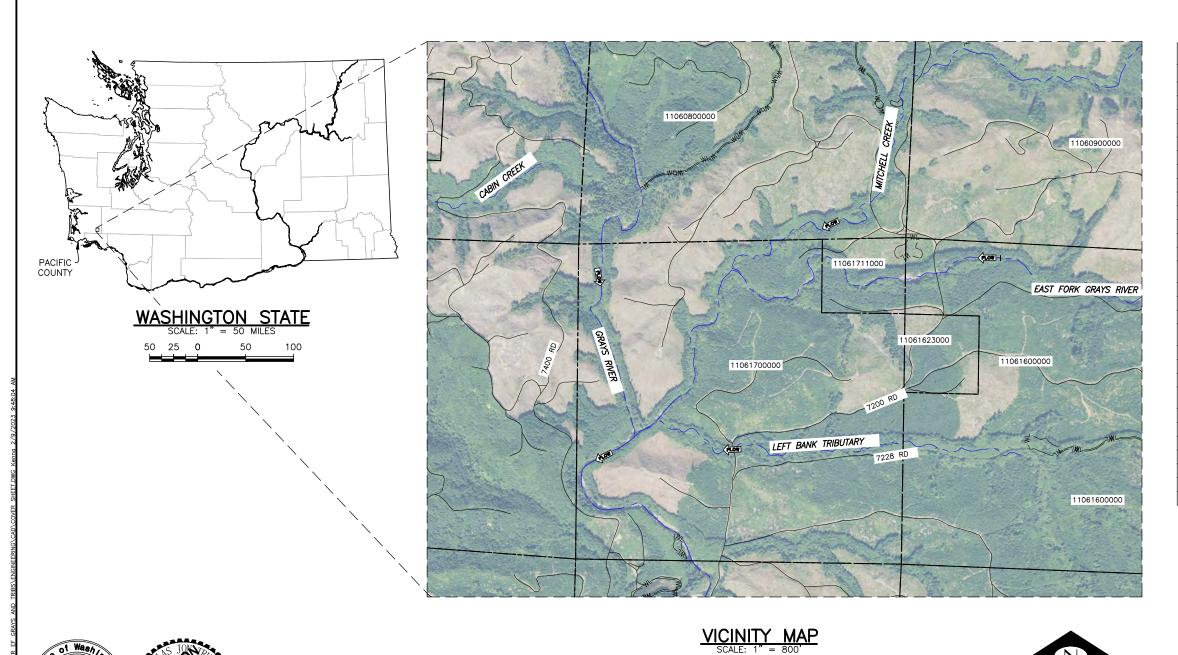
LOWER EAST FORK GRAYS RIVER, MITCHELL CREEK, AND LEFT BANK TRIBUTARY RESTORATION

COWLITZ TRIBE



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| 4 | EXISTING CONDITIONS OVERVIEW |
| 5 | PROPOSED CONDITIONS OVERVIEW |
| 6 | TESC ACCESS STAGING |
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CONTACT INFORMATION

WNER: COWLITZ INDIAN TRIBE

ADMINISTRATIVE OFFICE 1055 9TH AVE, STE B LONGVIEW, WA 98632 (360) 577-8140

ENGINEER: NATURAL SYSTEMS DESIGN, INC

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



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F THIS BAR DOES NOT
MEASURE 17 THEN
RAWING IS NOT PLOTTED
TO ORIGINAL SCALE.





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|----------|----------|-------------------|-----------|---------------|
| | NAME OR | INITIALS AND DATE | GEOGRAPH | IC INFORMATIO |
| 1 | DESIGNED | ME, TA, NT | LATITUDE | 46*26'29"N |
| | CHECKED | LE | LONGITUDE | 123°26'18"W |
| ! | DRAWN | KP, MP | TN/SC/RG | T11N/S6/R6W |
| | CHECKED | NT | DATE | 2/9/2023 |
| | | | | |

LOWER EAST FORK GRAYS RIVER, MITCHELL CREEK, AND LEFT BANK TRIBUTARY RESTORATION

COVER SHEET

1

SHEET 1 OF 29

09, 2023 DRAFT FINAL DESIGN

GENERAL NOTES

- 1. THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE COWLITZ TRIBE, HERFAFTER REFERRED TO AS "OWNER" AND THEIR AUTHORIZED AGENTS.
- 2. NATURAL SYSTEMS DESIGN HEREAFTER REFERRED TO AS "ENGINEER" IS RESPONSIBLE FOR THE PREPARATION OF THESE ORIGINAL 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.
- 3. MINOR MODIFICATIONS ARE EXPECTED TO SUIT JOB SITE DIMENSIONS OR CONDITIONS. SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK. THE OWNER, ENGINEER AND APPROPRIATE REGULATORY AGENCIES SHALL BE NOTIFIED OF ANY OWNER-AUTHORIZED CHANGE RESULTING IN MORE THAN A 10% DESIGN CHANGE OF PROPOSED FOOTPRINT OR THAT SIGNIFICANTLY AFFECTS THE INTENDED BENEFIT OR FUNCTION OF A PROJECT ELEMENT.
- 4. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY.

PERMIT NOTES

- 1. 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. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE COPIES OF ALL PERMITS ON THE JOB SITE, UNDERSTAND AND COMPLY WITH ALL PERMIT CONDITIONS.
- 3. 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 OWNER SHALL BE NOTIFIED IMMEDIATELY. CONTRACTÓR SHALL MAINTAIN SPILL KITS ONSITE, INCLUDING, BUT NOT LIMITED TO ONE AT EACH TEMPORARY STAGING AREA.
- 4. IF, DURING CONSTRUCTION, ARCHAEOLOGICAL REMAINS ARE ENCOUNTERED, CONSTRUCTION IN THE VICINITY SHALL BE HALTED, AND THE STATE OFFICE OF HISTORIC PRESERVATION 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
- 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 TO OWNER A SET OF PLANS, MARKED UP TO THE SATISFACTION OF THE OWNER WITH THE APPROVAL OF THE ONSITE ENGINEER, REFLECTING THE AS-CONSTRUCTED MODIFICATIONS.
- 3. THE BASIS FOR SURVEY DATA IS THE 2018-19 OLYMPIC PENINSULA LIDAR DATASET, PROVIDED BY WASHINGTON DEPARTMENT OF NATURAL RESOURCES. PROJECTION: WASHINGTON STATE PLANE SOUTH; HORIZONTAL DATUM: NAD83 (CORS96), LABELED HARN; VERTICAL DATUM: NAVD88 (GEOIDO3); UNITS: US SURVEY FEET.

