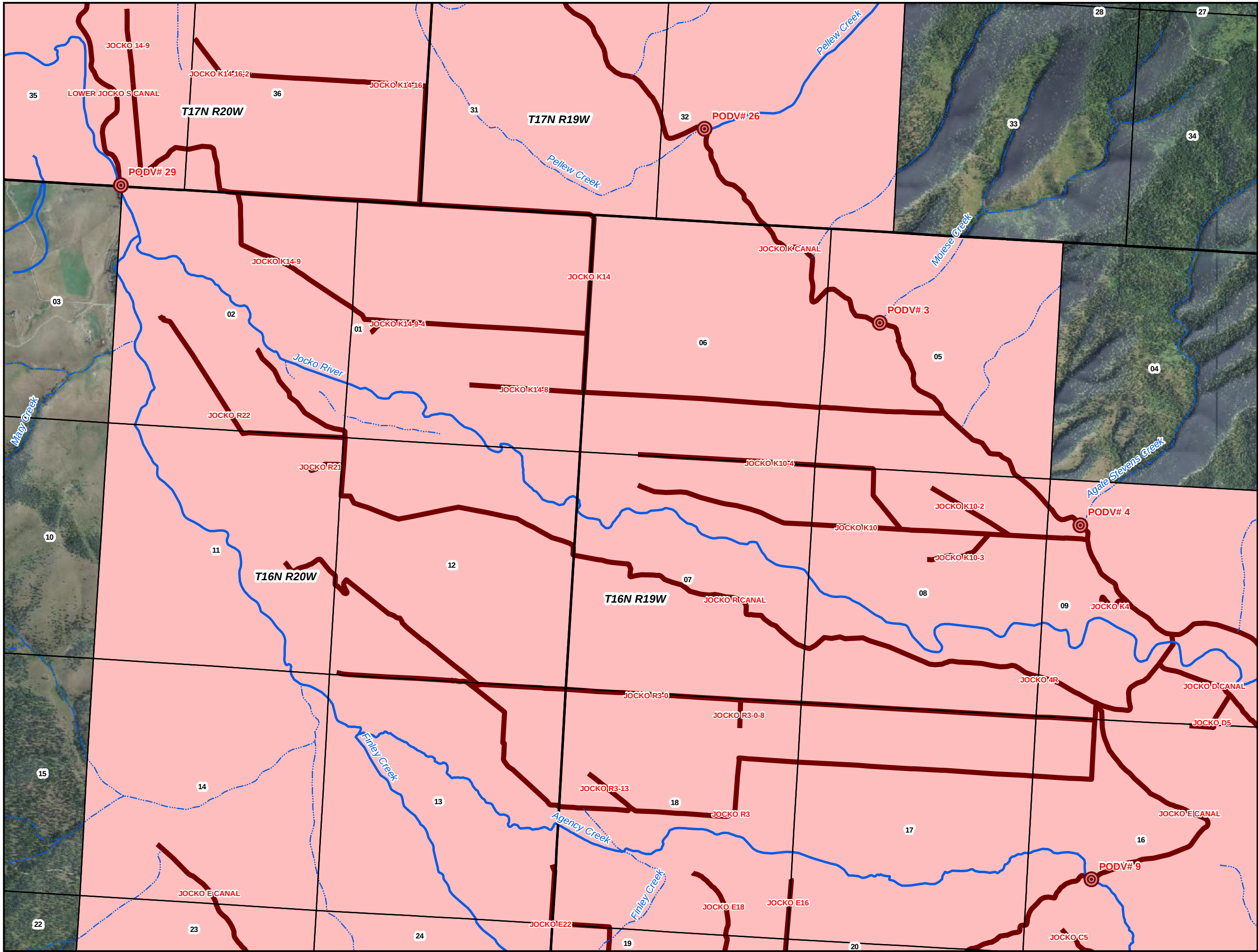
Legend

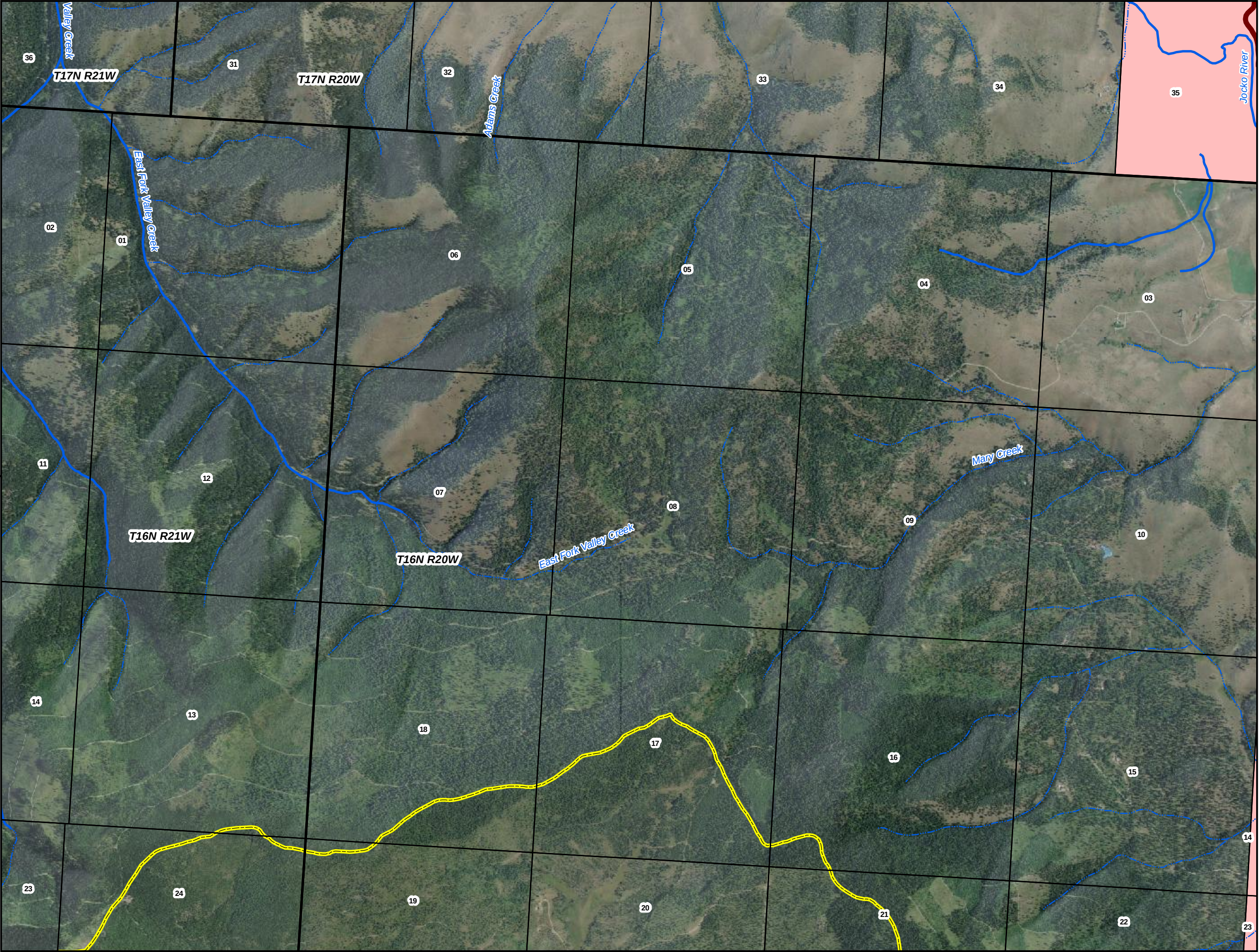
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

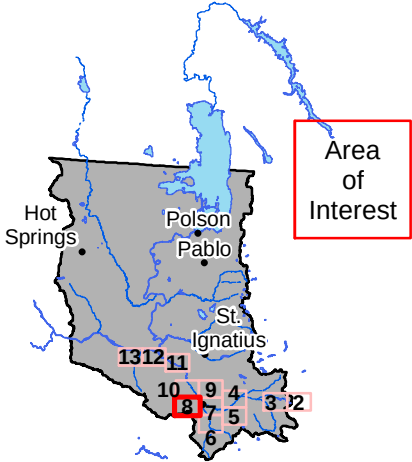




Place of Use
and Point of
Diversion

FIIP
Water Use

76L
30052931
Exhibit 8



Flathead Indian Reservation

Legend

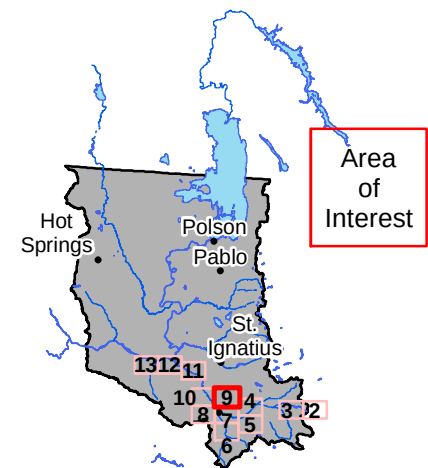
-  Place of Use
-  Primary Point(s) of Diversion
-  Secondary Point(s) of Diversion
-  Ditch or Pipeline
-  Reservoir

0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052931** Exhibit 9



Flathead Indian Reservation

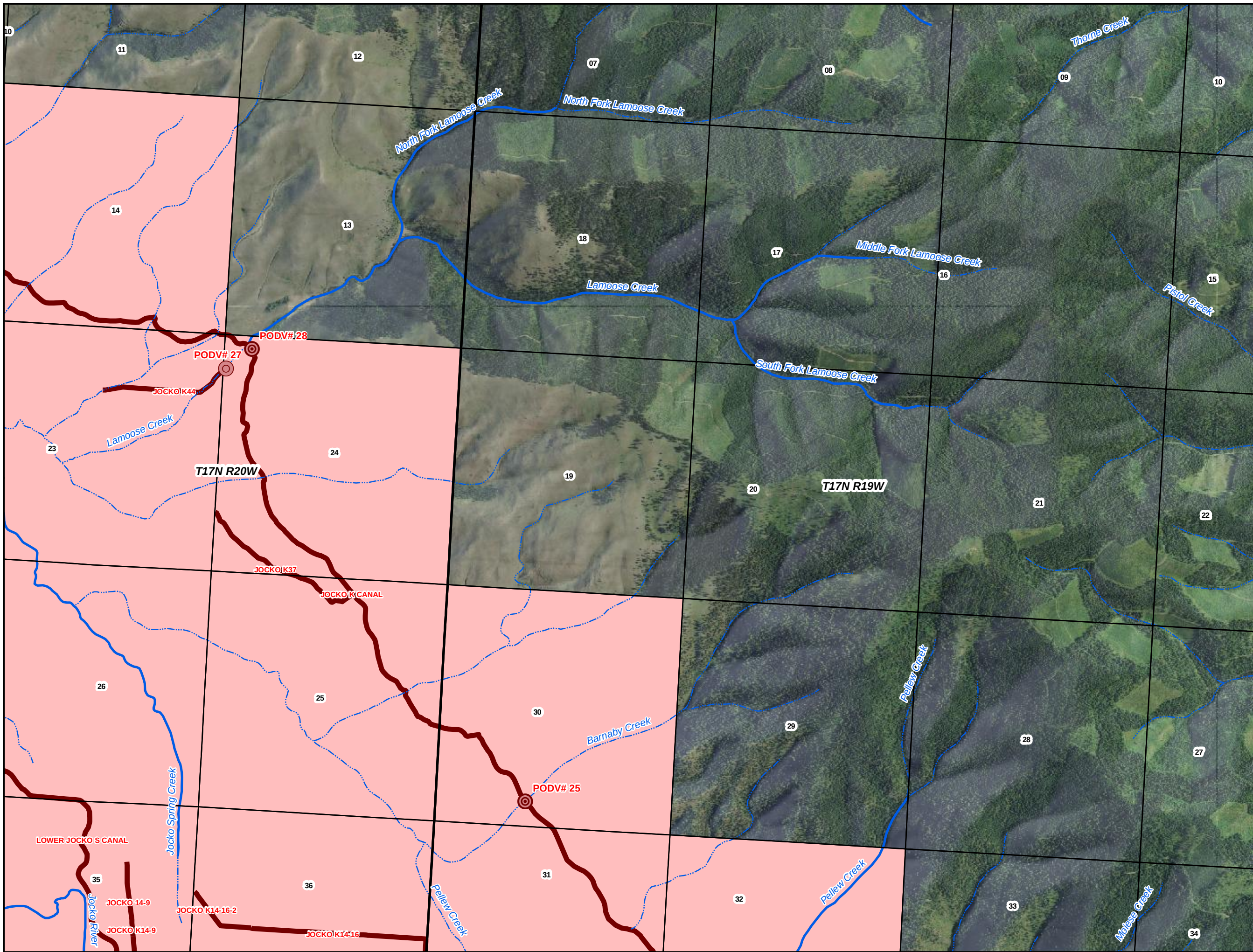
Legend

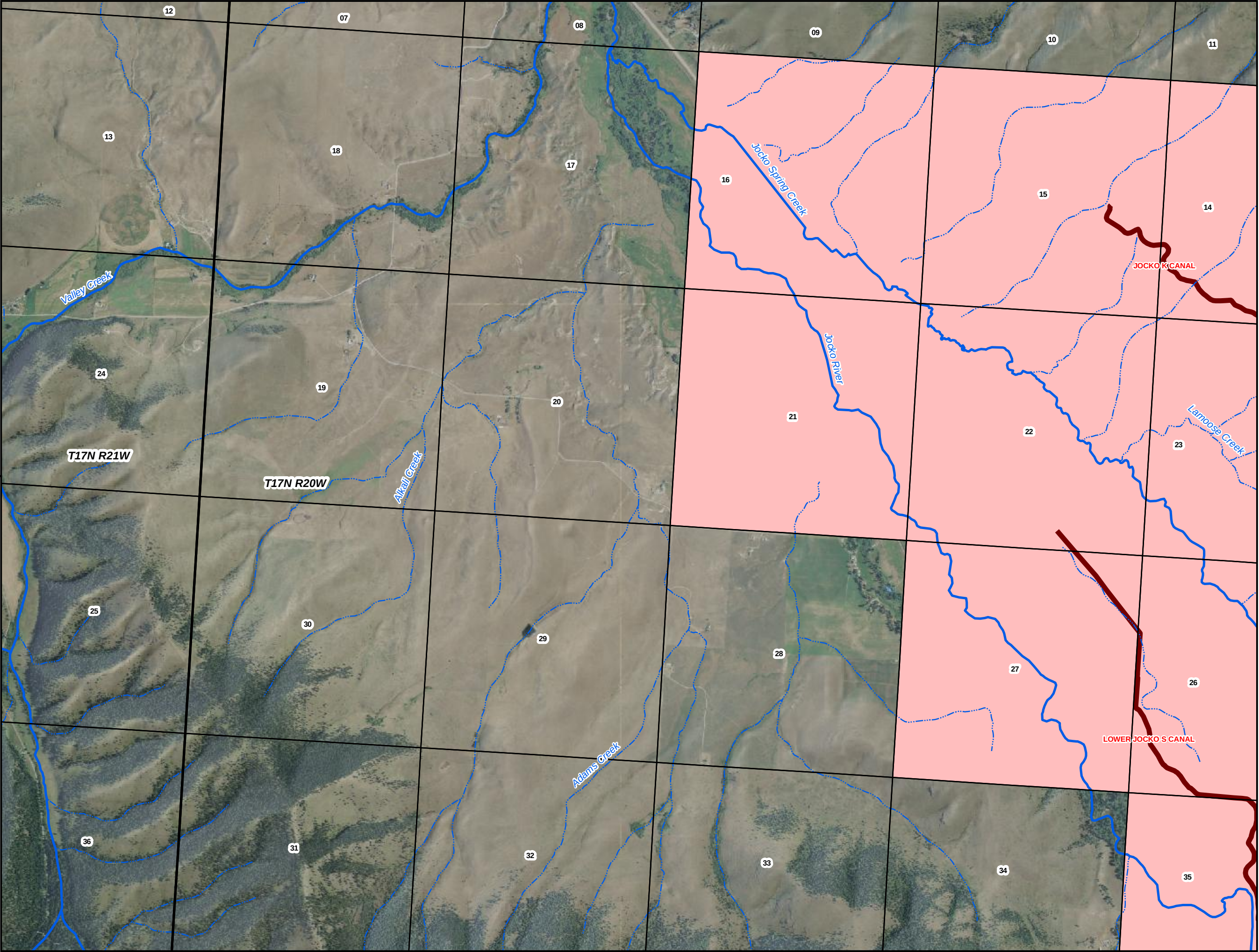
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles

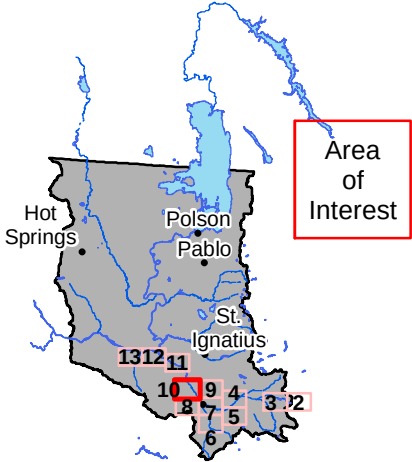


POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)





Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052931
Exhibit 10



Flathead Indian Reservation

Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052931
Exhibit 11



Flathead Indian Reservation

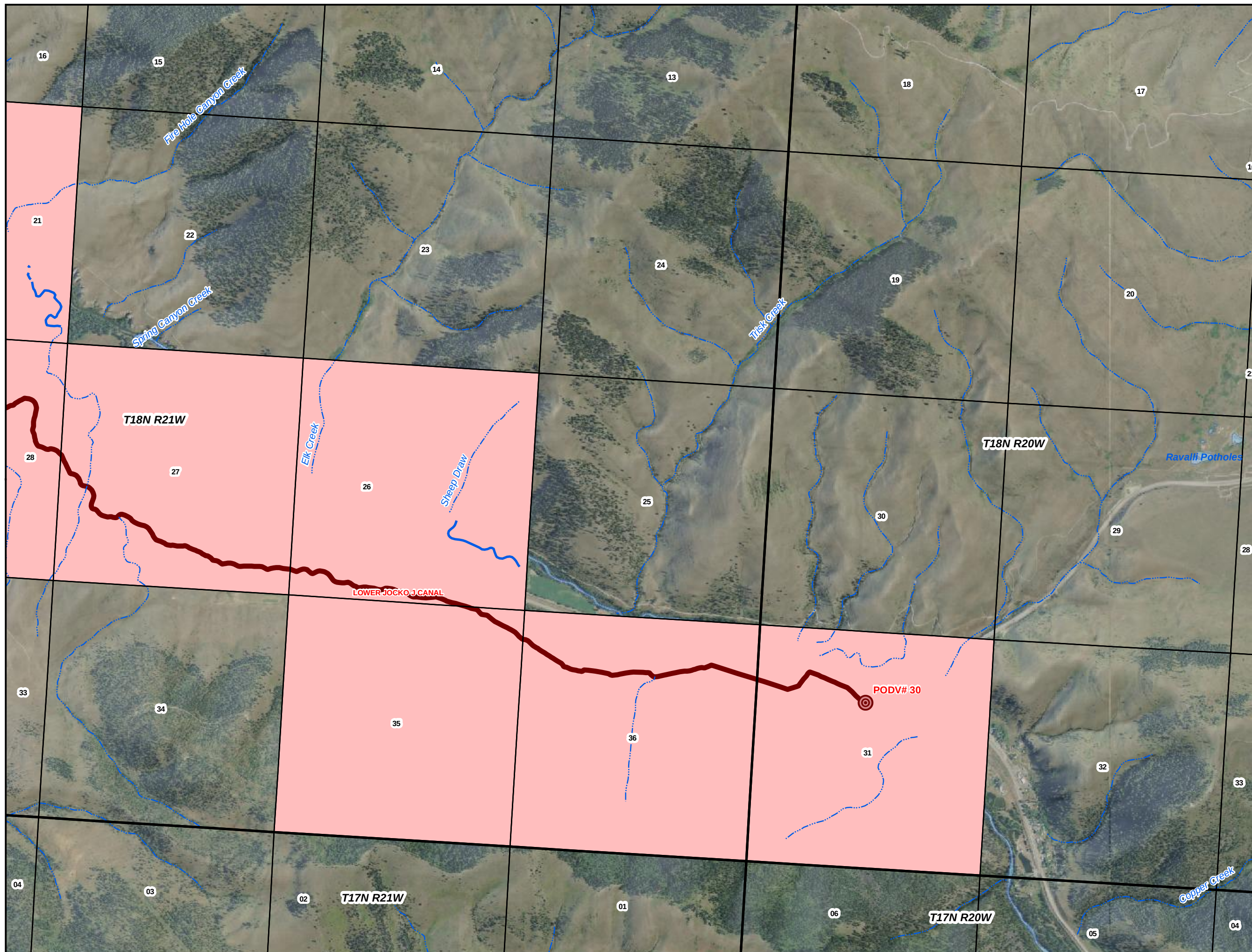
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

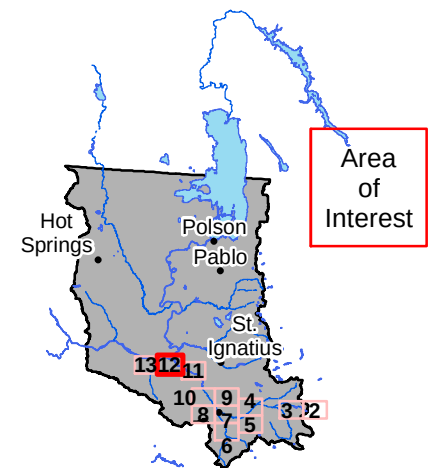
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052931
Exhibit 12



Flathead Indian Reservation

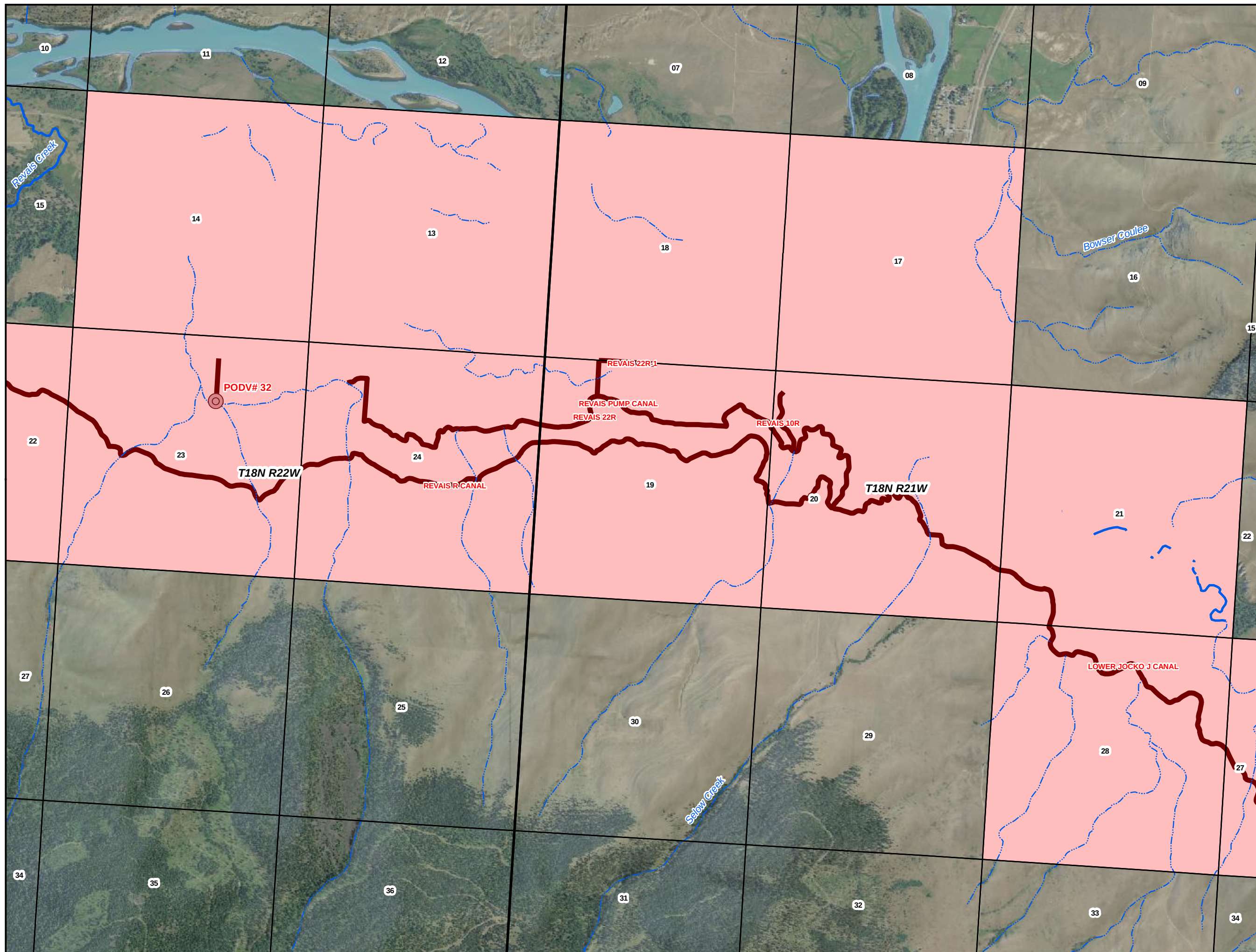
Legend

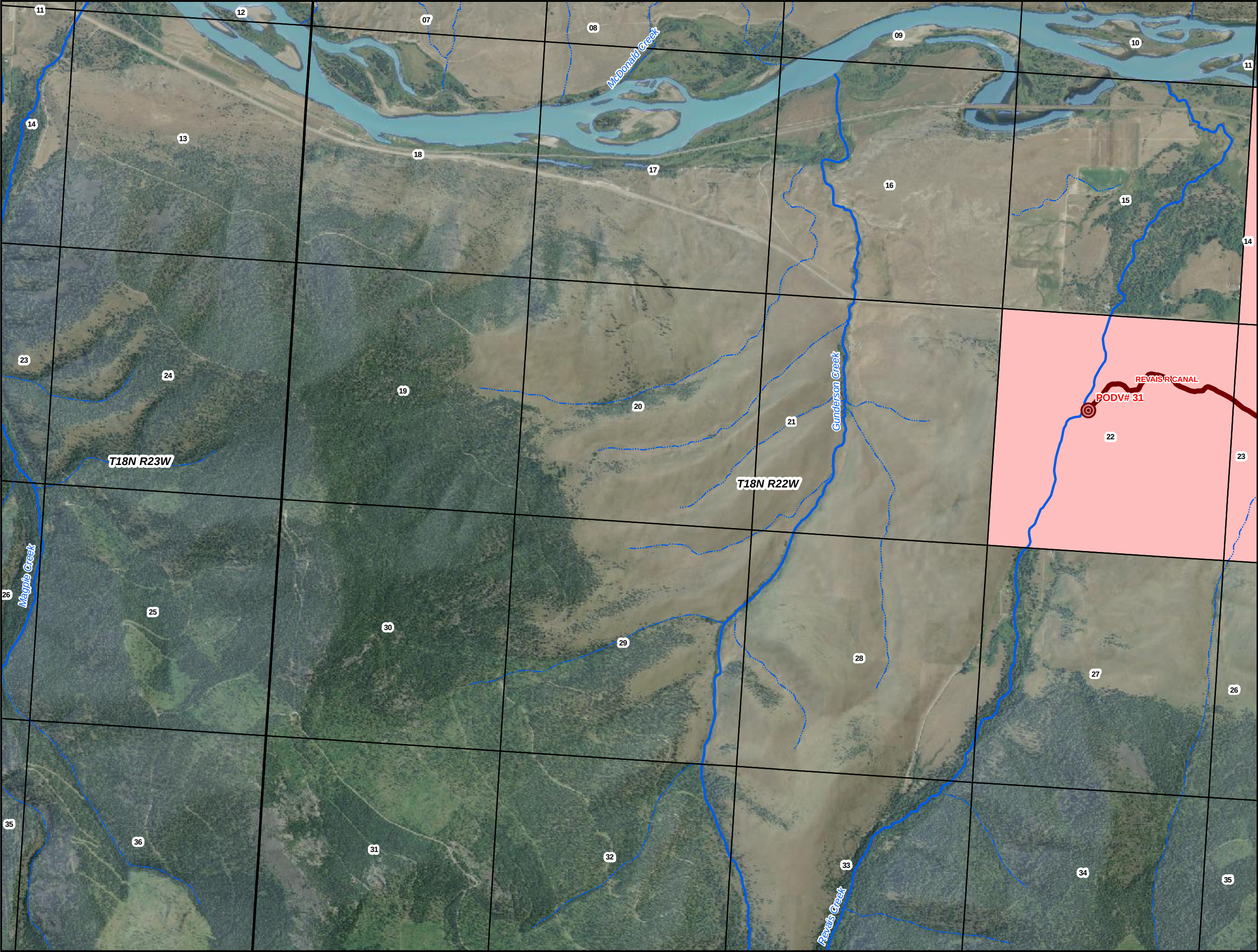
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)





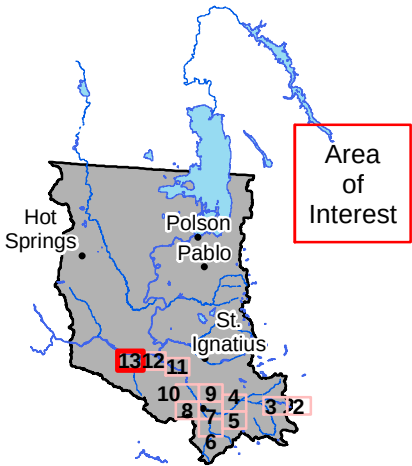
Place of Use
and Point of
Diversion

FIIP
Water Use

76L

30052931

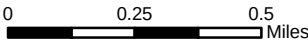
Exhibit 13



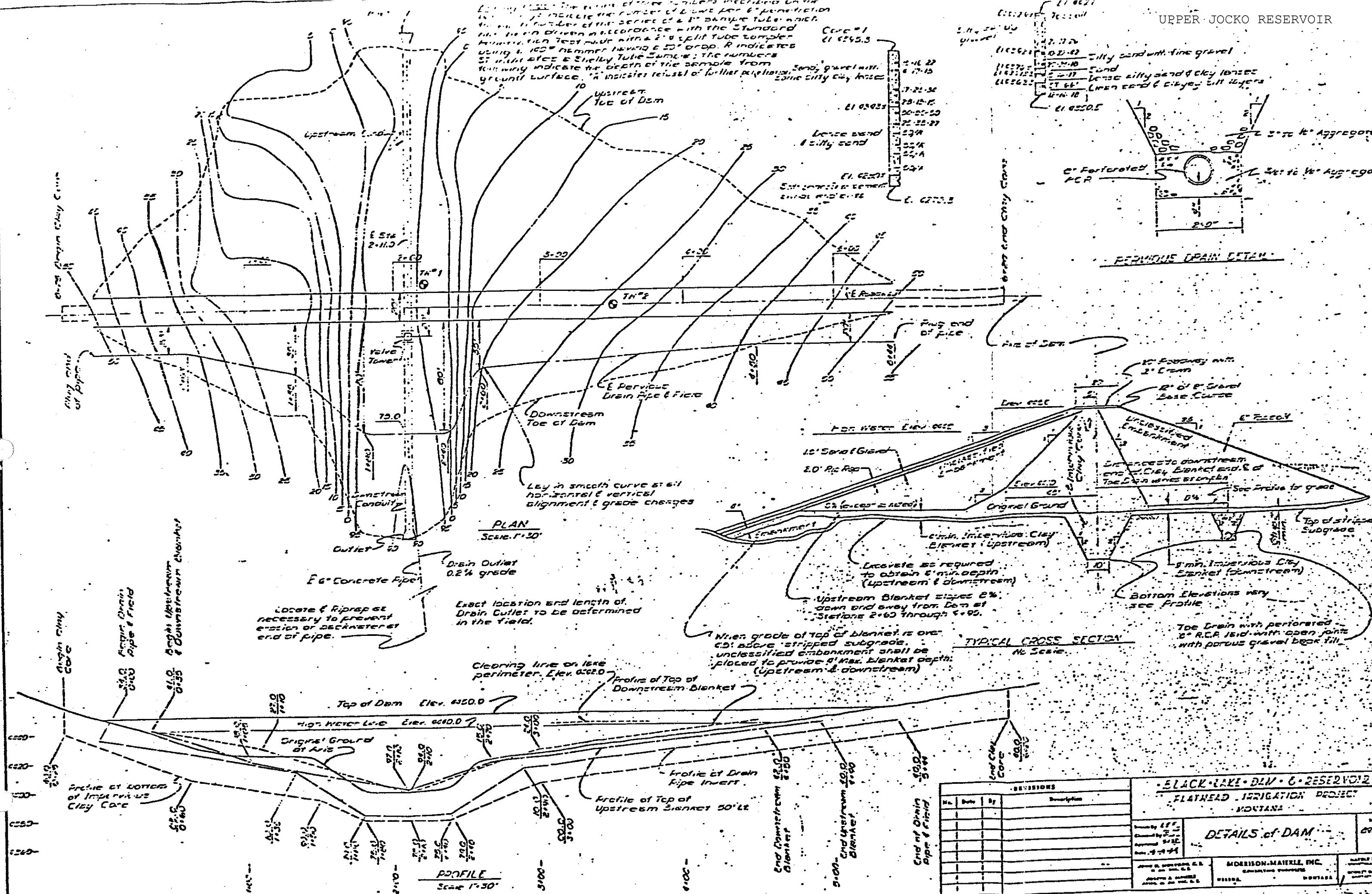
Flathead Indian Reservation

Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

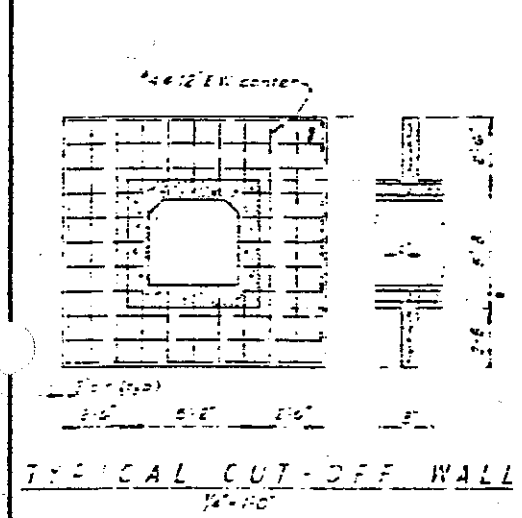
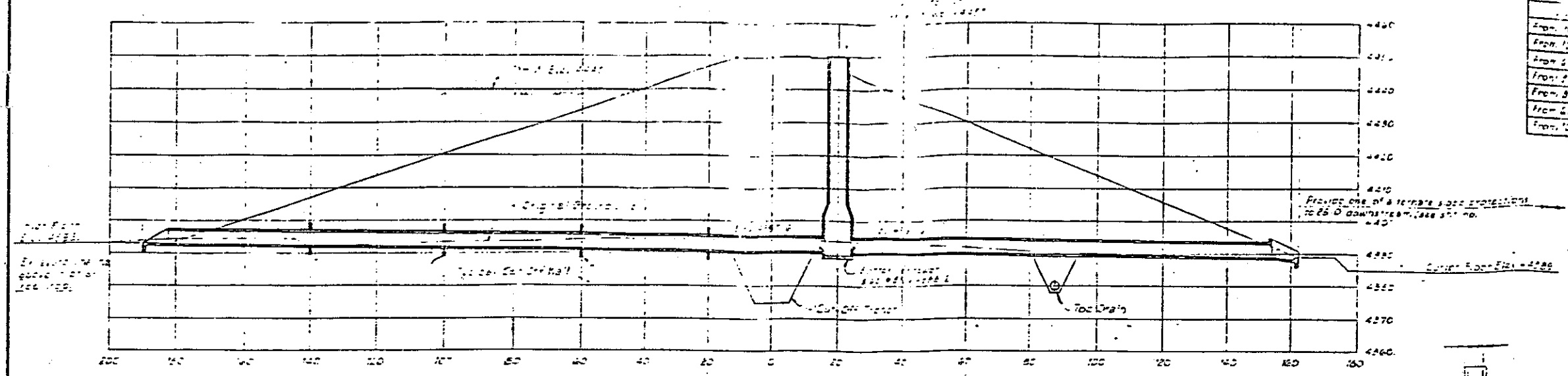


POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

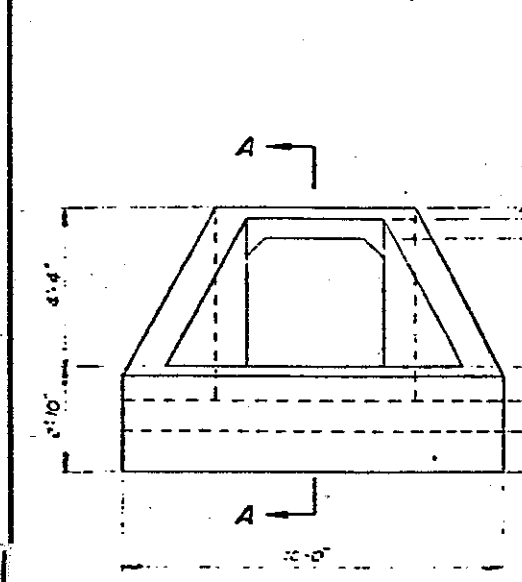


CONDUIT REINFORCEMENT SCHEDULE			
Location	Reinforcement	Bar Size	Bar Spacing
From 100' to 120' downstream	4#6	4#6	12" x 12"
From 120' to 140' downstream	4#6	4#6	12" x 12"
From 140' to 160' downstream	4#6	4#6	12" x 12"
From 160' to 180' downstream	4#6	4#6	12" x 12"
From 180' to 200' downstream	4#6	4#6	12" x 12"
From 200' to 220' downstream	4#6	4#6	12" x 12"
From 220' to 240' downstream	4#6	4#6	12" x 12"
From 240' to 260' downstream	4#6	4#6	12" x 12"
From 260' to 280' downstream	4#6	4#6	12" x 12"
From 280' to 300' downstream	4#6	4#6	12" x 12"

UPPER JOCKO RESERVOIR



TYPICAL CUT-OFF WALL

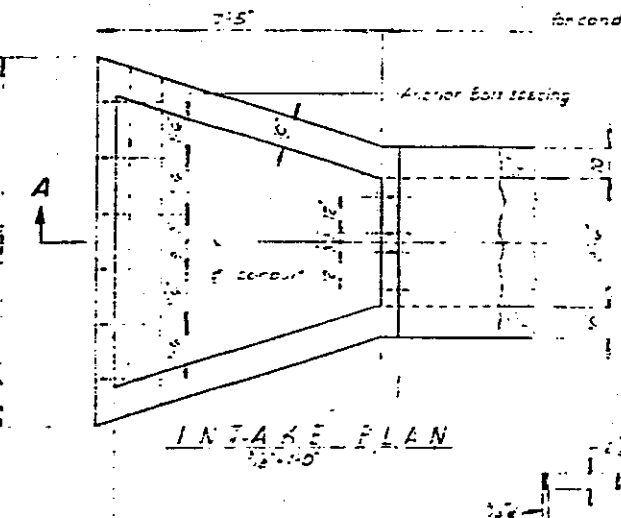


INTAKE PLAN

INTAKE ELEVATION

SECTION A-A

SECTION B-B



INTAKE PLAN

INTAKE ELEVATION

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

SECTION E-E

SECTION F-F

SECTION G-G

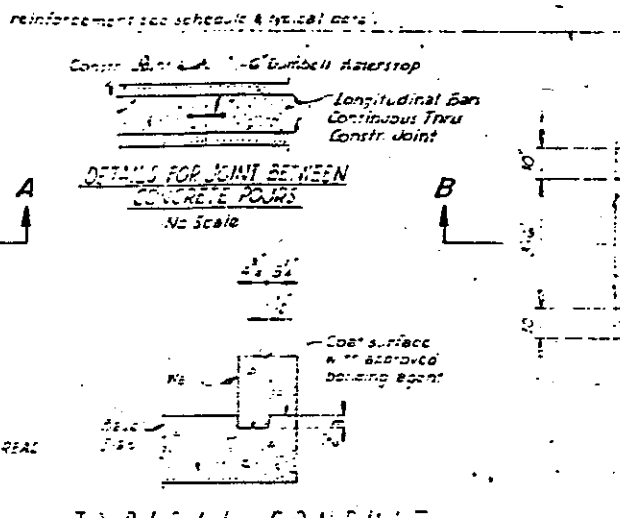
SECTION H-H

SECTION I-I

SECTION J-J

SECTION K-K

SECTION L-L



TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

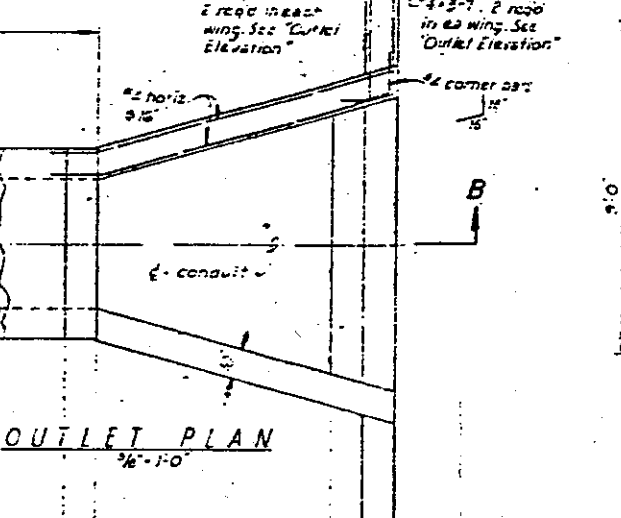
TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT



OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

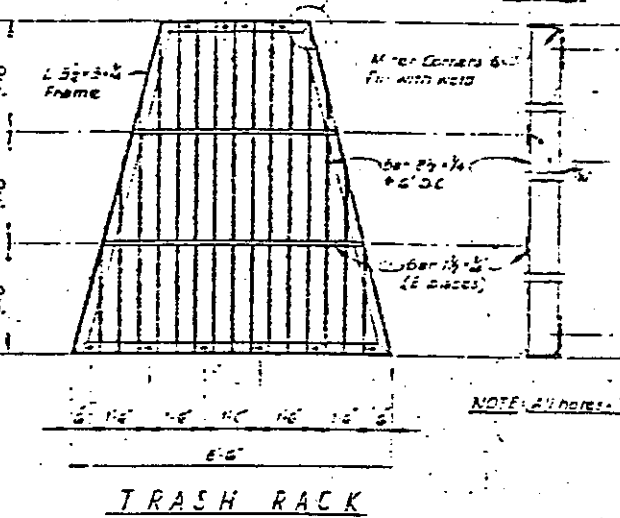
OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN



TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

REVISIONS			
No.	Date	By	Description

BLACK LAKE DAM & RESERVOIR
FLATHEAD IRRIGATION PROJECT
MONTANA

OUTLET CONDUIT

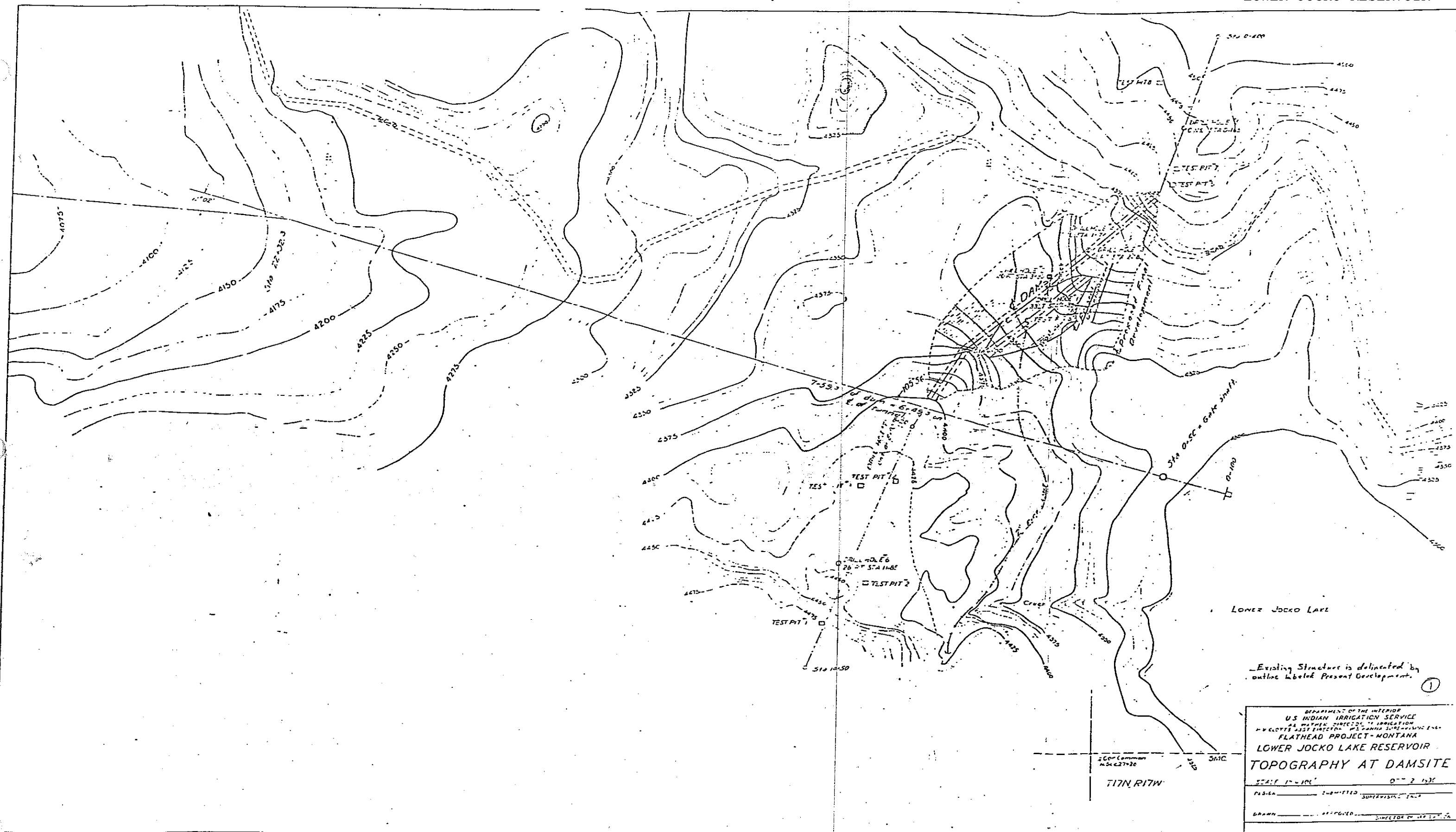
JOHN H. MORRISON, C.E.
M. ASCE, INC. C.E.

