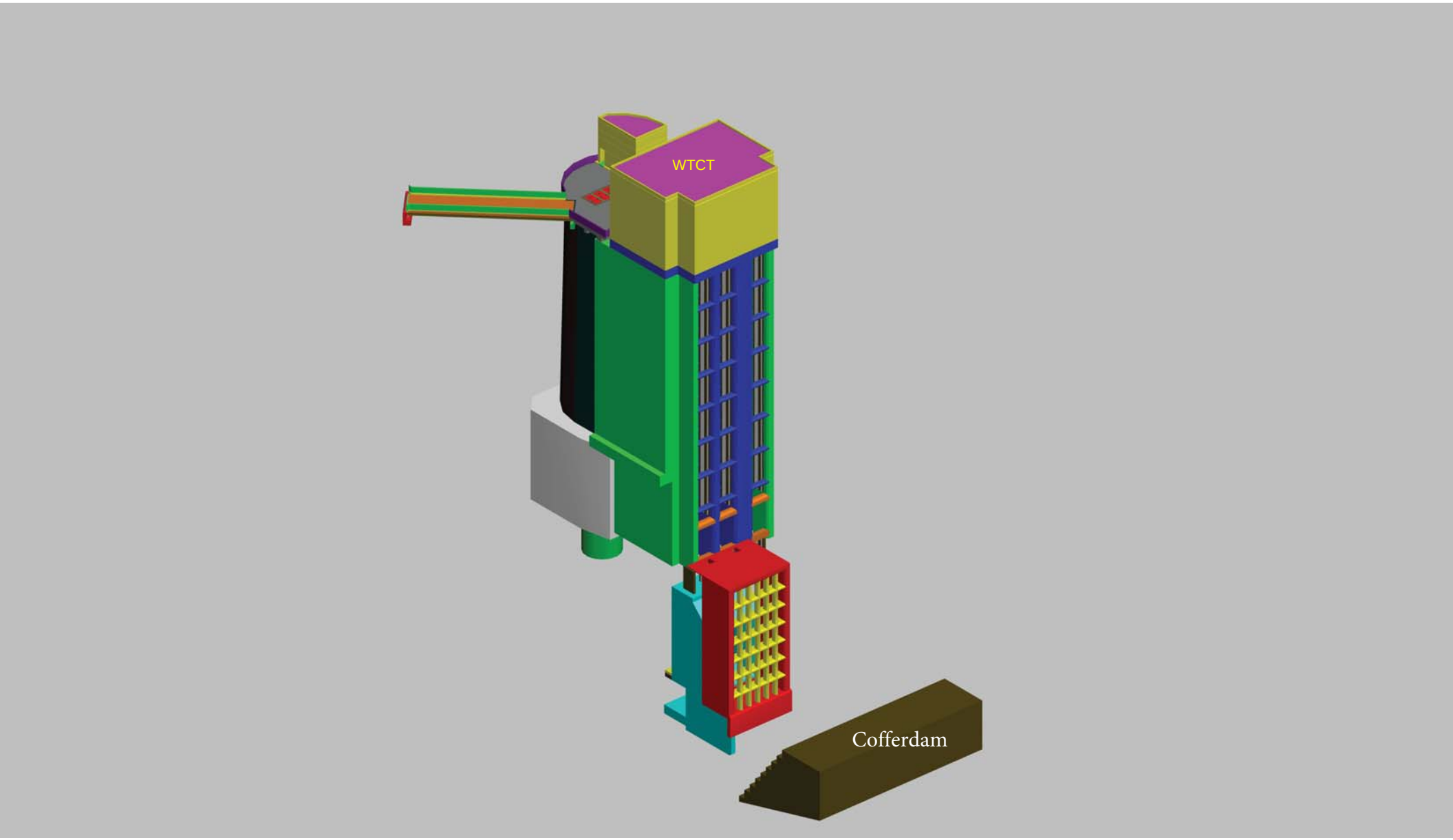
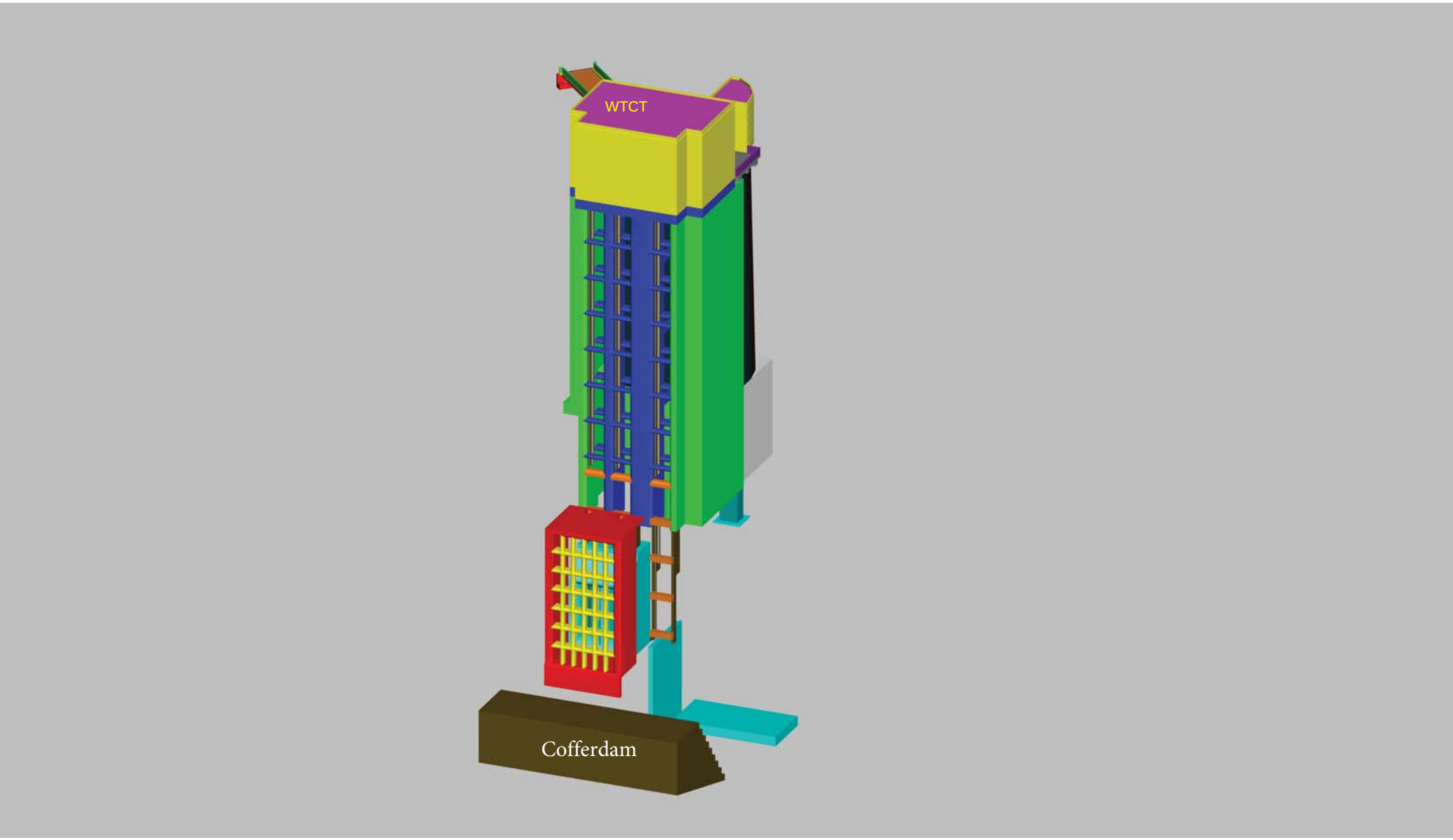
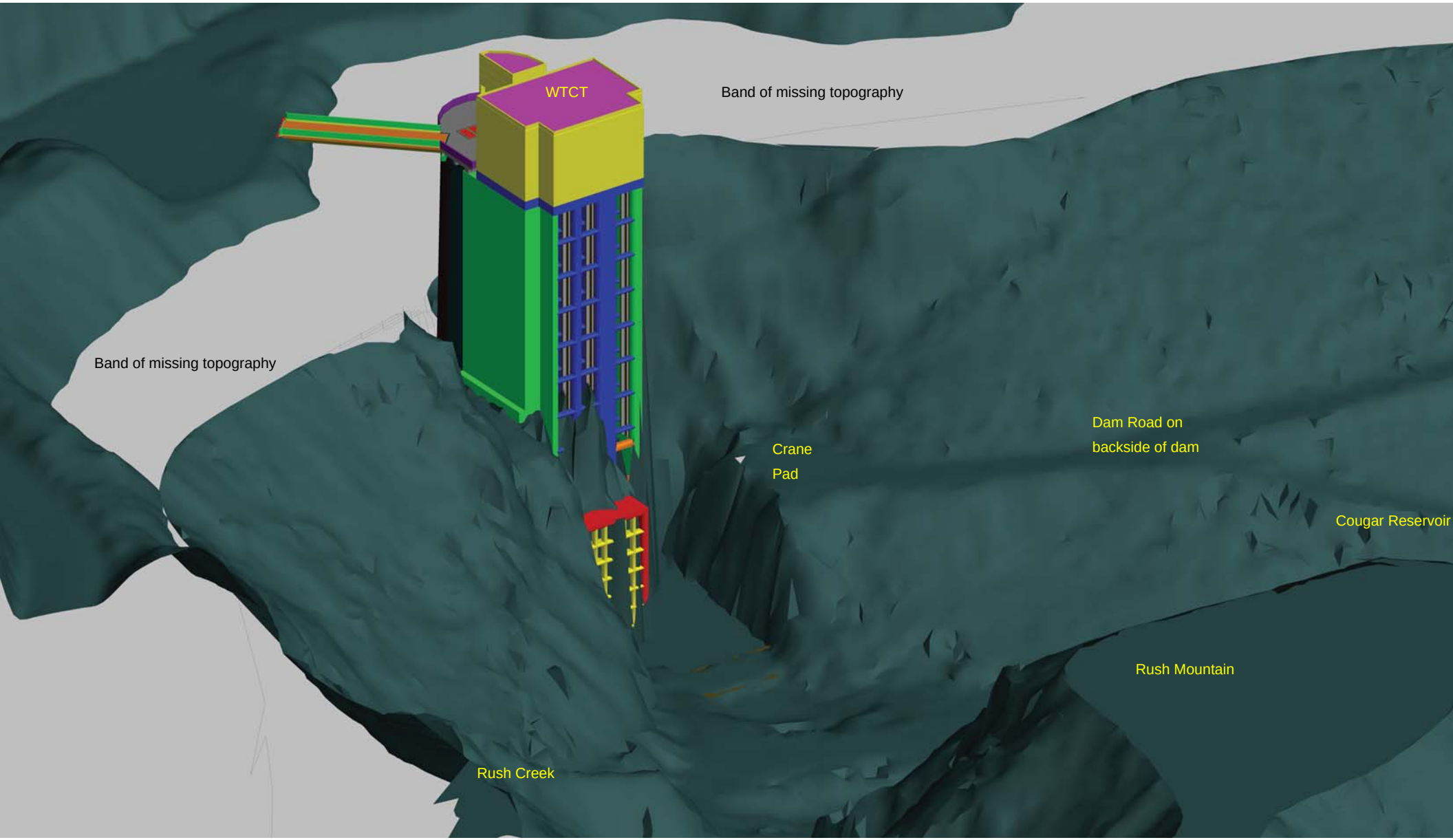
Water Temperature Control Tower (WTCT) looking in a northeast direction.



