Request for Statement of Qualifications
Cheesman Upstream Control Phase 2 Project

Summary of Request for Statement of Qualifications

Denver Water, owner and operator of the Cheesman Dam in Jefferson and Douglas Counties, Colorado, is requesting this Statement of Qualifications (SOQ) to solicit information from Contractors regarding their capabilities and capacity to construct the Cheesman Upstream Control Phase 2 Project. Contractors will be selected and invited to propose on the project based upon an evaluation of the submitted SOQ's.

Introduction and Background

Denver Water is in the process of an Outlet Works Rehabilitation at the Cheesman Dam. The outlet works system consists of tunnels bored through the left abutment at approximate elevations 6,780, 6,690, and 6,645, respectively referred to as the Auxiliary Outlet, 60-Foot (Mid-Level) Outlet, and 15-Foot (Low-Level) Outlet. The Phase 1 rehabilitation was recently completed by installing new stainless steel slide gates through underwater construction at all three locations. This SOQ request is for the Phase 2 work as described within the Project Description section.

The Cheesman Dam is an on-stream facility located on the South Platte River spanning the borders of Jefferson and Douglas Counties, Colorado, in the Pike National Forest. The dam was constructed for storage of municipal water supply and was completed in 1905 It is 221 feet in height and impounds 79,064 acre-feet of water, and is classified as a large high hazard dam.

The outlet works tunnels are located through the left abutment at approximate elevations 6,780, 6,690, and 6,645, respectively named within the drawing set as the Auxiliary Outlet, 60-Foot (Mid-Level) Outlet, and 15-Foot (Low-Level) Outlet. A fourth outlet tunnel at elevation 6734 was originally constructed, but was abandoned with the inlet portion being filled with concrete. The Auxiliary Outlet Works, built in 1925, is an independent tunnel outlet with no connection to the other tunnels and is controlled by the Larner-Johnson Needle Valve. The Low and Mid Level outlet tunnels combine to one tunnel (Primary Outlet Works) approximately two-thirds of the way through the abutment. Both tunnels are controlled by a total of six 42-inch gate valves after the tunnel intersection, and by various cone and free-discharge valves in the downstream Valve House.

The only recent major work on the outlet works systems succeeding the original construction was the recent installation of the upstream slide gates at all three levels; and the construction of the Valve House in 1971.

Site Location

Cheesman Dam and Reservoir is located about 60 miles southwest of Denver, Colorado on the South Platte River. The nearest town with full services is Woodland Park approximately 30 miles South of Cheesman Dam. Access to Cheesman Dam is from paved county road via single wide lane dirt/gravel Forest Service Road (FS 211), 3 miles in length with steep grades (as much as 10%) and tight turning radii. The spillway for the dam is adjacent to the dam and is the only access across the dam's crest. Large equipment and 18 wheel trucks can use the spillway and dam access when the spillway is not operating; however, parking or storing materials and equipment on the dam and spillway crest will not be permitted. Snow removal during construction along the Forest Service access road for the Contractor's access will be the responsibility of the Contractor.

Project Description

Auxiliary Outlet Works

The existing ladder system, 5 foot by 7 foot bonneted slide gate, 62-inch Larner-Johnson Needle Valve, tunnel liners, control actuators and stems, and accessory features will be removed from the Auxiliary Outlet Works. A new Jet Flow Gate, tunnel liner, and appurtenant support equipment will be installed in the place of the removed equipment. Rock excavation and concrete removal past the limits of the old equipment will be required to install the new equipment.

A new ladder system, electrical and control systems, and lighting equipment will also be installed within the Auxiliary Outlet Works. Finally, a new 6-inch stainless steel fill line will be installed from the new Jet Flow Gate bulkhead down to the existing Valve House. Installation of the line will require pipe installation along the downstream slope of the left abutment of the dam. The abutment is composed of near vertical to vertical granite rock.

Primary Outlet Works

The gate valves within the Primary Outlet Works System will be partially removed and then abandoned in place. This includes the single 42-inch gate valve at the 80-foot level, the inline set (2) 42-inch gate valves at the 60-Foot (Mid-Level) Outlet, and the twin inline set (4) 42-inch gate valves at the 15-Foot (Low-Level) Outlet. Additionally, new access bulkheads will be tunneled through rock at both the 60-Foot Outlet and the 15-Foot Outlet locations. The 15-Foot Outlet north adit access shaft will be abandoned in place by concrete fill, and a new washdown system will be installed throughout the manway. Finally, a 12" air vent will be installed from the existing air shaft to the dam crest, requiring rock chipping, excavation, and vertical rock drilling.

Project Cost

Pending final project scoping, the engineer's estimated opinion of probable construction cost is between $3-4 Million.

Contractor Selection Process and Project Schedule

Denver Water will use a two step process for selection of a contractor for the project. The process will first consider the contractors Statement of Qualifications (SOQ); accepted Contractors will then be invited to submit proposals for the project. Denver Water may elect to follow the proposals with a formal questionnaire and interview to assist with the proposal evaluation.

Final selection of a Contractor will be based upon a weighted grading system giving consideration to the proposal cost, project understanding and execution plan, and the Contractors SOQ.

The anticipated project schedule is summarized below:

- December 20, 2010 - Project Information Meeting (Optional)
- January 11, 2011 – Statement of Qualifications Due
- January 19, 2011 – Prequalified Contractors Identified
- January 26, 2011 – Issue Proposal Documents to Prequalified Contractors
- February 2, 2011 – Mandatory Pre-Proposal Meeting and Site Visit
- February 16, 2011 – Proposals Due
- March 9, 2011 – Selected Proposal recommended to Board of Water Commissioners for Award
- March 18, 2011 – Notice to Proceed Issued to Contractor
- October 30, 2011 – Project Substantial Completion
- November 30, 2011 – Project Final Completion

Statement of Qualifications Requirements

Contractors must submit a Statement of Qualifications conforming to a general outline as shown within this Request for Statement of Qualifications package, and also be tailored specifically to work related to the Cheesman Upstream Control Phase 2 project.

Contractors wishing to prequalify for the Cheesman Upstream Control Phase 2 Project must be in good standing with previous work performed for Denver Water.

The Contractor must have a minimum of 10 years experience working on heavy civil industrial or utility grade projects of a similar scope and size as this Project.

The Statement of Qualification package shall follow the outline provided below:

General Contractor(s) Required Evidence of Qualifications:

1. **Summary of Experience:** Provide a narrative of the Contractor's history and experience as it relates to the Cheesman Upstream Control Phase 2 Project. The narrative should outline the core strengths of the Contractor's areas of expertise relevant to this project, and provide examples of unique project challenges the Contractor has overcome (specific to this project) and how the Contractor is uniquely suited for these challenges.

2. **Statement of Experience**: List of at least 5 projects comparable to the Cheesman Upstream Control Phase 2 project which have been completed by the prospective Contractor. The comparable projects should include dam outlet works installations/renovations, underground civil/mining work, heavy civil water resource projects, and large diameter valve/gate installations and retrofits. Each referenced project should include the following success metrics: (1) Schedule Performance including original contract completion date and actual completion, (2) Change Order history including original contract amount and in final contract amount (Change Orders should be categorized as Owner directed or other), (3) Liquated damage claims (if any). Provide Owner's name, address, telephone number and contact name for each referenced Project.

3. **Minority Participation:** Denver Water's Small, Minority and Woman Business Enterprise (SMWBE) Program seeks to provide small businesses and businesses owned by minorities or women an opportunity to work for Denver Water as contractors, subcontractors and suppliers. As such, provide a statement of experience with minority participation on projects of similar scope as the Cheesman Upstream Control Phase 2 project. No previous SMWBE participation experience is required for qualification. In addition to the statement of experience, provide a statement of planned utilization of SMWBE businesses including proposed trade/discipline (i.e. trucking, purchasing, and subcontracting) for this project. Denver Water is still evaluating the SWMBE goal for the project and has not set a required participation level.

4. **Organization Char**t: Showing organization structure for the Company and this Project. Identify key personnel who will be assigned to do this Project.

5. **Qualification of Personnel:** Provide resumes giving management and technical qualifications of project manager, superintendent, project foreman and other key personnel shown on organization chart.

