Pre-Operations Report

Operation Name: Zig Zag Road
County (%): Tillamook (100%)
Elevation: 727 - 2,561 ft
Legal Description: T1S R7W, Section(s) 15, 16, 17, 21, 22, 27, 28

Tax Code(s): 902
BOF%: 100 **CSL%:** 0
Sale Quarter: 3

I. VOLUME AND VALUE SUMMARY

Table 1. Types, Acres, and Value

Unit	Harvest Type	Anticipated Product[c]	Gross Acres	Net Acres	MBF/ Acre[a]	MBF/ Unit[a]	$/MBF[b]	$/Unit
66	CC	DF-S, RA-S	159	119	25.6	3,046	$312	$950,352
332	CC	DF-M, RA-S	129	94	28.6	2,688	$312	$838,656
566	CC	DF-S, RA-S	112	100	28.6	2,860	$312	$892,320
568	CC	DF-M, RA-S	109	84	28.6	2,402	$312	$749,424
Total		Regeneration	509	398		10,996		
		Partial Cut						

	Gross Value	$3,430,752
a. Estimated harvest volume per acre for Unit.	Project Costs	$141,500
b. Estimated 'price' (excluding Project Costs)	Net Value	$3,289,252

c. Anticipated Product (AA-B-C) – AA) SLI species code of the bid species, B) Size Class (S – small [average DBH < 15], M – medium [average DBH 15 to 23], L – large (average DBH > 23]), C) Special Product (P – Premium, H – Hardwood)

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information

Unit	Stand ID	Measured/ Imputed[a]	Species	Age	TPA	DBH	BA	SDI	Net Acres[b]
66	31028	M	DF,WH	7	--	--	--	0%	1
66	35492	M	DF,RA	59	254	12	215	60%	42
66	35551	I = 37626	DF,RA	56	136	16	197	50%	4
66	35553	M	DF,RA	59	185	14	206	55%	31
66	35554	M	DF,RA	59	183	15	220	57%	39
66	37956	I = 37195	RA,DF	59	142	15	177	46%	1
332	35486	M	RA,DF	59	144	16	192	49%	12
332	35487	M	DF,RA	56	210	15	249	65%	13
332	35490	I = 31540	DF,RA	59	113	17	182	45%	11
332	35491	M	RA,DF	59	104	18	177	43%	28
332	37947	I = 32688	DF,RA	59	98	18	173	42%	2
332	37948	M	RA,DF	59	163	15	203	53%	14
332	37949	I = 32961	DF,RA	59	203	13	189	52%	12
566	37964	I = 35492	DF,RA	59	254	12	215	60%	18
566	38010	M	DF,RA	59	103	16	151	38%	63

566	38562	I = 38010	DF,RA	59	103	16	151	38%	19
568	37960	I = 34504	RA,DF	59	172	14	190	51%	4
568	37966	M	DF,RA	59	125	18	216	53%	27
568	37971	M	RA,DF	59	185	14	200	53%	17
568	37972	I = 37966	DF,RA	59	125	18	216	53%	27
568	37978	I = 35411	RA,WH	59	182	15	221	58%	8

a. Identify the source of stand inventory information. Use the following codes: M = Measured SLI data, I = Imputed SLI data, P = Pre-Cruise Plots, O = other (if other, describe below).

b. Net Acres have been rounded to the nearest whole acre in this table. Stand that comprise less than one acre of a harvest unit are not reported in this table, so the total "Net Acres" per unit in this table may not equal the total "Net Acres" per unit in table 1.

- These stands were planted, and portions of Units 566 and 568 were commercially thinned in 2000. Units 66 and 332 have no record of pre-commercial or commercial thinning.
- The 1 acre of 7-year-old trees listed for stand 31028 in Unit 66 reflects a small strip adjacent to the road that was harvested with a previous timber sale. This area is included with the sale boundary because it will be yarded through during harvest, however, the younger trees within it will not be targeted with this harvest.

