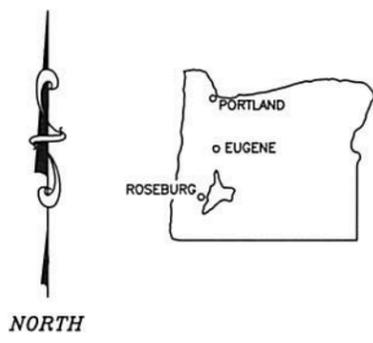
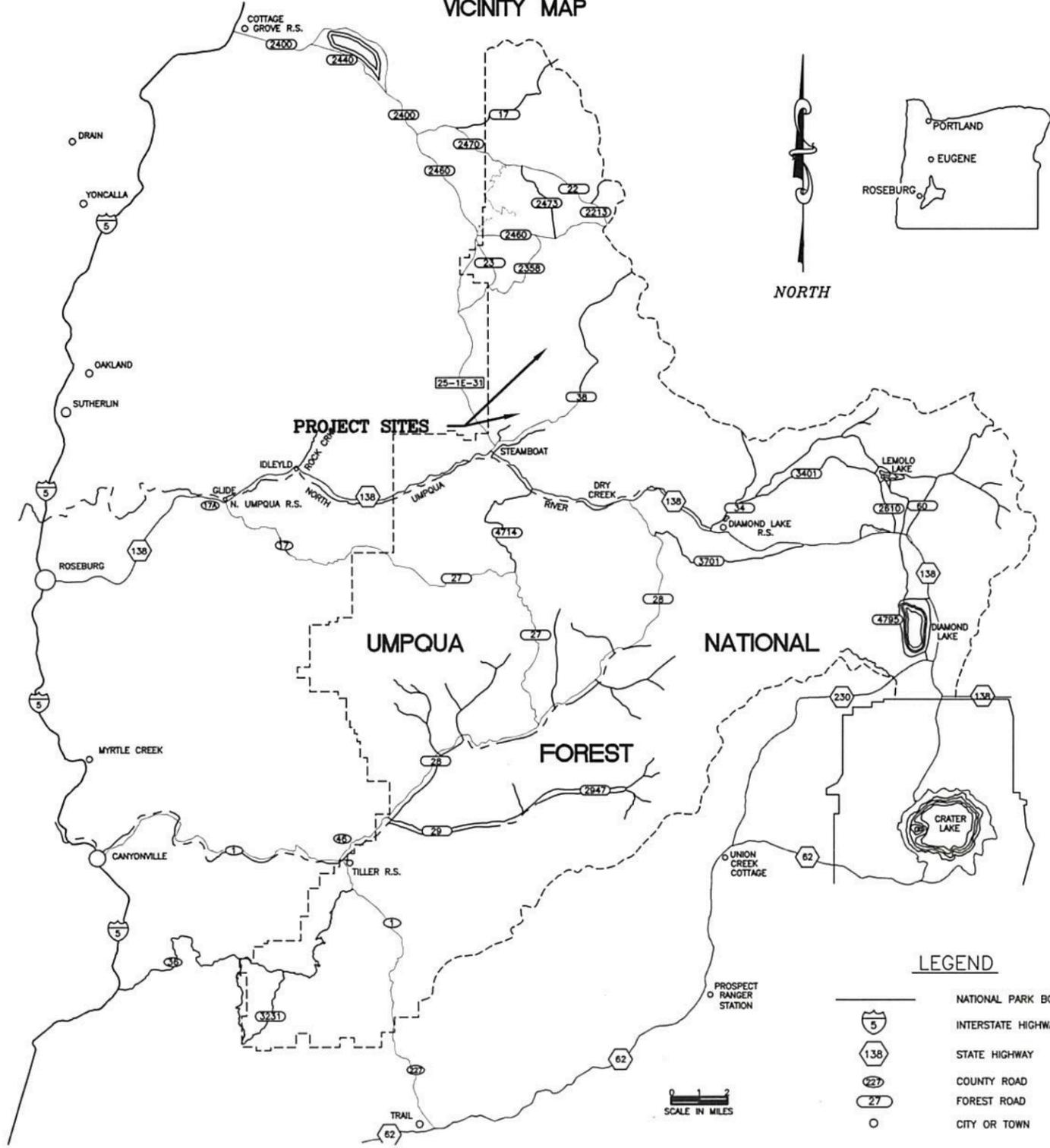




U.S. DEPARTMENT of AGRICULTURE  
 FOREST SERVICE  
 UMPQUA NATIONAL FOREST  
 NORTH UMPQUA RANGER STATION  
 VICINITY MAP



**LEGEND**

	NATIONAL PARK BOUNDARY
	INTERSTATE HIGHWAY
	STATE HIGHWAY
	COUNTY ROAD
	FOREST ROAD
	CITY OR TOWN

INDEX

<u>SHEET NO.</u>	<u>SHEET TITLE</u>
1	TITLE SHEET
2	VICINITY MAP
3	ESTIMATE OF QUANTITIES & ROADSIDE BRUSHING
4	CULVERT LISTING
5-6	CULVERT CONSTRUCTION TYPICALS
7	ROAD RECONDITIONING TYPICALS
8	DRIVABLE CROSS DRAIN & AGGREGATE PLACEMENT TYPICALS
9	ROLLING DIP TYPICALS
10	3806 WORKLIST
11	3809 & 3815 WORKLIST
12	3821, 3825, 3825-110, & 3828 WORKLIST
13	3829 WORKLIST

PROPOSED PROJECT

<u>ROAD NO.</u>	<u>LENGTH</u>	<u>TYPE OF WORK</u>
3806	12.52 mi.	Road Reconstruction
3809	6.57 mi.	Road Reconstruction
3815	10.30 mi.	Road Reconstruction
3821	0.48 mi.	Road Reconstruction
3825	5.58 mi.	Road Reconstruction
3825-110	0.50 mi.	Road Reconstruction
3828	4.93 mi.	Road Reconstruction
3829	1.30 mi.	Road Reconstruction

RECOMMENDED BY: <i>John W. [Signature]</i> TRANSPORTATION ENGINEER	DATE: 8/15/16	DESIGNED BY: <i>[Signature]</i>	DATE: 8/11/16
APPROVED BY: <i>[Signature]</i> DISTRICT RANGER	DATE: 8/22/16	PLAN IN HAND BY:	DATE:
<i>[Signature]</i> FOREST ENGINEER	DATE: 8-15-16	REVIEWED BY: <i>[Signature]</i>	DATE: 8-15-16