6. **Financial Statement: Provide** recent financial statement relative to resources, including cash and bank credits available, most recent Certified and Audited Financial Statement, and a Noncertified and Audited Financial Statement no older than 3 months.

7. **Surety Company:** Provide the name of the Surety Company that has indicated willingness to bond the CONTRACTOR.

8. **Safety Record:** Provide last three year's EMR's.

Subcontractors

Major subcontractors critical to the completion of the work will be required to submit a qualification package as part of the final proposal package. Denver Water anticipates prequalification of the following subcontractor disciplines:

a. Electrical
b. Instrumentation and Controls
c. Heavy Mechanical (if performed by other than General Contractor)

Project Overview Documents

The following documents are attached to convey a level of project overview and understanding to the potential proposers:

- Figure 1 – Site Location
- Figure 2 – Cheesman Dam Site Plan
- Figure 3 – Auxiliary Outlet Works Demo Plan
- Figure 4 – Auxiliary Outlet Works Jet Flow Gate Installation
- Figure 5 – Auxiliary Outlet Works Stairway Layout
- Figure 6 – Primary Outlet Works Section
- Figure 7 – Primary Outlet Works 15-FT Level Demo Plan
- Figure 8 – Primary Outlet Works 15-FT Level Installation Plan
- Photograph 1 – Spillway and top of dam
- Photograph 2 – Auxiliary Outlet Works Discharge
- Photograph 3 – Auxiliary Outlet Shaft and Bonneted Slide Gate
- Photograph 4 - Larner Johnson Needle Valve
- Photograph 5 – Upstream 42” Gate Valve at 60-Foot Level

An optional Project Information Meeting will be held at the Denver Water Administration Office on Monday, December 20, 2010 at 11:00 AM local time. All prequalification packages must be submitted by 5:00 p.m., local time, on January 11, 2011 to Jeff Martin, Project Engineer.

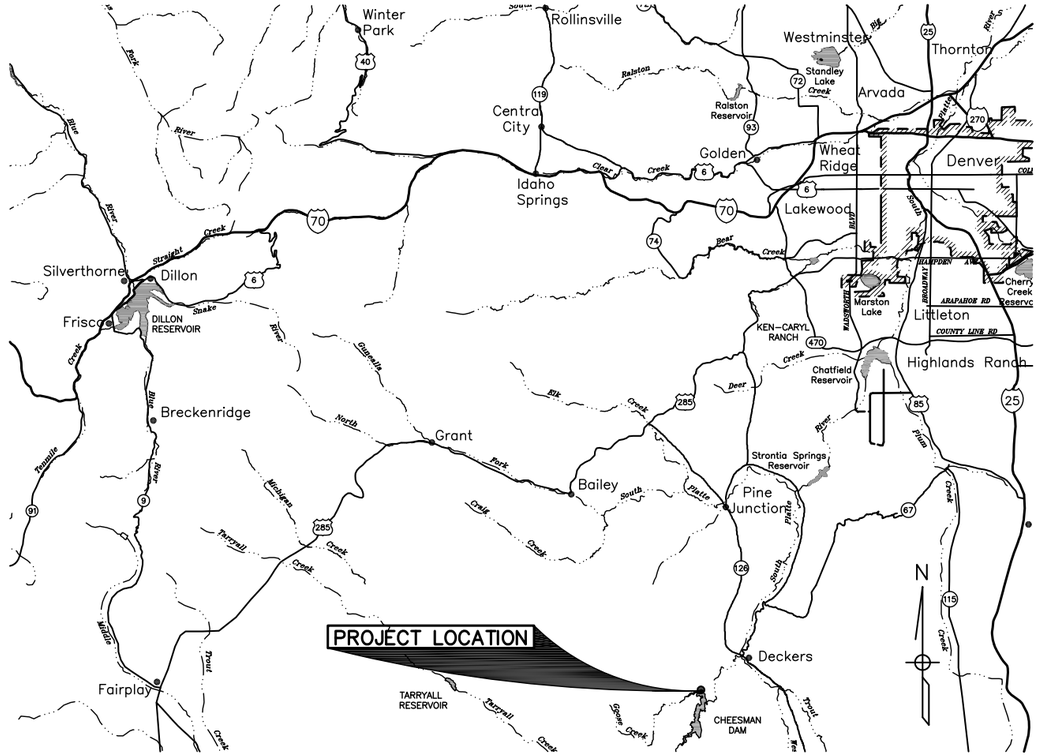
DENVER WATER
DENVER, COLORADO

CHEESMAN DAM

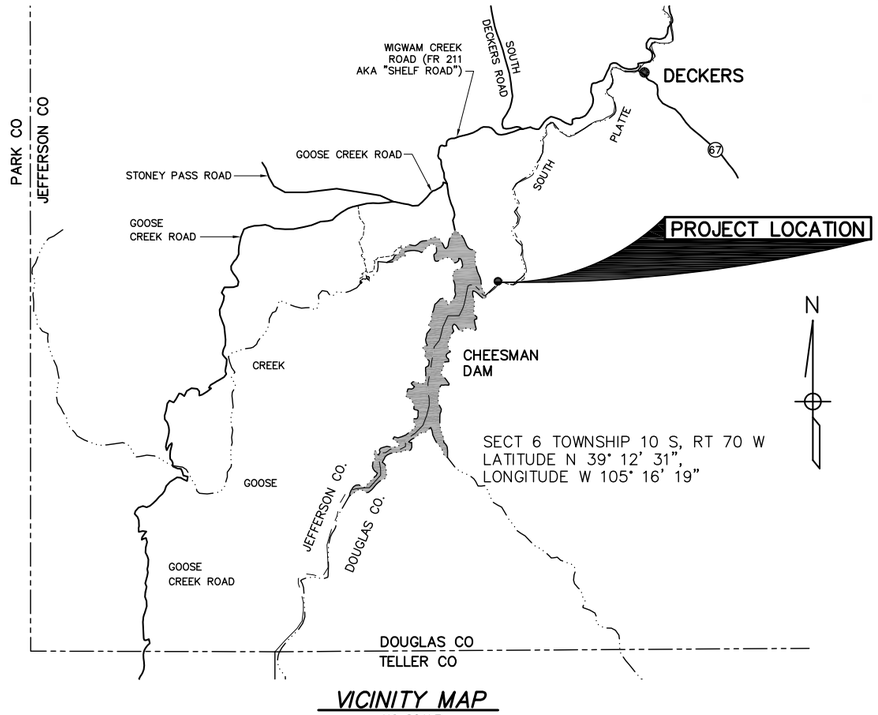
WATER DIVISION 1, WATER DISTRICT 80, JEFFERSON COUNTY, DAM ID 800102

UPSTREAM CONTROL PROJECT-PHASE II
COVER SHEET
CONTRACT 13099A

BOARD OF WATER COMMISSIONERS
DENVER, COLORADO
Penfield W. Tate III – President
James S. Lochhead – CEO/Manager
Robert J. Mahoney – Director of Engineering



LOCATION MAP
NO SCALE



VICINITY MAP
NO SCALE

PRELIMINARY
NOT FOR CONSTRUCTION

:R

OF _____20____

_____

BY_____
DEPUTY

AND,

THESE PLANS REPRESENT THE AS-CONSTRUCTED CONDITIONS OF CHEESMAN DAM UPSTREAM CONTROL PROJECT-PHASE 1B TO THE BEST OF OUR KNOWLEDGE AND JUDGEMENT, BASED IN PART ON INFORMATION FURNISHED BY OTHERS AS OF THE

_____DAY OF _____ , 20_____ .

_____ _____
(ENGINEER'S PRINTED NAME) SIGNATURE

I HEREBY CERTIFY THAT THESE PLANS FOR THE CHEESMAN DAM UPSTREAM CONTROL PROJECT-PHASE II, WERE PREPARED UNDER MY SUPERVISION FOR THE OWNER THEREOF.

