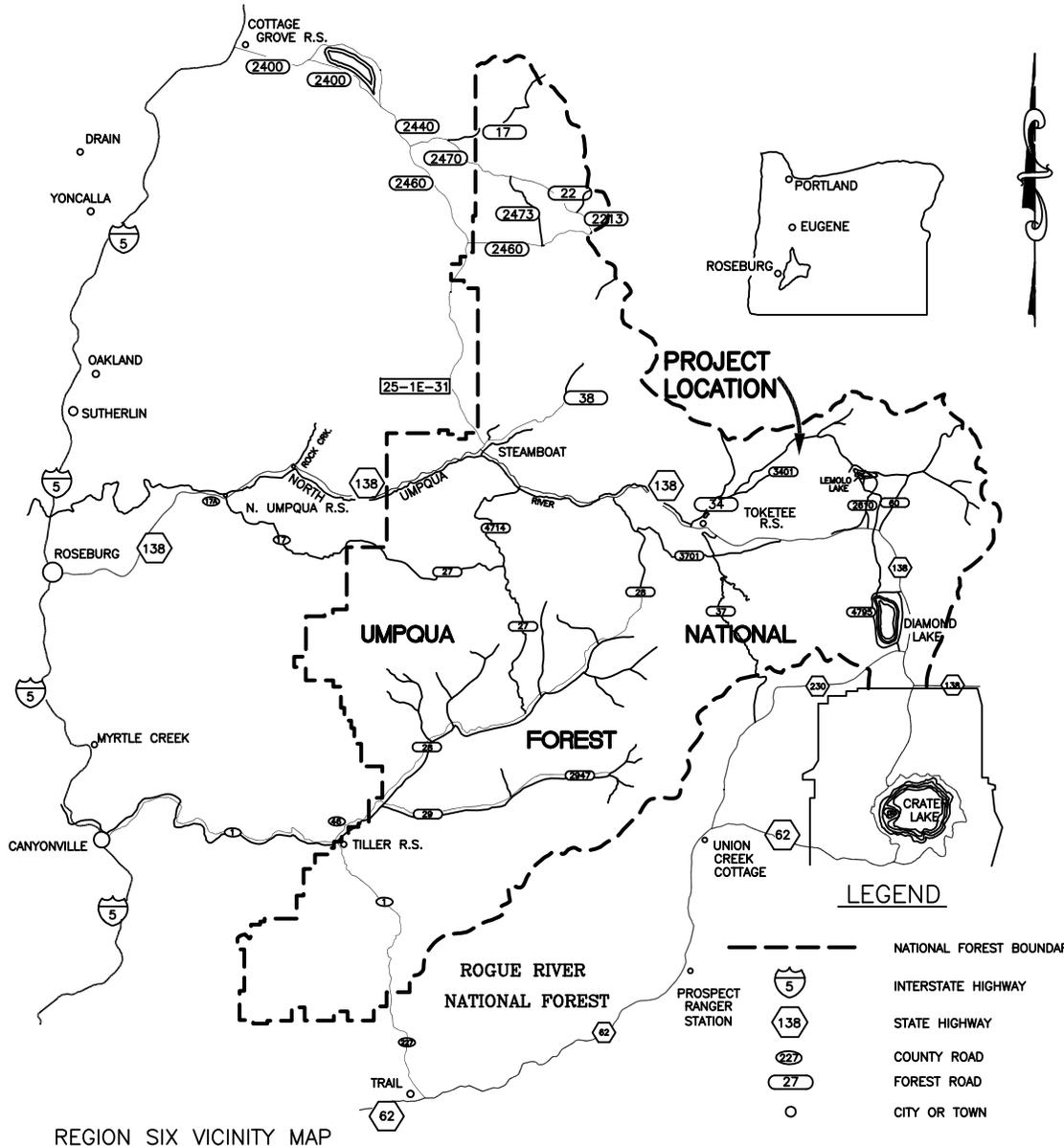




U.S. DEPARTMENT of AGRICULTURE  
 FOREST SERVICE  
 UMPQUA NATIONAL FOREST  
 DIAMOND LAKE RANGER DISTRICT



SHEET #	SHEET TITLE
1	TITLE SHEET
2	VICINITY MAP
3	ESTIMATE OF QUANTITIES
4	DRAINAGE LISTING
5	CULVERT CONSTRUCTION DETAIL
6	3400-100 MP 0.44 EXISTING PLAN VIEW
7	3400-100 MP 0.44 PROPOSED PLAN VIEW
8	3400-100 MP 0.44 PROFILE & TYPICAL
9	WORKLIST