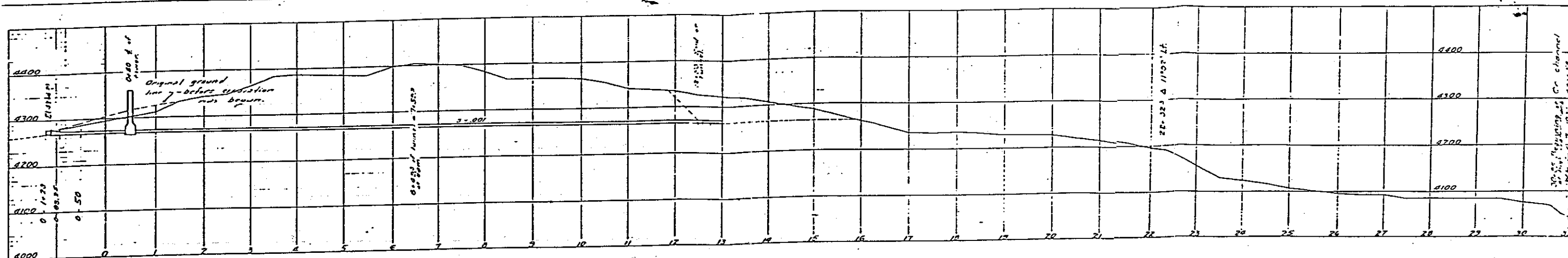
MORRISON-MAJERLE, INC.
CONSULTING ENGINEERS
HELENA, MONTANA

DAVID L. EAGLE
PHOTOGRAPHY
HELENA, MONTANA

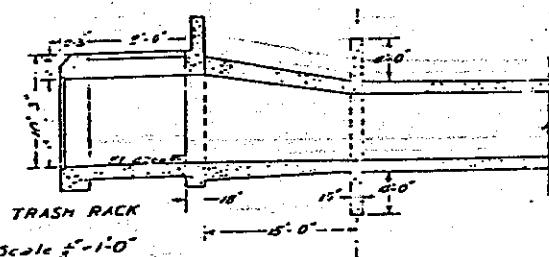
JOSEPH A. MARRIS
ASSOC. M. ASCE, C.E.

ROBERT H. OHLSON
ASSOCIATE ENGINEER

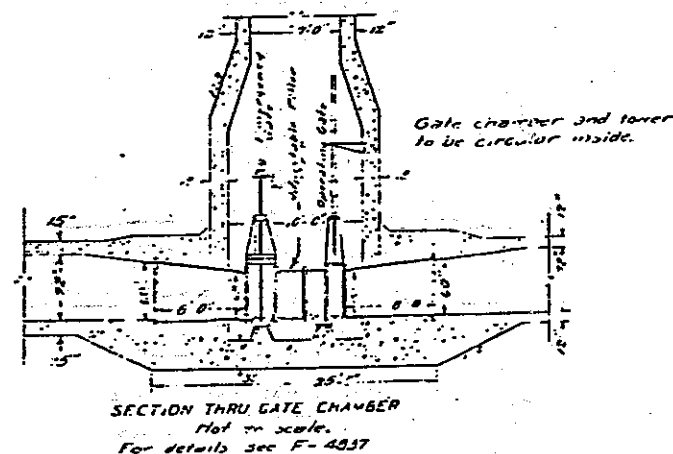




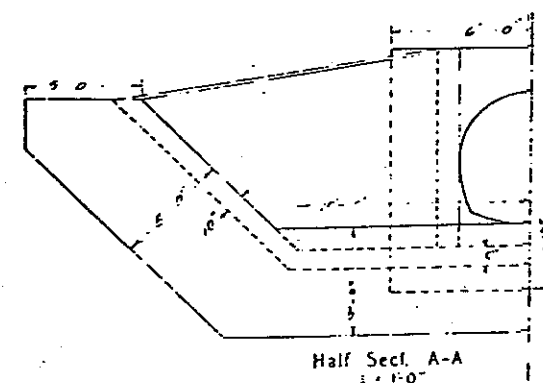
PROFILE ON CENTER LINE OF TUNNEL
Scale 1"=100'



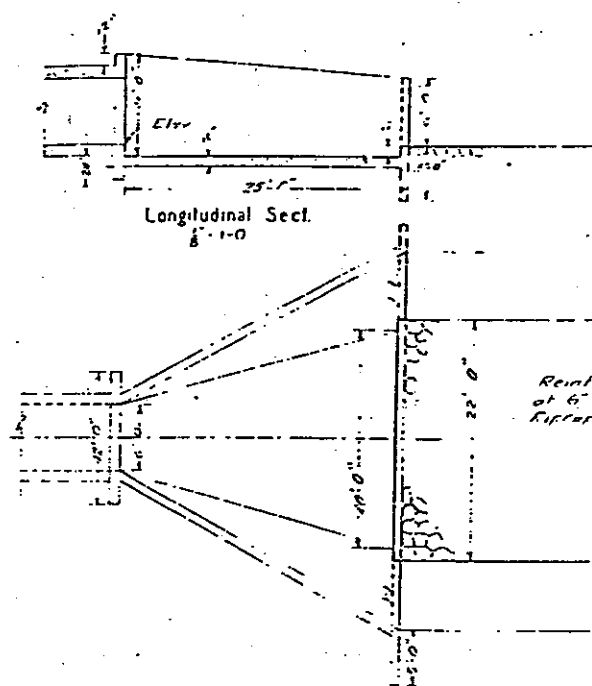
For details see F-4993



SECTION THRU GATE CHAMBER
Not to scale.
For details see F-4837



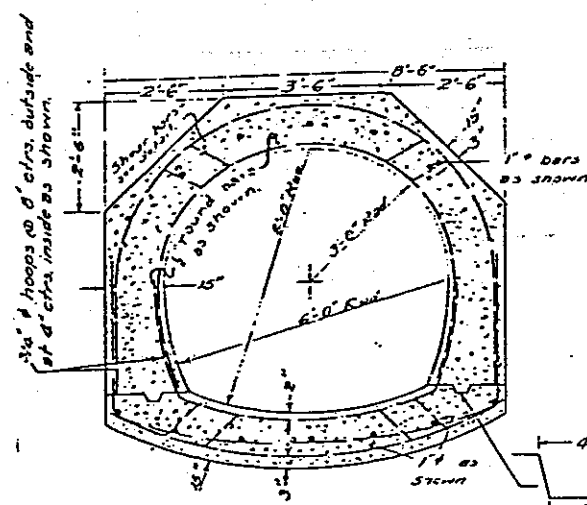
Half Sect. A-A
1/2"=1'-0"



Longitudinal Sect.
1/2"=1'-0"

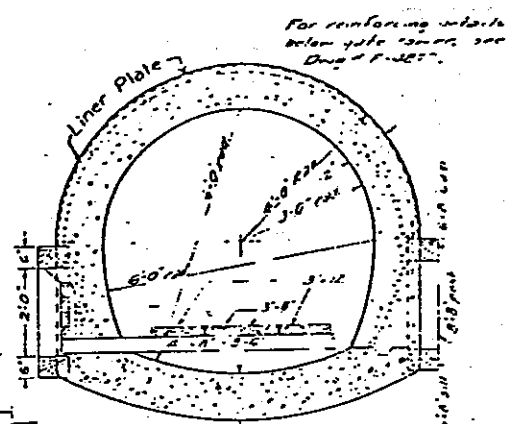
Reinforce with 1/2" bars
at 6" cts. with hoops.
Refer to 3rd sheet.

Plan
1/2"=1'-0"



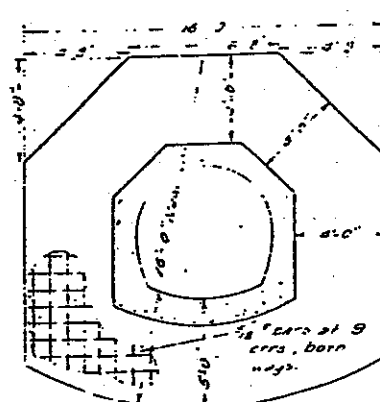
ABOVE GATE TOWER
Scale 1/2"=1'-0"

For details see F-5128



BELOW GATE TOWER
Scale 1/2"=1'-0"

Hoop reinforcing below
gate tower to be 1/2" bars,
placed as shown on Dwg. F-4837.



Cut-offs required as
shown on profile.

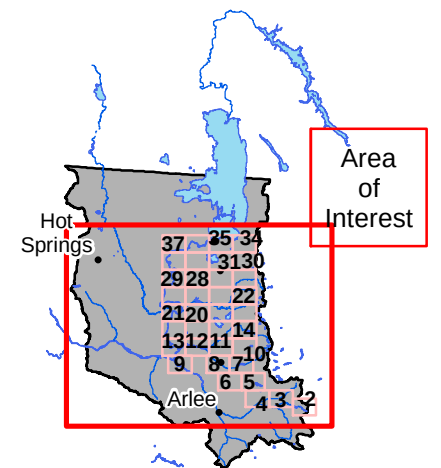
AT CUT-OFF
Scale 1/2"=1'-0"

TYPICAL TUNNEL SECTIONS

Revised - May 1937	DEPARTMENT OF THE INTERIOR	
	U.S. INDIAN IRRIGATION SERVICE	
	ASISTANT DIRECTOR OF IRRIGATION	
	FLATHEAD PROJECT - MONTANA	
	LOWER JOCKO LAKE RESERVOIR	
CONTROLLING WORKS		
S. L. F. 25 INCH		
S. L. F. 25 INCH		
S. L. F. 25 INCH		
S. L. F. 25 INCH		
S. L. F. 25 INCH		

F-4836

Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052932** **Exhibit 1**



Flathead Indian Reservation

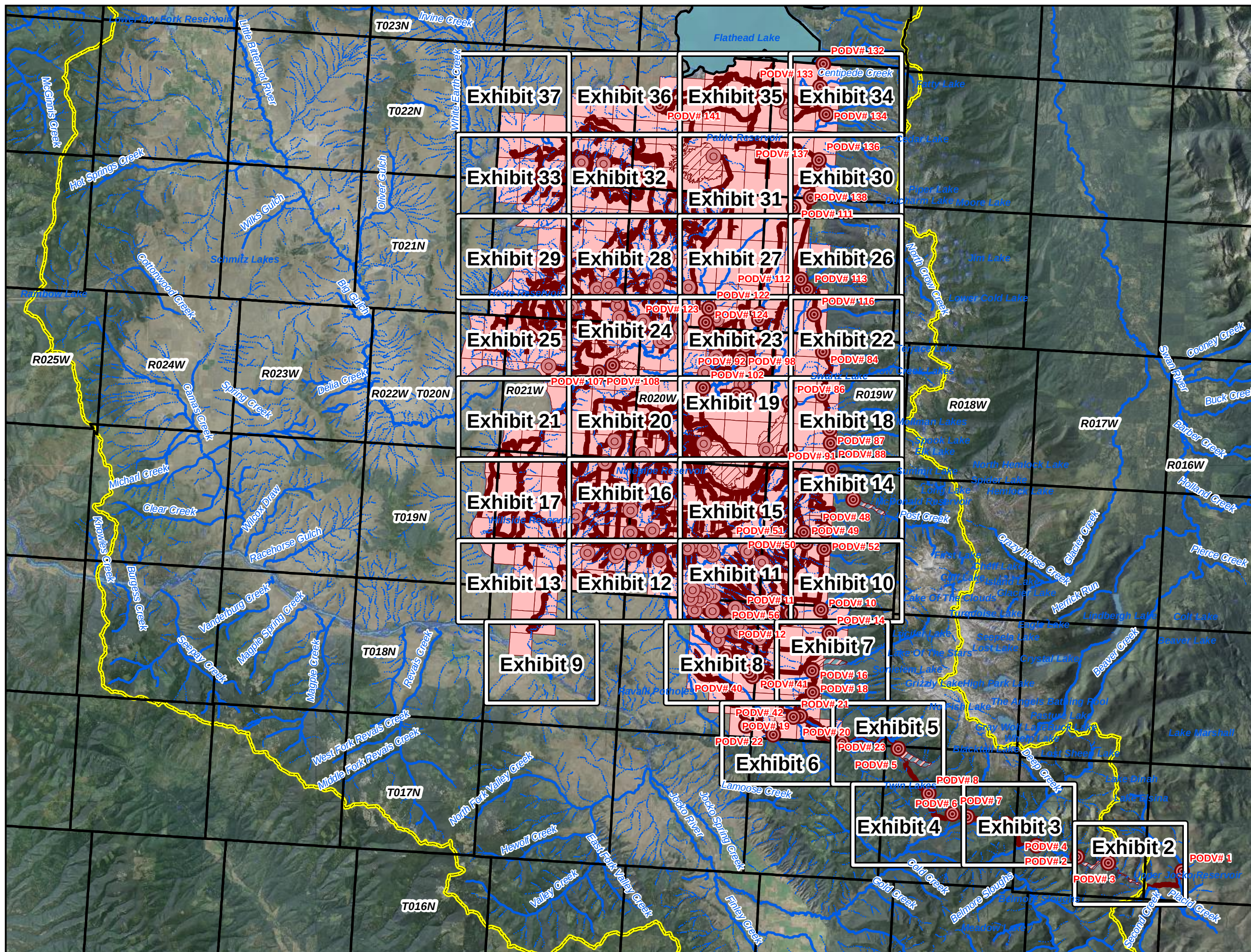
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

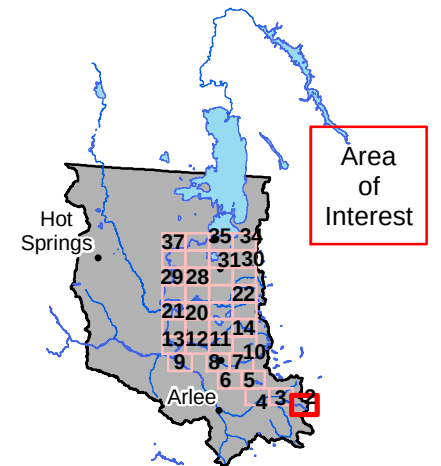
0 2.5 5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052932** Exhibit 2



Flathead Indian Reservation

Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

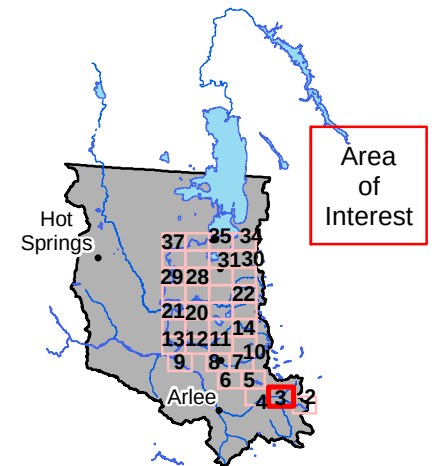
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



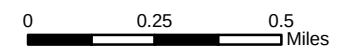
Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052932** Exhibit 3



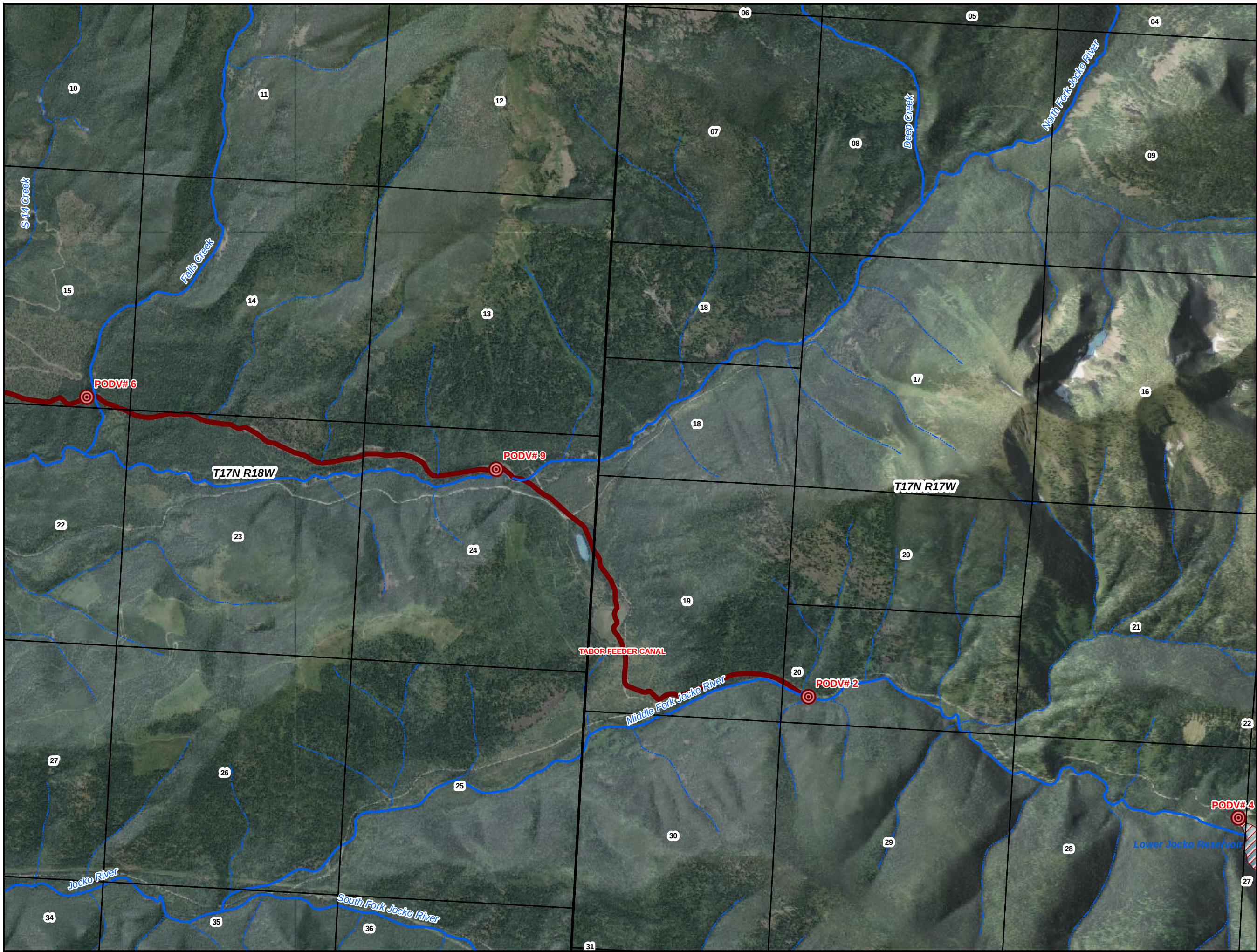
Flathead Indian Reservation

Legend

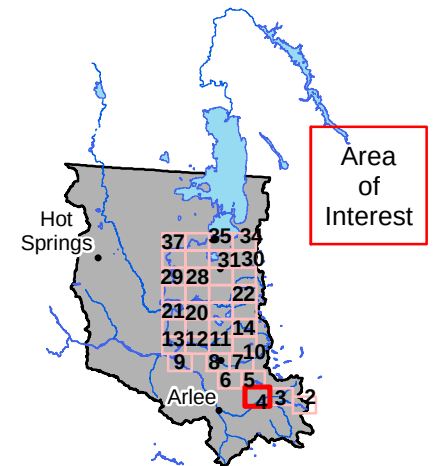
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



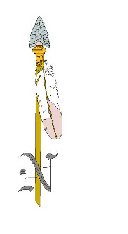
Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052932** Exhibit 4



Flathead Indian Reservation

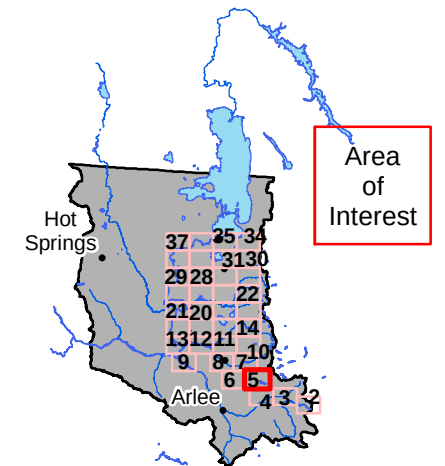
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052932** Exhibit 5



Flathead Indian Reservation

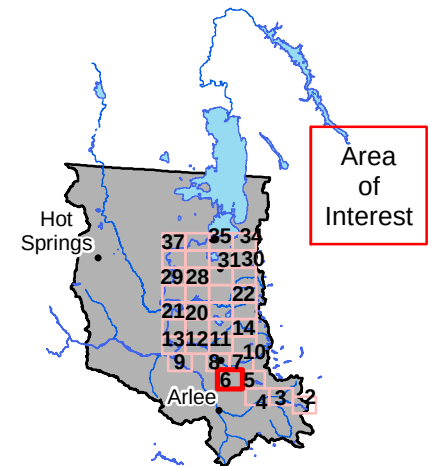
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052932** Exhibit 6



Flathead Indian Reservation

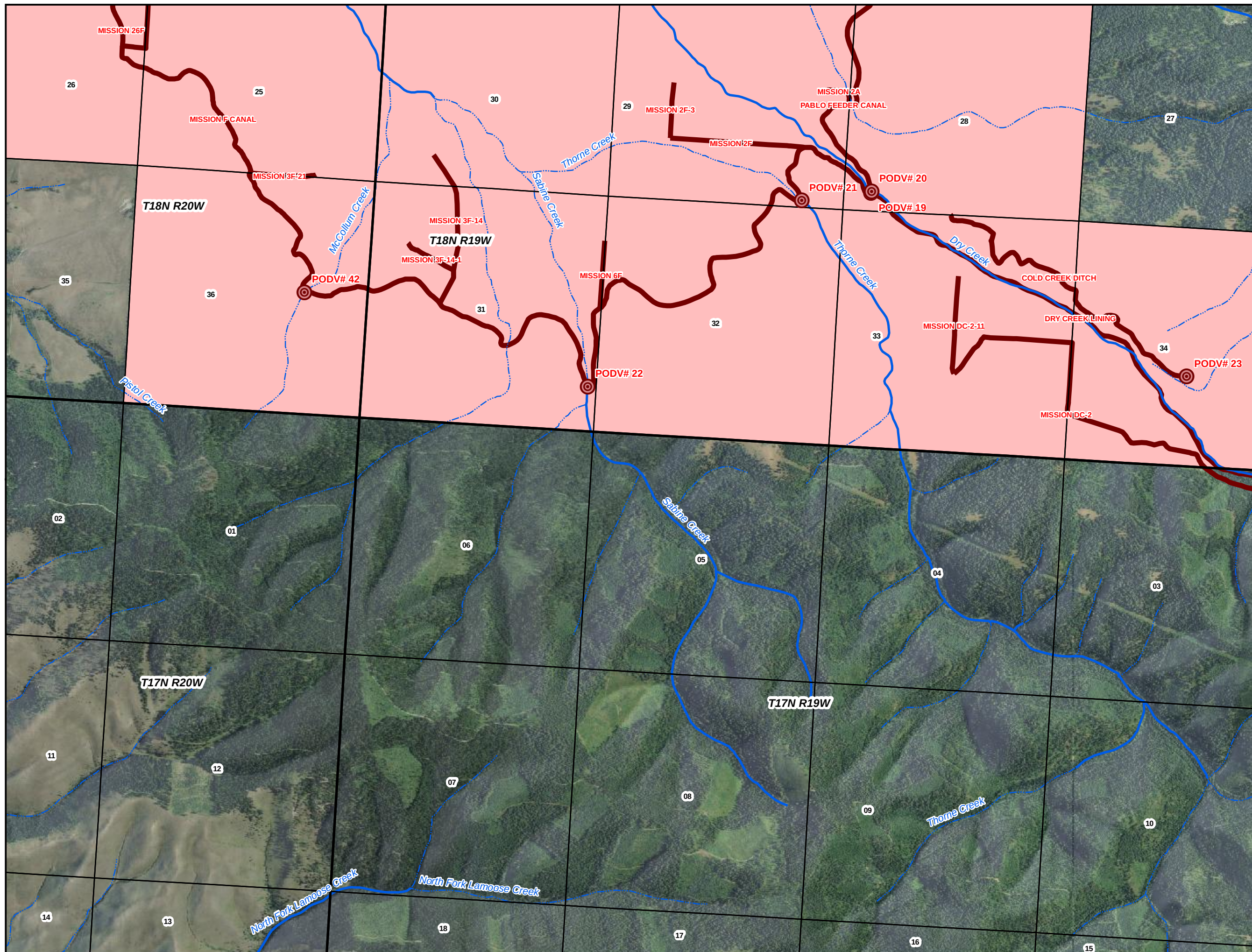
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

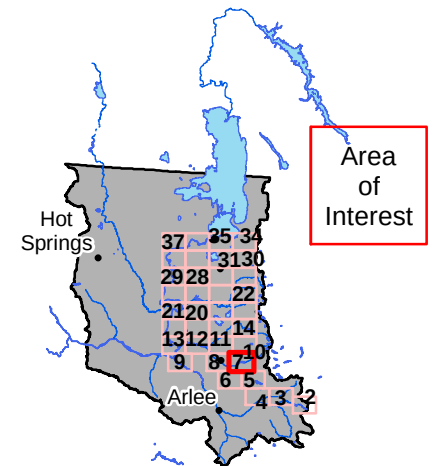
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



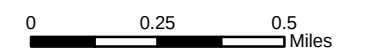
Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 7



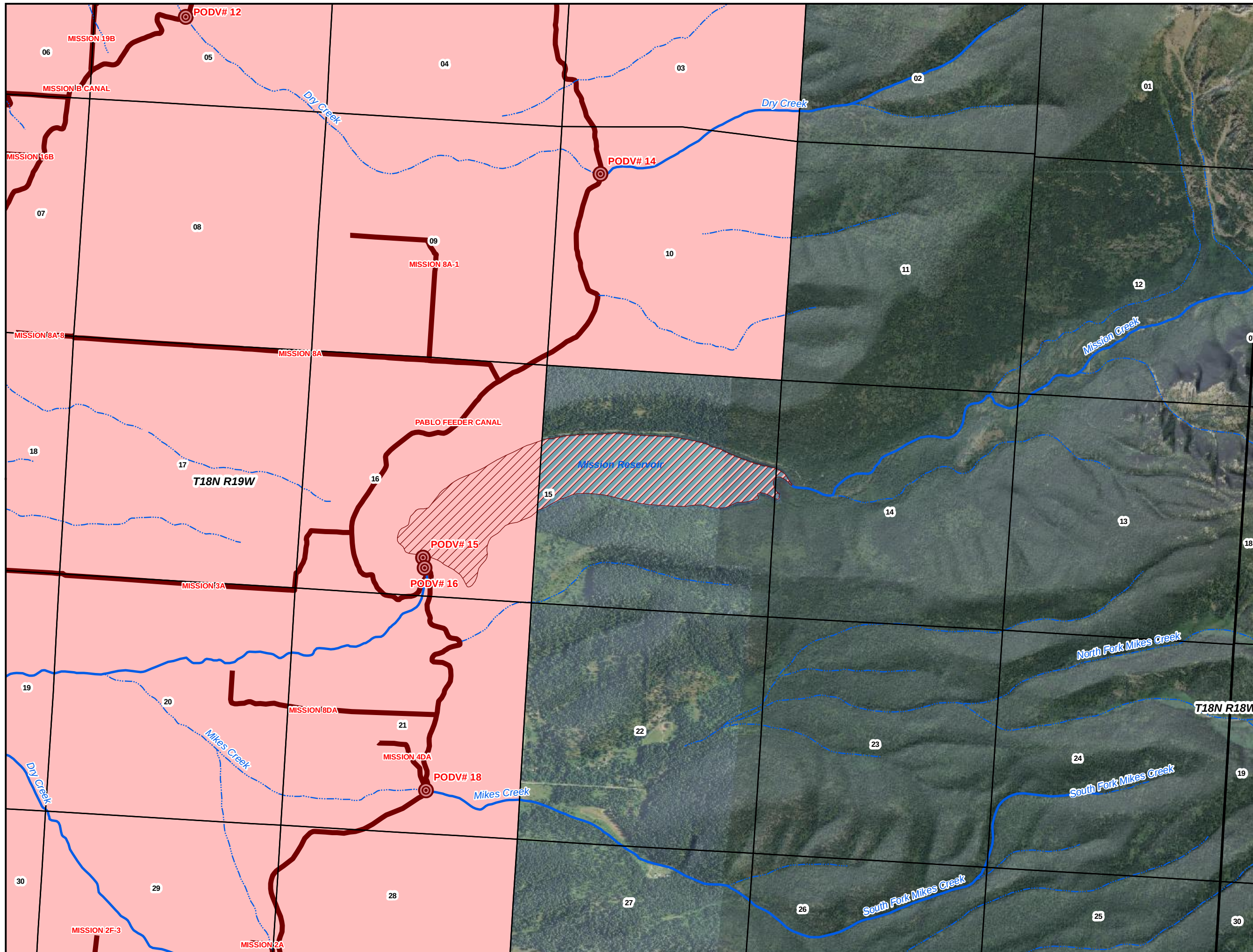
Flathead Indian Reservation

Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Area of Interest

Hot Springs

Arlee

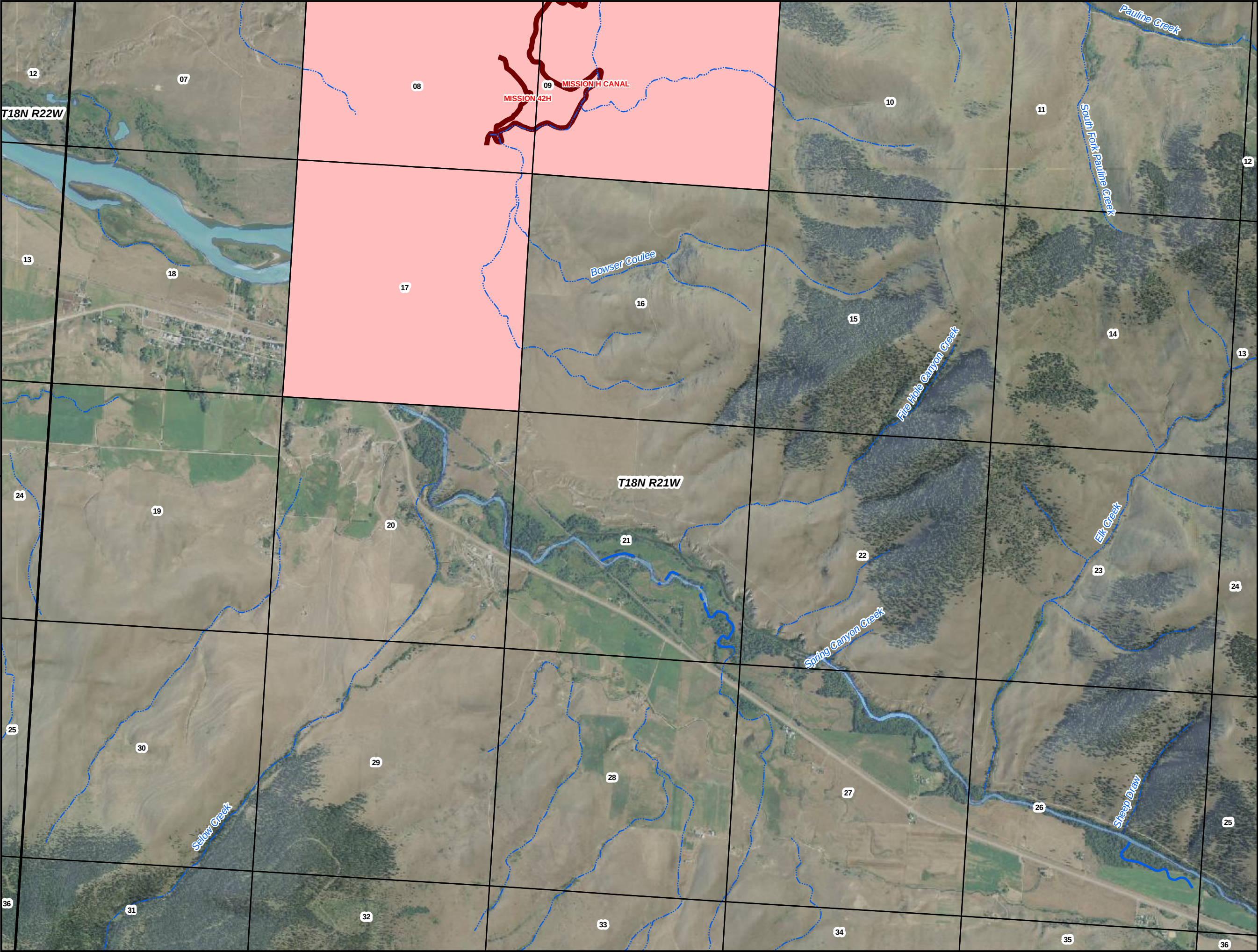
37	25	34		
29	28	31	30	
21	20		22	
13	12	11	14	
9	8	7	10	
	6	5		
		4	3	2

Legend

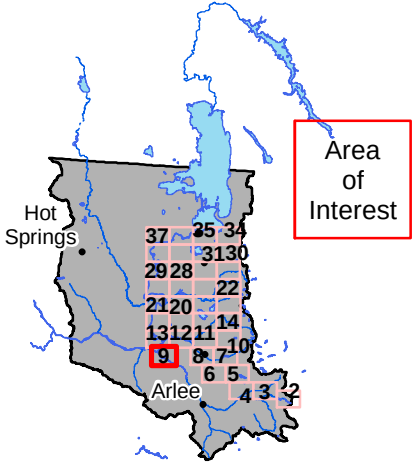
- 0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water
Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos,
12-Kilometer Tiles" courtesy of USDA-Farm Services Agency
Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of
U.S. Geological Survey (USGS), EROS Data Center
(1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 9



Flathead Indian Reservation

Legend

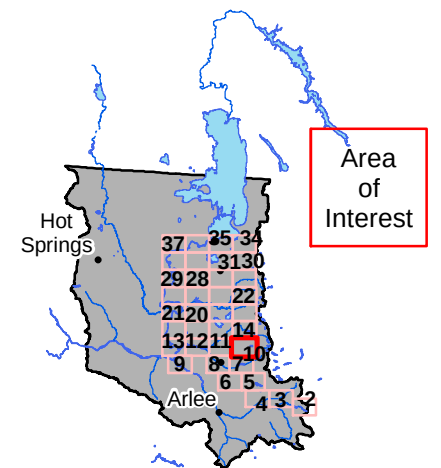
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 10



Flathead Indian Reservation

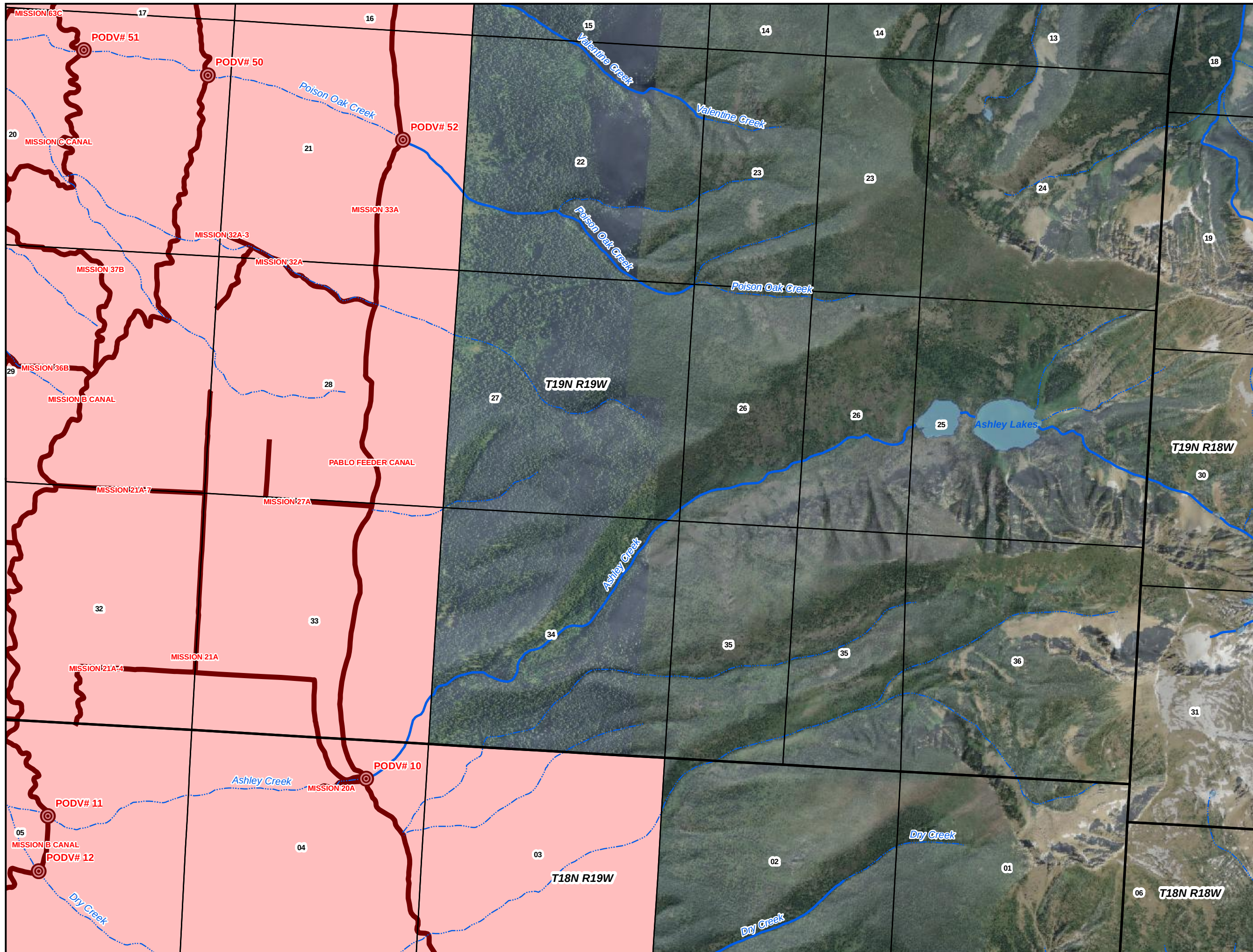
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

