

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE TIMBER SALE CONTRACT (Applicable to Sales to be Measured before Felling)		Name of Purchaser	
National Forest Hiawatha	Ranger District Sault Ste Marie	Region Eastern	Contract Number
Sale Name Red Alert Plus		Award Date	Termination Date 12/31/2020

The parties to this contract are The United States of America, acting through the Forest Service, United States Department of Agriculture, hereinafter called Forest Service, and _____ hereinafter called Purchaser.

Forest Service having advertised a sale at which either (1) Purchaser, whose required bid deposit is now held by Forest Service as an initial deposit, was the successful bidder, or (2) no bids were received and Purchaser having subsequently offered at least the minimum advertised price and made an initial deposit in the same amount as the bid deposit specified in the sale advertisement; and the parties hereto desiring to record their agreement; now therefore,

Unless provided otherwise herein, Forest Service agrees to sell and permit Purchaser to cut and remove Included Timber and Purchaser agrees to purchase, cut, and remove Included Timber.

This contract consists of three Divisions: AT - Specific Conditions, BT - Standard Provisions, and CT - Special Provisions, together with Sale Area Map, Plans and specifications for developments (if any), and such attachments as may be provided for in Division CT. Specific Conditions are numbered and apply to the Part, Section, Subsection, or Item of the Standard Provisions, as indicated hereunder. Other conditions of this contract are stated in Division CT - Special Provisions.

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the award date.

SAMPLE UNITED STATES OF AMERICA

Two Witnesses:^{1/}

By: _____
 Contracting Officer

 (Title)

By: _____
 (Purchaser) ^{2/}

 (Name)

 (Address)

 (Name)

 (Address)

 (Title)

 (Business Address)

I, ^{3/} _____, certify that I am the _____

Secretary of the corporation named as Purchaser herein; that _____

who signed this contract on behalf of Purchaser, was then _____

of the corporation; that the contract was duly signed for and in behalf of the corporation by authority of its governing body, and is

within the scope of its corporate powers.

CORPORATE
SEAL ^{4/}

The following conditions apply to the indicated portions of Division BT - Standard Provisions issued June 2006.

AT1 - Location and Area, applicable to BT1.1

This Sale Area of 1154 acres more or less is located in:

T47N, R3W Sections 20, 28, 29, 32, and 33

AT2 - Volume Estimate and Utilization Standards, applicable to BT2.1, BT2.2, BT2.4, and BT6.4

Species	Product	Estimated Quantity *	Unit of Measure	Minimum Specifications				
				Merchantable Tree		Piece Required to be Removed		
				Diameter Breast High (d.b.h.) (inches)	Number of Minimum Pieces per Tree	Length (feet)	Diameter Inside Bark at Small End (inches)	Net Scale in % of Gross Scale
Aspen	Sawtimber	437.00	CCF	11.0	1	8	9.6	70
Jack Pine	Sawtimber	15.00	CCF	9.0	1	8	7.6	50
Mixed Conifer	Sawtimber	1.00	CCF	9.0	1	8	7.6	50
Mixed Hardwood	Sawtimber	221.00	CCF	11.0	1	8	9.6	50
Red Pine	Sawtimber	1,980.00	CCF	9.0	1	8	7.6	50
Sugar Maple	Sawtimber	110.00	CCF	11.0	1	8	9.6	50
Aspen	Pulpwood	312.00	CCF	5.0	1	8	4.0	70
Mixed Conifer	Pulpwood	51.00	CCF	5.0	1	8	4.0	70
Mixed Hardwood	Pulpwood	2,623.00	CCF	5.0	1	8	4.0	70
Pine	Pulpwood	362.00	CCF	5.0	1	8	4.0	70
Total Quantity		6,112.00	CCF					

* Quantities not included here are described in BT2.4



AT3- Timber Designations, applicable to BT2.3; acres are approximate:

	Number	Acres
Clearcutting Units (BT2.31)		
Specified Road Clearing (BT2.32)		
Overstory Removal Units (BT2.33)		
Understory Removal Units (BT2.34)		
Individual Trees (BT2.35)		419
Incompletely Measured Payment Units (BT2.36)		

AT4 - Timber Payment Rates, applicable to BT3.1 and BT4.0

AT4a - For Species and Products to be Paid for at Rates Escalated under BT3.2

Not Applicable

AT4b- For Species and Products to be Paid for at Flat Rates

Species	Product	Unit of Measure	Rates per Unit of Measure				Required Deposits Slash Disposal \$
			Base \$	Advertised \$	Bid Premium \$	Bid (Flat) \$	
Aspen	Sawtimber	CCF	1.55	14.46			.00
Jack Pine	Sawtimber	CCF	4.79	47.59			.00
Mixed Conifer	Sawtimber	CCF	1.49	12.98			.00
Mixed Hardwood	Sawtimber	CCF	2.16	29.66			.00
Red Pine	Sawtimber	CCF	4.98	52.32			.00
Sugar Maple	Sawtimber	CCF	4.73	93.78			.00
Aspen	Pulpwood	CCF	1.46	12.27			.00
Mixed Conifer	Pulpwood	CCF	1.47	12.63			.00
Mixed Hardwood	Pulpwood	CCF	1.53	13.77			.00
Pine	Pulpwood	CCF	4.79	47.60			.00

For purposes of convenience in collection and bookkeeping, Bid Rates stated in AT4 include payment of deposits for sale area betterment required pursuant to 16 USC 576b. Such deposits are not included as Required Deposits defined hereunder.

