

FINAL DESIGN

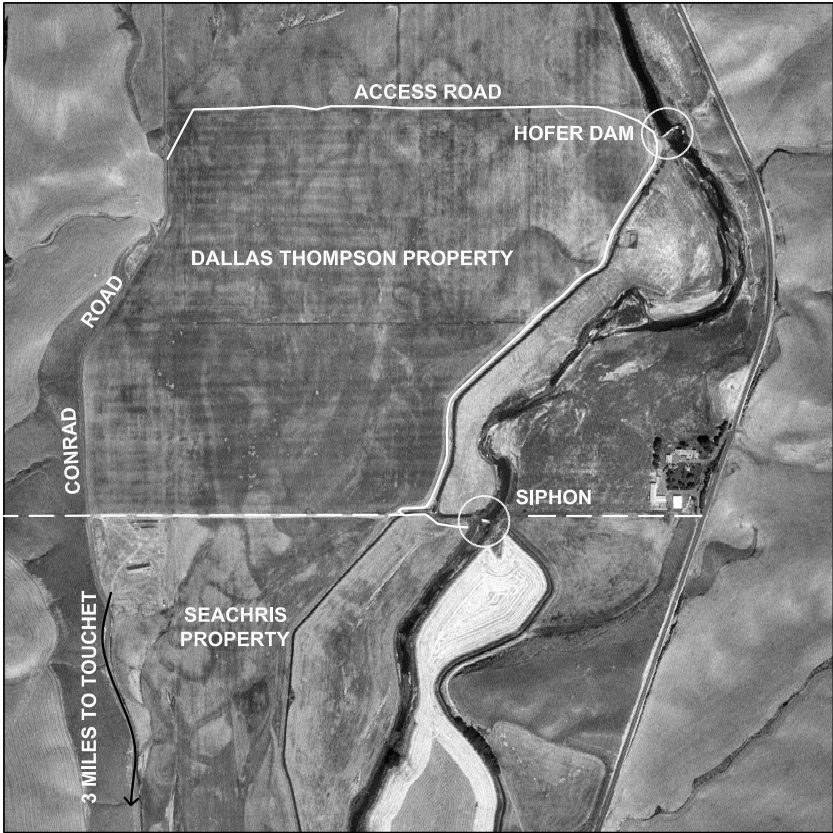
HOFER DAM FISH PASSAGE PROJECT

TOUCHET RIVER WALLA WALLA COUNTY, WASHINGTON

PROJECT VICINITY



PROJECT LOCATION



NOTES:

