2450
NORTHERN REGION - R-1
FOREST = 10 - Flathead * DISTRICT 08 - Tally Lake *
Expiration Date = April 1, 2017
V16.2

TIMBER SALE AND TRANSACTION EVIDENCE APPRAISAL REPORT

Select Contract Type

Red Shiner
(SALE NAME)

TIM # 16803

TYPE 6 - Contract Form 2400-6 UOM TON

Prepared by (Signature) (Date)

Prepared by (Signature) (Date)

Reviewed by (Signature) (Date)

Recommended by (Signature) (Date)

All attached documents and specifications for this timber sale have been completed in accordance with regulations at 36 CFR, Part 223, Subpart B, and the applicable Forest Service Manual and Handbook requirements and standards related to timber sales. Furthermore, the environmental documentation and NEPA decision have been reviewed; no significant new information or changed circumstances relating to the environmental impacts of this proposed action exist that require a correction, supplement, or revision to the documentation or decision; and implementation (advertisement) should continue.

Certification Reports for Gates 3 and 4 from TIM are attached to this timber sale report.

Timber Sale Final Package Approved By: (Date)

TIMBER SALE INFORMATION

TIM, Gate 3, Create Timber Sale (Prep101)

Sale Area Description:

Primary County Name (FIPS Code): 029 - Flathead *

Sale Area Legal Description (short T & R): T29N,R25W,PMM

Sale Area Legal Description (long):

Portions of Sections 9,10,15,16,17,20,21,28,29,31,32,T29N,R25W, Portions of Section 6,T28N,R25W, Portions of Section 1,T28N,R24W, Flathead County, State of Montana,PMM

The format that the description is entered here and inputted to TIM is exactly the way it will print out in the Contract, Ad and prospectus at Gate 4.

Compartment (s): 30

Environmental Documentation:

Project Association: List NEPA Project(s) that approved the timber sale.

NEPA Document Name	Percentage of Sale Volume (CCF)
Griffin Creek II Resource Management Project DN & FON	100

The above NEPA Document(s) shall be included in the Prospectus, General Narrative, TIM Gate 4 - Prospectus (ADVR115). Include the following statement in the Prospectus: The environmental document(s) that approved this sale:_____

Briefly describe additions or changes made to project design during timber sale preparation.

Logging System Changes approvals in Units 94,96,and 101-from Skyline to Tractor(winter required).

TSPIRS INFORMATION, SALE OBJECTIVES

TIM, Gate 3, Create Timber Sale (Prep101)

Purpose **(TIM -PREP101)**		Activity		% of Sale Volume - **CCF (TIM - PREP101)**
TC - Timber Commodity Purpose	*	01 - Timber Purpose	*	100
	*		*	
	*		*	

SALE PURPOSE AND ACTIVITY CODING INSTRUCTIONS

www.fs.fed.us/im/directives/fsh/2409.18/2409.18_20.doc

SALVAGE SALE FUND INFORMATION

TIM, Gate 4, Salvage Sale Fund Plan (ADVR112)

Reference to FSH 2409.19 - 71.12 - for assitance with SSF collections

https://fs.usda.gov/FSI_Directives/wo_2409.19_70.doc

SSF Silviculture Treatment Type (Pick one)

Salvage Component with Sanitation, Stand Improvement, or Regeneration (Use for all other sales - stand(s) that include a salvage component) *

SSF Volume (CCF): 5779 **60%** **% of total volume**

FUNDING SOURCE

Funding Source (button on tool bar) - From STAT102

Sale Preparation Funding Source ---SSSS **(Salvage Fund) %** 0%

(Contact SO for percentage to enter into Funding Source form. Funding Source percentage must be equal to or less than % of salvage in the SSF Plan.)

CRUISE INFORMATION

CRUISE: # 1

Date of Cruise 7/1/2016

Cruisers: Adam Kane, Cory Anderson, Keigh Smiley, Ethan Michael, Brady Hylton, John Harmon

Method: PNT, FIX

SE%: 12

CHECK CRUISE:

Date of Check: Jul-16

Cruisers: C. Anderson

Results: Office Check-Pass

Method of determining ROW volume:

Acreage determined by length and clearing width. ROW acres assigned to similar stand/Strata.

Basis for Percent Defect:

Cull & Breakage-Professional Judgement, Seen Defect assessed by cruisers

TOTAL CF VOLUME BY UNIT --- NCS REPORT (UC5)

Unit #	Acres	Sawtimber	CCF	Non-Saw	CCF
ROW units need to be entered last					
13	32	59317	593	33723	337
13A	4	7415	74	4215	42
15	11	20390	204	11592	116
15A	21	38927	389	22131	221
23	6	6081	61	7837	78
24	18	18242	182	23511	235
24A	6	6081	61	7837	78
25A	25	25336	253	32654	327
25B	5	5067	51	6531	65
26	28	28377	284	36573	366
27	10	10134	101	13062	131
49	39	72294	723	41099	411
49A	9	16683	167	9485	95
50	6	6081	61	7837	78
50A	3	3040	30	3918	39
94	25	46342	463	26346	263
94A	2	3707	37	2108	21
96	18	33366	334	18969	190
97	5	9268	93	5269	53
97A	2	3707	37	2108	21
98	11	20390	204	11592	116
98A	3	5561	56	3162	32
98B	11	20390	204	11592	116
98C	7	12976	130	7377	74
98D	6	11122	111	6323	63
100	8	14829	148	8431	84
101	17	31512	315	17915	179
104	13	24098	241	13700	137
ROW	1	1854	19	1054	11

NET MBF/CCF Ratio from NCS Report VSM3 (CS1)

Sawtimber (Product 01): 0.49331

Non-Saw (Product 08): .55576

If no Primary Non-Saw Enter Secondary Volumes Below

Net bdft

Net cf

Non-Saw (Product 08)

562587 Sawtimber — 397951 Non-Saw

TOTAL SALE UNIT VOLUME (CCF)

Sawtimber		Non-Saw	
5626	5626	3979	3979
(Sheet 1)	(Sheet 1&2)	(Sheet 1)	(Sheet 1&2)

