

# PHASE 2 - EAST MARTIS RESTORATION PROJECT

NEVADA COUNTY, CALIFORNIA

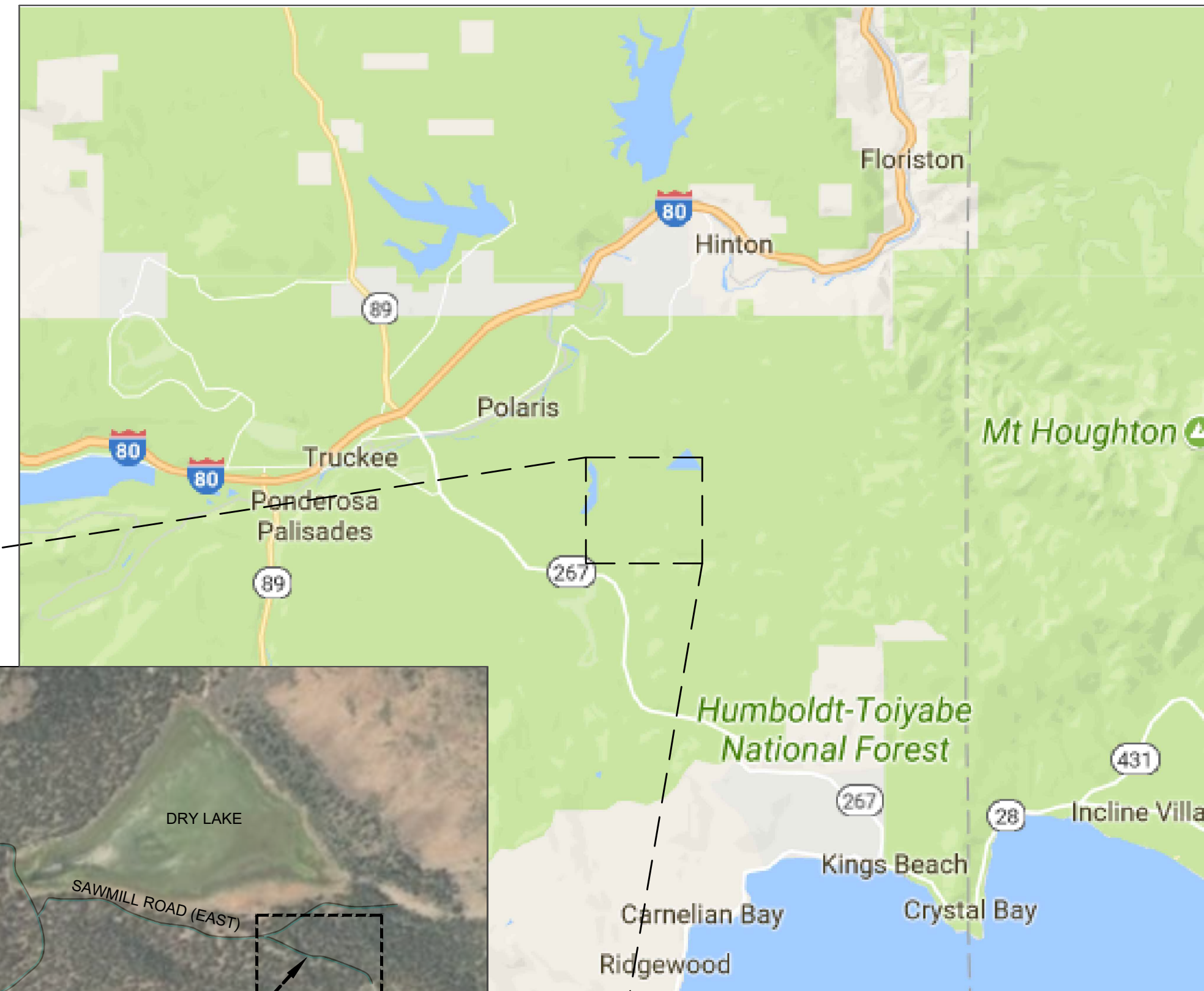
for

Truckee River Watershed Council

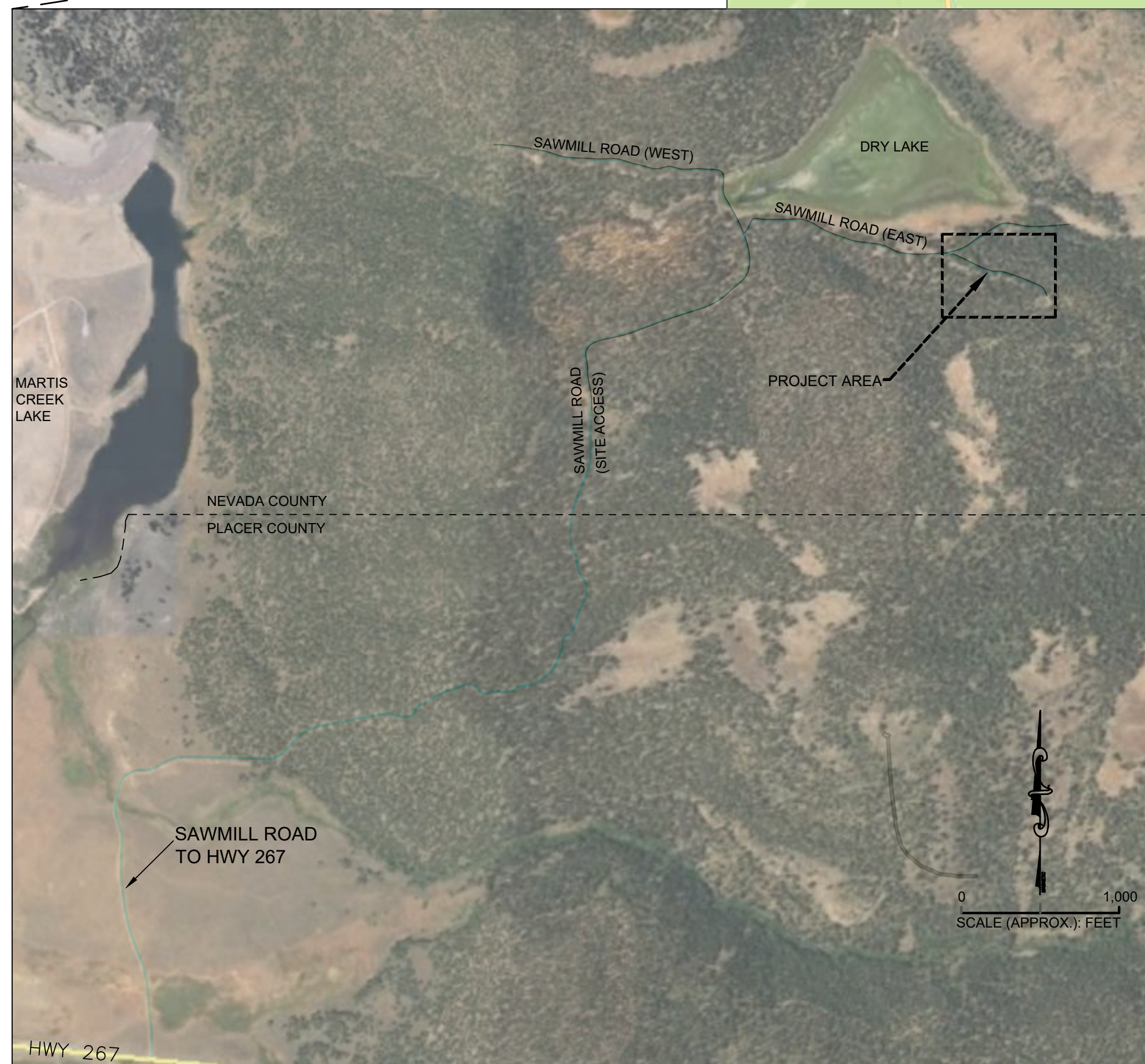
Project Partners:



VICINITY MAP



SITE MAP



**LEGEND**

- STAGING AREA
- ROBUST WATER BAR
- GRADE OUT - RESTORE TOPOGRAPHY
- ROCK STEP POOL
- BOULDER/ LOG ROAD BARRIER
- LOG WEIR
- LIMIT OF DISTURBANCE
- (E) CONTOUR (1-FOOT)
- (N) CONTOUR (1-FOOT)
- EDGE OF ROAD (APPROX.)
- EPHEMERAL DRAINAGE (APPROX.)
- RECONNECT/RESTORE DRAINAGE (FIELD DIRECT)
- BERM

**SHEET INDEX**

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**DRAWING SYMBOLS**

- SECTION NUMBER
- DRAWING NO. ON WHICH SECTION APPEARS
- DETAIL NUMBER
- DRAWING NO. ON WHICH DETAIL APPEARS
- DETAIL NUMBER

**ABBREVIATIONS**

|         |                             |
|---------|-----------------------------|
| APPROX  | APPROXIMATELY               |
| CL      | CENTERLINE                  |
| CMP     | CORRUGATED METAL PIPE       |
| EG      | EXISTING GRADE              |
| EL      | ELEVATION                   |
| (E)/(N) | EXISTING/NEW                |
| KTRT    | TRUCKEE TAHOE AIRPORT       |
| LOD     | LIMIT OF DISTURBANCE        |
| MAX/MIN | MAXIMUM/MINIMUM             |
| NTS     | NOT TO SCALE                |
| RSP     | ROCK SLOPE PROTECTION       |
| SPI     | SIERRA PACIFIC INDUSTRIES   |
| TEMP    | TEMPORARY                   |
| TYP     | TYPICAL                     |
| H:V     | HORIZONTAL:VERTICAL (SLOPE) |
| W/      | WITH                        |
| #       | NUMBER                      |
| %       | PERCENT                     |
| '       | FEET                        |
| "       | INCHES                      |
| @       | AT                          |