- PROJECT BENCHMARKS:
HOFER DAM SITE: 5/8 INCH REBAR @ ELEVATION 484.0, LOCATED 4 FEET S.W. OF CONCRETE WALL.
SIPHON SITE: INVERT OF 36-INCH CONCRETE PIPE ELEVATION 474.35. ADDITIONAL PROJECT TEMPORARY BENCH MARKS WILL BE SUPPLIED BY THE PROJECT ENGINEER AS REQUESTED.
- THIS PROJECT IS BEING DESIGNED TO OPERATE AS A GRAVITY FED DIVERSION ON A TEMPORARY BASIS. CURRENT PLAN IS TO INSTALL PUMPS AND PRESSURE LINES TO CONVERT TO A PUMPED/PRESSURE SYSTEM. SOME NOTES ON THE DRAWINGS MAY REFERENCE THIS FUTURE CONDITION.
- STEEL BEAM ASSEMBLY: ALL STEEL BEAMS SHALL BE WELDED TO ADJOINING BEAM WITH A CONTINUOUS WELD ALONG THE TOP AND BOTTOM FLANGE. END PLATES ARE REQUIRED AT THE ENDS OF ALL BEAMS FOR BOLTING TO CONCRETE WALL , OUTSIDE EDGE (TRASHRACK),. AND FOR BEARING IN THE CONCRETE SLAB.
- VERTICAL STEEL BEAMS: ALL VERTICAL STEEL BEAMS SHALL BE LEVELED, PLACED TO CORRECT ELEVATIONS AS SHOWN ON THE PLANS AND THEN GROUTED IN FLOOR BLOCKOUTS. ALL FINAL WELDING SHALL BE COMPLETED BEFORE THE FINAL CONCRETE POUR.
- CLOSURE GATE GUIDES: THERE ARE TWO DIFFERENT TYPES OF CLOSURE GATE GUIDES. ONE TYPE IS EITHER WELDED TO THE SCREEN GUIDE OR WELDED TO A VERTICAL BEAM. THE SECOND TYPE IS WIDER AND WELDED TO THE OUTSIDE OF THE VERTICAL BEAMS. CLOSURE GATES IN PLACE SEAL A HYDRAULIC HEAD OF 7 FEET, SO SEALING OF ALL GAPS ARE CRITICAL. CLOSURE GATE GUIDES WELDED TO VERTICAL BEAMS SHALL HAVE A CONTINUOUS WATER TIGHT WELD SO WHEN THE CONCRETE IS POURED IN THE BLOCKOUTS AND THE CLOSURE GATES ARE INSTALLED THERE IS A WATER TIGHT SEAL.
- TRASH RACKS: BOTH FRONT AND END PANELS SHALL BE FABRICATED IN THE SHOP, AND HOT DIPPED GALVANIZED. SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR APPROVAL BEFORE FINAL FABRICATION. HANDRAIL MOUNTING BRACKETS SHALL BE IN PLACE AND SPACED AT 6 FEET ON CENTER FOR HANDRAIL.
- BLOCKOUTS IN CONCRETE FLOOR FOR STEEL BEAMS, SCREEN/CLOSURE GATE GUIDE AND BAFFLE GUIDES: BLOCKOUTS SHALL BE PROVIDED FULL DEPTH OF THE SLAB. STEEL MEMBERS SHALL BE PLACED ON REBAR, BROUGHT TO GRADE USING, AND PLUMB. STEEL MEMBERS SHALL THEN BE WELDED TO REBAR. STEEL SHIM PLATES MAY BE USED. LOWERING OF THE REBAR IN SOME AREAS MAY BE REQUIRED. ONCE THE MEMBER IS PLUMB, ON GRADE AND ALL FINAL WELDING HAS BEEN COMPLETED, THE BLOCKOUT AREA SHALL BE FILLED WITH CONCRETE TO FINAL GRADE AND A SMOOTH SURFACE PROVIDED.
- FLUSH BEARING SURFACE FOR SCREEN: ONCE THE FINAL CONCRETE IS POURED THE SURFACE WITHIN THE SCREEN GUIDE SHOULD BE SMOOTHED AND LEVEL TO ENSURE A COMPLETE CONTACT WITH THE BOTTOM STEEL FRAME OF THE SCREEN.
- CONTINUOUS FLOW SHALL BE PROVIDED TO THE IRRIGATION DIVERSION SYSTEM.
- JIB CRANE SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS. AN APPROXIMATE DIMENSIONS AND BASE IS PROVIDED ON THE DRAWINGS BASED ON ANTICIPATED PLATE SIZE. JIB CRANE SHALL BE; FREE STANDING BASE PLATE MOUNTED WITH A SPAN OF 20 FEET, A CAPACITY OF 3000 LBS. AND A HEIGHT UNDER BOOM OF 14 FEET.

- DETAIL REFERENCE
- H
2/14
- SHEET WHERE DETAIL IS SHOWN
- SHEET WHERE DETAIL IS REFERENCED

HOFER DAM SITE LOCATION:
46° 5' 5.22" N, 118° 39' 30.41" W

SIPHON SITE LOCATION:
46° 4' 45.52" N, 118° 39' 44.42" W

DRAWING INDEX

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3	DIVERSION STRUCTURE, FISHWAY, CONSTRUCTED RIFFLE AND DAM MODIFICATIONS
4	SIPHON AND CONSTRUCTED RIFFLE
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6	DIVERSION/SCREEN STRUCTURE MECHANICAL/HARDWARE DETAILS
7	DIVERSION/SCREEN STRUCTURE MECHANICAL/HARDWARE DETAILS
8	FISHWAY STRUCTURE AND DAM MODIFICATIONS

SHEET #	SHEET TITLE
9	FISHWAY STRUCTURE STRUCTURAL DETAILS
10	CONSTRUCTED RIFFLES, SECTIONS AND PROFILES
11	TRASH RACK, SCREEN GUIDE & MISC. STEEL FABRICATION DETAILS
12	TRASH RACK, SCREEN GUIDE & MISC. STEEL FABRICATION DETAILS
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REVISIONS					DESCRIPTION
REV	DATE	BY	APP'D		