_____
MICHAEL J. MILLER, PE REGISTRATION #_____

OWNER/ENGINEER

Owner:
Denver Water
Board of Water
Commissioners
1600 W. 12th Ave.
Denver Colorado 80204

Jurisdiction:
Jefferson County

Jeff Martin–Project Engineer
303.628.6508/ Fax 303.628.6851

FIGURE 1

10/1/10 **PRELIMINARY 90%**
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303–694–3946 (fax)

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PT NO 13529

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CHEESMAN DAM
UPSTREAM CONTROL PROJECT–PHASE II
PRIMARY AND AUXILIARY OUTLET WORKS
COVER SHEET

Scale: *As Shown* Date: *November, 2010*
Drawn: *Barela* Checked: *JA/ML*
Approved: _____ Dr. 301 No. 1

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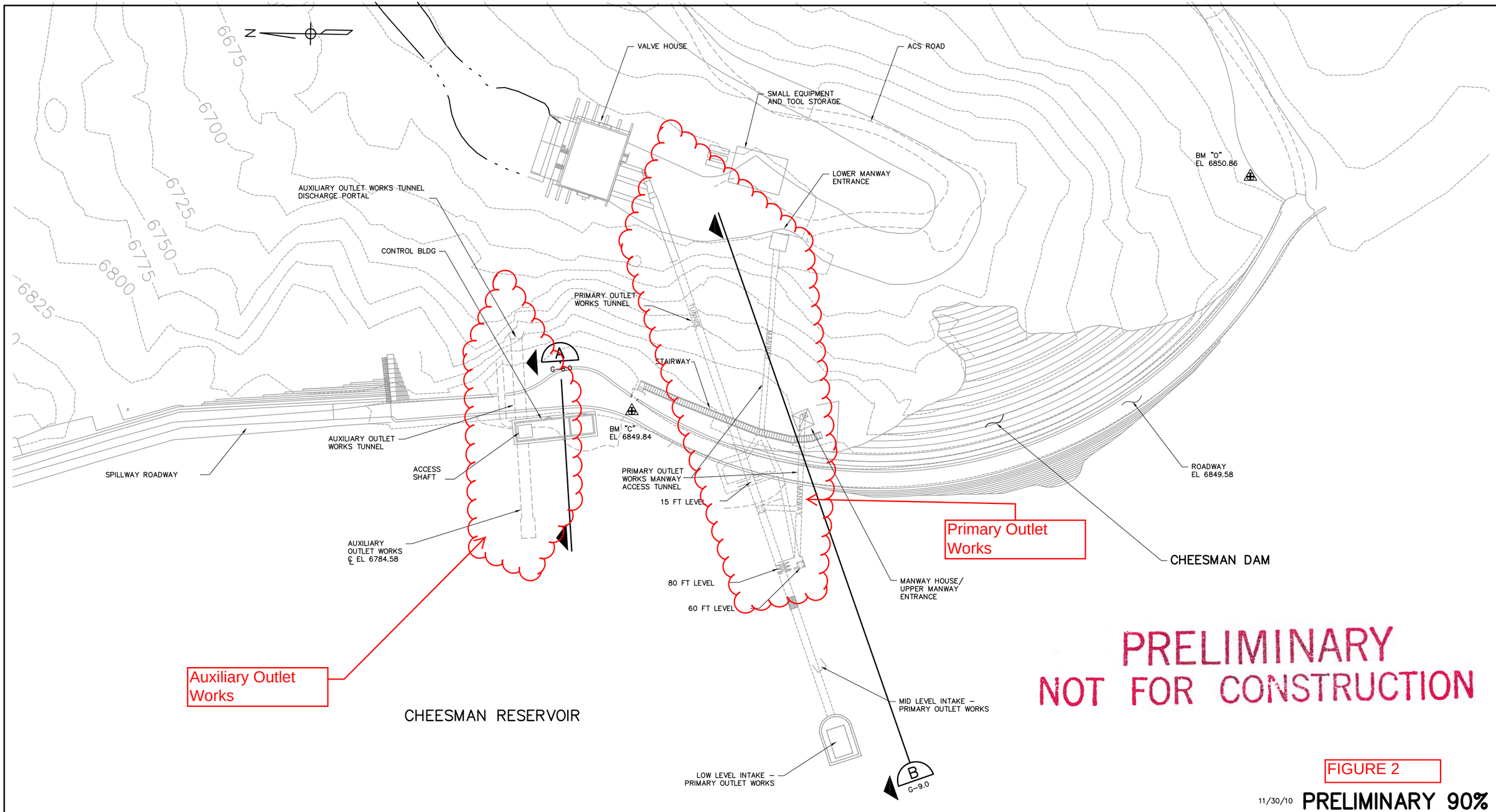

PRELIMINARY
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FIGURE 2

OUTLET WORKS PLAN
SCALE: 1"=40'

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CHEESMAN DAM
UPSTREAM CONTROL PROJECT PHASE II
PRIMARY AND AUXILIARY OUTLET WORKS
GENERAL ARRANGEMENT PLAN

Scale: *As Shown* Date: *November, 2010*
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Approved: Dr. *301* No. *1*

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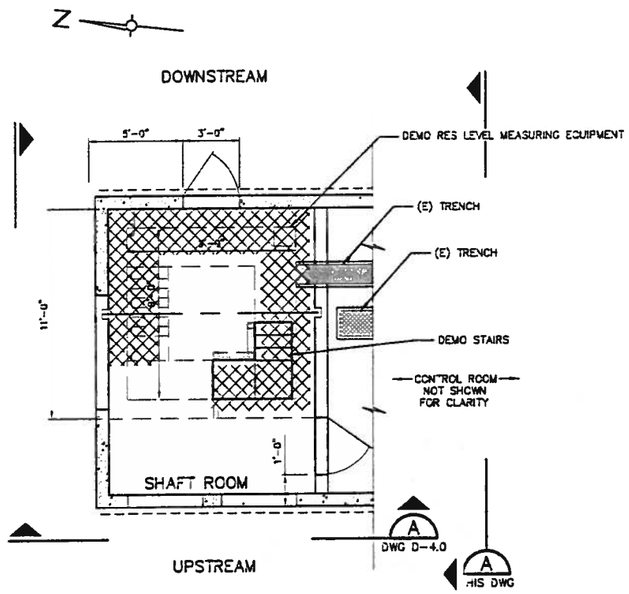
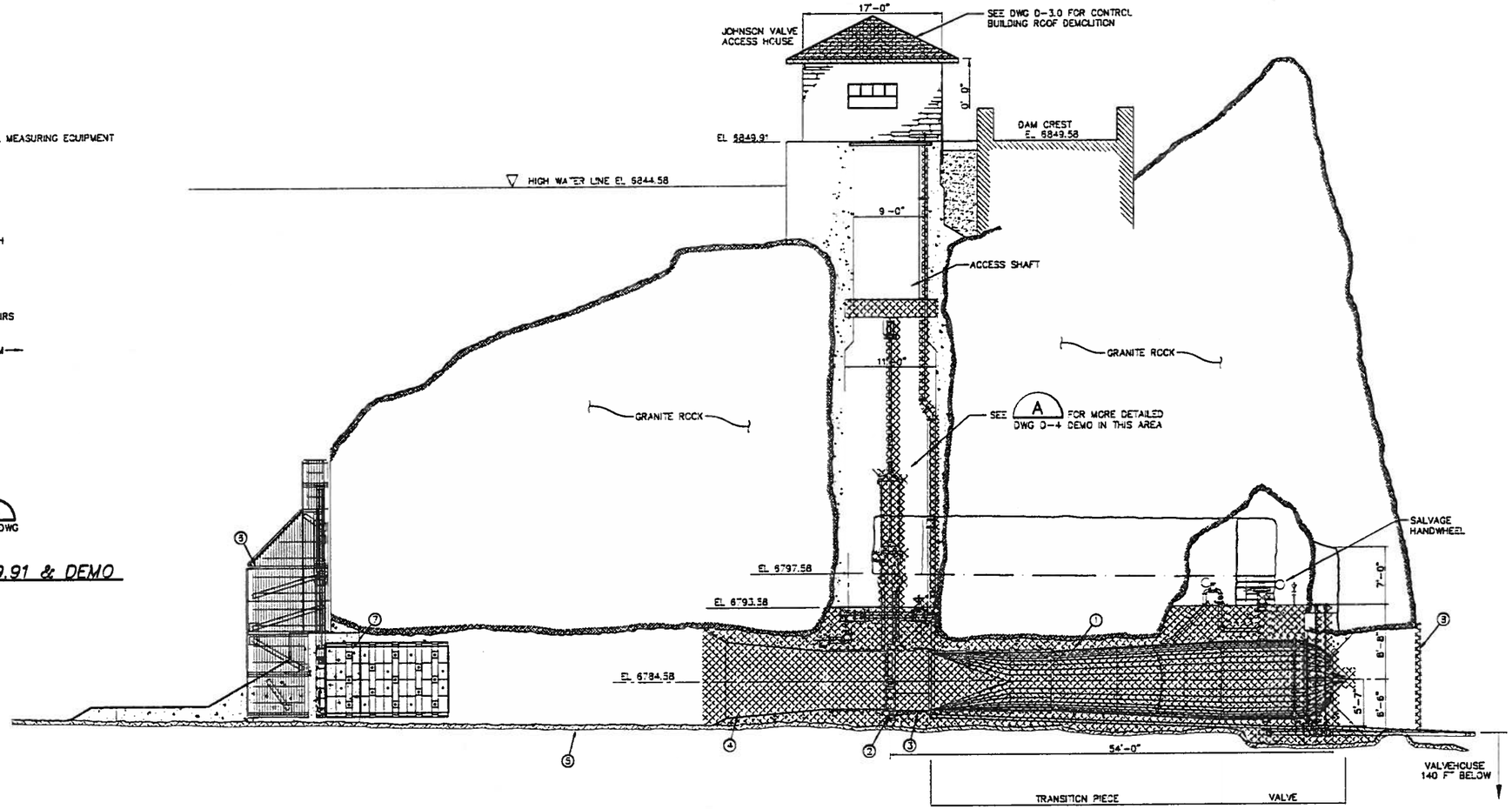