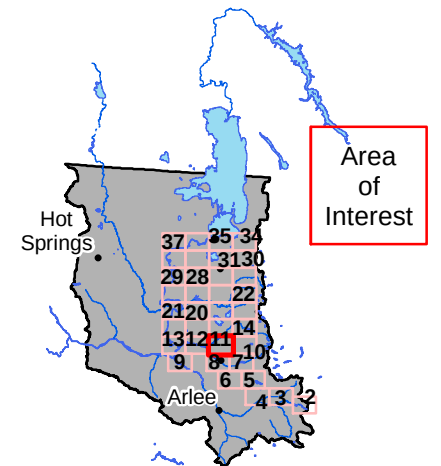
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 11



Flathead Indian Reservation

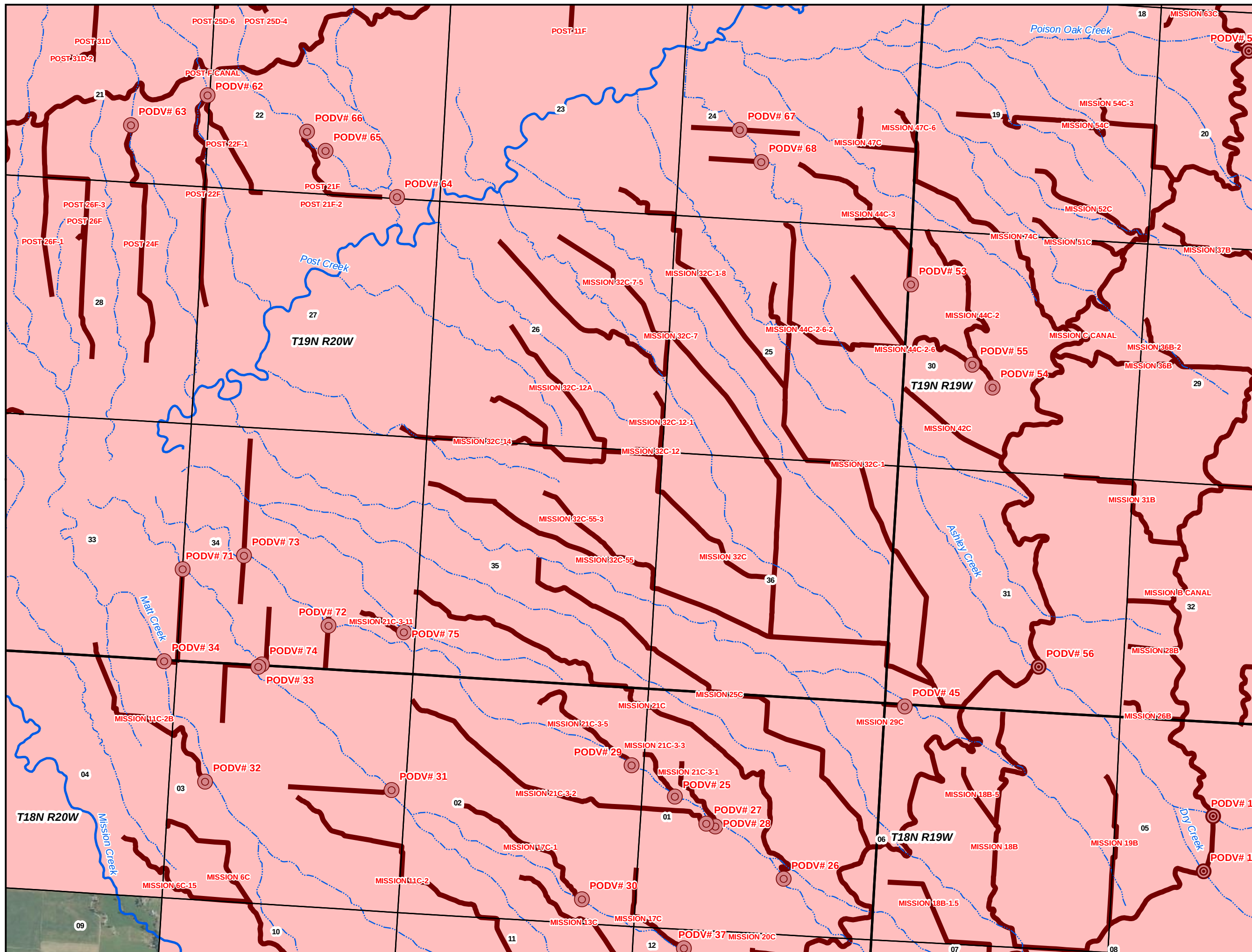
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

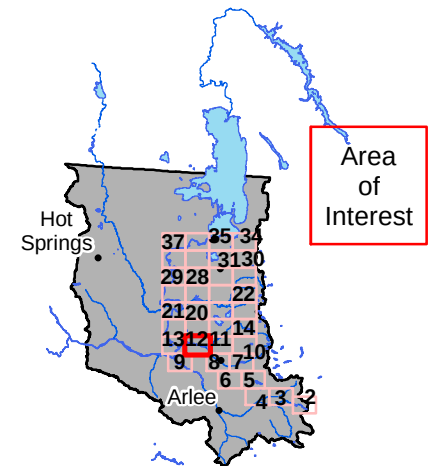
0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 12



Flathead Indian Reservation

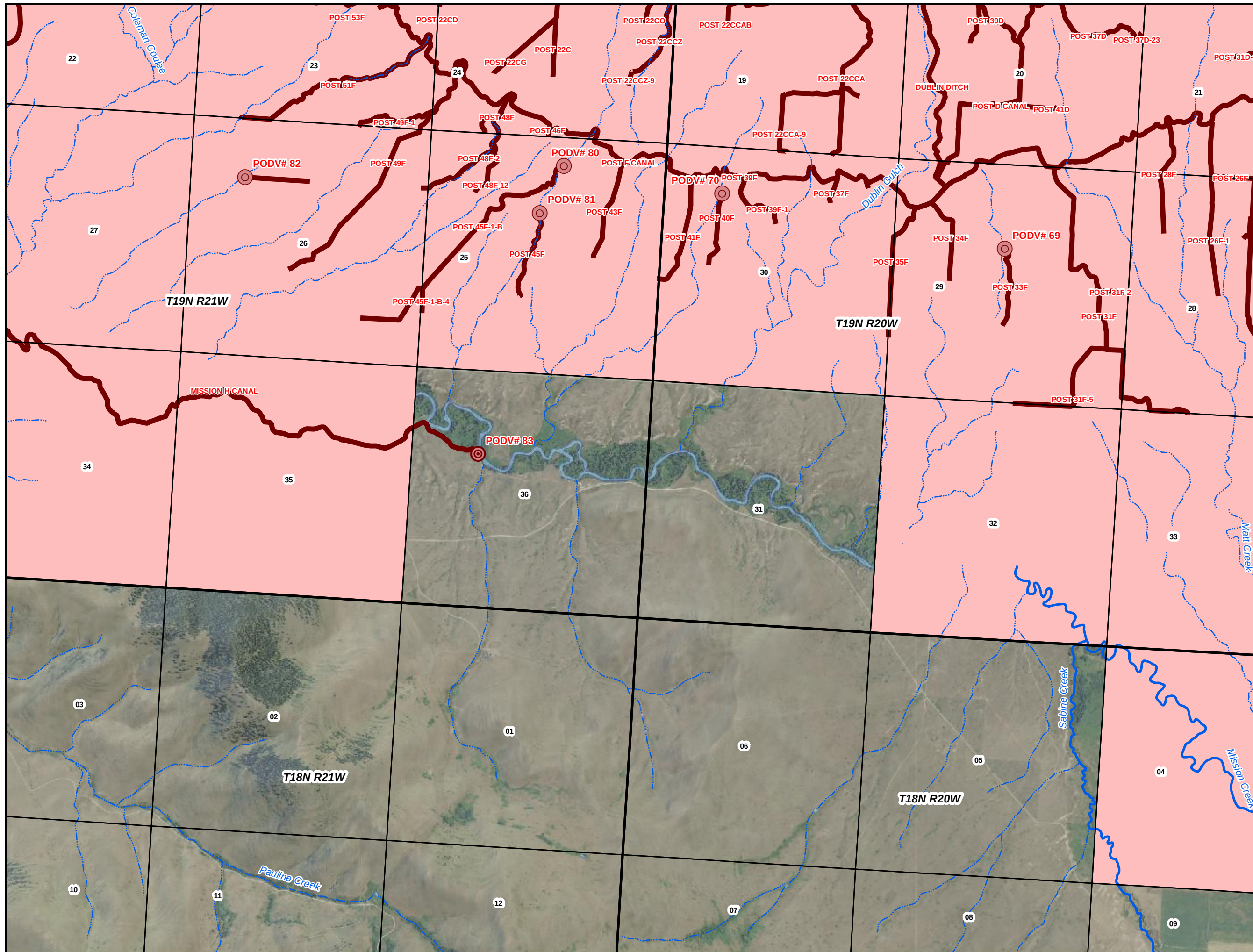
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

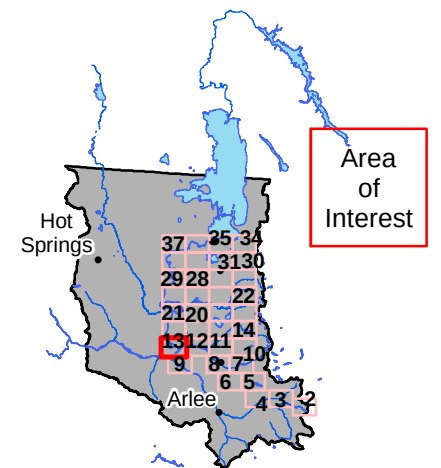
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 13



Flathead Indian Reservation

Legend

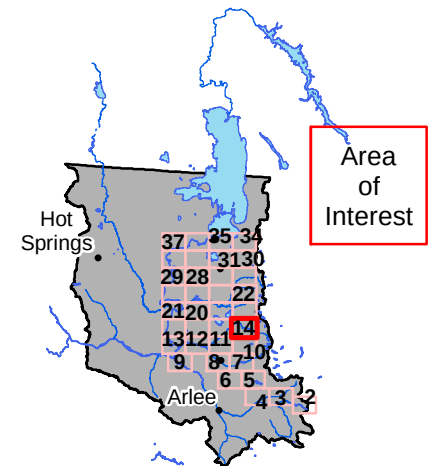
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 14



Flathead Indian Reservation

Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Area of Interest

Hot Springs

Arlee

37	25	34		
29	28	31	30	
21	20	22		
13	12	14		
9	8	7	10	
	6	5		
		4	3	2

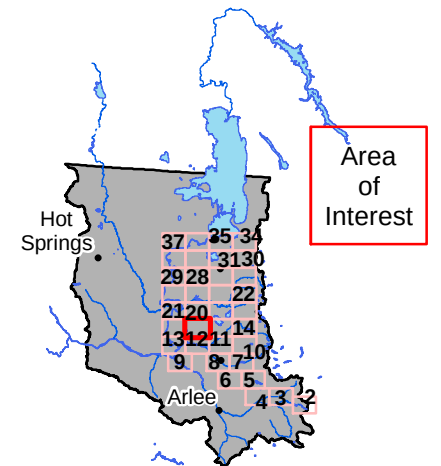
Legend

-
- 0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency
Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 16



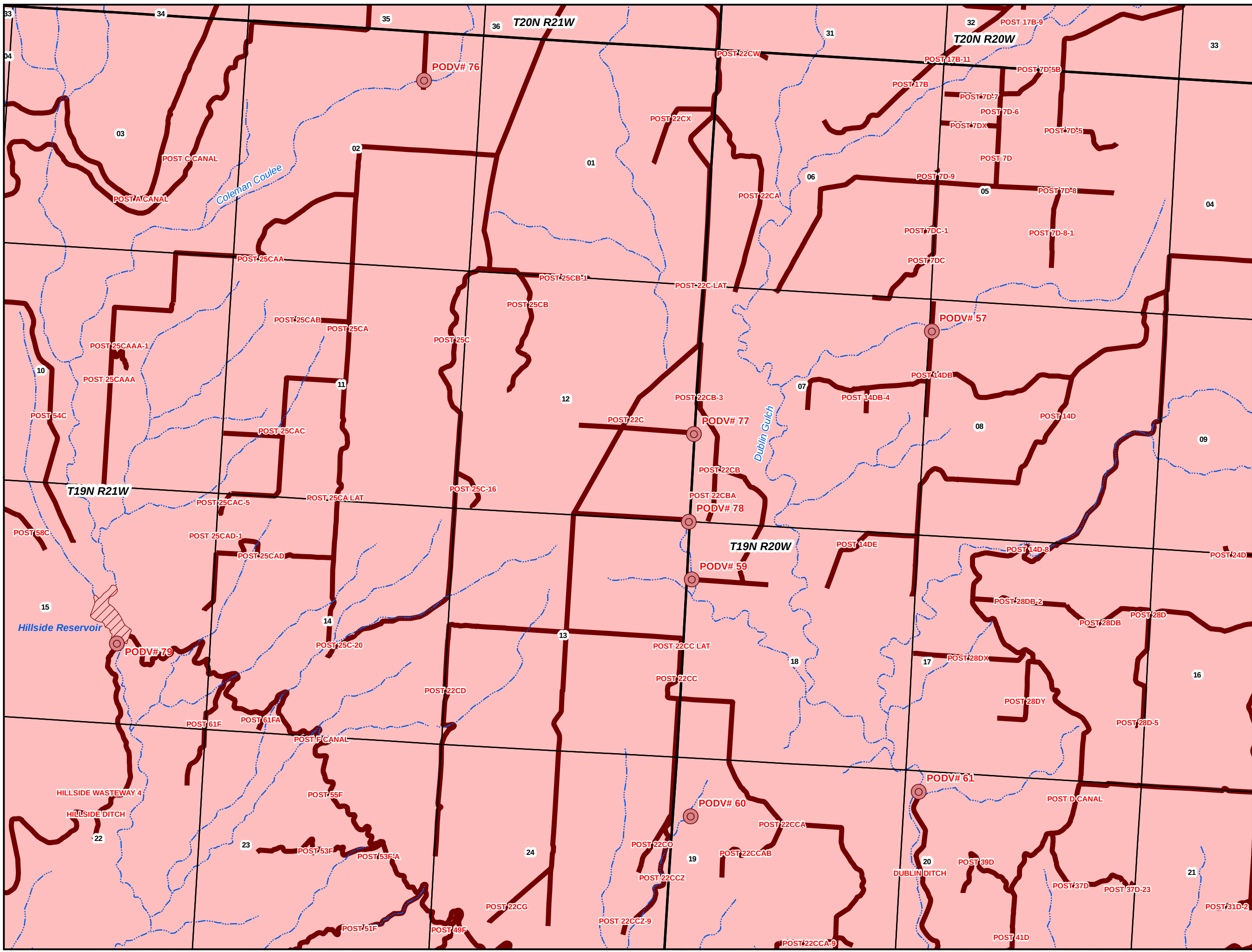
Flathead Indian Reservation

Legend

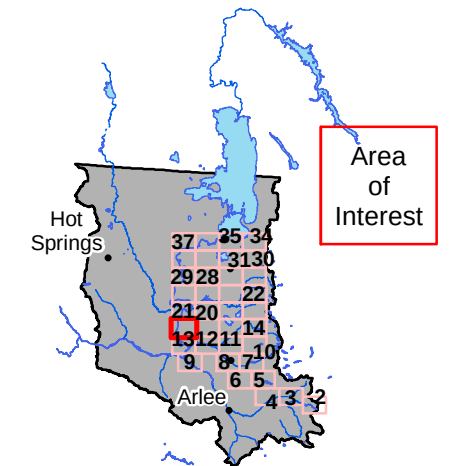
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 17



Flathead Indian Reservation

Legend

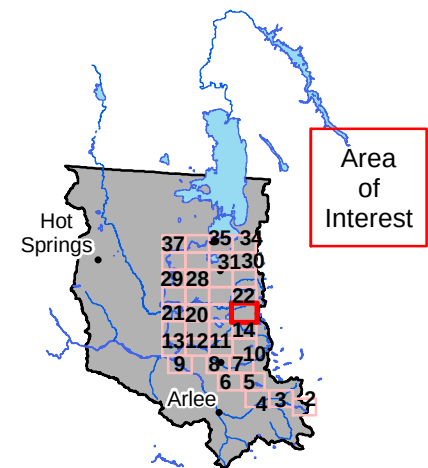
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

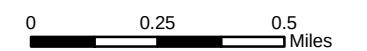
Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052932** **Exhibit 18**



Flathead Indian Reservation

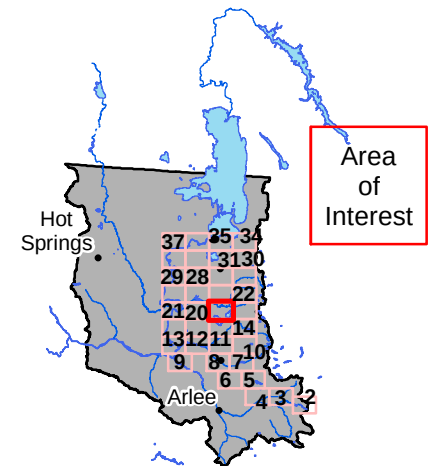
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 19



Flathead Indian Reservation

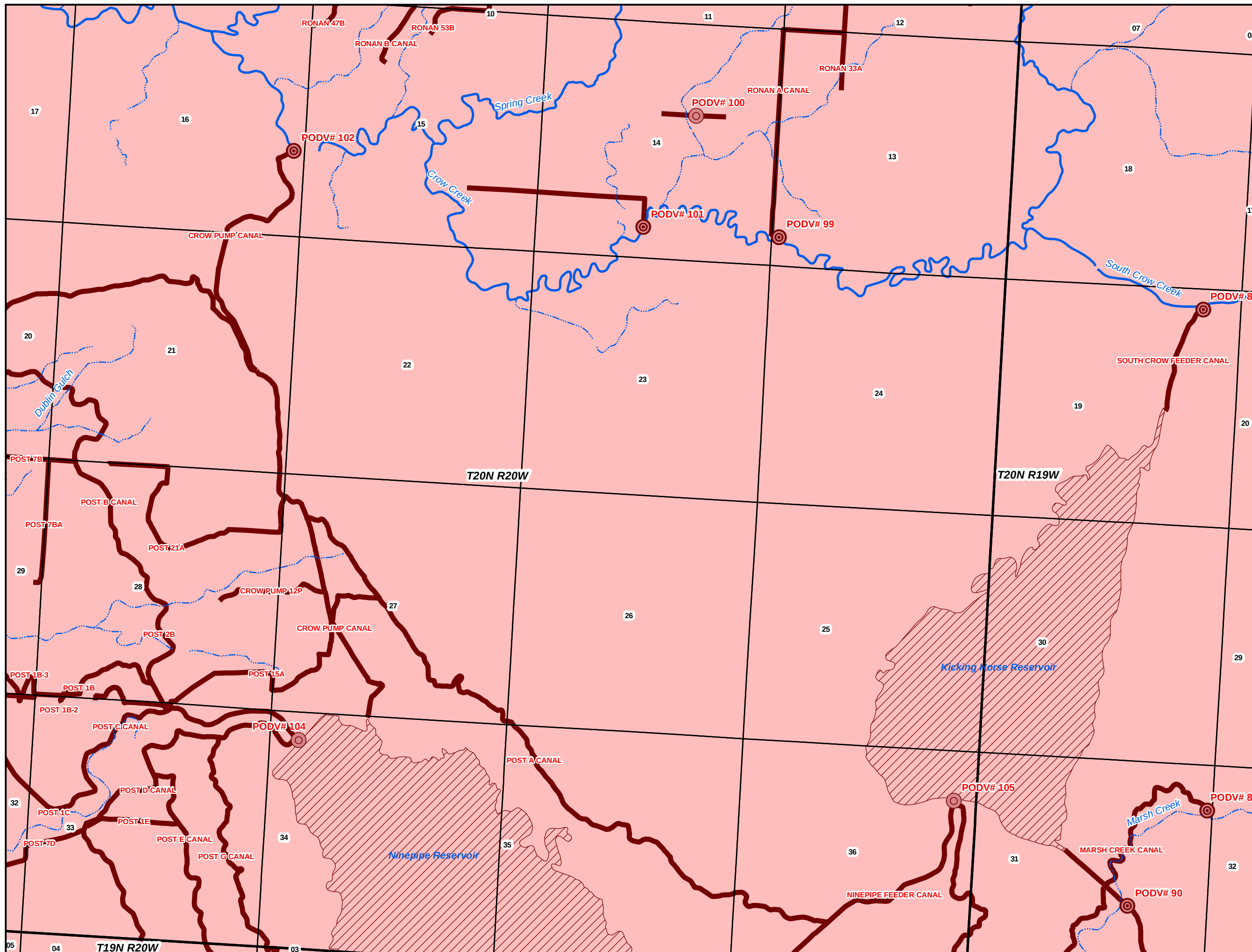
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

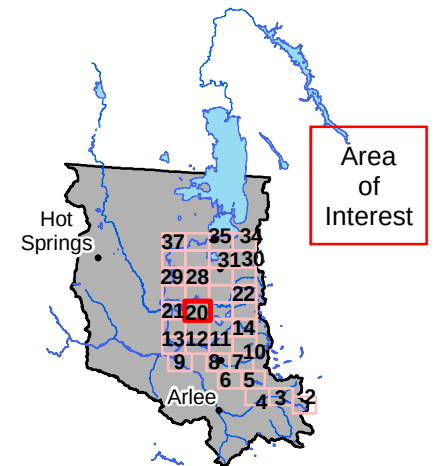
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



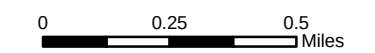
Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 20



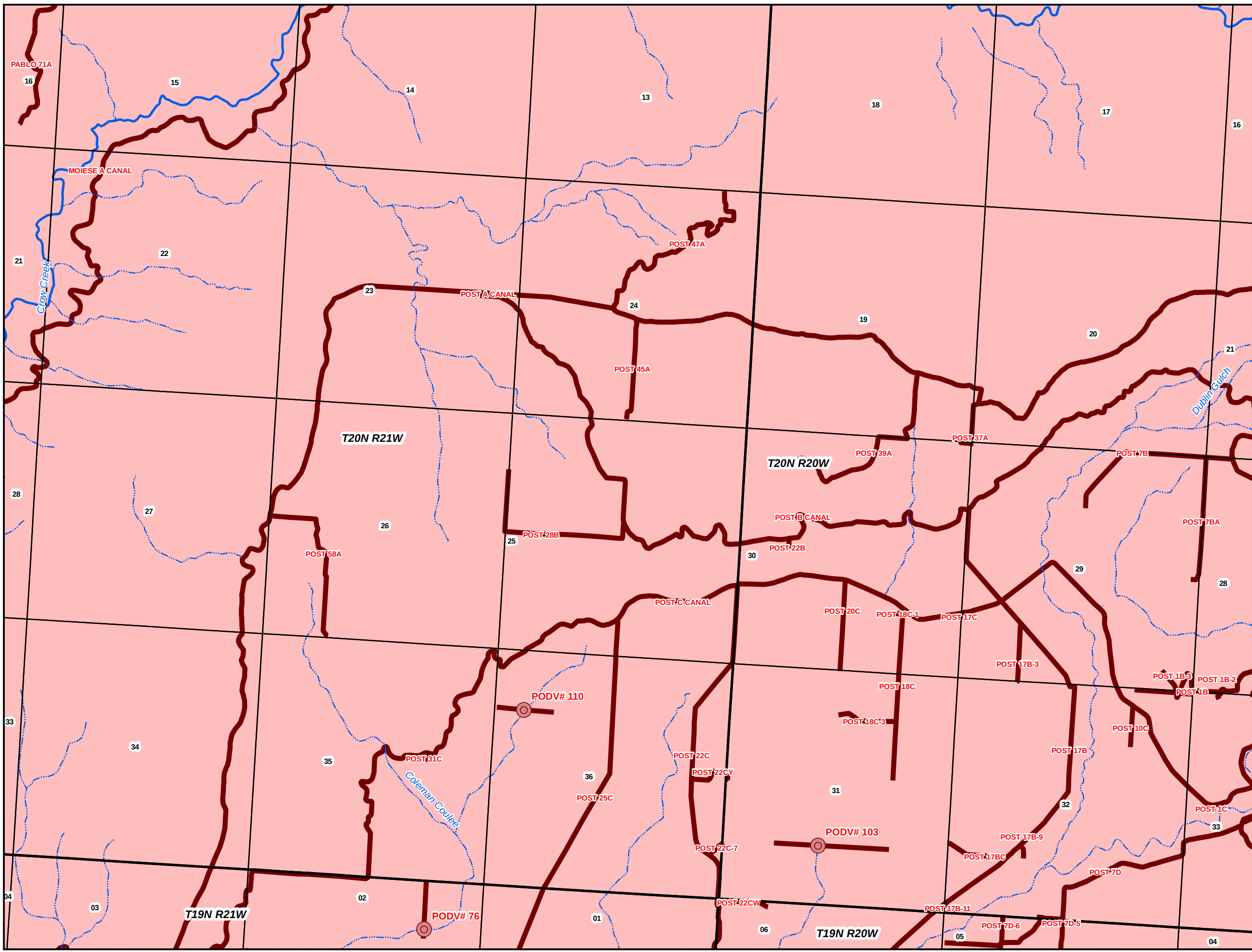
Flathead Indian Reservation

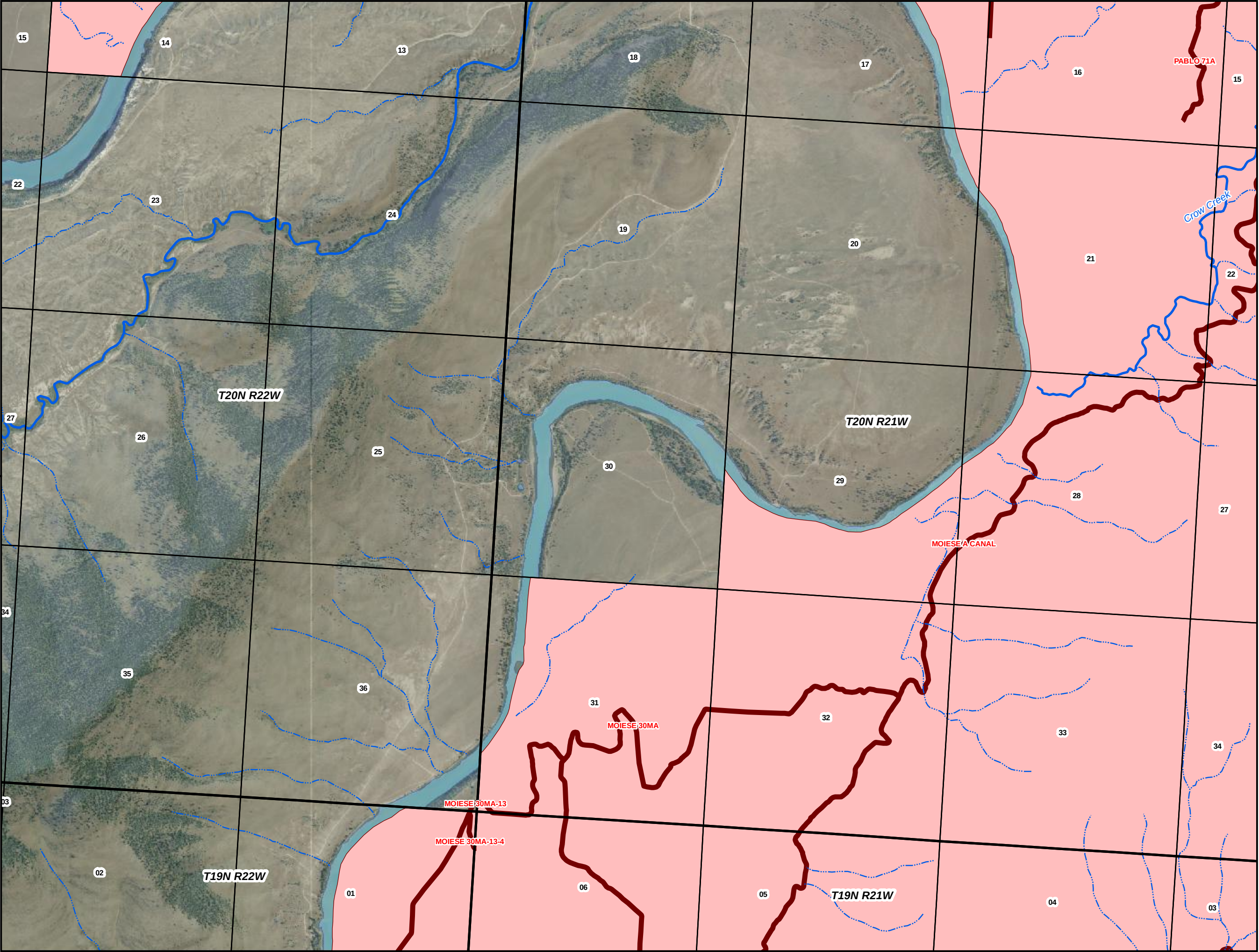
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)





Place of Use
and Point of
Diversion

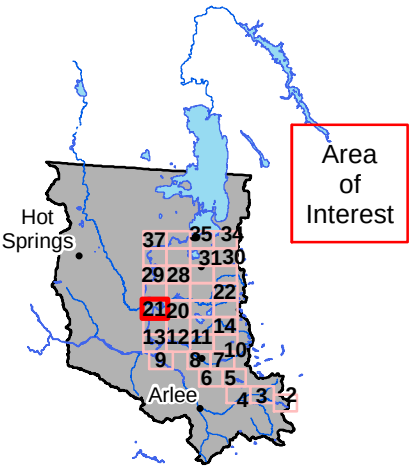
FIIP

Water Use

76L

30052932

Exhibit 21



Flathead Indian Reservation

Legend

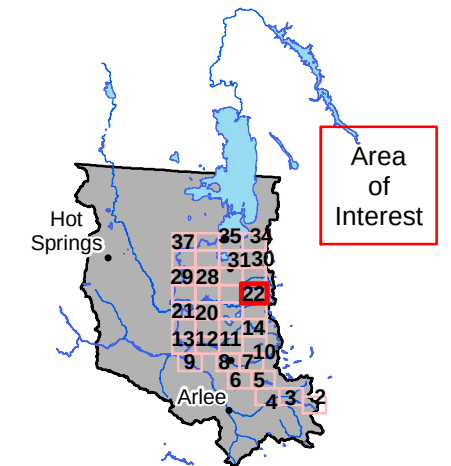
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

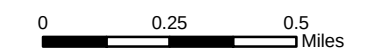
Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052932** Exhibit 22



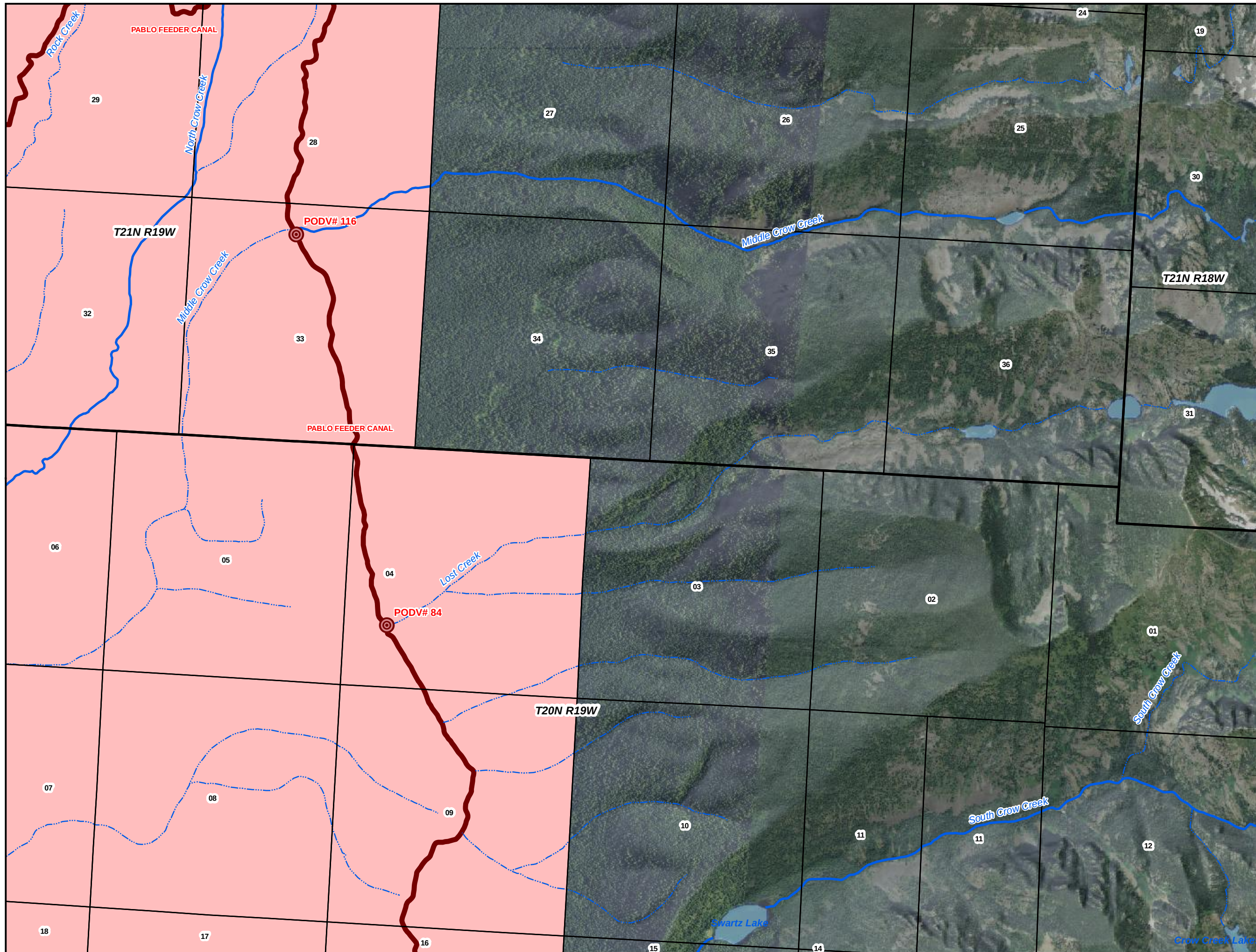
Flathead Indian Reservation

Legend

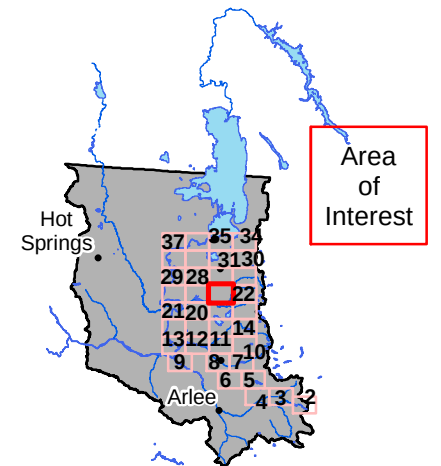
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 23



Flathead Indian Reservation

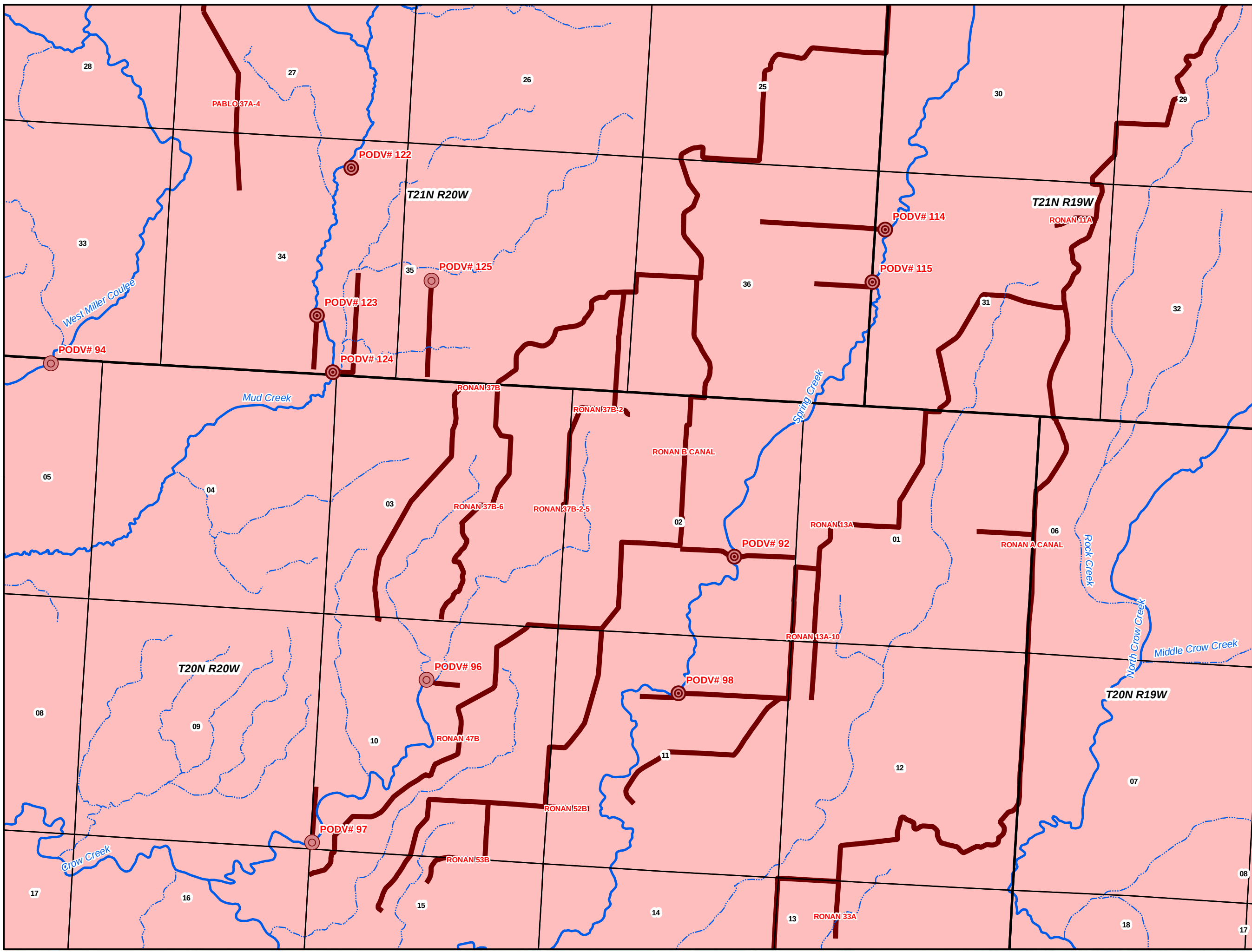
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Legend

-
- 0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

Hot Springs

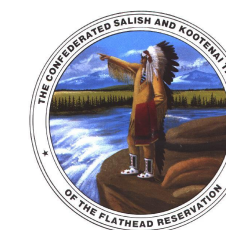
Area of Interest

Arlee

37 25 34
31 30
29 28
22
21 20
13 12 11
9 8 7 10
6 5
4 3 2

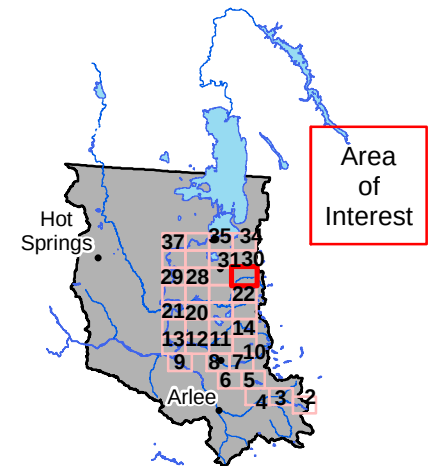
Legend

-



POU/POD Data Source: CSKT-MT Compact FIIP Water
Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos,
12-Kilometer Tiles" courtesy of USDA-Farm Services Agency
Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of
U.S. Geological Survey (USGS), EROS Data Center
(1-arc second)

Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 26



Flathead Indian Reservation

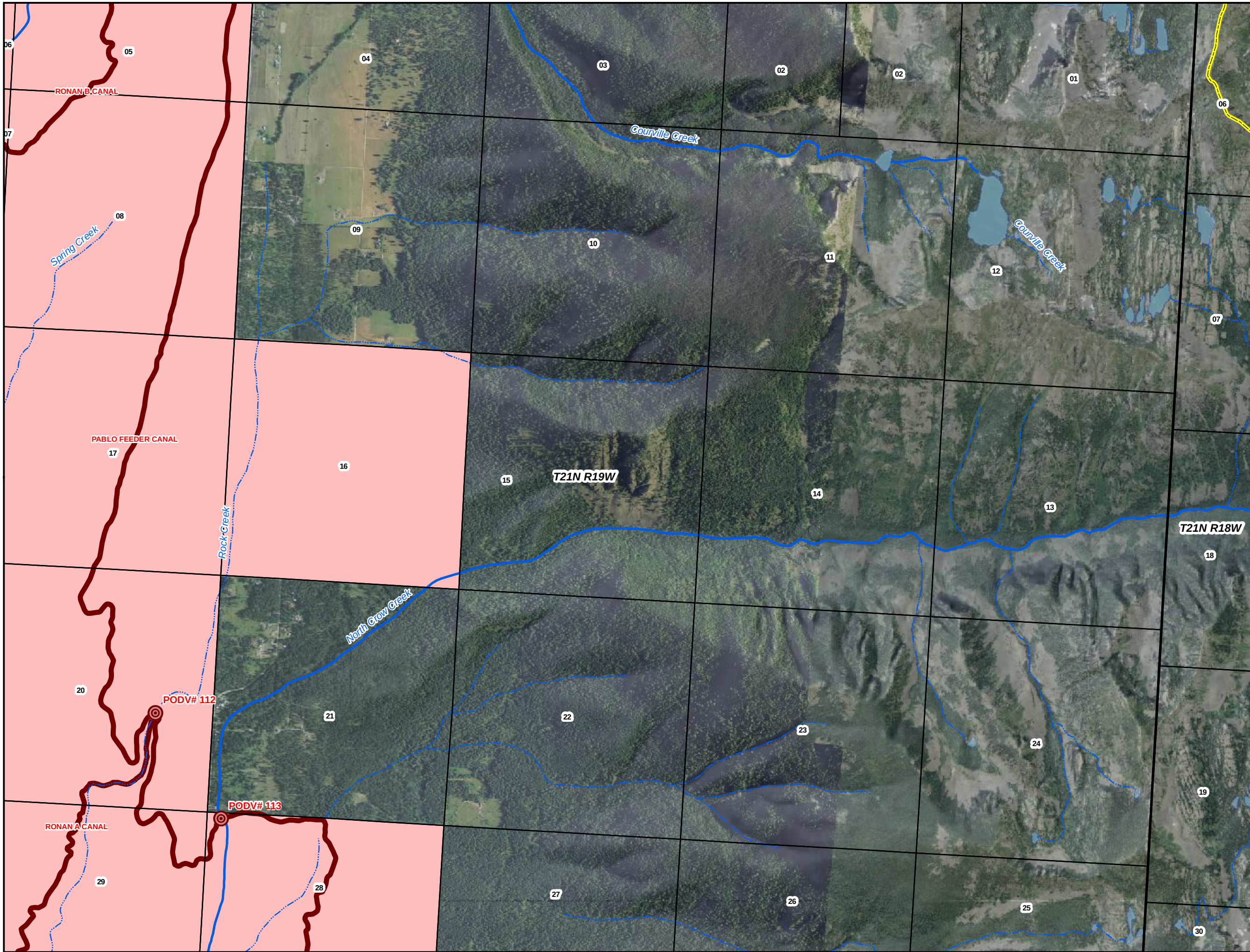
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

