



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Kerry East Sale 341-04-63

District: Astoria

Date: 1/9/04

| | Conifer | Hardwood | Total |
|--------------------------------|----------------|-------------------------|----------------|
| Gross Timber Sale Value | \$5,165,733.66 | \$164,214.48 | \$5,329,948.14 |
| | | Project Work | (\$722,946.00) |
| | | Advertised Value | \$4,607,002.14 |



Timber Sale Appraisal Timber Description Kerry East Sale 341-04-63

"STEWARDSHIP IN FORESTRY"

District: Astoria

Location: Sections 12, 13, 23, 24, and 25, T7N, R6W, and Sections 2, 3, and 11, T4N, R9W, W.M., Clatsop County, Oregon

Date: 1/9/04

Stand Stocking: 60%

| Species | Avg. DBH | Amortized% | Recovery% |
|-----------------------|----------|------------|-----------|
| Douglas - Fir | 15 | 0 | 99 |
| Western Hemlock / Fir | 14 | 0 | 97 |
| Sitka Spruce | 19 | 0 | 80 |
| Red Cedar | 19 | 0 | 100 |
| Alder (Red) | 13 | 0 | 90 |

| Volume by Grade | Douglas - Fir | Western Hemlock / Fir | Sitka Spruce | Red Cedar | Alder (Red) | Total |
|-----------------|---------------|-----------------------|--------------|-----------|-------------|--------|
| 2S | 4,373 | 4,255 | 3 | 7 | 0 | 8,638 |
| 3S | 6,071 | 6,602 | 3 | 3 | 355 | 13,034 |
| 4S | 878 | 1,048 | 0 | 0 | 64 | 1,990 |
| Total | 11,322 | 11,905 | 6 | 10 | 419 | 23,662 |

Comments: Pond Values Used: 4th Quarter 2003.

Log Markets: Scoggins Valley (D-fir); Tillamook (hemlock/true fir); Longview (alder)

Other Costs + P&R: 100% branding & painting - \$1/MBF x 23,662 MBF = \$23,662

Thinning tree selection - \$3/MBF x 17,520 MBF = \$52,560

Skid trail/cable corridor layout - \$4/MBF x 22,655 MBF = \$90,620

Rig intermediate supports - 10 man-days x \$150/day = \$1,500

Directional felling along buffers and plantations - \$2/MBF x 500 MBF = \$1,000

Other Costs No P&R: "Logger's Choice" spur road in thinning areas - 12 sta x \$125/sta = \$1,500

Pile slash at cable landings - \$130/landing x 4 landings = \$520

Slash piling in Areas 4 & 5 - 144 hours x \$95/hour = \$13,680

Excavator move-in = \$500

Porta-Potty Rental (12 months) = \$800

Total Other Costs + P&R = \$169,342

Total Other Costs No P&R = \$15,500



Timber Sale Appraisal

Logging Conditions

Kerry East

Sale 341-04-63

"STEWARDSHIP IN FORESTRY"

| | | | |
|--------------------------|--|--------|-----------------------------------|
| Combination#: 1 | Douglas - Fir | 9.48% | |
| | Western Hemlock / Fir | 16.79% | |
| | Alder (Red) | 2.43% | |
| Yarding Distance: | Short (400 ft) | | Downhill Yarding: Yes |
| Logging System: | Track Skidder | | Process: Feller Buncher |
| Tree Size: | Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF | | |
| Loads/Day: | 14 | | Bd. Ft./Load: 4,000 |
| Cost/MBF: | \$62.84 | | |
| Machines: | Feller Buncher w/ Delimber Log Loader (B) Stroke Delimber (B) Track Skidder | | |
| Combination#: 2 | Douglas - Fir | 35.52% | |
| | Western Hemlock / Fir | 30.96% | |
| | Alder (Red) | 42.10% | |
| Yarding Distance: | Medium (800 ft) | | Downhill Yarding: Yes |
| Logging System: | Track Skidder | | Process: Feller Buncher |
| Tree Size: | Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF | | |
| Loads/Day: | 9 | | Bd. Ft./Load: 4,000 |
| Cost/MBF: | \$97.75 | | |
| Machines: | Feller Buncher w/ Delimber Log Loader (B) Stroke Delimber (B) Track Skidder | | |
| Combination#: 3 | Douglas - Fir | 49.74% | |
| | Western Hemlock / Fir | 49.03% | |
| | Alder (Red) | 53.08% | |
| Yarding Distance: | Medium (800 ft) | | Downhill Yarding: No |
| Logging System: | Cable: Medium Tower >40 - <70 | | Process: Manual Delimiting |
| Tree Size: | Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF | | |
| Loads/Day: | 6 | | Bd. Ft./Load: 4,000 |
| Cost/MBF: | \$138.19 | | |
| Machines: | Log Loader (A) Tower Yarder (Medium) | | |

| | | | |
|--------------------------|--|---------|--------------------------------|
| Combination#: 4 | Douglas - Fir | 5.26% | |
| | Western Hemlock / Fir | 3.23% | |
| | Sitka Spruce | 100.00% | |
| | Red Cedar | 100.00% | |
| | Alder (Red) | 2.39% | |
| Yarding Distance: | Short (400 ft) | | Downhill Yarding: Yes |
| Logging System: | Track Skidder | | Process: Feller Buncher |
| Tree Size: | Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF | | |
| Loads/Day: | 15 | | Bd. Ft./Load: 4,000 |
| Cost/MBF: | \$58.65 | | |
| Machines: | Feller Buncher w/ Delimber | | |
| | Log Loader (B) | | |
| | Stroke Delimber (B) | | |
| | Track Skidder | | |



Timber Sale Appraisal

Logging Costs

Kerry East

Sale 341-04-63

"STEWARDSHIP IN FORESTRY"

Date: 1/9/04

Operating Seasons: 2.0

Profit & Risk: 14%

Project Costs: \$722,946

Other Costs (P/R): \$169,342

Slash Disposal: \$0

Other Costs: \$15,500

| Miles of Road | | | |
|---------------|----------------------|-----------------|-------|
| Dirt | Rock (Contractor) | Rock (State) | Paved |
| 0.0 | 0.0 | 0.0 | 0.0 |

Road Maintenance: \$2.08

Hauling Costs

| Species | \$/MBF | Trips/Day | MBF/Load |
|-----------------------|--------|-----------|----------|
| Douglas - Fir | \$0.00 | 2.0 | 4.0 |
| Western Hemlock / Fir | \$0.00 | 2.0 | 4.0 |
| Sitka Spruce | \$0.00 | 2.0 | 3.5 |
| Red Cedar | \$0.00 | 2.0 | 3.5 |
| Alder (Red) | \$0.00 | 3.0 | 3.0 |



Timber Sale Appraisal Logging Costs Breakdown Kerry East Sale 341-04-63

"STEWARDSHIP IN FORESTRY"

| Costs | Douglas - Fir | Western Hemlock / Fir | Sitka Spruce | Red Cedar | Alder (Red) |
|--------------------------|---------------|-----------------------|--------------|-----------|-------------|
| Logging | 112.50 | 110.46 | 58.65 | 58.65 | 117.43 |
| Road Maintenance | 2.10 | 2.14 | 2.60 | 2.08 | 2.31 |
| Fire Protection | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 |
| Hauling | 58.08 | 59.28 | 82.12 | 65.70 | 56.78 |
| Other (P/R appl.) | 7.16 | 7.16 | 7.16 | 7.16 | 7.16 |
| Profit & Risk | 25.21 | 25.10 | 21.11 | 18.73 | 25.75 |
| Slash Disposal | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Scaling | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Other | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 |
| Total | 207.94 | 207.03 | 174.53 | 155.21 | 212.32 |

| | | | | | |
|---------------------|--------|--------|--------|----------|--------|
| Amortization | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Pond Value | 526.96 | 336.73 | 385.00 | 1,000.00 | 604.24 |
| Stumpage | 319.02 | 129.70 | 210.47 | 844.79 | 391.92 |
| Amortized | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary Kerry East Sale 341-04-63

Amortized

| | Douglas - Fir | Western Hemlock / Fir | Sitka Spruce | Red Cedar | Alder (Red) |
|--------------|---------------|--------------------------|--------------|-----------|-------------|
| MBF | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Value | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Unamortized

| | Douglas - Fir | Western Hemlock / Fir | Sitka Spruce | Red Cedar | Alder (Red) |
|--------------|---------------|--------------------------|--------------|-----------|-------------|
| MBF | 11,322.00 | 11,905.00 | 6.00 | 10.00 | 419.00 |
| Value | 319.02 | 129.70 | 210.47 | 844.79 | 391.92 |
| Total | 3,611,944.44 | 1,544,078.50 | 1,262.82 | 8,447.90 | 164,214.48 |

Gross Timber Sale Value

Recovery \$5,329,948.14

Prepared by: Tom Scoggins

Date: 1/9/04

District: Astoria

Phone: (503) 325-5451

SUMMARY OF ALL PROJECT COSTS

SALE NAME: Kerry East

NEW CONSTRUCTION:

| Project No. | Road segment | Length/Sta | Cost |
|---------------|--|-------------------|------------------|
| Project No. 1 | North County Sale Access | | |
| | 1A-1B, 2A-2B, 2C-2D, 2E-2F, 2G-2H, 2I-2J, 2K-2L, 2M-2N, 2O-2P, 4A-4B, 4C-4D | 151.40 | |
| | North County Road Improvement | | |
| | 15-16 | 183.30 | |
| | | | \$194,259 |
| Project No. 2 | East Summit Roads | | |
| | P1-P2, P3-P4, P5-P6, P7-P8, P9-P10 | 70.00 | |
| | East Summit Road Improvement | | |
| | 11-12, 13-14, 17-18 | 70.95 | |
| | | | \$112,354 |
| TOTALS | | 475.65 | \$306,613 |
| | | 9.01 Miles | |

ROAD IMPROVEMENT:

| Road segment | Length/Sta | Cost |
|------------------|------------|------|
| <u>See Above</u> | | |

SPECIAL PROJECTS:

| Project No. | Description | Cost |
|---------------|---|------------------|
| Project No. 3 | Road Vacating | |
| | "V1"- "V12" 48 Stations | \$12,000 |
| | "V13"- "V22" 34 Stations | \$28,000 |
| Project No. 4 | View Point Quarry Crushing 18,063 Cubic Yards | \$91,872 |
| Project No. 5 | Munce Quarry Crushing 31,551 Cubic Yards | \$227,953 |
| Project No. 6 | Brushing 25.3 Miles | \$26,070 |
| Project No. 7 | Hamlet Stockpile Gate | \$3,000 |
| | Project Road Maintenance North County | \$15,518 |
| | Project Road Maintenance East Summit | \$3,610 |
| | TOTAL | \$408,023 |

MOVE IN:

| Equipment | Cost |
|------------------------------|----------------|
| Excavator C325 X 2 | \$1,800 |
| Dozer D8 X 2 | \$1,960 |
| Skidder C518 X 2 | \$1,040 |
| Vibratory Roller X 2 | \$1,080 |
| Dump Truck 10cy X 6 | \$684 |
| Dump Truck 20cy X 3 | \$402 |
| Grader 14G X 2 | \$1,080 |
| Water Truck 2,500 gallon X 2 | \$264 |
| TOTAL | \$8,310 |

GRAND TOTAL **\$722,946**

Compiled By: J. Tillotson

Date: 12/17/2003

**KERRY EAST
FY 2004
TIMBER CRUISE REPORT**

1. **Sale Area Location:** All sale areas (except Area 7 R/W) are located in Township 7 North, Range 6 West, W.M., Clatsop County, Oregon. Area 1 – Located in portions of Sections 13, 23, and 24; Area 2 – Located in portions of Sections 13, 23, 24, and 25; Area 3 – Located in portions of Sections 12 and 13; Area 4 - Located in portion of Section 13; Area 5 - Located in portions of Section 12 and 13. Area 6 R/W – Located within Areas 1 and 2 in Sections 13, 23, 24, and 25. Area 7 R/W – Located in portions of Sections 2, 3, and 11, T4N, R9W, W.M., Clatsop County, Oregon.