THIS DWG

SUPERSTRUCTURE EXISTING PARTIAL PLAN AT EL 6849.91 & DEMO

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



EXISTING SECTION A & DEMO

GENERAL NOTES:

1. ▨ DENOTES ITEMS TO BE DEMO'D
2. ALL DEMO'D MATERIAL SHALL BE REMOVED EITHER THROUGH THE ACCESS SHAFT AND CONTROL BUILDING ROOF, OR STRAIGHT OUT AND UP THE DOWNSTREAM FACE OF THE DAM.
3. ALL CONCRETE AND GROUT SHOWN AS BEING DEMO'D SHALL BE COMPLETELY REMOVED, LEAVING ONLY THE NATURAL ROCK SURFACE.
4. DEMOLITION SHALL BE SUFFICIENT ENOUGH TO INSERT JET FLOW GATE AND SPOOL SECTION.

KEYED NOTES:

① 62" LARNER-JOHNSON NEEDLE VALVE AND TRANSITION SPOOL.
REFERENCE MANUFACTURERS DRAWINGS IN APPENDIX.
-ESTIMATED WEIGHTS OF VALUE
-VALVE = 38,000 LBS
-HEAVIEST PIECE = 10,000 LBS
-CALCULATE THE WEIGHT OF THE TRANSITION PIECE BASED ON 1/2" THICK STEEL.

② 5'x7' BONNETED STEEL SLIDE GATE
-CALCULATE THE WEIGHT BASED ON CAST STEEL AND MANUFACTURES DRAWINGS.

③ CAST STEEL RECTANGLE TO ROUND TRANSITION PIECE

④ REINFORCED CONCRETE RECTANGULAR REDUCING SECTION

⑤ 10'x10' NOMINAL ROCK TUNNEL

⑥ EXISTING CARBON STEEL TRASHRACK

⑦ EXISTING STAINLESS STEEL SLIDEGATE AND SPOOL

⑧ EXISTING METAL DOOR AND FRAME TO BE REMOVED AND SALVAGED.

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FIGURE 3

PRELIMINARY 2/26/10
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C-1310B

DWG NO D-2.0
PT NO 13529

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CHEESMAN DAM
UPSTREAM CONTROL PROJECT-PHASE II
AUXILIARY OUTLET WORKS
DEMO-PLAN & SECTIONS

Scale: As Shown | Date: Feb, 2010
Drawn: Barela | Checked: Archer
Approved: _____ | Dr. 301 No. 1

GENERAL NOTES:

1. JET FLOW GATE, UPSTREAM SPOOL, AND DOWNSTREAM SPOOL ARE OWNER FURNISHED. REFERENCE MANUFACTURES DRAWINGS IN THE APPENDIX. ALL OTHER COMPONENTS SHALL BE FURNISHED BY THE CONTRACTOR.

2. ESTIMATED WEIGHTS:
   - JET FLOW GATE = 30,000 LBS
   - UPSTREAM SPOOL = 12,600 LBS
   - DOWNSTREAM SPOOL = 7,700 LBS

3. ROOF REMAVAL AND REPLACEMENT WILL BE REQUIRED FOR INSTALLATION OF EQUIPMENT. RE: DEMO DRAWINGS

KEYED NOTES:

① SCREENED VENT INLET

② 4"-SST TUNNEL DRAIN LINE

③ 8"-SST VENT/STANDPIPE LINE. LOCATE AS HIGH AS POSSIBLE IN TUNNEL.

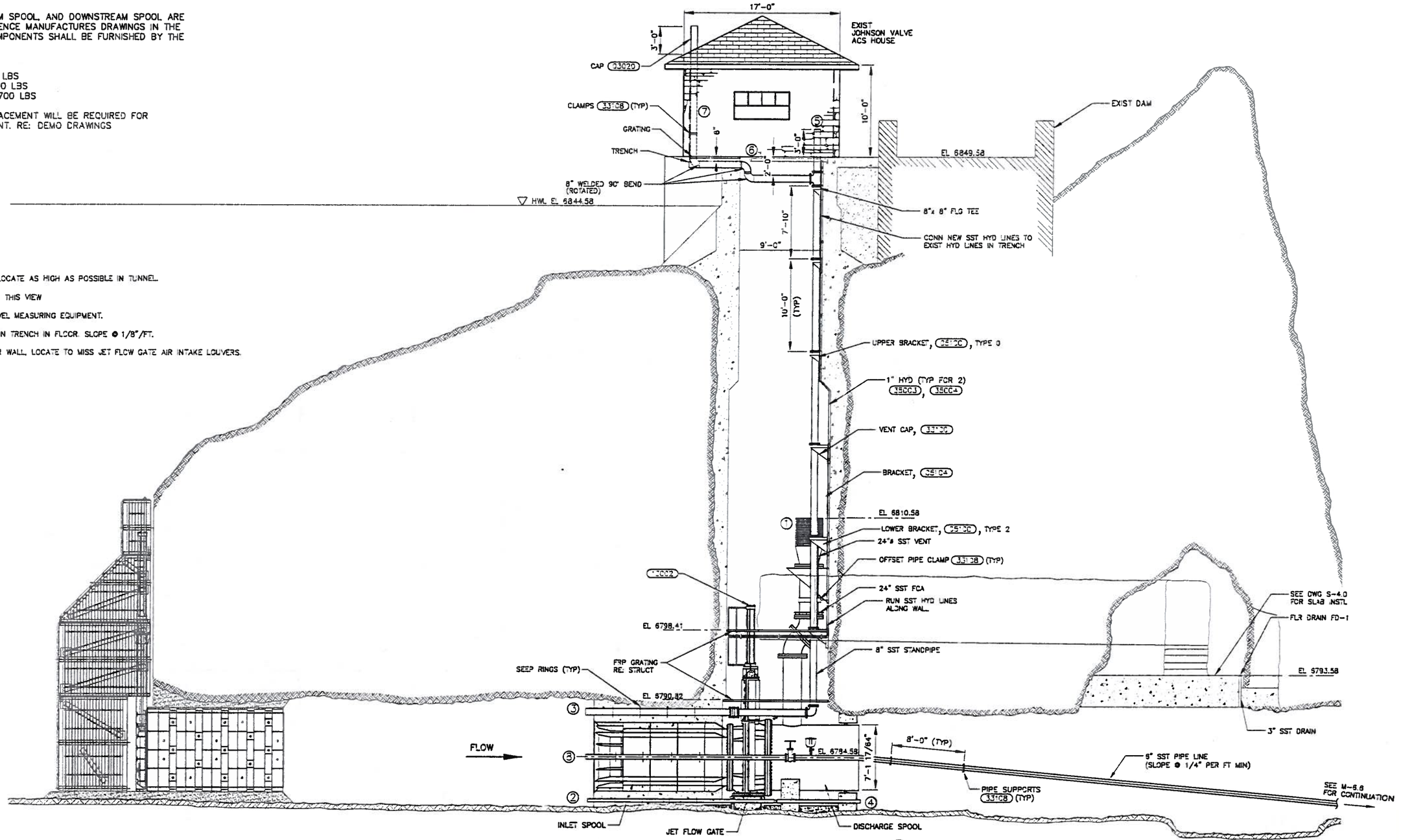
④ 3"-SST FLOOR DRAIN-HIDDEN IN THIS VIEW

⑤ LOCATION FOR STATE WATER LEVEL MEASURING EQUIPMENT.

