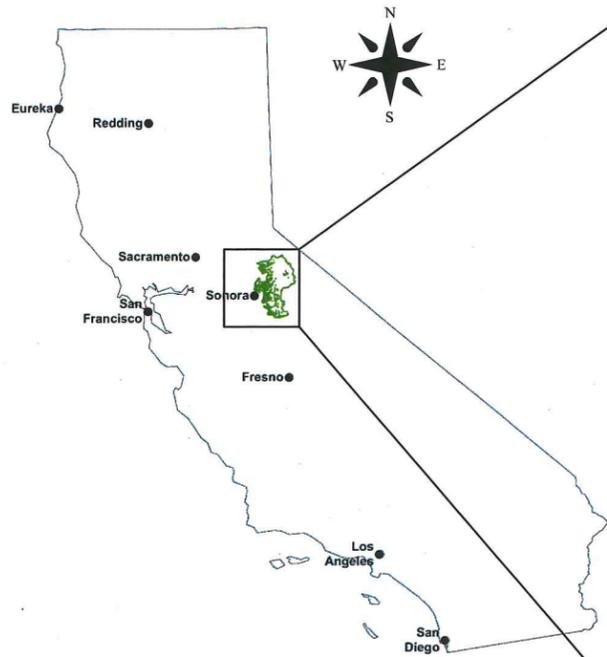


UNITED STATES DEPARTMENT OF AGRICULTURE  
 FOREST SERVICE  
 REGION FIVE  
 STANISLAUS NATIONAL FOREST  
 DRAWINGS FOR PROPOSED

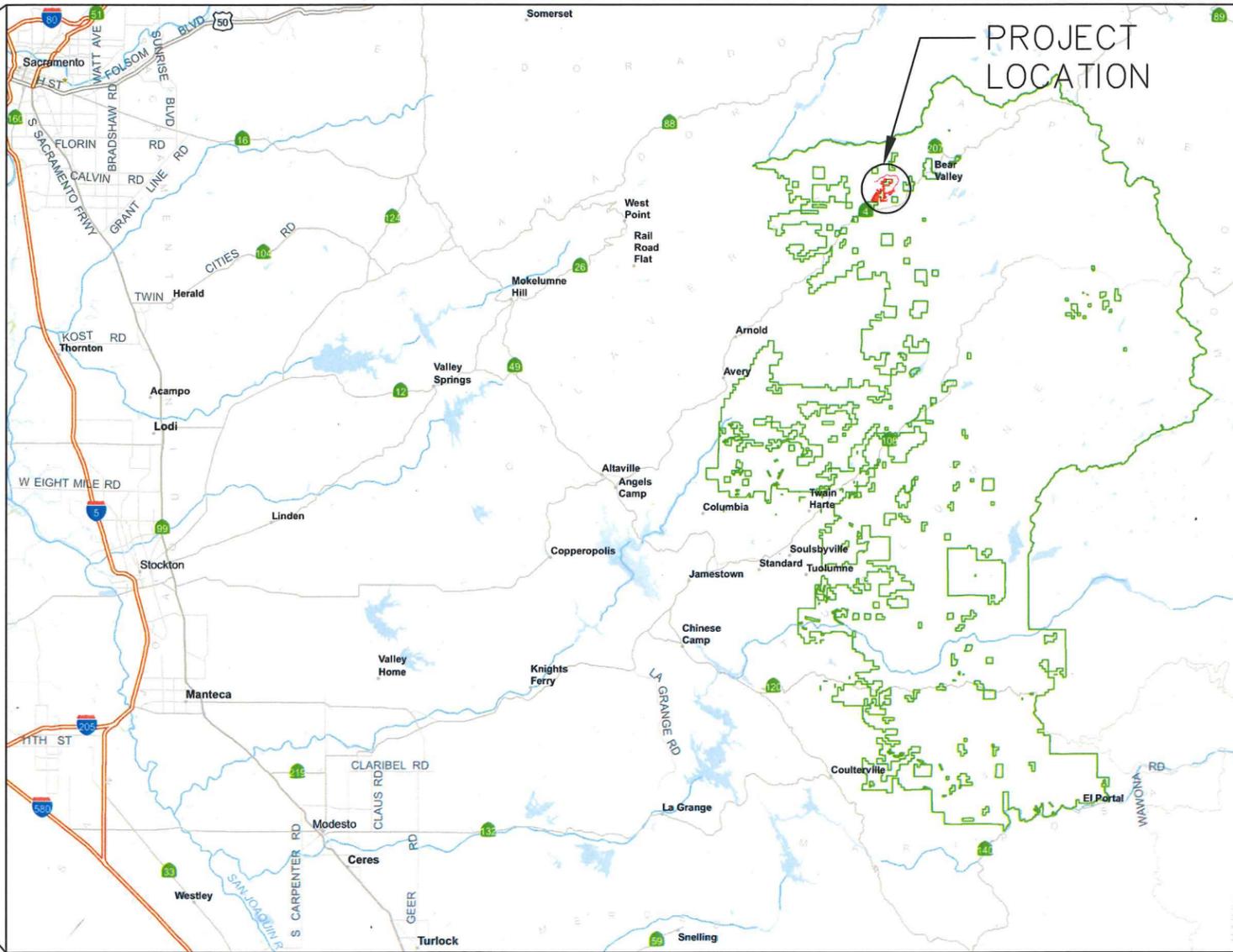


CALAVERAS-CORNERSTONE THOMPSON MEADOW STEWARDSHIP (IRTC)  
 Calaveras County, California

THE PROJECT IS ACCESSED VIA STATE HIGHWAY 4. TRAVEL APPROXIMATELY 18 MILES EAST OF ARNOLD TO THE INTERSECTION OF HIGHWAY 4 AND 7N09. (T7 N, R17 E, M.D.M)



STATE OF CALIFORNIA  
 INDEX MAP - N.T.S.



INDEX to SHEET

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LOCATION MAP
3	NOTES & LEGEND
4	MATERIALS & QUANTITIES
5-6	7N11
7	7N11C
8-10	7N72
11	7N72A
12	17EV494
13-24	TYPICALS

GOVERNING SPECIFICATIONS

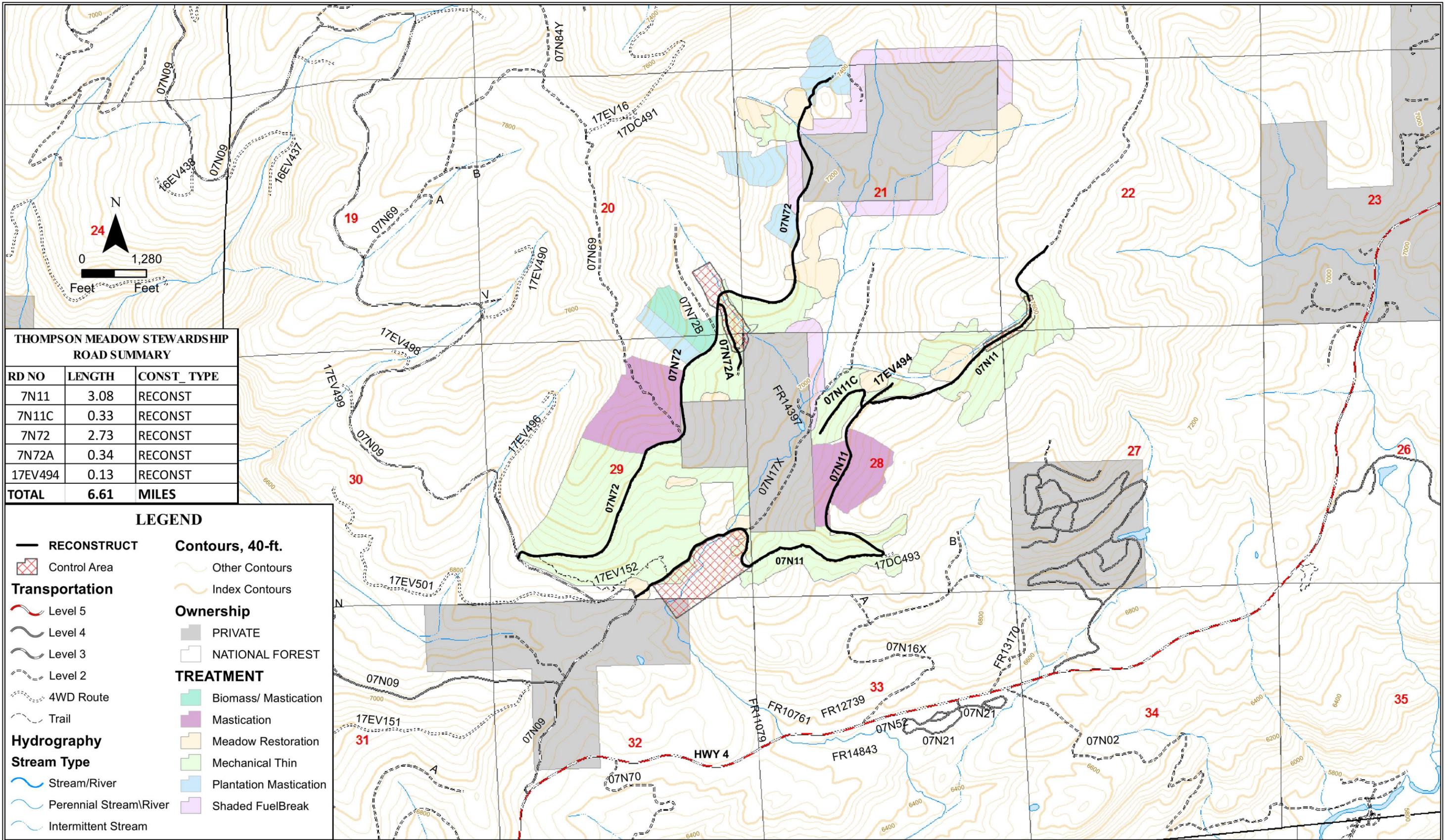
"STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS" FP-03 U.S. CUSTOMARY UNITS, SHALL GOVERN.

Drawn G.COX, A.COMBS  
 Designed G.COX, A.COMBS  
 Reviewed R.CABLAYAN

Sheet Title  
**TITLE SHEET**  
 Scale NO SCALE

Forest **STANISLAUS**  
 Project  
 THOMPSON MEADOW STEWARDSHIP (IRTC)

APPROVED BY:	<u>Allen Loucks</u>	DATE:	<u>6/9/16</u>	<u>Teresa Kelly</u>	DATE:	<u>6/10/16</u>	<u>Roy Cole</u>	DATE:	<u>6/9/16</u>	<u>James M. [unclear]</u>	DATE:	<u>6/13/16</u>	Sheet of	1 24
	DESIGNER			DISTRICT RANGER			FOREST ENGINEER			FOREST SUPERVISOR				



**THOMPSON MEADOW STEWARDSHIP ROAD SUMMARY**

RD NO	LENGTH	CONST_TYPE
7N11	3.08	RECONST
7N11C	0.33	RECONST
7N72	2.73	RECONST
7N72A	0.34	RECONST
17EV494	0.13	RECONST
<b>TOTAL</b>	<b>6.61</b>	<b>MILES</b>

**LEGEND**

- RECONSTRUCT**: Solid black line
- Control Area**: Red hatched pattern
- Transportation**:
  - Level 5: Red dashed line
  - Level 4: Grey dashed line
  - Level 3: Blue dashed line
  - Level 2: Green dashed line
  - 4WD Route: Dotted line
  - Trail: Dashed line with cross-ticks
- Hydrography**:
  - Stream/River: Blue line
  - Perennial Stream/River: Blue line with wavy edges
  - Intermittent Stream: Blue line with dashed edges
- Contours, 40-ft.**:
  - Other Contours: Thin grey line
  - Index Contours: Thick grey line
- Ownership**:
  - PRIVATE: Grey fill
  - NATIONAL FOREST: White fill with black border
- TREATMENT**:
  - Biomass/ Mastication: Green fill
  - Mastication: Purple fill
  - Meadow Restoration: Yellow fill
  - Mechanical Thin: Light green fill
  - Plantation Mastication: Blue fill
  - Shaded FuelBreak: Pink fill

U.S. DEPARTMENT OF AGRICULTURE  
**FOREST SERVICE**  
 R-5  
 PACIFIC SOUTHWEST REGION

Drawn	G.COX, A.COMBS
Designed	G.COX, A.COMBS
Reviewed	R.CABLAYAN
Approved	R.CABLAYAN

Revisions			
NO.	DESCRIPTION	DATE	BY

Forest  
**STANISLAUS**  
 Project Name  
 THOMPSON MEADOW STEWARDSHIP (IRTC)

Sheet Title  
 LOCATION MAP  
 Scale AS NOTED

Sheet  
 2  
 of  
 24

GENERAL NOTES:

1. UNLESS OTHERWISE SPECIFIED, NOTES APPLY TO ALL ROADS.
2. THIS IS AN EMBEDDED TIMBER SALE CONTRACT. DAVIS BACON PREVAILING WAGES DO NOT APPLY.
3. STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS" (FP-03)- U.S. CUSTOMARY UNITS, OR IT'S FOREST SERVICE SUPPLEMENT SHALL GOVERN.
4. INDIVIDUAL TREES 10" D.B.H. OR LARGER TO BE CLEARED ARE SPECIFICALLY INDICATED ON THE PLANS. UNLESS OTHERWISE INDICATED ALL OTHER TREES AND BRUSH SMALLER THAN 10" D.B.H. SHALL ALSO BE CLEARED WITHIN THE CLEARING LIMITS.
5. RECONSTRUCTION WIDEN AS NECESSARY TO OBTAIN THE MINIMUM SPECIFIED ROAD WIDTH. BACK OR EXCAVATION SLOPE ARE 1:1, EMBANKMENT OR FILL SLOPES ARE 1.5:1
6. SUITABLE MATERIAL, AS DEFINED IN FP-03 SECTION 101.04, THAT IS REMOVED FROM DITCHES, ROADBED SLIDES, AND CULVERT CATCH BASINS SHALL BE INCORPORATED BACK INTO THE ROADBED.
7. UNSUITABLE MATERIAL SHALL BE SIDE CAST FROM THE ROADBED, BUT NOT WITHIN 100 FT OF ANY DRAINAGE.
8. AT INTERSECTIONS THE ROADBED SHALL BE GRADED TO ASSURE BLENDING OF THE TWO RIDING SURFACES FOR A MINIMUM DISTANCE OF 50 LINEAL FT.
9. THE PURCHASER IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING. CONSTRUCTION STAKING SHALL BE IN COMPLIANCE WITH FP03 SECTION 152.01. CONSTRUCTION STAKES SHALL BE APPROVED BY THE GOVERNMENT PRIOR TO ANY CONSTRUCTION. SEE SHEET 13 FOR DETAILED INFORMATION ON STAKING.
10. THIS CONTRACT IS SUBJECT TO LIMITING OPERATING PERIODS. SEE THE CONTRACT AREA MAP AS WELL AS TIMBER SALE CONTRACT PROVISIONS GT.2.4,KT-GT.1.4#, AND KT-GT.3.1.5#

ABBREVIATIONS	
AB	AGGREGATE BASE
BOP	BEGINNING OF PROJECT
CY	CUBIC YARD
CMP	CORRUGATED METAL CULVERT
CO	CONTRACTING OFFICER
CONST	CONSTRUCT
EA	EACH
EOP	END OF PROJECT
EXIST	EXISTING
FT	FEET
INT	INTERSECTION
L.F.	LINEAL FOOT
STA	STATION
WB	WATERBAR

SPECIAL NOTES

1. THE PURCHASER SHALL POST A LABOR BULLETIN BOARD IN ACCORDANCE WITH FP-03 SECTION 107.03
2. THE PURCHASER SHALL SUBMIT A ROAD CONSTRUCTION SCHEDULE TO THE C.O. PRIOR TO THE START OF WORK
3. THE PURCHASER SHALL SUBMIT A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH FP-03 SECTION 156
4. WORK NOT SPECIFIED IN THE SCHEDULE OF ITEMS SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS
5. THE FOREST SERVICE WILL DESIGNATE BORROW SOURCES AS NEEDED. WATER SOURCES ARE SHOWN ON THE CONTRACT AREA MAP LOCATED IN THE STEWARDSHIP CONTRACT.
6. WHEN DRAWING FROM AN APPROVED WATER SOURCE, THE PURCHASER IS REQUIRED TO USE A COVERED WATER DRAFTING BOX AS SHOWN IN THE TYPICAL DETAIL.
7. AGGREGATE AND RIPRAP MATERIAL SHALL BE OBTAINED FROM AN APPROVED COMMERCIAL SOURCE. ALL MATERIAL SHALL BE CERTIFIED WEED FREE, HAVE NO MORE THAN 0.25% ASBESTOS PRESENT, AND SHALL BE IN COMPLIANCE WITH CALIFORNIA HEALTH & SAFETY CODE SECTIONS 93105 & 93106.
8. ALL ROCK MATERIAL OBTAINED FROM COMMERCIAL SOURCES REQUIRE A WEIGH BILL TICKET. MATERIAL SHALL BE WEIGHED BY A CERTIFIED WEIGHMASTER ON A SCALE CURRENTLY CERTIFIED BY THE CALIFORNIA DIVISION OF MEASUREMENT STANDARDS. WEIGH BILL TICKETS SHALL CLEARLY INDICATE QUANTITIES, MATERIAL TYPE, AND WHERE ROAD MATERIAL WAS DELIVERED TO. WEIGH BILL TICKETS SHALL BE DELIVERED TO THE C.O. OR THEIR DESIGNATED REPRESENTATIVE AT THE TIME OF DELIVERY. FAILURE TO COMPLY WILL RESULT IN WORK NOT BEING ACCEPTED.
9. CMP LENGTHS ARE APPROXIMATE. PAYMENT FOR CMP WILL BE FOR CONTRACT LENGTH.
10. EXISTING CMPS THAT ARE TO BE REPLACED SHALL BE REMOVED FROM GOVERNMENT LAND AT CONTRACTOR'S EXPENSE. UNLESS SHOWN ON THE SCHEDULE OF ITEMS, DISPOSAL IS INCIDENTAL TO OTHER PAY ITEMS.
11. BEFORE ANY EXCAVATION ACTIVITIES BEGIN, THE CONTRACTOR SHALL CONTACT A SERVICE TO LOCATE ANY BURIED UTILITIES. USA=1-800-227-2600 , THE NATIONAL 811 NUMBER, OR THE WEBSITE HTTP://WWW.CALL811.COM.
12. EROSION PREVENTION AND CONTROL DURING OPERATIONS- SET THE MINIMUM CONSTRUCTION LIMITS NEEDED FOR THE PROJECT AND CONFINE DISTURBANCE WITHIN THIS AREA. MONITOR & MAINTAIN EROSION CONTROLS (I.E. SILT FENCES, STRAW WATTLES, ETC) AS NEEDED THROUGH CONSTRUCTION AND REMOVE THEM ONCE SOURCES OF EROSION ARE ELIMINATED.
13. THE CONTRACTOR SHALL MEET THE REQUIREMENTS OF CHAPTERS 10, 11, & 12.2 IN THEIR ENTIRETY OF "WATER QUALITY MANAGEMENT FOR NATIONAL FOREST SYSTEM LANDS IN CALIFORNIA BEST MANAGEMENT PRACTICES" DATED SEPTEMBER 2000. [http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5362512.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5362512.pdf)
14. PRIOR TO THE PLACEMENT OF AGGREGATE BASE OR THE INSTALLATION OF A CULVERT, THE GOVERNMENT SHALL INSPECT THE SUBGRADE COMPACTION FOR APPROVAL. THE CONTRACTOR SHALL NOTIFY THE GOVERNMENT WHEN A SECTION IS READY FOR SUBGRADE INSPECTION.

