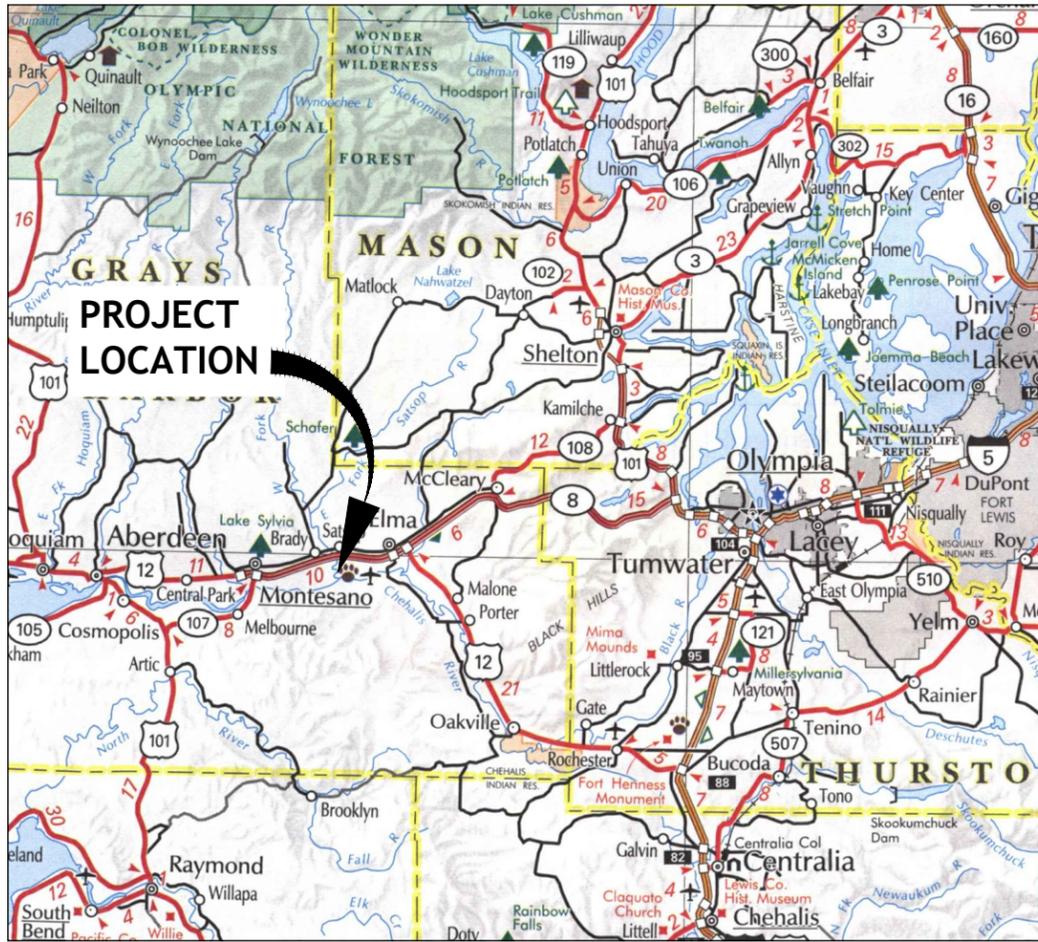
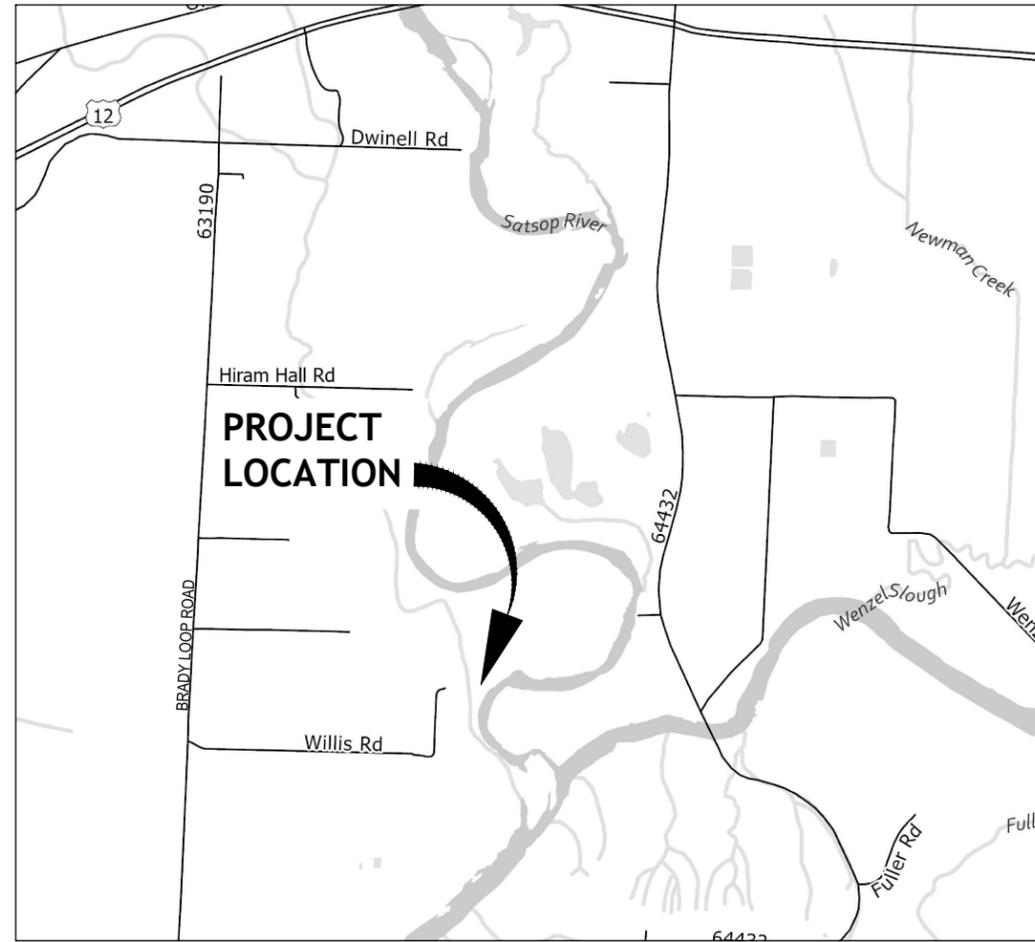


# LOWER SATSOP RIGHT BANK CONSERVATION PROJECT GRAYS HARBOR CONSERVATION DISTRICT



**LOCATION MAP**  
NO SCALE



**VICINITY MAP**  
NO SCALE

INDEX TO DRAWINGS		
SHT NO.	DWG NO.	SHEET TITLE
<b>GENERAL</b>		
1	G1	TITLE SHEET, LOCATION AND VICINITY MAPS, AND INDEX TO DRAWINGS
2	G2	GENERAL NOTES, LEGEND AND ABBREVIATIONS
<b>CIVIL</b>		
3	C1	EXISTING SITE PLAN
4	C2	SITE PLAN - PROPOSED - 1
5	C3	SITE PLAN - PROPOSED - 2
6	C4	CONSTRUCTION SEQUENCING - 1
7	C5	CONSTRUCTION SEQUENCING - 2
<b>DETAILS</b>		
8	DT1	LOG JACK DETAIL 1
9	DT2	LOG JACK DETAIL 2
10	DT3	LOG JACK SPUR DETAIL
11	DT4	CONTINUOUS LOG ROW DETAIL
<b>TESC</b>		
12	T1	STAGING, ACCESS AND TESC PLAN
13	T2	TESC DETAILS - 1
14	T3	TESC DETAILS - 2

LAYOUT: G1  
 PATH: U:\PSO\Projects\Clients\7132-001 Satsop RB Protection\995\CAAD\DWG  
 PLOTTED BY: alencia DATE: Tuesday, August 31, 2021 5:27:21 PM

REVISIONS	DATE	BY	DESIGNED
			CFO
			DRAWN
			CFO
			CHECKED
			####
			APPROVED
			####

<b>ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY</b> FILE NAME PS7132001G-01 JOB No. 217-7132-001 DATE 9/21
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PRELIMINARY



PROJECT NAME  <b>LOWER SATSOP RIGHT BANK CONSERVATION PROJECT</b> MONTESANO, WA
--

<b>TITLE SHEET, LOCATION AND VICINITY MAPS, AND INDEX TO DRAWINGS</b>
---

DRAWING NO. 1 OF 14  <b>G1</b>
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**LEGEND**

DESCRIPTION	PROPOSED	EXISTING
MAJOR CONTOURS		-----
MINOR CONTOURS		-----
2022 PROJECTED BANKLINE	-----	
2023 PROJECTED BANKLINE	-----	
SHADOW LINE	-----	
AREA OF POTENTIAL EFFECT	-----	
RIPARIAN VEGETATION LIMIT	-----	
SHORELINE BUFFER	-----	
PARCEL BOUNDARY	-----	
TEMP ACCESS ROAD	-----	
PROJECT AREA LIMITS	-----	
HEAVY EQUIPMENT/ STOCKPILE SETBACK	-----	
HIGH VISIBILITY FENCE	-----	
SILT FENCE	-----	
WATTLES	-----	

**LEGEND**

DESCRIPTION	PROPOSED	EXISTING
CONTINUOUS LOG ROW		
LOG JACK		
LOG JACK SPUR		
STAGING/ STOCKPILING AREA		
LOG JACK SPUR EXCAVATED AREA		
STABILIZED CONSTRUCTION ENTRANCE		

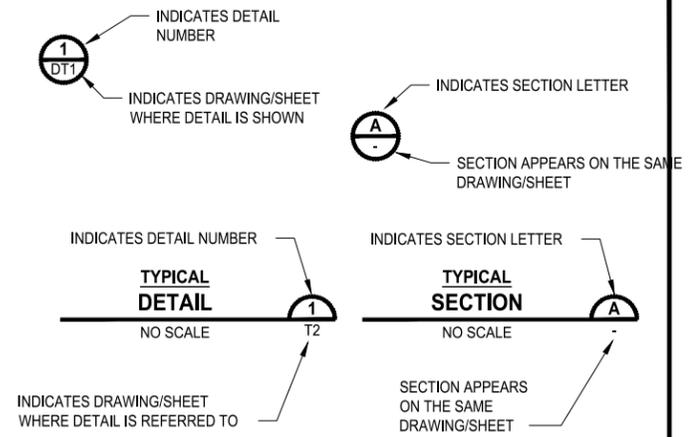
**DATUM**

VERTICAL DATUM NAVD88

**ABBREVIATIONS**

AC	ACRE
APE	AREA OF POTENTIAL EFFECT
APPROX	APPROXIMATE
CL	CENTERLINE
CLR	CLEAR, CLEARANCE
CONST	CONSTRUCT, CONSTRUCTION
CY	CUBIC YARD
DT	DETAIL
DWG	DRAWING
EA	EACH
ENGR	ENGINEER
EXIST	EXISTING
FIG	FIGURE
FT	FEET, FOOT
IN	INCH
LWM	LARGE WOODY MATERIAL
NTS	NOT TO SCALE
OHWM	ORDINARY HIGH WATER MARK
REQD	REQUIRED
SF	SQUARE FEET
SPEC	SPECIFICATION
STA	STATION
T	TON
TEMP	TEMPORARY
TESC	TEMPORARY EROSION SEDIMENT CONTROL
TOB	TOP OF BANK
TYP	TYPICAL
U	UPSIDE DOWN
WSEL	WATER SURFACE ELEVATION
WT	WEIGHT

**DETAIL AND SECTION DESIGNATION**



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			CFO
			RSR
			#####

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JOB No. 217-7132-001
DATE 9/21