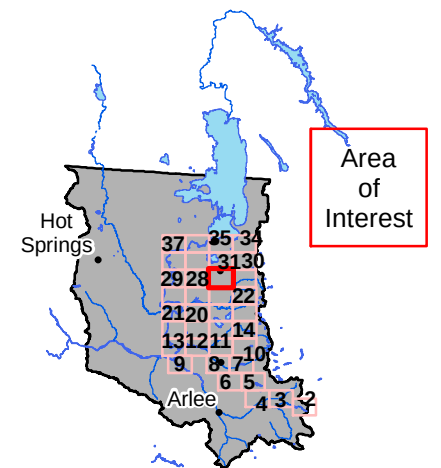
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



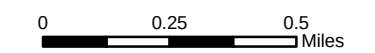
Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 27



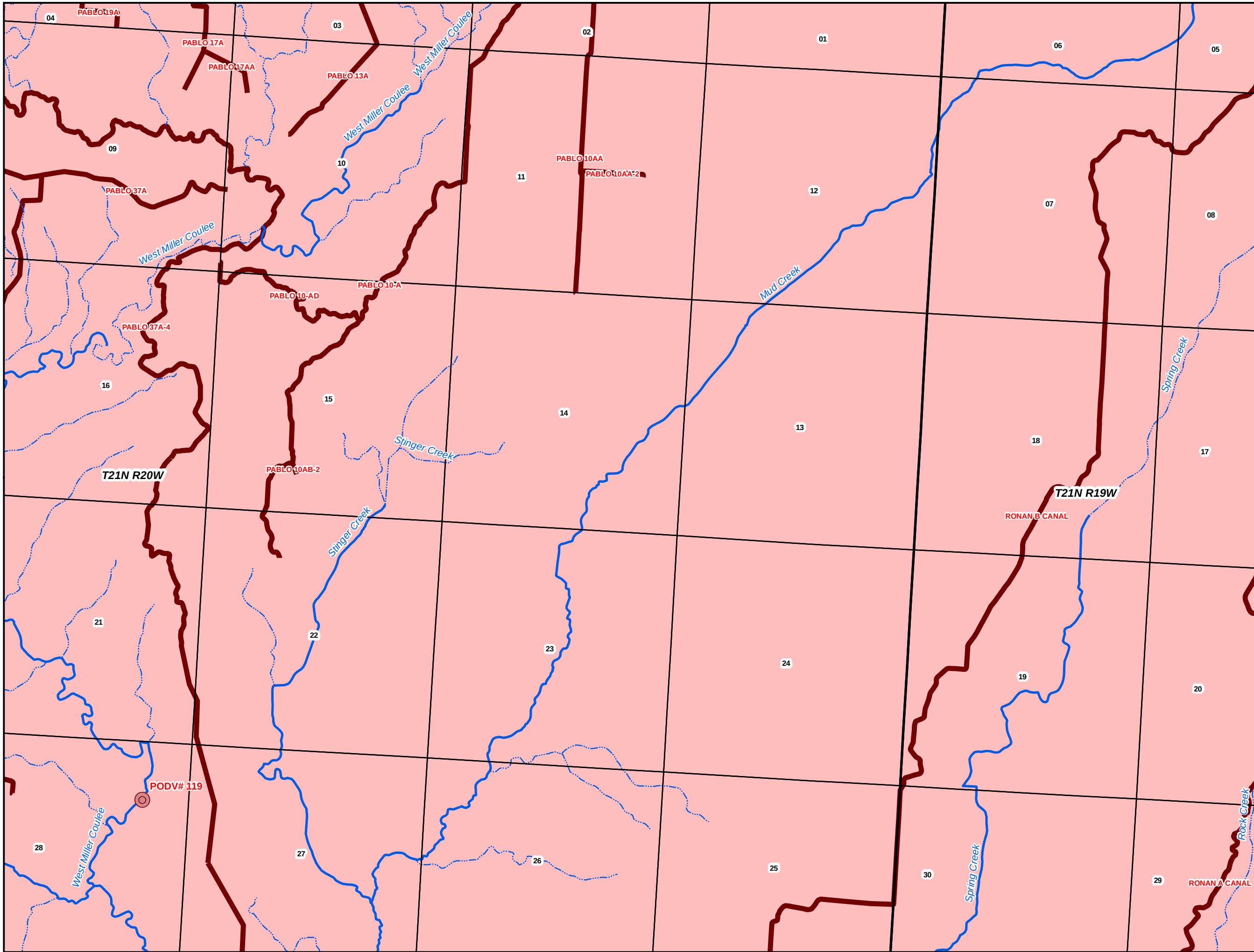
Flathead Indian Reservation

Legend

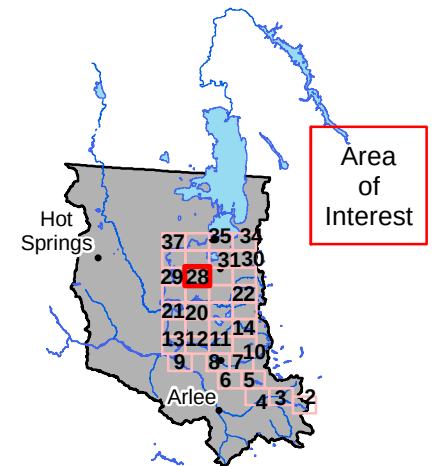
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 28

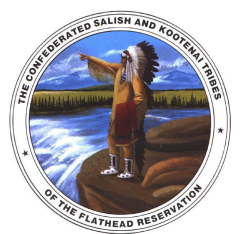


Flathead Indian Reservation

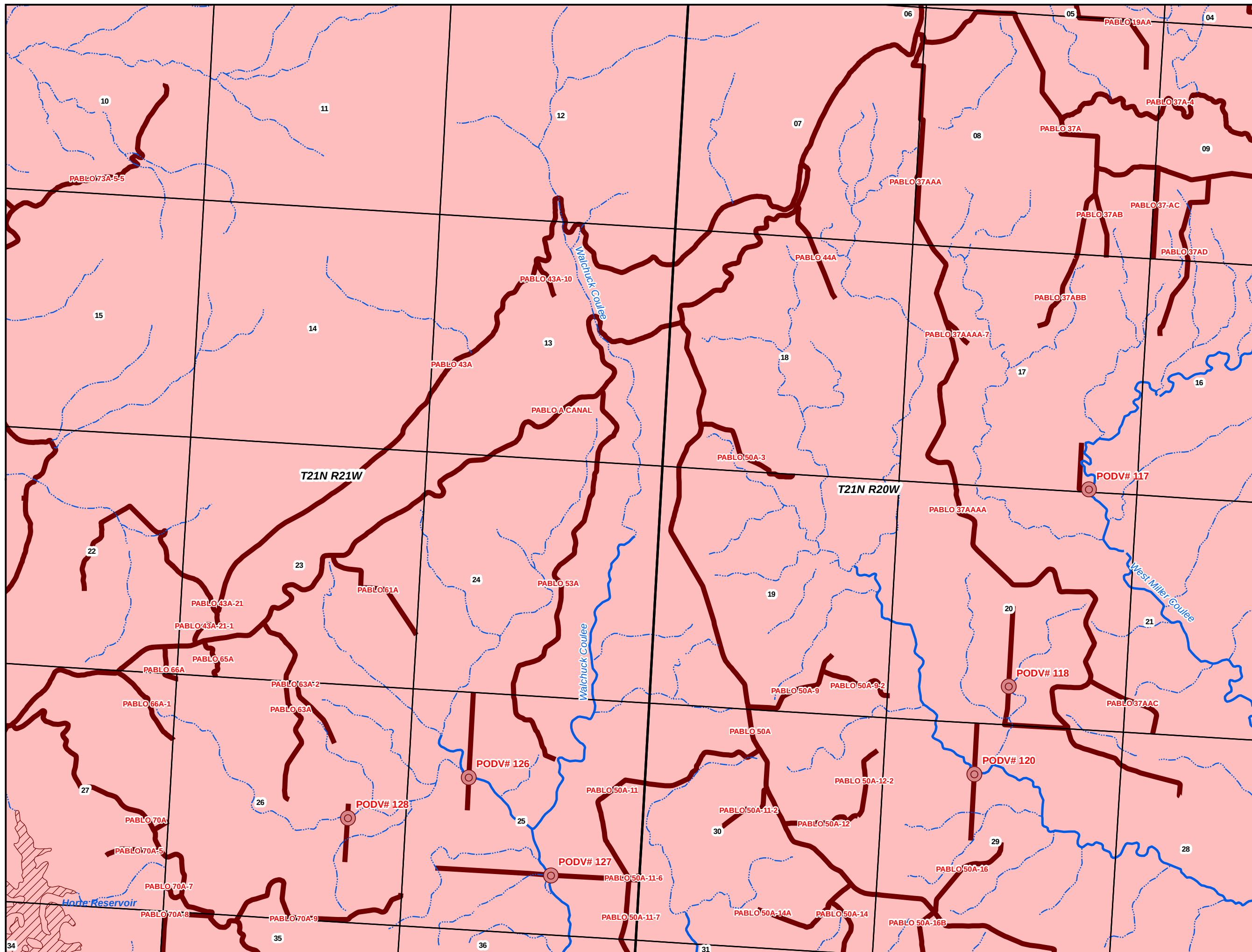
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

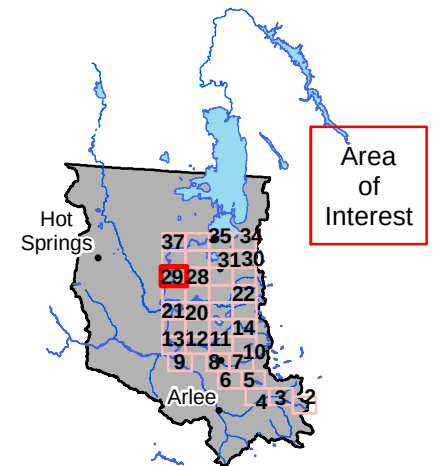
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 29



Flathead Indian Reservation

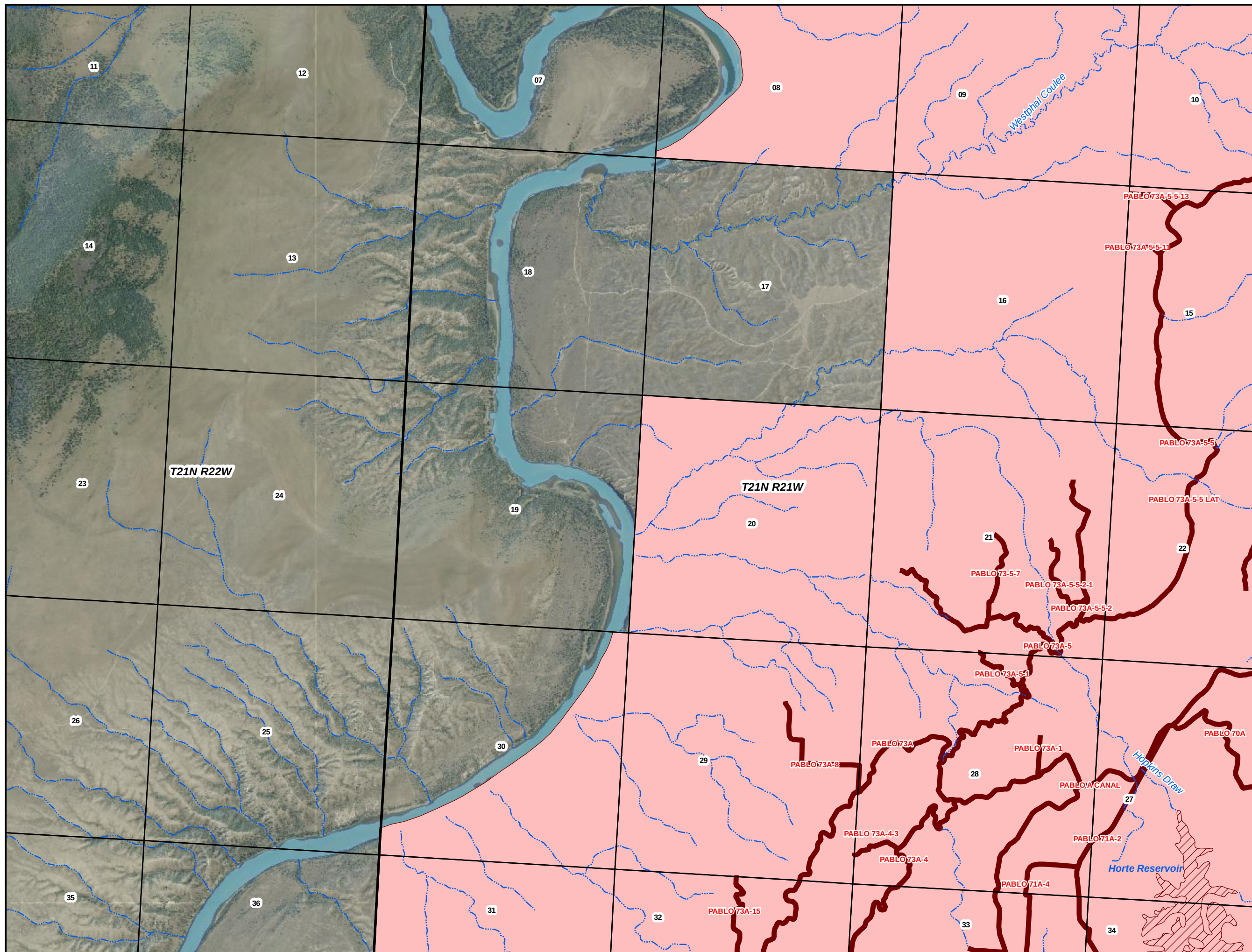
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

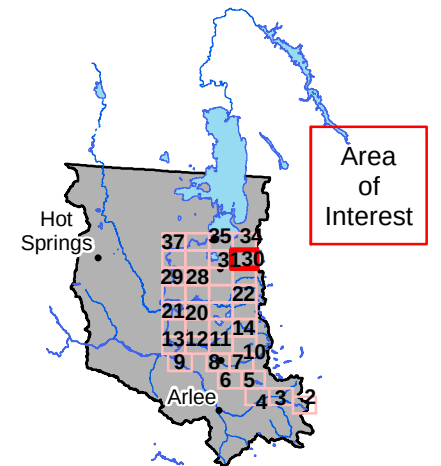
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



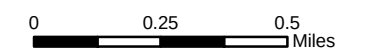
Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 30



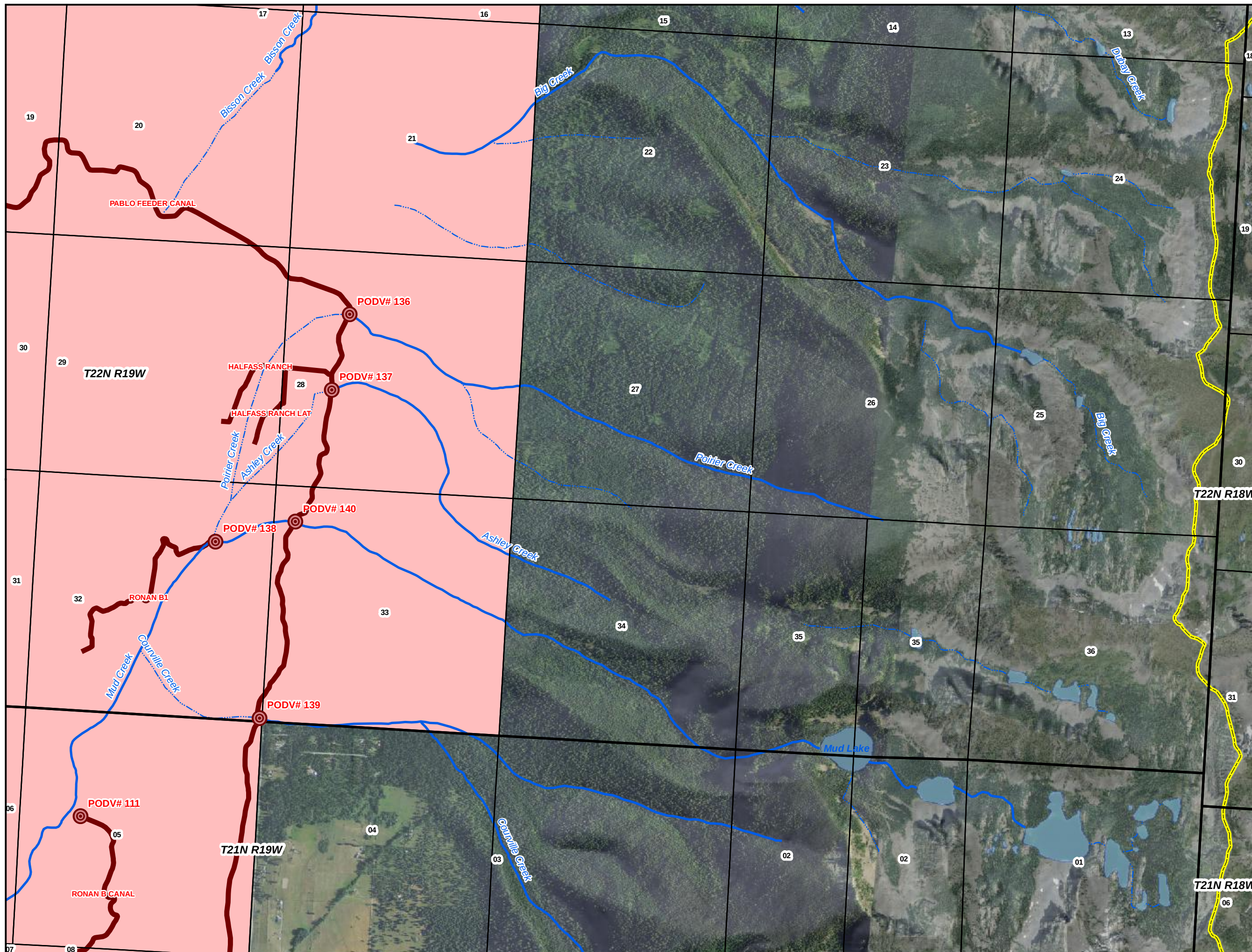
Flathead Indian Reservation

Legend

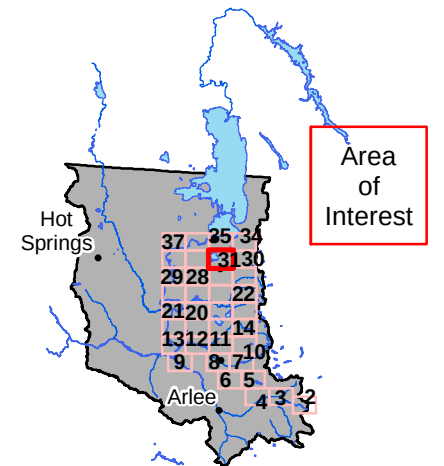
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 31



Flathead Indian Reservation

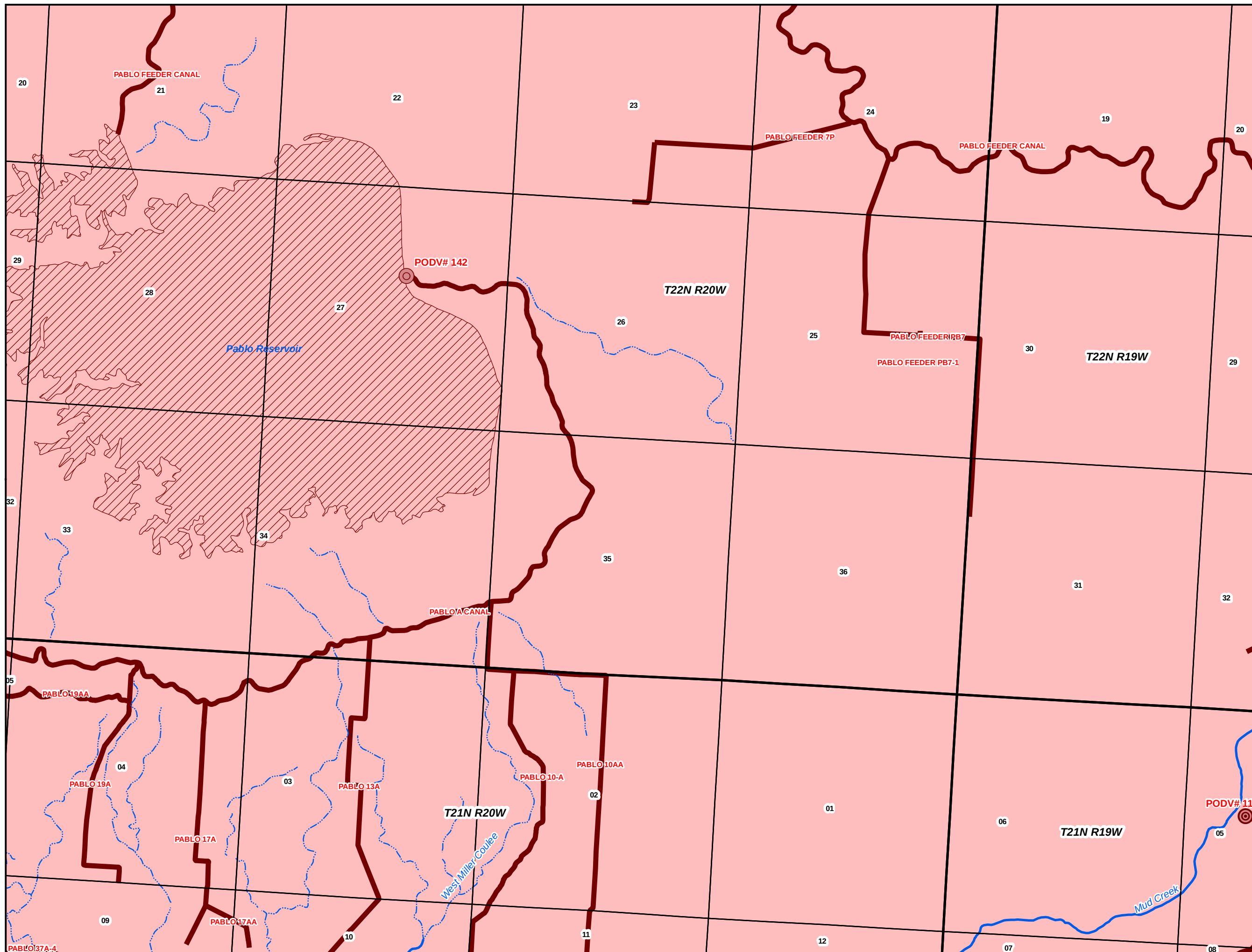
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

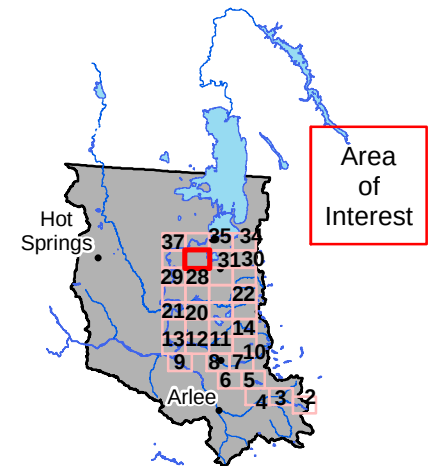
0 0.25 0.5
Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 32



Flathead Indian Reservation

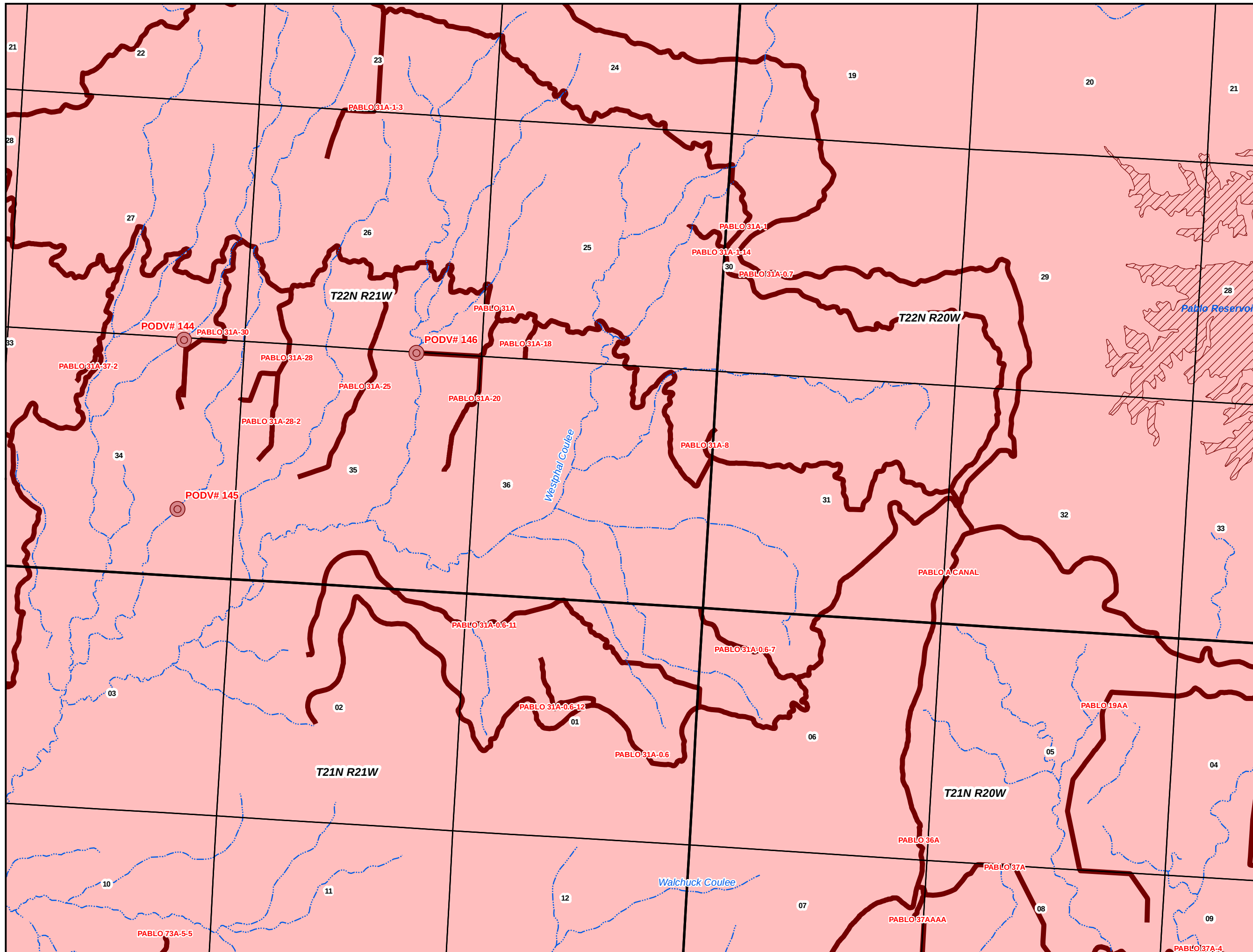
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

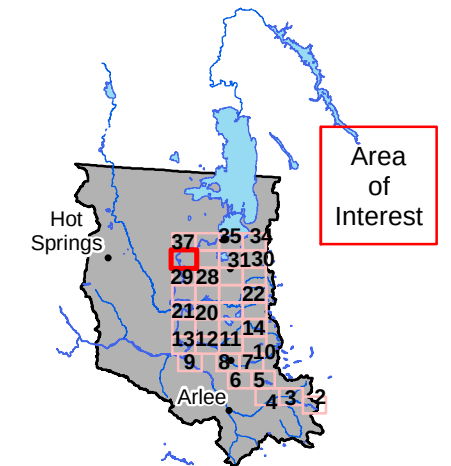
0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



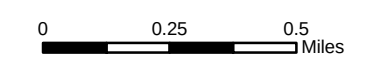
Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 33



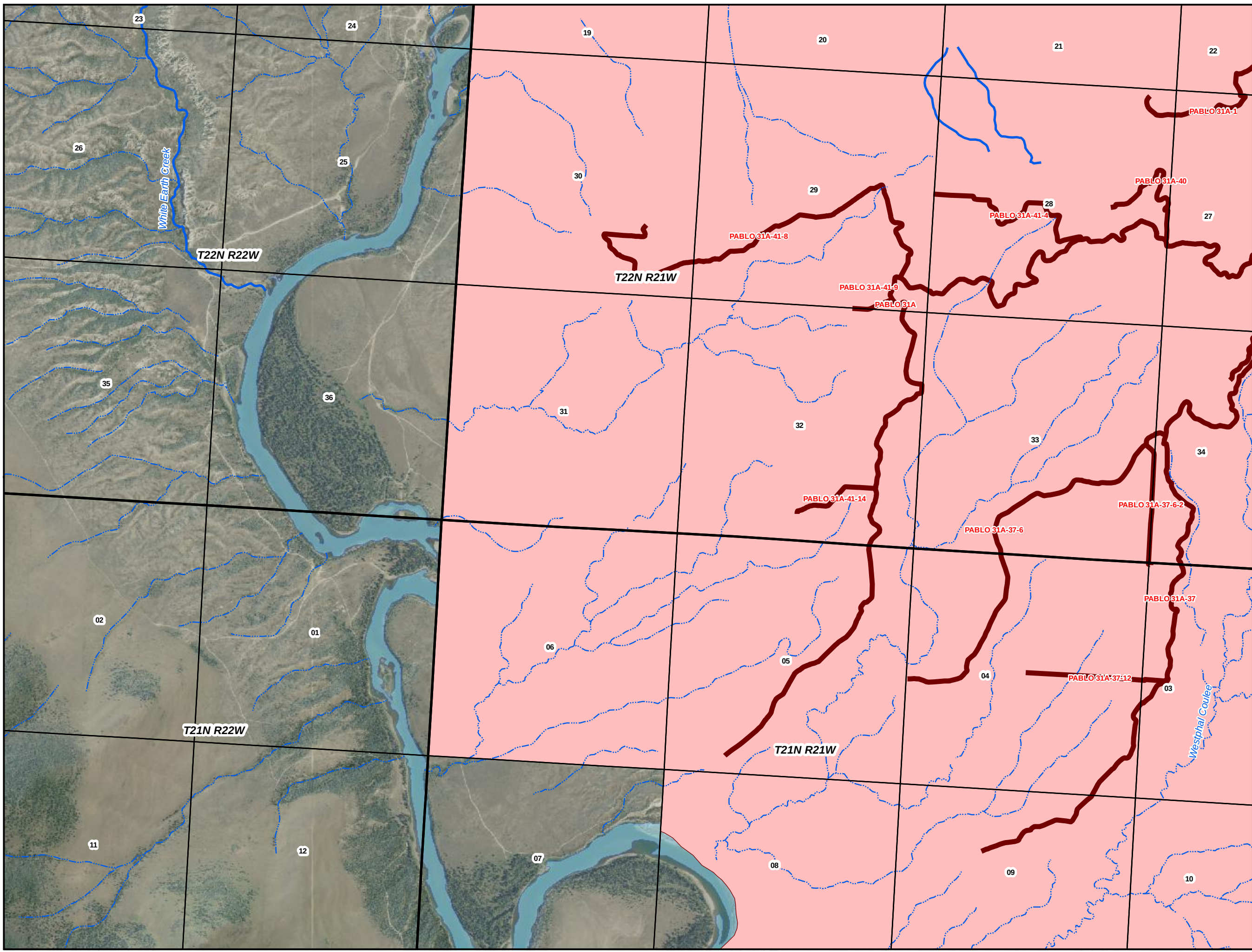
Flathead Indian Reservation

Legend

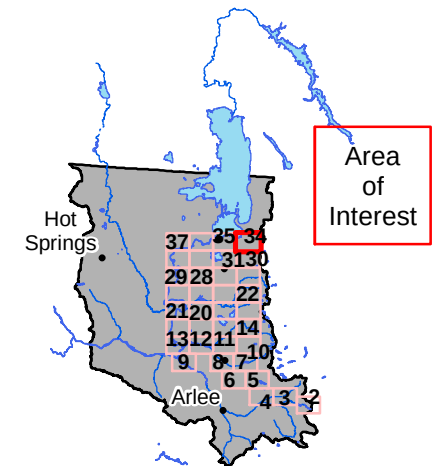
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



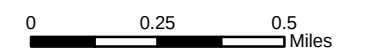
Place of Use and Point of Diversion *FIIP* Water Use **76L** **30052932** **Exhibit 34**



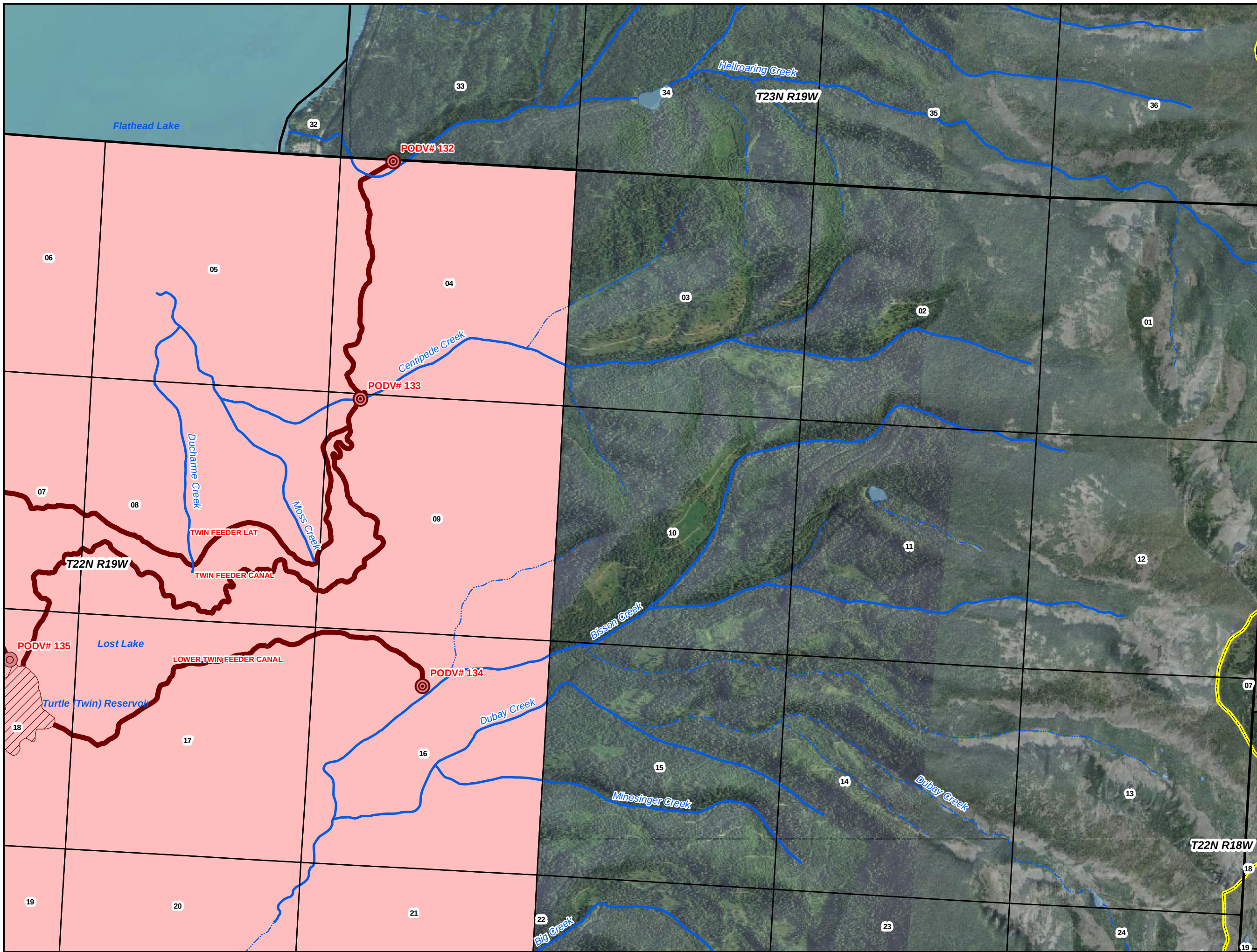
Flathead Indian Reservation

Legend

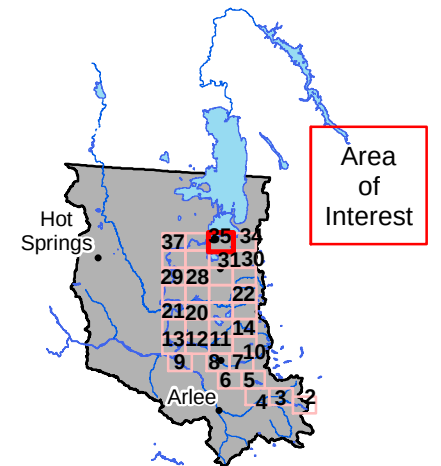
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
 Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
 Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 35



Flathead Indian Reservation

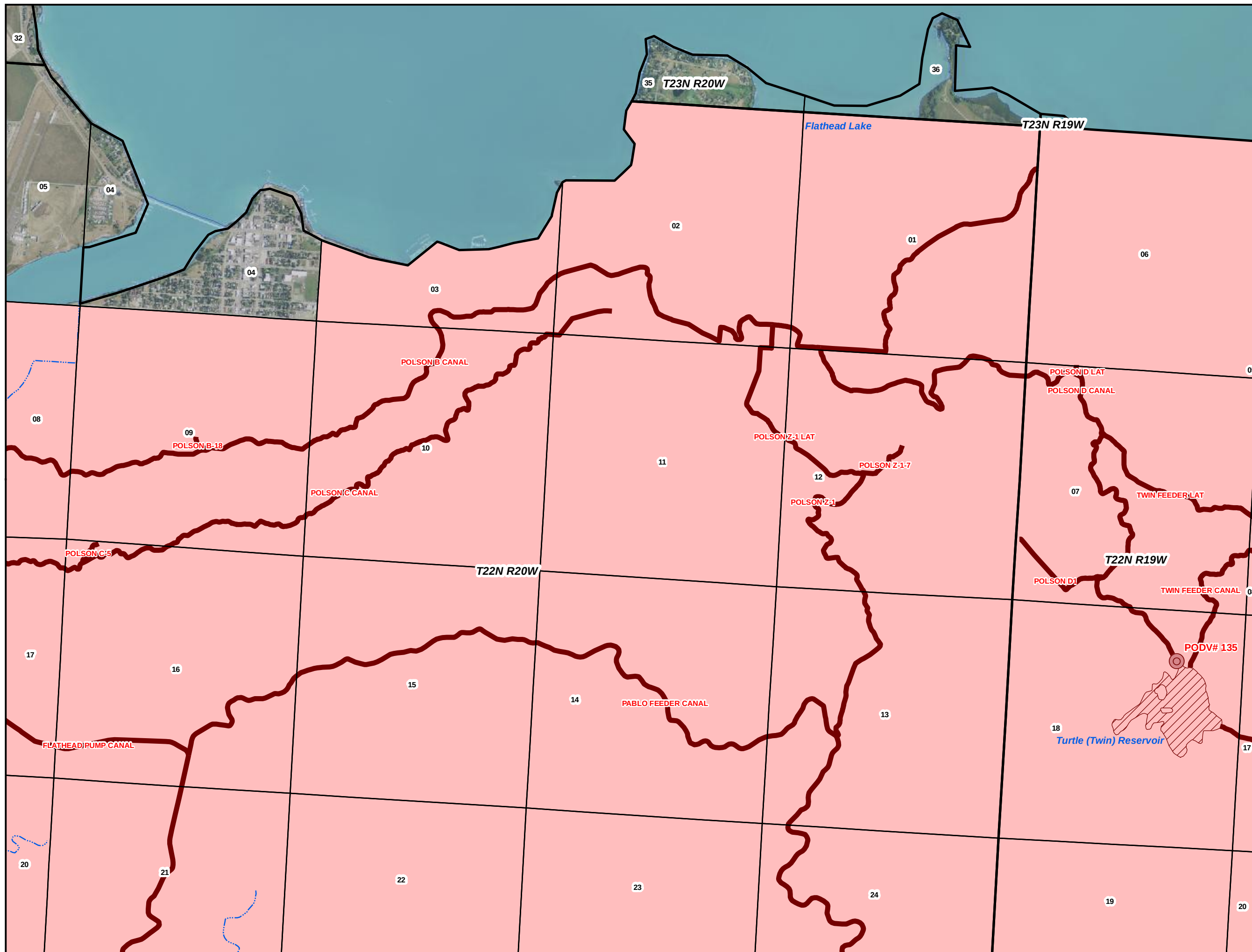
Legend

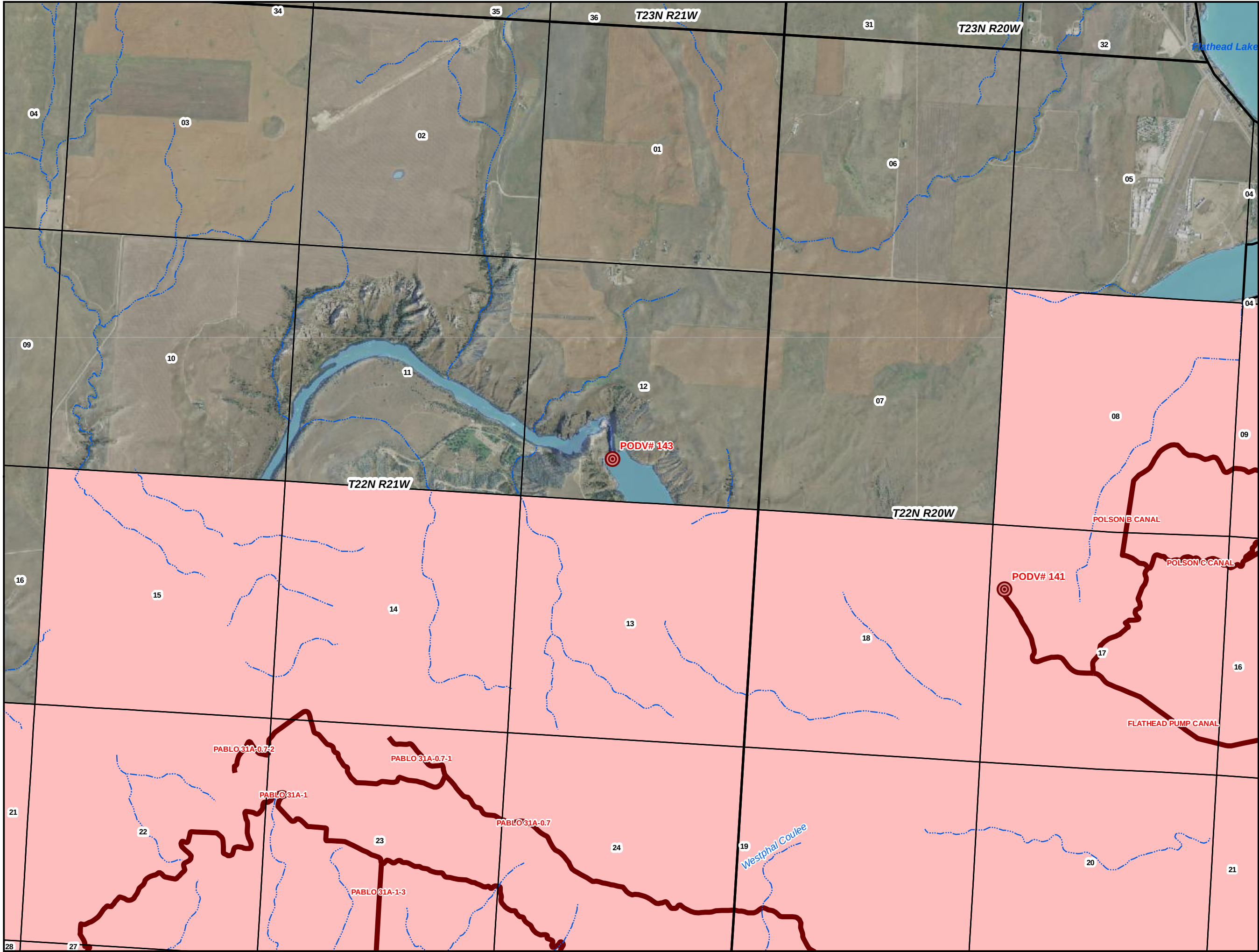
- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5 Miles