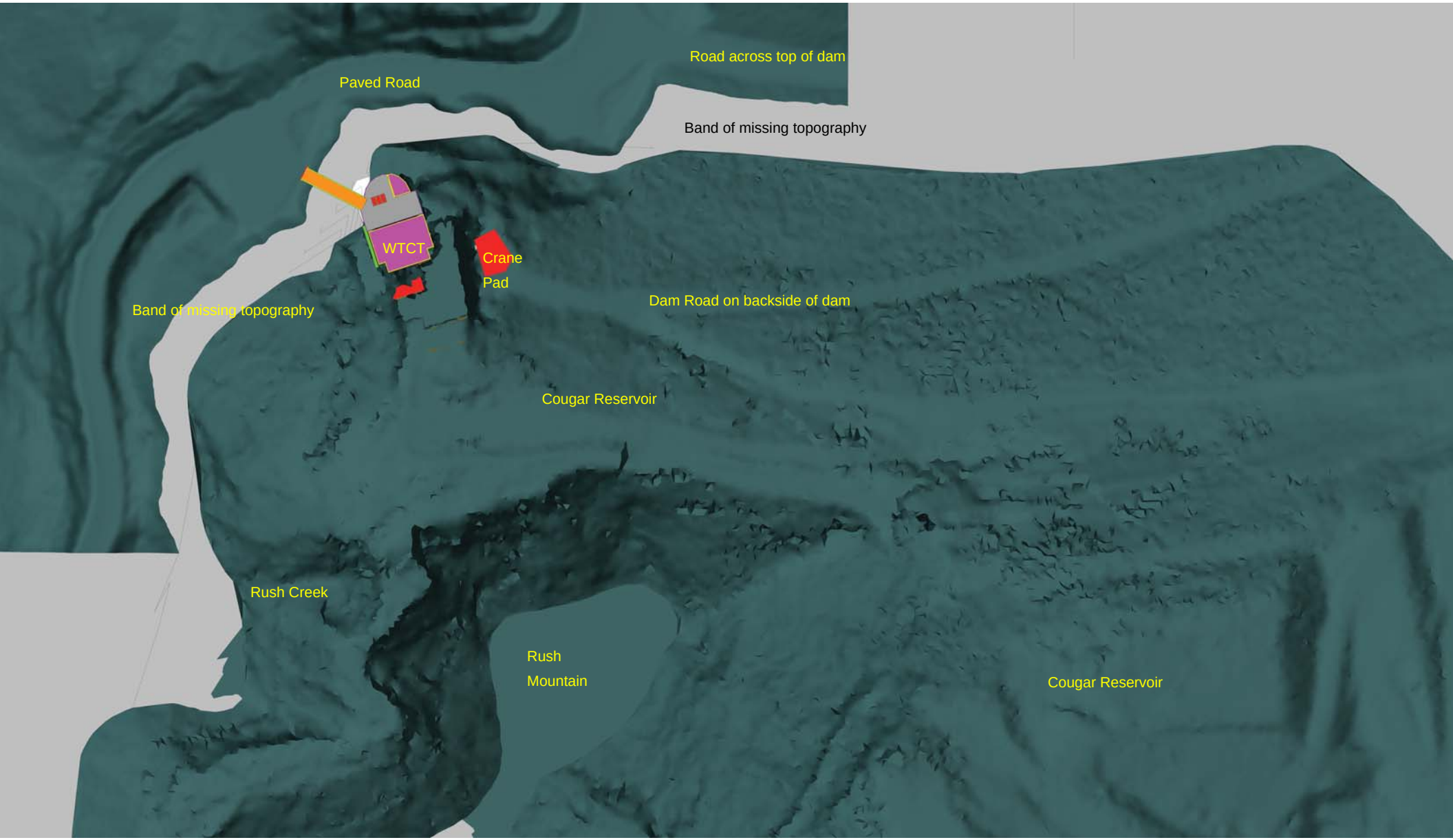
WTCT looking in a northwest direction.



WTCT with the existing surface data.