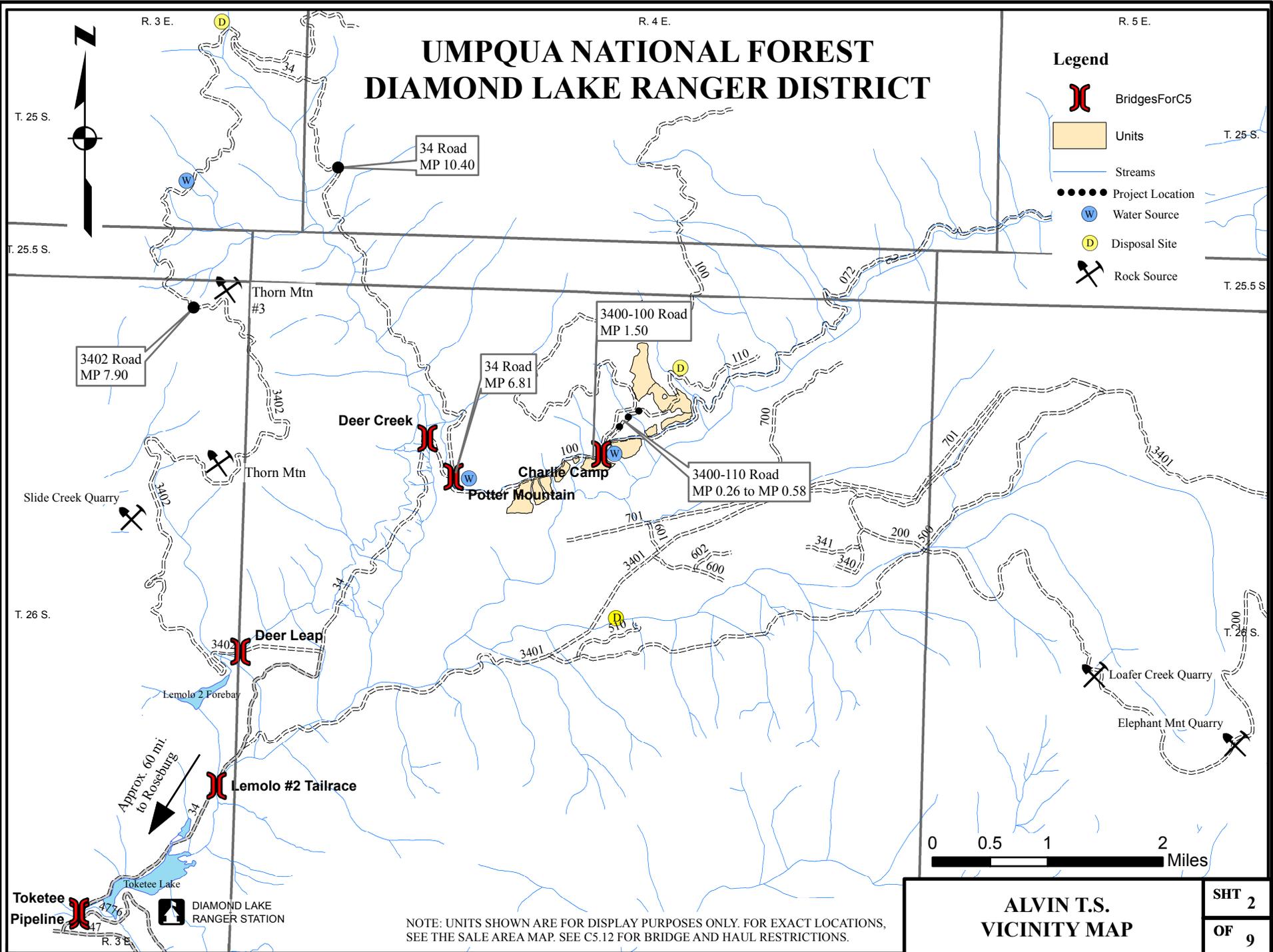
PROPOSED PROJECT		
ROAD NUMBER	LENGTH	TYPE OF WORK
34	M.P. 6.81	RECONSTRUCTION
34	M.P. 10.40	RECONSTRUCTION
3400-100	M.P. 1.50	RECONSTRUCTION
3400-110	M.P. 0.26	RECONSTRUCTION
3400-110	M.P. 0.44	RECONSTRUCTION
3400-110	M.P. 0.58	RECONSTRUCTION
3402-000	M.P. 7.90	RECONSTRUCTION

RECOMMENDED BY:	DESIGNED BY:
TRANSPORTATION ENGINEER	PLAN IN HAND BY:
APPROVED BY:	REVIEWED BY:
DISTRICT RANGER	PROJECT TEAM LEADER/DISTRICT ENGINEER
FOREST ENGINEER	

# UMPQUA NATIONAL FOREST DIAMOND LAKE RANGER DISTRICT

## Legend

-  BridgesForC5
-  Units
-  Streams
-  Project Location
-  Water Source
-  Disposal Site
-  Rock Source



ALVIN T.S.  
VICINITY MAP

SHT 2  
OF 9

NOTE: UNITS SHOWN ARE FOR DISPLAY PURPOSES ONLY. FOR EXACT LOCATIONS, SEE THE SALE AREA MAP. SEE C5.12 FOR BRIDGE AND HAUL RESTRICTIONS.

