

22x34 = FULL SCALE

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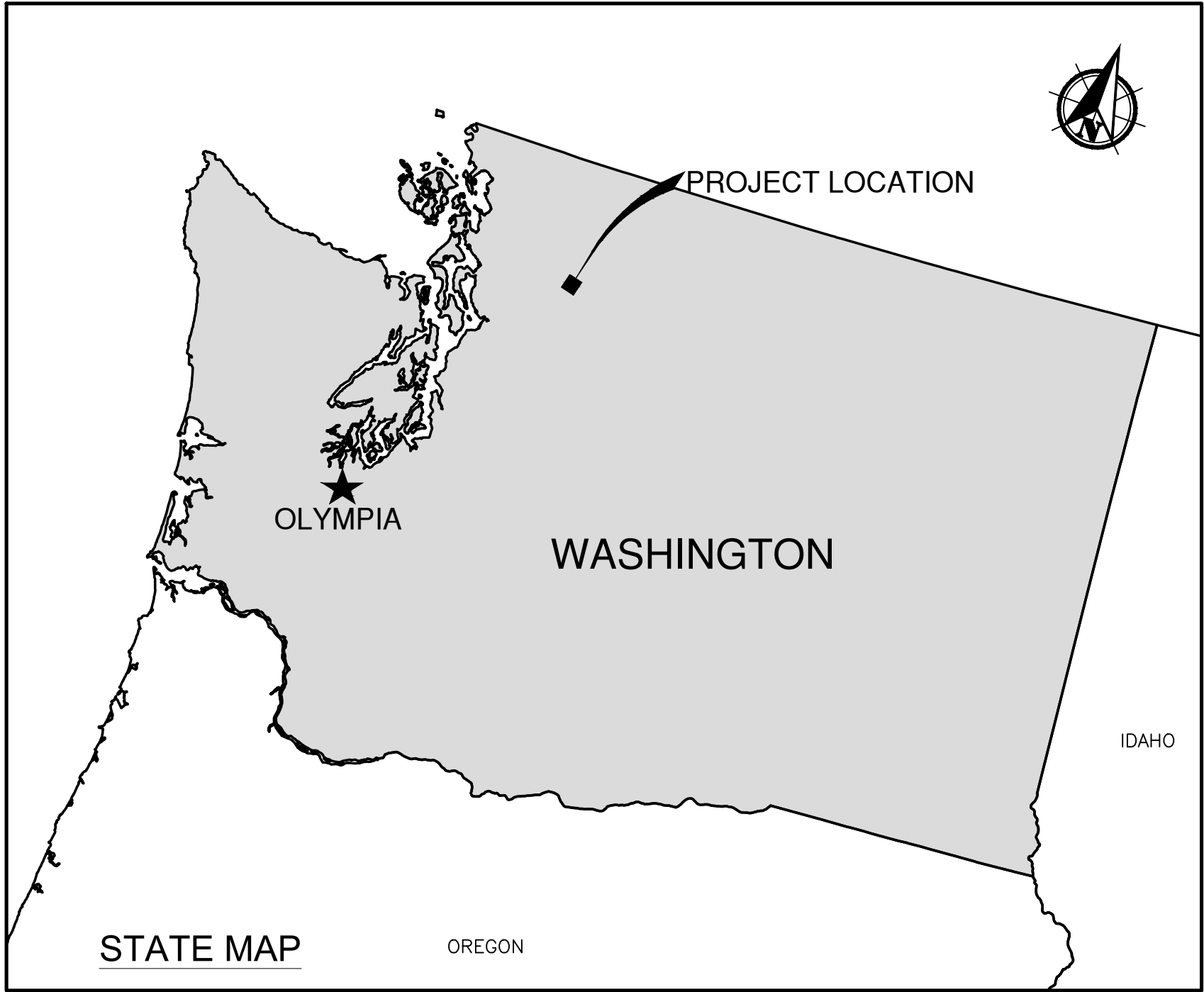
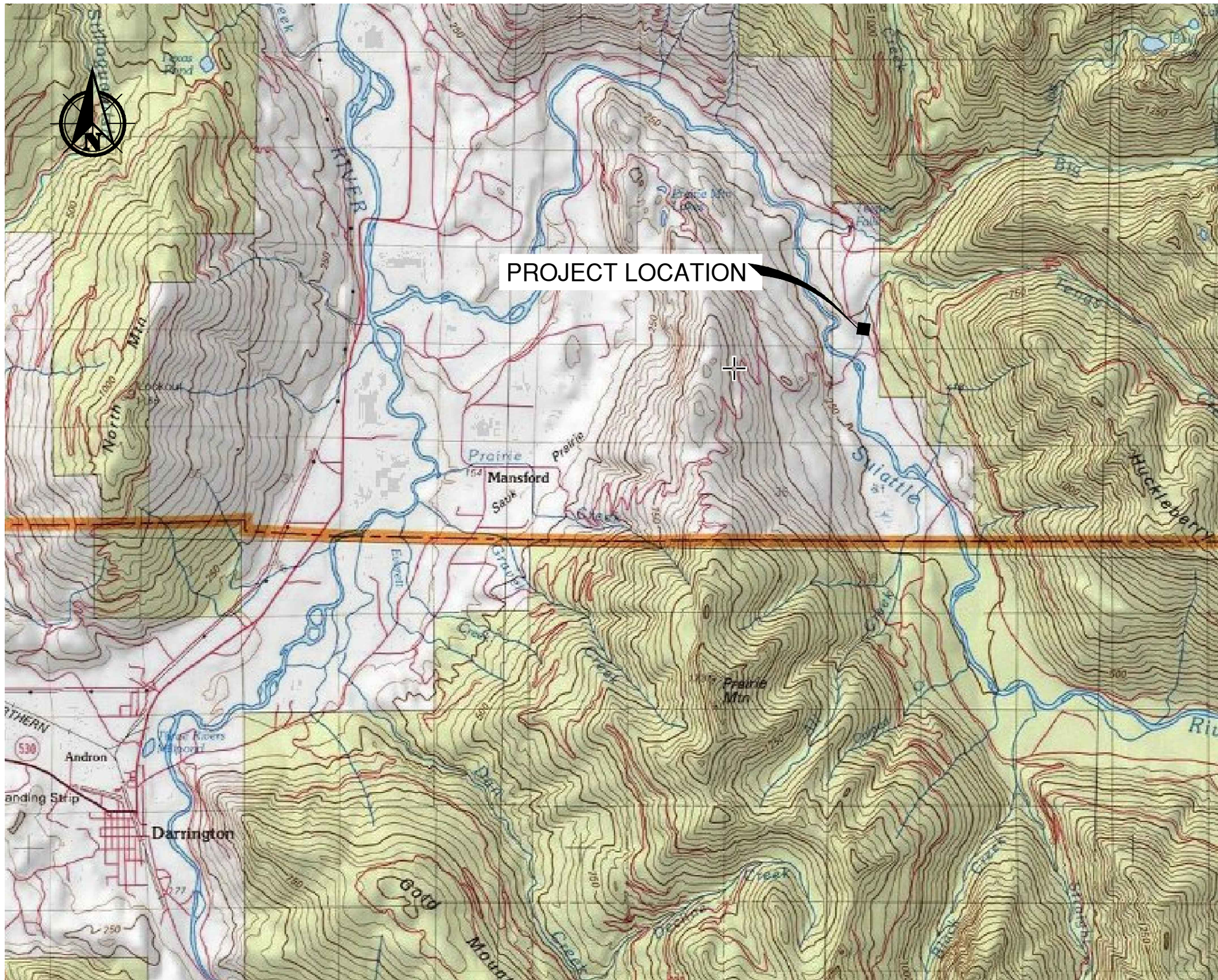
SKAGIT RIVER SYSTEM COOPERATIVE