CONTACT THE ENGINEER FOR SYMBOLS OR ABBREVIATIONS NOT SHOWN

**GENERAL NOTES**

- 1) ALL WORK PERFORMED SHALL BE CONDUCTED UNDER THE FIELD DIRECTION OF THE TRUCKEE RIVER WATERSHED COUNCIL (TRWC) APPOINTED CONSTRUCTION MANAGER. CONTRACTOR SHALL SUBMIT A PROPOSED PROJECT WORK SCHEDULE TO THE TRWC PROJECT MANAGER AT LEAST ONE WEEK PRIOR TO PLANNED COMMENCEMENT OF WORK. WORK ORDER SHALL GENERALLY FLOW FROM HIGHER IN THE WATERSHED TO LOWER.
- 2) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE WORK PERFORMED DOES NOT RESULT IN DAMAGE TO EXISTING UTILITIES; CALL U.S.A. (UNDERGROUND SERVICE ALERT) FOR UTILITY LOCATIONS AT LEAST 48 HOURS AND BEFORE START OF WORK.: 1-800-642-2444.
- 3) CONTRACTOR SHALL COMPLY WITH ALL PERMIT CONDITIONS FOR THE PROJECT AND HAVE COPIES OF PERMITS ONSITE AT ALL TIMES.
- 4) VEHICLES AND EQUIPMENT ARE TO ACCESS THE SITE VIA SAWMILL ROAD (GATED AND LOCKED) FROM HIGHWAY 267 ONLY. ACCESS SHALL BE COORDINATED WITH THE TRWC PROJECT MANAGER OR APPOINTED CONSTRUCTION MANAGER.
- 5) CONTRACTOR'S EQUIPMENT AND EMPLOYEE VEHICLES SHALL PARK ON EXISTING ROADS OR IN DESIGNATED STAGING AREAS ONLY; ANY DISTURBANCE OF PRIVATE PROPERTY BEYOND DESIGNATED AREAS SHALL BE RESTORED BY THE CONTRACTOR AT THEIR EXPENSE.
- 6) ALL VEHICLE FUELING, MATERIALS STAGING AND STORAGE SHALL TAKE PLACE IN DESIGNATED STAGING AREAS ONLY. CONTRACTOR SHALL CLEAN UP AND PROPERLY DISPOSE OF ANY SPILLS IMMEDIATELY.
- 7) CONTRACTOR IS RESPONSIBLE FOR THE SECURITY OF ALL EQUIPMENT AND MATERIALS STAGED ONSITE.
- 8) NO TREES OR MATURE VEGETATION ARE TO BE REMOVED UNLESS NOTED IN THE PLANS OR SPECIFIED ON SITE BY THE CONSTRUCTION MANAGER.
- 9) PROJECT AREA IS PRIVATELY OWNED BY TRUCKEE TAHOE AIRPORT DISTRICT (KTRT) AND SIERRA PACIFIC INDUSTRIES (SPI) AND IS AN ACTIVE RECREATION AREA. CONTRACTOR SHALL WORK WITH THE CONSTRUCTION MANAGER TO ENSURE KTRT AND SPI OPERATIONS ARE NOT IMPACTED BY PROJECT WORK AND SHALL TAKE ADEQUATE MEASURES TO PROTECT AND KEEP THE PUBLIC OUT OF ACTIVE WORK AREAS.

**HORIZONTAL & VERTICAL CONTROLS**

VERTICAL CONTROL IS NAVD 88

HORIZONTAL CONTROL IS CALIFORNIA STATE PLANE, ZONE 2, NAD 83, FEET

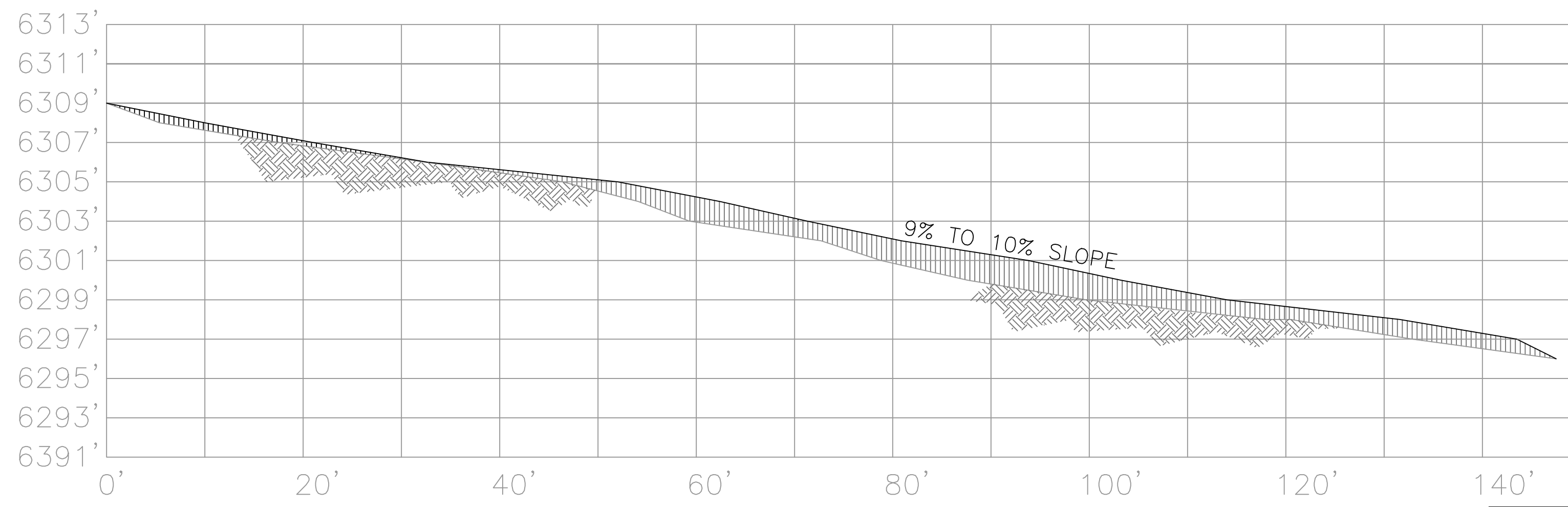
**Designed** \_\_\_\_\_ DATE  
CAROL BEAHAN, PE WILDSCAPE ENGINEERING, INC.

**Truckee River Watershed Council** \_\_\_\_\_ DATE  
LISA WALLACE, EXECUTIVE DIRECTOR

**Truckee Tahoe Airport** \_\_\_\_\_ DATE  
HARDY BULLOCK

**Sierra Pacific Industries** \_\_\_\_\_ DATE  
ERIC SWEET

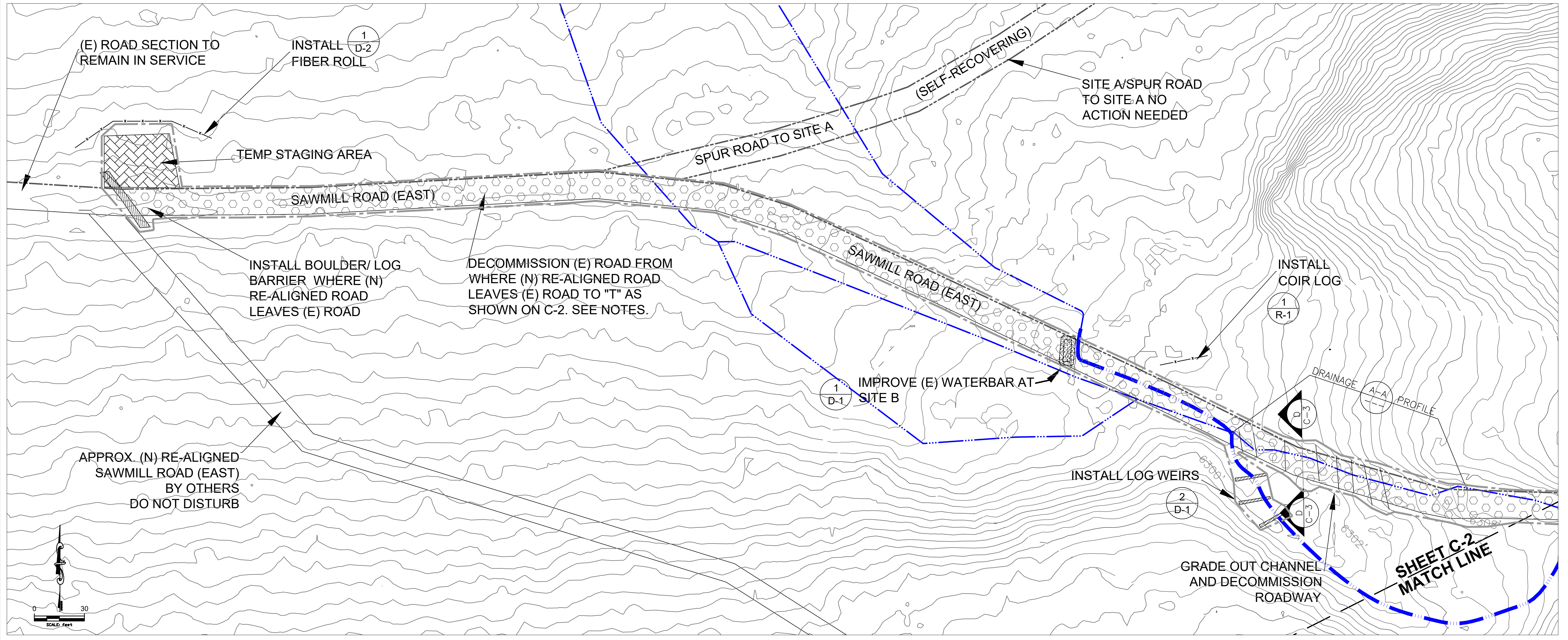




PROFILE A-A  
GRADE OUT INCISED CHANNEL ON LOWER ROAD  
(VERTICAL 2X)

| LEGEND |           |
|--------|-----------|
|        | (E) GRADE |
|        | (N) GRADE |
|        | CUT       |
|        | FILL      |

