WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

TIMBER NOTICE OF SALE

***SALE NAME**: EAST CAVANAUGH SWT* ***AGREEMENT NO**: 30-104692*

AUCTION: May 29, 2024 starting at 10:00 a.m., Northwest Region Office, Sedro Woolley, WA **COUNTY:** Skagit

SALE LOCATION: Sale located approximately 23 miles southeast of Sedro-Woolley, WA.

PRODUCTS SOLD AND SALE AREA: All timber as described for removal in Schedule B bounded by white timber sale boundary tags and the Deer Creek Road, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), in Unit #1.

All timber as described for removal in Schedule B bounded by white timber sale boundary tags and the LC-06 and LC-ML roads, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), in Unit #2.

All timber as described for removal in Schedule B bounded by white timber sale boundary tags and the LC-13 Road, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), in Unit #3.

All timber as described for removal in Schedule B bounded by white timber sale boundary tags and the LC-ML Road, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), in Unit #4.

All forest products above located on part(s) of Sections 30 and 31 all in Township 33 North, Range 7 East, Sections 23, 24, 25, 26 and 36 all in Township 33 North, Range 6 East, W.M., containing 268 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: BVC-SFIFM-018227)

ESTIMATED SALE VOLUMES AND QUALITY:

Species	Avg DBH	Ring Count	Total MBF	Total Tons	Price $/Ton	MBF by Grade 1P	2P	3P	SM	1S	2S	3S	4S	UT
Douglas fir	12.3	6	1,666	13,786								1,381	193	92
Hemlock	11.5		401	3,544								282	105	14
Red alder	13		30	225									30	
Sale Total			2,097	17,555										

MINIMUM BID: $0/ton (est. value $0.00) **BID METHOD:** Sealed Bids

PERFORMANCE SECURITY: $0.00 **SALE TYPE:** Tonnage Scale

EXPIRATION DATE: March 31, 2027 **ALLOCATION:** Export Restricted

BIDDABLE SPECIES: **Douglas fir**

BID DEPOSIT: $0.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

TIMBER NOTICE OF SALE

HARVEST METHOD: Cable OR tethered equipment; shovel, forwarder, tracked skidder, "6-wheeled rubber-tired skidder with over-the-tire tracks spanning both sets of rear tires" or rubber-tired skidder on sustained slopes 35% or less; self-leveling equipment on sustained slopes 50% or less (See below for restrictions); tethered equipment may be utilized; also, tracked machinery may be utilized for falling on sustained slopes 35% or less.

Purchaser must obtain prior written approval from the Contract Administrator for areas as to where to utilize self-leveling equipment prior to use. If ground disturbance is causing excessive damage, as determined by the Contract Administrator, the equipment will no longer be authorized. Falling and Yarding will not be permitted from November 1 to March 31 unless authorized in writing by the Contract Administrator (THIS PERTAINS TO GROUND-BASED EQUIPMENT ONLY) to reduce soil damage and erosion.

Falling and yarding shall not be permitted during the bark slippage season unless the Purchaser provides a written plan outlining mitigation measures and the plan is pre-authorized in writing by the Contract Administrator. This season is estimated to run from April 1 to July 15 but may vary depending on weather conditions.

ROADS: 61.19 stations of required construction. 15.85 stations of required reconstruction. 2.19 stations of optional reconstruction. 398.04 stations of required prehaul maintenance. 2.19 stations of abandonment, if built.

Rock may be obtained from the following source(s) on State land at no charge to the Purchaser: Decanter Hard Rock Pit at station 76+01 of the LC-13 Road. Tarn Hard Rock Pit at Station 24+38 of the LC-06 Road. Stockpiles available in both rock pits, see road plan for details.

Development of existing rock source(s) may involve clearing, stripping, and blasting.

An estimated total quantity of rock needed for this proposal: 302 cubic yards of riprap, 20 cubic yards of shot rock and 4,306 cubic yards of 3-inch minus ballast.

Road work and the hauling of rock will not be permitted from November 1 to March 31 unless authorized in writing by the Contract Administrator to reduce soil damage and siltation. The hauling of forest products will not be permitted from November 1 to March 31 unless authorized in writing by the Contract Administrator.

ACREAGE DETERMINATION

CRUISE METHOD: Acres determined by GPS traverse. Cruise was conducted via variable plot sample type. See Cruise Narrative for further details. Shapefiles of units are available upon request, and on the DNR website after the BNR meeting in which the sale is presented.

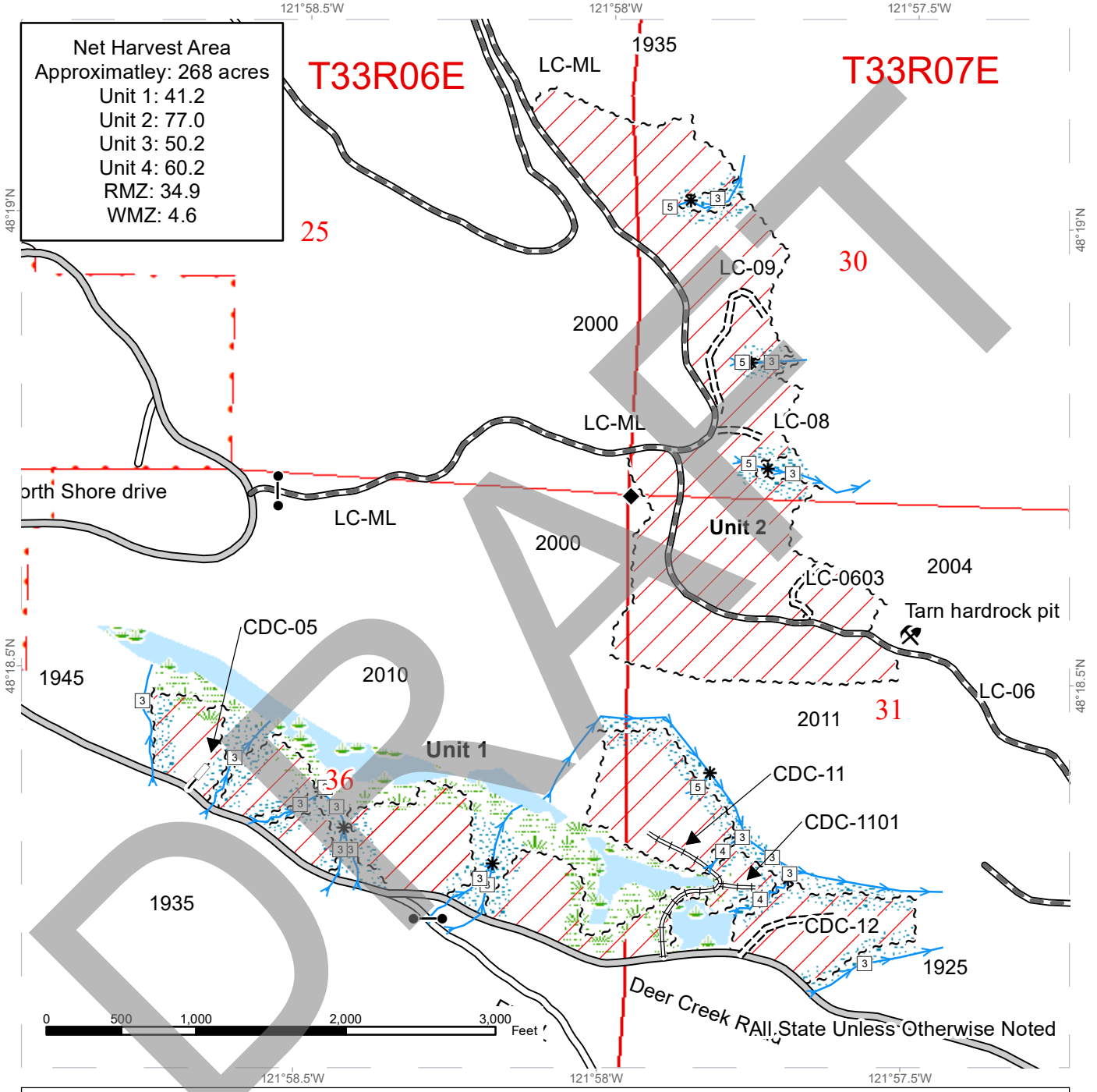
FEES: $35,649.00 is due on day of sale. $1.08 per ton is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS: 1. Skagit County Road Right-of-Way permit shall be obtained by Purchaser if optional roadwork is to be built on the CDC-05 Road.
2. Purchaser shall perform extreme hazard abatement within 100 feet of the Deer Creek Road.

TIMBER SALE MAP

SALE NAME: EAST CAVANAUGH SWT
AGREEMENT #: 30-104692
TOWNSHIP(S): T33R6E, T33R7E
TRUST(S): Agricultural School (4), Capitol Grant (7), Common School and Indemnity (3), Scientific School (10), State Forest Transfer (1)

REGION: Northwest Region
COUNTY(S): Skagit
ELEVATION RGE: 1000-1720



- Sale Area
- Sale Boundary Tags
- Stream
- Stream Type
- Stream Type Break
- County Road
- Existing Roads
- Required Pre-Haul Maintenance
- Required Construction
- Required Reconstruction
- Optional Reconstruction
- Wetlands - Non-forested
- Riparian Mgt Zone
- Wetland Mgt Zone
- Gate (F1-3)
- Rock Pit

N

Prepared By: cesk490
Accessed: 03/01/2024 10:58

Modification Date: cesk490 10/18/2023

TIMBER SALE MAP

SALE NAME: EAST CAVANAUGH SWT
AGREEMENT #: 30-104692
TOWNSHIP(S): T33R6E, T33R7E
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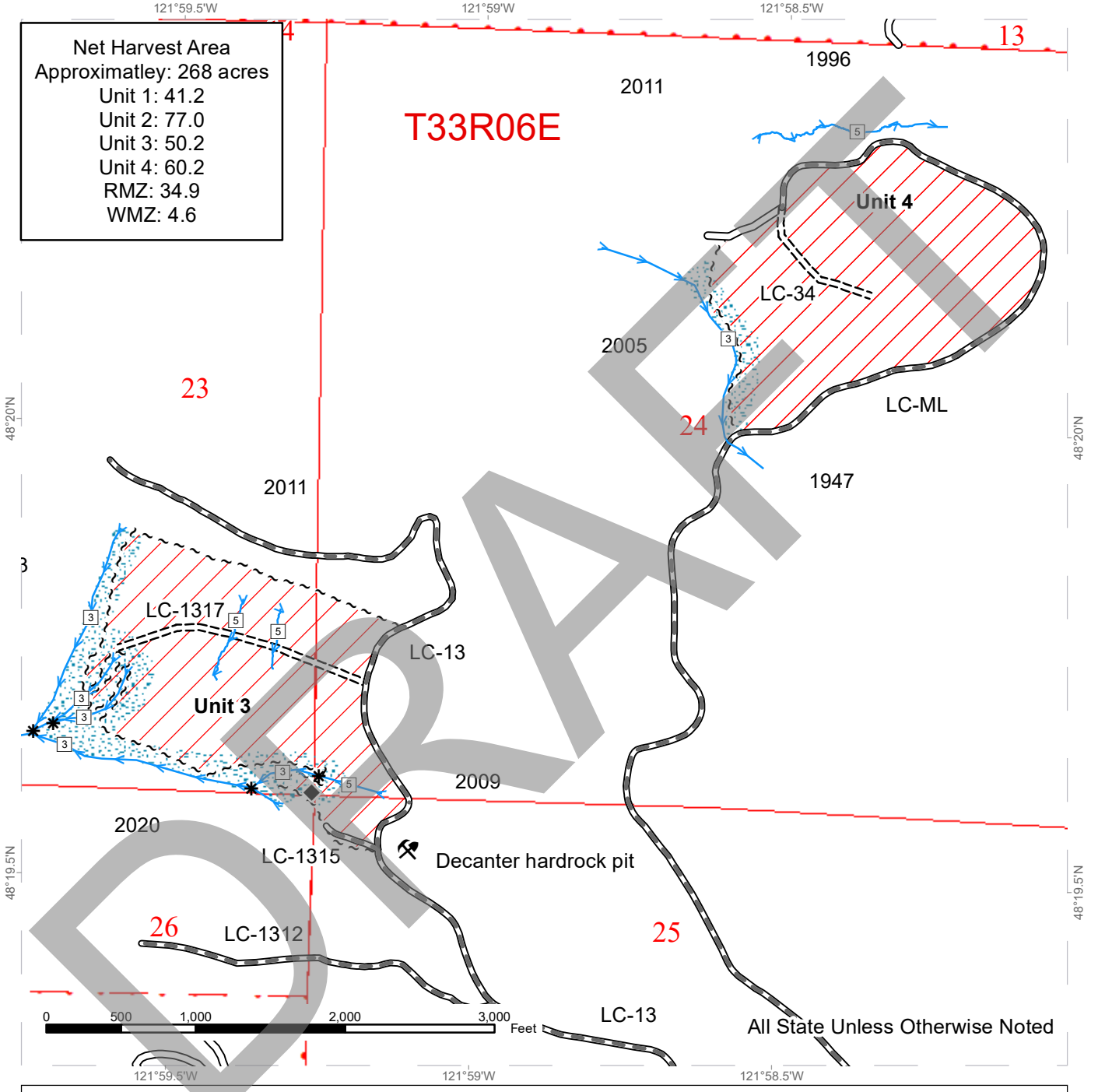

Sale Area
Sale Boundary Tags
Stream
Stream Type
Stream Type Break
Existing Roads
Required Pre-Haul Maintenance
Required Construction
Riparian Mgt Zone
Rock Pit

N

Prepared By: cesk490
Modification Date: cesk490 10/18/2023
Accessed: 03/01/2024 10:58

DRIVING MAP

SALE NAME: EAST CAVANAUGH SWT
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TOWNSHIP(S): T33R6E, T33R7E
TRUST(S): Agricultural School (4), Capitol Grant (7), Common School and Indemnity (3), Scientific School (10), State Forest Transfer (1)

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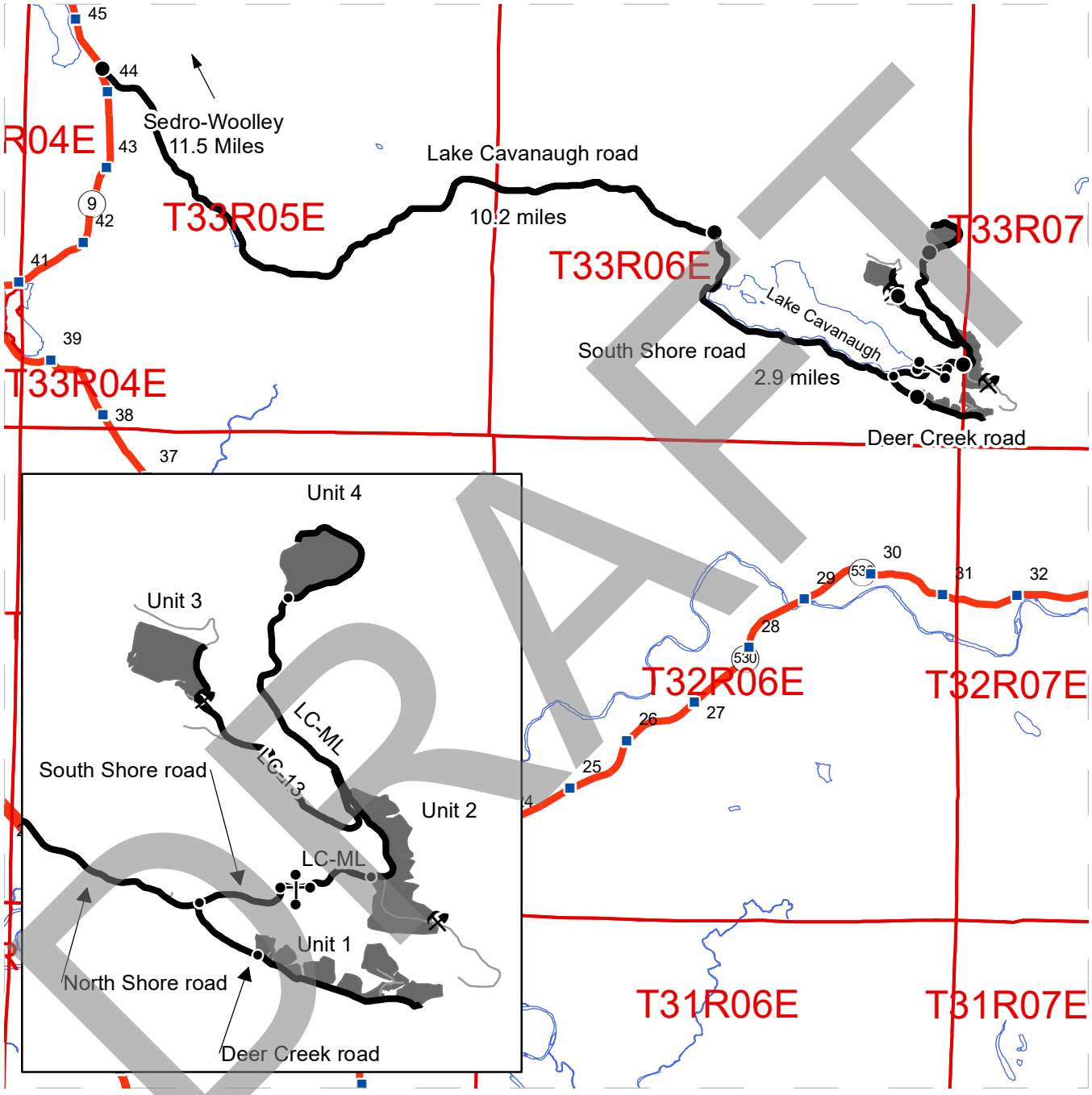


- Timber Sale Unit
- Milepost Markers
- Route
- Highway
- Distance Indicator
- Gate (<<Lock Type>>)
- Rock Pit

DRIVING DIRECTIONS:

Directions: From the junction of Hwy 20 and Hwy 9 in Sedro-Woolley, WA travel 11.5 miles south on Hwy 9 to Lake Cavanaugh Road. 10.2 miles to South Shore Drive. For unit 1A-F turn right and travel east 2.9 miles and turn right at the junction and onto Deer Creek Rd/ Oso Pass Rd. Travel 0.8 miles to reach the first unit. For units 2-4 turn left at the junction and travel east 4.4 miles to LC-ML. Turn right, pass through the gate and travel east 0.5 miles and you reach unit 2. For unit 3 travel 1.2 miles to junction of the LC-ML and LC-13 turn left then head up the LC-13 for 1.5 miles to reach the unit. For unit 4 stay right at the junction and travel 1.2 miles to reach the unit.