Toketee Pipeline  DIAMOND LAKE RANGER STATION 

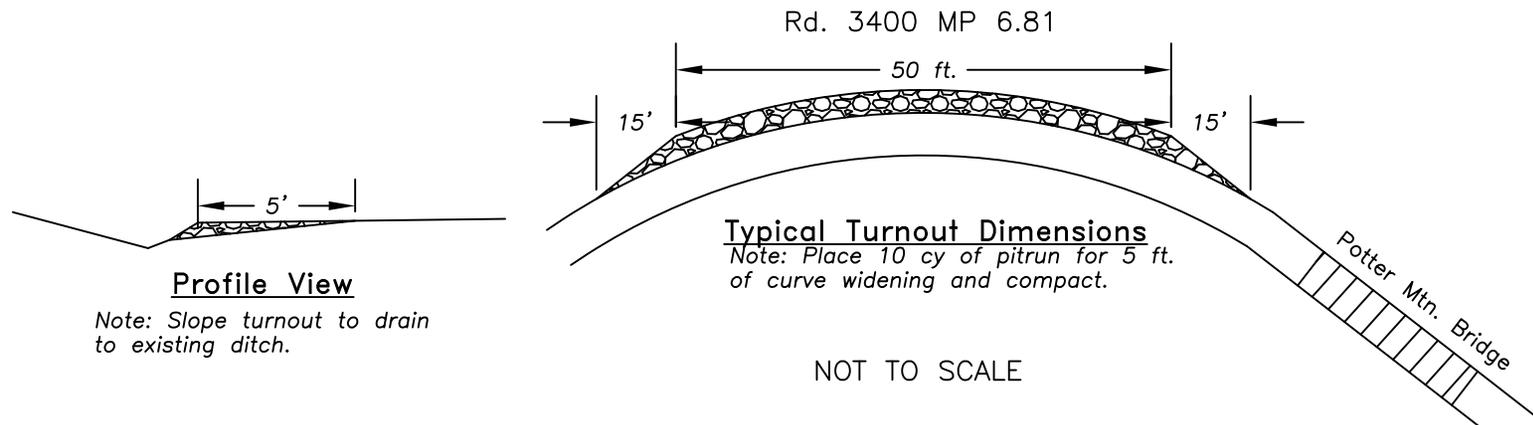
Approx. 60 mi.  
to Roseburg

**NOTES:**

1. All volume unit pay items are measured in-place. All reference to quantities of excavated volumes refer to original (prior to excavation) volume.
2. See worklists and vicinity map for further description and location of work.
3. Units are measured as Actual Quantities unless denoted by an asterisk \*. If denoted by an asterisk (\*), the quantity is measured as a contract quantity in accordance with FP-03 109.2.

<b>Road No.</b>	<b>3400</b>	<b>3400-100</b>	<b>3400-110</b>	<b>3402</b>	4. All waste material, woody debris, slash or boulders shall be hauled and placed in disposal area, located at Slide Creek Quarry. 5. Obtain riprap from Thorn Mtn. Quarry, located on Forest Road 3402, T 26 S, R 3 E, Sec 12. Sorting required. 6. Obtain pitrun and surface rock from Thorn Mtn. Quarry, located on Forest Service Road 3402, T 26 S, R 3 E, Sec. 1. 7. Approved water source is located at see vicinity Map.
<b>Project Length (miles)</b>	<b>MP 6.81 &amp; MP 10.40</b>	<b>MP 1.50</b>	<b>MP 0.26, MP 0.44, &amp; MP 0.58</b>	<b>MP 7.90</b>	
<b>Work Type</b>	<b>Recon.</b>	<b>Recon.</b>	<b>Recon.</b>	<b>Recon.</b>	

Pay Item	Description	Unit	Pay Items Quantities	Pay Items Quantities	Pay Items Quantities	Pay Items Quantities	Total Quantities	Remarks
151-01	Mobilization	L.S.	All Required				ALL	Mobilization for all roads.
152-01	Construction survey & staking, method I, tolerance A	L.S.	-	-	1	-	1	
202-58	Selective clearing, fall and leave individual trees	Each	-	-	3	-	3	
203-01	Removal of metal culvert	Each	-	-	2	-	2	Disposal off government land
204-15	Unsuitable Excavation	C.Y.*	-	-	90	-	90	
251-01.2	Placed Riprap, Class 2	C.Y.*	-	-	4	-	4	Obtain from Thorn Mtn. Quarry
251-01.3	Placed Riprap, Class 3	C.Y.*	2	-	-	3	5	Obtain from Thorn Mtn. Quarry
251-10.1	Hand placed Riprap, Class 1	C.Y.*	1	-	2	1	4	Obtain from Thorn Mtn. Quarry
322-22	Pit run maximum size 6 inch, Compaction Method B	C.Y.*	10	10			20	Obtain from Thorn Mtn. 3 Quarry
322-32	Haul and place stockpiled aggregate. Compaction Method B.	C.Y.*	5	-	35	5	45	Obtain from Thorn Mtn. 3 Quarry
602-63.18	18 inch aluminized steel, corrugated steel pipe, .064 inch thickness, method B	L.F.	-	-	-	38	38	
602-63.24	24 inch aluminized steel, corrugated steel pipe, .064 inch thickness, method B	L.F.	44	-	76	-	120	
606-02.24	Spillway Assembly, 24-inch full circle outlet pipe w/ anchors	L.F.	40	-	-	-	40	
606-05.24	Pipe elbow, Standard	Each	1	-	-	-	1	
625-30	Seeding and Mulching, Straw, Dry Method	L.S.	-	-	1	-	1	