CONSTRUCTION NOTES

- 1. CONSTRUCTION HOURS SHALL BE WEEKDAYS BETWEEN 7:00 A.M. AND 6:30 P.M. UNLESS PRIOR APPROVAL IS RECEIVED FROM THE OWNER.
- 2. THE CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, ROADWAYS, DRAINAGE WAYS, BRIDGES, CULVERTS, AND VEGETATION UNLESS SUCH ITEMS ARE TO BE DISTURBED, REMOVED OR REPLACED AS INDICATED IN THE CONTRACT DOCUMENTS.
- 3. THE CONTRACTOR SHALL KEEP THE JOB SITE CLEAN AND HAZARD FREE. UPON COMPLETION OF WORK, CONTRACTOR SHALL REMOVE ALL MATERIAL AND EQUIPMENT NOT SPECIFIED AS
- 4. ACTIVITIES SHALL BE IMPLEMENTED TO AVOID AND MINIMIZE ADVERSE IMPACTS TO WATERS OF THE UNITED STATES TO THE MAXIMUM EXTENT PRACTICABLE, INCLUDE ACTIONS THAT MINIMIZE THE NUMBER AND EXTENT OF IN-WATER WORK AND EQUIPMENT CROSSINGS OF WETTED





| NAME OR | initials and | DATE | GEOGRAPH | IC INFORMATION |
|----------|--------------|------|-----------|----------------|
| DESIGNED | ME, TA, NT | | LATITUDE | 46*26'29"N |
| CHECKED | LE | | LONGITUDE | 123'26'18"W |
| DRAWN | KP, MP | | TN/SC/RG | T11N/S6/R6W |
| CHECKED | NT | | DATE | 2/9/2023 |

LOWER EAST FORK GRAYS RIVER, MITCHELL CREEK, AND LEFT BANK TRIBUTARY RESTORATION

NOTES

SHEET 2 OF 29

2023 DRAFT FINAL DESIGN 60

ep

(TITLE)

- DETAIL REFERENCE NUMBER

SPECIFIES THAT DETAIL IS UNIFORMLY TYPICAL THROUGHOUT PROJECT EXCEPT WHERE OTHERWISE NOTED

SHEET FROM WHICH DETAIL WAS TAKEN

TEMPORARY EROSION CONTROL LEGEND

TEMPORARY STAGING AREA EXISTING ACCESS ROAD (GRAVEL) EXISTING DECOMMISSIONED ROAD (7228) FOR ACCESS

TEMPORARY OFF-ROAD ACCESS ROUTE

TEMPORARY ACCESS CROSSING

RESTORATION LEGEND

STAGING AREA RESTORATION

ACCESS ROUTE RESTORATION

PROPOSED STRUCTURES

| | ENGINEERED LOG JAM (ELJ) | WOOD LOADING STRUCTURE (WLS) | UNANCHORED WOOD LOADING |
|-------------------|-----------------------------|---------------------------------|----------------------------|
| | TYPE 1 ELJ | TYPE 2 WLS | UNANCHORED WOOD LOADING |
| MACHINE PLACED | TYPE 2 ELJ BASE | TYPE 3 WLS | |
| | TYPE 2 ELJ FULL | TYPE 3 WLS | |
| | TYPE 3 ELJ | | |
| HELICOPTER | TYPE 2 ELJ | TYPE 2 WLS | UNANCHORED WOOD LOADING |
| PLACED | BASE | TYPE 3 WLS | WHOLE TREE WOOD LOADING |

STRUCTURE COUNT BY REACH

| | GR | OUND-CONSTRUC | TED | HELI | COPTER-CONSTRU | JCTED |
|-----------------|--------------------|---------------|----------------|--------------------|----------------|----------------|
| STRUCTURE TYPE | EAST FORK GRAYS | MITCHELL | LEFT BANK TRIB | EAST FORK GRAYS | MITCHELL | LEFT BANK TRIB |
| TYPE 1 ELJ | 7 | | | | | |
| TYPE 2 ELJ BASE | 9 | | 3 | 3 | | |
| TYPE 2 ELJ FULL | 13 | | 3 | | | |
| TYPE 3 ELJ | | | 3 | | | |
| TYPE 2 WLS | | 18 | 4 | | | 21 |
| TYPE 3 WLS | | 11 | 3 | | | 23 |
| WHOLE TREE WLS | | | | 8 | | |

GENERAL LEGEND

— wz —— wz — WORK ZONE

--- EXISTING ROAD

EXISTING NWI WETLAND (NO WL WL WL NWI WETLAND MAPPED WITHIN PROJECT AREA)

STREAM CENTER LINE, OVERVIEW SHEET

CONTROL POINT

RIVER MILE

MACHINE EXCLUSION ZONE

- - - -5- - - EXISTING MAJOR CONTOUR

- - - -1- - - EXISTING MINOR CONTOUR

- OHWM ---- EXISTING OHWM



| NAME OR I | INITIALS AND | DATE | GEOGRAPH | IC INFORMATION |
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| DRAWN | KP, MP | | TN/SC/RG | T11N/S6/R6W |
| CHECKED | NT | | DATE | 2/9/2023 |
| | | | 1 | |