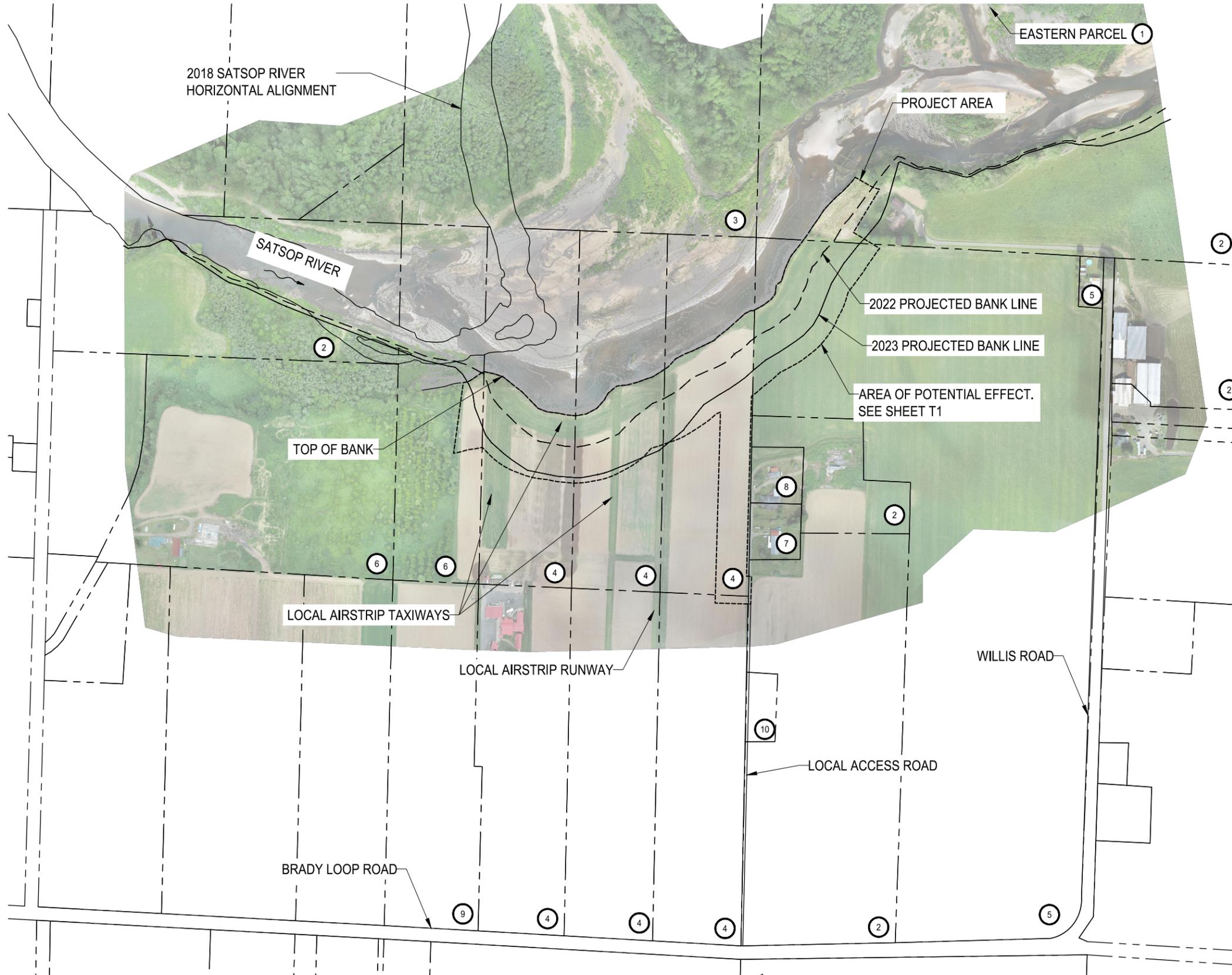


PROJECT NAME <b>LOWER SATSOP RIGHT BANK CONSERVATION PROJECT</b> MONTESANO, WA
--

<b>GENERAL NOTES, LEGEND, AND ABBREVIATIONS</b>
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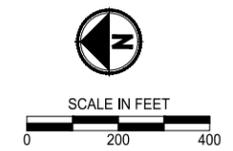
DRAWING NO. 2 OF 14 <b>G2</b>
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LAYOUT: C1  
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 PLOTTED BY: c1sancia DATE: Tuesday, August 31, 2021 5:30:50 PM



- NOTES**
1. SURVEY AND AERIAL IMAGERY COMPLETED JUNE 4, 2021.
  2. PARCEL OWNER IS LABELED WITH KEY NOTE IN PLAN AND IN TABLE BELOW.

PARCEL INFORMATION		
OWNER	ADDRESS	PARCEL NUMBER
STATE OF WASHINGTON DEPT OF GAME (1)	905 E HERON	170607210060
OLYMPIC VIEW DAIRY (2)	83 WILLIS ROAD	170807220010
STATE OF WASHINGTON WILDLIFE (3)	600 CAPITOL WAY N	170606330010
CHAPMAN (4)	239 BRADY LOOP RD E	170701440020
CHAPMAN (4)	239 BRADY LOOP RD E	170701440030
CHAPMAN (4)	239 BRADY LOOP RD E	170701440040
WILLIS (5)	16 WILLIS RD	170712120030
WILLIS (5)	83 WILLIS ROAD	170712110010
OLYMPIC VIEW DAIRY (2)	64 WILLIS ROAD	170712140010
OLYMPIC VIEW DAIRY (2)	83 WILLIS ROAD	170701410010
CONTRERAS (6)	45 N BLOCKHOUSE RD	170701440010
CONTRERAS (6)	45 N BLOCKHOUSE RD	170701410030
MORENO (7)	271 BRADY LOOP RD E	170712110030
RESTAU (8)	273 BRADY LOOP RD E	170712110040
OLYMPIC VIEW DAIRY (2)	83 WILLIS ROAD	170712110020
LUBBE (9)	186 BRADY LOOP RD E	170701430020
CHAPMAN (4)	239 BRADY LOOP RD E	170701430010
CHAPMAN (4)	239 BRADY LOOP RD E	170701430030
CHAPMAN (4)	239 BRADY LOOP RD E	170701430040
MCNEIL (10)	269 E BRADY LOOP RD	170712120020
OLYMPIC VIEW DAIRY (2)	83 WILLIS ROAD	170712120010



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			CHECKED
			APPROVED

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 JOB No.  
 217-7132-001  
 DATE  
 9/21



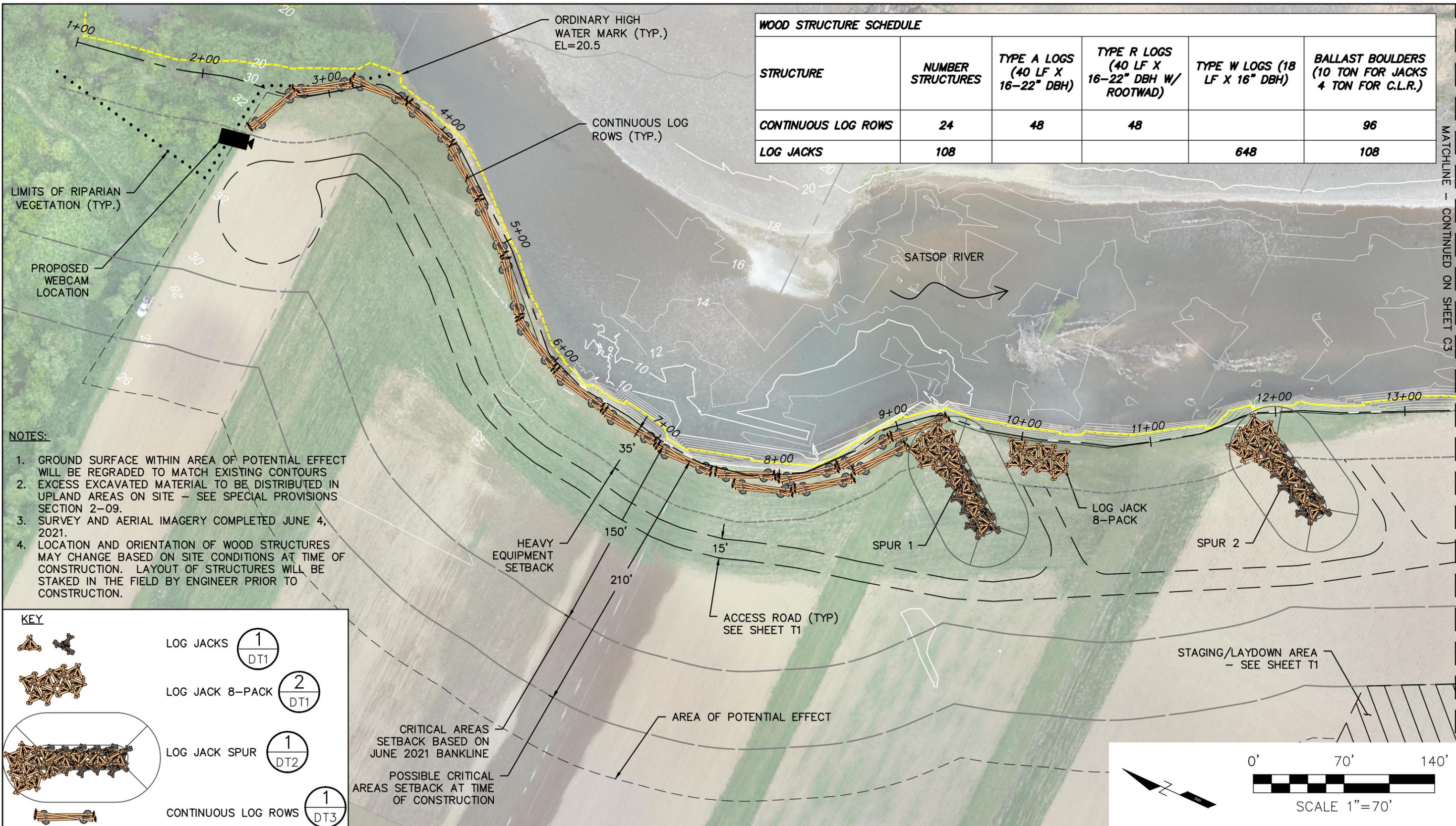
PROJECT NAME  
**LOWER SATSOP RIGHT BANK  
 CONSERVATION PROJECT**  
 MONTESANO, WA

**EXISTING SITE PLAN**

DRAWING NO.  
 3 OF 14  
**C1**

**WOOD STRUCTURE SCHEDULE**

STRUCTURE	NUMBER STRUCTURES	TYPE A LOGS (40 LF X 16-22" DBH)	TYPE R LOGS (40 LF X 16-22" DBH W/ ROOTWAD)	TYPE W LOGS (18 LF X 16" DBH)	BALLAST BOULDERS (10 TON FOR JACKS 4 TON FOR C.L.R.)
CONTINUOUS LOG ROWS	24	48	48		96
LOG JACKS	108			648	108



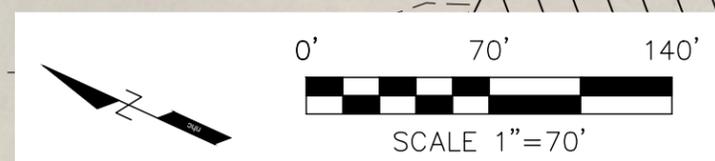
- NOTES:**
- GROUND SURFACE WITHIN AREA OF POTENTIAL EFFECT WILL BE REGRADED TO MATCH EXISTING CONTOURS
  - EXCESS EXCAVATED MATERIAL TO BE DISTRIBUTED IN UPLAND AREAS ON SITE - SEE SPECIAL PROVISIONS SECTION 2-09.
  - SURVEY AND AERIAL IMAGERY COMPLETED JUNE 4, 2021.
  - LOCATION AND ORIENTATION OF WOOD STRUCTURES MAY CHANGE BASED ON SITE CONDITIONS AT TIME OF CONSTRUCTION. LAYOUT OF STRUCTURES WILL BE STAKED IN THE FIELD BY ENGINEER PRIOR TO CONSTRUCTION.