TOTAL SALE CF VOLUME BY SPECIES --- NCS REPORT (R101)

Species	Saw	Rounded	%Defect	Av. DBH	Logs/Unit	NCS REPORT (UC5) Non-Saw	Rounded
AF	154483	1545	8	9.6	19.4	120644	1206
C		0					0
DF	51123	511	13	13.2	13	10209	102
GF		0					0
H		0					0
L		0					0
LP	179945	1800	13	7.6	28.4	219491	2195
PP		0					0
S	177036	1770	7	10.4	16.3	47607	476
WP		0					0

562587 — 397951

TOTAL VOLUME 5626 CCF — 3979 CCF

ROUNDED VOLUME IS THE DIFERENCE BETWEEN UNIT VOLUME AND SPECIES VOLUME (AFTER ROUNDING TO CCF) ADDED TO THE SPECIES WITH THE LARGEST VOLUME

		CUTTING UNIT DESCRIPTION (TIM GATE 3 - PREP 104)							VOLUME - DIRECT ENTRY (TIM GATE 3 - PREP 103)					
									Unit Volume CCF		Yield Component		Unit TONS	
Unit #	P.U.#	Cruise Unit Acres	Appraisal Unit Acres	ROW Acres	Logging Method	Harvest Method	Land Suit Class	MA	Sawtimber	Non-Saw	CL	NL	Saw	Non Saw
ROW units need to be entered last, Harvest Method=270, MA=ROW														
13		32	32		420	122	500	15	593	337	930		1643	930
13A		4	4		420	122	500	15	74	42	116		205	116
15		11	11		420	121	500	15	204	116	320		565	320
15A		21	21		430	121	500	15	389	221	610		1078	610
23		6	6		420	220	500	15	61	78	139		169	215
24		18	18		430	220	500	15	182	235	417		504	649
24A		6	6		430	220	500	15	61	78	139		169	215
25A		25	25		420	220	500	15	253	327	580		701	902
25B		5	5		420	117	500	15	51	65	116		141	179
26		28	28		420	220	500	15	284	366	650		787	1010
27		10	10		420	220	500	15	101	131	232		280	362
49		39	39		430	122	500	15	723	411	1134		2003	1134
49A		9	9		420	122	500	15	167	95	262		463	262
50		6	6		420	117	500	15	61	78	139		169	215
50A		3	3		420	117	500	15	30	39	69		83	108
94		25	25		430	122	500	15	463	263	726		1283	726
94A		2	2		420	122	500	15	37	21	58		103	58
96		18	18		420	122	500	15	334	190	524		925	524
97		5	5		420	117	500	15	93	53	146		258	146
97A		2	2		420	117	500	15	37	21	58		103	58
98		11	11		420	220	500	15	204	116	320		565	320
98A		3	3		420	220	500	15	56	32	88		155	88
98B		11	11		420	220	500	15	204	116	320		565	320
98C		7	7		420	220	500	15	130	74	204		360	204
98D		6	6		420	220	500	15	111	63	174		308	174
100		8	8		420	121	500	15	148	84	232		410	232
101		17	17		430	121	500	15	315	179	494		873	494
104		13	13		420	117	500	15	241	137	378		668	378
ROW		1	1	1	420	270	857	ROW	19	11	#N/A	#N/A	53	30
Totals Sheet 1		**352**	**352**	**1**					**5626**	**3979**	**#N/A**	**#N/A**	**15587**	**10981**

Total Sale Area: **4230** Sale Area Acres
Total Cutting Area: **352** Acres
(Sheet 1)

Total Sawtimber (Sheet 1) **5626** CCF
Total Saw + Non-Saw (Sheet 1) **9605** CCF

APPRAISAL CCF TO TON WORKSHEET

☐ Check Box — Check Box to use Fire Salvage Weights

SAWTIMBER - CCF

Species	Defect %	Net Volume	Total Additional	Total Net	Tons Per CCF	Total Tons
017-GF	0	0	0	0	3.1275	0
019-AF	8	1545	0	1545	2.4735	3822
073-L	0	0	0	0	3.1935	0
093-S	7	1770	0	1770	2.7040	4786
108-LP	13	1800	0	1800	3.0210	5438
119-WP	0	0	0	0	3.2230	0
122-PP	0	0	0	0	3.2230	0
204-DF	13	511	0	511	3.0160	1541
242-C	0	0	0	0	2.3540	0
263-H	0	0	0	0	3.2425	0
TOTAL =	10	5626	0	5626	2.7705	15587

Net MBF/CCF Ratio For Sawtimber From NCS Report
VSM3 (CS1): .49331

TIM Conversion	Prep 105 Factors
MBF	CCF
.17800	.36090

NON-SAWTIMBER - CCF

☐ Check Box — Check Box to use Fire Salvage Weights

Species		Net Volume	Additional Non-Saw	Total Net	Tons Per CCF	Total Tons
GF		0		0	2.9470	0
AF		1206		1206	2.3340	2815
L		0		0	3.0785	0
S		476		476	2.6330	1253
LP	0% %Dead	2195		2195	3.0200	6629
WP		0		0	3.1500	0
PP		0		0	3.1510	0
DF		102		102	2.7885	284
C		0		0	2.3540	0
H		0		0	3.2425	0
TOTAL =		3979	0	3979	2.7597	10981

Net MBF/CCF Ratio For Non-Sawtimber From NCS Report
VSM3 (CS1): .55576

TIM Conversion	Prep 105 Factors
MBF	CCF
.20140	.36240

	Gross	Net	Tons
TOTALS =	0	9605	26568

APPRAISAL SUMMARY

CONTRACT VOLUME (CCF)	9605
APPRAISAL VOLUME (CCF)	5626
CONTRACT VOLUME (TONS)	26568 (Note: Total Tons to be used for Rd. Maintenance Appr.)
WTD TONS/CCF	2.7700