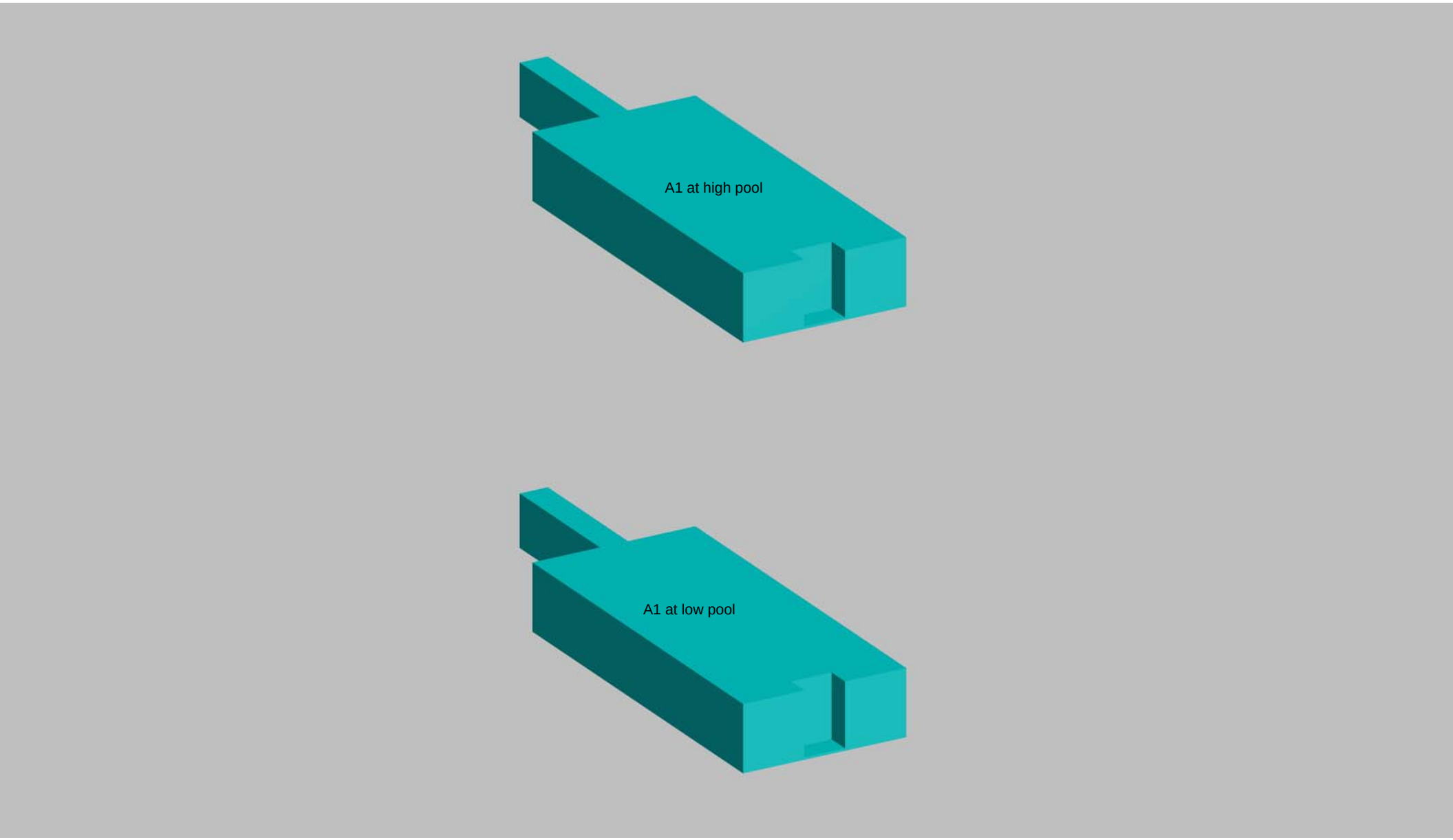


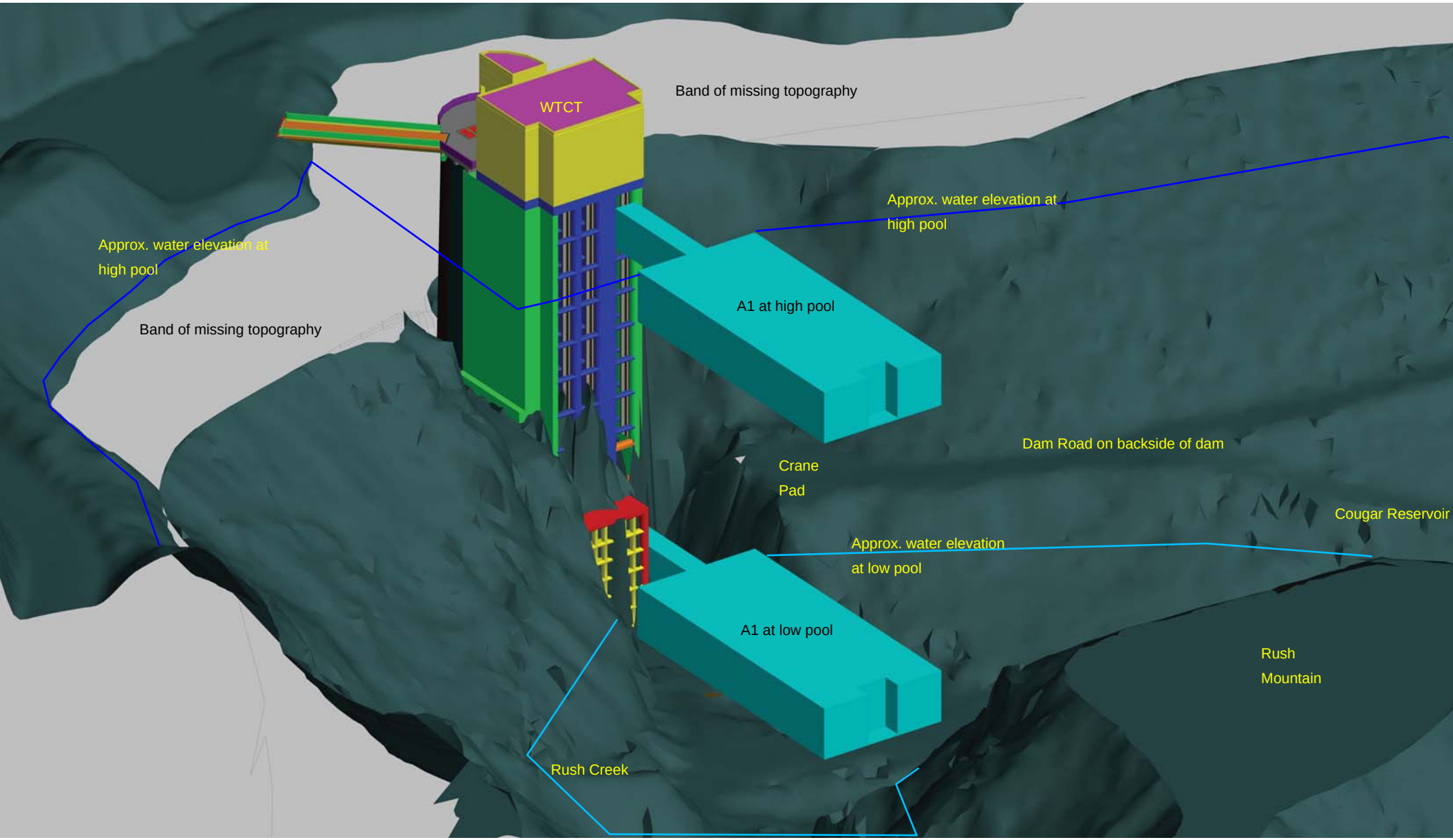
Plan view of site

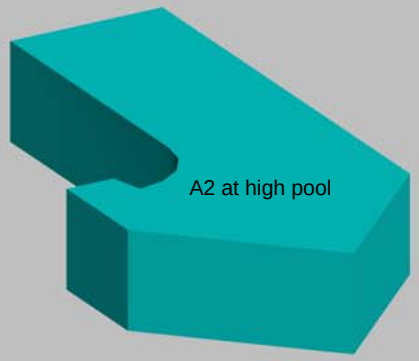


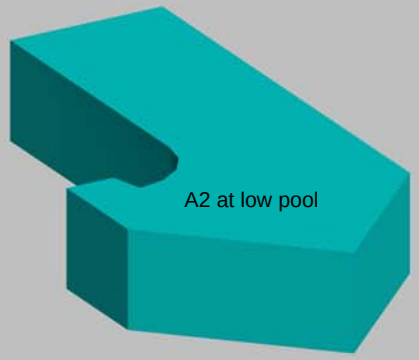
Configuration A1 - Single Entrance Inline Floating Screen Structure (FSS)