- NOTES:**
- 1) BOULDERS, ROCKS, AND LOGS SHALL BE SALVAGED ONSITE UNDER THE FIELD DIRECTION OF THE CONSTRUCTION MANAGER.
  - 2) DECOMPACT AND REVEGETATE STAGING AREA AND OTHER DISTURBED AREAS AFTER COMPLETION OF WORK. SEE SHEET R-1 FOR SEED MIX AND REVEGETATION SPECIFICATIONS.
  - 3) WHERE ROAD DECOMMISSION IS PRESCRIBED SALVAGE SURFACE ROCK TO REAPPLY TO FINAL GRADES. REGRADE TO ELIMINATE ANY ARTIFICIAL BERMS AND TIE INTO ADJACENT TOPOGRAPHY. IN GENTLY SLOPED AREAS WHERE THERE ARE NO ARTIFICIAL BERMS, DECOMMISSION SHALL INCLUDE SCARIFYING TO MIN. 6 INCH DEPTH AND SEEDING AND MULCHING.
  - 4) WHERE ROAD DECOMMISSION INCLUDES GRADING OUT CAPTURED DRAINAGE, FILL DRAINAGE AND GRADE ROAD SLOPE TO MATCH ADJACENT TOPOGRAPHY AS FEASIBLE WITHOUT IMPORTING NEW MATERIAL.
  - 5) IF INSUFFICIENT MATERIAL AVAILABLE TO MATCH ADJACENT GRADES ON ROAD DECOMMISSION/GRADING OUT, INSTALL ROCK CHECK DAMS PER DETAIL 3, D-1 AS FIELD DIRECTED.



|                     |                 |                 |
|---------------------|-----------------|-----------------|
| Designed:<br>CYB/BV | Drawn:<br>JAN/P | Checked:<br>CYB |
|---------------------|-----------------|-----------------|

File Date: 03/23/2021

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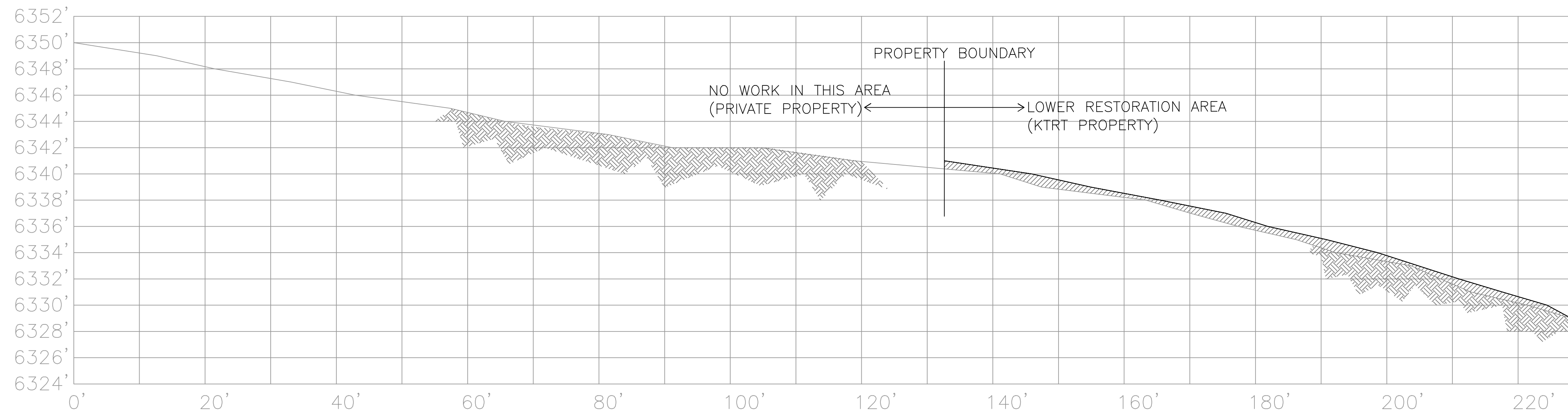
Sheet Title:  
SITE A & B  
LOWER  
RESTORATION

Sheet Scale: AS SHOWN

Sheet Number

**C-1**



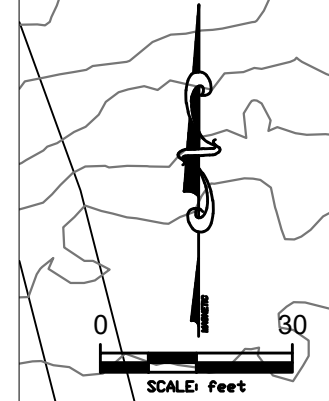
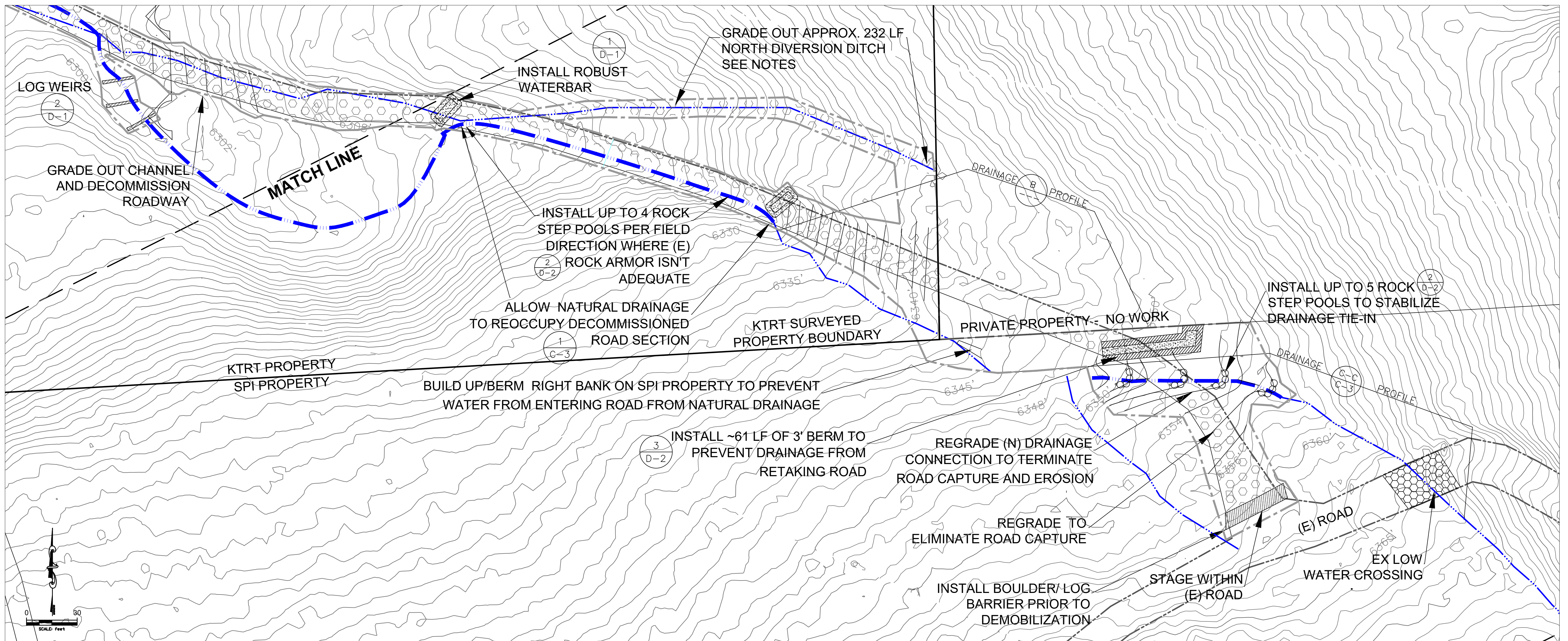


PROFILE B-B  
GRADE OUT UPPER ROAD DRAINAGE CAPTURE  
(VERTICAL 2X)

- NOTES:**
- 1) BOULDERS, ROCKS, AND LOGS SHALL BE SALVAGED ONSITE UNDER THE FIELD DIRECTION OF THE CONSTRUCTION MANAGER.
  - 2) DECOMPACT AND REVEGETATE DISTURBED AREAS AFTER COMPLETION OF WORK. SEE SHEET D-1 FOR SEED MIX AND REVEGETATION SPECIFICATIONS.
  - 3) WHERE ROAD DECOMMISSION IS PRESCRIBED - REGRADE TO ELIMINATE ANY ARTIFICIAL BERMS AND TIE INTO ADJACENT TOPOGRAPHY. IN GENTLY SLOPED AREAS WHERE THERE ARE NO ARTIFICIAL BERMS, DECOMMISSION TO INCLUDE SCARIFYING TO MIN. 6" DEPTH AND SEEDING AND MULCHING.
  - 4) WHERE DECOMMISSION ROAD INCLUDES GRADING OUT CAPTURED DRAINAGE, FILL DRAINAGE AND GRADE ROAD SLOPE TO MATCH ADJACENT TOPOGRAPHY AS FEASIBLE WITHOUT IMPORTING NEW MATERIAL.

**LEGEND**

- (E) GRADE
- (N) GRADE
- CUT
- FILL



|                       |                 |                 |
|-----------------------|-----------------|-----------------|
| Designed:<br>CYB/BV   | Drawn:<br>JA/NP | Checked:<br>CYB |
| File Date: 03/23/2021 |                 |                 |
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Sheet Title:  
UPPER  
RESTORATION

Sheet Scale: AS SHOWN

Sheet Number

**C-2**



**NOTES:**

- 1) BOULDERS, ROCKS, AND LOGS SHALL BE SALVAGED ONSITE UNDER THE FIELD DIRECTION OF THE CONSTRUCTION MANAGER.
- 2) DECOMPACT AND REVEGETATE STAGING AREA AND OTHER DISTURBED AREAS AFTER COMPLETION OF WORK. SEE SHEET R-1 FOR SEED MIX AND REVEGETATION SPECIFICATIONS.
- 3) LOCATION OF ROCK STEP POOLS IN NEW CONNECTING DRAINAGE CHANNEL TO BE FLAGGED IN THE FIELD BY THE CONSTRUCTION MANAGER. ONSITE SALVAGED ROCK IS TO BE USED AS FEASIBLE.