LOGGING METHOD SUMMARY
Sawlog Volume

	Tractor	Ground Lead	Skyline	Aerial Heli	Forwarder	Horse	TOTAL	Swing Not Included in Totals	
Acres	226	0	126	0	0	0	352	0	
Volume	3493	0	2133	0	0	0	5626	0	CCF
AEYD	665	0	795	0	0	0			
Max EYD	909	0	969	0	0	0			
% Acres	64%	0%	36%	0%	0%	0%			
% Vol	62%	0%	38%	0%	0%	0%			

HARVEST METHOD SUMMARY

	ClearCut	Seed Tree	Shelter Wood	Final Seed Tree	Intermed	Final Shelter wood	Selection	Other Changes	TOTAL
Acres	34	129	57	0	131	0	0	1	352
Volume	513	2391	1056	0	1647	0	0	19	5626
% Acres	10%	37%	16%	0%	37%	0%	0%	0%	
% Vol	9%	42%	19%	0%	29%	0%	0%	0%	

LOGGING METHOD SUMMARY
NON-Sawlog Volume

	Tractor	Ground Lead	Skyline	Aerial Heli	Forwarder	Horse	TOTAL	Swing Not Included in Totals	
Acres	226	0	126	0	0	0	352	0	
Volume	2592	0	1387	0	0	0	3979	0	CCF
AEYD	665	0	795	0	0	0			
% Acres	64%	0%	36%	0%	0%	0%			
% Vol	65%	0%	35%	0%	0%	0%			

HARVEST METHOD SUMMARY

	ClearCut	Seed Tree	Shelter Wood	Final Seed Tree	Intermed	Final Shelter wood	Selection	Other Changes	TOTAL
Acres	34	129	57	0	131	0	0	1	352
Volume	393	1359	600	0	1616	0	0	11	3979
% Acres	10%	37%	16%	0%	37%	0%	0%	0%	
% Vol	10%	34%	15%	0%	41%	0%	0%	0%	

ASSIGN CONTRACT SPECIES
TIM Gate 3 - Prep 105

Contract Species Association

Contract species shall be grouped to reflect differences in utilization and/or how species shall be grouped in A(T) 2 of the Timber Sale Contract.

All Non-sawtimber shall be grouped as Combined Softwood (CS) under Contract Species

UTILIZATION STANDARDS
TIM Gate 4 - Contract Prep Information ADVR114

Fill out Minimum Specifications below to reflect how sawtimber & non-sawtimber were cruised.

Contract Species	(Major Species Group)	Full Name for Contract	Conversion Factors (only applicable to weight scale sales) (Enter from Species Volume Summary) MBF	CCF	Minimum Specifications DBH	Number of Pieces	Length	DIB	Merch. Factor
LP	Live and Dead	Lodgepole Pine	0.178	0.3609	6	1	8.0	5.6	10.67
& Oth	Live and Dead	Spruce and Other	0.178	0.3609	7	1	8.0	5.6	10.67
					0	0	0.0	0	0
☑	CS	Live and Dead	0.2014	0.3624	4	1	16.0	2.5	N/A
☐	C14	Cedar Products - Net Merch. Factor - Refer to C(T)6.804#			0	0	0.0	0	0
☐	CS	Timber Subject to Agreement - Refer to C(T)2.11#			4	1	8.0	2.5	N/A
☐	Live and Dead	Timber Subject to Agreement - Refer to C(T)2.11#	0.178	0.3609	7	1	8.0	5.6	10.67

AVERAGE EXTERNAL YARDING DISTANCE

Unit #	Volume CCF	AEYD Feet
13	593	800
13A	74	200
15	204	700
15A	389	850
23	61	400
24	182	400
24A	61	300
25A	253	750
25B	51	900
26	284	800
27	101	750
49	723	950
49A	167	500
50	61	500
50A	30	250
94	463	900
94A	37	250
96	334	550
97	93	400
97A	37	300
98	204	800
98A	56	400
98B	204	850
98C	130	350
98D	111	550
100	148	600
101	315	450
104	241	700
ROW	19	300

To Calculate % Slope

Top Elevation

Bottom Elevation

EYD Distance (ft)

% Slope = #DIV/0!

AVERAGE EXTERNAL YARDING DISTANCE

% Slope	Unit #	Volume CCF	AEYD Feet
25%			
25%			
25%			
20%			
15%			
30%			
30%			
15%			
15%			
10%			
15%			
20%			
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10%			
15%			
10%			
10%			
20%			
15%			
15%			
10%			
10%			
10%			
10%			
20%			

To Calculate % Slope

Top Elevation

Bottom Elevation

EYD Distance (ft)

% Slope = #DIV/0!

% Slope

Tractor

420	3493	VOL
	665	AVE EYD

Forwarder

492	0	VOL
	0	AVE EYD

0	VOL	
0	AVE EYD	

Ground Lead

450	0	VOL
	0	AVE EYD

Skyline

430	2133	VOL
	795	AVE EYD

Horse

410	0	VOL
	0	AVE EYD

HAUL

Appraisal Point: Evergreen **State** Montana

Total Sawtimber Tributary Volume: 5,626

(The appraisal point is most advantageous when total transportation cost, including road work, are less than other appraisal points. Appraise to a mill where timber product can be processed. SBA Set Aside Sales are appraised the same way; not to the nearest SBA mill)

(Haul Appraisal for Sawtimber only. Non-Sawtimber included in Non-Sawtimber Adjustments)

WTD HAUL MILES

WTD Haul Note

Segment	Units															Segment Miles		Sawtimber Trib Vol	WTD MILES
																Paved	Unpaved		
Hwy 2		All														23.8		5626	23.80
sant Valley Road		All														5.8		5626	5.80
538		All														9.4		5626	9.40
9644		49	49A	50	50A												2.75	981	0.48
538		All	but units on 9644													1		5626	1.00
2814		23	24	24A	25A	25B	26										1	892	0.16
538		27														0.8		101	0.01
911	94	94A	96	97	98	98A	98B	98C	98D	97A	100	101	13	13A			3	2799	1.49
911	15	15A															3	593	0.32
911		96	97	98	98A	98B	98C	98D	97A	100	101	13	13A	15	15A		1.2	2892	0.62
911		100	101	13	13A	15	15A										1.7	1723	0.52
911		104															0.5	241	0.02
683 and temp		15	15A														0.5	593	0.05
164 and temp		27															0.5	101	0.01