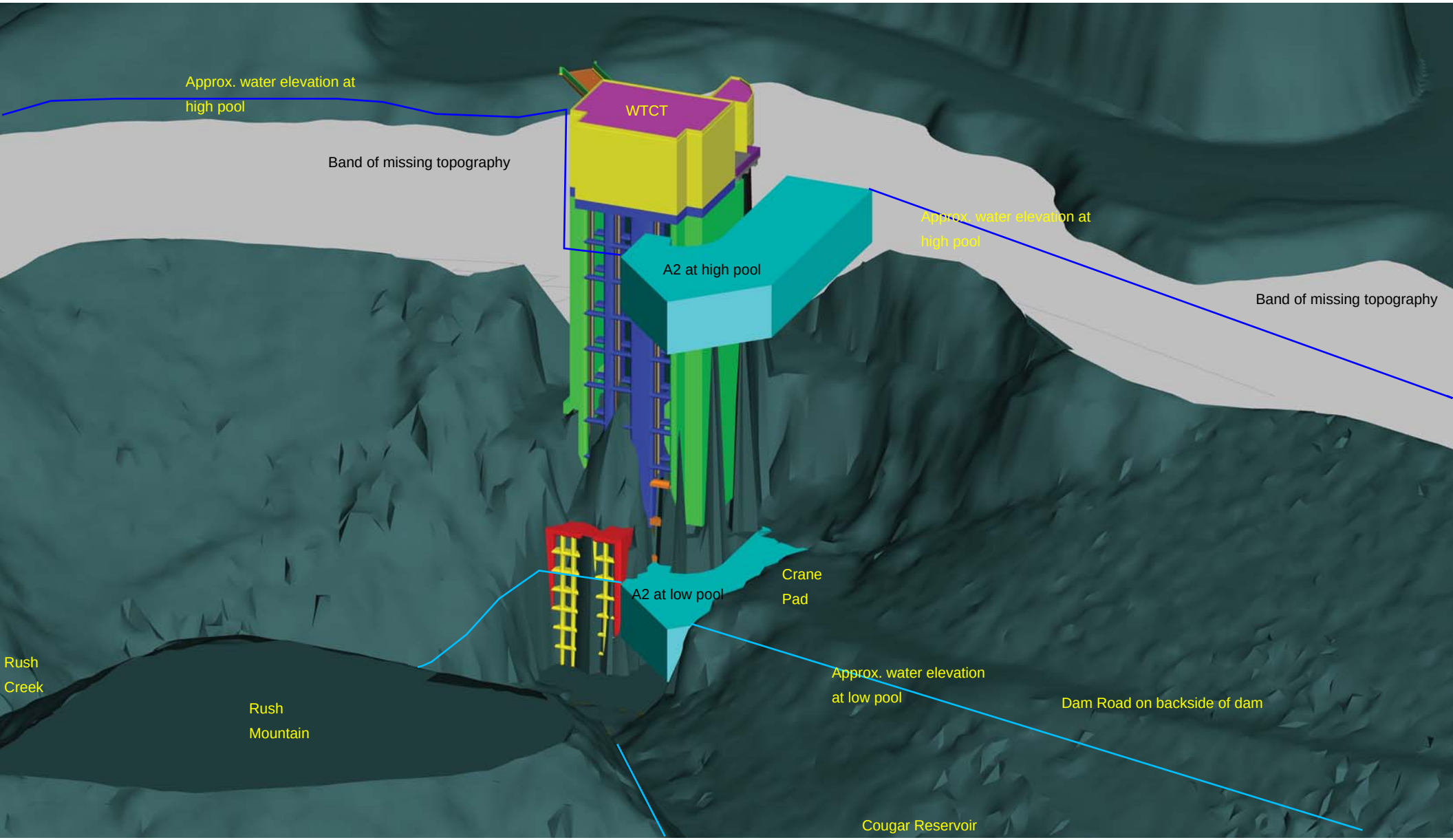
- 160 feet long by 70 feet wide
- Flume may add up to 60 feet for a total length of 220 feet out from WTCT




WTCT
Band of missing topography
Approx. water elevation at high pool
Approx. water elevation at high pool
Band of missing topography
A1 at high pool
Dam Road on backside of dam
Crane Pad
Cougar Reservoir
Approx. water elevation at low pool
A1 at low pool
Rush Mountain
Rush Creek

