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** Manistique	**Region** Eastern	**Contract Number**
Sale Name High Carr		**Award Date**	**Termination Date** 10/19/2018

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.

UNITED STATES OF AMERICA

Two Witnesses: 1/

By: _____
Contracting Officer

_____
(Name)

_____
(Title)

By: _____
(Purchaser) 2/

_____
(Address)

_____

_____
(Name)

_____
(Title)

_____
(Address)

_____
(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/

INSTRUCTIONS:

1/ The signatures and addresses of two witnesses are required if Purchaser is other than a corporation.

2/ If Purchaser is a co-partnership, the signatures should be: XYZ Company, by John Doe, a member of the firm. If Purchaser is a corporation, form of signature should be: XYZ Company, by John Doe, President (or other officer or agent) and the seal of the corporation must be impressed or indicated.

3/ The certificate must be completed if Purchaser is a corporation.

4/ If the corporation has no corporate seal that fact shall be stated, in which case a scroll or adhesive seal shall follow the corporate name.

EXAMPLE 1/

Subcontractor Certification
Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion

Timber Sale Name: _____
National Forest: _____

The prospective subcontractor (participants in lower tier covered transactions) certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this timber sale by any Federal department or agency.

Where the prospective subcontractor is unable to certify to any of the statements in this certification, such prospective subcontractor shall attach an explanation to this proposal.

Name of Subcontractor: _____
Business Address: _____
_____

_____ _____
Date Signature

1/ It is the Purchaser's responsibility to have subcontractors complete this certification and to maintain a file of completed certifications. This certification does not need to be returned to the Forest Service, except at the written request of the Contracting Officer.

Sale Name: High Carr **Contract No:**

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 2213 acres more or less is located in:

Compartments 38, 50, and 59, located in Delta County, Michigan, T43N, R18W, Sections 21, 22, 23, 25, 26, 27, 35, and 36

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	199.00	CCF	11.0	1	8	9.6	50
Mixed Conifer	Sawtimber	38.00	CCF	9.0	1	8	7.6	50
Mixed Hardwood	Sawtimber	87.00	CCF	11.0	1	8	9.6	50
Red Pine	Sawtimber	179.00	CCF	9.0	1	8	7.6	50
Sugar Maple	Sawtimber	53.00	CCF	11.0	1	8	9.6	50
Aspen	Pulpwood	766.00	CCF	5.0	1	8	4.0	70
Jack Pine	Pulpwood	157.00	CCF	5.0	1	8	4.0	70
Mixed Conifer	Pulpwood	52.00	CCF	5.0	1	8	4.0	70
Mixed Hardwood	Pulpwood	786.00	CCF	5.0	1	8	4.0	70
Red Pine	Pulpwood	394.00	CCF	5.0	1	8	4.0	70
Total Quantity		2,711.00	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)	1	2
Overstory Removal Units (BT2.33)		
Understory Removal Units (BT2.34)		
Individual Trees (BT2.35)		340.5
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				
			Base $	Advertised $	Bid Premium $	Bid (Flat) $	Required Deposits Slash Disposal $
Aspen	Sawtimber	CCF	20.35	25.74			.00
Mixed Conifer	Sawtimber	CCF	28.12	35.12			.00
Mixed Hardwood	Sawtimber	CCF	39.65	50.42			.00
Red Pine	Sawtimber	CCF	30.56	38.23			.00
Sugar Maple	Sawtimber	CCF	100.86	128.69			.00
Aspen	Pulpwood	CCF	21.82	27.62			.00
Jack Pine	Pulpwood	CCF	29.52	36.91			.00
Mixed Conifer	Pulpwood	CCF	17.25	21.67			.00
Mixed Hardwood	Pulpwood	CCF	26.21	33.22			.00
Red Pine	Pulpwood	CCF	38.60	48.52			.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.

Sale Name: High Carr **Contract No:**

AT4c - Schedule of Payment Units

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 $
01	8.2			Aspen	Sawtimber	0.00 CCF		.00
				Mixed Conifer	Sawtimber	4.00 CCF		
				Mixed Hardwood	Sawtimber	1.00 CCF		
				Red Pine	Sawtimber	0.00 CCF		
				Aspen	Pulpwood	8.00 CCF		
				Jack Pine	Pulpwood	7.00 CCF		
				Mixed Conifer	Pulpwood	2.00 CCF		
				Mixed Hardwood	Pulpwood	6.00 CCF		
				Red Pine	Pulpwood	0.00 CCF		
				Total PU Quantity And Value		28.00 CCF		
03	3.6			Mixed Conifer	Sawtimber	2.00 CCF		.00
				Jack Pine	Pulpwood	10.00 CCF		
				Mixed Conifer	Pulpwood	9.00 CCF		
				Mixed Hardwood	Pulpwood	1.00 CCF		
				Total PU Quantity And Value		22.00 CCF		
04	40.7			Aspen	Sawtimber	19.00 CCF		.00
				Mixed Conifer	Sawtimber	5.00 CCF		
				Mixed Hardwood	Sawtimber	2.00 CCF		
				Red Pine	Sawtimber	1.00 CCF		
				Aspen	Pulpwood	76.00 CCF		
				Jack Pine	Pulpwood	29.00 CCF		
				Mixed Conifer	Pulpwood	10.00 CCF		
				Mixed Hardwood	Pulpwood	16.00 CCF		
				Red Pine	Pulpwood	1.00 CCF		
				Total PU Quantity And Value		159.00 CCF		
05	6.5			Aspen	Sawtimber	0.00 CCF		.00
				Mixed Conifer	Sawtimber	1.00 CCF		
				Aspen	Pulpwood	27.00 CCF		
				Jack Pine	Pulpwood	10.00 CCF		
				Mixed Conifer	Pulpwood	1.00 CCF		
				Mixed Hardwood	Pulpwood	1.00 CCF		
				Total PU Quantity And Value		40.00 CCF		
06	41.3			Aspen	Sawtimber	19.00 CCF		.00
				Mixed Conifer	Sawtimber	18.00 CCF		
				Mixed Hardwood	Sawtimber	1.00 CCF		
				Red Pine	Sawtimber	22.00 CCF		
				Aspen	Pulpwood	199.00 CCF		
				Jack Pine	Pulpwood	62.00 CCF		
				Mixed Conifer	Pulpwood	6.00 CCF		
				Mixed Hardwood	Pulpwood	51.00 CCF		
				Red Pine	Pulpwood	22.00 CCF		
				Total PU Quantity And Value		400.00 CCF		
07	35.8			Mixed Conifer	Sawtimber	1.00 CCF		.00
				Red Pine	Sawtimber	43.00 CCF		
				Jack Pine	Pulpwood	1.00 CCF		
				Mixed Conifer	Pulpwood	6.00 CCF		
				Mixed Hardwood	Pulpwood	0.00 CCF		
				Red Pine	Pulpwood	231.00 CCF		
				Total PU Quantity And Value		282.00 CCF		

Sale Name: High Carr **Contract No:**

Pay-ment 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 $
08	19.8			Mixed Conifer	Sawtimber	5.00 CCF		.00
				Mixed Hardwood	Sawtimber	3.00 CCF		
				Red Pine	Sawtimber	36.00 CCF		
				Aspen	Pulpwood	26.00 CCF		
				Jack Pine	Pulpwood	22.00 CCF		
				Mixed Conifer	Pulpwood	1.00 CCF		
				Mixed Hardwood	Pulpwood	21.00 CCF		
				Red Pine	Pulpwood	39.00 CCF		
				Total PU Quantity And Value		153.00 CCF		
09	10			Aspen	Sawtimber	64.00 CCF		.00
				Mixed Conifer	Sawtimber	1.00 CCF		
				Mixed Hardwood	Sawtimber	3.00 CCF		
				Red Pine	Sawtimber	0.00 CCF		
				Aspen	Pulpwood	190.00 CCF		
				Jack Pine	Pulpwood	5.00 CCF		
				Mixed Conifer	Pulpwood	0.00 CCF		
				Mixed Hardwood	Pulpwood	43.00 CCF		
				Red Pine	Pulpwood	0.00 CCF		
				Total PU Quantity And Value		306.00 CCF		
10	43.3			Mixed Conifer	Sawtimber	1.00 CCF		.00
				Red Pine	Sawtimber	73.00 CCF		
				Jack Pine	Pulpwood	7.00 CCF		
				Mixed Hardwood	Pulpwood	3.00 CCF		
				Red Pine	Pulpwood	97.00 CCF		
				Total PU Quantity And Value		181.00 CCF		
11	19.5			Aspen	Sawtimber	68.00 CCF		.00
				Mixed Conifer	Sawtimber	0.00 CCF		
				Mixed Hardwood	Sawtimber	9.00 CCF		
				Red Pine	Sawtimber	1.00 CCF		
				Aspen	Pulpwood	197.00 CCF		
				Jack Pine	Pulpwood	2.00 CCF		
				Mixed Conifer	Pulpwood	0.00 CCF		
				Mixed Hardwood	Pulpwood	79.00 CCF		
				Red Pine	Pulpwood	3.00 CCF		
				Total PU Quantity And Value		359.00 CCF		
12	62.6			Aspen	Sawtimber	5.00 CCF		.00
				Mixed Hardwood	Sawtimber	34.00 CCF		
				Sugar Maple	Sawtimber	49.00 CCF		
				Aspen	Pulpwood	1.00 CCF		
				Mixed Conifer	Pulpwood	2.00 CCF		
				Mixed Hardwood	Pulpwood	346.00 CCF		
				Total PU Quantity And Value		437.00 CCF		
13	49.2			Aspen	Sawtimber	24.00 CCF		.00
				Mixed Hardwood	Sawtimber	33.00 CCF		
				Sugar Maple	Sawtimber	3.00 CCF		
				Aspen	Pulpwood	41.00 CCF		
				Mixed Conifer	Pulpwood	15.00 CCF		
				Mixed Hardwood	Pulpwood	215.00 CCF		
				Red Pine	Pulpwood	0.00 CCF		
				Total PU Quantity And Value		331.00 CCF		

Sale Name: High Carr **Contract No:**

Pay-ment 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 $
ROW	2			Mixed Conifer	Sawtimber	0.00 CCF		.00
				Mixed Hardwood	Sawtimber	1.00 CCF		
				Red Pine	Sawtimber	3.00 CCF		
				Sugar Maple	Sawtimber	1.00 CCF		
				Aspen	Pulpwood	1.00 CCF		
				Jack Pine	Pulpwood	2.00 CCF		
				Mixed Conifer	Pulpwood	0.00 CCF		
				Mixed Hardwood	Pulpwood	4.00 CCF		
				Red Pine	Pulpwood	1.00 CCF		
				Total PU Quantity And Value		13.00 CCF		

