DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION 9
ALLEGHENY NATIONAL FOREST

Little Arnot Timber Sale

FR 241	**Little Arnot**	**2.7 Mile Reconst. - Maintenance - Level C**
FR 472	**Arnot**	**0.8 Mile Reconst. - Maintenance - Level D**
FR 472A	**Arnot Spur A**	**0.8 Miles Const. - Existing Corridor-Level D**
FR 528	**Cherry Grove**	**1.3 Mile Reconst. - Maintenance - Level C**
FR 549	**Upper**	**1.2 Mile Reconst. - Maintenance - Level D**
FR 549A	**Upper Spur A**	**0.6 Mile Reconst. – Maintenance - Level D**
FR 549B	**Upper Spur B**	**0.5 Mile Reconst. – Maintenance - Level D**

Bradford Ranger District
Warren County
Pennsylvania

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29-30	Pit Development Plan

The location and design elements of this facility have been correlated with the plans, policies and constraints of the approved West Branch Tionesta Creek Environmental Impact Statement.

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:

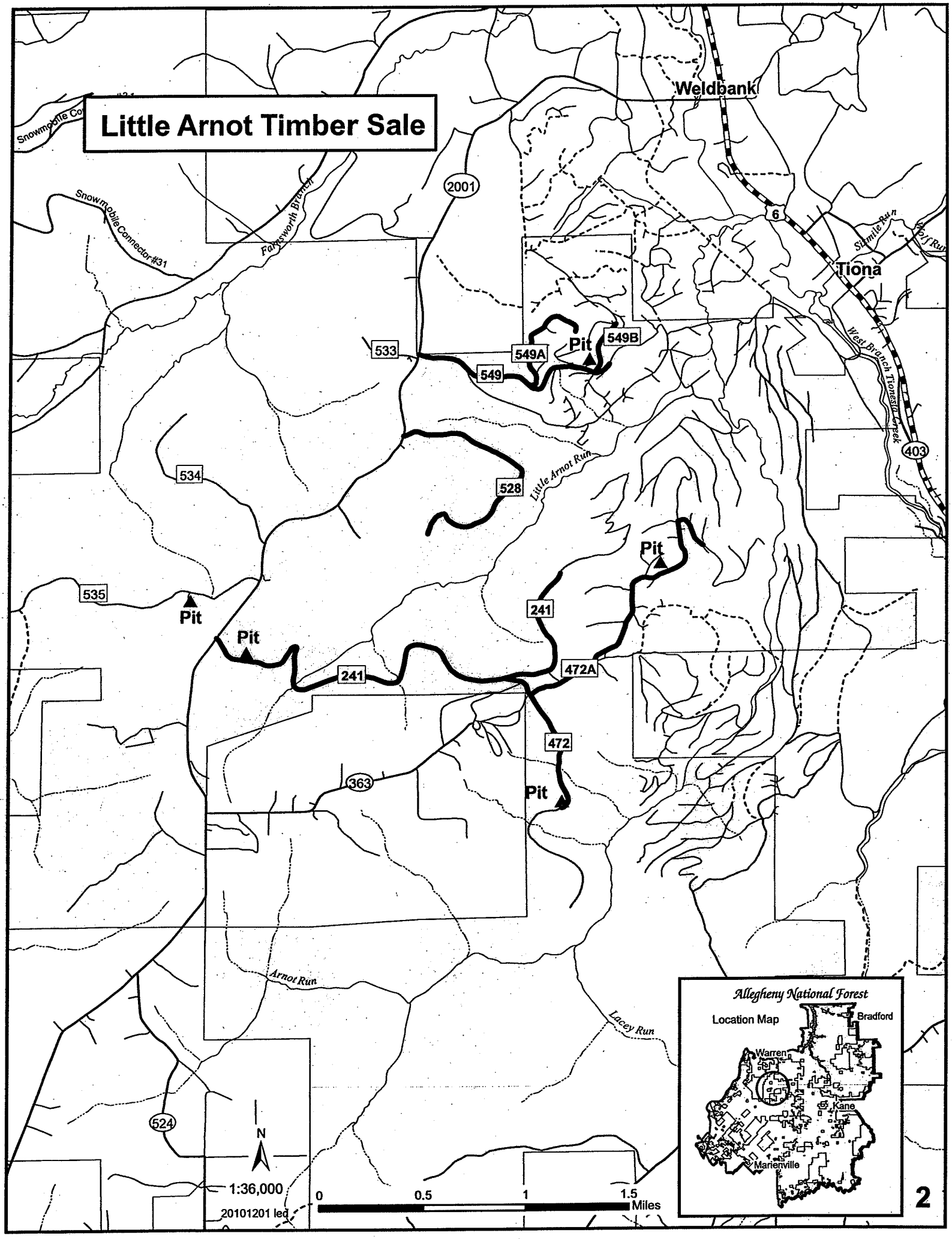
Henry S. Hu

Approved By:

Anthony C. Martyka — 1/7/11
District Ranger — **Date**

Dan Salm — 1-20-2011
Forest Engineer — **Date**

Thomas M. Mathe — 1/21/11
Forest Supervisor — **Date**


Little Arnot Timber Sale
Weldbank
Tiona
Snowmobile Connector #31
Fakesworth Branch
2001
6
Sixmile Run
West Branch Tionesta Creek
403
533
549A
549B
Pit
549
534
528
Little Arnot Run
535
Pit
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241
241
472A
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472
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Pit
Arnot Run
Lacey Run
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Miles
Allegheny National Forest
Location Map
Bradford
Warren
Kane
Marienville
2

SCHEDULE OF ITEMS

FR 241

ITEM	DESCRIPTION	UNIT	QTY
15101	Mobilization	All	1
20301	Removal of culverts	Each	12
20305	Removal of structures and obstructions	All	1
23050	Brushing	Mile	2.7
25102	Placed riprap, class R-4	Ton	42
25102	Placed riprap, class R-5	Ton	20
30103	Aggregate base, grading pit run, compaction method B	Cubic Yard	636
30115	Aggregate surface course, type DSA limestone, compaction method B	Ton	1624
30326	Road reconditioning	Mile	2.7
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	Foot	880
60264	77 inch span, 52 inch rise aluminized steel, type 2, corrugated steel pipe arch, 0.138 inch thickness, method A	Foot	40
62503	Seeding, hydraulic or dry method	All	1
63301	Sign system	Each	1
65001	Furnish and install road closure device type gate, size 21'	Each	1
65004	Gate repair	Each	1
65101	Pit and quarry development	Each	1

FR 472

ITEM	DESCRIPTION	UNIT	QTY
15101	Mobilization	All	1
20301	Removal of culverts	Each	1
20305	Removal of structures and obstructions	All	1
23050	Brushing	Mile	0.8
30103	Aggregate base, grading pit run, compaction method A	Cubic Yard	72
30115	Aggregate surface course, type DSA limestone, compaction method B	Ton	491
30326	Road reconditioning	Mile	0.8
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch	Foot	112
65102	Pit and quarry development	Each	1

FR 472A

ITEM	DESCRIPTION	UNIT	QTY
15101	Mobilization	All	1
20103	Clearing and grubbing	Mile	0.8
20305	Removal of structures and obstructions	All	1
20402	Roadway excavation, compaction method A	Mile	0.8
30103	Aggregate base, grading pit run, compaction method A	Cubic Yard	1250
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch	Foot	294
62506	Seeding, hydraulic or dry method	Mile	0.8
63301	Sign system	Each	1
65102	Pit and quarry development	Each	1