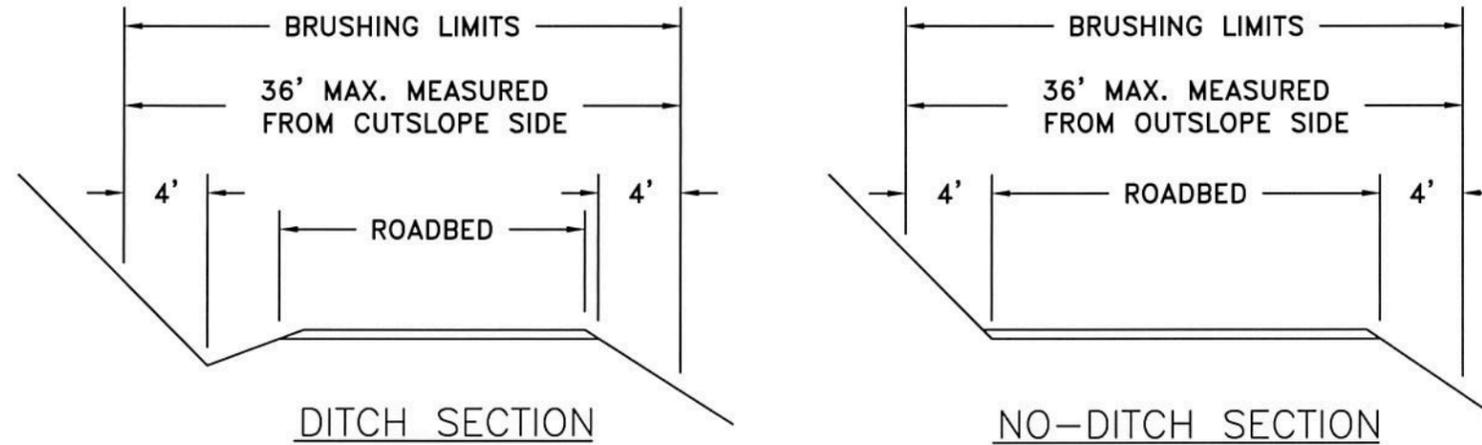
**BUSTER TIMBER SALE**

SHT 1  
of 13



# ROADSIDE BRUSHING for SPEC 230

Drawing not to scale



## ESTIMATE OF QUANTITIES

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.		ESTIMATE OF QUANTITIES										4. All waste material, woody debris, slash or boulders shall be hauled and placed in approved disposal sites located on the vicinity map. Chilcoot Quarry T24S, R1W, Sec 6, Road 3806 MP 12.44.	
		Road No.	3806	3809	3815	3821	3825	3825-110	3828	3829	Total Quantities		
Pay Item	Description	Unit											
151-01	Mobilization	L.S.									1	Mobilization for all roads.	
202-55	Removal and disposal of trees	Each	-	-	4	-	-	-	-	-	4		
202-58	Selective clearing, fall and leave individual trees	EA	4	-	10	-	-	-	-	-	14		
203-01.1	Removal of metal culverts, method A	Each	10	5	1	-	-	-	-	-	16	Dispose off Government Land	
203-01.2	Removal of obstruction, boulder	Each	2	-	-	-	-	-	-	-	2		
204-01	Roadway excavation, compaction method B	C.Y.*	80	10	75	18	40	-	30	5	258	Dispose in approved disposal site	
204-15	Unsuitable Excavation	C.Y.*	-	-	5	-	-	-	-	-	5	Dispose in approved disposal site	
204-20.1	Drainage excavation, type cross drain	EA	-	-	-	-	-	6	-	4	10		
204-20.2	Drainage excavation, type rolling dip	EA	2	-	2	-	-	-	1	9	14		
230-50	Roadside Brushing	Mile	-	-	-	-	-	0.50	-	-	0.5	Dispose in approved disposal site	
251-01.2	Riprap class 2, machine placed	C.Y.*	4.5	5	-	-	-	-	-	-	9.5	Obtain from Bloody Point Quarry	
251-01.3	Riprap class 3, machine placed	C.Y.*	16	-	-	-	-	-	-	-	16	Obtain from Bloody Point Quarry	
303-57	Roadway reconditioning, compaction method B	Mile	7.08	4.80	5.52	-	5.58	0.50	3.90	-	27.38		
322-11	Aggregate surface course, compaction method B	C.Y.*	9	5	-	15	-	-	-	544	573		
322-22	Pit run maximum size 6-inch	C.Y.*	-	10	-	-	-	-	-	185	195	Obtain from Chilcoot Quarry	
322-32	Haul and place stockpiled aggregate. Compaction Method B.	C.Y.*	40	25	10	-	-	-	5	-	80	Obtain from Bloody Point	
602-63.18	18-inch aluminized steel, corrugated steel pipe, 0.064 inch thickness, method A	L.F.	98	126	78	-	-	-	36	-	338	Work shall include excavation, backfill & bedding.	
602-63.24	24-inch aluminized steel, corrugated steel pipe, 0.064 inch thickness, method A	L.F.	174	139	-	-	-	-	-	-	313	Work shall include excavation, backfill & bedding.	
604-03.24	Inlet, beveled drop inlet 24-inch	Each	-	-	2	-	-	-	-	-	2		
606-02.18	Spillway assembly, 18-inch full circle outlet pipe	L.F.	20	-	-	-	-	-	-	-	20	Work shall include excavation, backfill & bedding.	
606-04.18	Anchors for downdrain, 18-inch pipe	EA	4	-	-	-	-	-	-	-	4	Work shall include excavation, backfill & bedding.	
606-05.18	Pipe Elbow, Turner	EA	1	-	-	-	-	-	-	-	1		
607-10	Reconditioning drainage structures	EA	-	1	-	-	-	-	-	-	1		

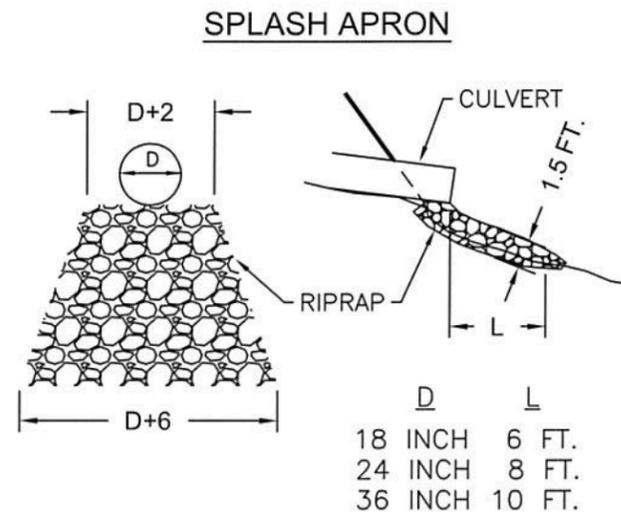
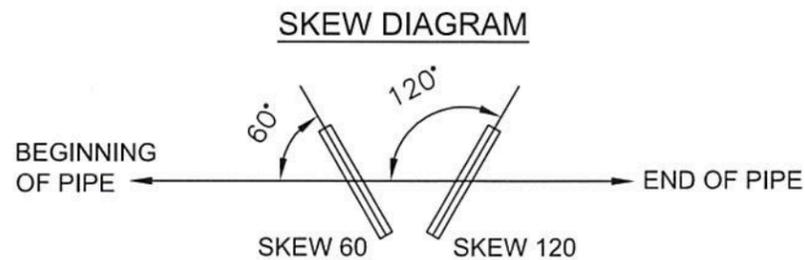
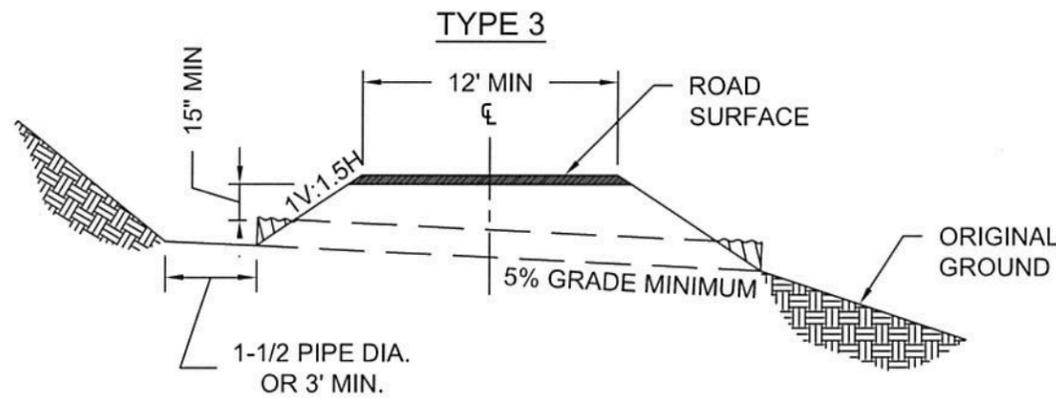
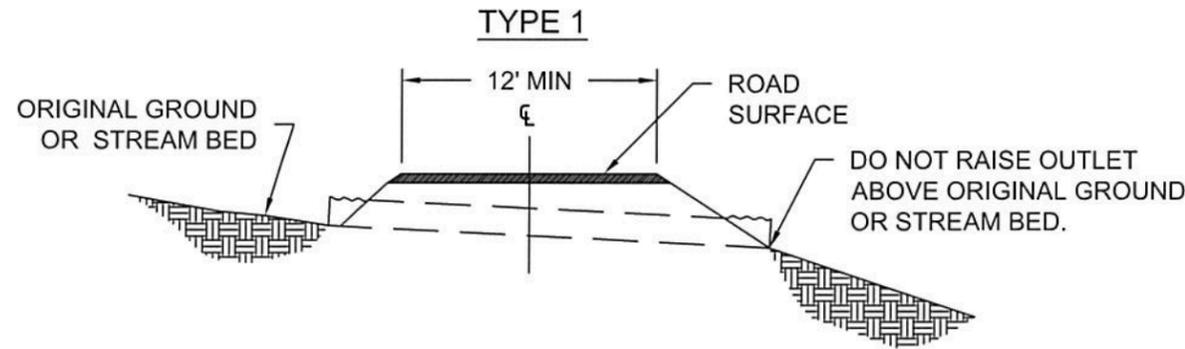
LOCATION AND CULVERT LENGTHS							INSTALLATION DETAILS AND SPECIAL SECTIONS									RIPRAP REQUIREMENTS									Remarks			
DESIGNED				AS BUILT			CORRUGATED METAL PIPE			SPILLWAYS			BEVELED DROP INLET			HEADWALL			SPLASH APRON		SLOPE PROTECTION			SUBGRADE REINFORCEMENT				
MP	STA (FT)	LENGTH (FT)	DEGREE OF SKEW	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	CY	CLASS	TYPE	CY		CLASS	TYPE	
<b>Road 3806</b>																												
0.60		32	Same				18	0.064	3																			
0.63		36	Same				18	0.064	3																			
0.71		40	Same				24	0.064	1										15	3								Splash Apron
0.95		30	Same				24	0.064	1										1	2								Splash Apron
1.14		30	Same				18	0.064	2	20	4	1							1	3								Splash Apron
1.87		30	Same				24	0.064	1										1.5	2								Splash Apron
2.21		40	Same				24	0.064	1																			
2.40		34	Same				24	0.064	1																			
<b>Road 3809</b>																												
2.11		48	Same				18	0.064	3																			
4.02		68	Same				24	0.064	1										5	2								Splash Apron
4.76		38	Same				18	0.064	3																			
4.96		40	Same				18	0.064	3																			
5.58		71	Same				24	0.064	1																			
<b>Road 3815</b>																												
1.45		40	Same				18	0.064	3																			
2.37		38	Staked				18	0.064	3																			
<b>Road 3828</b>																												
3.73		36	Staked				18	0.064	3																			

**NOTES:**

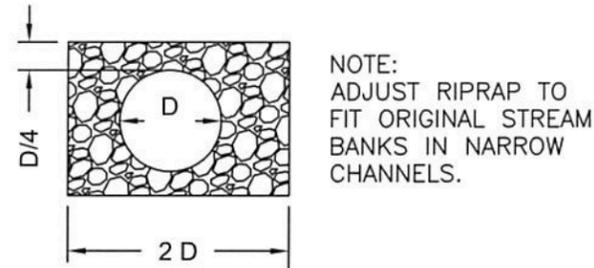
- 1) Staking for culverts has been completed by the Forest Service. Culvert lengths and locations are based on as-staked conditions. Install culverts as staked.
- 2) Excavations for new culverts and culvert replacements are generally deeper than existing culvert installations. Excavation of solid rock may be required in some locations.
- 3) Dimpled bands shall not be used on downpipes, elbows, or pipes laid on grades greater than 15%.
- 4) Unless shown otherwise, where cover heights exceed 11', culverts shall be cambered an amount equal to 0.5% of the culvert length.
- 5) Riprap shall be placed to the minimum dimensions shown on typical section drawings.
- 6) Riprap type abbreviations: D - Dumped, H - Hand Placed, M - Machine Placed.
- 7) Refer to sheet 5 for typical culvert installation and construction details.
- 8) \* Same = Skew is same as replaced culvert.
- 9) Skew is in degrees. From centerline of roadway, looking ahead on line, turn angle right.

