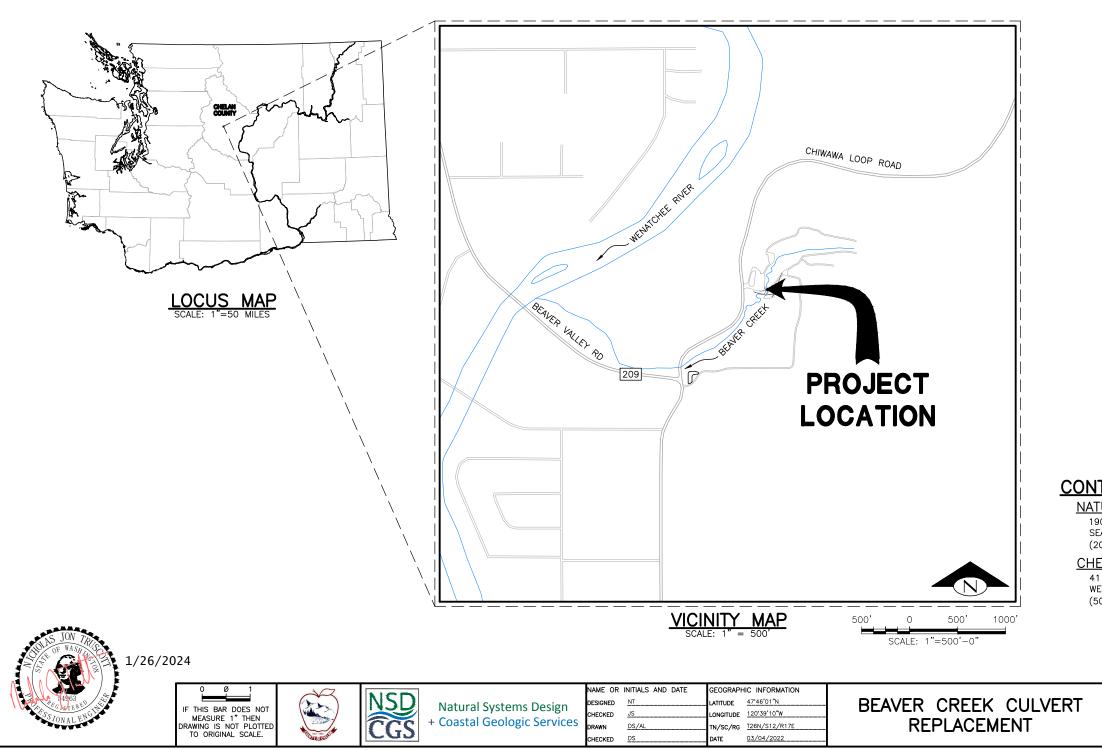
BEAVER CREEK CULVERT REPLACEMENT PROJECT CHELAN COUNTY DEPARTMENT OF NATURAL RESOURCES



PLAN SHEET INDEX

SHEET

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13 SITE RESTORATION PLAN

CONTACT INFORMATION

NATURAL SYSTEMS DESIGN, INC 1900 N NORTHLAKE WAY, SUITE 211 SEATTLE, WA 98103 (206) 834-0175

CHELAN COUNTY DEPARTMENT OF NATURAL RESOURCES 411 WASHINGTON ST, SUITE 201

WENATCHEE, WA 98801 (509) 667-6533

| CONSTRUCT |
|-----------|
| |
| - FOR |
| DESIGN |
| FINAL |
| 2024 |
| 26, |
| Jan |

NO

| COV | ER | SHE | ET |
|-----|----------|-----|----|
| | _ | | |



GENERAL NOTES

- 1. THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF CHELAN COUNTY NATURAL RESOURCES DEPARTMENT, HEREAFTER REFERRED TO AS "CONTRACTING AGENCY" AND THEIR AUTHORIZED AGENTS. THE CONTRACTING AGENCY WILL DESIGNATE A REPRESENTATIVE, HEREAFTER REFERRED TO AS "CONTRACTING OFFICER". TO REPRESENT THE CONTRACTING AGENCY. THE CONTRACTING OFFICER WILL BE RESPONSIBLE FOR FACILITATING ADMINISTRATION OF THE CONTRACT
- 2. NATURAL SYSTEMS DESIGN + COASTAL GEOLOGIC SERVICES (NSD+CGS) HEREAFTER REFERRED TO AS "ENGINEER" IS RESPONSIBLE FOR THE PREPARATION OF THESE ÓRIGINAL PLANS AND ASSOCIATED SPECIFICATIONS; AND WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGE, OR USE, OF THESE PLANS WHICH INCLUDES ALTERATION, DELETION OR EDITING OF THIS DOCUMENT WITHOUT EXPLICIT WRITTEN PERMISSION FROM THE ENGINEER. ANY OTHER UNAUTHORIZED USE OF THIS DOCUMENT IS PROHIBITED.
- MINOR MODIFICATIONS ARE EXPECTED TO SUIT JOB SITE DIMENSIONS OR CONDITIONS. SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.
- 4. THE LOCATION OF ALL FEATURES SHOWN IS APPROXIMATE.
- 5. THE CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; AND FURTHER AGREES THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS IN ACCORDANCE WITH THE PROVISIONS OUTLINED BY THE PROJECT CONTRACT AND SPECIFICATIONS.
- 6. ALL WORK SHALL CONFORM TO THE SPECIAL PROVISIONS. ANY ITEM NOT EXPLICITLY MENTIONED IN THE SPECIAL PROVISIONS SHALL BE AS DESCRIBED IN THE "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" (CURRENT EDITION) PUBLISHED BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. THE CONTRACTOR IS RESPONSIBLE FOR HAVING COPIES OF THESE PLANS, THE SPECIAL PROVISIONS, AND THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS ON-SITE DURING CONSTRUCTION.
- 7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTOR(S) TO EXAMINE THE PROJECT SITE PRIOR TO THE OPENING OF BID PROPOSALS. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, SUCH AS THE NATURE AND LOCATION OF THE WORK: AND THE GENERAL AND LOCAL CONDITIONS. PARTICULARLY THOSE AFFECTING THE AVAILABILITY OF TRANSPORTATION, THE DISPOSAL, HANDLING, AND STORAGE OF MATERIALS, AVAILABILITY OF LABOR, WATER, ELECTRICITY, ROADS, THE UNCERTAINTIES OF WEATHER, THE CONDITIONS OF THE GROUND, SURFACE AND SUBSURFACE MATERIALS, GROUNDWATER, THE EQUIPMENT AND FACILITIES NEEDED FOR AND DURING THE PERFORMANCE OF THE WORK. AND THE COSTS THEREOF. ANY FAILURE BY THE CONTRACTOR AND SUBCONTRACTOR(S) TO ACQUAINT THEMSELVES WITH ALL THE AVAILABLE INFORMATION WILL NOT RELIEVE THE CONTRACTOR AND SUBCONTRACTOR(S) FROM RESPONSIBILITY FOR PROPERLY ESTIMATING THE DIFFICULTY AND COST OF SUCCESSFULLY PERFORMING THE WORK
- 8. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE CONTRACT DOCUMENTS AND FOR ALL SUBMITTALS REQUIRED TO THE OWNER FOR REVIEW AND ACCEPTANCE.

PERMIT NOTES

- EVERY REASONABLE EFFORT SHALL BE MADE TO CONDUCT THE ACTIVITIES SHOWN IN THESE PLANS, IN A MANNER THAT MINIMIZES THE ADVERSE IMPACT ON WATER QUALITY, FISH AND WILDLIFE, AND THE NATURAL ENVIRONMENT.
- 2. ALL WORK WILL BE IN COMPLIANCE WITH PERMIT CONDITIONS ISSUED BY PERTINENT REGULATORY AGENCIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE COPIES OF ALL PERMITS ON THE JOB SITE, UNDERSTAND AND COMPLY WITH ALL PERMIT CONDITIONS.
- 3. ALL WORK THAT DISTURBS THE SUBSTRATE, BANK, OR SHORE OF A WATERS OF THE STATE THAT CONTAINS FISH LIFE SHALL BE CONDUCTED ONLY DURING THE APPROVED IN-WATER WORK WINDOW. THOSE PORTIONS OF THE PROJECT WORK THAT OCCUR OUTSIDE OR ABOVE THE ORDINARY HIGH WATER MARK (ABOVE THE USACE JURISDICTIONAL LINE) ARE NOT SUBJECT TO THE WORK PERIODS DESCRIBED ABOVE UNLESS SPECIFIED IN THE RELEVANT
- 4. ALL ACTIVITIES THAT INVOLVE WORK ADJACENT TO, OR WITHIN THE WETTED CHANNEL SHALL, AT ALL TIMES, REMAIN CONSISTENT WITH ALL APPLICABLE WATER QUALITY STANDARDS; EFFLUENT LIMITATION; AND STANDARDS OF PERFORMANCE, PROHIBITIONS, PRETREATMENT STANDARDS, AND MANAGEMENT PRACTICES ESTABLISHED PURSUANT TO THE CLEAN WATER ACT OR PURSUANT TO APPLICABLE STATE AND LOCAL LAW.
- 5. IF AT ANY TIME, AS A RESULT OF PROJECT ACTIVITIES, FISH ARE OBSERVED IN DISTRESS, A FISH KILL OCCURS, OR WATER QUALITY PROBLEMS DEVELOP (INCLUDING EQUIPMENT LEAKS OR SPILLS), OPERATIONS SHALL CEASE AND THE CONTRACTING OFFICER SHALL BE NOTIFIED IMMEDIATELÝ.
- 6. IF, DURING CONSTRUCTION, ARCHAEOLOGICAL REMAINS ARE ENCOUNTERED, CONSTRUCTION IN THE VICINITY SHALL BE HALTED, AND THE STATE OFFICE OF HISTORIC PRÉSERVATION AND THE OWNER SHALL BE NOTIFIED IMMEDIATELY.