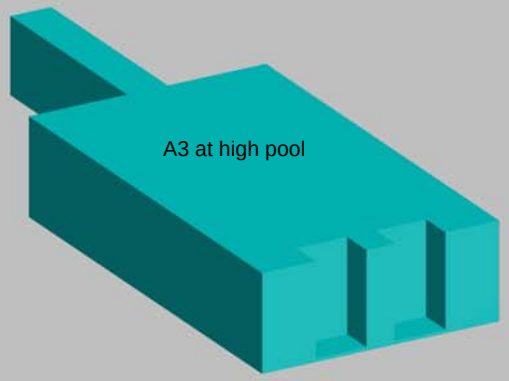

A2 at high pool

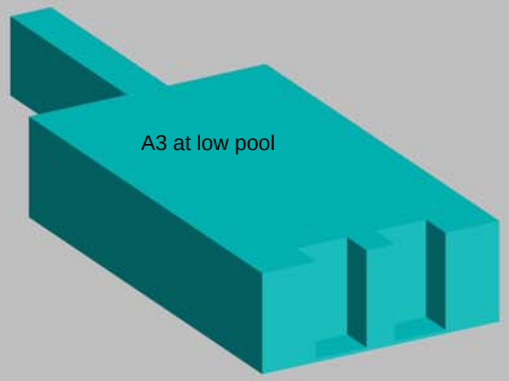

A2 at low pool

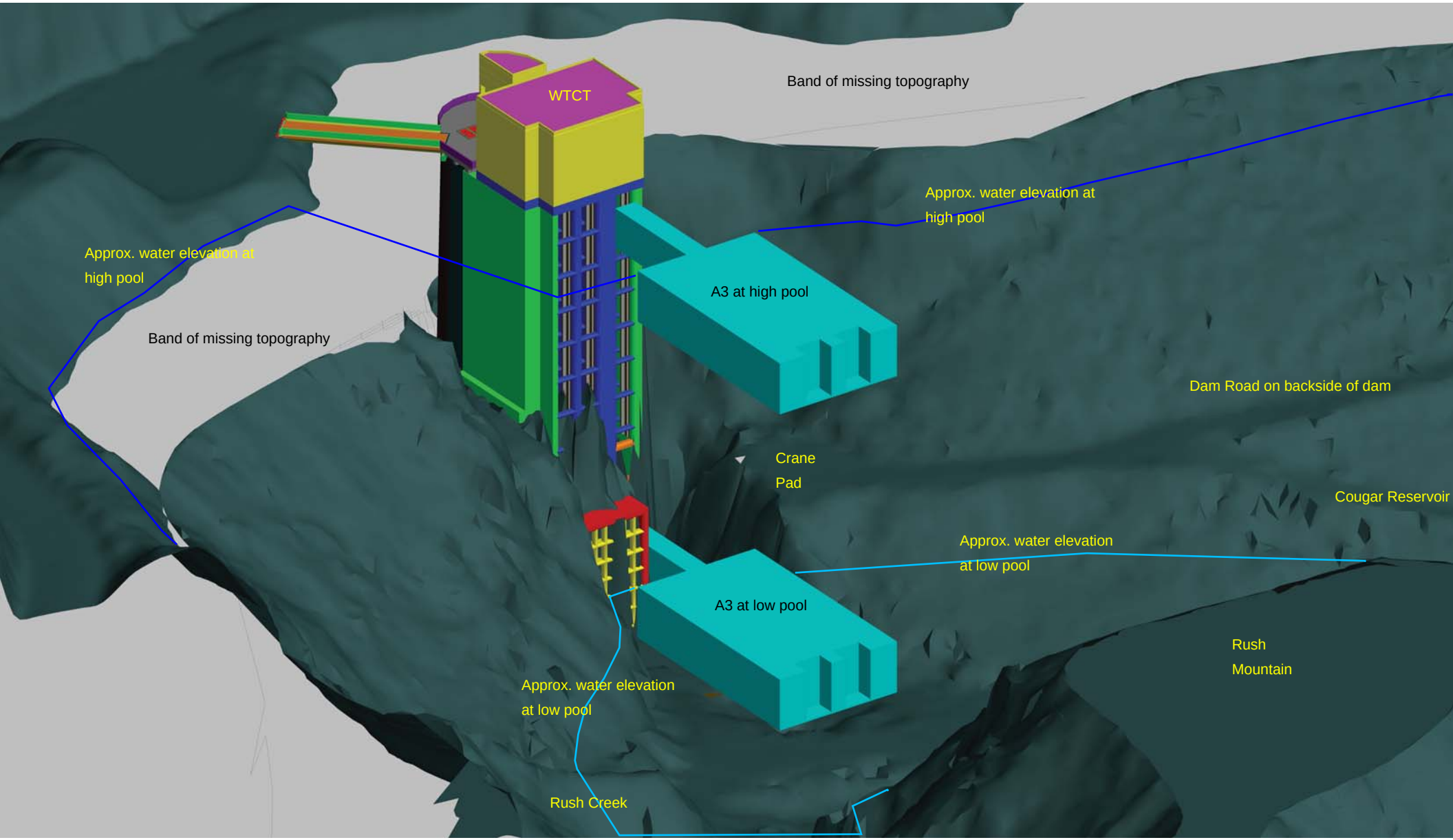

Approx. water elevation at
high pool
WTCT
Band of missing topography
Approx. water elevation at
high pool
A2 at high pool
Band of missing topography
Crane
Pad
A2 at low pool
Rush
Creek
Rush
Mountain
Approx. water elevation
at low pool
Dam Road on backside of dam
Cougar Reservoir

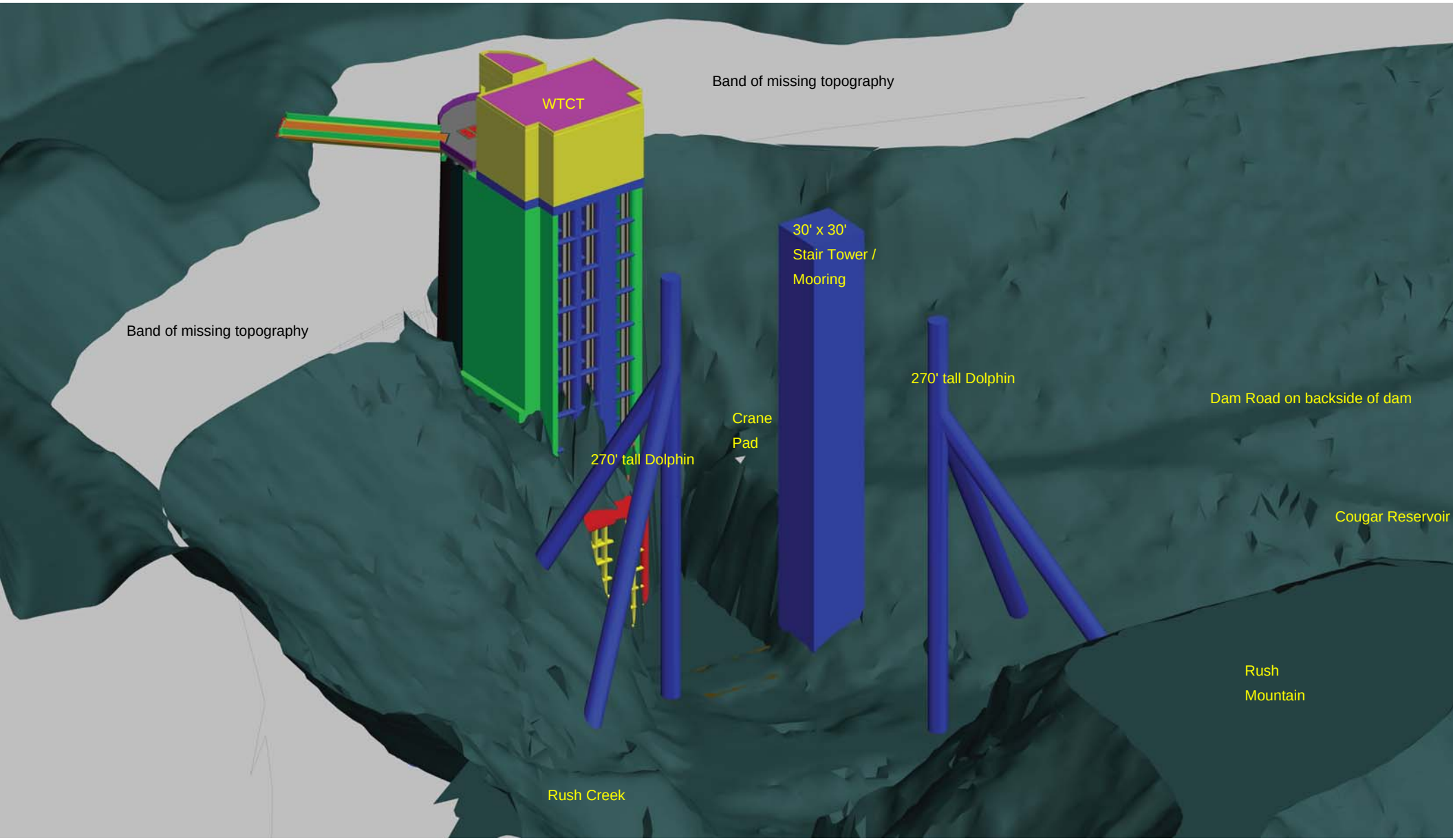
Configuration A3 - Dual Entrance Inline FSS

- 120 feet long by 70 feet wide
- Flume may add up to 60 feet for a total length of 180 feet out from WTCT