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	Pulpwood	6

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/
2436D	MOLLY LAKE SPUR D (C) (segment 0 to .05)	Single Lane - 10 mph	.05 / .08	HI - 667 06/30/2016	FS	FS	FS BC
2709	HIGH BRIDGE LAKE (R) (segment 0 to .87)	Single Lane - 10 mph	.87 / 1.4	HI - 667 06/30/2016	FS	FS	FS BC
2217C	JACK PINE TRUCK TRAIL SPUR C (R) (segment 0 to .49)	Single Lane - 10 mph	.49 / .79	HI - 667 06/30/2016	FS	FS	FS BC
2436E	MOLLY LAKE SPUR E (R) (segment 0 to .41)	Single Lane - 10 mph	.41 / .66	HI - 667 06/30/2016	FS	FS	FS BC
2711	SPRING LAKE (R) (segment 0 to .52)	Single Lane - 10 mph	.52 / .84	HI - 667 06/30/2016	FS	FS	FS BC
2711A	SPRING LAKE SPUR A (R) (segment 0 to .18)	Single Lane - 10 mph	.18 / .29	HI - 667 06/30/2016	FS	FS	FS BC
2711AI	SPRING LAKE SPUR AI (R) (segment 0 to .22)	Single Lane - 10 mph	.22 / .35	HI - 667 06/30/2016	FS	FS	FS BC
2710	SPRING LAKE WEST (R) (segment 0 to .63)	Single Lane - 10 mph	.63 / 1.01	HI - 667 06/30/2016	FS	FS	FS BC
2710B	SPRING LAKE WEST SPUR B (R) (segment 0 to .32)	Single Lane - 10 mph	.32 / .51	HI - 667 06/30/2016	FS	FS	FS BC
2710BA	SPRING LAKE WEST SPUR BA (R) (segment 0 to .28)	Single Lane - 10 mph	.28 / .45	HI - 667 06/30/2016	FS	FS	FS BC
2698A	TREFIVE SPUR A (R) (segment 0 to .08)	Single Lane - 10 mph	.08 / .13	HI - 667 06/30/2016	FS	FS	FS BC

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 Supression, applicable to BT7.3

Within 5 road miles

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

Within 10 road miles

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

Maximum Amount: $ $1,300

AT12 - Termination Date, applicable to BT8.2

October 19, 2018

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

First Period: May 15 to November 30 , 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

	Periodic Payment Determination Date	Amount
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

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.)

CT2.301#	PROTECTED AREAS (06/2009)
CT2.302#	BOUNDARY TREES (06/2009)
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)
CT5.221#	MATERIAL SOURCES (04/2004)
CT5.31#	ROAD MAINTENANCE REQUIREMENTS (07/2001)
CT5.32#	ROAD MAINTENANCE DEPOSIT SCHEDULE (08/2012)
CT5.33#	SNOW REMOVAL (06/2009)
CT6.2#	FACILITIES TO MANUFACTURE INCLUDED TIMBER (06/2009)
CT6.24#	SITE SPECIFIC SPECIAL PROTECTION MEASURES (04/2004)
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)
CT6.63#	TEMPORARY ROAD CLOSURE (06/2009)
CT6.7#	SLASH DISPOSAL MEASURES (06/2009)
CT7.2	FIRE PRECAUTIONS (06/2009)

CT8.212 MARKET-RELATED CONTRACT TERM ADDITION (11/2008)

CT2.301# - PROTECTED AREAS *(06/2009)*

Notwithstanding the designations for cutting under standard provisions BT2.31, BT2.33, BT2.34 and BT2.35, trees within the area to be protected in Payment Unit(s) **13, and Northwest of PU 6** shall be left uncut. Boundary trees along the perimeter of Protected Areas have been identified by **N/A**. BOUNDARY TREES ARE NOT TO BE CUT. Sale Area Map indicates, with symbol "PA," units within which Protected Areas are identified on the ground and are to be left uncut.

CT2.302# - BOUNDARY TREES *(06/2009)*

Boundary trees for all harvest units have been designated with **orange** paint marks above and below stump height. Boundary trees shall not be cut.

CT2.355# - INDIVIDUAL TREES, CUT TREE MARKING *(06/2009)*

Individual trees to be cut are Marked with indicated color above and below stump height in all or parts of the following Payment Unit(s). Areas of cut tree marking are shown on the Sale Area Map with the symbol "CTM."

PAYMENT UNIT(S)	PAINT COLOR

Cut Tree Marking Table
CT2.355# Individual Trees

Payment Unit	Paint Color
1	Blue
3	Blue
4	Blue
5	Blue
6	Blue
7	Blue
8	Blue
9	Blue
10	Blue
11	Blue
12	Blue
13	Blue
ROW	Green

CT4.211 - DOWNPAYMENT *(06/2007)*

The downpayment amount shown in AT15 may not be applied toward any other payment required under the provisions of this contract, except damages determined pursuant to BT9.4, transferred to other timber sales, or refunded until (a) stumpage value representing 25 percent of the total bid value of the timber sale is shown on Timber Sale Account to have been cut, removed, and paid for, or (b) the estimated value remaining to be cut and removed, as shown on Timber Sale Account, is equal to or less than the amount of the downpayment, or (c) if 36 CFR 223.49(e) is applicable, the estimated value remaining to be cut and removed, as shown on Timber Sale Account, is equal to or less than the amount of the downpay-ment. For lump sum timber sales, the downpayment may be applied to payment for release of the single payment unit.

If Forest Service makes a determination that this contract should not have been included under increased downpayment requirements (36 CFR 223.49(e)), the downpayment shall be revised and applied in accordance with 36 CFR 223.49(f).

CT4.212 - TEMPORARY REDUCTION OF DOWNPAYMENT *(08/2009)*

Notwithstanding BT4.211 or CT4.211, upon the Purchaser's written request Forest Service may temporarily reduce the downpayment when Purchaser's scheduled operations are delayed or interrupted for 30 or more consecutive days, or the contract term is extended for 30 or more consecutive days for any of the following reasons:

(1) Forest Service requests or orders Purchaser to delay or interrupt scheduled operations for reasons other than breach;

(2) Purchaser interrupts or delays scheduled operations to work on a sale designated by the Forest Service as in urgent need of harvesting; or

(3) An adjustment of the contract term authorized upon a determination of substantial overriding public interest, including a market-related contract term addition, or an urgent removal contract term extension under 36 CFR 223.53.

When Purchaser is not cutting or removing timber under contract during a qualifying period of delay, interruption, or extension listed above the downpayment may be reduced to $1000 or 2 percent of the downpayment amount stated in the contract, whichever is greater. The Purchaser must restore the downpayment to the full amount stated in the contract within 15 days from receipt of the bill for collection and written notice from the Contracting Officer that the basis for temporarily reducing the downpayment no longer exists. Purchaser shall not cut or remove timber on a contract where the downpayment has been temporarily reduced until the downpayment amount stated in the contract is fully restored.

CT4.4 - PAYMENTS NOT RECEIVED *(08/2012)*

(a) Payments are due and payable on the date of issue indicated on the bill for collection. When a payment for timber cut and other charges is not received at the location designated by Forest Service by the date specified in the bill for collection, Contracting Officer will suspend all or any part of Purchaser's Operations until payment or acceptable payment guarantee is received. Other charges include, but are not limited to:

(i) Slash disposal and road maintenance deposits;

(ii) Cooperative work at rates established by specific agreement under BT4.218;

(iii) Damages pursuant to BT9.4;

(iv) Road use fees;

(v) Restoration of downpayment pursuant to BT4.22;

(vi) Periodic payments pursuant to BT4.213;

(vii) Extension Deposits pursuant to BT4.217; and

(viii) Other mandatory deposits.

(b) Failure to pay amounts due by the date specified in the bill for collection shall be considered a breach under BT9.3. The 30-day notice period prescribed therein shall begin to run as of the end of business on the date specified for receipt of payments. If the performance or payment is guaranteed by surety bond, the surety will receive a copy of the written notification of breach. Demand will be made on the surety or other institution providing the guarantee or bond instrument for immediate payment 10 days after issuance of written notification of the breach.

(c) Pursuant to the Debt Collection Improvement Act of 1996, as amended, if payment is not received by Forest Service within 15 days after the date of issue indicated on the bill for collection:

(i) Simple interest shall be assessed at the Current Value of Funds Rate as established by the Secretary of the Treasury. Interest will begin to accrue as of the date of issue indicated on the initial bill for collection.

(ii) Debtors will be assessed administrative charges, in addition to the delinquent amount due. Administrative charges are those additional costs incurred by the Government in processing, handling, and collecting delinquent debts.

(iii) A penalty charge of six (6) percent per annum will be assessed on any portion of a debt delinquent more than 90 days. This penalty charge is in addition to interest and administrative charges under paragraphs (c)(i) and (c)(ii). The penalty charge shall accrue from the date of issue indicated on the bill for collection and shall be assessed on all outstanding amounts, including interest and administrative costs assessed under paragraphs (c)(i) and (c)(ii).

(iv) Payments will be credited on the date received by the Federal Depository or Collection Officer designated on the bill for collection.

(d) Forest Service remedies for Purchaser's failure to make payment for timber cut and other charges when due, except for accrual of interest, suspension of all or any part of Purchaser's Operations, and administrative offset, shall be stayed for so long as:

(i) A bona fide dispute exists as to Purchaser's obligation to make such payment and

(ii) Purchaser files and prosecutes a timely Claim.

CT5.12# - USE OF ROADS BY PURCHASER *(06/1999)*

Purchaser's use of existing roads identified on Sale Area Map by the following codes is prohibited or subject to restrictive limitations, unless agreed otherwise:

Code	Use Limitations
X	Hauling prohibited
R	Hauling restricted
U	Unsuitable for hauling prior to completion of agreed reconstruction
P	Use prohibited
A	Public use restriction
W	Regulation waiver

Roads coded A will be signed by the Forest Service to inform the public of use restrictions. Purchaser's use of roads coded R, A, or W shall be in accordance with the following restrictions:

See Restricted Road List Table.

Restricted Road List
CT5.12# - Use of Roads by Purchaser

Road Number	Road Name	Termini		Map Legend	Description of Restrictions
		From	To		
2218	Gooseneck Lake	2436	2688	R	No snowplowing allowed between December 1 and April 1.
2436	Molly Lake	2696	2218	R	No snowplowing allowed between December 1 and April 1.
2436B	Molly Lake Spur B	2436	POE	P	Use Prohibited
2696	Wolf Lake	2706	2436	R	No snowplowing allowed between December 1 and April 1.
2711	Spring Lake	2436	A50G	R	Hauling prohibited between May 1 and August 15.
A50G	2711 Spur G	2436	2711	R	Hauling prohibited between May 1 and August 15.
2711A	Spring Lake Spur A	Northwest corner of PU 6	POE	P	Use Prohibited

CT5.213# - DEPOSIT FOR RECONSTRUCTION ENGINEERING SERVICES *(04/2004)*

Purchaser shall make a cash deposit for engineering services (preconstruction and construction) provided by Forest Service for reconstruction of National Forest system roads necessary to accommodate Purchaser's use under this contract, pursuant to 16 USC 537.

The total amount to be deposited by Purchaser for reconstruction related engineering services to be completed by Forest Service personnel or by public works contract is **$3,983.00** . Purchaser shall make this deposit at the end of the first full Normal Operating Season or 12 months from contract award, whichever occurs first. In the event a different deposit schedule is agreed to, such deposit shall be due within 15 days after the date of issue indicated on the initial bill for collection, pursuant to BT4.4.

The amount of the required deposit will be shown as an associated charge on Purchaser's Timber Sale Account. Forest Service shall retain any unexpended deposit for reconstruction related engineering services.