N

Prepared By: cesk490
Accessed: 03/01/2024 10:58

Modification Date: marn490 9/19/2023

Timber Sale Cruise Report
East Cavanaugh

Sale Name: EAST CAVANAUGH
Sale Type: MBF SCALE
Region: NORTHWEST
District: CLEAR LAKE
Lead Cruiser: Bailey Vos
Other Cruisers: Matt Llobet

The East Cavanaugh TS was sampled using a full 40 BAF and a 1:1 ratio was applied. The smallest merchantable tree cruised throughout the sale had a DBH of 7.0 inches and 5.0 inches at 16 feet. My plots were generated in GIS and located in the field using Avenza Maps. Bole height was measured with a laser and taken to a 5" top or break point (40% of diameter at 16 feet). Trees were segmented into preferred west-side log lengths and defect was accounted for within each sampled VBAR tree.

- Conifer log lengths were cruised in 2 foot multiples - maximizing 32-40 ft. lengths.
- Hardwood log lengths were cruised in 10 foot multiples - no longer than 30 feet long.

My total net cruise volume for East Cavanaugh is 2,097 MBF. Observed throughout all four units was a mixture of younger "plantation" type Douglas fir and Western Hemlock in the small-medium diameter range. Topography is flat with a gentle gradient throughout the sale. Forest roads provide excellent access to all four units.

Timber Sale Notice Volume (MBF)

				MBF Volume by Grade			
Sp	DBH	Rings/In	Age	All	3 Saw	4 Saw	Utility
DF	12.3	6.0		1,666	1,381	193	92
WH	11.5			401	282	105	14
RA	13.0			30		30	
ALL	12.2	6.0		2,097	1,664	327	105

Timber Sale Notice Weight (tons)

	Tons by Grade			
Sp	All	3 Saw	4 Saw	Utility
DF	13,786	11,616	1,500	670
WH	3,544	2,504	937	103
RA	225		225	
ALL	17,555	14,120	2,662	773

Timber Sale Overall Cruise Statistics

BA (sq ft/acre)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR SE (%)	Net Vol (bf/acre)	Vol SE (%)
187.7	3.3	97.1	1.9	18,232	3.8

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
EAST CAVANAUGH U1	B1C: VR, 1 BAF (40) Measure/ Count Plots, Sighting Ht = 4.5 ft	62.8	64.4	42	24	0
EAST CAVANAUGH U2	B1C: VR, 1 BAF (40) Measure/ Count Plots, Sighting Ht = 4.5 ft	85.1	86.3	28	14	0
EAST CAVANAUGH U3	B1C: VR, 1 BAF (40) Measure/ Count Plots, Sighting Ht = 4.5 ft	57.4	58.7	21	11	0
EAST CAVANAUGH U4	B1C: VR, 1 BAF (40) Measure/ Count Plots, Sighting Ht = 4.5 ft	62.8	63.3	25	13	0
All		268.1	272.7	116	62	0

Timber Sale Log Grade x Sort Summary

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
DF	LIVE	3 SAW	Domestic	7.6	37	5,224	5,152	1.4	11,616.2	1,381.3
DF	LIVE	4 SAW	Domestic	6.0	20	721	718	0.4	1,500.2	192.6
DF	LIVE	CULL	Cull	12.1	6	12	0	100.0	0.0	0.0
DF	LIVE	UTILITY	Pulp	5.1	20	342	342	0.0	669.9	91.7
RA	LIVE	4 SAW	Domestic	8.4	22	111	111	0.0	225.1	29.7
WH	LIVE	3 SAW	Domestic	7.8	37	1,058	1,053	0.5	2,504.1	282.3
WH	LIVE	4 SAW	Domestic	5.5	26	392	392	0.0	937.1	105.2
WH	LIVE	UTILITY	Pulp	5.1	15	51	51	0.0	102.7	13.7

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	< 5	LIVE	Pulp	2.7	18	2	0.0	18.0	0.6
DF	5 - 7	LIVE	Pulp	5.2	20	340	0.0	651.9	91.1
DF	5 - 7	LIVE	Domestic	6.5	30	3,642	0.9	8,141.6	976.4
DF	8 - 11	LIVE	Domestic	9.0	37	2,228	1.8	4,974.8	597.5
DF	12 - 15	LIVE	Cull	12.1	6	0	100.0	0.0	0.0
RA	5+	LIVE	Domestic	8.4	22	111	0.0	225.1	29.7
WH	5 - 7	LIVE	Pulp	5.1	15	51	0.0	102.7	13.7

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
WH	5 - 7	LIVE	Domestic	5.9	30	900	0.6	2,175.1	241.2
WH	8 - 11	LIVE	Domestic	9.1	35	546	0.0	1,266.0	146.3

Cruise Unit Report
EAST CAVANAUGH U1

Unit Sale Notice Volume (MBF): EAST CAVANAUGH U1

				MBF Volume by Grade			
Sp	DBH	Rings/In	Age	All	3 Saw	4 Saw	Utility
DF	12.5			288	223	55	10
WH	11.7			173	124	43	7
RA	12.5			6		6	
ALL	12.2			467	347	104	16

Unit Cruise Design: EAST CAVANAUGH U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	62.8	64.4	42	24	0

Unit Cruise Summary: EAST CAVANAUGH U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RC		9	0.2	0
DF	27	150	3.6	0
WH	18	54	1.3	0
RA	1	1	0.0	0
ALL	46	214	5.1	0

Unit Cruise Statistics: EAST CAVANAUGH U1

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
RC	8.6	263.5	40.7						
DF	142.9	55.0	8.5	94.4	22.0	4.2	13,482	59.3	9.5
WH	51.4	115.6	17.8	96.6	26.3	6.2	4,966	118.5	18.9
RA	1.0	648.1	100.0	95.1	0.0	0.0	91	648.1	100.0
ALL	203.8	31.8	4.9	95.0	23.4	3.5	19,353	39.5	6.0

Unit Summary: EAST CAVANAUGH U1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	27	ALL	12.1	53	72	4,635	4,584	1.1	60.8	48.6	14.0	287.9
RA	LIVE	CUT	1	ALL	12.5	66	81	91	91	0.0	1.1	1.0	0.3	5.7
WH	LIVE	CUT	18	ALL	11.3	52	65	2,759	2,759	0.0	41.0	28.6	8.5	173.3
ALL	LIVE	CUT	46	ALL	11.8	53	69	7,485	7,434	0.7	102.9	78.1	22.7	466.8
ALL	ALL	ALL	46	ALL	11.8	53	69	7,485	7,434	0.7	102.9	78.1	22.7	466.8

Cruise Unit Report
EAST CAVANAUGH U2

Unit Sale Notice Volume (MBF): EAST CAVANAUGH U2

				MBF Volume by Grade			
Sp	DBH	Rings/In	Age	All	3 Saw	4 Saw	Utility
DF	12.9			415	355	26	33
WH	12.0			168	143	18	7
ALL	12.7			583	499	44	40

Unit Cruise Design: EAST CAVANAUGH U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	85.1	86.3	28	14	0

Unit Cruise Summary: EAST CAVANAUGH U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	21	102	3.6	0
WH	8	24	0.9	0
ALL	29	126	4.5	0

Unit Cruise Statistics: EAST CAVANAUGH U2

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	145.7	43.7	8.3	100.4	22.6	4.9	14,625	49.2	9.6
WH	34.3	164.1	31.0	115.1	14.6	5.2	3,948	164.8	31.4
ALL	180.0	36.0	6.8	103.2	21.3	4.0	18,573	41.9	7.9

Unit Summary: EAST CAVANAUGH U2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	21	ALL	12.8	52	78	4,945	4,875	1.4	54.4	48.6	13.6	414.9
WH	LIVE	CUT	8	ALL	12.9	52	75	1,990	1,974	0.8	18.9	17.1	4.8	168.0
ALL	LIVE	CUT	29	ALL	12.8	52	77	6,935	6,849	1.2	73.3	65.7	18.3	582.8
ALL	ALL	ALL	29	ALL	12.8	52	77	6,935	6,849	1.2	73.3	65.7	18.3	582.8

Cruise Unit Report
EAST CAVANAUGH U3

Unit Sale Notice Volume (MBF): EAST CAVANAUGH U3

				MBF Volume by Grade			
Sp	DBH	Rings/In	Age	All	3 Saw	4 Saw	Utility
DF	12.6	6.0		415	367	24	24
RA	14.0			10		10	
ALL	12.6	6.0		425	367	34	24

Unit Cruise Design: EAST CAVANAUGH U3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	57.4	58.7	21	11	0

Unit Cruise Summary: EAST CAVANAUGH U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
MA		1	0.0	0
DF	22	80	3.8	1
RA	1	9	0.4	0
ALL	23	90	4.3	1

Unit Cruise Statistics: EAST CAVANAUGH U3

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
MA	1.9	458.3	100.0						
DF	152.4	45.9	10.0	86.3	20.3	4.3	13,153	50.2	10.9
RA	17.1	271.8	59.3	92.6	0.0	0.0	1,588	271.8	59.3
ALL	171.4	37.7	8.2	87.0	19.7	4.1	14,907	42.6	9.2

Unit Summary: EAST CAVANAUGH U3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	22	ALL	12.7	46	72	7,257	7,234	0.3	95.3	83.8	23.5	415.3
RA	LIVE	CUT	1	ALL	14.0	40	52	176	176	0.0	1.8	1.9	0.5	10.1
ALL	LIVE	CUT	23	ALL	12.7	46	71	7,433	7,411	0.3	97.1	85.7	24.0	425.4
ALL	ALL	ALL	23	ALL	12.7	46	71	7,433	7,411	0.3	97.1	85.7	24.0	425.4

Cruise Unit Report
EAST CAVANAUGH U4

Unit Sale Notice Volume (MBF): EAST CAVANAUGH U4

				MBF Volume by Grade			
Sp	DBH	Rings/In	Age	All	3 Saw	4 Saw	Utility
DF	11.6			548	436	87	25
WH	9.5			60	15	45	
RA	12.4			14		14	
ALL	11.3			621	451	146	25

Unit Cruise Design: EAST CAVANAUGH U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	62.8	63.3	25	13	0

Unit Cruise Summary: EAST CAVANAUGH U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RC		4	0.2	0
DF	31	102	4.1	0
WH	4	15	0.6	0
RA	1	2	0.1	0
ALL	36	123	4.9	0

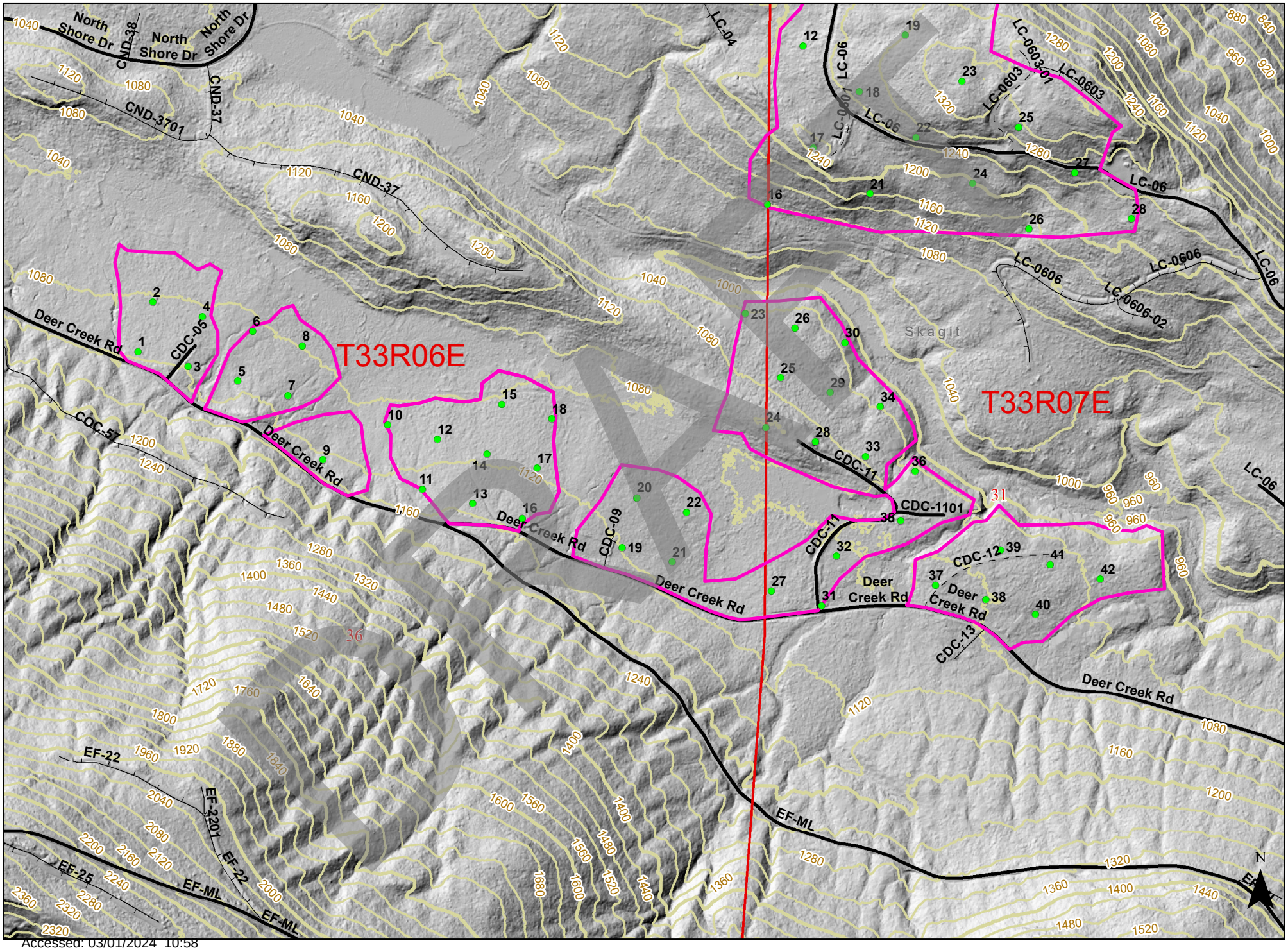
Unit Cruise Statistics: EAST CAVANAUGH U4

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
RC	6.4	233.9	46.8						
DF	163.2	47.4	9.5	102.8	19.2	3.5	16,781	51.2	10.1
WH	24.0	152.1	30.4	85.3	10.8	5.4	2,048	152.5	30.9
RA	3.2	346.1	69.2	69.2	0.0	0.0	221	346.1	69.2
ALL	196.8	29.9	6.0	100.1	20.0	3.3	19,690	36.0	6.8

Unit Summary: EAST CAVANAUGH U4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	31	ALL	11.5	47	77	8,924	8,719	2.3	117.6	84.8	25.0	547.6
RA	LIVE	CUT	1	ALL	13.1	55	80	221	221	0.0	3.4	3.2	0.9	13.9
WH	LIVE	CUT	4	ALL	9.5	37	60	956	956	0.0	22.8	11.2	3.6	60.0
ALL	LIVE	CUT	36	ALL	11.2	45	75	10,101	9,896	2.0	143.8	99.2	29.5	621.5
ALL	ALL	ALL	36	ALL	11.2	45	75	10,101	9,896	2.0	143.8	99.2	29.5	621.5

East Cavanaugh - 1



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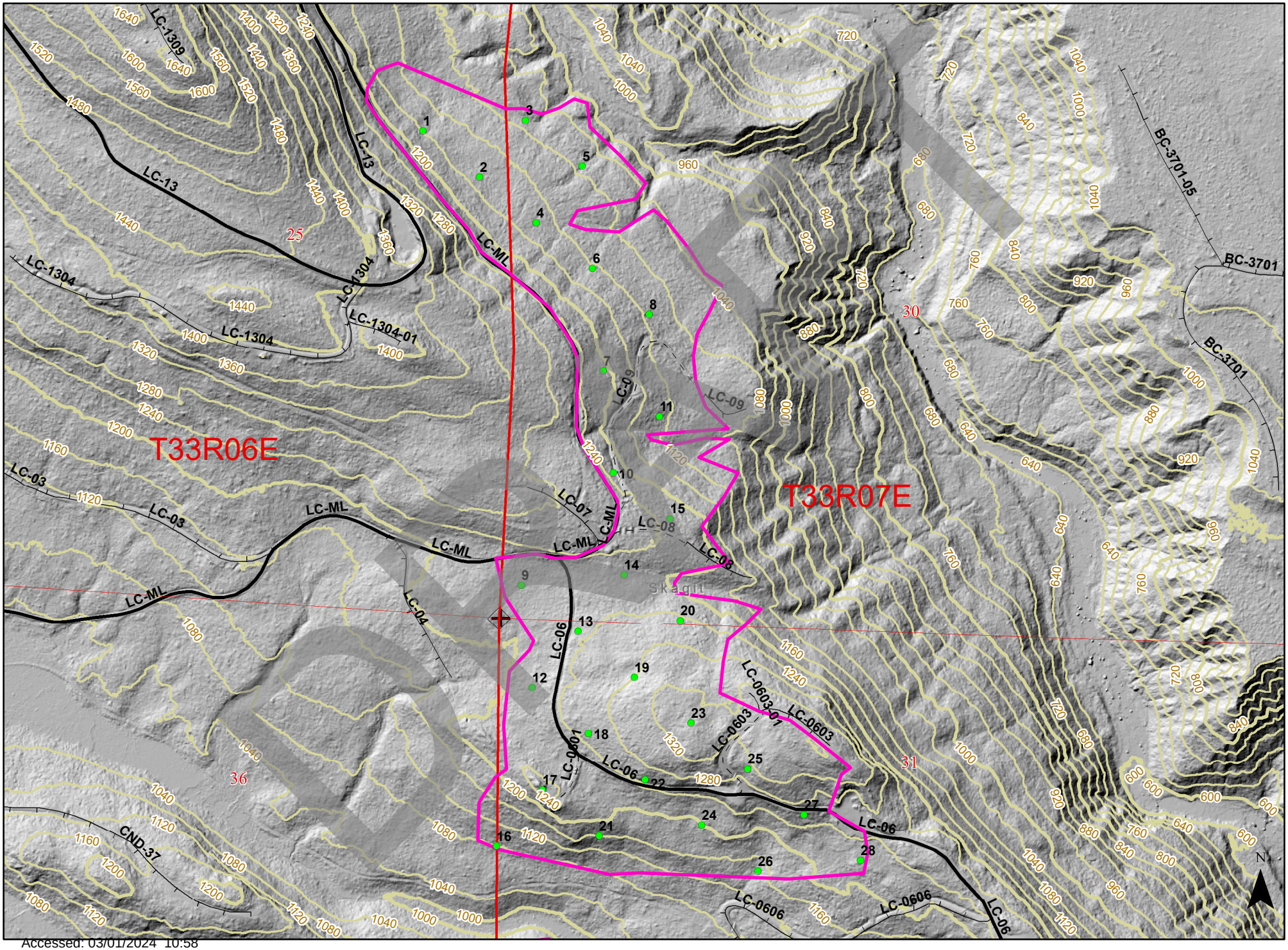