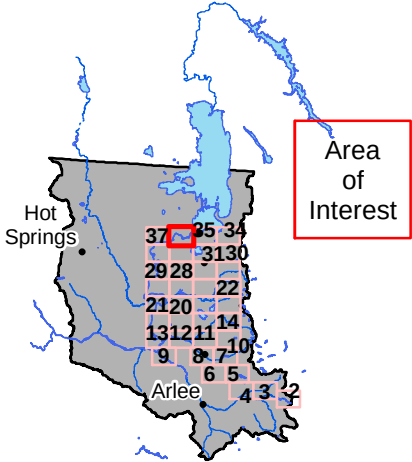


POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)





Place of Use
and Point of
Diversion
FIIP
Water Use
76L
30052932
Exhibit 36

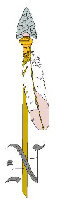


Flathead Indian Reservation

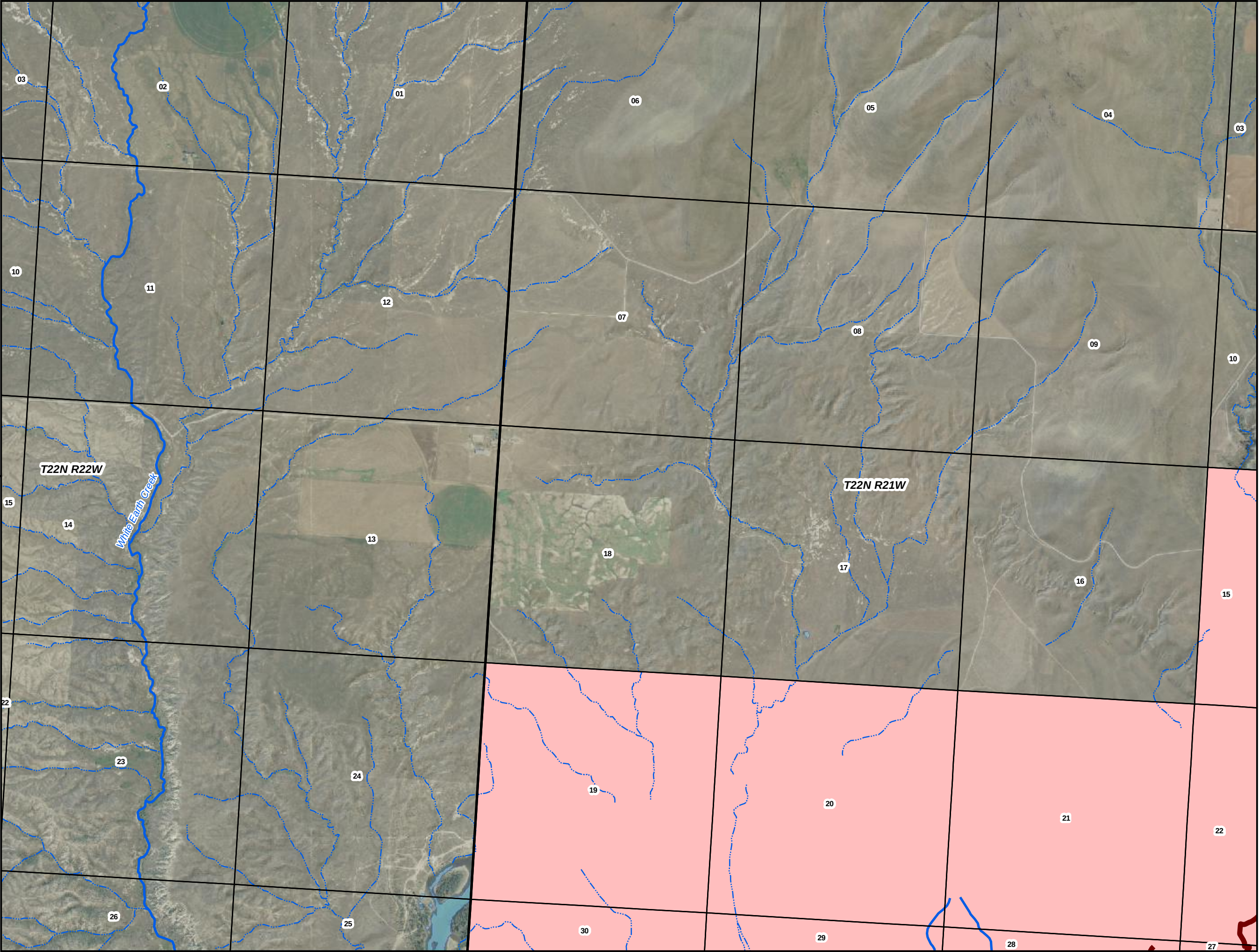
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5 Miles



POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency, Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)



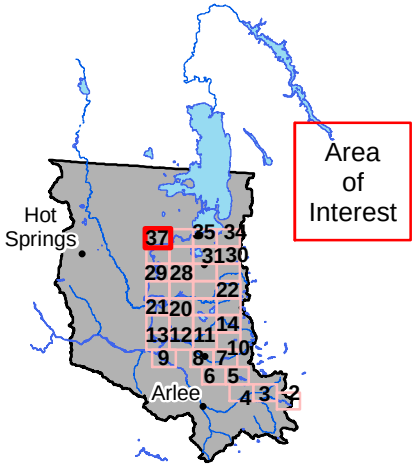
Place of Use
and Point of
Diversion

FIIP
Water Use

76L

30052932

Exhibit 37

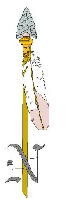


Flathead Indian Reservation

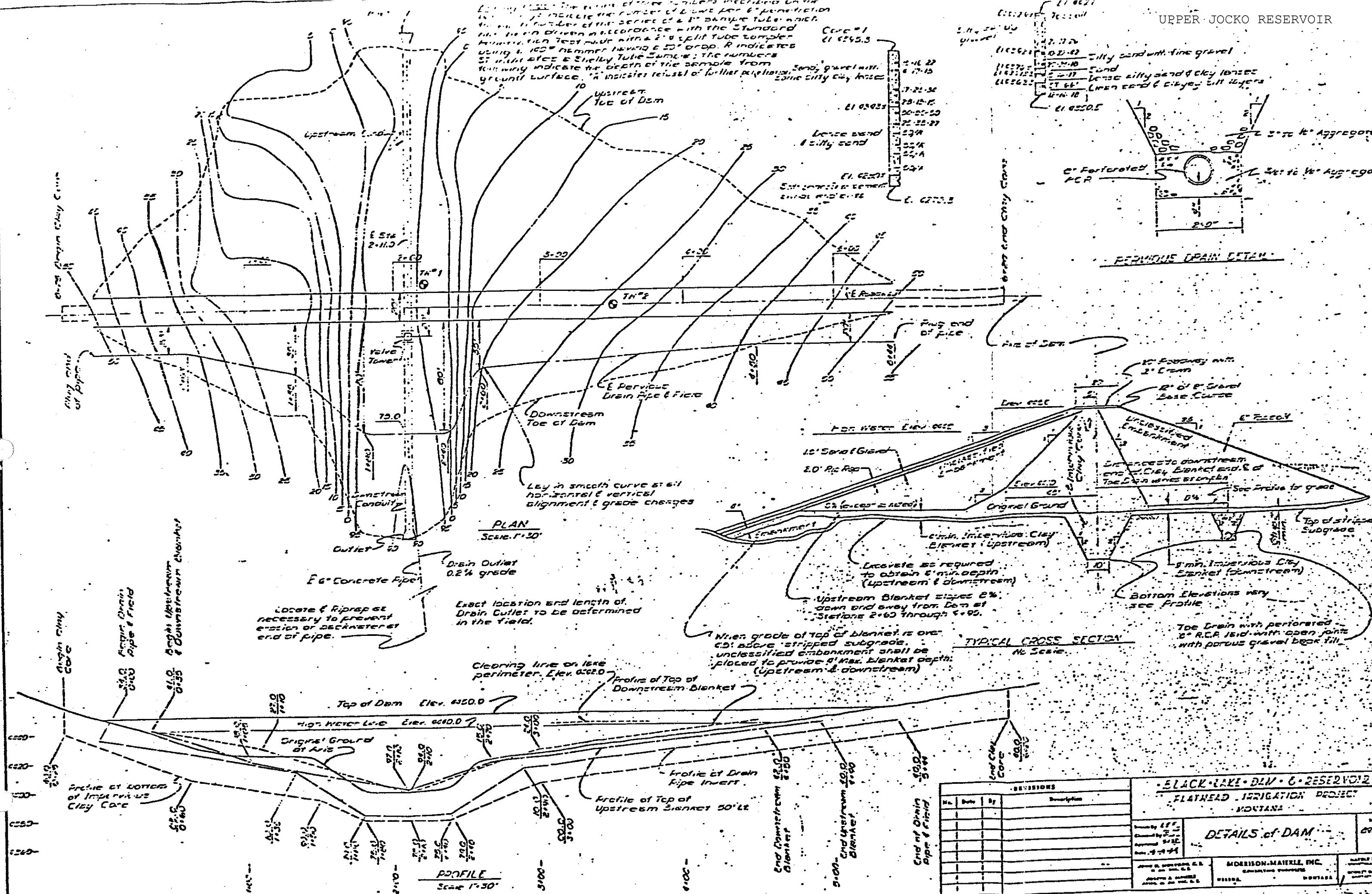
Legend

- Place of Use
- Primary Point(s) of Diversion
- Secondary Point(s) of Diversion
- Ditch or Pipeline
- Reservoir

0 0.25 0.5
Miles

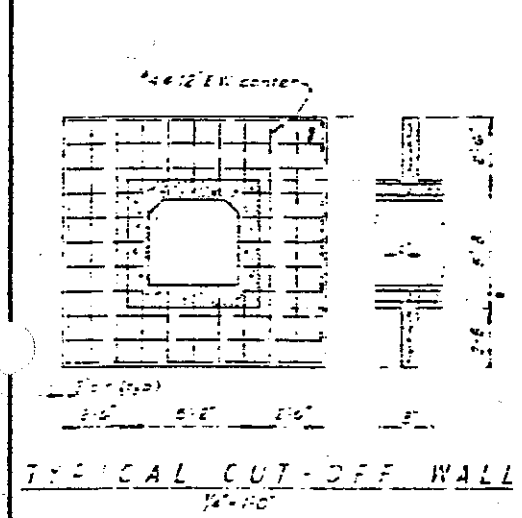
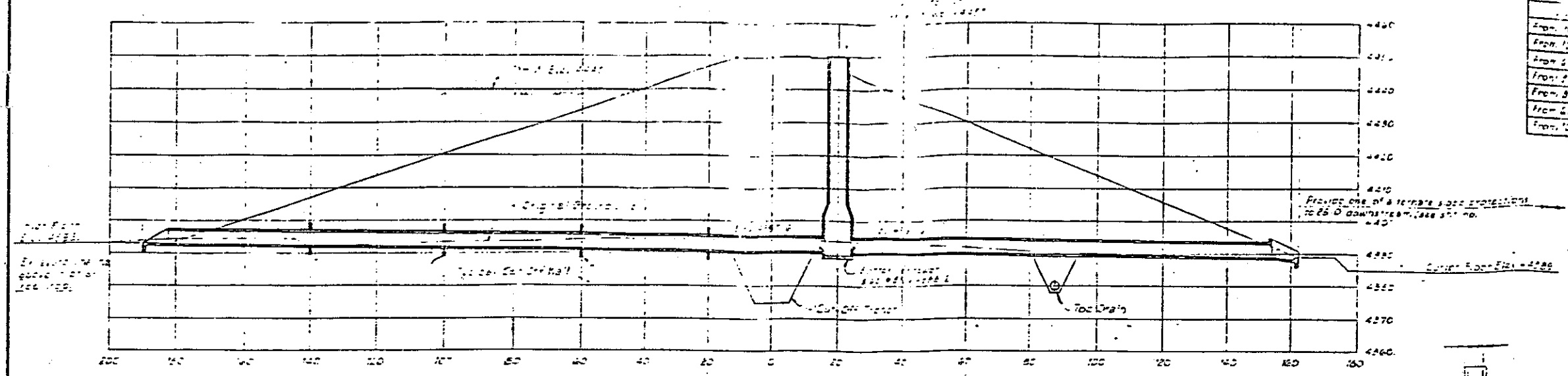


POU/POD Data Source: CSKT-MT Compact FIIP Water Use (available at nris.mt.gov)
Imagery Source: "Montana 2009 Color NAIP Orthophotos, 12-Kilometer Tiles" courtesy of USDA-Farm Services Agency Aerial Photography Field Office and the Montana State Library.
Hillshade created from: "National Elevation Dataset" courtesy of U.S. Geological Survey (USGS), EROS Data Center (1-arc second)

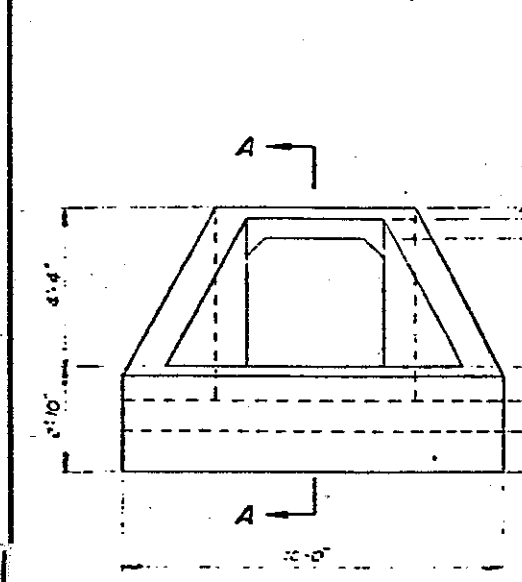


CONDUIT REINFORCEMENT SCHEDULE			
Location	Reinforcement	Bar Size	Bar Spacing
From 100' to 120' downstream	4" x 6" Bars	#4	12"
From 120' to 140' downstream	4" x 6" Bars	#4	12"
From 140' to 160' downstream	4" x 6" Bars	#4	12"
From 160' to 180' downstream	4" x 6" Bars	#4	12"
From 180' to 200' downstream	4" x 6" Bars	#4	12"
From 200' to 220' downstream	4" x 6" Bars	#4	12"
From 220' to 240' downstream	4" x 6" Bars	#4	12"
From 240' to 260' downstream	4" x 6" Bars	#4	12"
From 260' to 280' downstream	4" x 6" Bars	#4	12"
From 280' to 300' downstream	4" x 6" Bars	#4	12"

UPPER JOCKO RESERVOIR



TYPICAL CUT-OFF WALL

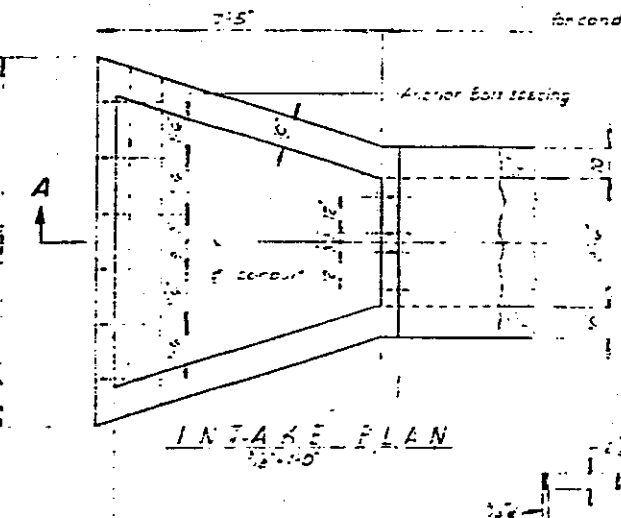


INTAKE PLAN

INTAKE ELEVATION

SECTION A-A

SECTION B-B



INTAKE PLAN

INTAKE ELEVATION

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

SECTION E-E

SECTION F-F

SECTION G-G

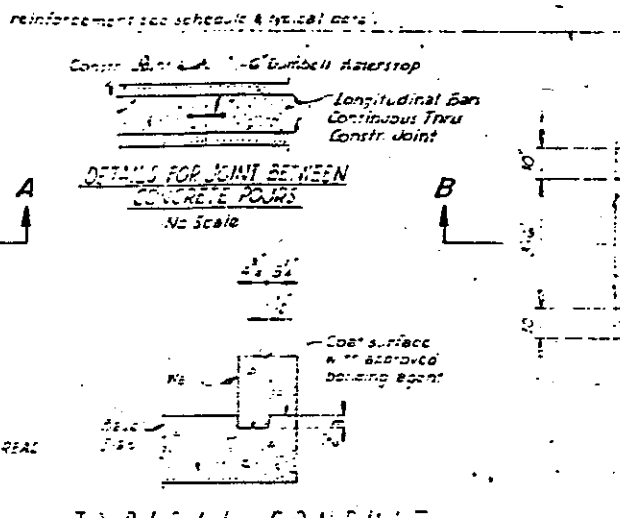
SECTION H-H

SECTION I-I

SECTION J-J

SECTION K-K

SECTION L-L



TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

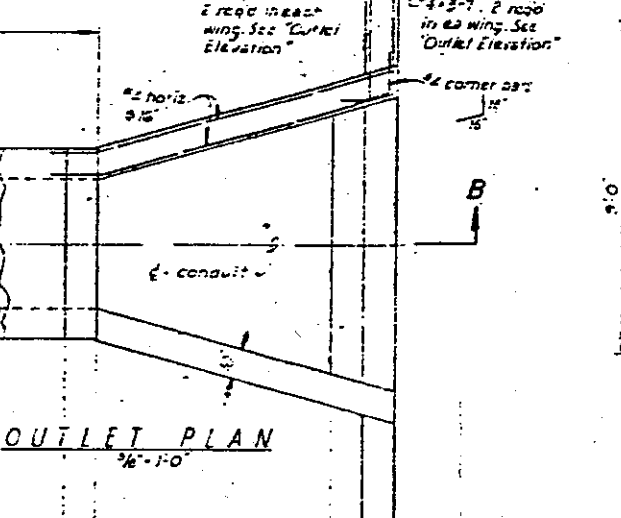
TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT

TYPICAL CONDUIT CONSTRUCTION JOINT



OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

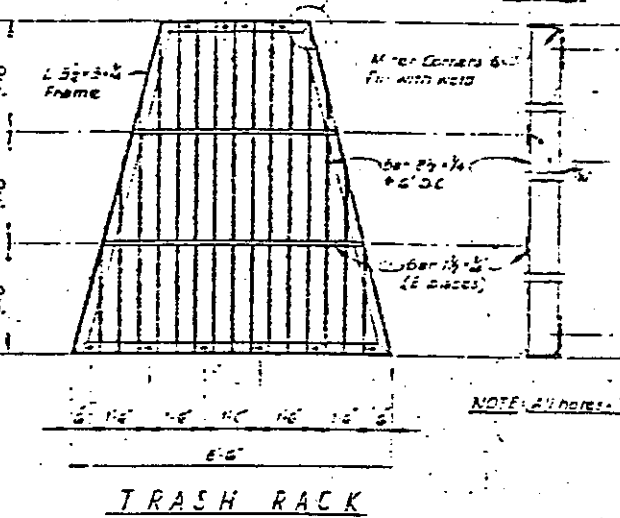
OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN

OUTLET PLAN



TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

TRASH RACK

REVISIONS			
No.	Date	By	Description

BLACK LAKE DAM & RESERVOIR
FLATHEAD IRRIGATION PROJECT
MONTANA

OUTLET CONDUIT

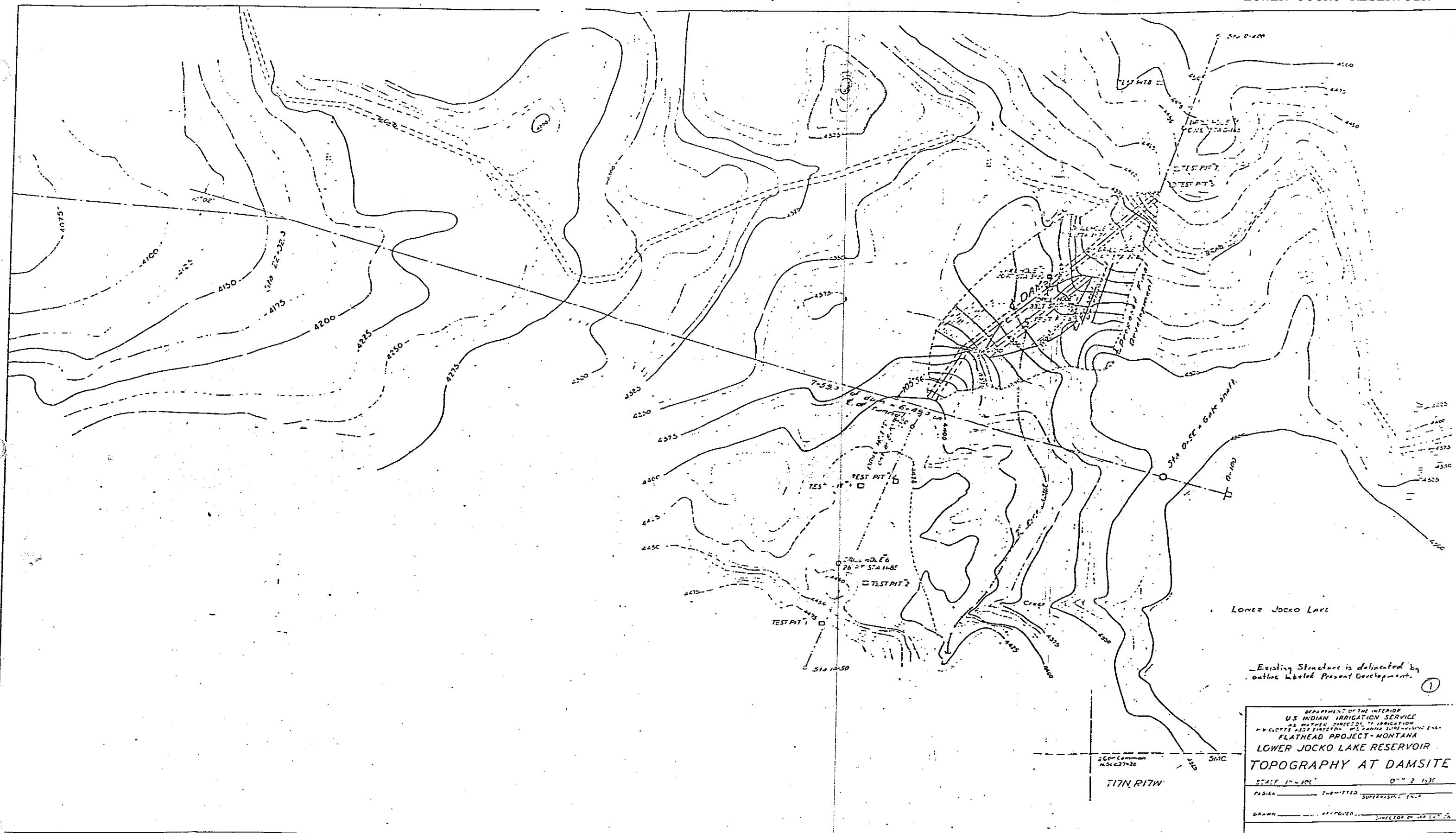
JOHN H. MORRISON, C.E.
M. ASCE, INC. C.E.

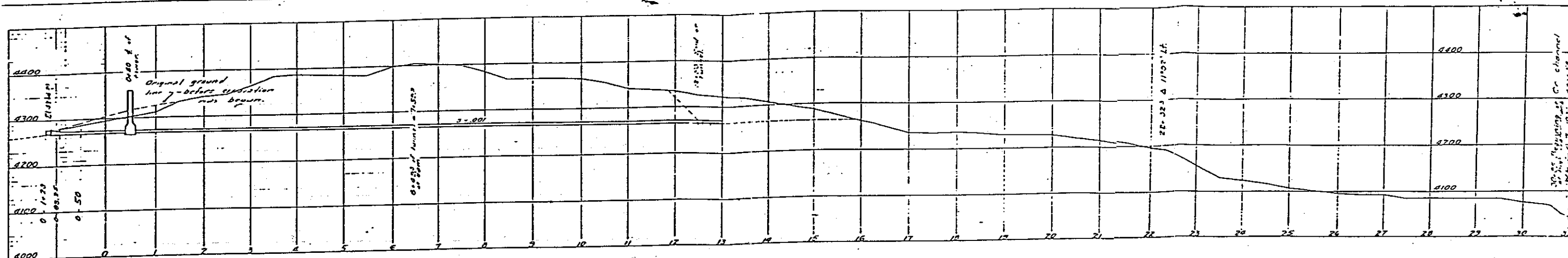
MORRISON-MAJERLE, INC.
CONSULTING ENGINEERS
HELENA, MONTANA

DAVID L. EAGLE
PHOTOGRAPHY
HELENA, MONTANA

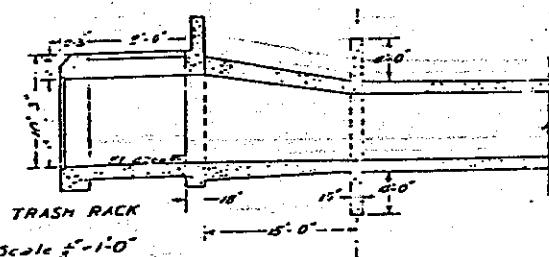
JOSEPH A. MARRIS
ASSOC. M. ASCE, C.E.

ROBERT H. OHLSTON
ASSOCIATE ENGINEER

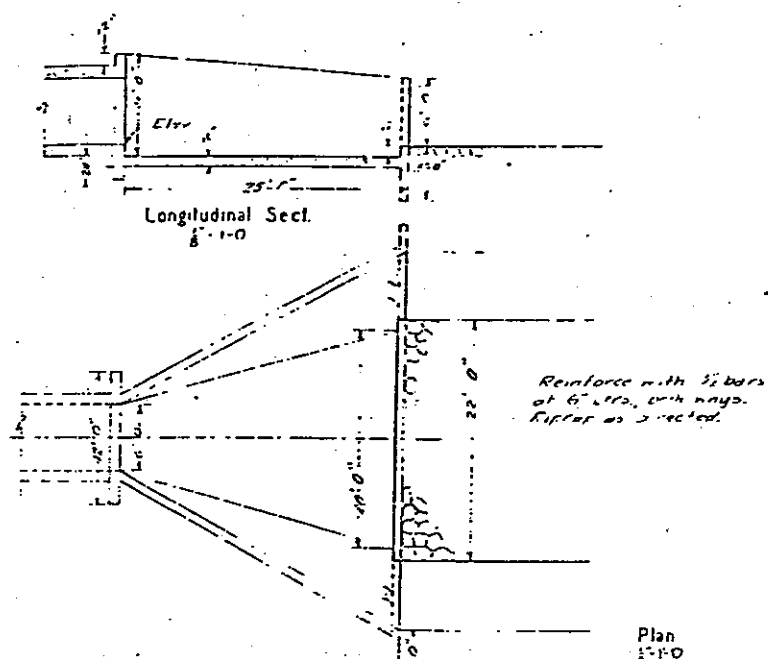
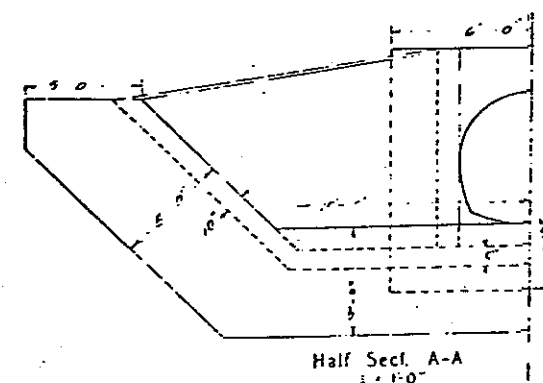
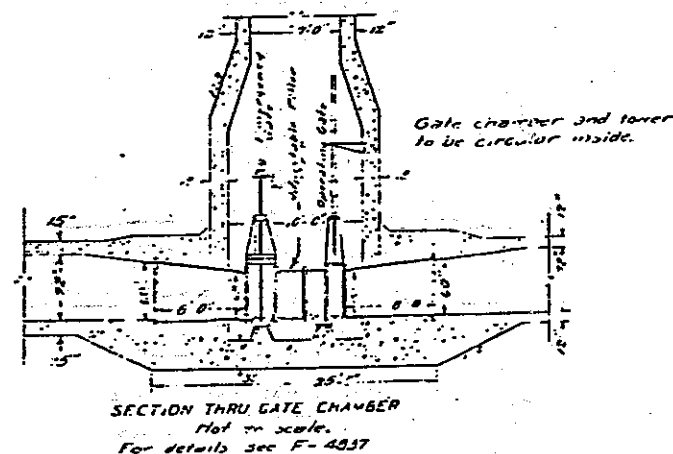




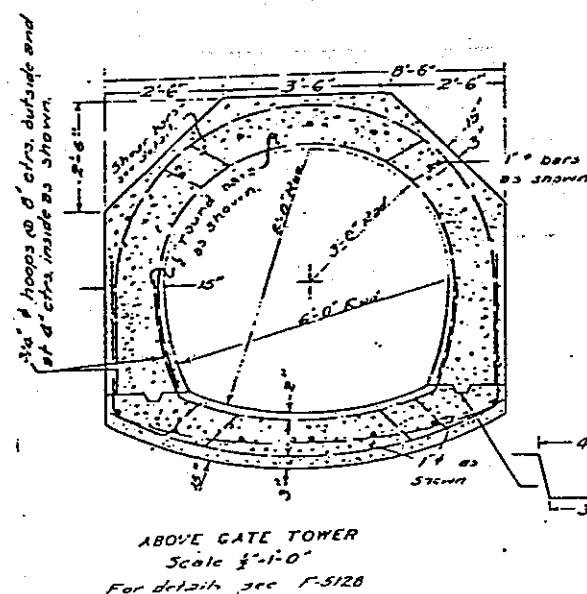
PROFILE ON CENTER LINE OF TUNNEL
Scale 1"=100'



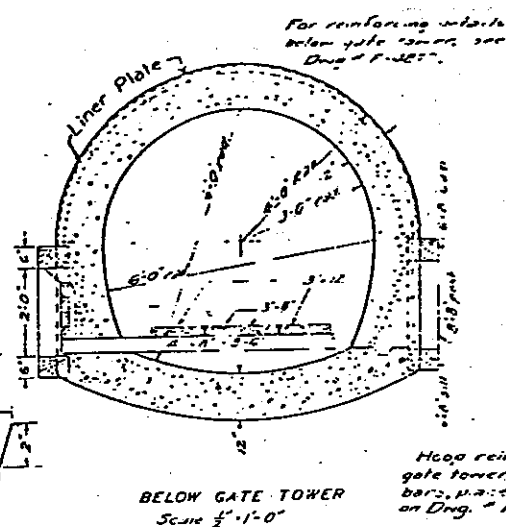
For details see F-4993



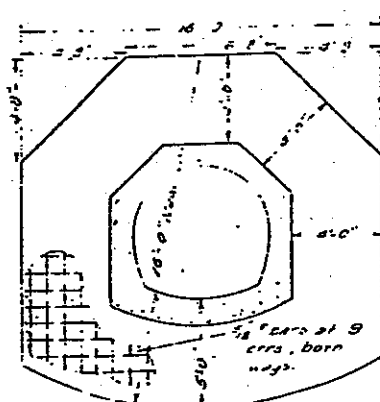
Reinforce with 1/2" bars at 6" c/c, with hoops. Refer to 3rd sheet.



For details see F-5128



Hoop reinforcing below gate tower to be 1/2" bars, spaced as shown on Dwg. F-4837.



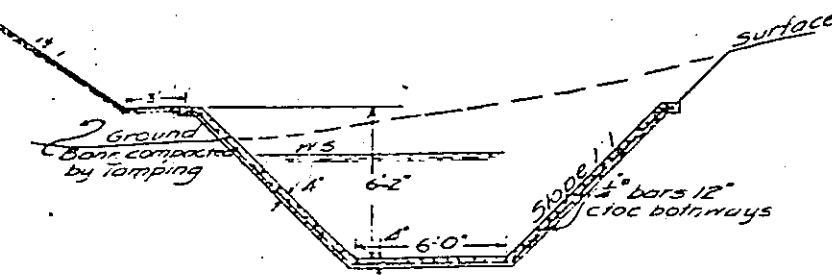
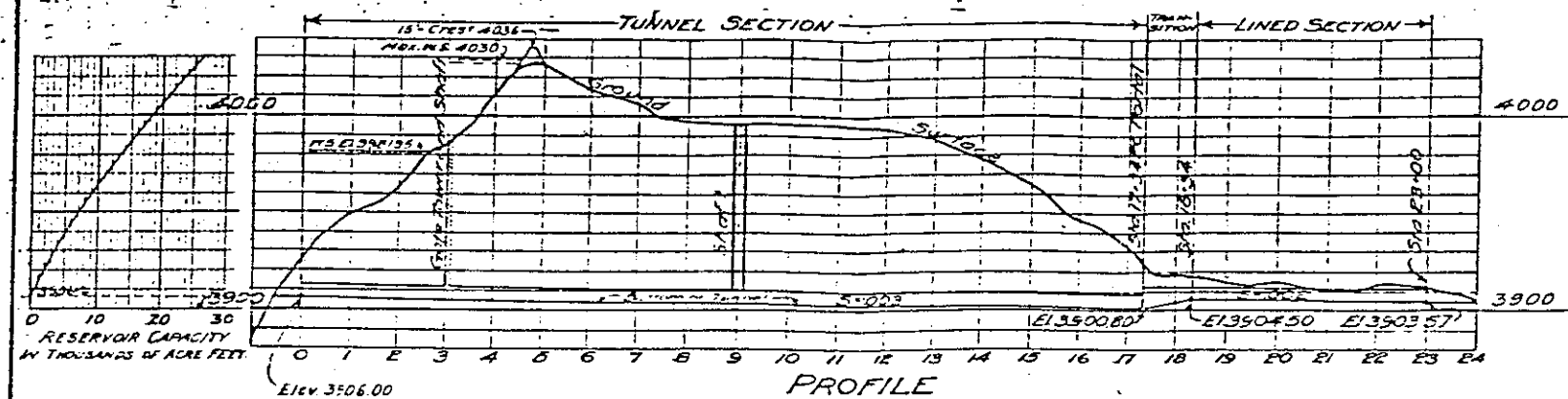
Cut-offs required as shown on profile.