SURVEY NOTES

- 1. UNLESS NOTED OTHERWISE ON THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION.
- 2. THE CONTRACTOR SHALL MAINTAIN A SET OF PLANS ON THE JOB SHOWING "AS-CONSTRUCTED" CHANGES MADE TO DATE. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUPPLY A SET OF PLANS, MARKED UP TO THE SATISFACTION OF THE CONTRACTING OFFICER, REFLECTING THE AS-CONSTRUCTED MODIFICATIONS.
- 3. ELEVATIONS SHOWN ON THE PLANS ARE BASED UPON THE TOPOGRAPHIC INFORMATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY ALL NECESSARY SURFACE ELEVATIONS IN THE FIELD AND NOTIFY THE CONTRACTING OFFICER OF ANY DISCREPANCIES, WHICH MIGHT AFFECT THE WORK SHOWN ON THE PLANS.
- 4. SURVEY FOR THIS PROJECT WAS CONDUCTED BY LANDLINE SURVEYORS, PROVIDED DECEMBER 2020. THE VERTICAL DATUM IS NAVD88 (FT). THE HORIZONTAL DATUM IS WASHINGTON STATE PLANE NORTH (FT)

EROSION, SEDIMENT CONTROL AND WATER MANAGEMENT NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING ALL TEMPORARY EROSION CONTROL MEASURES. THE EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PERFORMANCE OF THE TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT.
- 2. A SEDIMENT AND EROSION CONTROL PLAN WILL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED FOR APPROVAL BY THE CONTRACTING AGENCY BEFORE ANY CONSTRUCTION MAY BEGIN. THE SEDIMENT AND EROSION CONTROL PLAN SHALL IDENTIFY BEST MANAGEMENT PRACTICES TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS. DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
- 3. ACTIVITIES SHALL BE DESIGNED AND CONSTRUCTED TO AVOID AND MINIMIZE ADVERSE IMPACTS TO SURFACE WATERS, WETLANDS, AND GROUNDWATER TO THE MAXIMUM EXTENT PRACTICAL THROUGH THE USE OF PRACTICAL ALTERNATIVES. ALTERNATIVES THAT SHALL BE CONSIDERED INCLUDE THOSE THAT MINIMIZE THE NUMBER AND EXTENT OF IN-WATER WORK AND EQUIPMENT CROSSINGS OF WETTED CHANNELS.
- 4. AT NO TIME SHALL SEDIMENT-LADEN WATER BE DISCHARGED OR PUMPED DIRECTLY INTO SURFACE WATERS OR WETLANDS. WATER SHALL BE DISCHARGED IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE PROJECT PERMITS AND SPECIFICATIONS.
- 5. IF HIGH WATER LEVEL CONDITIONS THAT CAUSE SILTATION OR EROSION ARE ENCOUNTERED DURING CONSTRUCTION, WORK SHALL STOP UNTIL THE WATER LEVEL SUBSIDES.
- 6. PERMIT CONDITIONS CONTAIN SPECIFIC REQUIREMENTS FOR THE CONTROL OF EROSION AND TURBIDITY FROM PROJECT OPERATIONS. TURBIDITY WILL BE MONITORED ON A FREQUENT BASIS BY THE CONTRACTING AGENCY. TURBIDITY AMOUNTS IN EXCESS OF THE PERMITTED LEVELS MAY CAUSE WORK TO BE STOPPED UNTIL IMPROVED PRACTICES ARE IN EFFECT. THE CONTRACTOR IS RESPONSIBLE FOR ANY PROJECT DELAYS THAT OCCUR BY NATURE OF THIS FAILURE TO ADEQUATELY CONTAIN SEDIMENT ON-SITE.
- 7. ALL EXTERNAL GREASE AND OIL SHALL BE PRESSURE-WASHED OFF THE EQUIPMENT PRIOR TO TRANSPORT TO THE SITE.
- 8. THE CONTRACTOR SHALL HAVE AN EMERGENCY SPILL KIT ONSITE AT ALL TIMES.
- 9. NO TREES OR WETLAND VEGETATION SHALL BE REMOVED UNLESS THEY ARE SHOWN AND NOTED TO BE REMOVED ON THE PLANS OR AS DIRECTLY SPECIFIED BY THE CONTRACTING OFFICER. ALL TREES CONFLICTING WITH GRADING SHALL BE REMOVED. NO GRADING SHALL TAKE PLACE WITHIN THE DRIP LINE OF TREES TO REMAIN UNLESS OTHERWISE APPROVED.

CONSTRUCTION NOTES

- AND FIBER OPTIC LINES
- - THE CONTRACTING AGENCY: MON: TUE
 - WFD THUR: FRI: SAT: SUN:









| | NAME OR INITIALS AND DATE | | GEOGRAPHIC INFORMATION | |
|---|---------------------------|-------|------------------------|---------------|
| | DESIGNED | NT | LATITUDE | 47*46'01"N |
| | CHECKED | JS | LONGITUDE | 120°39'10"W |
| S | DRAWN | DS/AL | TN/SC/RG | T26N/S12/R17E |
| | CHECKED | DS | DATE | 03/04/2022 |
| | CHECKED | 20 | DAIL | 007.017.2022 |

BEAVER CREEK CULVERT REPLACEMENT

1. ALL WORK SHOWN ON THESE PLANS SHALL BE COMPLETED BETWEEN SEPTEMBER 16, 2024 AND OCTOBER 4, 2024, EXCLUDING WORK RELATED TO RELOCATION OF OVERHEAD POWER

2. CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE ALL WORK AS INDICATED IN THE CONTRACT DOCUMENTS.

CONSTRUCTION HOURS SHALL BE AS FOLLOWS UNLESS PRIOR APPROVAL IS RECEIVED FROM

9.00 AM - 7.00 PM 7:00 AM - 7:00 PM 7.00 AM - 7.00 PM 7:00 AM - 7:00 PM 7:00 AM - 3:00 PM NO WORK ALLOWED NO WORK ALLOWED

4 SOILS AT THE SITE MAY CONTAIN SOFT SILT CLAY AND HIGH GROUNDWATER AND MAY REQUIRE EQUIPMENT MATS TO SUPPORT CONSTRUCTION EQUIPMENT. CONSOLIDATION OF THE GROUND SURFACE SHOULD BE EXPECTED. CONTRACTOR IS RESPONSIBLE FOR DETERMINING NEED FOR, DESIGNING, PROCURING, INSTALLING, USING AND REMOVING ANY EQUIPMENT MATS NEEDED TO ALLOW FOR EQUIPMENT OPERATION SUFFICIENT TO CONSTRUCT THE PROJECT.