⑥ RUN ALONG SHAFT WALL, THEN IN TRENCH IN FLOOR. SLOPE @ 1/8"/FT.

⑦ RUN VERTICALLY ALONG INTERIOR WALL, LOCATE TO MISS JET FLOW GATE AIR INTAKE LOUVERS.

⑧ 6" SST TUNNEL PIPE LINE



NEW GATE INSTALLATION SECTION (A) M-3.0
SCALE: 3/16" = 1'-0"

FIGURE 4

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PRELIMINARY 2/26/10
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PT NO	13529

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No.	Description	Date	By
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CHEESMAN DAM
UPSTREAM CONTROL PROJECT-PHASE II
AUXILLARY OUTLET WORKS
JET FLOW GATE INSTALLATION SECTION

Scale: As Shown | Date: Feb, 2010
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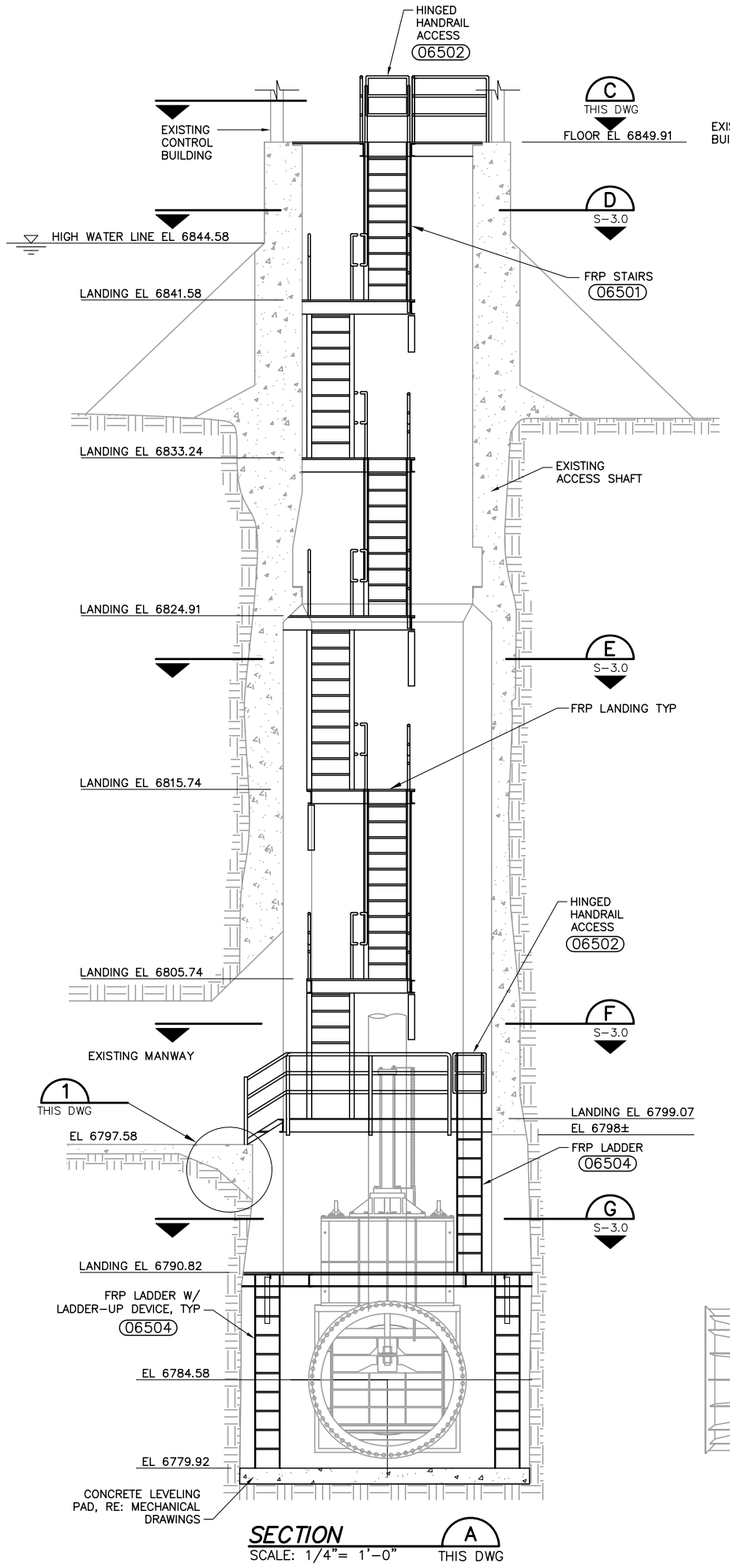
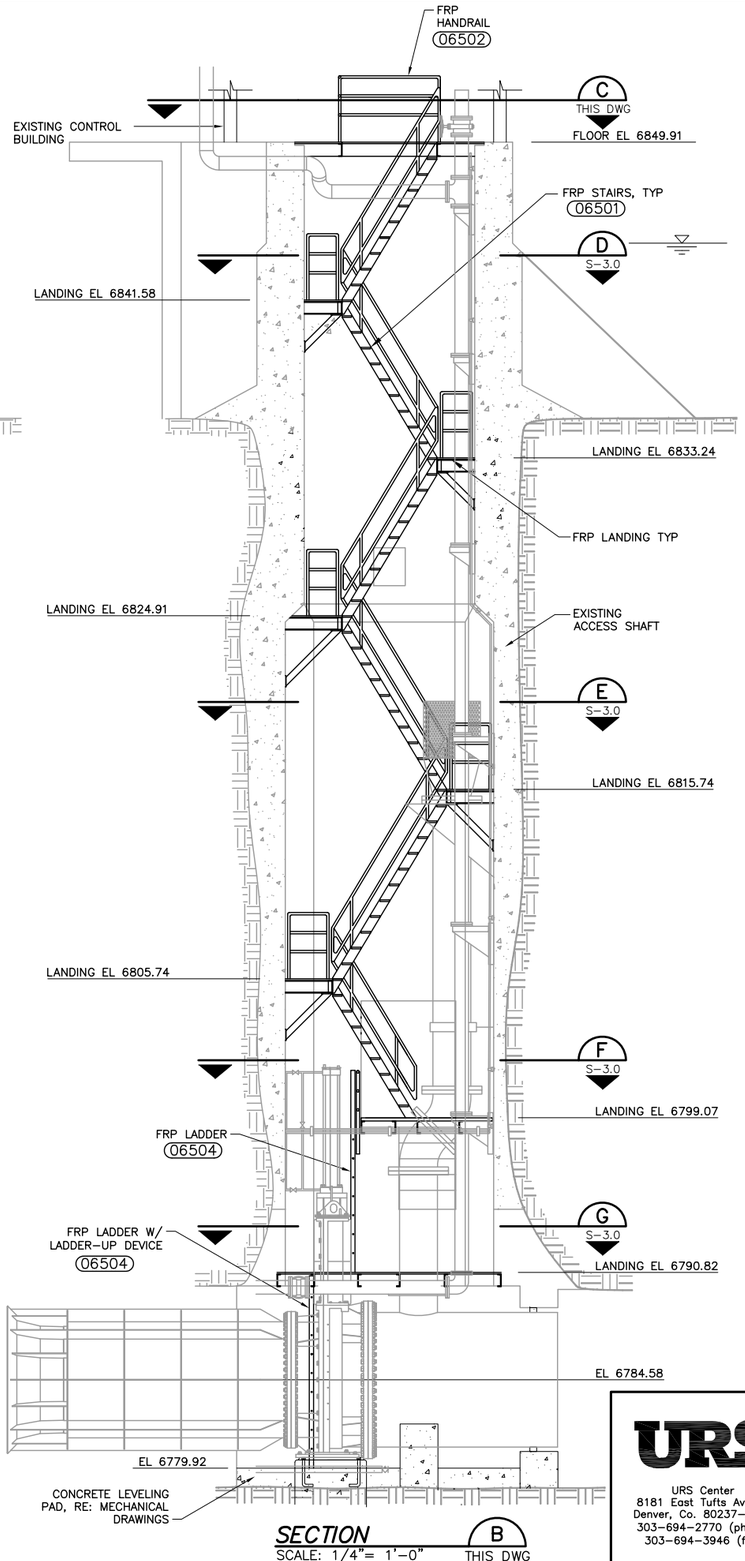
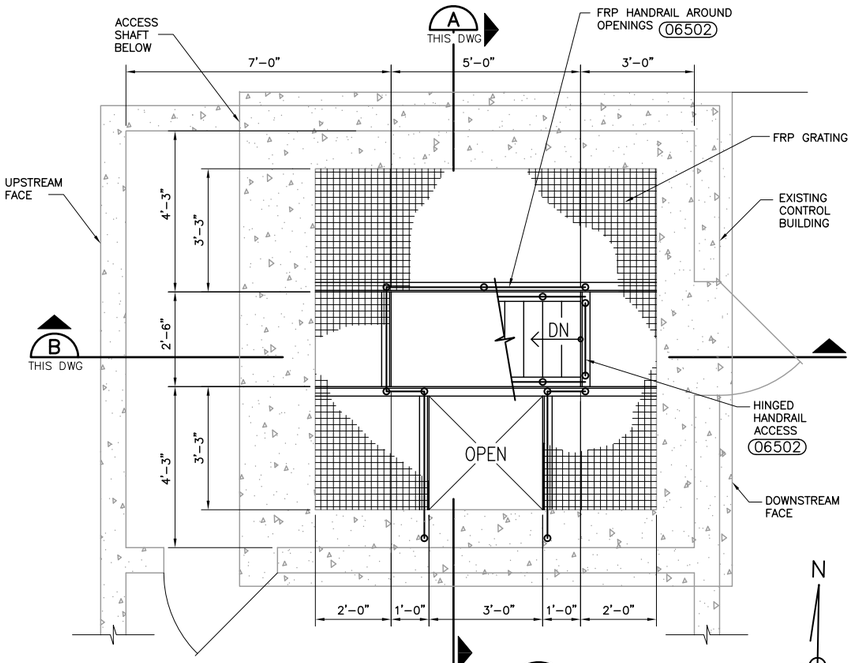
Approved: _____ | Dr. 301 No. 1