# CULVERT CONSTRUCTION DETAILS

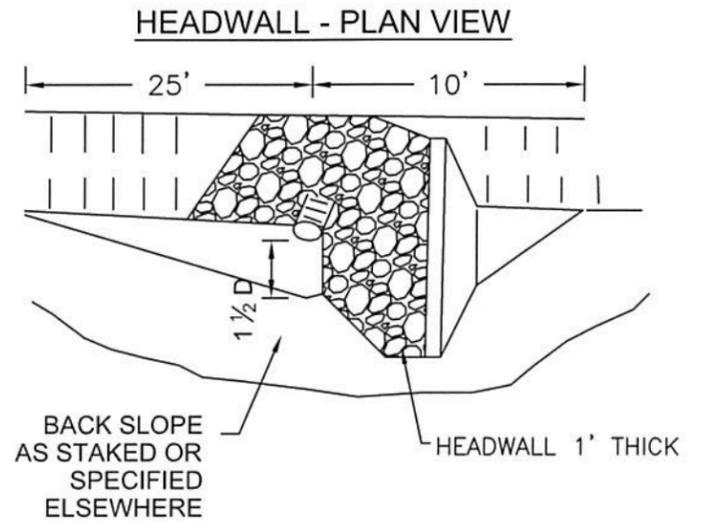
DISTANCES IN FEET EXCEPT WHERE NOTED. NOT TO SCALE REFER TO WORKLISTS



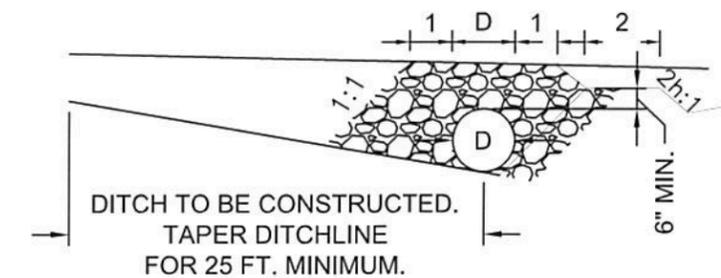
## HEADWALLS FOR TYPE 1



## CATCH BASIN DETAIL FOR TYPE 2 & 3



## HEADWALL - INLET PROFILE VIEW

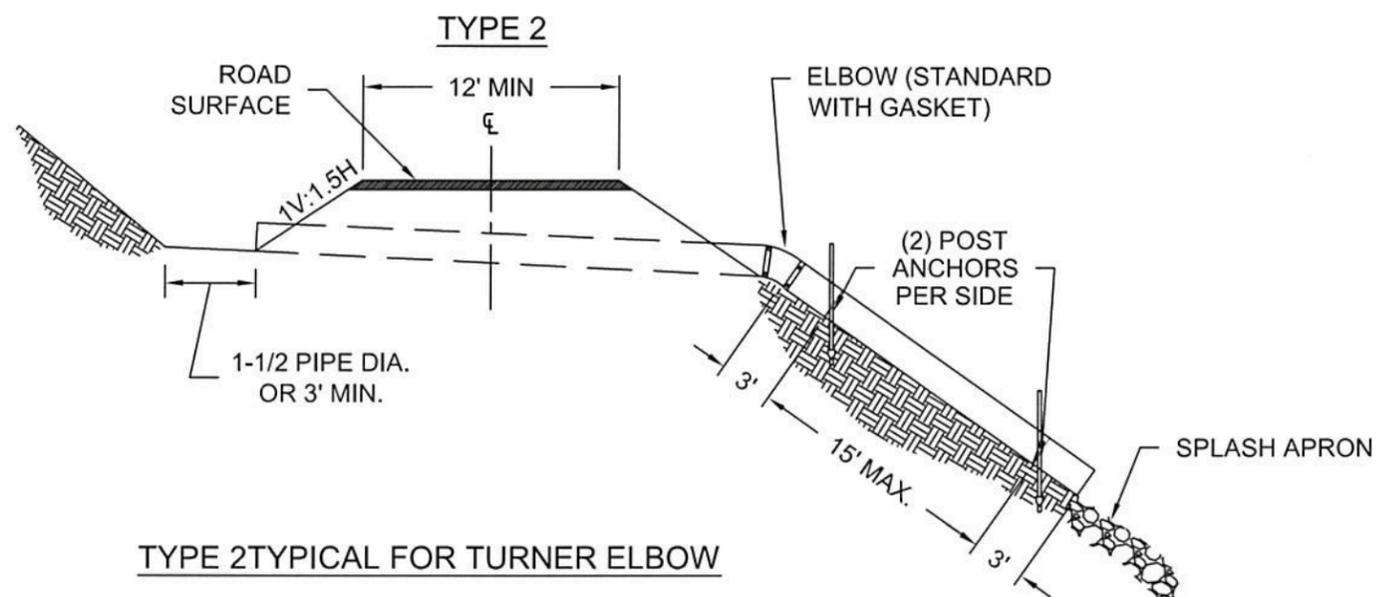


## NOTES FOR ALL CULVERT TYPES:

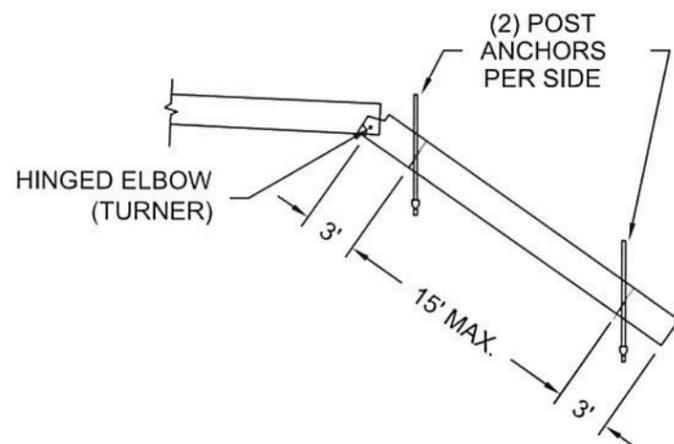
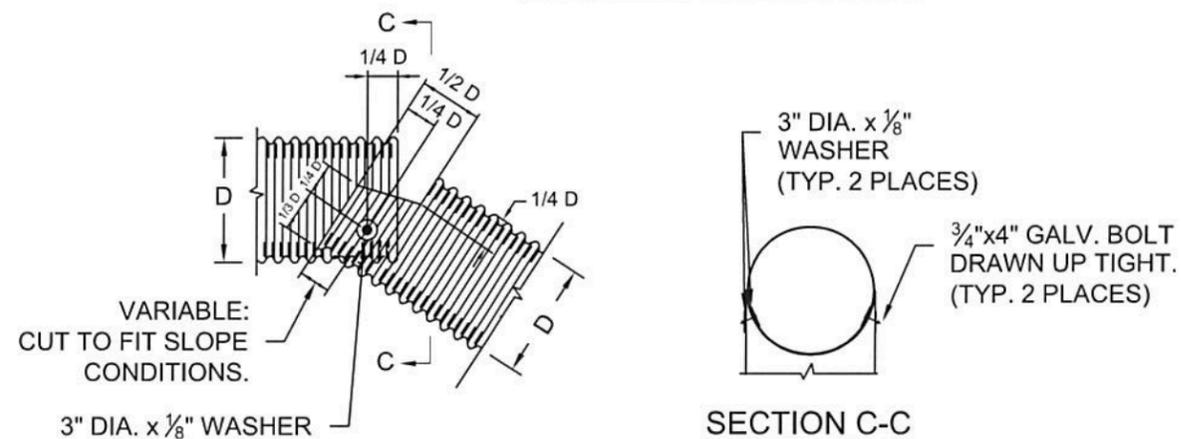
1. Conserve and utilize existing aggregate from roadbed at pipe excavation site.
2. Suitable material from existing excavation may be used as backfill material.
3. Replace conserved aggregate on road surface, supplementing the aggregate surface with 5 cubic yards of material obtained from Bloody Point Quarry and Shane Saddle Quarry.
4. 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.