All timber sale areas are posted with ODF "Timber Sale Boundary" signs, pink ribbon, (and blue paint along property lines and Type F stream buffers). Areas 6 R/W and 7 R/W are posted with ODF "Right-of-Way Boundary" signs.

2. **Fund Distribution:**
- | | |
|------------------|---------------|
| Fund: | BOF (100%) |
| Tax Code: | 1-02 (2.5%) |
| | 8-01 (0.5%) |
| | 30-05 (96.4%) |
| | 10-02 (0.6%) |

3. **Sale Acreage by Area:**

| Area | Gross Acreage | New R/W Acreage | Existing R/W Acreage | Stream Buffer Acreage | Net Acreage |
|---------------|---------------|--------------------|----------------------|-----------------------|--------------|
| 1 | 120 | -1 | 4 | 4 | 111 |
| 2 | 690 | -16 | 15 | 37 | 622 |
| 3 | 139 | 0 | 4.6 | 4.4 | 130 |
| 4 | 60 | (included in unit) | 0.4 | 0.6 | 59 |
| 5 | 58 | 0 | 3 | 2 | 53 |
| 6 R/W | | 17 | | | 17 |
| 7 R/W | | 10 | | | 10 |
| TOTALS | 1,067 | +10 | -27 | -48 | 1,002 |

4. **Cruisers and Cruise Dates:** Areas 1, 2, and 3 were cruised by Tom Scoggins, Ed Holloran, Kevin Berry, Kraig Kirkpatrick, and John Tillotson - August-September, 2003. Areas 4 and 5 were cruised by Tom Scoggins - August, 2003. Cruise for Area 6 R/W was calculated using total cruise per acre volumes for Areas 1, 2 and 3, and applying road R/W acreage. Area 7 R/W was cruised by Tom Scoggins in October, 2003.
5. **Cruise Method and Computation:** All cruises used Corvallis MicroTechnology (CMT) data collectors, and were downloaded to the Atterbury Super A.C.E. program in District for computing. See the attached Cruise Design for more details on the cruise method. The cruise calculations were processed in the Astoria district office.

| AREAS | PROJECT | CRUISE TYPE |
|---------|---------|-------------------|
| 1, 2, 3 | KERRYE | AREAS 1-2-3 TAKE |
| 4 & 5 | KERRYE | AREAS 4-5 CC TAKE |
| 6 R/W | KERRYE | ROAD |
| 7 R/W | KERRYE | OUTSALE |

6. **Timber Description:** Areas 1, 2, and 3 (Automark Thinning) -These are naturally regenerated overstocked stands of hemlock and Douglas-fir, 40-65 years old. Average diameter is about 16 inches DBH, averaging 205 trees per acre, with a basal area of 297 ft² per acre. Current volume averages about 49 MBF per acre. The stand

prescription would remove about 20 MBF per acre, leaving a residual stand of 64% Douglas-fir, 31% hemlock, and 5% silver fir, red cedar, and alder (by BA), which averages about 20" dbh, 66 trees per acre, 150 ft² per acre, and 28 MBF per acre.

Areas 4 & 5 (Clearcut) – These are naturally regenerated mixed conifer stands, 62-67 years old. There are several patches of dwarf mistletoe infection in about both of these stands. Average diameter is about 15 inches DBH, averaging 221 trees per acre with a basal area of 278 ft² per acre. Volumes to remove in these sale areas average almost 46 MBF per acre. Marked "wildlife trees" and trees within stream buffers total about 320 in Area 4 (about 45% hemlock, 40% silver fir, and 15% Douglas-fir); and about 375 trees in Area 5 (Douglas-fir and hemlock).

Area 6 R/W is comprised of stand types within Areas 2 and 3. Average tree size is 16" dbh, with about 205 trees per acre, with a basal area of about 297 ft², and an average volume of almost 49 MBF per acre.

Area 7 R/W runs through 25-40 year old conifer plantations of Douglas-fir and hemlock. Timber within these R/W areas averages 12" dbh, about 260 trees per acre, and 17.6 MBF per acre.

7. Statistical Analysis: (See also "Statistics Reports," attached.)

| Area | Target CV | Target SE% | Actual CV | Actual SE% |
|----------------|-----------|------------|-----------|------------|
| 1-2-3 Thinning | 40 | 7 | 34 | 3.4 |
| 4 & 5 Clearcut | 60 | 10 | 33.5 | 5.2 |
| 7 R/W | 40 | 12 | 36.3 | 10.5 |

8. Volumes by Species and Log Grades for All Sale Areas by MBF: (See "Species, Sort, Grade, Length % Type Reports" attached, of the thinning and regeneration harvest areas combined.) Volumes do not include "ingrowth." The majority of defect and breakage was culled out during the cruise.

| Species | DBH | Net Vol. | 2 Saw | 3Saw | 4 Saw | D & B | % Sale |
|------------------|--------------|---------------|-------|-------|-------|-------------|-------------|
| Douglas-fir | 14.6" | 11,322 | 4,373 | 6,071 | 878 | 3.6% | 48% |
| Hemlock/True fir | 13.9" | 11,905 | 4,255 | 6,602 | 1,048 | 7.7% | 50% |
| Cedar | 19.0" | 10 | 7 | 3 | 0 | 0% | 0% |
| Spruce | 18.8" | 6 | 3 | 3 | 0 | 25.3% | 0% |
| Alder | 12.6" | 419 | 0 | 355 | 64 | 15.3% | 2% |
| TOTAL | 14.2" | 23,662 | | | | 5.9% | 100% |

9. Approvals:

Bill Jostan, ADX

Prepared by: Tom Scoggins

Date: November 18, 2003

10. Attachments:




















Species, Sort, Grade Reports (5 pages)
 Statistics Stand Summary Reports (5 pages)
 Log Stock Table Reports (14 pages)
 Leave Tree Stand Summary Reports (2 pages)
 Leave Tree Stand Table Reports (3 pages)
 Total Stand Summaries (3 pages)
 Cruise Plans & Maps (9 pages)

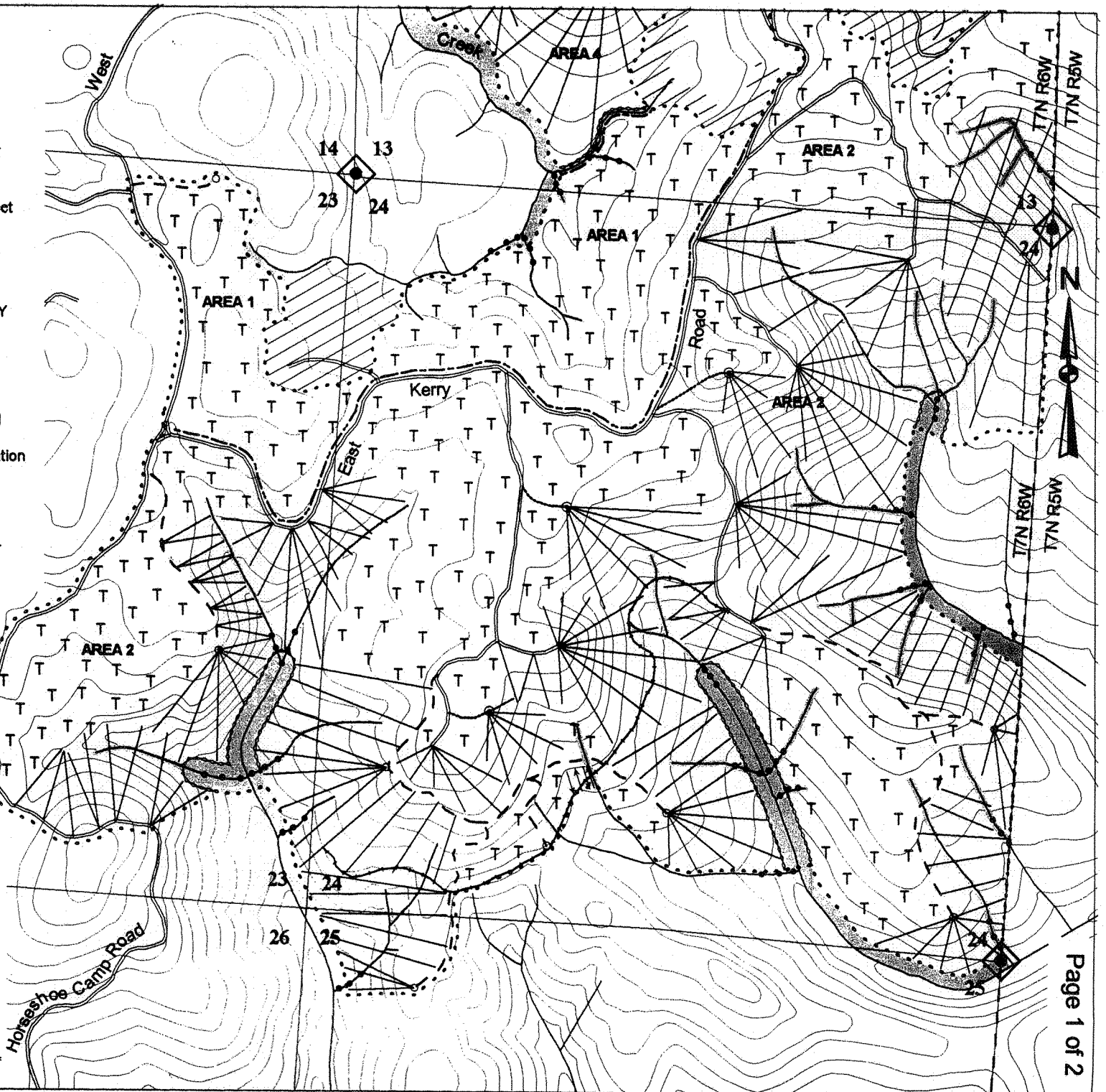
Logging Plan

OF TIMBER SALE
 CONTRACT NO. 341-04-63
 KERRY EAST
 PORTIONS OF SECTIONS
 12, 13, 23, 24, & 25, T7N, R6W
 W.M., CLATSOP COUNTY, OREGON
 APPROX. SCALE 1"=1,000'

500 0 500 1000 Feet

LEGEND

-  Ownership Boundary
-  TIMBER SALE BOUNDARY
-  Area Boundary
-  Reforestation Area
-  Existing Surfaced Road
-  New Construction
-  Logger's Choice Road
-  Landing To Be Constructed
-  Loggers Choice Landing
-  Helicopter Evacuation Location
-  Cable Logging
-  Tractor Logging
-  Line Pulling
-  RR Grade
-  Known Land Survey Corner
-  Posted Buffer
-  Unposted Buffer
-  Type F Stream
-  Type N Stream