WTD Total Paved Miles (Sheet 1) **40.0**

WTD Total Unpaved Miles (Sheet 1) **3.7**

WTD Total Miles (Sheet 1) **43.7**

NON-SAWTIMBER ADJUSTMENTS

Appraisal Point: Split-Olney and Bonner

DATA INPUT

Delivered Log Price ($/Ton, Nonsawtimber material)	$39.05		
Total Nonsawtimber Volume (CCF) (Primary + Secondary)	3,979		*Use LP NonSaw page for High Value Non-Saw Products of Any Species, not just Lodgepole Pine*
Total Nonsawtimber Volume (Tons) (Primary + Secondary)	10,981		
Tons / CCF for nonsawtimber material	2.76		
Total Appraised Sawlog Volume (CCF)	5,626		**Haul Adjustment**
Total One Way Weighted Haul Miles	112	0	No Adjustment Needed if using LP Non-Saw

Logging System	All Ground Based	All Cable	Forwarder
Nonsawtimber Primary Product (CCF) (NCS R103)	1,523	849	
Net MBF / Acre Harvested for nonsawtimber primary product	3.7	3.7	0.0
Average DBH Harvested for nonsawtimber primary product (NCS R103)	5.6	5.6	0.0
Average Yarding Distance (Feet)	665	795	0
Nonsawtimber Primary Product (Tons)	4,203	2,343	0
Net Tons / Acre Harvested for nonsawtimber primary product	10.3	10.3	0.0

Nonsawtimber Adjustment	
Final Nonsawtimber Value ($/CCF) A positive number is a negative value.	-$2.24
Final Nonsawtimber Adjustment to enter into TE appraisal program ($/CCF)	$2.24

LP Non-Saw

Report LD1 (CS4) - Nonsaw

Live LP Nonsaw Pri. and Sec. LD1 (CS4)	Dead LP Primary Nonsaw LD1 (CS4)	Total LP Live and Dead Pri/Sec Nonsaw	Total LP Primary Nonsaw (R101)	Total LP Secondary Nonsaw	Total Live LP Primary Nonsaw
160056	59434	219490	110692	108798	51258
1601	594	2195	1107	1088	513
% of Tot	% of Tot				
0.7292	0.2708				
Tons/CCF	Tons/CCF				
3.0200	2.0390				
Average Tons/CCF					
2.7544					

Enter on Species Apppraisal (Tons)

LPD Prim	594
LPL Prim	513
LP Sec	1088
Total	2195

% LPD Prim. Post Material		0 Tons
LPL Prim. and LP Secondary	→	4409 Tons
Total LP Post and Pole Material	→	4409 Tons
	Entered from Appraisal CCF to Ton Worksheet	
Total Nonsaw Tons	→	10981 Tons
Other Nonsaw Material	→	6572 Tons

LP Non-Saw page can be used for any Species of High Value Non-Saw Products, not just Lodgepole Pine.

Nonsaw Value and Weighted Haul

Appraisal Point (P&P Material)			Olney, MT		
Species	Weighted Haul Miles				
LPL, LPD	Gravel	Paved	Total Haul	Qty (Tons)	Value/Ton
	3.7	47	50.7	4409	$60.00

Appraisal Point			Bonner, MT		
Species	Weighted Haul Miles				
All Other	Gravel	Paved	Total Haul	Qty (Tons)	Value/Ton
	3.7	150	153.7	6572	$25.00

Total Nonsaw (Tons)	10981		
Weighted Haul Miles	112.3	Weighted Value/Ton	$39.05

RIGHTS - OF - WAY

(Include Cost share Agreements)

Road Name	Road #	Length	Type of Agreement	Agreement with (Names)

ROAD MAINTENANCE

(From Road Maintenance Appraisal Summary, sheets are attached)

Contract Rates

	$/CCF	$/TON	
Total Performance Recurrent Maintenance (Part A)			
C(T)5.31 - Recurrent Maintenance	$0.92	$0.33	
C(T)5.312 - Reconditioning	$0.00	$0.00	
Total Performance (Part A)	**$0.92**	**$0.33**	(A)
Total Required Deposits (Recurrent and Deferred) (Part B)	$1.85	$0.67	Recurrent
(Enter appropriate rate in TIM - Gate 4 - Road Maint. Plan - ADVR105	$2.34	$0.84	Deferred
C(T)5.32# - Total Required Deposits (Part B)	**$4.19**	**$1.51**	(B)
C(T)5.314 - Total Dust Abatement (Part C)	$3.33	$1.20	(C)
TOTAL MAINTENANCE COST (Parts A-B-C)	**$8.44**	**$3.05**	

Appraisal Rates

(Entries for 2400 - 17)

Total Required Deposits	$ $7.15	CCF
Total Road Maintenance Costs (Performance + Deposits)	$ $14.41	CCF

Refer to Road Maintenance Appraisal for Road Reconditioning cost per road segment.
(Attach worksheets with road costs)

Specified Road Construction

LOGGING METHOD SUMMARY

	Tractor	Ground Lead	Skyline	Aerial Heli	Forwarder	TOTAL
Acres	226	0	126	0	0	352
Volume	3493	0	2133	0	0	5626
EYD	665	0	795	0	0	

☑ Check Box if accomplishing road construction or re-construction work under timber sale.

Appraisal information required for the 2400-17 report is to be summarized from the Identify Facilities

SPECIFIED ROAD COST

	Miles	Total Cost
Construction	0.3	$7,244
Reconstruction	12.7	$105,744

Total Cost $112,988 / 5626 CCF = $20.08 $ / CCF

BASE RATE ADJUSTMENT FOR REGENERATION COST

Total Required Regeneration Costs - FACTS Line 21 Remarks **$95,116.00**
OR from BDKV Worksheet as Draft Activity Value *(Subtotal*
for Required Reforestation with National Program Support Cost Included)

Note: Base Rates may be raised for regeneration on only the Sawtimber component for green sales or % of Live Sawtimber on Salvage sales. In previously partial cut stands that are to be regenerated, protected regeneration cost shall be proportionate to remaining volume in the sale.