TENAS CREEK

ALLUVIAL FAN RESTORATION FEASIBILITY

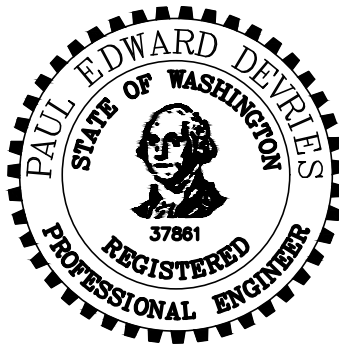
REVISED PRELIMINARY DESIGN

DRAWING LIST				
SHEET NO.	SHEET DESCRIPTION	DATE	REVISION	STATUS
1	GENERAL NOTES, LEGEND	05-25-23	1	PRELIMINARY
2	EXISTING SITE, ACCESS, OWNERSHIP: PLAN	05-25-23	1	PRELIMINARY
3	PROPOSED PROJECT ELEMENTS: PLAN, SECTION	05-25-23	1	PRELIMINARY
4	PROPOSED GRADING: PLAN, SECTION	05-25-23	1	PRELIMINARY
5	-	-	-	PRELIMINARY
6	-	-	-	PRELIMINARY
7	-	-	-	PRELIMINARY



VICINITY MAP (NTS)

PRELIMINARY
NOT FOR
CONSTRUCTION



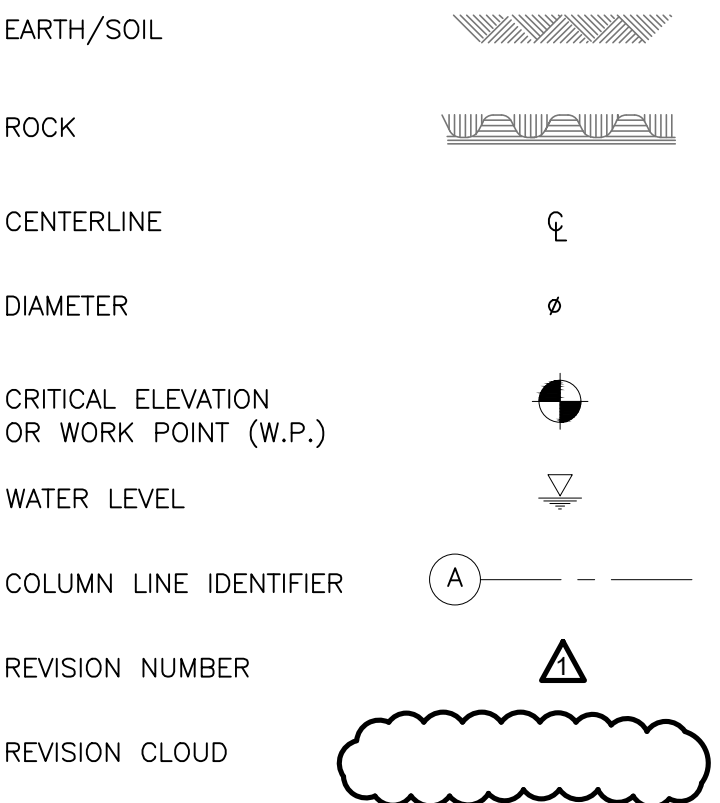
1	LEAVE EXISTING BRIDGE	06/09/25	PDV	
-	-	-	-	-
No.	Revision	Date	Drawn	Checked
			PDV	CM

DESIGNED: PDV
DRAWN: PDV
CHECKED: CM

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SKAGIT RIVER SYSTEM COOPERATIVE		
TENAS CREEK ALLUVIAL FAN RESTORATION FEASIBILITY		
COVER SHEET		
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Project No. 4976-238	Date Revised 05-25-23	Drawing No. 00

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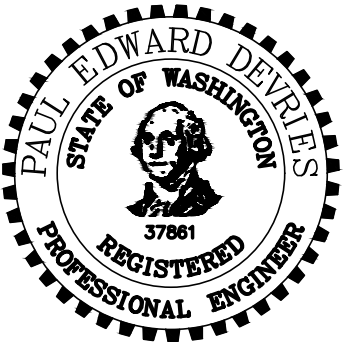
SYMBOLS



RESTORATION DESIGN LIMITATIONS

THE DESIGNS ON THESE PLANS ARE BASED IN PART ON ENGINEERING ANALYSES OF MOBILE BOUNDARY RIVER HYDRAULICS AND FLUVIAL GEOMORPHOLOGY, AND THE GOAL OF FACILITATING NATURAL RIVERINE PROCESSES. THERE IS INHERENT UNCERTAINTY IN THESE ANALYSES AND GOAL THAT PRECLUDE ASSURING ABSOLUTELY THAT A PROJECT AS DESIGNED WILL NOT BE ASSOCIATED WITH UNANTICIPATED/UNDESIRABLE CHANNEL CHANGES. CHANNEL ADJUSTMENT OF BED AND BANKS IS THE USUAL RESPONSE TO SPATIAL AND TEMPORAL CHANGES IN FLOW AND SEDIMENT TRANSPORT PATTERNS, IRRESPECTIVE OF WHETHER THE PROJECT WAS CONSTRUCTED. UNLESS OTHERWISE NOTED, THE ELEMENTS INCLUDED IN THESE PLANS WERE CONCEIVED AND DESIGNED WITH THE