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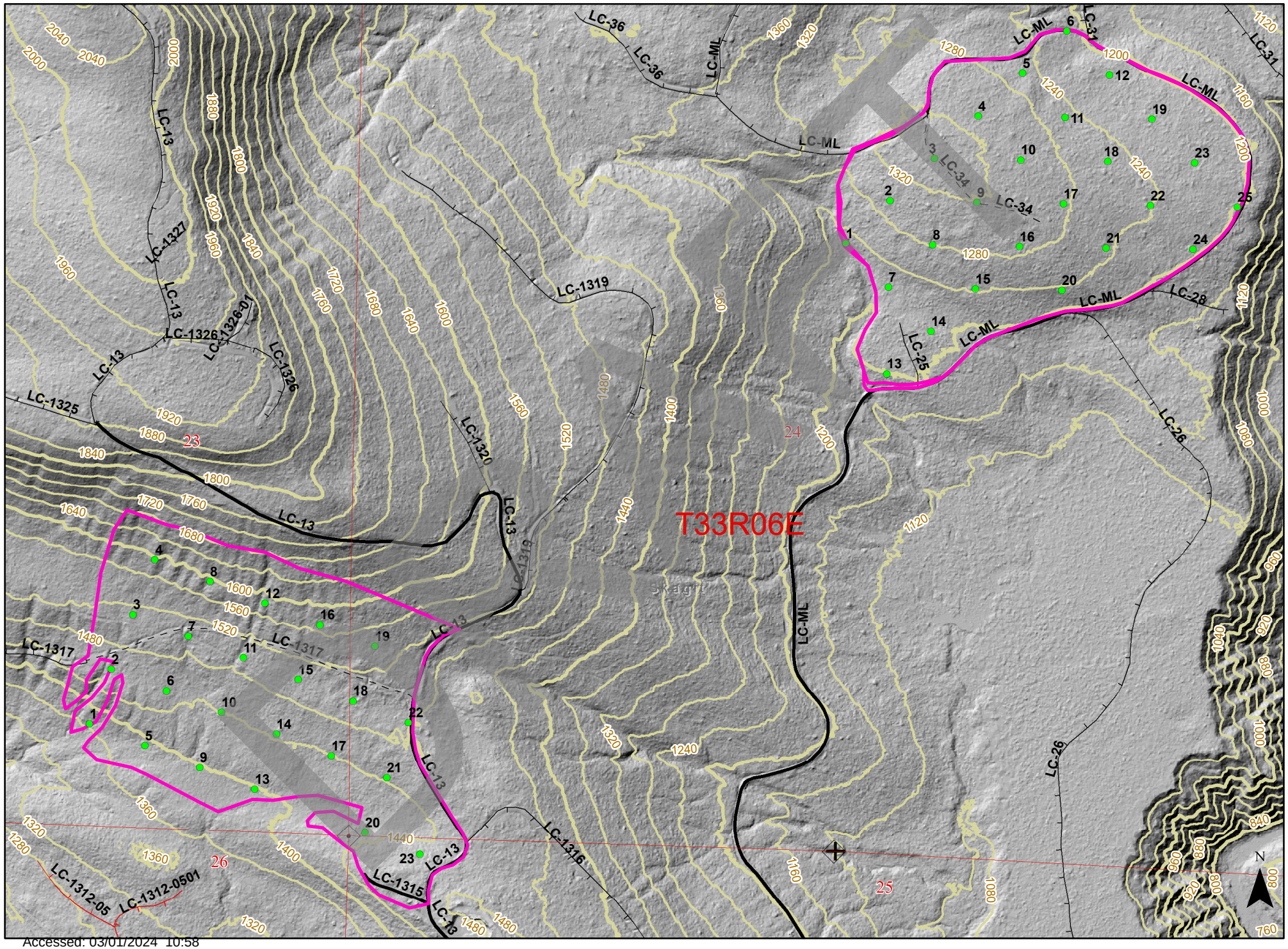
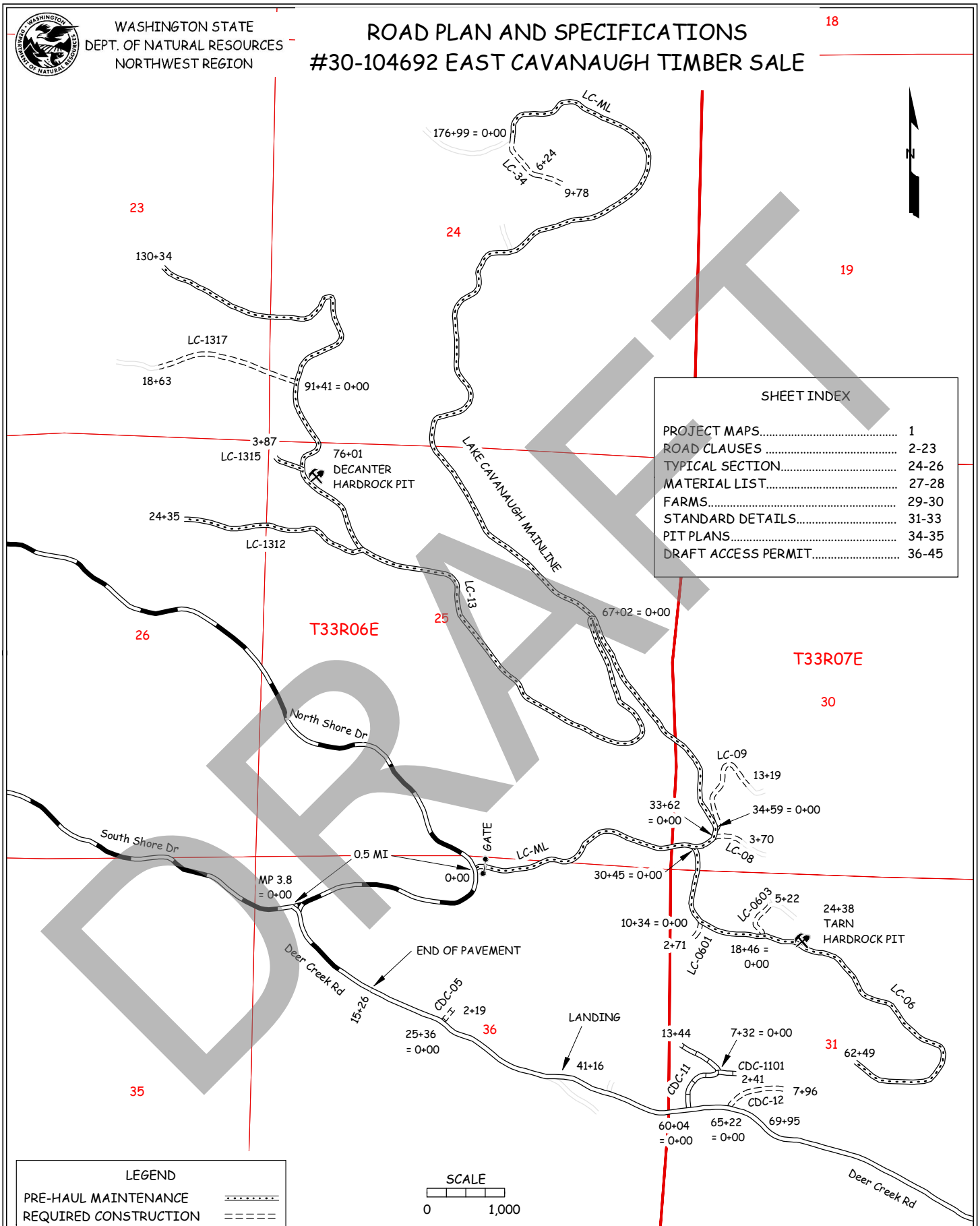
East Cavanaugh - 3/4



WASHINGTON STATE
DEPT. OF NATURAL RESOURCES
NORTHWEST REGION

ROAD PLAN AND SPECIFICATIONS
#30-104692 EAST CAVANAUGH TIMBER SALE



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LEGEND

- PRE-HAUL MAINTENANCE
- REQUIRED CONSTRUCTION
- OPTIONAL CONSTRUCTION
- REQUIRED RECONSTRUCTION
- OPTIONAL RECONSTRUCTION

SCALE
0 1,000

DESIGNED BY	REVIEWED BY	APPROVED BY	PLAN DATE	SHEET
D. SYMMANK	ZYLSTRA 9/20/2023	ZYLSTRA 9/20/2023	08/17/2023	1 OF 45

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

EAST CAVANAUGH TIMBER SALE ROAD PLAN
SKAGIT COUNTY
CLEAR LAKE DISTRICT
NORTHWEST REGION

AGREEMENT NO.: 30-104692 STAFF ENGINEER: D. SYMMANK

DATE: AUGUST 17, 2023

SECTION 0 – SCOPE OF PROJECT

0-1 ROAD PLAN SCOPE

Clauses in this road plan apply to all road related work, including landings and rock source development, unless otherwise noted.

0-2 REQUIRED ROADS

The specified work on the following roads is required.

Road	Stations	Type
CDC-11*****	0+00 to 13+44	RECONSTRUCTION
CDC-1101	0+00 to 2+41	RECONSTRUCTION
CDC-12***^**	0+00 to 7+96	CONSTRUCTION
LC-ML	0+00 to 176+99	PRE-HAUL MAINTENANCE
LC-06	0+00 to 62+49	PRE-HAUL MAINTENANCE
LC-0601**^**	0+00 to 2+71	CONSTRUCTION
LC-0603**^**	0+00 to 5+22	CONSTRUCTION
LC-08**^**	0+00 to 3+70	CONSTRUCTION
LC-09**^**	0+00 to 13+19	CONSTRUCTION
LC-13	0+00 to 130+34	PRE-HAUL MAINTENANCE
LC-1312	0+00 to 24+35	PRE-HAUL MAINTENANCE
LC-1315	0+00 to 3+87	PRE-HAUL MAINTENANCE
LC-1317**^**	0+00 to 18+63	CONSTRUCTION
LC-34**^**	0+00 to 9+78	CONSTRUCTION

*** See section 11-1 SKAGIT COUNTY ROAD RIGHT-OF-WAY PERMIT.**

^ Construction is on previously abandoned road grade.

0-3 OPTIONAL ROADS

The specified work on the following roads is not required. Any optional roads built by the Purchaser must meet all the specifications in the road plan.

Road	Stations	Type
CDC-05*	0+00 to 2+19	RECONSTRUCTION

*** See section 11-1 SKAGIT COUNTY ROAD RIGHT-OF-WAY PERMIT.**

0-4 CONSTRUCTION

Construction includes, but is not limited to clearing, grubbing, excavation and embankment to sub-grade, landing and turnout construction, culvert installation, and application of 3-inch minus ballast.

0-5 RECONSTRUCTION

Reconstruction includes, but is not limited to clearing, grubbing, excavation and embankment to sub-grade, landing and turnout construction, culvert installation, and application of 3-inch minus ballast.

0-6 PRE-HAUL MAINTENANCE

Pre-haul maintenance includes, brushing, blading, shaping, and ditching the road surface, and culvert installation.

0-7 POST-HAUL MAINTENANCE

This project includes post-haul road maintenance listed in Clause 9-5 POST-HAUL MAINTENANCE.

0-8 CLOSURE

This project includes road closure listed in Clause 9-15 ROAD CLOSURE.

0-10 ABANDONMENT

This project includes abandonment listed in Clause 9-21 ROAD ABANDONMENT.

0-12 DEVELOP ROCK SOURCE

Purchaser may develop existing rock sources. Rock source development may involve clearing, stripping, and blasting. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

If the Purchaser desires a change from this road plan including, but not limited to, relocation, extension, change in design, or adding roads; a revised road plan must be submitted in writing to the Contract Administrator for consideration. Before work begins, Purchaser shall obtain approval from the State for the submitted plan.

1-2 UNFORESEEN CONDITIONS

Quantities established in this road plan are minimum acceptable values. Additional quantities required by the state due to unforeseen conditions, or Purchaser's choice of construction season or techniques will be at the Purchaser's expense. Unforeseen conditions include, but are not limited to, solid subsurface rock, subsurface springs, saturated ground, and unstable soils.

1-3 ROAD DIMENSIONS

Purchaser shall perform road work in accordance with the dimensions shown on the TYPICAL SECTION SHEET and the specifications within this road plan, unless controlled by design data (plan, profile, and cross-sections).

1-4 ROAD TOLERANCES

Purchaser shall perform road work within the tolerances listed below. The tolerance class for each road is listed on the TYPICAL SECTION SHEET.

Tolerance Class	A	B	C
Road and Subgrade Width (feet)	+1.5	+1.5	+2.0
Subgrade Elevation (feet +/-)	0.5	1.0	2.0
Centerline alignment (feet lt./rt.)	1.0	1.5	3.0

1-6 ORDER OF PRECEDENCE

Any conflict or inconsistency in the road plan will be resolved by giving the documents precedence in the following order:

1. Addenda.
2. Designs or Plans. On designs and plans, figured dimensions shall take precedence over scaled dimensions.
3. Road Plan Clauses.
4. Typical Section Sheet.
5. Standard Lists.
6. Standard Details.

In case of any ambiguity or dispute over interpreting the road plan, the Contract Administrator's or designee's decision will be final.

1-8 REPAIR OR REPLACEMENT OF DAMAGED MATERIALS

Purchaser shall repair or replace all materials, roadway infrastructure, and road components damaged during road work or operation activities. The Contract Administrator will direct repairs and replacements. Repairs to structural materials must be made in accordance with the manufacturer's recommendation and may not begin without written approval from the Contract Administrator.

1-9 DAMAGED METALLIC COATING

Any cut ends, or damaged galvanized or aluminized coating on existing or new bridge components, culverts, downspouts, and flumes must be cleaned and treated with a minimum of two coats of zinc rich paint or cold galvanizing compound.

1-18 REFERENCE POINT DAMAGE

Purchaser shall reset reference points (RPs) that were moved or damaged at any time during construction to their original locations. Excavation and embankment may not proceed on road segments controlled by said RPs until Purchaser resets all moved or damaged RPs.

1-21 HAUL APPROVAL

Purchaser shall not use roads under this road plan for any hauling, other than timber cut on the right-of-way, without written approval from the Contract Administrator.

1-25 ACTIVITY TIMING RESTRICTION

The specified activities are not allowed during the listed closure periods unless authorized in writing by the Contract Administrator.

Activity	Closure Period
Rock hauling, construction, reconstruction, or maintenance	November 1 to March 31

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTION, Purchaser shall provide a maintenance plan to include further protection of state resources. Purchaser shall obtain written approval from the Contract Administrator for the maintenance plan and shall put preventative measures in place before operating during the closure period. Purchaser is required to maintain all haul roads at their own expense including those listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER. If other operators are using, or desire to use these designated maintainer roads, a joint operating plan must be developed. All parties shall follow this plan.

1-29 SEDIMENT RESTRICTION

Purchaser shall not allow silt-bearing runoff to enter any streams.

1-30 CLOSURE TO PREVENT DAMAGE

In accordance with Contract Clause G-220 STATE SUSPENDS OPERATION, the Contract Administrator will suspend road work or hauling right-of-way timber, forest products, or rock under the following conditions:

- Wheel track rutting exceeds 4 inches on crushed rock roads.
- Surface or base stability problems persist.

- Weather is such that satisfactory results cannot be obtained in an area of operations.
- When, in the opinion of the Contract Administrator excessive road damage or rutting may occur.

Operations must stop unless authority to continue working or hauling is granted in writing by the Contract Administrator. In the event that surface or base stability problems persist, Purchaser shall cease operations, or perform corrective maintenance or repairs, subject to specifications within this road plan. Before and during any suspension, Purchaser shall protect the work from damage or deterioration.

1-33 SNOW PLOWING RESTRICTION

Snowplowing will be allowed after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contact Administrator upon request. Purchaser shall request a SNOW PLOWING AGREEMENT each time plowing occurs. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS

Purchaser shall immediately remove any mud, dirt, rock, or other material tracked or spilled on to county roads and state highways.

If additional damage to the surface, signs, guardrails, etc. occurs then the damage will be repaired, at the Purchaser's expense, as directed by the Contract Administrator when authorized by the county or WSDOT.

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

Purchaser shall maintain all roads used under this contract in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS for the entire term of this contract. Maintenance is required even during periods of inactivity.

2-2 ROAD MAINTENANCE – PURCHASER MAINTENANCE

Purchaser shall perform maintenance on roads listed in Contract Clause C-050 PURCHASER ROAD MAINTENANCE AND REPAIR in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER

Purchaser may be required to perform maintenance on roads listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER as directed by the Contract Administrator. Purchaser shall maintain roads in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-5 MAINTENANCE GRADING – EXISTING ROAD

On the following roads, Purchaser shall use a grader to shape the existing surface before hauling.

Road	Stations	Requirements
LC-ML	0+00 to 176+99	− As directed by Contract Administrator. − After completion of Brushing.
LC-13	0+00 to 91+41	

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

Purchaser shall clean ditches, headwalls, and catchbasins. Work must be completed before application of rock and must be done in accordance with the TYPICAL SECTION. Pulling ditch material across the road or mixing in with the road surface is not allowed.