# CULVERT CONSTRUCTION DETAILS

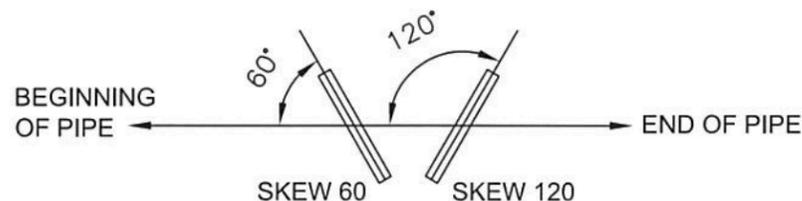
DISTANCES IN FEET EXCEPT WHERE NOTED. NOT TO SCALE REFER TO WORKLISTS



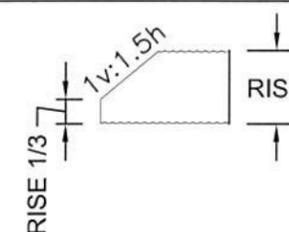
## TURNER ELBOW DETAILS



## SKEW DIAGRAM



## STEP BEVEL END TREATMENT

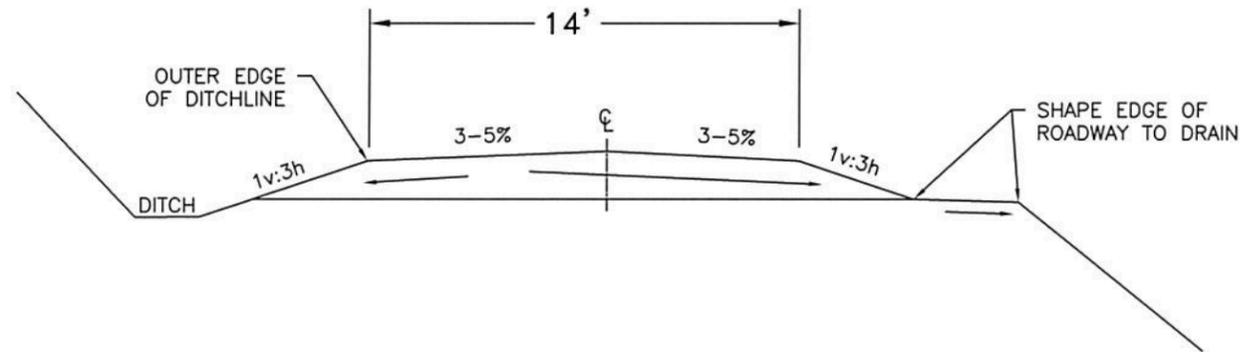


### NOTES FOR TYPE 2 CULVERT:

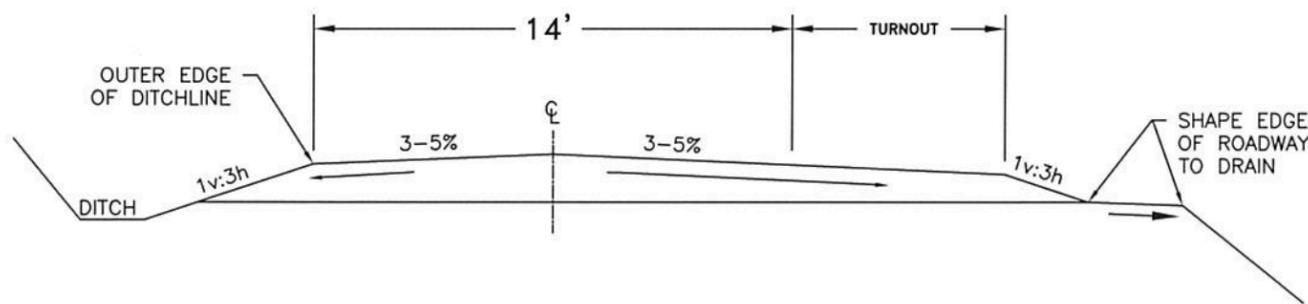
1. PROVIDE 3 WRAPS OF #9 GALVANIZED WIRE AROUND EACH CULVERT AND POST. EACH WRAP SHALL BE PLACED IN THE SAME CORRUGATION ON THE CULVERT. EACH POST SHALL BE DRIVEN SO THAT THE TOP OF THE POST DOES NOT PROTRUDE ABOVE THE TOP OF THE CULVERT.
2. TWO 6 FT. STUDDED TEE FENCE POSTS, ROLLED HIGH CARBON TOUGH RAIL STEEL, 1 3/8"x1 3/8", 1.33 LB./SECTION-FT. OR EQUAL, SET AGAINST CULVERT.
3. TWO ANCHOR ASSEMBLIES MINIMUM PER DOWN DRAIN WITH 15 FT MAXIMUM DISTANCE BETWEEN ANCHOR SETS. ADDITIONAL ANCHORS AS REQUIRED TO MAINTAIN 15 FT. MAXIMUM SPACING.

# ROAD RECONDITIONING TYPICALS

## ROAD RECONDITIONING REQUIREMENTS

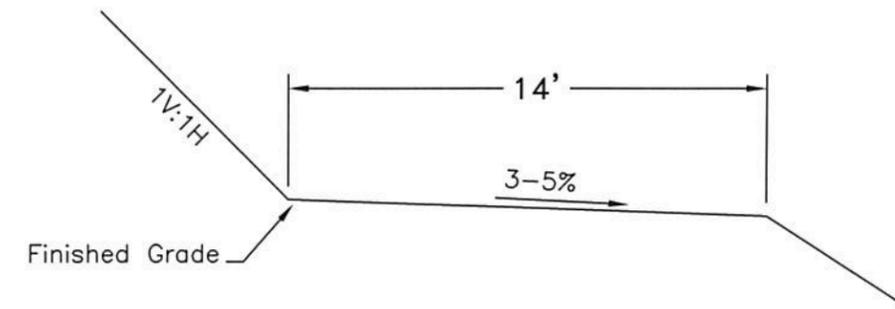


## ROAD RECONDITIONING REQUIREMENTS WITH TURNOUT

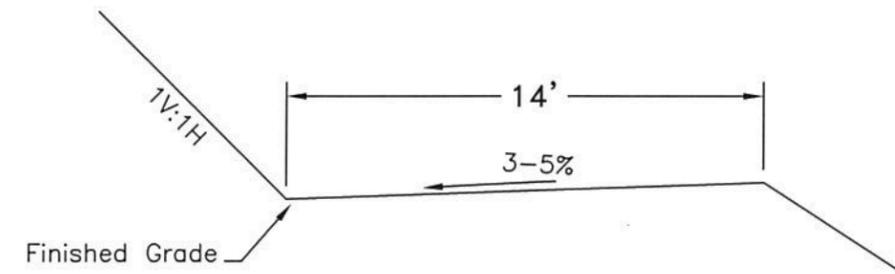


- NOTES:
1. RE-ESTABLISH A 14-FT WIDE TRAVELWAY MEASURED FROM THE OUTER EDGE OF DITCHLINE.
  2. CROWN RECONDITIONED TRAVELWAY. SLOPE 3-5% AWAY FROM CENTERLINE OF TRAVELWAY.
  3. CREATE A 1v:3h SLOPE AT EDGE OF RECONDITIONED TRAVELWAY.

