USDA - FOREST SERVICE — REPORT OF TIMBER SALE — R6-FS-2400-17 (04/10)
Stewardship: N — APPRAISAL SUMMARY CCF — Version 1521 (TEA 05-15)

Region: 06	Sale Name: Donkey	Appraisal Date:	07/14/15
Forest: 09 Olympic	Sale Number: 93505	Base Period Ending:	03/31/15
District: 03 Quinault	Appraise to: Aberdeen	Competition Factor:	20%
Salvage: N	Appraiser: McNealy	Essential KV Cost:	0

SELLING PRICES	1	2	3	4	5	6	7	Average	Total
1. Species	D-fir	W Hem							
2. Species Code	205	263							
3. Product/Unit	01-03	01-03							
4. Volume	4,590	8,900							13,490
5. Base Period Price	57.85	27.68						37.95	
6. Base Period Index	182.54	164.27						170.49	
7. Current Index	177.42	160.62						166.34	
8. Rapid Market Adj	5.20	3.64						4.17	
9. Market Adj BP Price	57.93	27.67						37.97	
10. Unusual Adjustment	5.46	5.46						5.46	
11. GBCv-Nonsaw Adj									
12. Product Quality Adj	12.05	11.71						11.83	
13. Adj Base Period Price	75.44	44.84						55.25	745,345.60

COSTS	Zone Avg Cost/UM	Est Sale Cost/UM	Adj to BP Cost	ROADS	Km	Miles	Cost
14. Stump to Truck	142.54	141.38	1.16	Specified Road Con			
15. Haul/Scale	28.47	42.85	-14.38	Specified Road Rec	20.79	12.91	521,622
16. Road Maintenance	11.06	11.76	-.70	Temporary Road Con	4.27	2.65	354,893
17. Contract	4.81	3.14	1.67	Haul Miles		55	
18. Development & Other	5.18	27.02	-21.84				
19. Road Const & Recon		38.67	-38.67	Br Disp/UM	Rd Mtc/UM	C(T)5.213#	
20. Total (lines 14-19)	192.06	264.82	-72.76	DEPOSITS: .26	6.99		

ADVERTISED RATES	1	2	3	4	5	6	7	Average	Total
21. Predicted Bid Rate	2.68	-27.92						-17.51	-236,186.80
22. Competition Adjustment	.54	-5.58						-3.50	-47,183.40
23. Property Value									
24. Indicated Adv Rate	2.14	-22.34						-14.01	-189,003.40
25. Base Rate	3.00	3.00						3.00	40,470.00
26. Adjustment	.86	25.34						17.01	229,473.40
27. Advertised Rate	3.00	3.00						3.00	40,470.00

CCF to MBF Rate Factors:	1.8345	1.8446						1.8411	
CCF to MBF Volume Factors:	.5451	.5421						.5431	
MBF to CCF Index Factors:	.52	.52							
CCF Base Index for A(T)5a:									
CCF Wtd Avg Del Log Price:	315.29	259.74							
MBF Volume:	2,502	4,825							7,327
Total Tons Removed:	13,665	29,308							42,973

Net CCF to Tons Conversion Factor for C8.3#(Option 1) or K-I.3.1#: 3.1855 DEPOSITS/Ton BD: .08 RM: 2.19

Erosion Control - **Donkey** 13490 CCF

		# Landing	Acres	
Ground based acres	138	27	6.75	ground landings are also shared with cable and counted as cable
Skyline acres	113	78	19.5	29.25 ac
Helicopter acres	50	4	3	

Skid Roads; ground based expect up to 15% of the acreage to be disturbed . Approximately 10% of this acreage will require seed and fert… 0.15 138 0.1 2.1 ac **use 10% of length**

	Length	Width	Sq FT/ Ac				
Temp Roads:	13987	14	43560	0.1	0.4	ac	
				Total ac	31.8	seed and fert ac	**use 10% of length**

Seed and fertilize: one person can seed and fert 2.2 ac/day;

Acres	Ac/Day	Days	$/Day		
	2.2	16	150	$2,400.00	labor

materials and equipment; 34.3 ac x $175/ ac =

Ac	$/Ac		
31.8	175	$5,565.00	materials and equipment seed and fert

scarify skid roads: district experience on recent sales shows scarification cost to be $100/ac over entire sale acreage

Ac	$/Ac		
138	100	$13,800.00	scarification

Total $21,765.00

21% overhead: 1.21 $21,765.00 $26,335.65

Subtotal Cost/ CCF $1.95

native seed deposit $0.04

Total Cost/CCF = $1.99

Estimated Purchaser Cost:
The total estimated purchaser cost is estimated at $ 12,005.52 or $ 255.44 per acre for the 47 acres in the treated strip. This was estimated by the following and calculated on the spread sheet below.