The deposit for reconstruction related engineering services shall be commensurate with project need and Purchaser's road use. Forest Service shall complete reconstruction related engineering services on the following schedule unless a different completion schedule is agreed in writing:

Road or Facility No.	Termini From	Termini To	Engineering Services Completion Date
Road-2217C	0	.49	11/10/2017
Road-2436D	0	.05	11/10/2017
Road-2436E	0	.41	11/10/2017
Road-2698A	0	.08	11/10/2017
Road-2709	0	.87	11/10/2017
Road-2710	0	.63	11/10/2017
Road-2710B	0	.32	11/10/2017
Road-2710BA	0	.28	11/10/2017
Road-2711	0	.52	11/10/2017
Road-2711A	0	.18	11/10/2017
Road-2711AI	0	.22	11/10/2017

Reconstruction related engineering services may consist of some or all of the engineering work and ex-pense of: preparing, setting out, controlling, inspecting, and measuring the reconstruction of a National Forest system road.

CT5.221# - MATERIAL SOURCES *(04/2004)*

Sources of local materials are designated on Plans and Sale Area Map. Forest Service assumes responsibility for the quality and quantity of material in designated sources. Purchaser shall determine the equipment and work required to produce the specified product, including the selection of acceptable material that is reasonably available in the source that meets specifications. The designation of source includes the rights of Purchaser to use certain area(s) for plant site, stockpiles, and haul roads.

Should the designated source, due to causes beyond the control of Purchaser, contain insufficient acceptable material, Forest Service will provide another source with adjustment in accordance with BT5.253.

When Purchaser elects not to use designated sources, Purchaser shall furnish the specified product with no adjustment in unit rates. Quality testing shall be the responsibility of Purchaser. Test results shall be furnished to Forest Service.

When Purchaser elects not to use designated sources and the Schedule of Items lists pit development separately, cost allowance will be reduced under BT5.253 when Forest Service determines the work will not be required.

When materials are subject to a weight measurement, the specific gravity or weight/volume relationship used as a basis for determination of estimated quantities shall be:

Source I **N/A**, Source II **N/A**, and Source III **N/A**.

Purchaser may, when agreed in writing, use on the project such suitable stone, gravel, and sand, or other material found in the excavation, and will earn a cost allowance for the excavation of such materials at the corresponding contract unit price and for the pay items for which the excavated material is used. Purchaser shall replace, without additional cost allowance, sufficient suitable materials to complete the portion of the work, which was originally contemplated to be constructed with such material. Purchaser shall not excavate or remove any material, except that which is within the excavation limits, without written authorization from Forest Service.

When material is appraised from non-National Forest designated sources, owner charges for the material in terms of unit cost for royalties, purchase of raw materials, or finished products shall be as follows until **N/A**:

See Material Source Table.

Should quantity vary from that estimated, payment to owners shall be for units actually obtained. Purchaser shall make arrangements with owner(s) for measurement and payment for royalties, purchase of raw materials, or finished products, as shown above.

Materials produced or processed from National Forest lands in excess of the quantities required for performance of this contract are the property of Forest Service, unless prior written agreement has been obtained to use excess material on other National Forest sales. Forest Service is not obligated to reimburse Purchaser for the cost of their production.

Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored mate-rials shall be located to facilitate their prompt inspection. Sites on Forest Service administered land, ap-proved by Forest Service, may be used for storage purposes and for the placing of Purchaser's plant equipment. All storage sites provided by Forest Service shall be restored at Purchaser's expense. Pur-chaser shall be responsible for making arrangements for storage on other than Forest Service adminis-

tered lands.

When the construction of the portion of the project for which Temporary Roads used for hauling materials is completed, all such Temporary Roads shall be restored as nearly as practicable to their original ground profile, unless otherwise agreed in writing.

Material Source Table, CT5.221#

3" Breaker Run and MDOT 23A	A-Frame Pit T42N R17W NW ¼ of NW ¼. Sec 28

CT5.31# - ROAD MAINTENANCE REQUIREMENTS *(07/2001)*

Purchaser shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

See Contract Road Maintenance Requirements Summary Table.

CT5.31# Road maintenance Requirements

Sections 1, 2, and 4, of the Road Maintenance Requirements are attached at the end of this provision.

SECTION 3. ROAD MAINTENANCE REQUIREMENTS SUMMARY TABLE

Contract Road Maintenance Requirements Summary Table

	Termini			Applicable Pre-Haul Road Maintenance Specifications		
Road Number	**From**	**To**	**Miles**	**T-8110**	**T-8360**	**T-8620**
2217	A50B	2218	4.8	D		
2217	2436	CR 437	1.5	D		
2217B	2217	POE	0.7		P	
2217C	2217	POE	1.0		P	
2217CA	2217C	POE	0.2		P	
2217CB	2217C	POE	0.1		P	
2217D	2217	POE	0.1		P	
2218	CR 442	CR 440	6.9	D		
2436	2217	2218	3.5	D		
2436A	2436	2436	0.2		P	
2436B	2436	POE	0.1		P	
2436C	2436	MP 0.1	0.1		P	
2436D	2436	POE	0.1		P	
2436E	2436	POE	0.4		P	
2698	2436	POE	0.8		P	
2698A	2698	2436	0.4		P	
2703	2436	MP 0.1	0.1		P	
2709	2218	2710	0.9		P	
2710	2436	MP 1.2	1.2		P	
2710B	2710	POE	0.7		P	
2710BA	2710B	POE	0.2		P	
2711	2436	2436	1.7		P	
2711A	2711	GATE	0.3		P	
2711AI	2711A	POE	0.3		P	
2714	2217	POE	0.6		P	
A50A	2436	POE	0.1		P	
A50B	2217	POE	0.3		P	
A50C	2217	POE	0.1		P	
A50D	2217C	POE	0.1		P	
A50F	2711	POE	0.1		P	
A50G	2711	2436	0.5		P	
A50H	2436	POE	0.2		P	
A50J	2711	POE	0.3		P	
A50K	2698	POE	0.3		P	
A50N	2710BA	POE	0.4		P	
A50O	2217C	POE	0.3		P	
A59A	2436E	POE	0.1		P	
A59B	2436E	POE	0.1		P	
A59C	2436	A59B	0.1		P	

P = PurcA59Ahaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

SECTION 3. ROAD MAINTENANCE REQUIREMENTS SUMMARY TABLE

Contract Road Maintenance Requirements Summary Table

	Termini			Applicable During-Haul Road Maintenance Specifications		
Road Number	**From**	**To**	**Miles**	**T-8110**	**T-8360**	**T-8620**
2217	A50B	2218	4.8	D		
2217	2436	CR 437	1.5	D		
2217B	2217	POE	0.7		P	
2217C	2217	POE	1.0		P	
2217CA	2217C	POE	0.2		P	
2217CB	2217C	POE	0.1		P	
2217D	2217	POE	0.1		P	
2218	CR 442	CR 440	6.9	D		
2436	2217	2218	3.5	D		
2436A	2436	2436	0.2		P	
2436B	2436	POE	0.1		P	
2436C	2436	MP 0.1	0.1		P	
2436D	2436	POE	0.1		P	
2436E	2436	POE	0.4		P	
2698	2436	POE	0.8		P	
2698A	2698	2436	0.4		P	
2703	2436	MP 0.1	0.1		P	
2709	2218	2710	0.9		P	
2710	2436	MP 1.2	1.2		P	
2710B	2710	POE	0.7		P	
2710BA	2710B	POE	0.2		P	
2711	2436	2436	1.7		P	
2711A	2711	GATE	0.3		P	
2711AI	2711A	POE	0.3		P	
2714	2217	POE	0.6		P	
A50A	2436	POE	0.1		P	
A50B	2217	POE	0.3		P	
A50C	2217	POE	0.1		P	
A50D	2217C	POE	0.1		P	
A50F	2711	POE	0.1		P	
A50G	2711	2436	0.5		P	
A50H	2436	POE	0.2		P	
A50J	2711	POE	0.3		P	
A50K	2698	POE	0.3		P	
A50N	2710BA	POE	0.4		P	
A50O	2217C	POE	0.3		P	
A59A	2436E	POE	0.1		P	
A59B	2436E	POE	0.1		P	
A59C	2436	A59B	0.1		P	

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

SECTION 3. ROAD MAINTENANCE REQUIREMENTS SUMMARY TABLE

Contract Road Maintenance Requirements Summary Table

	Termini			Applicable Post-Haul Road Maintenance Specifications		
Road Number	**From**	**To**	**Miles**	**T-8110**	**T-8360**	**T-8620**
2217	A50B	2218	4.8	D		
2217	2436	CR 437	1.5	D		
2217B	2217	POE	0.7		P	
2217C	2217	POE	1.0		P	
2217CA	2217C	POE	0.2		P	
2217CB	2217C	POE	0.1		P	
2217D	2217	POE	0.1		P	
2218	CR 442	CR 440	6.9	D		
2436	2217	2218	3.5	D		
2436A	2436	2436	0.2		P	
2436B	2436	POE	0.1		P	
2436C	2436	MP 0.1	0.1		P	
2436D	2436	POE	0.1		P	
2436E	2436	POE	0.4		P	
2698	2436	POE	0.8		P	
2698A	2698	2436	0.4		P	
2703	2436	MP 0.1	0.1		P	
2709	2218	2710	0.9		P	
2710	2436	MP 1.2	1.2		P	
2710B	2710	POE	0.7		P	
2710BA	2710B	POE	0.2		P	
2711	2436	2436	1.7		P	
2711A	2711	GATE	0.3		P	
2711AI	2711A	POE	0.3		P	P
2714	2217	POE	0.6		P	
A50A	2436	POE	0.1		P	
A50B	2217	POE	0.3		P	
A50C	2217	POE	0.1		P	
A50D	2217C	POE	0.1		P	
A50F	2711	POE	0.1		P	
A50G	2711	2436	0.5		P	
A50H	2436	POE	0.2		P	
A50J	2711	POE	0.3		P	
A50K	2698	POE	0.3		P	
A50N	2710BA	POE	0.4		P	
A50O	2217C	POE	0.3		P	
A59A	2436E	POE	0.1		P	
A59B	2436E	POE	0.1		P	
A59C	2436	A59B	0.1		P	

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

SECTION 1. GENERAL

Purchaser's main Road Maintenance responsibility begins: (1) after Purchaser performs Prehaul Maintenance on a road listed in the Road Maintenance Requirements Schedule; or (2) for all other roads, when Purchaser begins to use the road. Occasional travel by Purchaser's light vehicles, prior to beginning of construction clearing or logging operations in the area accessed by the road, does not constitute beginning of use. Purchaser is not required to perform routine maintenance during periods of inactivity. During periods of inactivity, Forest Service will perform maintenance only as required to meet its needs.

The Purchaser shall maintain roads, commensurate with the Purchaser's use, in accordance with the Road Maintenance Requirements Summary and Road Maintenance Specifications. Performance of road maintenance work by the Purchaser may be required prior to, during, or after each period of use. The timing of work accomplishment shall be based on the Purchaser's operating schedule under Standard Provision BT6.31.

If the Purchaser elects to use different roads than those listed in the Road Maintenance Requirements Summary, the Contracting Officer (CO) or designee shall determine the Purchaser's commensurate share of road maintenance and/or revise road maintenance deposits.

Unless the CO or designee agrees in writing, all Prehaul Maintenance requirements shall be completed on any portion of road prior to hauling on that portion.

The Forest Service shall prepare a revised Road Maintenance Requirements Schedule to reflect changes in the original haul routes when needed.

Any work or materials that are determined to no longer be needed and are waived shall have the estimated cost charged to the Timber Sale Account as described in BT8.31.

