

**DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION 9
ALLEGHENY NATIONAL FOREST**

Thunder West Timber Sale

FR 479 West Thundershower 1.9 Mile Reconst. – Maintenance – Level D
FR 479A West Thundershower - A 0.4 Mile Reconst. – Maintenance – Level D

Bradford Ranger District
McKean County
Pennsylvania

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The location and design elements of this facility have been correlated with the plans, policies and constraints of the approved Upper Kinzua Environmental Assessment.

Plans are to be used with "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects FP-03 with Special Project Specifications thereto included in this contract.

Prepared By:

Joan E. Martinez

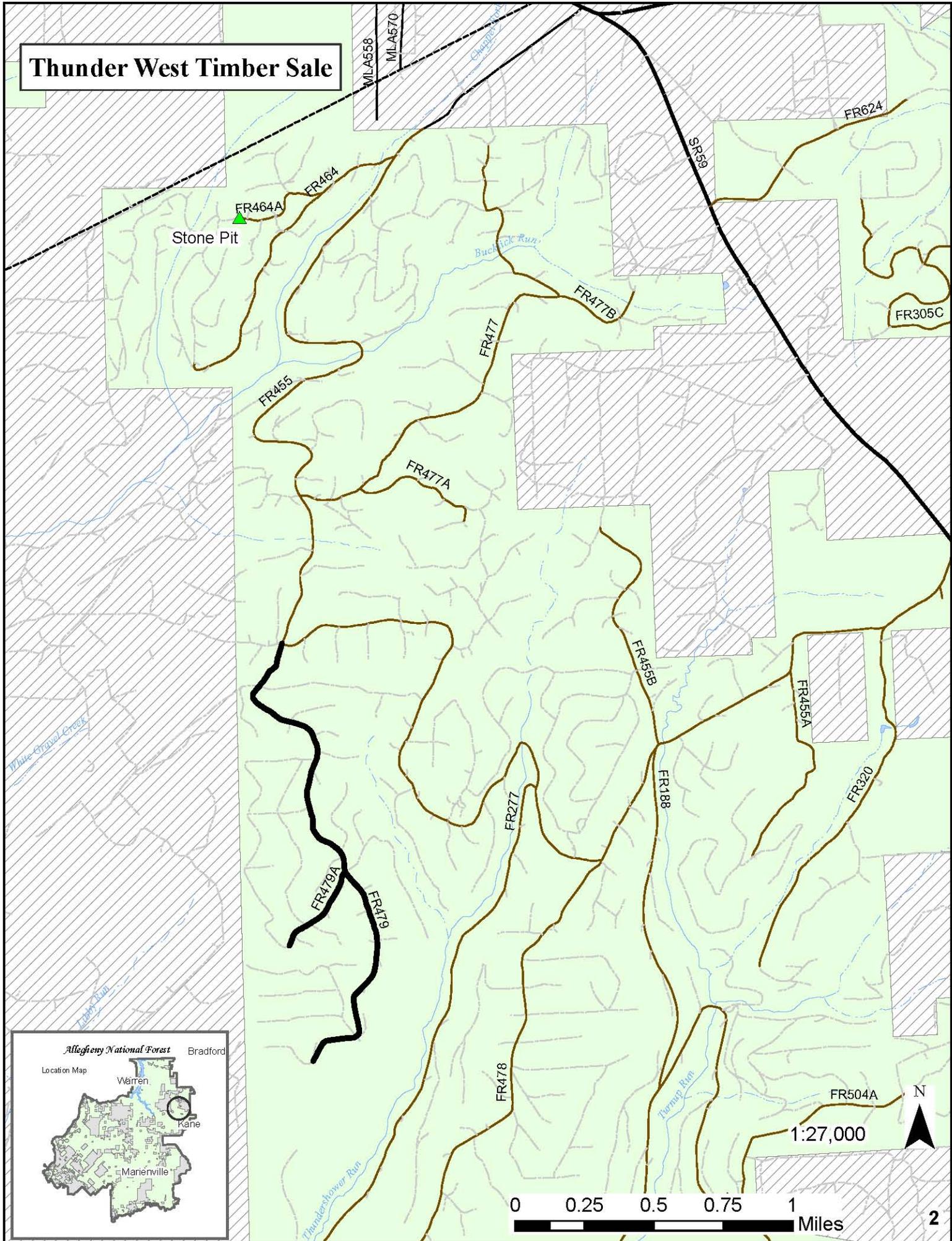
Approved By:

[Signature] 5/22/12
District Ranger Date

[Signature] 5-23-2012
Forest Engineer Date

[Signature] 5/23/2012
Forest Supervisor Date

Thunder West Timber Sale



Schedule of Items

FR 479

Item	Description	Unit	Quantity
15101	Mobilization (Lump Sum)	All	1
20301	Removal of culverts	Each	3
23050	Brushing (medium)	Mile	1.9
30103	Aggregate base, grading pit run, compaction method B	Cubic Yard	240
30111	Aggregate surface course, grading pit run, compaction method B	Cubic Yard	108
30326	Road reconditioning	Mile	1.9
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	Linear Foot	86
	24 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	Linear Foot	28
	42 inch aluminized steel, type 2, corrugated steel pipe, 0.079 inch thickness, method A	Linear Foot	30
62501	Seeding, hydraulic or dry method (Lump Sum)	All	1
65003	Gate Repair	Each	1
65101	Pit and quarry development	Each	1

FR 479A

Item	Description	Unit	Quantity
15101	Mobilization (Lump Sum)	All	1
20301	Removal of culverts	Each	3
23050	Brushing (medium)	Mile	0.4
30103	Aggregate base, grading pit run, compaction method B	Cubic Yard	168
30111	Aggregate surface course, grading pit run, compaction method B	Cubic Yard	36
30326	Road reconditioning	Mile	0.4
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	Linear Foot	22
62501	Seeding, hydraulic or dry method (Lump Sum)	All	1
65101	Pit and quarry development	Each	1

General Notes

-Prior to any earth disturbing activities, contractor shall call the Pennsylvania One Call System (800-242-1776) and all Oil & Gas Operators in the work area to determine locations of any underground utility lines.

-Culvert cleaning and repair will be considered incidental to road reconditioning.

-Contractor is responsible for maintenance of all Forest Service roads over which pit run or commercial stone material is hauled. Roads shall be bladed or shaped to restore travel way to the condition found prior to haul.

-Contractor shall install "ROAD CONSTRUCTION AHEAD" signs on all roads worked on in this project area and at ATV trail crossings. Signs shall conform to the Manual on Uniform Traffic Control Devices (MUTCD). Signs shall be covered when construction activity is not taking place.

-Roads shall be completed in such a manner that water shall not pond on roadbed or in ditch lines.

-All removed corrugated metal pipe culverts shall be hauled off Federal lands and become the property of the contractor, unless otherwise indicated for salvage. Steel pipe casings shall be returned to the Sheffield Work Center unless otherwise directed by the Engineer.

-Forest Service gate plans are available at the Allegheny National Forest Supervisor's Office, Warren, PA. 16365. The following are gate manufacturers:

Gary Asel
Marienville, PA.
(814) 927-8380

ADM Welding
2818 Penna. Ave. West
Warren, PA. 16365
(814) 723-7227

-Contouring, topsoil respreading, seeding and mulching of disturbed areas as determined by the Forest Service is required.

-DSA limestone shall be shipped at optimum moisture content not exceeding 15%. Limestone loads that fail field test parameters will be rejected.

-When replacing culverts in live streams, contractor shall install silt fence and straw bales at approaches to live stream crossings to eliminate sediment in the stream course. When culverts are located on High Quality and Exceptional Value streams, contractor shall install compost filter socks. Any sediment collected will be removed and ground will be stabilized with seed and mulch. Dewatering pumps will be used to redirect water out of the stream course at the time of stream crossing installation. Silt fence and straw bales will be removed only after vegetation is clearly re-established as determined by the Engineer. Contractor is responsible for obtaining any Department Of Environmental Protection GP-11 or GP-7 stream crossing permits and preparing a Soil Erosion and Sediment Control Plan. This work will be considered incidental to Section 151 Mobilization.