SAMPLE

AT4c - Schedule of Payment Units

Payment Unit No.	App rox. Acres	Quantity of Species and Products to be Escalated under AT4a	Total Tentative Payment \$	Quantity of Species and Products to be Paid for at Flat Rates under AT4b	Total Flat Rate Payment \$	Total Required Deposits for Slash Disposal \$
01	10.6			Aspen Sawtimber 39.00 CCF		
				Jack Pine Sawtimber 1.00 CCF		
				Mixed Hardwood Sawtimber 9.00 CCF		
				Sugar Maple Sawtimber 4.00 CCF		
				Aspen Pulpwood 27.00 CCF		
				Mixed Conifer Pulpwood 5.00 CCF		
				Mixed Hardwood Pulpwood 83.00 CCF		
				Pine Pulpwood 4.00 CCF		
Total PU Quantity And Value				172.00 CCF		.00
02	33.5			Aspen Sawtimber 123.00 CCF		
				Jack Pine Sawtimber 5.00 CCF		
				Mixed Hardwood Sawtimber 28.00 CCF		
				Sugar Maple Sawtimber 12.00 CCF		
				Aspen Pulpwood 85.00 CCF		
				Mixed Conifer Pulpwood 15.00 CCF		
				Mixed Hardwood Pulpwood 261.00 CCF		
				Pine Pulpwood 11.00 CCF		
Total PU Quantity And Value				540.00 CCF		.00
03	27.8			Aspen Sawtimber 102.00 CCF		
				Jack Pine Sawtimber 4.00 CCF		
				Mixed Hardwood Sawtimber 23.00 CCF		
				Sugar Maple Sawtimber 10.00 CCF		
				Aspen Pulpwood 70.00 CCF		
				Mixed Conifer Pulpwood 12.00 CCF		
				Mixed Hardwood Pulpwood 217.00 CCF		
				Pine Pulpwood 9.00 CCF		
Total PU Quantity And Value				447.00 CCF		.00
04	37.4			Aspen Sawtimber 137.00 CCF		
				Jack Pine Sawtimber 5.00 CCF		
				Mixed Hardwood Sawtimber 32.00 CCF		
				Sugar Maple Sawtimber 13.00 CCF		
				Aspen Pulpwood 95.00 CCF		
				Mixed Conifer Pulpwood 17.00 CCF		
				Mixed Hardwood Pulpwood 292.00 CCF		
				Pine Pulpwood 13.00 CCF		
Total PU Quantity And Value				604.00 CCF		.00
06	34.9			Aspen Sawtimber 10.00 CCF		
				Mixed Hardwood Sawtimber 34.00 CCF		
				Sugar Maple Sawtimber 26.00 CCF		
				Aspen Pulpwood 3.00 CCF		
				Mixed Conifer Pulpwood 0.00 CCF		
				Mixed Hardwood Pulpwood 273.00 CCF		
Total PU Quantity And Value				346.00 CCF		.00
07	55			Aspen Sawtimber 3.00 CCF		
				Mixed Hardwood Sawtimber 12.00 CCF		
				Red Pine Sawtimber 1.00 CCF		
				Sugar Maple Sawtimber 7.00 CCF		
				Aspen Pulpwood 7.00 CCF		
				Mixed Conifer Pulpwood 1.00 CCF		
				Mixed Hardwood Pulpwood 472.00 CCF		
Pine Pulpwood 1.00 CCF						
Total PU Quantity And Value				504.00 CCF		.00

SAMPLE

Payment Unit No.	Approx. Acres	Quantity of Species and Products to be Escalated under AT4a	Total Tentative Payment \$	Quantity of Species and Products to be Paid for at Flat Rates under AT4b	Total Flat Rate Payment \$	Total Required Deposits for Slash Disposal \$
08	54.9			Jack Pine Sawtimber 0.00 CCF Red Pine Sawtimber 826.00 CCF Aspen Pulpwood 0.00 CCF Mixed Hardwood Pulpwood 1.00 CCF Pine Pulpwood 126.00 CCF		.00
				Total PU Quantity And Value 953.00 CCF		
09	64.9			Jack Pine Sawtimber 0.00 CCF Red Pine Sawtimber 1,153.00 CCF Aspen Pulpwood 0.00 CCF Mixed Hardwood Pulpwood 1.00 CCF Pine Pulpwood 198.00 CCF		.00
				Total PU Quantity And Value 1,352.00 CCF		
10	42.3			Aspen Sawtimber 2.00 CCF Mixed Hardwood Sawtimber 36.00 CCF Red Pine Sawtimber 0.00 CCF Sugar Maple Sawtimber 11.00 CCF Aspen Pulpwood 6.00 CCF Mixed Conifer Pulpwood 0.00 CCF Mixed Hardwood Pulpwood 456.00 CCF Pine Pulpwood 0.00 CCF		.00
				Total PU Quantity And Value 511.00 CCF		
11	56.7			Aspen Sawtimber 19.00 CCF Mixed Hardwood Sawtimber 42.00 CCF Red Pine Sawtimber 0.00 CCF Sugar Maple Sawtimber 13.00 CCF Aspen Pulpwood 16.00 CCF Mixed Conifer Pulpwood 0.00 CCF Mixed Hardwood Pulpwood 542.00 CCF Pine Pulpwood 0.00 CCF		.00
				Total PU Quantity And Value 632.00 CCF		
50	1			Aspen Sawtimber 2.00 CCF Mixed Conifer Sawtimber 1.00 CCF Mixed Hardwood Sawtimber 5.00 CCF Sugar Maple Sawtimber 14.00 CCF Aspen Pulpwood 3.00 CCF Mixed Conifer Pulpwood 1.00 CCF Mixed Hardwood Pulpwood 25.00 CCF Pine Pulpwood 0.00 CCF		.00
				Total PU Quantity And Value 51.00 CCF		

SAMPLE

The following definitions are established for the terms used in AT4:

Base Rates are the lowest rates of payment for timber that are authorized by this contract. Base Rates remain constant throughout the life of this contract and are not subject to change by rate redetermination, except for reduction under BT3.31, BT3.32, or BT3.33.

Advertised Rates are the minimum acceptable Bid Rates for timber, exclusive of Required Deposits. These rates are those indicated by appraisal, with a cost allowance made for construction of Specified Roads listed in AT7, but are never less than Base Rates.

Bid Premium Rates are the amounts by which Purchaser's bid is in excess of Advertised Rates. The Bid Premium Rates are constant during this contract, except as provided in BT3.31, BT3.32, and BT3.33.

Bid Rates are the rates bid by Purchaser (exclusive of Required Deposits for slash disposal and road maintenance) and are the sum of Advertised Rates and Bid Premium Rates. Until a rate redetermination becomes effective, the Bid Rate for species and products in AT4a is the Tentative Rate that is subject to quarterly adjustment under BT3.2; for species and products in AT4b, the Bid Rate is the Flat Rate.

Required Deposits are deposits that Purchaser may be required to pay for slash disposal (16 USC 490) and road maintenance (16 USC 537). Required Deposits may be adjusted as part of a rate redetermination or a Contract Term Extension. The table shows only Required Deposits for slash disposal; road maintenance deposits, if any, are given in CT5.32#.

Base Index is the specified average of the lumber or other product selling value index used as the basis for computing adjustment in rates for variance in product selling value, as provided in BT3.2.

AT5 - Indices Used in Quarterly Adjustment, applicable to BT3.2

Not Applicable

AT6 - High Stumps, applicable to BT6.412

Species	Product	Maximum Stump Height (inches)
All	Sawtimber	12
All	Pulwood	10

AT7 - Specified Roads, applicable to BT5.2

Name and Date of Governing Road Specifications: Federal Highway Administration Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects(2003)-english

Project		Design Class	Approx. Length (mi./km.)	Sheet Numbers and Approval Date	Performance Responsibility		
Road No.	Name				Survey	Design	Construction Staking 1/
3688	Brushy (R) (segment 0 to .16)	Single Lane - 5 mph	.16 / .26	7 02/20/2015	FS	FS	FS AC
3369	IROQUOIS (R) (segment 0 to 1)	Single Lane - 10 mph	1 / 1.61	6 02/20/2015	FS	FS	FS AC
3690	Maple Alert (R) (segment 0 to .47)	Single Lane - 5 mph	.47 / .76	8 02/20/2015	FS	FS	FS AC
3690A	Maple Alert Spur A (R) (segment 0 to .13)	Single Lane - 5 mph	.13 / .21	9 02/20/2015	FS	FS	FS AC

1/ Indicate timing, i.e., before clearing (BC) or after clearing (AC). Applicable to BT5.212.