SECTION 2. ROAD MAINTENANCE DEFINITIONS

Wherever the following terms are used in the Road Maintenance Specifications, the meaning shall be:

Base Course. Material placed on the Subgrade to distribute concentrated wheel loads.

Borrow. Select Material taken from designated borrow sites.

Crown, Inslope, and Outslope. The cross slope of the Traveled Way to aid in drainage and traffic maneuverability.

Culverts. A conduit or passageway under a road, trail, or other obstruction. A culvert differs from a bridge in that it is usually entirely below the elevation of the Traveled Way.

Drainage Dip. A dip in the Traveled Way which intercepts surface runoff and diverts the water off the Traveled Way. A Drainage Dip does not block the movement of traffic.

Drainage Structures. Manufactured structures which control the runoff of water from the Roadway including Inslope, overside drains, aprons, flumes, downdrains and downpipes.

During Haul Maintenance. Road maintenance work to be accomplished during the period of timber removal.

Geotextile. A group of construction fabrics with varying attributes designed for different purposes.

Lead-off Ditches. A ditch used to transmit water from a Culvert, Drainage Structure or Drainage Dip outlet to the natural drainage area.

Maintenance Activitiy. Items of work leading to the restoration and upkeep of a road and necessary to sustain the road's anticipated traffic.

Material. Any substance specified for use in the performance of the work.

Post Haul Maintenance. Road maintenance work to be accomplished after timber removal is completed.

Prehaul Maintenance. Road maintenance work to be accomplished prior to the roads use. Roads receiving prehaul maintenance shall be shown on the Sale Area Map.

Road Maintenance Cost. An estimate of the cost to perform road maintenance activities; as determined by the Forest Service. Estimates may include any or all of the work activities listed in Section 4, Road Maintenance Activity Specifications.

Roadbed. The portion of a road between the intersection of Subgrade and sideslopes, excluding that portion of the ditch below Subgrade.

Roadside. A general term denoting the area adjoining the outer edge of the Roadway.

Roadway. The portion of a road within the limits of excavation and embankment.

Sand Hole. A hole that develops in the running surface of the road which is quite soft and dangerous in nature. Usually found in very sandy soils.

Shoulder. That portion of Roadway contiguous with Traveled Way for accommodation of stopped vehicles, for emergency use, and lateral support of Base and Surface Course, if any.

Slide. A concentrated deposit of materials from above or on backslope extending onto the Traveled Way or Shoulders, whether caused by mass land movements or accumulated ravelling.

Slough. Material eroded from the backslope which partially or completely blocks the ditch, but does not encroach on the Traveled Way so as to block passage of traffic.

Slump. A localized portion of the Roadbed which has slipped or otherwise become lower than that of the adjacent Roadbed and constitutes a hazard to traffic.

Subgrade. Top surface of Roadbed upon which Base Course or Surface Course is constructed. For roads without Base Course or Surface Course, that portion of Roadbed prepared as the finished wearing surface.

Surface Course. The Material placed on the Base Course or Subgrade to enhance traction, distribute concentrated wheel loads and resist abrasion and the effects of climate. Surface Course may be referred to as surfacing.

Traveled Way. That portion of Roadway, excluding Shoulders, used for the movement of vehicles.

Turnouts. That portion of the Traveled Way constructed as additional width on single lane roads to allow for safe passing of vehicles.

SECTION 4. ROAD MAINTENANCE SPECIFICATIONS

INCLUDED SPECIFICATIONS

Specification No.	Specification Title
T-8110	Maintenance Blading/Grading
T-8360	Composite High Clearance Road Maintenance
T-8620	Miscellaneous Maintenance

T-8110 Maintenance Blading/Grading

DESCRIPTION

1.1 Maintenance Blading/Grading is keeping an aggregate surfaced Roadbed in a condition to facilitate traffic and provide proper drainage. It includes maintaining the Crown, Inslope or Outslope of the Traveled Way, Turnouts, and Shoulder; repairing Berms; blending approach road intersections; and cleaning Drainage Dips and Lead-off Ditches.

EQUIPMENT

2.1 The equipment required to shape, spread, and compact surfacing is listed below.

Road Number	Road Termini - From	Road Termini - To	Equipment Description
2217	N/A	N/A	Forest Service
2218	N/A	N/A	Forest Service
2436	N/A	N/A	Forest Service

REQUIREMENTS

3.1 Maintenance Blading/Grading shall be performed to facilitate traffic and proper drainage before, during, or after Purchaser's use as required by Section 3. Road Maintenance Requirements Schedule.

3.2 The surface blading shall preserve the existing cross-section. Surface irregularities shall be eliminated and the surface left in a smooth, free-draining state needed to facilitate traffic. Surface Course Material which has been displaced to the Shoulders or Turnouts shall be returned to the Traveled Way. The blading operation shall be conducted to conserve Surface Material and to provide for a thorough mixing of the Material being worked.

3.3 On aggregate surfaced roads Material generated from back slope Sloughing and ditch cleaning shall not be blended with Surface or Base Course Material unless agreed otherwise

3.4 Roadway back slopes shall not be undercut.

3.5 Drainage Dips and Lead-off Ditches shall be cleaned and maintained to retain the existing line, grade, and cross-section.

3.6 Intersecting roads shall be bladed for a distance of 50 feet to assure blending of the surfaces.

3.7 Rocks or other Material remaining on the Traveled Way after the final pass that are 4 inches in diameter or larger shall be removed. The unsuitable Material shall be disposed of by side casting unless agreed otherwise. Side casting into streams, lakes, or water courses will not be permitted.

3.8 Material resulting from this activity shall not remain on or in structures, such as Culverts, cattle guards, ditches, bridges, and Drainage Dips.

3.9 Material resulting from this activity, plus any accumulated debris, shall be removed from roadway structures, such as concrete low-water crossings or fords.

T-8360 Composite High Clearance Road Maintenance

DESCRIPTION

1.1 This work consists of making limited use roads passable for project use by Purchaser and providing drainage from the traveled way and roadbed.

MATERIALS

2.1 Required materials are listed in subsection 3.2.

REQUIREMENTS

3.1 Traveled Way

A. Purchaser may smooth or fill existing cross ditches and waterbars and, by agreement, modify existing road junction to enable vehicle access. Prior to beginning haul and resumption of haul after an extended stoppage:

1. Remove brush, fallen trees, rocks, and other debris from traveled way, including turnouts, turnarounds, and other locations that interfere with needed maintenance. No object extending over 4 inches above the road surface shall remain within the 12 feet usable traveled way.
2. Center the usable width of the roadbed or position away from the fill slope.
3. Cut and remove standing or down trees, logs, brush, and limbs from within the 12 feet usable traveled way. Remove encroaching limbs to a height of 14 feet above the traveled way surface. Scatter material not meeting utilization standards outside and below the roadbed on the fill side. Limb and remove designated timber which meets utilization standards or deck at agreed locations.
4. Place all removed material away from drainages and in locations previously agreed to in writing by the FSR.
5. During use, maintain drainage structures including dips, ditches and culverts in a usable condition and surface in a flat, Insloped or Outsloped, or Crowned usable condition.

3.2 Drainage Facilities. Clean and recondition drainage facilities in accordance with T-8310 Ditch Cleaning and T-8340 Drainage Structure Maintenance.

Road Number	Location/length	Remove/Install	Type of Work/Drainage Structure	Size	Quantity
N/A	N/A	N/A	N/A	N/A	N/A

3.3 Slough and Slides

1. Slough and Slides may be left in place provided surface drainage is adequately provided and at least 12 feet of width is available for vehicle passage.
2. Purchaser may reposition or ramp over Slides and Slough when the Traveled Way is less than 12 feet providing the material is capable of supporting vehicles. Limit Outslope to no more than six percent.
3. Reposition Slough or Slide materials, which are not capable of supporting a vehicle, on the roadbed to provide the 12 feet width. When directed by Forest Service, Slough or Slide material will be removed under Section T-8320 Slide, Slump, and Erosion Repair.

3.4 Slumps, Eroded areas, and Washouts

1. Drain the roadbed immediately upgrade of Slumps and longitudinal cracks to prevent water from entering Slump area.
2. Slumps and longitudinal cracks at the edge of the roadbed shall not be considered a part of the usable width. Usable width may be reduced to ten feet in the area of the Slump.
3. Unless Forest Service agrees to material being placed on Slumps, ramp the Slumps on both ends into undisturbed roadbed to provide at least ten feet usable width. Use removed materials to guide vehicles to the ramp location or to aid in draining the area.
4. Eroded areas/washouts may be filled with suitable material and compacted by operating equipment over the fill area.

3.5 Posthaul

A. At the end of hauling or prior to entering into seasonal shutdowns or a period of extended inactivity:

1. Shape the traveled way and disturbed roadbed to provide functional drainage.
2. Reinstall removed cross ditches and waterbars and provide any additional drainage structures necessary to offset changes caused through use and maintenance.
3. Leave roads useable for high clearance vehicles. Remove or reshape Purchaser modifications at road junctions to leave the entrance as it was before use, or as agreed at the time of improvement.
4. Close all roads which were closed prieviously, using prior existing methodology.

T-8620 Miscellaneous Maintenance

DESCRIPTION

1.1 Maintenance of miscellaneous structures includes cattle guards, gates (this includes all types of closure devices such as logs, rocks, dirt berms, dirt and slash berms, metal gates, etc), signs, and other similar structures that have been previously installed to insure safe and efficient operation of the road.

MATERIALS

2.1 Any Materials needed in the maintenance of miscellaneous structures shall be similar in type and quality to the Material in the structure being maintained.

REQUIREMENTS

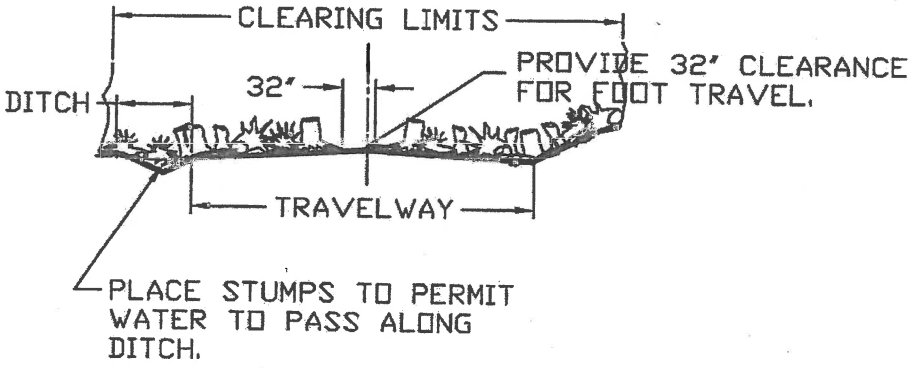
3.1 Cattle guards. Loose rails shall be welded or bolted back in place.
Excess Material carried into the cattle guard shall be removed when drainage is blocked or when it reaches six inches from the bottom of the cattle guard frame. Drainage into and from the cattle guard shall be kept open.

3.2 Gates (and other closure devices). Gates shall be kept in good repair and made to swing easily. Hinges or latches shall be repaired if not operating properly. Brush and debris shall be removed from within the swinging radius. Weathered berms or wood piles shall be reconstructed to a height which discourages use and blocks the road.