2-8 MAINTAINING EROSION CONTROL STRUCTURES

Purchaser shall clean and maintain all erosion control structures. Work must be completed before hauling of rock or timber and must be done as approved by the Contract Administrator. Excavated material must be scattered outside the grubbing limits.

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

3-1 BRUSHING

On the following roads, Purchaser shall cut vegetative material up to 6 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by manual or mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation may not be disturbed unless directed by the Contract Administrator. Purchaser shall remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets.

Road	Stations
LC-ML	0+00 to 176+99
LC-06	0+00 to 62+49
LC-13	0+00 to 130+34
LC-1312	0+00 to 24+35
LC-15	0+00 to 3+87

3-5 CLEARING

Purchaser shall fall all vegetative material larger than 2 inches DBH or over 5 feet high between the marked right-of-way boundaries and within waste and debris areas, or if not marked in the field, between the clearing limits specified on the TYPICAL SECTION SHEET. Clearing must be completed before starting excavation and embankment.

3-8 PROHIBITED DECKING AREAS

Purchaser shall not deck right-of-way timber in the following areas:

- Within the grubbing limits.
- Within 50 feet of any stream.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- On slopes greater than 40%.
- Against standing trees.

3-10 GRUBBING

Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET. Purchaser shall also remove stumps with undercut roots outside the grubbing limits. Grubbing must be completed before starting excavation and embankment.

3-20 ORGANIC DEBRIS DEFINITION

Organic debris is defined as all vegetative material not eligible for removal by Contract Clause G-010 PRODUCTS SOLD AND SALE AREA or G-011 RIGHT TO REMOVE FOREST PRODUCTS AND CONTRACT AREA, that is larger than one cubic foot in volume within the clearing limits as shown on the TYPICAL SECTION SHEET.

3-21 DISPOSAL COMPLETION

Purchaser shall remove organic debris from the road surface, ditchlines, and culvert inlets and outlets. Purchaser shall complete all disposal of organic debris before application of rock.

3-23 PROHIBITED DISPOSAL AREAS

Purchaser shall not place organic debris in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland.
- On road subgrades, or excavation and embankment slopes.
- On slopes greater than 50%.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush can fall into the ditch or onto the road surface.
- Against standing timber.

3-24 BURYING ORGANIC DEBRIS RESTRICTED

Purchaser shall not bury organic debris unless otherwise stated in this plan.

3-25 SCATTERING ORGANIC DEBRIS

Purchaser shall scatter organic debris outside of the clearing limits in natural openings unless otherwise detailed in this road plan.

4-2 PIONEERING

Pioneering may not extend past construction that will be completed during the current construction season. Pioneering may not extend more than 500 feet beyond completed construction unless approved in writing by the Contract Administrator. In addition, the following actions must be taken as pioneering progresses:

- Drainage must be provided on all uncompleted construction.
- Road pioneering operations may not undercut the final cut slope or restrict drainage.
- Culverts at live stream crossings must be installed during pioneering operations prior to embankment.

4-3 ROAD GRADE AND ALIGNMENT STANDARDS

Purchaser shall follow these standards for road grade and alignment:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 12 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 5% in 100 feet.
- Maximum grade change for crest vertical curves is 4% in 100 feet.

4-5 CUT SLOPE RATIO

Purchaser shall construct excavation slopes no steeper than shown on the following table, unless construction staked or designed:

Material Type	Excavation Slope Ratio	Excavation Slope Percent
Common Earth (on side slopes up to 55%)	1:1	100
Common Earth (56% to 70% side slopes)	¾:1	133
Common Earth (on slopes over 70%)	½:1	200
Fractured or loose rock	½:1	200
Hardpan or solid rock	¼:1	400

4-6 EMBANKMENT SLOPE RATIO

Purchaser shall construct embankment slopes no steeper than shown on the following table, unless construction staked or designed:

Material Type	Embankment Slope Ratio	Embankment Slope Percent
Sandy Soils	2:1	50
Common Earth and Rounded Gravel	1½:1	67
Angular Rock	1¼:1	80

4-7 SHAPING CUT AND FILL SLOPE

Purchaser shall construct excavation and embankment slopes to a uniform line and left rough for easier revegetation.

4-8 CURVE WIDENING

The minimum widening placed on the inside of curves is:

- 6 feet for curves of 50 to 79 feet radius.
- 4 feet for curves of 80 to 100 feet radius.

4-9 EMBANKMENT WIDENING

The minimum embankment widening is:

- 2 feet for embankment heights at centerline of 2 to 6 feet.
- 4 feet for embankment heights at centerline of greater than 6 feet.

Purchaser shall apply embankment widening equally to both sides of the road to achieve the required width.

4-21 TURNOUTS

Purchaser shall construct turnouts intervisible with a maximum distance of 1,000 feet between turnouts unless otherwise shown on drawings. Locations may be adjusted to fit the final subgrade alignment and sight distances. Locations changes are subject to written approval by the Contract Administrator. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

4-22 TURNAROUNDS

Purchaser shall construct turnarounds in accordance with the TURNAROUND DETAIL on all roads. Turnarounds must be no larger than 30 feet long and 30 feet wide. Locations are subject to written approval by the Contract Administrator.

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

Purchaser shall construct or reconstruct ditches into the subgrade as specified on the TYPICAL SECTION SHEET. Ditches must be constructed concurrently with construction of the subgrade.

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-29 DITCHOUTS

Purchaser shall construct ditchouts as identified on the MATERIALS LIST and as needed. Ditchouts must be constructed in a manner that diverts ditch water onto the forest floor and must have excavation backslopes no steeper than a 1:1 ratio.

4-35 WASTE MATERIAL DEFINITION

Waste material is defined as all dirt, rock, mud, or related material that is extraneous or unsuitable for construction material. Waste material, as used in Section 4 EXCAVATION, is not organic debris.

4-36 DISPOSAL OF WASTE MATERIAL

Purchaser may sidecast waste material on side slopes up to 50% if the waste material is compacted and free of organic debris. On side slopes greater than 50%, all waste material must be end hauled or pushed to the designated embankment sites and waste areas approved by the Contract Administrator.

4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas, except as otherwise specified in this plan:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Against standing timber.

4-55 ROAD SHAPING

Purchaser shall shape the subgrade and surface as shown on the TYPICAL SECTION SHEET. The subgrade and surface shape must ensure runoff in an even, un-concentrated manner, and must be uniform, firm, and rut-free.

4-60 FILL COMPACTION

Purchaser shall compact all embankment and waste material by routing equipment over the entire width of each lift.

4-61 SUBGRADE COMPACTION

Purchaser shall compact constructed or reconstructed subgrades by routing equipment over the entire width.

4-63 EXISTING SURFACE COMPACTION

Purchaser shall compact maintained road surfaces by routing equipment over the entire width.

5-5 CULVERTS

Purchaser shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the MATERIAL LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts must be new material and meet the specifications in Clauses 10-15 through 10-24.

5-12 UNUSED MATERIALS STATE PROPERTY

On required roads, any materials listed on the MATERIAL LIST that are not installed will become the property of the state. Purchaser shall stockpile materials as directed by the Contract Administrator.

5-15 CULVERT INSTALLATION

Culvert installation must be in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL and the National Corrugated Metal Pipe Association's "Installation Manual for Corrugated Steel Drainage Structures" and the Corrugated Polyethylene Pipe Association's "Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings". Corrugated Polyethylene pipe must be installed in a manner consistent with the manufacturer's recommendations. Culverts over 18 inches diameter shall be banded using lengths of no less than 10 feet, and no more than one length less than 16 feet**.** Shorter section of banded culvert shall be installed at the inlet end.

5-16 APPROVAL FOR LARGER CULVERT INSTALLATION

Purchaser shall obtain written approval from the Contract Administrator for the installation of culverts 36 inches in diameter and over before backfilling.

5-17 CROSS DRAIN SKEW AND SLOPE

Cross drains, on road grades in excess of 3%, must be skewed at least 30 degrees from perpendicular to the road centerline, except where the cross drain is at the low point in the road culverts will not be skewed. Cross drain culverts must be installed at a slope steeper than the incoming ditch grade, but not less than 3% or more than 10%.

5-18 CULVERT DEPTH OF COVER

All culverts must be installed with a depth of cover of not less than 1 foot of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts must be installed with a depth of cover recommended by the culvert manufacturer for the type and size of the pipe.

5-20 ENERGY DISSIPATERS

Purchaser shall install energy dissipaters in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL. Energy dissipater installation is subject to approval by the Contract Administrator.

The type of energy dissipater and the amount of material must be consistent with the specifications listed on the CULVERT AND DRAINAGE SPECIFICATION DETAIL

5-21 DOWNSPOUTS AND FLUMES

Downspouts and flumes must be staked on both sides at a maximum interval of 10 feet with 6-foot heavy-duty steel posts and fastened securely to the posts in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL.

5-25 CATCH BASINS

Purchaser shall construct catch basins in accordance with CULVERT AND DRAINAGE SPECIFICATION DETAIL. Minimum dimensions of catch basins are 2 feet wide and 4 feet long.

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Purchaser shall construct headwalls in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all cross drain culverts. Rock used for headwalls must weigh at least 50 pounds. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets. Minimum specifications require that rock be placed at a width of one culvert diameter on each side of the culvert opening, and to a height of one culvert diameter above the top of the culvert. Rock may not restrict the flow of water into culvert inlets or catch basins. No placement by end dumping or dropping of rock is allowed.

5-27 ARMORING FOR STREAM CROSSING CULVERTS

At stream crossing culverts, Purchaser shall place riprap in conjunction with construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets as designated on the MATERIALS LIST or as directed by the Contract Administrator. Rock may not restrict the flow of water into culvert inlets or catch basins. Placement must be by zero-drop-height method only. No placement by end dumping or dropping of rock is allowed.

6-2 ROCK SOURCE ON STATE LAND

Rock used in accordance with the quantities on the TYPICAL SECTION and MATERIALS LIST may be obtained from the following sources on state land at no charge to the Purchaser. Purchaser shall obtain written approval from the Contract Administrator for the use of material from any other source. If other operators are using, or desire to use the rock sources, a joint operating plan must be developed. All parties shall follow this plan.

Source	Location	Rock Type	Use requirements
DECANTER Hardrock Pit	LC-13 76+01	3-inch minus ballast, Shot rock, and Rip rap	None
TARN Hardrock Pit	LC-06 24+38	Scattered Ripped/Shot rock	- Optional for use to reduce haul. - Rock used is in addition to total road plan 3-inch minus ballast rock and does not replace the total quantity of road plan 3-inch minus ballast rock to be produced in the DECANTER pit. - Approval by Contract Administrator prior to use.

6-3 ROCK SOURCE STATE LAND, EXISTING STOCKPILE

Rock used in accordance with the quantities on the TYPICAL SECTION and MATERIALS LIST may be obtained from the following existing stockpiles on state land at no charge to the Purchaser. Purchaser shall not remove additional yardage without prior written approval from the Contract Administrator. Other stockpiles may not be used without prior written approval from the Contract Administrator.

Source	Location	Rock Type	Use requirements
DECANTER Hardrock Pit	LC-13 76+01	Shot	None
TARN Hardrock Pit	LC-06 24+38	Ripped/Shot	- Optional for use to reduce haul. - Rock used is in addition to total road plan 3-inch minus ballast rock and does not replace the total quantity of road plan 3-inch minus ballast rock to be produced in the DECANTER pit. - Approval by Contract Administrator prior to use.

6-5 ROCK FROM COMMERCIAL SOURCE

Rock used in accordance with the quantities on the TYPICAL SECTION and MATERIALS LIST may be obtained from any commercial source at the Purchaser's expense. Rock sources are subject to written approval by the Contract Administrator before their use.

6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

Purchaser shall conduct rock source development and use at the following sources, in accordance with the written ROCK SOURCE DEVELOPMENT PLAN prepared by the state and included in this road plan. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN and approved in writing by the Contract Administrator.

Source	Rock Type
DECANTER Hardrock Pit	3-inch minus ballast, Shot rock, and Rip rap

6-11 ROCK SOURCE DEVELOPMENT PLAN BY PURCHASER

Purchaser shall conduct rock source development and use at the following sources, in accordance with a written ROCK SOURCE DEVELOPMENT PLAN to be prepared by the Purchaser. The plan is subject to written approval by the Contract Administrator before any rock source operations. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN and approved in writing by the Contract Administrator.

Source	Rock Type	Use requirements
TARN Hardrock Pit	Scattered Ripped/Shot rock	- Optional for use to reduce haul. - Rock used is in addition to total road plan 3-inch minus ballast rock and does not replace the total quantity of road plan 3-inch minus ballast rock to be produced in the DECANTER pit. - Approval by Contract Administrator prior to use.

Rock source development plans prepared by the Purchaser must show the following information:

- Rock source location.
- Rock source overview showing access roads, development areas, stockpile locations, waste areas, and floor drainage.
- Rock source profiles showing development areas, bench locations including widths, and wall faces including heights.

6-12 ROCK SOURCE SPECIFICATIONS

Rock sources must be in accordance with the following specifications:

- Pit walls may not be undermined or over steepened. The maximum slope of the walls must be consistent with recognized engineering standards for the type of material being excavated in accordance with the following table:

Material	Maximum Slope Ratio (Horiz. :Vert.)	Maximum Slope Percent
Sand	2:1	50
Gravel	1.5:1	67
Common Earth	1:1	100
Fractured Rock	0.5:1	200
Solid Rock	0:1	vertical

- Pit walls must be maintained in a condition to minimize the possibility of the walls sliding or failing.
- The width of pit benches must be a minimum of 1.5 times the maximum length of the largest machine used.
- The surface of pit floors and benches must be uniform and free-draining at a minimum 2% outslope gradient.
- All operations must be carried out in compliance with all regulations of the Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration and Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.

6-23 ROCK GRADATION TYPES

Purchaser shall provide rock in accordance with the types and amounts listed in the TYPICAL SECTION and MATERIALS LIST. Rock must meet the following specifications for gradation and uniform quality when placed in hauling vehicles or during manufacture and placement into a stockpile. The exact point of evaluation for conformance to specifications will be determined by the Contract Administrator.

6-34 3-INCH MINUS BALLAST ROCK

Ballast rock must be 100% equal to, or smaller than, 3 inches in at least one dimension.

Rock may contain no more than 5 percent organic debris, dirt, and trash. All percentages are by weight.

6-50 LIGHT LOOSE RIP RAP

Light loose rip rap must consist of angular, hard, sound, and durable stone. It must be free from segregation, seams, cracks, and other defects tending to destroy its resistance to weather. Light loose rip rap must be free of rock fines, soil, organic debris, or other extraneous material, and must meet the following requirements:

Quantity	Approximate Size Range
20% to 90%	300 lbs. to 1 ton (18”- 36”)
15% to 80%	50 lbs. to 500 lbs. (8”- 18”)
10% to 20%	50 lbs. max (3”- 8”)

6-51 HEAVY LOOSE RIP RAP

Heavy loose rip rap must consist of angular, hard, sound, and durable stone. It must be free from segregation, seams, cracks, and other defects tending to destroy its resistance to weather. Heavy loose rip rap must be free of rock fines, soil, organic debris, or other extraneous material, and must meet the following requirements:

Quantity	Size Range
30% to 90%	1 ton to 3 ton (36”- 54”)
70% to 90%	500 lbs. to 1½ ton (24”- 42”)
10% to 30%	50 lbs. max (3”- 8”)

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

Measurement of specified rock depths are defined as the compacted depths using the compaction methods required in this road plan. Estimated quantities specified in the TYPICAL SECTION are loose yards. Purchaser shall apply adequate amounts of rock to meet the specified rock depths. Specified rock depths are minimum requirements and are not subject to reduction. Unless otherwise stated in Clause 6-75 OPTIONAL ROCK EXCEPTION.

6-65 ROCK STOCKPILE LOCATION

Purchaser shall stockpile rock as listed below as directed by the Contract Administrator.

Rock Source	Rock Type	Quantity (c.y.)	Stockpile Location
DECANTER Hardrock Pit	3-inch minus	Balance of optional rock used from the TARN Hardrock Pit	DECANTER Hardrock Pit

6-67 ROCK STOCKPILE SPECIFICATIONS

Rock stockpiles listed in Clause 6-65 ROCK STOCKPILE LOCATION must meet the following specifications:

Before placing aggregates upon the stockpile site, the site must be cleared of vegetation, trees, stumps, brush, rocks, or other debris and the ground leveled to a smooth, firm, uniform surface.

When completed, the stockpile must be neat and regular in shape. The stockpile height is limited to a maximum of 24 feet. Stockpiles in excess of 200 cubic yards must be built up in layers of not more than 4 feet deep. Stockpile layers must be constructed by trucks, clamshells, or other methods approved in writing by the Contract Administrator. Each layer must be completed over the entire area of the pile before depositing aggregates in the next layer. The aggregates may not be dumped so that they run down and over the lower layers in the stockpile. The method of dropping from a bucket or spout in one location to form a cone shaped pile is not allowed.

Stockpiles of different types or sizes of aggregate must be spaced far enough apart, or separated by suitable walls or partitions, to prevent the mixing of the aggregates.

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for culvert installation, ditch construction, ditch reconstruction, headwall construction, and headwall reconstruction before rock application.

6-71 ROCK APPLICATION

Purchaser shall apply rock in accordance with the specifications and quantities shown on the TYPICAL SECTION. Rock must be spread, shaped, and compacted full width concurrent with rock hauling operations. The Contract Administrator will direct locations for rock that is to be applied as spot patching. Road surfaces must be compacted by routing equipment over the entire width.

6-73 ROCK FOR WIDENED PORTIONS

Purchaser shall apply rock to turnarounds, turnouts, and areas with curve widening to the same depth and specifications as the traveled way.

SECTION 8 – EROSION CONTROL

8-2 PROTECTION FOR EXPOSED SOIL

Purchaser shall provide and evenly spread a 4-inch layer of straw to all exposed soils within 25 feet of a stream or wetland. Soils must be covered before the first anticipated storm event.

8-15 REVEGETATION

Purchaser shall spread seed and fertilizer on all exposed soils within the grubbing limits resulting from road work activities using manual dispersal. Other methods of covering must be approved in writing by the Contract Administrator.