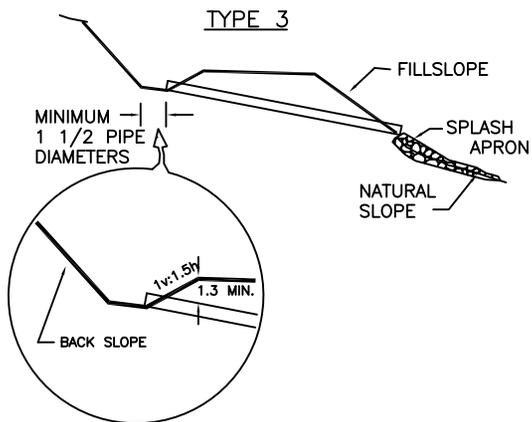
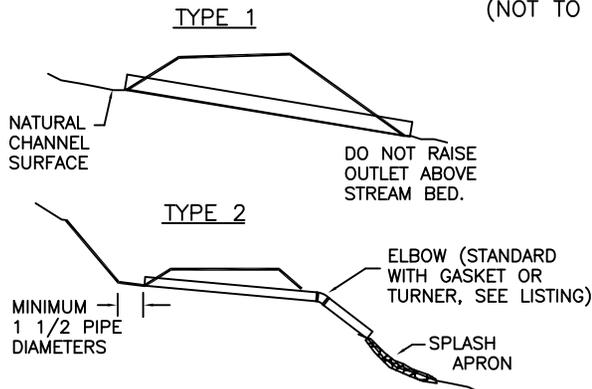
U.S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE - THE PACIFIC NORTHWEST REGION 6  
 UMPQUA NATIONAL FOREST - DIAMOND LAKE RANGER DISTRICT

_____ DATE: _____ APPROVED	DRAWN BY _____ DATE: _____ REVIEWED _____ DATE: _____	TIMBER SALE NAME: <p style="text-align: center; font-size: 1.2em;">ALVIN TIMBER SALE</p>	SHEET TITLE: <p style="text-align: center; font-size: 1.2em;">ESTIMATE OF QUANTITIES</p>	SHT. 3 OF 9
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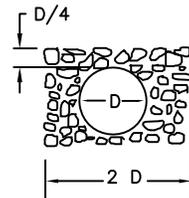
LOCATION AND CULVERT LENGTHS						INSTALLATION DETAILS AND SPECIAL SECTIONS									RIPRAP REQUIREMENTS									SHEET 4 OF 9				
DESIGNED			AS BUILT			CORRUGATED METAL PIPE			SPILLWAYS			BEVELED DROP INLET			HEADWALL			SPLASH APRON			SLOPE PROTECTION			SUBGRADE REINFORCEMENT			ALVIN TIMBER SALE DRAINAGE LISTING	
MP	STA. (FT)	LENGTH (FT)	MP	STA. (FT)	LENGTH (FT)	DIA. (IN)	TH. (IN)	TYPE	DOWN-DRAIN LENGTH (FT)	ANCHORS (EA)	ELBOW	DIA (INCH)	LENGTH (FT)	"B" ANGLE	CY	CLASS	TYPE	CY	CLASS	TYPE	CY	CLASS	TYPE	CY	CLASS	TYPE		
<b>Road #3400</b>																												Remarks
10.40		44				24	0.064	2	40	4	1				1	1	H	2	3	M								
<b>Road #3400-110</b>																												
0.26		46				24	0.064	3							1	1	H	2	2	M								
0.58		30				24	0.064	3							1	1	H	2	2	M								
<b>Road #3402</b>																												
7.90		38				18	0.064	3							1	1	H	3	3	M								
<p>Note:</p> <p>1) Staking for culverts has been completed by the Forest Service. Culvert lengths and locations are based on as-staked conditions. Install culverts as staked.</p> <p>2) Excavations for new culverts and culvert replacements are generally deeper than existing culvert installations. Excavation of solid rock may be required in some locations.</p> <p>3) Dimpled bands shall not be used on downpipes, elbows, or pipes laid on grades greater than 15%.</p> <p>4) Unless shown otherwise, where cover heights exceed 11' , culverts shall be cambered an amount equal to 0.5% of the culvert length.</p> <p>5) Riprap shall be placed to the minimum dimensions shown on typical section drawings.</p> <p>6) Riprap type abbreviations: D - Dumped (Mechanical in FP-03 Sec 251), H - Hand Placed, M - Machine Placed.</p> <p>7) Minimum one foot subgrade cover over culvert installation.</p>																												

# CULVERT CONSTRUCTION DETAIL

(NOT TO SCALE. ALSO REFER TO WORKLIST.)

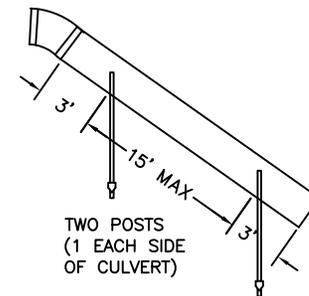
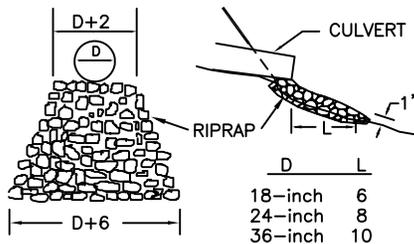


## HEADWALLS FOR TYPE 1



NOTE:  
ADJUST RIPRAP  
TO FIT ORIGINAL  
STREAM BANKS IN  
NARROW CHANNELS.