Directional felling for the 47 acres for one feller at $0.26/CCF and 25 CCF/Acre is $305.50. Pullback for the 47 acres with one laborer at $19.92 per hour is estimated at 1 hour per acre for 47 hours. The total was $ 936.24. In addition, the machine cost for pull back was estimated using a single yarder/carriage combo with one operator. Operator costs for 1 hour per treated acre and 47 acres comes to $1,035.88. The equipment costs are estimated at $115.00 per hour and totals $ 5,405 or $115.00 per acre. Additional equipment time for landing pile creation is estimated with an excavator/operator for the landing piles. It is estimated to take 1 hour per landing (est. 21 landings) bringing operator costs to $220.40 and equipment costs to $ 4,628.40.

Donkey T.S.

SUBGRADE, SURFACING, AND ROCK

For appraisal purposes only, not part of the contract, not to be used as final design.

Road Name	From Station (Approx.)	To Station (Approx.)	Subdivision	Cut Slope Ratio	Fill Slope Ratio	Finished Surface Width Excluding Curve Widening and Turnouts Feet (Approx.)	Uncompacted Depth of New Rock Inches (Approx.) PIT RUN	Designated Rock Source PIT RUN	Remarks
T1	0+00	3+45	49B	Utilize Existing Prism		12	Spot rock 6″	Commercial	1,3
T2	0+00	3+18	4A	1:1	1½:1	12	12″	Commercial	1
T3	0+00	6+87	3B	1:1	1½:1	12	12″	Commercial	1
T4	0+00	8+00	3	Utilize Existing Prism		12	Spot Rock 6″	Commercial	1,3
T5	0+00	9+80	16	Utilize Existing Prism		12	Spot Rock 6″	Commercial	1,3
T6	0+00	1+97	2B	Utilize Existing Prism		12	Spot Rock 6″	Commercial	1,3
T6	1+97	3+23	2B	1:1	1½:1	12	12″	Commercial	1
T7	0+00	1+43	2A	1:1	1½:1	12	12″	Commercial	1
T8	0+00	3+42	2	Utilize Existing Prism		12	Spot Rock 6″	Commercial	1,3
T8	3+42	6+22	2	1:1	1½:1	12	12″	Commercial	1
T9	0+00	4+36	1	Utilize Existing Prism		12	12″	Commercial	1,3
T9	4+36	11+43	1	Utilize Existing Prism		12	Spot Rock 6″	Commercial	1,3
T10	0+00	3+94	1	Utilize Existing Prism		12	Spot Rock 6″	Commercial	1,3
T11	0+00	17+73	13A,B,C	Utilize Existing Prism		12	Spot Rock 12″	Commercial	1,3
T12	0+00	1+30	14C	1:1	1½:1	12	12″	Commercial	1
T13	0+00	3+30	14C	1:1	1½:1	12	12″	Commercial	1
T14	0+00	9+79	14E	Utilize Existing Prism		12	Spot Rock 6″	Commercial	1,3
T15	0+00	5+06	15	Utilize Existing Prism		12	6″	Commercial	1,3
T17	5+06	9+76	15	Utilize Existing Prism		12	Spot Rock 6″	Commercial	1,3
T16	0+00	4+14	15	Utilize Existing Prism		12	Spot Rock 6″	Commercial	1,3

T16	4+14	9+75	15	1:1	1½:1	12	6”	Commercial	1
T17	0+00	24+31	16,A,B	Utilize Existing Prism		12	Spot Rock 12”	Commercial	1,3
T18	0+00	6+38	16	Utilize Existing Prism		12	Spot Rock 6”	Commercial	1,3

