



**Erosion Control -**

**Carcass**

19126 CCF

		# Landing	Acres	
Ground based acres	36	5	1.25	ground landings are also shared with cable and counted as cable
Skyline acres	338	144	36	37.25 ac
Helicopter acres	0	0	0	

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	36	0.1	0.5 ac	<b>use 10% of length</b>
Temp Roads:	Length 15065	Width 14	Sq FT/ Ac 43560	0.1	
				Total ac 38.3	seed and fert ac <b>use 10% of length</b>

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

Acres	Ac/Day	Days	\$/Day	
	2.2	18	150	\$2,700.00 labor

materials and equipment; 38.3 ac x \$175/ ac =

Ac	\$/Ac	
38.3	175	\$6,702.50 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	
36	100	\$3,600.00 scarification

Total \$13,002.50

21% overhead: 1.21 \$13,002.50 \$15,733.03

Subtotal Cost/ CCF \$0.82  
 native seed deposit \$0.04

**Total Cost/CCF = \$0.86**



**Total Landing Construction Cost**

**\$2.87** \$/CCF

ds

**Carcass**

Sale Volume

19126 CCF

Road Name	50k/mile new const	35k/mile Heavy	30k/mile Moderate Reconstruction	25k/mile Light	total ft	Subdivision	Travel Way	Rock Depth	CY Rock	Culverts	Diameter	Culvert Stn
T1			3477		3477	17	12	3	402	3	18	8+45, 24+70, & 33+50
T2			1002		1002	28A	12	3	116			
T3				1499	1499	28A & 28B	12	6	180			
T4			1477		1477	28A	12	6	356			
T5				675	675	15	12	6	163	1	18	2+85
T6				745	745	15	12	6	90	1	18	2+31
T7	676			676	676	15 & 15A	12	6	175			
T8	650			1281	1931	7	12	6	501			
T9				982	982	26	12	3	114			
T10				462	462	11	12	3	53			
T11		400		1739	2139	28	12	3	248	3	18	3+85, 7+45, & 14+70
	1326	400	5956	7383	15065			Totals =	2397	8		

Miles 0.25 0.08 1.13 1.40 2.85 **spot rock**

Average Rock Haul for pit run one way is \$52.00/cubic yard in place (Commercial), (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	2397	0	
other	300		Landings & short access spurs
Total	2697		
Round To	2700		

New construction temp 0.25 miles												
0.25 miles X		\$50,000										
						<b>\$12,557</b>						
Reconstruction of temp roads	Heavy	Moderate	Light									
miles	0.08	1.13	1.40									
\$/mile	\$35,000	\$30,000	\$25,000									
\$	\$2,800	\$33,841	\$34,957			<b>\$71,598.30</b>						

Culverts	\$500/culvert	<b>18"</b>	<b>24"</b>	<b>36"</b>
8 - 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)				
Rd#	MPH	RTMiles	RTMin	
N/A				

Rock Haul

	yards	loads	\$/load	Cost
Pit Run	2,700	270	\$520.00	\$140,400.00
Crushed	0	0	\$0.00	\$0.00

Total **\$140,400.00**

total =	<b>\$251,055.11</b>
cost per CCF =	<b>\$13.13</b>

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 15 days to use shovel to close roads at \$1500/day includes pr and r etc **\$22,500**

Carcass 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.)	Designated Rock Source	Remarks
							PIT RUN	PIT RUN	
T1	0+00	34+77	17	Utilize Existing Prism		12	3"	Commercial	1,3
T2	0+00	10+02	28A	Utilize Existing Prism		12	3"	Commercial	1,3
T3	0+00	14+99	28A & 28B	Utilize Existing Prism		12	Spot Rock 6"	Commercial	1,3
T4	0+00	14+77	28A	Utilize Existing Prism		12	6"	Commercial	1,3
T5	0+00	6+75	15	Utilize Existing Prism		12	6"	Commercial	1,3
T6	0+00	7+45	15	Utilize Existing Prism		12	Spot Rock 6"	Commercial	1,3
T7	0+00	6+76	15 & 15A	1:1	1½:1	12	6"	Commercial	1
T8	0+00	12+81	7	Utilize Existing Prism		12	6"	Commercial	1,3
T8	12+81	19+31	7	1:1	1½:1	12	6"	Commercial	1
T9	0+00	9+82	26	Utilize Existing Prism		12	3"	Commercial	1,3
T10	0+00	4+62	11	Utilize Existing Prism		12	3"	Commercial	1,3
T11	0+00	21+39	28	Utilize Existing Prism		12	3"	Commercial	1,3