Sale Volume (ALL Vol./Products) _____CCF X $0.25 (NFF)	9,605	$0.25	$2,401.25	
Select Either (A) or (B)				
(A) Green Sale - Required Regen Cost $ 100% Sawtimber Vol. =	$95,116.00	100%	$95,116.00 (d)	
(B) Salvage Sales enter % Live Sawtimber Volume;		=		
For Partial Cut Stands Use Previously Cut Worksheet.	**Total:**		$97,517.25 (a)	

% Adjustment For Partial Cut Stands 0%

Species Groups	Volume (CCF)	Minimum Rates 1/ Per CCF	Minimum Rates 1/ Total	Base Rates 2/ Per CCF	Base Rates 2/ Total
WP, PP, C	0	$5.00	$0.00	0	$0.00
All other species (list)	5626	$3.00	$16,878.00	$16.63	$93,538.25
Nonsawtimber (all species)	3979	$1.00	$3,979.00	$1.00	$3,979.00
TOTALS	9605	XXXXX	$20,857.00 (b)	XXXXX	$97,517.25
Sawtimber (Appraisal) Volume	5626				
			Weighted Average Minimum Rate		$3.00

(a) - (b) = (c) amount need in addition to base rates (plus $.25/CCF) **$76,660.25** (c)

Note: If minimum rate total (b) => (a) no adjustment needed → **Adjust Base Rate**

Adjustment To Minimum Rate:
$_____ (c) / (Total Sawtimber Volume) CCF = $___/CCF

$76,660.25	5,626	$13.63

1/ **Minimum rates: FSH 2409.22, Chp 80, Sect. 81**
(Base rates for Sawtimber can be weighted if appraising and advertising as a single species group (DF,O))

2/ **Minimum rate + adjustment = Base Rate**

FACTS INFORMATION
(Enter Sale Information - SAIP100)

Amount of Stumpage Availiable for Protected KV at Base Rates = **$95,116.00**
(The only stumpage availiable for KV at advertised rates is when KV is protected by base rates)

BRUSH DISPOSAL

From FACTS - Detailed Listing of BD and Purchaser Slash Treatment Activities
OR from BDKV Worksheet as Draft Activity Values
Appraisal Rates for 2400-17 (Applied to Sawtimber only)

Forest Service Rate (Fund Code BDBD)	$20,386.00	Total $	(a) $3.62	CCF
Purchaser Rate (Fund Code PPPP)	$66,975.00	Total$	(b) $11.90	CCF
		TOTAL: (a) + (b) =	$15.52	CCF

Contract Rates (Applied to All Products)

Forest Service Rate Per CCF (Fund Code BDBD)	$2.12	CCF
(Rate Per CCF Converted to Tons for Weight Scale Contracts)	$0.77	TON

Lump Sum BD Deposits for Weight Scaled Sales

Cutting Unit Number	Required Deposits
13	$1,980.05
13A	$246.97
15	$681.31
15A	$1,298.74
23	$295.94
24	$887.83
24A	$295.94
25A	$1,234.87
25B	$246.97
26	$1,383.91
27	$493.95
49	$2,414.38
49A	$557.82
50	$295.94
50A	$146.91
94	$1,545.72
94A	$123.49
96	$1,115.64
97	$310.85
97A	$123.49
98	$681.31
98A	$187.36
98B	$681.31
98C	$434.33
98D	$370.46
100	$493.95
101	$1,051.77
104	$804.79

Total Cost $20,386.00
(Sheet 1)

EROSION CONTROL

Seed mix is to be included in C(T)6.601# - Erosion Control Seeding and Special Project Specifications (SPS) 625.05 in Road Package.
Make sure that the seed mix and fertilizer are the same in both Contract and Road Package.

Site specific areas, such as gravel pits and very dry sites may call for more and/or different species in the mix. Document below the rational for deviation from the standard seed mix.

Species of Seed	Pounds per Acre
Blue Wildrye	10
Mountain Brome	14
	0
	0
	0
TOTAL	24

Type of Fertilizer	Pounds per Acre
25-10-10 or 27-12-12 or 34-16-10	0
TOTAL	0

Crossdrains

Installation of crossdrains on temporary roads, skid trails and firelines are included in their respective cost allowance.

Scarification - Landings and Skid Trails ONLY

_____ acres @ _____ per acre = $0.00

Seed and Fertilizer

If Temp Road seeding is not included in Temp Road worksheet then enter here

Temporary Roads _____ feet = 0.0 acres
Firelines _____ feet = 0.0 acres

Skid Trails

Number of acres to be skidded using ground based systems times the percentage of area requiring seed and fertilizer. 226 acres X 2 % = 4.5 acres

Number of acres to be yarded using cable systems times the percentage of area requiring seed and fertilizer. 126 acres X 2 % = 2.5 acres

Landings

Number of landings 15 X 0.3 acres per landing = 4.5 acres

TOTAL 11.5 acres

	Tractor	Ground Lead	Skyline	Aerial Heli	Forwarde	Horse
Acres	226	0	126	0	0	0

Seed mix, fert., labor costs:

	Lbs / Acre		$ / Lb		$ per Acre
Blue Wildrye	10	X	$10.00	=	$100.00
Mountain Brome	14	X	$10.00	=	$140.00
	0	X	$10.00	=	$0.00
	0	X	$10.00	=	$0.00
	0	X		=	$0.00
0	0	X		=	$0.00
0	0	X		=	$0.00
0	0	X		=	$0.00
Fertilizer	0	X		=	$0.00
*Labor per Acre				=	$19.98

$ per acre $259.98

Total cost for

SEEDING	11.5	acres X	$240.00	$/acre =		$2,760.00
FERTILIZER	11.5	acres X	$0.00	$/acre =		$0.00
LABOR	11.5	acres X	$19.98	$/acre =		$229.77
SCARIFICATION						$0.00
				TOTAL		$2,989.77

$2,989.77 COST / 5626 CCF = $0.53 PER CCF

* Engineers estimate Page 103 of the Cost Guide Item Labor Rates.
http://fsweb.r1.fs.fed.us/e/Transportation/Development/2013_Cost_Estimating_Guide_for_Road_Construction.pdf

Document Rational for Costs or Changes to Standard Seed Mix.