## SPLASH APRON

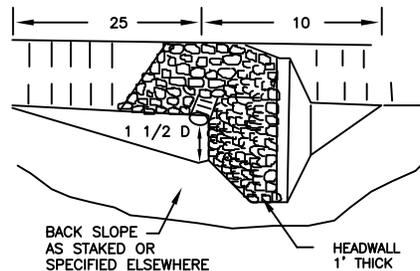


TWO POSTS  
(1 EACH SIDE  
OF CULVERT)

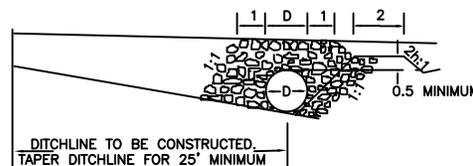
TWO POSTS  
(1 EACH SIDE  
OF CULVERT)

## CATCH BASIN DETAIL FOR TYPE 2 & 3

### HEADWALL - PLAN VIEW



### HEADWALL - INLET PROFILE VIEW



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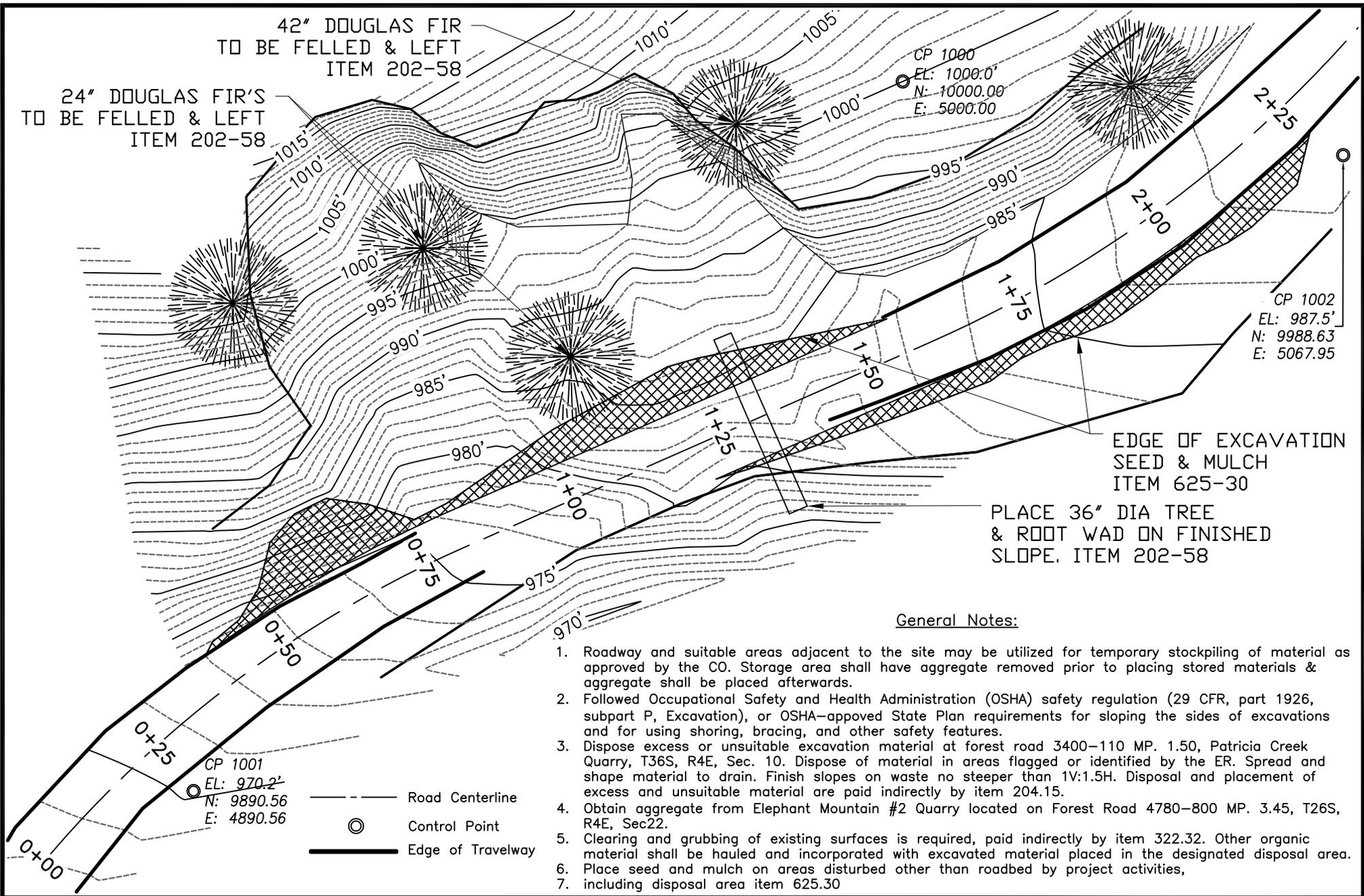
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DRAWN BY \_\_\_\_\_ DATE: \_\_\_\_\_  
REVIEWED \_\_\_\_\_ DATE: \_\_\_\_\_