TYPICAL TUNNEL SECTIONS

Revised - May 1937

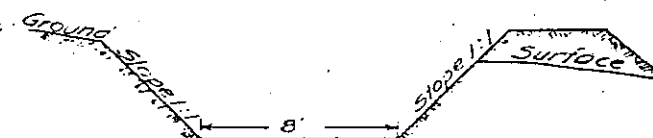
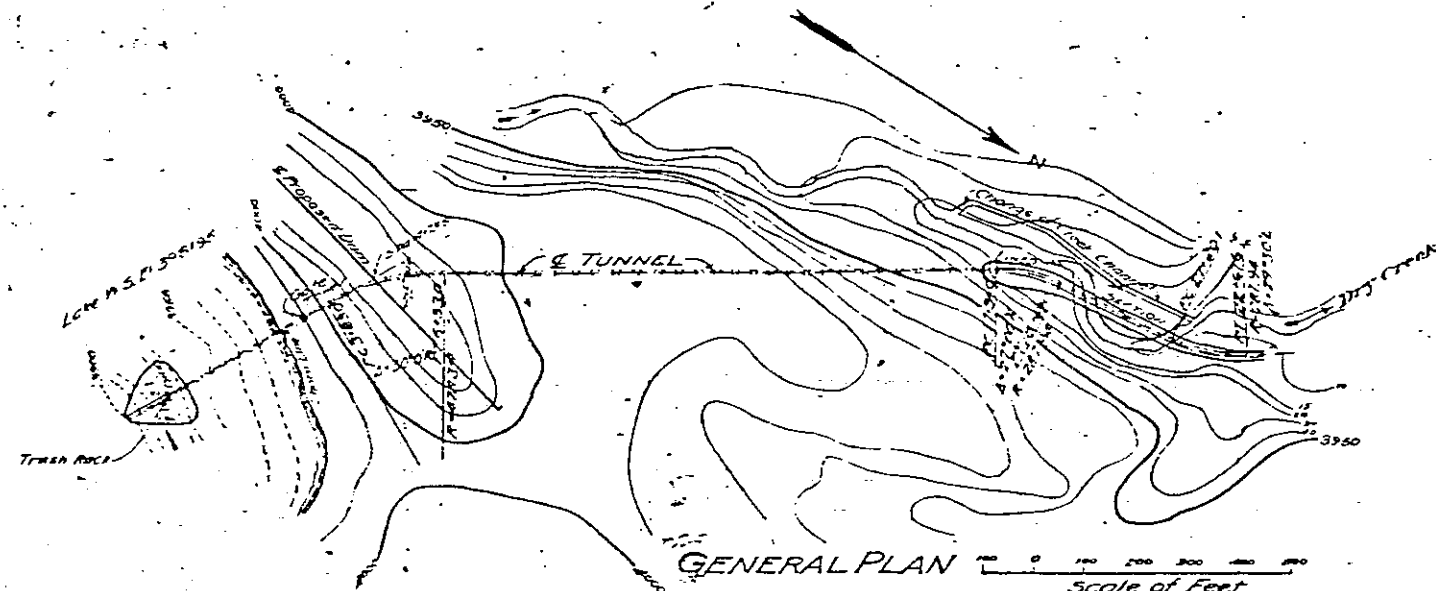
DEPARTMENT OF THE INTERIOR
U.S. INDIAN IRRIGATION SERVICE
ASISTANT DIRECTOR OF IRRIGATION
FLATHEAD PROJECT - MONTANA
LOWER JOCKO LAKE RESERVOIR
CONTROLLING WORKS
SCALE 25' = 1" (PLAN)
SCALE 1" = 10' (PROFILE)
SUBMITTED: []
APPROVED: []

F-4836

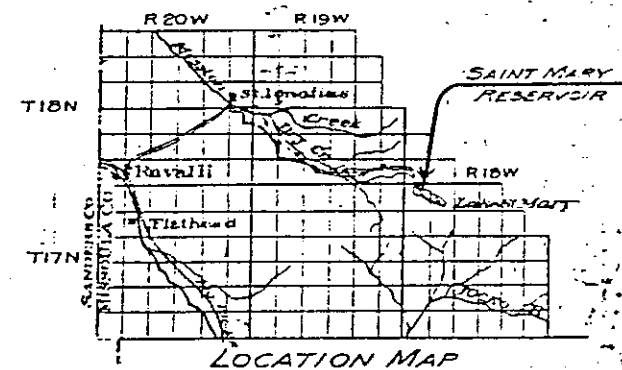
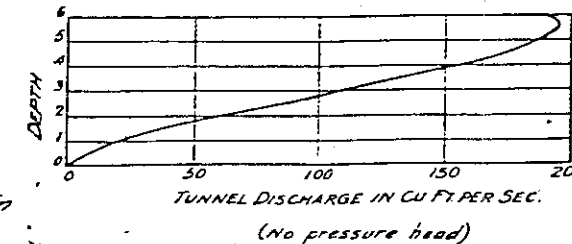
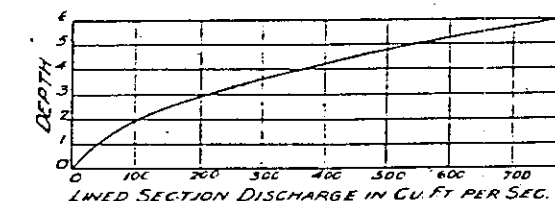
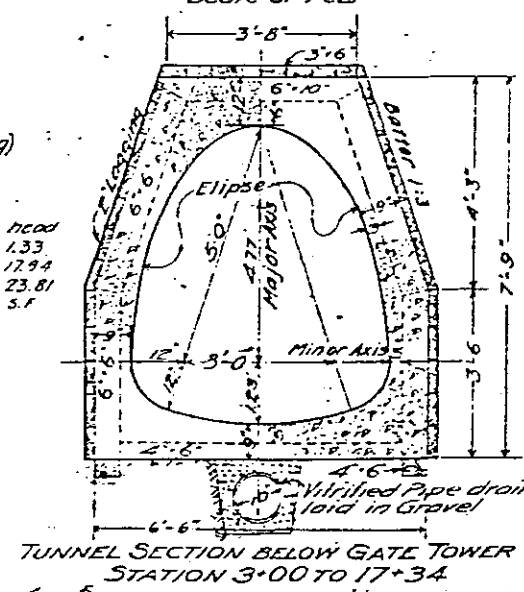
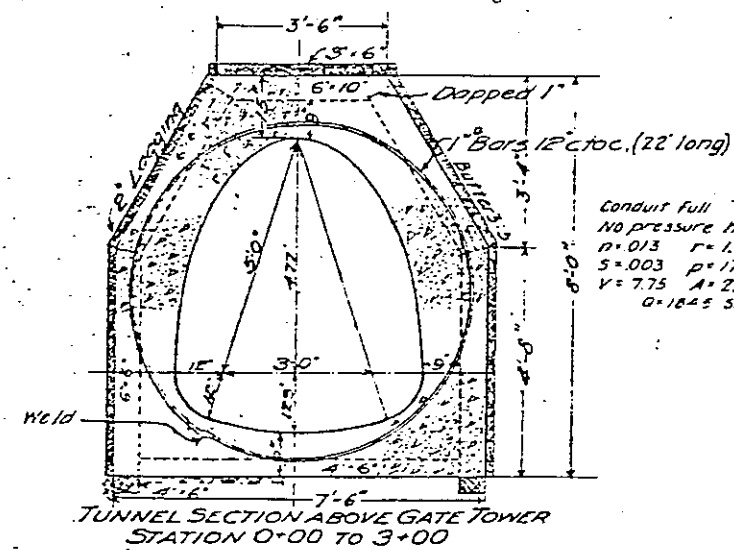


LINED SECTION
STATION 18+69 TO 23+00

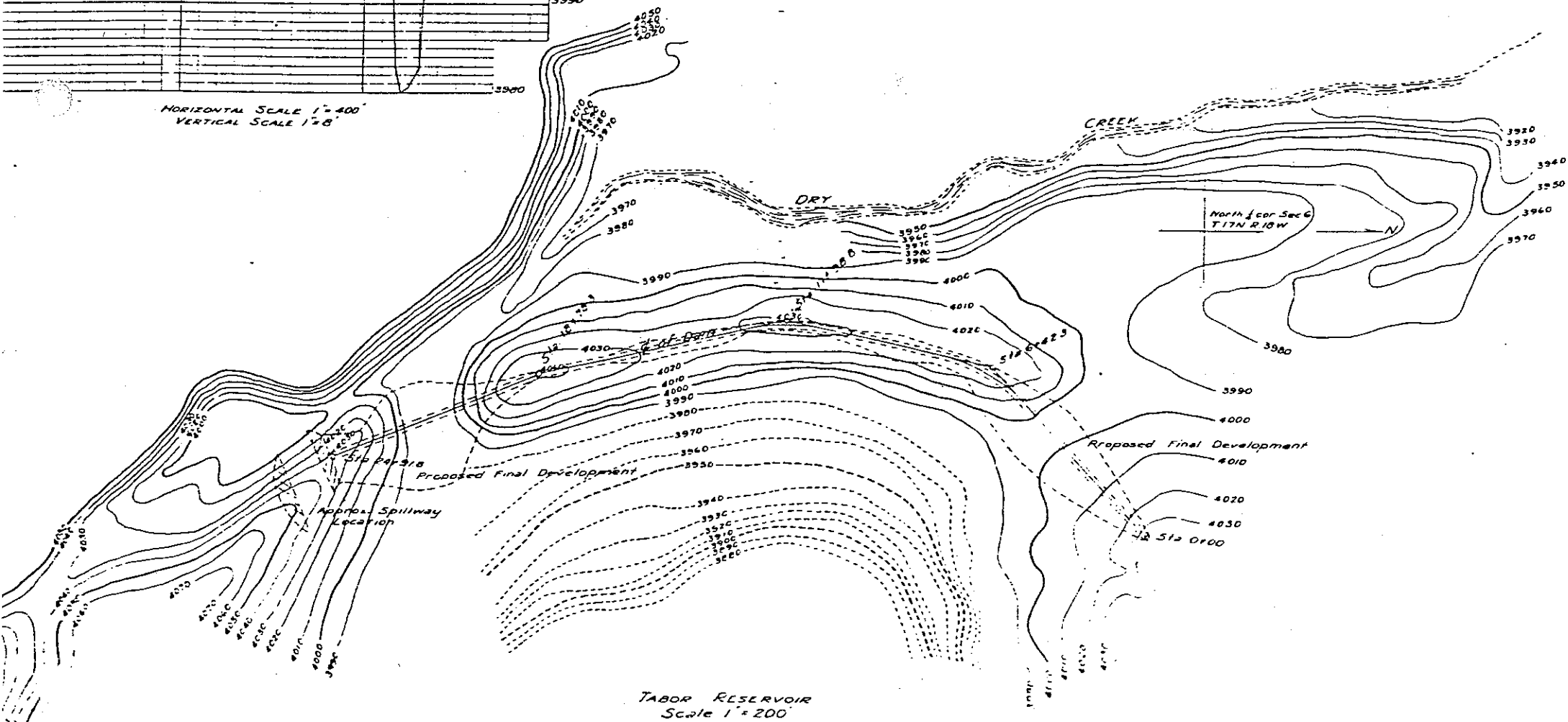
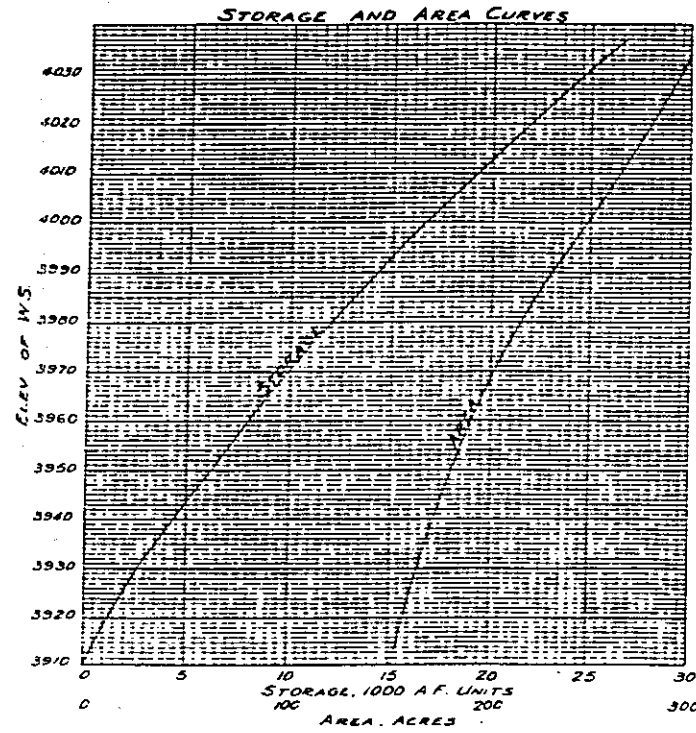
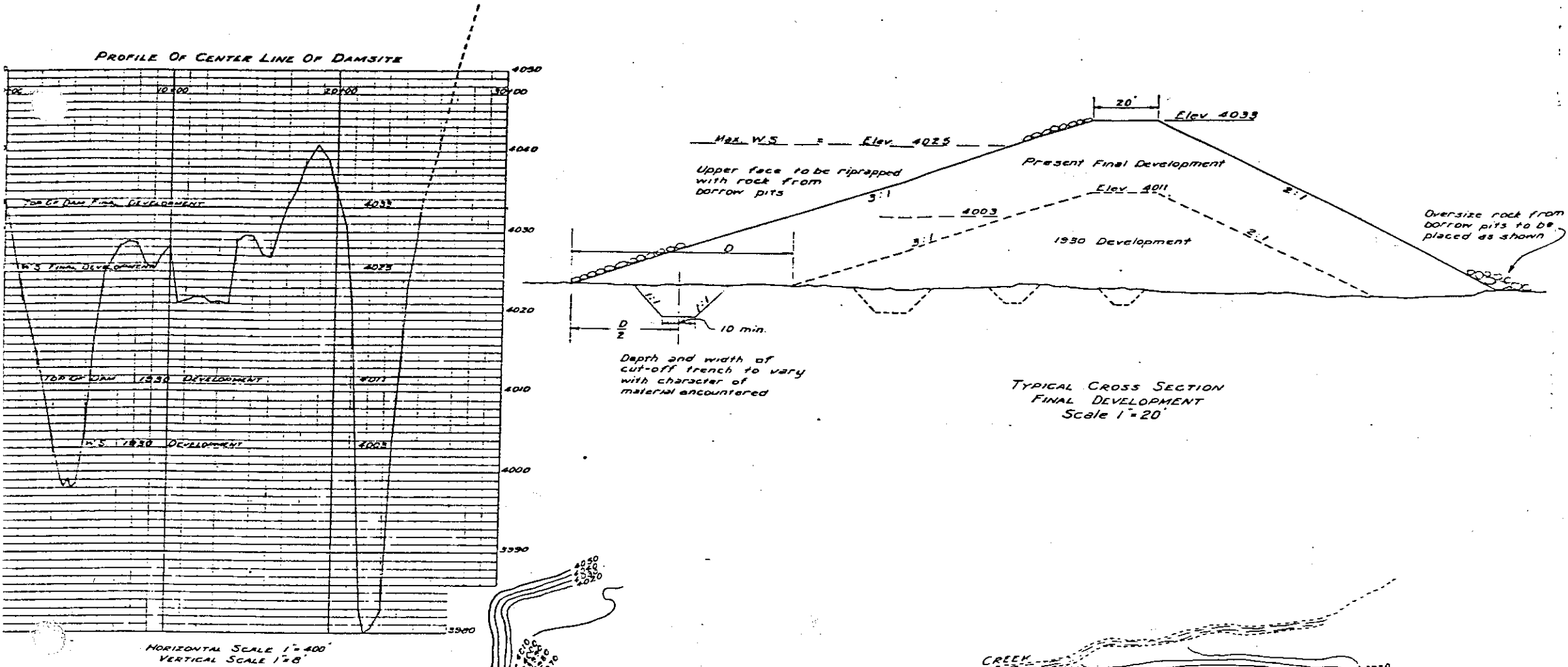
HYDRAULIC PROPERTIES



SECTION OF CREEK CHANNEL CHANGE

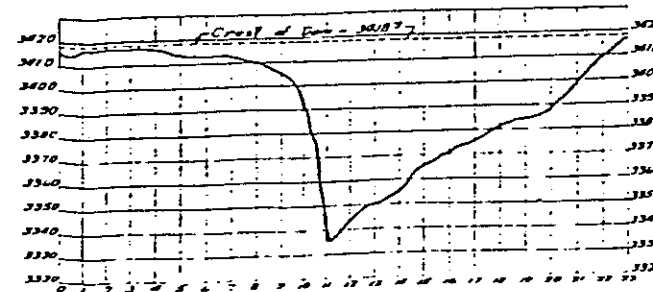
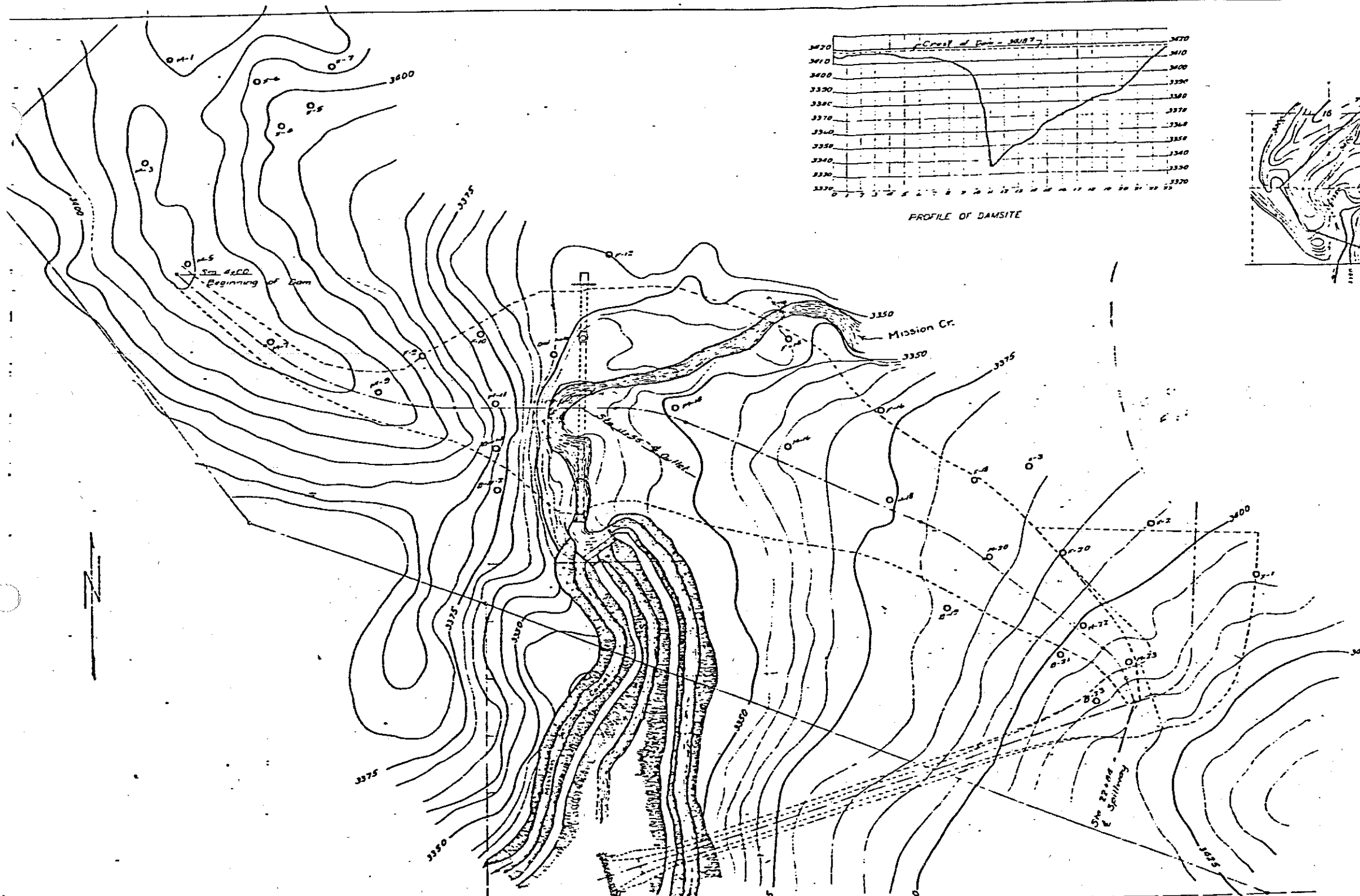


Reviewed SP-23500
DEPARTMENT OF THE INTERIOR
UNITED STATES RECLAMATION SERVICE
FLATHEAD PROJECT-MONTANA
SAINT MARY RESERVOIR
OUTLET
PROFILE, PLAN AND SECTIONS
Drawn: RTL Recommended
Checked: Y Approved
F-2355 ST IGNATIUS, MONT. 9-3-46

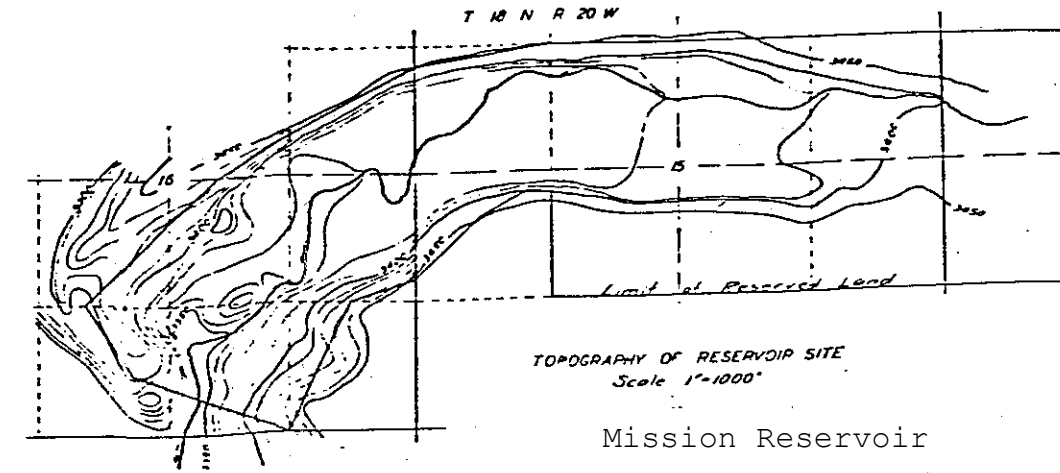


TABOR RESERVOIR
Scale 1"=200'

DEPARTMENT OF THE INTERIOR
U.S. INDIAN IRRIGATION SERVICE
ALBATHEN - DIRECTOR OF IRRIGATION
HYCLOTTIS - ASST. DIRECTOR - W.S. HANNA - S. REG. S. IN. EN.
GL. SPEEDY - PROJECT ENG.
FLATHEAD PROJECT - MONTANA
TABOR RESERVOIR
PROPOSED FINAL DEVELOPMENT
SCALE - AS NOTED
DESIGNED _____ SUMMITTED _____
DRAWN _____ RECOMMENDED _____
TRACED R.M.V. _____ APPROVED _____
SEP. 1915

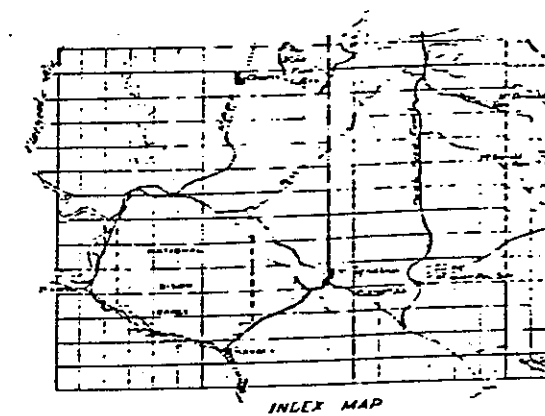
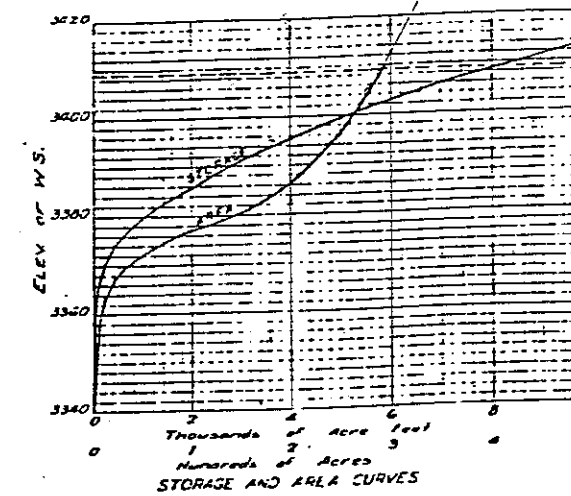


PROFILE OF DAMSITE

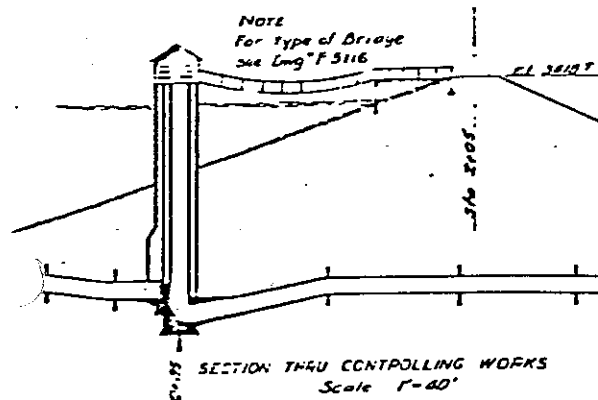


TOPOGRAPHY OF RESERVOIR SITE
Scale 1"=1000'

Mission Reservoir



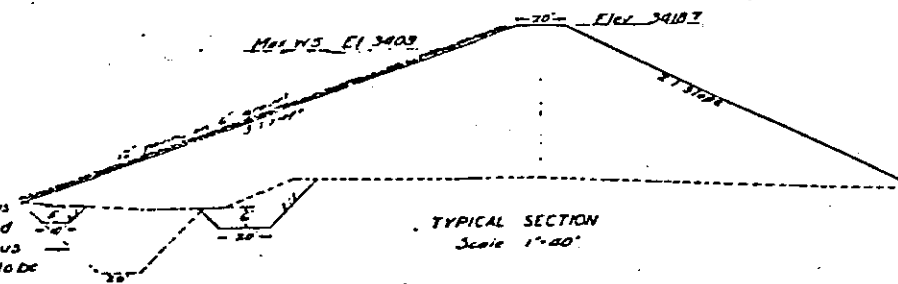
INDEX MAP



NOTE
For type of Bridge
see Eng'g F 3116

TOPOGRAPHY OF DAMSITE
Scale 1"=100'

NOTE
Where required this
trench enlarged and
sunk into an impervious
layer thick enough to be
safe.



TYPICAL SECTION
Scale 1"=40'

DEPARTMENT OF THE INTERIOR
U.S. BUREAU OF RECLAMATION
FLATHEAD PROJECT-MON.
MISSION RESERVOIR
PLAN AND SECTIONS OF
DESIGN: AS NOTED
SUBMITTER: SUPERVISOR
APPROVED: DIRECTOR

[illegible]

PLAN
Scale 1" = 2'

TRASH RACK

For details see F-9972

Scale $\frac{1}{2}'' = 1'$
Typical section as at
"AA" (Sta 2+05)

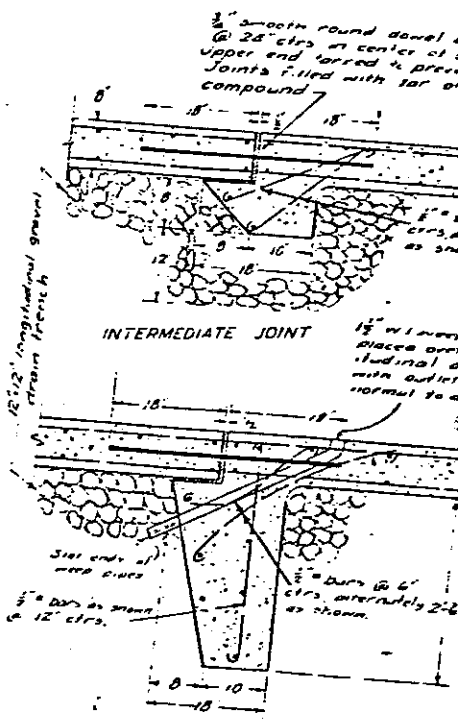
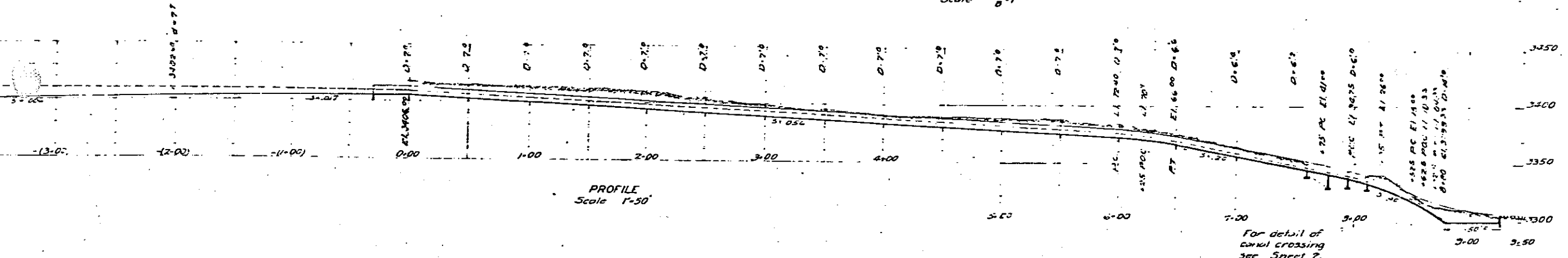
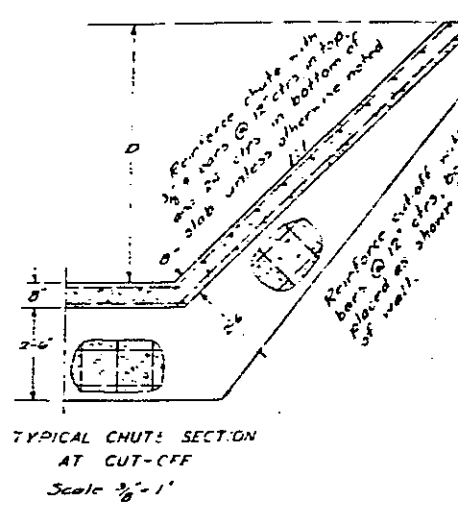
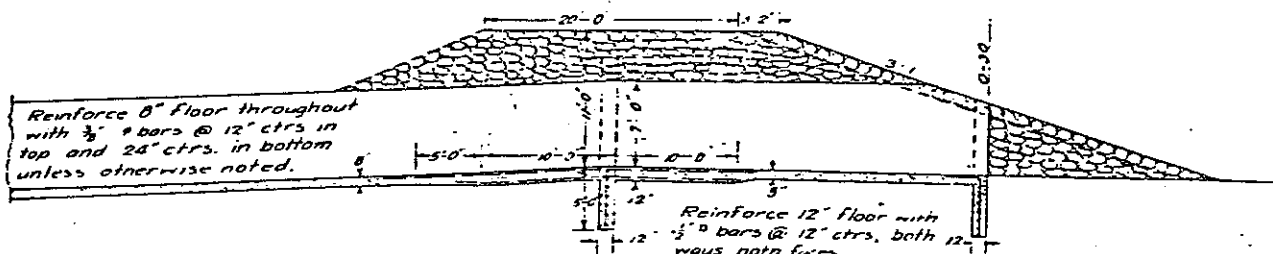
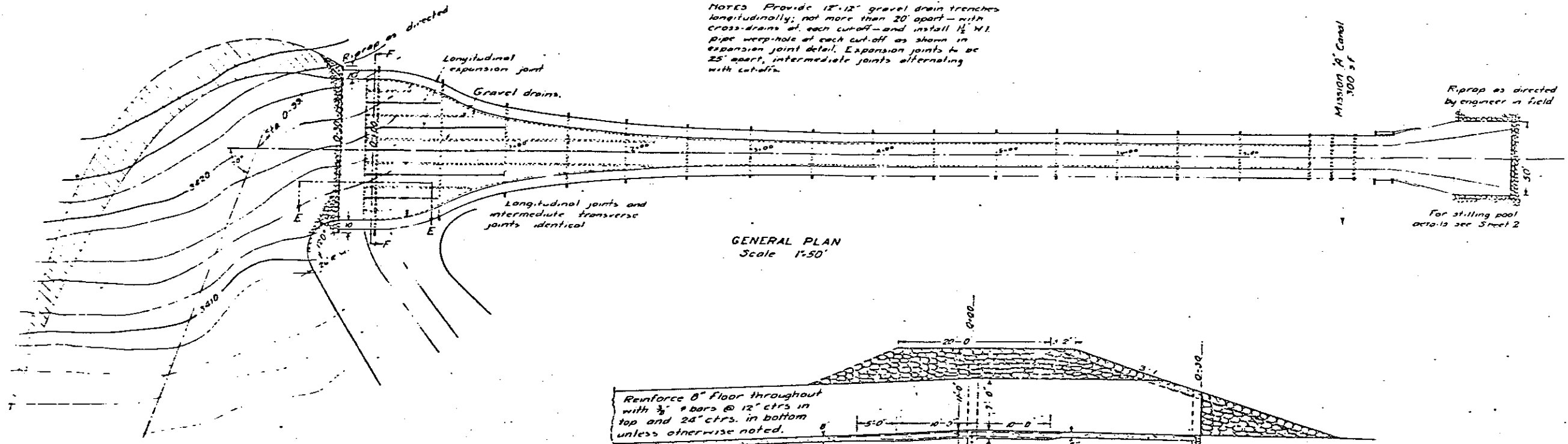
SECTION	CGNC CY	S'EE - FOUND			
		1' 0"	2' 0"	3' 0"	4' 0"
Tower Sect	480	600	21,820	3,150	36,200
Trash Rack	55	1,000	3,000		5,000
Conduit	342		28,200		9,250
Cut-offs	56		3,965		
Outlet	25		1,500		
Totals	958	1,600	57,985	3,150	600 50,450

DEPARTMENT OF THE INTERIOR
U.S. INDIAN IRRIGATION SERVICE
A.C. WATHEN — DIRECTOR OF IRRIGATION
H.V. CLOUTTS — ASST. DIRECTOR — W.S. HANNA — SUPERVISING ENGR.
FLATHEAD PROJECT — MONTANA
MISSION RESERVOIR
CONTROLLING WORKS

Scales: As noted Jan 1934

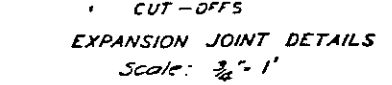
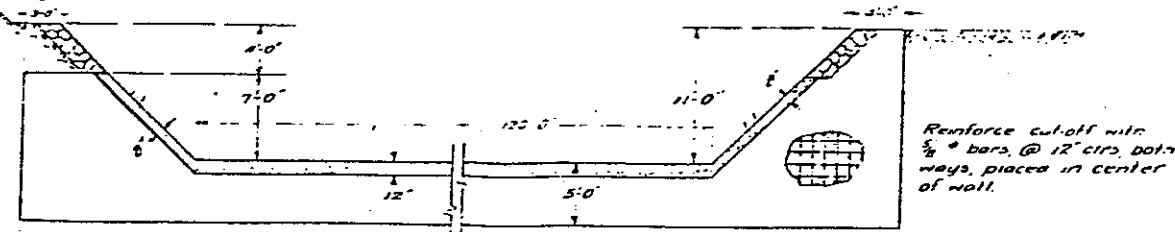
DESIGN	SUBMITTED	W.S. Hanna, Engr.
		SUPERVISING ENGR.
DRAWN <i>W.S.</i>	APPROVED	HANNA
		DIRECTOR OF IRRIGATION

NOTES Provide 12" x 12" gravel drain trenches longitudinally; not more than 20' apart - with cross-drains at each cut-off - and install 1 1/2" W.I. pipe weep-hole at each cut-off as shown in expansion joint detail. Expansion joints to be 25' apart, intermediate joints alternating with cut-offs.



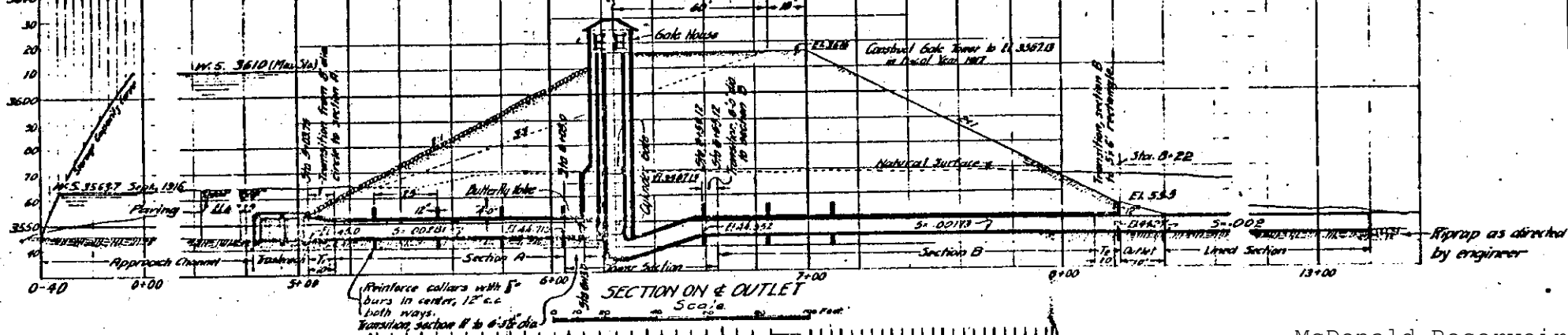
HYDRAULIC PROPERTIES Q = 3000 S.F.

Station	Water Surface Elevation	Bottom Elevation	Depth	Area	Velocity
0+00	3406.5	3372.00	34.5	27.3	
0+25	3405.5	3371.00	34.5	27.3	
0+50	3404.5	3370.00	34.5	27.3	
1+00	3403.5	3369.00	34.5	27.3	
1+25	3402.5	3368.00	34.5	27.3	
1+50	3401.5	3367.00	34.5	27.3	
2+00	3400.5	3366.00	34.5	27.3	
2+25	3399.5	3365.00	34.5	27.3	
2+50	3398.5	3364.00	34.5	27.3	
3+00	3397.5	3363.00	34.5	27.3	
3+25	3396.5	3362.00	34.5	27.3	
3+50	3395.5	3361.00	34.5	27.3	
4+00	3394.5	3360.00	34.5	27.3	

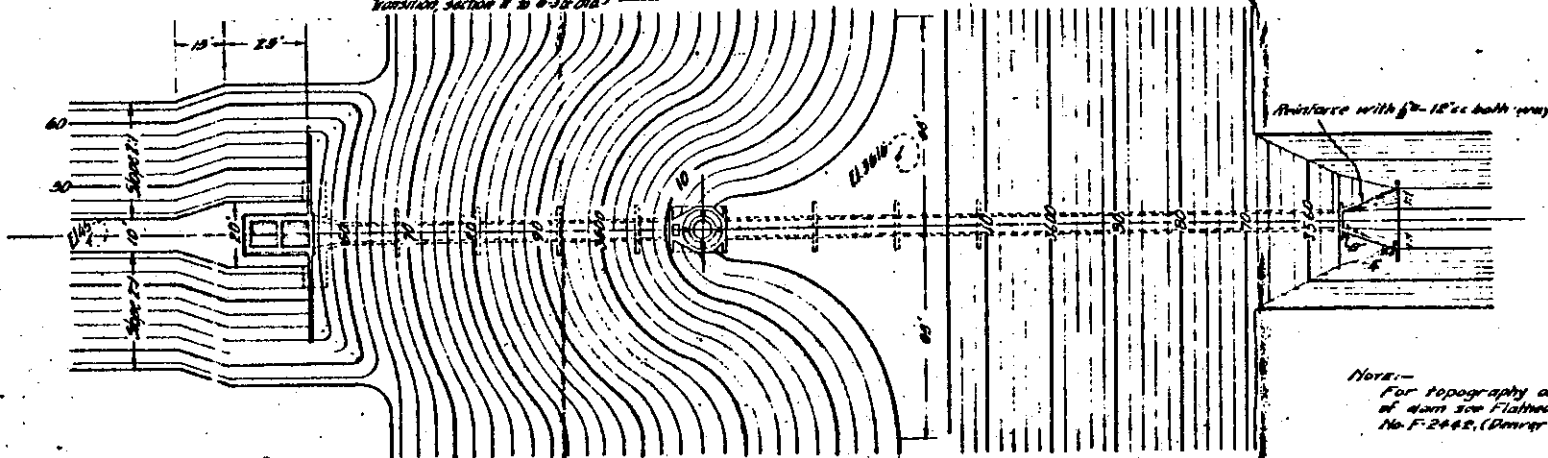


DEPARTMENT OF THE INTERIOR
U.S. INDIAN IRRIGATION SERVICE
AL. WATSON - DIRECTOR OF IRRIGATION
H.V. CLOTTIS - ASST. DIRECTOR
FLATHEAD PROJECT-MONTANA
MISSION RESERVOIR
SPILLWAY PLAN AND DETAILS
SHEET 1 OF 2 SHEETS
DESIGN G.L.C. SUBMITTED BY J. L. LAMAR
DRAWN F.R.R. APPROVED BY H. CLOTTIS
DIRECTOR OF IRRIGATION

Storage in thousands of A.F.
1 2 3 4 5 6 7 8 9 10 11 12



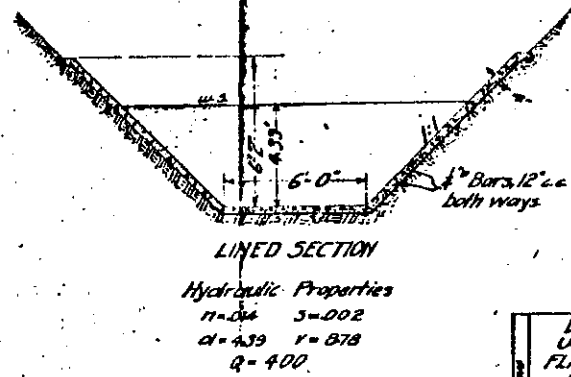
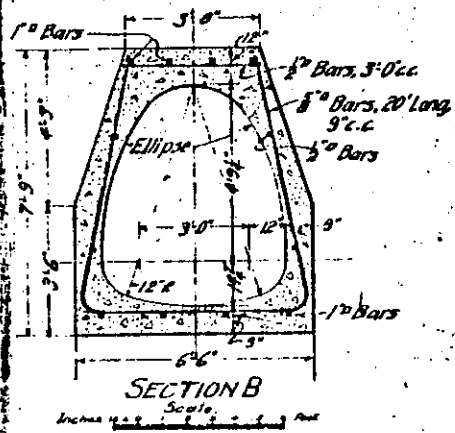
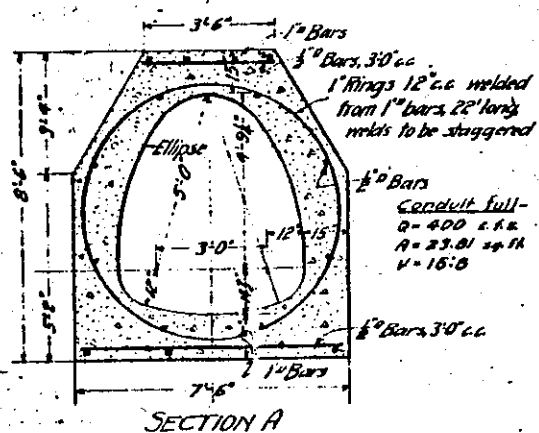
McDonald Reservoir



BILL OF MATERIAL

Section	Concrete Cu. Yds.	Steel - Pounds	8"	6"	4"	3"	2"
Trash Rack	See drawing 6-C-40						
T. & A.	155	1100	2500	10500			
Tower	See drawing 6-C-24						
B. & T.	140	500	7500	5500			
Outlet	13	3.0					
Lined Section	144	5100					