Table 3. Additional Stand Information

Unit	Stand ID	Snags/ Acre[a]	Down Wood/ Acre[b]	Forest Health		
				SNC	Phellinus	Other[c]
66	31028	0	770	Yes	--	--
66	35492	5	737	Yes	--	Sprayed Alder
66	35551	18	80	Yes	--	Sprayed Alder
66	35553	12	449	Yes	--	Sprayed Alder
66	35554	8	127	Yes	--	Sprayed Alder
66	37956	7	204	Yes	--	--
332	35486	7	20	Yes	--	Sprayed Alder
332	35487	11	223	Yes	--	Sprayed Alder
332	35490	10	77	Yes	--	Sprayed Alder
332	35491	7	50	Yes	--	Sprayed Alder
332	37947	9	843	Yes	--	Sprayed Alder
332	37948	7	167	Yes	--	Sprayed Alder
332	37949	11	666	Yes	--	Sprayed Alder
566	37964	5	737	Yes	--	Sprayed Alder
566	38010	6	799	Yes	--	Sprayed Alder
566	38562	6	799	Yes	--	Sprayed Alder
568	37960	5	86	Yes	--	Sprayed Alder
568	37966	10	835	Yes	--	Sprayed Alder
568	37971	11	187	Yes	--	Sprayed Alder
568	37972	10	835	Yes	--	Sprayed Alder
568	37978	19	93	Yes	--	Sprayed Alder

a. Identify the number of hard snags per acre (decay classes 1 and 2)

b. Identify the cubic feet per acre of hard down wood (decay classes 1 and 2)

c. Describe "Other" forest health issue.

III. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

Foresters need to request the Biological Survey Tracking Form (BSTF) from the ODF Wildlife Biologist prior to sale layout in order to ensure all T&E related information is complete and understood.

1. A portion of the operation is within (Check all that apply):
   ☐ TAS ☐ NSO Circle or Home Range, or Baseline or Elevated Baseline Thiessen (BA required)
   ☐ MMMA (BA required) ☒ None
2. Are Surveys for NSO being conducted for any portion of this operation?
   ☐ No ☒ Density Surveys ☐ Operational Surveys ☐ Combination (Density/Operational)
   Notes:
3. Are Surveys for MM being conducted for any portion of this operation?
   ☒ Yes (in progress/completed) ☐ No (Not habitat) ☐ N/A (outside of MM survey zone)
   Notes: Units 66, 566 and 568 were surveyed in 2023/2024. These surveys will expire on 04/01/2030.
4. Are there any additional considerations (FPA Resource Sites, Species of Concern sites/Plant [from ORBIC[1]])?
   ☒ No ☐ Yes, please describe:

IV. DESIRED FUTURE CONDITION AND PRESCRIPTION:

Table 4. Stand Structure Information

Unit	Stand ID	Current	Desired Future[b]	Inside of HCA	Net Acres[a]
66	31028	REG	GEN	Yes	1
66	35492	UDS	LYR	Yes	42
66	35551	UDS	LYR	Yes	4
66	35553	UDS	LYR	Yes	31
66	35554	UDS	LYR	Yes	39
66	37956	UDS	GEN	Yes	1
332	35486	UDS	GEN	No	12
332	35487	UDS	GEN	No	13
332	35490	UDS	GEN	No	11
332	35491	UDS	GEN	No	28
332	37947	UDS	GEN	No	2
332	37948	UDS	GEN	No	14
332	37949	UDS	GEN	No	12
566	37964	UDS	GEN	No	18

[1] Oregon Biodiversity Information Center

Unit	Stand ID	Current	Desired Future[b]	Inside of HCA	Net Acres[a]
566	38010	UDS	GEN	No	63
566	38562	UDS	GEN	No	19
568	37960	UDS	GEN	No	4
568	37966	UDS	GEN	No	27
568	37971	UDS	GEN	No	17
568	37972	UDS	GEN	No	27
568	37978	UDS	GEN	No	8

a. Net Acres have been rounded to the nearest whole acre in this table. Stand that comprise less than one acre of a harvest unit are not reported in this table, so the total "Net Acres" per unit in this table may not equal the total "Net Acres" per unit in table 1.

b. While desired future condition complex (Layered -LYR and Older Forest Structure – OFS) is mapped, targets for Regeneration, Closed Single Canopy and Understory stands are not. These stand types are typically referred to as General (GEN) when discussing desired future condition.