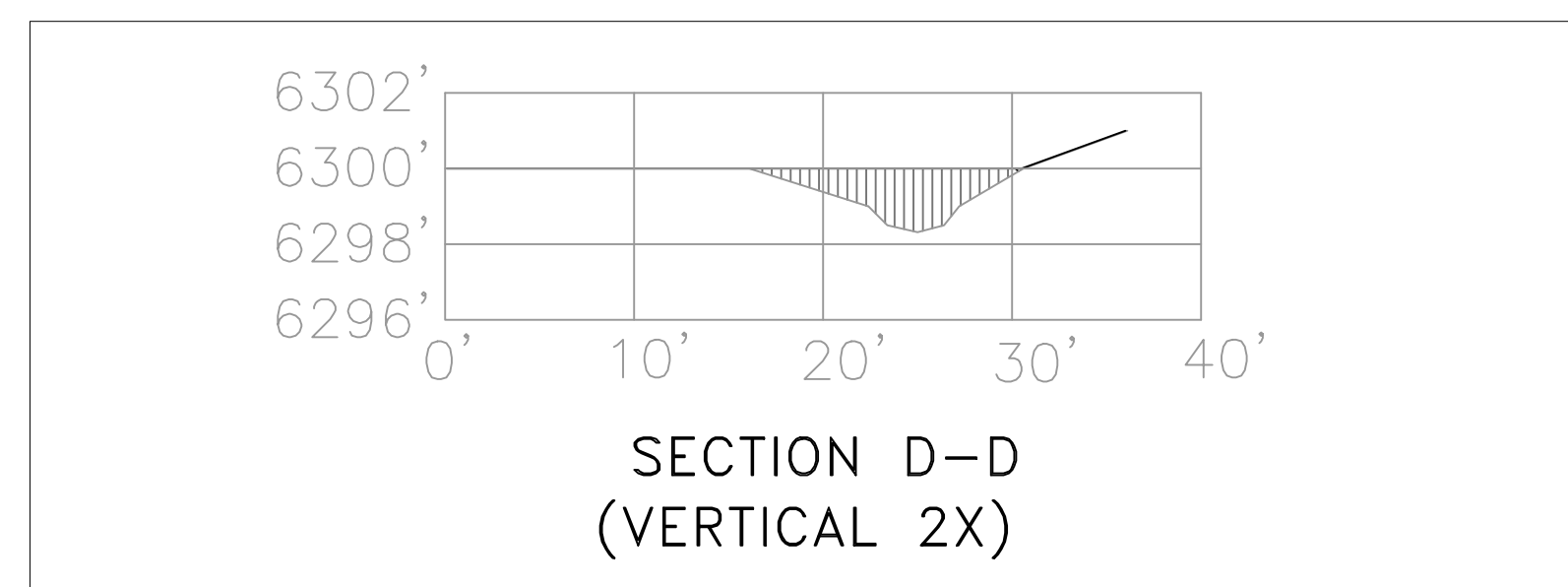
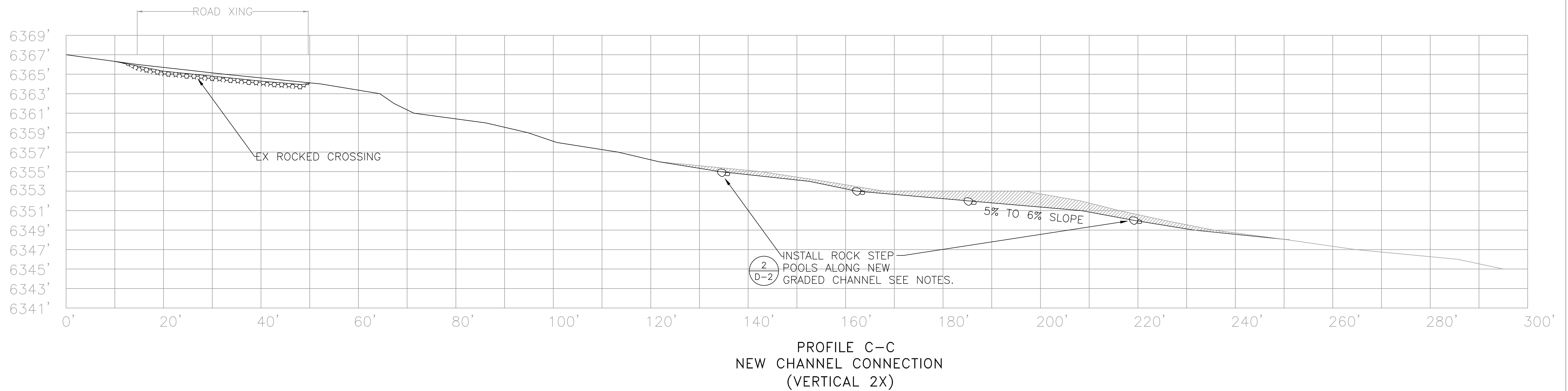
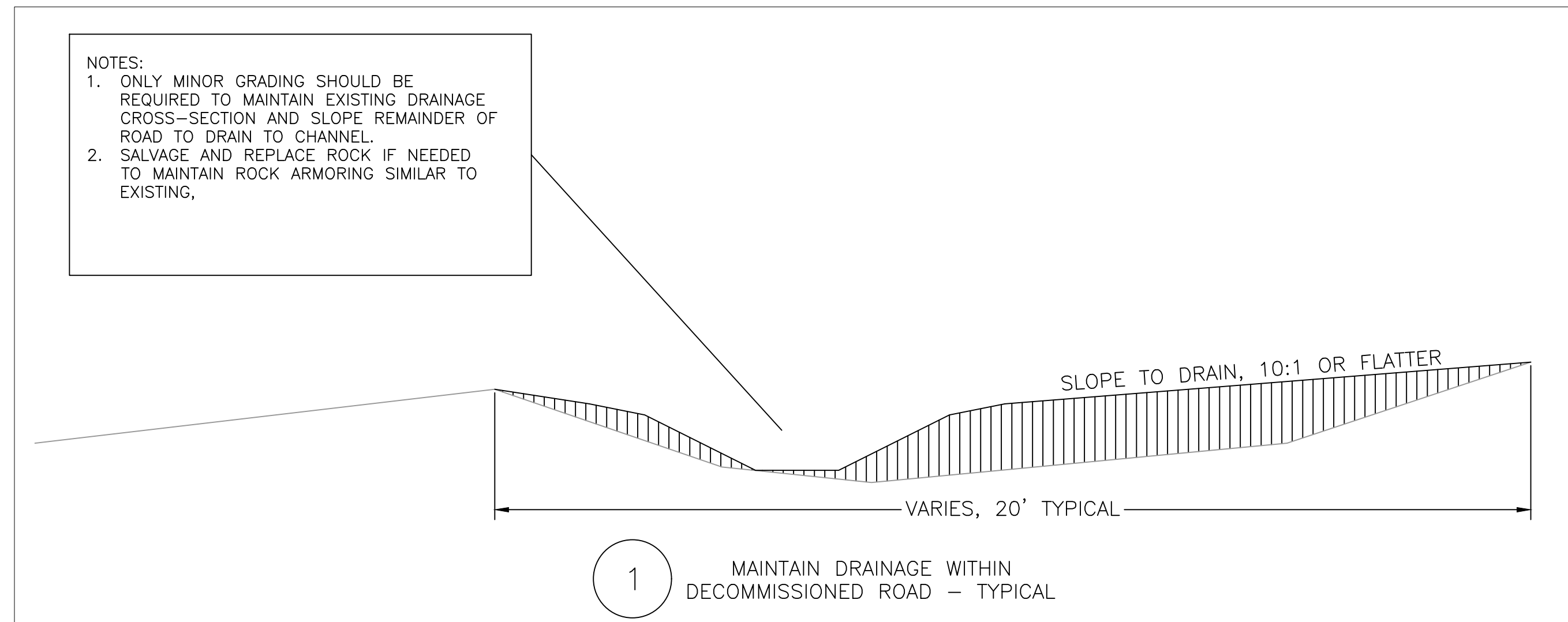