OTHER CONTRACTUAL REQUIREMENTS (A)

***Other* - Include Contractual Obligations Requiring Performance Bond Coverage**
(Road closure, Barriers, Trail Restoration, etc.)

ITEM	#	X	COST		=	TOT COST
Earth Berm- Road 10164	1	X	$300.00	per berm	=	$300.00
Temp Gate-Road 10164	1	X	$300.00	per XXX	=	$300.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00

$600.00 Cost / 5626 CCF = $0.11 CCF

Subtotal Other Contractual Requirements (A) = $0.11 CCF

OTHER CONTRACTUAL REQUIREMENTS (B)

The cost allowance for herbicide application has been based on the following assumptions; 300 gallon sprayer with herbicide injectors (not tank mixed); 20 gallon of carrier/ac; one trip will be required for each herbicide per road; labor rate and production includes mix, loading, cleanup and daily documentation; misc. expenses include equipment maintenance and depreciation, herbicide storage and handling and licensing fees. One mile of road with an average ROW of 30 feet is equal to 3.6 acres. Herbicides approved for use are listed in K-G.2.7# under Technical Spraying Specifications.

Herbicide (Common name)	Application Rate oz per acre	Cost Per oz	Cost per UOM
2,4,D Amine	32	$0.00	$0.00 mile
Clopyralid (Transline)	11	$2.15	$85.14 mile
Picloram (Tordon)	32	$0.00	$0.00 mile
Aminopyralid (Milestor	6	$3.47	$74.95 mile

Price quote for herbicide obtained from: North Valley Ag

Sufactant & Dye	
.32 oz/gal H2O	**$0.68/acre = $2.45/ mile**
Labor Rate	**$40/ hour (2 Miles per hour)**

Miles of road to be sprayed: **50.62** miles

Herbicide to be applied:	Miles	$ UOM	Tot Cost
2,4,D Amine		$0.00	$0.00
Clopyralid (Transline		$85.14	$0.00
Picloram (Tordon)		$0.00	$0.00
Aminopyralid (Milest	50.62	$74.95	$3,793.97
Sufactant & dye:	50.62	$2.45	$124.02
Application Cost (Labor):	50.62	$20.00	$1,012.40
Misc. Expensense:	50.62	$32.00	$1,619.84

TOTAL WEED TREATMENT: **$6,550.23** cost / **5626** CCF = **$1.16** CCF

ON-SITE EQUIPMENT WASHING K-G.3.5.1#

Cost allowance for washing off-road equipment Prior To Leaving locations identified in EIS/EA

Number (pieces of equipment)
Cleaning costs per piece $0.00
Number of seasons
CCF **5626**

Total cost for washing equipment per CCF **$0.00** CCF

Subtotal Other Contractual Requirements (B) **$1.16** CCF

MISCELLANEOUS CONTRACTUAL REQUIREMENTS (C)

(Contractual Obligations That Would Not Require Coverage Under The Performance Bond)

Stump Shoveling (Not required under normal operating/winter conditions. Include if clippers not allowed)

	# stumps	X	$0.00	$ per stump	=	$0.00

$0.00 Cost / 5626 CCF = $0.00 CCF

Stump Treatment

***C(T)6.412# Limits treatment to stumps >12". Use Report TC 56 for ~10" DBH**
Cellu-Treat Wood Preservative: 1# + 2gal water will treat ~500 12" stumps. @ $40/hr and 40 stumps/hr + $.01/stump forCellu-Treat = $1.01/stump**

*	# stumps	X	$0.00	$ per stump**	=	$0.00

$0.00 Cost / 5626 CCF = $0.00 CCF

Snow Plowing

Grader @ $110/hr and Operator @ $46/hr , and includes MOB of $750.
Production Rate: 1-2 miles/hour; .25-1 miles/hour on initial plow or with heavy snow.
Total Cost: ~ $200/mile

18	# miles X	$200.00	$per mile X	18	# plowings	=	$64,800.00

$64,800.00 Cost / 5626 CCF = $11.52 CCF

Document Additional Costs for Plowing

6 plows/winter NOS. Figured 18 miles to furthest Unit 15A

Miscellaneous: (Helicopter Landing Construction, Traffic Control etc...)

ITEM	#	X	COST		=	TOT COST
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00
XXX		X	$0.00	per XXX	=	$0.00

Stewardship Base Rate Allowance = N/A N/A

$0.00 Cost / 5626 CCF = $0.00 CCF

Subtotal Miscellaneous Contractual Requirements (C) = $11.52 CCF

Total Other Contractual Requirements (A+B+C)	$12.79 CCF
Brush Disposal (Purchaser and FS)	$15.52 CCF
Total Environmental Protection Cost	$28.31 CCF

TEMPORARY ROADS

0.42 Miles

If you have more than 5 Temporary Roads, you can lump Roads together.