FR 528

ITEM	DESCRIPTION	UNIT	QTY
15101	Mobilization	All	1
20301	Removal of culvert	Each	1
23050	Brushing	Mile	1.3
25102	Placed riprap, class R-4	Ton	4
30101	Aggregate base, grading AASHTO #3, compaction method B	Ton	161
30103	Aggregate base, grading pit run, compaction method A	Cubic Yard	10
30326	Road reconditioning	Mile	1.3
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	Foot	30
60264	57 inch span, 38 inch rise aluminized steel, type 2, corrugated steel pipe arch, 0.079 inch thickness	Foot	32
62503	Seeding hydraulic or dry method	All	1
65004	Gate repair	Each	1

FR 549

ITEM	DESCRIPTION	UNIT	QTY
15101	Mobilization	All	1
20301	Removal of culverts	Each	11
23050	Brushing	Mile	1.2
30103	Aggregate base, grading pit run, compaction method A	Cubic Yard	108
30326	Road reconditioning	Mile	1.2
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	Foot	268
62503	Seeding, hydraulic or dry method	All	1
63301	Sign system	Each	2
65004	Gate repair	Each	1
65101	Pit and quarry development	Each	1

FR 549A

ITEM	DESCRIPTION	UNIT	QTY
15101	Mobilization	All	1
23050	Brushing	Mile	0.6
30103	Aggregate base, grading pit run, compaction method A	Cubic Yard	775
30326	Road reconditioning	Mile	0.6
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	Foot	28
63301	Sign system	Each	1

FR 549B

ITEM	DESCRIPTION	UNIT	QTY
15101	Mobilization	All	1
20301	Removal of Culverts	Each	4
23050	Brushing	Mile	0.3
30103	Aggregate base, grading pit run, compaction method A	Cubic Yard	96
30326	Road reconditioning	Mile	0.3
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	Foot	28
62503	Seeding, hydraulic or dry method	All	1
63301	Sign system	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 culverts shall be hauled off federal lands and become the property of the contractor, unless otherwise indicated for salvage. All steel pipe casings shall be returned to Sheffield Work Center.

-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 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. 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.

-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.

Possible OGM operators in the area:

I.L. Geer & Sons
Louis Geer
814-723-9430

Andrea & Holden
Rosella Andrea
814-723-5233

Missing Moon
Denny Arthur
814-723-3438

Mead Oil Co.
Jim Mead
814-968-3820

FR 241 Little Arnot (Level C)

Station	Road Log/**Work Description**
0+00	Intersection with SR2001
0+00-142+56	**Recondition roadbed see TYPICAL RECONDITION SECTION, perform roadside brushing 12' from each shoulder 14' high, clean all culverts and outlet ditches**
0+00-5+00	Existing commercial stone PA 2A
0+30	STOP sign left
0+33	Road number sign right
1+29	10 TON WEIGHT LIMIT sign right
1+64	NO OUTLET sign right
2+40	COMMERCIAL ROAD USE sign right
4+31	Log landing right
5+32	**Forest Service gate, replace barricade sign, paint gate and adjust cross arm**
6+05	**Remove 18" x 32' CMP, install 18" x 32' CMP, apply 12 CY pit run**
6+60	**Remove tree from right side of road**
9+05	18" x 32' CMP
9+05	Turnout right
10+25	Pit left, wildlife opening
12+45	**Install 18" x 32' CMP, apply 12 CY pit run**
13+20	Turnout left
14+05	**Remove tree from sides of road (in ditch line)**
14+25	**Remove 18" x 32' CMP, install 18" x 32' CMP, apply 12 CY pit run, place 4 tons riprap at outlet**
17+55	**Install 18" x 28' CMP, apply 12 CY pit run**
19+25	18" x 32' CMP (97), **reshape inlet ditch line to fully capture spring and direct it to this pipe**
20+15	Turnout right

23+15	**Install 18" x 32' CMP, apply 12 CY pit run**
25+15	18" x 34' CMP, **place 4 tons riprap at outlet**
26+50	Turnout left, switch back corner
27+40	**Clean sediment basin right**
27+50	18" x 40' CMP (97), **install 5 tons riprap in inlet ditch, place 5 tons riprap at outlet**
30+00-63+00	**Apply 4" DSA limestone surfacing (1075 tons)**
31+08	18" x 28' CMP (seep) (97), **place 8 tons riprap in inlet ditch**
31+90	**Install 18' x 32' CMP, apply 12 CY pit run**
32+57	**Turnout left**
35+40	18" x 28' CMP (97)
35+60-45+60	Old commercial surfacing
37+55	**Remove 66" x 51" x 38' CMPA (live drainage), install 77" x 52" x 40' CMPA, apply 96 CY pit run, Little Arnot Run Crossing, place 10 tons riprap (R-5) at inlet to protect banks and 10 tons riprap at outlet to protect banks (Contractor must obtain Pennsylvania DEP permit)**
40+11	18" x 32' CMP (live drainage), **place 4 tons riprap at outlet**
42+30	**Install 18" x 32' CMP (seep), apply 12 CY pit run**
44+04	18" x 30' CMP (seep) (97)
46+92	**Turnout left**
50+05	18" x 30' CMP (seep) (97)
52+50	18" x 30' CMP (seep) (97)
55+36	**Install 18" x 32' CMP, apply 12 CY pit run**
57+80	18" x 39' CMP, when replaced, lower outlet, re-align with spring
60+35	18" x 32' CMP

61+15	**Install 18" x 28' CMP, apply 12 CY pit run (spring)**
61+50	**Turnout left**
62+00	**Install 18" x 32' CMP, apply 12 CY pit run**
63+00	**End DSA limestone surfacing**
64+70	18" x 32' CMP, **place 4 tons riprap at outlet, construct ditch block**
66+00	**Install 18" x 30' CMP, apply 12 CY pit run**
68+45	Turnouts left and right, **remove tree branches from left turnout**
69+73	18" x 30' CMP, **place 4 tons riprap at outlet (97), remove trees left and right ditch lines**
73+33	Turnout left
73+75	**Install 18" x 32' CMP, apply 12 CY pit run**, water cutting road
76+27	**Remove 18" x 31' CMP, install 18" x 32' CMP, apply 12 CY pit run**
76+90	Turnout left
81+03	18" x 30' CMP (97)
83+00	**Install 18" x 32' CMP, apply 12 CY pit run**
84+75	Turnout right
86+10	**Install 18" x 32' CMP, apply 12 CY pit run**
89+23	**Remove 18" x 32' CMP, install 18" x 28' CMP, apply 12 CY pit run**
90+00	Parking lot left
90+00	**Install ROAD CLOSED AHEAD sign (field locate)**
90+82	Forest Service gate
93+57	18" x 30' CMP (97)

95+76	Possible gas line crossing
98+83	18" x 34' CMP (97)
102+35	Woods road right
102+42	18" x 32' CMP (97)
103+35	FR 472 right
103+75	**Install Forest Service gate (field locate)**
108+00-110+55	**Reshape ditchline to drain standing water**
108+80	**Install 18" x 28' CMP, apply 12 CY pit run**
109+00-114+50	**Apply 6" pit run surfacing (144 CY)**
109+12	Gas pipeline crossing, Kinzua Gas Corporation, culvert needed to access OGM road
110+55	**Remove 22" x 13" x 28' CMP, install 18" x 30' CMP, apply 12 CY pit run**
113+20	**Install 18" x 30' CMP, apply 12 CY pit run**
114+50	**End pit run surfacing**
115+60	**Remove 22" x 13" x 30' CMPA, install 18" x 34' CMP, apply 12 CY pit run**
116+22	Turnout right
119+65	**Remove 22" x 13" x 28' CMP, install 18" x 32' CMP, apply 12 CY pit run**
120+90	Well left
122+07	Turnout right
124+00-140+50	**Apply 4" DSA limestone surfacing (549 tons)**
124+15	**Remove 18" x 30' CMP, install 18" x 34' CMP, apply 12 CY pit run**