AT8 - Forest Service Engineering Completion Schedule, applicable to BT5.21

Road No.	Road Name	Type of Work	Completion Date
NOT APPLICABLE			

AT9 - Fire Precautionary Period, applicable to BT7.2

April 01 to December 01, inclusive

AT10 - Purchaser Responsibility to Furnish Crews and Equipment for:

Initial Fire Suppression, applicable to BT7.3

Within 5 road miles

Fire Suppression Reinforcement, applicable to BT7.312 and BT7.313

Within 10 road miles

SAMPLE

AT11 - Purchaser's Obligation per Operations Fire, applicable to BT7.41

Maximum Amount: \$ \$1,200

AT12 - Termination Date, applicable to BT8.2

December 31, 2020

AT13 - Normal Operating Season, applicable to BT6.31, BT6.66, BT8.21 and BT9.3

First Period: May 15 to March 31, inclusive

Second Period: _____ to _____, inclusive

AT14 - Performance Bond, applicable to BT9.1

Performance Bond Amount: _____

AT15 - Downpayment, applicable to BT4.211

Downpayment Amount: _____

AT16 - Periodic Payment Amount, applicable to BT4.213

	<u>Periodic Payment Determination Date</u>	<u>Amount</u>
Initial Payment:	_____	_____
Additional Payment:	_____	_____

AT17 - Market-Related Contract Term Addition Producer Price Index, applicable to BT8.212

Index Name: Wood Chips Index Number: 211135

AT18 - Inapplicable Standard Provisions

The following listed Sections, Subsections, or Items of Division BT - Standard Provisions - are hereby made inapplicable. (Instructions: List by reference number and title.)

BT4.211	DOWNPAYMENT
BT4.4	PAYMENTS NOT RECEIVED
BT8.212	MARKET-RELATED CONTRACT TERM ADDITION

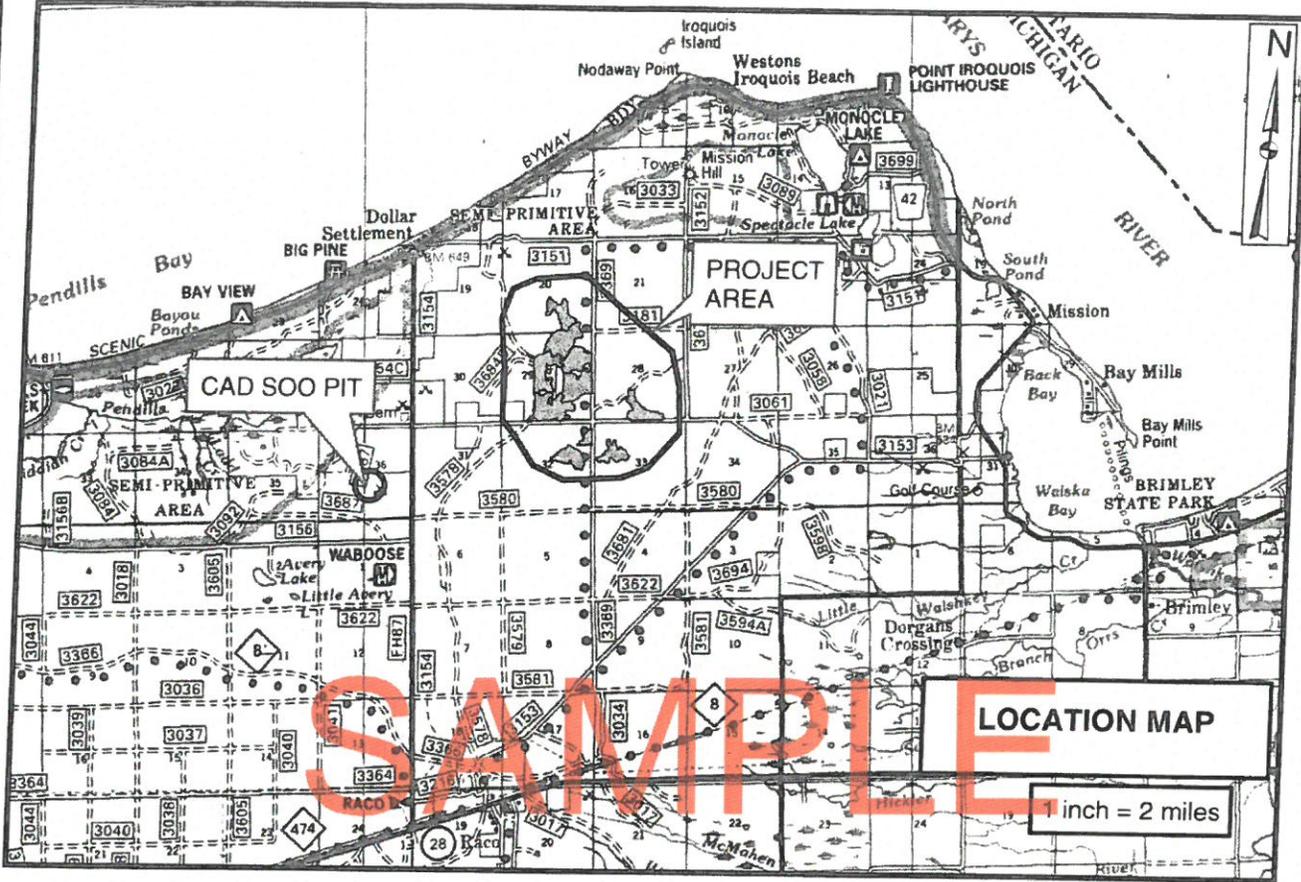
SAMPLE

AT19 - List of Special Provisions

The following listed special provisions are attached to and made a part of this contract as Division CT. Provisions with reference numbers followed by # contain blanks into which data have been entered for this sale. (Instructions: List by reference number, title, and date.)

CT2.302#	BOUNDARY TREES (06/2009)
CT2.352#	DESIGNATION BY SPECIES AND DIAMETER (04/2004)
CT2.355#	INDIVIDUAL TREES, CUT TREE MARKING (06/2009)
CT4.211	DOWNPAYMENT (06/2007)
CT4.212	TEMPORARY REDUCTION OF DOWNPAYMENT (08/2009)
CT4.4	PAYMENTS NOT RECEIVED (08/2012)
CT5.12#	USE OF ROADS BY PURCHASER (06/1999)
CT5.213#	DEPOSIT FOR RECONSTRUCTION ENGINEERING SERVICES (04/2004)
CT5.31#	ROAD MAINTENANCE REQUIREMENTS (07/2001)
CT5.32#	ROAD MAINTENANCE DEPOSIT SCHEDULE (07/2001)
CT5.33#	SNOW REMOVAL (06/2009)
CT6.313#	CUTTING SCHEDULE (06/2009)
CT6.314#	OPERATING REQUIREMENTS (06/2009)
CT6.412	STUMP MARKS (06/2009)
CT6.42#	SKIDDING AND YARDING REQUIREMENTS (06/2009)
CT6.7#	SLASH DISPOSAL MEASURES (06/2009)
CT7.2	FIRE PRECAUTIONS (06/2009)
CT8.212	MARKET-RELATED CONTRACT TERM ADDITION (11/2008)