Table 5. Partial Cut & HCA Prescriptions

Unit	Harvest Type	Harvest Species	Residual			
			Species	TPA	BA	% SDI
66	CC	DF, RA	DF, WH	--	--	--
All others	CC	--	--	--	--	--

- **Prescription Considerations:**
  - Unit 66 is located in a Habitat Conservation area and is predominately a Douglas-fir stand that is infected with Swiss Needle Cast. This stand will be regeneration harvested to remove the majority of the Swiss Needle Cast infested Douglas fir while retaining the largest trees available, those individual Douglas-fir that are growing well, and tree species that are resistant to Swiss needle cast. Red alder will be evaluated during layout and if any sprayed alder is identified it will likely be removed. This area will be replanted with a mix of SNC resistant species and will highlight planting at lower densities to promote complex patches of early seral stage forest resulting in a stand that is positioned for future habitat treatments to grow into habitat for covered species in an accelerated timeframe. Treatments are intended to improve spatial heterogeneity, compositional diversity, understory development, canopy layering, and structural complexity of dominant and subdominant cohorts relative to untreated stands with similar conditions. Field staff and ODF Wildlife biologists will work closely during sale layout to determine legacy components (species, size, location, etc.) when finalizing prescriptions in these areas.
- **Leave Tree Considerations:** Foresters will work with wildlife biologist during sale layout. The following should be considered when determining final leave tree arrangements.
  - **Stand Characteristics:** Prioritize minor species, larger diameter, and open grown trees from previous harvests as part of the retention strategy.
  - **Geotechnical:** Additional wind firm leave trees will be concentrated around the No Harvest Areas within the sale shown on the Exhibit A map. Foresters will evaluate stand and topographic conditions to determine sites appropriate for these buffer areas.

- **Reforestation Considerations:** Following the completion of harvest, the unit will be planted with a mixture of species native to the geographic area.

V. HARVESTING AND ACCESS CONSIDERATIONS:

Table 6. Harvest System and Access Summary

Unit	Harvest System		Slope (%)	Unit Access	Seasonal Access
	% Cable	% Ground			
332	80	20	35-65	Simple	All Weather
566	100	0	<35	Simple	Combo
568	100	0	35-65	Simple	All Weather
66	100	0	35-65	Simple	All Weather

1. Haul Route: Zig Zag, Hembre Lookout, Hembre Ridge, Trask Cutoff
    - There are no locked gates on the haul route.
2. Haul Route Condition: Hembre Ridge and Trask Cutoff require minor spot patching and grading. Zig Zag will need more significant spot patching.
3. Are easements required for the haul route? ☐ No ☒ Yes
    - 311.29243 Trask Cutoff Road.

Table 7. Transportation Management Summary (Miles)

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0	1.14	0.4
Improve, Rock, and/or Maintain	0	8.23	0.17	0
Vacate	0	0	0	0
Stream Crossings to install existing (IE)/replace (R)/ new construction (NC)				
Type F - SSBT[a]	0	0	0	0
Type F – Non-SSBT	0	0	0	0
Type N	0	2 (R)	2 (NC)	0

a. Salmon Steelhead and Bull Trout (SSBT)

4. Rock Sources for this operation: Unnamed Pit on Hembre Ridge, Clear Creek Pit, Crushed stockpiles.
5. Are property line surveys required for this operation? ☐ No ☒ Yes
    - Potential section subdivision of Section 16, T1S, R7W, W.M. if center quarter corner cannot be found. A cutting line exists but no surveys or corner reports are on file with the county surveyor.
6. Is there planned new road construction planned within RCAs/HCAs? ☐ No ☒ Yes
    - New road construction within RCA and HCAs will only occur when other alternatives are not operationally or economically feasible. Planned new road construction will be evaluated as it is further refined during sale layout.

VI. AQUATIC RESOURCES:

1. Do any streams require additional review for the following?
    - Fish presence: ☒ No ☐ Yes

- Perennial/Seasonal: ☐ No ☒ Yes
- H.E.R: ☐ No ☒ Yes
- There are streams within the sale that require additional review. Buffers shown on the map indicate where it is believed streams are located. These streams will be located, verified for permanence, and/or type of seasonal stream during sale layout and Geotech review and buffered as required.