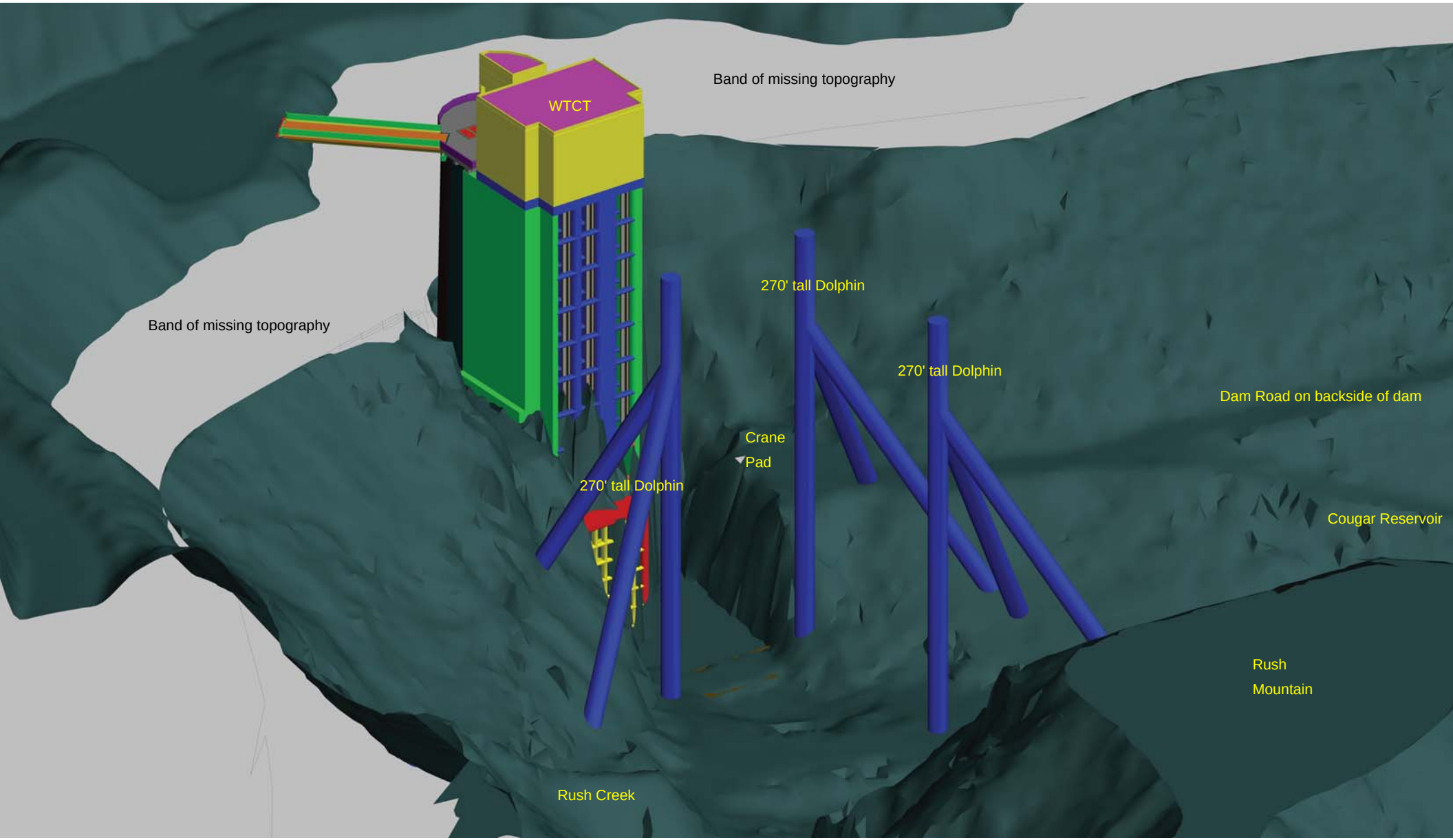





WTCT
Band of missing topography
Approx. water elevation at high pool
Approx. water elevation at high pool
A3 at high pool
Band of missing topography
Dam Road on backside of dam
Crane Pad
Cougar Reservoir
Approx. water elevation at low pool
A3 at low pool
Rush Mountain
Approx. water elevation at low pool
Rush Creek


WTCT
Band of missing topography
30' x 30'
Stair Tower /
Mooring
Band of missing topography
270' tall Dolphin
Dam Road on backside of dam
Crane
Pad
270' tall Dolphin
Cougar Reservoir
Rush
Mountain
Rush Creek

Mooring Option M2 - Three Dolphins



N

1700
1675
1650
1625
1600
1575
1550
ROAD
1525
1500
1475

BATTERED PILE
GUIDE (TYP)
MOORING TOWER 30'x30'
EXISTING CRANE PAD
STAIR TOWER
FLOATING SURFACE SCREEN
TOE OF EMBANKMENT
MONORAIL SUPPORT (ATTACHED TO WTCT)
FLUME
BOX TRUSS (TYP)
BATTERED PILE
10' RADIUS (TYP)
MONORAIL SUPPORT TOWER
WTCT
TRASH STRUCTURE
MONORAIL SUPPORT TOWER
ACCESS BRIDGE
TRUCK LOADING STATION
STAIR TOWER
T.O. PAVEMENT

Fish Transport F1 - Mono Rail System Plan View and Crew Access C1 - Walkway to Stair Tower. The location of the transport truck may be moved to the top of the WTCT between the mechanical bulding and the Adit Building if space allows. Crew Access will be along the path of the mono rail and down the stair tower.

SCALE: 1"= 20'
20' 0 20'

US Army Corps of Engineers
Portland District

Rev	Date	Description	By
0	4-14-17	ISSUED FOR 100% ENGINEERING DESIGN REPORT	DRH
A	4-3-17	ISSUED FOR 90% REVIEW	DRH

Designed by: DRH
Drawn by: HDV
Checked by: DRH
Date: 14 APR 2017
CADD File Name: PLATE NO.3
Technical Manager: TECH_MGR
Submitted by: SUBMITTED_BY

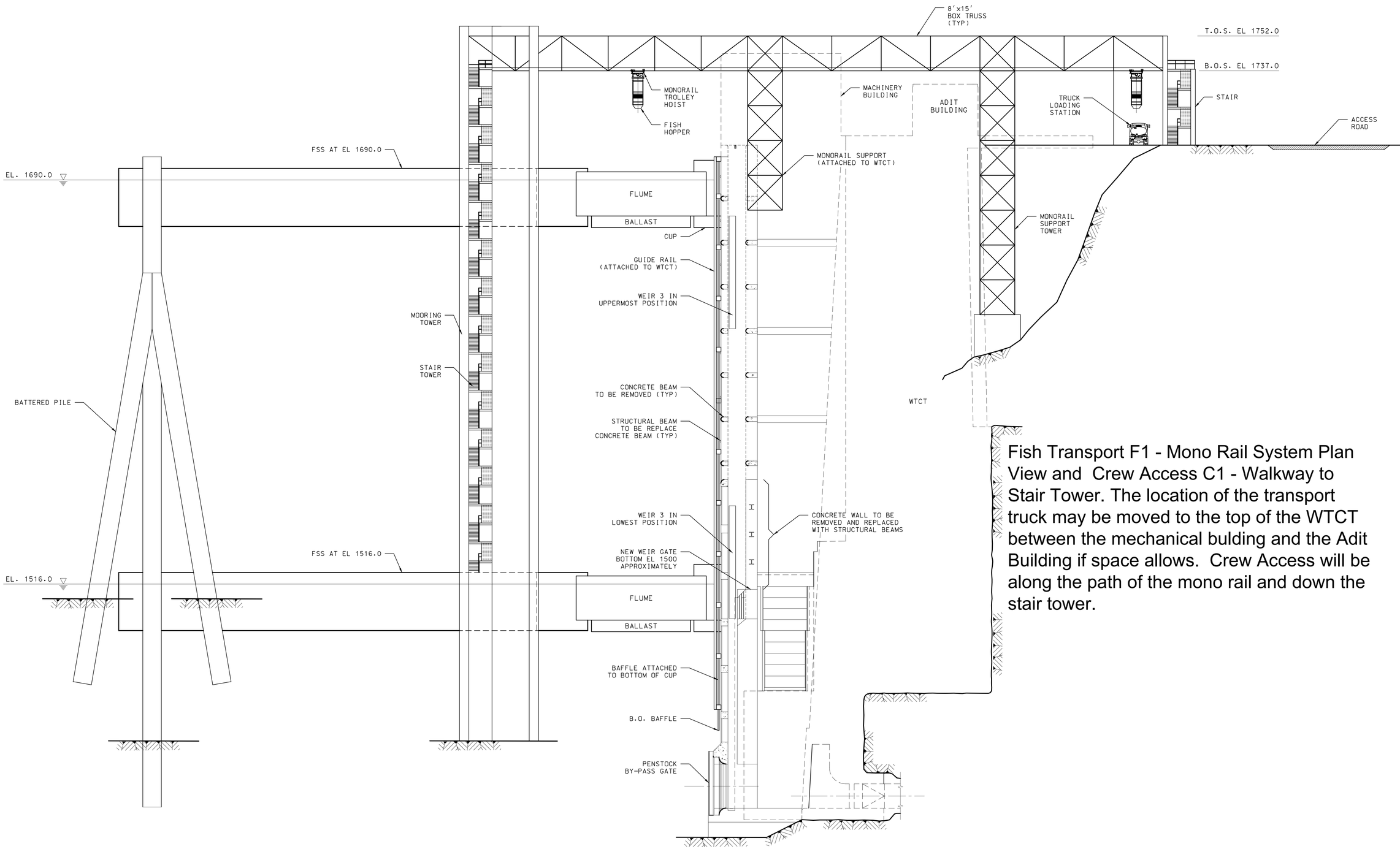
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
PORTLAND, OREGON

SOUTH FORK MCKENZIE RIVER, OREGON
COUGAR DAM AND RESERVOIR
DOWNSTREAM PASSAGE
CDR

DRAWING STATUS:
100% ENGINEERING DESIGN REPORT

DRAWING NO.
CUD-2-75/XX

PLATE
3



Fish Transport F1 - Mono Rail System Plan View and Crew Access C1 - Walkway to Stair Tower. The location of the transport truck may be moved to the top of the WTCT between the mechanical bulding and the Adit Building if space allows. Crew Access will be along the path of the mono rail and down the stair tower.