Revisions			
NO.	DESCRIPTION	DATE	BY

**MATERIALS & QUANTITIES**

SPECIFICATION DATA		TYPE:	RECONST	RECONST	RECONST	RECONST	RECONST	TOTAL
		ROAD NO.	7N11	7N11C	7N72	7N72A	17EV494	
SPEC NO.	ITEM DESCRIPTION	UNIT						
151.01	MOBILIZATION	LS	ONE TIME COST APPLIES TO ALL ROADS					
152.01	CONSTRUCTION SURVEY & STAKING	LS	1	1	1	1	1	5
201.05	CLEARING & GRUBBING, DISPOSAL OF TOPS & LIMBS-CHIP, LOGS-DECK, STUMPS-SCATTER	LS	1	1	1	1	1	5
203.04	REMOVE EXISTING 18" CMP	LS			1			1
204.02	ROADWAY EXCAVATION, COMPACTION METHOD- B FINISHING METHOD- B	CY	10					10
204.13	FURROW DITCHES	LF	560	183				743
204.20	DRAINAGE EXCAVATION TYPE- ROLLING DIP	EA	31		36			67
204.20A	DRAINAGE EXCAVATION TYPE- ROCK DIP	EA		1				1
204.20B	DRAINAGE EXCAVATION TYPE- SWALE	EA	3		3		3	9
204.20C	DRAINAGE EXCAVATION TYPE- ROCK SWALE	EA			1	1		2
204.20D	DRAINAGE EXCAVATION TYPE- WATER BAR	EA	2	6	2	7		17
204.20E	DRAINAGE EXCAVATION TYPE- LOW-WATER CROSSING	EA		1		1		2
204.20F	DRAINAGE EXCAVATION TYPE- LEAD OFF DITCH	EA	1	1	7	1		10
251.01	PLACED RIPRAP, CLASS -2	CY	3					3
251.01A	PLACED RIPRAP, CLASS -3	CY	6	6				12
301.03	AGGREGATE BASE GRADING-C (TABLE 703-2) COMPACTION METHOD-B	TON	404	77	297	44	44	866
303.22	ROAD RECONDITIONING, COMPACTION METHOD- B	MI	3.08	0.33	2.73	0.34	0.13	6.61
602.11	12 INCH CORRUGATED STEEL PIPE .064 INCH THK, COMPACTION METHOD- B	FT	50					50
602.11A	18 INCH CORRUGATED STEEL PIPE .064 INCH THK, COMPACTION METHOD- B	FT	40					40
605.13	GEOTEXTILE MATERIAL, SEPARATION FABRIC TYPE IIA-NONWOVEN	SY			275			275
619.03	CATTLE GUARD 14 FOOT	EA			1			1
650.02	FURNISH & INSTALL ROAD CLOSURE DEVICE, TYPE- EARTH AND LOG BARRICADE	EA		1		1		2

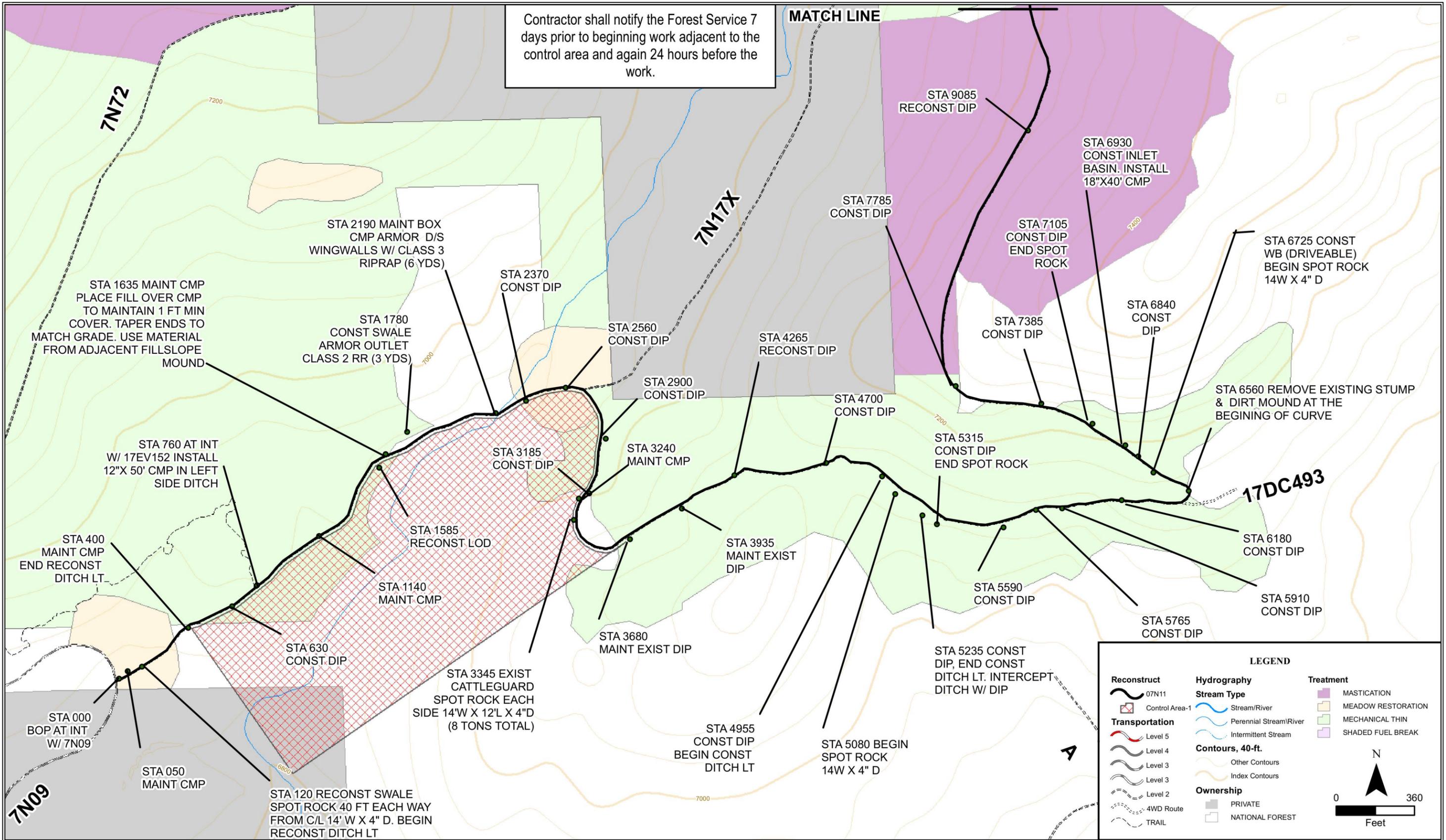

**U.S. DEPARTMENT OF AGRICULTURE**  
**FOREST SERVICE**  
**R-5**  
**PACIFIC SOUTHWEST REGION**

Drawn G.COX, A.COMBS  
 Designed G.COX, A.COMBS  
 Reviewed R.CABLAYAN  
 Approved R.CABLAYAN

Revisions			
NO.	DESCRIPTION	DATE	BY

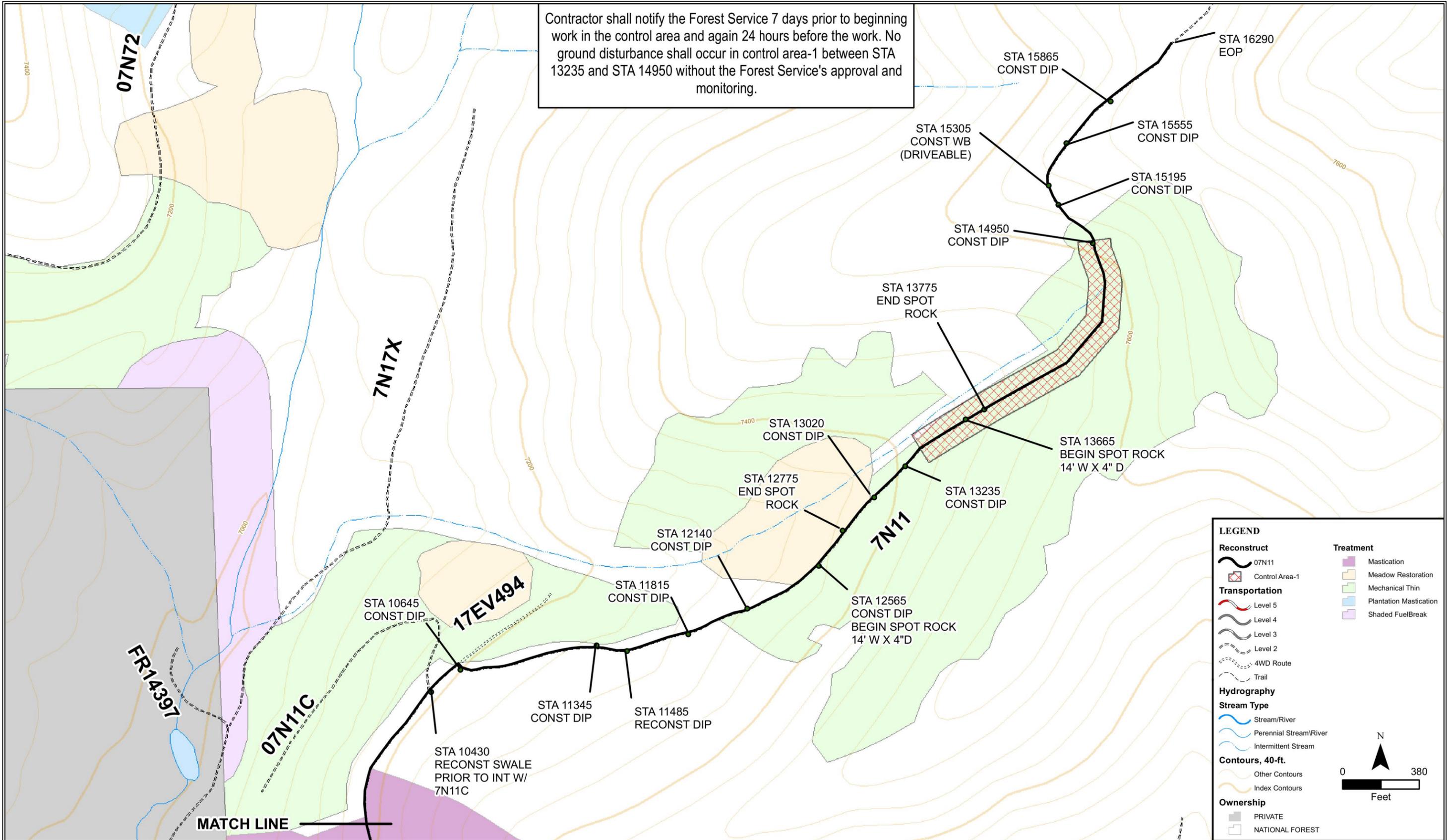
Forest  
**STANISLAUS**  
 Project Name  
 THOMPSON MEADOW  
 STEWARDSHIP (IRTC)

Sheet Title <b>MATERIALS &amp; QUANTITIES</b> Scale AS NOTED	Sheet 4 of 24
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Revisions			
NO.	DESCRIPTION	DATE	BY

Contractor shall notify the Forest Service 7 days prior to beginning work in the control area and again 24 hours before the work. No ground disturbance shall occur in control area-1 between STA 13235 and STA 14950 without the Forest Service's approval and monitoring.



**LEGEND**

**Reconstruct**

- 07N11
- Control Area-1

**Transportation**

- Level 5
- Level 4
- Level 3
- Level 2
- 4WD Route
- Trail

**Hydrography**

**Stream Type**

- Stream/River
- Perennial Stream/River
- Intermittent Stream

**Contours, 40-ft.**

- Other Contours
- Index Contours

**Ownership**

- PRIVATE
- NATIONAL FOREST

**Treatment**

- Mastication
- Meadow Restoration
- Mechanical Thin
- Plantation Mastication
- Shaded FuelBreak

0 380 Feet

U.S. DEPARTMENT OF AGRICULTURE  
**FOREST SERVICE**  
 R-5  
 PACIFIC SOUTHWEST REGION

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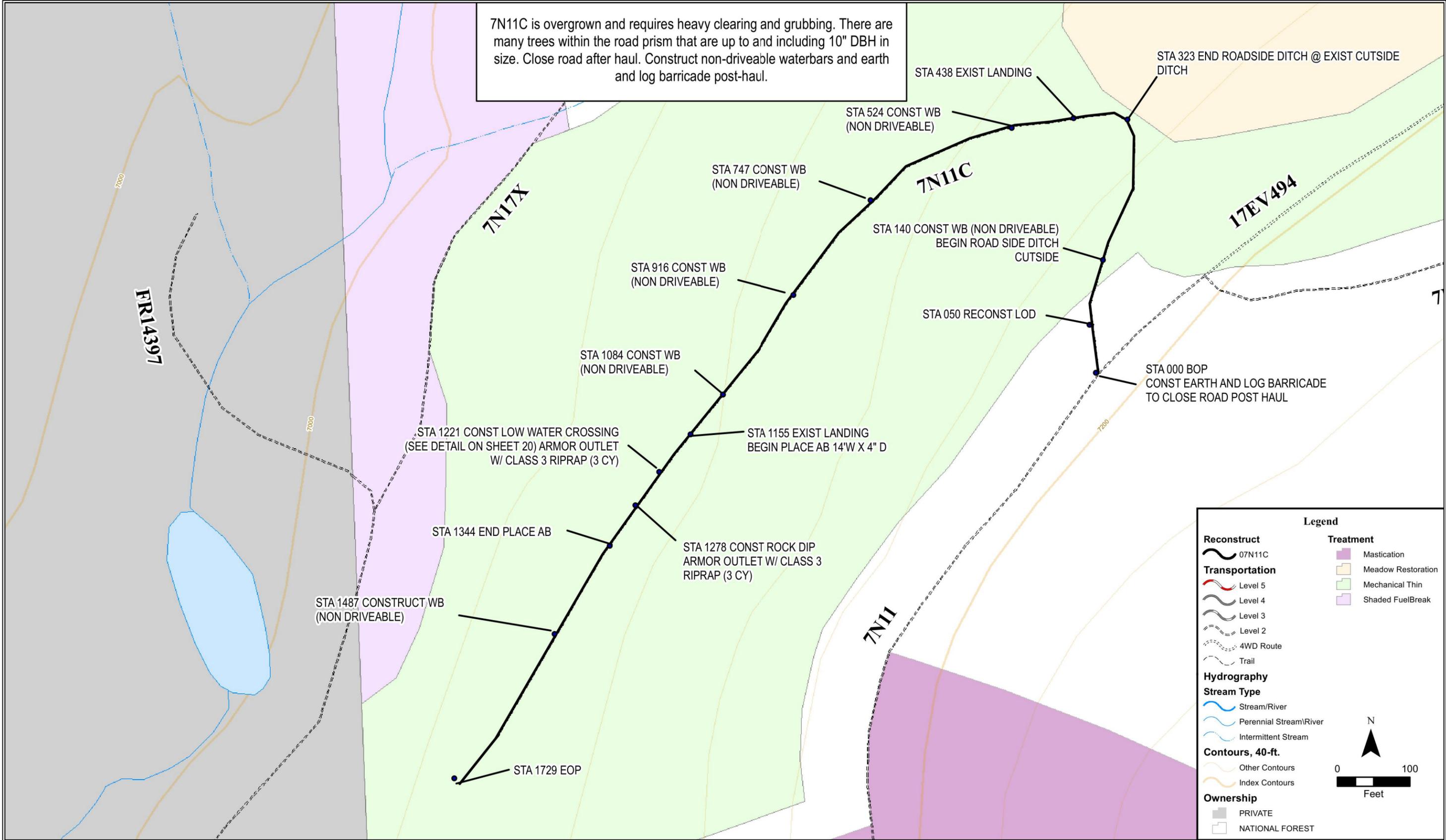
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NO.	DESCRIPTION	DATE	BY

Forest  
**STANISLAUS**  
 Project Name  
 THOMPSON MEADOW  
 STEWARDSHIP (IRTC)