Temporary Road #1 15A,27,101 New construction	Cost $ $4,352.00
Temporary Road #2 0	Cost $ $0.00
Temporary Road #3 0	Cost $ $0.00
Temporary Road #4 0	Cost $ $0.00
Temporary Road #5 0	Cost $ $0.00

TOTAL TEMPORARY ROAD COST = **$4,352.00**
(Total Temporary Development Costs)

$4,352.00 Cost $ / 5626 CCF = $0.77 CCF

Cost Guide for Temporary Roads
http://.../2013_Cost_Estimating_Guide_for_Road_Construction.pdf

Temporary Road Seeding, Fertilizing and Obliteration Costs per CCF **$0.30**

UNUSUAL CONDITION ADJUSTMENTS

Cost $ / 5626 CCF = $0.00 CCF

TEMPORARY ROAD COSTS #1

Unit or Road Number: 15A,27,101 New construction

Reference to Cost estimating procedures for temporary roads from Cost Guide pages 100-104

Average Side Slope	10	%	
Length	2200	Feet	**0.42** Miles
Volume per Acre	10		

(Note: Do not adjust project costs for inflation or deflation)

		Costs Prer Mile
Clearing and Grubbing (Table T-1)	=	$3,430.00 Mile
Excavation (Table T-1)	=	$1,410.00 Mile
Seeding (Table T-1)	=	$510.00 Mile
Obliteration (Table T-1)	=	$3,450.00 Mile
Total Unit Cost Per Mile	=	**$8,800.00**
Baisc Cost Total X Length	=	**$3,696.00**

Drainage Structures

	Dips	X		=	**$0.00**
1	18" CMP	X	$615.00	=	**$615.00**
	other CMP	X		=	**$0.00**
	Drainage Cost Total			=	**$615.00**

Other Requirements

###	###	X	$0.00	=	**$0.00**
###	###	X	$0.00	=	**$0.00**
###	###	X	$0.00	=	**$0.00**
###	###	X	$0.00	=	**$0.00**
	Other Cost Total			=	**$0.00**

Subtotal (Basic + Drainage + Other)		=	**$4,311.00**
Mobilization (Table T-4)	**7%**	=	**$302.00**
	Subtotal	=	**$4,613.00**

TOTAL COST **$4,613.00** / **1.06** Profit = **$4,352.00**

Total Cost to be entered on 2400-17

TIMBER SALE CONTRACT INFORMATION

Tim Gate 4 - Contract Preparation information (ADVR114)

Normal Operating Season
(ADVR114, Page 1)

				Units
First Period :	15-Jul	to	30-Sep	13,13A,23,49,49A,50,50A,90,94,95, 100,101,104
Second Period:	20-Dec	to	15-Feb	15,15A,24,24A,25A,25B,26,27,94A, 96,97,97A,98,98A,98B,98C,98D

(Note: If sale has more than one NOS - List dates and units for each N in A16 or AT13 of Timber Sale Contract)

Periodic Payment Schedule

Approximate Award Date: 09/30/16 mm/dd/yy

(And Road Completion Date if roads are included.)
Road Completion Date: 10/13/17 mm/dd/yy
(ENTER N/A if no roads)

Contract Termination Date: 09/30/20 mm/dd/yy

TIM - Input at Gate 4 - Prospectus, Bid and Misc. Information - Page 1 (ADVR115)

Approximate Payment Date: 04/07/19 **Tentative Date. TIM will Calculate Official Date Upon Award.**

As per B(T) 4.213, Periodic Payment Schedule, a periodic payment will be required. The approximate periodic payment date is XXXX. The final date will be based on the award date of this timber sale contract.

FIRE LIABILITY CALCULATION (ADVR114, Page 4)

5 CCF / man day --- 120 operating days / year --- 600 CCF / man year --- 12 hrs / shift --- 5 shifts / v
AD-C Firefighter wage is updated yearly, ~March (FSH 5109.34 Chp 10). Link below to directive.

(A)	Total Volume =	9605	CCF
(B)	Sale Duration =	4	YEARS (Calculated from Award Date to Termination Date)
(C)	Operating Days in Sale =	480	(Sale Duration X 120 days.)
(D)	CCF Per Day =	20.0	(Total Volume / Operating Days in Sale)
(E)	Men Needed to Log Sale =	4.0	(CCF Per Day / 5 CCF)

(F) Liability = $17.80 (Wage Rate AD-C) 12 (hrs/shift) X 5 (# shifts) X
http://www.fs.fed.us/r1/fire/nrcg/Committees/business_committee.htm
4.0 (# men) = TOTAL LIABILITY = $4,272

Round up to nearest $50.00 up to $200.00, then round up to nearest $100.00
ROUNDED TOTAL = $4,300

When sale is entered through TIM, Bid Guarantee is calculated and auto-filled during completion of Gate 4 –Prospectus, Bid and Misc. Information – Page 1- (ADVR115)

MINIMUM PERFORMANCE BOND:

TIM Gate 4 - Prospectus, Bid and Misc. Information - Page 3 - (ADVR115)

The greater of (A) or (B) rounded **UP** to nearest $100.00 if sale is under $10,000.00 stumpage value and up to nearest $1,000.00 if sale is over $10,000 stumpage value.

(A) Advertised Value $150,761 X 10% = $15,076

Rounded 10% Advertised Value = **$16,000** **(A)**

(B) Purchaser requirements (Performance) - Based on number of seasons.

Road Maintenance =	$0.92	CCF
Erosion =	$0.53	CCF
Brush Disposal =	$11.90	CCF
Other =	$1.57	CCF
Total =	$14.91	CCF

Total Purchaser Requirements = $14.91 X Tot Vol 5626 CCF = $83,904 Tot Value

divided by 7 # Seasons = $11,986 Performance Bond Value

Rounded Performance Bond Value = **$12,000** **(B)**

MINIMUM PERFORMANCE BOND **$16,000**

2400-17 Input Sheet for R1 TIMBER SALE APPRAISAL

Create New Sale

Sale Name	Red Shiner *
Sale No	16803 *
Forest No	10 - Flathead
District No	08 - Tally Lake

Size Class	6 - $100,000,01 thru $1,000,000 *
Sale Status	*
SBA Code	N - No *
Appraisal Type	TE - Transaction Evidence *

Basic Information

State	MT - Montana *
County Code	029 - Flathead *
Legal Description	T29N,R25W,PMM *
Appraisal Date	*
Contract Date	
Term Date	9/30/2020 *
Bid Date	
Modified By	
Modified Date	