HIAWATHA NATIONAL FOREST
SPECIFIED ROAD DRAWINGS
RED ALERT PLUS SALE
ST. IGNACE DISTRICT



INDEX OF SHEETS

- 1..... Cover Sheet
- 2..... Est. of Quantities & Const. Notes
- 3 - 5.....Typicals & Details
- 6 - 9.....Description of Work Sheet
- 10.....Plan View

Road No.	Road Name	Length	C/R
3369	Iroquois	1.00	R
3688	Brushy	0.16	R
3690	Maple Alert	0.47	R
3690A	Maple Alert Spur A	0.13	R

Plans, Specifications, and Estimates Reviewed and Certified as to Content and Correctness

DESIGNED:

K. J. Will 12/23/14
 Civil Engineering Technician date

REVIEWED:

D. Lenoir 2/10/15
 Title: Civ Eng Tech date

APPROVED:

Greg Gardner 2/18/15
 Forest Engineer date

Robert West 2/20/15
 District Ranger date

RED ALERT PLUS SALE ROADS

SHEET TITLE
COVER SHEET

SCALE
AS SHOWN

FILE NO.
HI-530

SHEET
1 OF 10

ESTIMATE OF QUANTITIES - RED ALERT PLUS SALE SPECIFIED ROADS

Item Number	Description	Unit	3369	3688	3690	3690A	Total	Unit Price	Total
10101	Mobilization	LS	0.4	0.2	0.2	0.2	1.00	\$1,000.00	\$1,000.00
20101	Clearing and grubbing	LS	0.10	0.20	0.50	0.20	1.00	\$2,200.00	\$2,200.00
20301	Excavation	STA	53.0	8.2	24.7	6.6	92.50	\$60.00	\$5,550.00
20302	Construct road closure	Each	0	0	0	1	1.00	\$200.00	\$200.00
30401	Aggregate Base, Pit Run	CY	100	60	100	0	260	\$9.00	\$2,340.00
								Total	\$11,290.00

All items are contract quantities.
 LS = Lump Sum
 STA = Station of 100'
 CY = Cubic Yard

Aggregate Quantities shown are loose volume hauled. This quantity is estimated by calculating compacted in place volume and adding 25%.

CONSTRUCTION NOTES

SAMPLE

101 - CONTROL OF WORK

Construction Staking: The Forest Service will initially set all construction stakes. Clearing limits will be designated with pink flagging and/or lath with pink flagging. It is the responsibility of the contractor to maintain the construction stakes, lath, and flagging for the duration of the project.

101.02 Inspection of Construction: Furnish written records documenting aggregate hauled and placed. Records must show, at a minimum, date, pit location, road number, quantity, and be signed by the construction representative. Submit records to the Engineering Representative as the work progresses.

203 - EXCAVATION Construction Tolerances:

- Roadbed width +1.0'
- Alignment 2.0'
- Slopes +/- 1/2:1

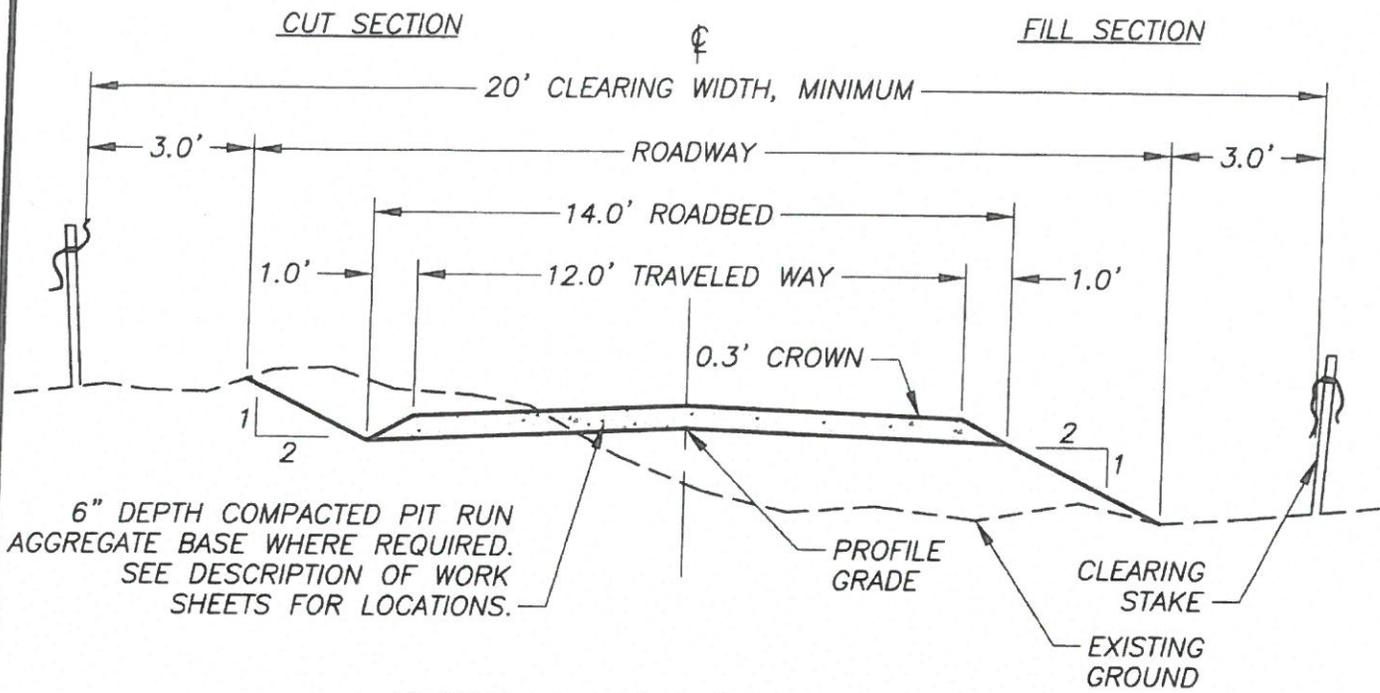
Grade: Profile grade closely follows existing ground, cuts and fills up to 1' could be required to achieve an acceptable roadbed.

304 - AGGREGATE Source: The source for Pit Run Aggregate, item 30401, will be the Forest Service Cad Soo Pit, located in T47N, R4W, S36. The exact area in the pit to excavate will be approved by the Engineer. Finished pit slopes will be 2:1 or flatter unless otherwise approved.

Aggregate base material from sources other than Forest Service pits must be approved in writing by the engineer prior to hauling any material.

Remove loose rocks over 4" in any dimension from road surface, dispose of rocks outside clearing limits.