125+75	**Install 18" x 28' CMP, apply 12 CY pit run**
126+00	**Reconstruct turnout left, apply 24 CY pit run**
128+40	**Remove 22" x 13" x 30' CMPA, install 18" x 32' CMP, apply 12 CY pit run: CAUTION EXPOSED PIPELINE AT OUTLET END**
132+00	**Remove trees from both sides of road and ditchline**
132+18	**Remove 18" x 34' CMP, install 18" x 34' CMP, apply 12 CY pit run**
132+80	Well left
135+30	**Install 18" x 32' CMP, apply 12 CY pit run**
135+30	**Construct turnaround right, apply 36 CY pit run**
138+50	**Install 18" x 32' CMP, apply 12 CY pit run**
140+45	**Remove 18" x 34' CMP, install 18" x 36' CMP, apply 12 CY pit run, place 4 tons riprap at outlet**
140+50	**End DSA limestone surfacing**
142+56	**End road reconditioning, road continues**
145+61	18" x 37' CMP
149+30	18" x 32' CMP
151+31	Small turnaround left
152+86	Tank battery right, end of road

NOTE: IF LOGGING IN THIS AREA CALL:
Garrett Tharan
Tharan Production Inc.
814-222-8972

They have electric lines in this area they will take down before logging

FR 472 Arnot (Level D)

Station	Road Log/**Work Description**
0+00	FR 241 Station 103+35
0+00-43+80	**Recondition roadbed to TYPICAL RECONDITION SECTION, clean all culverts and ditches, perform roadside brushing 12' from each shoulder to a minimum height of 14'**
0+35	Road number sign right
3+00	18" x 26' CMP
4+00	Turnout left
8+40	Access road left and right, FR 472 goes straight ahead, FR 472A left
11+40	18" x 24' CMP
13+50	18" x 22' CMP, **install 4' extension on outlet, apply 12 CY pit run**
14+60	Turnout left
17+75	18" x 22' CMP, **install 4' extension on outlet, apply 12 CY pit run**
22+40	18" x 26' CMP (97)
24+65	Turnout left
24+95	Well left, **remove tree and branches in right ditchline**
25+00-39+60	**Apply 4" DSA limestone surfacing (491 tons)**
25+70	18" x 26' CMP (97)
28+75	24" x 30' CMP (97), **remove branches at inlet of culvert, and overhanging hazard tree**
29+50	**Turnout right**
30+00	CAUTION: oil line buried along right side of road

32+00	Well right
32+40	**Remove 15" x 26' CMP, install 18" x 26' CMP, apply 12 CY pit run**
36+75	**Turnaround/turnout right**
37+25	**Install 18" x 26' CMP, apply 12 CY pit run**
37+60	Well right
39+05	**Spring, install 18" x 26' CMP, apply 12 CY pit run**
39+15	Pit right, short access road right
40+50	**Remove 12" x 24' steel casing, install 18" x 26' CMP, apply 12 CY pit run**
43+80	Well left, **end reconditioning**
44+40	Forest Service gate
44+95	18" x 26' CMP (97)
48+10	18" x 26' CMP (97), clean inlet
50+10	30" x 30' CMP (97)
51+70	18" x 24' CMP (97)
53+70	Turnout/turnaround left
55+70	18" x 26' CMP (97)
59+55	18" x 26' CMP (97)
62+45	18" x 26' CMP (97)
65+10	18" x 26' CMP (97)
68+60	18" x 26' CMP (97)
71+85	18" x 26' CMP (97)
74+45	18" x 26' CMP (97)
77+35	18" x 26' CMP (97)
80+15	Turnaround right
80+75	End of road

FR 472A Arnot Spur A (Level D)

Station	Road Log/**Work Description**
0+00	FR 472 station 8+40
0+00-41+85	**Reconstruct roadbed to TYPICAL CONSTRUCTION SECTION, increasing clearing limits to 30' corridor, construct ditch, apply 6" pit run surfacing**
0+25	**Install 18" x 32' CMP, apply 12 CY pit run**
0+50	**Install road number sign right**
2+80	Pipeline crossing
3+45	Old OGM gate
3+60	**Install 18" x 26' CMP, apply 12 CY pit run**
4+80	Pipeline crossing
6+45	**Construct turnout right, apply 24 CY pit run**
10+25	Woods road left
13+65	**Install 18" x 26' CMP, apply 12 CY pit run**
17+05	Leadoff ditch right
17+65	**Install 18" x 26' CMP, apply 12 CY pit run**
18+60	**Leadoff ditch left**
19+10	Road intersection, **FR 472A is the left fork**
19+30	Leadoff ditch right
19+70	**Install 18" x 26' CMP, apply 12 CY pit run**
20+60	Old grassed road left
22+20	Well, tanks, shack left, opening right
22+50	**Install 18" x 26' CMP, apply 12 CY pit run**

23+70	OGM road right
25+40	**Construct turnout left, apply 24 CY pit run**
27+75	**Install 18" x 26' CMP, apply 12 CY pit run**
30+00	**Turnaround right, apply 24 CY pit run**
30+55	Leadoff ditch left
32+05	Leadoff ditch left, well tank right
32+45*	**Install 18" x 26' CMP, apply 12 CY pit run**
33+10	OGM road left
35+15	Old sediment basin, filled
36+40	Road right
36+55*	**Install 18" x 26' CMP, apply 12 CY pit run**
37+65	Road right
38+60	**Remove 18" x 26' CMP, install 18" x 28' CMP, apply 12 CY pit run**
40+70*	**Install 18" x 26' CMP, apply 12 CY pit run**
41+85	Grassy road left to well, **end reconditioning**
47+35	OGM road left
49+95	Road right
51+85	Two tanks left
60+65	Gas equipment left
63+95	Well tanks right
65+65	Road left
67+80	Road right
69+70	Road left

70+05	Road right
74+16	Brown building left, OGM road continues

FR 528 Cherry Grove

Station	Road Log/**Work Description**
0+00	Intersection FR 528 and Cherry Grove Road (SR 2001) 3 miles southwest of Weldbank
0+00-69+35	**Recondition roadbed, see TYPICAL RECONDITION SECTION, perform roadside brushing12' from each shoulder 14' minimum height, clean all culverts and outlet ditches**
0+30	Road number sign right
0+50	STOP sign left
1+15	**Forest Service gate, turnbuckle style, re-paint, install new signs**
4+40	Small tree across road
4+60	18" x 28' CMP
6+05	**Remove tree across ditch and into road**
6+75	Leadoff ditch left
7+75	**Reconstruct turnaround right, apply 24 CY pit run**
8+40	**Remove 18" x 30' CMP, install 18" x 30' CMP, apply 12 CY pit run**
11+60	15" x 22' CMP (94)
14+70	15" x 22' CMP (94)
23+35	15" x 22' CMP (94)
26+25	15" x 22' CMP (94)
29+40	15" x 22' CMP (94)
33+45	15" x 22' CMP (94)
33+90	**Remove tree top from right ditch**
39+15	15" x 22' CMP (94)

41+60	Turnaround right
42+45	15" x 22' CMP (94)
44+15	18" x 24' CMP (94)
45+20	Turnout right
46+75	15" x 22' CMP (94)
47+70	**Remove tree from ditchline**
52+70	**Remove tree from ditchline**
54+80	18" x 24' CMP (94)
55+10	**Remove tree from ditchline**
55+85	15" x 22' CMP (94)
58+70	15" x 22' CMP (94)
61+50	Turnout right
63+45	Turnaround right
64+65	**Remove earthen barrier, reshape road to template**
65+50	**Remove waterbar, reshape road to template**
65+85	**Excavate for placement of culvert, install geotextile fabric for separation in trench, install 57" x 38" x 32' CMPA, apply 161 tons of AASHTO #3 (commercial stone) clean backfill, place 4 tons riprap at outlet. Contractor shall obtain a DEP permit for this Exceptional Value (EV) stream. This is a tributary of Little Arnot Run.**
66+30	**Remove waterbar**
66+60	18" x 24' CMP (spring)
68+10	18" x 24' CMP (spring)
68+90	Turnaround right
69+35	End of road