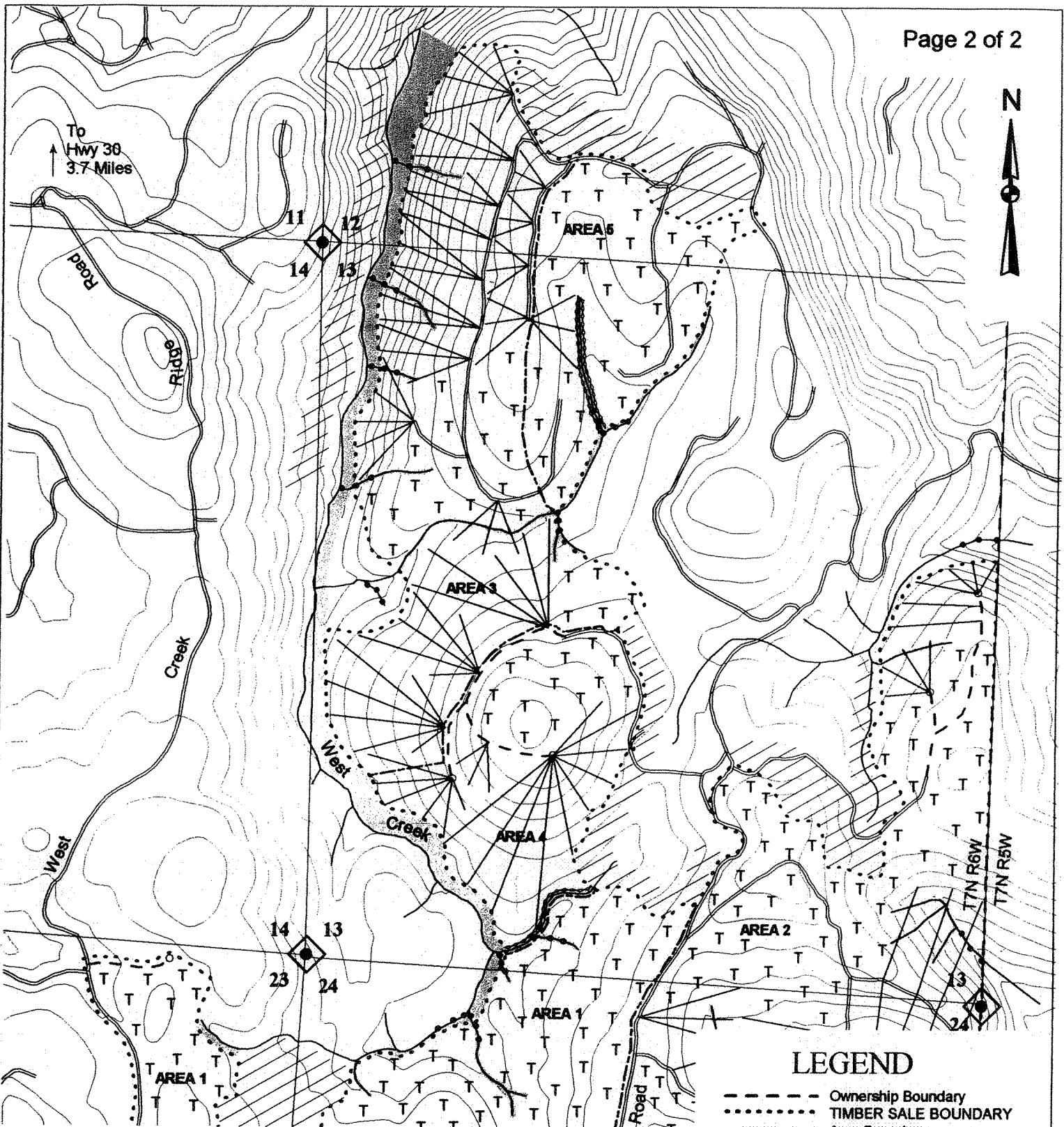


APPROXIMATE NET ACREAGE:

| AREA | CC ACRES | PC ACRES |
|-------------------|----------|------------|
| AREA 1 | | 111 |
| AREA 2 | | 622 |
| AREA 3 | | 130 |
| AREA 4 | 59 | |
| AREA 5 | 53 | |
| TOTAL | 112 | 863 |
| AREA 6 R/W | | 17 |
| AREA 7 R/W | | 10 |
| TOTAL ALL AREAS = | | 1002 ACRES |



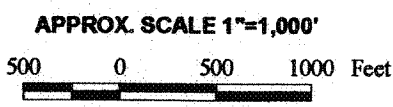
To
Hwy 30
3.7 Miles



APPROXIMATE NET ACREAGE:

| AREA | CC ACRES | PC ACRES |
|-------------------|----------|------------|
| AREA 1 | | 111 |
| AREA 2 | | 622 |
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| AREA 4 | 59 | |
| AREA 5 | 53 | |
| TOTAL | 112 | 863 |
| AREA 6 R/W | | 17 |
| AREA 7 R/W | | 10 |
| TOTAL ALL AREAS = | | 1002 ACRES |

Logging Plan
 OF TIMBER SALE
 CONTRACT NO. 341-04-63
 KERRY EAST
 PORTIONS OF SECTIONS
 12, 13, 23, 24 & 25, T7N, R6W
 W.M., CLATSOP COUNTY, OREGON



LEGEND

- Ownership Boundary
- TIMBER SALE BOUNDARY
- Area Boundary
- //// Reforestation Area
- ==== Existing Surfaced Road
- - - - New Construction
- Landing To Be Constructed
- ⊙ Loggers Choice Landing
- ⊕ Helicopter Evacuation Location
- ⊖ Cable Logging
- T Tractor Logging
- ◇ Known Land Survey Corner
- Posted Buffer
- █ Unposted Buffer
- ~ Type F Stream
- ~ Type N Stream

Species, Sort Grade - Board Foot Volumes (Type)

Project: KERRYE

T07N R06W S24 TTAKE

T07N R06W S24 TTAKE

Twp Rge Sec Tract Type Acre Plots Sample Trees CuFt BdFt
07N 06W 24 AREAS 1-2-3 TAKE 863.00 102 151 1 W

| Spp | S T | So rt | Gr ad | % | Bd. Ft. per Acre | | | Total Net MBF | Percent Net Board Foot Volume | | | | | | | | Average Log | | | Logs Per /Acre | |
|--------------------|---------------|----------|----------|-----|------------------|--------|--------|------------------|-------------------------------|----------------|------|-------|-----|------------|-------|-------|-------------|----------|----------|----------------------|-----------|
| | | | | | Net BdFt | Def% | Gross | | Net | Log Scale Dia. | | | | Log Length | | | | Ln Ft | Bd Ft | | CF/ Lf |
| | | | | | | | | | | 4-5 | 6-11 | 12-16 | 17+ | 12-20 | 21-30 | 31-35 | 36-99 | | | | |
| D | | DO | CU | | 00.0 | 323 | | | | | | | | | | | 7 | | 0.00 | 6.4 | |
| D | | DO | 2S | 34 | 1.1 | 3,548 | 3,509 | 3,028 | | 100 | | | | 6 | 4 | 32 | 58 | 34 | 209 | 1.45 | 16.8 |
| D | | DO | 3S | 58 | 1.0 | 6,039 | 5,980 | 5,161 | | 98 | | 2 | | 0 | 6 | 48 | 45 | 35 | 80 | 0.61 | 74.9 |
| D | | DO | 4S | 8 | 3.1 | 898 | 870 | 751 | | 100 | | | | 43 | 47 | 9 | | 20 | 26 | 0.37 | 34.0 |
| D | Totals | | | 51 | 4.2 | 10,808 | 10,359 | 8,940 | | 65 | 34 | 1 | | 6 | 9 | 39 | 46 | 30 | 78 | 0.68 | 132.2 |
| H | | DO | CU | | 00.0 | 694 | | | | | | | | | | | | 20 | | 0.00 | 6.9 |
| H | | DO | 2S | 29 | .9 | 2,688 | 2,662 | 2,298 | | | 86 | 14 | | 8 | 9 | 38 | 45 | 33 | 206 | 1.46 | 12.9 |
| H | | DO | 3S | 61 | 1.9 | 5,780 | 5,672 | 4,895 | | 95 | 3 | 2 | | 1 | 2 | 46 | 51 | 35 | 89 | 0.68 | 63.9 |
| H | | DO | 4S | 11 | 4.3 | 1,043 | 998 | 862 | | 100 | | | | 39 | 38 | 23 | | 22 | 28 | 0.40 | 35.3 |
| H | Totals | | | 46 | 8.6 | 10,205 | 9,333 | 8,054 | | 68 | 26 | 6 | | 7 | 8 | 41 | 44 | 30 | 78 | 0.69 | 119.1 |
| A | | DO | CU | | 00.0 | 65 | | | | | | | | | | | | 15 | | 0.00 | 2.5 |
| A | | DO | 3S | 84 | 5.2 | 405 | 383 | 331 | | 87 | 13 | | | 27 | 10 | 51 | 12 | 25 | 54 | 0.68 | 7.0 |
| A | | DO | 4S | 16 | | 70 | 70 | 61 | | 100 | | | | 37 | 63 | | | 21 | 30 | 0.50 | 2.3 |
| A | Totals | | | 2 | 15.9 | 540 | 454 | 392 | | 89 | 11 | | | 28 | 19 | 43 | 10 | 22 | 38 | 0.55 | 11.9 |
| SF | | DO | 3S | 100 | | 156 | 156 | 135 | | 100 | | | | | | 48 | 52 | 35 | 65 | 0.49 | 2.4 |
| SF | Totals | | | 1 | | 156 | 156 | 135 | | 100 | | | | | | 48 | 52 | 35 | 65 | 0.49 | 2.4 |
| Type Totals | | | | | 6.5 | 21,709 | 20,302 | 17,520 | | 67 | 29 | 3 | | 7 | 9 | 40 | 44 | 30 | 76 | 0.68 | 265.6 |

Species, Sort Grade - Board Foot Volumes (Type)

Project: KERRYE

T07N R06W S13 TTAKE

T07N R06W S13 TTAKE

| | | | | | | | | | |
|-----|-----|-----|--------------|------|--------|-------|--------------|------|------|
| Twp | Rge | Sec | Tract | Type | Acre | Plots | Sample Trees | CuFt | BdFt |
| 07N | 06W | 13 | AREAS 4-5 CC | TAKE | 112.00 | 42 | 151 | 1 | W |

| Spp | S T | So rt | Gr ad | % Net BdFt | Bd. Ft. per Acre | | | Total Net MBF | Percent Net Board Foot Volume | | | | | | | | Average Log | | | Logs Per /Acre |
|--------------------|---------------|----------|----------|------------------|------------------|--------|--------|------------------|-------------------------------|------|-------|-----|------------|-------|-------|-------|-------------|----------|-----------|----------------------|
| | | | | | Def% | Gross | Net | | Log Scale Dia. | | | | Log Length | | | | Ln Ft | Bd Ft | CF/ Lf | |
| | | | | | | | | | 4-5 | 6-11 | 12-16 | 17+ | 12-20 | 21-30 | 31-35 | 36-99 | | | | |
| H | | DO | CU | | 00.0 | 1,411 | | | | | | | | | | 8 | 0.00 | | 20.6 | |
| H | | DO | 2S | 52 | 2.7 | 15,045 | 14,632 | 1,639 | | | 63 | 37 | 2 | 2 | 52 | 45 | 35 | 282 | 1.81 | 51.9 |
| H | | DO | 3S | 43 | .9 | 12,261 | 12,149 | 1,361 | 1 | 99 | | | 1 | 3 | 51 | 46 | 35 | 78 | 0.62 | 155.4 |
| H | | DO | 4S | 5 | 1.1 | 1,426 | 1,410 | 158 | | 100 | | | 51 | 49 | | | 20 | 25 | 0.36 | 55.7 |
| H | Totals | | | 61 | 6.5 | 30,143 | 28,191 | 3,157 | 1 | 47 | 33 | 19 | 4 | 5 | 49 | 43 | 30 | 99 | 0.83 | 283.6 |
| D | | DO | CU | | 00.0 | 101 | | | | | | | | | | | 1 | 0.00 | | 7.7 |
| D | | DO | 2S | 57 | .7 | 9,078 | 9,017 | 1,010 | | | 55 | 45 | 1 | | 37 | 62 | 36 | 313 | 1.98 | 28.8 |
| D | | DO | 3S | 39 | .5 | 6,279 | 6,246 | 700 | | 99 | 1 | | | 3 | 54 | 43 | 35 | 74 | 0.59 | 84.9 |
| D | | DO | 4S | 4 | 1.3 | 703 | 694 | 78 | 17 | 83 | | | 41 | 59 | | | 21 | 25 | 0.35 | 28.0 |
| D | Totals | | | 35 | 1.3 | 16,160 | 15,957 | 1,787 | 1 | 42 | 32 | 25 | 2 | 4 | 42 | 52 | 31 | 107 | 0.87 | 149.4 |
| SF | | DO | 2S | 70 | 3.7 | 1,124 | 1,082 | 121 | | | 100 | | | | 100 | | 40 | 247 | 1.57 | 4.4 |
| SF | | DO | 3S | 28 | | 441 | 441 | 49 | | 100 | | | | 39 | 39 | 22 | 34 | 101 | 0.78 | 4.4 |
| SF | | DO | 4S | 2 | | 29 | 29 | 3 | | 100 | | | 100 | | | | 15 | 20 | 0.47 | 1.5 |
| SF | Totals | | | 3 | 2.6 | 1,594 | 1,552 | 174 | | 30 | 70 | | 2 | 11 | 11 | 76 | 34 | 152 | 1.16 | 10.2 |
| A | | DO | 3S | 89 | | 135 | 135 | 15 | | | 100 | | 32 | 68 | | | 22 | 125 | 1.32 | 1.1 |
| A | | DO | 4S | 11 | 40.0 | 27 | 16 | 2 | | 100 | | | | | 100 | | 32 | 30 | 0.53 | .5 |
| A | Totals | | | 0 | 6.7 | 162 | 151 | 17 | | 11 | 89 | | 29 | 61 | 11 | | 25 | 93 | 0.99 | 1.6 |
| Type Totals | | | | | 4.6 | 48,059 | 45,852 | 5,135 | 1 | 45 | 34 | 20 | 3 | 5 | 45 | 47 | 30 | 103 | 0.85 | 444.8 |