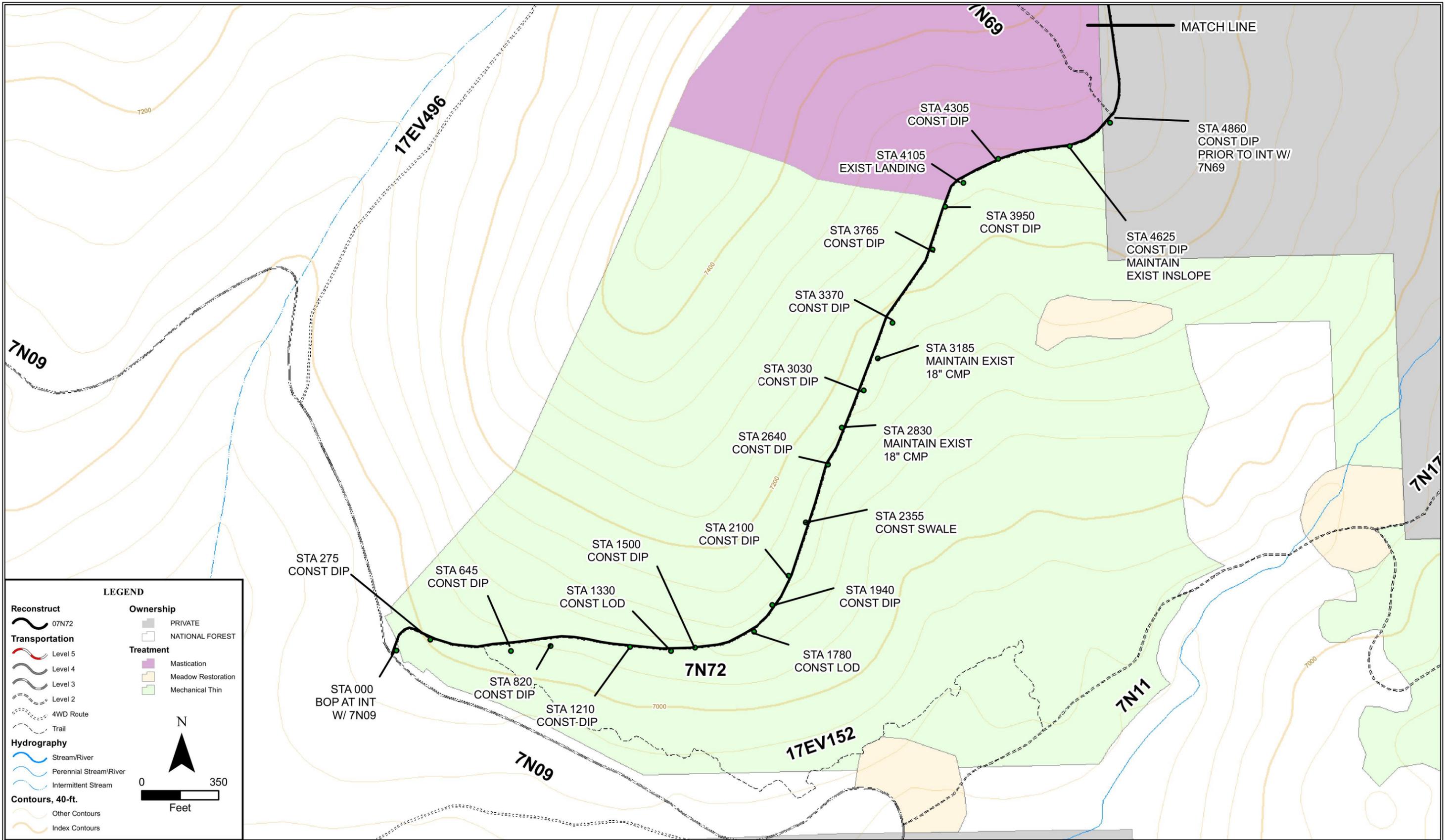
Sheet Title  
 7N11 (2 OF 2)  
 Scale AS NOTED

Sheet  
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7N11C is overgrown and requires heavy clearing and grubbing. There are many trees within the road prism that are up to and including 10" DBH in size. Close road after haul. Construct non-driveable waterbars and earth and log barricade post-haul.



Revisions			
NO.	DESCRIPTION	DATE	BY



Drawn G.COX, A.COMBS  
 Designed G.COX, A.COMBS  
 Reviewed R.CABLAYAN  
 Approved R.CABLAYAN

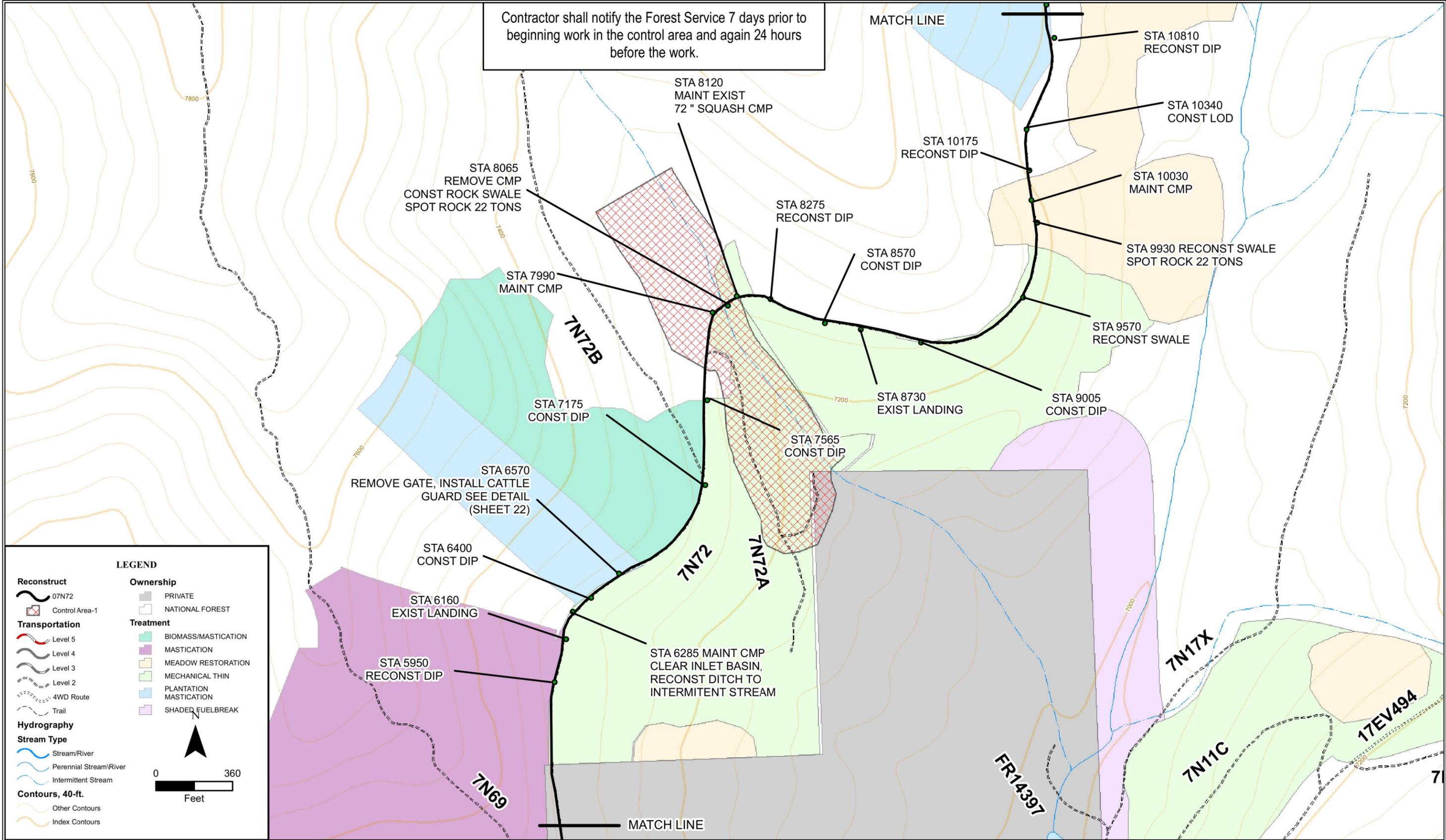
Revisions			
NO.	DESCRIPTION	DATE	BY

Forest  
**STANISLAUS**  
 Project Name  
 THOMPSON MEADOW  
 STEWARDSHIP (IRTC)

Sheet Title  
 7N72 (1 OF 3)  
 Scale AS NOTED

Sheet  
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 of  
 24

Contractor shall notify the Forest Service 7 days prior to beginning work in the control area and again 24 hours before the work.



**LEGEND**

**Reconstruct**  
 07N72  
 Control Area-1

**Transportation**  
 Level 5  
 Level 4  
 Level 3  
 Level 2  
 4WD Route  
 Trail

**Hydrography**  
**Stream Type**  
 Stream/River  
 Perennial Stream/River  
 Intermittent Stream

**Contours, 40-ft.**  
 Other Contours  
 Index Contours

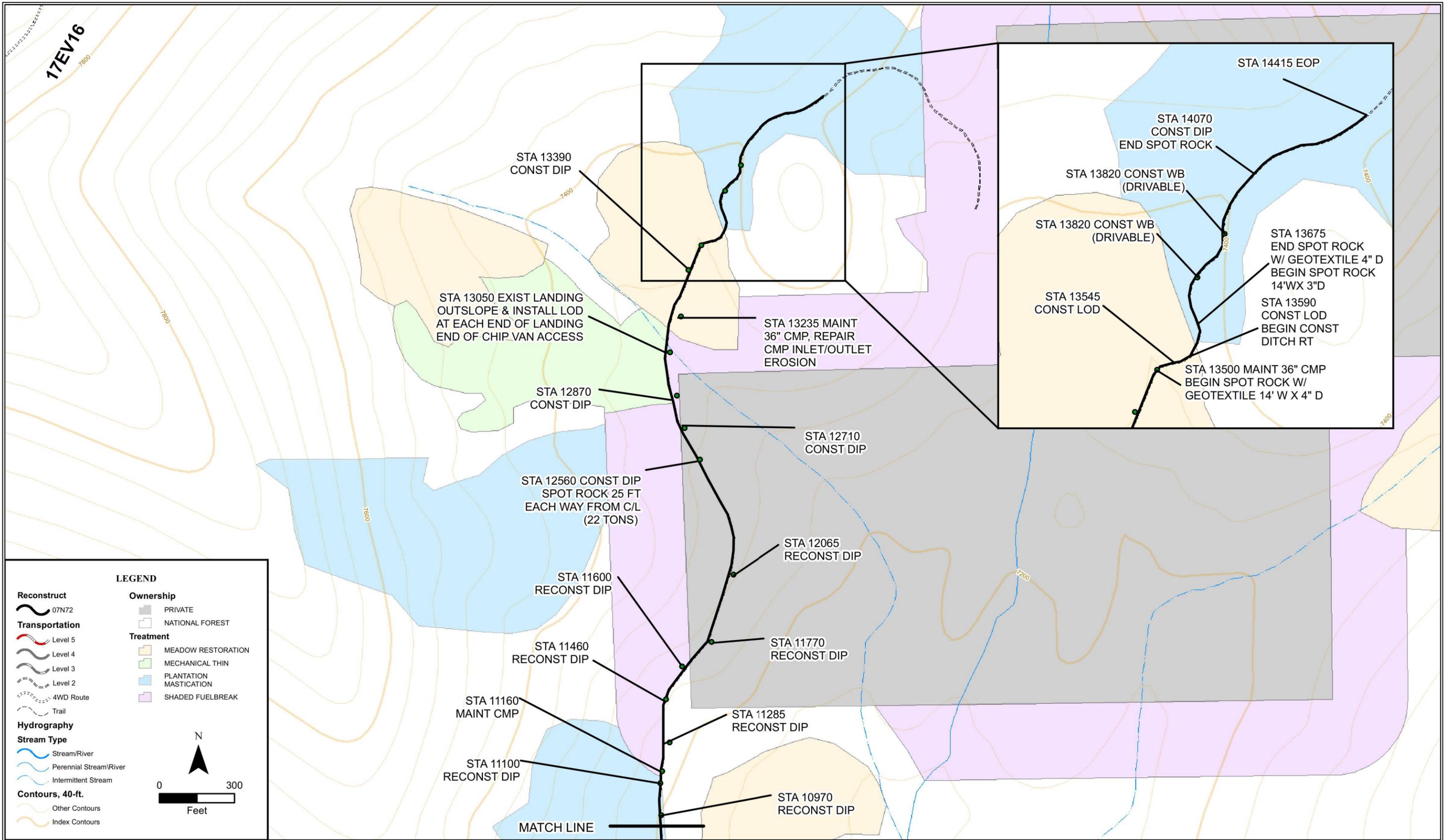
**Ownership**  
 PRIVATE  
 NATIONAL FOREST

**Treatment**  
 BIOMASS/MASTICATION  
 MASTICATION  
 MEADOW RESTORATION  
 MECHANICAL THIN  
 PLANTATION MASTICATION  
 SHADED FUELBREAK

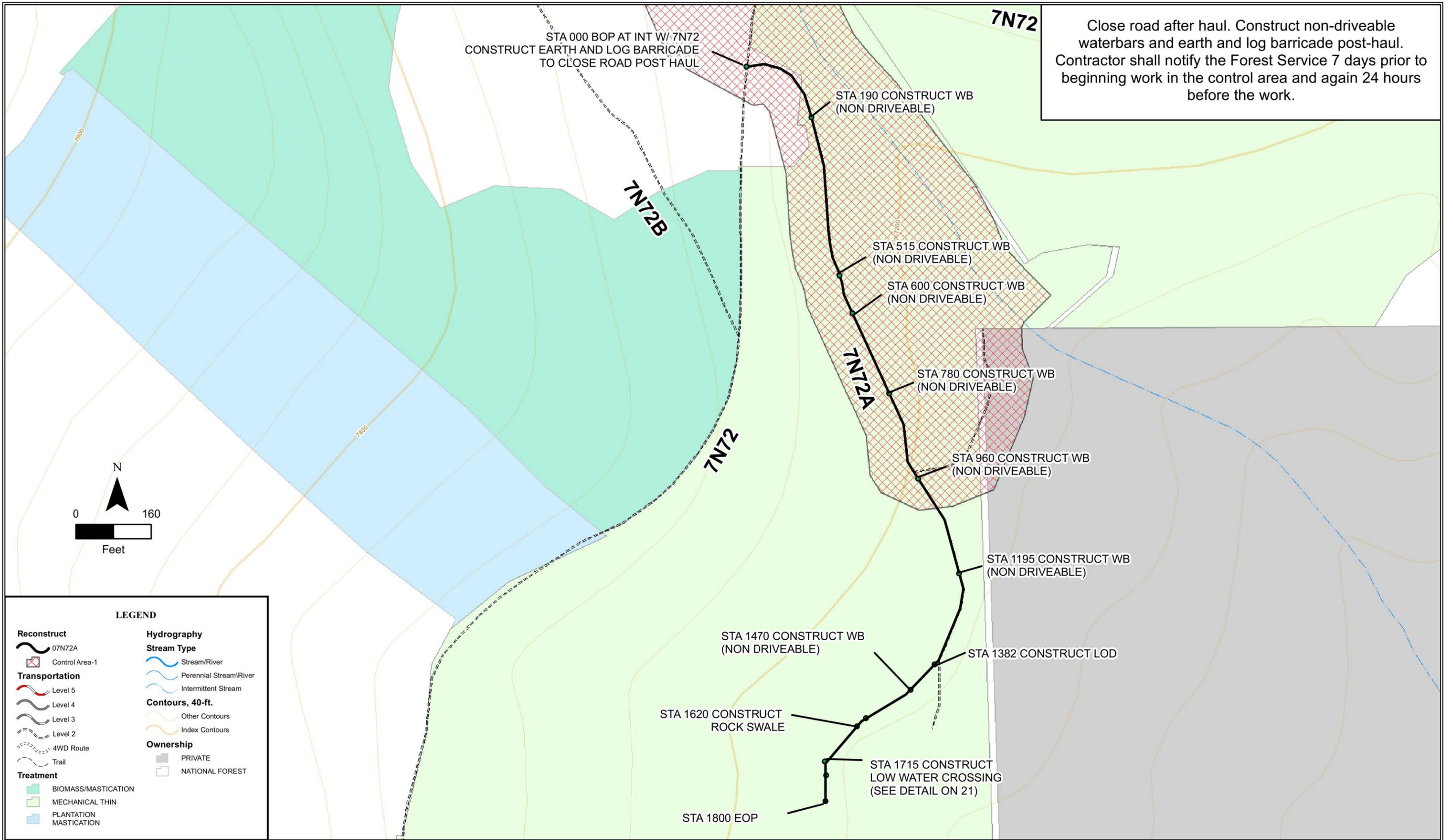
0 360 Feet

Drawn	G.COX, A.COMBS
Designed	G.COX, A.COMBS
Reviewed	R.CABLAYAN
Approved	R.CABLAYAN