**KEY**

- LOG JACKS (1 DT1)
- LOG JACK 8-PACK (2 DT1)
- LOG JACK SPUR (1 DT2)
- CONTINUOUS LOG ROWS (1 DT3)

CRITICAL AREAS SETBACK BASED ON JUNE 2021 BANKLINE

POSSIBLE CRITICAL AREAS SETBACK AT TIME OF CONSTRUCTION



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1019 39th Ave. SE, Suite 100  
Puyallup, WA 98374

**nhc**  
northwest hydraulic consultants  
12787 gateway drive south  
tukwila, washington 98168-3308  
phone: (206) 241-6000  
fax: (206) 439-2420

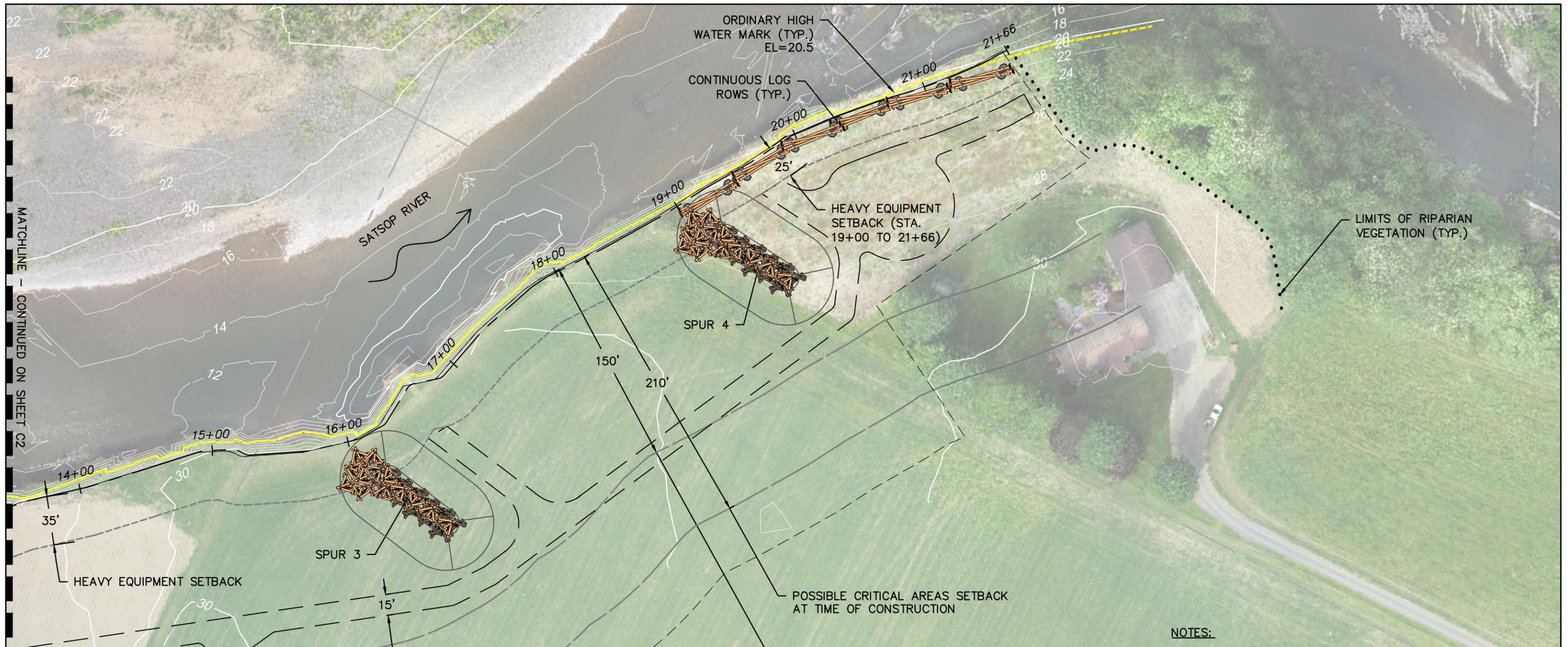
PRELIMINARY - NOT FOR CONSTRUCTION

Job: 2006723  
Rev:  
Drft: CB  
Chkd: JL  
Date: 01Sep21

Lower Satsop Right Bank Conservation Project  
**SITE PLAN - PROPOSED - 1**  
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C2

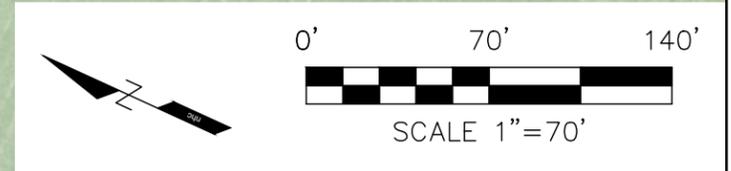
MATCHLINE - CONTINUED ON SHEET C3



**KEY**

-  LOG JACKS (1) DT1
-  LOG JACK 8-PACK (2) DT1
-  LOG JACK SPUR (1) DT2
-  CONTINUOUS LOG ROWS (1) DT3

- NOTES:**
- GROUND SURFACE WITHIN AREA OF POTENTIAL EFFECTS WILL BE REGRADED TO MATCH EXISTING CONTOURS
  - EXCESS EXCAVATED MATERIAL TO BE DISTRIBUTED IN UPLAND AREAS ON SITE – SEE SPECIAL PROVISIONS SECTION 2-09.
  - SURVEY AND AERIAL IMAGERY COMPLETED JUNE 4, 2021.
  - LOCATION AND ORIENTATION OF WOOD STRUCTURES MAY CHANGE BASED ON SITE CONDITIONS AT THE TIME OF CONSTRUCTION. LAYOUT OF STRUCTURES WILL BE STAKED IN THE FIELD BY ENGINEER PRIOR TO CONSTRUCTION.



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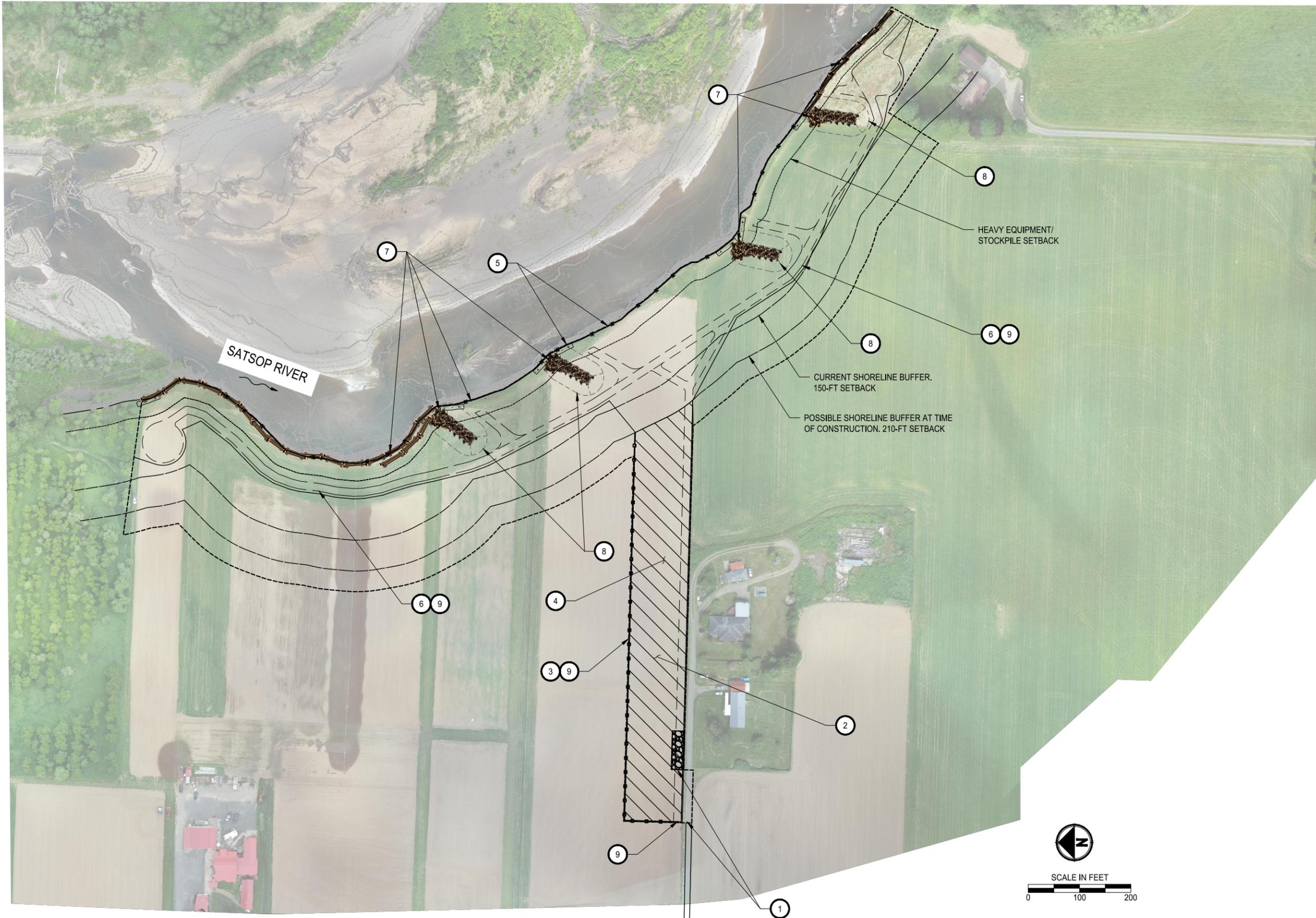
**nhc**  
northwest hydraulic consultants  
12787 gateway drive south  
tukwila, washington 98168-3308  
phone: (206) 241-6000  
fax: (206) 439-2420

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Rev:
Drft: CB
Chkd: JL
Date: 01Sep21

Lower Satsop Right Bank Conservation Project  
**SITE PLAN - PROPOSED - 2**  
90% REVIEW SET  
C3  
5 OF 14

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**CONSTRUCTION SEQUENCING NOTES**

- 1 CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE FROM FARM ROAD TO STAGING AREA.
- 2 SET UP STAGING AND LAYDOWN AREA OUTSIDE OF SHORELINE SETBACK AREA. SEE SPECIAL PROVISIONS SECTION 1-08.3(2)A FOR APPROXIMATE AVAILABILITY DATES.
- 3 PLACE SILT FENCE AND ALL OTHER TESC MEASURES FOR STAGING AREA.
- 4 CONSTRUCT LOG JACK STRUCTURES AND LOG ROWS IN STAGING AREA
- 5 PLACE REMAINING TESC MEASURES, IN SHORELINE SETBACK AREA INCLUDING BUT NOT LIMITED TO: HIGH VISIBILITY FENCE, WATTLES, ADDITIONAL SILT FENCE. SEE SPECIAL PROVISIONS SECTION 1-08.3(2)A FOR APPROXIMATE AVAILABILITY DATES.
- 6 CONSTRUCT TEMPORARY ACCESS ROAD IN SHORELINE SETBACK AREA.
- 7 PLACE STRUCTURES IN AREAS INDICATED ON SHEETS C2 AND C3 - PROPOSED SITE PLAN. STRUCTURE PLACEMENT DETAILS AND SEQUENCING INCLUDED ON SHEET C6 - CONSTRUCTION SEQUENCING 2.
- 8 SEPARATE TOP 12 INCHES FROM THE SPUR EXCAVATIONS AND PLACE BACK IN SPUR AFTER LOG JACKS ARE PLACED. EACH LOG JACK SPUR SHALL BE COMPLETE PRIOR TO CONSTRUCTING NEXT SPUR.
- 9 AFTER CONSTRUCTION PERIOD, REMOVE TEMPORARY ACCESS ROAD AND RESTORE TO PRE-EXISTING CONDITIONS. SEE SHEET T1 FOR MORE INFORMATION.