3.3 Signs. Any signs needing repair or replacement shall be installed per sign placement detail or MUTCD direction. All roads shall have legible sign numbers. ML 3-5 roads shall have horizontal numbering and ML 1-2 roads shall have vertical numbers. The material used shall be as directed by the Forest Service Representative. All new signs must meet retroreflectivity requirements.

Road Number	Road Name	Location	Remove/Install	Type of Item	Size	Quantity
2711AI	Spring Lake Spur AI	50 feet back from the intersection with 2711A	Install	Stump and Earthen Berm	See Diagram	1

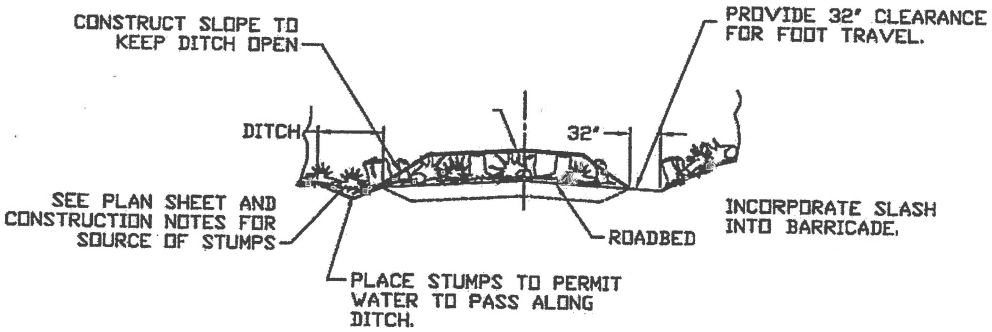
Typical Road Closure



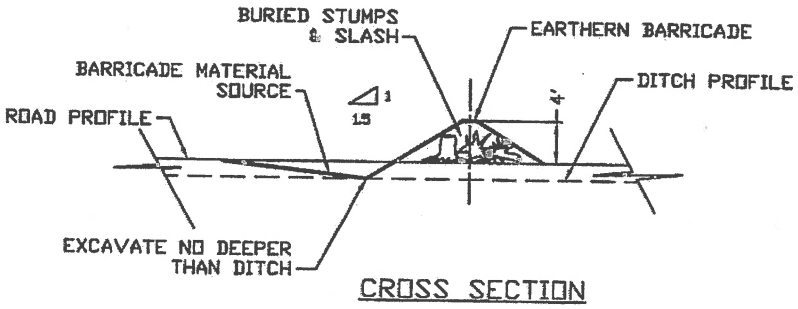
PRE-HAUL ROAD CLOSURE DEVICE

STUMP BARRIER

NO SCALE



PROFILE



CROSS SECTION

POST-HAUL ROAD CLOSURE DEVICE

TYPE 1 STUMP & EARTHEN BARRICADE

NO SCALE

CT5.32# - ROAD MAINTENANCE DEPOSIT SCHEDULE *(08/2012)*

Other provisions herein notwithstanding, when Forest Service requests payment in lieu of Purchaser's performance of road maintenance, Purchaser shall make Required Deposits (16 USC 537) for current and/or deferred road maintenance. Such deposits are based on the estimated volume and distance hauled and Purchaser's commensurate use of each road listed in the Road Maintenance Plan in CT5.31#.

Purchaser and Forest Service may agree in writing on adjustment of such rates. If Purchaser uses roads under jurisdiction of Forest Service other than those listed in the Road Maintenance Plan, Forest Service shall establish rates commensurate with Purchaser's use of such roads.

The Required Deposits for Forest Service work in lieu of Purchaser performance are **$2.28** per **CCF** for recurrent maintenance, and **$1.73** per **CCF** for deferred maintenance.

The following table lists who Purchaser will make deposits for road maintenance to, and the rate per unit of measure of the deposit. The Road Maintenance Agreement is available for inspection at the Forest Supervisor's office.

Deposit Made To	Rate	Unit of Measure
N/A		

CT5.33# - SNOW REMOVAL *(06/2009)*

Snow removal shall be done in a manner that will preserve and protect roads, provide for safe and efficient transport of timber, and prevent erosion damage to streams and adjacent lands. In performing snow removal, Purchaser shall adhere to the following performance standards, unless otherwise agreed:

1. Blade will be equipped with skid shoes to prevent loss of surfacing and damage to the road bed. On gravel and native surface roads, a minimum **1** -inch depth compacted snow mat will be maintained on the roadbed during blading.

2. Snow shall be removed from the entire road width, including turnouts.

3. Snow berms will be reduced at road intersections where plowed road segements join unplowed road segments. Reduce the piled snow in the roadway to create a smooth transition from plowed road to normal snow depth.

4. Openings will be created in snow berms as needed for proper drainage. Remove snow, ice, and debris from culverts and other drainage structures as needed to ensure efficient flow of water.

5. Tracked or cleated vehicles will not be used for snow removal without prior written approval of Forest Service Representative.

CT6.2# - FACILITIES TO MANUFACTURE INCLUDED TIMBER *(06/2009)*

Purchaser may construct or operate facilities, **including** portable chippers, to manufacture or process Included Timber when approved in writing by Forest Service and when facilities are constructed and used in a manner which will protect National Forest values. Written approval shall specify suitable locations and specify standards of design, construction, use, maintenance of the facilities, and proper disposal of waste and debris.

CT6.24# - SITE SPECIFIC SPECIAL PROTECTION MEASURES *(04/2004)*

Special protection measures needed to protect known areas identified on Sale Area Map or on the ground include:

Cultural Resource Protection Measures: **N/A**
Wildlife and Botanical Protection Measures: **N/A**
Cave Resource Protection Measures: **N/A**

No operations allowed on FR 2711A past the Northwest corner of Payment Unit (PU) 6. No operations allowed inside the Protected Area (PA) shown on the Sale Area Map near PU 13. No trees are to be cut or felled into the PA.

CT6.313# - CUTTING SCHEDULE *(06/2009)*

Unless changed by written agreement, only **4, plus the ROW unit** Payment Units may be released at one time, and the sequence of cutting Payment Units shall be: **N/A** .

Unless there is agreement in writing to postpone specific requirements, all contractual requirements on a Payment Unit shall be accepted by Forest Service prior to the release of an additional Payment Unit.

CT6.314# - OPERATING REQUIREMENTS *(06/2009)*

Within Sale Area, unless changed by written agreement, the following operating requirements apply:

Restricted operations/activities:
Within Payment Unit 5, no operations from 12/1 to 6/30.

Within Payment Unit 11, no harvesting between Memorial Day and Labor Day.

Within Payment Unit 12, equipment operations may only occur when soils are capable of supporting logging equipment without incurring detrimental soil compaction, puddling, or rutting. This is generally considered to be 6 inches of frozen soil and/or 12 inches of compacted snow, or when the water table is at least 15 inches below the surface of the ground.

Within Payment Units 1, 3, 4, 6, 8, 9, 10, and 11, no operations from 12/1 to 4/1.
Prohibited operations/activities:
N/A

CT6.412 - STUMP MARKS *(06/2009)*

Trees designated for cutting under BT2.35 have been marked with paint at breast height and below stump height. Trees shall be felled so as to leave paint on stump.

CT6.42# - SKIDDING AND YARDING REQUIREMENTS *(06/2009)*

As used in this provision, skidding equipment includes rubber-tire and track-mounted skidders, forwarders, fell bunchers, processors and any other mechanized equipment that is used off of landings and roads.

Within Payment Unit(s)
1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13 ,
whole tree harvesting is not permitted .

Within portions of Payment Unit(s)

N/A , as shown on Sale Area Map with symbol "SYR," **N/A** .

CT6.63# - TEMPORARY ROAD CLOSURE *(06/2009)*

Notwithstanding Standard Provision BT6.63, measures to effectively block temporary roads to normal vehicular traffic shall consist of the following:

At locations designated by the Forest Service, the Purchaser shall effectively block the temporary road in a manner agreed to in writing, at the time of approval.

CT6.7# - SLASH DISPOSAL MEASURES *(06/2009)*

Slash resulting from Purchaser's operations shall be removed from lakes, ponds, private land, right-of-way clearings for telephone lines, power lines, pipelines, and other authorized facilities, and landings to be seeded under Special Provision CT6.6#.

The tops of felled trees shall not be left hanging in standing trees. All trees cut or pushed for landing and other construction clearings shall be completely felled and not left leaning. Slash resulting from construction clearing shall be treated concurrent with operations.

Slash Disposal treatment zones are shown on the Sale Area Map with symbol "SDZ."

Other specific slash disposal requirements are as follows:

Within Payment Unit ROW, all slash resulting from the Purchaser's operations shall be reduced to 12 inches in height within 25 feet of Forest Roads 2217 and 2218.

Within Payment Unit 13, all slash resulting from the Purchaser's operations shall be removed within 25 feet of the cleared road edge adjacent to FR 2436, from the west boundary 350 feet to the east.

No windrowing of slash will be allowed.

CT7.2 - FIRE PRECAUTIONS *(06/2009)*

Unless other methods are agreed to in writing between the Purchaser and the Contracting Officer, the following specific precautionary measures are applicable during Purchaser's Operations in Fire Precautionary Period indicated in AT9.

1. Purchaser shall maintain Forest Service-approved spark arresting device on any piece of equipment operated by an internal combustion motor. In addition, each piece of motorized equipment shall be equipped with a serviceable round-pointed shovel and an operational fire extinguisher of at least five-pound rating suitable for the equipment being used. All chainsaw operators will have a serviceable round-pointed shovel and a one-pound multipurpose fire extinguisher readily available.

2. Purchaser shall require that smoking and the building of lunch or warming fires by Purchaser's employees, contractors, or employees of contractors be confined to designated safe places where flammable debris has been cleared away and where, at the option of the Purchaser, smoking or the building of lunch or warming fires may be permitted.

3. Adequate spark arresters shall be maintained on chimneys or stovepipes where wood or coal is being burned in an enclosed device.

4. Purchaser shall furnish serviceable firefighting tools. Location, numbers, and types of tools shall be specified in the Fire Prevention and Control Plan in accordance with BT7.1.

CT8.212 - MARKET-RELATED CONTRACT TERM ADDITION *(11/2008)*

The term of this contract may be adjusted when a drastic reduction in wood product prices has occurred in accordance with 36 CFR 223.52. The Producer Price Index used to determine when a drastic reduction in price has occurred is stated in AT17. Purchaser will be notified whenever the Chief determines that a drastic reduction in wood product prices has occurred. If the drastic reduction criteria specified in 36 CFR 223.52 are met for 2 consecutive calendar quarters, after contract award date, Contracting Officer will add 1 year to the contract term, upon Purchaser's written request. For each additional consecutive quarter such a drastic reduction occurs, Contracting Officer will, upon written request, add an additional 3 months to the term during Normal Operating Season, except that no single 3-month addition shall extend the term of the contract by more than one year. Contracting Officer must receive Purchaser's written request for a market-related contract term addition before the expiration of this contract.

No more than 3 years shall be added to a contract's term by market-related contract term addition unless the following conditions are met:

(i) The sale was awarded after December 31, 2006; and

(ii) A drastic reduction in wood product prices occurred in at least ten of twelve consecutive quarters during the contract term, but not including the quarter in which the contract was awarded.

For each qualifying quarter meeting the criteria in paragraphs (i) and (ii) of this provision, the Forest Service will, upon the Purchaser's written request, add an additional 3 months during the normal operating season to the contract, except no single 3-month addition shall extend the term of a contract by more than 1 year.