LOWER EAST FORK GRAYS RIVER, MITCHELL CREEK, AND LEFT BANK TRIBUTARY RESTORATION

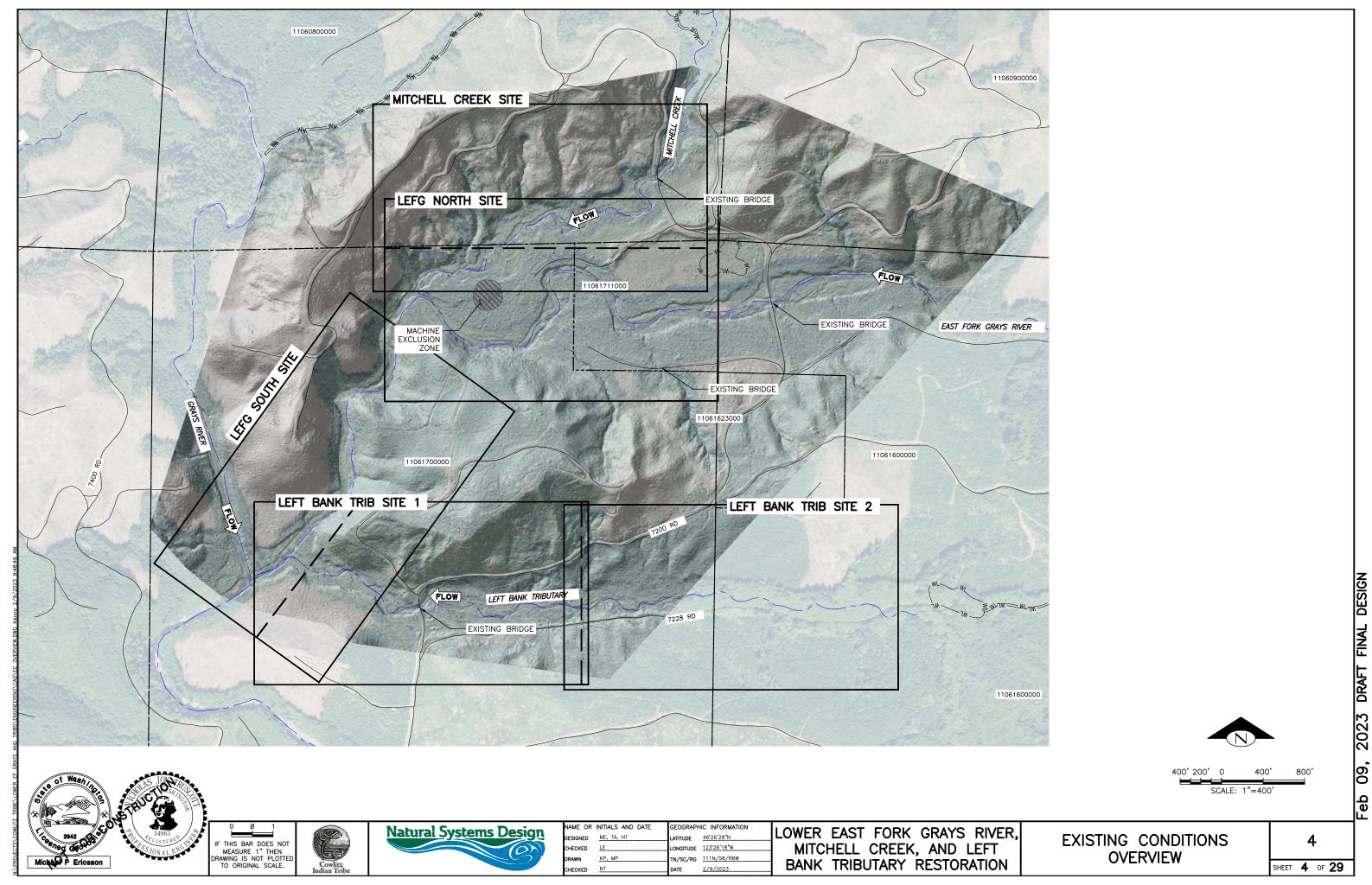
LEGEND

3

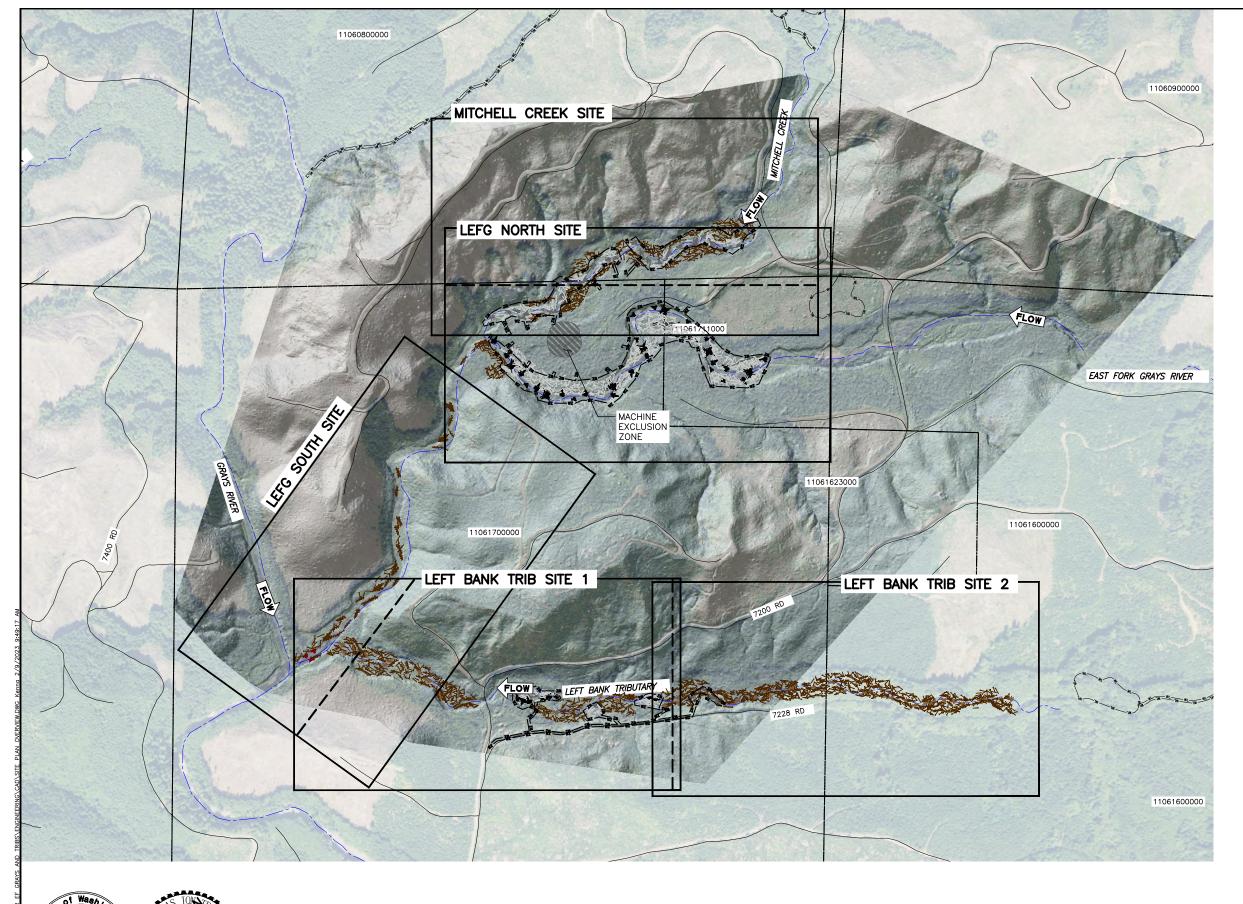
SHEET **3** OF **29**

09, 2023 DRAFT FINAL DESIGN

Feb







<u>NOTES</u>

- STAGING FOR HELICOPTER OPERATIONS WILL BE AT STORAGE YARD OFF OF 7200 ROAD 0.75-MI SOUTH OF LEFT BANK TRIBUTARY BRIDGE.
- 2. ALL PROJECT SITES AND ACCESS ARE OWNED BY RAYONIER, INC.
- 3. MITCHELL CREEK LOGS ARE AVAILABLE AT PRIOR TIMBER HARVEST AREAS, <1 MILE FROM SITE, FOR CONTRACTOR DELIVERY TO DESIGNATED STAGING AREAS AND/OR SPECIFIED ONSITE HABITAT STRUCTURE LOCATIONS.
- 4. LEFT BANK TRIB LOGS ARE AVAILABLE AT PRIOR TIMBER HARVEST AREA, APPROXIMATELY 1 MILE FROM SITE, FOR CONTRACTOR DELIVERY TO DESIGNATED STAGING AREA AND/OR SPECIFIED ONSITE HABITAT STRUCTURE LOCATIONS.