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			RSR
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 JOB No.: 217-7132-001  
 DATE: 9/21

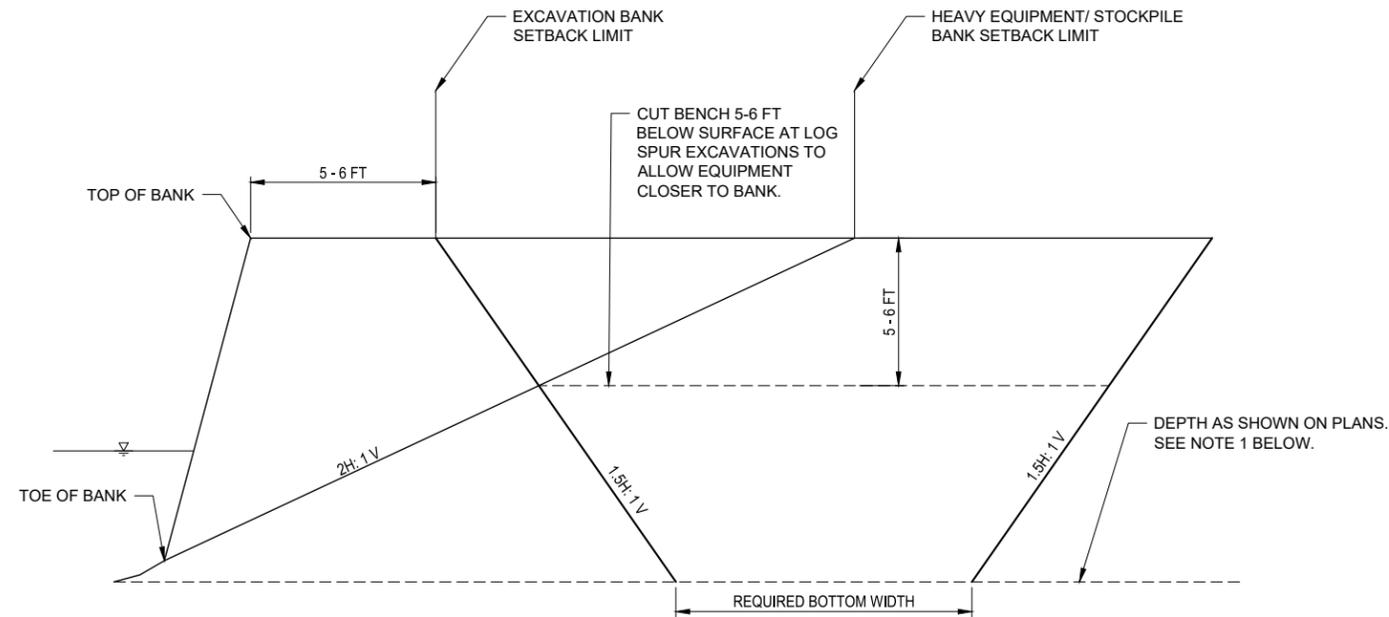


PROJECT NAME  
**LOWER SATSOP RIGHT BANK CONSERVATION PROJECT**  
 MONTESANO, WA

**CONSTRUCTION SEQUENCING 1**

DRAWING NO.  
6 OF 14  
**C4**

PATH: U:\PSO\Projects\Clients\7132-Groys Harbor Conservation District\217-7132-001 Satsop RB Protection\995scs\CADD\DWG PLOTTED BY: oisencia DATE: Tuesday, August 31, 2021 5:31:48 PM LAYOUT: C5



**NOTES**

1. PRACTICAL EXCAVATION DEPTH LIMIT IS 20-FT (OSHA LIMIT WITH WORKERS IN THE EXCAVATION WITHOUT SHORING) OR WHERE WATER HINDERS CONSTRUCTION (NO WORKERS IN EXCAVATION).
2. HEAVY EQUIPMENT AND STOCKPILE BANK SETBACK LIMIT DETERMINED BY 2H:1V SLOPE FROM TOE OF BANK TO TOP OF BANK.
3. OSHA STEEPED ALLOWED EXCAVATION SLOPE WITHOUT SHORING: 1.5 H: 1 V.

**TYPICAL EXCAVATION LIMITS  
DETAIL**

NTS

**PRELIMINARY**

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			CF0
			RSR
			####

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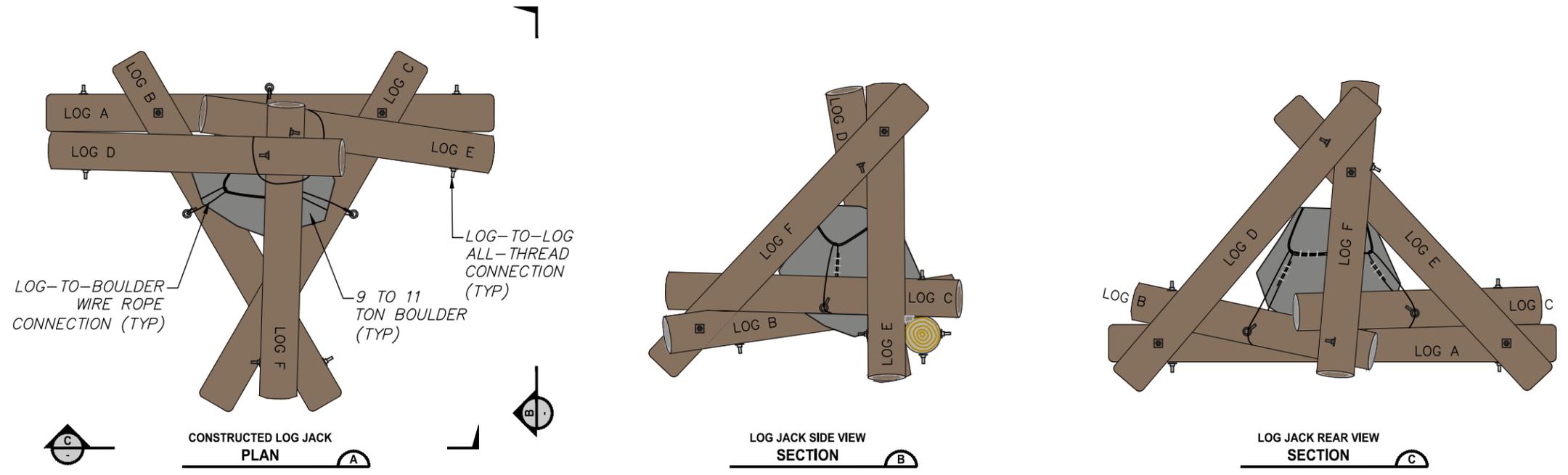
PROJECT NAME <b>LOWER SATSOP RIGHT BANK CONSERVATION PROJECT</b> MONTESANO, WA
--

<b>CONSTRUCTION SEQUENCING 2</b>
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DRAWING NO. 7 OF 14 <b>C5</b>
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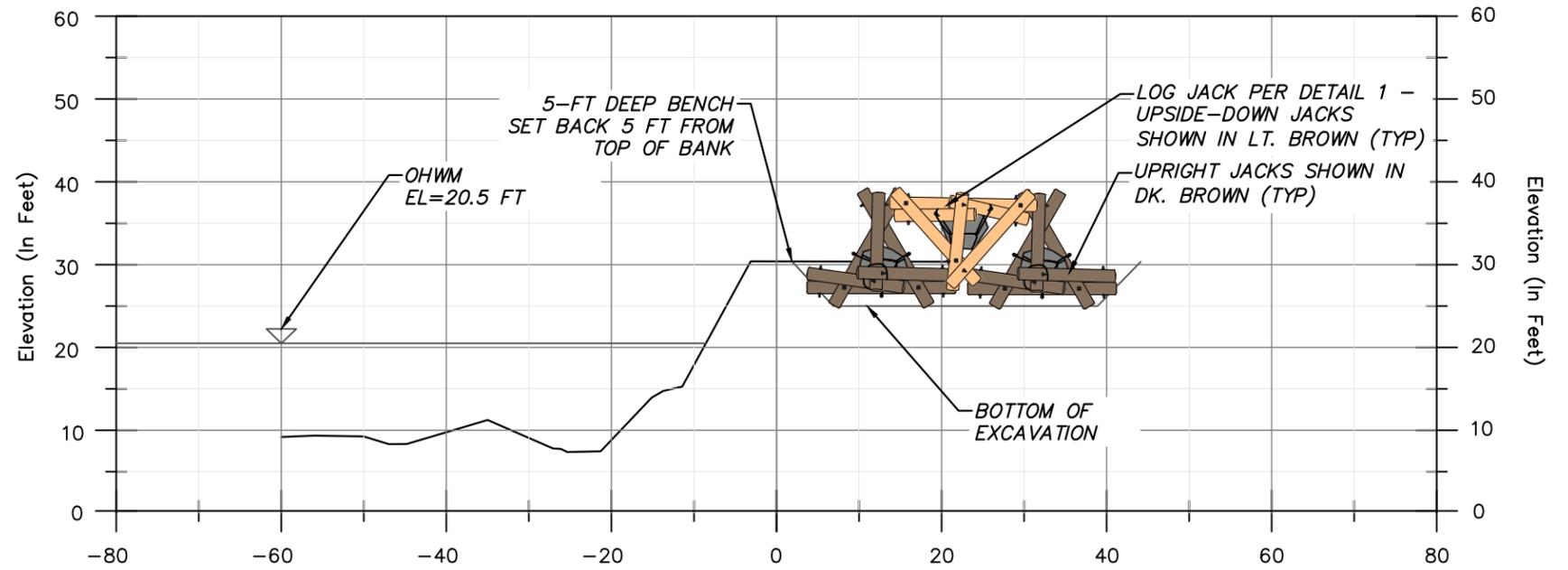


THE LOG JACK IN THE IMAGE ABOVE IS TYPICAL AND FOR ILLUSTRATION ONLY. DISCREPANCIES EXIST BETWEEN THE IMAGE AND THE LOG JACK DESIGN. SLASH NOT SHOWN FOR CLARITY.

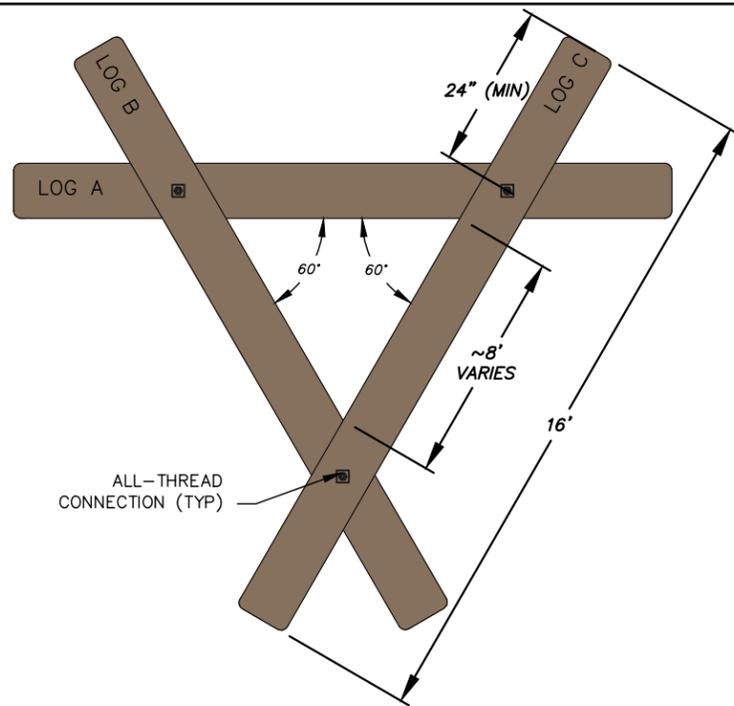


1 LOG JACK UNIT - TYPICAL PLAN & SECTION VIEWS  
SCALE: 1"=5'

SEE SHEET DT2 FOR LOG JACK CONSTRUCTION SEQUENCE, NOTES, AND CONNECTION DETAILS

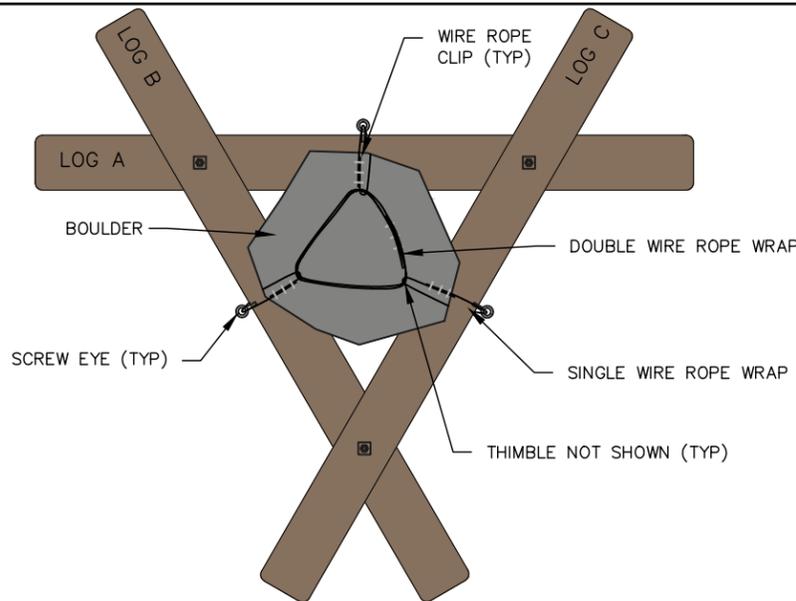


2 LOG JACK 8-PACK - SECTION  
SCALE: 1"=20'



**STEP 1**

1. BUILD BASE TRIANGLE WITH LOGS A, B, & C OVERLAID AS SHOWN.
2. PLACE LOGS SO THAT BOULDER WILL REST ON ALL 3 LOGS AND WILL NOT FALL THROUGH THE OPENING.
3. DRILL AND BOLT LOGS TOGETHER WITH ALL-THREAD, NUTS, AND WASHERS.