SCALE 1"= 20'

20' 0 20'

US Army Corps of Engineers
Portland District

By	Description	Date	Revision
DRH	ISSUED FOR 100% ENGINEERING DESIGN REPORT	4-14-17	0
DRH	ISSUED FOR 90% REVIEW	4-3-17	A

Designed by: DRH
Drawn by: HDV
Checked by: DRH
Submitted by: SUBMITTED_BY
Date: 14 APR 2017
CADD File Name: PLATE NO_4
Technical Manager: TECH_MGR

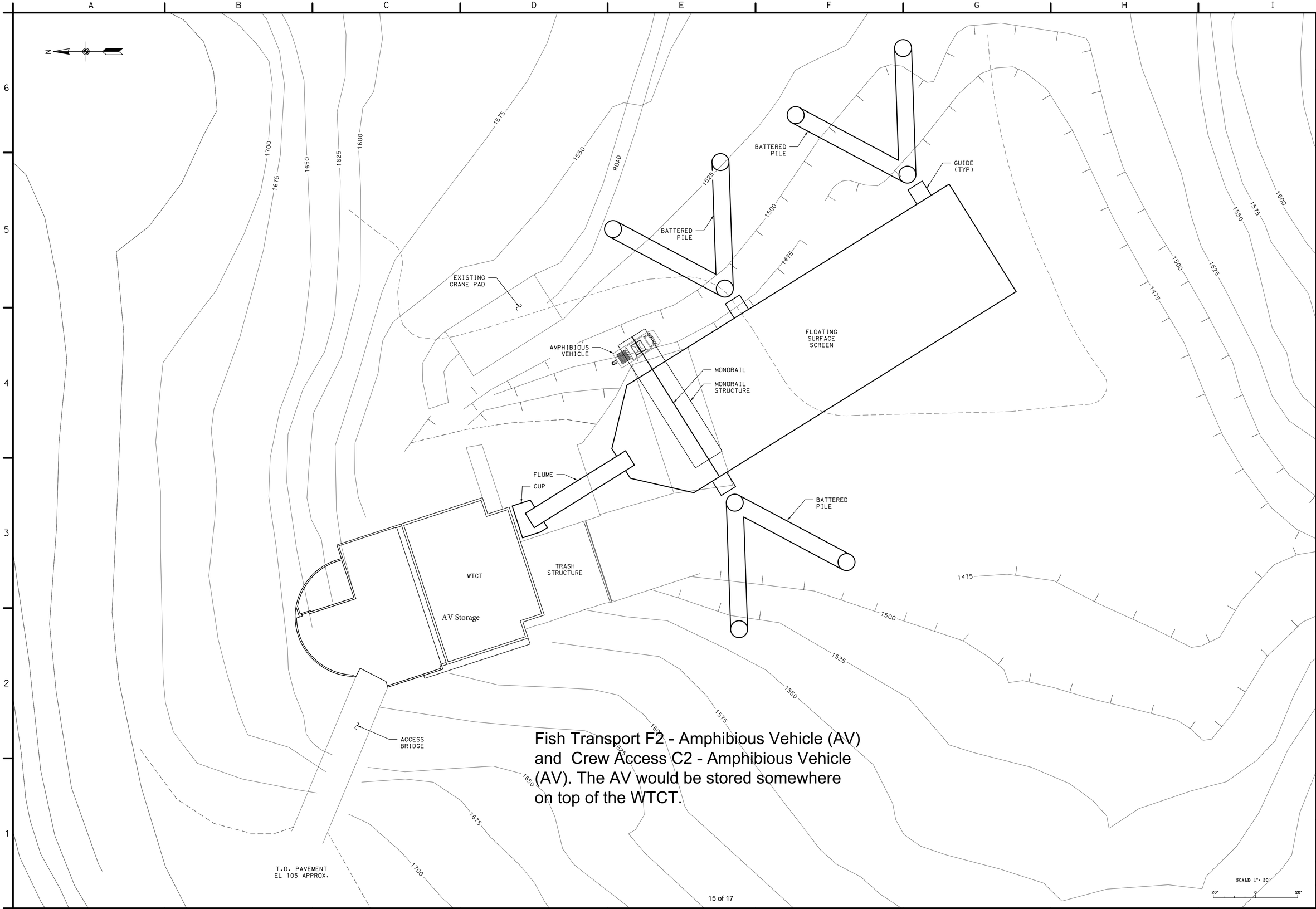
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
PORTLAND, OREGON

SOUTH FORK McKENZIE RIVER
COUGAR DAM AND RESERVOIR
DOWNSTREAM PASSAGE
EDR
OREGON

DRAWING STATUS:
100% ENGINEERING DESIGN REPORT

DRAWING NO.
CUD-2-75/XX

PLATE
4



Fish Transport F2 - Amphibious Vehicle (AV) and Crew Access C2 - Amphibious Vehicle (AV). The AV would be stored somewhere on top of the WTCT.

US Army Corps of Engineers
Portland District

Revision	Date	Description	By
0	4-14-17	ISSUED FOR 100% ENGINEERING DESIGN REPORT	DRH
A	4-3-17	ISSUED FOR 90% REVIEW	DRH

Designed by: DRH
Drawn by: HDV
Checked by: DRH
Date: 14 APR 2017
CADD File Name: PLATE NO_7
Technical Manager: TECH_MGR
Submitted by: SUBMITTED_BY

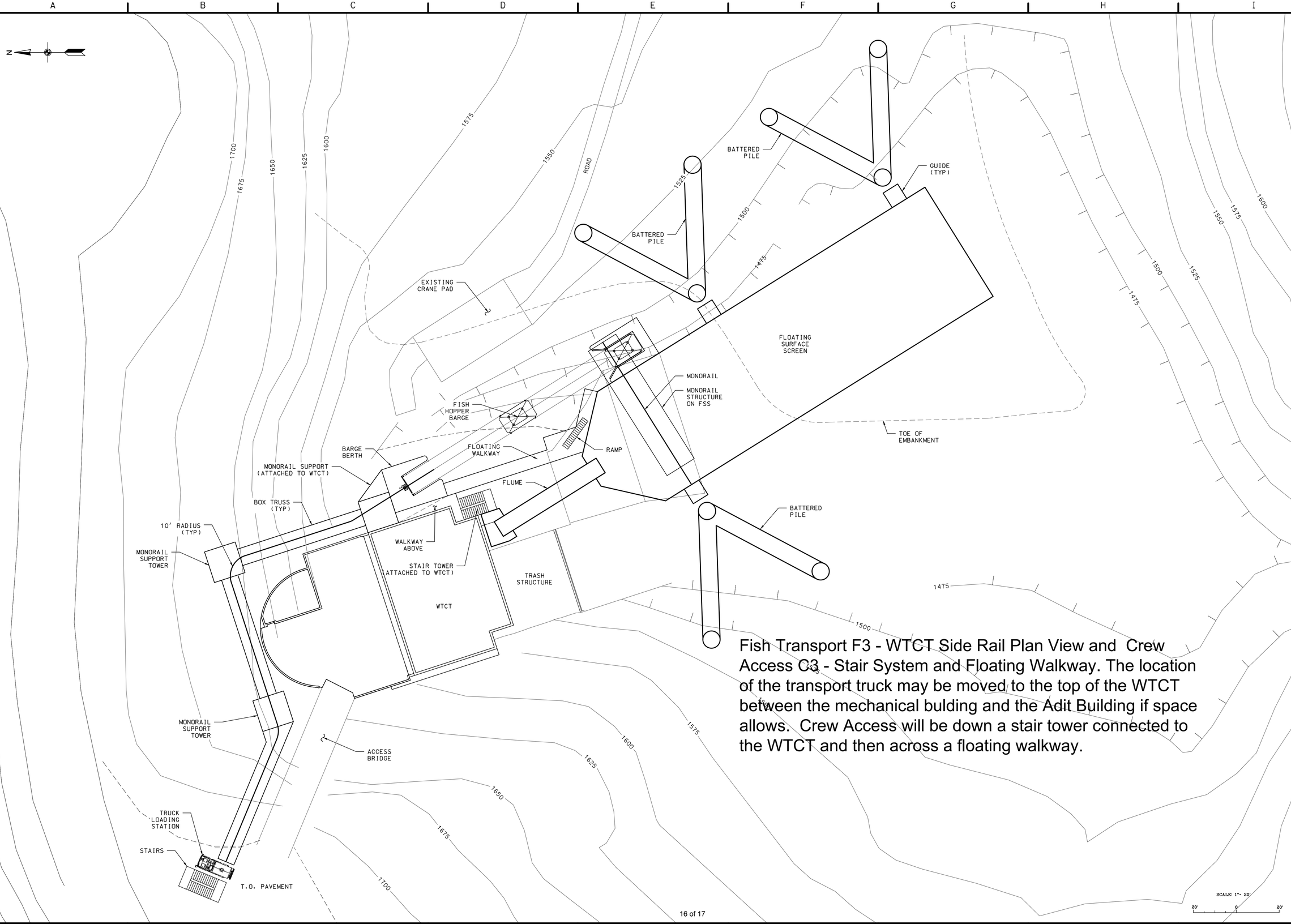
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
PORTLAND, OREGON