- EAST FORK GRAYS RIVER LOGS ARE AVAILABLE AT PRIOR TIMBER HARVEST AREAS, <1 MILE FROM SITE, FOR CONTRACTOR DELIVERY TO DESIGNATED STAGING AREA AND/OR SPECIFIED ONSITE HABITAT STRUCTURE LOCATIONS.
- 6. ALL TREES TO BE USED FOR CONSTRUCTION WILL BE FURNISHED BY THE TRIBE AND ARE STAGED ADJACENT TO THE 7200 AND SPUR ROADS.



0' 200' 0 400' 8 SCALE: 1"=400'

0 Ø 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT PLOTTED TO ORIGINAL SCALE.

TO ORIGINAL SCALE.





| NAME OR | INITIALS AND | DATE | GEOGRAPH | IC INFORMATION |
|----------|--------------|------|-----------|----------------|
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| DRAWN | KP, MP | | TN/SC/RG | T11N/S6/R6W |
| CHECKED | NT | | DATE | 2/9/2023 |
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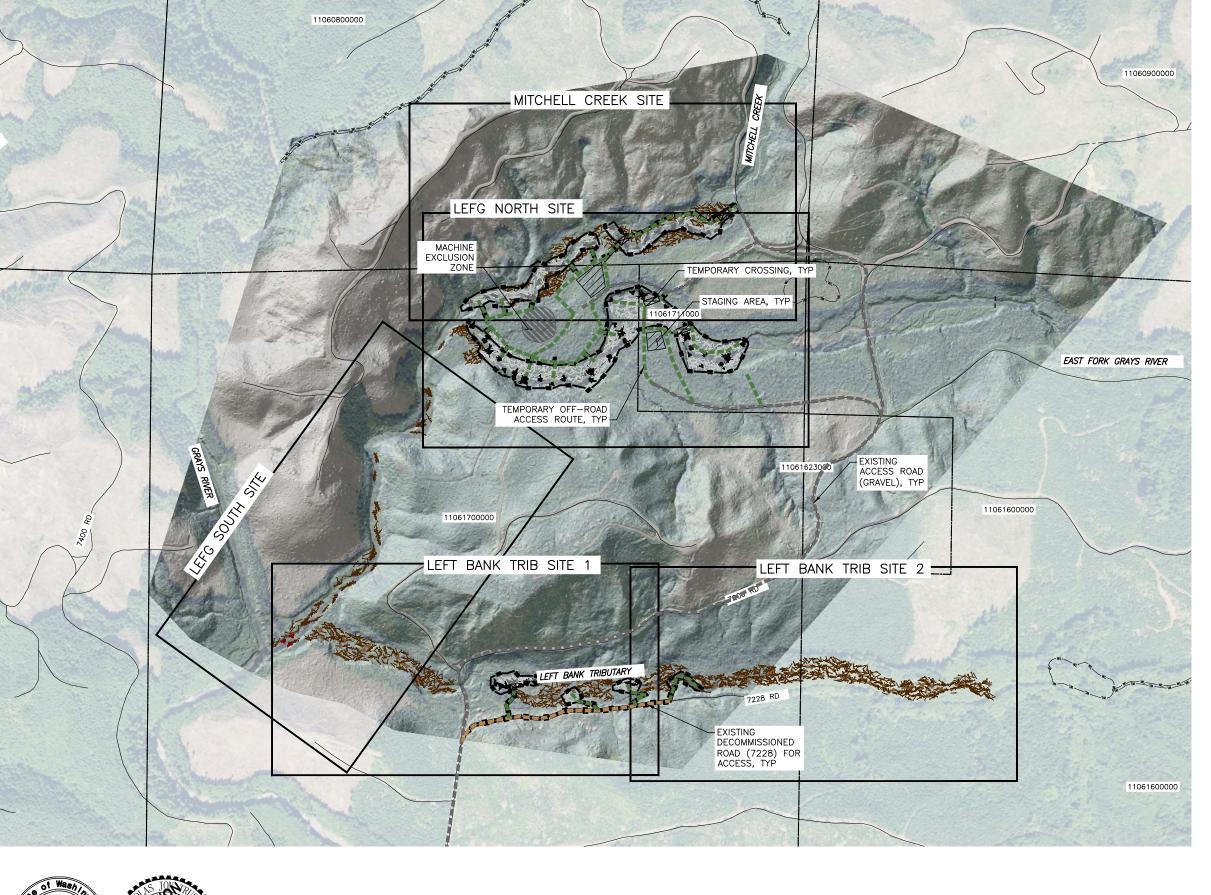
LOWER EAST FORK GRAYS RIVER, MITCHELL CREEK, AND LEFT BANK TRIBUTARY RESTORATION