TIMBER SALE NAME:  
**ALVIN TIMBER SALE**

SHEET TITLE:  
**CULVERT  
CONSTRUCTION DETAIL**

SHT. 5  
OF 9



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 UMPQUA NATIONAL FOREST - DIAMOND LAKE RANGER DISTRICT

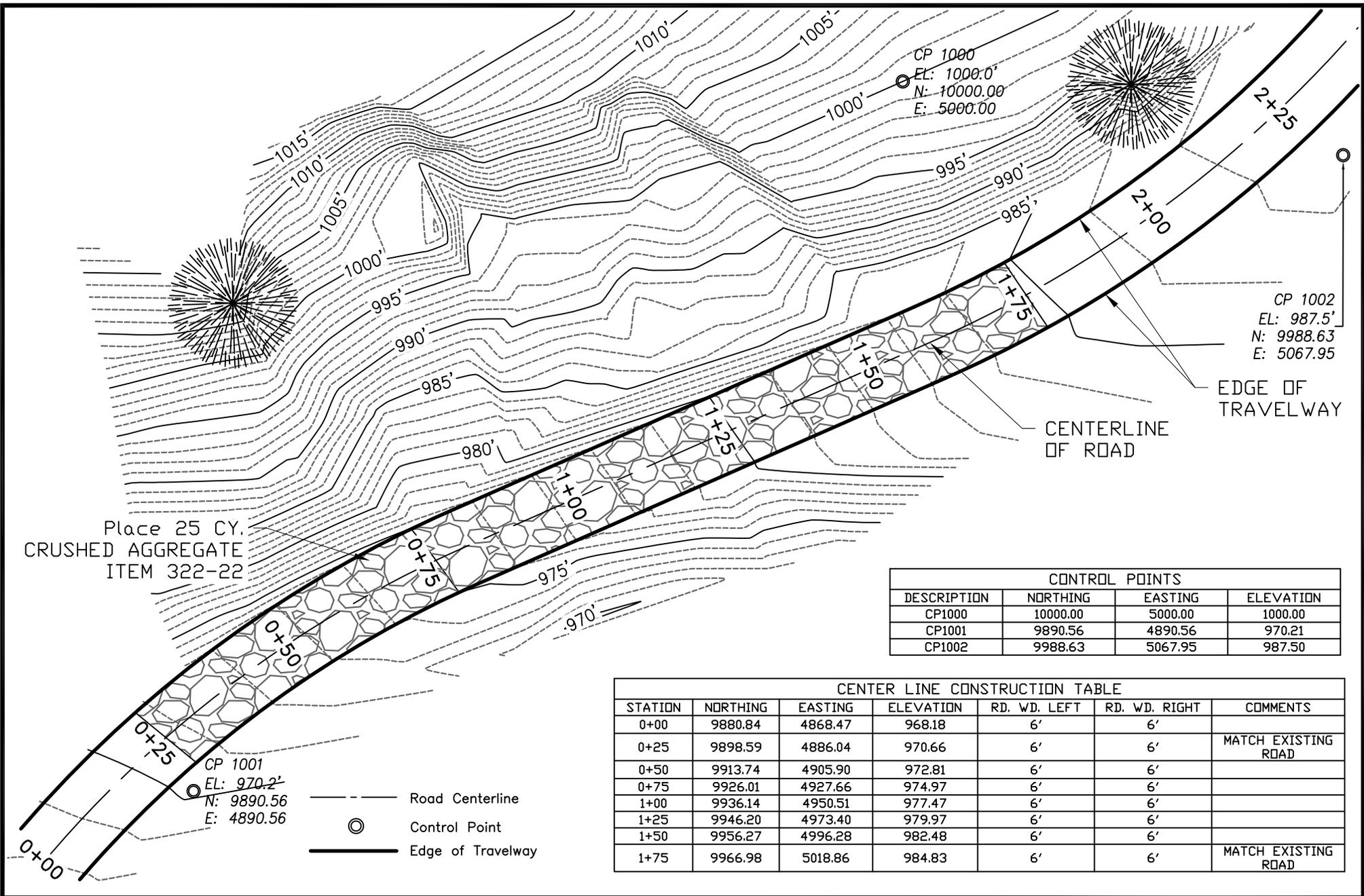
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DRAWN BY \_\_\_\_\_ DATE: \_\_\_\_\_  
 REVIEWED \_\_\_\_\_ DATE: \_\_\_\_\_