In no event shall a revised contract term exceed 10 years as a result of market-related contract term addition.

Additional contract time may not be granted for those portions of the contract that have a required completion date or for those portions of the contract where Contracting Officer determines that the timber is in need of urgent removal or that timber deterioration or resource damage may result from delay.

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE - REGION 9
HIAWATHA NATIONAL FOREST
DELTA COUNTY, MICHIGAN
High Carr Timber Sale HI-667
PROJECT AREA ROADS

THE INTENT OF CONTRACT: The intent of the contract is to provide for the complete construction/reconstruction of the project described in the contract. Unless otherwise provided, the Contractor shall furnish all labor, materials, equipment, transportation, and supplies, and shall perform all work required to complete the project, and to conform with the drawings and specifications, and in accordance with the provisions of the contract.

ROAD NAME	ROAD NUMBER	LENGTH	
Jack Pine Truck Trail Spur C	2217C	0.49	R
Molly Lake Spur D	2436D	0.05	C
Molly Lake Spur E	2436E	0.41	R
Trefive Spur A	2698A	0.08	R
High Bridge Lake	2709	0.87	R
Spring Lake West	2710	0.63	R
Spring Lake West Spur B	2710B	0.32	R
Spring Lake West Spur BA	2710BA	0.28	R
Spring Lake	2711	0.52	R
Spring Lake Spur A	2711A	0.18	R
Spring Lake Spur AI	2711AI	0.22	R

Reconstruction = R	**Total Miles =**	**4.00**
Construction = C	**Total Miles =**	**0.05**

INDEX OF SHEETS

1	Title
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3	Construction Notes
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	Tabulation of Quantities
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10	2436E
11	2698A
12	2709
13	2710
14	2710B
15	2710BA
16	2711
17	2711A
18	2711AI
19	Schedule of Items
20	Engineers Estimate
A1-A8	Specifications

Aggregate Sources
A-Frame Pit (3" Breaker Run and MDOT 23A)
T42N R17W
NW1/4 of NW1/4, Sec 28

Plans, Specifications, and Estimates have been reviewed.

W. P. Dutter
Date: May 2016

Forest Engineer

Greg Gardner
Date: 6/30/16

District Ranger

Date: 6/30/16

HIGH CARR CONSTRUCTION NOTES

LV203 – EXCAVATION

Construction Tolerances:

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

Cuts and fills will be offset staked by Forest Service.

LV 304 – AGGREGATE SURFACE COURSE

LV 304.02
Breaker Run will be from the A-Frame Pit, T42N R17W, NW1/4 of NW1/4, Sec 28
MDOT 23A will be from the A-Frame Pit, T42N R17W, NW1/4 of NW1/4, Sec 28

Specified gradation of aggregate shall comply with the following:

Gradation A. ¾" stone, complies with MDOT 23A specification

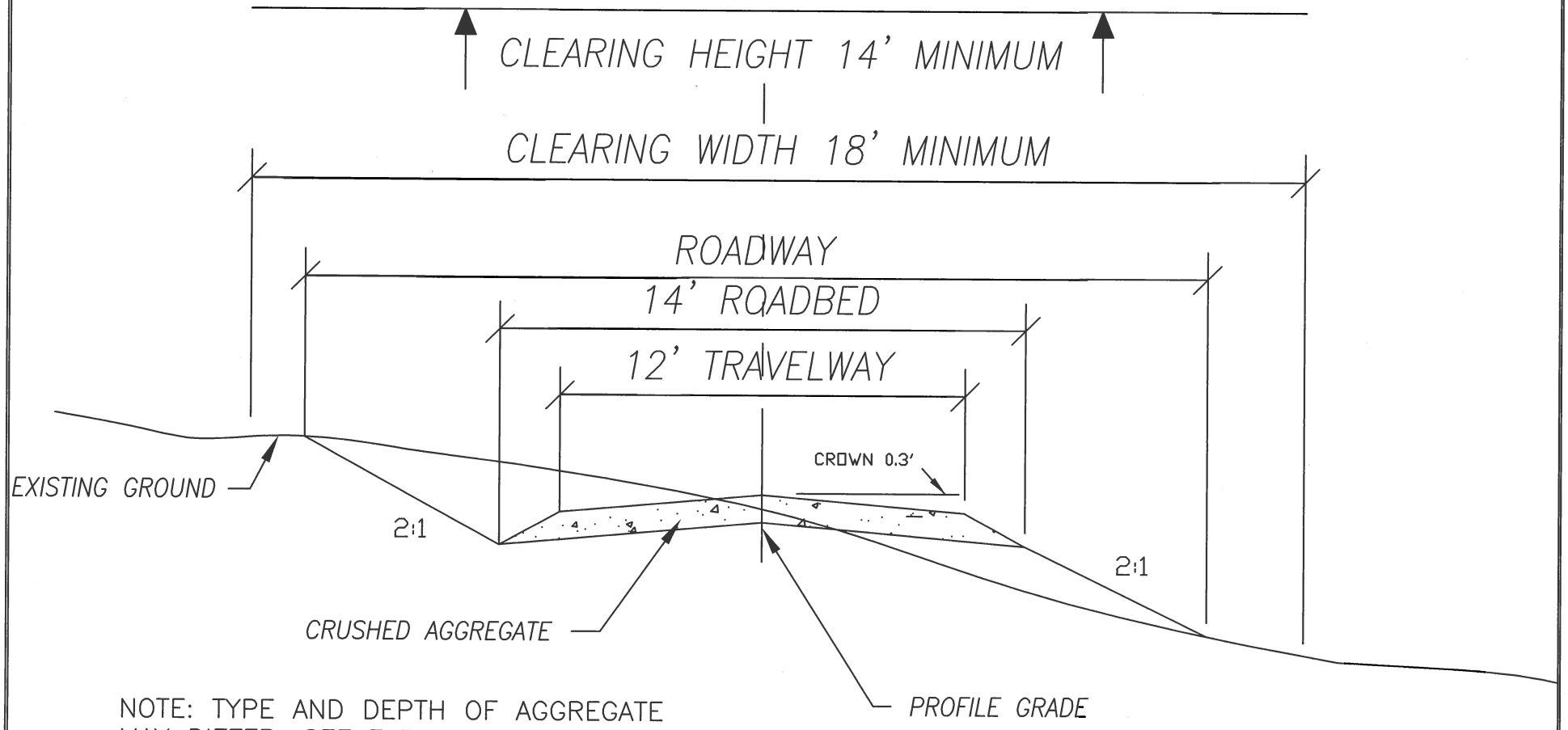
Gradation B. 3" Breaker Run

LV 304.03 – Thickness The compacted thickness of the aggregate shall not vary more than +/- 1" from the specified thickness.

Prior to aggregate placement, existing roadbed shall be reconditioned to applicable typical detail.

CONSTRUCTION STAKING – Construction stakes and clearing limit flagging will be set by the Forest Service. Construction stakes shall be maintained by the contractor throughout the life of the project. After final inspection the Contractor will be responsible for removing all flagging from the site and disposing of properly. Payment for flagging removal is included under Item LV 201(02).

AGGREGATE BASE - Prior to the placement of aggregate base, the proposed portion of the roadbed shall be approved by Forest Service Construction Inspector or Engineering Representative.

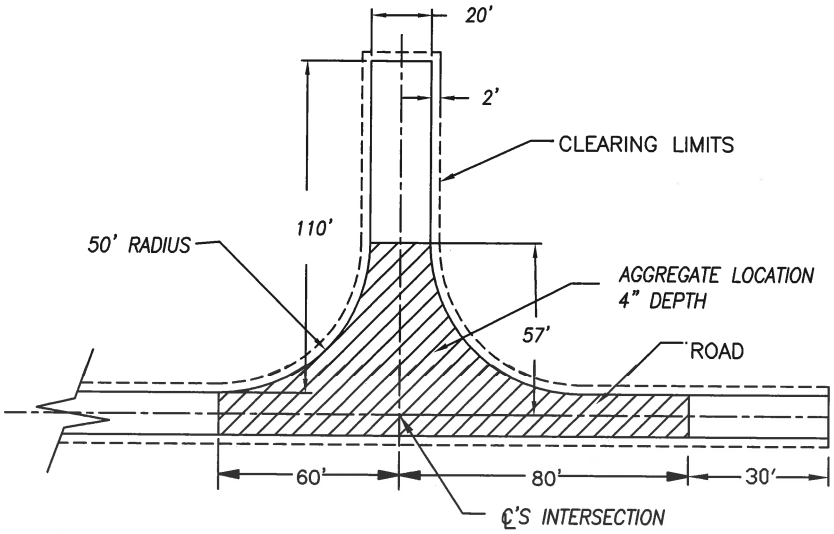


NOTE: TYPE AND DEPTH OF AGGREGATE MAY DIFFER, SEE TABULATION OF QUANTITIES.

TYPICAL SECTION A

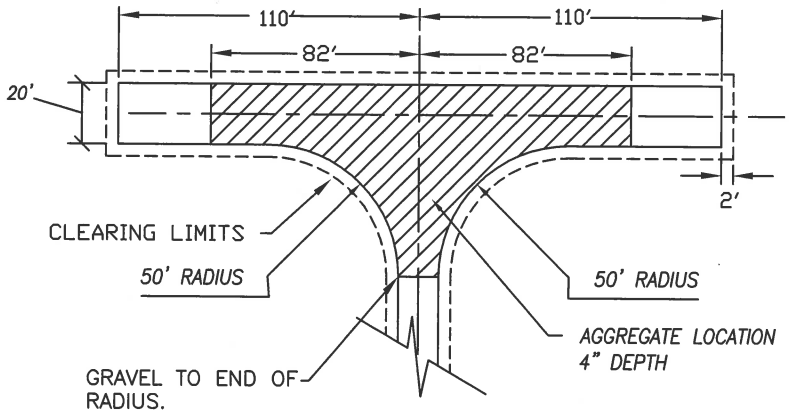
NO SCALE

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE R-9 EASTERN REGION	Forest: HIAWATHA NATIONAL FOREST RAPID RIVER/MANISTIQUE RANGER DISTRICT	Design: Date:	Sheet Title: Typical Section A High Carr Timber Sale	Sub Sheet:	Project No: HI-667 Sheet 4 OF 20