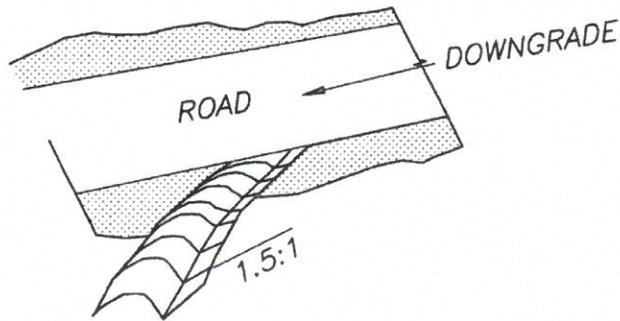
RED ALERT PLUS SALE ROADS	SHEET TITLE EST OF QUANT/NOTES	SCALE NO SCALE	FILE NO. HI-530	SHEET 2 OF 10
----------------------------------	--	--------------------------	---------------------------	-------------------------



TYPICAL CROSS SECTION

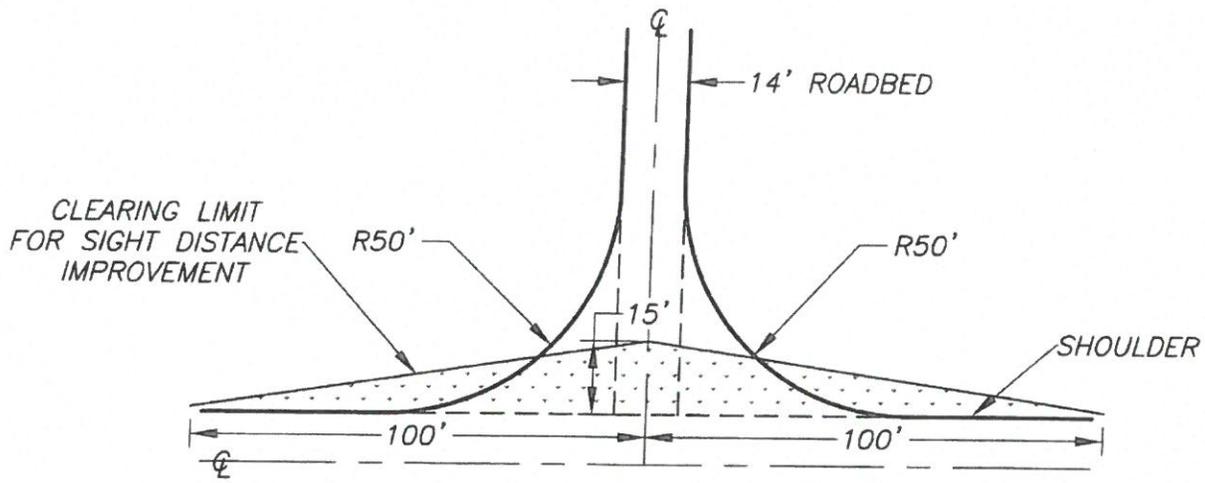
CONSTRUCT ALL SPECIFIED ROAD SEGMENTS TO THIS TYPICAL CROSS SECTION. SEE DESCRIPTION OF WORK SHEETS FOR DETAILS.

SAMPLE



TYPICAL LEAD OFF DITCH

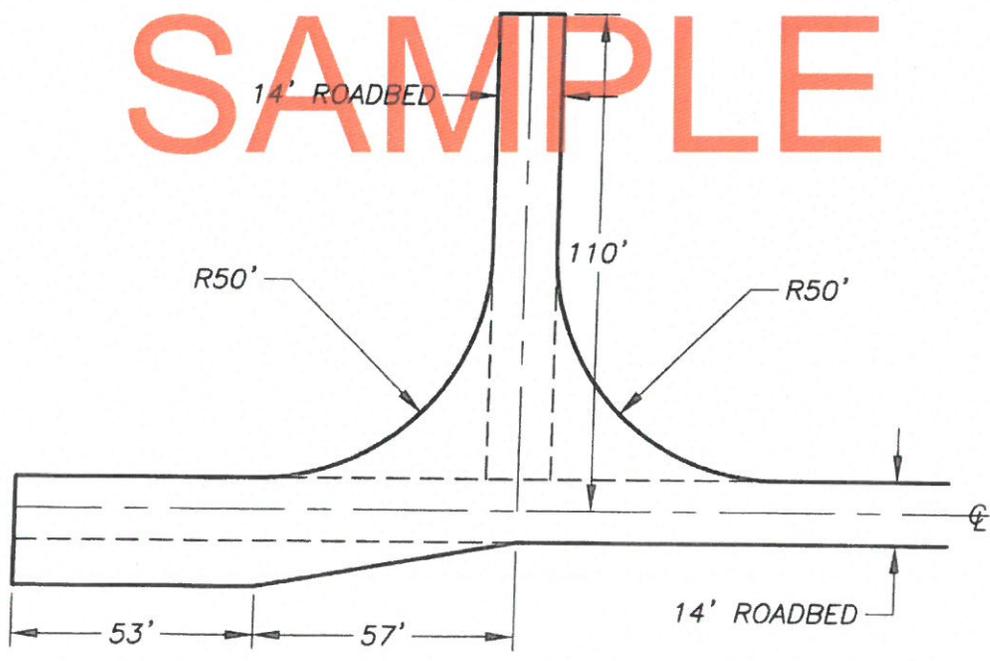
CONSTRUCT 5 LEAD OFF DITCHES ON FR3369 AT LOCATIONS STAKED ON THE GROUND BY THE ENGINEER, AVERAGE LENGTH IS 20', DEPTH AS STAKED. THIS WORK INCLUDED UNDER ITEM 20301.



TYPICAL INTERSECTION

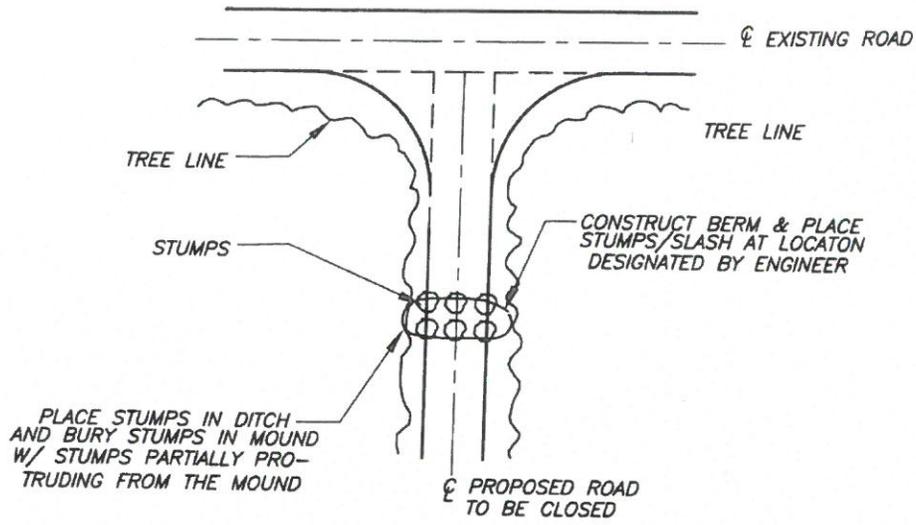
NUMBER TO CONSTRUCT IS 3.
SEE DESCRIPTION OF WORK SHEETS FOR LOCATIONS.