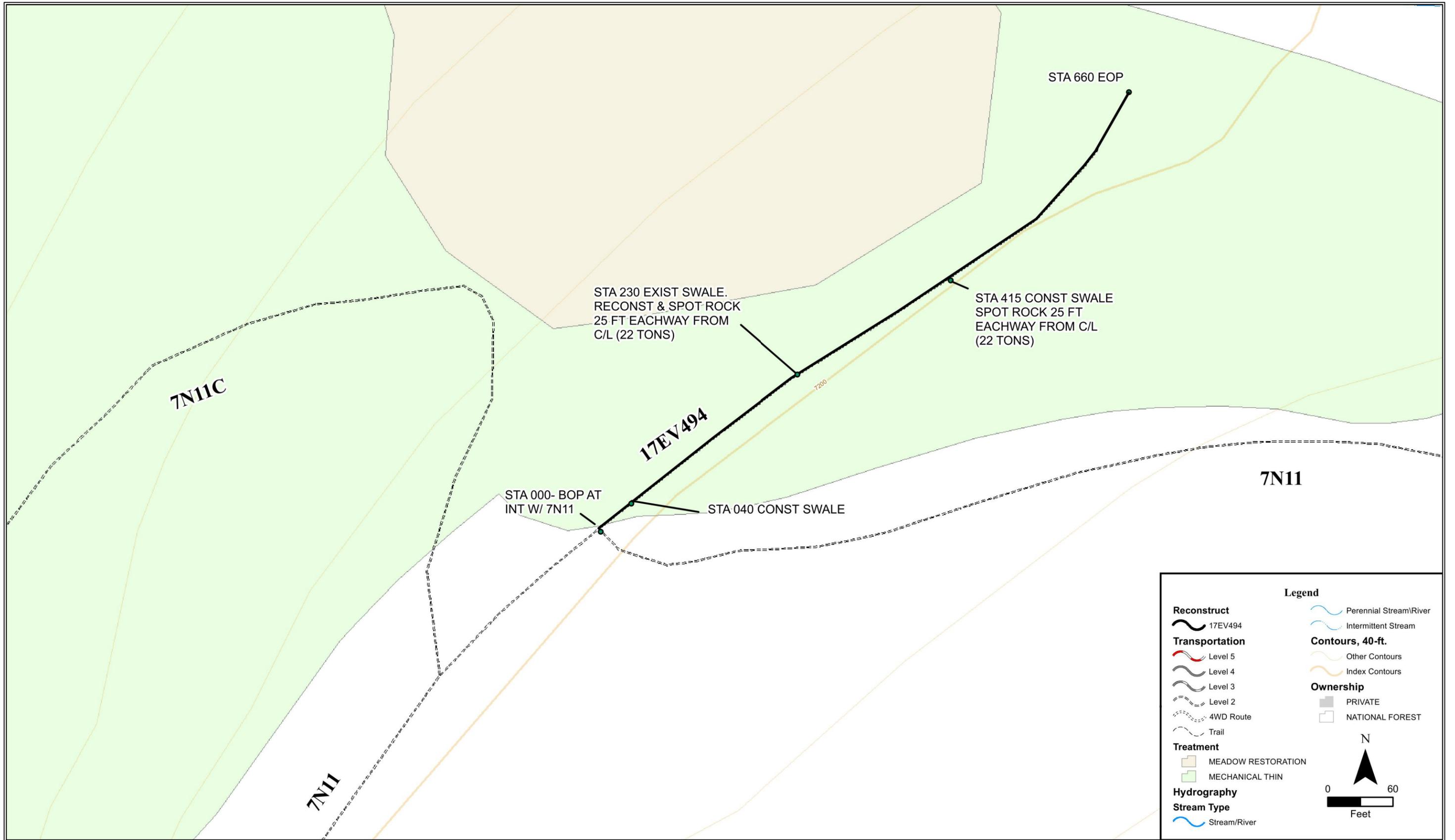
Revisions			
NO.	DESCRIPTION	DATE	BY



Revisions			
NO.	DESCRIPTION	DATE	BY



Revisions			
NO.	DESCRIPTION	DATE	BY



**Legend**

**Reconstruct**  
 17EV494

**Transportation**  
 Level 5  
 Level 4  
 Level 3  
 Level 2  
 4WD Route  
 Trail

**Treatment**  
 MEADOW RESTORATION  
 MECHANICAL THIN

**Hydrography**  
**Stream Type**  
 Stream/River

**Contours, 40-ft.**  
 Other Contours  
 Index Contours

**Ownership**  
 PRIVATE  
 NATIONAL FOREST

0 60  
 Feet

U.S. DEPARTMENT OF AGRICULTURE  
 FOREST SERVICE  
 R-5  
 PACIFIC SOUTHWEST REGION

Drawn	G.COX, A.COMBS
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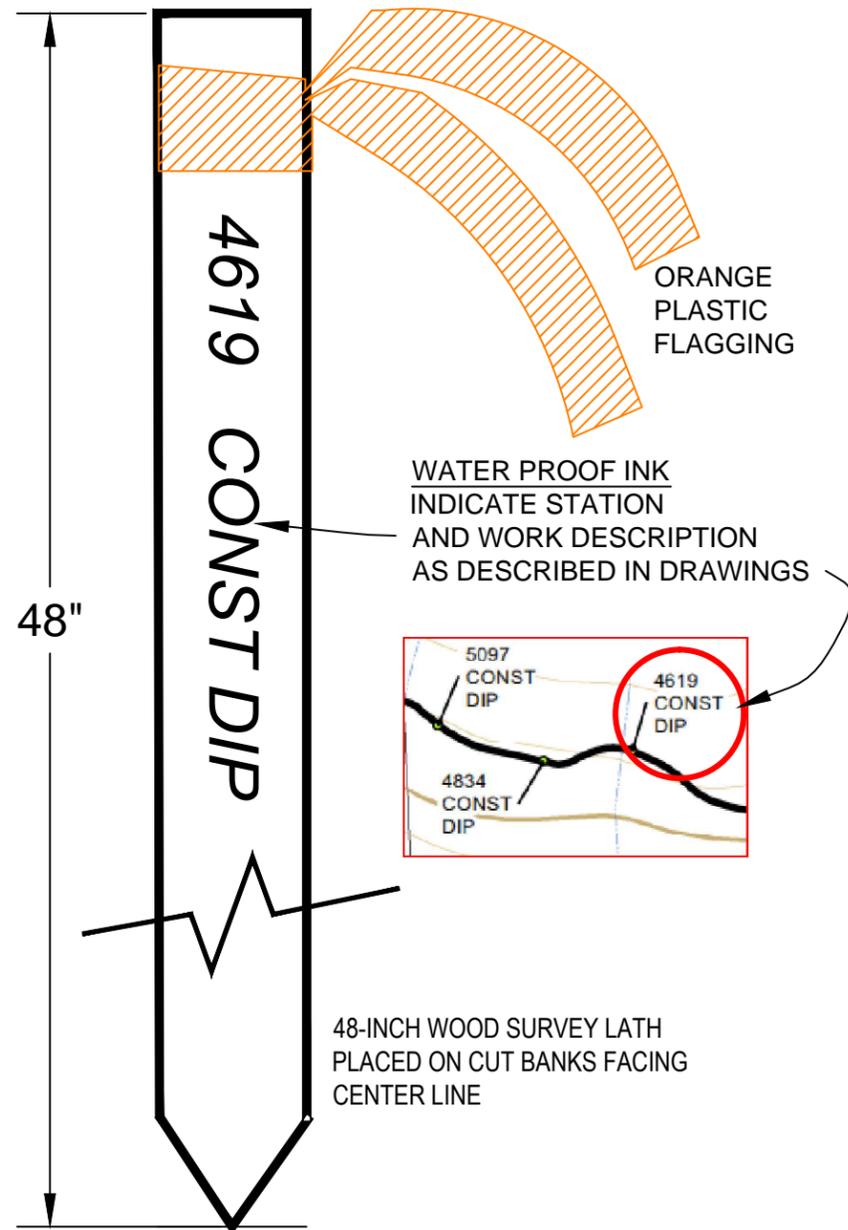
Forest  
**STANISLAUS**  
 Project Name  
 THOMPSON MEADOW  
 STEWARDSHIP (IRTC)

Sheet Title  
 17EV494  
 Scale AS NOTED

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 of  
 24

# CONSTRUCTION STAKING (PAY ITEM 152.01):

NOT TO SCALE



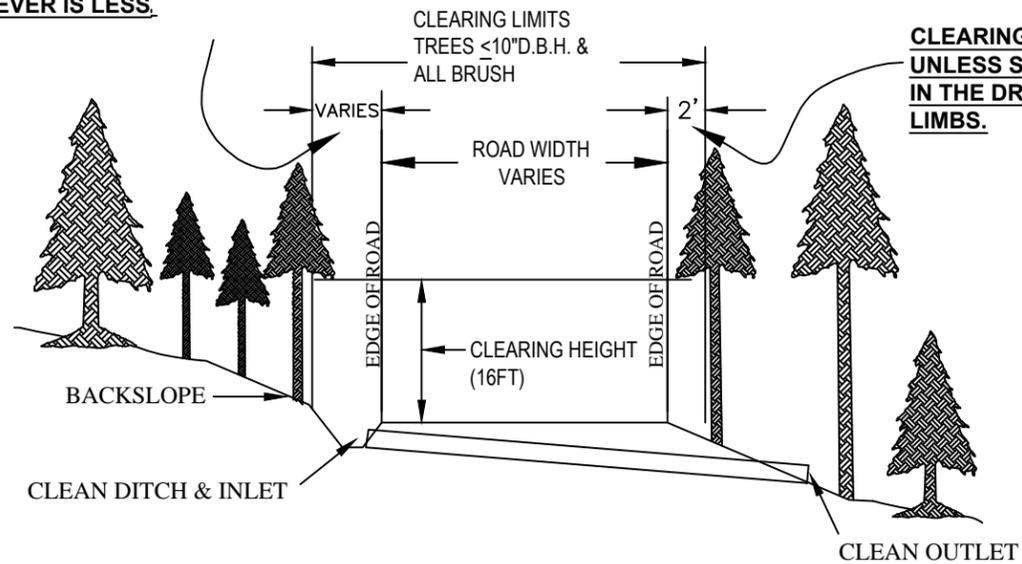
## STAKING NOTES:

- Work. Complete the construction staking of a road project that will be reconstructed. Furnish all labor, equipment, instruments, materials, transportation, and other incidentals necessary to complete the reconstruction staking in accordance with these specifications and acceptable engineering practice.
- Equipment. Recommend staking roads using a GPS device or a calibrated DMI. If using GPS on Android or iPhone systems, you may use PDF Maps by Avenza Systems or similar. If using Microsoft system, you may use ArcPad or similar software. Which ever software is used, it must be capable of using georeferenced images.
- Provide stakes that have the nominal dimensions SHOWN IN THE DRAWINGS. Ensure that identification stakes are of sufficient length to provide a solid set in the ground and space for marking above ground when applicable. Other dimensions and materials may be used if approved in writing by the CO. Paint the top 2 inches of all stakes and lath, or mark them with plastic orange flagging.
- Painting of rocks, trees, or other natural landmarks is strictly prohibited.
- Government-Furnished Documents. The Government will provide GPS data and georeferenced road plans for staking purposes.
- Contractor shall stake all work related sites as SHOWN IN THE DRAWINGS.
- Stake Approval & Maintenance. Do not begin construction work within a roadway segment until the stakes, marks, and controls established have been approved in writing by the CO. The minimum segment for approval shall be 10,000 feet or the length of the project, whichever is less. Contractor shall submit a schedule to the CO detailing method used for establishing work location (staking) and when staking is complete.
- Approval of construction staking shall not relieve the Contractor of responsibility for maintaining the survey work until construction has been completed, and for correcting errors, whether the errors are discovered during the performance of survey or in subsequent phases of the project. Stakes shall be maintained during construction and remain in place after road work has been completed.
- The CO, at his discretion, may make minor adjustments to the placement of the construction stakes to more accurately locate the proposed constructed feature. Notification shall be provided to the contractor in the event such adjustment is necessary.
- Measurement and Payment. Measure and payment shall be lump sum for each road at the contract unit price DESIGNATED IN THE SCHEDULE OF ITEMS.

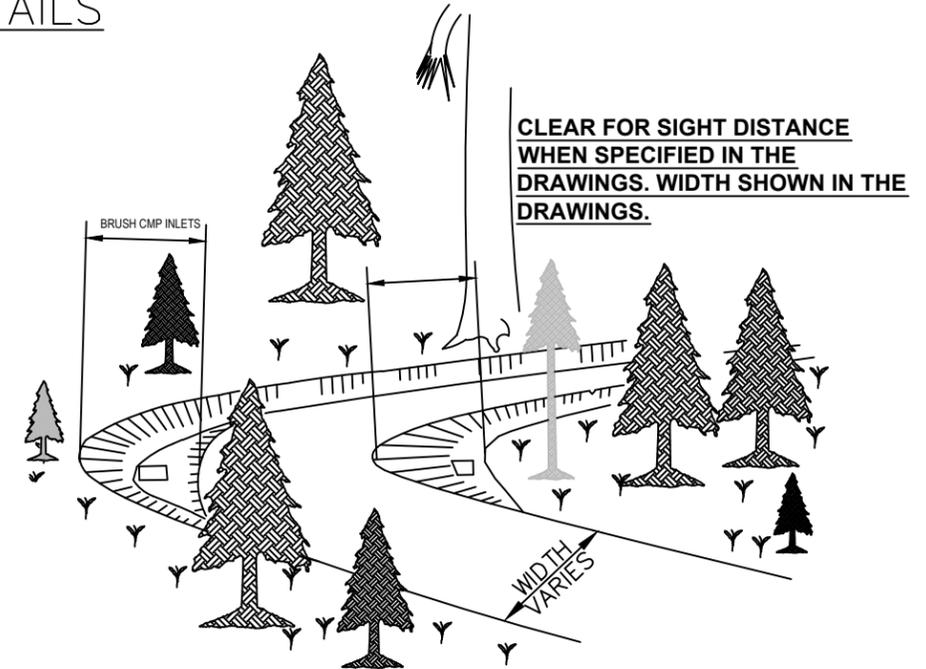
Revisions			
NO.	DESCRIPTION	DATE	BY

# ROAD RECONSTRUCTION DETAILS

**WIDTH IS 6' (LEVEL) OR TOP OF BANK - WHICH EVER IS LESS.**



**CLEARING WIDTH IS 2 FT UNLESS SPECIFIED OTHERWISE IN THE DRAWINGS. FLUSH CUT LIMBS.**



## CLEARING & GRUBBING (PAY ITEM 201.05):

1. CLEARING SLASH DISPOSAL METHODS SHALL BE DESIGNATED IN THE SCHEDULE OF ITEMS OR SHOWN ON THE DRAWINGS
2. HAZARD TREE REMOVAL, **IF REQUIRED** WILL BE MARKED BY FOREST SERVICE PRIOR TO FALLING OPERATIONS. TREATMENT OF LOGS & LIMBS SHALL BE TREATED AS SPECIFIED IN FP-03 201. PRICE INCLUDED IN PAY ITEM 201.
3. CLEARING SLASH DISPOSAL SITES SHALL BE DESIGNATED ON THE GROUND BY THE FOREST SERVICE.
4. CLEAR SMALL TREES ( $\leq 10"$  DBH) AND BRUSH FROM ALL EXISTING DITCHES, CATCH BASINS, AND INLET BASINS. ALSO CLEAR AND BRUSH ABOVE ALL CMP INLETS FOR A DISTANCE OF 10 LINEAR FEET EITHER SIDE OF CMP. PRICE INCLUDED IN PAY ITEM 201.
5. UNLESS NOTED OTHERWISE, MASTICATION MAY BE SUBSTITUTED FOR CHIPPING OF ROAD SIDE SLASH. **WHEN MASTICATION IS USED, SIDE CAST ALL MASTICATED MATERIAL ONTO FILL SLOPES. REMOVE MASTICATED MATERIAL FROM ALL DRAINAGES, INLETS, DITCHES AND EXISTING BERMS. MASTICATED MATERIAL SHALL BE NO LONGER THAN 36" IN LENGTH. CONCENTRATIONS OF CHIP MATERIAL SHALL BE SCATTERED AS DIRECTED BY THE FOREST SERVICE. FLUSH CUT STOBS GREATER THAN 2".**
6. WHERE "TREAT WITHIN UNITS" OR "SCATTER WITHIN UNITS" IS SPECIFIED, SCATTER SLASH WITHIN ADJACENT UNITS. SLASH NEEDS TO BE OUTSIDE OF THE ROAD PRISM & IN UNITS WHERE EQUIPMENT HAS ACCESS TO IT.
7. **ON ALL ROADS ACTUAL CLEARING MAY BE GREATER THAN SPECIFIED IN THE ABOVE TYPICAL. SINCE ROAD WIDTH VARIES WIDELY ON ANY GIVEN ROAD SEGMENT, THE TYPICAL TRIES TO CONVEY THE INTENT OF CLEARING REQUIREMENTS. THE ACTUAL CLEARING WIDTH WIL BE BASED ON WHETHER A DITCH, CUTSLOPE, TURNOUT, OR FILL SLOPE IS PRESENT. IN THE ABSENCE OF THESE, THE MINIMUM CLEARING WOULD BE THAT SPECIFIED ON THE ROAD SHEETS.**

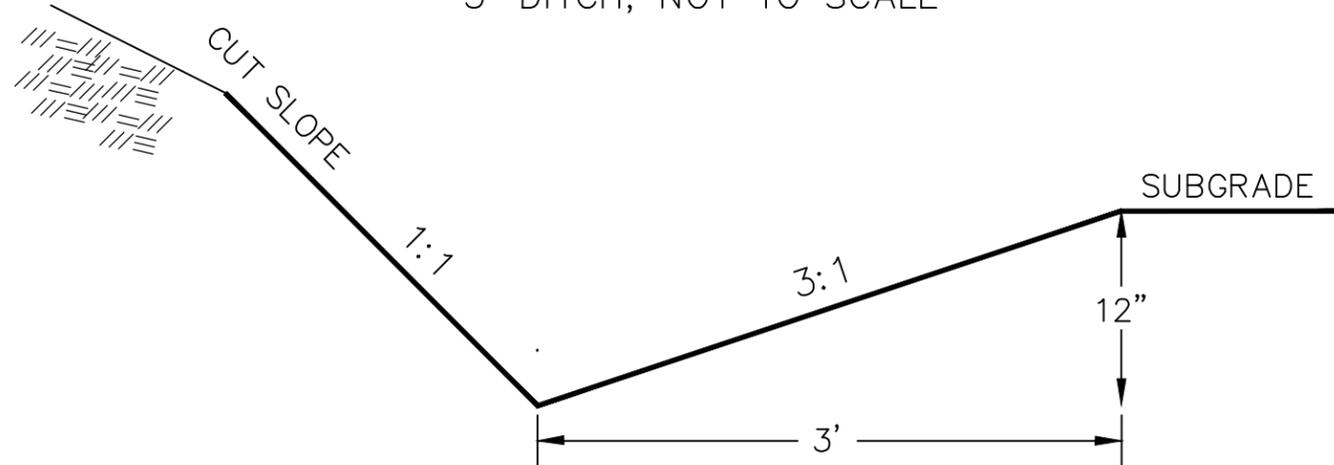
## RECONDITIONING OF ROADBED (PAY ITEM 303.22):