8-16 REVEGETATION SUPPLY

The Purchaser shall provide the seed and fertilizer.

8-17 REVEGETATION TIMING

Purchaser shall revegetate during the first available opportunity after road work is completed. Soils may not be allowed to sit exposed for longer than one month without receiving revegetation treatment unless otherwise approved in writing by the Contract Administrator.

8-18 PROTECTION FOR SEED

Purchaser shall provide a protective cover for seed if revegetation occurs between July 1 and March 31. The protective cover may consist of straw, jute matting, or clear plastic sheets. The protective cover requirement may be waived in writing by the Contract Administrator if Purchaser is able to demonstrate a revegetation plan that will result in the establishment of a uniform dense crop (at least 50% coverage) of 3-inch tall grass by October 31.

8-19 ASSURANCE FOR SEEDED AREA

Purchaser shall ensure the growth of a uniform and dense crop (at least 50% coverage) of 3-inch tall grass. Purchaser shall reapply the grass seed and fertilizer in areas that have failed to germinate or have been damaged through any cause, restore eroded or disturbed areas, clean up and properly dispose of eroded materials, and reapply the grass seed and fertilizer at no additional cost to the state.

8-25 GRASS SEED

Purchaser shall evenly spread the seed mixture listed below on all exposed soil inside the grubbing limits at a rate of 50 pounds per acre of exposed soil. Grass seed must meet the following specifications:

1. Weed seed may not exceed 0.5% by weight.
2. All seed species must have a minimum 90% germination rate, unless otherwise specified.
3. Seed must be certified.
4. Seed must be furnished in standard containers showing the following information:
    a. Common name of seed
    b. Net weight
    c. Percent of purity
    d. Percentage of germination
    e. Percentage of weed seed and inert material
5. Seed must conform to the following mixture unless a comparable mix is approved in writing by the Contract Administrator.

Kind and Variety of Seed in Mixture	% by Weight

Creeping Red Fescue	50
Elf Perennial Rye Grass	25
Highland Colonial Bentgrass	15
White Clover	10
Inert and Other Crop	0.5

8-27 FERTILIZER

Purchaser shall evenly spread the fertilizer listed below on all exposed soil inside the grubbing limits at a rate of 200 pounds per acre of exposed soil. Fertilizer must meet the following specifications:

Chemical Component	% by Weight
Nitrogen	16
Phosphorous	16
Potassium	16
Sulphur	3
Inerts	49

SECTION 9 – POST-HAUL ROAD WORK

9-3 CULVERT MATERIAL REMOVED FROM STATE LAND

Culverts removed from roads become the property of the Purchaser and must be removed from state land.

9-5 POST-HAUL MAINTENANCE

Purchaser shall perform post-haul maintenance in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS and as specified below.

Road	Location	Additional Requirements
Deer Creek Road (Skagit County)	15+26 to 69+95 (MP 0.44 to MP 1.33)	Purchase shall use a grader to shape the existing surface

9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface.

9-12 LANDING EMBANKMENT REMOVAL

The Purchaser shall reduce or relocate landing embankment, in a manner approved, in writing, by the Contract Administrator. Excavated material shall be placed in a waste area designated by the Contract Administrator.

9-15 ROAD CLOSURE

Purchaser shall close the following roads before the termination of this contract.

Road	Stations	Requirements
CDC-11	0+00 to 13+44	Ecology Block Barricade
CDC-1101	0+00 to 2+41	
CDC-12	0+00 to 7+96	Ecology Block Barricade

9-16 CLOSURE

At a minimum, closure consists of:

- Maintain road according to the FOREST ACCESS ROAD SPECIFICATIONS.
- Purchaser shall provide ECOLOGY BLOCKS and CABLE as listed in the MATERIALS LIST.
- Block the road by constructing an effective barricade of cable interlocked ECOLOGY BLOCKS in a manner approved by the Contract Administrator. Barricade entrance so that four-wheel highway vehicles cannot pass the point of closure.

9-21 ROAD ABANDONMENT

Purchaser shall abandon the following roads before the termination of this contract.

Road	Stations
CDC-05	0+00 to 2+19

9-22 ABANDONMENT

- Remove all ditch relief culverts. The resulting slopes must be 1:1 or flatter. Place and compact the removed fill material in a location that will not erode into any Type 1 through 5 waters or wetlands.
- Remove all culverts in natural drainages. The resulting slopes must be 1.5:1 or flatter. Strive to match the existing native stream bank gradient. The natural streambed width must be re-established. Place and compact the removed fill material in a location that will not erode into any Type 1 through 5 waters or wetlands.
- Transport all removed culverts off site. All removed culverts are the property of the Purchaser.
- Construct non-drivable waterbars at natural drainage points and at a spacing that will produce a vertical drop of no more than 20 feet between waterbars and with a maximum horizontal spacing of 400 feet.
- Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 percent grade.
- Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
- Inslope or outslope the road as appropriate.
- Remove bridges and other structures.

- Pull back unstable fill that has potential of failing and entering any Type 1 through 5 waters or wetlands. Place and compact removed material in a stable location.
- Remove berms except as designed.
- Block the road by constructing an aggressive barrier of dense interlocked large woody debris (logs, stumps, root wads, etc.) so that four-wheel highway vehicles cannot pass the point of abandonment. Typical barrier dimensions are 10 feet high by 20 feet deep, spanning the entire road prism from top of cutslope to toe of fillslope. Long term effectiveness is the primary objective. If necessary, construct a vehicular turn-around near the point of abandonment.
- Apply grass seed to all exposed soils resulting from the abandonment work and in accordance with Section 8 EROSION CONTROL.

SECTION 10 MATERIALS

10-15 CORRUGATED STEEL CULVERT

Metallic coated steel culverts must meet AASHTO M-36 (ASTM A-760) specifications. Culverts must be galvanized (zinc coated meeting AASHTO M-218).

10-16 CORRUGATED ALUMINUM CULVERT

Aluminum culverts must meet AASHTO M-196 (ASTM A-745) specifications.

10-17 CORRUGATED PLASTIC CULVERT

Polyethylene culverts must meet AASHTO M-294 specifications, or ASTM F-2648 specifications for recycled polyethylene. Culverts must be Type S – double walled with a corrugated exterior and smooth interior.

10-20 FLUME AND DOWNSPOUT

Downspouts and flumes must meet the AASHTO specification designated for the culvert. Plastic downspouts and flumes must be Type C – corrugated single walled pipe.

10-21 METAL BAND

Metal coupling and end bands must meet the AASHTO specification designated for the culvert and must have matching corrugations. Culverts 24 inches and smaller must have bands with a minimum width of 12 inches. Culverts over 24 inches must have bands with a minimum width of 24 inches.

10-22 PLASTIC BAND

Plastic coupling and end bands must meet the AASHTO specification designated for the culvert. Only fittings supplied or recommended by the culvert manufacturer may be used.

10-24 GAUGE AND CORRUGATION

Metal culverts must conform to the following specifications for gage and corrugation as a function of diameter.

Diameter	Gauge	Corrugation
18"	16 (0.064”)	2 $^{2}/_{3}$" X $^{1}/_{2}$"
24" to 48"	14 (0.079”)	2 $^{2}/_{3}$" X $^{1}/_{2}$"
54" to 96"	12 (0.109”)	3" X 1"

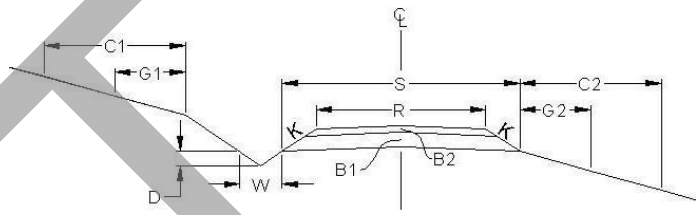
SECTION 11 SPECIAL NOTES

11-1 SKAGIT COUNTY ROAD RIGHT-OF-WAY PERMIT

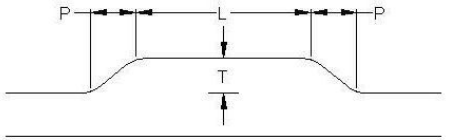
The Purchaser must enter into a Right-of-Way Permit with Skagit County for work required on the Deer Creek Road. Purchaser must provide the State with a copy of the executed permit indicating satisfactory Right-of-Way permit has been consummated between Purchaser and Skagit County before commencing work. A draft example of the Right-of-Way Permit application to be submitted is on pages XX-XX. As part of this permit, the Purchaser shall pay all fees and provide all required insurance and bonding to Skagit County, as well as a complete traffic control plan. Purchaser and contractors shall adhere to all requirements of this permit.

ROAD #		CDC-05	CDC-11	CDC-1101	CDC-12[1]
REQUIRED / OPTIONAL		Optional	Required	Required	Required
CONSTRUCT / RECONSTRUCT		Reconstruction	Reconstruction	Reconstruction	Construction
TOLERANCE CLASS (A/B/C)		C	C	C	C
STATION / MP TO		0+00	0+00	0+00	0+00
STATION / MP		2+19	13+44	2+41	7+96
ROAD WIDTH	R	12	12	12	12
CROWN (INCHES @ C/L)		3	3	3	3
DITCH WIDTH	W	3	3	3	3
DITCH DEPTH	D	1	1	1	1
TURNOUT LENGTH	L	25	50	50	50
TURNOUT WIDTH	T	10	10	10	10
TURNOUT TAPER	P	25	25	25	25
GRUBBING	G1	5	5	5	5
	G2	5	5	5	5
CLEARING	C1	10	10	10	10
	C2	10	10	10	10
ROCK FILLSLOPE	K:1	1½	1½	1½	1½
❖ BALLAST DEPTH	B1	12	6	6	6
CUBIC YARDS / STATION		72	34	34	34
➢ TOTAL CY BALLAST		158	457	82	271
❖ SURFACING DEPTH	B2	--	--	--	--
CUBIC YARDS / STATION		--	--	--	--
➢ TOTAL CY SURFACING		--	--	--	--
➢ TOTAL CUBIC YARDS		158	457	82	271
SUBGRADE WIDTH	S	15	13.5	13.5	13.5
BRUSHCUT (Y/N)		N/A	N/A	N/A	N/A
BLADE, SHAPE, & DITCH (Y/N)		N/A	N/A	N/A	N/A

TYPICAL SECTION



TURNOUT DETAIL (PLAN VIEW)



SYMBOL NOTES

❖ Specified Rock Depth is FINISHED COMPACTED DEPTH in inches.

➢ Specified Rock Quantity is LOOSE MEASURE (Truck Cubic Yards) needed to accomplish specified FINISHED COMPACTED DEPTH. Rock quantities include volume for turnouts, curve widening and landings.

[1] Previously abandoned road grade.

[2] 3-Inch minus ballast for culvert inslalations.

Rock Totals Summary

Type	Quantity (Cubic Yards)
Shot rock	20
Rip Rap	302
3-inch minus ballast	4,306

ROAD #		LC-ML	LC-06	LC-06	LC-0601[1]	LC-0603[1]	LC-08[1]	LC-09[1]	LC-13
REQUIRED / OPTIONAL		Required	Required	Required	Required	Required	Required	Required	Required
CONSTRUCT / RECONSTRUCT		Pre-Haul	Pre-Haul	Pre-Haul	Construction	Construction	Construction	Construction	Pre-Haul
TOLERANCE CLASS (A/B/C)		C	C	C	C	C	C	C	C
STATION / MP TO		0+00	0+00	24+38	0+00	0+00	0+00	0+00	0+00
STATION / MP		176+99	24+38	62+49	2+71	5+22	3+70	13+19	91+41
ROAD WIDTH	R	12	12	12	12	12	12	12	12
CROWN (INCHES @ C/L)		3	3	3	3	3	3	3	3
DITCH WIDTH	W	3	3	3	3	3	3	3	3
DITCH DEPTH	D	1	1	1	1	1	1	1	1
TURNOUT LENGTH	L	50	50	50	50	50	50	50	50
TURNOUT WIDTH	T	10	10	10	10	10	10	10	10
TURNOUT TAPER	P	25	25	25	25	25	25	25	25
GRUBBING	G1	--	--	--	5	5	5	5	--
	G2	--	--	--	5	5	5	5	--
CLEARING	C1	--	--	--	10	10	10	10	--
	C2	--	--	--	10	10	10	10	--
ROCK FILLSLOPE	K:1	1½	1½	1½	1½	1½	1½	1½	1½
❖ BALLAST DEPTH	B1	--	6	--	6	6	6	12	--
CUBIC YARDS / STATION		--	34	--	34	34	34	72	--
➢ TOTAL CY BALLAST		60[2]	829	--	93	178	126	950	--
❖ SURFACING DEPTH	B2	--	--	--	--	--	--	--	--
CUBIC YARDS / STATION		--	--	--	--	--	--	--	--
➢ TOTAL CY SURFACING		--	--	--	--	--	--	--	--
➢ TOTAL CUBIC YARDS		60[2]	829	--	93	178	126	950	--
SUBGRADE WIDTH	S	13.5	13.5	--	13.5	13.5	13.5	13.5	--
BRUSHCUT (Y/N)		Y	Y	Y	N/A	N/A	N/A	N/A	Y
BLADE, SHAPE, & DITCH (Y/N)		Y	Y	N	N/A	N/A	N/A	N/A	Y

ROAD #		LC-13	LC-1312	LC-1315	LC-1317	LC-34[1]	LC-34[1]		
REQUIRED / OPTIONAL		Required	Required	Required	Required	Required	Required		
CONSTRUCT / RECONSTRUCT		Pre-Haul	Pre-Haul	Pre-Haul	Construction	Construction	Construction		
TOLERANCE CLASS (A/B/C)		C	C	C	C	C	C		
STATION / MP TO		91+41	0+00	0+00	0+00	0+00	6+24		
STATION / MP		130+34	24+35	3+87	18+63	6+24	9+78		
ROAD WIDTH	R	12	12	12	12	12	12		
CROWN (INCHES @ C/L)		3	3	3	3	3	3		
DITCH WIDTH	W	3	3	3	3	3	3		
DITCH DEPTH	D	1	1	1	1	1	1		
TURNOUT LENGTH	L	50	50	50	50	50	50		
TURNOUT WIDTH	T	10	10	10	10	10	10		
TURNOUT TAPER	P	25	25	25	25	25	25		
GRUBBING	G1	--	--	--	5	5	5		
	G2	--	--	--	5	5	5		
CLEARING	C1	--	--	--	10	10	10		
	C2	--	--	--	10	10	10		
ROCK FILLSLOPE	K:1	1½	1½	1½	1½	1½	1½		
❖ BALLAST DEPTH	B1	--	--	--	6	6	12		
CUBIC YARDS / STATION		--	--	--	34	34	72		
➢ TOTAL CY BALLAST		--	--	--	634	213	255		
❖ SURFACING DEPTH	B2	--	--	--	--	--	--		
CUBIC YARDS / STATION		--	--	--	--	--	--		
➢ TOTAL CY SURFACING		--	--	--	--	--	--		
➢ TOTAL CUBIC YARDS		--	--	--	634	213	255		
SUBGRADE WIDTH	S	--	--	--	13.5	13.5	15		
BRUSHCUT (Y/N)		Y	Y	Y	N/A	N/A	N/A		
BLADE, SHAPE, & DITCH (Y/N)		N	N	N	N/A	N/A	N/A		

MATERIALS LIST

LOCATION		CULVERT			DWNSPT		RIPRAP			FILL TYPE	TOLERANCE	REMARKS
ROAD #	STATION	DIAMETER	LENGTH	TYPE	LENGTH	TYPE	INLET	OUTLET	TYPE			**Note: Galvanized metal culverts shall conform to the following specifications for gage and corrugation as a function of the diameter:** **Diameter / Gage / Corrugation** **18" / 16 / 2 2/3" x 1/2"** **24" – 48" / 14 / 2 2/3" x 1/2"** **54" – 96" / 14 / 3" x 1"**
CDC-11	0+10	--	--	--	--	--	--	--	--	--	C	6 Concrete Ecology blocks and cable for road barricade
	4+45	18	30	PD	--	--	2	3	L	NT	C	
	8+47	48	40	GM	--	--	30	50	H/L	SR/ NT	C	20 CY shot rock. Stream
CDC-12	0+10	--	--	--	--	--	--	--	--	--	C	6 Concrete Ecology blocks and cable for road barricade
LC-ML	4+87	30	35	PD	--	--	3	6	H/L	NT	C	Stream
	49+86	24	35	PD	--	--	3	6	H/L	NT	C	Stream
	101+72	48	40	GM	--	--	15	20	H/L	NT	C	Stream
	127+42	30	35	PD	--	--	3	6	H/L	NT	C	Stream
	134+70	30	35	PD	--	--	3	6	H/L	NT	C	Stream
	165+23	30	35	PD	--	--	3	6	H/L	NT	C	Stream
LC-0603	1+24	18	30	PD	--	--	2	3	L	NT	C	
LC-09	2+96	18	30	PD	--	--	2	6	L	NT	C	
	4+37	36	40	PD	--	--	8	20	H/L	NT	C	Stream
	6+36	18	40	PD	--	--	2	3	L	NT	C	
	9+31	--	--	--	--	--	0	3	L	NT	C	Ditchout Left
	12+22	18	40	PD	--	--	2	3	L	NT	C	Ditchout Left
LC-1317	1+16	18	30	PD	--	--	2	3	L	NT	C	
	2+48	18	30	PD	--	--	2	3	L	NT	C	
	3+88	18	30	PD	--	--	2	3	L	NT	C	
	6+57	24	30	PD	--	--	4	6	H/L	NT	C	Stream
	8+71	18	30	PD	--	--	2	3	L	NT	C	

GM – Galvanized Metal PS – Polyethylene Pipe Single Wall PD – Polyethylene Pipe Dual Wall AM – Aluminized Metal C – Concrete XX – PD or GM
H – Heavy Loose Riprap L – Light Loose Riprap SR – Shot Rock NT – Native (Bank Run) QS – Quarry Spalls

MATERIALS LIST

LOCATION		CULVERT			DWNSPT		RIPRAP			FILL TYPE	TOLERANCE	REMARKS
ROAD #	STATION	DIAMETER	LENGTH	TYPE	LENGTH	TYPE	INLET	OUTLET	TYPE			**Note: Galvanized metal culverts shall conform to the following specifications for gage and corrugation as a function of the diameter:** **Diameter / Gage / Corrugation** **18" / 16 / 2 2/3" x 1/2"** **24" – 48" / 14 / 2 2/3" x 1/2"** **54" – 96" / 14 / 3" x 1"**
LC-1317 Cont.	9+49	24	30	PD	--	--	4	6	H/L	NT	C	Stream
	11+62	18	30	PD	--	--	2	3	L	NT	C	
	13+16	18	30	PD	--	--	2	3	L	NT	C	
	15+09	24	30	PD	--	--	3	6	H/L	NT	C	
	15+76	24	35	PD	--	--	3	6	H/L	NT	C	
	17+38	24	40	PD	--	--	4	6	H/L	NT	C	Stream
LC-34	6+24	18	30	PD	--	--	2	3	L	NT	C	

GM – Galvanized Metal PS – Polyethylene Pipe Single Wall PD – Polyethylene Pipe Dual Wall AM – Aluminized Metal C – Concrete XX – PD or GM
H – Heavy Loose Riprap L – Light Loose Riprap SR – Shot Rock NT – Native (Bank Run) QS – Quarry Spalls

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Cuts and Fills

- Maintain slope lines to a stable gradient compatible with the construction materials. Remove slides from ditches and the roadway. Repair fill-failures, in accordance with Clause 4-6 EMBANKMENT SLOPE RATIO, with selected material or material approved by the Contract Administrator. Remove overhanging material from the top of cut slopes.
- Waste material from slides or other sources shall be placed and compacted in stable locations identified in the road plan or approved by the Contract Administrator, so that sediment will not deliver to any streams or wetlands.
- Slide material and debris shall not be mixed into the road surface materials, unless approved by the Contract Administrator.