CONCURRENT GOALS OF CHANGING FLOW AND SEDIMENTATION PATTERNS WHILE AT THE SAME TIME REDUCING RISK OF IMPACTS FROM FLOODING OR CHANNEL CHANGES TO THE EXTENT PRACTICABLE AND FEASIBLE. THE DESIGN ACCORDINGLY CANNOT ELIMINATE THESE RISKS COMPLETELY IN BOTH SPACE AND TIME. THE EXISTENCE OF THESE RISKS INCLUDES, BUT IS NOT LIMITED TO, CASES WHERE: (I) AN EVENT UPSTREAM OR DOWNSTREAM SUCH AS A LANDSLIDE, DEBRIS FLOW, CHANNEL AVULSION, SIGNIFICANT BANK EROSION, TREE FALL, OR OTHER NATURAL OR ANTHROPOGENIC EVENT OCCURS IN A WAY THAT AFFECTS THE FLOW RATE AND SEDIMENT DEPOSITION/TRANSPORT/EROSION RATES AND PATTERNS INTO, THROUGH, AND BELOW THE PROJECT REACH; (II) SOME DEGREE OF BANK EROSION AND/OR TREE FALL OCCURS AT LOCATIONS WITHIN THE PROJECT REACH WHERE RIGID BANK PROTECTION IS NOT DESIGNED SPECIFICALLY; (III) AN UNPREDICTABLE EVENT OCCURS IN THE VICINITY OF A DESIGNED STRUCTURE THAT CAUSES THE RIVER TO PERFORM AN END-RUN AROUND THE STRUCTURE; (IV) THE RIVER ABANDONS THE STRUCTURE THROUGH CHANNEL MIGRATION OR AN AVULSION ASSOCIATED WITH AN EXTREME FLOOD EVENT, OR (V) VANDALISM OCCURS. IN ADDITION, ALL STRUCTURES AND DESIGNS INVOLVING BIODEGRADABLE MATERIALS HAVE A FIXED MATERIAL LIFESPAN THAT AFFECTS FUTURE PERFORMANCE AND PERSISTENCE, AND THAT IS NOT PREDICTABLE WITH HIGH CERTAINTY. THE DESIGNS ON THESE PLANS WERE DEVELOPED WITH DUE DILIGENCE IN CONSIDERATION OF THESE POTENTIAL OUTCOMES TO THE EXTENT THAT THEIR LIKELIHOOD OF OCCURRING IS REDUCED QUALITATIVELY BUT NOT ELIMINATED QUANTITATIVELY. IN ADDITION, GEOTECHNICAL EXPLORATION WAS NOT A PROJECT REQUIREMENT, WHERE SUBSURFACE CONDITIONS ARE UNKNOWN, THE BRIDGE FOUNDATION AND SUPPORT DESIGN REFLECTS THIS UNCERTAINTY, WITH MEASURES INCLUDED TO REDUCE THE UNCERTAINTY AS MUCH AS REASONABLY POSSIBLE.