SAMPLE

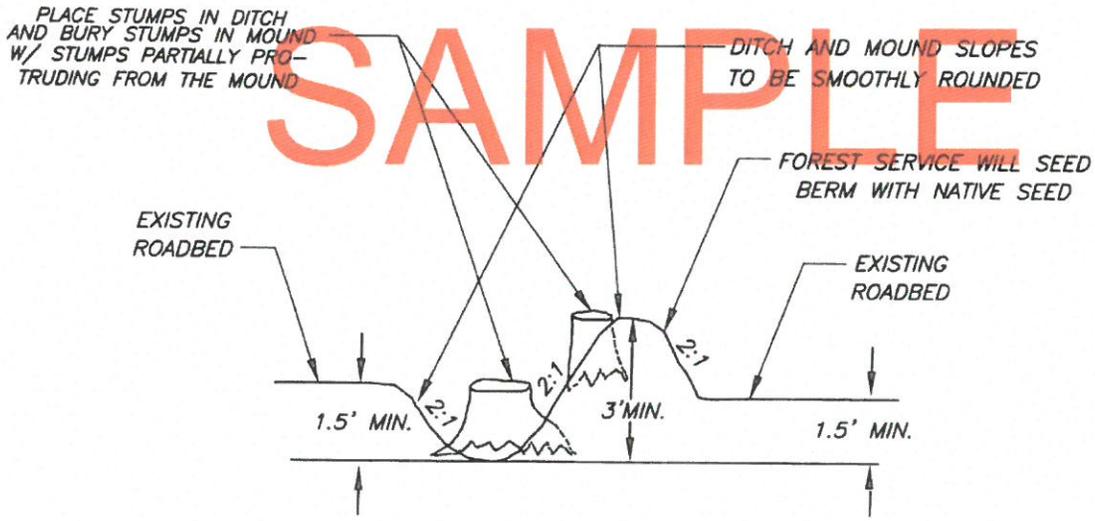


TYPICAL L-TURNAROUND

NUMBER TO BUILD IS 3.
SEE DESCRIPTION OF WORK SHEETS FOR LOCATIONS.



PLAN VIEW
NOT TO SCALE



PROFILE VIEW
NOT TO SCALE

TYPICAL STUMP/BERM ROAD CLOSURE

NUMBER TO BUILD IS 1. EXACT LOCATION WILL BE STAKED ON THE GROUND BY THE ENGINEER.

DESCRIPTION OF WORK

ROAD NO.
3369

LOCATION
(STATION)

TYPICAL CROSS
SECTION

CLEARING AND
GRUBBING

EXCAVATION

AGGREGATE
BASE

DETAILS

END
ROADWORK
53+00

END ROADWORK AT
INTERSECTION WITH
3690.

CROWNED WITH SPOT GRAVEL

BRUSH & LIMBING

53.0 STATIONS

100 CY PIT RUN AGG.

SAMPLE

CONSTRUCT 5 LEAD OFF
DITCHES, LOCATION &
DIMENSIONS WILL BE
STAKED BY THE
ENGINEER.

HAUL & PLACE
100 CY PIT-RUN AGG,
LOCATIONS WILL BE
STAKED ON THE GROUND
BY THE ENGINEER.

START
ROADWORK
0+00

START ROADWORK AT
INTERSECTION WITH
PENDILLS LAKE ROAD (PLANTATION)

DESCRIPTION OF WORK

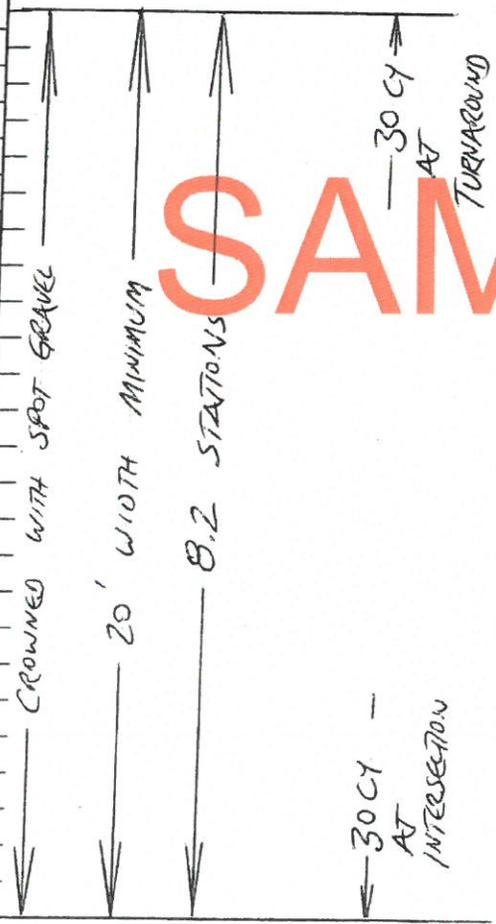
ROAD NO.
3688

DETAILS

END
ROADWORK
8+20

CONSTRUCT
TURNAROUND AT
7+10 RIGHT

SAMPLE



START ROAD WORK AT
INTERSECTION WITH 3369.

DESCRIPTION OF WORK

ROAD NO.
3690

LOCATION
(STATION)

TYPICAL CROSS
SECTION

CLEARING AND
GRUBBING

EXCAVATION

AGGREGATE
BASE

DETAILS

END
ROAD WORK
24+70

CROWNED WITH SPOT GRAVEL

20' MINIMUM WIDTH

24.7 STATIONS

30 CY
AT
INTERSECTION

70 CY
AT INTERSECTION
WITH 3690A

30 CY
AT
TURNAROUND

START
ROAD WORK
0+00

END ROAD WORK AT 24+70,
CONSTRUCT TURNAROUND
AT 23+60 RIGHT

START ROAD WORK AT
INTERSECTION WITH 3369

SAMPLE

DESCRIPTION OF WORK

ROAD NO.
3690A

DETAILS

LOCATION
(STATION)

TYPICAL CROSS
SECTION

CLEARING AND
GRUBBING

EXCAVATION

END
ROADWORK
6+60

END ROADWORK AT
6+60, CONSTRUCT
TURNAROUND AT 5+50
LEFT, AS STAKED.