FR 549 Upper Weldbank

Station	Road Log/**Work Description**
0+00	Intersection FR 549 and Cherry Grove Road (SR 2001) 2.5 miles southwest of Weldbank
0+00-51+75	**Recondition roadbed to TYPICAL RECONDITION SECTION, clean all ditches, perform roadside brushing, 12' from shoulder to a minimum height of 14'**
0+27	Forest Service gate, **install Forest Service gate signs**
0+50	**Install road number sign right, STOP sign left**
7+70	Leadoff ditch right
8+10*	18" x 26' CMP, sediment basin left
9+35	Turnout left
9+85	Leadoff ditch right
11+95*	15" x 22' steel casing
13+65	Turnout left
15+90*	**Remove 12" x 27' CMP, install 18" x 30' CMP, apply 12 CY pit run**
19+90*	**Remove 12" x 27' CMP, install 18" x 30' CMP, apply 12 CY pit run**
24+85*	**Remove 12" x 27' CMP, install 18" x 30' CMP, apply 12 CY pit run**
28+20	Turnaround left
30+95*	FR 549A left, **ditch line needs to be reshaped to direct water to this pipe at entrance to FR 549A**
33+25*	**Remove 12" x 27' CMP, install 18" x 30' CMP, apply 12 CY pit run, lower inlet**
38+65	**Remove 12" x 26' steel casing, install 18" x 30' CMP, apply 12 CY pit run, lower inlet**

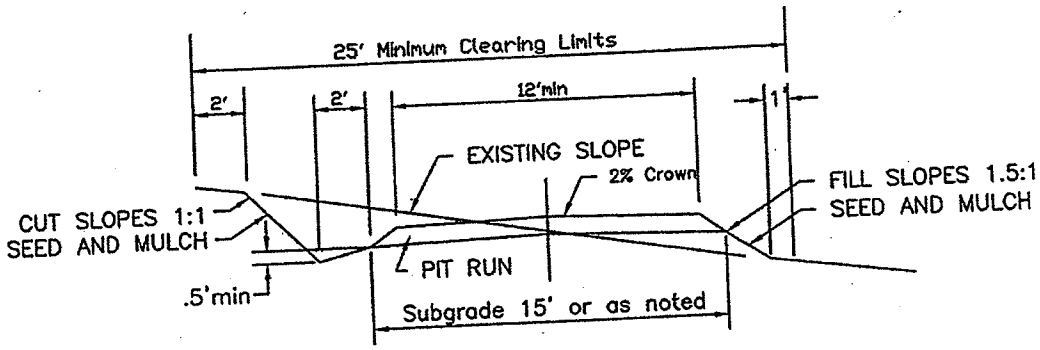
41+70	Old road right, overhead electric lines
42+35	**Remove 12" x 27' CMP, install 18" x 30' CMP, apply 12 CY pit run**
43+45	**Remove 12" x 27' CMP, install 18" x 30' CMP, apply 12 CY pit run**
45+20	Turnout left
47+20	**Remove 12" x 30' CMP, install 18" x 30' CMP, apply 12 CY pit run**
48+30	**Install 18" x 28' CMP, apply 12 CY pit run**
48+80	Well left
51+55	Well tank battery
51+75	Road right and FR 549B left, **end reconditioning**
55+60	12" x 30' CMP
57+80	12" x 30' CMP
61+00	12" x 30' CMP
65+60	OGM gate

FR 549A Upper Weldbank A

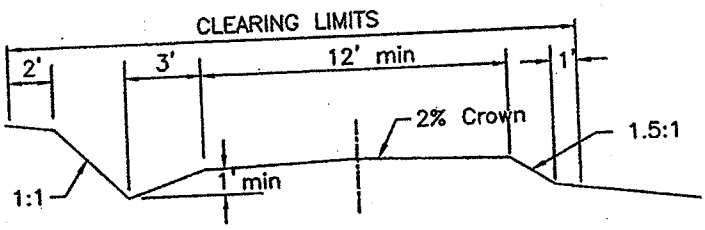
Station	Road Log/**Work Description**
0+00	FR 549 station 30+95
0+00-30+50	**Perform roadside brushing, 12' each side of shoulder to a minimum height of 14', perform road reconditioning see TYPICAL RECONDITION SECTION, apply 6" pit run surfacing**
0+35	18" x 34' CMP, **repair outlet end (squashed)**
0+50	**Install road number sign right**
2+75	Well right
4+60	OGM road right
7+35	Well right
8+40	Wildlife planting/opening
8+90*	**Install 18" x 28' CMP, apply 12 CY pit run**
11+80	Well left
12+10	OGM road right
15+65	Well left
19+85	OGM road right
30+50	End of reconditioning

FR 549B Upper Weldbank B

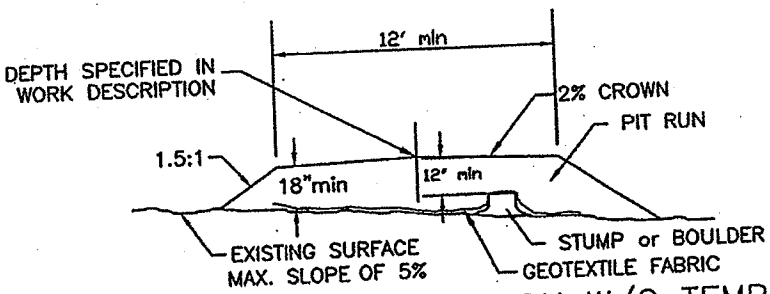
Station	Road Log/**Work Description**
0+00	FR 549 station 51+75
0+00-14+70	**Recondition roadbed, see TYPICAL RECONDITION SECTION, clean all culverts, perform roadside brushing 12' beyond shoulders and minimum 14' height**
0+35*	**18" CMP, clean inlet**
0+50	**Install road number sign right**
2+00	Turnout right
3+25	**Install 18" x 28' CMP, apply 12 CY pit run**
5+50-6+45	**Apply 48 CY pit run**
6+20	18" x 20' pipe casing
6+70	Well pad left
8+80-9+50	**Apply 36 CY pit run**
9+10	18" x 20' pipe casing
10+80	Well pad left
11+30	Leadoff ditch left
12+40	Turnout right
14+70	OGM road left, **end reconditioning**
17+90	OGM road right
22+25	18" x 20' pipe casing
24+75	18" x 20' pipe casing
25+15	End of road, OGM road continues left and right