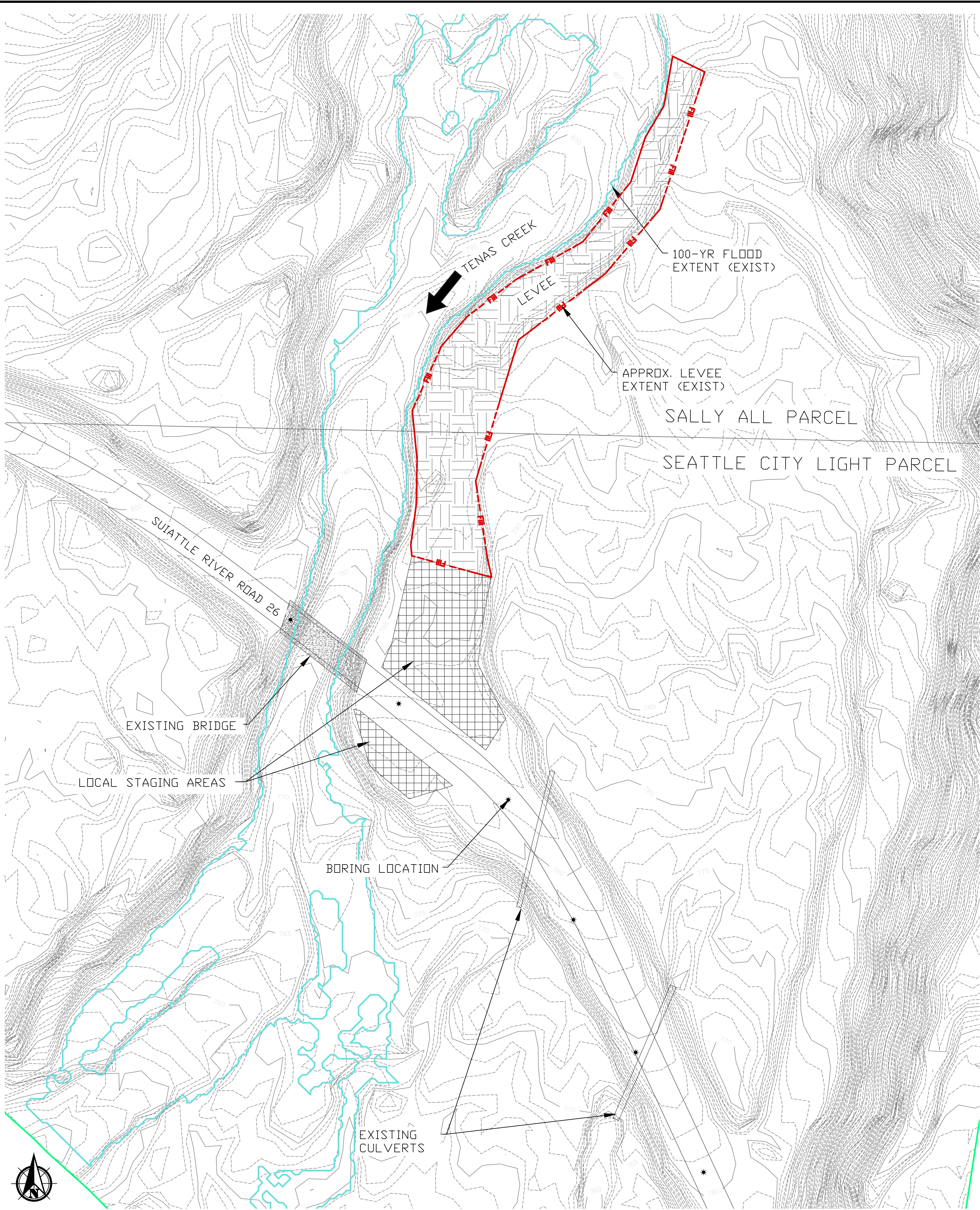
REVISION IDENTIFICATION



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TENAS CREEK ALLUVIAL FAN RESTORATION FEASIBILITY			
GENERAL NOTES, LEGEND			
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Project No. 4976-238	Date Revised 05-25-23	Drawing No.	01