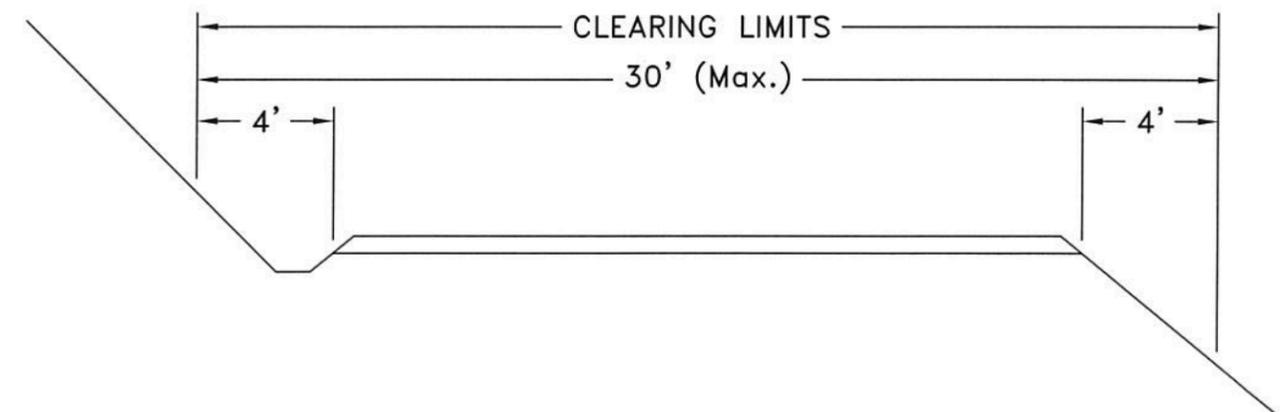
## OUTSLOPE ROAD-NO DITCH TYPICAL



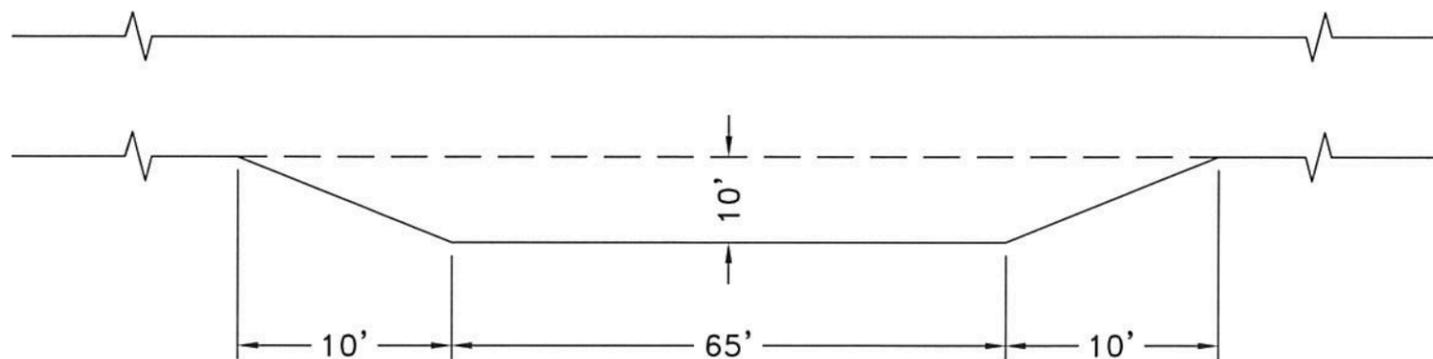
## INSLOPE ROAD-W/DITCH TYPICAL



## DITCH SECTION

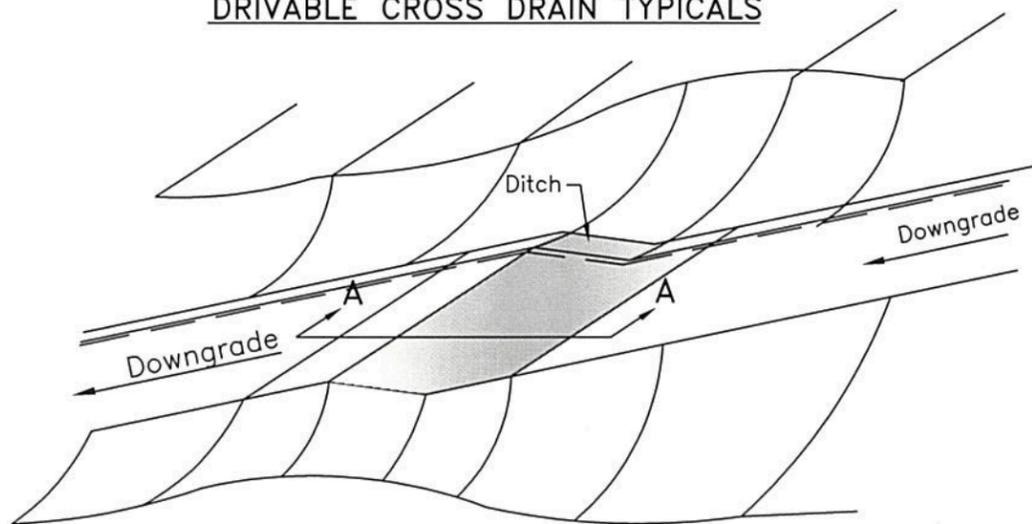


## TURNOUT DIMENSIONS PLAN VIEW



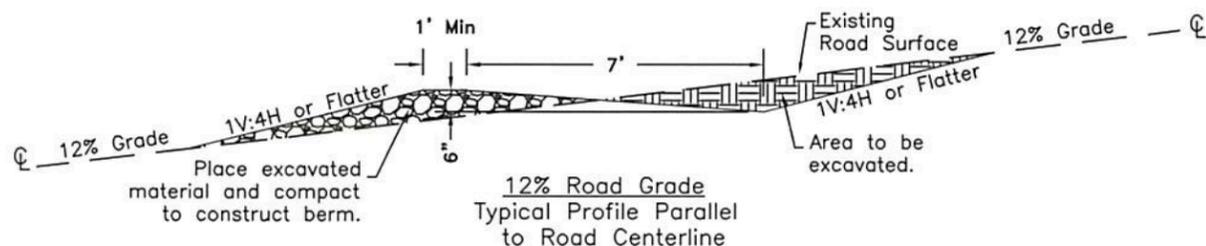
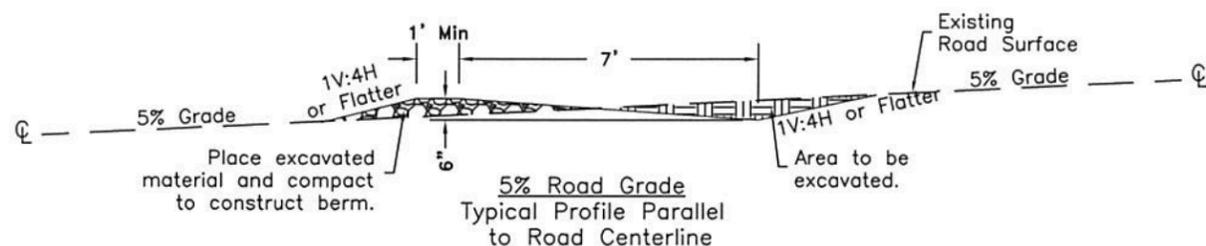
# DRIVABLE CROSS DRAIN & AGGREGATE PLACEMENT TYPICALS

## DRIVABLE CROSS DRAIN TYPICALS



Typical Cross Section Plan View

NOTE: Berm of excavated material shall cross entire roadbed and ditchline, unless otherwise designated in the road listing.

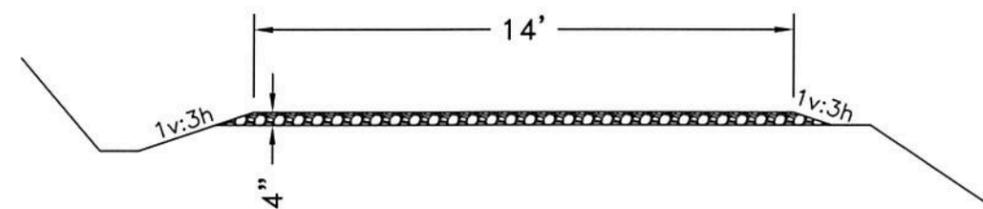


**Notes:**

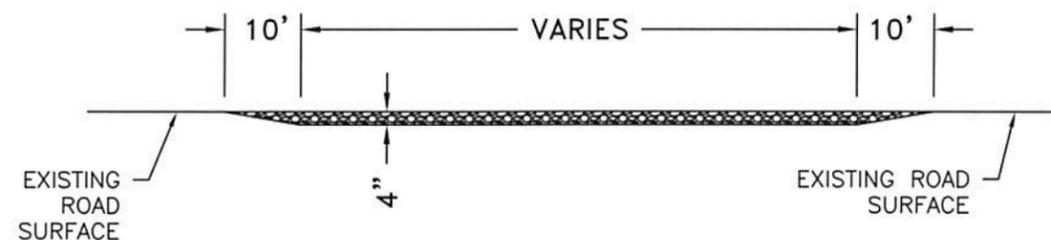
1. Flowline shall be horizontally skewed 60 degrees from the road centerline, unless otherwise designated in the road listing.
2. Berm of excavated material shall cross entire roadbed and ditchline, unless otherwise designated in the road listing.

## CROSS SECTION TYPICALS

### AGGREGATE PLACEMENT USE OVER NEW and REPLACED CULVERTS



### AGGREGATE PLACEMENT PROFILE ALONG CENTERLINE OF ROAD USE OVER NEW and REPLACED CULVERTS

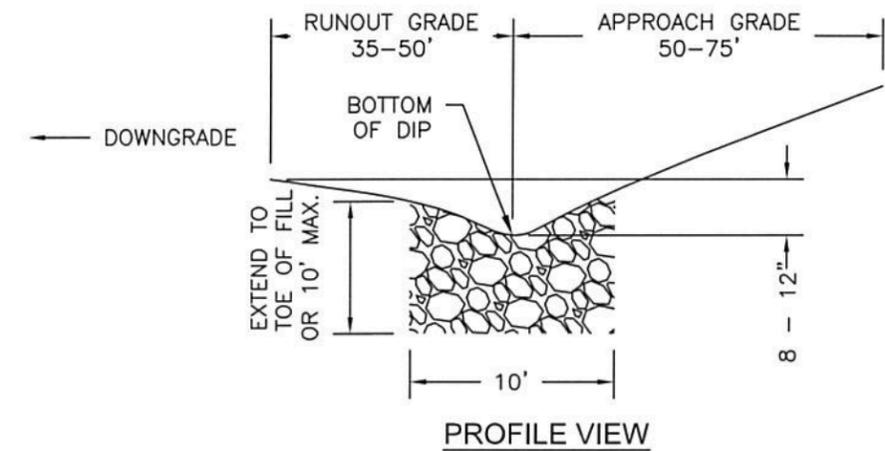
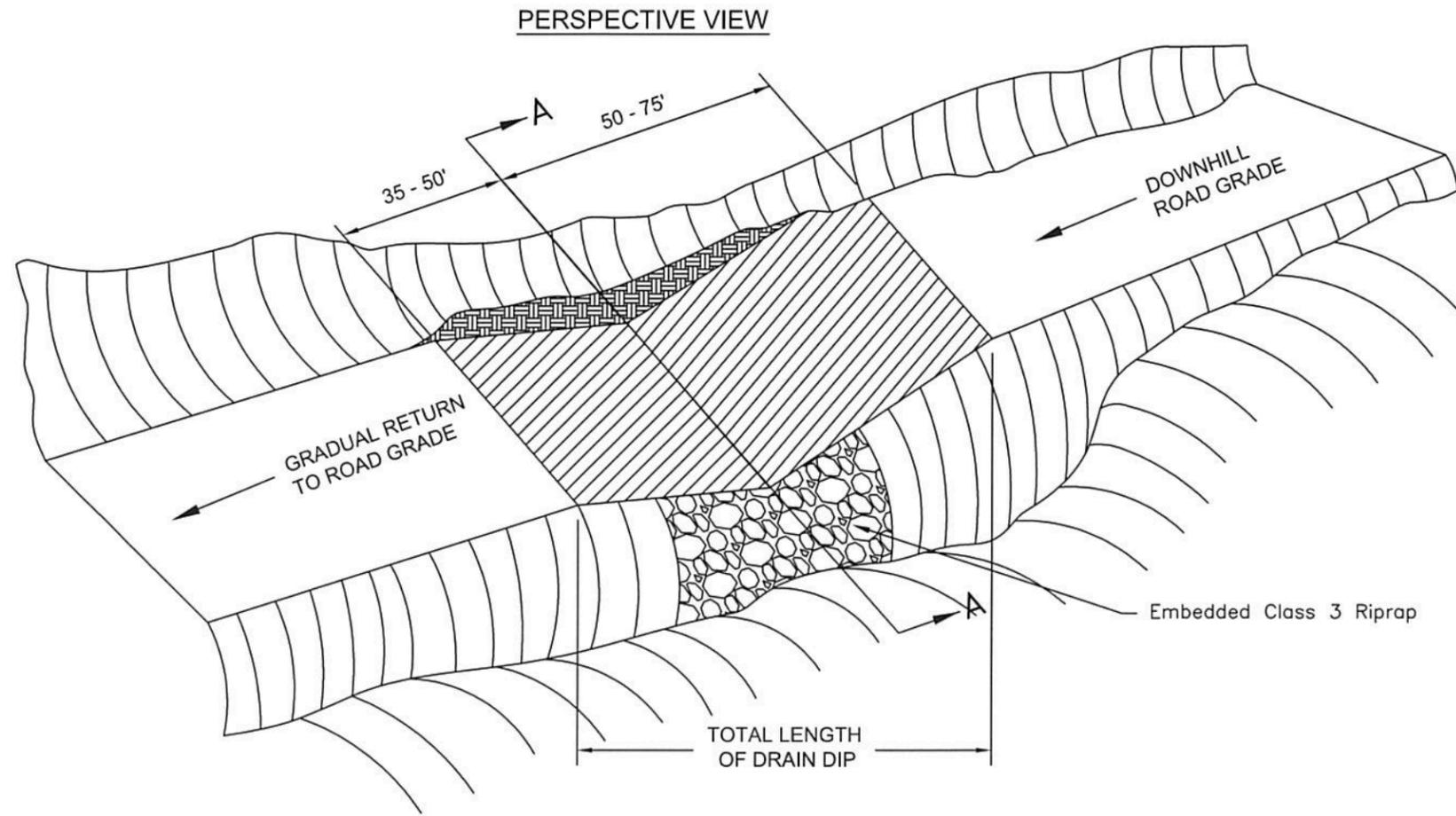