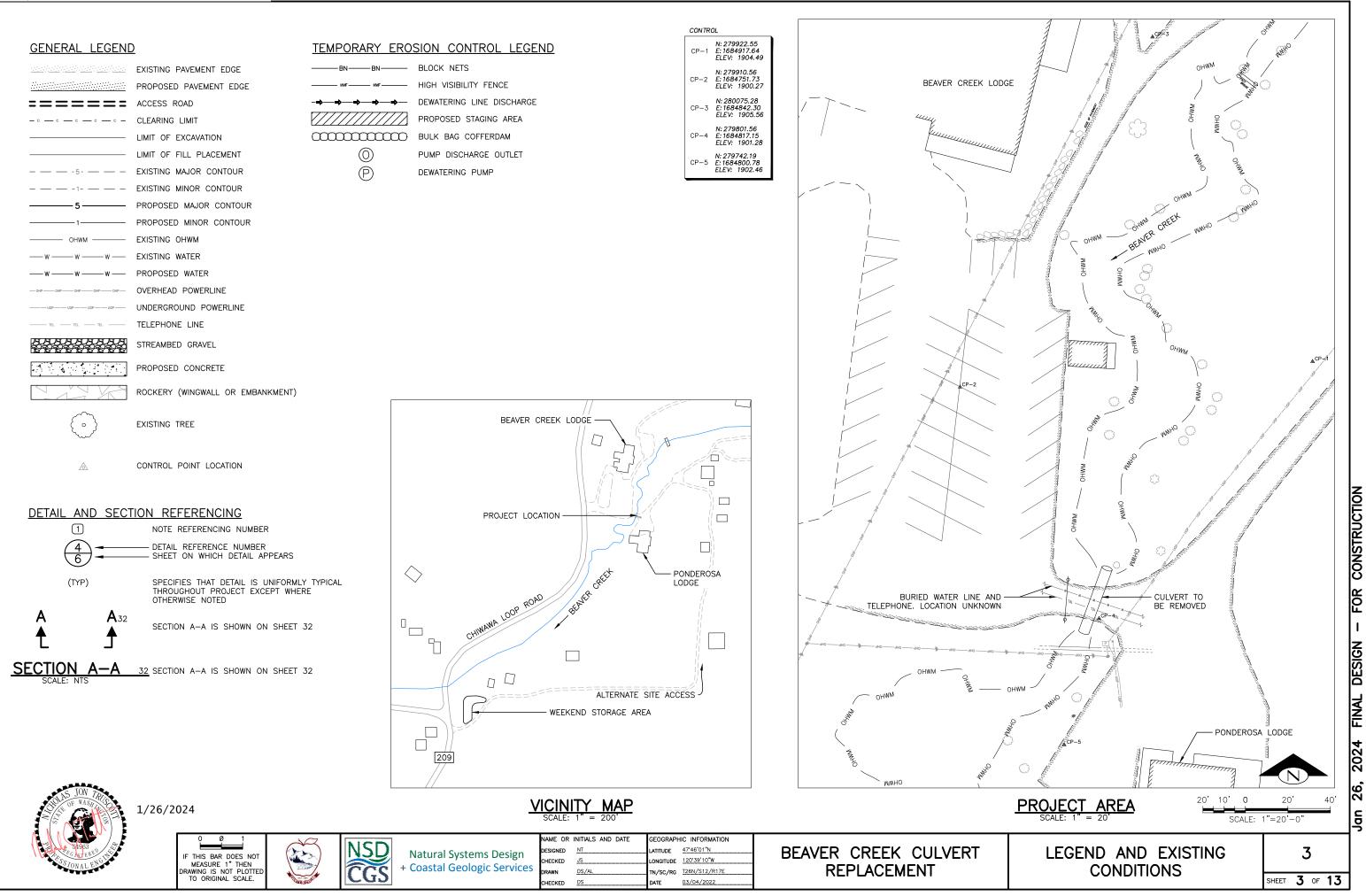
5. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE CONTRACTING AGENCY PRIOR TO PROCEEDING WITH THE WORK.

6. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.

7. THE CONTRACTOR SHALL KEEP THE JOB SITE CLEAN AND HAZARD FREE. CONTRACTOR SHALL DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH FOR THE DURATION OF THE WORK. UPON COMPLETION OF WORK, CONTRACTOR SHALL REMOVE ALL MATERIAL AND EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY.

GENERAL NOTES

2



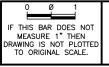
1 FINAL DESIGN 2024 26,

BRIDGE LINE - INCREMENTAL STATIONING TABLE

| STATION | NORTHING | EASTING | TANGENTIAL DIRECTION |
|---------|-------------|---------------|----------------------|
| 0+00.00 | 279,810.79' | 1,684,714.36' | S81°04'35.87"E |
| 0+05.00 | 279,810.01' | 1,684,719.30' | S81°04'35.87"E |
| 0+10.00 | 279,809.23' | 1,684,724.24' | S81°04'35.87"E |
| 0+15.00 | 279,808.46' | 1,684,729.18' | S81°04'35.87"E |
| 0+20.00 | 279,807.68' | 1,684,734.11' | S81°04'35.87"E |
| 0+25.00 | 279,806.91' | 1,684,739.05' | S81°04'35.87"E |
| 0+30.00 | 279,806.13' | 1,684,743.99' | S81°04'35.87"E |
| 0+35.00 | 279,805.43' | 1,684,748.94' | S84° 47' 57.66"E |
| 0+40.00 | 279,805.35' | 1,684,753.94' | N86° 31' 10.10"E |
| 0+45.00 | 279,806.03' | 1,684,758.89' | N77 50' 17.86"E |
| 0+50.00 | 279,807.17' | 1,684,763.75' | N76°41'51.81"E |
| 0+55.00 | 279,808.32' | 1,684,768.62' | N76°41'51.81"E |
| 0+60.00 | 279,809.48' | 1,684,773.48' | N76°41'51.81"E |
| 0+65.00 | 279,810.63' | 1,684,778.35' | N76°41'51.81"E |
| 0+70.00 | 279,811.78' | 1,684,783.22' | N76°41'51.81"E |
| 0+75.00 | 279,812.93' | 1,684,788.08' | N76°41'51.81"E |
| 0+80.00 | 279,813.74' | 1,684,793.01' | N84° 55' 32.09"E |
| 0+85.00 | 279,813.81' | 1,684,798.01' | S86° 23' 35.67"E |
| 0+90.00 | 279,813.19' | 1,684,802.97' | S81° 35' 57.59"E |
| 0+95.00 | 279,812.46' | 1,684,807.91' | S81° 35' 57.59"E |
| 1+00.00 | 279,811.73' | 1,684,812.86' | S81° 35' 57.59"E |
| 1+05.00 | 279,811.00' | 1,684,817.80' | S81° 35' 57.59"E |
| 1+10.00 | 279,810.27' | 1,684,822.75' | S81° 35' 57.59"E |
| 1+15.00 | 279,809.54' | 1,684,827.70' | S81° 35' 57.59"E |
| 1+20.00 | 279,809.12' | 1,684,832.68' | S89° 32' 54.71"E |
| 1+25.00 | 279,809.46' | 1,684,837.66' | N81° 46' 13.05"E |
| 1+30.00 | 279,810.55' | 1,684,842.53' | N73°05'20.80"E |
| 1+35.00 | 279,812.36' | 1,684,847.19' | N64°24'28.56"E |
| 1+40.00 | 279,814.85' | 1,684,851.52' | N55° 43' 36.32"E |
| 1+45.00 | 279,817.97' | 1,684,855.42' | N47°02'44.07"E |
| 1+50.00 | 279,821.64' | 1,684,858.81' | N39°20'32.46"E |
| 1+55.00 | 279,825.50' | 1,684,861.98' | N39°20'32.46"E |
| 1+60.00 | 279,829.37' | 1,684,865.15' | N39°20'32.46"E |
| 1+65.00 | 279,833.24' | 1,684,868.32' | N39°20'32.46"E |
| 1+70.00 | 279,837.11' | 1,684,871.49' | N39°20'32.46"E |
| 1+75.00 | 279,840.97' | 1,684,874.66' | N39°20′32.46"E |
| 1+80.00 | 279,844.84' | 1,684,877.83' | N39°20'32.46"E |
| 1+85.00 | 279,848.71' | 1,684,881.00' | N39°20'32.46"E |
| 1+90.00 | 279,852.57' | 1,684,884.17' | N39°20'32.46"E |
| 1+95.00 | 279,856.44' | 1,684,887.34' | N39°20'32.46"E |
| 2+00.00 | 279,860.31' | 1,684,890.51' | N39°20'32.46"E |
| 2+05.00 | 279,864.17' | 1,684,893.68' | N39°20'32.46"E |
| 2+10.00 | 279,868.04' | 1,684,896.85' | N39°20'32.46"E |
| 2+15.00 | 279,871.91' | 1,684,900.02' | N39°20′32.46"E |
| 2+20.00 | 279,875.77' | 1,684,903.19' | N39°20'32.46"E |
| 2+23.31 | 279,878.33' | 1,684,905.29' | N39°20'32.46"E |
| | | | |