Salvage Code	2 - Salv Sale or Salv Component in Regular Program *
Pricing Method	FLAT - Flat Rate *
SAI Collection	$95,116.00
Contract No	16803
Contract Form	6 - Contract Form 2400-6 *
CO Authority	S - Forest Supervisor *
Sale Method	A - Auction *
Regulation Code	6 - 36 CFR 223.1 Commercial Sale *

Area & Volume

Total Sale Area Acres	4230
Clearcut Acres	34
Seed Tree Acres	129
Right Of Way Acres	1
Final Seed Tree Acres	0
Shelter Wood Acres	57
Cedar Poles: Volume	
Count	
Length	
Percent Salvage	60%

Total Cutting Unit Acres	352
Clearcut Volume (CCF)	513
Seed Tree Volume (CCF)	2391
Right Of Way Volume (CCF)	19
Final Seed Tree Volume (CCF)	0
Shelter Wood Volume (CCF)	1056

Costs / CCF

		Comments
Slash FS	$3.62	
Slash Total	$15.52	
Erosion	$0.53	
Misc	$12.79	Includes other (A), weeds (B), Misc (C
Temp Roads	$0.77	
Other Temp Dev	$0.00	
Unusual Cond Adj	$0.00	
Road Maint Dep	$7.15	Includes Tons/CCF Adjustment
Road Maint Total	$14.41	
Non-sawtimber Adj	$2.24	

Timber Property Value	$0.00

Roads

Construction Miles	0.3
Reconstruction Miles	12.7
Temp Road Const Miles	0.4
Total Haul Miles	44
Appraisal Point (City Name)	Evergreen
Contributed Funds	$0

Construction Costs	$7,244
Reconstruction Costs	$105,744
Temp Road Construction Costs	$4,352
Paved Miles	40.0
State Appraisal Point	Montana

Logging Systems

	Acres	CCF	Average External Yarding Distance(ft)
Tractor	226	3493	665
Horse	0	0	0
Ground Lead	0	0	0
Skyline	126	2133	795
Heli	0	0	0
Swing	0	0	
Forwarder	0	0	0

*Swing Acres are not included in Total Logging System Acres

Species/Products

U of M	Species	Product	TIM Species	Volume CCF	Volume TONS	% Defect	Base Rate	Base Index	Avg DBH	Logs/Unit
				0	0	0			0.0	0.0
3 - CCF	019 - Subalpine Fir	1 - Sawtimber	AF	1545	3822	8	$16.63		9.6	19.4
				0	0	0			0.0	0.0
3 - CCF	093 - Englemann Spruce	1 - Sawtimber	S	1770	4786	7	$16.63		10.4	16.3
3 - CCF	108 - Lodgepole Pine	1 - Sawtimber	LP	1800	5438	13	$16.63		7.6	28.4
				0	0	0			0.0	0.0
				0	0	0			0.0	0.0
3 - CCF	204 - Douglas Fir	1 - Sawtimber	DF	511	1541	13	$16.63		13.2	13.0
				0	0	0			0.0	0.0
				0	0	0			0.0	0.0
3 - CCF	007 - COMBINED SOFTWOOD	8 - Non-Sawtimber	CS	3979	10981	0	$1.00		0	0

Use this sheet to calculate advertised value and to convert $/CCF to $/Tons.

Attach this sheet to the 2400-17 for Documentation.

Sawtimber Rate from the 2400-17 $26.09

Conversion to Tons

Advertised Rate per Ton

	Adv. Rate	CCF Vol	Tons	Weighted Average Bidding	Total Value Bidding	
Sawtimber	$26.09	5626	15587	$9.42	$5.67	Sawtimber
Non-Sawtimber	$1.00	3979	10981	$0.36	$5.67	Non_Saw
Base Rate (Sawtimber)	$16.63	5626	15587	$6.00	$3.67	Base Rate (Saw and Nonsaw)

Total Sale Value $150,761.34

If FACTS information is available then use FACTS COSTS here and on BD and REGEN Base Rate pages.

BRUSH DISPOSAL
Purchaser

Inflation calculation: 2

FACTS ID	Description	Local Qualifier	UOM	Cost/Unit	# Units	Comments	Inflatio	Total Activity $
1140	Fireline Const	AF_Hand Type I	Mile	$8,800			N/A	
		AF_Hand Type II	Mile	$6,600			N/A	
		AF_Hand Type III	Mile	$3,000			N/A	
		AF_Exc Type I	Mile	$4,700			N/A	
		AF_Exc Type II	Mile	$2,400			N/A	
		AF_Exc Type III	Mile	$800			N/A	
1153	Piling_Fuels	AF_HP Type I	Acre	$825			N/A	
		AF_HP Type II	Acre	$670			N/A	
		AF_HP Type III	Acre	$360			N/A	
		AF_Exc Type I	Acre	$300			N/A	
		AF_Exc Type II	Acre	$200	220	All Regen Units	N/A	$44,000.00
		AF_Exc Type III	Acre	$165			N/A	
		AF_Landing Clean Up	Each	$60	35	1/10 acres	N/A	$2,100.00
		AF_System Road Clean Up ROW	Mile	$125			N/A	
1154	Chipping of Fuels	Activity Fuels	Acre	$350			N/A	
		AF_Landing Cleanup	Each	$0			N/A	
1150	Rearrangement of Fuels	AF_Type I	Acre	$240			N/A	
		AF_Type II	Acre	$160			N/A	
		AF_Type III (Skyline)	Acre	$80	220	All Regen	N/A	$17,600.00
		AF_Type III (tractor)	Acre	$40			N/A	
		AF_Fell Damaged Residual	Acre	$25	131	Intermediate Treatments	N/A	$3,275.00
		AF_Lop/Scatter	Acre	$75			N/A	
1180	Fuel Break	AF_Hand Type I	Mile	$6,543			N/A	
		AF_Hand Type II	Mile	$4,950			N/A	
		AF_Hand Type III	Mile	$2,180			N/A	
		AF_Exc Type I	Mile	$2,311			N/A	
		AF_Exc Type II	Mile	$1,177			N/A	

Subtotal - Purchaser	$66,975.00 >>>>
$/CCF	$11.90