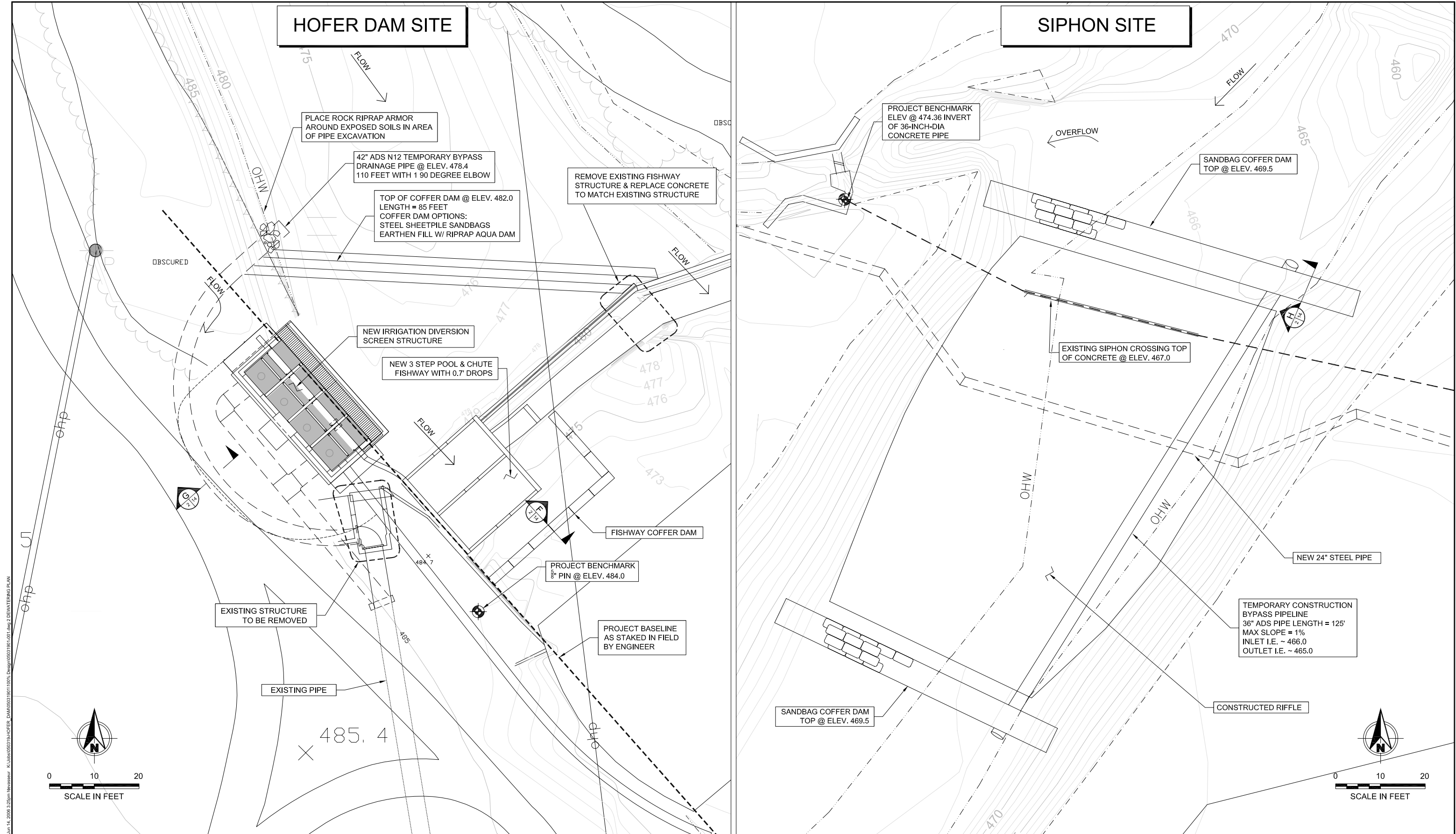
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1423 3RD AVENUE SUITE 300
SEATTLE, WA 98101 (206) 287-9130

Walla Walla County
Conservation District


COVER SHEET

DESIGNED BY: P. POWERS
DRAWN BY: LEVASSEUR
CHECKED BY: X
APPROVED BY: X
SCALE: X
DATE: 06/12/06


SHEET:
1
SHEET NO. 1 OF 15




Jun 14, 2006 3:25pm Hesseleur K:\Jobs\050315-HOFER DAM\050315-001.dwg 2 DEWATERING PLAN