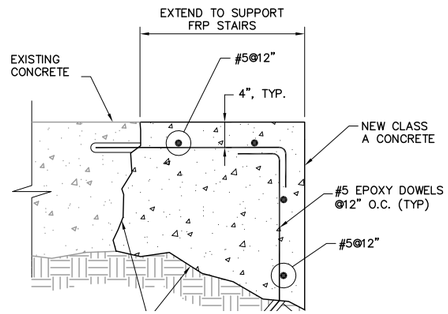
SECTION A THIS DWG
SCALE: 1/4"= 1'-0"



SECTION B THIS DWG
SCALE: 1/4"= 1'-0"



SECTIONAL PLAN C THIS DWG
SCALE: 1/2"= 1'-0"



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NOTES:

1. STAIR AND PLATFORM LAYOUTS ARE SHOWN FOR GENERAL CONFIGURATION ONLY. CONTRACTOR SHALL DESIGN FOR CONDITIONS ENCOUNTERED IN THE FIELD PER THE SPECIFICATIONS.

FIGURE 5

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CHEESMAN DAM
UPSTREAM CONTROL PROJECT PHASE II
AUXILIARY OUTLET WORKS – ACCESS SHAFT
STAIRWAY PLANS AND SECTIONS

Scale: As Shown _ _ | Date: November, 2010
Drawn: Lowell _ | Checked: Ledesma/ _ _
Approved: _____ | Dr. 301 No. 1 _

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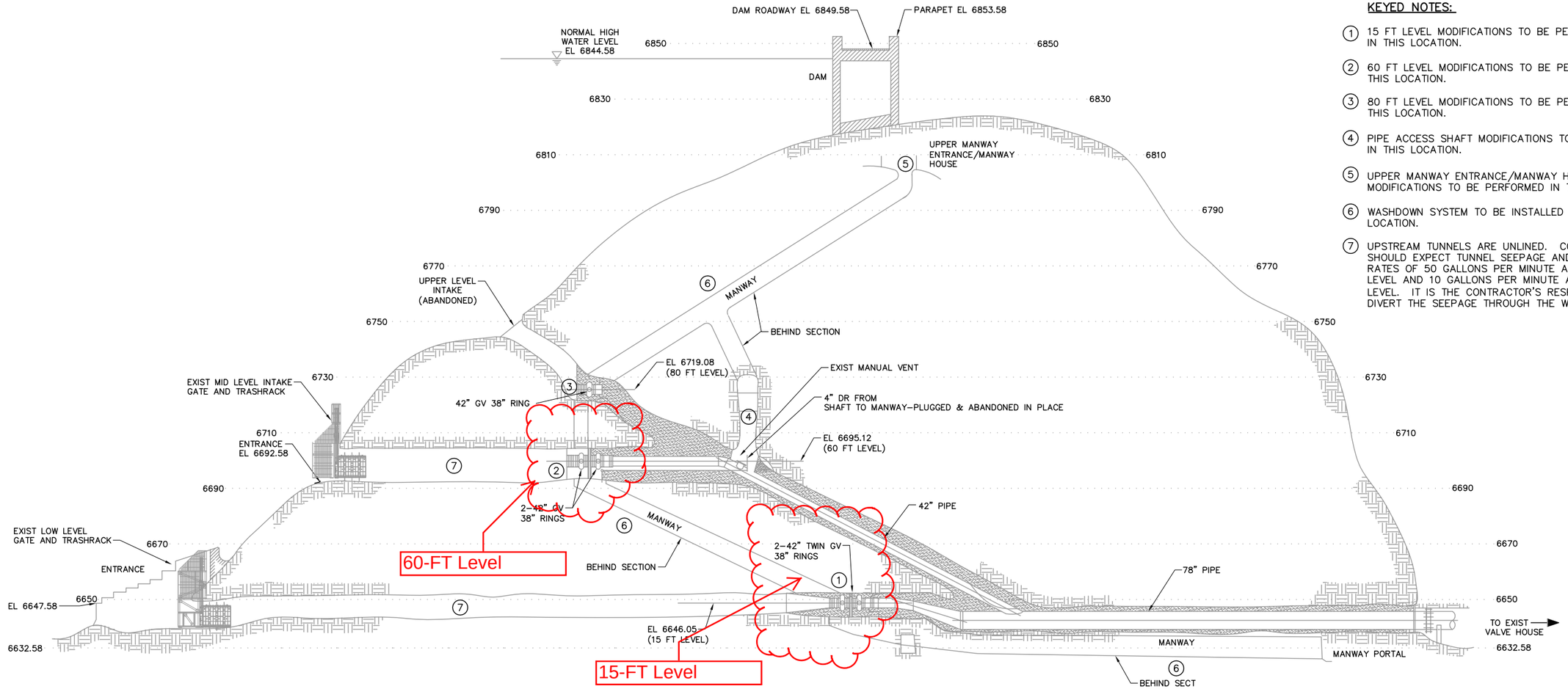
GENERAL NOTE:

DRAWING SHOWS GENERAL SECTION CUT AND IS TO BE USED ONLY TO SHOW THE GENERAL LOCATIONS OF NEW CONSTRUCTION. SEE OTHER DRAWINGS FOR DETAILS OF CONSTRUCTION.