2. Is a portion of the operation within an Aquatic Anchor? ☒ No ☐ Yes, name:
3. Are any domestic points of diversion identified in the Oregon Water Resource Department's water rights information search GIS database located downstream within 3,000 feet of the harvest operation?

   ☒ No ☐ Yes, describe protection measures:
4. Are there any unregistered or unknown status domestic points of diversion that have been identified within the harvest operation? ☒ No ☐ Yes, please describe:
5. Is there a Stream Enhancement Project planned? ☒ No ☐ Yes, please describe:

VII. SLOPE STABILITY ISSUES:

Table 8. Summary of Slope Stability Assessment

Unit	Harvest Review Complete	Public Safety Review Complete	Additional Comment
66	Yes	Yes	
332	Yes	Yes	
566	Yes	Yes	
568	Yes	Yes	

- **Geotech Review:** Geotechnical reviews have been completed, and slope protections have been incorporated into No Harvest buffers shown on the map. Additional consultation with Geotechnical Specialists will be done during sale layout as needed.

VIII.RECREATION RESOURCES:

1. Recreation issues/coordination: ☐ No ☒ Yes, please describe:

   - Segments of the Zig Zag Trail exist within the sale areas #332, #66, and #568. Hombre Trail exists in sale area #566. The Marketing Unit and Roads Unit will work closely with the Recreation Program during sale layout, contract writing, and sale administration to minimize impact to the recreational trails and mitigate public use safety concerns.

     The recreation trails will be temporarily closed when safety hazards are present during timber sale activity and re-opened once sale activity is completed or when safe to do so. Trail segments impacted by road construction will be evaluated for re-route construction post timber harvest. The Recreation Program may perform maintenance upgrades to improve sustainability and improve hydrological disconnection during closure to minimize impact to the public.

IX. HISTORIC AND CULTURAL RESOURCES:

1. Has the sale been reviewed by a qualified archaeologist for potential historic or cultural resource presence? ☐ No ☒Yes