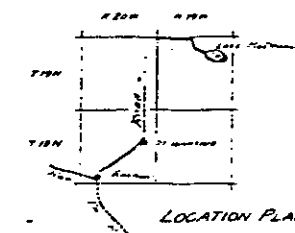
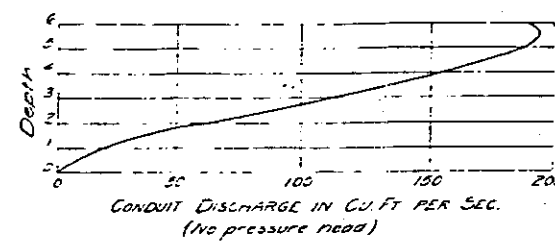
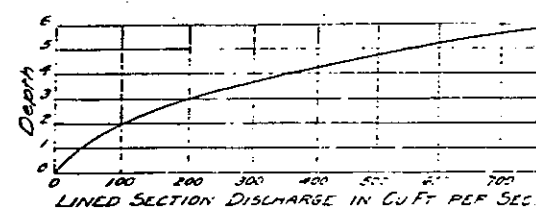
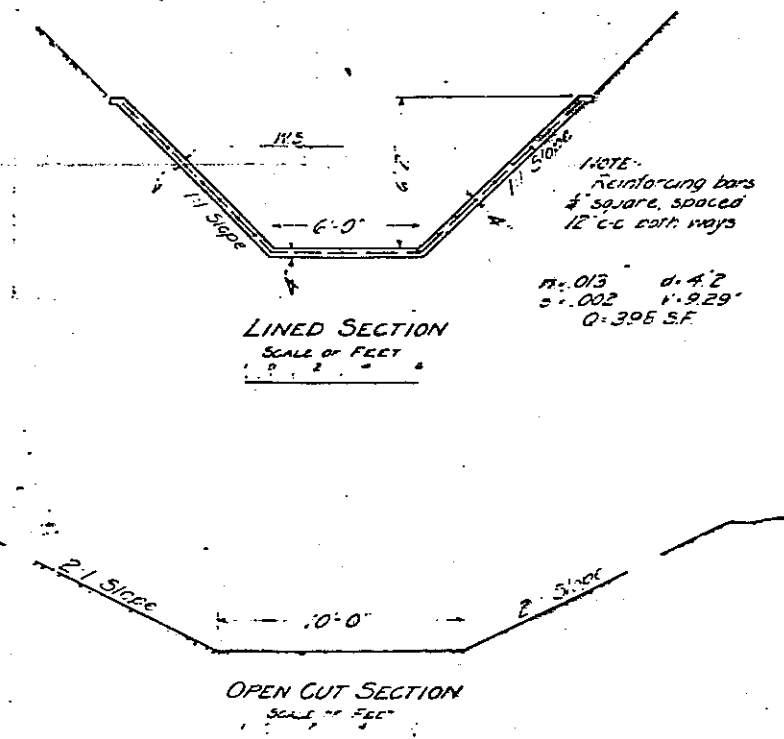
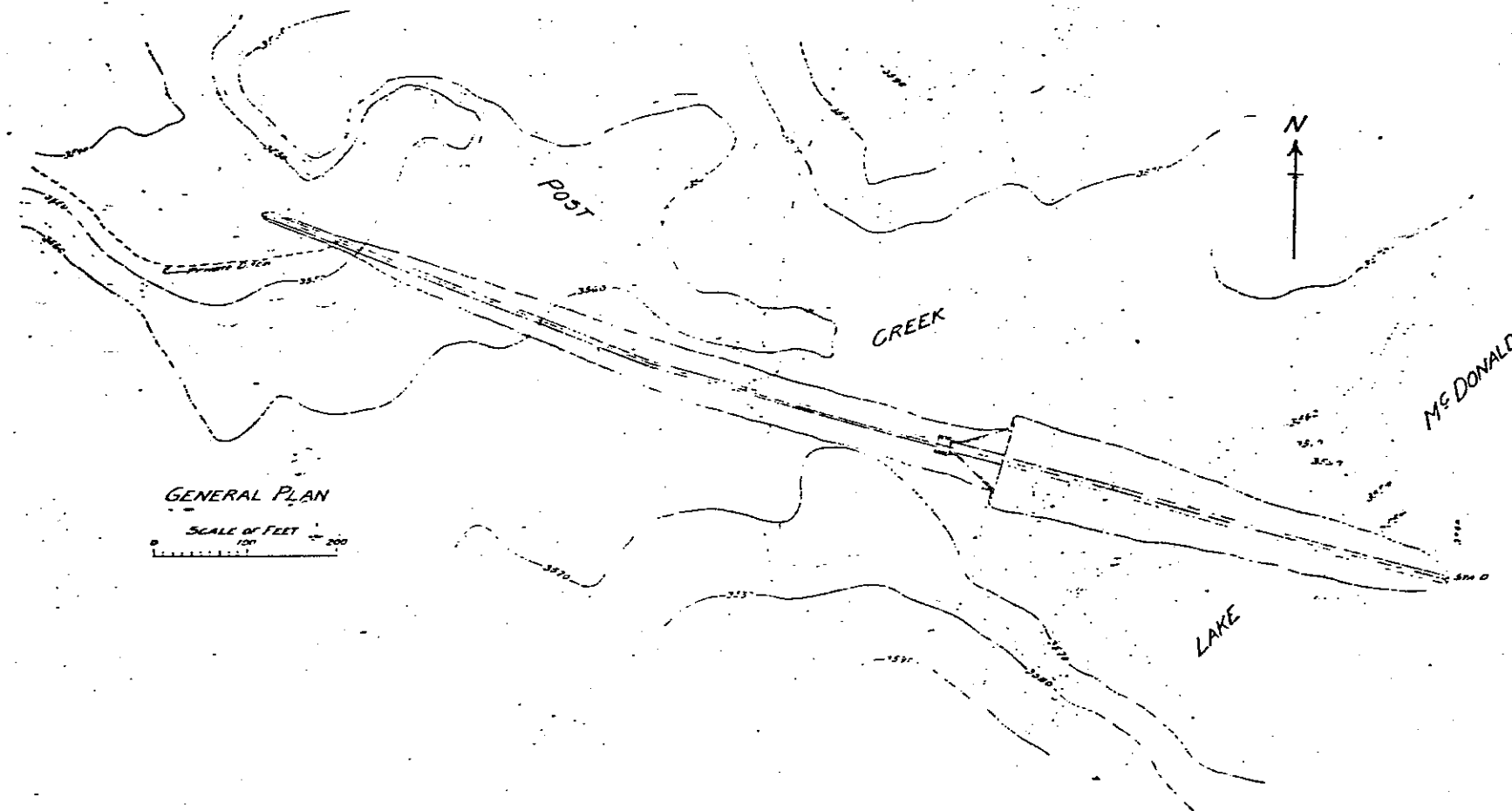
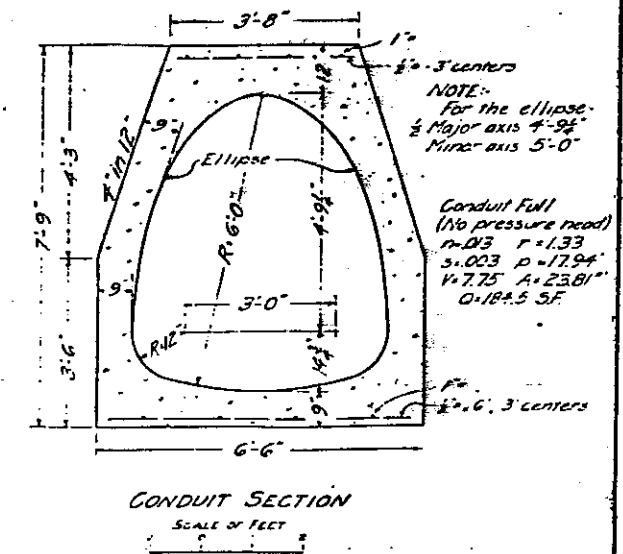
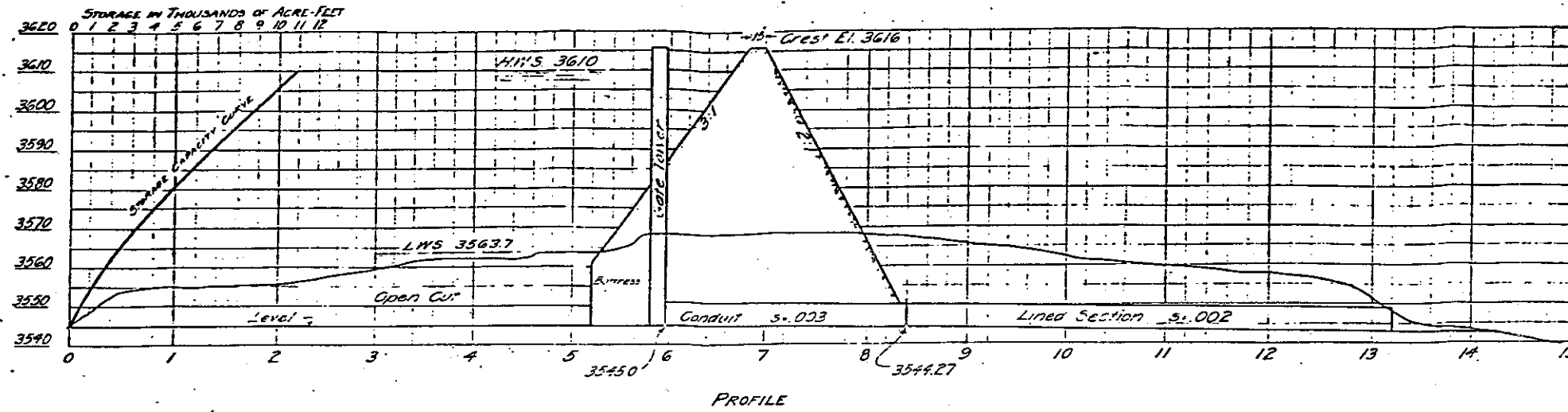
NOTE:-
For topography and plan of dam see Flathead area No. F-2442, (Drawing No. 60417).



DEPARTMENT OF THE INTERIOR
U.S. RECLAMATION SERVICE
FLATHEAD PROJECT MONTANA
MCDONALD LAKE RESERVOIR
SECTIONS & GENERAL PLAN

Drawn by J.H. - [Signature]
Checked by L.B.V. - [Signature]
F-2495 Drawn by [Signature] 10/27/46

McDonald Reservoir

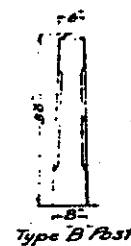
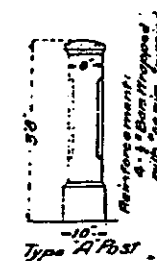
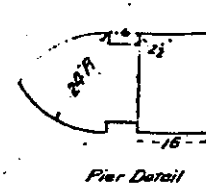
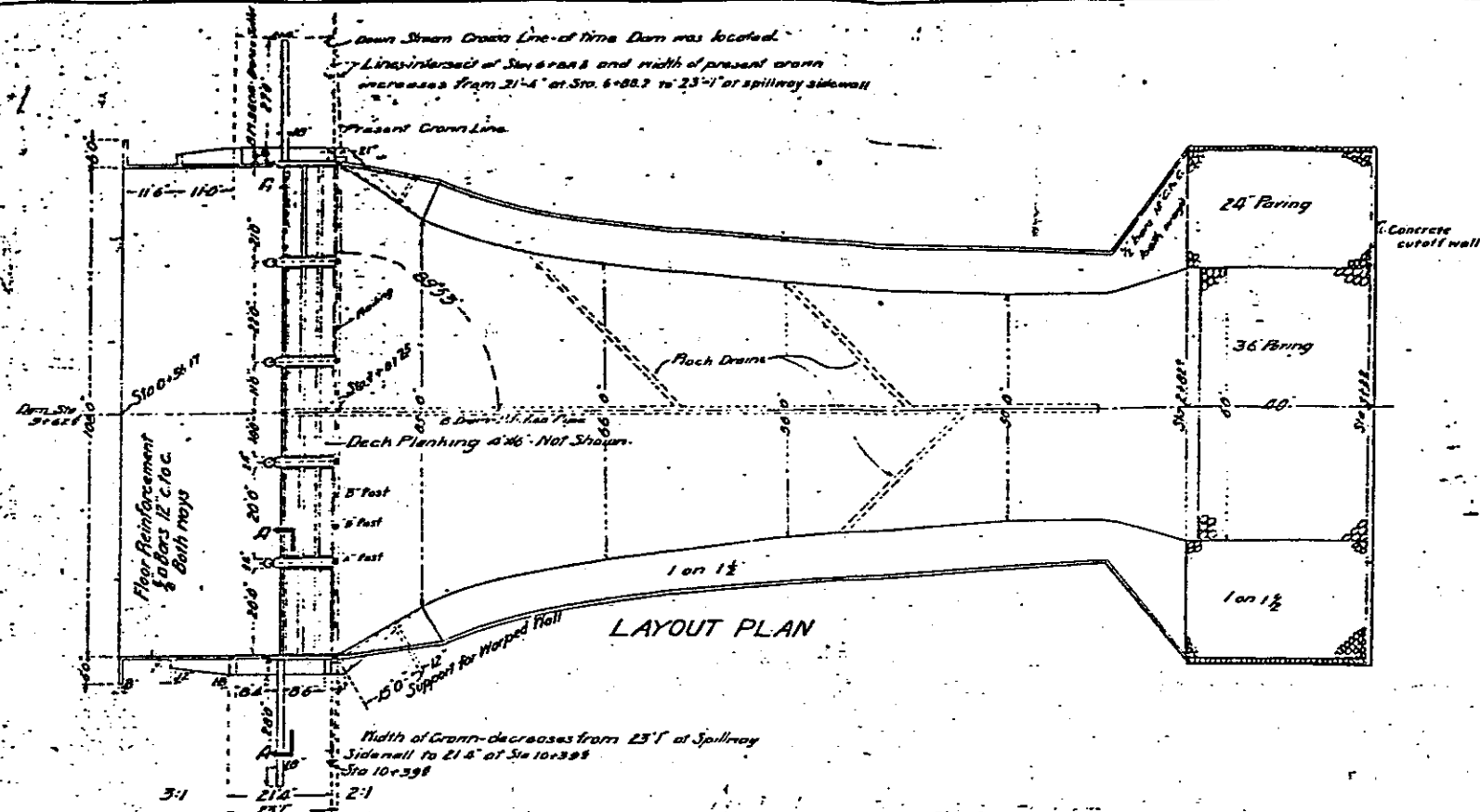


RE. 5180-K-1000

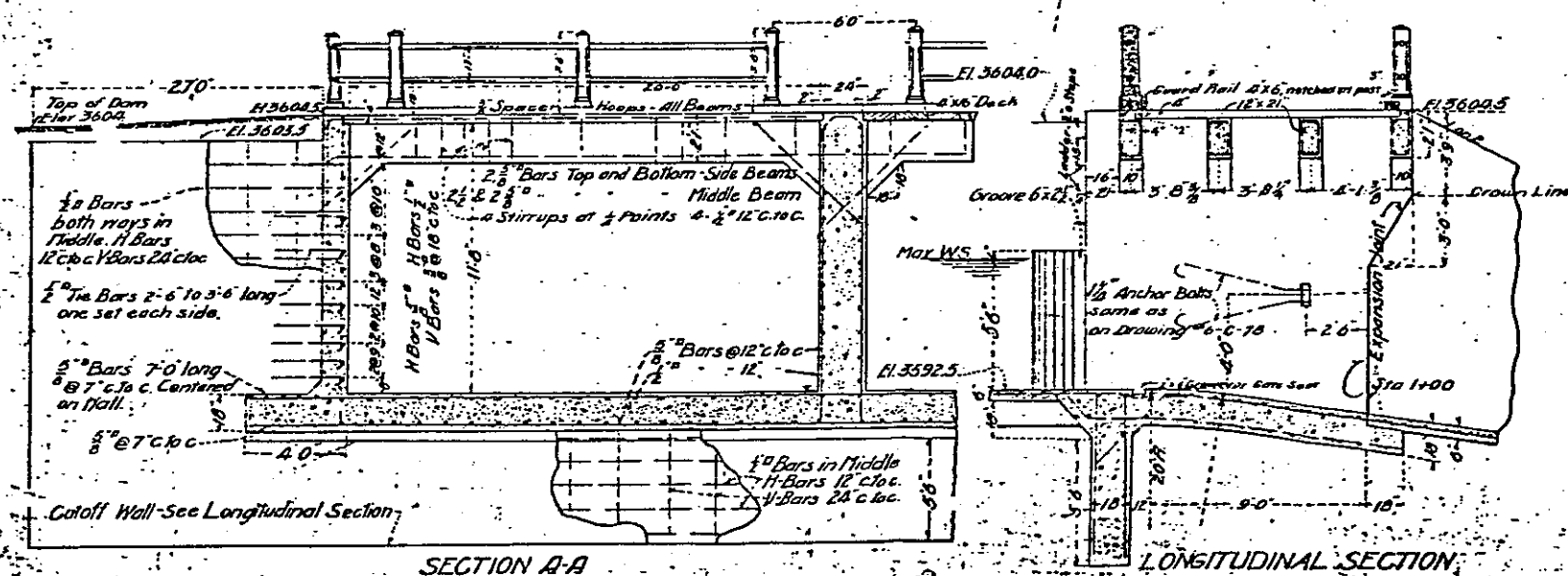
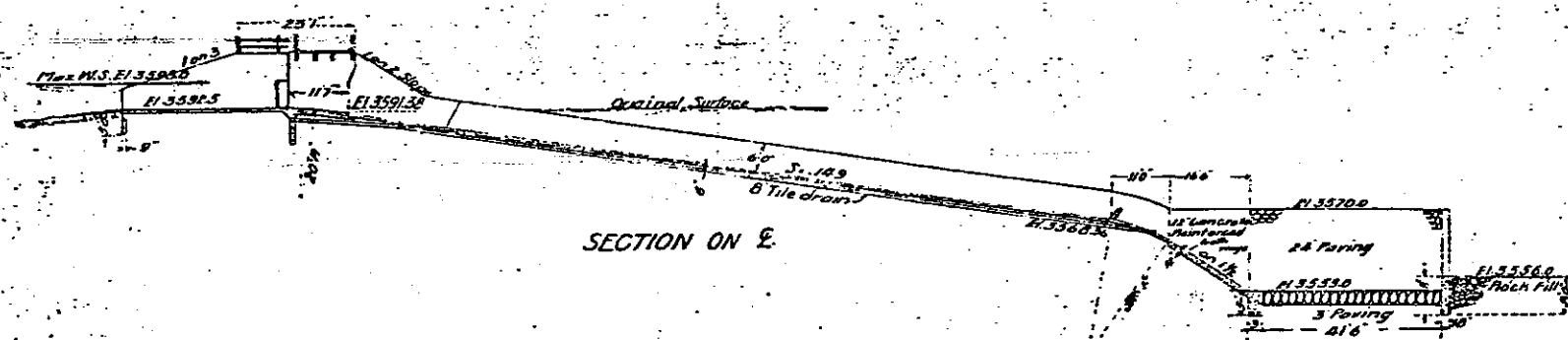
DEPARTMENT OF THE INTERIOR
UNITED STATES RECLAMATION SERVICE
FLATHEAD PROJECT - MONT.
McDONALD LAKE RESERVOIR
OUTLET
PROFILE, PLAN AND SECTIONS

DESIGNED BY: [Signature]
APPROVED BY: [Signature]

F-2356 SIGNATURE, MONT. SEP 13-16



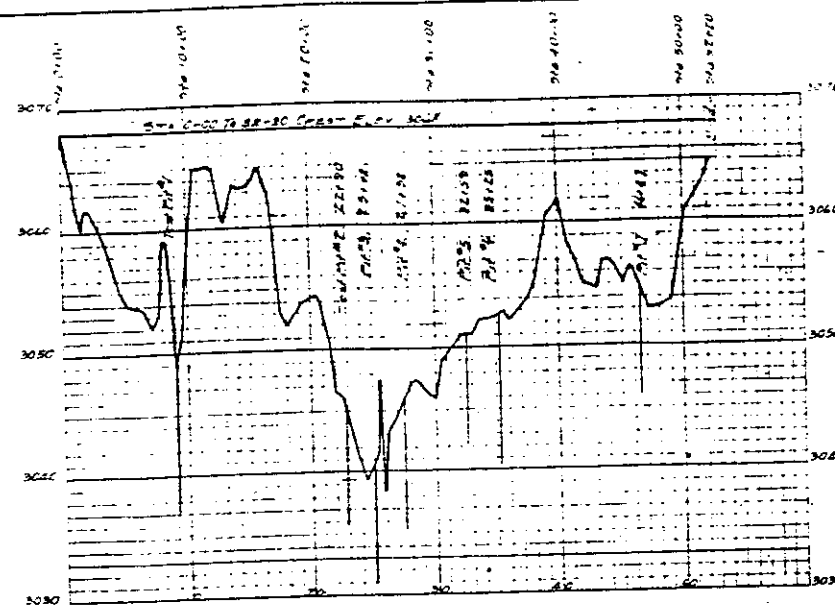
McDonald Reservoir.



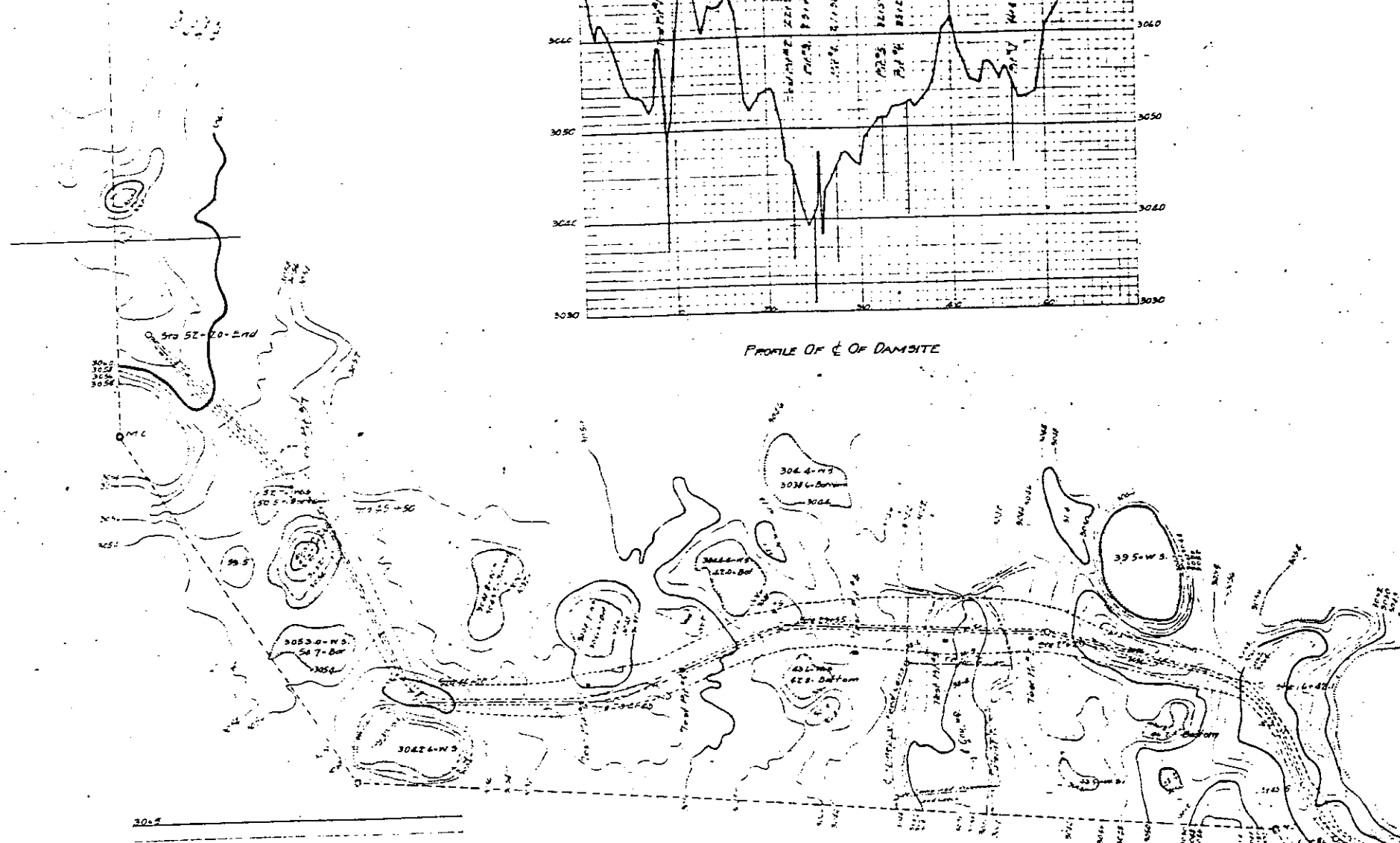
DEPARTMENT OF THE INTERIOR
UNITED STATES RECLAMATION SERVICE
FLATHEAD PROJECT-MONTANA
MCDONALD LAKE DAM
SPILLWAY
RECORD DRAWING

DRAWN - C.S.H. RECOMMENDED
CHECKED - J.B.H. APPROVED
F-3774 Sr Ignatius - Mont Jan 12, 1961

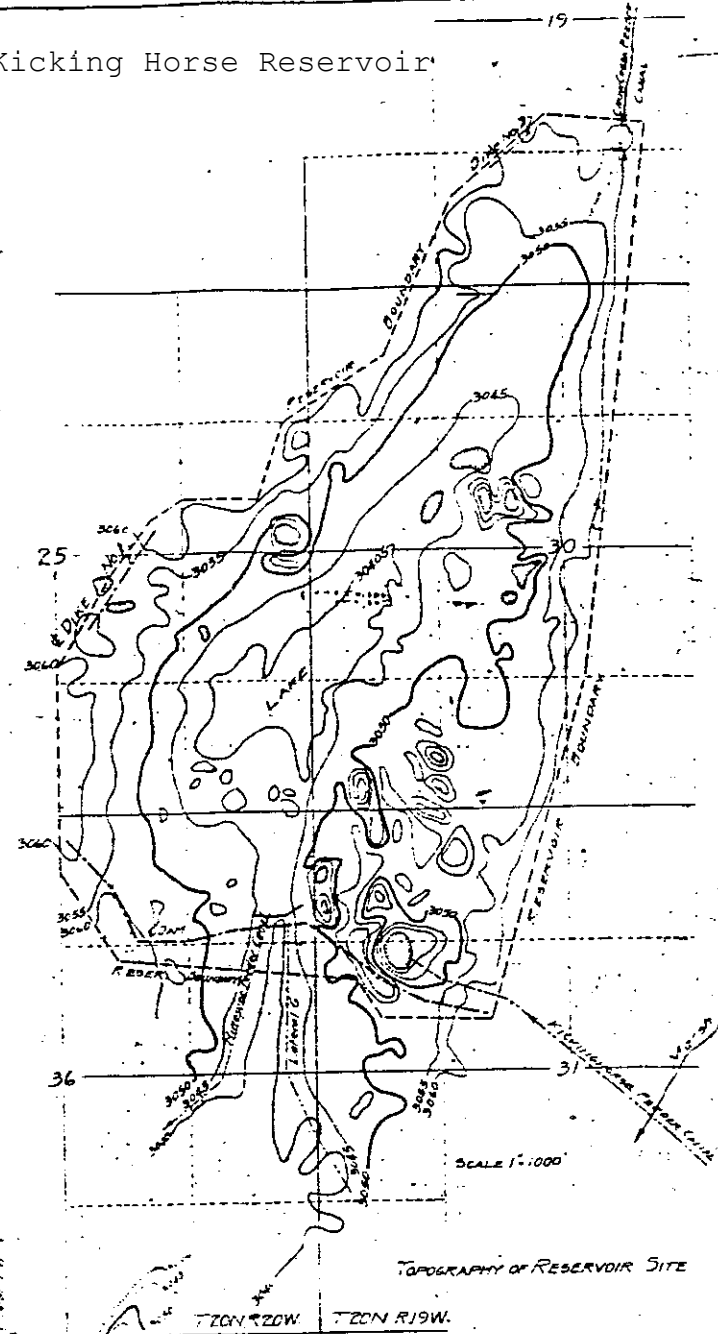
Street 2 of 4



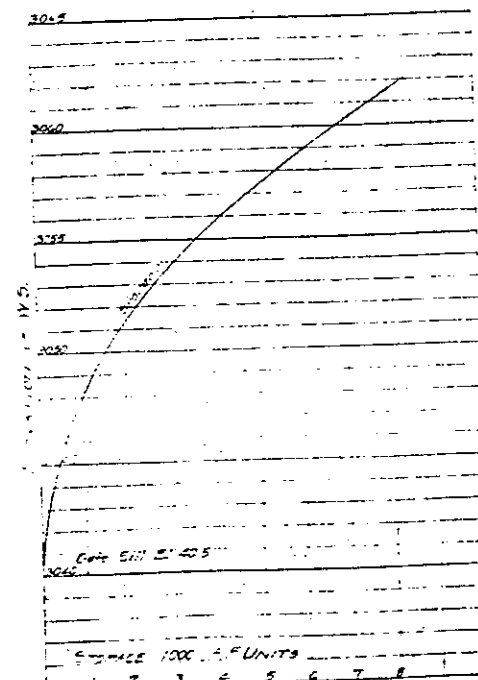
PROFILE OF E OF DAMSITE



TOPOGRAPHY OF DAMSITE
SCALE 1" = 100'

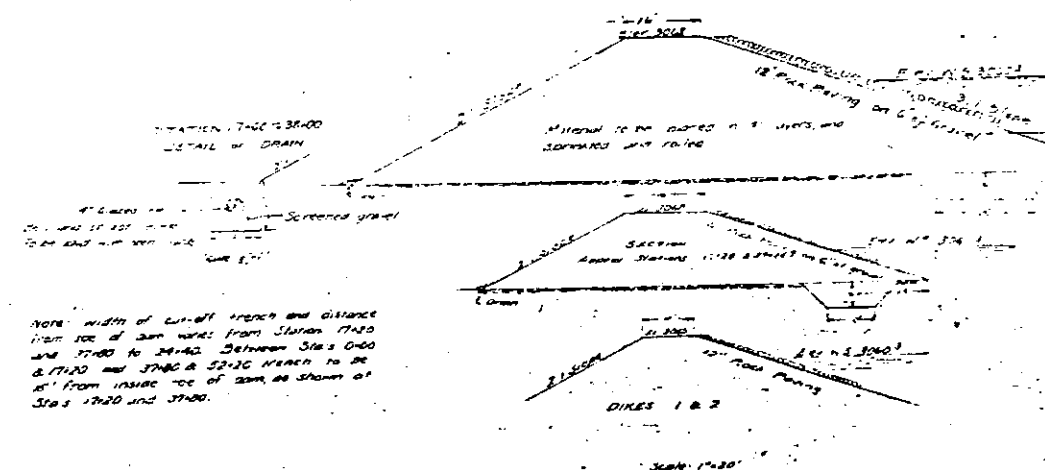


TOPOGRAPHY OF RESERVOIR SITE



STORAGE CURVE

SECTION STA 28+40



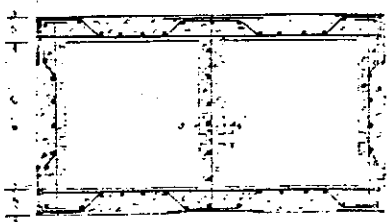
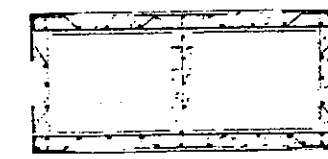
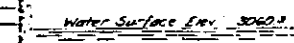
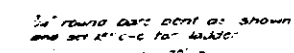
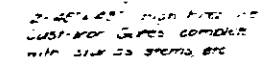
NOTE: width of cut-off trench and distance from toe of dam wall from Station 17+00 and 17+00 to 17+40. Between Sta's 0+00 & 17+00 and 17+40 & 17+00 trench to be 15' from inside toe of dam as shown at Sta's 17+00 and 17+00.

STATION	EMBANKMENT	PAVING	PAVING	REMARKS
MAX DAM STA. 28+40	34,000.0	1,100.0	3,125.0	PAVING 12"
STA. 28+40	22,100.0	745.0	0	PAVING 12"
Dike No. 1	10,710.0	755.0	0	12"
Dike No. 2	8,400.0	810.0	0	12"

DEPARTMENT OF THE INTERIOR
UNITED STATES INDIAN IRRIGATION SERVICE
NIGHTINGALE ENGINEERS
FLATHEAD PROJECT, MONTANA
KICKING HORSE RESERVOIR AND DAMSITE
C. J. MOODY, PROJECT ENGINEER

APPROVED: *[Signature]*
CONSULTING ENGINEER

REVIEWED BY: *[Signature]*
APPROVED: *[Signature]*
F-4431

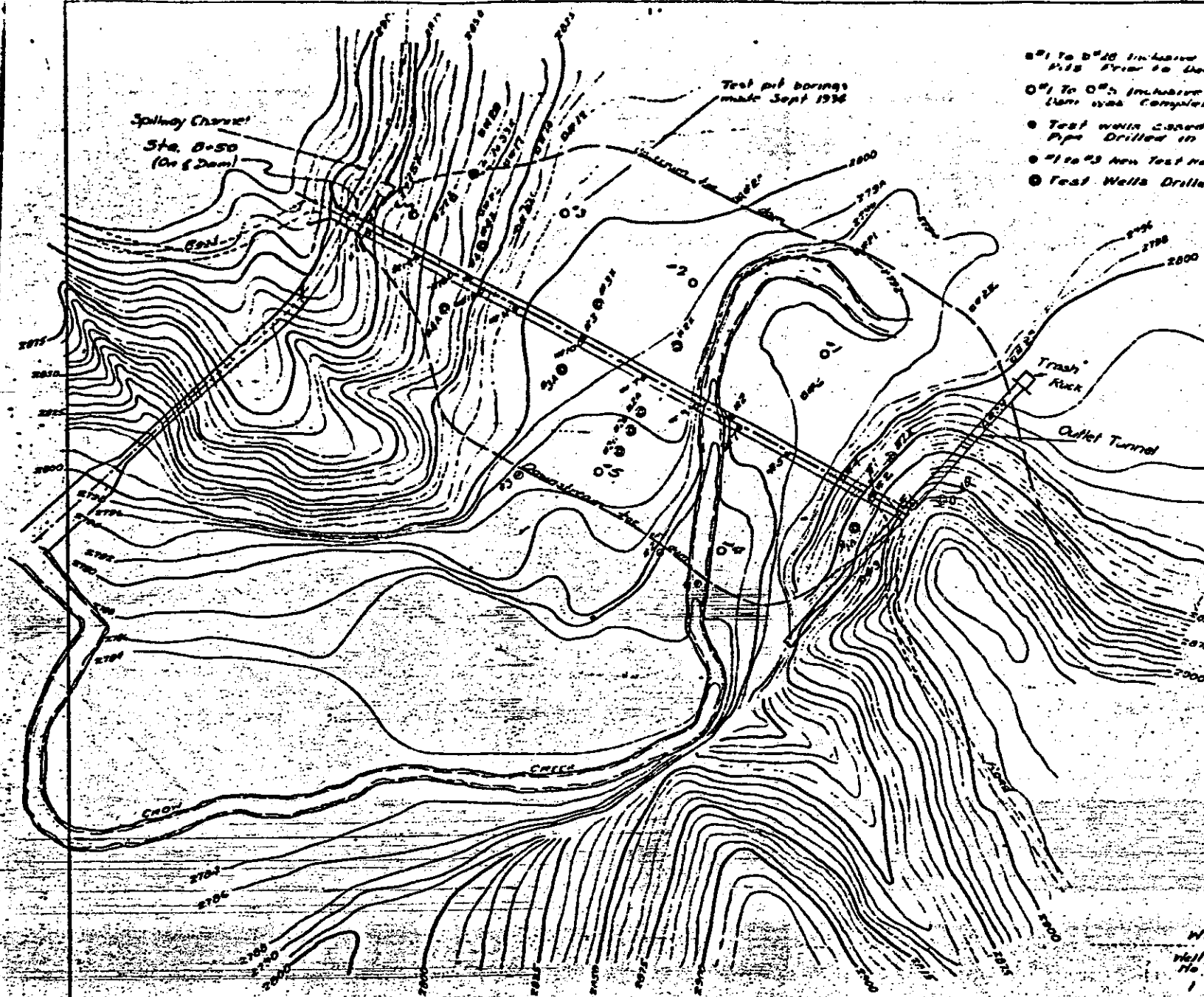


Bill of Materials		
Concrete	110	Cu Yds
Steel	2250	Lbs
wire mesh	2040	Sq ft
3" round iron	260	Lin ft
Forming	125	Cu Yds
All concrete to be 1:2:4 mix		

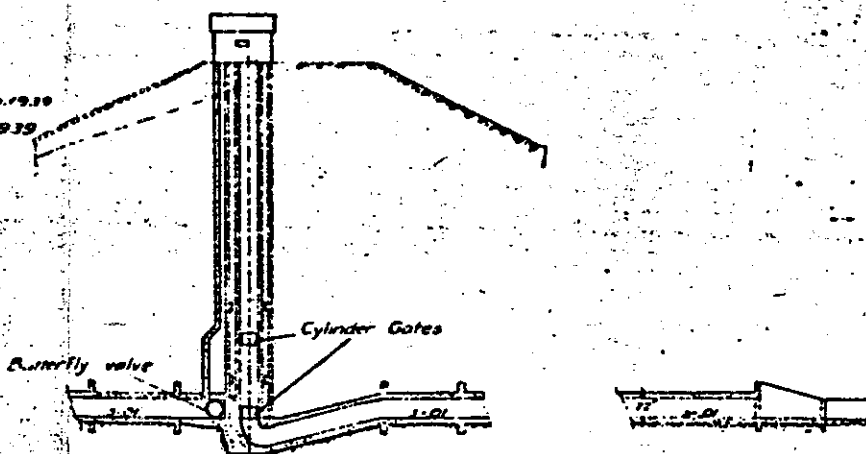
All concrete to be 1:2 1/2 max

APPROVED G. J. [Signature]
CONSULTING ENGINEER

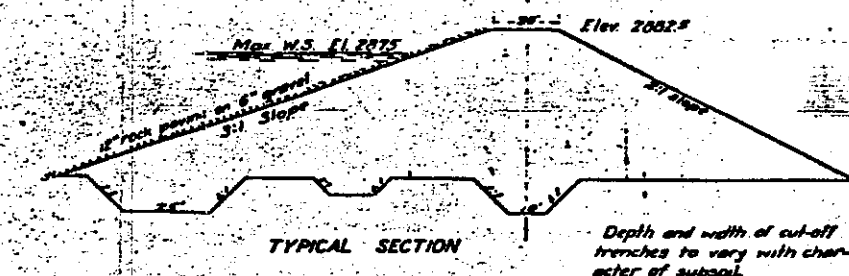
DEPARTMENT OF THE INTERIOR
UNITED STATES BUREAU OF RECLAMATION
FLATHEAD PROJECT MONTANA
CONTROLLING WORK
KICKINGHORSE RESERVOIR
H. G. DODDS, CHIEF ENG. D. SHAWNA SUPERVISING ENG.
F. L. GARDNER, CHIEF CLERK R. C. HARRIS, CHIEF CLERK
SAUNDERS, S. D. RECOMMENDED BY J. W. HARRIS
CHECKED BY APPROVED
F-4432 DISTRICT MONTANA



- 1" to 2" inclusive are Original Test Holes Prior to Dam Construction See R-5480
- 3" to 6" inclusive Test Holes after Dam was Completed See R-5467
- Test wells cased with 3" Perforated Pipe Drilled in Dec. 1938 By Contract
- 1" to 3" New Test Holes at Lower Toe of Dam Jan. 1939
- Test Wells Drilled By Gov't Forces Feb. 1939

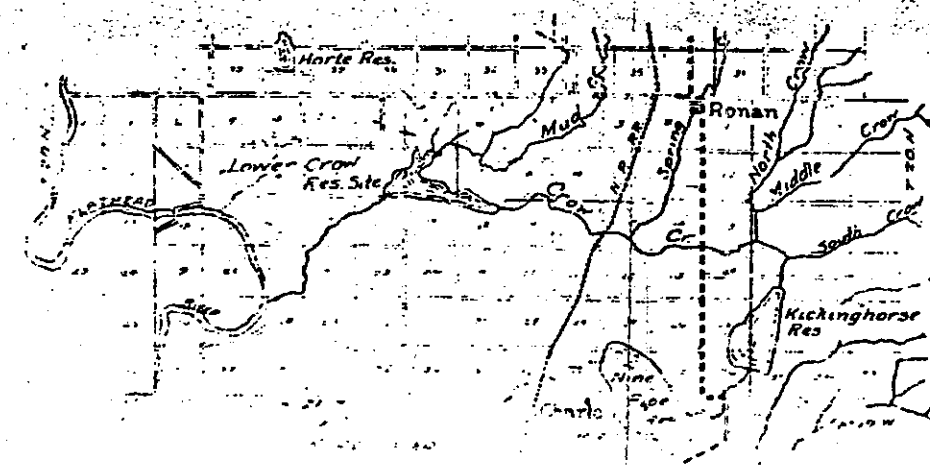
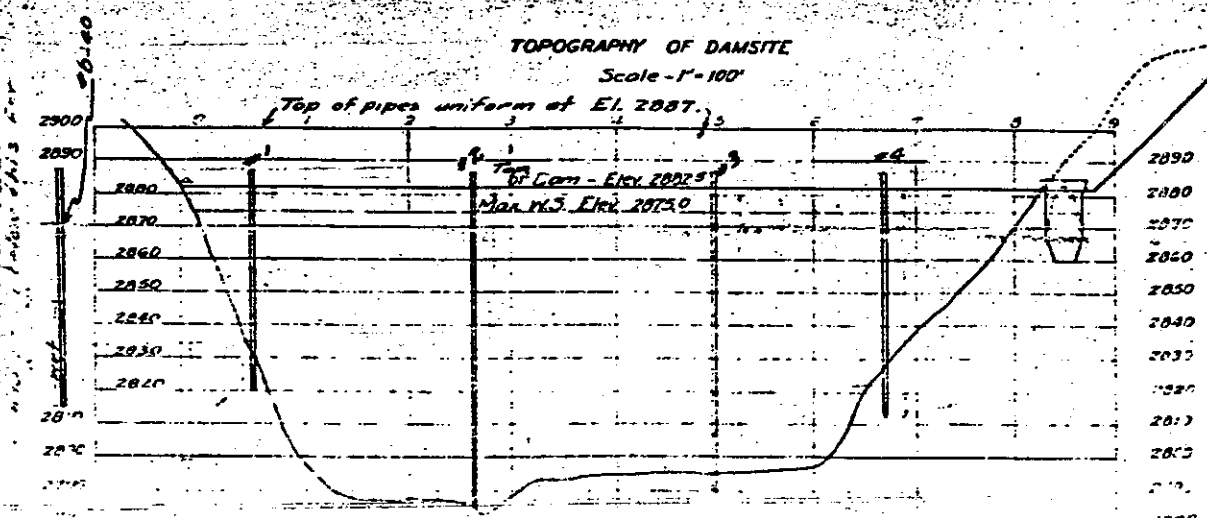
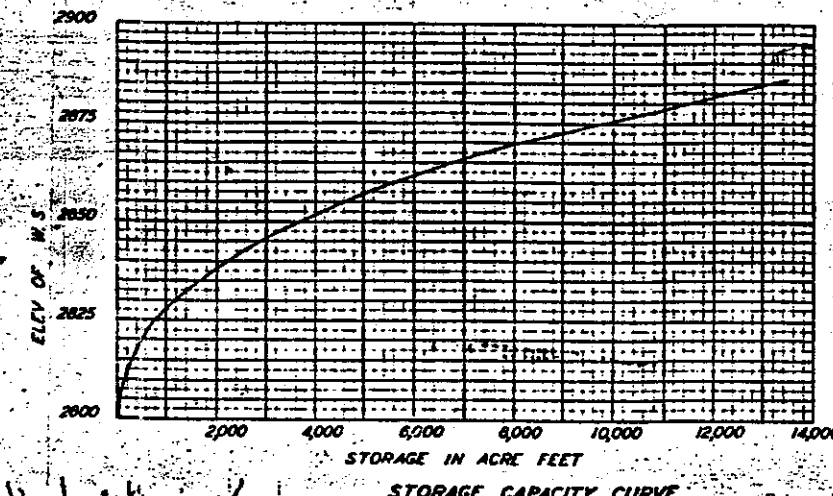


SECTION THRU OUTLET WORKS



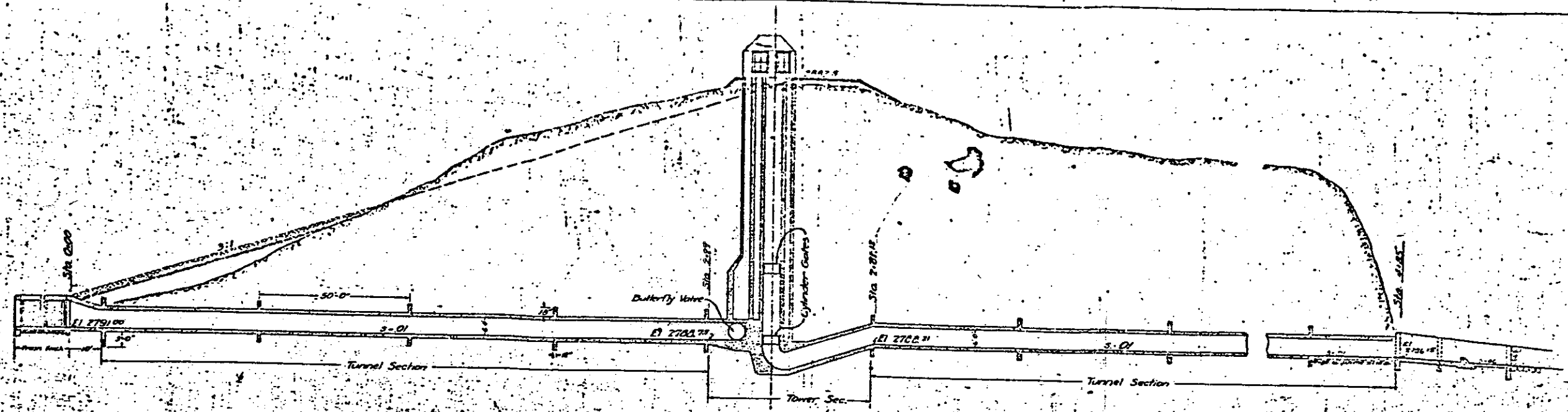
WELL DATA

Well No.	Total Depth	Drilling Time	Depth of Pipe Driven
1	67'	12 hr.	6'
2	102'	14 "	7.5'
3	96'	13 "	3'
4	74'	7 1/2 "	3'

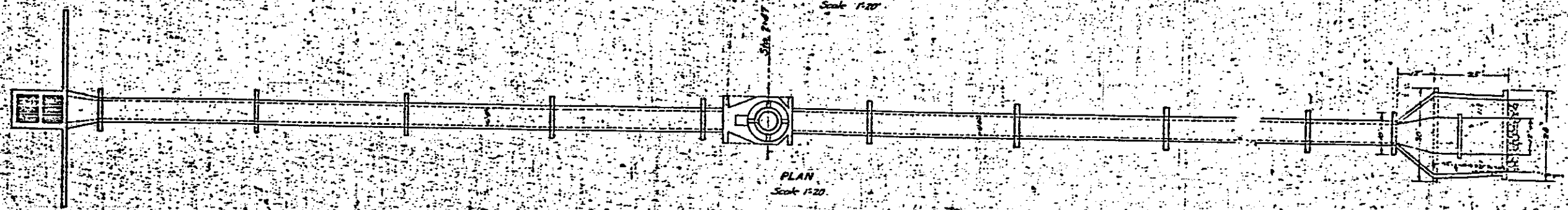


For topography of res. site, see F-4761.