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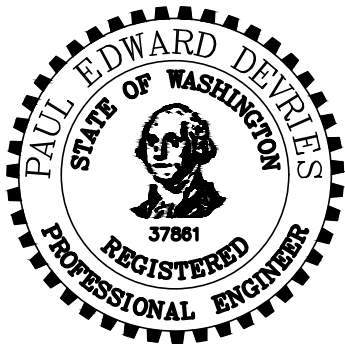


OFFSITE STAGING PLAN (NTS)

~1000 FT

- NOTES:
1. OFF-SITE STAGING AREA LOCATION SUBJECT TO DNR APPROVAL.

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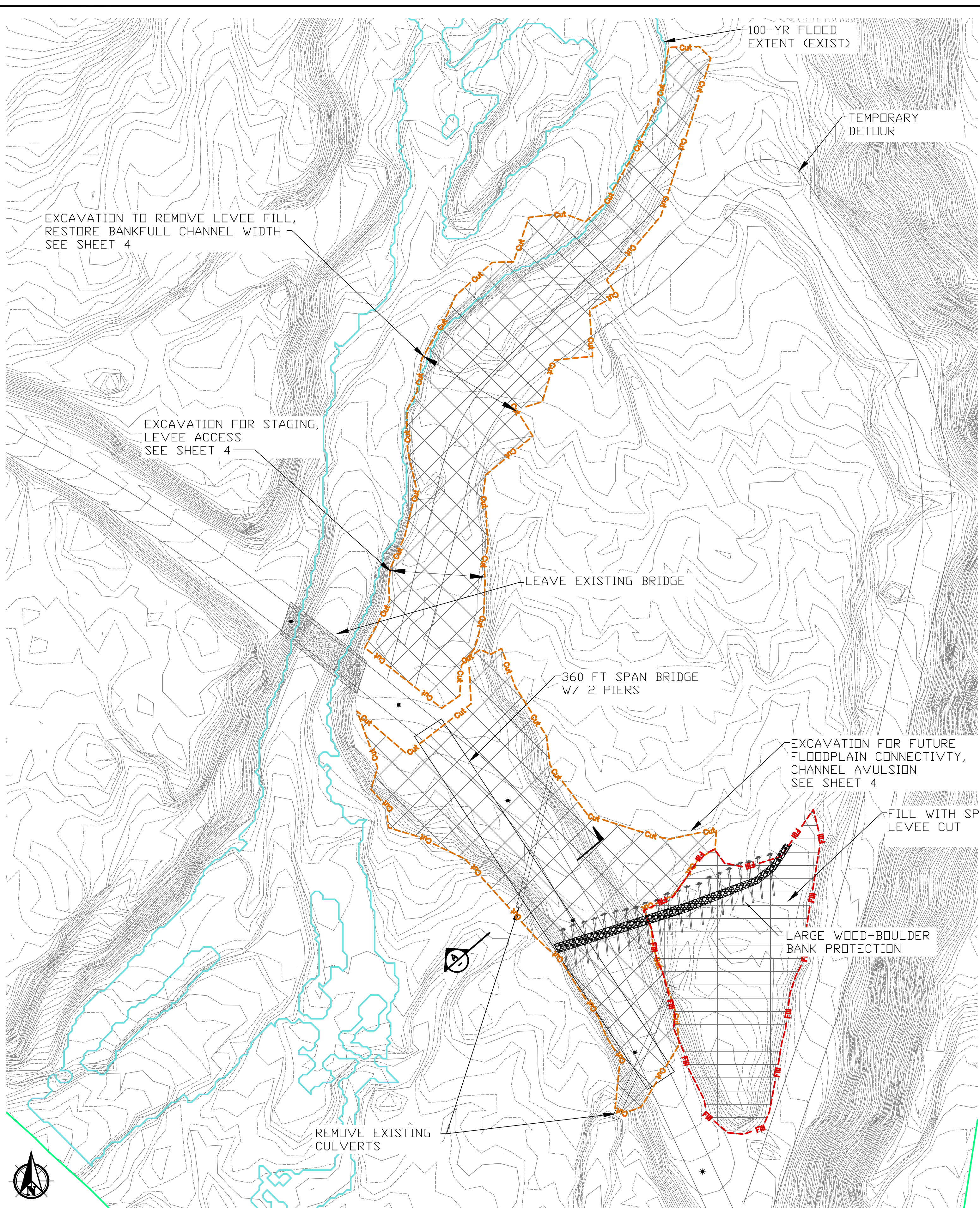