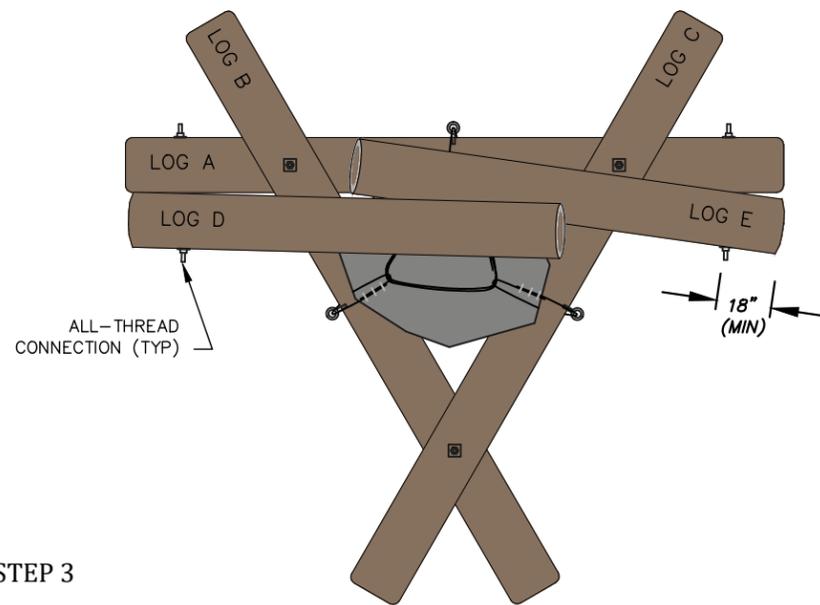


**STEP 2**

1. PLACE BOULDER ON LOG BASE TRIANGLE. ORIENT BOULDER SO IT RESTS SECURELY ON ALL THREE LOGS AND WILL NOT FALL THROUGH TRIANGULAR OPENING.
2. THREAD SCREW EYES INTO LOGS A, B, AND C SUCH THAT THE DISTANCE FROM THE EYE TO THE TOP CENTER OF THE BOULDER IS MINIMIZED. THE SCREW EYE SHALL BE HORIZONTAL.
3. PLACE A DOUBLE-WRAP WIRE ROPE RING APPROXIMATELY 1/2 THE BOULDER DIAMETER OVER THE TOP CENTER OF THE BOULDER AND SECURE LOOSELY WITH 3 WIRE ROPE CLIPS.
4. WRAP WIRE ROPE AROUND EACH LOG, THROUGH EACH SCREW EYE, AND THROUGH THE WIRE ROPE RING USING THIMBLES. SECURE EACH LOOP WITH 3 WIRE ROPE CLIPS. MECHANICALLY TENSION THE DOUBLE-WRAP WIRE ROPE RING TO SECURE THE BOULDER TO THE LOG BASE, AND THEN SECURE THE 3 WIRE ROPE CLIPS.
5. THE BOULDER SHOULD BE CINCHED SNUG AGAINST THE BASE TRIANGLE WITH NO PLAY, AND BOULDER MOVEMENT IN ANY DIRECTION SHOULD BE IMMEDIATELY RESISTED BY ONE OR MORE WIRE ROPE LOOPS.

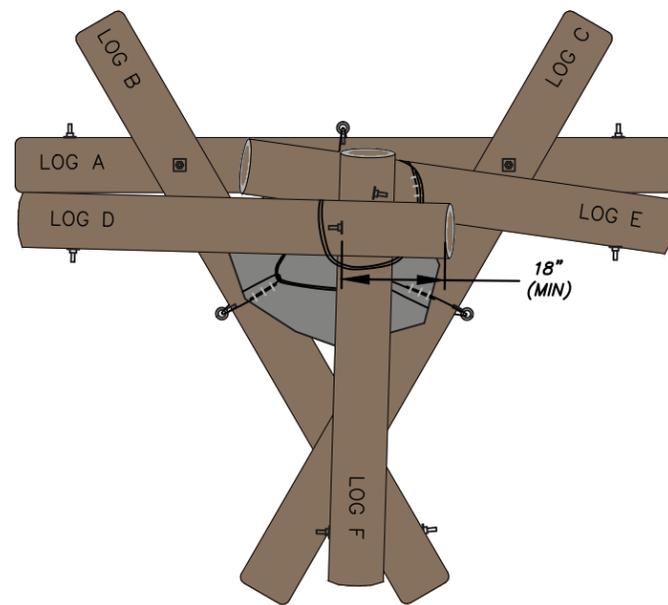
**LOG JACK CONSTRUCTION NOTES**

1. LOG JACKS SHALL BE CONSTRUCTED FROM DOUGLAS FIR OR WESTERN RED CEDAR, 16 FEET IN LENGTH AND 16 TO 22 INCHES IN DIAMETER.
2. LOGS AND BOULDERS ARE NOT SYMMETRICAL AND HAVE NATURALLY OCCURRING VARIATIONS THAT NECESSITATE CUSTOM FITTING. THE CONTRACTOR WILL MODIFY THE LOG-TO-LOG AND LOG-TO-BOULDER CONNECTIONS SO THAT THE COMPLETED JACK IS A TIGHT AND COMPACT UNIT. THERE SHOULD BE NO PLAY IN THE LOG- TO-LOG CONNECTIONS. THE BOULDER SHOULD BE SECURELY CONTAINED WITHIN AND IN CONTACT WITH A MINIMUM OF 5 LOGS.
3. REMOVE ALL BARK BETWEEN LOG- TO-LOG CONNECTIONS. LIMIT DEBARKED AREA TO 3' ALONG LOG LENGTH.
4. FOR ALL LOG-TO-LOG CONNECTIONS, USE CHAINSAW LOG DEBARKER OR SIMILAR SO THAT ONE LOG NESTLES INTO THE OTHER. THE LOG- TO-LOG CONNECTION MUST NOT BE A SINGLE POINT OF CONTACT. A TYPICAL LOG NOTCH WILL BE ~1' 0" WIDE BY ~2" DEEP CUT AT THE APPROPRIATE ANGLE.
5. ALL LOG-TO-LOG ALL-THREAD CONNECTIONS MUST BE MADE THROUGH THE CENTER OF THE LOG WITH A MINIMUM OF 18" BETWEEN THE ALL-THREAD AND THE LOG END.
6. FOR ALL LOG-TO-LOG CONNECTIONS, PEEN THE ALL-THREAD TO A DEPTH OF 1/2 THE THREAD DEPTH IN TWO OPPOSING LOCATIONS IMMEDIATELY AGAINST THE NUT. LEAVE NO MORE THAN 3" OF ALL-THREAD EXPOSED PAST THE NUT.
7. WIRE ROPE SHOULD BE MECHANICALLY TENSIONED TO ~3/4 OF THE ROPE WORKING LOAD. FOR LOG JACKS PLACED UPSIDE DOWN, THE TOPS OF LOGS D, E, AND F SHOULD BE TRIMMED TO AN EVEN HEIGHT, LEAVING A MINIMUM OF 18" BEYOND THE CONNECTION POINTS.
8. COMPLETED LOG JACKS CAN BE TRIMMED DURING PLACEMENT TO FACILITATE FITTING THEM ADJACENT TO ONE ANOTHER, LEAVING A MINIMUM OF 18" BEYOND THE CONNECTION POINTS.



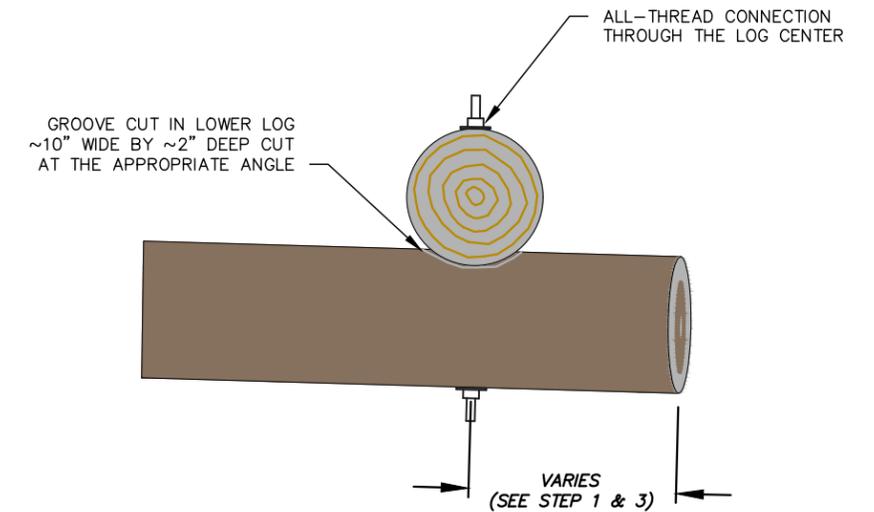
**STEP 3**

1. PLACE LOG D SUCH THAT IT CONTACTS LOG A, THE TOP OF THE BOULDER, AND IF POSSIBLE LOG B, AND TEMPORARILY BIND IN PLACE.
2. PLACE LOG E SUCH THAT IT CONTACTS LOG A, THE TOP OF THE BOULDER, AND IF POSSIBLE LOG C, AND TEMPORARILY BIND IN PLACE.
3. ENSURE THE TOPS OF LOGS D AND E CROSS AND TOUCH ONE ANOTHER WITH AT LEAST 18" EXTENDING PAST THEIR CROSSING AND TEMPORARILY BIND IN PLACE.
4. CONNECT LOG D TO LOG A AND LOG E TO LOG A WITH ALL-THREAD, NUTS, AND WASHERS. CONNECTING LOG D TO LOG B AND/OR LOG E TO LOG C IS ACCEPTABLE WITH ENGINEER APPROVAL.