**NOTES:**

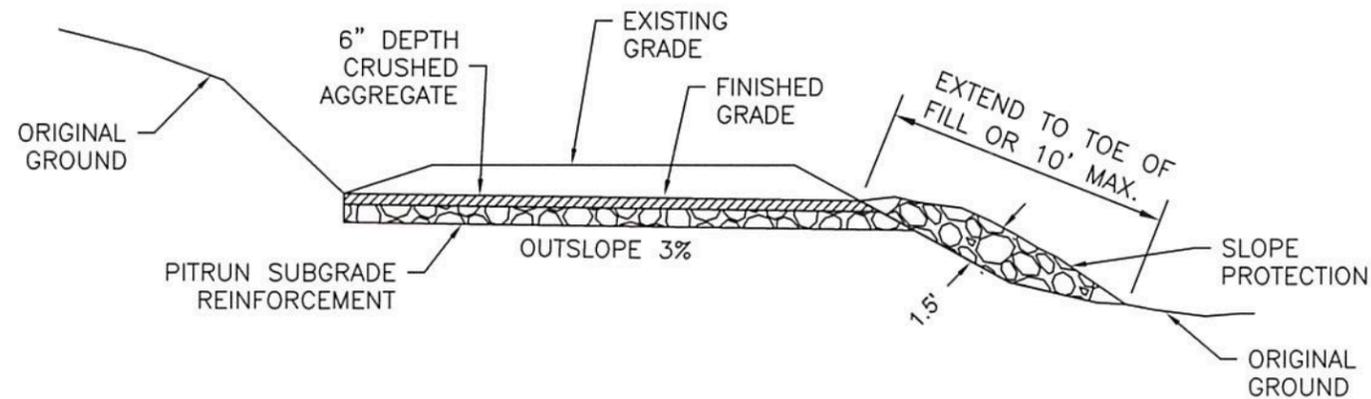
1. THESE TYPICALS APPLY TO ALL AREAS REQUIRED SUPPLEMENTAL AGGREGATE PLACEMENT OVER NEWLY INSTALLED AND REPLACED CULVERTS.
2. CONSERVE AND UTILIZE EXISTING AGGREGATE FROM ROADBED AT PIPE EXCAVATION SITE. SUITABLE MATERIAL FROM EXISTING EXCAVATION MAY BE USED AS BACKFILL MATERIAL.
3. REFER TO WORKLIST FOR LOCATIONS. ITEM 322-32 QUANTITIES ARE INTENDED TO SUPPLEMENT EXISTING MATERIALS CONSERVED DURING CONSTRUCTION.
4. RECONDITION ENTIRE SUBGRADE LENGTH AS SPECIFIED IN PROFILE DRAWING PRIOR TO AGGREGATE PLACEMENT.
5. ANY UNSUITABLE BACKFILL MATERIAL, WOODY DEBRIS, OR SLASH FROM EXCAVATION WILL BE HAULED (INDIRECTLY PAID BY ITEM 602-01) TO APPROVED DISPOSAL SITES.

# ROLLING DIP TYPICALS

DRAWING NOT TO SCALE



## SECTION A-A



### NOTES:

1. Minimum cross slope of drain line: 2% min and 4% max.
2. Skew of drain line shall be 0-25 degrees.
3. When riprap is specified at outlet, it shall be shaped to assure water goes onto riprap, not around.
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. Low point of drain dip shall be 8 - 12 inches lower in elevation than the drain dip crest.
7. Where ditches are greater than 1 foot deep, blend lead-in ditch to match finished elevation of drain dip low point.
8. Clearing and grubbing of existing surfaces may be required and is indirect to pay item 204-20.2. cleaned material may be placed on adjacent fill slopes.
9. Subgrade reinforcement and slope protection quantities and types shown on worklist and drainage listing.
10. Conserve existing surface rock and replace on new subgrade. this work is indirect to pay item 204-20.2.
11. Do not disturb existing armor in low point of drain dip.
12. When shown on the worklist, crushed aggregate surfacing shall be placed.

MP	SPECIFIED ROAD WORKLIST- ROAD 3806	PAY ITEM	QUANTITY
0.00	Junction of 38 road. Begin reconditioning existing roadway. Conserve and utilize the aggregate that has scattered onto the shoulders of the roadway and re-incorporate into the traveled way. Scarify aggregate surface in accordance with FP-03 303.06. Shape and compact the traveled way, shoulders and existing staked turnouts. Existing staked turnouts are variable width, length, and transitions. See Turnout Table, Sheet 6. Mile post stakes are at approximate center of turnout. Clean inlets, outlets and reshape ditch as staked.	303-57	7.08 Mi
0.15	Clean inlet and catch basin of 18-inch CMP. Install splash apron with 0.5 CY of class 2 riprap.	251-01.2	0.5 CY
0.45	Log out trees from roadway.		
0.50	Clean inlet and catch basin of 18-inch CMP. Saw cut culvert 5 feet from outlet and dispose according to 203.05 (a). Install splash apron with 1.5 CY of class 2 riprap.	203-01.1 251-01.2	1 EA 1.5 CY
0.53	Turnout right.		
0.60	Remove existing 18-inch ditch relief culvert. Install new 18-inch CMP. Place 5 CY aggregate surfacing.	203-01.1 322-32 602-63.18	1 EA 5 CY 32 LF
0.63	Remove existing 18-inch ditch relief culvert. Install new 18-inch CMP at new staked location. Place 5 CY aggregate surfacing. Reshape ditch for 200 ft. Haul material to designated disposal site.	203-01.1 322-32 602-63.18	1 EA 5 CY 36 LF
0.68	Turnout right.		
0.71	Remove existing 18-inch stream crossing culvert. Install new 24-inch CMP. Machine place 15 CY of class 3 riprap in outlet scour hole. Place 5 CY aggregate surfacing.	203-01.1 251-01.3 322-32 602-63.24	1 EA 15 CY 5 CY 40 LF
0.90	Turnout right.		
0.95	Remove existing 18-inch stream crossing culvert. Install new 24-inch CMP. Place 1 CY of class 2 riprap in outlet scour hole. Place 5 CY aggregate surfacing.	203-01.1 251-01.2 322-32 602-63.24	1 EA 1 CY 5 CY 30 LF
1.05	Clean inlet and catch basin of 18-inch CMP.		
1.06	Clean inlet and catch basin of 18-inch CMP. Saw cut culvert 2 feet from inlet and dispose according to 203.05 (a).	203-01.1	1 EA
1.14	Remove existing 18-inch ditch relief culvert. Install new 18-inch CMP with turner elbow and 20 ft. downdrain. Place 5 CY aggregate surfacing.	203-01.1 251-01.3 322-32 602-63.18 606-02.18 606-04.18 606-05.18	1 EA 1 CY 5 CY 30 LF 20 LF 4 EA 1 EA
1.17	Clean inlet and catch basin of 18-inch CMP.		
1.24	Clean inlet, catch basin, and outlet of 18-inch CMP.		
1.35	Clean inlet and catch basin of 18-inch CMP.		
1.44	Clean inlet and catch basin of 18-inch CMP.		
1.61	Clean inlet and catch basin of 18-inch CMP.		
1.73	Turnout left.		
1.87	Remove existing 18-inch stream crossing culvert. Install new 24-inch CMP. Place 1.5 CY of class 2 riprap in outlet scour hole. Place 5 CY aggregate surfacing.	203-01.1 251-01.2 322-32 602-63.24	1 EA 1.5 CY 5 CY 30 LF
1.91	Install rolling dip. Reshape ditch for 200 ft. Haul material to designated disposal site.	204-20.2	1 EA
2.00	Clean inlet, catch basin, and outlet of 18-inch CMP.		
2.21	Remove existing 18-inch stream crossing culvert. Install new 24-inch CMP. Place 5 CY aggregate surfacing. Fall and leave trees marked by F.S. within the site location.	202-58 203-01.1 322-32 602-63.24	4 EA 1 EA 5 CY 40 LF
2.23	Turnout right.		