| | |
|---|---------------------|
| T07N R06W S24 TROAD | T07N R06W S24 TROAD |
| Twp 07N Rge 06W Sec 24 Tract AREAS 1-2-3 Type ROAD Acre 17.00 Plots 102 Sample Trees 307 CuFt 1 | BdFt W |

| Spp | S T | So rt | Gr ad | % Net BdFt | Bd. Ft. per Acre | | | Total Net MBF | Percent Net Board Foot Volume | | | | | | | | Average Log | | | Logs Per /Acre | |
|--------------------|---------------|----------|----------|------------------|------------------|--------|--------|------------------|-------------------------------|------|-------|-----|------------|-------|-------|-------|-------------|----------|-----------|----------------------|-------|
| | | | | | Def% | Gross | Net | | Log Scale Dia. | | | | Log Length | | | | Ln Ft | Bd Ft | CF/ Lf | | |
| | | | | | | | | | 4-5 | 6-11 | 12-16 | 17+ | 12-20 | 21-30 | 31-35 | 36-99 | | | | | |
| D | ? | ? | | 00.0 | 431 | | | | | | | | | | | | 6 | 0.00 | 8.6 | | |
| D | ? | 2S | | 64 | .6 | 18,990 | 18,876 | 321 | | 4 | 67 | 29 | | 1 | 2 | 27 | 70 | 36 | 278 | 1.76 | 68.0 |
| D | ? | 3S | | 31 | .7 | 9,116 | 9,049 | 154 | | 97 | 2 | 1 | | 0 | 8 | 44 | 47 | 35 | 82 | 0.65 | 110.7 |
| D | ? | 4S | | 5 | 1.8 | 1,427 | 1,400 | 24 | | 100 | | | | 45 | 45 | 10 | | 20 | 27 | 0.40 | 52.3 |
| D | Totals | | | 60 | 2.1 | 29,963 | 29,325 | 499 | | 37 | 44 | 19 | | 3 | 6 | 31 | 60 | 31 | 122 | 0.97 | 239.6 |
| H | ? | ? | | 00.0 | 862 | | | | | | | | | | | | | 18 | 0.00 | 8.1 | |
| H | ? | 2S | | 50 | .8 | 9,004 | 8,929 | 152 | | 2 | 71 | 27 | | 4 | 7 | 36 | 54 | 34 | 251 | 1.69 | 35.6 |
| H | ? | 3S | | 43 | 1.4 | 7,714 | 7,609 | 129 | | 92 | 6 | 2 | | 0 | 4 | 49 | 46 | 35 | 92 | 0.71 | 83.1 |
| H | ? | 4S | | 7 | 3.2 | 1,343 | 1,299 | 22 | | 100 | | | | 46 | 37 | 17 | | 21 | 28 | 0.43 | 46.5 |
| H | Totals | | | 37 | 5.7 | 18,923 | 17,838 | 303 | | 48 | 38 | 14 | | 5 | 8 | 40 | 47 | 30 | 103 | 0.87 | 173.3 |
| A | ? | ? | | 00.0 | 80 | | | | | | | | | | | | | 14 | 0.00 | 2.6 | |
| A | ? | 3S | | 86 | 3.7 | 521 | 502 | 9 | | 83 | 17 | | | 19 | 7 | 52 | 22 | 27 | 63 | 0.75 | 7.9 |
| A | ? | 4S | | 14 | | 80 | 80 | 1 | | 100 | | | | 30 | 70 | | | 21 | 30 | 0.50 | 2.6 |
| A | Totals | | | 1 | 14.5 | 681 | 582 | 10 | | 85 | 15 | | | 20 | 16 | 45 | 19 | 23 | 44 | 0.62 | 13.1 |
| SF | DO | CU | | 00.0 | 29 | | | | | | | | | | | | | 8 | 0.00 | .2 | |
| SF | DO | 2S | | 12 | | 61 | 61 | 1 | | | 100 | | | | | | 100 | 40 | 290 | 1.78 | .2 |
| SF | DO | 3S | | 88 | | 452 | 452 | 8 | | 100 | | | | | | 61 | 39 | 34 | 79 | 0.60 | 5.7 |
| SF | Totals | | | 1 | 5.4 | 542 | 513 | 9 | | 88 | 12 | | | | | 54 | 46 | 34 | 84 | 0.64 | 6.1 |
| C | DO | 2S | | 76 | | 388 | 388 | 7 | | | 100 | | | | | 32 | 68 | 36 | 1460 | 8.31 | .3 |
| C | ? | 3S | | 24 | | 121 | 121 | 2 | | 67 | 33 | | | | 33 | 67 | | 32 | 170 | 2.36 | .7 |
| C | Totals | | | 1 | | 509 | 509 | 9 | | 16 | 8 | 76 | | | 8 | 40 | 52 | 33 | 521 | 4.14 | 1.0 |
| Type Totals | | | | | 3.7 | 50,618 | 48,766 | 829 | | 42 | 41 | 17 | | 4 | 7 | 35 | 54 | 31 | 113 | 0.93 | 433.1 |

Species, Sort Grade - Board Foot Volumes (Type)

Project: KERRYE

T4N R9W S2 T0007

T4N R9W S2 T0007

Twp Rge Sec Tract Type Acre Plots Sample Trees CuFt
4N 9W 2 AREA 7-RW 0007 10.00 12 40 1

BdFt
W

| Spp | S T | So rt | Gr ad | % Net BdFt | Bd. Ft. per Acre | | | Total Net MBF | Percent Net Board Foot Volume | | | | | | | | Average Log | | | Logs Per /Acre |
|--------------------|---------------|----------|----------|------------------|------------------|--------|--------|------------------|-------------------------------|-------|-----|-------|------------|-------|-------|----|-------------|----------|-----------|----------------------|
| | | | | | Def% | Gross | Net | | Log Scale Dia. | | | | Log Length | | | | Ln Ft | Bd Ft | CF/ Lf | |
| | | | | | | | | 4-5 | 6-11 | 12-16 | 17+ | 12-20 | 21-30 | 31-35 | 36-99 | | | | | |
| D | | DO | CU | | 00.0 | 167 | | | | | | | | | | 5 | | 0.00 | 29.7 | |
| D | | DO | 2S | 15 | | 1,410 | 1,410 | 14 | | | 100 | | | 74 | 26 | 34 | 180 | 1.60 | 7.8 | |
| D | | DO | 3S | 59 | 1.8 | 5,818 | 5,711 | 57 | 6 | 94 | | | | 40 | 60 | 37 | 56 | 0.55 | 102.2 | |
| D | | DO | 4S | 27 | | 2,572 | 2,572 | 26 | 60 | 40 | | 61 | 39 | | | 20 | 22 | 0.36 | 116.2 | |
| D | Totals | | | 55 | 2.8 | 9,968 | 9,693 | 97 | 19 | 66 | 15 | 16 | 10 | 34 | 39 | 25 | 38 | 0.51 | 256.0 | |
| H | | DO | CU | | 00.0 | 157 | | | | | | | | | | 8 | | 0.00 | 6.3 | |
| H | | DO | 2S | 61 | | 4,441 | 4,441 | 44 | | | 100 | | 10 | 90 | | 31 | 200 | 1.64 | 22.3 | |
| H | | DO | 3S | 35 | | 2,507 | 2,507 | 25 | | 100 | | | 23 | 34 | 43 | 33 | 68 | 0.69 | 36.9 | |
| H | | DO | 4S | 4 | | 305 | 305 | 3 | | 100 | | 100 | | | | 16 | 20 | 0.36 | 15.3 | |
| H | Totals | | | 41 | 2.1 | 7,410 | 7,253 | 73 | | 39 | 61 | 4 | 14 | 67 | 15 | 27 | 90 | 0.93 | 80.7 | |
| S | | DO | CU | | 00.0 | 188 | | | | | | | | | | 6 | | 0.00 | 5.8 | |
| S | | DO | 2S | 46 | | 257 | 257 | 3 | | | 100 | | | 100 | | 24 | 150 | 1.71 | 1.7 | |
| S | | DO | 3S | 54 | | 299 | 299 | 3 | | 100 | | | | 100 | | 32 | 73 | 0.98 | 4.1 | |
| S | Totals | | | 3 | 25.3 | 744 | 556 | 6 | | 54 | 46 | | 46 | 54 | | 18 | 48 | 0.97 | 11.6 | |
| C | | DO | 3S | 100 | | 85 | 85 | 1 | | 100 | | | | 100 | | 37 | 60 | 1.14 | 1.4 | |
| C | Totals | | | 0 | | 85 | 85 | 1 | | 100 | | | | 100 | | 37 | 60 | 1.14 | 1.4 | |
| Type Totals | | | | | 3.4 | 18,207 | 17,587 | 176 | 11 | 55 | 35 | 11 | 13 | 48 | 28 | 26 | 50 | 0.63 | 349.7 | |