No.	Revision	Date	Drawn	Checked
-	-	-	-	-
Designed	Drawn	Checked	Project No.	Date Revised
PDV	PDV	CM	4976-238	05-25-23

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SKAGIT RIVER SYSTEM COOPERATIVE		
TENAS CREEK ALLUVIAL FAN RESTORATION FEASIBILITY		
EXIST SITE PLAN STAGING, ACCESS, OWNERSHIP		
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Drawing No.	02	

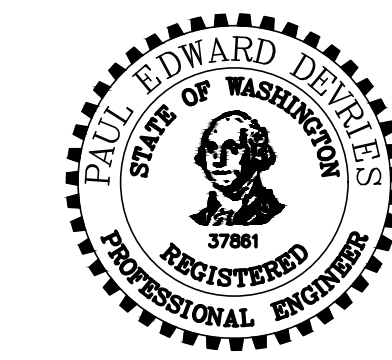
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PROPOSED PLAN
SCALE IN FEET, 1 FT CONTOUR INTERVAL

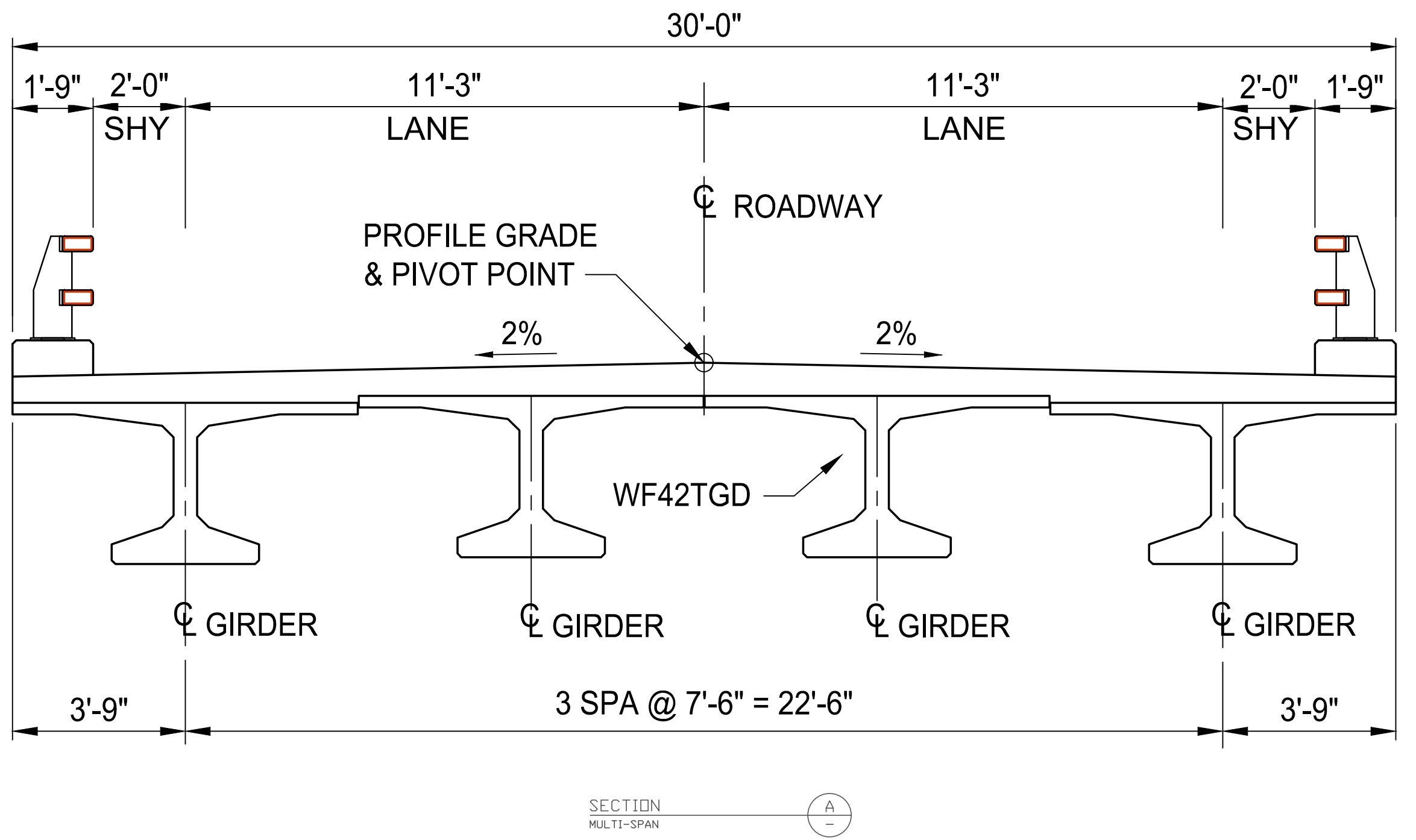
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No.	Revision	Date	Drawn	Checked
1	LEAVE EXISTING BRIDGE	6/9/25	PDV	-