| STATION | NORTHING | EASTING | TANGENTIAL DIRECTION |
|----------|-------------|---------------|----------------------|
| 12+50.00 | 279,907.53' | 1,684,844.79' | S16°23'59.85"W |
| 12+45.00 | 279,902.74' | 1,684,843.38' | S16 23 59.85"W |
| 12+40.00 | 279,897.97' | 1,684,841.89' | S21° 12' 51.47"W |
| 12+35.00 | 279,893.54' | 1,684,839.60' | S33° 31' 15.64"W |
| 12+30.00 | 279,889.46' | 1,684,836.70' | S36° 27' 55.25"W |
| 12+25.00 | 279,885.76' | 1,684,833.35' | S45° 34' 31.77"W |
| 12+20.00 | 279,882.26' | 1,684,829.78' | S45° 34' 31.77"W |
| 12+15.00 | 279,878.50' | 1,684,826.48' | S39°29'28.78"W |
| 12+10.00 | 279,874.53' | 1,684,823.46' | S31° 14' 32.03"W |
| 12+05.00 | 279,869.98' | 1,684,821.40' | S20° 48' 24.85"W |
| 12+00.00 | 279,865.28' | 1,684,819.70' | S14° 46' 57.10"W |
| 11+95.00 | 279,860.33' | 1,684,819.24' | S3 51' 33.81"E |
| 11+90.00 | 279,855.34' | 1,684,819.57' | S3 51' 33.81"E |
| 11+85.00 | 279,850.35' | 1,684,819.93' | S4° 46' 34.34"E |
| 11+80.00 | 279,845.37' | 1,684,820.35' | S4° 46' 34.34"E |
| 11+75.00 | 279,840.39' | 1,684,820.76' | S4° 46' 34.34"E |
| 11+70.00 | 279,835.40' | 1,684,821.18' | S4° 46' 34.34"E |
| 11+65.00 | 279,830.41' | 1,684,821.20' | S5° 25' 16.88"W |
| 11+60.00 | 279,825.51' | 1,684,820.23' | S16° 52' 49.84"W |
| 11+55.00 | 279,820.77' | 1,684,818.66' | S18° 24' 02.41"W |
| 11+50.00 | 279,816.02' | 1,684,817.09' | S18° 24' 02.41"W |
| 11+45.00 | 279,811.28' | 1,684,815.51' | S18° 24' 02.41"W |
| 11+40.00 | 279,806.53' | 1,684,813.93' | S18° 24' 02.41"W |
| 11+35.00 | 279,801.79' | 1,684,812.35' | S18° 24' 02.41"W |
| 11+30.00 | 279,797.04' | 1,684,810.77' | S18° 24' 02.41"W |
| 11+25.00 | 279,792.30' | 1,684,809.19' | S18° 24' 02.41"W |
| 11+20.00 | 279,787.66' | 1,684,807.35' | S23° 45' 49.26"W |
| 11+15.00 | 279,783.08' | 1,684,805.34' | S23° 45' 49.26"W |
| 11+10.00 | 279,778.72' | 1,684,802.92' | S38° 52' 32.09"W |
| 11+05.00 | 279,775.05' | 1,684,799.53' | S43° 10' 17.68"W |
| 11+00.00 | 279,771.41' | 1,684,796.11' | S43° 10' 17.68"W |
| 10+95.00 | 279,768.18' | 1,684,792.32' | S58° 41' 18.28"W |
| 10+90.00 | 279,765.58' | 1,684,788.04' | S58° 41' 18.28"W |
| 10+85.00 | 279,763.30' | 1,684,783.61' | S71° 56' 07.68"W |
| 10+80.00 | 279,762.35' | 1,684,778.71' | S80° 57' 59.31"W |
| 10+75.00 | 279,761.75' | 1,684,773.75' | N89° 26' 16.05"W |
| 10+70.00 | 279,761.95' | 1,684,768.76' | N87° 38' 24.75"W |
| 10+65.00 | 279,762.16' | 1,684,763.76' | N87° 38' 24.75"W |
| 10+60.00 | 279,762.36' | 1,684,758.76' | N87° 38' 24.75"W |
| 10+55.00 | 279,762.65' | 1,684,753.78' | N81° 12' 57.18"W |
| 10+50.00 | 279,763.91' | 1,684,748.94' | N74° 16' 20.00"W |
| 10+45.00 | 279,765.27' | 1,684,744.13' | N74° 16' 20.00"W |
| 10+40.00 | 279,766.59' | 1,684,739.31' | N78° 34' 20.21"W |
| 10+35.00 | 279,767.12' | 1,684,734.34' | N84° 45' 42.03"W |
| 10+30.52 | 279,767.53' | 1,684,729.87' | N84° 45' 42.03"W |

1/26/2024



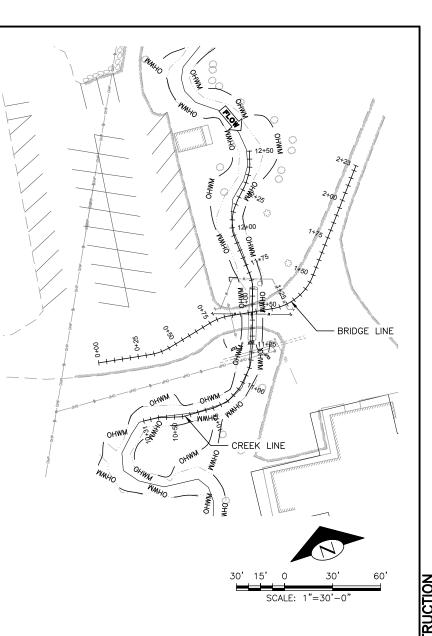


Natural Systems Design Coastal Geologic Service

| | NAME OR | INITIALS AND DATE | GEOGRAPH | IC INFORMATION |
|----|----------|-------------------|-----------|----------------|
| | DESIGNED | NT | LATITUDE | 47*46'01"N |
| | CHECKED | JS | LONGITUDE | 120'39'10"W |
| es | DRAWN | DS/AL | TN/SC/RG | T26N/S12/R17E |
| | CHECKED | DS | DATE | 03/04/2022 |
| | ONEORED | | BATE | |