PROPOSED CONDITIONS OVERVIEW

5

SHEET **5** OF **29**

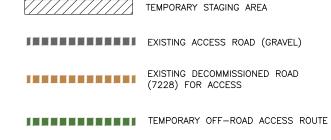




<u>NOTES</u>

- VEGETATION CLEARED DURING CONSTRUCTION FOR TEMPORARY ACCESS SHALL BE SALVAGED, STOCKPILED, AND USED FOR RESTORATION OF TEMPORARY ACCESS ROUTES.
 ALL MACHINE BUILT STRUCTURES SHALL BE
- ALL MACHINE BUILT STRUCTURES SHALL BE CONSTRUCTED FROM THE BANK OR WITH THE USE OF TEMPORARY LOG CROSSINGS.
 - 3. ACCESS ROUTES SHOWN ARE APPROXIMATE AND ARE TO BE ADJUSTED IN THE FIELD BASED ON SITE CONDITIONS TO MINIMIZE TEMPORARY IMPACTS.
 - 5. CONTRACTOR SHALL TEMPORARILY
 RE-COMMISSION ROAD 7228 TO THE EXTENT
 NECESSARY TO SAFELY TRANSPORT MATERIALS
 AND EQUIPMENT TO STRUCTURE LOCATIONS;
 DECOMMISSION ROUTES AS PER PLANS,
 PERMITS AND OWNER DIRECTION AFTER
 CONSTRUCTION.
- 6. RESTORE ALL TEMPORARILY DISTURBED AREAS AND ESTABLISHED FOREST ROADS AS REQUIRED IN THE PLANS. SEE SHEET 29.

TEMPORARY ACCESS PLAN LEGEND



EXISTING ROADS NOT USED FOR CONSTRUCTION

TEMPORARY ACCESS CROSSING



00' 200' 0 400' SCALE: 1"=400'

Michalp P Ericason

Michalp P Ericason

Cowlitz Indian Tribe



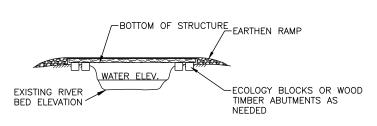
| NAME OR | INITIALS AND DATE | GEOGRAPH | IC INFORMATION |
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| DESIGNED | ME, TA, NT | LATITUDE | 46*26'29"N |
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| CHECKED | NT | DATE | 2/9/2023 |
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LOWER EAST FORK GRAYS RIVER, MITCHELL CREEK, AND LEFT BANK TRIBUTARY RESTORATION

TESC ACCESS STAGING

SHEET **6** OF **29**

6

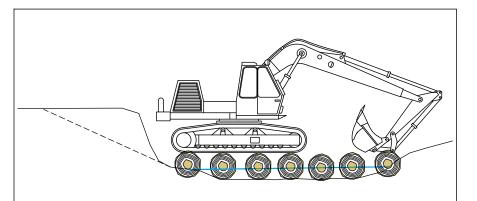


NOTES

- 1. CONTRACTOR TO DESIGN TEMPORARY CROSSING.
- 2. TEMPORARY CROSSING LOCATIONS SHALL BE APPROVED BY CIT PROJECT MANAGER/ENGINEER. TEMPORARY CROSSINGS SHALL MINIMIZE CONSTRUCTION IMPACTS TO ACTIVELY FLOWING CHANNEL.
- 3. END OF CROSSING SHALL BEAR ON HIGH BANKS WITH SUFFICIENT BEARING CAPACITY TO PREVENT SLOUGHING OR COLLAPSE OF SIDE CHANNEL BANKS.
- 4. CONCRETE ECOLOGY BLOCKS OR WOOD ABUTMENTS MAY BE USED TO SUPPORT ENDS OF TEMPORARY CROSSING AS NEEDED.
- 5. CROSSINGS MAY BE CONSTRUCTED FROM LOGS, RAIL CAR BEDS OR APPROVED EQUAL AND DECKED WITH STEEL SHEET, WOOD LAGGING OR APPROVED EQUAL.

TEMPORARY ACCESS CROSSING





 WHEN FLOWING WATER IS ENCOUNTERED THAT MUST BE CROSSED, RATHER THAN WORKING FROM EITHER SIDE OF THE CHANNEL, A LOG CROSSING SHALL BE USED. THE ENGINEER OR CHANNEL, A LOG CROSSING SHALL BE USED. THE ENGINEER OR CIT PROJECT MANAGER SHALL APPROVE ALL CROSSING LOCATIONS. THE TEMPORARY CROSSING SHALL BE REMOVED AND AREAS RESTORED UPON COMPLETION OF INSTREAM WORK.

DEPENDING ON CONTRACTOR MACHINERY AND CROSSING SITE CONDITIONS, CONTRACTOR MAY NEED TO PROVIDE STEEL PLATES, WHE ROPE OR EQUIVALENTS; WHOLE TREES FOR CONTRACTOR AND ANALYSIS TO CONTRACTOR (1 CREATING LOG CROSSINGS ARE AVAILABLE TO CONTRACTOR <1