DRAINAGE AND CULVERTS

Road Name	Station (Approx.)	Feature	Purpose	Minimum Culvert Diameter (Inches)	Q-100 Culvert Diameter (Inches)	Rock Source (Fill)	Remarks
						PIT RUN	
T1	8+45	Culvert	Dry Swale	18	na	Commercial	
T1	24+70	Culvert	Dry Swale	18	na	Commercial	
T1	33+50	Culvert	Dry Swale	18	na	Commercial	
T5	2+85	Culvert	Dry Swale	18	na	Commercial	
T6	2+31	Culvert	Ditch Relief	18	na	Commercial	
T11	3+85	Culvert	Dry Swale	18	na	Commercial	
T11	7+45	Culvert	Ditch Relief	18	na	Commercial	
T11	14+70	Culvert	Dry Swale	18	na	Commercial	

1. Inslope and outslope as needed to maintain proper drainage.
2. Miscellaneous rock, estimate 300 cubic yards.
3. Existing culverts may be utilized in place.

USDA - FOREST SERVICE  
Stewardship: N

REPORT OF TIMBER SALE  
APPRAISAL SUMMARY CCF

R6-FS-2400-17 (04/10)  
Version 1621 (TEA 04-16)

Region: 06  
Forest: 09 Olympic  
District: 03 Quinault  
Salvage: N

Sale Name: Carcass  
Sale Number: 93640  
Appraise to: Aberdeen  
Appraiser: McPhie

Appraisal Date: 07/05/16  
Base Period Ending: 03/31/16  
Competition Factor: 20%  
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	5,225	13,900							19,125
5. Base Period Price	64.75	46.99						51.84	
6. Base Period Index	190.53	165.49						172.33	
7. Current Index	190.53	165.49						172.33	
8. Rapid Market Adj	2.60	5.20						4.49	
9. Market Adj BP Price	67.35	52.19						56.33	
10. Unusual Adjustment									
11. GBCv-Nonsaw Adj									
12. Product Quality Adj	13.75	11.19						11.89	
13. Adj Base Period Price	81.10	63.38						68.22	1,304,729.50

COSTS	Zone Avg Cost/UM	Est Sale Cost/UM	Adj to BP Cost	ROADS	Km	Miles	Cost
14. Stump to Truck	122.35	113.82	8.53	Specified Road Con			
15. Haul/Scale	33.99	53.04	-19.05	Specified Road Rec	11.93	7.41	148,924
16. Road Maintenance	14.16	6.21	7.95	Temporary Road Con	4.83	3.00	251,055
17. Contract	5.59	2.21	3.38	Haul Miles		67	
18. Development & Other	5.19	16.00	-10.81				
19. Road Const & Recon		7.79	-7.79				
20. Total (lines 14-19)	181.28	199.07	-17.79	DEPOSITS:	Br Disp/UM .86	Rd Mtc/UM 3.05	C(T)5.213# 32,010.00

ADVERTISED RATES	1	2	3	4	5	6	7	Average	Total
21. Predicted Bid Rate	63.31	45.59						50.43	964,495.75
22. Competition Adjustment	12.66	9.12						10.09	192,916.50
23. Property Value									
24. Indicated Adv Rate	50.65	36.47						40.34	771,579.25
25. Base Rate	3.00	3.00						3.00	57,375.00
26. Adjustment									
27. Advertised Rate	50.65	36.47						40.34	771,579.25

CCF to MBF Rate Factors: 1.8282 1.8462 1.8412  
 CCF to MBF Volume Factors: .5470 .5417 .5431  
 MBF to CCF Index Factors: .52 .52  
 CCF Base Index for A(T)5a:  
 CCF Wtd Avg Del Log Price: 317.45 231.27  
 MBF Volume: 2,858 7,529 10,387  
 Total Tons Removed: 15,535 44,942 60,477  
 Net CCF to Tons Conversion Factor for C8.3#(Option 1) or K-I.3.1#: 3.1622 DEPOSITS/Ton BD: .27 RM: .96