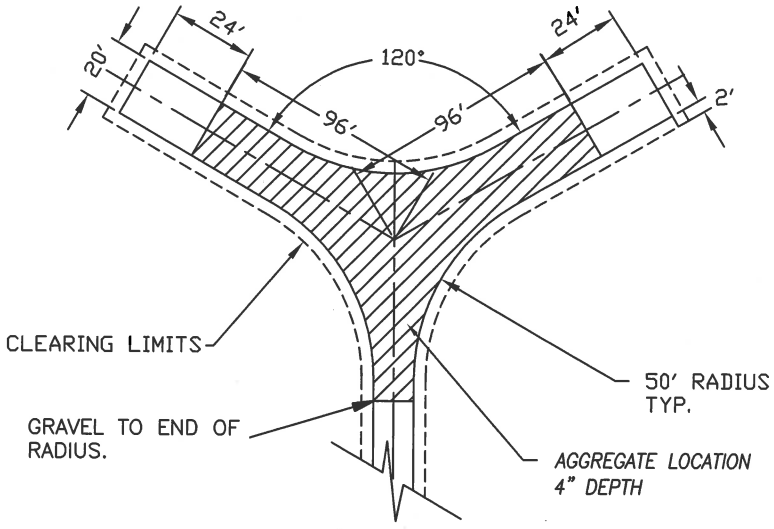
L–TURNAROUND DETAIL

NO SCALE



T– TURNAROUND DETAIL

NO SCALE



WYE– TURNAROUND DETAIL

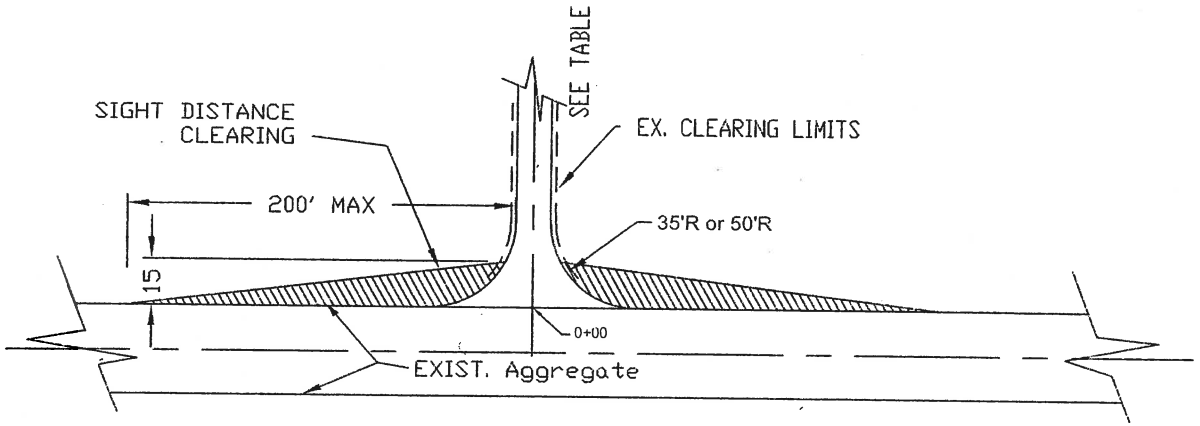
NO SCALE

Project No: HI–667
Sheet 5 OF 20
Sub Sheet:
Sheet Title: Typical Turnaround Details
High Carr Timber Sale
Design:
Date:
Forest: HIAWATHA NATIONAL FOREST
RAPID RIVER/MANISTIQUE RANGER DISTRICT
U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R–9
EASTERN REGION

Typical Sight Distance Clearing

SIGHT DIST. CLEARING TABLE

FR 2711
FR 2436E



TYPICAL INTERSECTION

NO SCALE

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-9
EASTERN REGION

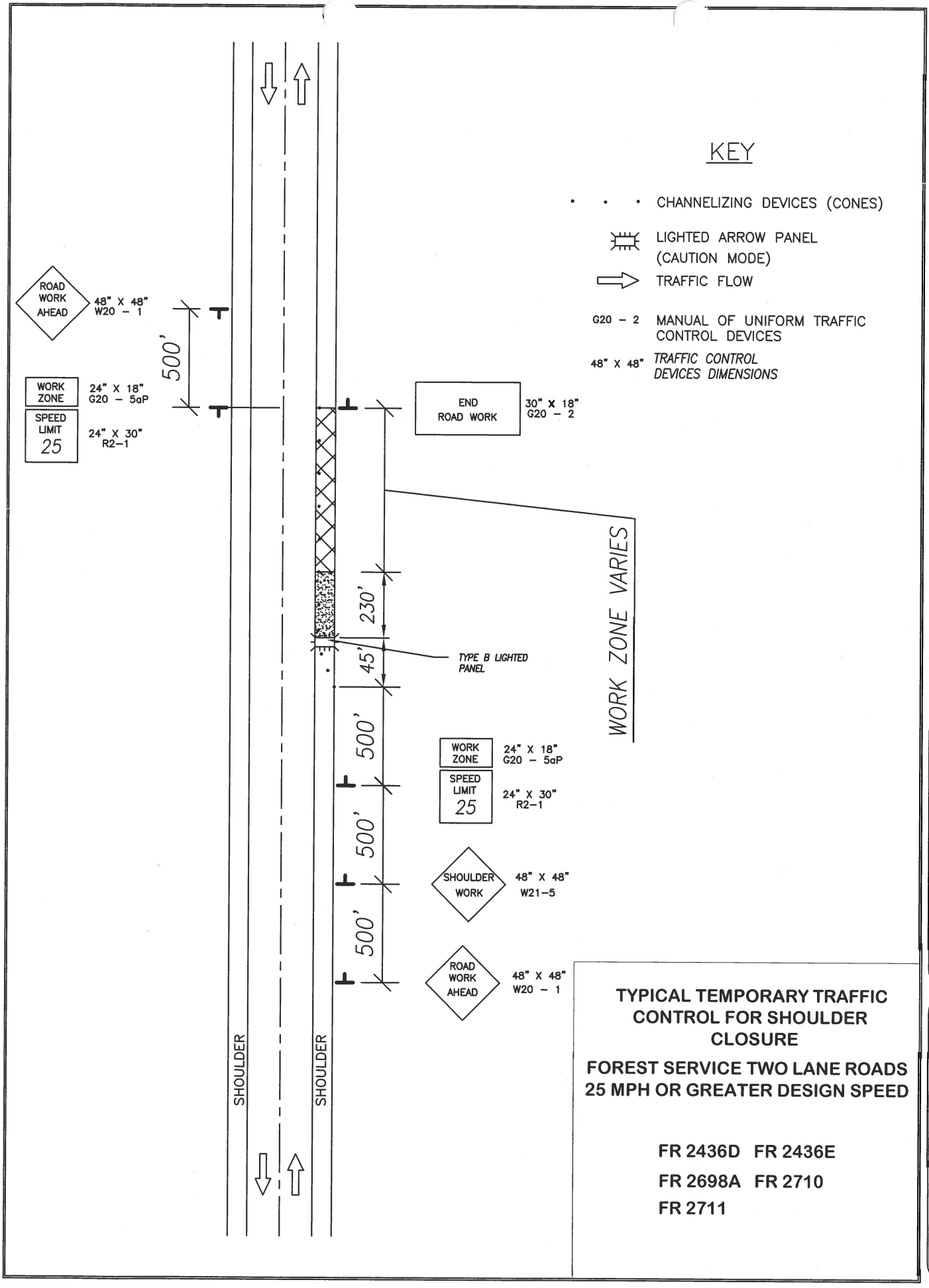
Forest: HIAWATHA NATIONAL FOREST
RAPID RIVER/MANISTIQUE RANGER DISTRICT

Design: _____
Date: _____

Sheet Title: Sight Distance Clearing
High Carr Timber Sale

Sub Sheet:

Project No: HI-667
Sheet 6 of 20



TYPICAL TEMPORARY TRAFFIC CONTROL FOR SHOULDER CLOSURE

FOREST SERVICE TWO LANE ROADS
25 MPH OR GREATER DESIGN SPEED

FR 2436D FR 2436E
FR 2698A FR 2710
FR 2711

Project No: HI–667
Sheet 7 OF 20
Sub Sheet:
Sheet Title: Temp. Traffic Control 25 mph or Greater
HIGH CARR TIMBER SALE
Design:
Date:
Forest: HIAWATHA NATIONAL FOREST
RAPID RIVER/MANISTIQUE RANGER DISTRICT
U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R–9
EASTERN REGION

FR 2217C

BEGIN STATION	END STATION	Description of Work	15101 **Mobilization (LS)**	20102A **C & G (LSUM)**	20102B **Brushing (LSUM)**	20302A **Roadway Excavation (STA)**	20302C **Drainage Excavation, Lead Off Ditch(LSUM)**	20302E **Road recondition, Roadbed (STA)**	30402B **Aggregate, Brkr. Run (CYD)**	**COMMENTS**
0+00		POB - South West edge of FR 2217	0.091							
POB	POE	Brushing and Limbing			1					
6+10	7+50	Road Recondition						1.4		
6+10	8+50	4" of Breaker Run							48	
24+80		Lead-Off Ditch Left					1			
24+90		Construct L-Turnaround Right, Excavation, Clear and Grub, 4" of Breaker Run		1		2.3			60	
	26+00	POE								
		Total Quantity	0.091	1	1	2.3	1	1.4	108	

Hiawatha National Forest
High Carr HI-667
Tabulation of Quantities

FR 2436D

BEGIN STATION	END STATION	Description of Work	15101 **Mobilization (LS)**	20102A **C & G (LSUM)**	20102B **Brushing (LSUM)**	20302A **Roadway Excavation (STA)**	30402A **Aggregate, 23A (CYD)**	30402B **Aggregate, Brkr. Run (CYD)**	63301 **Temp Traffic Control (LS)**	**COMMENTS**
0+00		POB - Northwest Edge of FR 2436	0.091						0.20	
POB	POE	Brushing and Limbing, Clear and Grub		1	1					Clear and Grub Intersection with FR 2436 and Turnaround
0+00	0+95	Excavate 2-50' Radii, Clear and Grub, 4" of MDOT 23A				1	36			
	2+45	Construct Wye Turnaround, Excavation, Clear and Grub, 4" of Breaker Run				2.5		72		
		Total Quantity	0.091	1	1	3.5	36	72	0.20	

Hiawatha National Forest
High Carr HI-667
Tabulation of Quantities

FR 2436E

BEGIN STATION	END STATION	Description of Work	15101 Mobilization (LS)	20102B Brushing (LSUM)	20302C Drainage Excavation, Lead Off Ditch(LSUM)	20302E Road recondition, Roadbed (STA)	30402B Aggregate, Brkr. Run (CYD)	63301 Temp Traffic Control (LS)	COMMENTS
0+00		POB - South edge of FR 2436	0.091					0.20	
POB	POE	Brushing and Limbing, Sight Distance Clearing Both Directions along FR 2436		1					
11+80		Lead-Off Ditch Left			1				
11+80	12+20	Road Recondition				0.4			
20+70		Existing Turnaround Left, Recondition, 4" of Breaker Run				1.1	60		
	21+80	POE							
		Total Quantity	0.091	1	1	1.5	60	0.20	

FR 2698A

BEGIN STATION	END STATION	Description of Work	15101 Mobilization (LS)	20102A C & G (LSUM)	20302A Roadway Excavation (STA)	20302E Road recondition, Roadbed (STA)	30402A Aggregate, 23A (CYD)	30402B Aggregate, Brkr. Run (CYD)	63301 Temp Traffic Control (LS)	COMMENTS
0+00		POB - North Edge of FR 2436	0.091						0.20	
0+00	0+70	Recondition 35' Radii and 4" of MDOT 23A				0.7	24			
3+00		Construct L-turnaround Right, Excavation, 4" of Breaker Run, Recondition, Clear and Grub		1	1.1	1.1		60		Reconditioning only required on existing roadway from 3+00 to 4+10
	4+10	POE								
		Total Quantity	0.091	1	1.1	1.8	24	60	0.20	