SAMPLE

CROWNED

20' MINIMUM WIDTH

6.6 STATIONS

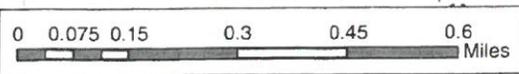
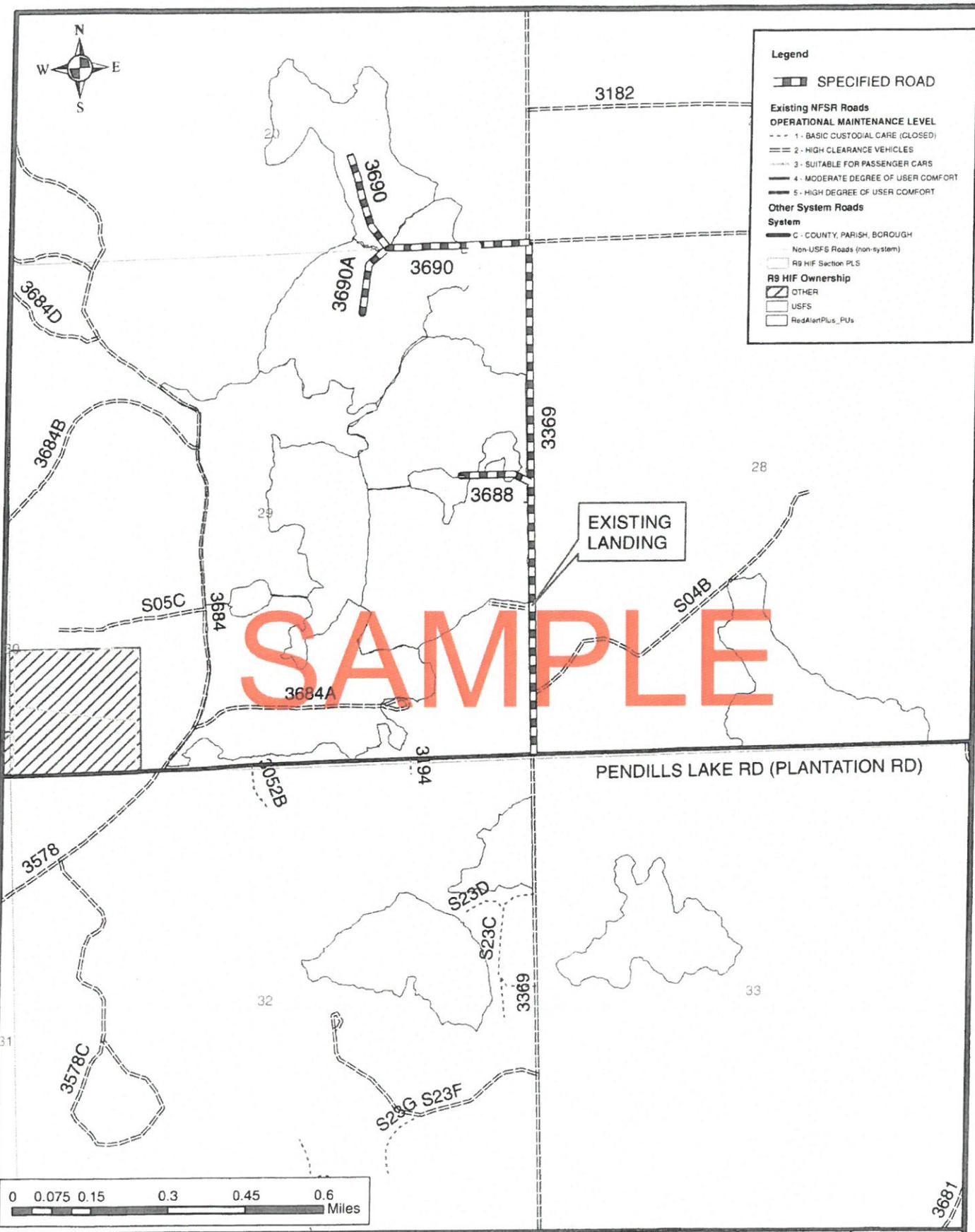
START
ROADWORK
0+00

CONSTRUCT STUMP / BERM
ROAD CLOSURE AT
LOCATION STAKED ON THE
GROUND BY THE ENGINEER.

START ROADWORK AT
INTERSECTION WITH
3690



- Legend**
- SPECIFIED ROAD**
 - Existing NFSR Roads**
 - OPERATIONAL MAINTENANCE LEVEL**
 - 1 - BASIC CUSTODIAL CARE (CLOSED)
 - 2 - HIGH CLEARANCE VEHICLES
 - 3 - SUITABLE FOR PASSENGER CARS
 - 4 - MODERATE DEGREE OF USER COMFORT
 - 5 - HIGH DEGREE OF USER COMFORT
 - Other System Roads**
 - System**
 - C - COUNTY, PARISH, BOROUGH
 - Non-USFS Roads (non-system)
 - R9 HIF Section PLS
 - R9 HIF Ownership**
 - OTHER
 - USFS
 - RedAlertPlus_PUs



Red Alert Plus Sale Roads	SHEET TITLE PLAN VIEW	SCALE 1:15,840	FILE NO. HI-530	SHEET 10 OF 10
---------------------------	--------------------------	-------------------	--------------------	-------------------

HIAWATHA NATIONAL FOREST

SPECIFICATIONS FOR TIMBER SALE ROADWORK

Red Alert Plus Timber Sale

Index of included specifications:

Section 101 – Control of Work

Section 201-Clearing and Grubbing

Section 203 – Excavation

Section 304 – Aggregate

SAMPLE

SECTION 101 – CONTROL OF WORK

101.01 Use of Roads by Contractor

The Contractor is authorized to use roads under the jurisdiction of the Forest Service for all activities necessary to complete this contract, subject to the limitations and authorizations designated in the Road Order(s) or described in the contract, when such use will not damage the roads or national forest resources, and when traffic can be accommodated safely.

101.02 Inspection of Construction.

Maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. Record the work and perform calculations to determine quantities for each work item. Maintain complete inspection records and make them available to the Government. Use an acceptable format for measurement records and include, at a minimum: project name, work item, date the work was performed, location of the work, measured quantity, calculations made to arrive at the quantity, and name of person(s) measuring the work.

The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

Perform all work to the lines, grades, cross-sections, dimensions, and processes or material requirements shown on the plans or specified in the contract.

Remove and replace work that does not conform to the contract, or to prevailing industry standards where no specific contract requirements are noted, at no cost to the Government.

101.03 Public Traffic.

Description

This work consists of controlling and protecting public traffic adjacent to and with the project. All signing shall conform to the Michigan Manual on Uniform Traffic Control Devices (MMUTCD)

General

Unless otherwise provided for, keep existing roads open to all traffic during road improvement work, and maintain them in a condition that will adequately accommodate traffic. Delays may not exceed 30 minutes at any one time followed by an open period of no less than 5 minutes.

Perform no work that interferes or conflicts with traffic or existing access to the roadway surface until a traffic control plan has been approved. Post construction signs and traffic control devices in conformance with MUTCD. All required signs will be in place and approved prior to beginning work on project.

If the Contractor agrees in writing to allow public traffic to use a new road being constructed prior to completion, it will be considered an existing road for traffic control purposes.

Temporary Traffic Control

Install and maintain temporary traffic control devices adjacent to and within the project as required by the approved traffic control plan and the MUTCD. Install and maintain traffic control devices as follows:

- (a) Furnish and install traffic control devices before the start of construction operations.
- (b) All detours outside of clearing limits will be approved in writing by the Contracting Officer as part of the traffic control plan.
- (c) Install only those traffic control devices needed for each stage or phase.
- (d) Relocate temporary traffic control devices as necessary.
- (e) Remove devices that no longer apply to the existing conditions.
- (f) Immediately replace any device that is lost, stolen, destroyed, or inoperative.
- (g) Keep temporary traffic control devices clean.
- (h) Remove all temporary traffic control devices upon contract completion or when approved.
- (i) When required, use flaggers certified by the American Traffic Safety Services Association, the National Safety Council, the International Municipal Signal Association, a state agency, or other acceptable organization. Perform the work described under MUTCD Part 6. Use type III, VII, VIII, or IX retroreflective sheeting on flagger paddles. Do not use flags. Flaggers must wear high visibility safety apparel as required by MUTCD 6E.02.