TEMPORARY LOG CROSSING





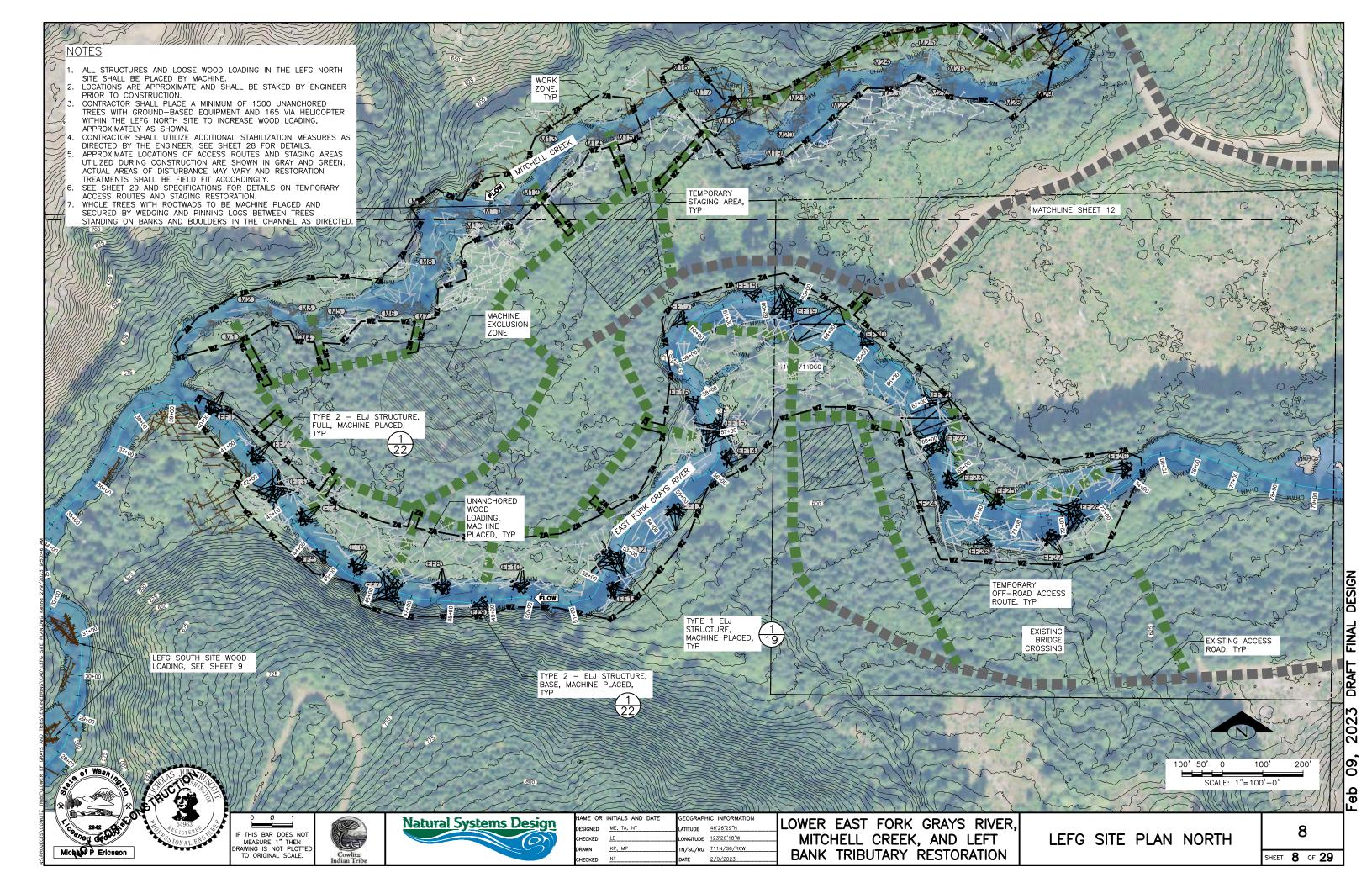
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|-----------|--------------|------|-----------|-----------------|
| DESIGNED | ME, TA, NT | | LATITUDE | 46*26'29"N |
| CHECKED | LE | | LONGITUDE | 123°26'18"W |
| DRAWN | KP, MP | | TN/SC/RG | T11N/S6/R6W |
| CHECKED | NT | | DATE | 2/9/2023 |
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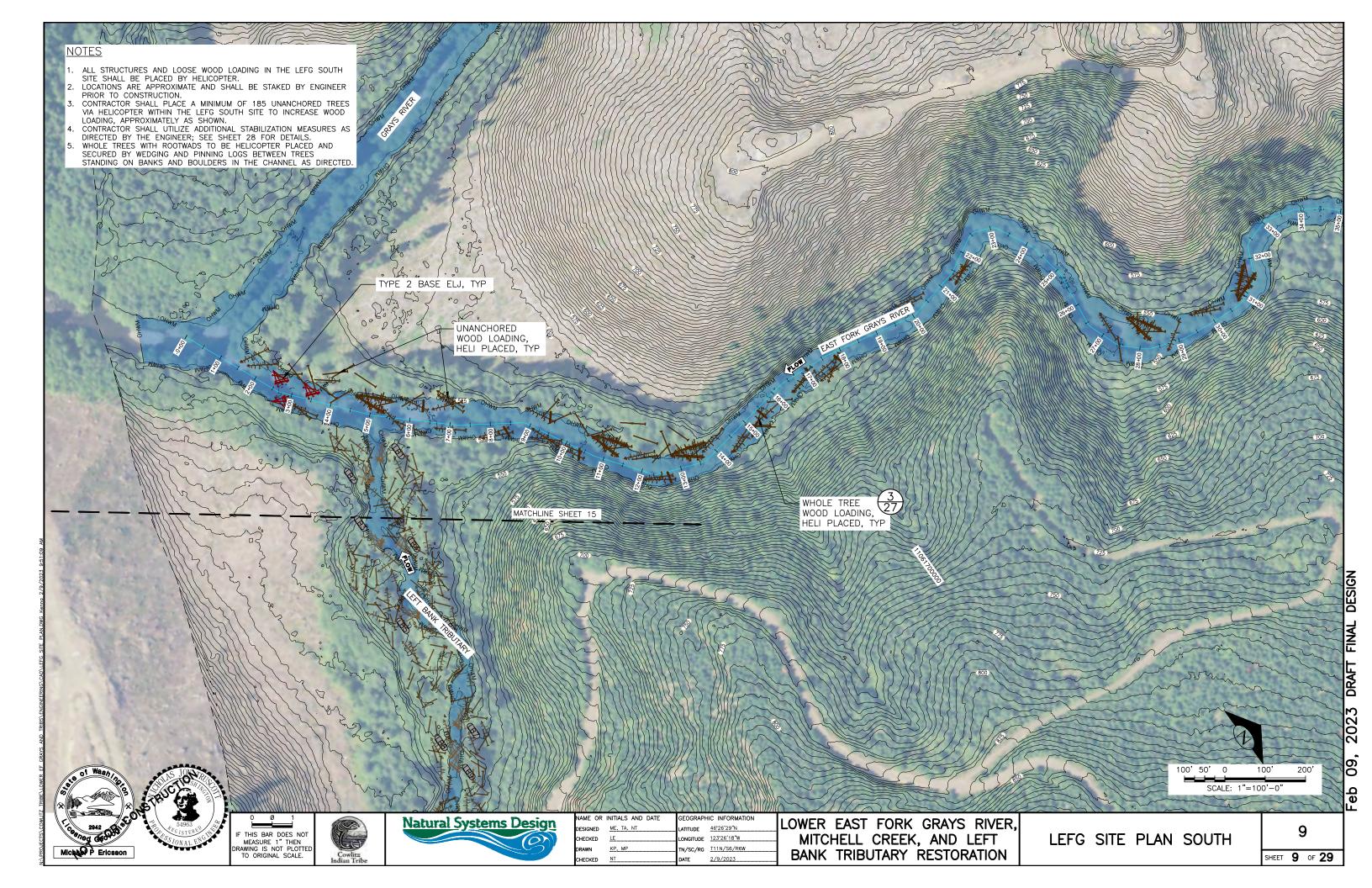
LOWER EAST FORK GRAYS RIVER, MITCHELL CREEK, AND LEFT BANK TRIBUTARY RESTORATION