-Roadway sod encountered during road reconditioning operations will be spread and leveled outside the road template avoiding piles. Natural terrain depressions and openings are the preferred waste locations. Seeding and mulching may be required to supplement natural revegetation.

-Vegetation cut down during roadside brushing will be pulled beyond the clearing limits and the toe of any roadway template construction. Mixing of soil and cut vegetation shall be avoided. All material will be scattered and lopped within 3' of the ground.

-Aggregate stockpiled for culvert replacement will be located on the existing road surface to assure maximum utilization of the material and eliminate disturbance of existing vegetated areas.

Road Log - Work Descriptions

FR 479 West Thundershower (Level D)

CAUTION: GAS, OIL, AND ELECTRIC LINES BURIED IN SAME DITCH ON BOTH SIDES OF ROAD

Station	Road Log/Work Description
0+00	Intersection with FR 455 station 226+37
0+00 – 99+50	Recondition roadbed, see TYPICAL RECONDITION SECTION, clean all culverts
0+00 – 99+50	Perform roadside brushing and debris removal, see BRUSHING DETAIL (medium)
0+00	OGM road right
0+40	STOP sign left, reposition to MUTCD standards (trim overhead hemlock for stop sign visibility), incidental to road recondition
0+40	Leadoff ditch right, clean to drain
0+60	Road number sign right
1+10	NARROW ROUGH ROAD sign right
1+30	NO OUTLET sign
1+85	Lead of ditch left, clean to drain
3+55	Well left
4+10	Forest Service gate, scrape and paint
4+20	STOP sign left, remove sign and post, incidental to road recondition
5+75	Turnout right
7+15	18" x 26' CMP, clean inlet/outlet and 50' outlet leadoff ditch left
9+25	OGM road left and right
10+75	Recondition turnout right
12+65 – 17+50	Apply 6" pit run road surfacing (132 CY)
15+40	16" x 30' CAS, clean 25' outlet leadoff ditch left
16+00	Construct leadoff ditch left
16+55	Well right
17+50	End pit run road surfacing
17+90	Turnout right
18+95	Turnout right, log landing left
20+70	OGM road left and right
22+75	Construct leadoff ditch left
22+80	Remove 18" x 24' CMP, install 18" x 26' CMP, apply 12 CY pit run, clean 25' outlet leadoff ditch and remove debris at the end
25+30	Well left
26+25	18" x 28 CMP, clean outlet/inlet

27+30	Log landing right
28+70	OGM road left
30+55	OGM road right
32+35	OGM road left
32+75	18" x 28' CMP, clean outlet/inlet
33+10	Turnout left
36+15	18" x 30' PPC
38+90	OGM road right, tank battery right
42+50	18' x 26' CMP, clean outlet/inlet and clean debris at outlet
43+80	Turnout right
45+75 – 46+35	Apply 6" pit run road surfacing (24 CY)
45+90	Well left
46+00	Reconstruct 25' leadoff ditch left
47+60	18" x 26' CMP, clean outlet/inlet
47+40	Turn around left
51+00	OGM road left
52+10	OGM road right
54+95	Intersection FR 479A right
54+95	OGM left
59+50	OGM road left
61+20	18" x 26' CMP
63+75	OGM road right
64+45	18" x 26' CMP, clean inlet/outlet
64+80	OGM road left
66+60	Reconstruct turnout left, apply pit run surfacing (24 CY)
69+95	18" x 26' CMP, clean inlet/outlet
70+25	OGM road right and left
71+20	18" x 26' CMP, clean inlet/outlet
73+95	OGM road left
76+05	Recondition turnout left
76+00 – 79+00	Apply 6" pit run road surfacing to road including turnout (84 CY)
76+40	Construct leadoff ditch left
76+55	Turnout left
77+45	Remove 18" x 30' CMP, install 42" x 30' CMP apply 24 CY, install outlet to ground level
78+25	Well left
79+00	End pit run road surfacing
80+35	Install 18" x 30' CMP right forward skew, apply 12 CY pit run
80+35	Turnout right
82+30	18" x 26' CMP
85+40	Install 18" x 30' CMP right forward skew, apply 12 CY pit run
87+25	Turnout left
89+00	OGM road left and right, tank battery left
90+45	Well left
91+64	18" x 26' CMP, clean 50' outlet leadoff ditch