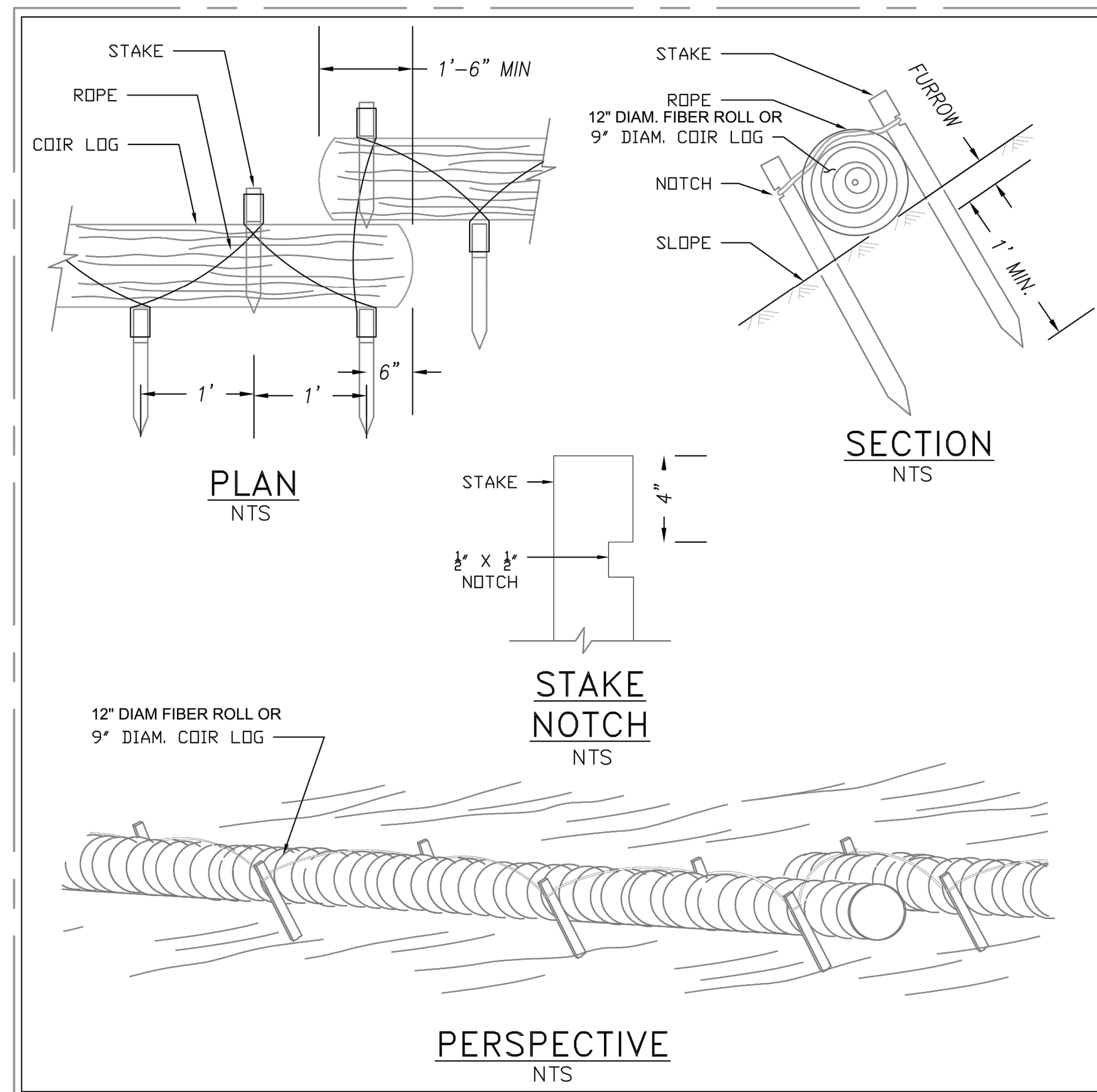
TABLE 1. SEED SPECIFICATIONS

| TABLE 1. SEED SPECIFICATION                     |                             |               |
|---|-----------------------------|---------------|
| Botanical Name                                  | Common Name/Variety         | PLS lbs./acre |
| <i>Achillea millefolium</i>                     | Yarrow                      | 0.10          |
| <i>Achnatherum occidentale</i>                  | Western needlegrass         | 1.00          |
| <i>Artemisia tridentata</i> ssp <i>vaseyana</i> | Mtn. sagebrush              | 0.50          |
| <i>Balsamorhiza sagitata</i>                    | Arrowleaf balsamroot        | 0.50          |
| <i>Bromus carinatus</i>                         | California brome            | 3.00          |
| <i>Elymus elymoides</i>                         | Squirreltail                | 3.00          |
| <i>Elymus trachycaulus</i>                      | Slender wheatgrass, 'Pryor' | 4.00          |
| <i>Ericameria nauseosa</i>                      | Rubber rabbitbrush          | 0.50          |
| <i>Eriogonum umbellatum</i>                     | Sulfur buckwheat            | 1.00          |
| <i>Lupinus lepidus</i>                          | Pacific lupine              | 2.00          |
| <i>Poa secunda</i>                              | Sandberg bluegrass          | 1.00          |
| <i>Purshia tridentata</i>                       | Bitterbrush                 | 3.00          |
| <i>Wyethia mollis</i>                           | Mule's ears                 | 0.50          |
|   | Total                       | 20.10         |

REVEGETATION NOTES:

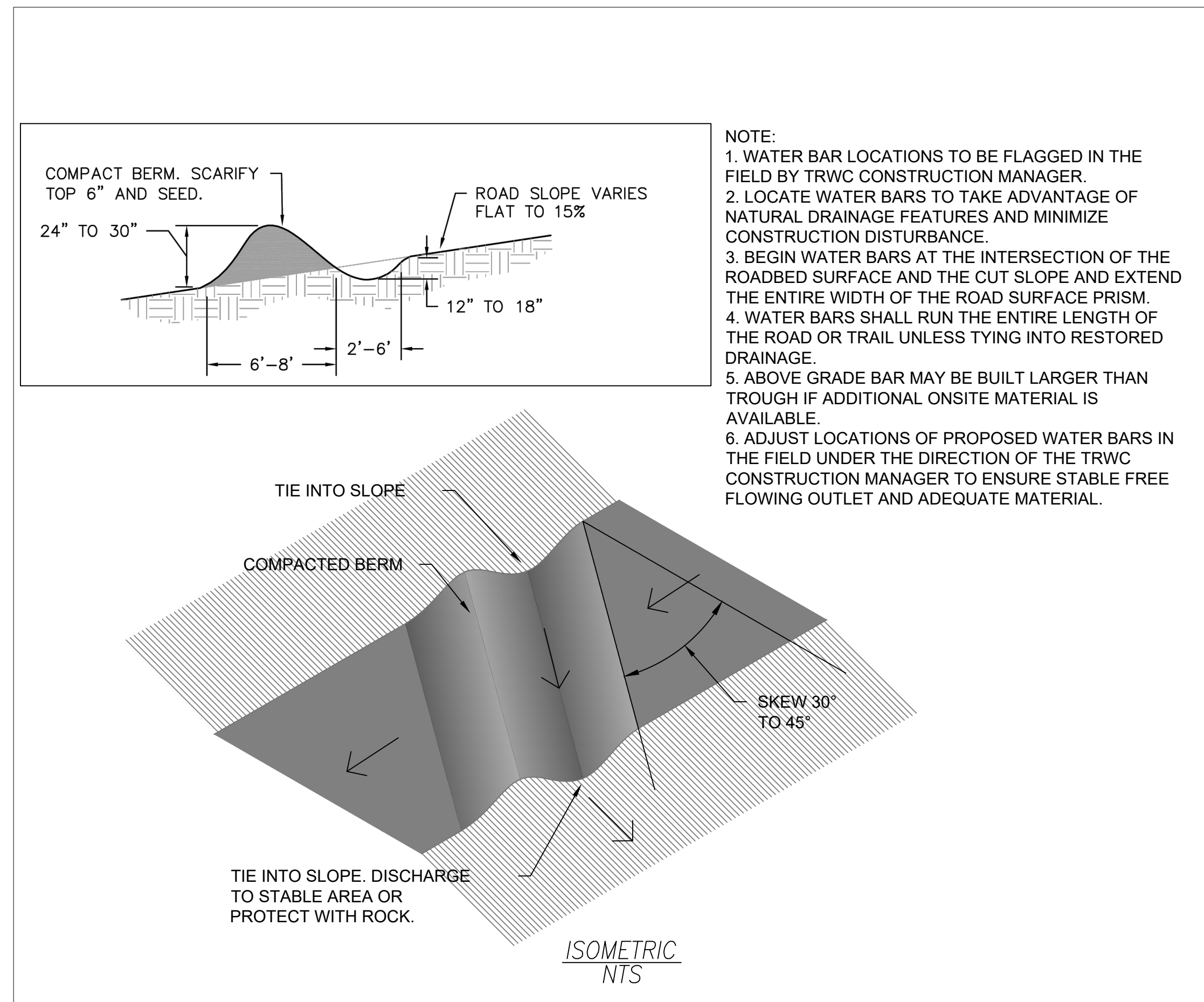
- ALL WORK RELATED TO REVEGETATION AND EROSION CONTROL SHALL BE CONDUCTED BY A QUALIFIED LANDSCAPE CONTRACTOR, POSSESSING A CA C27 LANDSCAPING LICENSE.
- SOIL DISTURBANCE SHALL BE MINIMIZED AND LIMITED TO AREAS THAT REQUIRE TREATMENT. THE CONTRACTOR SHALL REPLACE ANY UNAUTHORIZED DAMAGED VEGETATION.
- THE CONTRACTOR SHALL REQUEST THAT ALL TREATMENT TYPES, BOUNDARIES, AND QUANTITIES ARE VERIFIED PRIOR TO INITIATING THE WORK.
- REVEGETATED AREAS SHALL BE MAINTAINED FOR ONE FULL YEAR FOLLOWING COMPLETION OF THE WORK.
- SEED BED PREPARATION: DE-COMPACT TO A MINIMUM SIX INCHES AND UP TO 12 INCHES AS DIRECTED PERPENDICULAR TO THE FLOW AS MUCH AS PRACTICABLE. LEAVE SOIL SURFACE ROUGH. USE A RUBBER-TIRED PIECE OF EQUIPMENT WITH RIPPERS OR OTHER APPROVED EQUIPMENT TO ACHIEVE DE-COMPACT. DO NOT OTHERWISE MIX OR DISTURB SOILS.
- SEED SHALL BE AS SPECIFIED IN TABLE 1. ALL SEED SHALL CONFORM TO ALL LAWS AND REGULATIONS PERTAINING TO THE SALE AND SHIPMENT OF SEED REQUIRED BY THE CALIFORNIA FOOD AND AGRICULTURAL CODE OF 1982, REGULATIONS OF 1983, AND THE FEDERAL SEED ACT. FOR SAGEBRUSH AND RABBITBRUSH SEED TESTS AND RESULTS MUST BE CONDUCTED WITHIN SIX (6) MONTHS OF APPLICATION DATE. ALL OTHER SEED MUST BE TESTED WITHIN TWELVE (12) MONTHS PRIOR TO THE APPLICATION DATE. SEED TAGS MUST REFLECT THE MOST RECENT TEST DATE. SUBMIT ORIGINAL SEED TEST BY LOT NUMBER TO THE OWNER OR THEIR REPRESENTATIVE **AT MINIMUM 30 DAYS PRIOR TO APPLICATION FOR APPROVAL.** FOLLOWING APPROVAL SEED MAY BE MIXED AND DELIVERED TO THE SITE. DELIVER IN SEALED BAGS WITH PROPER LABELING. WEED SEED SHALL NOT EXCEED 0.25 OF THE PURE LIVE SEED SPECIFIED AND SHALL NOT INCLUDE ANY SEED OF CHEATGRASS (*BROMUS TECTORUM*), RUSSIAN THISTLE (*SALSOLA TRAGUS*), OR SWEET-BLOSSOM CLOVER (*MELILOTUS OFFICINALIS*, *M. ALBA*). CROPS SEED SHALL NOT EXCEED 0.25 PERCENT. ALL SEED IS SUBJECT TO REVIEW AND APPROVAL. REQUESTS FOR SUBSTITUTE SPECIES/AND OR VARIETIES MUST BE SUBMITTED IN WRITING. WRITTEN APPROVAL IS REQUIRED FOR ALL REQUESTED SUBSTITUTIONS. SEED TAGS SHALL SHOW THE FOLLOWING INFORMATION:
  - SUPPLIER
  - SCIENTIFIC NAME
  - COMMON NAME
  - LOT NUMBER
  - PERCENT PURITY
  - PERCENT GERMINATION INCLUDING HARD AND DORMANT SEED
  - PERCENT WEED SEED
  - PERCENT CROP SEED
  - ORIGIN