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REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: P POWERS

DRAWN BY: LEVASSEUR

CHECKED BY:

APPROVED BY:

SCALE: AS NOTED

DATE: 06/14/06

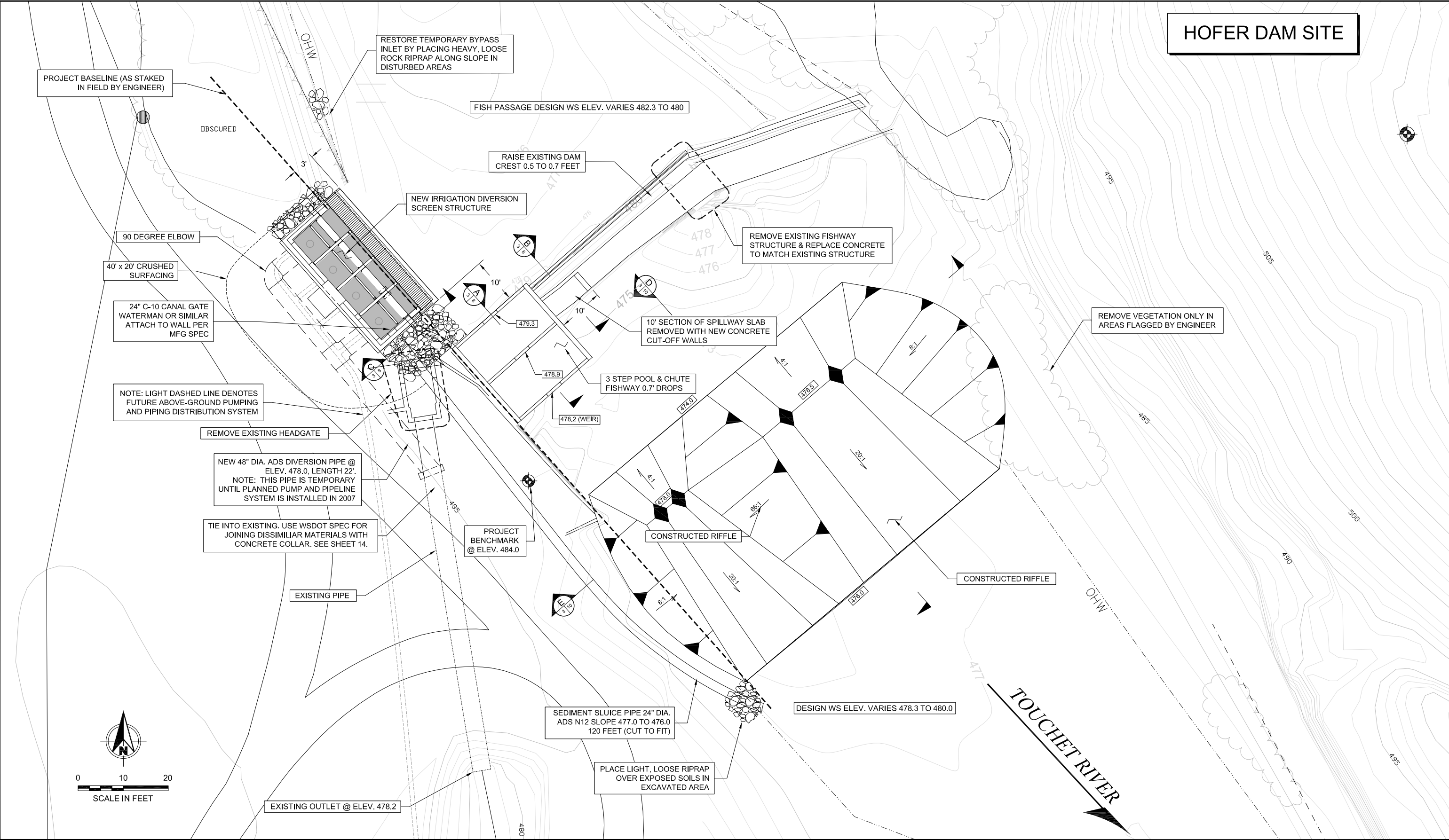
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DEWATERING PLAN

SHEET:


2

SHEET NO. 2 OF 15

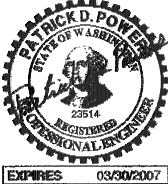




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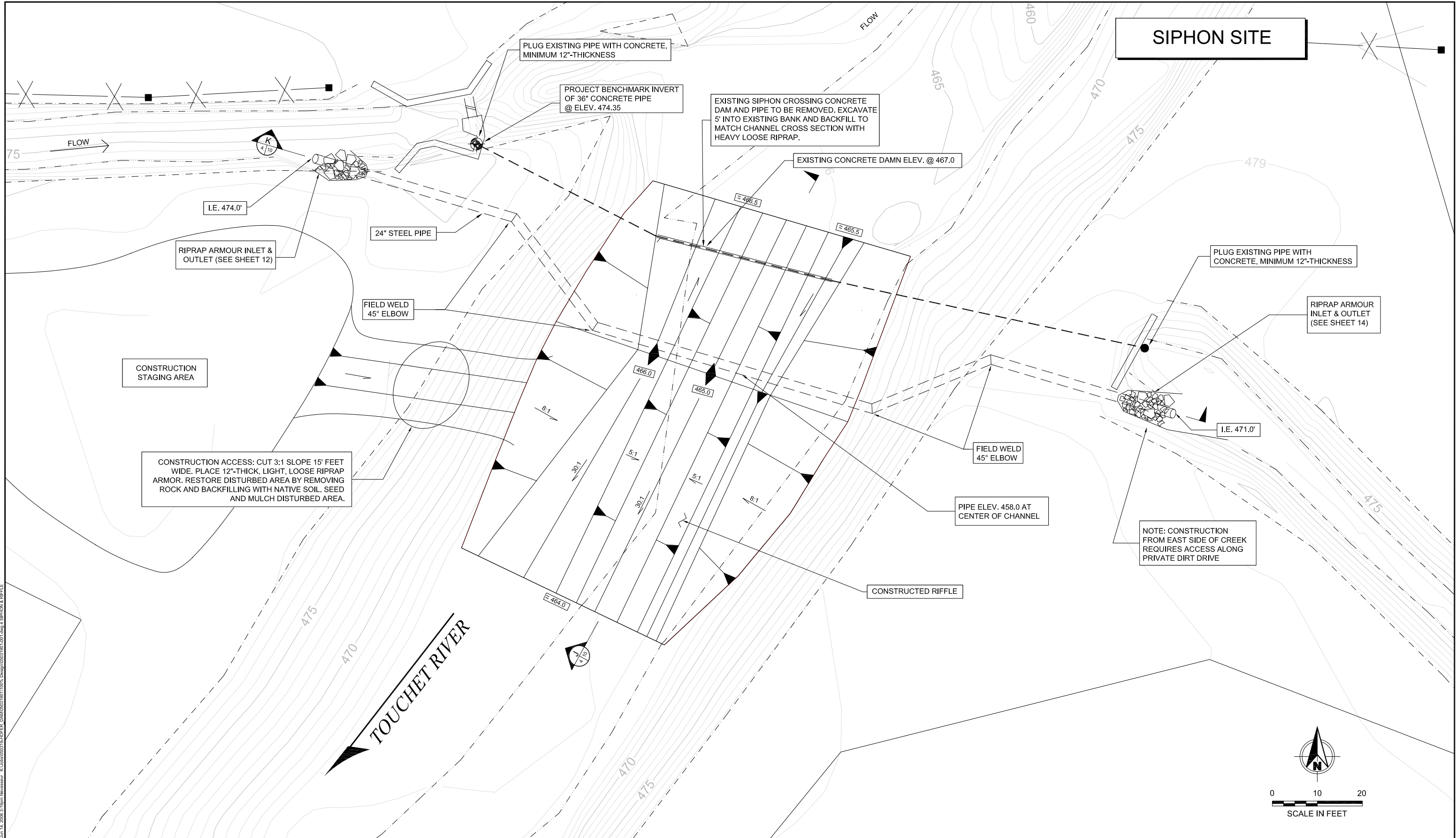
DESIGNED BY: P. POWERS
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DIVERSION STRUCTURE, FISHWAY,
CONSTRUCTED RIFFLE AND DAM MODIFICATIONS