TIMBER SALE NAME:  
**ALVIN TIMBER SALE**

SHEET TITLE:  
**3400-110 MP 0.44  
 EXISTING PLAN VIEW**

SHT. 6  
 OF 9



Place 25 CY.  
CRUSHED AGGREGATE  
ITEM 322-22

CP 1001  
EL: 970.2'  
N: 9890.56  
E: 4890.56

- Road Centerline
- ⊙ Control Point
- Edge of Travelway

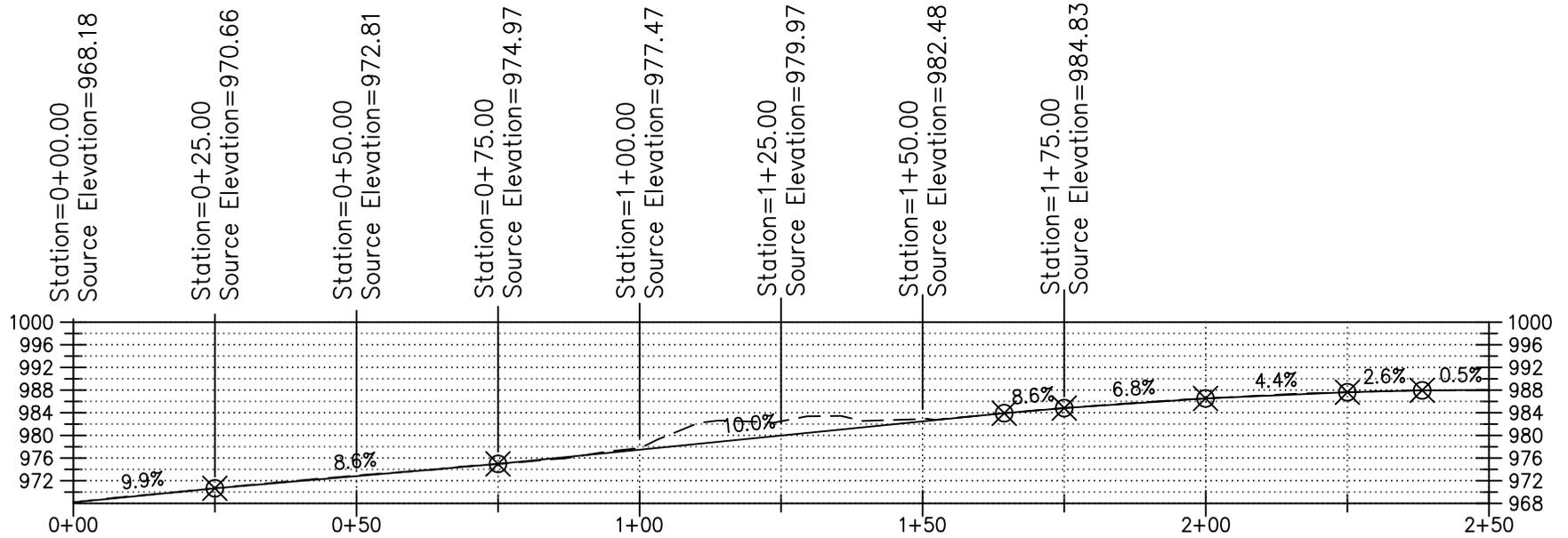
CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP1000	10000.00	5000.00	1000.00
CP1001	9890.56	4890.56	970.21
CP1002	9988.63	5067.95	987.50

CENTER LINE CONSTRUCTION TABLE						
STATION	NORTHING	EASTING	ELEVATION	RD. WD. LEFT	RD. WD. RIGHT	COMMENTS
0+00	9880.84	4868.47	968.18	6'	6'	
0+25	9898.59	4886.04	970.66	6'	6'	MATCH EXISTING ROAD
0+50	9913.74	4905.90	972.81	6'	6'	
0+75	9926.01	4927.66	974.97	6'	6'	
1+00	9936.14	4950.51	977.47	6'	6'	
1+25	9946.20	4973.40	979.97	6'	6'	
1+50	9956.27	4996.28	982.48	6'	6'	
1+75	9966.98	5018.86	984.83	6'	6'	MATCH EXISTING ROAD

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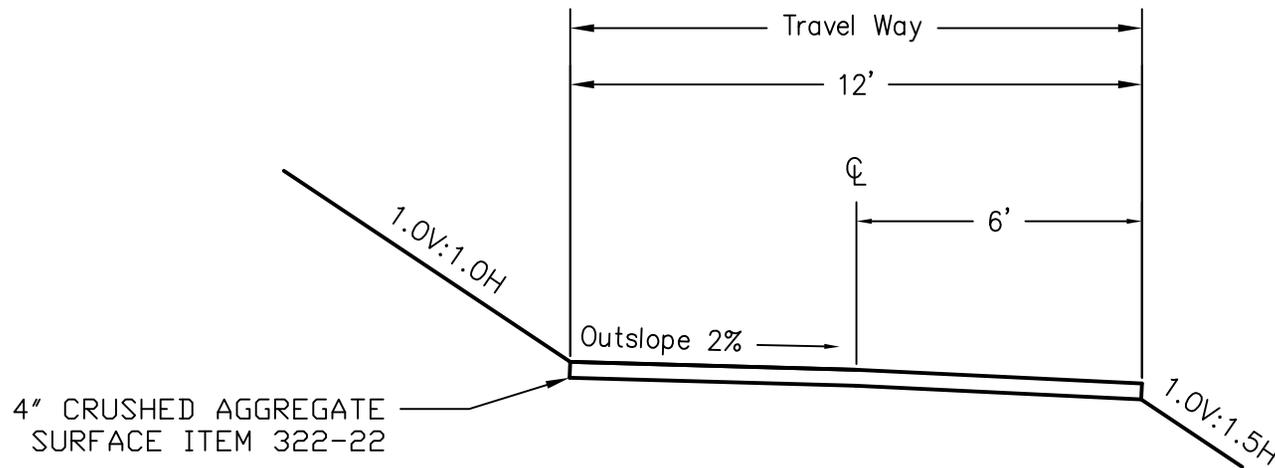
DATE: _____ APPROVED _____	DRAWN BY _____ DATE: _____ REVIEWED _____ DATE: _____	TIMBER SALE NAME: <p style="text-align: center; font-size: 1.2em;">ALVIN TIMBER SALE</p>	SHEET TITLE: <p style="text-align: center; font-size: 1.2em;">3400-110 MP 0.44          PROPOSED PLAN VIEW</p>	SHT. 7 OF 9
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# Road Profile