MP	SPECIFIED ROAD WORKLIST- ROAD 3806	PAY ITEM	QUANTITY
2.36	Turnout right.		
2.40	Remove existing 18-inch stream crossing culvert. Install new 24-inch CMP. Place 5 CY aggregate surfacing.	203-01.1 322-32 602-63.24	1 EA 5 CY 34 LF
2.41	Junction of 3806-200 road right.		
2.72	Turnout left.		
2.94	Turnout left.		
3.16	Clean inlet, catch basin, and outlet of 18-inch CMP.		
3.45	Turnout right.		
3.66	Clean outlet of 18-inch CMP.		
3.79	Clean inlet and catch basin of 18-inch CMP. Jack open inlet.		
3.94	Clean inlet and catch basin of 18-inch CMP.		
3.98	Clean inlet and catch basin of 18-inch CMP.		
4.04	Turnout right.		
4.14	Clean inlet and catch basin of 18-inch CMP.		
4.34	Clean inlet and catch basin of 18-inch CMP.		
4.45	Clean inlet and catch basin of 18-inch CMP.		
4.64	Remove boulder from ditch and haul to designated disposal site (mp 6.12)		
4.76	Clean inlet and catch basin of 18-inch CMP.		
4.77	Remove boulders from ditch and haul to designated disposal site (mp 6.12)		
4.79	Reshape road template from a crowned road with ditch to an outslped road. Shift road to establish 12 ft. travel way for 200 ft.	204-01	10 CY
4.88	Remove boulders and reshape ditch for 150 ft. Haul to designated disposal site (mp 6.12).		
4.93	Clean inlet and catch basin of 18-inch CMP.		
5.03	Turnout right.		
5.46	Junction of 3806-350 road right.		
5.79	Turnout right.		
5.83	Water source W1807.		
5.94	Clean inlet and catch basin of 18-inch CMP.		
6.12	Siwash Pit and disposal site.		
6.45	Clean inlet and catch basin of 18-inch CMP.		
6.70	Disposal site left.		
7.08	Junction of 3806-370 road right. End Road Reconditioning.		
7.35	Remove 8ft x 6ft x 8ft boulder from roadway. Haul to designated disposal site (mp 6.70).	203-01.2	1 EA
7.74	Remove 4ft x 5ft x 3ft boulder from roadway. Haul to designated disposal site (mp 6.70).	203-01.2	1 EA
8.22	Water source W1909 & W1910		
9.10	Remove fill slope failure and haul to designated disposal site (mp 6.12).	204-01	10 CY
9.87	Junction of 3809 road right.		
10.60	Remove material and reshape ditch for 200 ft. Haul material to designated disposal site (mp 6.12).		
10.71	Remove material and reshape ditch for 400 ft. Haul material to designated disposal site (mp 6.12).		
10.92	Junction of 3806-480 road left.		
11.19	Remove material and reshape ditch for 100 ft. Haul material to designated disposal site (mp 6.12). Begin aggregate surfacing placement on existing roadway for 75 ft., 3-inch depth, compaction method B.	204-01 322-11	5 CY 9 CY
11.53	Remove material and reshape ditch for 100 ft. Haul material to designated disposal site (mp 6.12).	204-01	3 CY
11.73	Remove material and reshape ditch for 50 ft. Haul material to designated disposal site (mp 6.12).	204-01	2 CY
11.77	Remove material and reshape ditch for 300 ft. Haul material to designated disposal site (mp 6.12).	204-01	10 CY
12.44	Chilcoot Quarry. Riprap and pitrun source.		
12.49	Remove fill slope failure material and reshape road template to a crowned road. Shift road to establish 12 ft. travel way for 150 ft.	204-01	40 CY
12.52	Install rolling dip. Obtain pitrun and riprap from Chilcoot Quarry (mp 12.44).	204-20.2	1 EA

MP	SPECIFIED ROAD WORKLIST- ROAD 3809	PAY ITEM	QUANTITY
0.00	Junction of 38 road. Begin reconditioning existing roadway. Conserve and utilize the aggregate that has scattered onto the shoulders of the roadway and re-incorporate into the traveled way. Scarify aggregate surface in accordance with FP-03 303.06. Shape and compact the traveled way, shoulders and existing staked turnouts. Existing staked turnouts are variable width, length, and transitions. See Turnout Table, Sheet 6. Mile post stakes are at approximate center of turnout. Clean inlets, outlets and reshape ditch as staked.	303-57	4.80 Mi
0.19	Clean inlet and catch basin of 18-inch CMP.		
0.26	Turnout right.		
0.37	Clean inlet and catch basin of 18-inch CMP.		
0.49	Clean inlet and catch basin of 18-inch CMP.		
0.60	Clean inlet and catch basin of 18-inch CMP.		
0.68	Turnout right.		
1.00	Remove material and reshape ditch for 75 ft. Haul material to designated disposal site.		
1.53	Turnout right.		
1.61	Water source W1812.		
1.96	Remove large boulder from inlet of stream crossing. Haul to designated disposal site.		
2.11	Remove existing 18-inch ditch relief culvert. Install new 18-inch CMP at new staked location. Place 5 CY aggregate surfacing.	203-01.1 322-32 602-63.18	1 EA 5 CY 48 LF
2.51	Turnout right.		
2.83	Clean inlet and catch basin of 18-inch CMP.		
3.02	Clean inlet and catch basin of 18-inch CMP.		
3.15	Junction of 3809-100 road right. Clean inlet and catch basin of 18-inch CMP.		
3.34	Turnout left.		
4.02	Remove existing 18-inch stream crossing culvert. Install new 24-inch CMP. Machine place 5 CY of class 2 riprap in outlet scour hole. Place 5 CY aggregate surfacing.	203-01.1 251-01.2 322-32 602-63.24	1 EA 5 CY 5 CY 68 LF
4.41	Clean inlet and catch basin of 18-inch CMP.		
4.60	Clean inlet and catch basin of 18-inch CMP.		
4.76	Remove existing 18-inch ditch relief culvert. Install new 18-inch CMP at new staked location. Place 5 CY aggregate surfacing.	203-01.1 322-32 602-63.18	1 EA 5 CY 38 LF
4.80	Junction of 3809-161 road right. End Road Reconditioning.		
4.96	Remove existing 18-inch ditch relief culvert. Install new 18-inch CMP at new staked location. Place 5 CY aggregate surfacing.	203-01.1 322-32 602-63.18	1 EA 5 CY 40 LF
5.14	Re-attach existing down spout to existing culvert.	607-10	1 EA
5.53	18-inch CMP Armor outlet.	251-01.2	2 CY
5.58	Remove existing 18-inch stream crossing culvert. Install new 24-inch CMP. Place 5 CY aggregate surfacing.	203-01.1 322-32 602-63.24	1 EA 5 CY 71 LF
6.57	Excavate hole in road and backfill with pitrun. Place 5 CY aggregate surfacing.	204-01 322-11 322-22	10 CY 5 CY 10 CY

MP	SPECIFIED ROAD WORKLIST- ROAD 3815	PAY ITEM	QUANTITY
0.00	Junction of 38 road. Begin reconditioning existing roadway. Conserve and utilize the aggregate that has scattered onto the shoulders of the roadway and re-incorporate into the traveled way. Scarify aggregate surface in accordance with FP-03 303.06. Shape and compact the traveled way, shoulders and existing staked turnouts. Existing staked turnouts are variable width, length, and transitions. See Turnout Table, Sheet 6. Mile post stakes are at approximate center of turnout. Clean inlets, outlets and reshape ditch as staked.	303-57	5.52 Mi
0.14	Remove fallen tree from roadway. Place on fill slope in a way that does not impede drainage.		
0.15	Remove fallen tree from roadway. Place on fill slope in a way that does not impede drainage.		
0.42	Clean inlet and catch basin of 18-inch CMP.		
0.87	Clean inlet and catch basin of 18-inch CMP.		
0.97	Remove material and reshape ditch for 50 ft. Haul material to designated disposal site (mp 5.72).		
1.02	Clean inlet and catch basin of 18-inch CMP.		
1.20	Clean inlet and catch basin of 18-inch CMP.		
1.27	Clean inlet and catch basin of 18-inch CMP.		
1.28	Turnout right.		
1.45	Remove existing 18-inch ditch relief culvert. Install new 18-inch CMP at new staked location. Place 5 CY aggregate surfacing.	203-01.1 322-32 602-63.18	1 EA 5 CY 40 LF
1.59	Remove stump and rootwad from roadway. Place on fill slope in a way that does not impede drainage.		
1.77	Turnout right.		
1.92	Clean inlet of 24-inch CMP.		
2.00	Excavate 5 CY silt deposition at culvert inlet. Fall approximately 10 4-6-inch dia trees and place on fill slope in a way that does not impede drainage. Buck and remove four 30-36-inch downed logs around inlet and haul to designated disposal site.	202-58 202-55 204-15	10 EA 4 EA 5 CY
2.08	Remove fill slope slump material and reshape ditch.		
2.20	Turnout right.		
2.35	Remove material and reshape ditch for 50 ft. Haul material to designated disposal site (mp 5.72).		
2.37	Install new 18-inch CMP at new staked location. Place 5 CY aggregate surfacing.	322-32 602-63.18	5 CY 38 LF
2.51	Turnout right.		
3.23	Clean inlet and catch basin of 18-inch CMP.		
3.32	Clean inlet and catch basin of 18-inch CMP.		
3.53	Turnout right.		
3.64	Reshape road template from a crowned road with ditch to an outsloped road. Shift road into ditch to establish 12 ft. travel way for 150 ft.	204-01	15 CY
3.67	Clean inlet and catch basin of 18-inch CMP. Install beveled drop inlet for existing 18-inch CMP.	604-03.24	1 EA
3.72	Remove material and reshape ditch for 100 ft. Haul material to designated disposal site (mp 5.72).		
3.78	Clean inlet and catch basin of 18-inch CMP.		
3.85	Install beveled drop inlet for existing 18-inch CMP.	604-03.24	1 EA
4.58	Clean inlet and catch basin of 18-inch CMP.		
4.81	Clean inlet and catch basin of 18-inch CMP.		
5.00	Clean inlet and catch basin of 18-inch CMP.		
5.52	Junction of 3811 road right. End Road Reconditioning.		
5.72	Johnson Butte Pit and disposal site.		
5.90	Reshape existing rolling dip.	204-20.2	1 EA
9.45	Reshape existing rolling dip.	204-20.2	1 EA
10.17	Remove fill slope failure and haul to designated disposal site (mp 5.72).	204-01	10 CY
10.30	Remove material and reshape ditch for 500 ft. Haul material to designated disposal site (mp 5.72).	204-01	50 CY
10.94	End of road and junction of 3821 road right.		