94+50 Remove 18" x 26' CMP, install 24" x 28' CMP, apply 12 CY
pit run, re-contour inlet basin

94+55 Reconstruct turnout right, apply pit run surfacing (12 CY)

95+60 Construct 30' leadoff ditch left

95+60 – 98+00 Remove berm left road shoulder

96+55 18" x 26' CMP, clean inlet/outlet

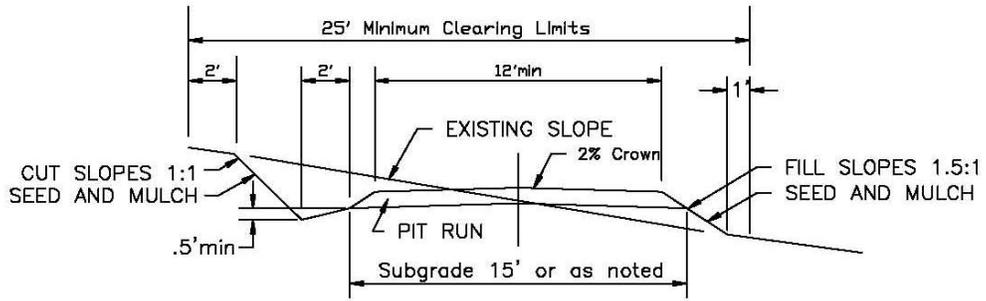
98+95 Old landing left, OGM roads straight ahead and right

99+50 End of road, 18" CMP clean inlet/outlet and 25' outlet leadoff
ditch left, OGM road continues

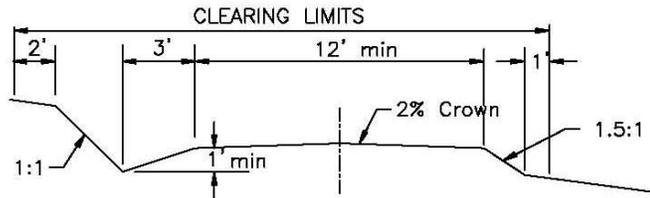
FR 479A West Thundershower - A (Level D)

Station	Road Log/Work Description
0+00	Intersection with FR 479 station 54+95
0+00 – 18+75	Recondition roadbed, see TYPICAL RECONDITION SECTION, clean all culverts
0+00 – 18+75	Perform roadside brushing and debris removal, see BRUSHING DETAIL (medium)
0+00 – 6+65	Apply 6” pit run road surfacing (192 CY) (includes 24 CY intersection apron)
0+30	Road number sign right
0+50	NARROW ROUGH ROAD sign right
1+60	Construct 25’ leadoff ditch left
2+80	Well left
5+95	Remove 12” x 20’ CMP, install 18” x 22’ CMP, apply 12 CY pit run
6+65	End pit run road surfacing
7+25	Reconstruct leadoff ditch left
8+65	Well left, remove driveway 12” steel pipe casing, reconstruct intersection with existing material, return pipe to OGM
11+40	Reconstruct leadoff ditch left
12+20	Leadoff ditch right
12+50	OGM road left
13+15	OGM road right, remove driveway 12” steel pipe casing, construct drivable dip, return pipe to OGM
16+35	OGM road left
18+25	Turnaround and log landing left
18+75	End of road, OGM road continues