SOUTH FORK MCKENZIE RIVER, OREGON
COUGAR DAM AND RESERVOIR
DOWNSTREAM PASSAGE
EDR

DRAWING STATUS:
100% ENGINEERING DESIGN REPORT

DRAWING NO.
CUD-2-75/XX

PLATE
7



Fish Transport F3 - WTCT Side Rail Plan View and Crew Access C3 - Stair System and Floating Walkway. The location of the transport truck may be moved to the top of the WTCT between the mechanical bulding and the Adit Building if space allows. Crew Access will be down a stair tower connected to the WTCT and then across a floating walkway.

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Portland District

Revision	Date	Description	By
0	4-14-17	ISSUED FOR 100% ENGINEERING DESIGN REPORT	DRH
A	3-31-17	ISSUED FOR 90% REVIEW	DRH

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Drawn by: HDV
Checked by: DRH
Date: 14 APR 2017
CADD File Name: PLATE NO.5
Technical Manager: TECH_MGR
Submitted by: SUBMITTED_BY

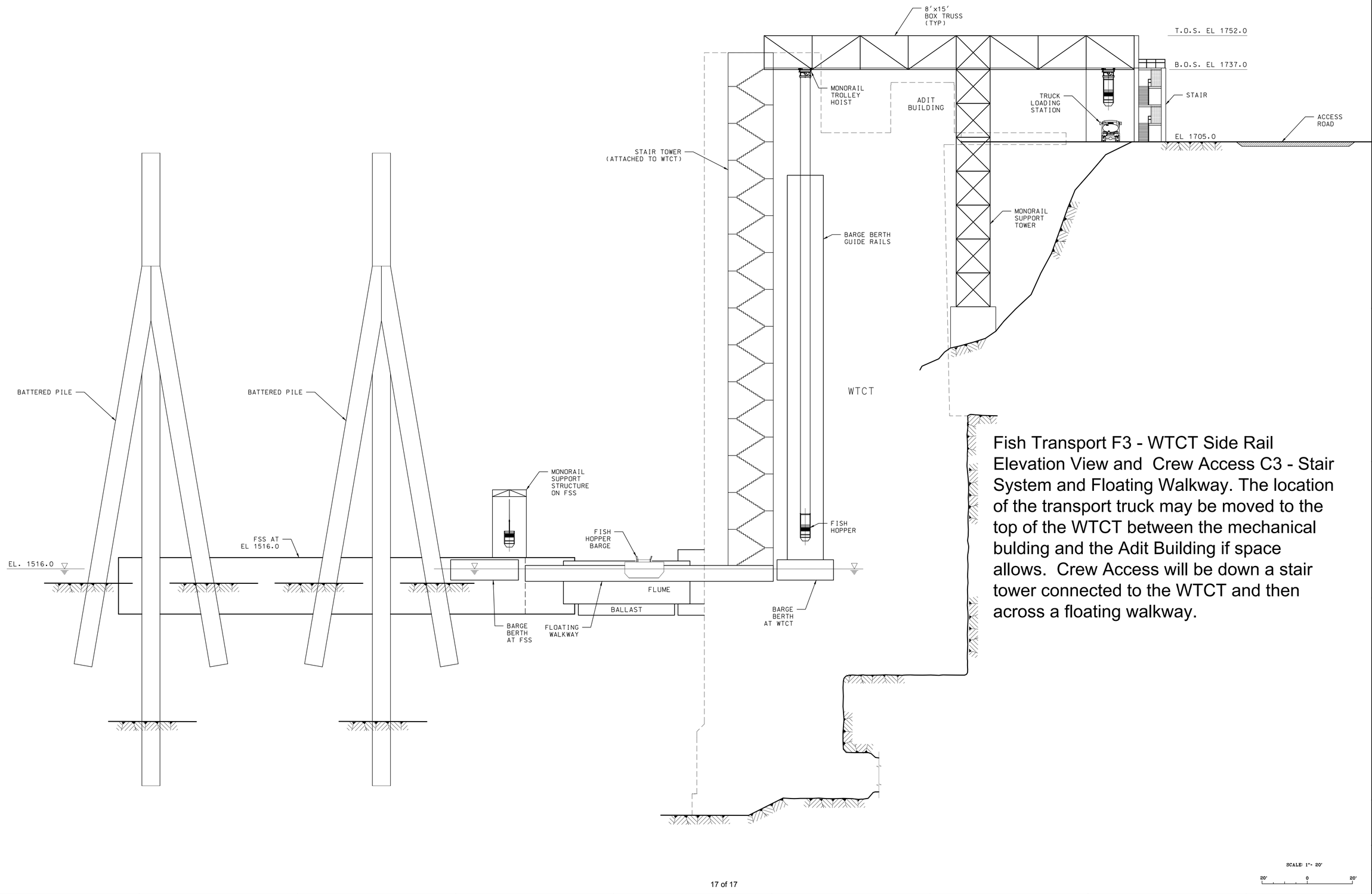
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
PORTLAND, OREGON

SOUTH FORK McKENZIE RIVER
COUGAR DAM AND RESERVOIR
DOWNSTREAM PASSAGE
EDR
OREGON

DRAWING STATUS:
100% ENGINEERING DESIGN REPORT

DRAWING NO.
CUD-2-75/XX

PLATE
5



Fish Transport F3 - WTCT Side Rail Elevation View and Crew Access C3 - Stair System and Floating Walkway. The location of the transport truck may be moved to the top of the WTCT between the mechanical bulding and the Adit Building if space allows. Crew Access will be down a stair tower connected to the WTCT and then across a floating walkway.

SCALE: 1"= 20'

20' 0 20'

US Army Corps of Engineers
Portland District

By	Description	Date	Revision
DRH	ISSUED FOR 100% ENGINEERING DESIGN REPORT	4-14-17	0
DRH	ISSUED FOR 90% REVIEW	4-3-17	A

Designed by: DRH
Drawn by: HDV
Checked by: DRH
Submitted by: SUBMITTED.BY
Date: 14 APR 2017
CADD File Name: PLATE NO_6
Technical Manager: TECH_MGR

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
PORTLAND, OREGON

SOUTH FORK McKENZIE RIVER
COUGAR DAM AND RESERVOIR
DOWNSTREAM PASSAGE
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OREGON

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100%
ENGINEERING
DESIGN REPORT

DRAWING NO.
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PLATE
6