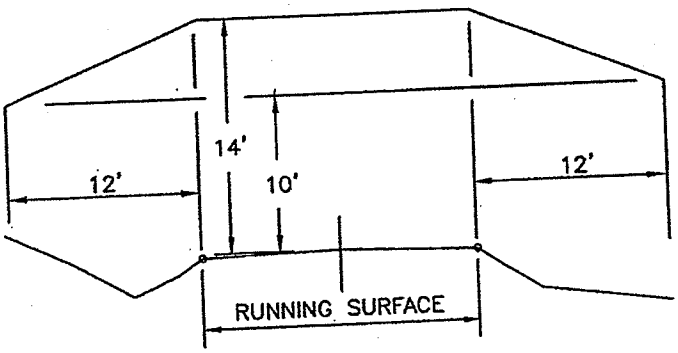
TYPICAL CONSTRUCTION SECTION



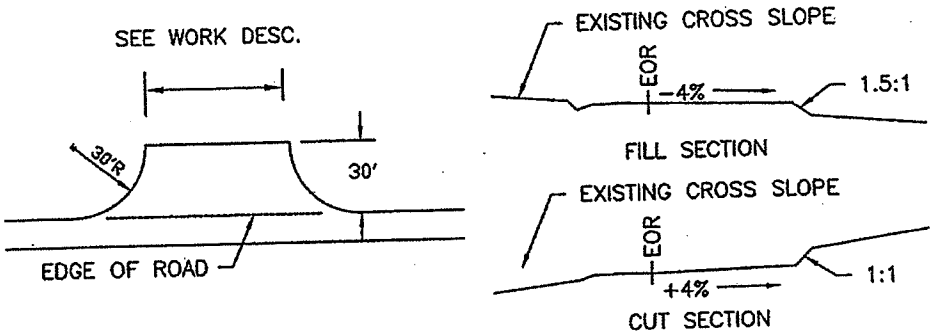
TYPICAL RECONDITION SECTION



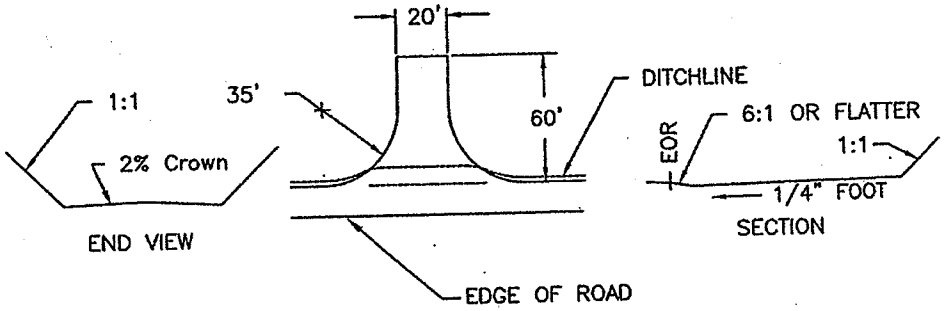
TYPICAL FABRIC SECTION W/O TEMPLATE



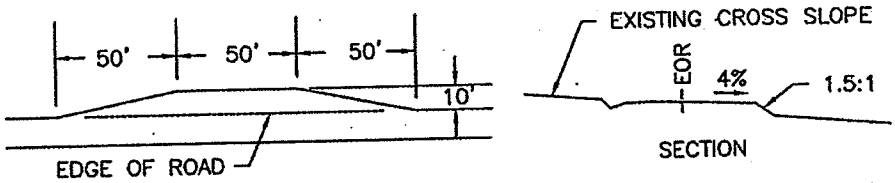
ROADSIDE BRUSHING DETAIL



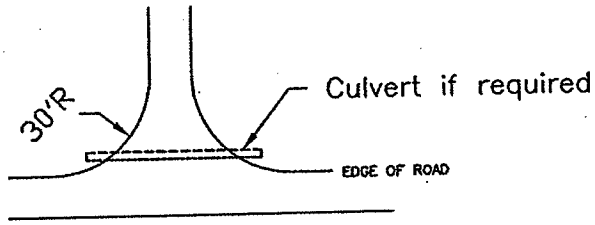
PARKING LOT DETAIL



TURNAROUND DETAIL

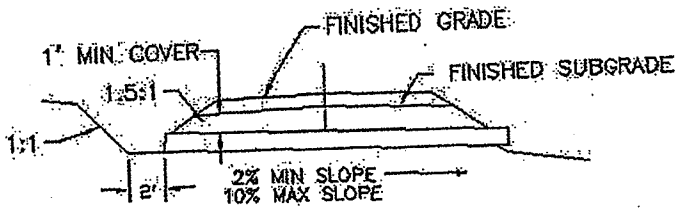


TURNOUT DETAIL

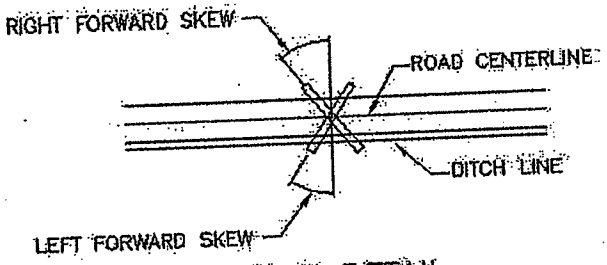


INTERSECTION DETAIL

culvert_details.jpg (750x1050x16M jpeg)

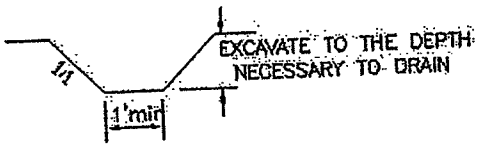


CULVERT SECTION



SKEW DETAIL

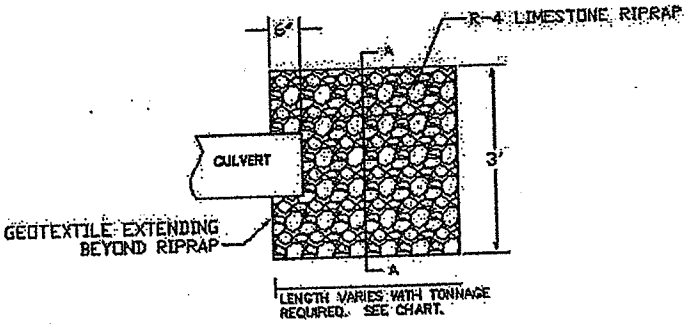
NOTE: Field locate ditch to minimize new clearing



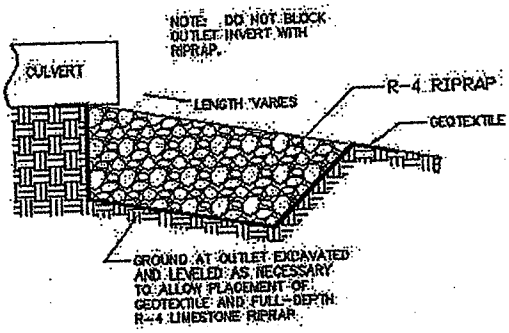
OUTLET/LEAD OFF DITCH SECTION

Riprap_Detail.jpg (750x1050x16M jpeg)

CULVERT OUTLET RIPRAP DETAIL

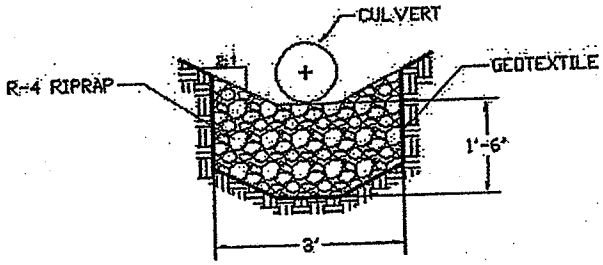


PLAN VIEW



PROFILE

R-4 RIPRAP	
QUANTITY	APPROXIMATE COVERAGE
2 TONS	3' X 7' X 1.5'
3 TONS	3' X 10' X 1.5'
4 TONS	3' X 13' X 1.5'



SECTION A-A

GENERAL NOTES

ALL STEEL SHALL BE PAINTED WITH (2) COATS OF IRON OXIDE RED PRIMER AND (1) COAT OF WALNUT 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 L. JEDREK C/O UNITED STATES FOREST SERVICE, WARREN, PA. (814) 723-5150

SIGN CODE

① (2) L-R AND (2) R-R TYPE 1 BARRICADE MARKERS - RED ON WHITE - 12" x 36"