| TC TSTATS | | | | STATISTICS | | | | PAGE | 1 | |
|---------------|-------------|-----------------|---------------|----------------|---------------|-----------------|---------------|---------------|--------------|--------------|
| | | | | PROJECT KERRYE | | | | DATE | 11/14/2003 | |
| TWP | RGE | SECT | TRACT | TYPE | ACRES | PLOTS | TREES | CuFt | BdFt | |
| 07N | 06W | 24 | AREAS 1-2-3 | TAKE | 863.00 | 102 | 441 | 1 | W | |
| | | | | TREES | ESTIMATED | PERCENT | | | | |
| | | | | PER PLOT | TOTAL | SAMPLE | | | | |
| | | | | | TREES | TREES | | | | |
| TOTAL | 102 | 441 | 4.3 | | | | | | | |
| CRUISE | 34 | 151 | 4.4 | | 121,633 | | .1 | | | |
| DBH COUNT | | | | | | | | | | |
| REFOREST | | | | | | | | | | |
| COUNT | 62 | 290 | 4.7 | | | | | | | |
| BLANKS | 6 | | | | | | | | | |
| 100 % | | | | | | | | | | |
| STAND SUMMARY | | | | | | | | | | |
| | SAMPLE | TREES | AVG | BOLE | REL | BASAL | GROSS | NET | GROSS | NET |
| | TREES | /ACRE | DBH | LEN | DEN | AREA | BF/AC | BF/AC | CF/AC | CF/AC |
| DOUG FIR | 60 | 62.3 | 14.4 | 66 | | 70.2 | 10,808 | 10,359 | 2,739 | 2,676 |
| WHEMLOCK | 75 | 68.2 | 13.4 | 55 | | 66.9 | 10,205 | 9,333 | 2,624 | 2,474 |
| R ALDER | 14 | 8.0 | 12.3 | 34 | | 6.6 | 540 | 454 | 163 | 143 |
| PS FIR | 2 | 2.4 | 11.2 | 39 | 0 | 1.6 | 156 | 156 | 41 | 41 |
| TOTAL | 151 | 140.9 | 13.7 | 58 | | 145.3 | 21,709 | 20,302 | 5,587 | 5,335 |
| | COEFF | TREES/ACRE | | | | # OF PLOTS REQ. | | INF. POP. | | |
| SD: 1 | VAR. | S.E.% | LOW | AVG | HIGH | | 5 | 10 | | 15 |
| DOUG FIR | 105.0 | 10.4 | 36 | 62 | 69 | | | | | |
| WHEMLOCK | 104.9 | 10.4 | 61 | 68 | 75 | | | | | |
| R ALDER | 426.9 | 42.3 | 5 | 8 | 11 | | | | | |
| PS FIR | 600.6 | 59.5 | 1 | 2 | 4 | | | | | |
| TOTAL | 56.8 | 5.6 | 133 | 141 | 149 | | 129 | 32 | | 14 |
| | COEFF | BASAL AREA/ACRE | | | | # OF PLOTS REQ. | | INF. POP. | | |
| SD: 1 | VAR. | S.E.% | LOW | AVG | HIGH | | 5 | 10 | | 15 |
| DOUG FIR | 103.3 | 10.2 | 63 | 70 | 77 | | | | | |
| WHEMLOCK | 103.6 | 10.3 | 60 | 67 | 74 | | | | | |
| R ALDER | 412.5 | 40.8 | 4 | 7 | 9 | | | | | |
| PS FIR | 600.6 | 59.5 | 1 | 2 | 3 | | | | | |
| TOTAL | 54.7 | 5.4 | 137 | 145 | 153 | | 120 | 30 | | 13 |
| | COEFF | NET BF/ACRE | | | | # OF PLOTS REQ. | | INF. POP. | | |
| SD: 1 | VAR. | S.E.% | LOW | AVG | HIGH | | 5 | 10 | | 15 |
| DOUG FIR | 106.1 | 10.5 | 9,271 | 10,359 | 11,447 | | | | | |
| WHEMLOCK | 110.7 | 11.0 | 8,310 | 9,333 | 10,355 | | | | | |
| R ALDER | 416.2 | 41.2 | 267 | 454 | 641 | | | | | |
| PS FIR | 600.6 | 59.5 | 63 | 156 | 249 | | | | | |
| TOTAL | 60.8 | 6.0 | 19,079 | 20,302 | 21,524 | | 148 | 37 | | 16 |

STATISTICS
PROJECT KERRYE

| TWP | RGE | SECT | TRACT | TYPE | ACRES | PLOTS | TREES | CuFt | BdFt |
|-----|-----|------|--------------|------|--------|-------|-------|------|------|
| 07N | 06W | 13 | AREAS 4-5 CC | TAKE | 112.00 | 42 | 292 | 1 | W |

| | PLOTS | TREES | TREES PER PLOT | ESTIMATED TOTAL TREES | PERCENT SAMPLE TREES |
|--------------------------------|-------|-------|-------------------|-----------------------------|----------------------------|
| TOTAL | 42 | 292 | 7.0 | | |
| CRUISE | 22 | 151 | 6.9 | 24,791 | .6 |
| DBH COUNT REFOREST COUNT | 20 | 133 | 6.7 | | |
| BLANKS 100 % | | | | | |

STAND SUMMARY

| | SAMPLE TREES | TREES /ACRE | AVG DBH | BOLE LEN | REL DEN | BASAL AREA | GROSS BF/AC | NET BF/AC | GROSS CF/AC | NET CF/AC |
|--------------|-----------------|----------------|-------------|-------------|------------|---------------|----------------|---------------|----------------|---------------|
| WHEMLOCK | 86 | 140.9 | 14.9 | 62 | | 171.4 | 30,143 | 28,191 | 7,294 | 7,007 |
| DOUG FIR | 61 | 75.5 | 15.4 | 63 | | 97.1 | 16,160 | 15,957 | 4,017 | 3,998 |
| PS FIR | 3 | 4.4 | 18.9 | 82 | 1 | 8.6 | 1,594 | 1,552 | 402 | 402 |
| R ALDER | 1 | .5 | 18.0 | 79 | | 1.0 | 162 | 151 | 40 | 40 |
| TOTAL | 151 | 221.3 | 15.2 | 63 | | 278.1 | 48,059 | 45,852 | 11,754 | 11,447 |

| SD: | 1 | COEFF | | TREES/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|---|-------------|------------|------------|------------|------------|-----------------|-----------|-----------|
| | | VAR. | S.E.% | LOW | AVG | HIGH | 5 | 10 | 15 |
| WHEMLOCK | | 79.6 | 12.3 | 124 | 141 | 158 | | | |
| DOUG FIR | | 117.6 | 18.2 | 62 | 76 | 89 | | | |
| PS FIR | | 242.6 | 37.4 | 3 | 4 | 6 | | | |
| R ALDER | | 648.1 | 100.0 | 0 | 1 | 1 | | | |
| TOTAL | | 46.1 | 7.1 | 206 | 221 | 237 | 85 | 21 | 9 |

| SD: | 1 | COEFF | | BASAL AREA/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|---|-------------|------------|-----------------|------------|------------|-----------------|-----------|-----------|
| | | VAR. | S.E.% | LOW | AVG | HIGH | 5 | 10 | 15 |
| WHEMLOCK | | 69.4 | 10.7 | 153 | 171 | 190 | | | |
| DOUG FIR | | 102.5 | 15.8 | 82 | 97 | 113 | | | |
| PS FIR | | 242.5 | 37.4 | 5 | 9 | 12 | | | |
| R ALDER | | 648.1 | 100.0 | | 1 | 2 | | | |
| TOTAL | | 31.9 | 4.9 | 264 | 278 | 292 | 41 | 10 | 5 |

| SD: | 1 | COEFF | | NET BF/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|---|-------------|------------|---------------|---------------|---------------|-----------------|-----------|-----------|
| | | VAR. | S.E.% | LOW | AVG | HIGH | 5 | 10 | 15 |
| WHEMLOCK | | 69.4 | 10.7 | 25,173 | 28,191 | 31,209 | | | |
| DOUG FIR | | 100.6 | 15.5 | 13,481 | 15,957 | 18,434 | | | |
| PS FIR | | 239.7 | 37.0 | 978 | 1,552 | 2,126 | | | |
| R ALDER | | 648.1 | 100.0 | 0 | 151 | 302 | | | |
| TOTAL | | 33.5 | 5.2 | 43,483 | 45,852 | 48,221 | 45 | 11 | 5 |

STATISTICS
PROJECT KERRYE

| TWP | RGE | SECT | TRACT | TYPE | ACRES | PLOTS | TREES | CuFt | BdFt |
|-----|-----|------|-------------|------|-------|-------|-------|------|------|
| 07N | 06W | 24 | AREAS 1-2-3 | ROAD | 17.00 | 102 | 901 | 1 | W |

| | PLOTS | TREES | TREES PER PLOT | ESTIMATED TOTAL TREES | PERCENT SAMPLE TREES |
|-----------|-------|-------|----------------|-----------------------|----------------------|
| TOTAL | 102 | 901 | 8.8 | | |
| CRUISE | 36 | 307 | 8.5 | 3,493 | 8.8 |
| DBH COUNT | | | | | |
| REFOREST | | | | | |
| COUNT | 66 | 590 | 8.9 | | |
| BLANKS | | | | | |
| 100 % | | | | | |

STAND SUMMARY

| | SAMPLE TREES | TREES /ACRE | AVG DBH | BOLE LEN | REL DEN | BASAL AREA | GROSS BF/AC | NET BF/AC | GROSS CF/AC | NET CF/AC |
|--------------|--------------|--------------|-------------|-----------|---------|--------------|---------------|---------------|---------------|---------------|
| DOUG FIR | 150 | 103.6 | 17.3 | 75 | | 168.7 | 29,963 | 29,325 | 7,379 | 7,277 |
| WHEMLOCK | 130 | 88.4 | 15.3 | 62 | | 112.4 | 18,923 | 17,838 | 4,749 | 4,568 |
| R ALDER | 19 | 8.8 | 13.1 | 36 | | 8.2 | 681 | 582 | 211 | 189 |
| PS FIR | 6 | 3.9 | 13.6 | 56 | 1 | 4.0 | 542 | 513 | 138 | 132 |
| WR CEDAR | 2 | .7 | 30.6 | 47 | | 3.6 | 509 | 509 | 132 | 132 |
| TOTAL | 307 | 205.5 | 16.3 | 67 | | 296.9 | 50,618 | 48,766 | 12,608 | 12,298 |

| SD: | COEFF VAR | S.E.% | TREES/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|-------------|------------|------------|------------|------------|-----------------|-----------|-----------|
| 1 | | | LOW | AVG | HIGH | 5 | 10 | 15 |
| DOUG FIR | 69.6 | 6.9 | 96 | 104 | 111 | | | |
| WHEMLOCK | 88.6 | 8.8 | 81 | 88 | 96 | | | |
| R ALDER | 414.1 | 41.0 | 5 | 9 | 12 | | | |
| PS FIR | 490.4 | 48.6 | 2 | 4 | 6 | | | |
| WR CEDAR | 510.4 | 50.5 | 0 | 1 | 1 | | | |
| TOTAL | 34.0 | 3.4 | 199 | 205 | 212 | 46 | 12 | 5 |

| SD: | COEFF VAR | S.E.% | BASAL AREA/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|-------------|------------|-----------------|------------|------------|-----------------|----------|-----------|
| 1 | | | LOW | AVG | HIGH | 5 | 10 | 15 |
| DOUG FIR | 66.4 | 6.6 | 158 | 169 | 180 | | | |
| WHEMLOCK | 85.7 | 8.5 | 103 | 112 | 122 | | | |
| R ALDER | 427.5 | 42.3 | 5 | 8 | 12 | | | |
| PS FIR | 467.8 | 46.3 | 2 | 4 | 6 | | | |
| WR CEDAR | 503.8 | 49.9 | 2 | 4 | 5 | | | |
| TOTAL | 29.6 | 2.9 | 288 | 297 | 306 | 35 | 9 | 4 |

| SD: | COEFF VAR | S.E.% | NET BF/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|-------------|------------|---------------|---------------|---------------|-----------------|-----------|-----------|
| 1 | | | LOW | AVG | HIGH | 5 | 10 | 15 |
| DOUG FIR | 67.6 | 6.7 | 27,362 | 29,325 | 31,289 | | | |
| WHEMLOCK | 88.1 | 8.7 | 16,281 | 17,838 | 19,394 | | | |
| R ALDER | 450.8 | 44.6 | 322 | 582 | 842 | | | |
| PS FIR | 466.9 | 46.2 | 276 | 513 | 750 | | | |
| WR CEDAR | 511.6 | 50.7 | 251 | 509 | 766 | | | |
| TOTAL | 34.3 | 3.4 | 47,111 | 48,766 | 50,422 | 47 | 12 | 5 |

