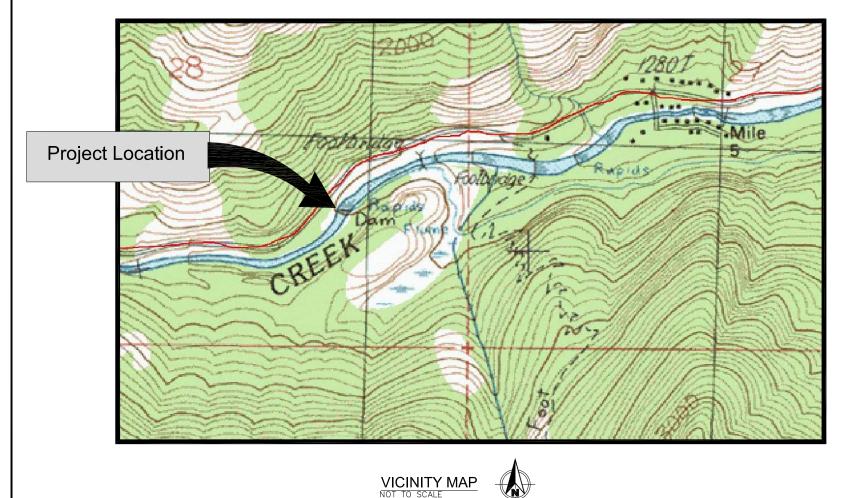
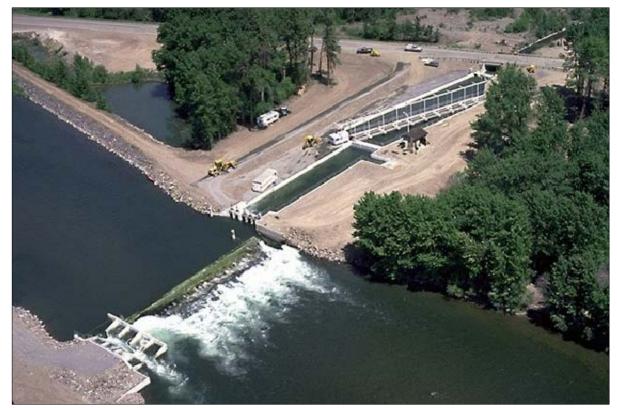
## **Preliminary Design Documents Icicle Creek - Diversion Dam Pool and Chute Fishway**







Example of Pool and Chute Fishway on Yakima River



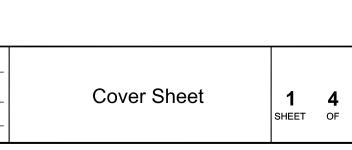
**Icicle Creek Diversion Dam** Pool and Chute Fishway

					DESIGN BY:	
REV	DATE	BY	APP'D	DESCRIPTION	Waterfall Engineering	
					DRAWN BY:	
					RiverSide Drafting and Design	
					DATE:	
BAR IS ONE INCH ON				SCALE VERIFICATION IF NOT ONE INCH ON THIS SHEET, ADJUST   1" SCALES ACCORDINGLY.	10/2/15	