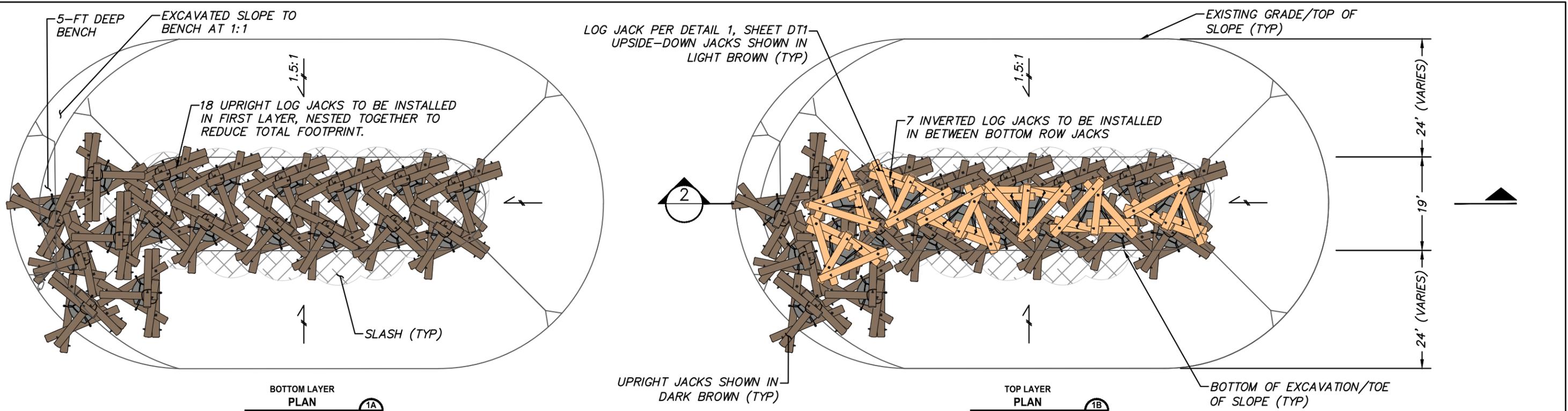


**STEP 4**

1. PLACE LOG F SUCH THAT IT CONTACTS LOGS B, D, E, AND IF POSSIBLE THE TOP OF THE BOULDER AND/OR LOG C.
2. CONNECT BOTTOM OF LOG F TO LOG B WITH ALL-THREAD, NUTS, AND WASHERS. CONNECTING LOG F TO LOG C IS ACCEPTABLE WITH ENGINEER APPROVAL.
3. DOUBLE-WRAP WIRE ROPE AROUND THE LOG D-E-F CONNECTION, MECHANICALLY TENSION, AND SECURE WITH 3 WIRE ROPE CLIPS. NO BARK ALLOWED UNDERNEATH THE CABLE WRAP.
4. CONNECT TOP OF LOG F TO LOG D AND ALSO LOG E WITH ALL-THREAD, NUTS, AND WASHERS. CONNECTING LOG D TO LOG E INSTEAD OF A SECOND LOG F CONNECTION IS ACCEPTABLE WITH ENGINEER APPROVAL.



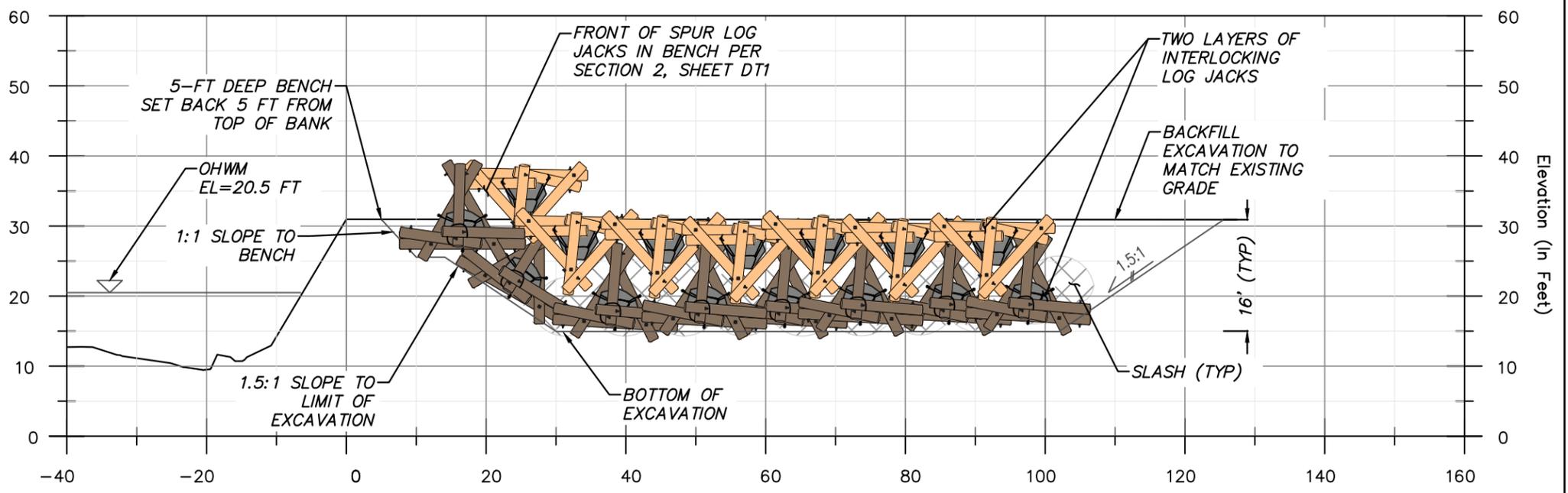
**1** LOG-TO-LOG CONNECTION - DETAIL  
N.T.S.



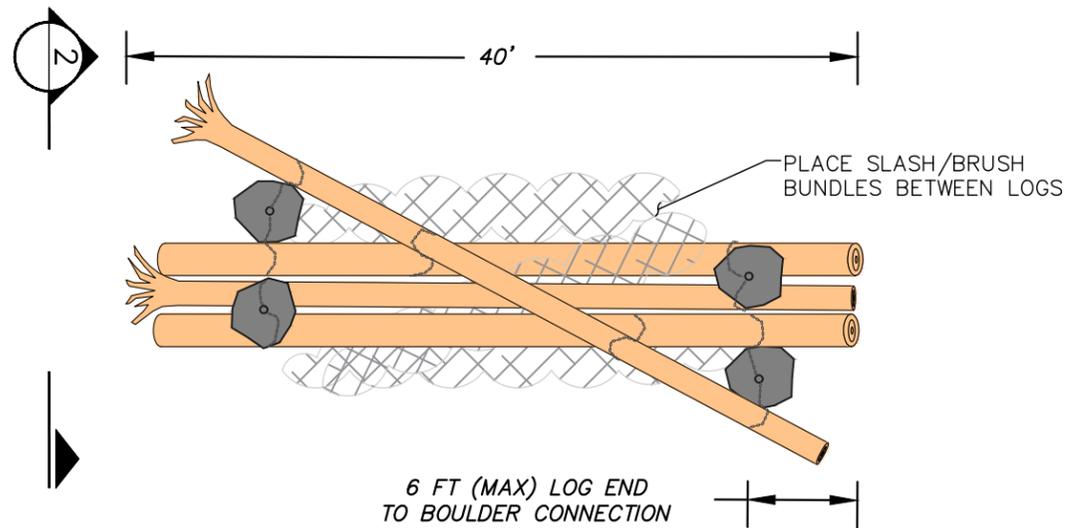
**1 LOG JACK SPUR - PLAN**  
SCALE: 1"=20'

**CONSTRUCTION SEQUENCING NOTES:**

1. ALL EXCAVATED SLOPES ARE 1.5:1 UNLESS NOTED OTHERWISE.
2. EXCAVATE TO ELEVATION 15. IF CONDITIONS ALLOW EXCAVATE BELOW ELEVATION 15 AT DIRECTION OF ENGINEER. NO DEWATERING OF EXCAVATION PIT IS REQUIRED.
3. PLACE LOWER LAYER OF LOG JACKS. NO CONNECTIONS BETWEEN ADJACENT LOG JACKS WILL OCCUR.
4. PLACE AND COMPACT SLASH INTO VOIDS BETWEEN LOG JACKS. DAMAGE TO LOGS, LOG-LOG CONNECTIONS, OR JACKS WILL BE REPAIRED OR REPLACED AT DIRECTION OF ENGINEER.
5. PLACE SECOND LAYER OF LOG JACKS. NO CONNECTIONS BETWEEN ADJACENT LOG JACKS WILL OCCUR. PLACE AND COMPACT SLASH INTO VOIDS BETWEEN LOG JACKS. DAMAGE TO LOGS, LOG-LOG CONNECTIONS, OR JACKS WILL BE REPAIRED OR REPLACED AT DIRECTION OF ENGINEER.
6. BACKFILL SPUR EXCAVATION WITH STOCKPILE SOIL AND GRADE TO MATCH EXISTING CONTOURS WITHIN 1' OF EXISTING GRADE. COMPACT AND SEED DISTURBED SOILS.
7. DUE TO TIMING OF CONSTRUCTION AND POSSIBILITY OF OVERBANK FLOODING DURING CONSTRUCTION, ADDITIONAL MEASURES MAY BE NECESSARY TO PREVENT EROSION OF UNPROTECTED SOILS. REFER TO SPECIFICATIONS FOR PROCEDURES.
8. SPURS ARE TO BE CONSTRUCTED ONE AT A TIME PER CREW, TO MINIMIZE THE VOLUME OF OPEN EXCAVATION.
9. EXCAVATION, PLACEMENT OF JACKS, AND BACKFILL OF SPURS SHOULD PROCEED LENGTHWISE, TO LIMIT THE VOLUME OF OPEN EXCAVATION AND ASSOCIATED STOCKPILED SOIL. TEMPORARY STOCKPILES MUST BE STORED AWAY FROM THE RIVER BANK, IN UPLAND AREAS OF THE SITE.
10. CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SEQUENCING PLAN FOR REVIEW BY THE ENGINEER PRIOR TO BEGINNING SPUR CONSTRUCTION.



**2 LOG JACK SPUR - SECTION**  
SCALE: 1"=20'

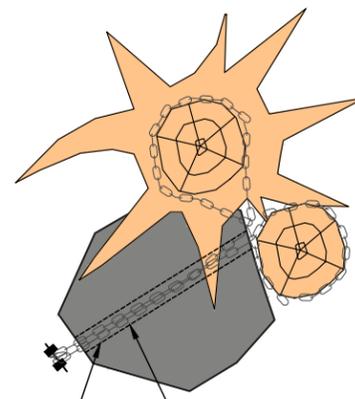


**NOTES FOR CONTINUOUS LOG ROWS:**

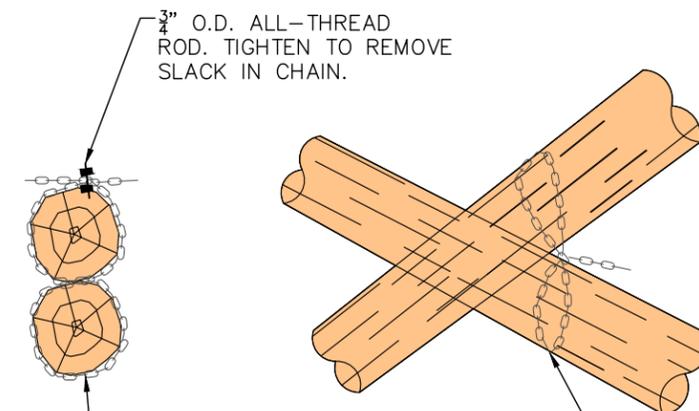
1. EACH UNIT CONSISTS OF FOUR LOGS (TWO WITH ROOTWADS) AND FOUR BALLAST BOULDERS CONNECTED WITH CHAIN.
2. ASSEMBLED UNITS WILL BE INSTALLED WITHIN A 5 FOOT DEEP TRENCH, SET BACK MINIMUM 5 FEET FROM TOP OF BANK.
3. UNITS WILL BE INSTALLED END-TO-END, ADJACENT UNITS WILL NOT BE CHAINED OR CONNECTED TOGETHER.

**1** CONTINUOUS LOG ROW UNIT - PLAN  
SCALE: 1"=10'

SECURE 4 LINKS OF LOOSE END OF CHAIN WITH  $\frac{3}{4}$ "  $\phi$  8" ALL-THREAD ROD. CENTER LINKS ON ALL-THREAD ROD USING 3 NUTS BOTH SIDES OF CHAIN. TIGHTEN TO REMOVE ALL SLACK IN CHAIN AND SECURE TIGHT TO BOULDER. PEEN THREADS.