1. UNLESS SPECIFIED IN THE SCHEDULE OF ITEMS, ALL WORK INDICATED BELOW IS INCIDENTAL TO PAY ITEM 303.22
2. RECONDITION ROAD IN ACCORDANCE WITH FP03 SECTION-303.07. **THE CONTRACTOR SHALL SCARIFY TO A 6" DEPTH, REMOVE SURFACE IRREGULARITIES, AND SHAPE TO PROVIDE AN UNIFORM SURFACE. DISPOSE OF ROCKS LARGER THAN 4" BROUGHT TO THE SURFACE. WHERE APPLICABLE, ROCKS MAY BE SIDE CAST.**
3. REMOVE ALL OUTSIDE BERMS. **WHEN THIS IS IMPRACTICAL DUE TO TREES LARGER THAN 10" D.B.H. OR BERMS GREATER THAN 6' WIDE AND 18" IN HEIGHT, THEN RELIEVE BERMS EVERY 50 LINEAR FEET. SUITABLE MATERIAL SHALL BE INCORPORATED BACK INTO THE ROADBED. UNSUITABLE MATERIAL MAY BE SIDECAST BUT NOT WITHIN 100 FT OF A DRAINAGE.**
4. WHERE INDICATED ON THE PLANS AS "MAINT CMP" CLEAN ALL CMP INLETS & OUTLETS IN ACCORDANCE WITH FP-03 SECTION 607.04, AT A MINIMUM OF 4 FT OR THE NECESSARY DISTANCE TO MAINTAIN POSITIVE DRAINAGE. DO NOT PLACE MATERIAL UPSTREAM OF THE INLET.
5. CLEAN & RESHAPE ALL EXISTING DITCHES, DIPS, & WATERBARS IN ACCORDANCE WITH FP-03 SECTIONS- 303.07 AND AS SHOWN IN THE TYPICALS
6. DRAIN ALL LOW POINTS, PONDS & SWALES.
7. CONSTRUCTION OF LEAD-OFF DITCHES (LOD) ARE INCIDENTAL TO OTHER PAY ITEMS, CRITICAL LODS MAY BE SHOWN IN THE DRAWINGS, OTHERWISE LOD ARE NOT TYPICALLY SHOWN.
8. CURVE WIDENING-UNLESS SHOWN OTHERWISE, IS TYPICALLY INCLUDED WITH RECONDITIONING OF ROADBED. GRADING TO FULL WIDTH MEANS THE POTENTIAL ROAD WIDTH IN THE ABSENCE OF BERMS, DITCHES, SLOUGHS & SLIPS.

Revisions			
NO.	DESCRIPTION	DATE	BY

ROADWAY DITCH (PAY ITEM 204.13):

3' DITCH, NOT TO SCALE

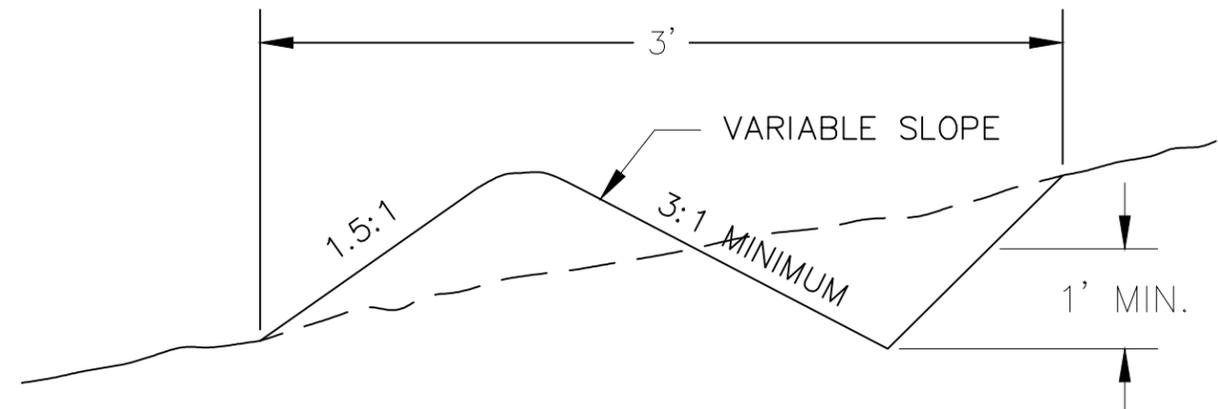


NOTE:

1. WHEN POSSIBLE, UTILIZE SUITABLE EXCAVATED MATERIAL IN ROADBED.

LEAD OFF DITCH (PAY ITEM 204.20F):

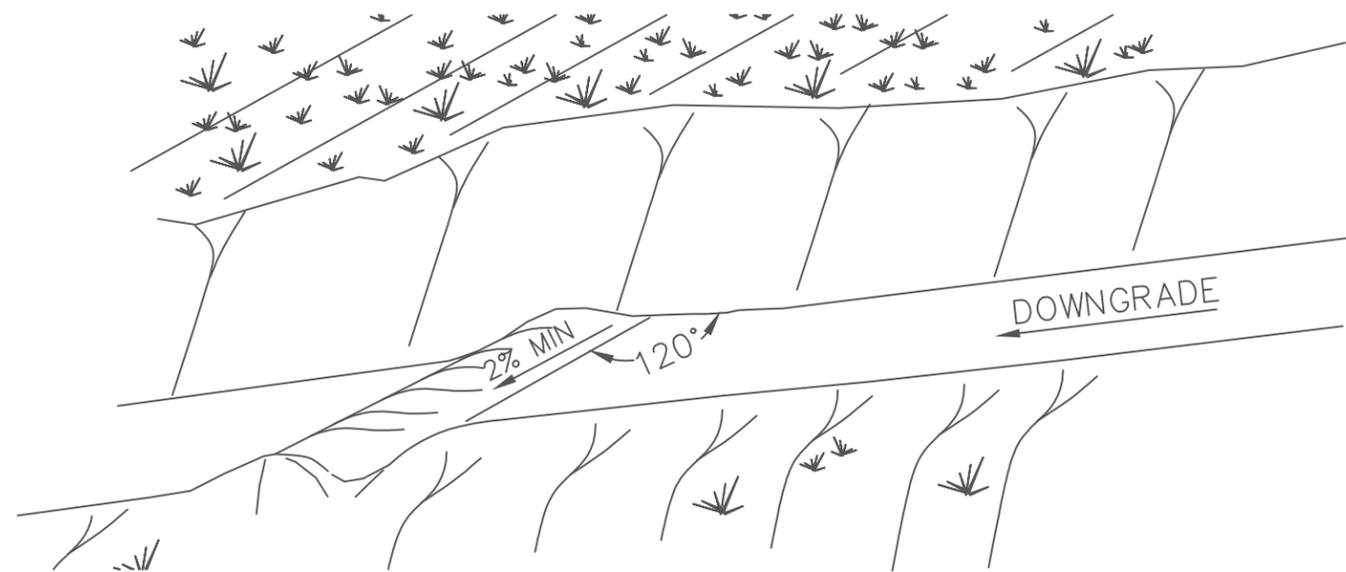
NOT TO SCALE



1. CONSTRUCT LEAD OFF DITCH TO ENSURE PROPER DRAINAGE OF ROAD SURFACE OR FEATURE.
2. LOD'S UNDER PAY ITEM 204.20F ARE NEW OR CRITICAL. ALL OTHER LOD'S WILL BE CONSTRUCTED AS INCIDENTAL TO OTHER PAY ITEMS.

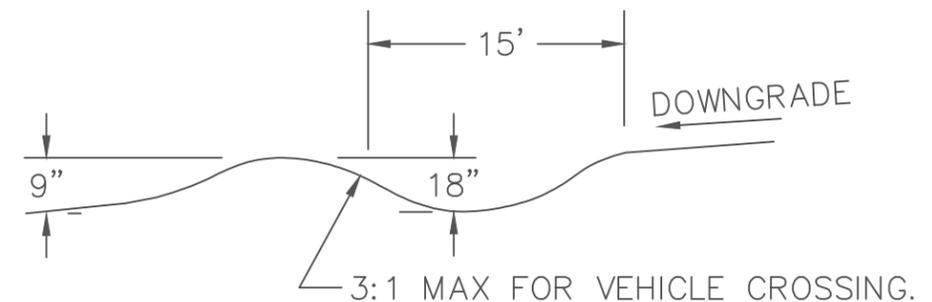
DRIVEABLE WATERBAR (PAY ITEM 204.20D):

NOT TO SCALE, FOR HIGH CLEARANCE VEHICLES



NOTES:

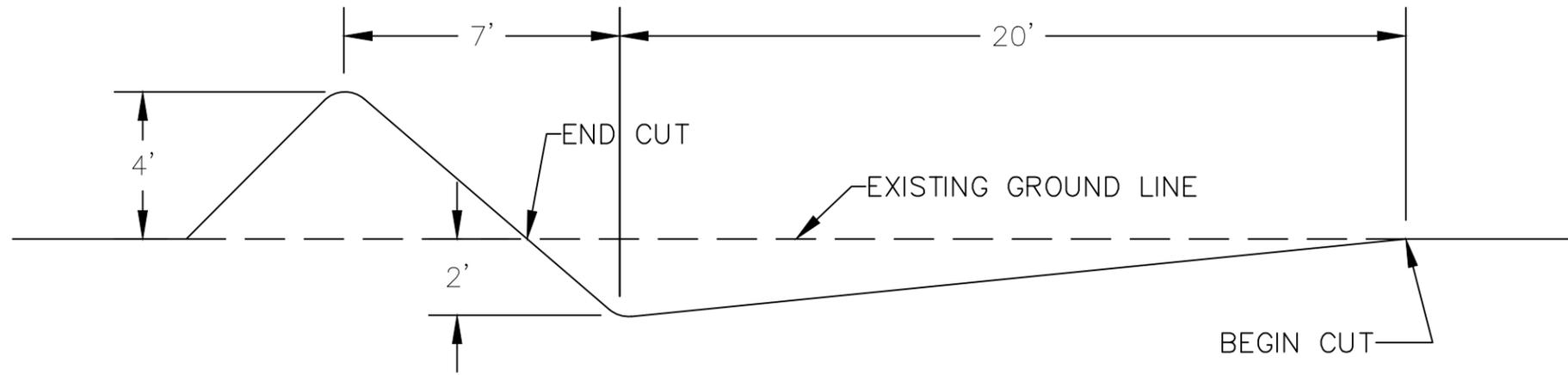
1. WATERBARS SHALL RUN ACROSS THE ENTIRE WIDTH OF THE ROAD BED, FROM CUT SLOPE TO FILL SLOPE.
2. WATERBARS SHALL HAVE FREE FLOWING OUTLETS. CONSTRUCTION OF LEAD OFF DITCHES IS INCIDENTAL TO WATERBAR CONSTRUCTION.
3. WHEEL ROLL AND COMPACT ALL DRIVEABLE WATERBARS. REMOVE ROCKS AND OTHER OBSTRUCTIONS FROM FINISHED WATERBARS.
4. WHEN STAKING FOR LOCATION, THE STAKE WILL INDICATE OUTFALL.



Revisions			
NO.	DESCRIPTION	DATE	BY

NON-DRIVEABLE WATERBAR (PAY ITEM 204.20D):

NOT TO SCALE

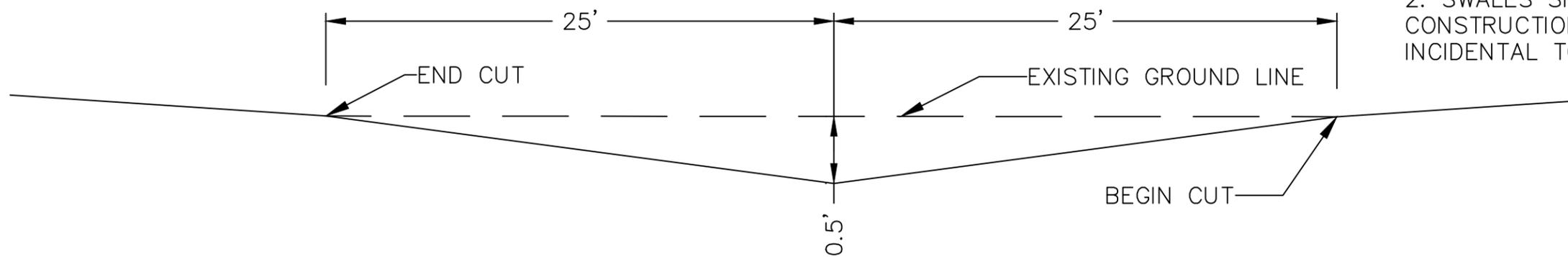


NOTES:

1. WATERBARS SHALL RUN ACROSS THE ENTIRE WIDTH OF THE ROAD BED, FROM CUT SLOPE TO FILL SLOPE.
2. WATERBARS SHALL HAVE FREE FLOWING OUTLETS. CONSTRUCTION OF LEAD OFF DITCHES IS INCIDENTAL TO WATERBAR CONSTRUCTION.

SWALE (PAY ITEM 204.20B):

NOT TO SCALE



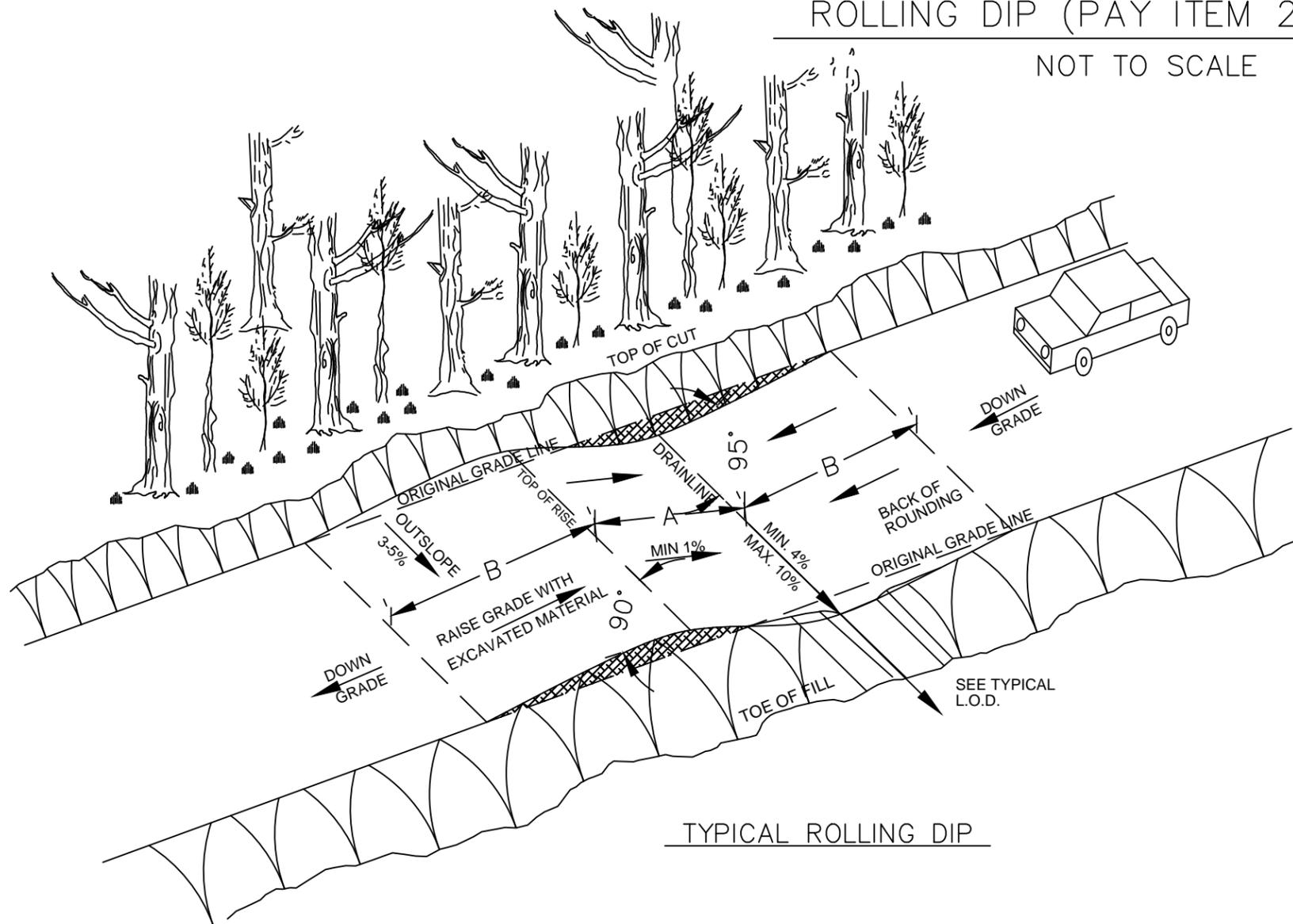
NOTES:

1. ENTIRE LENGTH OF SWALE SHALL BE OUTSLOPED 3%
2. SWALES SHALL HAVE FREE FLOWING OUTLETS. CONSTRUCTION OF LEAD OFF DITCHES IS INCIDENTAL TO WATERBAR CONSTRUCTION.