Temporary Closures

Road segments may be closed as agreed to by the CO. The maximum consecutive days of closure shall be followed by a minimum number of consecutive days open to traffic. Maintain traffic control devices during closure period(s). Appropriate barricades and signs will be erected and maintained as shown in the traffic control plan or as otherwise designated.

Prior to closing roads during construction, give written notice to the Contracting Officer at least 10 days in advance.

SECTION 201 – CLEARING AND GRUBBING

DESCRIPTION

201.01 This work shall consist of clearing, grubbing, and disposing of or treatment of timber, construction slash, and debris.

CONSTRUCTION

201.02 CLEARING & GRUBBING. All debris, trees, stumps, roots, and other protruding vegetative material within the clearing limits shall be cleared, grubbed, removed, and disposed of, except that undisturbed stumps in locations SHOWN ON THE DRAWINGS may remain.

Cut stumps to be grubbed to 12" maximum height before or immediately after grubbing.

Roadway must be grubbed. Stump holes caused by grubbing shall be leveled. Areas outside the roadway but within the clearing limits need not be grubbed. Height of stumps left shall not exceed 12" above ground.

Branches on remaining trees or shrubs shall be trimmed to give a clear height of 14 feet above the roadbed.

Trim tree limbs as near flush with the trunk as practicable.

Clearing shall be done in such a manner to prevent damage to remaining trees and other property.

Grubbing shall include removal of stumps and exposed roots over 3" in diameter.

201.03 PIONEERING. Pioneering operations shall be conducted to minimize mixing of slash and excavated material. Final back slopes shall not be undercut, material shall not be deposited outside the fill and excavation limits, nor shall drainage be restricted.

201.04 DISPOSAL. Treatment of construction slash shall be accomplished by scattering slash outside the clearing limits without damaging trees. All logs shall be limbed. Logs and stumps shall be placed away from trees, positioned so they will not roll, and not be placed on top of one another. Scattered slash shall be lopped and scattered to reduce concentrations and made to lie within four feet of the ground concurrent with the clearing and grubbing operations unless other requirements are SHOWN ON THE DRAWINGS. Grubbed and scattered stumps shall be turned upright with roots down.

Dispose of merchantable timber designated for removal according to the B(BT) provisions of the timber sale contract. Deck merchantable timber adjacent to the roadway in areas approved by the Engineer.

MEASUREMENT

201.05 When Clearing & Grubbing is shown in the Schedule of Items, the work will be either on a lump sum basis where no measurement will be made, or on an area basis. For the area basis the original design quantity as shown on the Schedule of Items will be the final quantity, unless adjustments are made as specified in the changes provision. The design quantity is the number of acres calculated to be cleared and/or grubbed within the limits SHOWN ON THE DRAWINGS.

SAMPLE

SECTION 203 – EXCAVATION

DESCRIPTION

203.01 This work shall consist of all excavation regardless of its nature, borrow excavation, embankment construction, and shaping of roadway including such items as drainage dips, ditches, turnarounds, and other subsidiary work.

CONSTRUCTION

203.02 All suitable excavated material shall be used to construct a roadway conforming to the typical section(s) and tolerances SHOWN ON THE DRAWINGS.

Side casting and end dumping will be permitted for embankment construction; however, excavation and embankment shall be confined within the roadway limits. Compaction shall be accomplished by operating equipment over the full width of the traveled way. Rocks too large for incorporation shall be placed to the side of the embankment so they will not roll, obstruct drainage, or hinder use and maintenance of the road. Excess excavation and unsuitable material shall be disposed of as SHOWN ON THE DRAWINGS or in locations approved by the Engineer.

Location and requirements for borrow excavation are SHOWN ON THE DRAWINGS.

The finished slopes shall be left in a roughened condition to facilitate vegetative growth.

Rocks in the roadbed that protrude less than 2" above the finished road surface will be allowed to remain in place.

When specified, topsoil shall be salvaged in sufficient quantity to meet the quantity requirements SHOWN IN THE SCHEDULE OF ITEMS. Topsoil shall consist of loose, friable, sandy loam, free of admixture of subsoil, refuse, stumps, roots, rocks, brush, weeds, of other material that would be detrimental to the development of vegetative growth. Topsoil, as used herein, shall mean that portion of the soil profile defined technically as the "A" horizon by the Soil Science Society of America.

MEASUREMENT

203.03 The method of measurement will be on a linear basis or cubic yard basis. In both cases the original design quantity as shown on the Schedule of Items will be the final quantity, unless adjustments are made as specified in the changes provision. For linear measurements the design quantity is the length of road measured along quantity is computed using the average end area method.

SECTION 304 – AGGREGATE

DESCRIPTION

304.01 This work shall consist of furnishing, hauling, and placing one or more courses of aggregate surface course on the approved subgrade. Aggregate shall be pit-run, screened, crushed, or furnished by the Government as SHOWN IN THE SCHEDULE OF ITEMS.

MATERIALS

304.02 Materials shall be obtained from sources SHOWN ON THE DRAWINGS or other approved sources. Aggregate quality, production, and gradation requirements are SHOWN ON THE DRAWINGS.

When a gradation is specified, the Contractor shall submit test results and a Certificate of Compliance that states that the gradation of the aggregate meets the contract requirements. Aggregates shall be stockpiled, removed, transported, and placed in a manner that will preserve specified gradation and avoid contamination. Samples may be required at any time to validate gradation.

CONSTRUCTION

304.03 Prior to aggregate placement, the proposed portion of the roadbed shall (1) be completed in accordance with the specifications; (2) have hauling and spreading equipment operated uniformly over the full width; and (3) be approved in writing by the Engineering Representative.

The aggregate shall be spread in a uniform layer, with no segregation of size, and to a loose depth that shall have the required thickness when compacted. The maximum compacted thickness of any one layer shall not exceed six inches.

The aggregate shall be compacted by one of the following methods as specified on the Schedule of Items:

- Compaction A. Aggregate shall be compacted by operating spreading and hauling equipment over the full width of each layer of the aggregate.
- Compaction B. Each layer of aggregate shall be compacted to a density of at least 95 percent of the maximum density, as determined by AASHTO T 99, Method C or D.

The final compacted surface shall be smooth and the thickness shall not vary more than the tolerance SHOWN ON THE DRAWINGS. The compacted thickness shall not be consistently above or below the specified thickness.

MEASUREMENT

304.04 The method of measurement will be on a volume basis or a weight basis as shown in the Schedule of Items. The volume basis will be the computed number of cubic yards adjusted for compaction, that is loose volume. The original design quantity shown in the Schedule of Items will be the final quantity unless adjustments are made as specified in the changes provision.