KEYED NOTES:

1. 15 FT LEVEL MODIFICATIONS TO BE PERFORMED IN THIS LOCATION.
2. 60 FT LEVEL MODIFICATIONS TO BE PERFORMED IN THIS LOCATION.
3. 80 FT LEVEL MODIFICATIONS TO BE PERFORMED IN THIS LOCATION.
4. PIPE ACCESS SHAFT MODIFICATIONS TO BE PERFORMED IN THIS LOCATION.
5. UPPER MANWAY ENTRANCE/MANWAY HOUSE MODIFICATIONS TO BE PERFORMED IN THIS LOCATION.
6. WASHDOWN SYSTEM TO BE INSTALLED IN THIS LOCATION.
7. UPSTREAM TUNNELS ARE UNLINED. CONTRACTOR SHOULD EXPECT TUNNEL SEEPAGE AND GATE LEAKAGE RATES OF 50 GALLONS PER MINUTE AT THE 60–FT LEVEL AND 10 GALLONS PER MINUTE AT THE 15–FT LEVEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DIVERT THE SEEPAGE THROUGH THE WORK AREAS.



SECTION THROUGH EXISTING PRIMARY OUTLET WORKS (B) G–7.0

SCALE: 1"=20'

PRELIMINARY
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FIGURE 6

11/30/10 PRELIMINARY 90% NOT FOR CONSTRUCTION

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No.	Description	Date	By
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Date: ____ By: ___

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CHEESMAN DAM
UPSTREAM CONTROL PROJECT–PHASE II

EXISTING PRIMARY OUTLET WORKS SECTION

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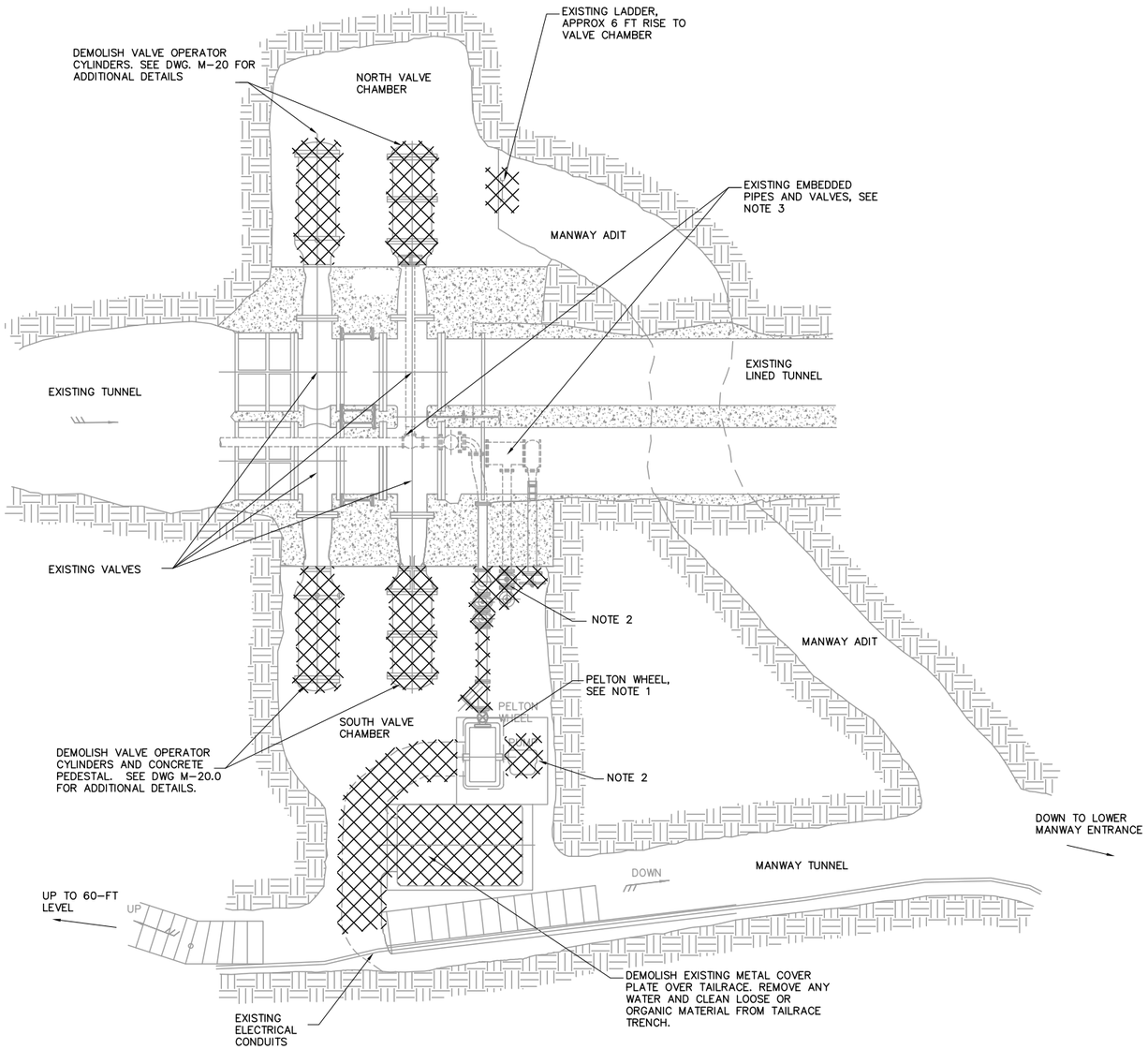

DEMOLITION PLAN OF 15–FT LEVEL VALVE CHAMBERS

SCALE: 1/4"=1'–0"

NOTES:

1. EXISTING PELTON WHEEL SHALL BE SALVAGED AND REMOVED FROM MANWAY TUNNELS AS DIRECTED BY DENVER WATER.
2. DEMOLISH ALL EXISTING EXPOSED PIPING AND PUMP MACHINERY.
3. FILL EMBEDDED PIPES WITH GROUT AND ABANDON IN PLACE

PRELIMINARY
NOT FOR CONSTRUCTION

FIGURE 7

11/30/10 **PRELIMINARY 90%**
NOT FOR CONSTRUCTION

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DWG NO D–10.0
PT NO 13529

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No.	Description	Date	By
△			
△			
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REVISIONS