Surface

- Grade and shape the road surface, turnouts, and shoulders to the original shape on the TYPICAL SECTION SHEET. Inslope or outslope as directed to provide a smooth, rut-free traveled surface and maintain surface water runoff in an even, unconcentrated manner.
- Blading shall not undercut the backslope or cut into geotextile fabric on the road.
- If required by the Contract Administrator, water shall be applied as necessary to control dust and retain fine surface rock.
- Surface material shall not be bladed off the roadway. Replace surface material when lost or worn away, or as directed by the Contract Administrator.
- Remove shoulder berms, created by grading, to facilitate drainage, except as marked or directed by the Contract Administrator.
- For roads with geotextile fabric: spread surface aggregate to fill in soft spots and wheel ruts (barrel spread) to prevent damage to the geotextile fabric.

Drainage

- Prevent silt bearing road surface and ditch runoff from delivering sediment to any streams or wetlands.
- Maintain rolling dips and drivable waterbars as needed to keep them functioning as intended.
- Maintain headwalls to the road shoulder level with material that will resist erosion.
- Maintain energy dissipaters at culvert outlets with non-erodible material or rock.
- Keep ditches, culverts, and other drainage structures clear of obstructions and functioning as intended.
- Inspect and clean culverts at least monthly, with additional inspections during storms and periods of high runoff. This shall be done even during periods of inactivity.

Preventative Maintenance

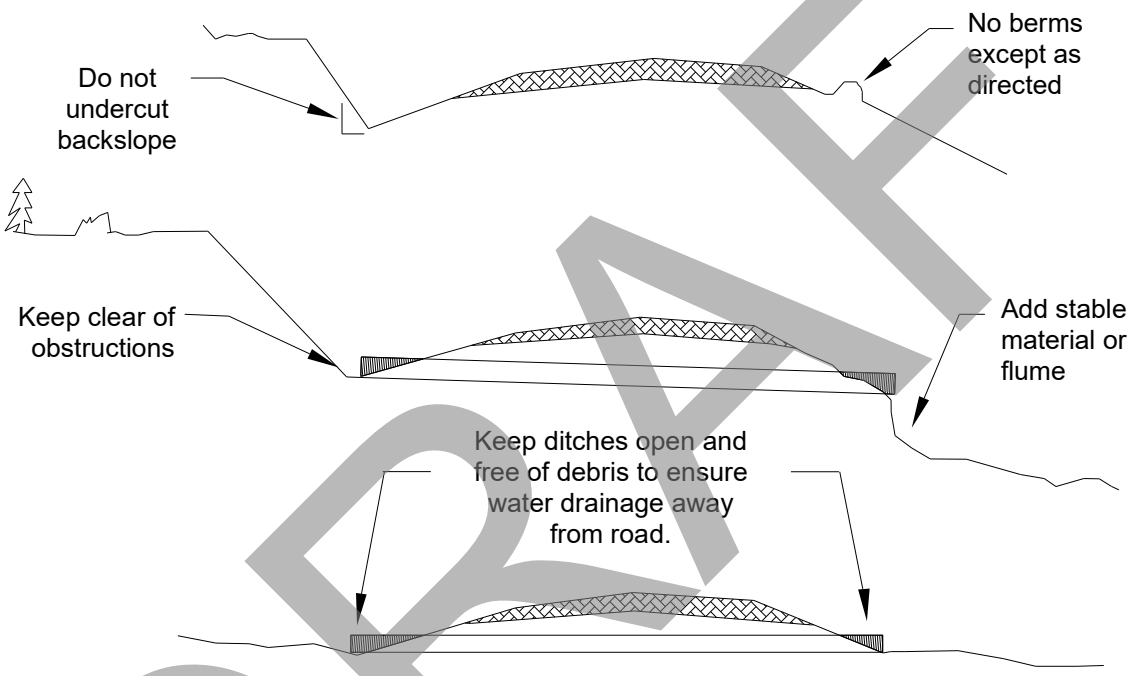
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

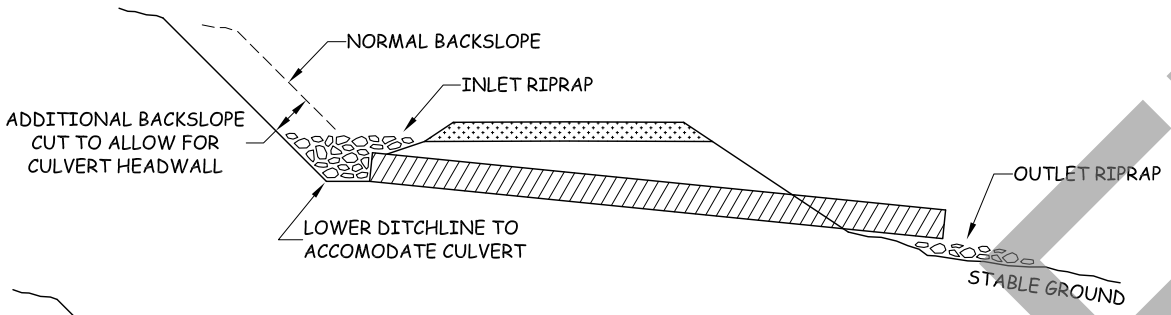
Debris

- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.

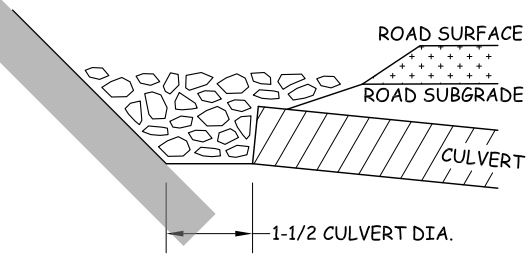


CULVERT AND DRAINAGE SPECIFICATIONS

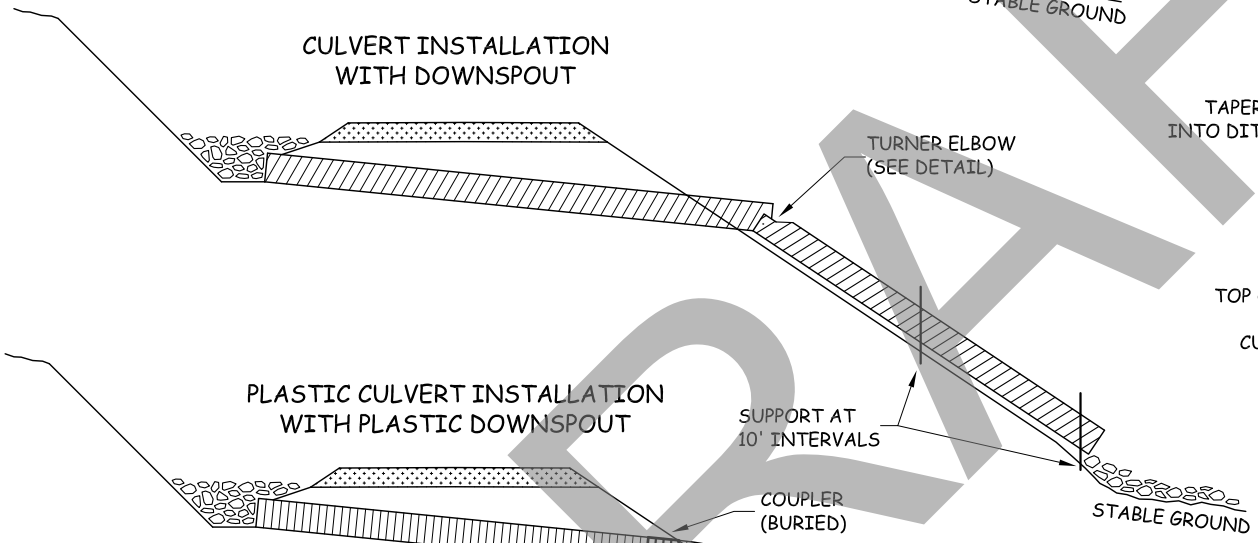
CULVERT INSTALLATION (TYPICAL)



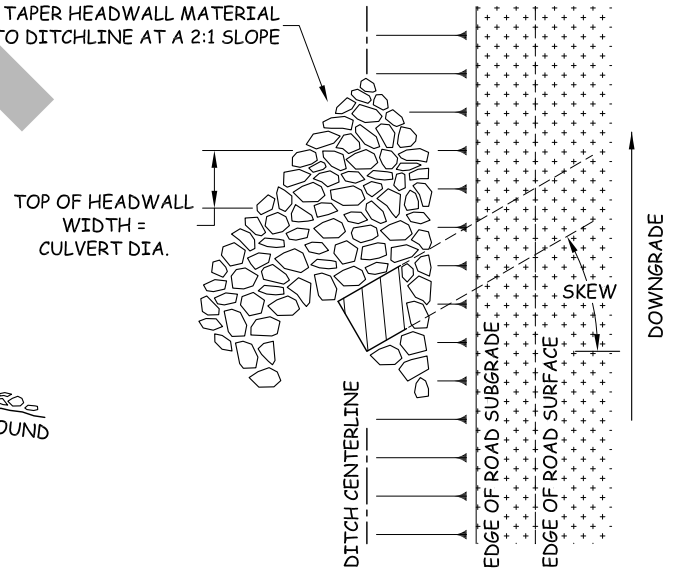
CULVERT HEADWALL - SECTION VIEW



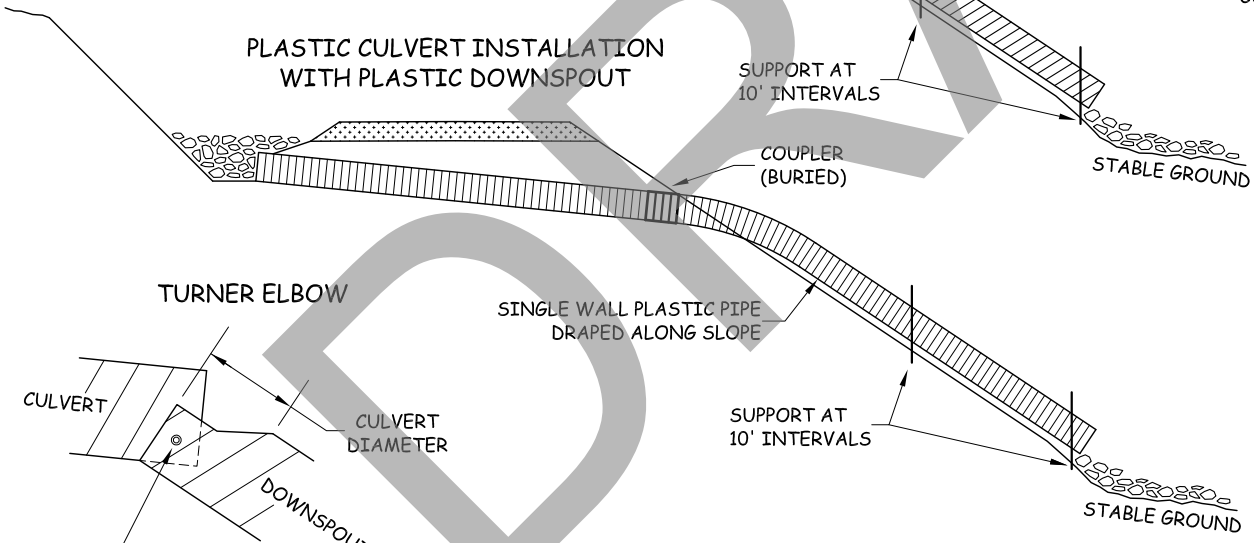
CULVERT INSTALLATION WITH DOWNSPOUT



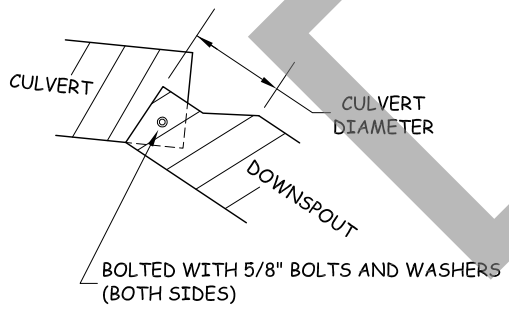
CULVERT HEADWALL - PLAN VIEW



PLASTIC CULVERT INSTALLATION WITH PLASTIC DOWNSPOUT



TURNER ELBOW

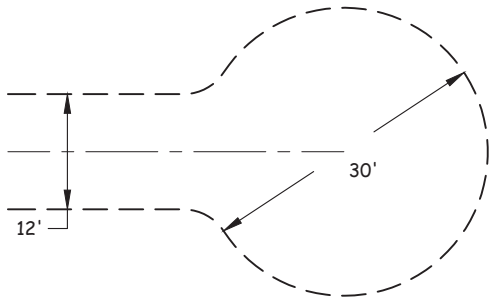


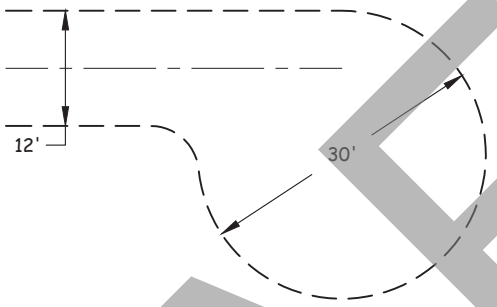
HEADWALL NOTE:

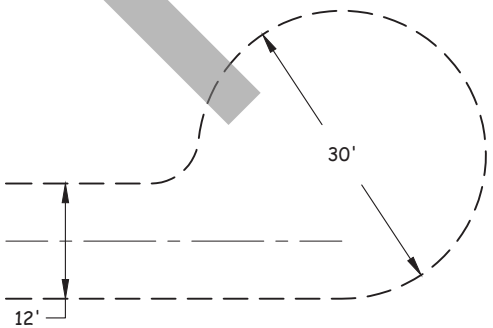
HEADWALL TO BE CONSTRUCTED OF IMPERVIOUS MATERIAL THAT WILL RESIST EROSION AND ARMORED WITH RIPRAP QUANTITY SPECIFIED IN ROAD PLAN.

CONTRACT #	PROJECT	SHEET
30-104692	EAST CAVANAUGH	31 OF 45

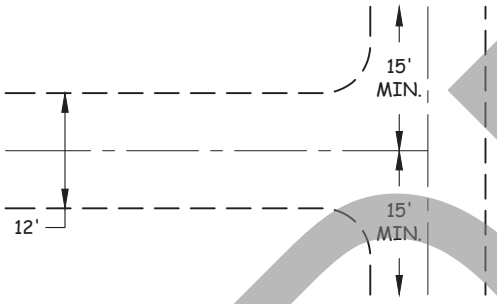
TURNAROUND DETAILS

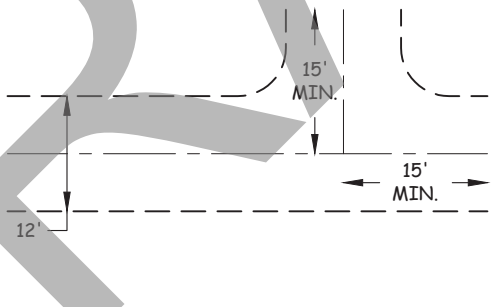


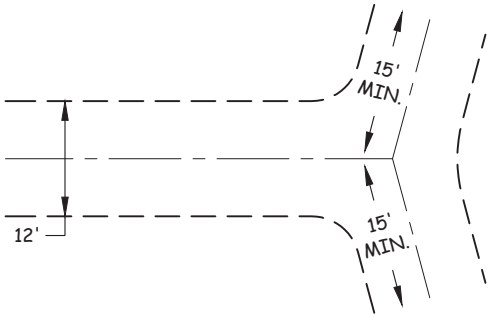




CUL-DE-SAC







HAMMERHEAD

3-POINT SIDE

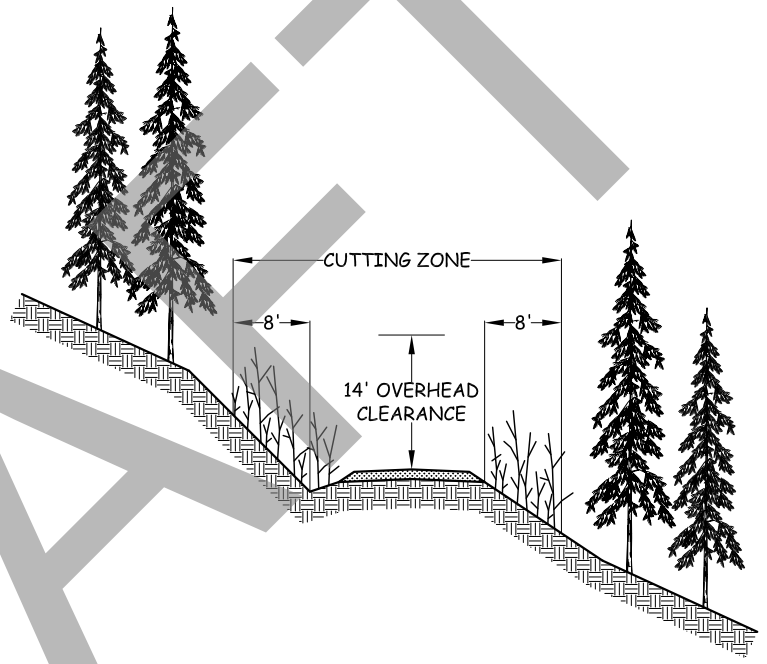
3-POINT WYE

TURNAROUND TYPE AND TURNAROUND LOCATION ARE SUBJECT TO THE APPROVAL OF THE CONTRACT ADMINISTRATOR.