BEAVER CREEK CULVERT REPLACEMENT

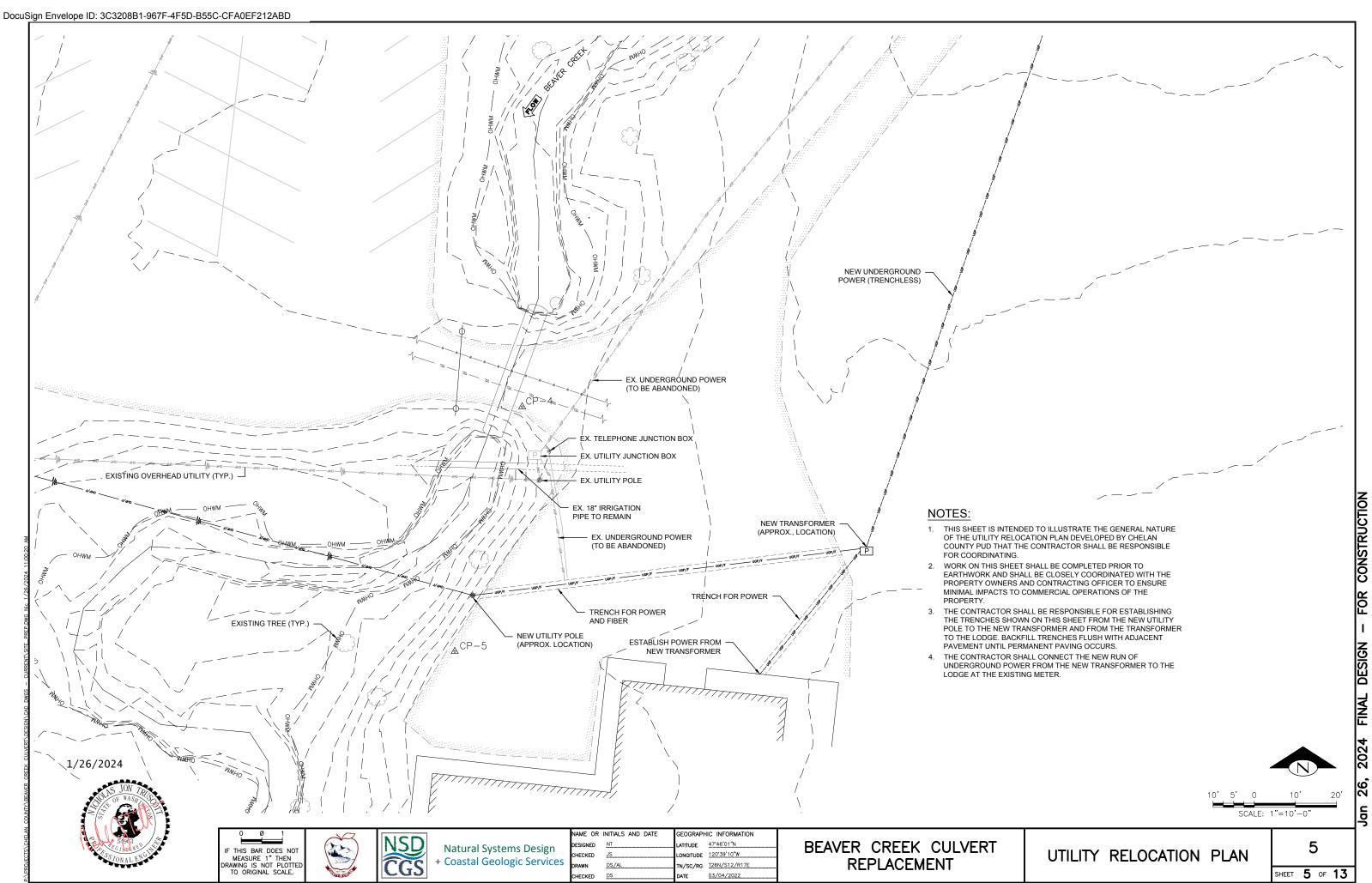
CREEK LINE - INCREMENTAL STATIONING TABLE



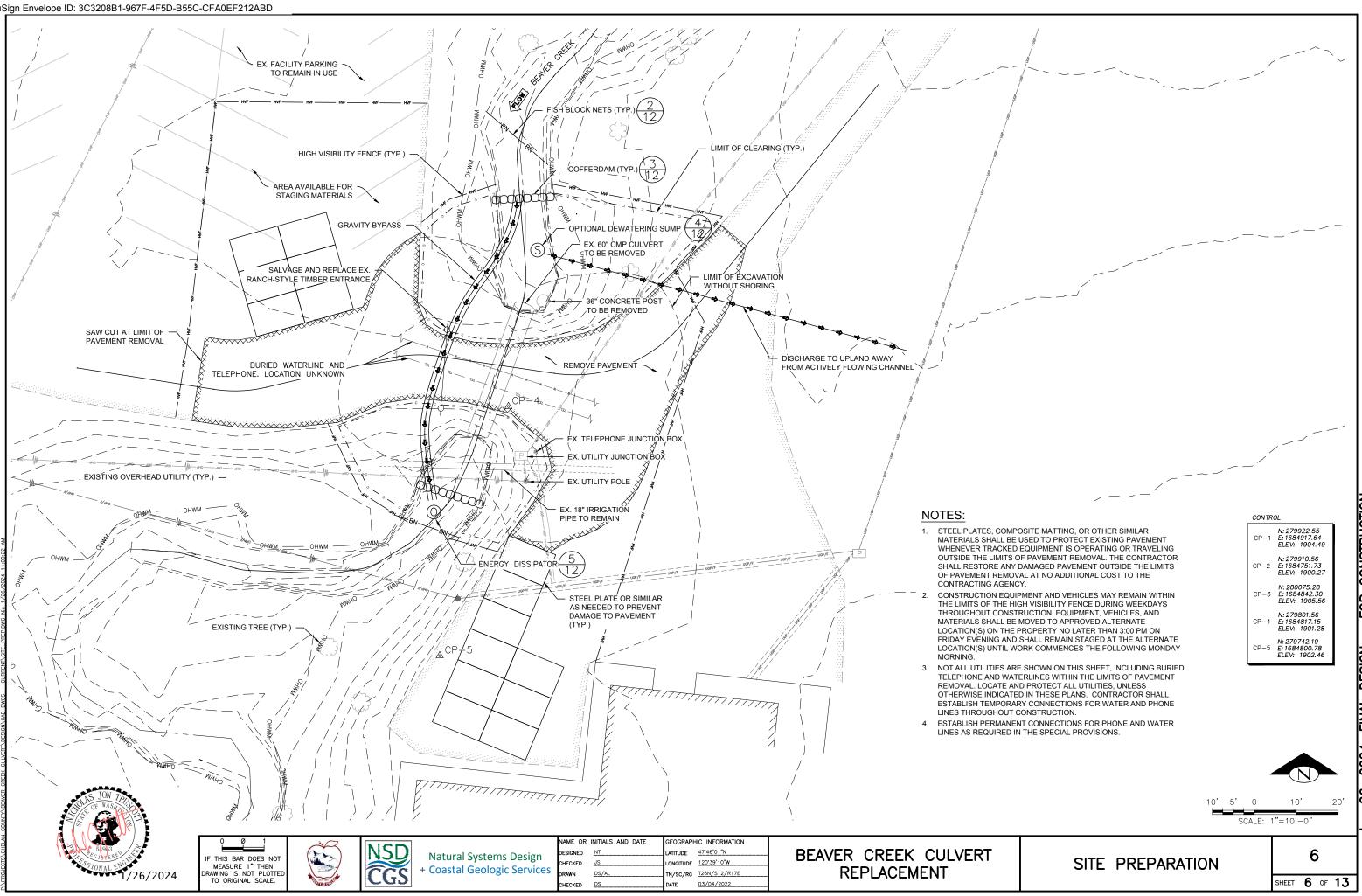
NOTES:

- 1. ALIGNMENT INFORMATION PROVIDED ON THIS SHEET MAY BE USED FOR CONSTRUCTION STAKEOUT.
- 2. ADDITIONAL ALIGNMENT AND CONSTRUCTION STAKEOUT INFORMATION ARE AVAILABLE UPON REQUEST INCLUDING DIGITAL REPRESENTATIONS OF FINISHED GROUND ELEVATIONS.