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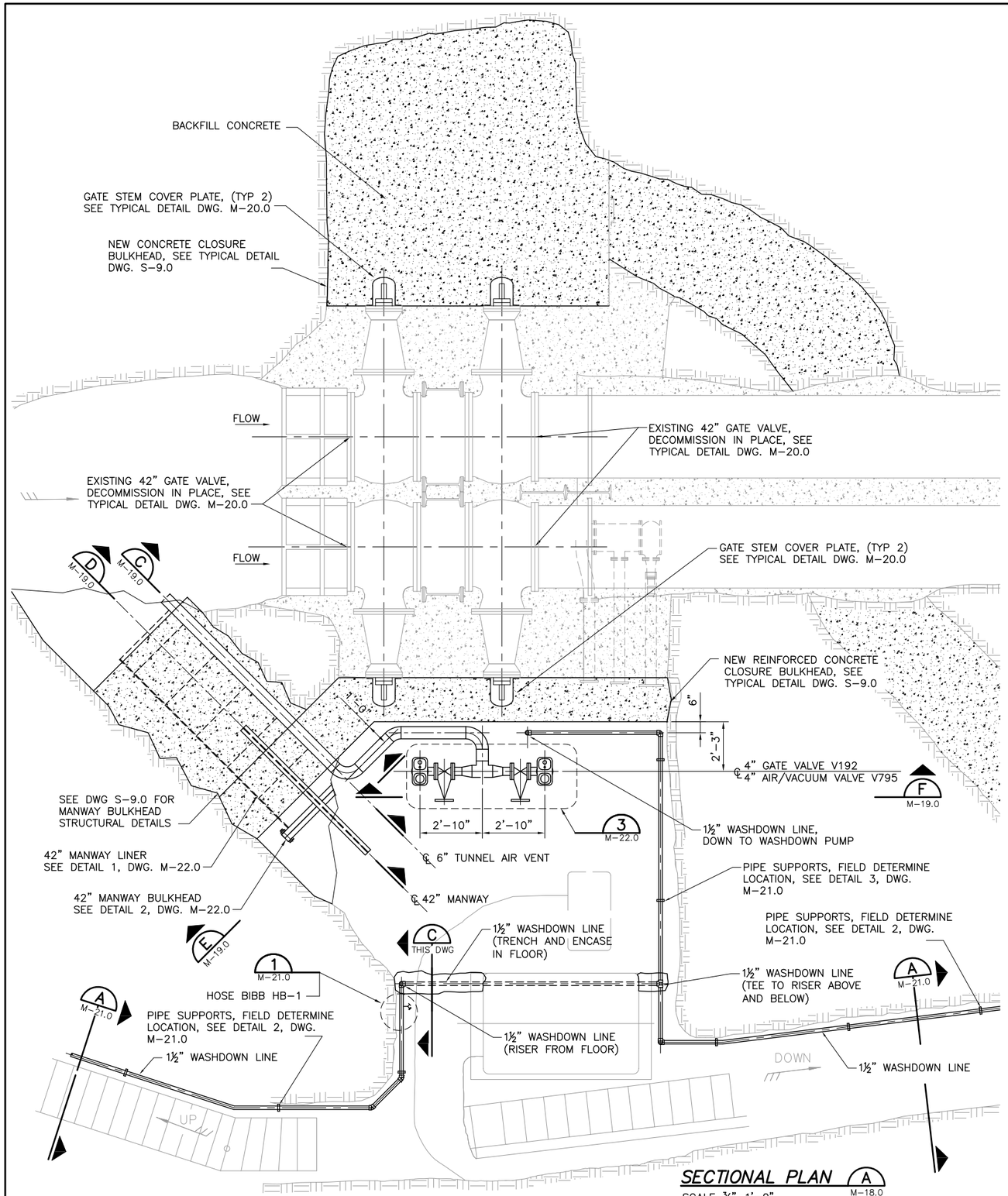
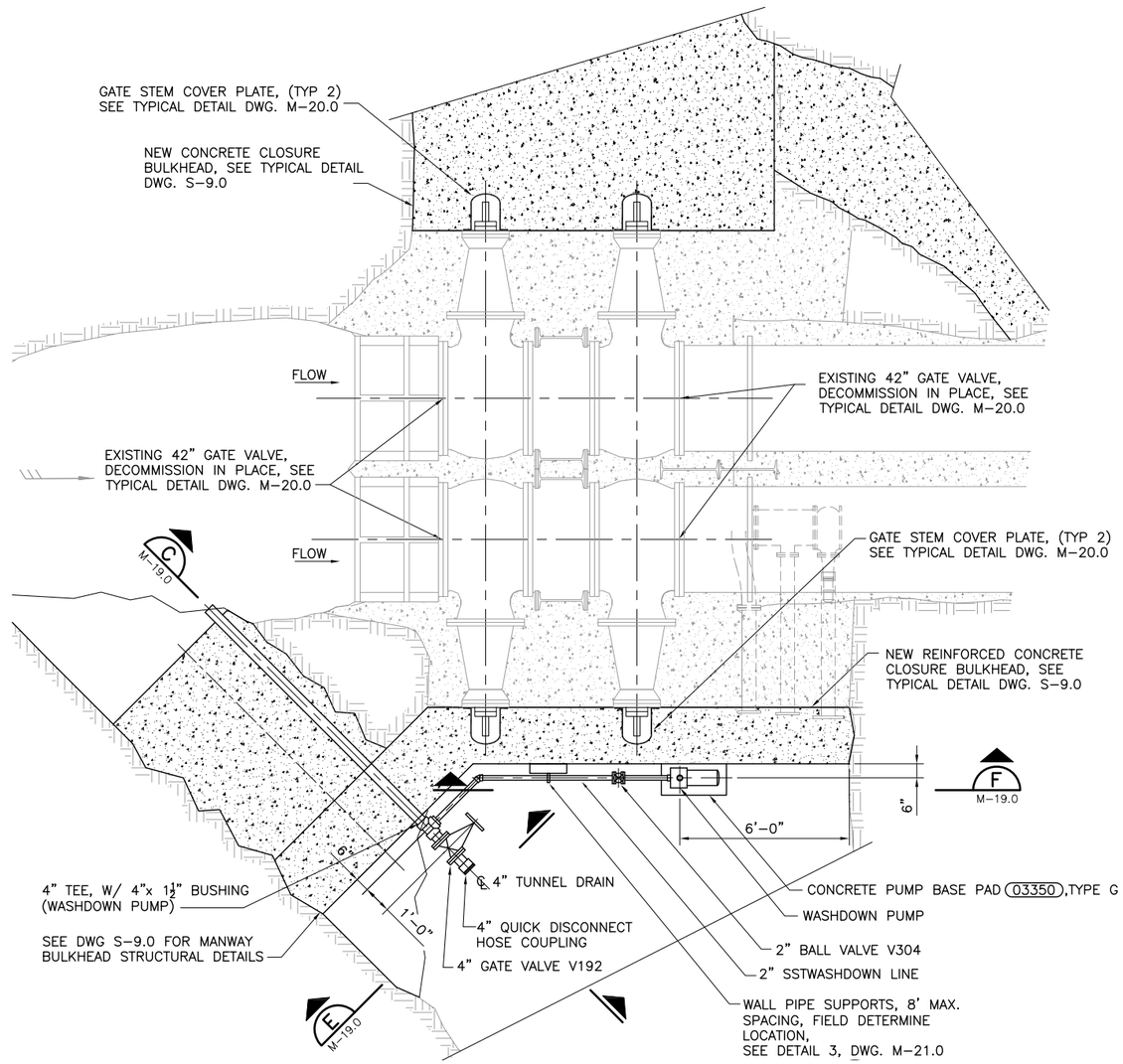
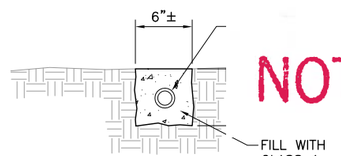
CHEESMAN DAM
UPSTREAM CONTROL PROJECT PHASE II
PRIMARY OUTLET WORKS – 15–FT VALVE CHAMBER
DEMOLITION PLAN AND SECTIONS

Scale: *As Shown* Date: *November, 2010*
Drawn: *Turrentine* Checked: *Ledesma/*
Approved: _ _ _ _ _ _ _ Dr. 301 No. 1

SHEET OF SHEETS







SECTION C M–18.0
NOT TO SCALE

PRELIMINARY
NOT FOR CONSTRUCTION

11/30/10 PRELIMINARY 90% NOT FOR CONSTRUCTION

FIGURE 8

C–1310

URS
URS Center
8181 East Tufts Avenue
Denver, Co. 80237–2637
303–694–2770 (phone)
303–694–3946 (fax)

DWG NO M–18
PT NO 13529

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

No.	Description	Date	By

REVISIONS

Spec. _ _ _ _ _ Field Book No. _ _ _
Date: _ _ _ _ By: _ _ _

DENVER WATER
1600 West 12th Avenue·Denver, Colorado 80204
Phone(303)628–6000·Telecopier No.(303)628–6851

CHEESMAN DAM
UPSTREAM CONTROL PROJECT PHASE II
PRIMARY OUTLET WORKS
15–FT LEVEL MECHANICAL MODIFICATIONS

Scale: As Shown _ _ | Date: November, 2010
Drawn: Gross _ _ | Checked: Ledesma/ _ _
Approved: _ _ _ _ _ _ _ | Dr. 301 No. 1 _ _

SHEET OF SHEETS

Photo 1 – Spillway Crossing: Access to Site

Photo 2 – Auxiliary Outlet Works Discharge. Photo taken from top of dam.

Photo 3 – Existing Stairway and Bonneted Slide Gate in Auxiliary Access Shaft. All shown equipment to be removed and replaced with new Owner Furnished Jet Flow Gate and Contractor furnished FRP stairway.

Photo 4 –Larner Jonson Needle Valve - To be completely removed, including all concrete encasements and rock to limits necessary to install new Jet Flow Gate. Larner Johnson Needle Valve located at downstream end of Auxiliary Outlet Works. See Photo 2.

Photo 5 – Typical condition of existing 42” Gate Valve. The cylinder shown above will be removed. The gate body will remain in place, with a new cap and concrete bulkhead placed at the flange area seen behind the cylinder.