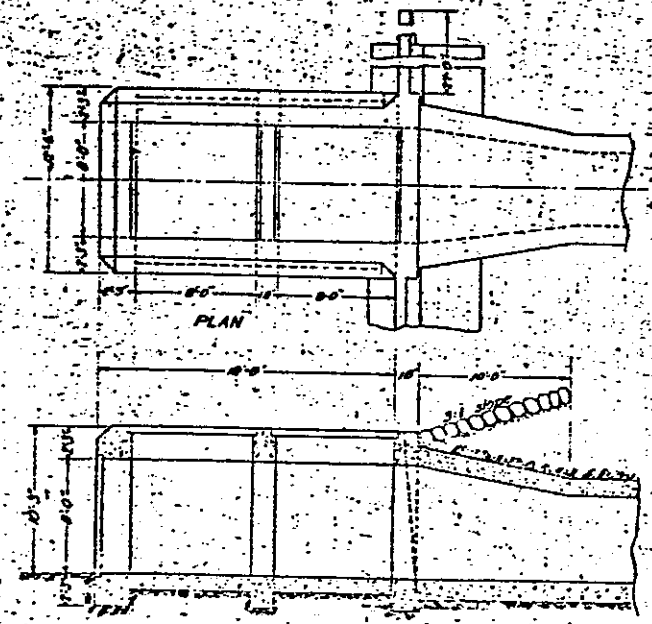
DEPARTMENT OF THE INTERIOR
U.S. INDIAN IRRIGATION SERVICE
WAS. POST DIRECTOR OF IRRIGATION
WAS. ASST. DIRECTOR W.S. HANNA SUPERVISING ENG.
FLATHEAD PROJECT - MONTANA
LOWER CROW RESERVOIR
PLAN & SECTION OF DAM
DRAWN BY: W.S. Hanna
CHECKED BY: W.S. Hanna
F-4761



LONG SECTION
Scale 1/20'

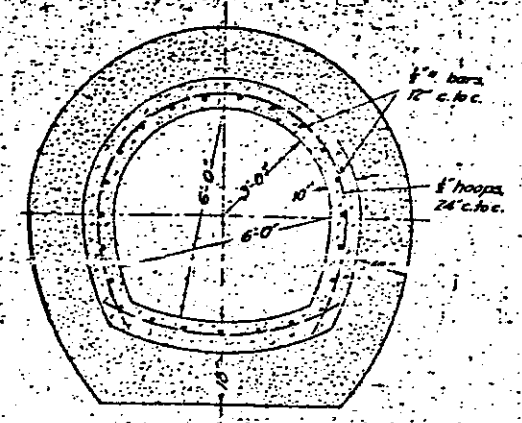


PLAN
Scale 1/20'

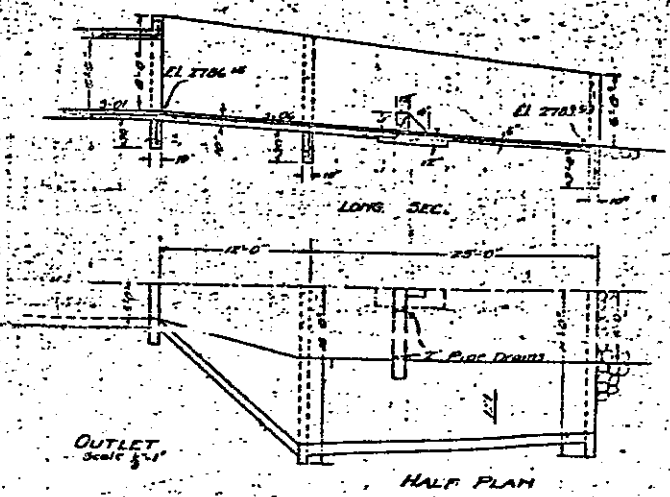


LONG SECTION

TRASH RACK



TUNNEL SECTION
Scale 3/4"

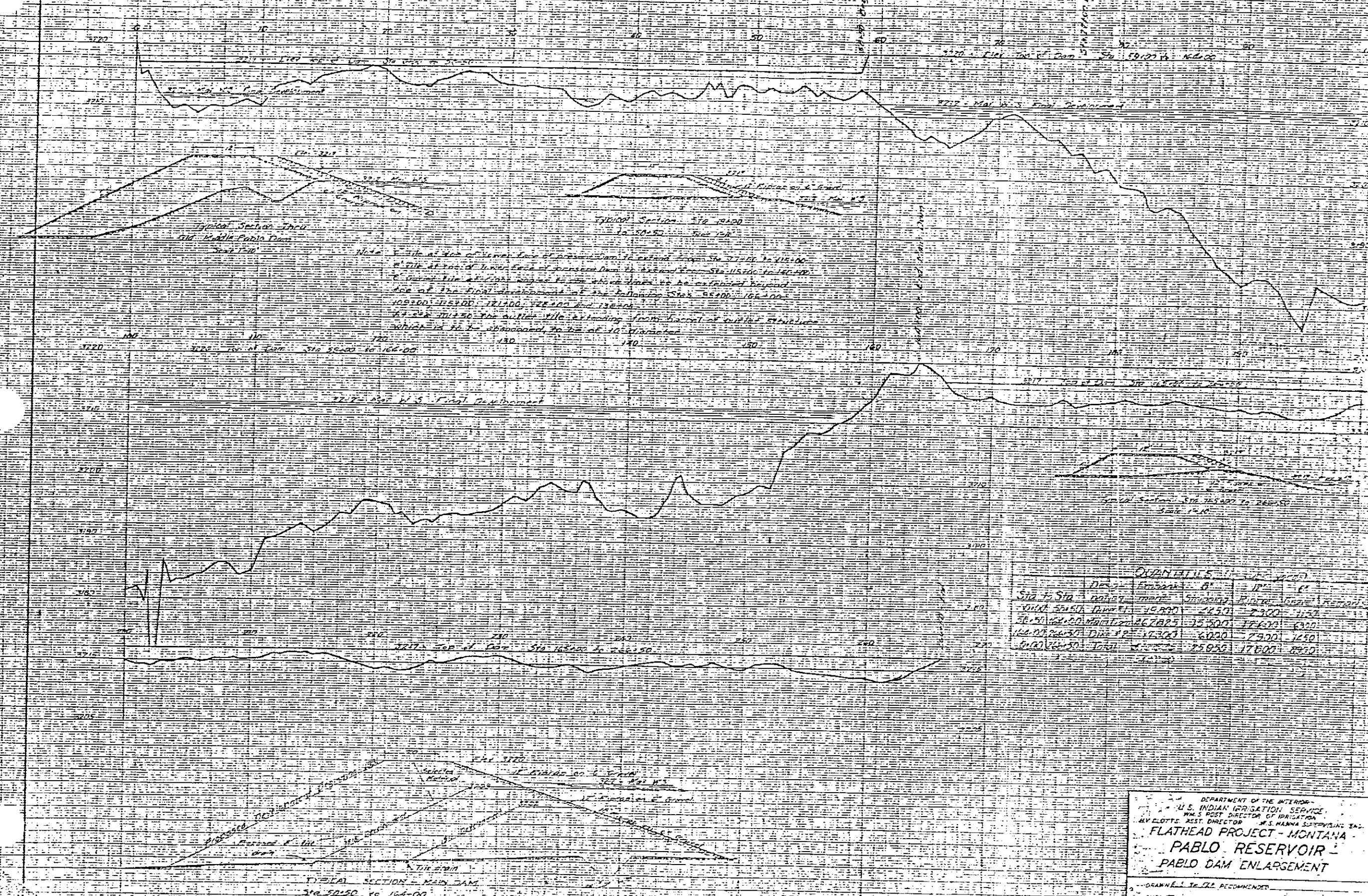


HALF PLAN

OUTLET
Scale 3/4"

U.S. DEPARTMENT OF THE INTERIOR	
U.S. INDIAN IRRIGATION SERVICE	
WAS. POST DIRECTOR OF IRRIGATION	W.S. HANNA SUPERVISING ENG.
FLATHEAD PROJECT - MONTANA	
LOWER CROW RESERVOIR	
CONTROLLING WORKS	
DRAWN J.E.P.	RECOMMENDED J.E.P.
CHECKED G.J.M.	APPROVED J.E.P.
F-4765	STATIONING MONT APPL. 1931

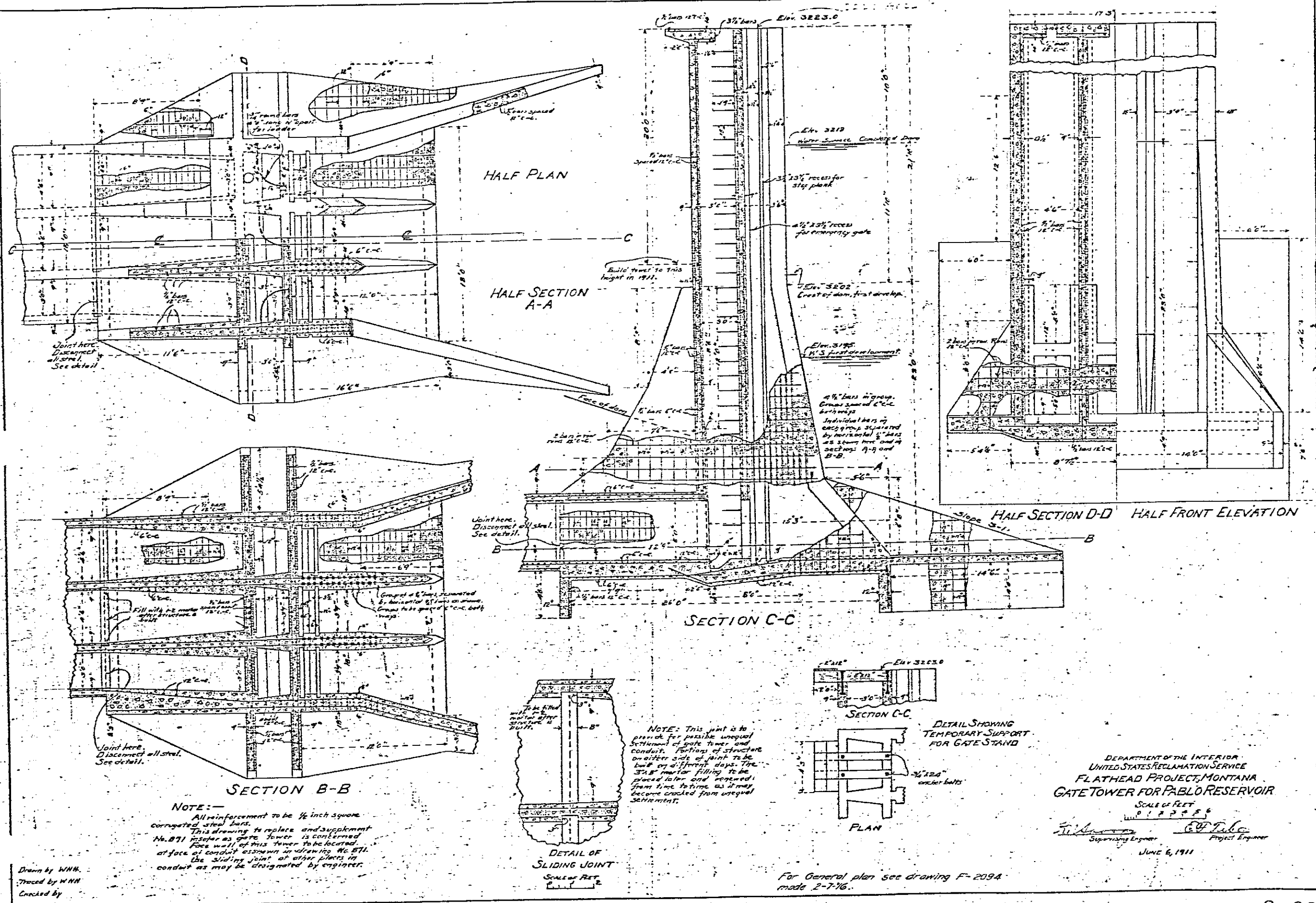
DEPARTMENT OF THE INTERIOR
U.S. INDIAN IRRIGATION SERVICE
WILLIAM R. BENTLEY, DIRECTOR OF IRRIGATION
MAYLOTTE, ASST. DIRECTOR
FLATHEAD PROJECT - MONTANA
PABLO RESERVOIR -
PABLO DAM ENLARGEMENT

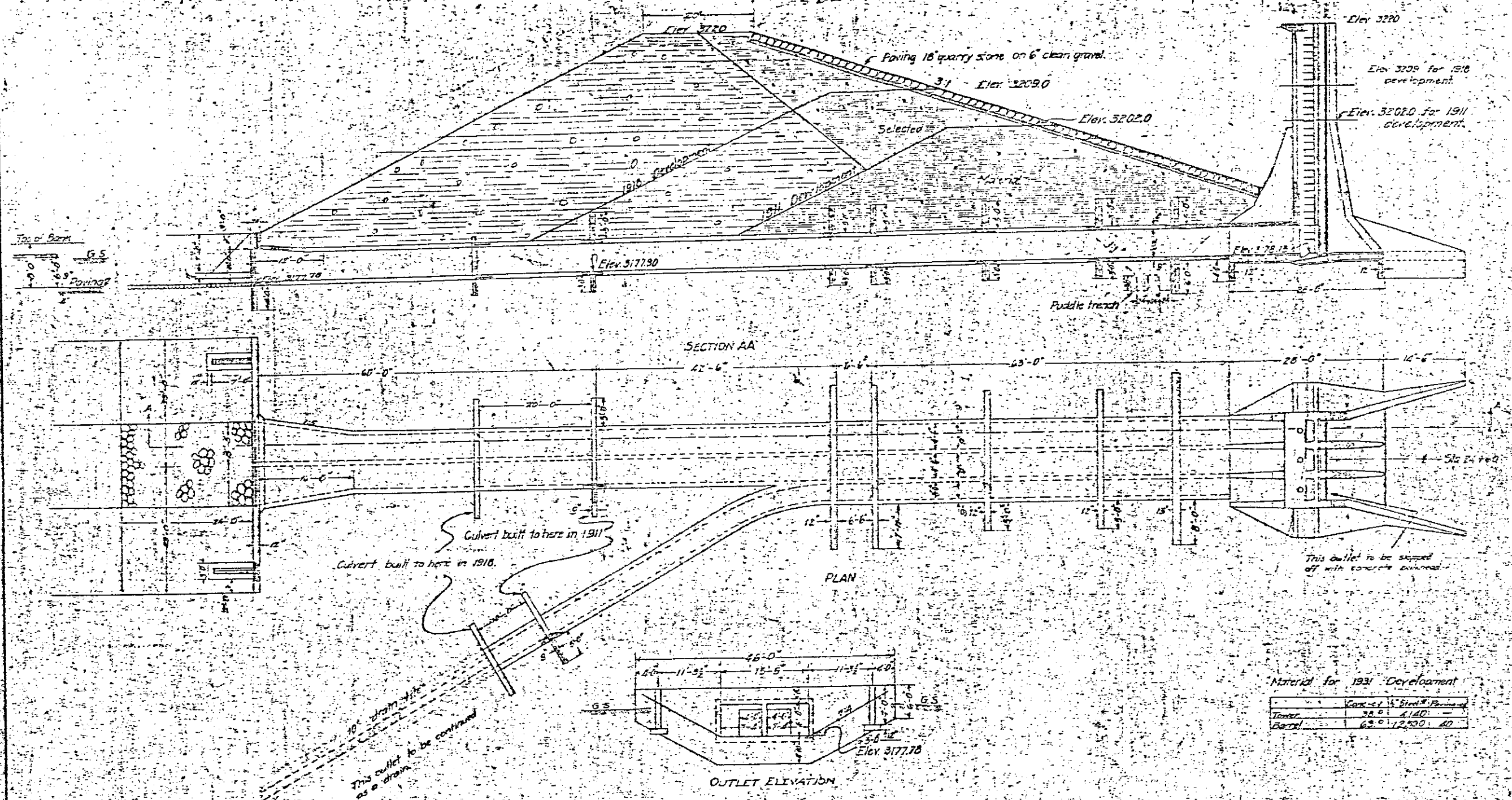


QUANTITIES					
Sta. to Sta.	Dist.	Material	8"	12"	6"
Sta. to Sta.	Dist.	Material	8"	12"	6"
50+00 to 50+50	Dist. 50	Material	25000	7500	12500
50+50 to 51+00	Dist. 50	Material	25000	7500	12500
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99+50 to 100+00	Dist. 50	Material	25000	7500	12500

DEPARTMENT OF THE INTERIOR
U.S. INDIAN IRRIGATION SERVICE
W.M.S. POST, DIRECTOR OF IRRIGATION
M.V. LOTTE, ASST. DIRECTOR U.S. NATURAL SURVEYING DIV.
FLATHEAD PROJECT - MONTANA
PABLO RESERVOIR -
PABLO DAM ENLARGEMENT

2 - DRAWN IN TO FILE RECOMMENDED
CHECKED _____ APPROVED _____
F-4762 ST. RAYLIS MONT FEB 1934

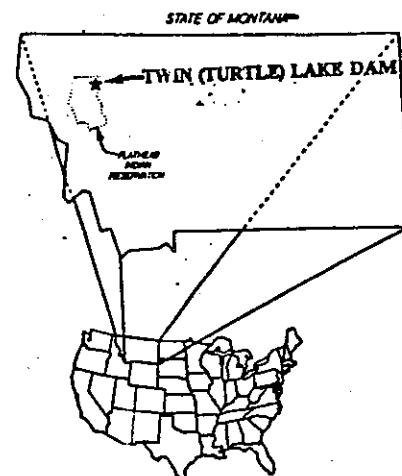




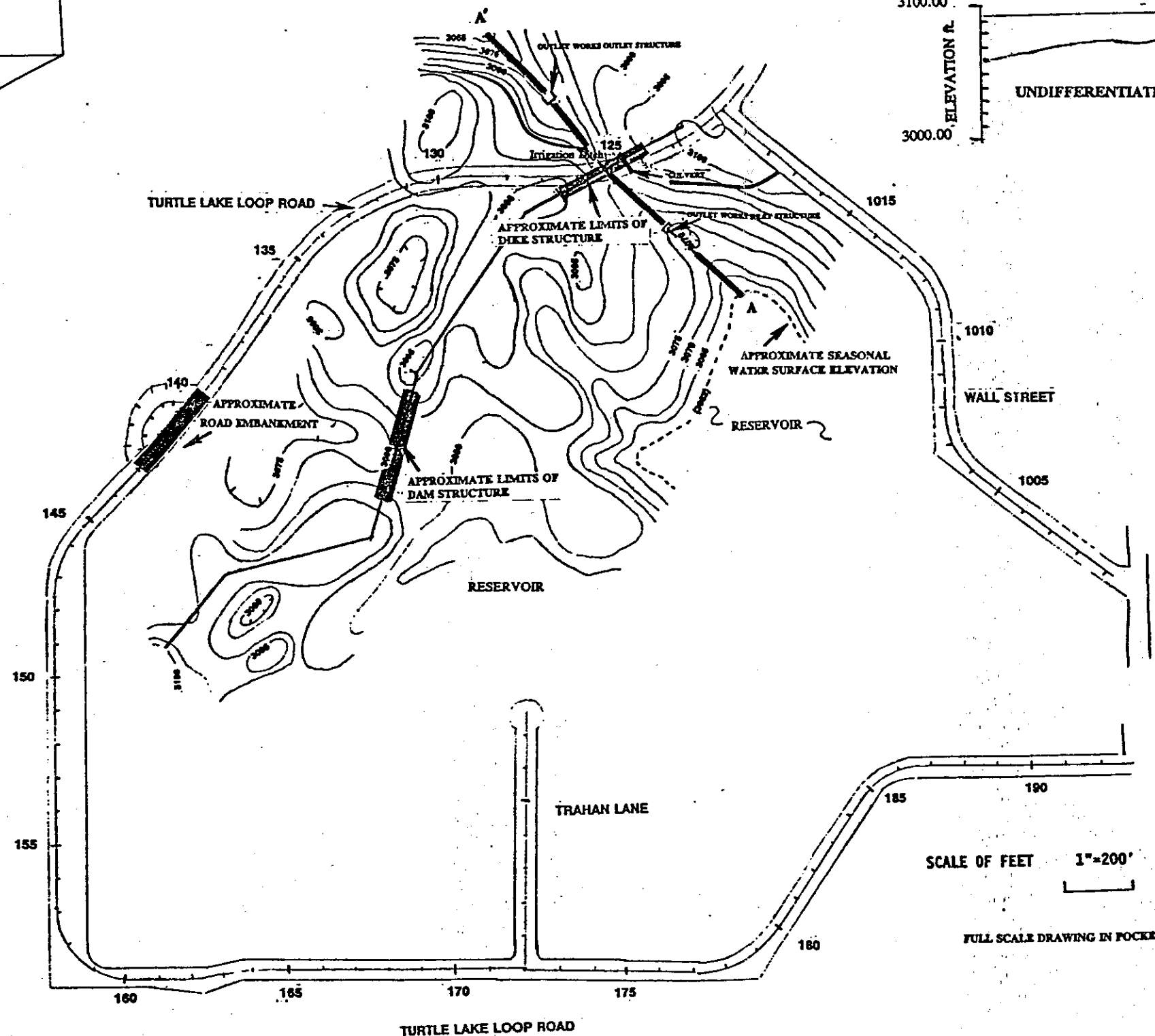
Note:
For detail of gate tower see F-925.
For original design see F-871.
For contract drawing see F-1012.

Revised: Feb. 1931	DEPARTMENT OF THE INTERIOR	
	UNITED STATES RECLAMATION SERVICE	
	FLATHEAD PROJECT MONTANA	
	SOUTH PABLO RESERVOIR	
	CONTROLLING WORKS	
Designed by E. J. ...	Checked by ...	Submitted by ...
F-2094. Signatures, Mr. ...		

Turtle (Twin) Reservoir

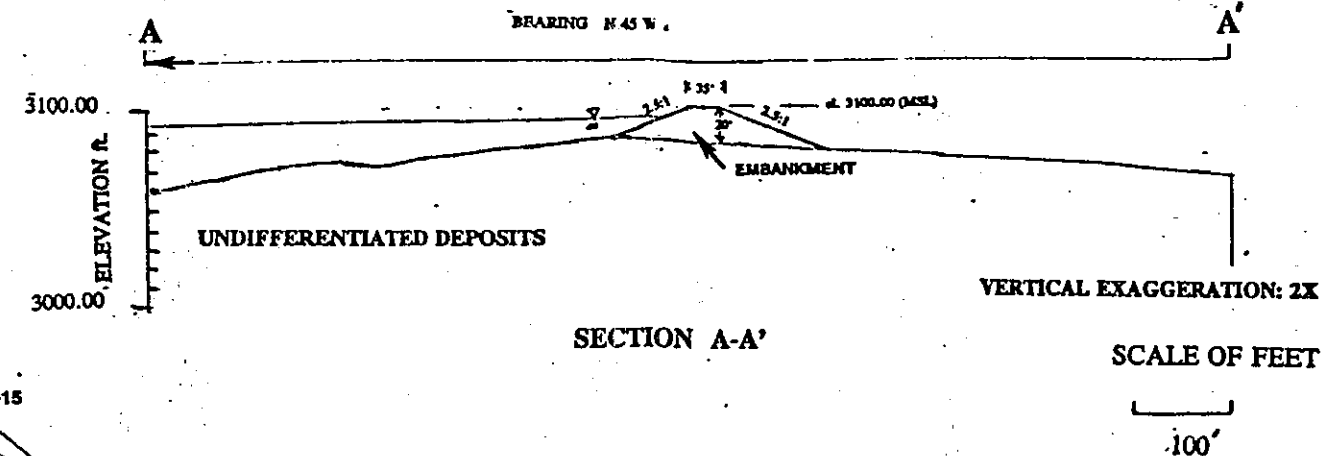


LOCATION MAP

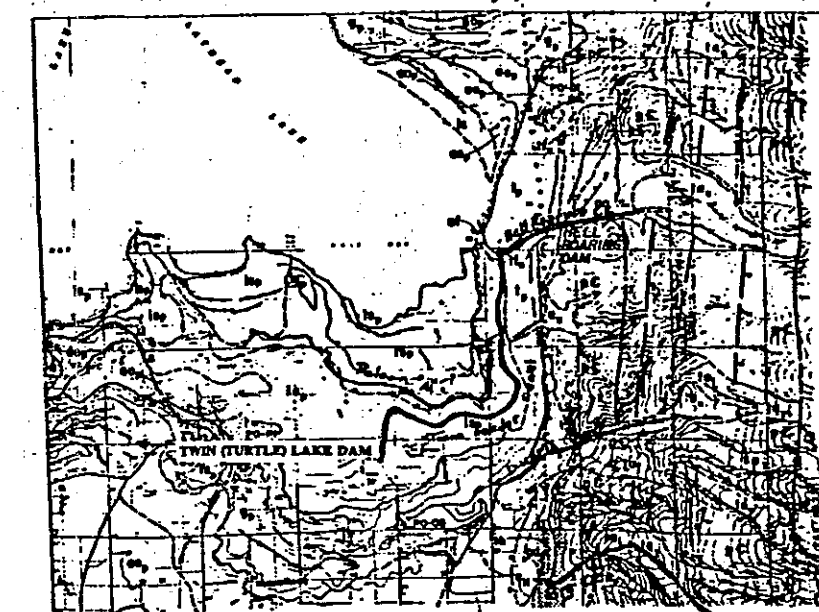


GENERAL PLAN AND TOPOGRAPHY

- NOTE: 1. TOPOGRAPHIC CONTOURS FROM F-4751 SEPT., 1930
 2. ROAD ALIGNMENT AND STATIONING FROM BIA ROADS DRAWINGS
 3. STRUCTURE LOCATIONS ARE FROM F-4751 AND SHOULD BE CONSIDERED APPROXIMATE.
 4. DWG F-4751 REFERENCED IS TITLED "TWIN RESERVOIR AND DAMSITE" AND IS LOCATED IN THE ST. IGNATIUS PROJECT OFFICE.



SECTION A-A'



SURFICIAL GEOLOGY

BLURBS THINK SAFETY

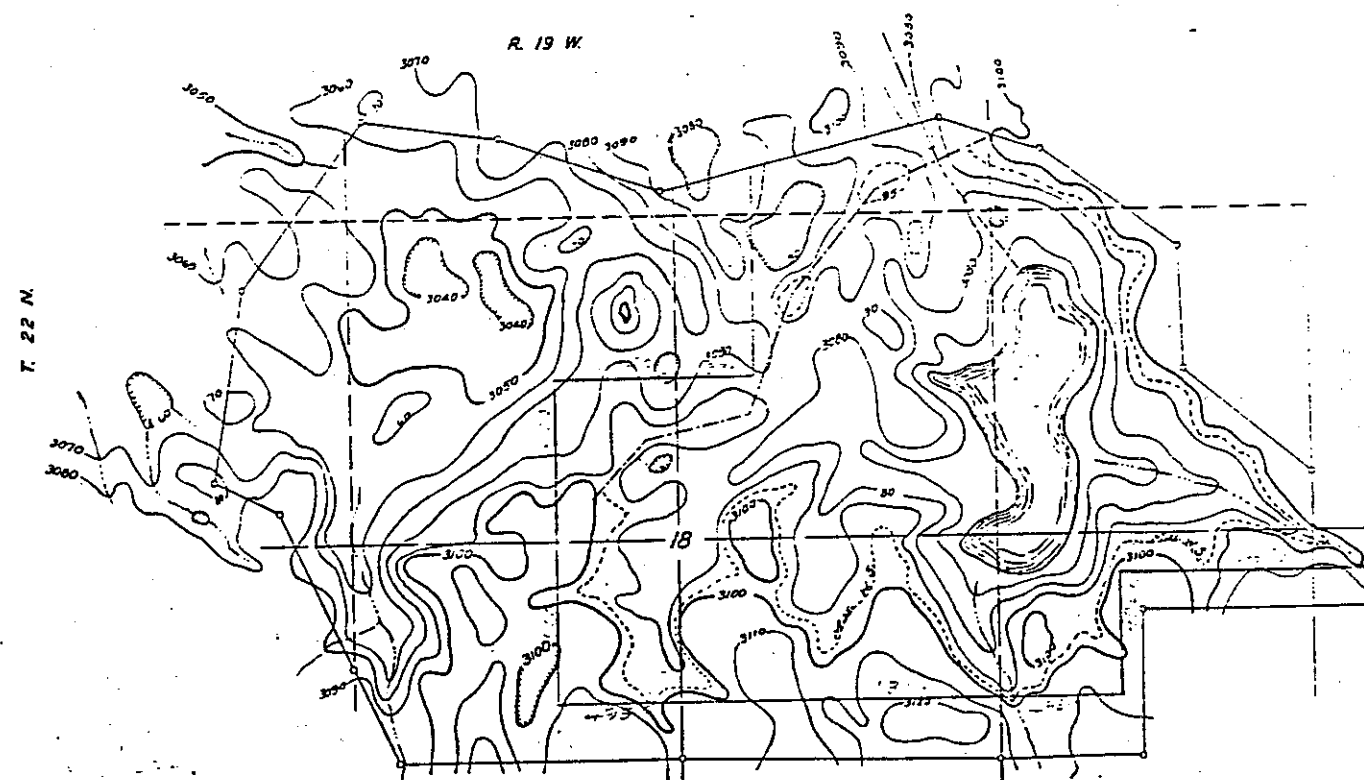
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

TWIN (TURTLE)-FAID-BIA-SOD

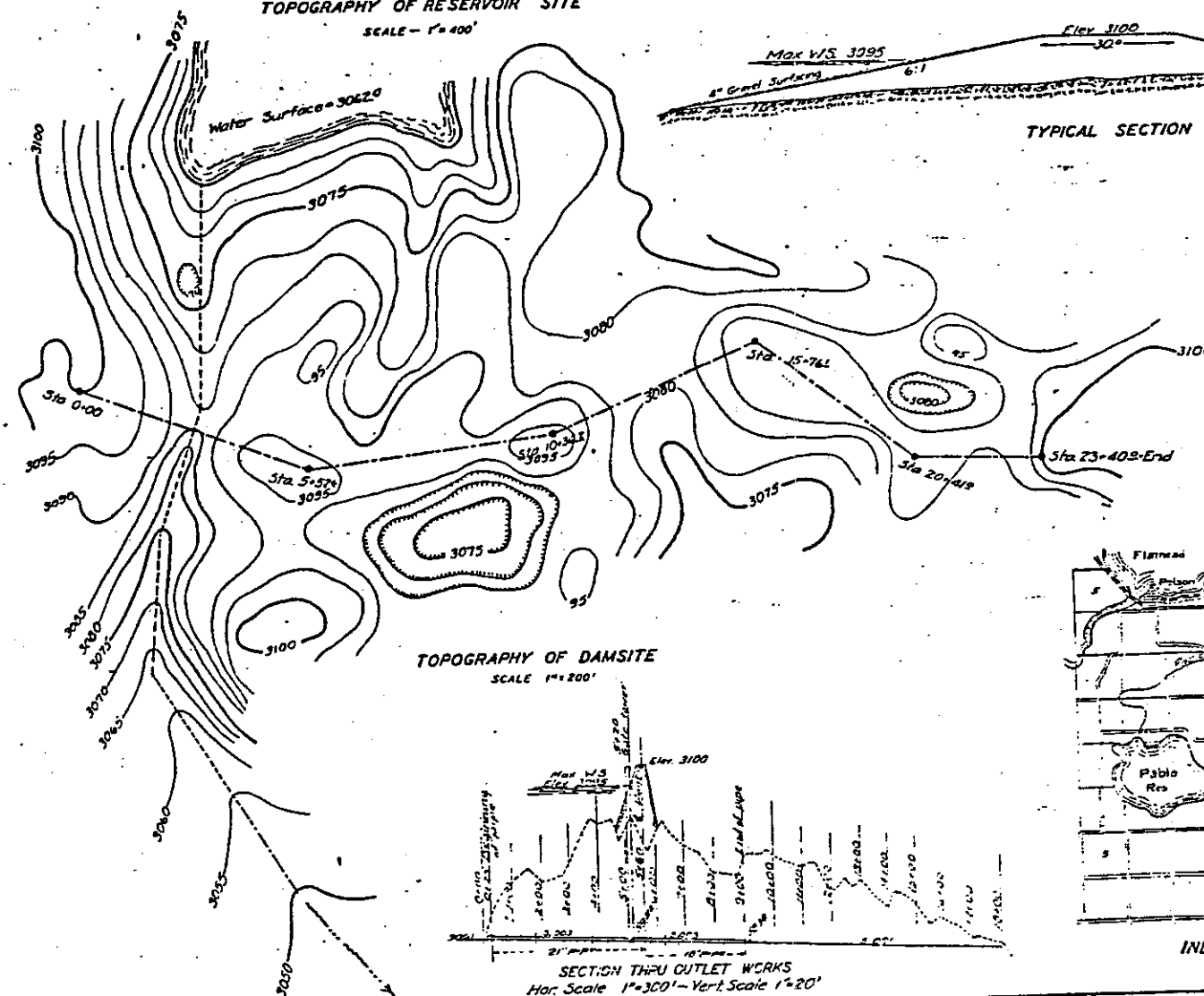
GENERAL PLAN, LOCATION, AND GEOLOGY
MAP

DESIGNED... TECHNICAL APPROVAL...
 DRAWN... M.FAHY... SUBMITTED...
 CHECKED... M.FAHY... APPROVED...

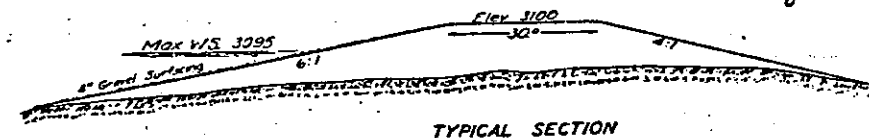
DENVER, COLORADO NOVEMBER 30, 1991 981-D-50



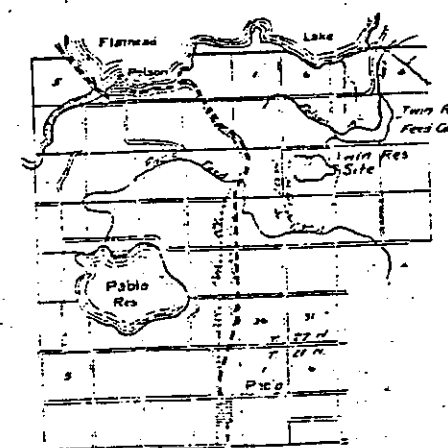
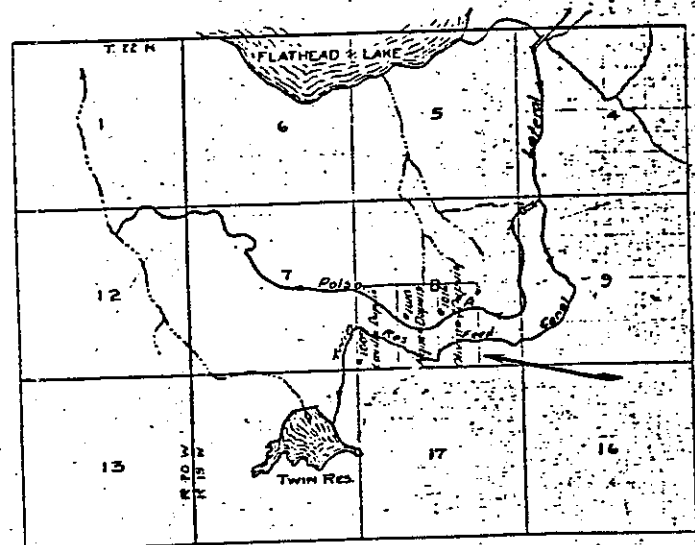
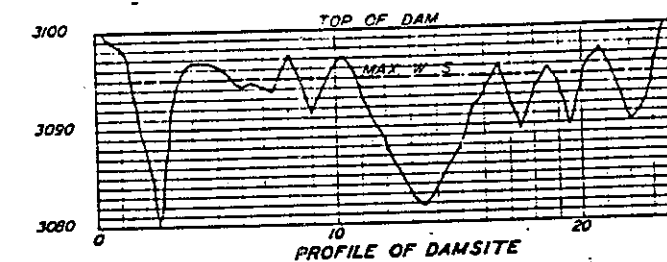
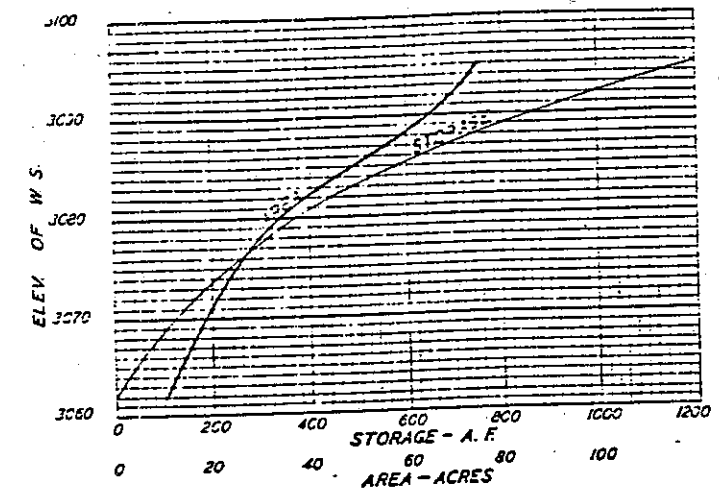
TOPOGRAPHY OF RESERVOIR SITE
SCALE - 1" = 400'



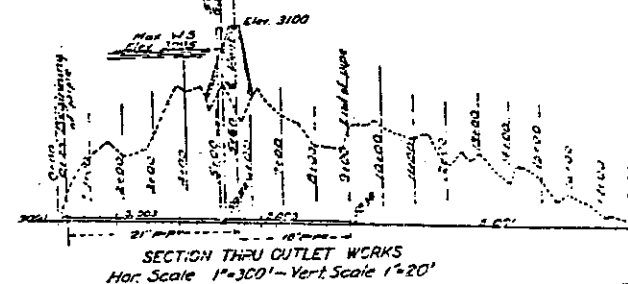
TOPOGRAPHY OF DAMSITE
SCALE 1" = 200'



TYPICAL SECTION



INDEX MAP



SECTION THRU OUTLET WORKS
Hor. Scale 1" = 300' - Vert. Scale 1" = 20'

DEPARTMENT OF THE INTERIOR U. S. INDIAN IRRIGATION SERVICE H. W. CLOTTIS - CHIEF ENG. - A. S. HANNA - SUPERVISING ENG. C. J. MOODY - PROJECT ENG.	
FLATHEAD PROJECT - MONTANA PABLO SUBDIVISION TWIN RESERVOIR AND DAMSITE	
DESIGNED BY CHECKED BY	RECOMMENDED BY APPROVED BY
F-4751	SE IGNATIUS MCINT SEPT. 1930

DEPARTMENT OF THE INTERIOR
U. S. INDIAN IRRIGATION SERVICE
M. V. CLOUTS CHIEF ENG. U. S. INDIAN SUPERVISING ENG.
C. J. DOODY - PROJECT ENG.
FLATHEAD PROJECT - MONTANA
PABLO SUBDIVISION

TWIN RESERVOIR OUTLET WORKS

DATA DEM RECOMMENDED H. S. Lawrence 12-29-1930
CHECKED C. J. M. APPROVED Herbert Clotts 1/2/31

F-4759

ST. IGNATIUS MONT.
DEC 1930