| TC TSTATS | | | | STATISTICS | | | | PAGE 1 | | |
|---------------|-----------------|----------------|-----------------|-------------------|-----------------------------|----------------------------|----------------|-----------------|----------------|--------------|
| | | | | PROJECT KERRYE | | | | DATE 11/11/2003 | | |
| TWP | RGE | SECT | TRACT | TYPE | ACRES | PLOTS | TREES | CuFt | BdFt | |
| 4N | 9W | 2 | AREA 7-RW | 0007 | 10.00 | 12 | 76 | 1 | W | |
| | | PLOTS | TREES | TREES PER PLOT | ESTIMATED TOTAL TREES | PERCENT SAMPLE TREES | | | | |
| TOTAL | | 12 | 76 | 6.3 | | | | | | |
| CRUISE | | 7 | 40 | 5.7 | 2,609 | 1.5 | | | | |
| DBH COUNT | | | | | | | | | | |
| REFOREST | | | | | | | | | | |
| COUNT | | 5 | 30 | 6.0 | | | | | | |
| BLANKS | | | | | | | | | | |
| 100 % | | | | | | | | | | |
| STAND SUMMARY | | | | | | | | | | |
| | SAMPLE TREES | TREES /ACRE | AVG DBH | BOLE LEN | REL DEN | BASAL AREA | GROSS BF/AC | NET BF/AC | GROSS CF/AC | NET CF/AC |
| DOUG FIR | 23 | 205.5 | 11.0 | 33 | | 134.4 | 9,968 | 9,693 | 3,367 | 3,334 |
| WHEMLOCK | 13 | 48.2 | 15.7 | 47 | | 64.4 | 7,410 | 7,253 | 2,099 | 2,062 |
| S SPRUCE | 3 | 5.8 | 18.8 | 39 | | 11.2 | 744 | 556 | 247 | 198 |
| WR CEDAR | 1 | 1.4 | 19.0 | 38 | | 2.8 | 85 | 85 | 60 | 60 |
| TOTAL | 40 | 260.9 | 12.2 | 36 | | 212.9 | 18,207 | 17,587 | 5,774 | 5,633 |
| | COEFF VAR. | S.E.% | TREES/ACRE | | | # OF PLOTS REQ. | | INF. POP. | | |
| SD: 1 | | | LOW | AVG | HIGH | 5 | 10 | 15 | | |
| DOUG FIR | 76.8 | 22.2 | 160 | 206 | 251 | | | | | |
| WHEMLOCK | 138.5 | 40.0 | 29 | 48 | 67 | | | | | |
| S SPRUCE | 266.3 | 76.9 | 1 | 6 | 10 | | | | | |
| WR CEDAR | 346.4 | 100.0 | 0 | 1 | 3 | | | | | |
| TOTAL | 38.3 | 11.1 | 232 | 261 | 290 | 59 | 15 | 7 | | |
| | COEFF VAR. | S.E.% | BASAL AREA/ACRE | | | # OF PLOTS REQ. | | INF. POP. | | |
| SD: 1 | | | LOW | AVG | HIGH | 5 | 10 | 15 | | |
| DOUG FIR | 64.8 | 18.7 | 109 | 134 | 160 | | | | | |
| WHEMLOCK | 143.2 | 41.4 | 38 | 64 | 91 | | | | | |
| S SPRUCE | 266.3 | 76.9 | 3 | 11 | 20 | | | | | |
| WR CEDAR | 346.4 | 100.0 | 0 | 3 | 6 | | | | | |
| TOTAL | 10.3 | 3.0 | 207 | 213 | 219 | 4 | 1 | 0 | | |
| | COEFF VAR. | S.E.% | NET BF/ACRE | | | # OF PLOTS REQ. | | INF. POP. | | |
| SD: 1 | | | LOW | AVG | HIGH | 5 | 10 | 15 | | |
| DOUG FIR | 63.0 | 18.2 | 7,930 | 9,693 | 11,456 | | | | | |
| WHEMLOCK | 151.4 | 43.7 | 4,083 | 7,253 | 10,423 | | | | | |
| S SPRUCE | 266.3 | 76.9 | 129 | 556 | 983 | | | | | |
| WR CEDAR | 346.4 | 100.0 | 0 | 85 | 171 | | | | | |
| TOTAL | 36.3 | 10.5 | 15,742 | 17,587 | 19,431 | 53 | 13 | 6 | | |

Log Stock Table - MBF

T07N R06W S13 TyTAKE
THRU
T4N R9W S2 Ty0007

Project: KERRYE
Acres 1,002.00

Page 5
Date 11/18/2003
Time 11:11:49AM

| Spp | S T | So rt | Gr de | Log Len | Gross MBF | Def % | Net MBF | % Spc | Net Volume by Scaling Diameter in Inches | | | | | | | | | | | |
|-------|--------|-------------|----------|------------|--------------|----------|------------|----------|--|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-----|
| | | | | | | | | | 2-3 | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 | 30-39 | 40+ |
| A | | ? | 3S | 24 | 35 | | 35 | 8.3 | | | | 35 | | | | | | | | |
| A | | DO | 3S | 28 | 10 | | 10 | 2.5 | | | | | 10 | | | | | | | |
| A | | ? | 3S | 32 | 182 | 4.2 | 174 | 41.7 | | | 57 | 117 | 1 | | | | | | | |
| A | | ? | 3S | 37 | 0 | | 0 | .1 | | | 0 | | | | | | | | | |
| A | | ? | 3S | 39 | 13 | | 13 | 3.0 | | | 13 | | | | | | | | | |
| A | | ? | 3S | 40 | 28 | | 28 | 6.7 | | | 27 | 1 | | | | | | | | |
| A | | ? | 4S | 16 | 6 | | 6 | 1.4 | | | 6 | | | | | | | | | |
| A | | ? | 4S | 18 | 10 | | 10 | 2.4 | | | 10 | | | | | | | | | |
| A | | ? | 4S | 20 | 7 | | 7 | 1.6 | | | 7 | | | | | | | | | |
| A | | ? | 4S | 21 | 10 | | 10 | 2.4 | | | 10 | | | | | | | | | |
| A | | ? | 4S | 22 | 0 | | 0 | .0 | | | 0 | | | | | | | | | |
| A | | ? | 4S | 24 | 14 | | 14 | 3.3 | | | 14 | | | | | | | | | |
| A | | ? | 4S | 25 | 15 | | 15 | 3.7 | | | 15 | | | | | | | | | |
| A | | DO | 4S | 32 | 3 | 40.0 | 2 | .4 | | | 2 | | | | | | | | | |
| A | | Totals | | | 496 | 15.6 | 418 | 1.8 | | | 191 | 16 | 152 | 60 | | | | | | |
| SF | | DO | CU | 8 | 0 | 100.0 | | | | | | | | | | | | | | |
| SF | | DO | 2S | 40 | 127 | 3.7 | 122 | 38.5 | | | | 36 | 86 | | | | | | | |
| SF | | DO | 3S | 30 | 19 | | 19 | 6.0 | | | | 19 | | | | | | | | |
| SF | | ? | 3S | 32 | 89 | | 89 | 28.2 | | | 67 | 1 | 21 | | | | | | | |
| SF | | DO | 3S | 38 | 1 | | 1 | .2 | | | 1 | | | | | | | | | |
| SF | | ? | 3S | 40 | 83 | | 83 | 26.1 | | | 11 | 71 | 1 | | | | | | | |
| SF | | DO | 4S | 15 | 3 | | 3 | 1.0 | | | 3 | | | | | | | | | |
| SF | | Totals | | | 322 | 1.6 | 317 | 1.3 | | | 82 | 72 | 41 | 36 | 86 | | | | | |
| S | | ? | ? | 9 | 0 | 100.0 | | | | | | | | | | | | | | |
| S | | ? | ? | 10 | 2 | 100.0 | | | | | | | | | | | | | | |
| S | | ? | 2S | 24 | 3 | | 3 | 46.2 | | | | | 3 | | | | | | | |
| S | | ? | 3S | 32 | 3 | | 3 | 53.8 | | | 1 | 2 | | | | | | | | |
| S | | Totals | | | 7 | 25.3 | 6 | .0 | | | 1 | 2 | | 3 | | | | | | |
| Total | | All Species | | | 25,160 | 6.0 | 23,661 | 100.0 | | | 51 | 6414 | 3880 | 4284 | 4591 | 2027 | 1687 | 651 | 42 | 32 |

TC TLOGSTVB

Log Stock Table - MBF
Project: KERRYE

T07N R06W S24 TTAKE

T07N R06W S24 TTAKI

Twp Rge Sec Tract Type Acres Plots Sample Trees
 07N 06W 24 AREAS 1-2-3 TAKE 863.00 102 151