# Road Typical

Station 0+00 to 1+75



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APPROVED _____ DATE: _____	DRAWN BY _____ DATE: _____ REVIEWED _____ DATE: _____	TIMBER SALE NAME: <p style="text-align: center; font-weight: bold;">ALVIN TIMBER SALE</p>	SHEET TITLE: <p style="text-align: center; font-weight: bold;">3400-110 MP 0.44                  PROFILE &amp; TYPICAL</p>	SHT. 8 OF 9
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<u>MILE POST</u>	<u>DESCRIPTION</u>	<u>PAY ITEM</u>	<u>QUANTITY</u>
<b>Reconstruction Worklist for Road 34</b>			
6.81	Place and compact 6 inch max. Pitrun obtain for Thorn Mtn. 3 Quarry. Slope the turnout to drain to existing ditch. See Sheet 3 for details.	322-22	10 CY
10.40	Install a new 24" CMP, including new elbow, downdrain, and anchors. Conserve and utilize existing aggregate from roadbed at pipe excavation site. Suitable material from existing excavation may be used as backfill material. Replace conserved aggregate on road surface, supplementing the aggregate surface with 5 cubic yards of material obtained from Thorn Mtn. 3 Quarry. Any unsuitable backfill material, woody debris, or slash from excavation will be hauled (indirectly paid by Item 602-63.24) to approved disposal sites. All unsuitable material shall be slope to drain at disposal sites. Construct catch basin (indirectly paid by 602-63.24).	151-01 251-01.3 251-10.1 322-32 602-63.24 606-02.24 606-05.24	1 LS 2 CY 1 CY 5 CY 44 LF 40 LF 1 EA
<b>Reconstruction Worklist for Road 3400-100</b>			
1.5	Place and compact 6 inch max. Pitrun obtain for Thorn Mtn. 3 Quarry. Location to be staked by E.R.	322-22	10 CY
<b>Reconstruction Worklist for Road 3400-110</b>			
0.26	Remove existing 15" culvert and replace with a new 24" CMP. Conserve and utilize existing aggregate from roadbed at pipe excavation site. Suitable material from existing excavation may be used as backfill material. Replace conserved aggregate on road surface, supplementing the aggregate surface with 5 cubic yards of material obtained from Thorn Mtn. 3 Quarry. Any unsuitable backfill material, woody debris, slash or boulders from excavation will be hauled (indirectly paid by Item 602-63.24) to approved disposal sites. Construct catch basin (indirectly paid by 602-63.24).	203-01 251-01.2 251-10.1 322-32 602-63.24	1 EA 2 CY 1 CY 5 CY 46 LF
0.44	Existing fill slope failure. Fall and leave trees marked by F.S. within the site location. Begin Unsuitable Excavation. Outslope road using the road typical and road profile, minimum 12' travelway, Sheet 8. Conserve and utilize existing aggregate from roadbed at excavation site. Dispose unsuitable excavation material at FSR 3400-110 MP 1.50 (Patricia Creek Quarry). Spread and shape material to drain, see Sheet 6-8 for details, indirectly paid by item 204-15. Place 25 cubic yards crushed aggregate, item 322-22, from Elephant Mountain #2 Quarry FSR 2610-800 MP 3.45. Place seed and mulch on areas disturbed other than roadbed, item 625-30.	152-01 202-58 204-15 322-32 625-30	1 LS 3 EA 90 CY 25 CY 1 LS
0.58	Remove existing 15" culvert and replace with a new 24" CMP. Conserve and utilize existing aggregate from roadbed at pipe excavation site. Suitable material from existing excavation may be used as backfill material. Replace conserved aggregate on road surface, supplementing the aggregate surface with 5 cubic yards of material obtained from Thorn Mtn. 3 Quarry. Any unsuitable backfill material, woody debris, slash or boulders from excavation will be hauled (indirectly paid by Item 602-63.24) to approved disposal sites. Construct catch basin (indirectly paid by 602-63.24).	203-01 251-01.2 251-10.1 322-32 602-63.24	1 EA 2 CY 1 CY 5 CY 30 LF
<b>Reconstruction Worklist for Road 3402</b>			
7.90	Install a new 18" CMP. Conserve and utilize existing aggregate from roadbed at pipe excavation site. Suitable material from existing excavation may be used as backfill material. Replace conserved aggregate on road surface, supplementing the aggregate surface with 5 cubic yards of material obtained from Thorn Mtn. 3 Quarry. Any unsuitable backfill material, woody debris, slash or boulders from excavation will be hauled (indirectly paid by Item 602-63.18) to approved disposal sites. Construct catch basin (indirectly paid by 602-63.18).	251-01.3 251-10.1 322-32 602-63.18	3 CY 1 CY 5 CY 38 LF