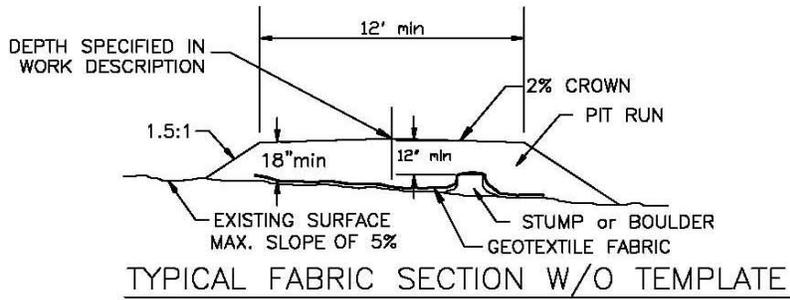
Roadbed Details



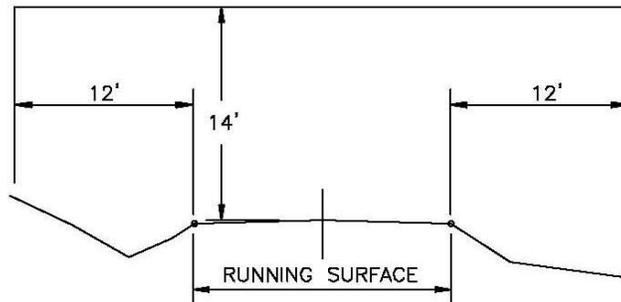
TYPICAL CONSTRUCTION SECTION



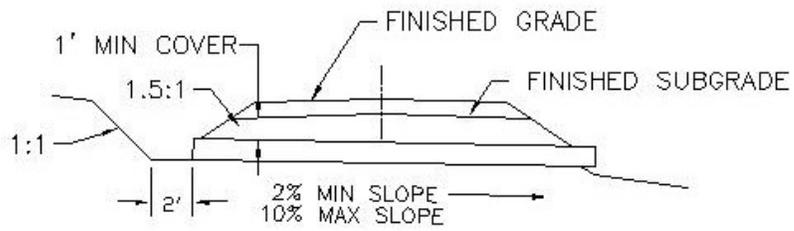
TYPICAL RECONDITION SECTION



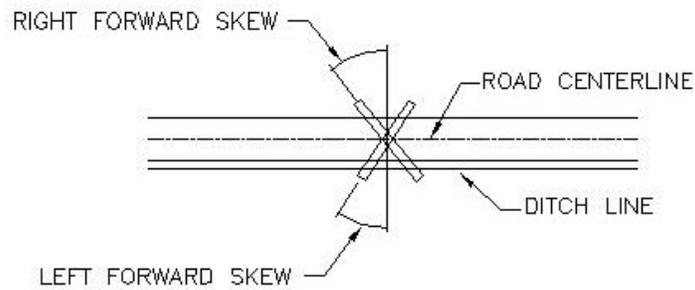
TYPICAL FABRIC SECTION W/O TEMPLATE



ROADSIDE BRUSHING DETAIL

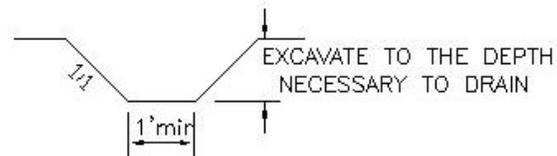


CULVERT SECTION

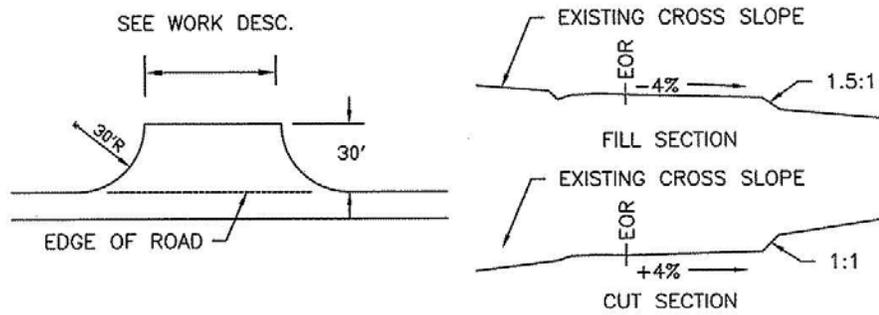


SKEW DETAIL

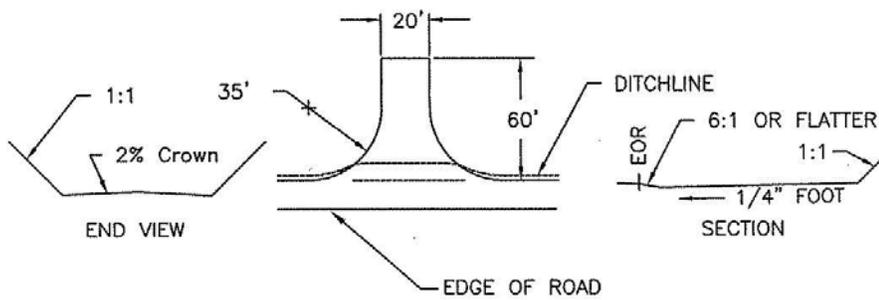
NOTE: Field locate ditch to minimize new clearing