ALIGNMENT TABLES
4
SHEET 4 OF 13

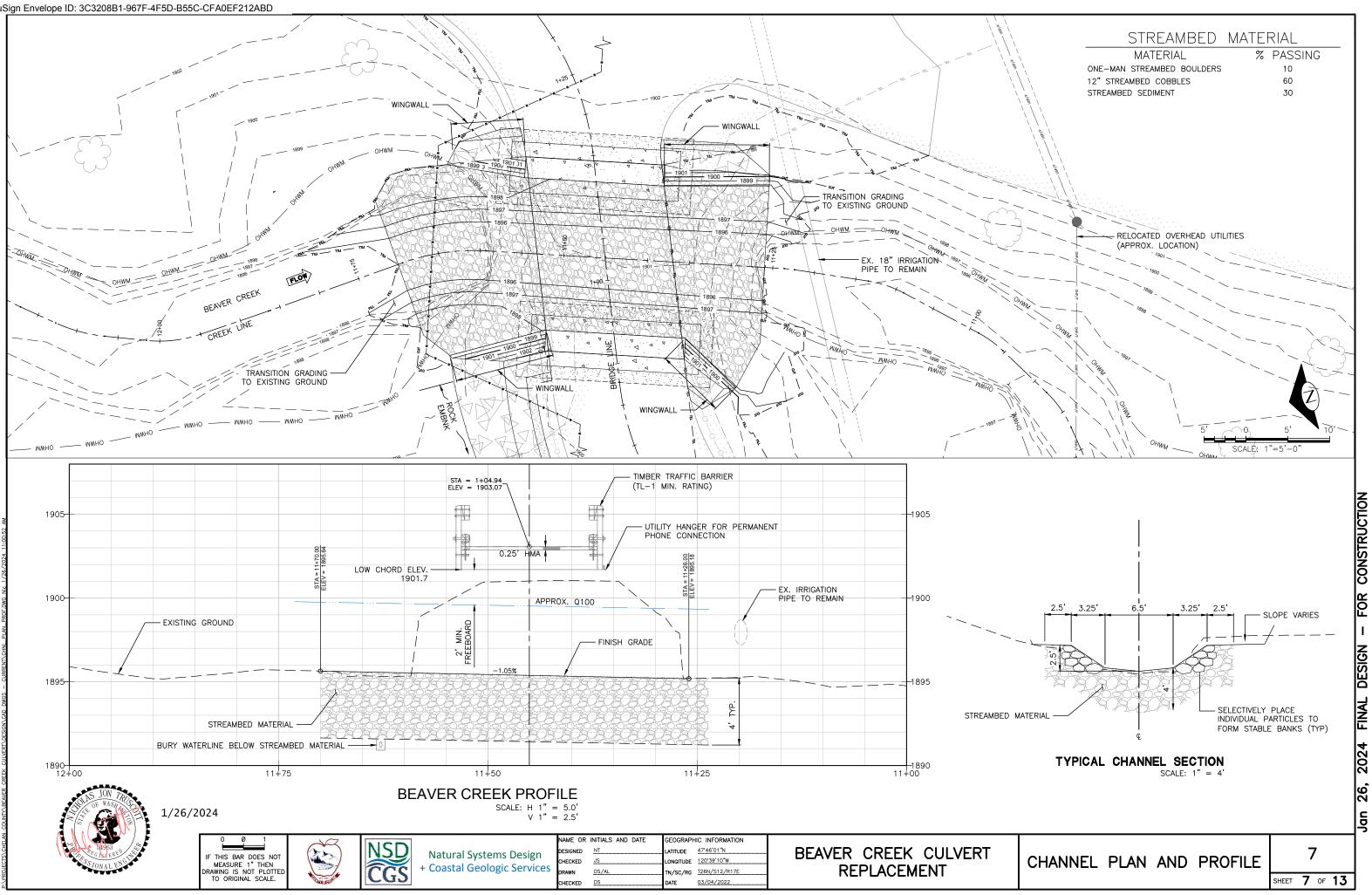


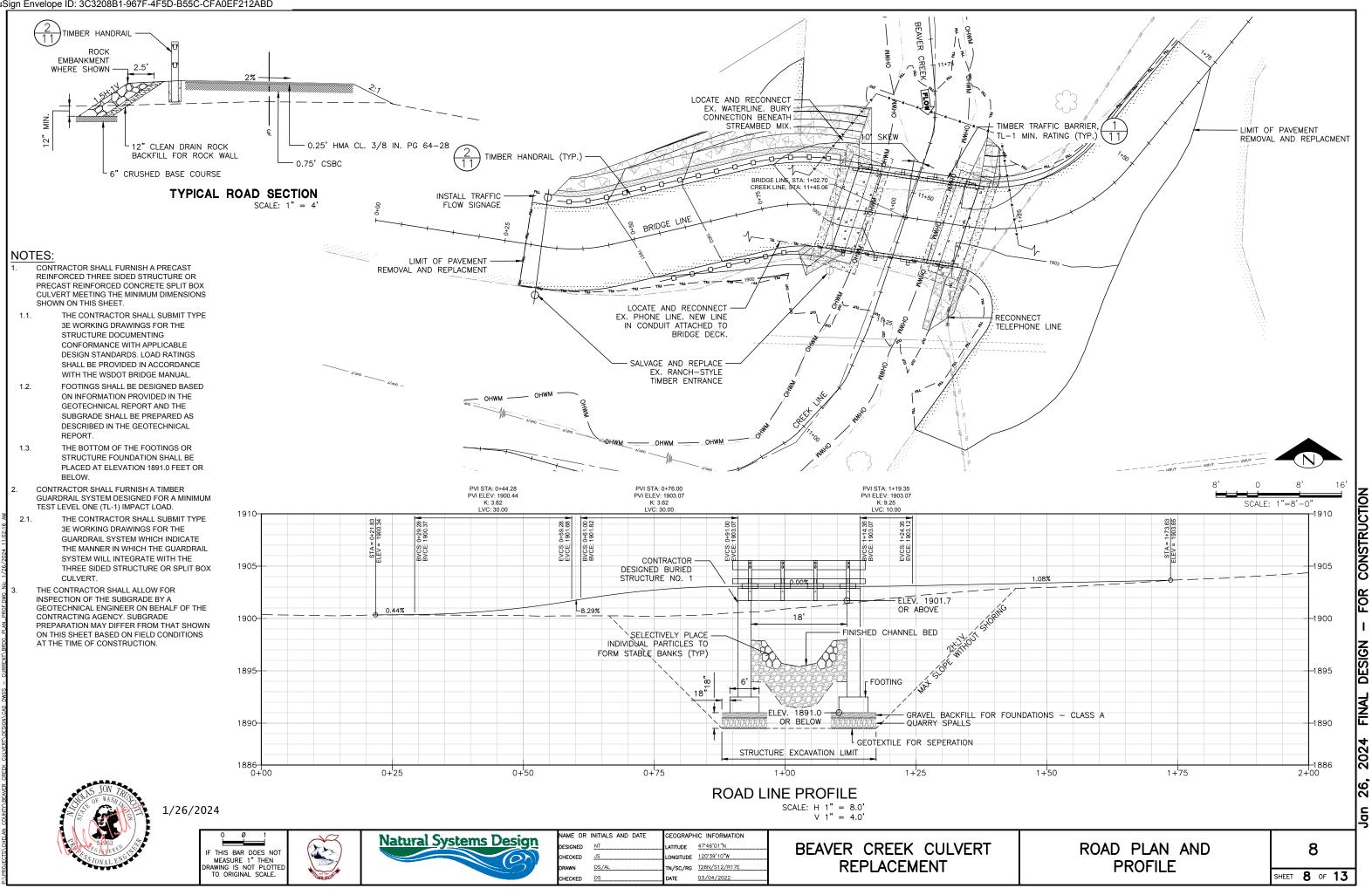
2024 26, Jan



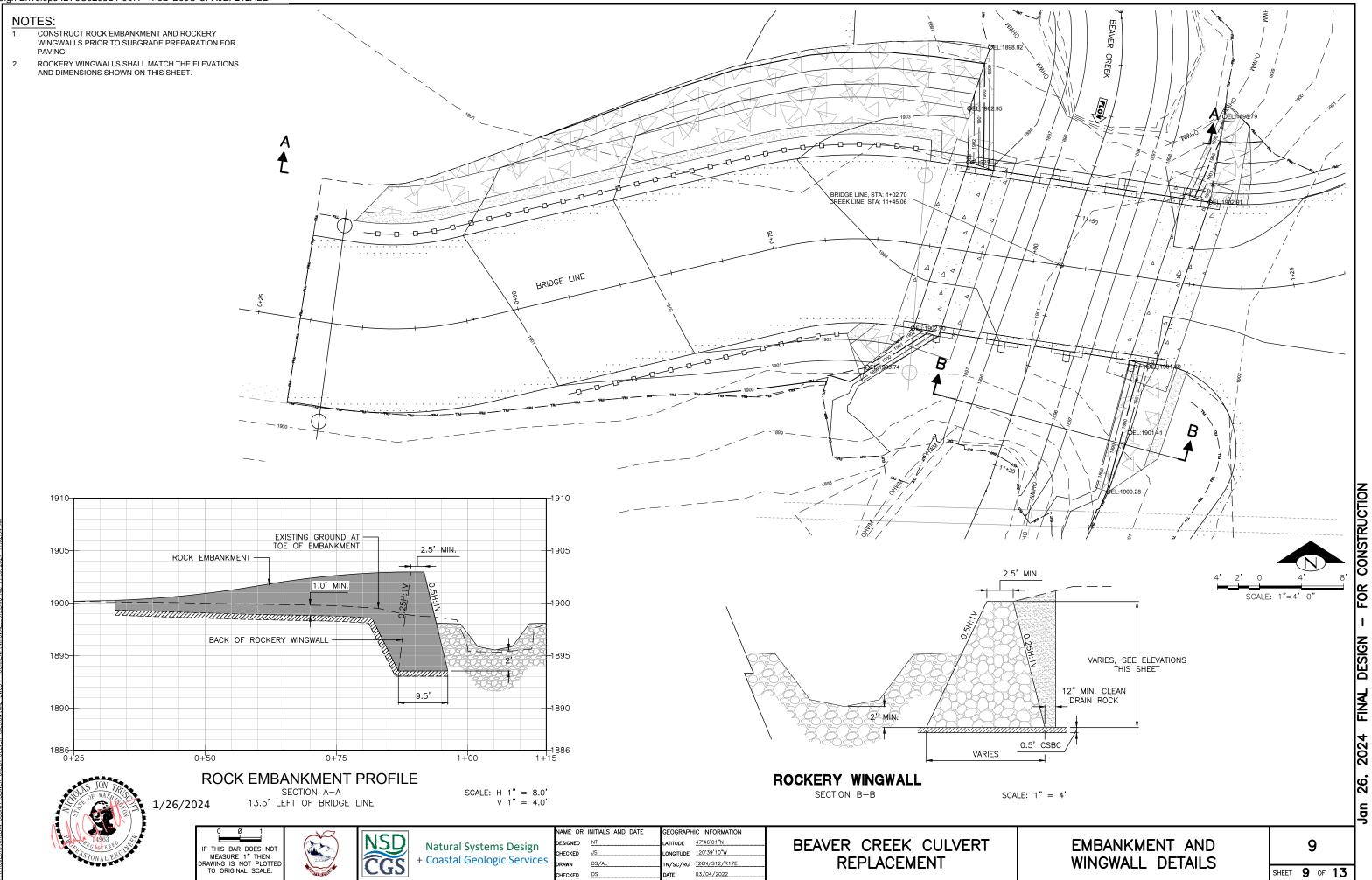
CONSTRUCTION FOR 1 FINAL DESIGN 2024 26, Jan