ROCK SHALL BE APPLIED THROUGHOUT THE TURNAROUND TO THE SAME DEPTH AND SPECIFICATIONS AS LISTED IN THE TYPICAL SECTION.

CONTRACT #	PROJECT	SHEET
30-104692	EAST CAVANAUGH	32 OF 45

ROAD BRUSHING DETAILS



SPECIFICATIONS

BRUSH SHALL BE CUT ON THE ROAD SURFACE AND 8 ft. BACK FROM ROAD DITCH AND OUTSIDE EDGE OF RUNNING SURFACE.

ON THE INSIDE OF SWITCHBACKS AND TIGHT CURVES, BRUSH SHALL BE CUT BACK 16 ft. FOR VISIBILITY.

ON TRUCK TURNOUTS, BRUSH SHALL BE CUT 8 ft. BACK FROM OUTSIDE EDGE.

BRUSH SHALL BE CUT TO PROVIDE AN OVERHEAD CLEARANCE OF 14 ft. ABOVE THE ROAD RUNNING SURFACE.

BRUSH SHALL BE CUT TO WITHIN 6 in. OF THE GROUND.

SLASH SHALL BE REMOVED FROM CUT SLOPES ABOVE THE ROAD AND SCATTERED ON EMBANKMENT SLOPES.

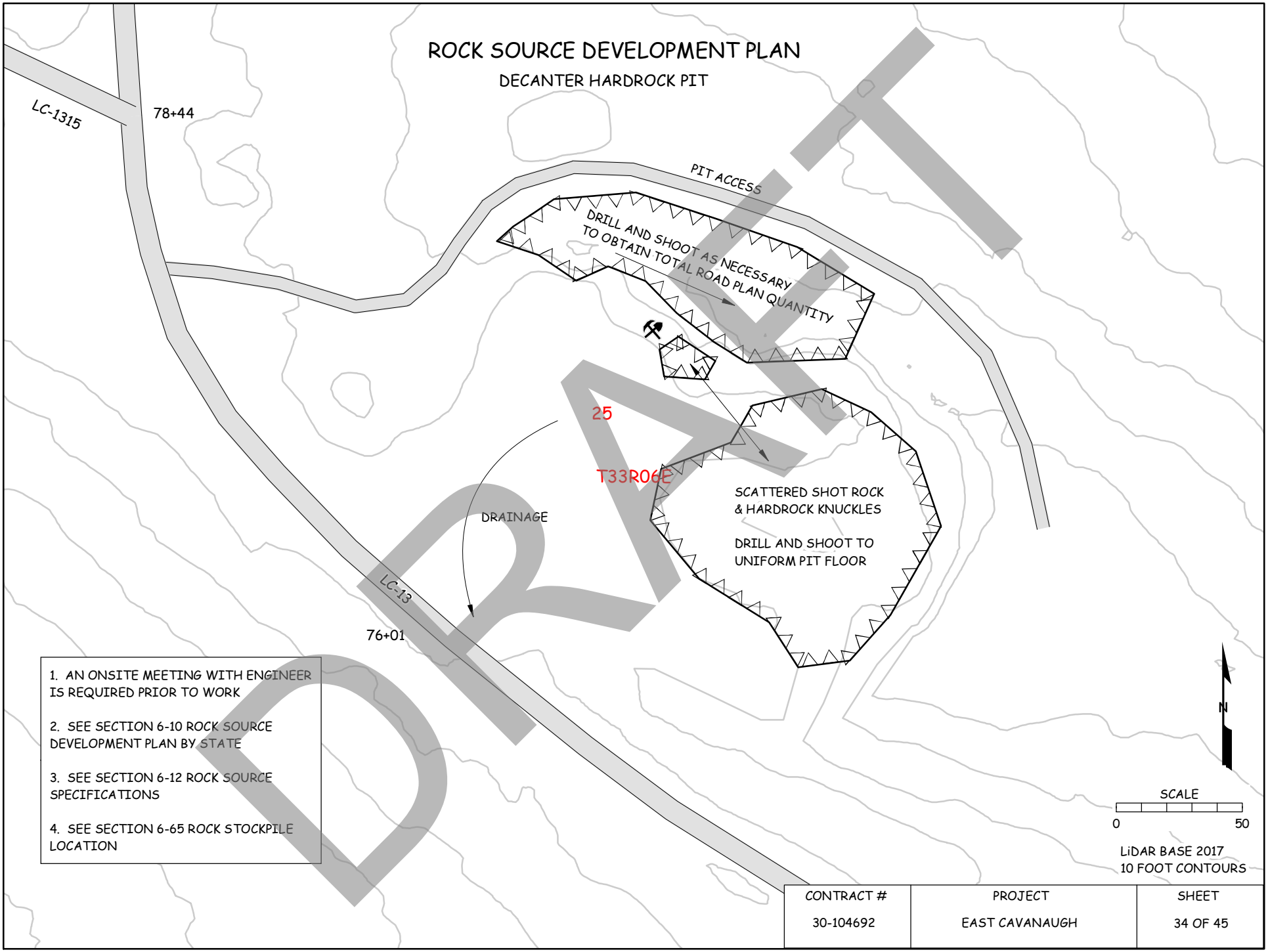
DITCHES SHALL BE CLEARED OF WOODY DEBRIS.

CULVERT INLETS AND OUTLETS SHALL BE CLEANED A MINIMUM DISTANCE OF TWO PIPE DIAMETERS AWAY.

CONTRACT #	PROJECT	SHEET
30-104692	EAST CAVANAUGH	33 OF 45

ROCK SOURCE DEVELOPMENT PLAN

DECANTER HARDROCK PIT



1. AN ONSITE MEETING WITH ENGINEER IS REQUIRED PRIOR TO WORK

2. SEE SECTION 6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

3. SEE SECTION 6-12 ROCK SOURCE SPECIFICATIONS

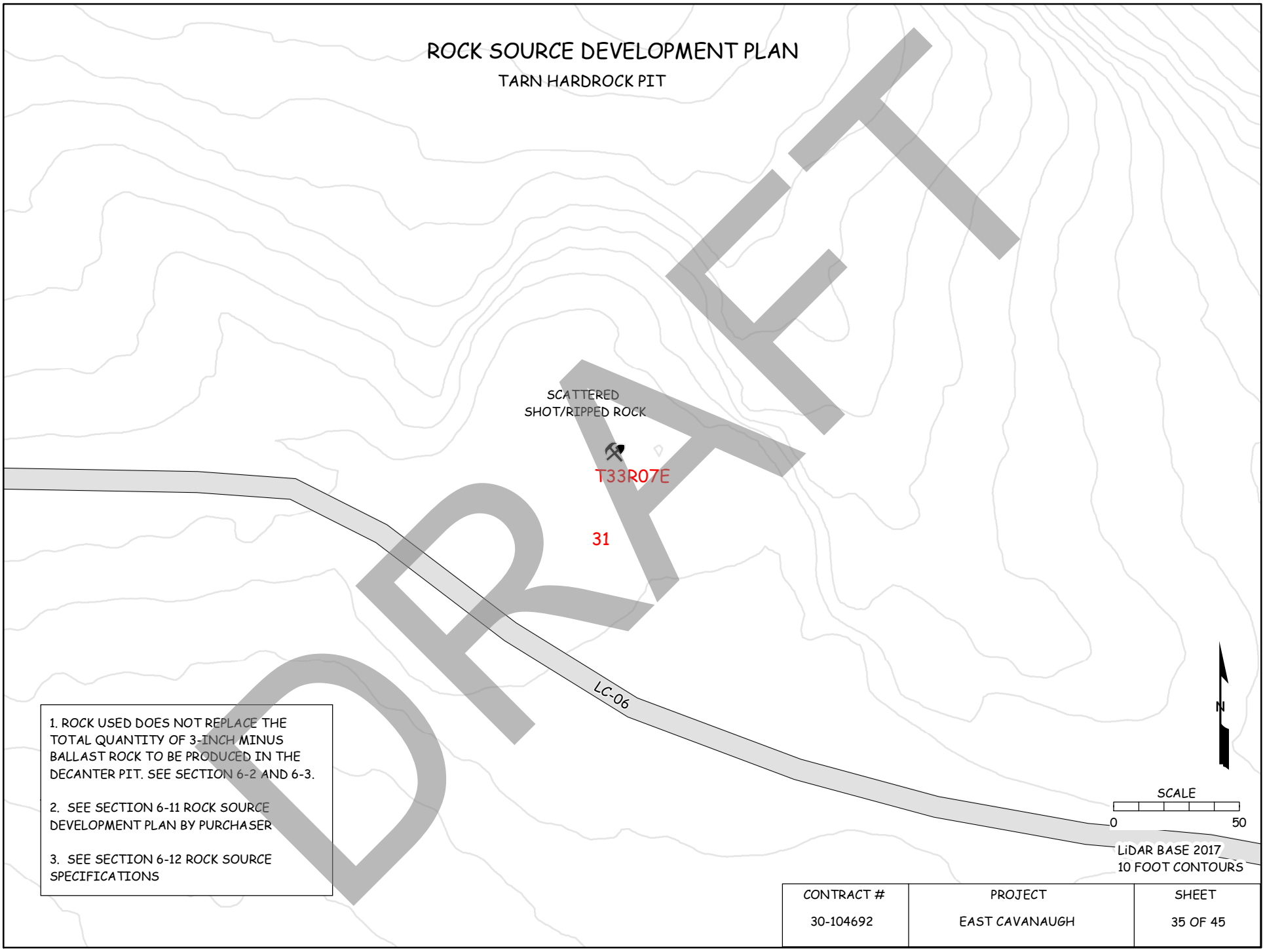
4. SEE SECTION 6-65 ROCK STOCKPILE LOCATION

LiDAR BASE 2017
10 FOOT CONTOURS

CONTRACT #	PROJECT	SHEET
30-104692	EAST CAVANAUGH	34 OF 45

ROCK SOURCE DEVELOPMENT PLAN

TARN HARDROCK PIT



1. ROCK USED DOES NOT REPLACE THE TOTAL QUANTITY OF 3-INCH MINUS BALLAST ROCK TO BE PRODUCED IN THE DECANTER PIT. SEE SECTION 6-2 AND 6-3.

2. SEE SECTION 6-11 ROCK SOURCE DEVELOPMENT PLAN BY PURCHASER

3. SEE SECTION 6-12 ROCK SOURCE SPECIFICATIONS

CONTRACT #	PROJECT	SHEET
30-104692	EAST CAVANAUGH	35 OF 45

Right-of-Way / Utility Permit Application

Skagit County Public Works
1800 Continental Place
Mount Vernon, WA 98273

Phone: 360.416-1400
www.skagitcounty.net
pw@co.skagit.wa.us

Internal Use Only	
Permit Number	
Road Number	
Mile Post	
Road District	

Subject to all the terms, conditions, and provisions written or printed below or on any part of this form.

Permission is hereby granted to: (Issued in the name of the utility owner)

Name:	Dave Symmank				
Address:	919 North Township			**City:**	Sedro-Woolley
State:	WA	**Zip:**	98284	**Phone:**	360-770-6366
Contractor	TBD			**Contr Lic #**	TBD
Email:	david.symmank@dnr.wa.gov				

Proposed start:	TBD	**Finish:**	TBD
Project location:	Along North R/W of Deer Creek Road. 3 access points MP 0.44 to 1.33		

Project Description: *(attach construction plans)*

See attached site plan map. Re-construction of previous logging road accesses along the gravel portion of Deer Creek Rd east of Lake Cavanaugh. Access points will take off the north side of the r/w and harvest units for the DNR "East Cavanaugh" timber sale are adjacent to the this side of the r/w also. The approaches will remain but be blocked by either ecology blocks or other means. Work includes purchaser required maintenance associated with harvest activities adjacent to the Deer Creek Rd, and post-haul maintenance, in accordance with the Road Plan's "Forest Access Roads Maintenance Specifications" attached.

MP 0.00 Junction of South Shore Dr and Deer Creek Rd.
MP 0.29 End of pavement.
MP 0.44 Begin harvest boundary. Begin purchaser required maintenance associated with harvest activities and post-haul maintenance.
MP 0.48 Existing old R/W access. Reconstruct access for harvest. Close access after harvest is completed.
MP 0.78 Existing old landing. Reconstruct landing for harvest. Clean landing after harvest. Landing to remain as it is curve approach for access to East Frailey Mainline.
MP 1.14 Existing old R/W access. Reconstruct access for harvest. Close access after harvest is completed.
MP 1.24 Existing old R/W access. Reconstruct access for harvest. Close access after harvest is completed.
MP 1.33 End harvest boundary. End purchaser required maintenance associated with harvest activities and post-haul maintenance.

Work is not expected to impede traffic, however with harvest activity being adjacent to the R/W, posting is advised for a "Stationary Work Zone" with "Typical Shoulder Closure - Low Speed (40 MPH or Less)".

This is application for a "draft" permit and purchaser/operator will submit final application and pay fee upon award of the DNR timber sale.

No work shall be done under this permit until the party or parties to whom it is granted shall have communicated with and received instructions from the Skagit County Road Engineer or his representative.

Approved By: **Date Issued:**

Permit expires 90 days from date of issuance.
Please be sure to read and sign the following pages of this application.

FINAL INSPECTION REQUIRED 24 HOURS MINIMUM NOTICE

Inspected by:			
Date:		**Final:**	
Comments:			

Applicant is responsible for having all utilities located prior to construction. Call before you dig 1-800-424-5555

Accessed: 03/01/2024 10:58

Insurance

The Applicant shall furnish and maintain all insurance as required herein and comply with all limits, terms and conditions stipulated therein, at their expense, for the duration of the contract. Following is a list of requirements for this contract. Any exclusion that may restrict required coverage must be pre-approved by the County. The Permit shall not be effective until evidence of all required insurance and bonding is provided to the County. The Applicant's insurer shall have a minimum A.M. Best's rating of A-VII and shall be licensed to do business in the State of Washington. Evidence of such insurance shall consist of a completed copy of the Certificate of Insurance, signed by the insurance agent for the Applicant and returned to the County Department with whom the Permit in executed. The insurance policy or policies will not be cancelled, materially changed or altered without forty-five (45) day prior notice submitted to the department with whom the Permit is executed. The policy shall be endorsed and the certificate shall reflect that the County is an additional named insured on the Applicant's general liability policy with respect to activities under the Permit. The policy shall provide and the certificate shall reflect that the insurance afforded applies separately to each insured against whom claim is made or suit is brought except with respect to the limits of the company's liability.

The policy shall be endorsed and the certificate shall reflect that the insurance afforded therein shall be primary insurance and any insurance or self-insurance carried by the County shall be in excess and not contributory insurance to that provided by the Applicant.

The Applicant shall not commence work, nor shall the Applicant allow any subcontractor to commence work on any subcontract until a Certificate of Insurance, meeting the requirements set forth herein, has been approved by the County and filed with the department with whom the Permit is executed. Upon request, the Applicant shall forward to the County the original policy, or endorsement obtained, to the Applicant's policy currently in force.

Failure of the Applicant to fully comply with the insurance requirements set forth herein, during the term of the Permit, shall be considered a material breach of contract and cause for immediate termination of the Permit at the County's discretion.

Providing coverage in the amounts listed shall not be construed to relieve the Applicant from liability in excess of such amounts.

REQUIRED COVERAGE: The insurance shall provide the minimum coverage as set forth below:

1. GENERAL LIABILITY INSURANCE: The Applicant shall have Commercial General Liability with limits of $1,000,000.00 per occurrence, which includes general aggregate, products, completed operation, personal injury, fire damage and medical expense.

2. ADDITIONAL INSURED ENDORSEMENT: General Liability Insurance must state that Skagit County, its officers, agents and employees, and any other entity specifically required by the provisions of this Agreement will be specifically named additional insured(s) for all coverage provided by this policy or insurance and shall be fully and completely protected by this policy from all claims. Language such as the following should be used, "Skagit County, its Officers, Agents and Employees are named Additional Insured."

The Applicant shall defend, indemnify and hold the County, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or in connection with activities or operations performed by the Applicant or on the Applicant's behalf out of issuance of this Permit, except for injuries and damages caused by the sole negligence of the County.

GENERAL PROVISIONS APPLICABLE TO ALL WORK WITHIN COUNTY RIGHT-OF-WAY

The construction of all public and private roads in Skagit County shall comply with the most recent version of the Skagit County Public Works Standards adopted by the Board of Skagit County Commissioners. *See,* **SCC 14.36.010**

No person shall be permitted to build or construct any approach to any county road without first obtaining permission therefor from the Board [of Skagit County Commissioners]. *See,* **RCW 36.75.130**

A bond in the amount of $ _____ (120% of the actual contract amount) is required for the protection of Skagit County as set forth in the terms of the bond.

All work shall comply with Skagit County Utility Policy and Road Standards. Available online at http://www.skagitcounty.net/Departments/PublicWorksDevelopmentReview/main.htm

All work shall comply with Washington State Department of Transportation Standard Specifications for Road, Bridge and Municipal Construction. http://www.wsdot.wa.gov/Publications/Manuals/M41-10.htm

The Applicant shall defend, indemnify and hold the County, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or in connection with activities or operations performed by the Applicant or on the Applicant's behalf out of issuance of this Permit, except for injuries and damages caused by the sole negligence of the County.

The undersigned hereby accept this permit subject to the terms and conditions as herein set forth.