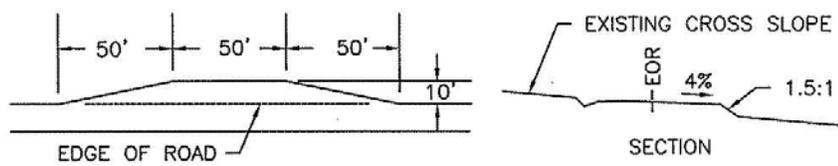
OUTLET/LEAD OFF DITCH SECTION



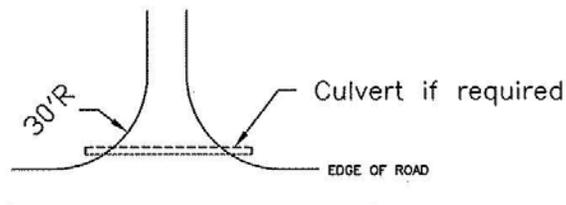
PARKING LOT DETAIL



TURNAROUND DETAIL



TURNOUT DETAIL



INTERSECTION DETAIL

GENERAL NOTES

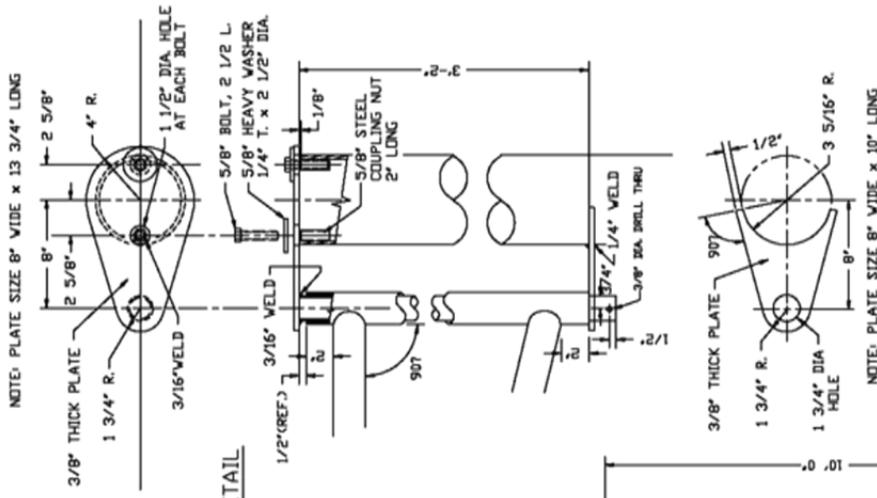
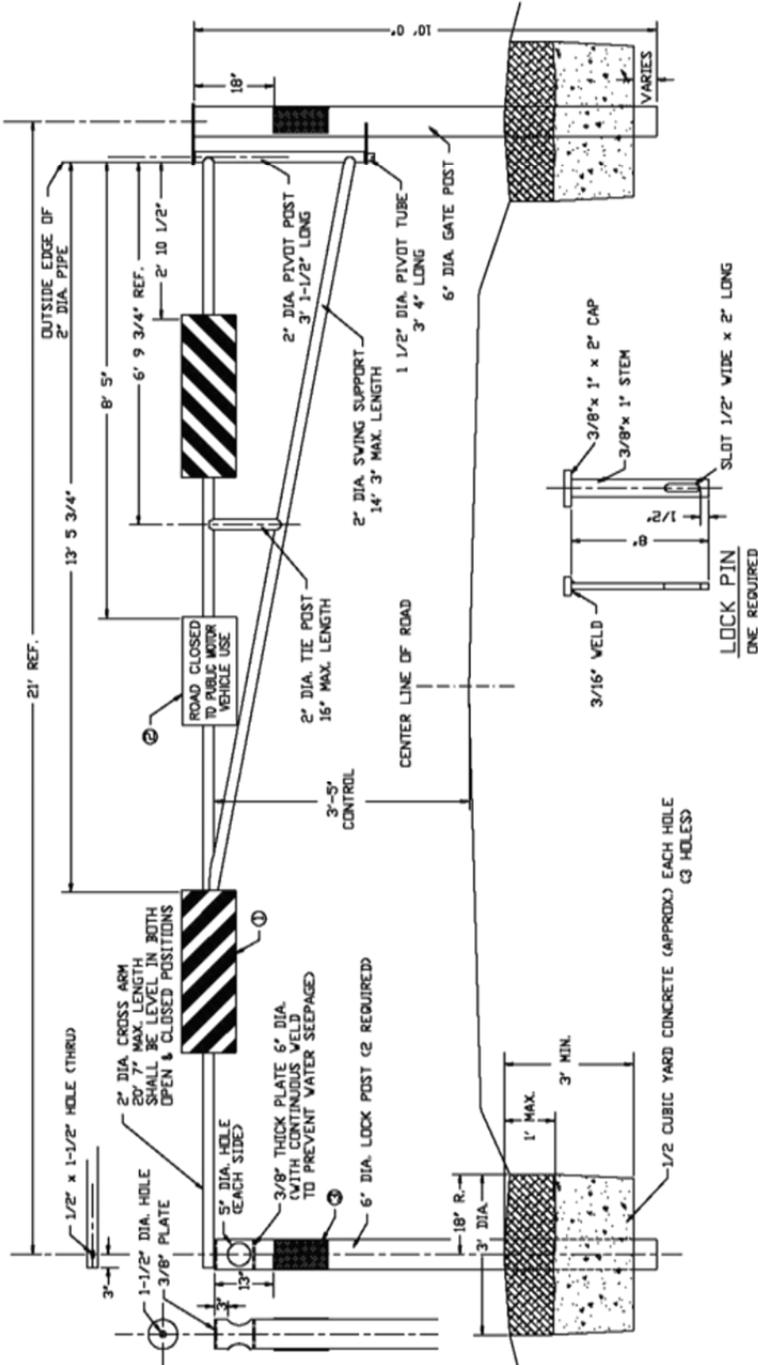
- ALL STEEL SHALL BE PAINTED WITH (2) COATS OF IRON OXIDE RED PRIMER AND (3) COAT OF VALUAT BROWN PAINT, FED. STANDARD 595 A PAINT NO. 20140 (EXCEPT PIVOT TUBE)
- ALL STEEL SHALL BE NEW MATERIAL
- WELD ALL CROSS ARM ASSEMBLY JOINTS WITH 3/16" FILLETS ALL AROUND ALL WELDS ON GATE ASSEMBLY SHALL BE STRUCTURALLY SOUND
- DRILL 1/4" DIAMETER HOLES 4" ON CENTER IN BOTTOM OF CROSS ARM TO FACILITATE DRAINAGE.
- APPLY GREASE TO OUTSIDE OF PIVOT TUBE, ENTIRE LENGTH, PRIOR TO INSTALLATION OF CROSS ARM ASSEMBLY. TYPE OF GREASE SHALL BE EXTREME PRESSURE MULTIPURPOSE WHEEL BEARING GREASE OR EQUAL
- POSTS SHALL BE ENCASED WITH CONCRETE TO WITHIN 1 FT. OF GROUND LEVEL AND BACKFILL COMPACTED (3) POSTS:
- PRIOR TO GATE INSTALLATION, NOTIFY FOREST SERVICE FOR LOCATION ON ROAD
- PARTS MAY BE FLAME CUT AND ALL BURRS REMOVED
- INSTALL SIGNS AFTER INSTALLATION OF GATE
- TECHNICAL CONTACT IS JIM DUCKETT, FOREST SERVICE, WARREN, PA. (814) 728-6257