**3** LOG TO BOULDER CONNECTION - DETAIL  
N.T.S.

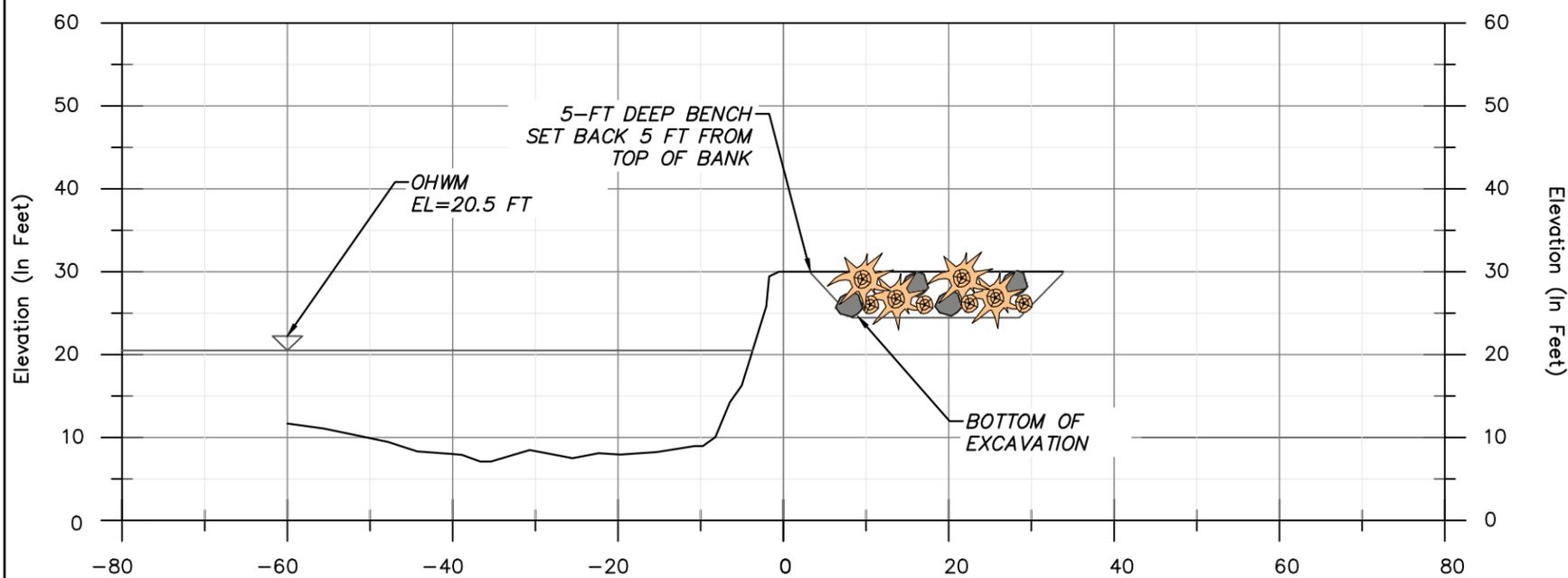


LOG TO LOG CONNECTIONS ARE MADE WHERE ONE LOG RESTS ON ANOTHER (NO GAP BETWEEN LOGS). SECURE CHAIN AROUND LOGS IN A FIGURE-8 FASHION. LOG TO LOG CONNECTIONS ARE MADE BETWEEN 2 LOGS ONLY, NO MORE.

**4** LOG TO LOG CONNECTION - DETAIL  
N.T.S.

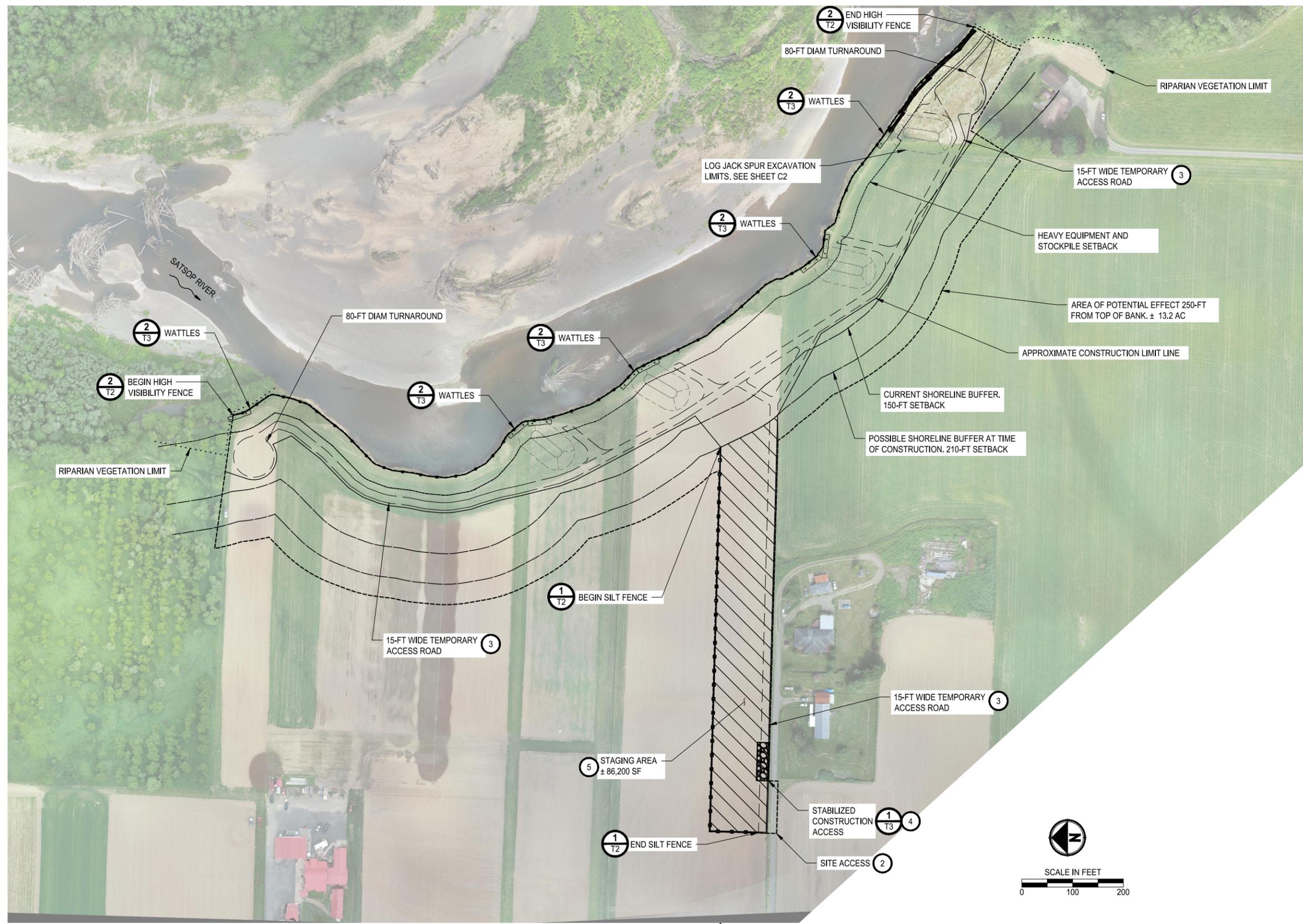
**NOTES FOR LOG TO BOULDER AND LOG TO LOG CONNECTIONS:**

- PROVIDE 2" DEEP NOTCH AND SEAT CHAIN WITHIN THE GROOVE. USE STAPLES TO SECURE CHAIN WITHIN NOTCH.
- PLACE BOULDERS AS CLOSE TO EACH LOG AS POSSIBLE, NO SLACK IN THE CHAIN UNLESS OTHERWISE NOTED.



**2** CONTINUOUS LOG ROW INSTALLATION - SECTION  
SCALE: 1"=20'

PATH: U:\FSO\Projects\Clients\7132-001 Satsop Harbor Conservation District\217-7132-001 Satsop RB Protection\995\cadd\DWG PLOTTED BY: olsoncl DATE: Wednesday, September 01, 2021 8:43:24 AM  
 LAYOUT: T1



- NOTES**
1. SURVEY AND AERIAL IMAGERY COMPLETED JUNE 4, 2021.
  2. SITE ACCESS SHALL BE FROM THE WILLIS PROPERTY'S PRIVATE ROAD.
  3. TEMPORARY ACCESS ROAD SHALL BE INSTALLED AND MAINTAINED THROUGH THE DURATION OF THE PROJECT TO BE REMOVED AT PROJECT COMPLETION. FOLLOWING REMOVAL, AREA SHALL BE RESTORED TO PRE-EXISTING CONDITIONS AND RE-SEEDED WITH PASTURE GRASS OR CROP. SEE SPECIAL PROVISIONS SECTION 2-01.3(7).
  4. GRAVEL CONSTRUCTION ENTRANCE SHALL BE INSTALLED AND MAINTAINED THROUGH THE DURATION OF THE PROJECT.
  5. STAGING AREA SHALL BE INSTALLED AND MAINTAINED THROUGH THE DURATION OF THE PROJECT TO BE REMOVED AT PROJECT COMPLETION. FOLLOWING REMOVAL, AREA SHALL BE RESTORED TO PRE-EXISTING CONDITIONS AND RE-SEEDED WITH PASTURE GRASS OR CROP. SEE SPECIAL PROVISIONS SECTION 2-01.3(7).
  6. WILLOW WATTLES OR OTHER BIOENGINEERING TECHNIQUES MAY BE INSTALLED AT UNDETERMINED LOCATIONS ALONG THE BANK FOLLOWING EROSION AS STRUCTURES SLUFF DOWN TO THE RIVERBANK, PER THE ADAPTIVE MANAGEMENT PLAN.
  7. MAINTENANCE AGREEMENT AND/ OR TEMPORARY ACCESS/ CONSTRUCTION EASEMENT WILL BE IN PLACE BETWEEN APPLICANT AND LANDOWNERS PRIOR TO CONSTRUCTION.

PRELIMINARY

**90% REVIEW SET**  
NOT FOR CONSTRUCTION

REVISIONS	DATE	BY	DESIGNED
			RSR
			CFD
			RSR
			####

**ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY**  
 FILE NAME: PS7132001T-01  
 JOB No.: 217-7132-001  
 DATE: 9/21