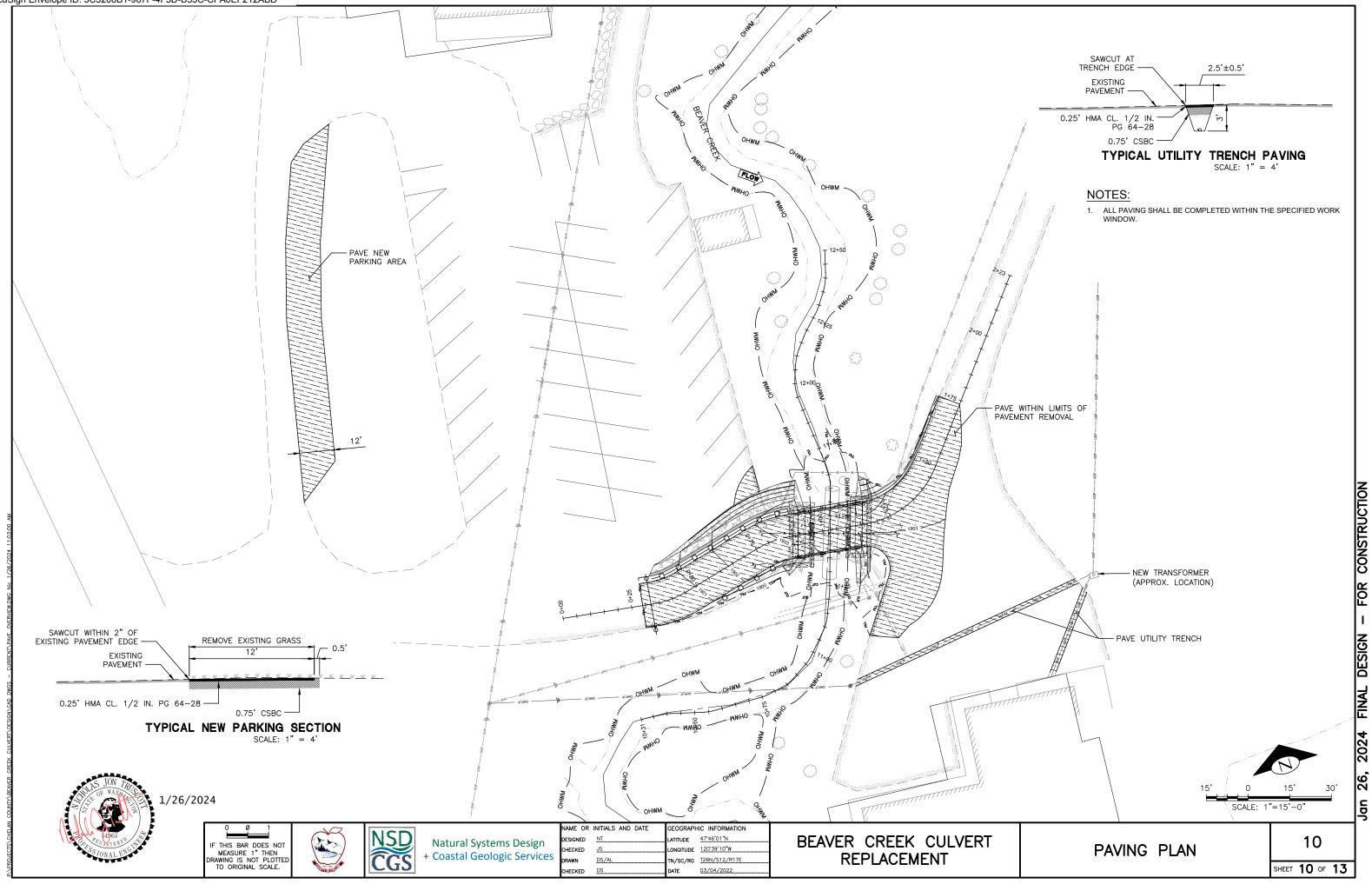
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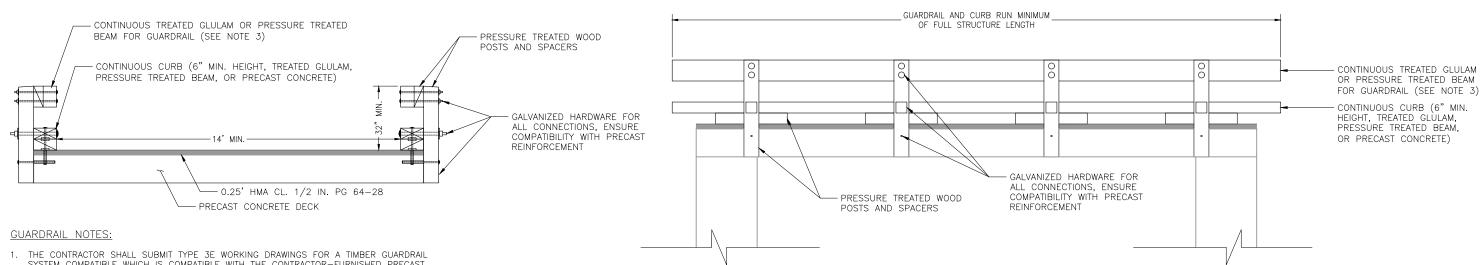




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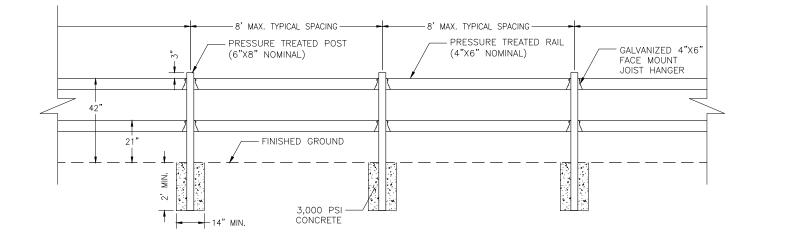






- 1. THE CONTRACTOR SHALL SUBMIT TYPE 3E WORKING DRAWINGS FOR A TIMBER GUARDRAIL SYSTEM COMPATIBLE WHICH IS COMPATIBLE WITH THE CONTRACTOR-FURNISHED PRECAST BURIED STRUCTURE.
- 2. THE TIMBER GUARDRAIL SYSTEM SHALL BE AN AASHTO APPROVED SYSTEM WITH A MINIMUM RATING OF TEST LEVEL ONE (TL-1).
- 3. SEVERAL TL-1 TIMBER RAIL SYSTEMS DO NOT INCLUDE A TOP RAIL WITH A MINIMUM HEIGHT OF 32 INCHES. SHOULD THE CONTRACTOR ELECT TO UTILIZE SUCH A SYSTEM, THE WORKING DRAWINGS SHALL INCLUDE A TIMBER GUARD SYSTEM TO PREVENT FALLS. THE TIMBER GUARD SYSTEM SHALL HAVE A CONTINUOUS TOP RAIL AND SHALL BE DESIGNED TO MEET THE SPACING AND LOADING REQUIREMENTS FOUND IN THE INTERNATIONAL BUILDING CODE (IBC). ALTERNATIVELY THE CONTRACTOR MAY ELECT TO UTILIZE A TIMBER GUARDRAIL SYSTEM WHICH INCLUDES A TOP RAIL WITH A MINIMUM HEIGHT OF 32 INCHES (MOST TL-2 SYSTEMS).
- 4. ALL WOOD COMPONENTS OF THE GUARDRAIL SYSTEM AND/OR TIMBER GUARD SHALL BE EITHER TREATED GLULAM OR PRESSURE TREATED LUMBER. TREATED GLULAM SHALL BE TREATED TO USE CATEGORY UC4C AS DEFINED BY THE ENGINEERED WOOD ASSOCIATION (APA).
- 5. ALL HARDWARE USED FOR STRUCTURAL CONNECTIONS SHALL BE GALVANIZED. WORKING DRAWINGS SHALL CLEARLY ILLUSTRATE COMPATIBILITY WITH THE BURIED STRUCTURE AND THE MANNER IN WHICH CONNECTIONS TO THE BURIED STRUCTURE ARE TO BE MADE WITHOUT COMPROMISING THE INTEGRITY OF THE BURIED STRUCTURE.

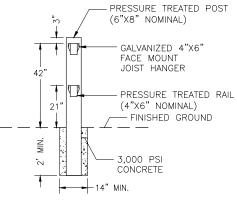




NSD

CGS

5









| Natural Systems Design - Coastal Geologic Services | DESIGNED | INITIALS AND DATE NT JS DS/AL DS | GEOGRAPH LATITUDE LONGITUDE TN/SC/RG DATE | HC INFORMATION 47'46'01"N 120'39'10"W T26N/S12/R17E 03/04/2022 | BE, |
|---|----------|----------------------------------|---|--|-----|
|---|----------|----------------------------------|---|--|-----|