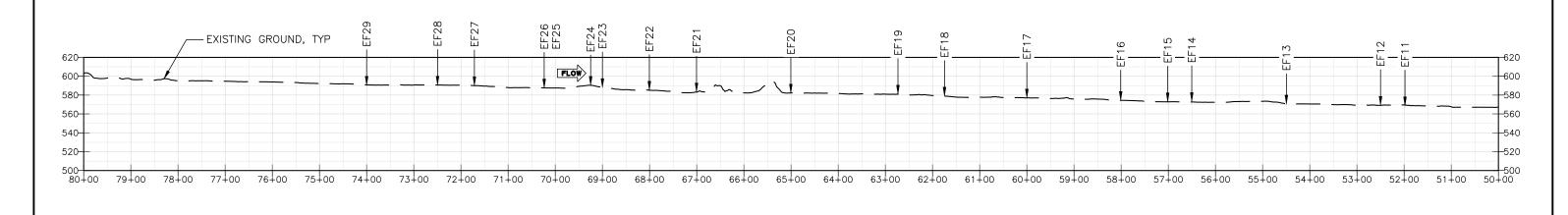
TESC DETAILS

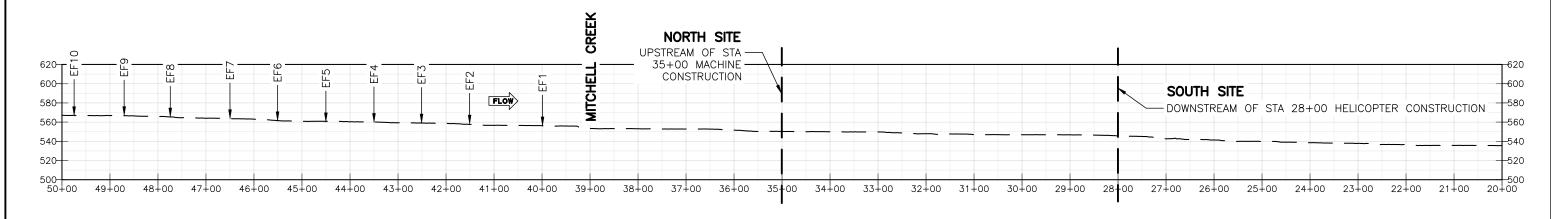
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SHEET **7** OF **29**







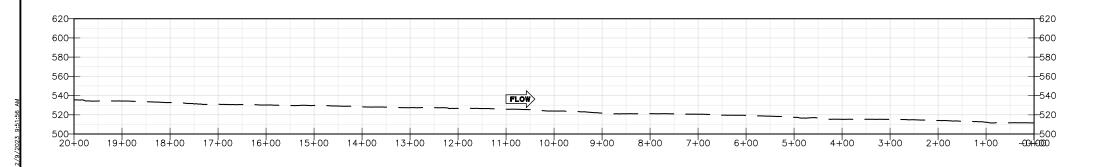


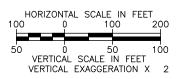
GEOGRAPHIC INFORMATION

TITUDE 46*26'29"N

ONGITUDE 123*26'18"W N/SC/RG T11N/S6/R6W

2/9/2023





LOWER EAST FORK GRAYS RIVER PROFILE





| ms Design | NAME | OR | INITIALS | AND | DATE |
|------------|--------|----|----------|-----|------|
| ins Design | DESIGN | ED | ME, TA, | NT | |
| | CHECK | ED | LE | | |
| | DRAWN | | KP, MP | | |
| | CHECK | ED | NT | | |
| | | | | | |

LOWER EAST FORK GRAYS RIVER, MITCHELL CREEK, AND LEFT BANK TRIBUTARY RESTORATION

LEFG PROFILE

10

SHEET 10 OF 29

LEFG RIVER CENTERLINE CONTROL POINTS

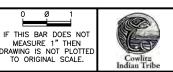
| Creek Ce | enter Alignment F | Point Table |
|----------|-------------------|-------------|
| Station | Northing | Easting |
| 0+00 | 414,943.4 | 894,165.8 |
| 1+00 | 414,983.1 | 894,257.6 |
| 2+00 | 415,022.9 | 894,349.3 |
| 3+00 | 415,070.8 | 894,436. |
| 4+00 | 415,135.3 | 894,512.6 |
| 5+00 | 415,199.7 | 894,589.0 |
| 6+00 | 415,273.0 | 894,657.0 |
| 7+00 | 415,346.8 | 894,724.5 |
| 8+00 | 415,428.2 | 894,782.2 |
| 9+00 | 415,506.2 | 894,842.9 |
| 10+00 | 415,554.0 | 894,930.7 |
| 11+00 | 415,604.8 | 895,016.6 |
| 12+00 | 415,665.1 | 895,096.4 |
| 23+00 | 416,716.5 | 895,114.6 |
| 22+00 | 416,624.6 | 895,122.2 |
| 17+00 | 416,139.5 | 895,129. |
| 16+00 | 416,040.0 | 895,129.9 |
| 18+00 | 416,238.6 | 895,140.4 |
| 15+00 | 415,941.5 | 895,147.0 |
| 13+00 | 415,747.2 | 895,147.7 |
| 21+00 | 416,532.6 | 895,158.9 |
| 19+00 | 416,336.7 | 895,160.0 |
| 14+00 | 415,842.9 | 895,164.0 |
| 20+00 | 416,434.8 | 895,179.3 |
| 24+00 | 416,767.0 | 895,199.4 |
| 25+00 | 416,788.7 | 895,296.4 |
| 26+00 | 416,780.2 | 895,395.7 |
| 27+00 | 416,787.5 | 895,492.9 |