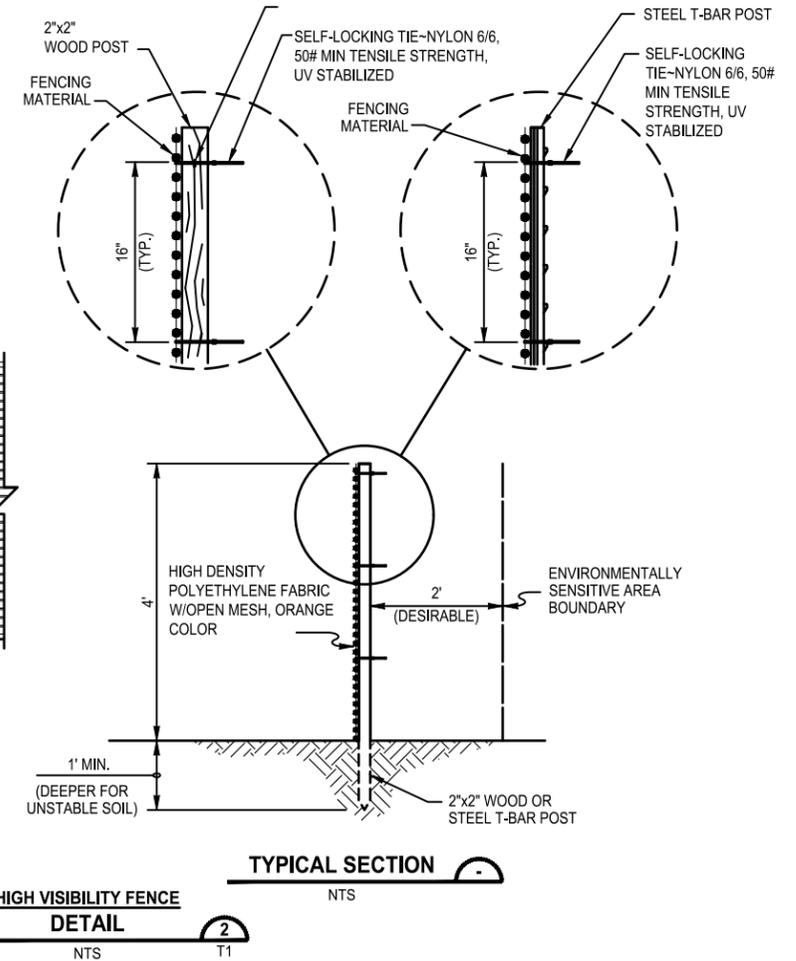
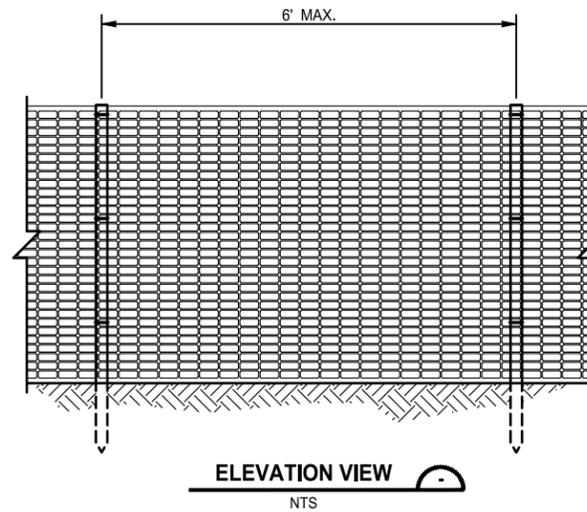
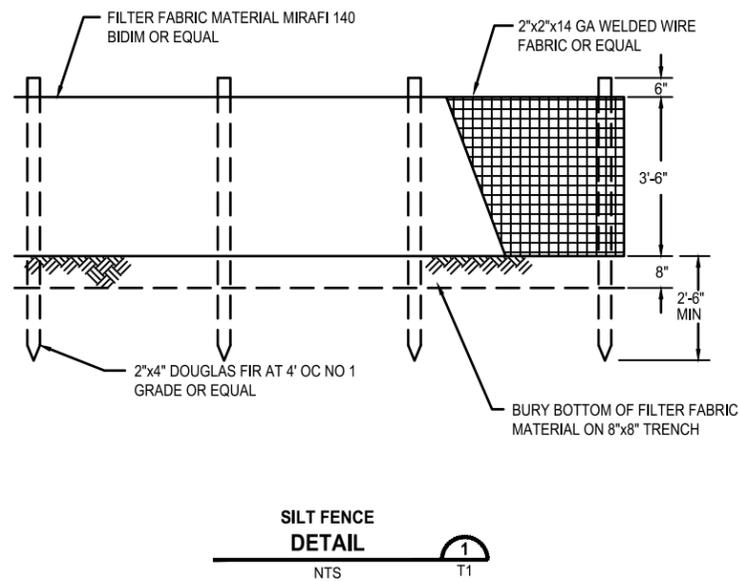
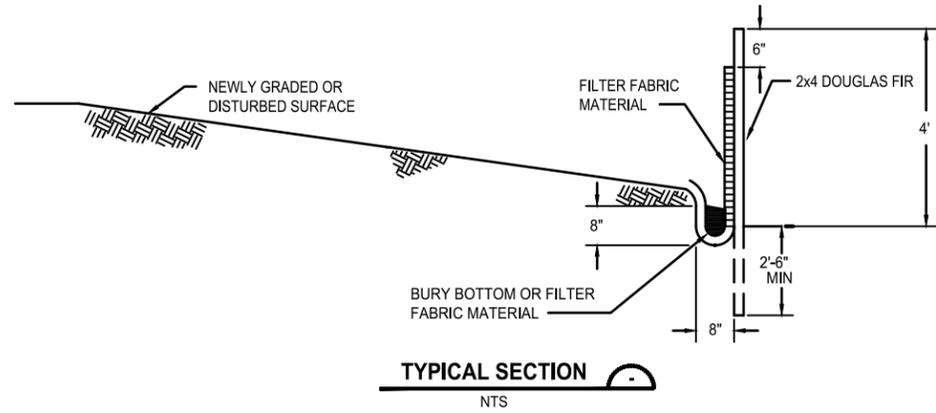


PROJECT NAME  
**LOWER SATSOP RIGHT BANK CONSERVATION PROJECT**  
 MONTESANO, WA

STAGING, ACCESS AND  
 TEMPORARY EROSION AND  
 SEDIMENT CONTROL PLAN

DRAWING NO.  
 12 OF 14  
**T1**

U:\PSO\Projects\Clients\7132-Groves Harbor Conservation District\217-7132-001 Satsop RB Protection\995\CA\DWG PLOTTED BY: aleanda DATE: Tuesday, August 31, 2021 5:34:04 PM  
 LAYOUT: T2



**TYPICAL SECTION**  
NTS

**90% REVIEW SET**  
NOT FOR CONSTRUCTION

REVISIONS	DATE	BY	DESIGNED
			CFO
			DRAWN
			CFO
			CHECKED
			RSR
			APPROVED
			####

ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY
FILE NAME PS7132001T-01
JOB No. 217-7132-001
DATE 8/21

PRELIMINARY

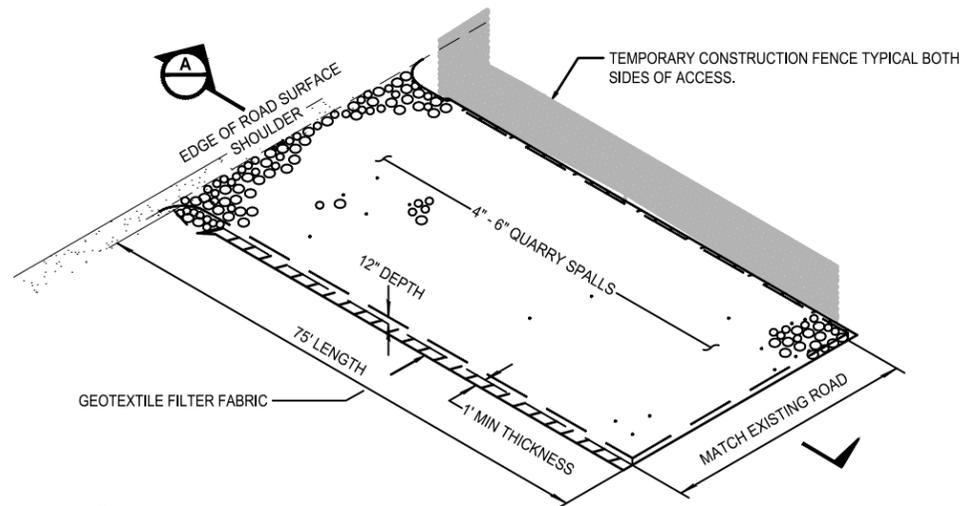
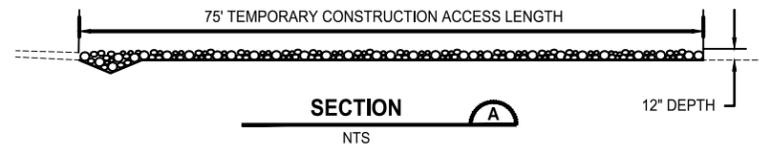
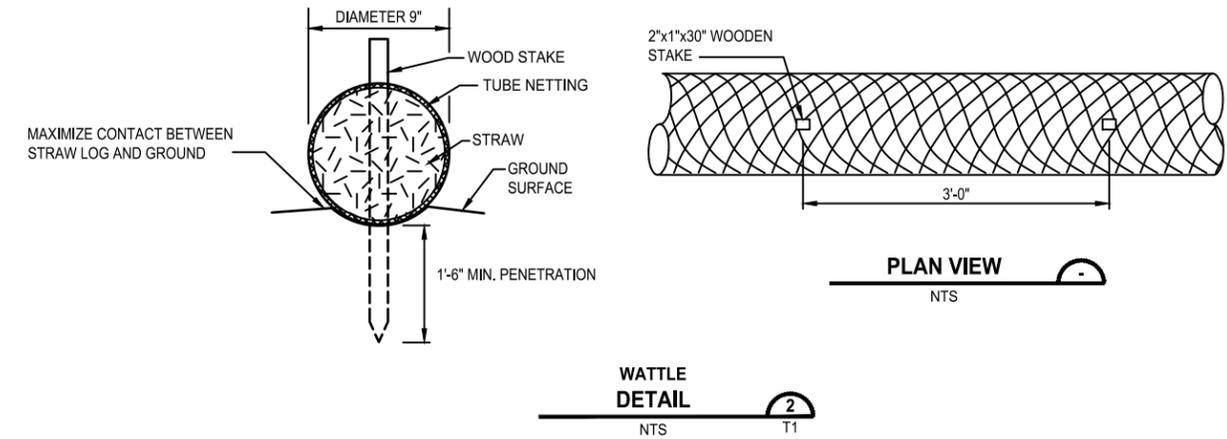
**Parametrix**  
ENGINEERING · PLANNING · ENVIRONMENTAL SCIENCES

PROJECT NAME  
**LOWER SATSOP RIGHT BANK CONSERVATION PROJECT**  
MONTESANO, WA

**TEMPORARY EROSION AND SEDIMENT CONTROL DETAILS 1**

DRAWING NO.  
13 OF 14  
**T2**

LAYOUT: T3  
 PATH: U:\VSO\Projects\Clients\7132-001 Satsep RB Protection\995\ca\CADD\DWG  
 PLOTTED BY: aleanda  
 DATE: Tuesday, August 31, 2021 5:34:44 PM



**NOTE:**  
THE 'TEMPORARY CONSTRUCTION ACCESS' WILL BE THE ONLY ALLOWED POINT OF ACCESS IN AND OUT OF THE CONSTRUCTION AREA.

**DESIGN AND INSTALLATION SPECIFICATIONS:**

1. GEOTEXTILE SHALL BE PLACED UNDER THE SPALLS TO PREVENT FINE SEDIMENTS FROM PUMPING UP INTO THE ROCK PAD. THE FABRIC SHALL CONFORM TO WSDOT STANDARD SPECIFICATION 9-33, TABLE 3 FOR SOIL STABILIZATION FABRIC.
2. FENCING SHALL BE INSTALLED AS NECESSARY TO RESTRICT TRAFFIC TO THE CONSTRUCTION ENTRANCE.
3. LOCATION OF CONSTRUCTION ENTRANCE SHALL BE APPROVED BY THE ENGINEER.
4. TRUCK ROUTES SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER.

**MAINTENANCE STANDARDS:**

1. QUARRY SPALLS SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
2. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO ADJACENT ROADS, ALTERNATIVE/ADDITIONAL MEASURES SHALL BE REQUIRED WHICH MAY INCLUDE INCREASING DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH.
3. ANY ROCK SPALLS THAT ARE LOOSENEED FROM THE PAD AND END UP ON ADJACENT ROADS OR FIELDS SHALL BE REMOVED IMMEDIATELY.

**90% REVIEW SET  
NOT FOR CONSTRUCTION**

REVISIONS	DATE	BY	DESIGNED
			CFO
			DRAWN
			CFO
			CHECKED
			RSR
			APPROVED
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ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY
FILE NAME PS7132001T-01
JOB No. 217-7132-001
DATE 5/21

PRELIMINARY



PROJECT NAME <b>LOWER SATSOP RIGHT BANK CONSERVATION PROJECT</b> MONTESANO, WA
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<b>TEMPORARY EROSION AND SEDIMENT CONTROL DETAILS 2</b>
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DRAWING NO. 14 OF 14
<b>T3</b>