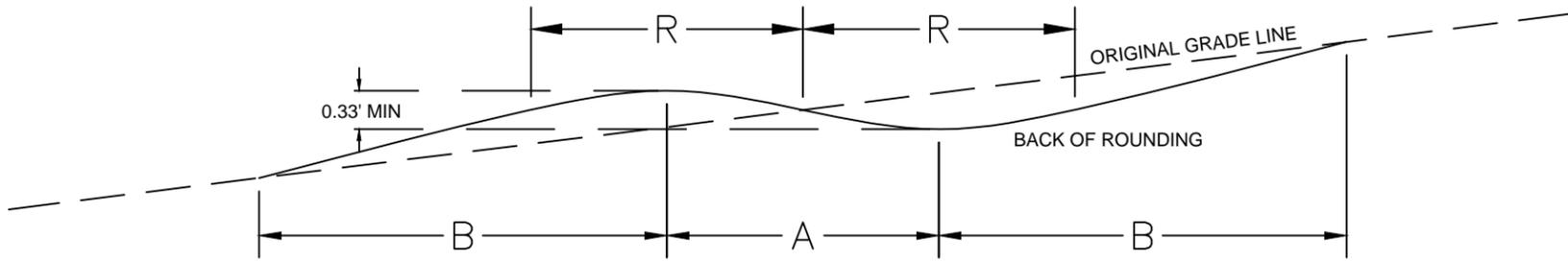
Revisions			
NO.	DESCRIPTION	DATE	BY

# ROLLING DIP (PAY ITEM 204.20):

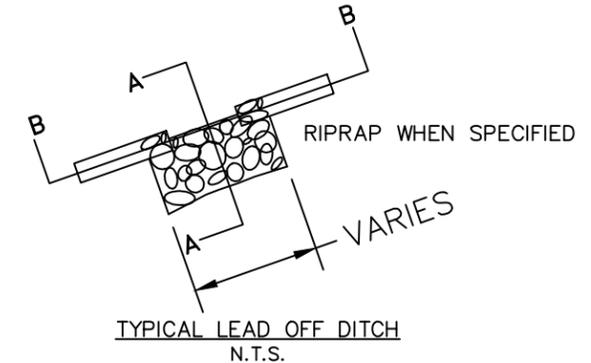
NOT TO SCALE



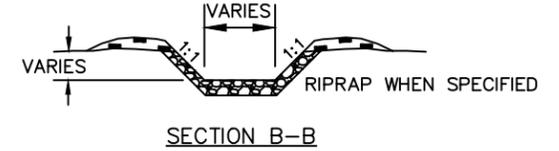
TYPICAL ROLLING DIP



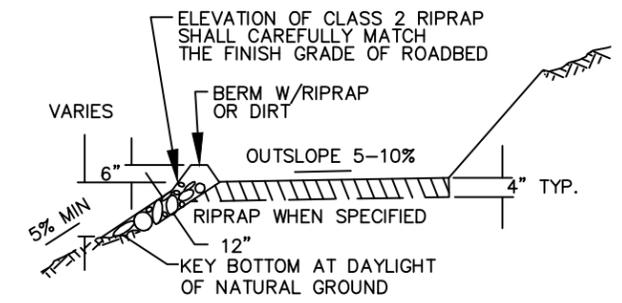
ROLLING DIP SECTION TYPICAL



1. LEAD OFF DITCH BOTTOM SHALL BE SLOPED TO PROVIDE PROPER DRAINAGE.
2. WHEN RIPRAP IS SPECIFIED AT OUTLET, IT SHALL BE SHAPED TO ASSURE WATER GOES ONTO RIPRAP, NOT AROUND. INSTRUMENT SHALL BE USED TO DETERMINE LOW POINT.
3. WHEN RIPRAP IS SPECIFIED – TOP ELEVATION SHALL BE AT TOP OF FINISHED OUTLET GRADE, NOT SUBGRADE.



SECTION B-B



SECTION A-A

GRADE %	LOWBOY				LOG TRUCK				4X4 (FIRE ENGINE)				
	LENGTH	TAPER	ROUNDING		LENGTH	TAPER	ROUNDING		LENGTH	TAPER	ROUNDING		
	A	B	%	R	A	B	%	R	A	B	%	R	
0-5	30	30	7	30	20	25	10	20	10	10	19	10	
6-8	30	50	7	30	20	40	10	20	10	15	19	10	
CHORD LENGTH FOR ROUNDING				15					15				

**NOTES**

1. MIN CROSS-SLOPE OF DRAINLINE: MIN 4%; MAX:10%
2. SKEW OF DRAINLINE SHALL BE 0-5 DEGREES DOWN GRADE
3. WHEN RIPRAP IS SPECIFIED AT OUTLET, IT SHALL BE SHAPED TO ASSURE WATER GOES ONTO RIPRAP, NOT AROUND. INSTRUMENT SHALL BE USED TO DETERMINE LOW POINT
4. RIPRAP TOP ELEVATION SHALL BE AT TOP OF FINISHED OUTLET GRADE, NOT SUBGRADE
5. TAPER LENGTHS SHALL BE WITHIN 10% OF LISTED LENGTHS
6. DIP SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN PRIOR TO PLACEMENT OF AGGREGATE COURSE

U.S. DEPARTMENT OF AGRICULTURE  
**FOREST SERVICE**  
**R-5**  
 PACIFIC SOUTHWEST REGION

Drawn G.COX, A.COMBS  
 Designed G.COX, A.COMBS  
 Reviewed R.CABLAYAN  
 Approved R.CABLAYAN

Revisions			
NO.	DESCRIPTION	DATE	BY

Forest  
**STANISLAUS**  
 Project Name  
 THOMPSON MEADOW  
 STEWARDSHIP (IRTC)

Sheet Title  
 ROLLING DIP  
 Scale AS NOTED

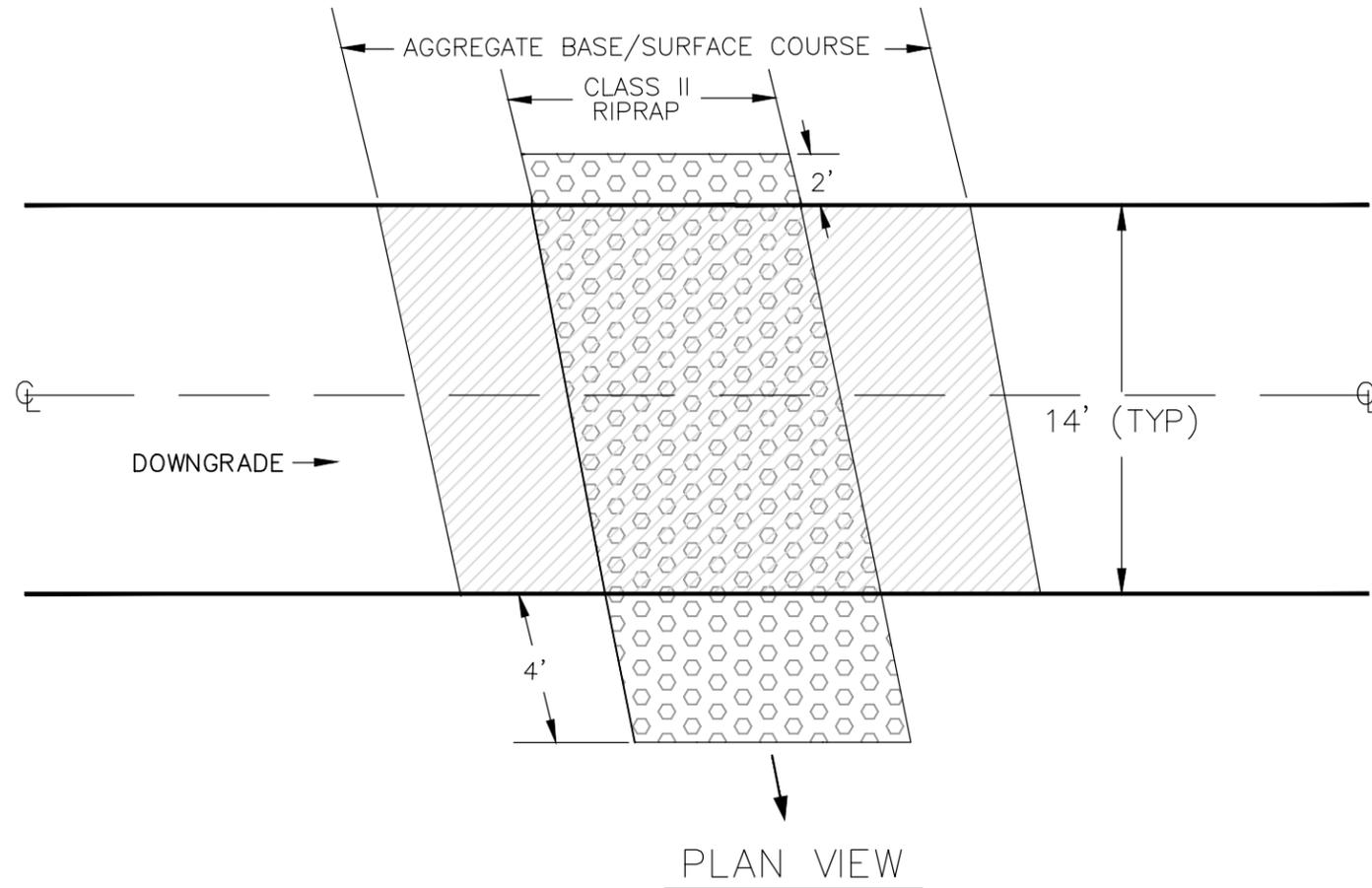
Sheet  
 17  
 of  
 24

# ROCK DIP (PAY ITEM 204.20A):

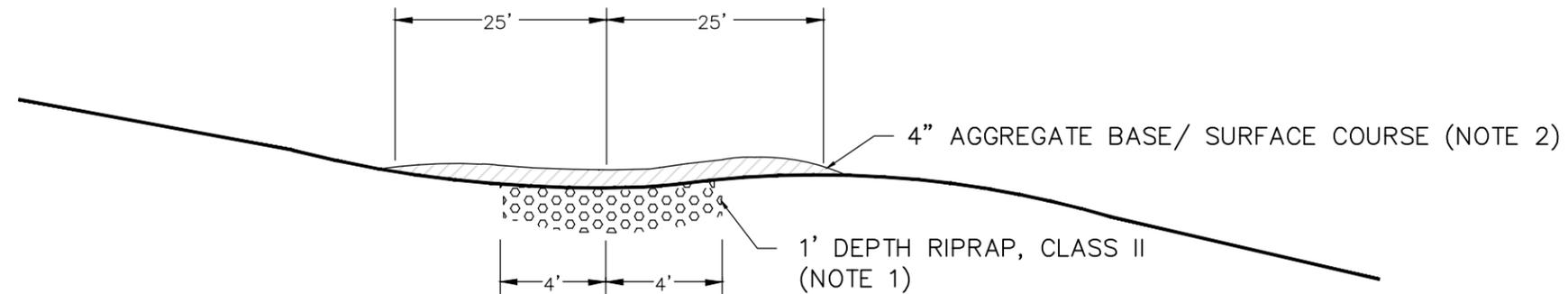
NOT TO SCALE

**NOTES:**

1. COST OF ROCK DIP INCLUDES CLASS II RIPRAP
2. COST OF ROCK DIP DOES NOT INCLUDE COST OF AGGREGATE BASE. INCLUDE AGGREGATE BASE COST IN PAY ITEM 301.03
3. CONSTRUCT DIP TO DIMENSIONS PER SHEET 17



ROADWIDTH	AGGREGATE	RIPRAP
14'	22 TON	6 CU. YDS.

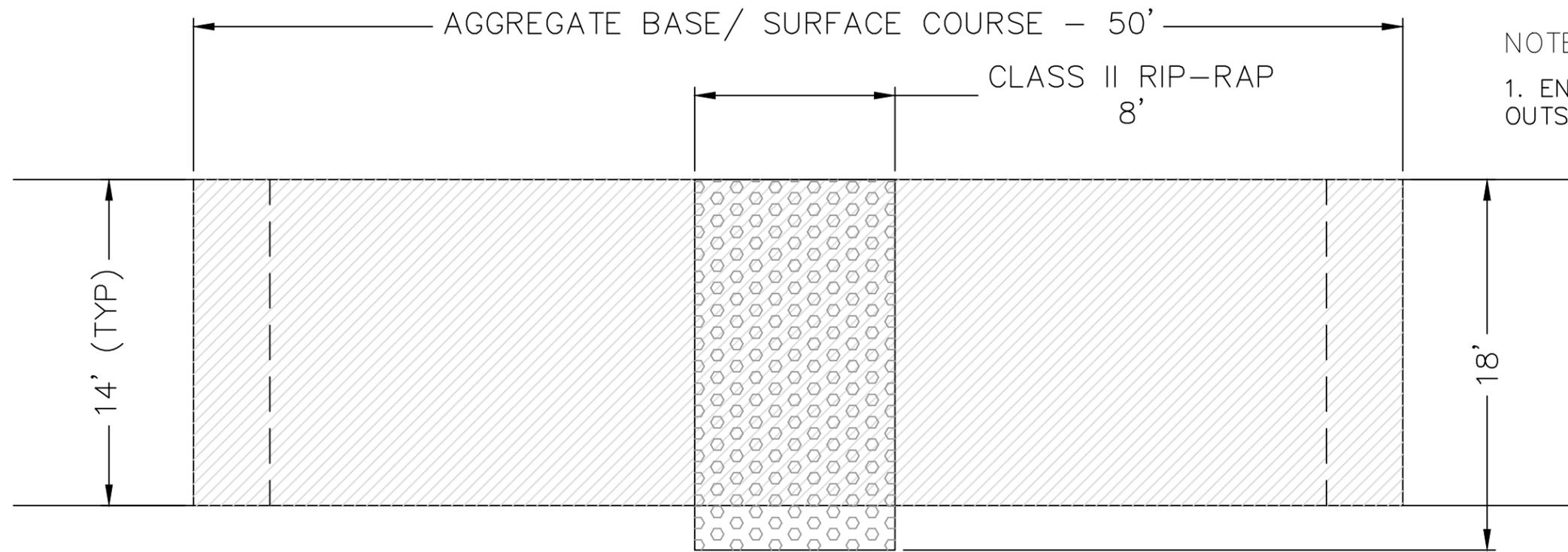


PROFILE ALONG CL OF DIP

Revisions			
NO.	DESCRIPTION	DATE	BY

ROCK SWALE (PAY ITEM 204.20C):

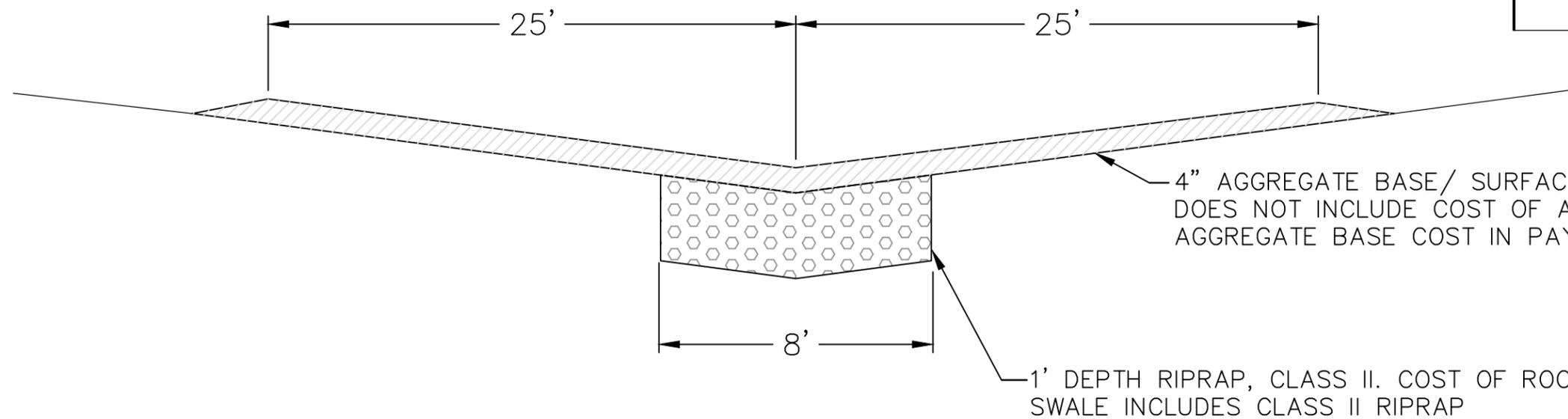
NOT TO SCALE



NOTES:

1. ENTIRE LENGTH OF SWALE SHALL BE OUTSLOPED 3%

ROADWIDTH	AGGREGATE	RIPRAP
14'	22 TON	6 CU. YDS.