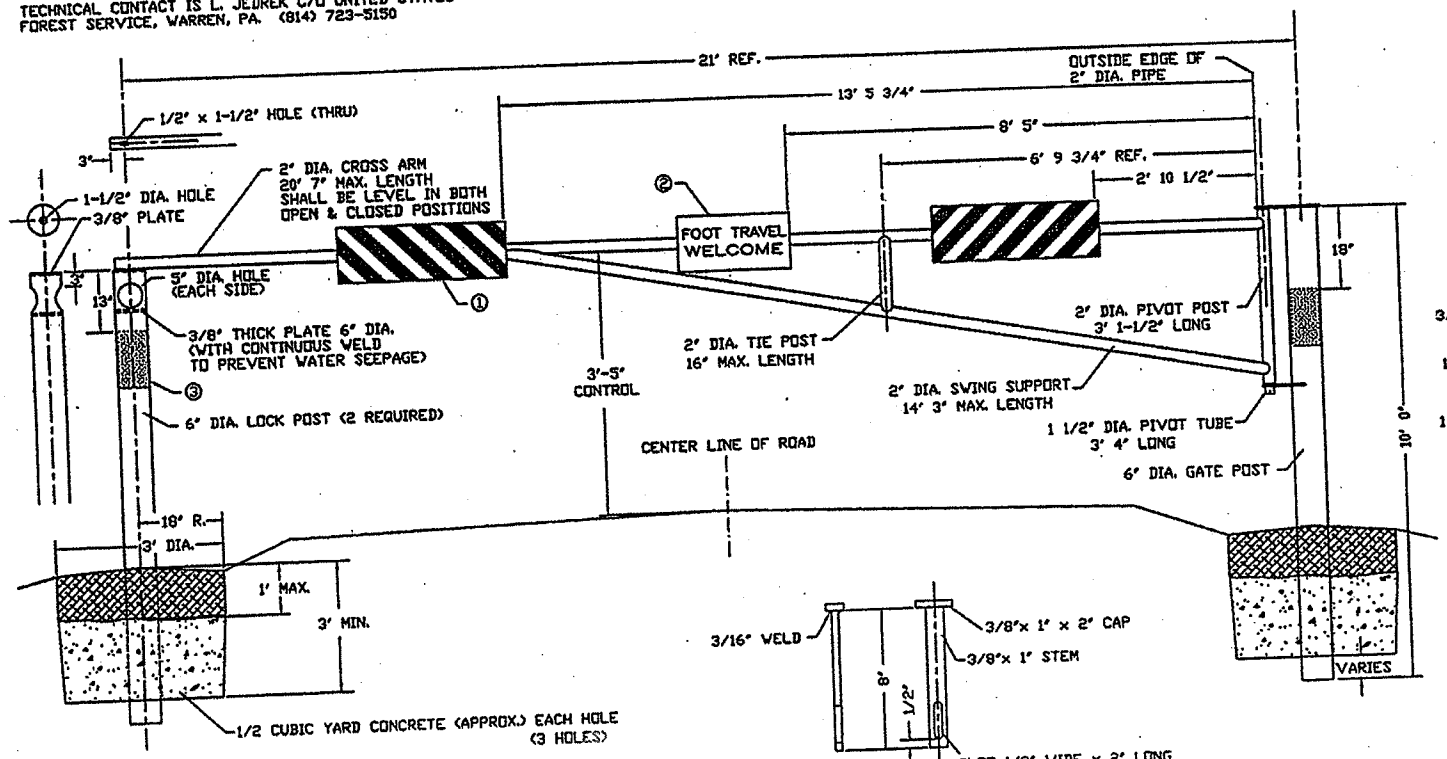
② (1) FOOT TRAVEL WELCOME

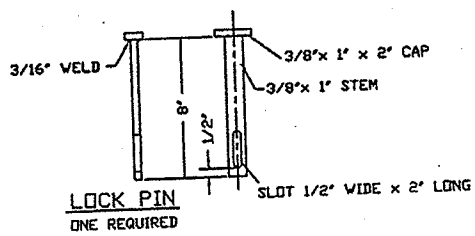
③ (5) TYPE 2 OBJECT MARKERS (OM-2-B) - YELLOW (REFLECTORIZED) - 6" x 12"
(2) ON GATE POST AND (2) ON CLOSED POSITION LOCK POST
(1) ON OPEN POSITION LOCK POST FACED TO ONCOMING TRAFFIC

NOTE: ALL SIGNS SHALL BE FURNISHED BY THE FOREST SERVICE AND INSTALLED BY THE CONTRACTOR.

ESTIMATED QUANTITIES

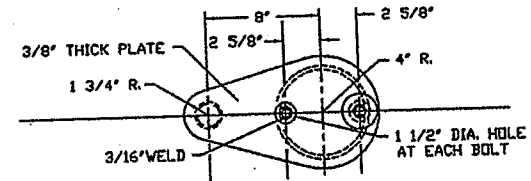
MATERIAL	QUANTITY (LF)	REMARKS
1-1/2" DIA. PIPE(NOM.)	3' 4"	PIVOT TUBE
2" DIA. PIPE(NOM.)	39' 4"	CROSS ARM ASSEMBLY
6" DIA. PIPE(NOM.)	30' 0"	GATE POSTS (3)
3/8" x 1" STRAP	0' 10"	LOCK PIN
3/8" x 8" PLATE	4' 1"	MISC.
BOLTS, NUTS, WASHERS		TWO (2) OF EACH



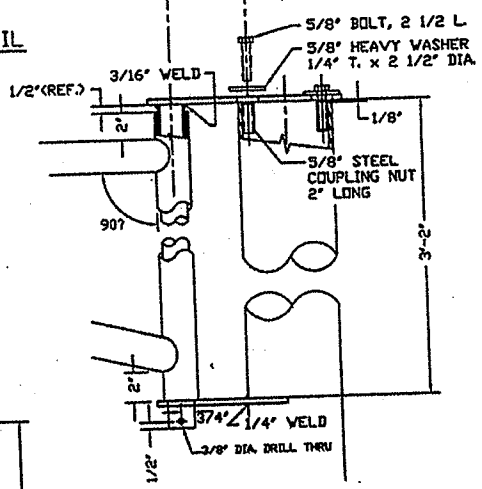


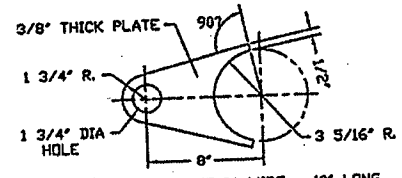
LOCK PIN
ONE REQUIRED

NOTE: PLATE SIZE 8" WIDE x 13 3/4" LONG



DETAIL





NOTE: PLATE SIZE 8" WIDE x 10" LONG

LEVEL "D" FOREST SERVICE GATE	
ALLEGHENY NATIONAL FOREST WARREN, PA	
	DES. R.NEARING, D.JOHNSON, R.GALLO-9/27/89
	DRN. D.JOHNSON & R.GALLO - 12/89
	NOT TO SCALE