MP	SPECIFIED ROAD WORKLIST- ROAD 3821	PAY ITEM	QUANTITY
0.00	Junction of 38 road.		
0.54	Place aggregate surfacing 4-inch depth for 100 ft.	322-11	15 CY
7.96	Remove material and reshape ditch for 200 ft. Haul material to designated disposal site (3815 mp 5.72).	204-01	10 CY
8.36	Remove material and reshape ditch for 100 ft. Haul material to designated disposal site (3815 mp 5.72).	204-01	5 CY
8.42	Remove material and reshape ditch for 75 ft. Haul material to designated disposal site (3815 mp 5.72).	204-01	3 CY
8.62	End of road and junction of 3815 road left.		

MP	SPECIFIED ROAD WORKLIST- ROAD 3825	PAY ITEM	QUANTITY
0.00	Junction of 38 road. Begin reconditioning existing roadway. Conserve and utilize the aggregate that has scattered onto the shoulders of the roadway and re-incorporate into the traveled way. Scarify aggregate surface in accordance with FP-03 303.06. Shape and compact the traveled way, shoulders and existing staked turnouts. Existing staked turnouts are variable width, length, and transitions. See Turnout Table, Sheet 6. Mile post stakes are at approximate center of turnout. Clean inlets, outlets and reshape ditch as staked.	303-57	5.58 Mi
0.43	Turnout right.		
0.85	Turnout right.		
1.31	Remove material and reshape ditch for 300 ft. Haul material to designated disposal site (mp 4.63).		
1.61	Clean inlet and catch basin of 18-inch CMP.		
1.69	Turnout right.		
2.06	Turnout right.		
2.29	Clean inlet and catch basin of 18-inch CMP.		
2.60	Turnout right.		
2.64	Clean inlet and catch basin of 18-inch CMP.		
3.00	Turnout right.		
3.17	Remove material and reshape ditch for 75 ft. Haul material to designated disposal site (mp 4.63).		
3.22	Remove material and reshape ditch for 50 ft. Haul material to designated disposal site (mp 4.63).		
4.00	Remove material and reshape ditch for 300 ft. Haul material to designated disposal site (mp 4.63).		
4.04	Clean inlet and catch basin of 18-inch CMP.		
4.07	Remove material and reshape ditch for 100 ft. Haul material to designated disposal site (mp 4.63).		
4.34	Turnout left.		
4.63	Disposal site.		
4.74	Remove material and reshape ditch for 400 ft. Haul material to designated disposal site (mp 4.63).	204-01	40 CY
5.06	Turnout right.		
5.58	Junction of 3825-100 road right. End Road Reconditioning.		

MP	SPECIFIED ROAD WORKLIST- ROAD 3825-110	PAY ITEM	QUANTITY
0.00	Junction of 3825-100 road. Begin roadside brushing. Begin reconditioning existing roadway. Conserve and utilize the aggregate that has scattered onto the shoulders of the roadway and re-incorporate into the traveled way. Scarify aggregate surface in accordance with FP-03 303.06. Shape and compact the traveled way, shoulders and existing staked turnouts. Existing staked turnouts are variable width, length, and transitions. See Turnout Table, Sheet 6. Mile post stakes are at approximate center of turnout. Clean inlets, outlets and reshape ditch as staked.	303-57	0.50 Mi
		230-50	0.50 Mi
0.07	Install drivable cross ditch.	204-20.1	1 EA
0.15	Install drivable cross ditch.	204-20.1	1 EA
0.26	Install drivable cross ditch.	204-20.1	1 EA
0.34	Install drivable cross ditch.	204-20.1	1 EA
0.41	Install drivable cross ditch.	204-20.1	1 EA
0.46	Install drivable cross ditch.	204-20.1	1 EA
0.50	End roadside brushing and road reconditioning.		

MP	SPECIFIED ROAD WORKLIST- ROAD 3828	PAY ITEM	QUANTITY
0.00	Junction of 38 road. Begin reconditioning existing roadway. Conserve and utilize the aggregate that has scattered onto the shoulders of the roadway and re-incorporate into the traveled way. Scarify aggregate surface in accordance with FP-03 303.06. Shape and compact the traveled way, shoulders and existing staked turnouts. Existing staked turnouts are variable width, length, and transitions. See Turnout Table, Sheet 6. Mile post stakes are at approximate center of turnout. Clean inlets, outlets and reshape ditch as staked.	303-57	3.9 Mi
0.23	Clean inlet and catch basin of 18-inch CMP.		
0.38	Turnout left.		
0.80	Hand clean plugged 48-inch stream crossing inlet.		
1.08	Turnout left.		
1.34	Reshape existing rolling dip.	204-20.2	1 EA
1.72	Remove material and reshape ditch for 50 ft. Haul material to designated disposal site.		
1.77	Turnout right.		
1.90	Remove material and reshape ditch for 50 ft. Haul material to designated disposal site.		
2.24	Turnout left.		
2.60	Clean inlet and catch basin of 18-inch CMP.		
2.73	Clean inlet and catch basin of 18-inch CMP.		
2.90	Clean ditch transition to culvert drop inlet.		
3.20	Turnout right.		
3.73	Install new 18-inch CMP at new staked location. Place 5 CY aggregate surfacing.	322-32 602-63.18	5 CY 36 LF
3.78	Clean inlet and catch basin of 18-inch CMP.		
3.90	Junction of 3828-135 road right. End Road Reconditioning.		
4.09	Designated disposal site		
4.88	Remove material and reshape ditch for 70 ft. Haul material to designated disposal site.	204-01	10 CY
4.93	Remove material and reshape ditch for 200 ft. Haul material to designated disposal site.	204-01	20 CY
7.21	Shane Saddle Quarry.		

MP	SPECIFIED ROAD WORKLIST- ROAD 3829	PAY ITEM	QUANTITY
0.00	Junction of 38 road.		
0.10	Begin aggregate surfacing placement on existing roadway, 4-inch depth, compaction method B. Haul aggregate from Bloody Piont Quarry (3803-003 mp 0.22). Install drivable cross ditch.	204-20.1 322-11	1 EA 14 CY
0.15	End aggregate surfacing placement on existing roadway.		
0.16	Install drivable cross ditch.	204-20.1	1 EA
0.20	Begin aggregate surfacing placement on existing roadway, 4-inch depth, compaction method B. Haul aggregate from Bloody Piont Quarry (3803-003 mp 0.22).	322-11	120 CY
0.22	Install drivable cross ditch.	204-20.1	1 EA
0.30	Install drivable cross ditch.	204-20.1	1 EA
0.34	End aggregate surfacing placement on existing roadway.		
0.37	Begin aggregate surfacing placement on existing roadway, 4-inch depth, compaction method B. Haul aggregate from Bloody Piont Quarry (3803-003 mp 0.22).	322-11	25 CY
0.40	End aggregate surfacing placement on existing roadway. Place 15 CY pitrun material, compaction method B, and reshape existing rolling dip.	204-20.2 322-22	1 EA 15 CY
0.45	Place 20 CY pitrun material, compaction method B, and reshape existing rolling dip.	204-20.2 322-22	1 EA 20 CY
0.53	Begin aggregate surfacing placement on existing roadway, 4-inch depth, compaction method B. Haul aggregate from Bloody Piont Quarry (3803-003 mp 0.22).	322-11	75 CY
0.57	Place 25 CY pitrun material, compaction method B, and reshape existing rolling dip.	204-20.2 322-22	1 EA 25 CY
0.62	End aggregate surfacing placement on existing roadway. Place 35 CY pitrun material, compaction method B, and reshape existing rolling dip.	204-20.2 322-22	1 EA 35 CY
0.67	Reshape existing rolling dip.	204-20.2	1 EA
0.69	Remove material and reshape ditch for 100 ft. Haul material to designated disposal site.	204-01	5 CY
0.73	Begin aggregate surfacing placement on existing roadway, 4-inch depth, compaction method B. Haul aggregate from Bloody Piont Quarry (3803-003 mp 0.22). Place 15 CY pitrun material, compaction method B, and reshape existing rolling dip.	204-20.2 322-11 322-22	1 EA 75 CY 15 CY
0.77	Place 20 CY pitrun material, compaction method B, and reshape existing rolling dip.	204-20.2 322-22	1 EA 20 CY
0.82	End aggregate surfacing placement on existing roadway.		
0.92	Begin aggregate surfacing placement on existing roadway, 4-inch depth, compaction method B. Haul aggregate from Bloody Piont Quarry (3803-003 mp 0.22).	322-11	45 CY
0.97	End aggregate surfacing placement on existing roadway.		
1.05	Begin aggregate surfacing placement on existing roadway, 4-inch depth, compaction method B. Haul aggregate from Bloody Piont Quarry (3803-003 mp 0.22).	322-11	20 CY
1.07	End aggregate surfacing placement on existing roadway.		
1.18	Begin aggregate surfacing placement on existing roadway, 4-inch depth, compaction method B. Haul aggregate from Bloody Piont Quarry (3803-003 mp 0.22).	322-11	50 CY
1.24	End aggregate surfacing placement on existing roadway.		
1.25	Place 25 CY pitrun material, compaction method B, and reshape existing rolling dip.	204-20.2 322-22	1 EA 25 CY
1.26	Begin aggregate surfacing placement on existing roadway, 4-inch depth, compaction method B. Haul aggregate from Bloody Piont Quarry (3803-003 mp 0.22).	322-11	120 CY
1.36	Place 30 CY pitrun material, compaction method B, and reshape existing rolling dip.	204-20.2 322-22	1 EA 30 CY
1.40	End aggregate surfacing placement on existing roadway.		