| Station | Northing | Easting |
|---------|-----------|-----------|
| | | - |
| 33+00 | 417,272.4 | 895,500.3 |
| 34+00 | 417,367.5 | 895,527.3 |
| 32+00 | 417,195.2 | 895,552.8 |
| 28+00 | 416,843.3 | 895,572.9 |
| 35+00 | 417,445.6 | 895,588.6 |
| 29+00 | 416,933.2 | 895,613.5 |
| 31+00 | 417,130.2 | 895,621.1 |
| 30+00 | 417,032.0 | 895,627.5 |
| 36+00 | 417,514.4 | 895,661.1 |
| 37+00 | 417,600.1 | 895,712.8 |
| 38+00 | 417,686.7 | 895,760.0 |
| 39+00 | 417,711.5 | 895,855.6 |
| 40+00 | 417,688.1 | 895,949.7 |
| 41+00 | 417,617.4 | 896,018.3 |
| 42+00 | 417,534.4 | 896,074.2 |
| 43+00 | 417,452.0 | 896,130.9 |
| 44+00 | 417,371.2 | 896,189.5 |
| 45+00 | 417,305.7 | 896,265.1 |
| 46+00 | 417,260.8 | 896,352.6 |
| 47+00 | 417,228.6 | 896,447.3 |
| 48+00 | 417,216.9 | 896,546.3 |
| 49+00 | 417,219.6 | 896,645.9 |
| 50+00 | 417,225.4 | 896,745.2 |
| 51+00 | 417,212.8 | 896,842.7 |
| 52+00 | 417,266.4 | 896,917.4 |
| 53+00 | 417,355.6 | 896,962.5 |
| 54+00 | 417,429.7 | 897,026.6 |
| 55+00 | 417,500.0 | 897,097.5 |

| Station | Northing | Easting |
|---------|-----------|----------|
| 59+00 | 417,809.6 | 897,110. |
| 60+00 | 417,902.3 | 897,132. |
| 58+00 | 417,722.4 | 897,159. |
| 56+00 | 417,539.8 | 897,188. |
| 57+00 | 417,633.0 | 897,203. |
| 61+00 | 417,948.5 | 897,220. |
| 62+00 | 417,968.9 | 897,317. |
| 63+00 | 417,955.2 | 897,412. |
| 64+00 | 417,909.5 | 897,501. |
| 65+00 | 417,851.4 | 897,582 |
| 66+00 | 417,790.0 | 897,661 |
| 67+00 | 417,721.1 | 897,733. |
| 68+00 | 417,625.1 | 897,761. |
| 69+00 | 417,530.2 | 897,792. |
| 70+00 | 417,465.3 | 897,864. |
| 71+00 | 417,429.5 | 897,957 |
| 72+00 | 417,434.8 | 898,056 |
| 73+00 | 417,462.8 | 898,150 |
| 74+00 | 417,518.8 | 898,232 |
| 75+00 | 417,582.1 | 898,304. |
| 76+00 | 417,578.8 | 898,400 |
| 77+00 | 417,546.3 | 898,495 |
| 78+00 | 417,517.6 | 898,590 |
| 79+00 | 417,497.6 | 898,688 |
| 80+00 | 417,491.5 | 898,788. |

| LOWER EA | AST FORK GRAY | S SITE STF | RUCTURES |
|-----------|----------------|----------------------------|----------------|
| STRUCTURE | CTDUCTURE TYRE | ALIGNMENT | INSTALL |
| I.D. | STRUCTURE TYPE | STATION | METHOD |
| EF1 | 2 — ELJ— FULL | 40+00 | MACHINE/GROUND |
| EF2 | 2 — ELJ— FULL | 41+50 | MACHINE/GROUND |
| EF3 | 1 — ELJ | 42+50 | MACHINE/GROUND |
| EF4 | 2 — ELJ— FULL | 43+50 | MACHINE/GROUND |
| EF5 | 2 -ELJ - BASE | 44+50 | MACHINE/GROUND |
| EF6 | 2 — ELJ— FULL | 45+50 | MACHINE/GROUND |
| EF7 | 1 — ELJ | 46+50 | MACHINE/GROUND |
| EF8 | 2 — ELJ— FULL | 47+75 | MACHINE/GROUND |
| EF9 | 2 -ELJ - BASE | 48+75 | MACHINE/GROUND |
| EF10 | 2 — ELJ— FULL | 49+75 | MACHINE/GROUND |
| EF11 | 2 — ELJ— FULL | 52+00 | MACHINE/GROUND |
| EF12 | 1 — ELJ | 52+50 | MACHINE/GROUND |
| EF13 | 2 — ELJ— FULL | 54+50 | MACHINE/GROUND |
| EF14 | 2 — ELJ— FULL | 56+50 | MACHINE/GROUND |
| EF15 | 1 — ELJ | 57+00 | MACHINE/GROUND |
| EF16 | 2 -ELJ - BASE | 58+00 | MACHINE/GROUND |
| EF17 | 2 -ELJ - BASE | 60+00 | MACHINE/GROUND |
| EF18 | 2 -ELJ - BASE | 61+75 | MACHINE/GROUND |
| EF19 | 1 — ELJ | 62+75 | MACHINE/GROUND |
| EF20 | 2 -ELJ - BASE | 65+00 | MACHINE/GROUND |
| EF21 | 2 -ELJ - BASE | 67+00 | MACHINE/GROUND |
| EF22 | 1 — ELJ | 68+00 | MACHINE/GROUND |
| EF23 | 2 — ELJ— FULL | 69+00 | MACHINE/GROUND |
| EF24 | 2 -ELJ - BASE | 69+25 | MACHINE/GROUND |
| EF25 | 2 — ELJ— FULL | 70+25 | MACHINE/GROUND |
| EF26 | 2 -ELJ - BASE | 70+25 | MACHINE/GROUND |
| EF27 | 2 — ELJ— FULL | 71+75 | MACHINE/GROUND |
| EF28 | 1 — ELJ | 72+50 | MACHINE/GROUND |
| EF29 | 2 — ELJ— FULL | 74+00 | MACHINE/GROUND |
| | | TOTAL TYPE 1 ELJ | 7 |
| | | TOTAL TYPE 2 (BASE) ELJ | 9 |
| | | TOTAL TYPE 2 (FULL) ELJ | 13 |
| | | TOTAL STRUCTURE COUNT | 29 |







| NAME | OR | INITIALS | AND | DATE | GEOGRAPHIC INFORMATION | |
|---------|----|----------|-----|------|------------------------|-------------|
| DESIGNE | D | ME, TA, | NT | | LATITUDE | 46*26'29"N |
| CHECKE | D | LE | | | LONGITUDE | 123*26'18"W |
| DRAWN | | KP, MP | | | TN/SC/RG | T11N/S6/R6W |
| CHECKE | D | NT | | | DATE | 2/9/2023 |
| | | | | | | |

Feb 09, 2023 DRAFT FINAL DESIGN