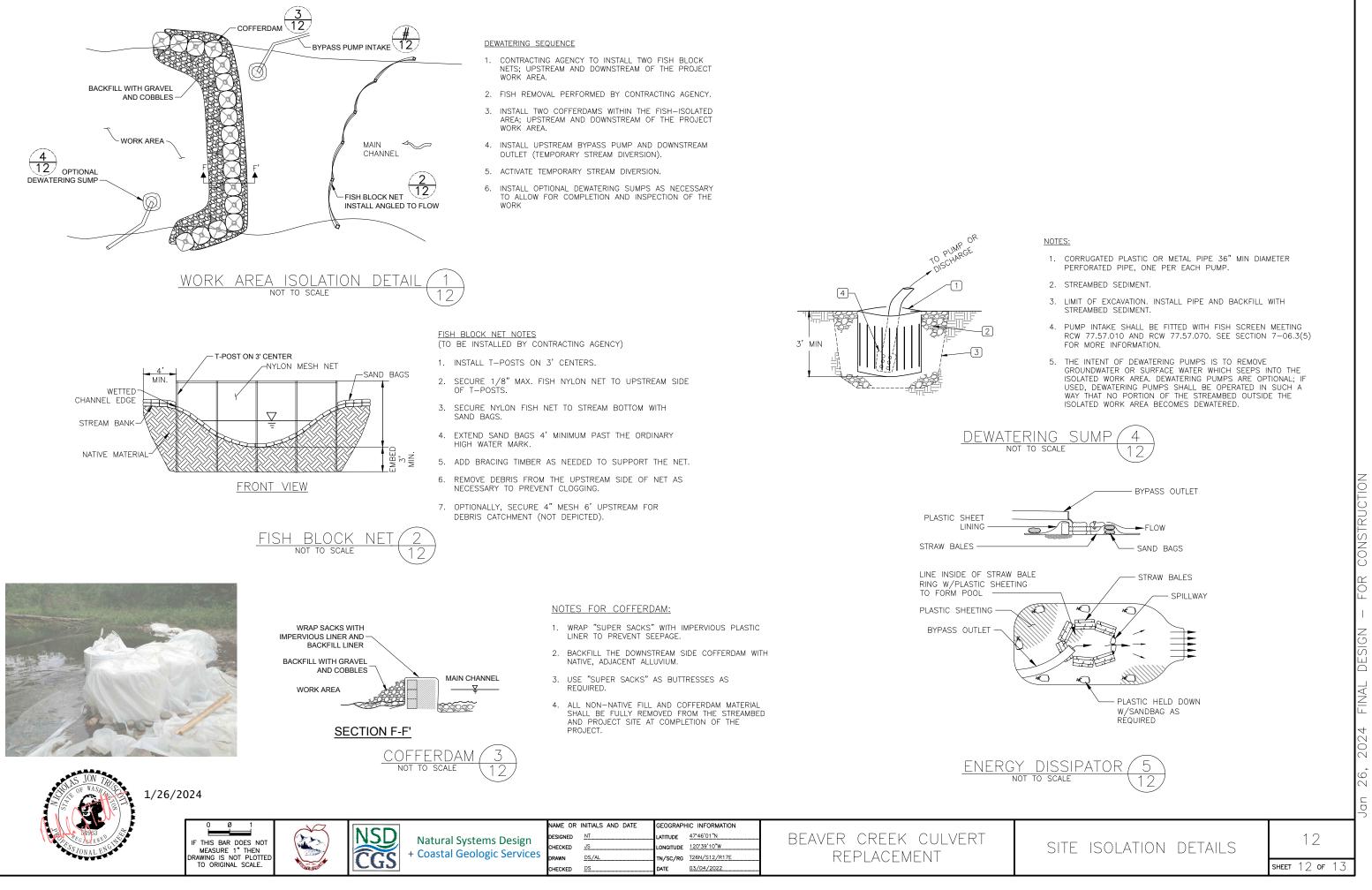
AVER CREEK CULVERT REPLACEMENT

TIMBER HANDRAIL NOTES:

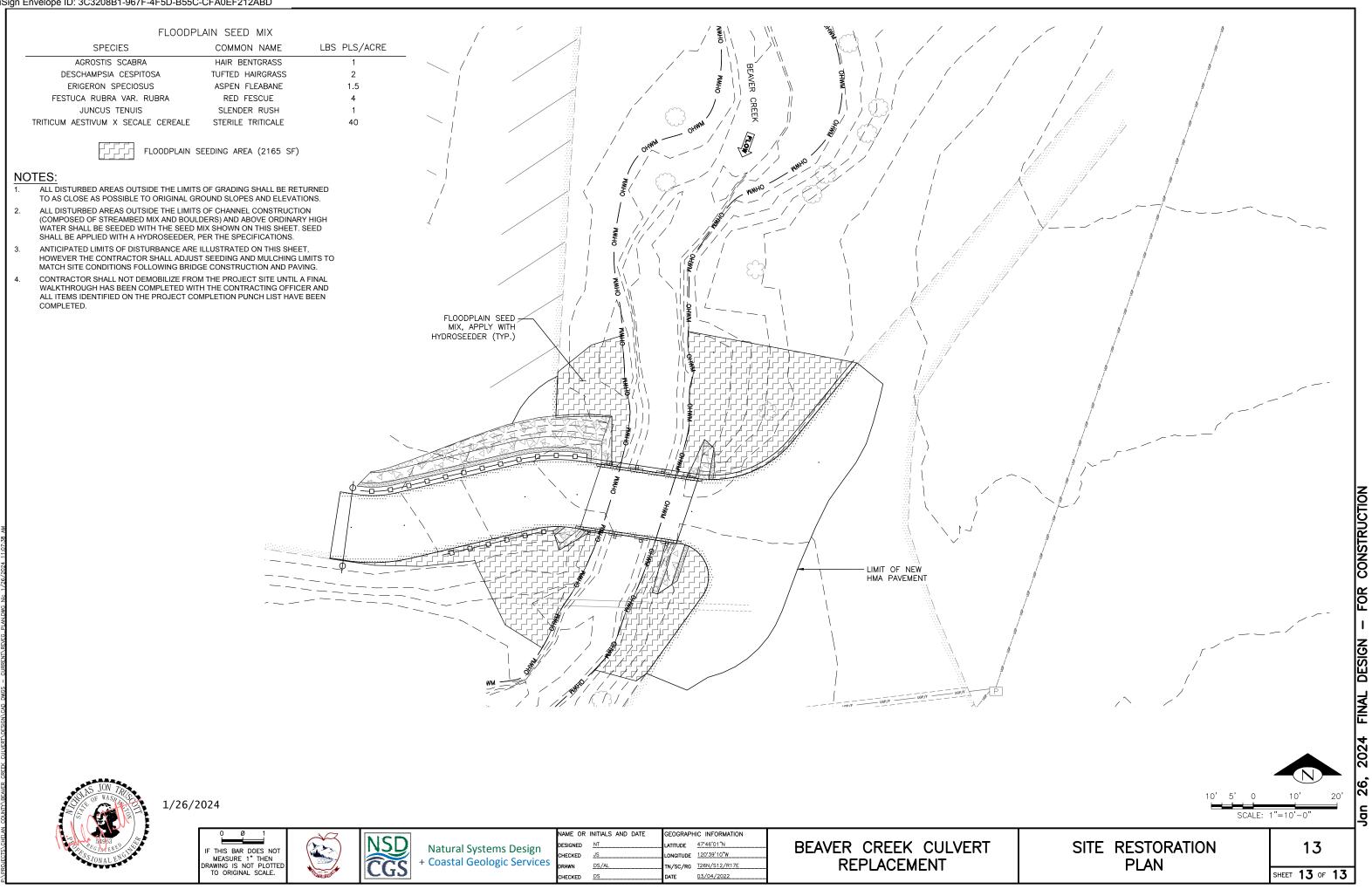
- 1. TIMBER HANDRAIL SHALL BE CONSTRUCTED FROM PRESSURE TREATED (GROUND CONTACT RATED) NOMINAL LUMBER
- 2. EMBED TIMBER POSTS A MINIMUM OF 2 FEET BELOW THE GROUND SURFACE.
- 3. PITS FOR POSTS SHALL BE NEATLY CREATED, FREE OF DEBRIS AND WATER, AND SHALL MEET THE MINIMUM DIMENSIONS SHOWN ON THIS SHEET.
- 4. BACKFILL PITS FOR POSTS WITH CONCRETE (MINIMUM 3,000 PSI COMPRESSIVE STRENGTH).
- 5. ALLOW CONCRETE TO CURE A MINIMUM OF 24 HOURS PRIOR TO ATTACHING RAILS.
- CONNECT RAILS TO POSTS WITH GALVANIZED FACE MOUNTED JOIST HANGERS AND MANUFACTURER 6. RECOMMENDED NAILS OR SCREWS.
- 7. ALL POSTS AND RAILS SHALL BE SIMILAR IN APPEARANCE.



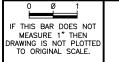
SHEET 11 OF 13



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| | NAME OR | INITIALS AND DATE | GEOGRAPH | IC INFORMATION |
|----|----------|-------------------|-----------|----------------|
| | DESIGNED | NT | LATITUDE | 47*46'01"N |
| es | CHECKED | JS | LONGITUDE | 120'39'10"W |
| | DRAWN | DS/AL | TN/SC/RG | T26N/S12/R17E |
| | CHECKED | DS | DATE | 03/04/2022 |
| | ONLONED | | Drife | |