Page 2
 Date 11/14/2003
 Time 3:22:57PM

| S Spp | So Gr | Log rt de Len | Gross MBF | % Def | Net MBF | % Spc | Net Volume by Scaling Diameter in Inches | | | | | | | | | | |
|-------|--------|---------------|-----------|-------|---------|-------|--|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | | 2-3 | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 | 30-39 |
| H | DO | CU | 28 | 66 | 100.0 | | | | | | | | | | | | |
| H | DO | CU | 40 | 117 | 100.0 | | | | | | | | | | | | |
| H | DO | CU | 50 | 93 | 100.0 | | | | | | | | | | | | |
| H | DO | 2S | 16 | 63 | | 63 | .8 | | | | | | | | | 63 | |
| H | DO | 2S | 20 | 128 | | 128 | 1.6 | | | | | 55 | | | | 73 | |
| H | DO | 2S | 26 | 165 | 7.9 | 152 | 1.9 | | | | | 57 | | | 96 | | |
| H | DO | 2S | 28 | 61 | | 61 | .8 | | | | | 61 | | | | | |
| H | DO | 2S | 32 | 869 | .2 | 867 | 10.8 | | | | | 647 | 120 | 100 | | | |
| H | DO | 2S | 36 | 215 | | 215 | 2.7 | | | | | | 215 | | | | |
| H | DO | 2S | 40 | 818 | .8 | 811 | 10.1 | | | | | 709 | 102 | | | | |
| H | DO | 3S | 20 | 67 | | 67 | .8 | | | | 67 | | | | | | |
| H | DO | 3S | 21 | 12 | | 12 | .1 | | | | | | | | | | |
| H | DO | 3S | 22 | 20 | | 20 | .2 | | | 12 | | | | | | | |
| H | DO | 3S | 24 | 72 | | 72 | .9 | | | | 20 | | | | | | |
| H | DO | 3S | 32 | 2,008 | 3.9 | 1,930 | 24.0 | | | | | 72 | | | | | |
| H | DO | 3S | 33 | 75 | | 75 | .9 | | | 303 | 603 | 984 | 40 | | | | |
| H | DO | 3S | 34 | 182 | | 182 | 2.3 | | | 59 | 16 | | | | | | |
| H | DO | 3S | 35 | 48 | | 48 | .6 | | | 182 | | | | | | | |
| H | DO | 3S | 36 | 44 | | 44 | .5 | | | 31 | 17 | | | | | | |
| H | DO | 3S | 37 | 71 | | 71 | .9 | | | 26 | 18 | | | | | | |
| H | DO | 3S | 40 | 2,390 | .7 | 2,374 | 29.5 | | | 71 | | | | | | | |
| | | | | | | | | | | 881 | 127 | 1160 | 87 | | | 119 | |
| H | DO | 4S | 12 | 28 | | 28 | .4 | | | | 28 | | | | | | |
| H | DO | 4S | 15 | 44 | | 44 | .5 | | | 44 | | | | | | | |
| H | DO | 4S | 16 | 54 | | 54 | .7 | | | 54 | | | | | | | |
| H | DO | 4S | 17 | 9 | | 9 | .1 | | | 9 | | | | | | | |
| H | DO | 4S | 18 | 79 | | 79 | 1.0 | | | 9 | | | | | | | |
| H | DO | 4S | 19 | 38 | | 38 | .5 | | | 54 | 25 | | | | | | |
| H | DO | 4S | 20 | 88 | | 88 | 1.1 | | | 38 | | | | | | | |
| H | DO | 4S | 21 | 15 | | 15 | .2 | | | 79 | 8 | | | | | | |
| H | DO | 4S | 24 | 143 | | 143 | 1.8 | | | 15 | | | | | | | |
| H | DO | 4S | 26 | 52 | | 52 | .6 | | | 143 | | | | | | | |
| H | DO | 4S | 27 | 29 | | 29 | .4 | | | 52 | | | | | | | |
| H | DO | 4S | 29 | 22 | | 22 | .3 | | | 29 | | | | | | | |
| H | DO | 4S | 30 | 64 | | 64 | .8 | | | 22 | | | | | | | |
| H | DO | 4S | 32 | 199 | 15.8 | 168 | 2.1 | | | 64 | | | | | | | |
| H | DO | 4S | 34 | 36 | 20.0 | 29 | .4 | | | 168 | | | | | | | |
| | | | | | | | | | | 29 | | | | | | | |
| H | Totals | | | 8,807 | 8.6 | 8,054 | 46.0 | | | 2366 | 862 | 2283 | 1656 | 436 | 196 | 255 | |
| A | DO | CU | 2 | 4 | 100.0 | | | | | | | | | | | | |
| A | DO | CU | 8 | 19 | 100.0 | | | | | | | | | | | | |
| A | DO | CU | 12 | 12 | 100.0 | | | | | | | | | | | | |
| A | DO | CU | 35 | 22 | 100.0 | | | | | | | | | | | | |
| A | DO | 3S | 12 | 20 | 16.7 | 17 | 4.2 | | | | | 17 | | | | | |
| A | DO | 3S | 16 | 64 | 11.7 | 56 | 14.4 | | | 15 | 15 | | 26 | | | | |
| A | DO | 3S | 20 | 15 | | 15 | 3.8 | | | 15 | | | | | | | |
| A | DO | 3S | 24 | 34 | | 34 | 8.7 | | | | | 34 | | | | | |
| A | DO | 3S | 32 | 177 | 4.2 | 170 | 43.4 | | | 56 | | 114 | | | | | |
| A | DO | 3S | 39 | 12 | | 12 | 3.2 | | | 12 | | | | | | | |
| A | DO | 3S | 40 | 27 | | 27 | 6.8 | | | 27 | | | | | | | |
| A | DO | 4S | 16 | 6 | | 6 | 1.5 | | | 6 | | | | | | | |
| A | DO | 4S | 18 | 10 | | 10 | 2.5 | | | 10 | | | | | | | |

TC TLOGSTVB

Log Stock Table - MBF
Project: KERRYE

T07N R06W S24 TTAKE

T07N R06W S24 TTAKI

Twp Rge Sec Tract
07N 06W 24 AREAS 1-2-3

Type Acres Plots Sample Trees
TAKE 863.00 102 151

Page 3
Date 11/14/2003
Time 3:22:57PM

| S Spp | So T | Gr rt | Log de | Len | Gross MBF | % Def | Net MBF | % Spc | Net Volume by Scaling Diameter in Inches | | | | | | | | | |
|-------------------|---------|----------|-----------|-----|--------------|----------|------------|----------|--|-----|------|------|-------|-------|-------|-------|-------|-------|
| | | | | | | | | | 2-3 | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 |
| A | DO | 4S | 20 | | 7 | | 7 | 1.7 | | | 7 | | | | | | | |
| A | DO | 4S | 21 | | 10 | | 10 | 2.5 | | | 10 | | | | | | | |
| A | DO | 4S | 24 | | 13 | | 13 | 3.4 | | | 13 | | | | | | | |
| A | DO | 4S | 25 | | 15 | | 15 | 3.9 | | | 15 | | | | | | | |
| A Totals | | | | | 466 | 15.9 | 392 | 2.2 | | | 185 | 15 | 149 | 43 | | | | |
| SF | DO | 3S | 32 | | 65 | | 65 | 48.4 | | | 65 | | | | | | | |
| SF | DO | 3S | 40 | | 69 | | 69 | 51.6 | | | | 69 | | | | | | |
| SF Totals | | | | | 135 | | 135 | .8 | | | 65 | 69 | | | | | | |
| Total All Species | | | | | 18,735 | 6.5 | 17,520 | 100.0 | | | 5120 | 3189 | 3517 | 3509 | 1285 | 645 | 255 | |

Log Stock Table - MBF
Project: KERRYE

T07N R06W S13 TTAKE

T07N R06W S13 TTAKI

Twp Rge Sec Tract Type Acres Plots Sample Trees Page
 07N 06W 13 AREAS 4-5 CC TAKE 112.00 42 151 1
 Date 11/14/2003
 Time 3:29:24PM

| S Spp | So T | Gr rt | Log de Len | Gross MBF | % Def | Net MBF | % Spc | Net Volume by Scaling Diameter in Inches | | | | | | | | | | |
|-------|------|-------|------------|-----------|-------|---------|-------|--|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | | | 2-3 | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 | 30-39 |
| H | DO | CU | | | | | | | | | | | | | | | | |
| H | DO | CU | 2 | 8 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 3 | 1 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 4 | 4 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 5 | 3 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 6 | 5 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 7 | 9 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 8 | 6 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 10 | 22 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 11 | 14 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 12 | 12 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 14 | 2 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 15 | 12 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 21 | 4 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 31 | 6 | 100.0 | | | | | | | | | | | | | |
| H | DO | CU | 40 | 50 | 100.0 | | | | | | | | | | | | | |
| H | DO | 2S | 12 | 8 | | 8 | .3 | | | | | | | | | | | |
| H | DO | 2S | 20 | 17 | | 17 | .5 | | | | | | | | | | | |
| H | DO | 2S | 27 | 14 | | 14 | .4 | | | | 17 | | | | | | | |
| H | DO | 2S | 28 | 26 | 13.8 | 23 | .7 | | | | | 14 | | | | | | |
| H | DO | 2S | 32 | 875 | 3.3 | 846 | 26.8 | | | | 244 | 101 | 360 | | 23 | 140 | | |
| H | DO | 2S | 36 | 65 | 1.3 | 64 | 2.0 | | | | | | | | | | | |
| H | DO | 2S | 40 | 680 | 1.8 | 667 | 21.1 | | | | | | | | | | | |
| H | DO | 3S | 20 | 11 | | 11 | .4 | | | | 11 | | | | | | | |
| H | DO | 3S | 23 | 14 | 3.3 | 13 | .4 | | | | 13 | | | | | | | |
| H | DO | 3S | 27 | 4 | | 4 | .1 | | | | | | | | | | | |
| H | DO | 3S | 28 | 5 | 10.0 | 5 | .1 | | | | 4 | | | | | | | |
| H | DO | 3S | 29 | 7 | | 7 | .2 | | | | | 5 | | | | | | |
| H | DO | 3S | 30 | 10 | 6.6 | 9 | .3 | | | | | | | | | | | |
| H | DO | 3S | 31 | 8 | | 8 | .3 | | | | | | | | | | | |
| H | DO | 3S | 32 | 607 | .7 | 602 | 19.1 | | | | 19 | 201 | 121 | 262 | | | | |
| H | DO | 3S | 33 | 28 | 3.4 | 27 | .8 | | | | | 27 | | | | | | |
| H | DO | 3S | 34 | 40 | 1.8 | 40 | 1.3 | | | | | 35 | 4 | | | | | |
| H | DO | 3S | 35 | 11 | | 11 | .4 | | | | | 11 | | | | | | |
| H | DO | 3S | 36 | 98 | 1.4 | 97 | 3.1 | | | | | 97 | | | | | | |
| H | DO | 3S | 37 | 18 | 6.3 | 17 | .5 | | | | | 12 | 5 | | | | | |
| H | DO | 3S | 38 | 61 | | 61 | 1.9 | | | | | 61 | | | | | | |
| H | DO | 3S | 39 | 17 | | 17 | .5 | | | | | 17 | | | | | | |
| H | DO | 3S | 40 | 434 | .5 | 432 | 13.7 | | | | | 100 | 135 | 198 | | | | |
| H | DO | 4S | 12 | 1 | | 1 | .0 | | | | | | | | | | | |
| H | DO | 4S | 13 | 30 | 3.5 | 29 | .9 | | | | | 1 | | | | | | |
| H | DO | 4S | 15 | 2 | | 2 | .1 | | | | | 29 | | | | | | |
| H | DO | 4S | 16 | 5 | | 5 | .1 | | | | | 2 | | | | | | |
| H | DO | 4S | 17 | 3 | | 3 | .1 | | | | | 3 | 2 | | | | | |
| H | DO | 4S | 18 | 20 | | 20 | .6 | | | | | 3 | | | | | | |
| H | DO | 4S | 19 | 18 | | 18 | .6 | | | | | 20 | | | | | | |
| H | DO | 4S | 20 | 3 | 25.0 | 2 | .1 | | | | | 18 | | | | | | |
| H | DO | 4S | 21 | 3 | | 3 | .1 | | | | | | | | | | | |
| H | DO | 4S | 22 | 9 | | 9 | .3 | | | | | | | | | | | |
| H | DO | 4S | 23 | 3 | | 3 | .1 | | | | | 9 | | | | | | |
| H | DO | 4S | 24 | 17 | | 17 | .5 | | | | | | | | | | | |
| H | DO | 4S | 26 | 24 | | 24 | .8 | | | | | 17 | | | | | | |
| | | | | | | | | | | | | 24 | | | | | | |

Log Stock Table - MBF
Project: KERRYE

T07N R06W S13 TTAKE

T07N R06W S13 TTAKI

Twp Rge Sec Tract Type Acres Plots Sample Trees
07N 06W 13 AREAS 4-5 CC TAKE 112.00 42 151