- MULCH SHALL CONSIST OF SALVAGED NATIVE MATERIAL FROM THE PROJECT FOOTPRINT INCLUDING PINE NEEDLES AND FOREST DUFF IN AREAS ADJACENT TO THE WORK AS IDENTIFIED BY THE CONSTRUCTION MANAGER IF NECESSARY TO ACHIEVE SPECIFIED COVER. IMPORTED MULCH SHALL BE WOOD CHIPS OR TUB GRINDINGS. PARTICLE SIZE SHALL BE BETWEEN 0.5 AND 2 INCHES IN LENGTH AND NOT LESS THAN 0.5 INCHES IN WIDTH AND 0.125 INCHES IN THICKNESS, WITH AT LEAST 95% CONFORMING TO SPECIFIED SIZES. ALL MATERIAL SHALL BE CLEAN FROM ROCK, GARBAGE, WEEDS, OR OTHER DELETERIOUS MATERIAL.
- SALVAGE PINE NEEDLES AND DUFF IN THE PROJECT FOOTPRINT AND WINDROW ADJACENT TO THE SITE. IF MATERIAL GENERATED ON SITE IS INADEQUATE, STAGE COMMERCIAL MATERIALS PRIOR TO COMPLETING GRADING. APPLY SALVAGED PINE NEEDLES, DUFF, AND/OR COMMERCIALY OBTAINED WOOD CHIPS OR TUB GRINDINGS TO A DEPTH OF APPROXIMATELY 1/4 - 1/2 INCH TO ACHIEVE 85% COVER, ONE LAYER DEEP.
- MAINTENANCE AND WARRANTY: MAINTAIN ALL REVEGETATED AREAS FOR ONE (1) FULL YEAR FOLLOWING NOTICE OF COMPLETION (N.O.C) SO THERE IS NO EVIDENCE OF EROSION, SUCH AS RILLS, GULLIES, OR EVIDENCE OF SHEET FLOW. THE MAINTENANCE PERIOD BEGINS ON THE DATE FOLLOWING THE LAST INSTALLATION. WARRANTY 85% COVERAGE BY VEGETATION AND MULCH.
- WARRANTY AND MAINTENANCE MAY INCLUDE RE-APPLICATION OF SEED AND MULCH. DURING THE MAINTENANCE PERIOD THE SITE SHALL BE KEPT FREE FROM ALL NOXIOUS AND INVASIVE WEEDS. IF AT ANY TIME IT IS DETERMINED THAT PROPER MAINTENANCE IS NOT BEING PERFORMED THE ONE-YEAR MAINTENANCE PERIOD SHALL BE STOPPED AND NOT RESUMED UNTIL THE PROJECT IS BROUGHT UP TO THE SPECIFICATIONS AND PROPER MAINTENANCE IS RESUMED.
- IF PROJECT CONSTRUCTION OCCURS IN THE SPRING, CONTRACTOR SHALL TREAT THE INVASIVE SPECIES *BROMUS TECTORUM* PRIOR TO SEED SET, AS DIRECTED AND APPROVED BY THE TRWC PROJECT MANAGER. IF PROJECT CONSTRUCTION OCCURS IN THE SUMMER OR FALL, CONTRACTOR SHALL SWEEP ALL VEHICLES AND EQUIPMENT THOROUGHLY BEFORE DEMOBILIZING TO REMOVE SEED OF INVASIVE SPECIES *BROMUS TECTORUM* TO THE EXTENT PRACTICABLE TO PREVENT SPREADING.



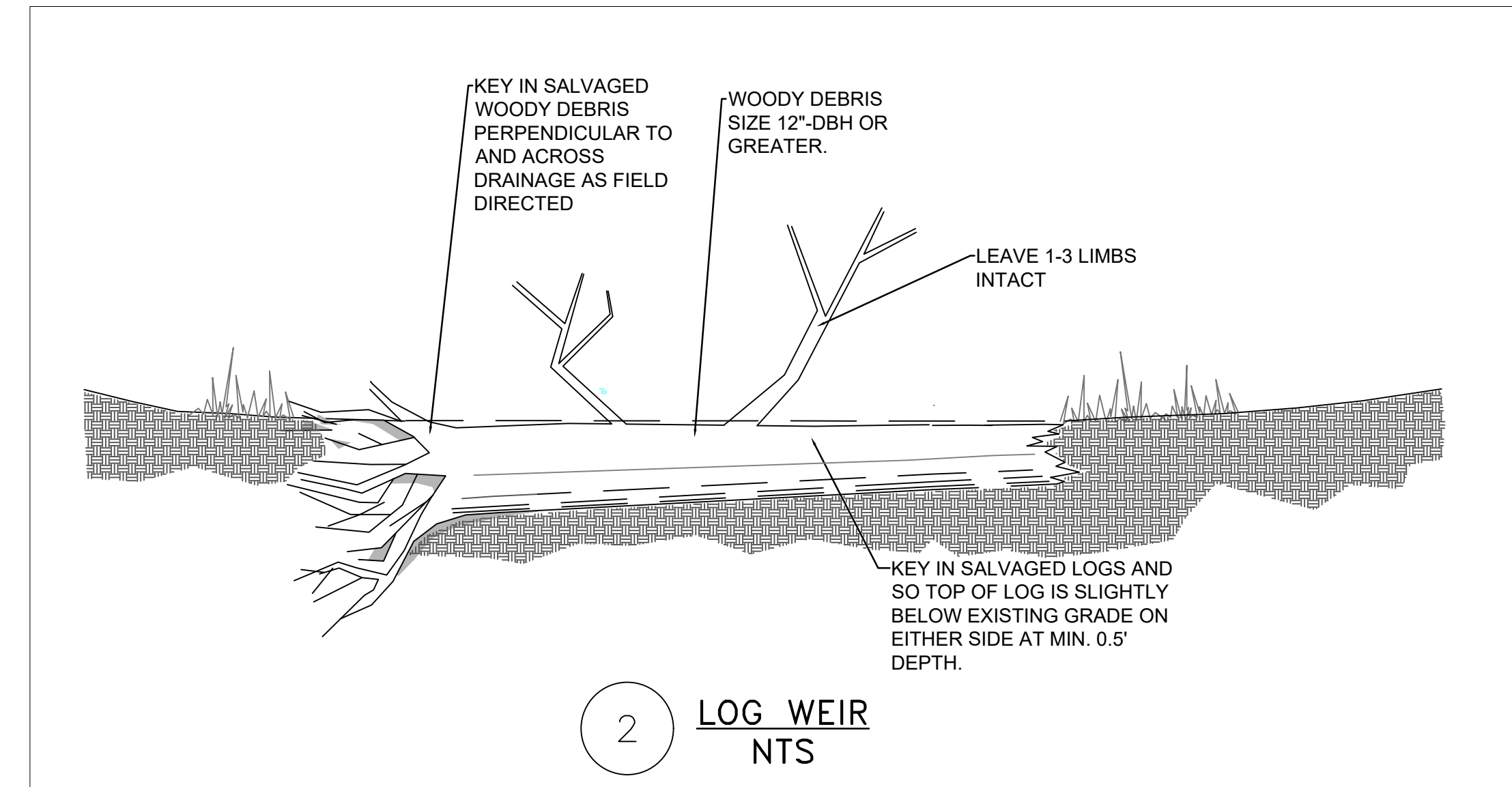
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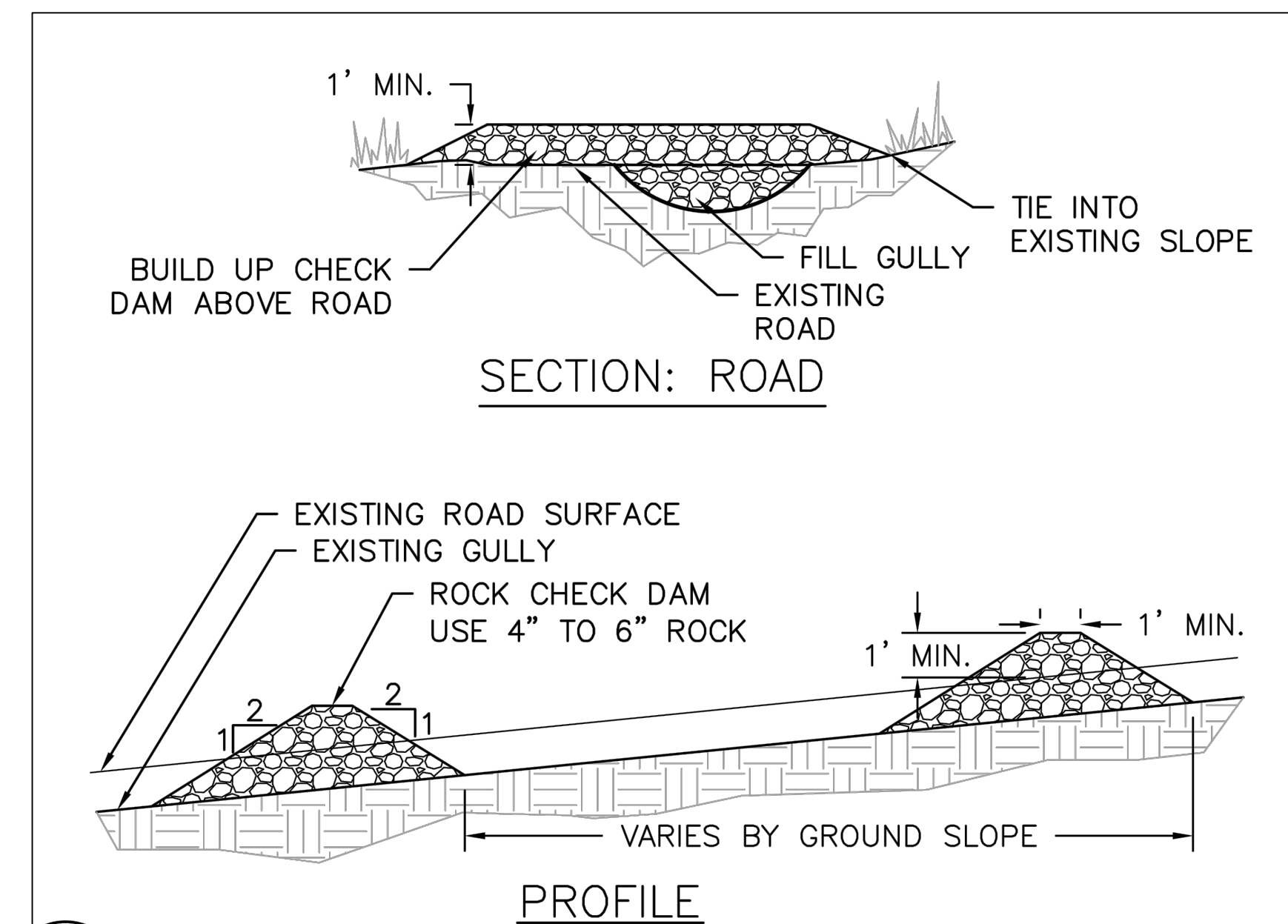