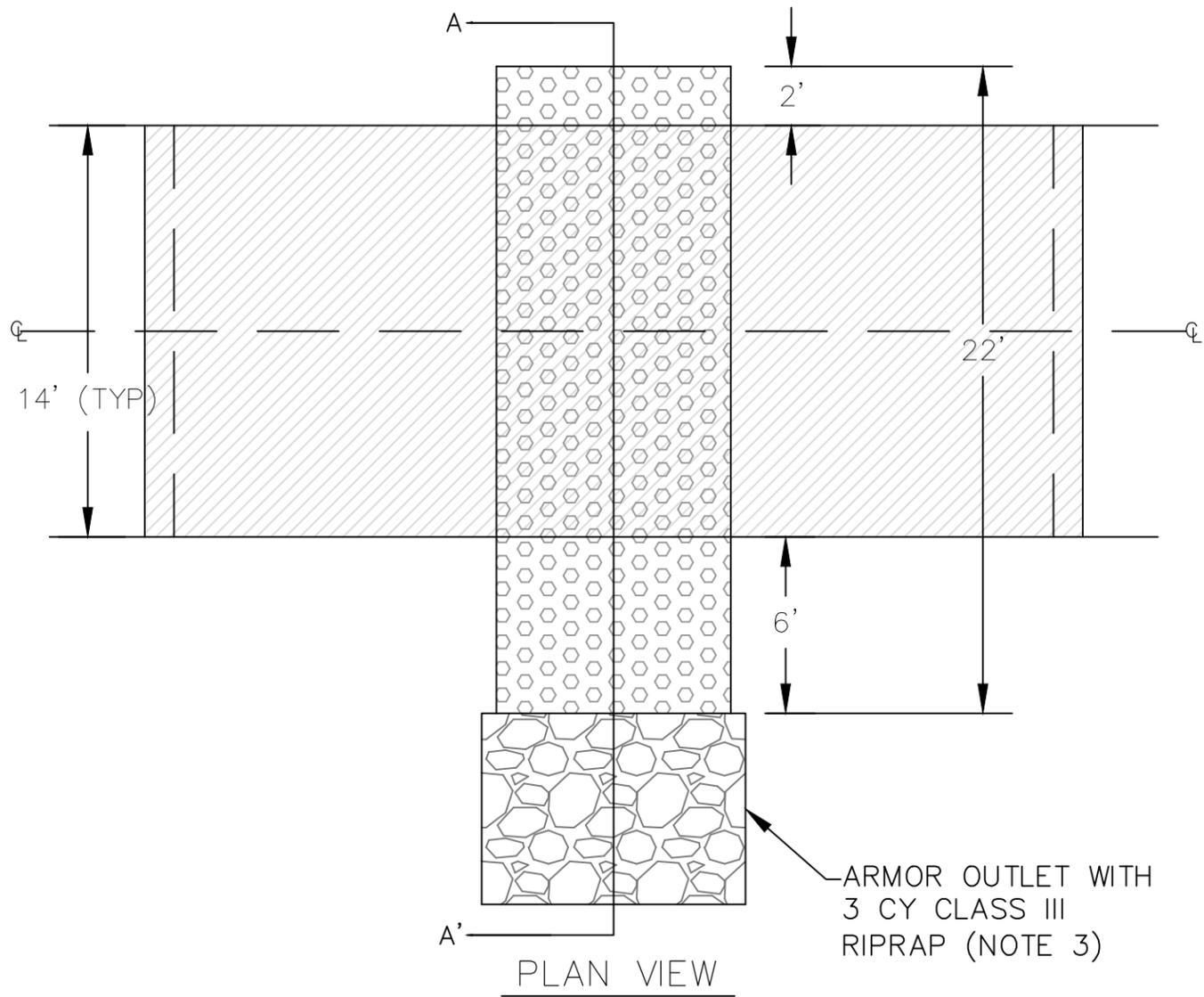
Revisions			
NO.	DESCRIPTION	DATE	BY

# 7N11C LOW WATER CROSSING (PAY ITEM 204.20E):

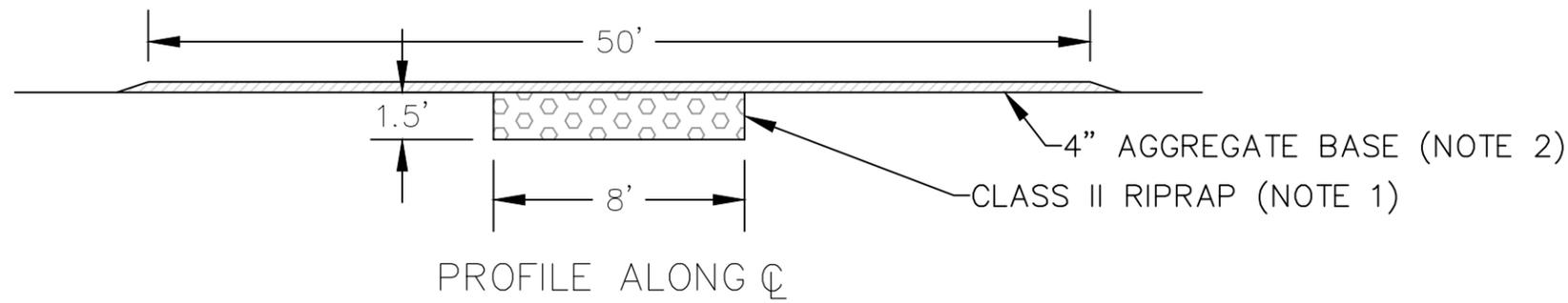
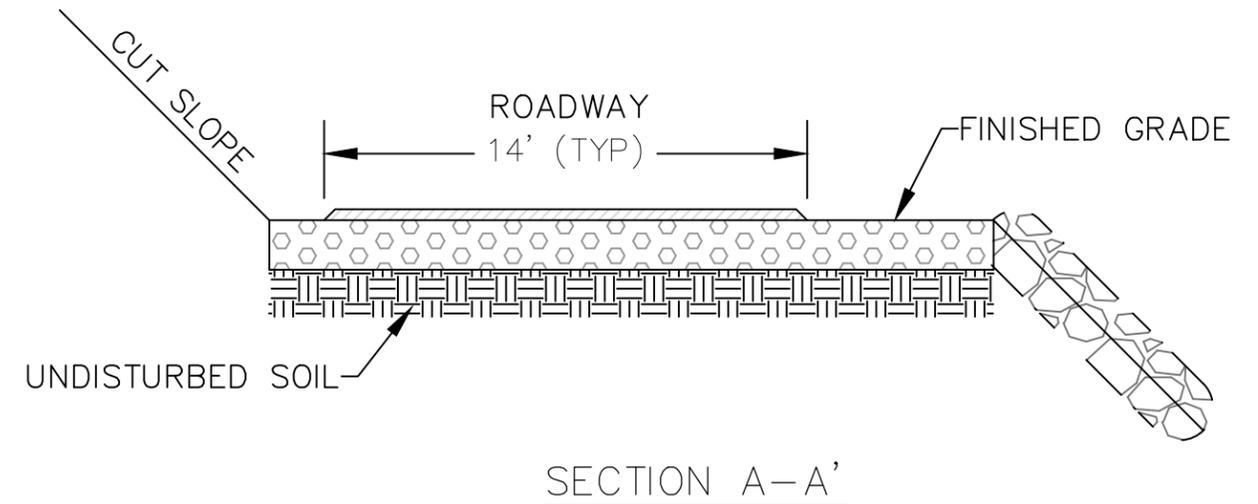
NOT TO SCALE

**NOTES:**

1. COST OF LOW WATER CROSSING INCLUDES CLASS II RIPRAP.
2. COST OF LOW WATER CROSSING DOES NOT INCLUDE COST OF AGGREGATE BASE. INCLUDE AGGREGATE BASE COST IN PAY ITEM 301.03.
3. COST OF LOW WATER CROSSING DOES NOT INCLUDE COST OF CLASS III RIPRAP. INCLUDE CLASS III RIPRAP COST IN PAY ITEM 251.01A.



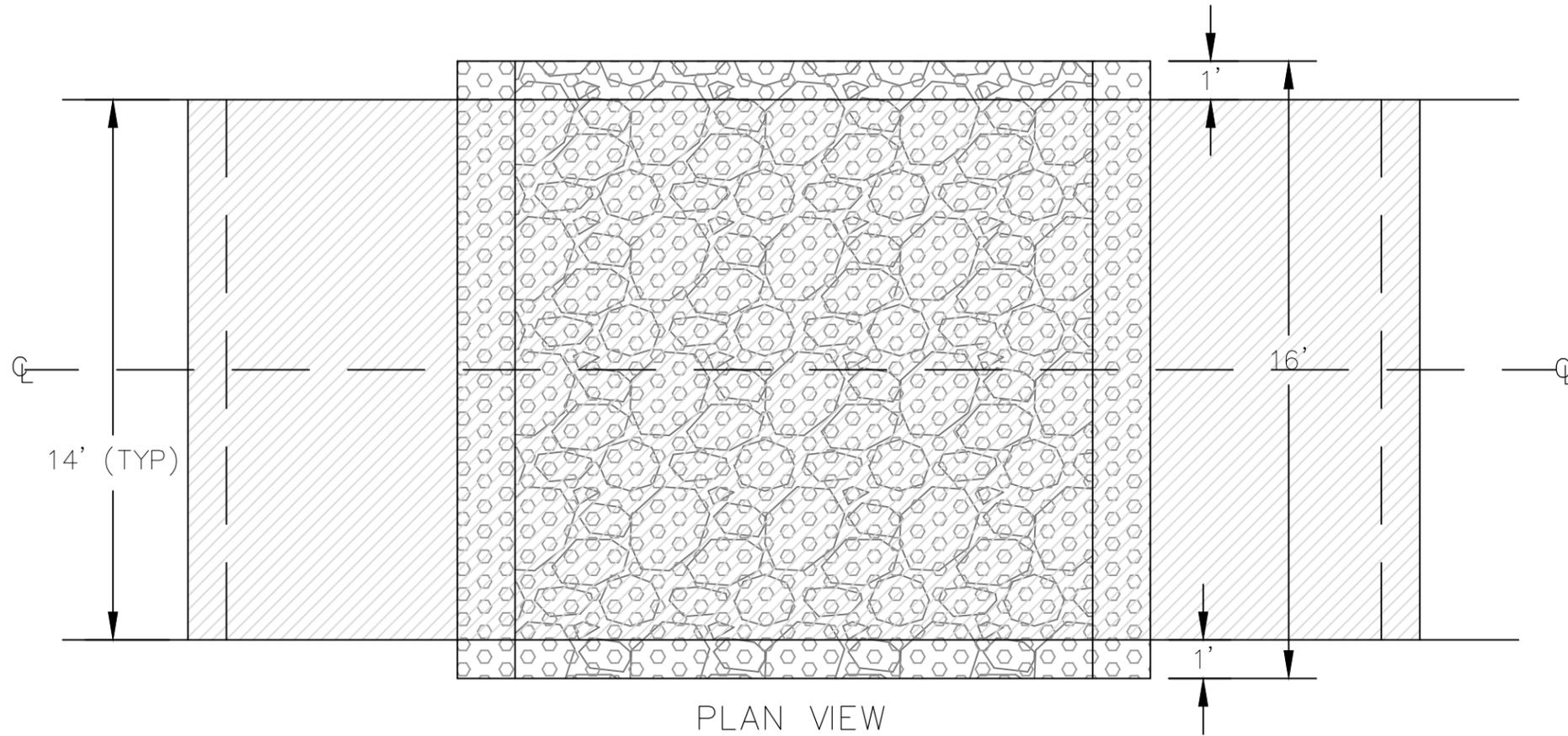
ROADWIDTH	AGGREGATE	RIPRAP CLASS II	RIPRAP CLASS II
14'	22 TON	10 CU. YDS.	3 CU. YDS.



Revisions			
NO.	DESCRIPTION	DATE	BY

7N72A LOW WATER CROSSING (PAY ITEM 204.20E):

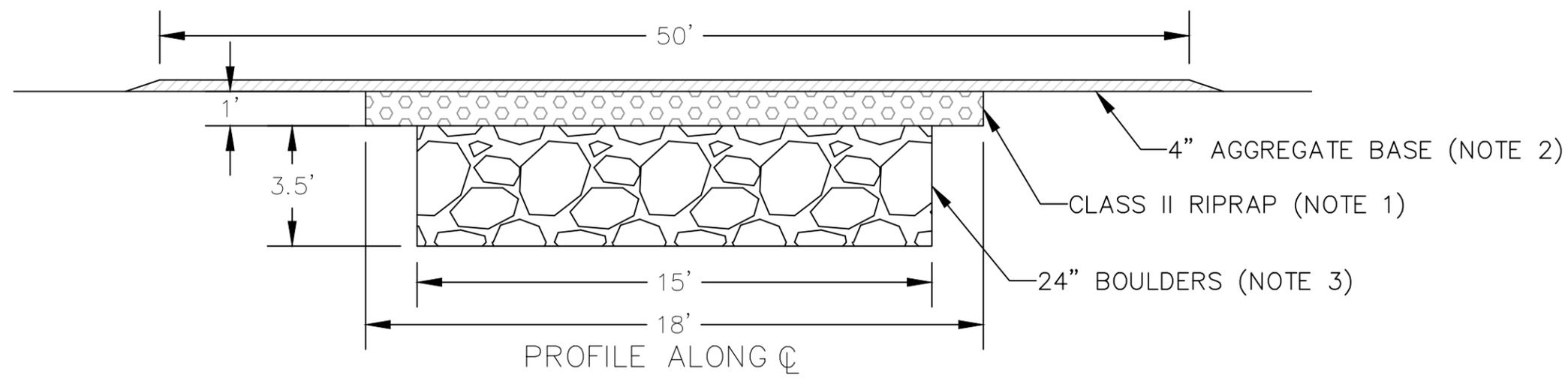
NOT TO SCALE



NOTES:

1. COST OF LOW WATER CROSSING INCLUDES CLASS II RIPRAP.
2. COST OF LOW WATER CROSSING DOES NOT INCLUDE COST OF AGGREGATE BASE. INCLUDE AGGREGATE BASE COST IN PAY ITEM 301.03.
3. USE LARGE 24" BOULDERS EXISTING ON SITE TO FILL SCOUR CHANNEL. NO ADDITIONAL MATERIAL HAUL NECESSARY.

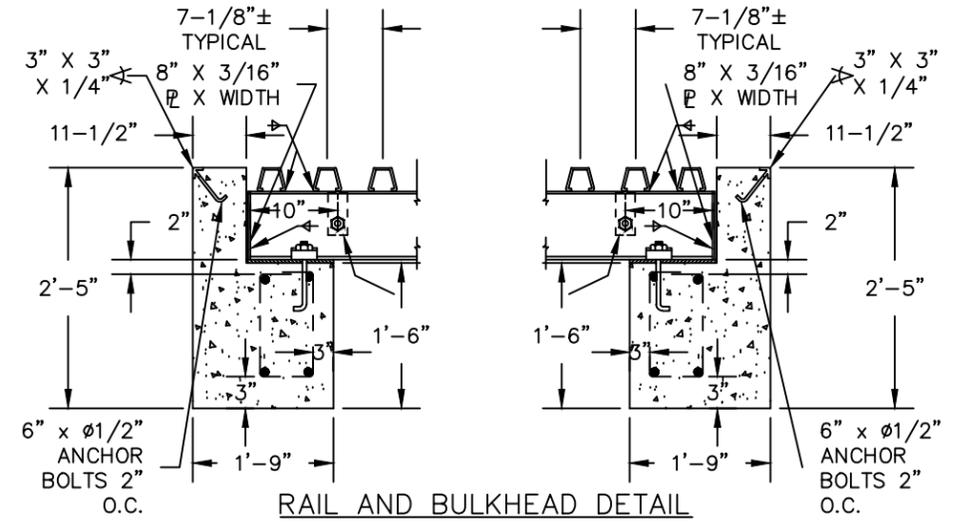
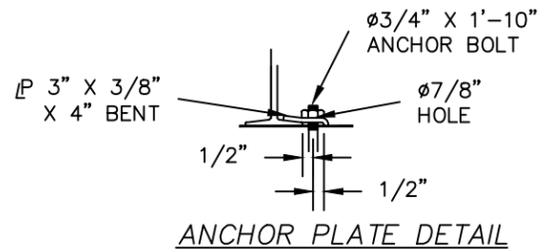
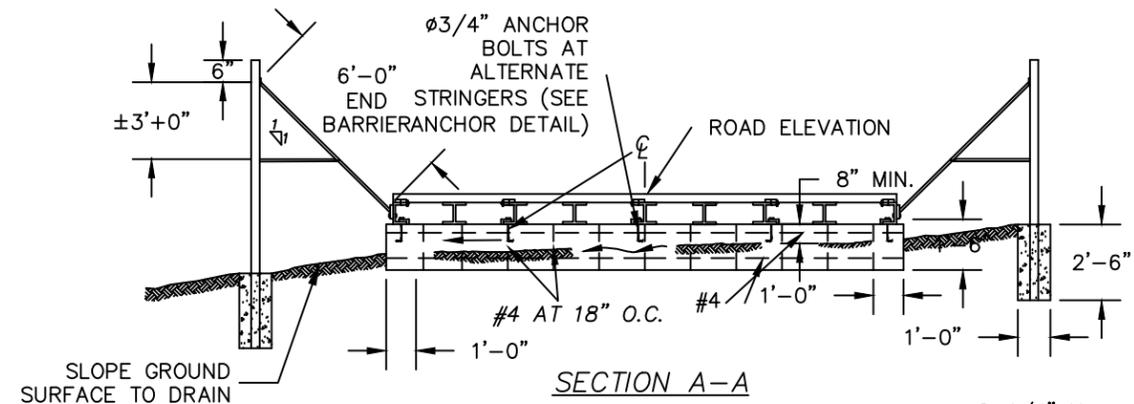
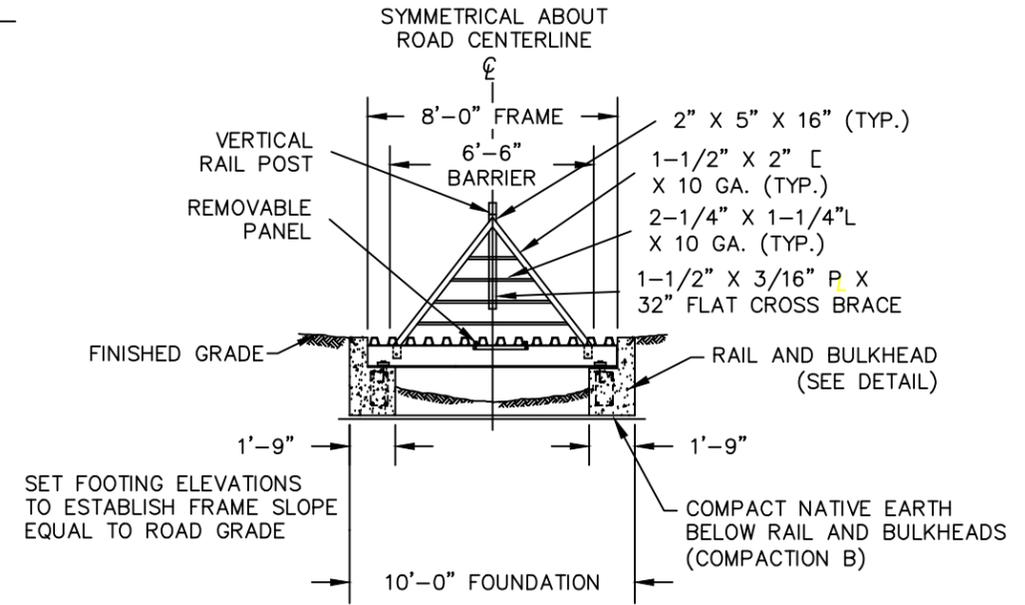
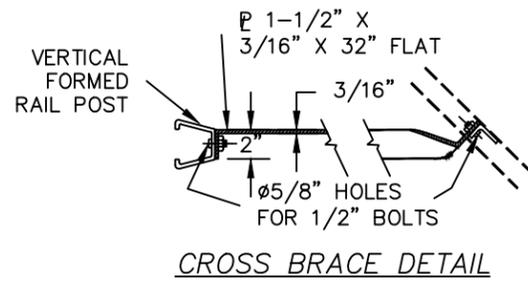
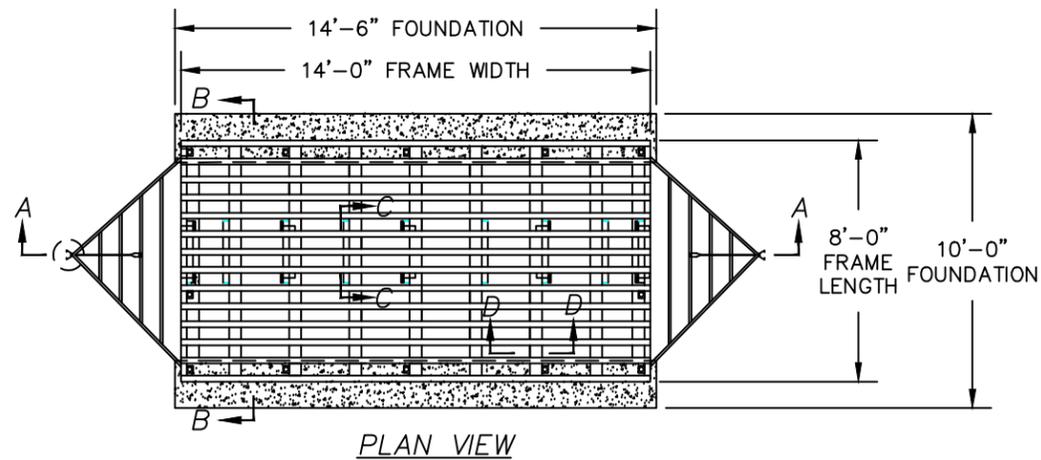
ROADWIDTH	AGGREGATE	RIPRAP
14'	22 TON	11 CU. YDS.