SIGN CODE

- (1) (2) L-R AND (2) R-R TYPE 1 BARRICADE MARKERS - RED ON WHITE - 12" x 36"
 - (3) ROAD CLOSED TO PUBLIC MOTOR VEHICLE USE
 - (4) (5) TYPE 2 OBJECT MARKERS (OM-2-B) - YELLOW (REFLECTORIZED) - 6" x 12" (2) ON GATE POST AND (2) ON CLOSED POSITION LOCK POST (3) ON OPEN POSITION LOCK POST FACED TO ONCOMING TRAFFIC
- NOTE: ALL SIGNS SHALL BE FURNISHED BY THE FOREST SERVICE AND INSTALLED BY THE CONTRACTOR.

ESTIMATED QUANTITIES

MATERIAL	QUANTITY (LF)	REMARKS
1-1/2" DIA PIPE (NOM)	3' 4"	PIVOT TUBE
2" DIA PIPE (NOM)	39' 4"	CROSS ARM ASSEMBLY
6" DIA PIPE (NOM)	30' 0"	GATE POSTS (3)
3/8" x 1" STRAP	0' 10"	LOCK PIN
3/8" x 8" PLATE	4' 1"	MISC.
BOLTS, NUTS, WASHERS		TWO (2) OF EACH



LEVEL "D" FOREST SERVICE GATE
ALLEGHENY NATIONAL FOREST
WARREN, PA
DES. DRAWING: J. JONSON, R. GALLO - 8/27/99
CHK. J. JONSON & R. GALLO - 10/99
NOT TO SCALE

Pit Development Plan

Pit run for this project will come from the pits off of FR 464A.

Note: Pit material is currently extracted for another timber sale; pit map will be provided before road work begins.

A. Pit Development

1. The overburden removed will be stockpiled in a location agreed upon by the Forest Service and the contractor, and used for pit reclamation.
2. Only ONE face of the pit is to be open and worked on at any given time.
3. High walls are a violation of OSHA regulations.
4. The pit floor will be sloped to prevent pooling of water.
5. Any oversized material left over in the pit area shall be stockpiled at a mutually agreed upon, by Forest Service and contractor, location.
6. No disposed equipment, trash, vehicles, pipe, or miscellaneous supplies will be allowed to accumulate or be stored in the pit and surrounding areas unless first agreed to by the Forest Service.
7. Operator will not undermine any boundary of the pit area.
8. No slash, soil or stumps will be permitted against live trees. No undercutting of roots of live trees allowed.

B. Timber

1. Slash resulting from this project will be scattered outside the clearing limits of the road and pit site. Stumps will be scattered at random and set upright. Stumps will be pulled into the pit floor not out into the woods.
2. The Forest Service will mark any further pit expansion after being notified, in advance by the Operator.
3. Any timber stored within the pit area that is decked for a timber sale shall not be damaged or buried. Timber shall be decked at a location designated by the Forest Service.
4. No timber may be cut or pushed over unless it is marked by the Forest Service and compensated for.

C. Pit Reclamation

1. As each open face is depleted of suitable rock material, that area will be reclaimed promptly to a slope of 1.5:1 or greater using the previously stockpiled overburden.
2. The slope/reclaimed area will then promptly be seeded, fertilized, and mulched using a non-exotic seed mixture designed by the Forest Service.
3. Areas seeded that are not receiving 50% or greater germination will be reseeded within 30 days, or the next suitable seeding season.
4. No open face of the pit will be closed without prior notification to the Forest Service.
5. When excavation of material is complete, the Forest Service will be notified to approve and document the reclamation work.