SHEET:
3


SHEET NO. 3 OF 15



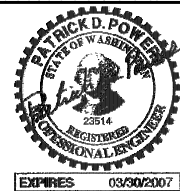
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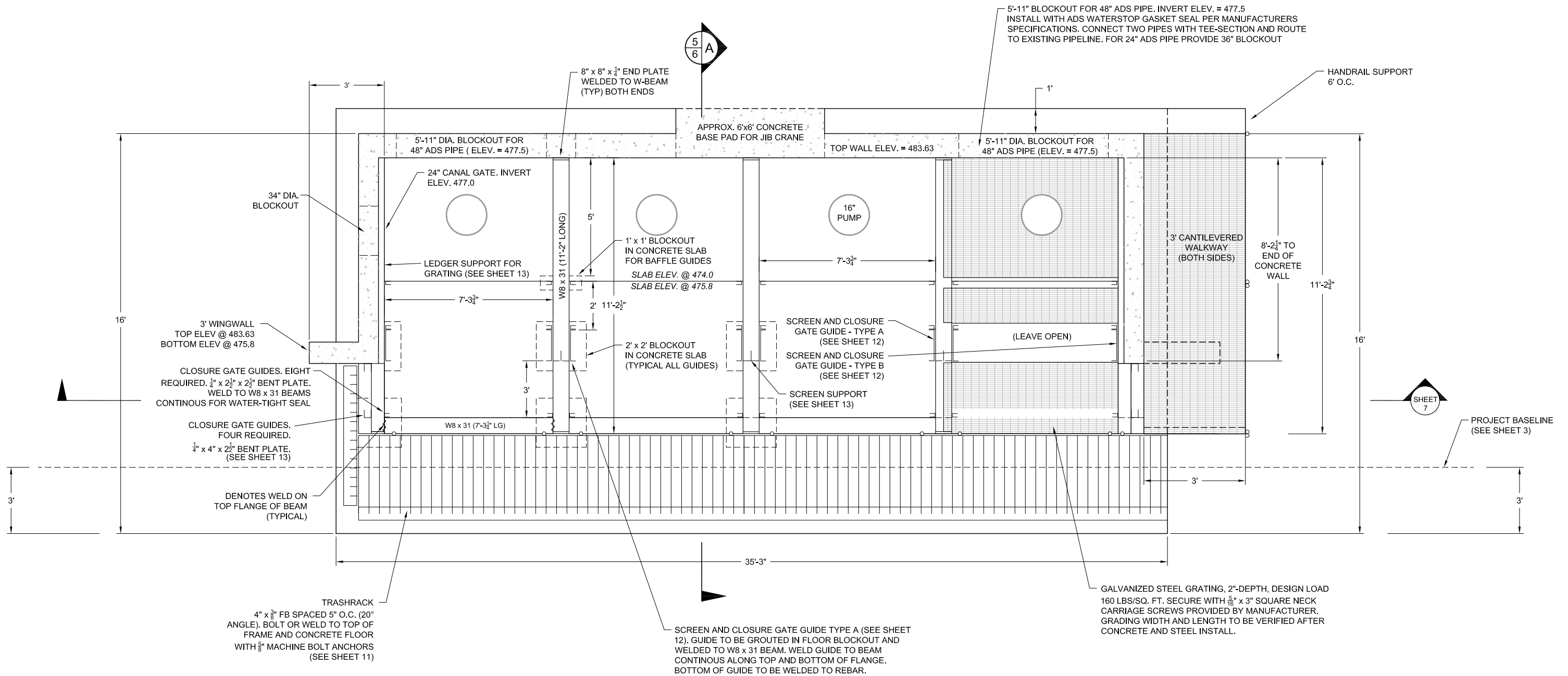
SIPHON AND CONSTRUCTED RIFFLE
PLAN VIEW

SHEET:

4

SHEET NO. **4** OF **15**

Jun 14, 2008 3:17pm levasseur K:\Jobs\050319-ADFER DAM\05031901\100% Design\05031901-ADFER DAM 5 DIVERSION SCREEN PLAN



PLAN - DIVERSION STRUCTURE



NOTE: SEE SHEET 12 FOR DETAILS

REVISIONS					
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DRAWN BY: LEVASSEUR
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APPROVED BY:
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HOFER DAM FISH PASSAGE PROJECT

DIVERSION/SCREEN STRUCTURE

SHEET:

5

SHEET NO. **5** OF **15**