Pit Development Plan

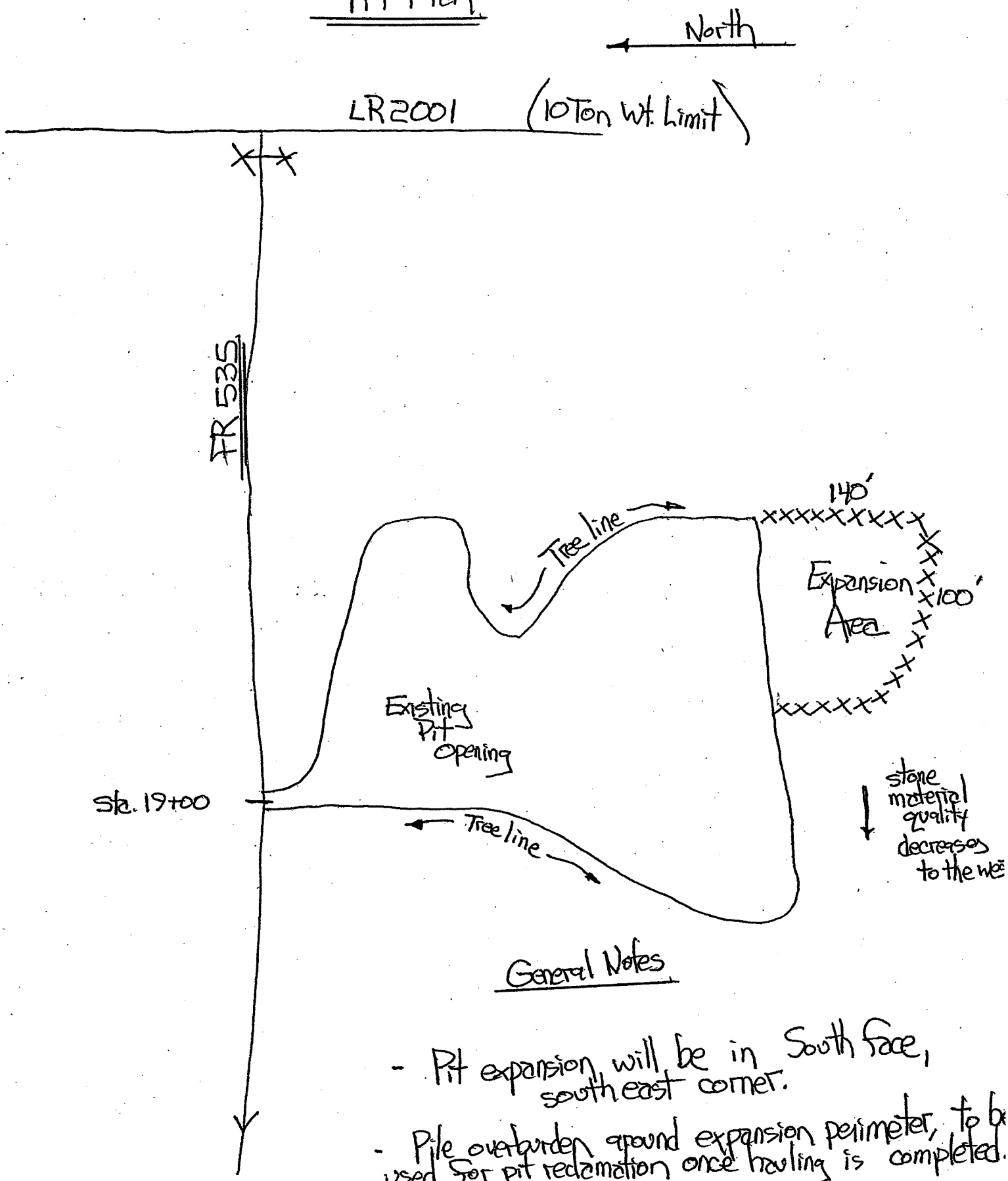
Pit run for this project will come from the FR 535 pit.

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.

Pit Plan



General Notes

- Pit expansion will be in South face, southeast corner.
- Pile overburden around expansion perimeter, to be used for pit reclamation once hauling is completed.
- Proposed pit clearing 140'x100' (pit development) trees/stumps will be placed on existing pit floor beyond expansion area.
- Clearing & grubbing of saplings/poles is req'd

SCHEDULE OF ITEMS, SPECIFICATIONS & DRAWINGS FOR SPECIFIED ROADS

I. Road Summary	2
II. Schedule of Items	3-9
III. Specification List and Special Project Specifications	51 Pages
IV. Road Plans: Little Arnot Timber Sale	30 Pages

ROAD SUMMARY

SPECIFIED ROADS

a. Description of Work:

Reconstruction: FR 241, 472, 528, 549, 549A, 549B
Construction (existing corridor) FR 472A

Excavation, Clearing & Grubbing, Pit run, Crushed Aggregate, Reconditioning of Roadbed, Mobilization, Culvert Installation, Seeding & Mulching, Removal of Culverts, Signs, Gate Repair, Gate Installation and Brushing.

b. Construction Costs:

Road No.	Miles	Estimated road cost	Engineer's Estimate	Reconst. Deposits
241	2.7	$117,652.00	$132,872.00	$20,000.00
472	0.8	$26,811.00	$30,291.25	$5,000.00
472A	0.8	$34,232.00	$40,688.00	
528	1.3	$13,345.40	$15,335.40	$2,000.00
549	1.0	$16,005.00	$18,982.00	$3,000.00
549A	0.6	$12,384.00	$14,185.00	$2,000.00
549B	0.3	$4,094.00	$5,256.00	$800.00
Total		$224,523.40	$257,609.65	$32,800.00

Completion dates: 9/30/2012

FR 241								
Pay Item	Description	Method of Measure	Pay Unit	Estimated Quantity	Unit Price	Extended Total	Engineer's Estimate Unit Price	Engineer's Extended Total
15101	Mobilization	LSQ	All	1	2800.00	$ 2,800.00	9250.00	$ 9,250.00
20301	Removal of culverts	CQ	Each	12	100.00	$ 1,200.00	120.00	$ 1,440.00
20305	Removal of structures and obstructions	LSQ	Lump Sum	1	500.00	$ 500.00	600.00	$ 600.00
23050	Brushing	CQ	Mile	2.7	1500.00	$ 4,050.00	1800.00	$ 4,860.00
25102	Placed riprap, class R-4	VQ	Ton	42.0	60.00	$ 2,520.00	70.00	$ 2,940.00
25102	Placed riprap, class R-5	VQ	Ton	20.0	60.00	$ 1,200.00	70.00	$ 1,400.00
30103	Aggregate base, grading pit run, compaction method A	CQ	Cubic Yard	636	7.00	$ 4,452.00	8.00	$ 5,088.00
30115	Aggregate surface course, Type DSA limestone, compaction A	VQ	Ton	1624	38.25	$ 62,118.00	40.00	$ 64,960.00
30326	Road reconditioning	CQ	Mile	2.7	1000.00	$ 2,700.00	1200.00	$ 3,240.00
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	CQ	Foot	880	28.00	$ 24,640.00	30.00	$ 26,400.00
60264	77 inch span, 52 inch rise aluminized steel, type 2, corrugated steel pipe arch, 0.138 inch thickness, method A	CQ	Foot	40	160.00	$ 6,400.00	170.00	$ 6,800.00
62503	Seeding hydraulic or dry method	LSQ	All	1	2000.00	$ 2,000.00	2400.00	$ 2,400.00
63301	Sign system	CQ	Each	1	50.00	$ 50.00	60.00	$ 60.00
65001	Furnish and install road closure device type gate, size 21'	CQ	Each	1	1250.00	$ 1,250.00	1400.00	$ 1,400.00
65004	Gate Repair	CQ	Each	1	800.00	$ 800.00	900.00	$ 900.00
65102	Pit and quarry development	CQ	Each	1	972.00	$ 972.00	1134.00	$ 1,134.00
TOTAL						**$ 117,652.00**		**$ 132,872.00**