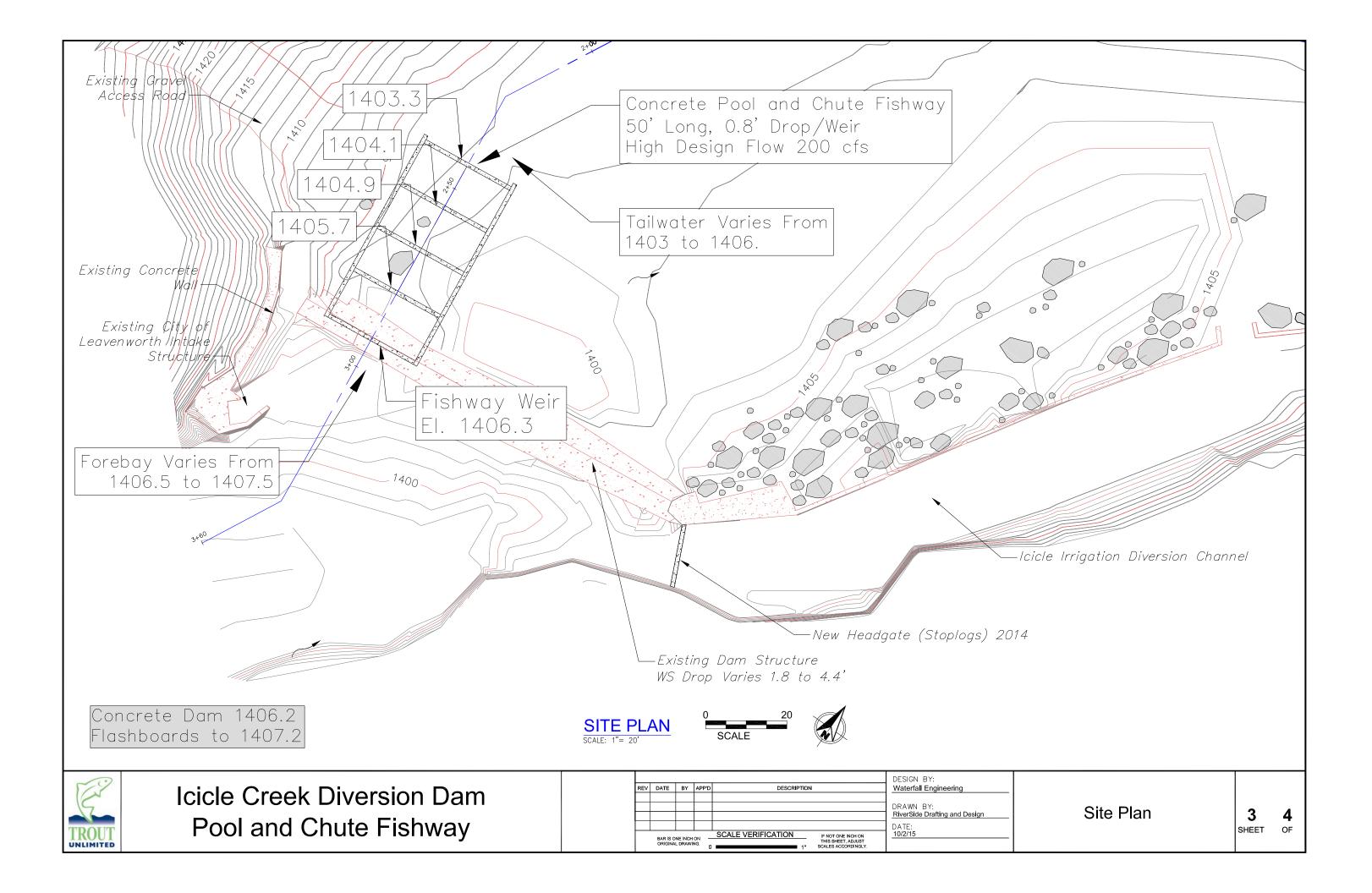


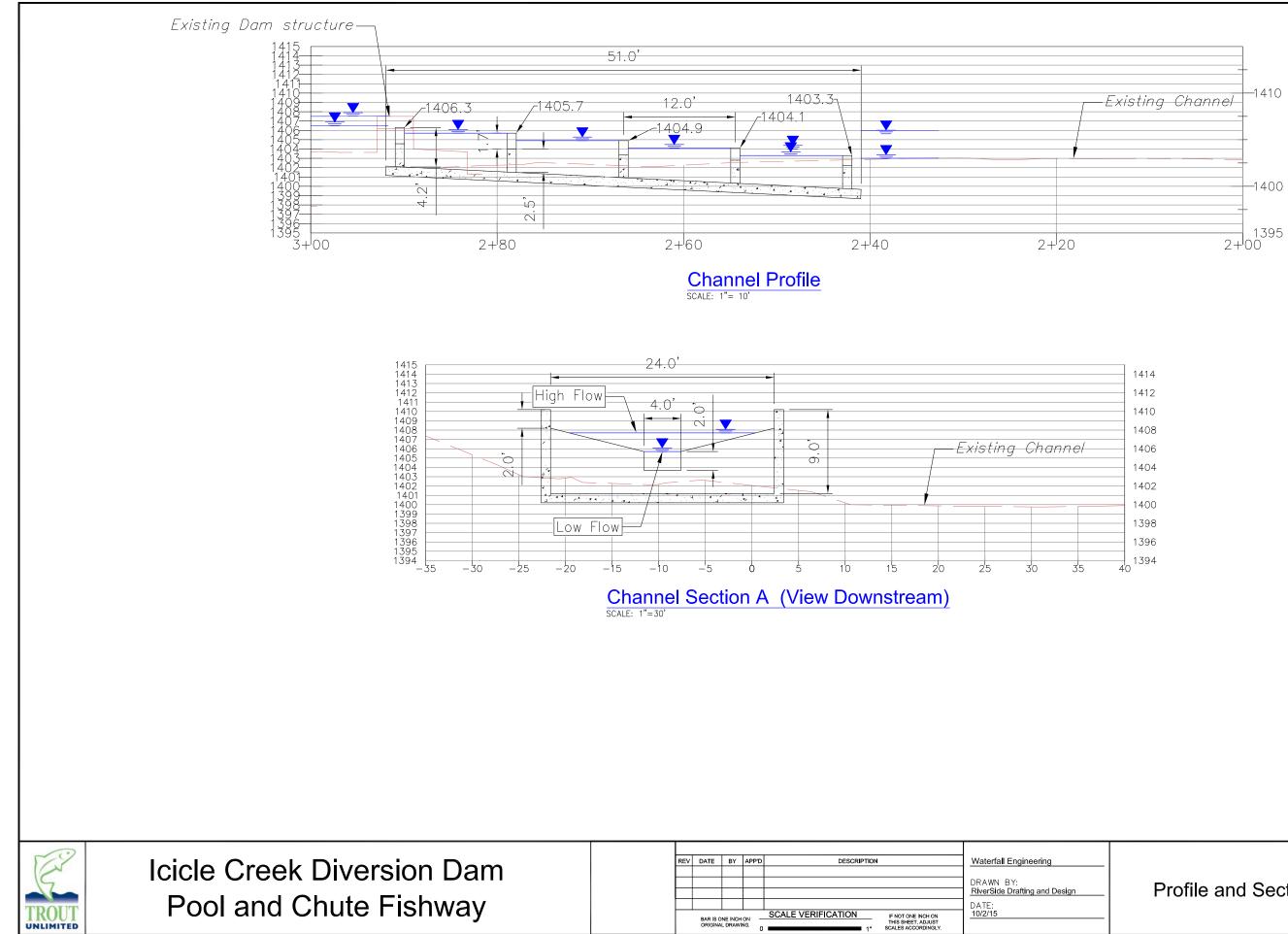
## **DRAWING INDEX:**

Cover Sheet 2. Site Plan (Aerial Photo) 3. Site Plan (1'' = 20')4. Profile and Sections









Profile and Section	4	4
	SHEET	OF

Estimate By: Design Level:	Waterfall Engineering 70%								
Proposed Correction:	Construct a Pool and Chute Concrete Fishway by Removing a section of the dam.								
Description	Unit	Calc Quantity	Mult	Cost	Amount	Sub Total	Notes		
Mobilize	L.S.	1		\$20,000.00	\$20,000				
Access	L.S.	1		\$8,000.00	\$8,000				
Stream Bypass	L.S.	1		\$6,000.00	\$6,000				
Dewater (Pumps, Etc)	L.S.	1		\$6,000.00	\$6,000				
Fish Removal	L.S.	1		\$1,200.00	\$1,200				
Excavation, Rock	C.Y.	220	1.2	\$35.00	\$9,240		Dispose Along Stream Banks		
Steel Plates	L.S.	1		\$10,000.00	\$10,000		Tops of Weirs		
Concrete Walls and Weirs	-	125	1.1	\$1,200.00	\$165,000				
Excavation Disposal	C.Y.	220	1.2	\$12.00	\$3,168				
Partial Dam Removal	L.S.	1		\$15,000.00	\$15,000				
CONSTRUCTION SUB TO				\$243,608					
Contingencies	15%					\$36,541			
Sales Tax	8.0%					\$22,412			
CONSTRUCTION TOTA									

## **Opinions of Probable Construction Cost**

In providing opinions of probable construction cost, the Client understands that the Consultant (Waterfall Engineering, L.L.C.) has no control over the cost or availability of labor, equipment or materials, or over market condition or the Contractor's method of pricing, and the consultant's opinions of probable construction costs are made on the basis of the Consultant's professional judgment and experience. The Consultant makes no warranty, express of implied that the bids or the negotiated cost of the Work will not vary from the Consultant's opinion of probable construction cost.