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Designed	Drawn	Checked
PDV	PDV	CM



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SKAGIT RIVER SYSTEM COOPERATIVE

TENAS CREEK ALLUVIAL FAN
RESTORATION FEASIBILITY

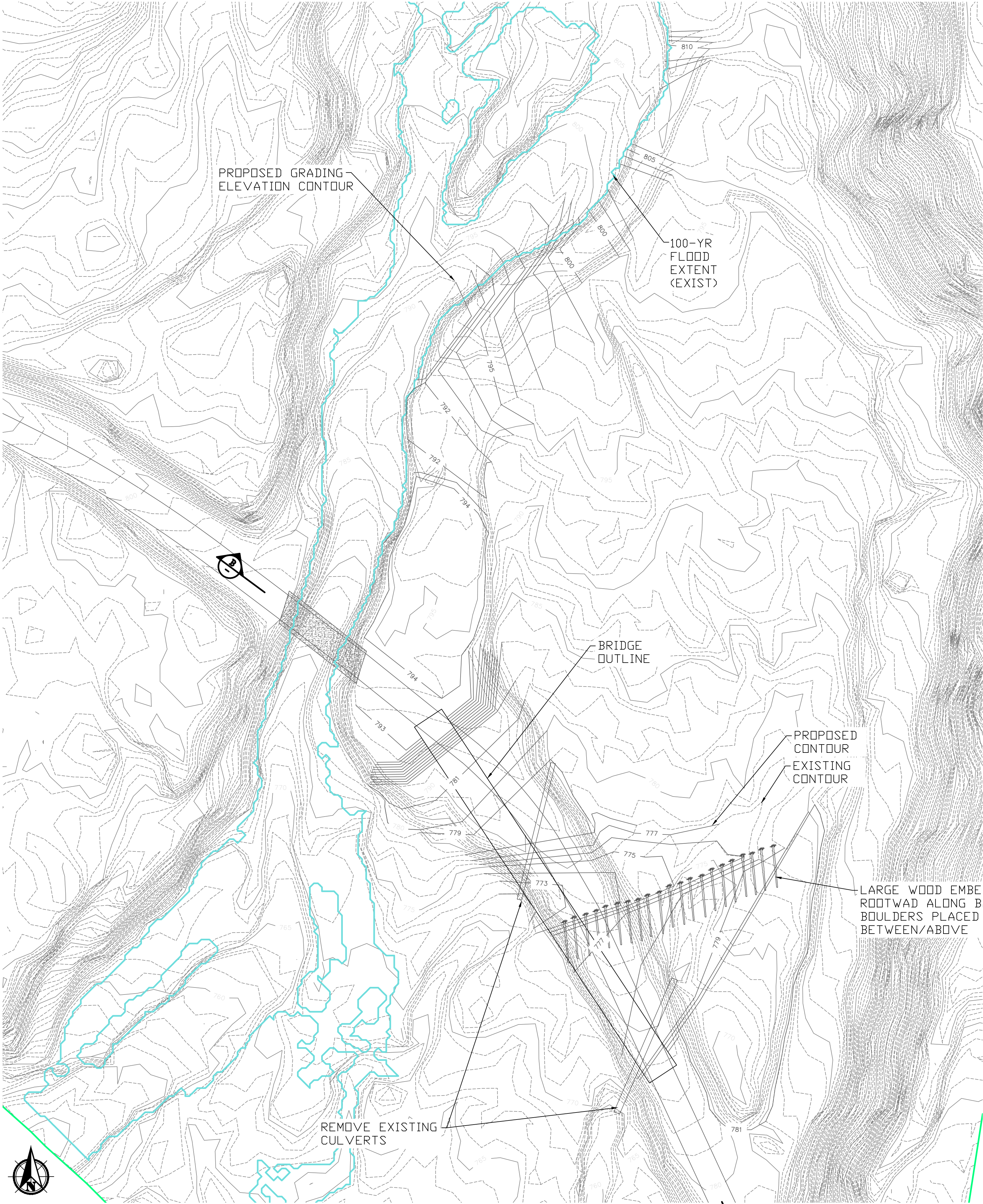
PROPOSED PROJECT ELEMENTS
PLAN, SECTION - PRELIMINARY

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Project No.	Date Revised	Drawing No.
4976-238	05-25-23	03

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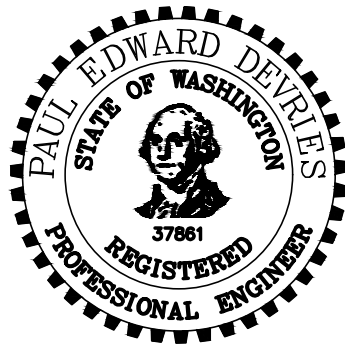
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GRADING PLAN