Signature of applicant: Dave Symmank 2023.06.26 14:53:32 -07'00'

Print name:	Dave Symmank	**Date:**	6/26/2023
Title of Applicant:	District Engineer, WA DNR Northwest Region		

Please complete roadside safety section:

ROADSIDE HAZARDS

☐ This installed utility meets Skagit County Control Zone Guidelines.

☐ This installed utility does not meet Skagit County Control Zone Guidelines and the completed Control Zone Variance Request form is attached.

TRAFFIC CONTROL PLAN

■ This work will not impede traffic, there will be no equipment, workers, or hazards in or near the traveled way.

☐ This work will affect traffic, a complete traffic control plan is attached with this application.

Traffic control plan information:

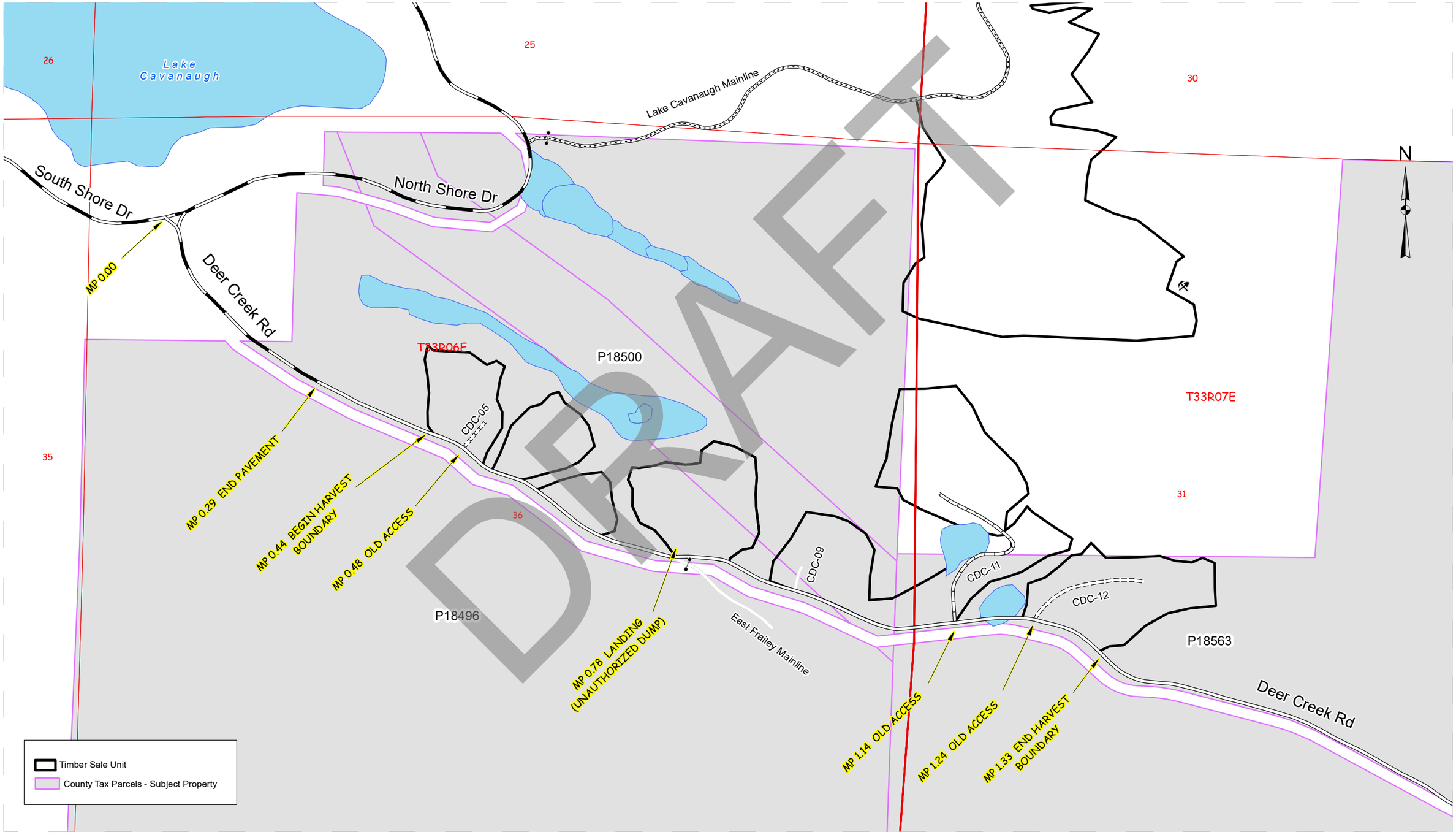
http://www.wsdot.wa.gov/NR/rdonlyres/7C537BEC-B174-4E13-8C26-B33B6BADADD8/0/WZSB_Traffic_Control_Plans.pdf

SITE PLAN - SKAGIT COUNTY ROAD ACCESS APPLICATION

WASHINGTON STATE
DEPT. OF NATURAL RESOURCES
NORTHWEST REGION

DNR SALE NAME: EAST CAVANAUGH
PARCEL #: P18496, P18500, P18563

COUNTY ROAD: DEER CREEK ROAD
TOWNSHIP(S): T33R06E, T33R07E



Prepared By: dsym490 8/18/2023 8:02:14 AM

Modification Date: 8/18/2023

Accessed: 03/01/2024 10:58

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Surface

- Grade and shape the road surface, turnouts, and shoulders to the original shape. Provide a smooth, rut-free traveled surface and maintain surface water runoff in an even, unconcentrated manner.
- Blading shall not undercut the backslope or cut into geotextile fabric on the road.
- If required by the Contract Administrator, water shall be applied as necessary to control dust and retain fine surface rock.
- Surface material shall not be bladed off the roadway. Replace surface material when lost or worn away
- Remove shoulder berms, created by grading, to facilitate drainage, except as marked or directed by the Contract Administrator.

Preventative Maintenance

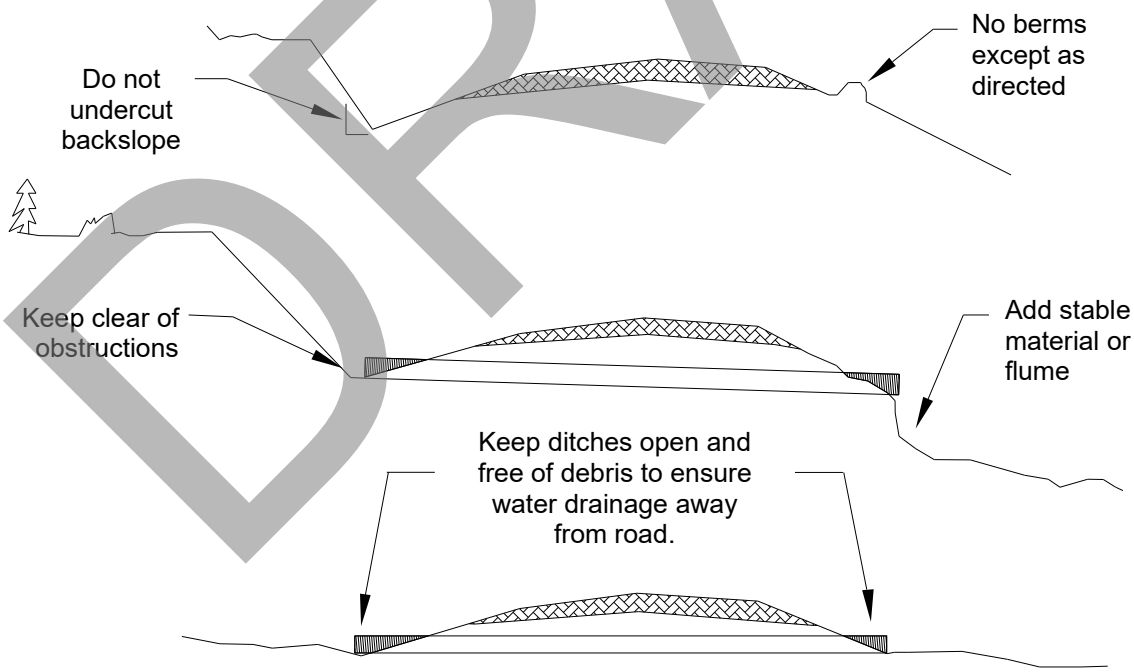
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning.

Termination of Use or End of Season

- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.



TCP 9 *Typical Shoulder Closure – Low Speed (40 MPH or Less)*

SIGN SPACING = X (1)	
RURAL ROADS & URBAN ARTERIALS	35-40 MPH 350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH 200' +/- (2)
URBAN STREETS	25 MPH OR LESS 100' +/- (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

ALL SIGNS ARE 48" X 48" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED

SHOULDER CLOSURE TAPER LENGTH = L/3						
SHOULDER WIDTH (feet)	SPEED (MPH)	20	25	30	35	40
6	L/3 (feet)	40	40	40	60	60
10		40	40	60	90	90

FOR SHOULDERS LESS THAN 6', USE 3 DEVICES MINIMUM

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35-40	30	60
20-30	20	40

LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	20	25	30	35	40
LENGTH (feet)	115	155	200	250	305

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R
NO SPECIFIED DISTANCE REQUIRED. STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW.

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R	
HOST VEHICLE WEIGHT	R
9,900 TO 22,000 lbs.	100'
22,001+ lbs.	74'

NOTES
1. Address pedestrian control through or around the work area.
2. When used, device spacing for the downstream taper should be 20' O.C.

LEGEND
- SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE - RECOMMENDED

TYPICAL SHOULDER CLOSURE - LOW SPEED (40 MPH OR LESS)
TCP 9

Skagit County Road Temp Logging Access Inspector's Report: PW23-0(DRAFT) Deer Cr Rd

Note: Access permit authorizes access location and allowed work within the County right-of-way only
(Applicant is responsible for securing Critical Area Review and applicable permits for driveway within parcel.)

Any construction near the travel lane that will affect traffic must submit a traffic control plan.

A.) Road #**01250** Class **09** Maintenance District **2** Site review date**: 07/21/2023** Inspector: **Paul Erickson**
B.) Access Permit is hereby: () Granted (**X**) DRAFT ONLY - LOCATION OK Date: **07/21/2023**
C.) Install: () Single () Double width (**X**) Pvt. Rd: Temporary logging spurs Mile Posts **0.48, 0.78, 1.14, 1.24**

Subject to all the terms, conditions and provisions written or printed below or on any part of this form. Access to be installed per County Standards and all permit conditions subject to the following:

*(**X**) Access requires improvements as indicated below; certificate of insurance must be submitted for review by Skagit County Risk Management prior to any work within County Right-of-Way.*
*(**X**) Access requires improvements as indicated below, certificate of insurance submitted prior to permit issuance:*
*(**X**) Min. **40**' of **12"** culvert is required at the **30'** wide accesses where stormwater ditch channel is present. (**12" min. cover)***
*(**X**) Ditch must be cleaned of debris/organics and culvert set at proper gradient, consistent with ditchline.*
*(**X**) Bevel culvert ends and driveway fill slopes within right-of-way control zone to **3h→:1v**↑*
*(**X**) The shoulder surface at apron shall have a slope of 2% away from the County road surface minimum **eight** feet.*
*(**X**) Access point grades and apron lengths per Skagit County Road Standards - see attached for reference*
*(**X**) Surface construction access with quarry spalls, see BMP C105 attached*
*(**X**) Minimum sight braking distance of **250'** is required.*
*(**X**) Vegetation must be trimmed by the applicant to provide adequate sight distance*. Any tree removal within right-of-way must follow Skagit County Tree Cutting Policy
*(**X**) Remove culvert and restore ditch at completion.*

*__RCW 46.61.655 (4)(b) Any vehicle with deposits of mud, rocks, or other debris on the vehicle's body, fenders, frame, undercarriage, wheels, or tires shall be cleaned of such material before the operation of the vehicle on a paved public highway.__

No surface drainage shall flow onto the County road surface. The surface of the shoulder apron shall have a slope of 2% away from the road from its connection with the County road pavement. All surface drainage from access road must be dispersed on property or contained and directed to an open ditch when approved by the County.

A bond in the amount of _____ is required to insure compliance with the above conditions, said bond to be kept in full force and effect for a period of _____ years following completion and inspection of work authorized by this permit.

(**X**) No work shall be done under this application until the party or parties to whom it is granted have communicated with or received issued instructions from: Name: **Paul Erickson** Email: perickson@co.skagit.wa.us Phone: **(360) 416-1400**

(**X**) Culvert placement req'd: _____ (**X**) Grade inspection req'd: _____ (**X**) Final inspection req'd: _____

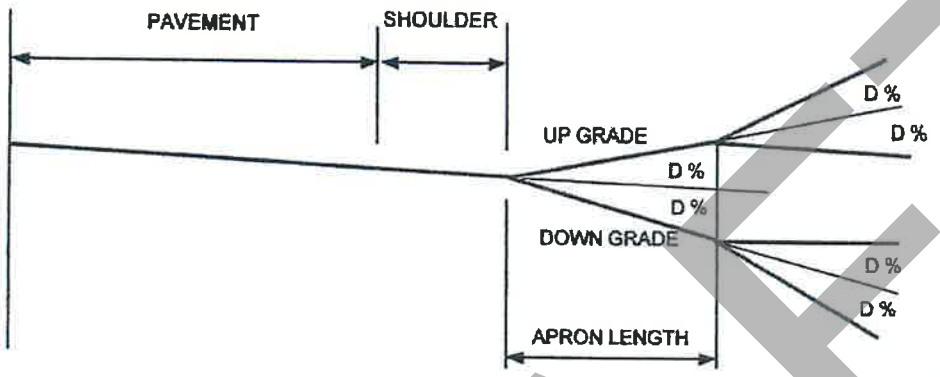
(X) Final Inspection by: _____ Date: _____

It is the responsibility of the owner to notify all utilities and private property owners when such property is subject to injury or damage through the performance of the above work and the applicant shall make all necessary arrangements relative to the protection of such property and/or utilities.

The construction of all public and private roads in Skagit County shall comply with the most recent version of the Skagit County Public Works Standards adopted by the Board of Skagit County Commissioners. See, SCC 14.36.010

No person shall be permitted to build or construct any approach to any county road without first obtaining permission therefor from the Board [of Skagit County Commissioners]. The boards of the several counties of the state may adopt reasonable rules for the construction of approaches which, when complied with, shall entitle a person to build or construct an approach from any abutting property to any county road. The rules may include provisions for the construction of culverts under the approaches, the depth of fills over the culverts and for such other drainage facilities as the board deems necessary. The construction of approaches, culverts, fills, or such other drainage facilities as may be required shall be under the supervision of the county road engineer, and all such construction shall be at the expense of the person benefited by the construction. See, RCW 36.75.130

UTILITY DAMAGE IS COSTLY, CALL BEFORE YOU DIG 811 (aka) **1-800-424-5555.**



ACCESS POINT GRADES AND APRON LENGTHS FOR ROADWAYS AND DRIVEWAYS

DESIGN VALUES			
ROADWAY CLASSIFICATION	APRON LENGTH (A)	GRADE CHANGE (D)	
		DESIRABLE	MAXIMUM
ARTERIAL	MIN. 20 FEET	4% OR LESS	5%
COLLECTOR	MIN. 15 FEET	5% OR LESS	6%
LOCAL ACCESS	MIN. 10 FEET	6% OR LESS	7%

GENERAL NOTES

1. PIVOT POINT SHALL BE AT THE EDGE OF SHOULDER
2. DESIRABLE WIDTHS SHOWN WILL BE THE REQUIREMENT, UNLESS THE APPLICANT DEMONSTRATES TO THE ENGINEER'S SATISFACTION THAT THEY CANNOT BE OBTAINED.
3. VERTICAL CURVES ARE NOT TO EXCEED A 3-1/4" HUMP OR A 2" DEPRESSION IN A 10 FOOT CHORD.
4. IN CASES OF FUTURE LAND WIDENING AND ADDITIONAL LANES, THE APRON LENGTH SHALL BE INCREASED TO ACCOMMODATE FUTURE WIDENING.

AccessGrades.doc

SKAGIT COUNTY DEPARTMENT OF PUBLIC WORKS

REVISIONS	DATE

ROADWAY STANDARDS

ACCESS POINT GRADES

FIGURE C - 4

6/26/2000

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** 00000000-0 **REVISION NUMBER:** 1

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY	Y					EACH OCCURRENCE	$
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$
	X POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$
	OTHER:							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$
	DED RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						PER STATUTE OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) N / A						E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Skagit County, its Officers, Agents and Employees are listed as Additional Insured

CERTIFICATE HOLDER	CANCELLATION
Skagit County 1800 Continental Place Mount Vernon, WA 98273	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE

(RIS)

AGENCY CUSTOMER ID: _____

LOC #: _____

ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 FORM TITLE: _____

Skagit County, its Officers, Agents and Employees are additional insured as respects the insured operations where required by written contract.

SUMMARY - Road Development Costs

REGION: NW
DISTRICT: Clear Lake

SALE/PROJECT NAME: East Cavanaugh CONTRACT #: 30-104692

ROAD NUMBERS:	CDC-05, CDC-12, LC-0601, LC-0603, LC-08, LC-09, LC-1317, LC-34	CDC-11, CDC-1101	DEER CREEK RD, LC-ML, LC-06, LC-13, LC-1312, LC-1315
ROAD STANDARD:	Construction	Reconstruction	Maintenance
NUMBER OF STATIONS:	61+19	18+04	398+04
CLEARING & GRUBBING:	$11,848	$3,367	$0
EXCAVATION AND FILL:	$10,710	$2,730	$0
MISC. MAINTENANCE:	$0	$0	$20,108
ROAD ROCK:	$39,320	$13,023	$13,705
ROCK STOCKPILE PROD:	$0	$0	$0
CULVERTS AND FLUMES:	$15,750	$4,388	$11,844
STRUCTURES:	$0	$0	$0
MOBILIZATION:	$2,736	$777	$4,323
TOTAL COSTS:	$80,364	$24,287	$49,979
COST PER STATION:	$1,313	$1,346	$110
ROAD DEACTIVATION & ABANDONMENT COSTS:		$378	

Pre-Cruise Estimated Sale Volume

TOTAL (All Roads) = $155,008
SALE VOLUME MBF = 1,100
TOTAL $/MBF = $141

Compiled by: Symmank Date: 09/15/23