1 WATERBAR ROBUST  
NTS

- NOTE:
1. WATER BAR LOCATIONS TO BE FLAGGED IN THE FIELD BY TRWC CONSTRUCTION MANAGER.
  2. LOCATE WATER BARS TO TAKE ADVANTAGE OF NATURAL DRAINAGE FEATURES AND MINIMIZE CONSTRUCTION DISTURBANCE.
  3. BEGIN WATER BARS AT THE INTERSECTION OF THE ROADBED SURFACE AND THE CUT SLOPE AND EXTEND THE ENTIRE WIDTH OF THE ROAD SURFACE PRISM.
  4. WATER BARS SHALL RUN THE ENTIRE LENGTH OF THE ROAD OR TRAIL UNLESS TYING INTO RESTORED DRAINAGE.
  5. ABOVE GRADE BAR MAY BE BUILT LARGER THAN TROUGH IF ADDITIONAL ONSITE MATERIAL IS AVAILABLE.
  6. ADJUST LOCATIONS OF PROPOSED WATER BARS IN THE FIELD UNDER THE DIRECTION OF THE TRWC CONSTRUCTION MANAGER TO ENSURE STABLE FREE FLOWING OUTLET AND ADEQUATE MATERIAL.

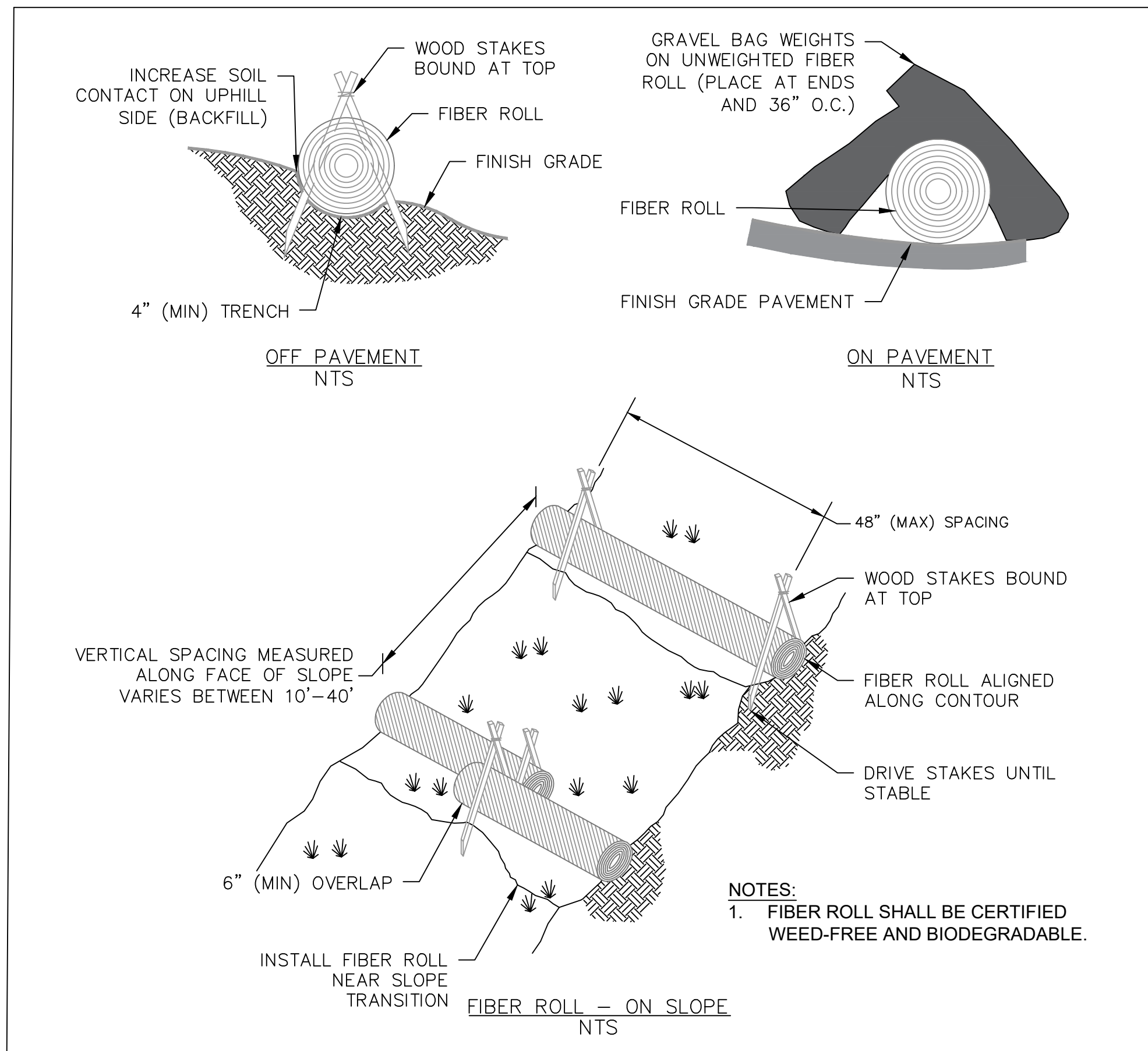