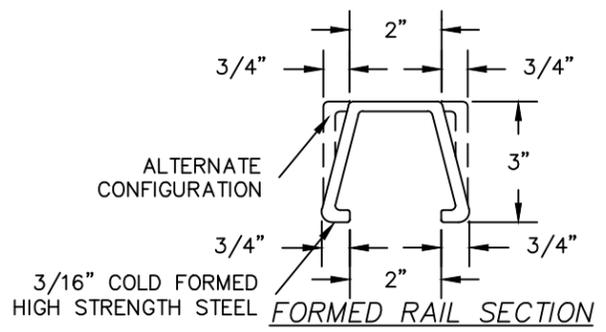
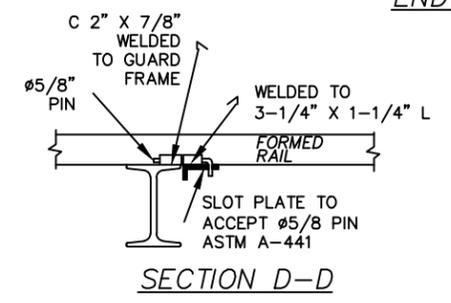
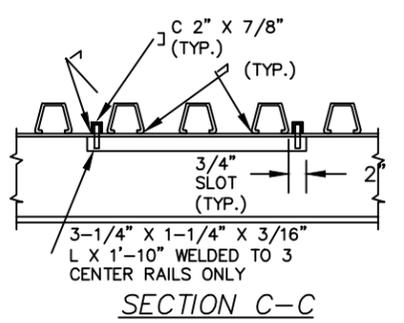
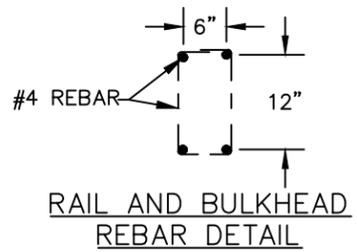
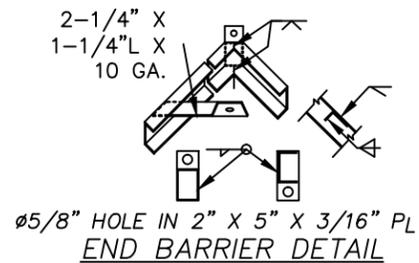
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NO.	DESCRIPTION	DATE	BY

# CATTLEGUARD (PAY ITEM 619.03):

NOT TO SCALE



H2O LOADING					
FRAME SIZE	UNDERSTRUCTURE		RAILS		
LENGTH	WIDTH	NO.	SIZE	SPACING	NO.
8'-0"	ALL	2	W 8X11.5	1 EA. END	14
	14'-0"	6	W 8X17	24"	



**SPECIFICATIONS:**  
 DESIGN: AASHTO 1993  
 DESIGN LOADING: H20-44 AND U-80

**MATERIALS:**  
 P.C. CONCRETE: 3000 P.S.I. AT 28 DAYS  
 STRUCTURAL STEEL: ALL STRUCTURAL STEEL EXCEPT THE FORMED RAIL SECTIONS SHALL CONFORM TO ASTM DESIGNATION A-441. MACHINE BOLTS SHALL CONFORM TO ASTM A-307.

ALL WELDING SHALL BE DONE IN CONFORMANCE WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES. ALL STRUCTURAL STEEL EXCEPT ANCHOR BOLTS

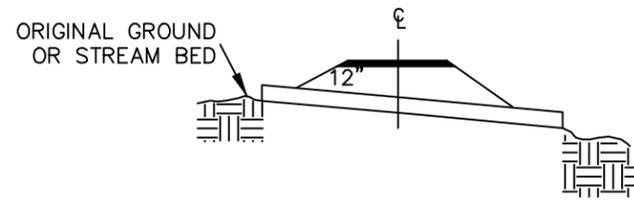
**GENERAL NOTES:**  
 SHALL BE PAINTED WITH ONE COAT OF READ LEAD DESIGNATED AASHTO M72 TYPE II AND ONE COAT OF FOLIAGE GREEN BRIDGE PAINT AASHTO M-67. ANCHOR BOLTS SHALL BE GALVANIZED.  
**REINFORCING STEEL:** ALL REINFORCING STEEL SHALL BE GRADE 40.  
**CONCRETE:** ALL CONCRETE SHALL BE CLASS A UNLESS OTHERWISE SPECIFIED IN THE SUPPLEMENTAL SPECIFICATIONS. ALL PORTLAND CEMENT SHALL BE TYPE I OR II LOW ALKALI.

Revisions			
NO.	DESCRIPTION	DATE	BY

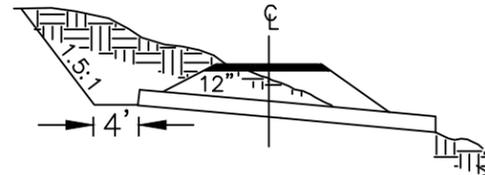
# CULVERT INSTALLATION (PAY ITEM 602.11):

NOT TO SCALE

## DRAINAGE CONSTRUCTION DETAILS



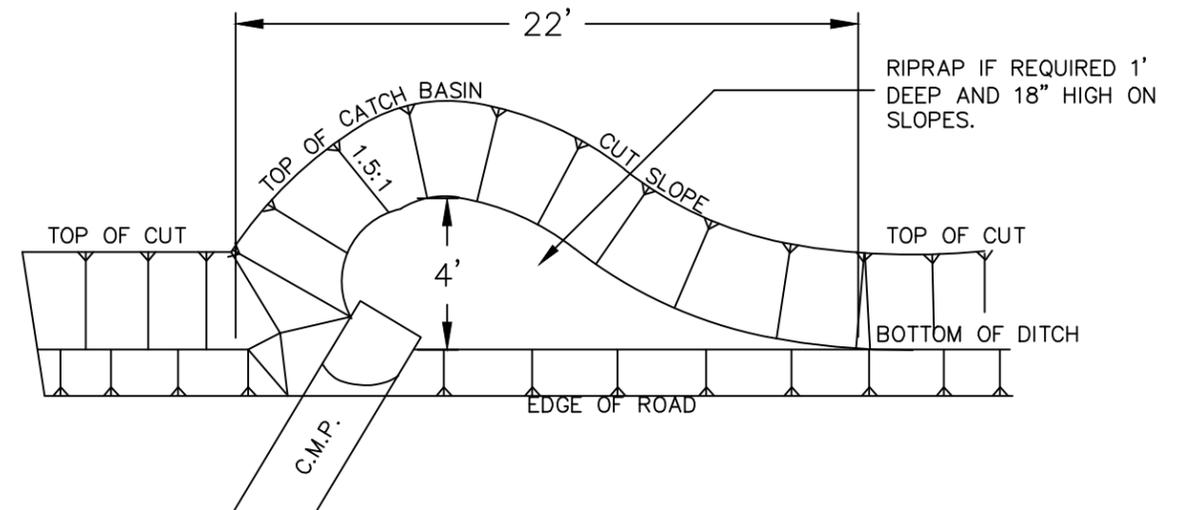
DO NOT RAISE OUTLET ABOVE ORIGINAL GROUND OR STREAM BED



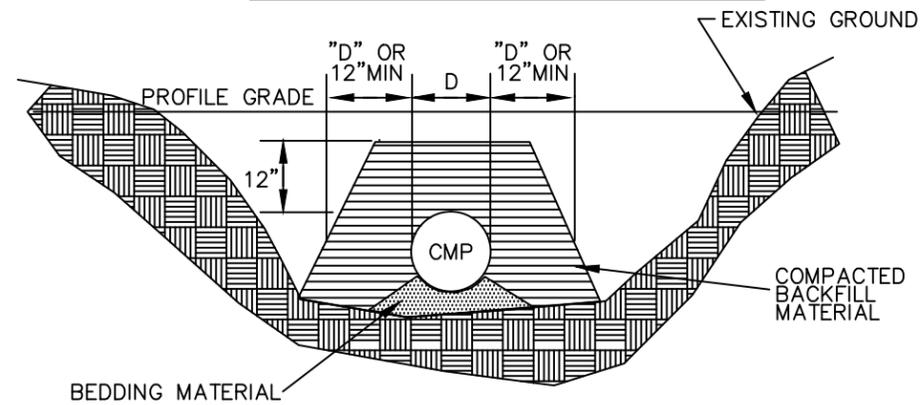
BOTTOM WIDTH MAY VARY WHEN CATCH BASIN IS CONSTRUCTED IN NATURAL DRAINAGE.

NOTE: MINIMUM COVER OVER CULVERT AT SHOULDER SHALL BE 12 INCHES BELOW SUBGRADE FOR SURFACED AND 18 INCHES BELOW SUBGRADE FOR UNSURFACED.

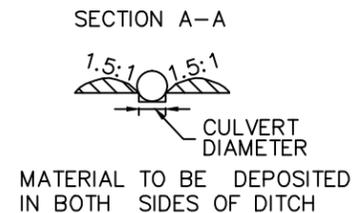
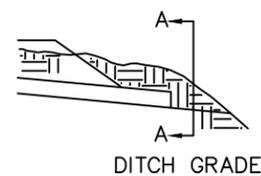
## CATCH BASIN



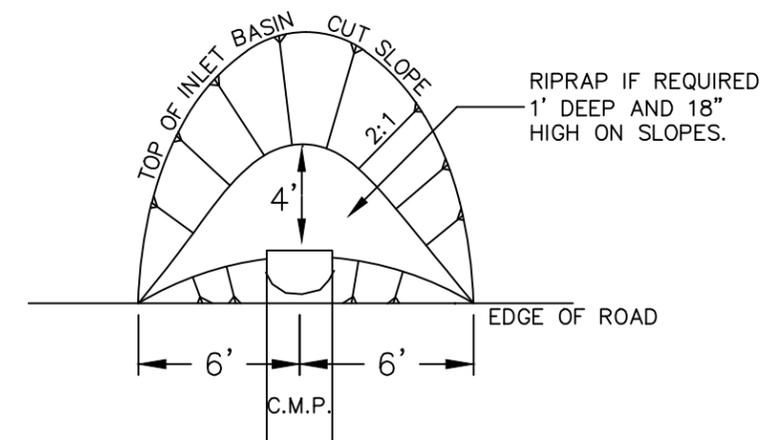
## METHOD OF BACKFILLING PIPE



## OUTLET DITCH



## INLET BASIN



Revisions			
NO.	DESCRIPTION	DATE	BY

# COVERED WATER DRAFTING BOX:

NOT TO SCALE

## PART 1 GENERAL

### 1.01 SCOPE

A. This specification shall be included in all contracts that allow drafting of water from a live stream . Approval from the CONTRACTING OFFICER shall be in writing prior to any drafting from a live stream. This work shall include any stream preperation , installation of a screen box as shown on the drawings and other work as required by the CONTRACTING OFFICER .

### 1.02 MEASUREMENT AND PAYMENT

A. No separate measurement or payment will be made for work defined in this section. Work defined under this section shall be considered as part of the work, and contract price and payment is included in other sections.

## PART 2 PRODUCTS AND MATERIALS

### 2.01 WIRE MESH

A. Wire mesh shall be 2mm openings.  
 B. The screen box frame shall be constructed of 1-1/2" angle iron , that will support the wire mesh in a secure manner with no joints or holes over 2mm in greatest dimension.

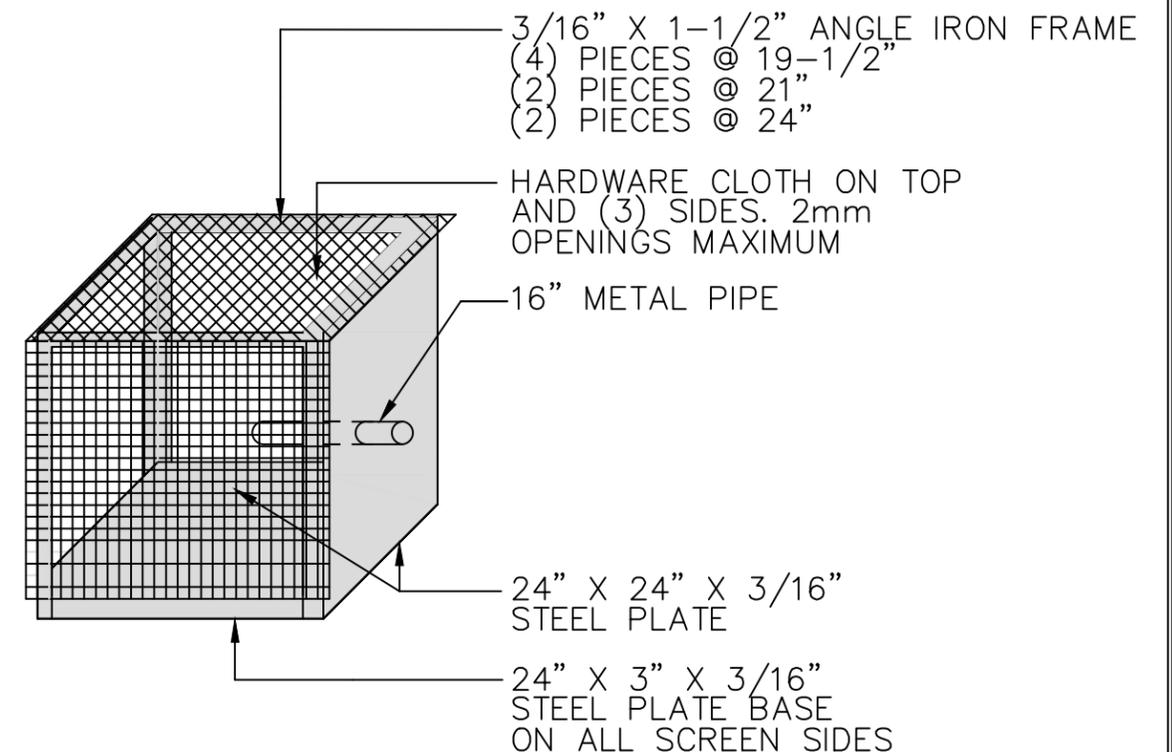
### 2.02 SCREEN BOX METAL FRAME

A. The metal frame shall have a solid bottom and one solid side of 3/16" metal. The bottom shall be welded a minimum of three (3) inches from the bottom of the screen box. The solid side shall be securely welded to the side frame metal and to the metal bottom.

## PART 3 EXECUTION

### 3.01 SCREEN BOX CONSTRUCTION

A. A 16" long metal pipe for the drafting hose to be used shall be fixed to the metal side plate a minimum of four inches (4") from the bottom of the screen box. The bottom of the metal pipe and the inlet end of the pipe would be fixed so it is at the center of the screen box as shown on the DRAWING. The outlet end of the pipe may be attached to the drafting hose by any method that will ensure a secure, tight connection.  
 B. The metal screen shall be securely attached to the outside of the screen box frame with metal screws , bolts , clamps or other method that will securely hold the screen material in place. The three open sides and the top shall be covered with screen . The top of the box should be constructed so that it may be opened to service the inlet pipe and to clean the screen.



Revisions			
NO.	DESCRIPTION	DATE	BY