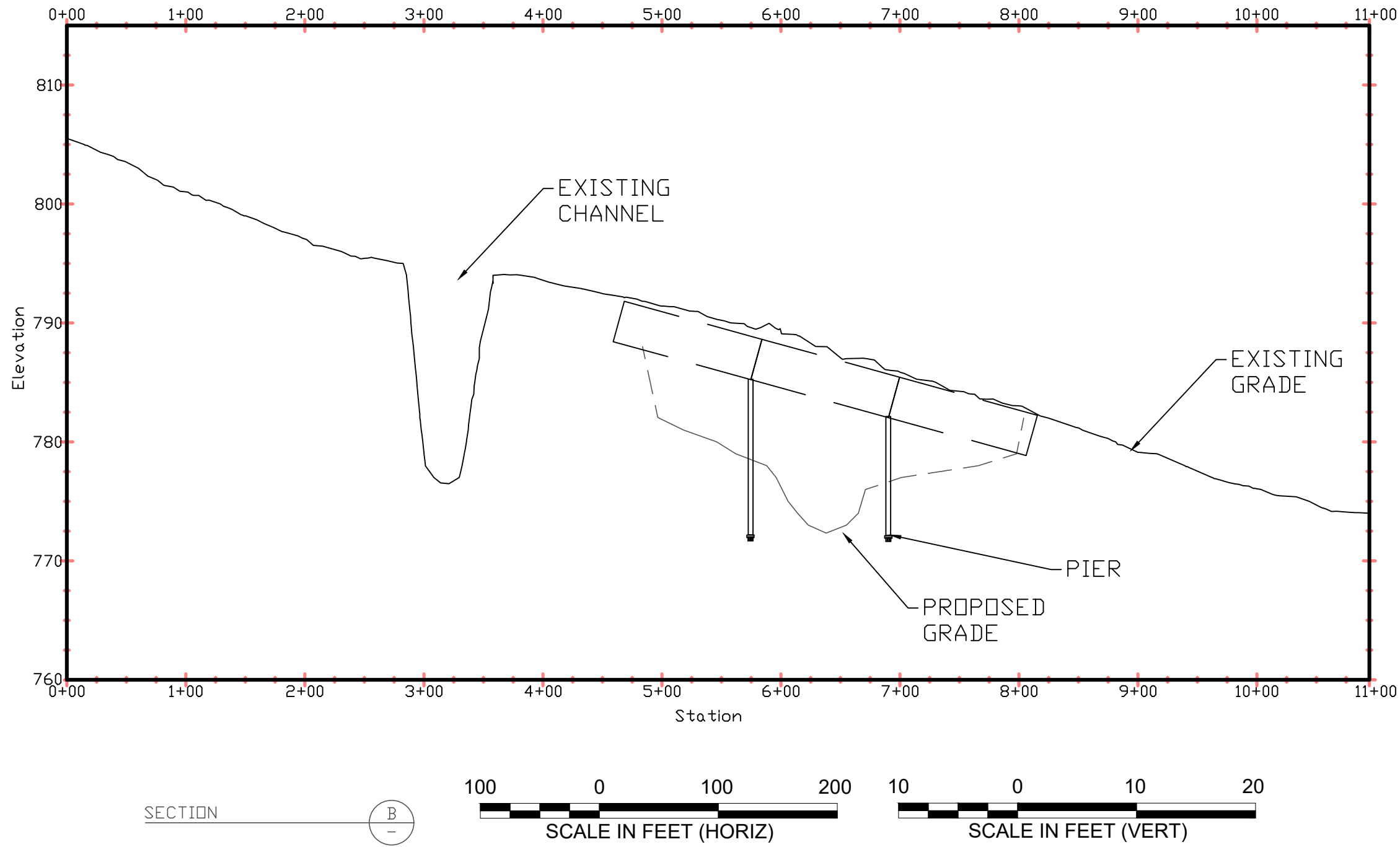
50 0 50 100
SCALE IN FEET, 1 FT CONTOUR INTERVAL

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1	LEAVE EXISTING BRIDGE	6/9/25	PDV	-
No.	Revision	Date	Drawn	Checked
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SECTION
SCALE IN FEET (HORIZ)
SCALE IN FEET (VERT)

NOTES:

1. OFF-SITE DISPOSAL LOCATION FOR EXCESS SPOILS TO BE IDENTIFIED AND APPROVED BY US FOREST SERVICE.

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SKAGIT RIVER SYSTEM COOPERATIVE

TENAS CREEK ALLUVIAL FAN
RESTORATION FEASIBILITY

GRADING
PLAN, SECTION - PRELIMINARY

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Project No. 4976-238	Date Revised 05-25-23	Drawing No.
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04