2 LOG WEIR  
NTS

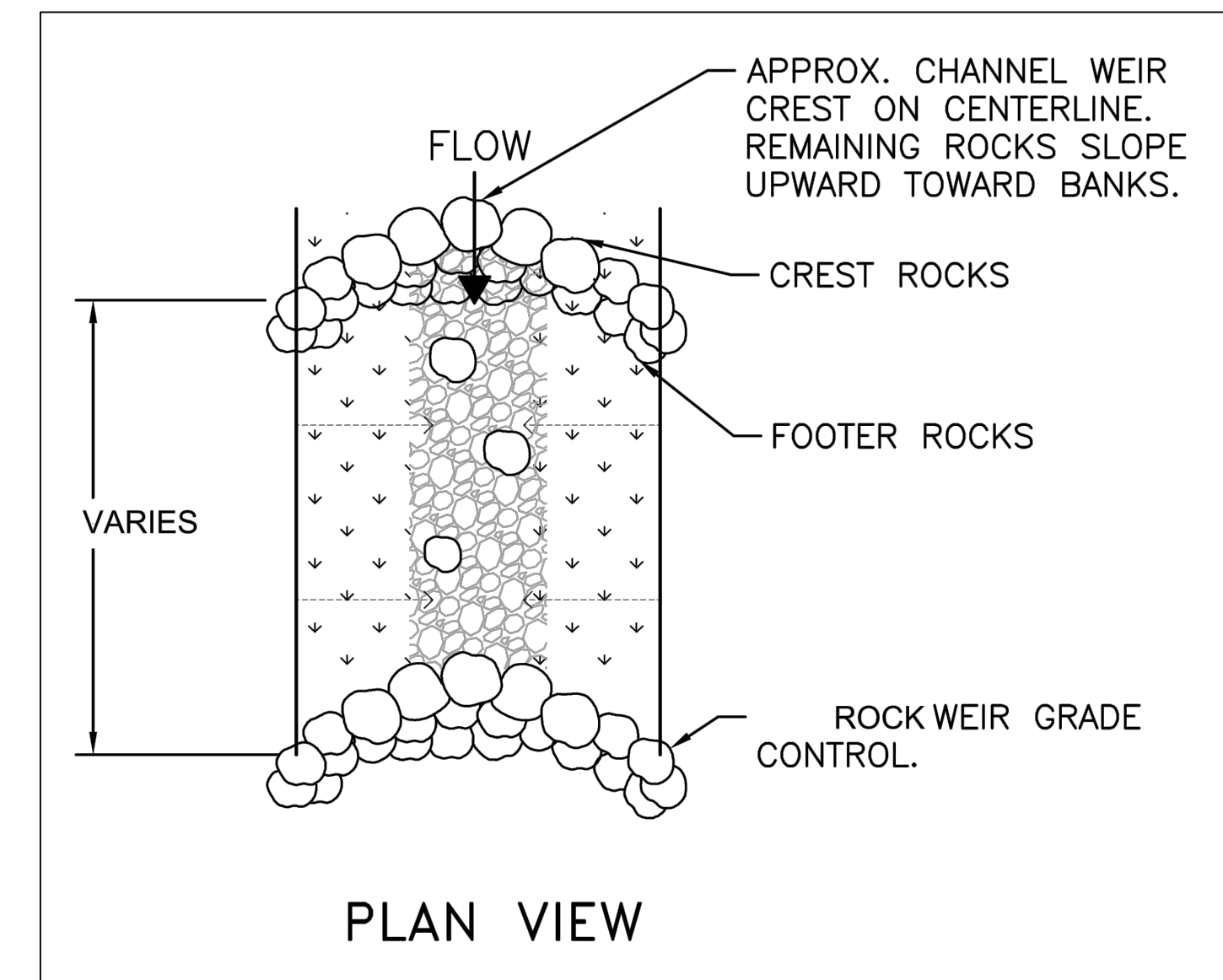
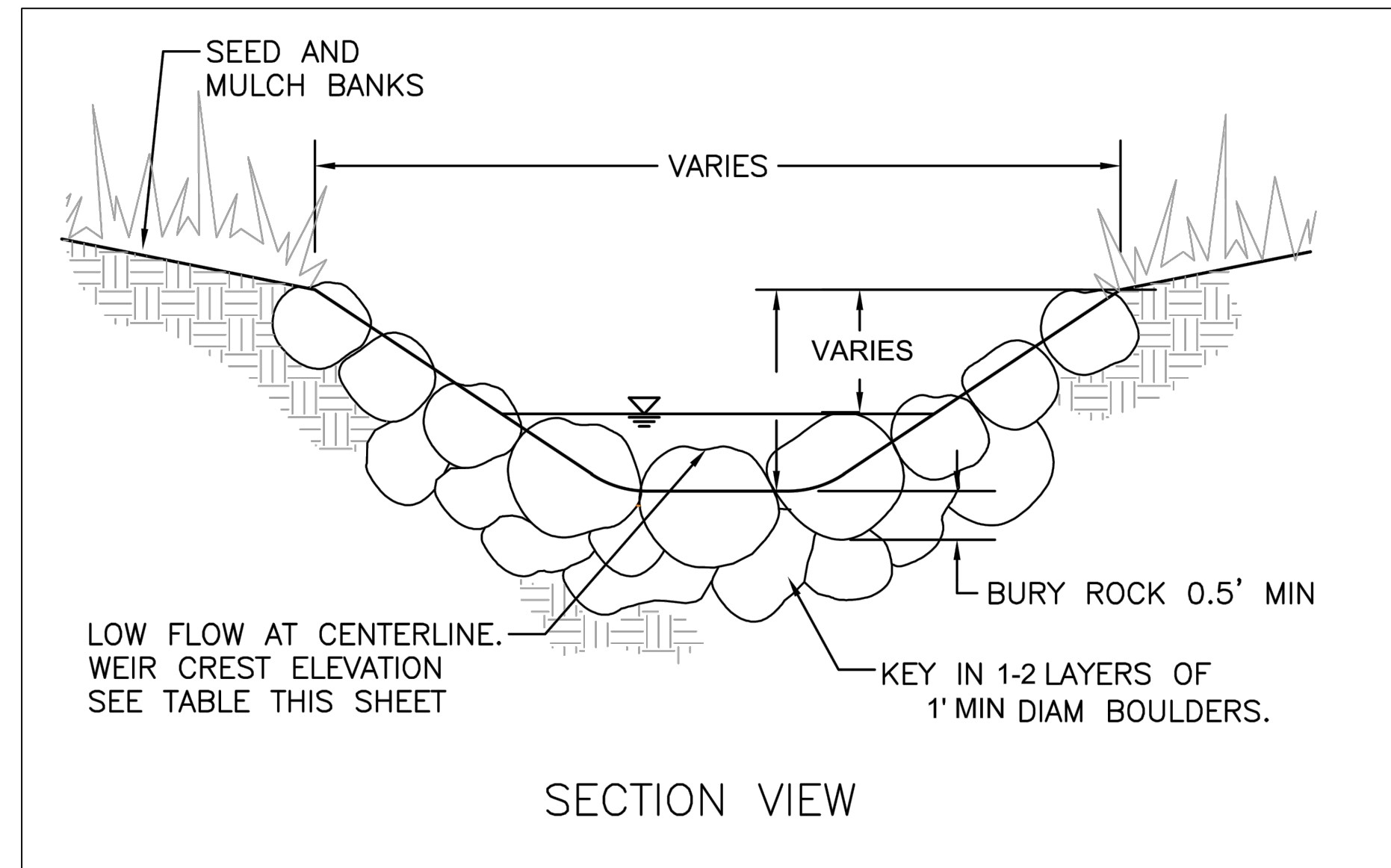


NOTE: MAY BE REQUIRED ALONG ROAD DRAINAGE CAPTURE BELOW MAIN LANDING IF INCISED TOO DEEP TO ADEQUATELY TIE INTO ADJACENT TOPOGRAPHY.

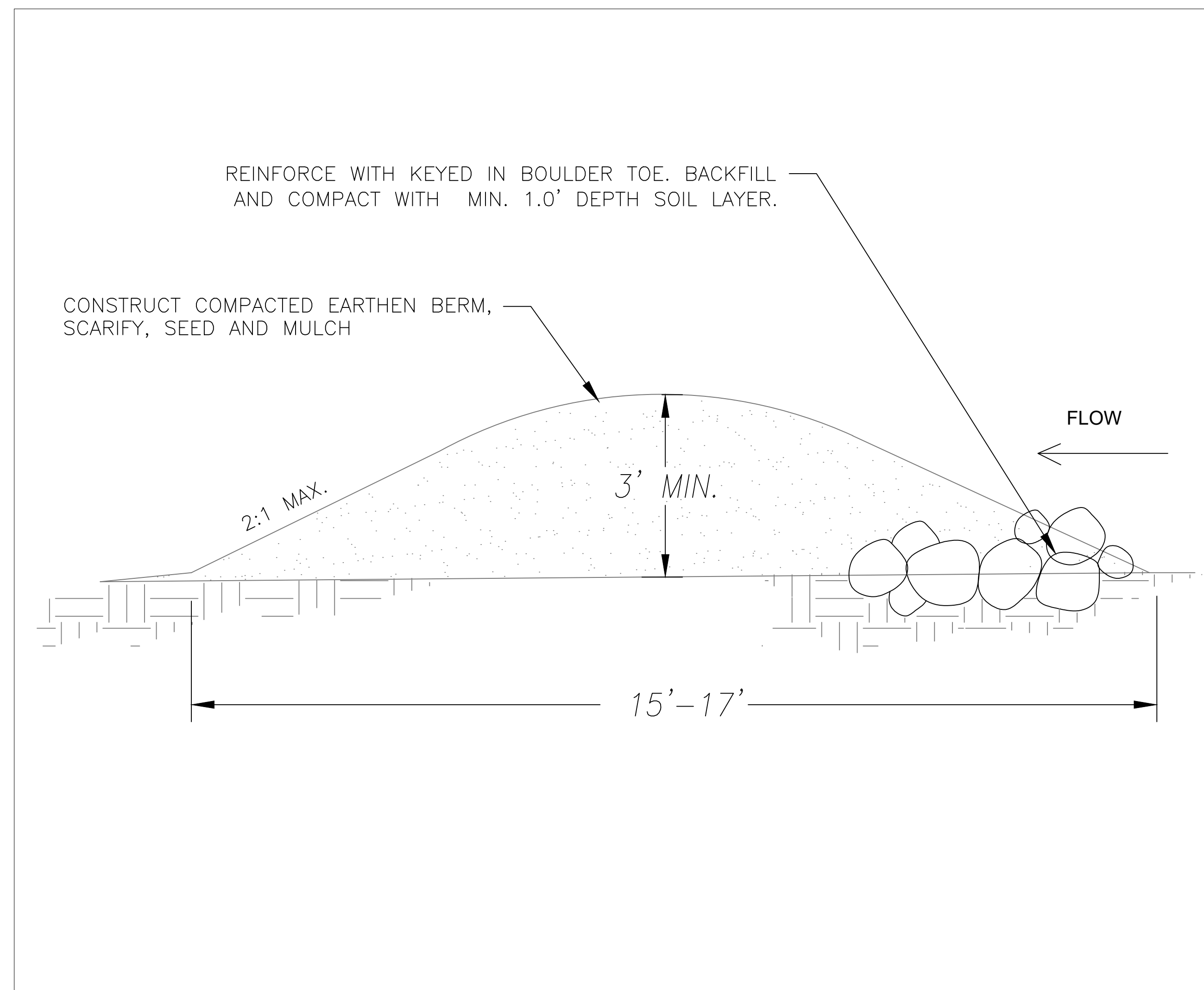
3 ROCK CHECK DAM  
NTS



1 **FIBER ROLL**



2 **ROCK WEIR**



3 **BERM NTS**

|                                    |                 |                 |
|------------------------------------|-----------------|-----------------|
| Designed:<br>CYB/BV                | Drawn:<br>JA/NP | Checked:<br>CYB |
| File Date: 03/23/2021              |                 |                 |
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Sheet Title:  
DETAILS 2

Sheet Scale: AS SHOWN

Sheet Number