Hiawatha National Forest
High Carr HI-667
Tabulation of Quantities

FR 2709

BEGIN STATION	END STATION	Description of Work	15101 **Mobilization (LS)**	20102B **Brushing (LSUM)**	20302A **Roadway Excavation (STA)**	20302E **Road recondition, Roadbed (STA)**	30402B **Aggregate, Brkr. Run (CYD)**	**COMMENTS**
0+00		POB - West Edge of FR 2218	0.091					
POB	POE	Brushing		1				
33+50	39+50	Road Recondition, 4" of Breaker Run				6	120	
44+00	45+20	4" Breaker Run					24	
	45+90	Existing "T" Turnaround w/intersection of FR 2710, 4" of Breaker Run, Road Recondition, Excavation			1	1.2	72	Recondition intersection into "T" Turnaround
		Total Quantity	0.091	1	1	7.2	216	

Hiawatha National Forest
High Carr HI-667
Tabulation of Quantities

FR 2710

BEGIN STATION	END STATION	Description of Work	15101 Mobilization (LS)	30402A Aggregate, 23A (CYD)	63301 Temp Traffic Control (LS)	COMMENTS
0+00		POB - West Edge of FR 2436	0.091		0.20	
0+00	0+70	4" of MDOT 23A		24		
33+10		POE				
		Total Quantity	0.091	24	0.20	

Hiawatha National Forest
High Carr HI-667
Tabulation of Quantities

FR 2710B

BEGIN STATION	END STATION	Description of Work	15101 Mobilization (LS)	20102B Brushing (LSUM)	COMMENTS
0+00		POB - East Edge of FR 2710	0.091		
POB	POE	Brushing		1	
	16+90	POE			
		Total Quantity	0.091	1	

Hiawatha National Forest
High Carr HI-667
Tabulation of Quantities

FR 2710BA

BEGIN STATION	END STATION	Description of Work	15101 Mobilization (LS)	20102B Brushing (LSUM)	COMMENTS
0+00		POB - East Edge of FR 2710BA	0.091		
POB	POE	Brushing		1	
13+90		Existing "L" Turnaround Right, Minor Brushing			Brushing is including in total brushing for road.
	15+00	POE			
		Total Quantity	0.091	1	

Hiawatha National Forest
High Carr HI-667
Tabulation of Quantities

FR 2711

BEGIN STATION	END STATION	Description of Work	15101 Mobilization (LS)	20102B Brushing (LSUM)	20302E Road recondition, Roadbed (STA)	30402B Aggregate, Brkr. Run (CYD)	63301 Temp Traffic Control (LS)	COMMENTS
0+00		POB - Northeast edge of FR 2436	0.091				0.20	
POB	POE	Brushing, Include Sight Distance Clearing Both Directions at Intersection of FR 2436		1				
6+50	8+30	Road Recondition, 4" of Breaker Run			1.8	36		
10+20	12+60	4" of Breaker Run				48		
13+90	16+30	4" of Breaker Run				48		
27+70		POE - Intersection with FR 2711A						
		Total Quantity	0.091	1	1.8	132	0.20	

Hiawatha National Forest
High Carr HI-667
Tabulation of Quantities

FR 2711A

BEGIN STATION	END STATION	Description of Work	15101 Mobilization (LS)	20102B Brushing (LSUM)	COMMENTS
0+00		POB is North edge of of 2711	0.091		
POB	POE	Brushing		1	
8+55		Intersection With FR 2711AI			May be used as a turnaround.
	9+65	POE			
		Total Quantity	0.091	1	

Hiawatha National Forest
High Carr HI-667
Tabulation of Quantities

FR 2711AI

BEGIN STATION	END STATION	Description of Work	15101 Mobilization (LS)	20102A C & G (LSUM)	20102B Brushing (LSUM)	20302A Roadway Excavation (STA)	30402B Aggregate, Brkr. Run (CYD)	COMMENTS
0+00		POB - Northwest edge of FR 2711A	0.091					
POB	POE	Brushing			1			
0+00	0+50	Clear and Grub 2 - 50' Radii, Excavation, 4" of Breaker Run		1		1	36	Construct Intersection into L-Turnaround with FR 2711A
10+70		Construct L-Turnaround Right, Excavation, 4" of Breaker Run				2.1	60	
	11+80	POE						
		Total Quantity	0.091	1	1	3.1	96	

Hiawatha National Forest
High Carr HI-667
Schedule of Items

		Estimated Quantity by Road											
Item No.	**Description**	**Unit**	**2217C**	**2436D**	**2436E**	**2698A**	**2709**	**2710**	**2710B**	**2710BA**	**2711**	**2711A**	**2711AI**	**Total Est. Quantity**
15101	Mobilization	Lump sum	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	1.0
20102A	Clearing and grubbing	Lump sum	1	1	0	1	0	0	0	0	0	0	1	4
20102B	Brushing	Lump sum	1	1	1	0	1	0	1	1	1	1	1	9
20302A	Roadway excavation, compaction method (d), finishing method A	Station	2.30	3.50	0.00	1.10	1.00	0.00	0.00	0.00	0.00	0.00	3.10	11.00
20302C	Drainage excavation, Lead Off Ditch	Cubic Yard	1	0	1	0	0	0	0	0	0	0	0	2
20302E	Roadway recondition, roadbed	Station	1.40	0.00	1.50	1.80	7.20	0.00	0.00	0.00	1.80	0.00	0.00	13.70
30402A	Aggregate base (Haul & Place), grading MDOT 23A, compaction method (A)	Cubic Yard *	0	36	0	24	0	24	0	0	0	0	0	84
30402A	Aggregate base (Processing), grading MDOT 23A	Cubic Yard	0	36	0	24	0	24	0	0	0	0	0	84
30402B	Aggregate base (Haul & Place), Breaker Run, compaction method (A)	Cubic Yard *	108	72	60	60	216	0	0	0	132	0	96	744
30402B	Aggregate base (Processing), Breaker Run	Cubic Yard	108	72	60	60	216	0	0	0	132	0	96	744
63301	Temporary Traffic Control Device	Lump Sum	0.00	0.20	0.20	0.20	0.00	0.20	0.00	0.00	0.20	0.00	0.00	1.00

* Quantity for items is shown as loose volume hauled. This was estimated by first calculating the compacted in place volume and then adding 25%.

All items are paid at Contract Quantities (CQ).

Item No.	Description	Unit Price	2217C	2436D	2436E	2698A	2709	2710	2710B	2710BA	2711	2711A	2711AI	TOTAL COST
15101	Mobilization **(LSUM)**	$902.00	$82.00	$82.00	$82.00	$82.00	$82.00	$82.00	$82.00	$82.00	$82.00	$82.00	$82.00	$902.00
20102A	Clearing and grubbing **(LSUM)**	LSUM	$185.00	$390.00	$0.00	$152.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$106.00	$833.00
20102B	Brushing **(LSUM)**	LSUM	$247.00	$100.00	$150.00	$0.00	$100.00	$0.00	$100.00	$100.00	$238.00	$100.00	$100.00	$1,235.00
20302A	Roadway excavation, compaction method (A) **(STA)**	$65.00	$149.50	$227.50	$0.00	$71.50	$65.00	$0.00	$0.00	$0.00	$0.00	$0.00	$201.50	$715.00
20302C	Drainage excavation, Lead Off Ditch	$34.00	$34.00	$0.00	$34.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$68.00
20302E	Roadway recondition, roadbed **(STA)**	$49.00	$68.60	$0.00	$73.50	$88.20	$352.80	$0.00	$0.00	$0.00	$88.20	$0.00	$0.00	$671.30
30402A	Aggregate base (Haul & Place), grading MDOT 23A, compaction method (A) **(CYD)**	$7.40	$0.00	$266.40	$0.00	$177.60	$0.00	$177.60	$0.00	$0.00	$0.00	$0.00	$0.00	$621.60
30402A	Aggregate base (Processing), grading MDOT 23A **(CYD)**	$4.80	$0.00	$172.80	$0.00	$115.20	$0.00	$115.20	$0.00	$0.00	$0.00	$0.00	$0.00	$403.20
30402B	Aggregate base (Haul & Place), Breaker Run, compaction method (A) **(CYD)**	$7.40	$799.20	$532.80	$444.00	$444.00	$1,598.40	$0.00	$0.00	$0.00	$976.80	$0.00	$710.40	$5,505.60
30402B	Aggregate base (Processing), Breaker Run **(CYD)**	$4.80	$518.40	$345.60	$288.00	$288.00	$1,036.80	$0.00	$0.00	$0.00	$633.60	$0.00	$460.80	$3,571.20
63301	Temporary Traffic Control Device **(LSUM)**	$750.00	$0.00	$150.00	$150.00	$150.00	$0.00	$150.00	$0.00	$0.00	$150.00	$0.00	$0.00	$750.00
	Road Totals		$2,083.70	$2,267.10	$1,221.50	$1,568.50	$3,235.00	$524.80	$182.00	$182.00	$2,168.60	$182.00	$1,660.70	$15,275.90
CT 5.213#	Engineering Costs (LSUM)													$3,983.00
													Total	**$19,258.90**

HIAWATHA NATIONAL FOREST

SPECIFICATIONS FOR TIMBER SALE ROADWORK

High Carr Timber Sale

INDEX OF INCLUDED SPECIFICATIONS:

Section 101 - Control of Work

Section 201-Clearing and Grubbing

Section 203 - Excavation

Section 304 - Aggregate

Section 625 – Seeding and Mulching

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 two feet of the ground concurrent with the clearing and grubbing operations unless other requirements are STATED IN THE CONSTRUCTION NOTES. Grubbed and scattered stumps shall be turned upright with roots down.

Dispose of merchantable timber designated for removal according to the (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 or as spelled out in the TABULATION OF QUANTITIES.

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. Embankment material shall be placed in horizontal layers not exceeding 12 inches in compacted thickness. 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 Road Recondition, Roadbed is called for in the TABULATION OF QUANTITIES, the work will consist of blading, reshaping, and recompacting existing material to the specified typical cross section

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 STATED IN THE CONSTRUCTION NOTES.

MATERIALS

304.02 Materials shall be obtained from sources STATED IN THE CONSTRUCTION NOTES 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 reshaped 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.

SECTION 625 – SEEDING & MULCHING

DESCRIPTION

625.01 This work shall consist of furnishing and placing required seed, fertilizer, and mulch.

MATERIALS

625.02 Materials shall meet the following requirements:

(a) Seed shall meet the requirements of Federal Specification JJJ-S-181 and shall have been tested within the past six months.
*Seed shall be free of noxious weeds, mold or other materials injurious to plant growth.

(b) Mulch shall be grain straw in an air dry condition or wood cellulose fiber. Mulch shall be free of noxious weeds, mold or other materials injurious to plant growth.
(c) Fertilizer shall be a standard commercial grade furnished in sealed containers with name, weight and contents clearly marked.

(d) Limestone shall be a ground calcic or dolomitic limestone containing not less than 85 percent of total (calcium and magnesium) carbonates.

CONSTRUCTION

625.03 Areas to be seeded shall be completed as specified. Areas which are damaged by erosion or other causes shall be restored.

Seeding shall be performed between May 1 and November 1. The seeding shall not be accomplished during windy weather or when the ground is excessively wet or frozen. Work shall be performed during each specified seeding season on all completed and previously untreated surfaces.

The methods, rates of application, and types of seed, fertilizer, limestone, and mulch shall be as SHOWN ON THE DRAWINGS. Materials shall be applied uniformly to the areas being treated.

MEASUREMENT

625.04 When Seeding & Mulching is shown in the Schedule of Items the work will be calculated on an area basis with the area computed along the slope lines. 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.