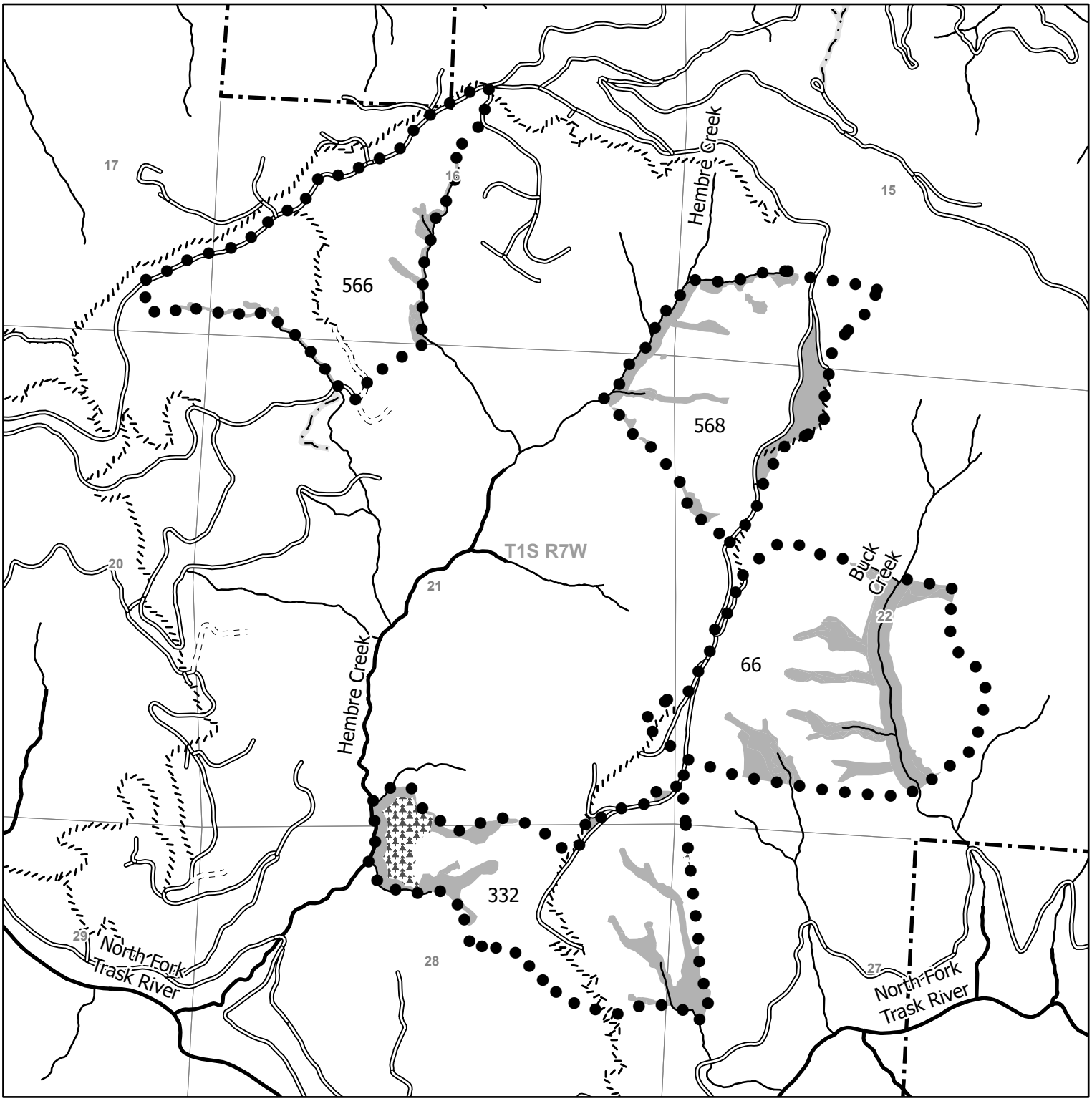
X. SCENIC RESOURCES:

1. Are there scenic resources in the vicinity of this operation that need additional consideration?
   ☒ No ☐ Yes, please describe:

XI. OTHER RESOURCE CONSIDERATIONS:

1. Has a review of the FLMCS layer determined that any resources not mentioned in the report above need additional planning? ☒ No ☐ Yes, please describe:

2. Are there any other resources present that need additional consideration? ☐ No ☒ Yes, please describe:
   - **Unit Size**: Units 66 and 332 are adjacent to each other and combined exceed 120 acres. Unit 66 itself is over 120 acres. After stream buffers are posted it will be determined if there is at least 300 feet of buffer between these Units. If the 300 foot minimum buffer between units is not met, then modifications will be made to either the sale boundaries or the stream buffers to ensure compliance with the FPA.
   - **No Harvest (Other):**
     - Unit 332 and 568 – Previously harvested areas that may need to be yarded through and/or accommodate landing locations.
   - **Adjacent Landowners (shared property lines)**:
     - Private Industrial:
       - District staff will work with adjacent private landowners to determine what additional outreach is needed during the sale process and if any additional restrictions are needed.



Legend

- Sale Boundary
- Surfaced
- Unsurfaced
- Ownership Boundary
- Perennial Fish
- Perennial Non-Fish
- New Road Construction
- Recreation Trails
- No Harvest - Green Tree Retention
- No Harvest Area
- No Harvest - Existing Road; New Construction

FY 2026 - Tillamook District
Zig Zag Road
Portions of Section(s) 15, 16, 17, 21, 22, 27, 28, T1S, R7W, W.M.
Tillamook County

State Forest Division
03/19/2025

This product is for informational use and may not have been prepared for or be suitable for legal, engineering or survey purposes. Variations may exist between and among data sets in use by the Department of Forestry. This map was developed using the Statewide Flow Line layer layer.

1:18,000

Unit 66	119	Acres (CC)
Unit 332	94	Acres (CC)
Unit 566	100	Acres (CC)
Unit 568	84	Acres (CC

Total 398 Acres

N

2,500 1,250 0 2,500 Feet