W

FR 472								
Pay Item	Description	Method of Measure	Pay Unit	Estimated Quantity	Unit Price	Extended Total	Engineer's Estimate Unit Price	Engineer's Extended Total
15101	Mobilization	LSQ	All	1	800.00	$ 800.00	2500.00	$ 2,500.00
20301	Removal of culverts	CQ	Each	1	100.00	$ 100.00	120.00	$ 120.00
20305	Removal of structures and obstructions	LSQ	Lump Sum	1	500.00	$ 500.00	600.00	$ 600.00
23050	Brushing	CQ	Mile	0.8	1500.00	$ 1,200.00	1800.00	$ 1,440.00
30103	Aggregate base, grading pit run, compaction method A	CQ	Cubic Yard	72	8.00	$ 576.00	9.00	$ 648.00
30115	Aggregate surface course, Type DSA limestone, compaction A	VQ	Ton	491	39.00	$ 19,149.00	40.75	$ 20,008.25
30326	Road reconditioning	CQ	Mile	0.8	1500.00	$ 1,200.00	1800.00	$ 1,440.00
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	CQ	Foot	112	28.00	$ 3,136.00	30.00	$ 3,360.00
65102	Pit and quarry development	CQ	Each	1	150.00	$ 150.00	175.00	$ 175.00
TOTAL						**$ 26,811.00**		**$ 30,291.25**

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FR 472A								
Pay Item	Description	Method of Measure	Pay Unit	Estimated Quantity	Unit Price	Extended Total	Engineer's Estimate Unit Price	Engineer's Extended Total
15101	Mobilization	LSQ	All	1	800.00	$ 800.00	3000.00	$ 3,000.00
20103	Clearing and grubbing	CQ	Mile	0.8	6000.00	$ 4,800.00	7000.00	$ 5,600.00
20306	Removal of structures and obstructions	LSQ	All	1	500.00	$ 500.00	600.00	$ 600.00
20402	Roadway excavation, compaction method B,	CQ	Mile	0.8	6000.00	$ 4,800.00	7000.00	$ 5,600.00
30103	Aggregate base, grading pit run, compaction method A	CQ	Cubic Yard	1250	8.00	$ 10,000.00	9.00	$ 11,250.00
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	CQ	Foot	294	28.00	$ 8,232.00	30.00	$ 8,820.00
62501	Seeding hydraulic or dry method	CQ	Mile	0.8	4000.00	$ 3,200.00	4500.00	$ 3,600.00
63301	Sign system	CQ	Each	1	25.00	$ 25.00	30.00	$ 30.00
65102	Pit and quarry development	CQ	Each	1	1875.00	$ 1,875.00	2188.00	$ 2,188.00
TOTAL						**$ 34,232.00**		**$ 40,688.00**

FR 528								
Pay Item	Description	Method of Measure	Pay Unit	Estimated Quantity	Unit Price	Extended Total	Engineer's Estimate Unit Price	Engineer's Extended Total
15101	Mobilization	LSQ	All	1	2759.00	$ 2,759.00	3680.00	$ 3,680.00
20301	Removal of culvert	CQ	Each	1	100.00	$ 100.00	120.00	$ 120.00
23050	Brushing	CQ	Mile	1.3	1000.00	$ 1,300.00	1200.00	$ 1,560.00
25102	Placed riprpap, class R-4	VQ	Ton	4.0	70.00	$ 280.00	75.00	$ 300.00
30101	Aggregate base, grading AASHTO #3, compaction method A	VQ	Ton	161	22.40	$ 3,606.40	23.40	$ 3,767.40
30103	Aggregate base, grading pit run, compaction method A	VQ	Cubic Yard	10	7.00	$ 70.00	8.00	$ 80.00
30326	Road reconditioning	CQ	Mile	1.3	1000.00	$ 1,300.00	1200.00	$ 1,560.00
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	CQ	Foot	30	28.00	$ 840.00	30.00	$ 900.00
60264	57 inch span, 38 inch rise aluminized steel, type 2, corrugated steel pipe, 0.079 inch thickness	CQ	Foot	32	70.00	$ 2,240.00	74.00	$ 2,368.00
62503	Seeding hydraulic or dry method	LSQ	All	1	250.00	$ 250.00	300.00	$ 300.00
65004	Gate Repair	CQ	Each	1.0	600.00	$ 600.00	700.00	$ 700.00
TOTAL						**$ 13,345.40**		**$ 15,335.40**

FR 549								
Pay Item	Description	Method of Measure	Pay Unit	Estimated Quantity	Unit Price	Extended Total	Engineer's Estimate Unit Price	Engineer's Extended Total
15101	Mobilization	LSQ	All	1	800.00	$ 800.00	2000.00	$ 2,000.00
20301	Removal of culverts	CQ	Each	11	90.00	$ 990.00	100.00	$ 1,100.00
23050	Brushing	CQ	Mile	1.2	1500.00	$ 1,800.00	1800.00	$ 2,160.00
30103	Aggregate base, grading pit run, compaction method A	CQ	Cubic Yard	108	10.00	$ 1,080.00	11.00	$ 1,188.00
30326	Road reconditioning	CQ	Mile	1.2	1500.00	$ 1,800.00	1800.00	$ 2,160.00
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	CQ	Foot	268	28.00	$ 7,504.00	30.00	$ 8,040.00
62503	Seeding, hydraulic or dry method (Lump Sum)	LSQ	All	1	1400.00	$ 1,400.00	1600.00	$ 1,600.00
63301	Sign system	CQ	Each	2	50.00	$ 100.00	60.00	$ 120.00
65004	Gate Repair	CQ	Each	1	300.00	$ 300.00	350.00	$ 350.00
65102	Pit and quarry development	CQ	Each	1	231.00	$ 231.00	264.00	$ 264.00
TOTAL						**$ 16,005.00**		**$ 18,982.00**

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FR 549A								
Pay Item	Description	Method of Measure	Pay Unit	Estimated Quantity	Unit Price	Extended Total	Engineer's Estimate Unit Price	Engineer's Extended Total
15101	Mobilization	LSQ	All	1	800.00	$ 800.00	1200.00	$ 1,200.00
20305	Removal of structures and obstructions	LSQ	All	0	500.00	$ -	600.00	$ -
23050	Brushing	CQ	Mile	0.6	1500.00	$ 900.00	1800.00	$ 1,080.00
30103	Aggregate base, grading pit run, compaction method A	CQ	Cubic Yard	775	10.00	$ 7,750.00	11.00	$ 8,525.00
30326	Road reconditioning	CQ	Mile	0.6	1500.00	$ 900.00	1800.00	$ 1,080.00
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	CQ	Foot	28	28.00	$ 784.00	30.00	$ 840.00
62503	Seeding, hydraulic or dry method with mulch	LSQ	All	0	500.00	$ -	600.00	$ -
63301	Sign system	CQ	Each	1	50.00	$ 50.00	60.00	$ 60.00
65101	Pit and quarry development	CQ	Each	1	1200.00	$ 1,200.00	1400.00	$ 1,400.00
TOTAL						**$ 12,384.00**		**$ 14,185.00**

FR 549B								
Pay Item	Description	Method of Measure	Pay Unit	Estimated Quantity	Unit Price	Extended Total	Engineer's Estimate Unit Price	Engineer's Extended Total
15101	Mobilization	LSQ	All	1	800.00	$ 800.00	1500.00	$ 1,500.00
20301	Removal of culverts	CQ	Each	4	100.00	$ 400.00	120.00	$ 480.00
23050	Brushing	CQ	Mile	0.3	1500.00	$ 450.00	1800.00	$ 540.00
30103	Aggregate base, grading pit run, compaction method A	CQ	Cubic Yard	96	10.00	$ 960.00	11.00	$ 1,056.00
30326	Road reconditioning	CQ	Mile	0.3	1500.00	$ 450.00	1800.00	$ 540.00
60263	18 inch aluminized steel, type 2, corrugated steel pipe, 0.064 inch thickness, method A	CQ	Foot	28	28.00	$ 784.00	30.00	$ 840.00
62503	Seeding, hydraulic or dry method (Lump Sum)	LSQ	All	1	200.00	$ 200.00	240.00	$ 240.00
63301	Sign system	CQ	Each	1	50.00	$ 50.00	60.00	$ 60.00
TOTAL						**$ 4,094.00**		**$ 5,256.00**