DRAINAGE AND CULVERTS

Road Name	Station (Approx.)	Feature	Purpose	Minimum Culvert Diameter (Inches)	Q-100 Culvert Diameter (Inches)	Rock Source (Fill) PIT RUN	Remarks
T2	0+00	Culvert	Ditch Relief	18	na	Commercial	
T6	0+00	Culvert	Ditch Relief	18	na	Commercial	
T9	0+00	Culvert	Ditch Relief	18	na	Commercial	
T11	0+00	Culvert	Ditch Relief	18	na	Commercial	
T11	13+90	Culvert	Wet seep	18	na	Commercial	
T12	0+00	Culvert	Ditch Relief	18	na	Commercial	
T13	0+00	Culvert	Ditch Relief	18	na	Commercial	
T14	0+00	Culvert	Ditch Relief	18	na	Commercial	
T16	0+00	Culvert	Ditch Relief	18	na	Commercial	

1. Inslope and outslope as needed to maintain proper drainage.
2. Landings, short access spurs, and Heli landings estimate 2000 cubic yards.
3. Existing culverts may be utilized in place.

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Road Name	50k/mile new const	35k/mile Heavy	30k/mile Reconstruction Moderate	25k/mile Light	total ft	Subdivision	Travel Way	Rock Depth	CY Rock	Culverts		
T1				345	345	49B	12	6	42			
T2	318				318	4A	12	12	165	1	0+00	
T3	687				687	3B	12	12	356			
T4			800		800	3	12	6	96			
T5			980		980	3	12	6	118			
T6				197	197	2B	12	6	24	1	0+00	
T6	126				126	3B	12	12	65			
T7	143				143	2A	12	12	74			
T8				342	342	2	12	6	41			
T8	280				280	2	12	12	145			
T9			436		436	1	12	12	226	1	0+00	
T9				707	707	1	12	6	85			
T10				394	394	1	12	6	47			
T11			1773		1773	13A,B	12	12	690	2	0+00	13+90
T12	130				130	14C	12	12	67	1	0+00	
T13	330				330	14C	12	12	171	1	0+00	
T14				979	979	14E	12	6	118	1	0+00	
T15				506	506	15	12	6	122			
T15				470	470	15	12	6	57			
T16				414	414	15	12	6	50	1	0+00	
T16	561				561	15	12	6	135			
T17				2431	2431	16	12	12	878			
T18			638		638	16	12	6	77			
	2575	0	4627	6785	13987			Totals =	3849	9		
Miles	0.49	0.00	0.88	1.29	2.65			**spot rock**				

Average Rock Haul for pit run one way is commercial source. $42.10/cubic yard in place, (engineers estimate)
Average Rock Haul for crushed one way is 0 miles, na

New construction - as shown in above table. Use cost of $50,000/mi from past district experience.

Reconstruction of existing grade includes some removal of timber , debris removal, drainage restoration, culvert placement, blading and shaping. Rock as shown in above table. Use cost of 70 % of new const for heavy, 60% moderate and 50% for light reconstruction

Clearing limits will not exceed 16 feet unless otherwise designated.

Estimated CY of Rock Needed

Temp. roads:	Pit Run	Crushed
All	3849	0
other	2000	
Total	5849	

Landings, short access spurs, and 4 he

New construction temp 0.49 miles
0.49 miles X $50,000 **$24,500**

Reconstruction of temp roads	Heavy	Moderate	Light	
miles	0	0.88	1.29	
$/mile	$35,000	$30,000	$25,000	
$	$0	$26,400	$32,250	**$58,650.00**

	18"	24"	36"
Culverts $500/culvert	**$4,500.00**		

9 - 18 " culverts may be needed as relief culverts
Placement of the culverts will be determined as described in Sensitive Construction of temp roads (C5.1, Option 1)

commercial rock = $42.10 per cubic yard

$/load = $421.00

Rock Haul

	yards	loads	$/load	Cost
Pit Run	5,849	585	$421.00	$246,242.90
Pit Run	0	0	$0.00	$0.00
Crushed	0	0	$0.00	$0.00
			Total	**$246,242.90**

total =	**$354,892.90**
cost per CCF =	**$26.31**

Close Temp Roads - includes culvert removal, barrier placement, scarification for rehab, ~14inches. Seeding and fert is included in the erosion control appraisal:
Approximately 1000 feet per day estimated.
Allow 14 days to use shovel to close roads at $1500/day includes pr and r etc **$21,000**