Page 2
Date 11/14/2003
Time 3:29:24PM

| S Spp | So T | Gr rt | Log de | Len | Gross MBF | % Def | Net MBF | % Spc | Net Volume by Scaling Diameter in Inches | | | | | | | | | | | |
|-------------------|---------|----------|-----------|-----|--------------|----------|------------|----------|--|-----|------|-----|-------|-------|-------|-------|-------|-------|-------|-----|
| | | | | | | | | | 2-3 | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 | 30-39 | 40+ |
| H | DO | 4S | 30 | | 23 | | 23 | .7 | | | 23 | | | | | | | | | |
| H Totals | | | | | 3,376 | 6.5 | 3,157 | 61.5 | | 19 | 714 | 297 | 489 | 483 | 378 | 615 | 163 | | | |
| D | DO | CU | | | | | | | | | | | | | | | | | | |
| D | DO | CU | 2 | | 6 | 100.0 | | | | | | | | | | | | | | |
| D | DO | CU | 4 | | 3 | 100.0 | | | | | | | | | | | | | | |
| D | DO | CU | 5 | | 3 | 100.0 | | | | | | | | | | | | | | |
| D | DO | 2S | 20 | | 13 | | 13 | .7 | | | | | | 13 | | | | | | |
| D | DO | 2S | 32 | | 352 | 1.2 | 348 | 19.5 | | | | | | 133 | 32 | 148 | 12 | 22 | | |
| D | DO | 2S | 35 | | 27 | | 27 | 1.5 | | | | | | | | | 27 | | | |
| D | DO | 2S | 36 | | 23 | | 23 | 1.3 | | | | | | | | | 23 | | | |
| D | DO | 2S | 40 | | 603 | .4 | 600 | 33.6 | | | | | | 206 | 86 | 126 | 137 | 17 | 28 | |
| D | DO | 3S | 21 | | 2 | | 2 | .1 | | | | | | | | | | | | |
| D | DO | 3S | 22 | | 2 | | 2 | .1 | | | | | | | | | | | | |
| D | DO | 3S | 25 | | 9 | 4.2 | 8 | .5 | | | | | | | | | | | | |
| D | DO | 3S | 26 | | 2 | | 2 | .1 | | | | | | | | | | | | |
| D | DO | 3S | 28 | | 5 | | 5 | .3 | | | | | | | | | | | | |
| D | DO | 3S | 29 | | 3 | | 3 | .2 | | | | | | | | | | | | |
| D | DO | 3S | 31 | | 4 | 9.1 | 3 | .2 | | | | | | | | | | | | |
| D | DO | 3S | 32 | | 278 | .8 | 276 | 15.4 | | | | | | | | | | | | |
| D | DO | 3S | 33 | | 28 | | 28 | 1.6 | | | | | | | | | | | | |
| D | DO | 3S | 34 | | 52 | | 52 | 2.9 | | | | | | | | | | | | |
| D | DO | 3S | 35 | | 19 | | 19 | 1.1 | | | | | | | | | | | | |
| D | DO | 3S | 36 | | 12 | | 12 | .6 | | | | | | | | | | | | |
| D | DO | 3S | 37 | | 4 | | 4 | .2 | | | | | | | | | | | | |
| D | DO | 3S | 38 | | 21 | 3.2 | 20 | 1.1 | | | | | | | | | | | | |
| D | DO | 3S | 40 | | 263 | | 263 | 14.7 | | | | | | | | | | | | |
| D | DO | 4S | 14 | | 7 | | 7 | .4 | | | | | | | | | | | | |
| D | DO | 4S | 15 | | 15 | | 15 | .8 | | | | | | | | | | | | |
| D | DO | 4S | 17 | | 4 | | 4 | .2 | | | | | | | | | | | | |
| D | DO | 4S | 18 | | 4 | | 4 | .2 | | | | | | | | | | | | |
| D | DO | 4S | 20 | | 2 | | 2 | .1 | | | | | | | | | | | | |
| D | DO | 4S | 23 | | 12 | 8.7 | 11 | .6 | | | | | | | | | | | | |
| D | DO | 4S | 24 | | 12 | | 12 | .7 | | | | | | | | | | | | |
| D | DO | 4S | 26 | | 10 | | 10 | .5 | | | | | | | | | | | | |
| D | DO | 4S | 29 | | 14 | | 14 | .8 | | | | | | | | | | | | |
| D Totals | | | | | 1,810 | 1.3 | 1,787 | 34.8 | | 14 | 351 | 284 | 119 | 355 | 124 | 274 | 199 | 40 | 28 | |
| SF | DO | 2S | 40 | | 126 | 3.7 | 121 | 69.7 | | | | | | 36 | 85 | | | | | |
| SF | DO | 3S | 30 | | 19 | | 19 | 11.0 | | | | | | 19 | | | | | | |
| SF | DO | 3S | 32 | | 20 | | 20 | 11.2 | | | | | | 20 | | | | | | |
| SF | DO | 3S | 40 | | 11 | | 11 | 6.2 | | | | | | | | | | | | |
| SF | DO | 4S | 15 | | 3 | | 3 | 1.9 | | | | | | | | | | | | |
| SF Totals | | | | | 179 | 2.6 | 174 | 3.4 | | 14 | | 39 | 36 | 85 | | | | | | |
| A | DO | 3S | 16 | | 5 | | 5 | 28.6 | | | | | | 5 | | | | | | |
| A | DO | 3S | 28 | | 10 | | 10 | 60.7 | | | | | | 10 | | | | | | |
| A | DO | 4S | 32 | | 3 | 40.0 | 2 | 10.7 | | | | | | | | | | | | |
| A Totals | | | | | 18 | 6.7 | 17 | .3 | | 2 | | | | 15 | | | | | | |
| Total All Species | | | | | 5,383 | 4.6 | 5,135 | 100.0 | | 33 | 1081 | 581 | 647 | 889 | 587 | 889 | 362 | 40 | 28 | |

Log Stock Table - MBF
Project: KERRYE

T07N R06W S24 TROAD

T07N R06W S24 TROAI

Twp 07N Rge 06W Sec 24 Tract AREAS 1-2-3 Type ROAD Acres 17.00 Plots 102 Sample Trees 307

Page 3
 Date 11/12/2003
 Time 4:19:21PM

| S SppT | So rt | Gr de | Log Len | Gross MBF | % Def | Net MBF | % Spc | Net Volume by Scaling Diameter in Inches | | | | | | | | | | |
|-------------------|----------|----------|------------|--------------|----------|------------|----------|--|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | | | 2-3 | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 | 30-39 |
| H | ? | 4S | 23 | 0 | | 0 | .1 | | | 0 | | | | | | | | |
| H | ? | 4S | 24 | 3 | | 3 | 1.0 | | | 3 | 0 | | | | | | | |
| H | ? | 4S | 25 | 0 | | 0 | .1 | | | | 0 | | | | | | | |
| H | ? | 4S | 26 | 1 | | 1 | .4 | | | 1 | | | | | | | | |
| H | ? | 4S | 27 | 1 | | 1 | .2 | | | 1 | | | | | | | | |
| H | ? | 4S | 29 | 0 | | 0 | .1 | | | 0 | | | | | | | | |
| H | ? | 4S | 30 | 1 | | 1 | .5 | | | 1 | | | | | | | | |
| H | ? | 4S | 32 | 4 | 15.8 | 3 | 1.1 | | | 3 | | | | | | | | |
| H | ? | 4S | 34 | 1 | 20.0 | 1 | .2 | | | 1 | | | | | | | | |
| H | Totals | | | 322 | 5.7 | 303 | 36.6 | | | 57 | 26 | 61 | 61 | 42 | 46 | 10 | | |
| A | ? | ? | 2 | 0 | 100.0 | | | | | | | | | | | | | |
| A | ? | ? | 8 | 1 | 100.0 | | | | | | | | | | | | | |
| A | ? | ? | 12 | 0 | 100.0 | | | | | | | | | | | | | |
| A | ? | ? | 35 | 0 | 100.0 | | | | | | | | | | | | | |
| A | ? | 3S | 12 | 0 | 16.7 | 0 | 3.0 | | | | | 0 | | | | | | |
| A | ? | 3S | 16 | 1 | 11.7 | 1 | 10.3 | | | 0 | 0 | | 0 | | | | | |
| A | DO | 3S | 20 | 0 | | 0 | 2.7 | | | 0 | | | | | | | | |
| A | ? | 3S | 24 | 1 | | 1 | 6.3 | | | | | | | | | | | |
| A | ? | 3S | 32 | 5 | 3.0 | 4 | 44.5 | | | 1 | | 1 | | | | | | |
| A | ? | 3S | 37 | 0 | | 0 | 4.2 | | | 0 | | | | | | | | |
| A | ? | 3S | 39 | 0 | | 0 | 2.3 | | | 0 | | | | | | | | |
| A | ? | 3S | 40 | 1 | | 1 | 12.8 | | | 1 | 1 | | | | | | | |
| A | ? | 4S | 16 | 0 | | 0 | 1.1 | | | 0 | | | | | | | | |
| A | ? | 4S | 18 | 0 | | 0 | 1.8 | | | 0 | | | | | | | | |
| A | ? | 4S | 20 | 0 | | 0 | 1.2 | | | 0 | | | | | | | | |
| A | ? | 4S | 21 | 0 | | 0 | 1.8 | | | 0 | | | | | | | | |
| A | ? | 4S | 22 | 0 | | 0 | 1.4 | | | 0 | | | | | | | | |
| A | ? | 4S | 24 | 0 | | 0 | 3.7 | | | 0 | | | | | | | | |
| A | ? | 4S | 25 | 0 | | 0 | 2.8 | | | 0 | | | | | | | | |
| A | Totals | | | 12 | 14.5 | 10 | 1.2 | | | 4 | 1 | 3 | 1 | | | | | |
| SF | DO | CU | 8 | 0 | 100.0 | | | | | | | | | | | | | |
| SF | DO | 2S | 40 | 1 | | 1 | 11.9 | | | | | | 1 | | | | | |
| SF | DO | 3S | 32 | 5 | | 5 | 53.6 | | | 2 | 1 | 1 | | | | | | |
| SF | DO | 3S | 38 | 1 | | 1 | 6.3 | | | 1 | | | | | | | | |
| SF | DO | 3S | 40 | 2 | | 2 | 28.2 | | | | 1 | 1 | | | | | | |
| SF | Totals | | | 9 | 5.4 | 9 | 1.1 | | | 3 | 2 | 3 | 1 | | | | | |
| C | DO | 2S | 32 | 2 | | 2 | 24.0 | | | | | | | | | 2 | | |
| C | DO | 2S | 40 | 5 | | 5 | 52.3 | | | | | | | | | | 5 | |
| C | DO | 3S | 30 | 1 | | 1 | 7.8 | | | | | | | 1 | | | | |
| C | ? | 3S | 32 | 1 | | 1 | 15.9 | | | | 1 | | | | | | | |
| C | Totals | | | 9 | | 9 | 1.0 | | | | 1 | | | 1 | | 2 | 5 | |
| Total All Species | | | | 861 | 3.7 | 829 | 100.0 | | | 137 | 93 | 118 | 163 | 124 | 153 | 34 | 2 | 5 |

Log Stock Table - MBF
Project: KERRYE

T4N R9W S2 T0007

T4N R9W S2 T0007

Twp 4N **Rge** 9W **Sec** 2 **Tract** AREA 7-RW **Type** 0007 **Acres** 10.00 **Plots** 12 **Sample Trees** 40 **Page** 1
Date 11/11/2003 **Time** 3:20:48PM

| S Spp | So T | Gr rt | Log de | Len | Gross MBF | % Def | Net MBF | % Spe | Net Volume by Scaling Diameter in Inches | | | | | | | | | | | | |
|-------------------|---------|----------|-----------|-----|--------------|----------|------------|----------|--|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-----|--|
| | | | | | | | | | 2-3 | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 | 30-39 | 40+ | |
| D | DO | CU | | | | | | | | | | | | | | | | | | | |
| D | DO | CU | 9 | | 2 | 100.0 | | | | | | | | | | | | | | | |
| D | DO | 2S | 32 | | 10 | | 10 | 10.7 | | | | | 10 | | | | | | | | |
| D | DO | 2S | 40 | | 4 | | 4 | 3.8 | | | | | 4 | | | | | | | | |
| D | DO | 3S | 32 | | 18 | | 18 | 18.2 | | 3 | | 5 | 9 | | | | | | | | |
| D | DO | 3S | 34 | | 4 | | 4 | 3.8 | | | | 4 | | | | | | | | | |
| D | DO | 3S | 35 | | 1 | | 1 | 1.4 | | | | 1 | | | | | | | | | |
| D | DO | 3S | 39 | | 9 | | 9 | 9.4 | | | | 9 | | | | | | | | | |
| D | DO | 3S | 40 | | 26 | 4.1 | 25 | 26.1 | | | | 25 | | | | | | | | | |
| D | DO | 4S | 14 | | 1 | | 1 | 1.5 | | | | 1 | | | | | | | | | |
| D | DO | 4S | 15 | | 0 | | 0 | .4 | | | | 0 | | | | | | | | | |
| D | DO | 4S | 16 | | 7 | | 7 | 7.3 | | 6 | | 1 | | | | | | | | | |
| D | DO | 4S | 20 | | 7 | | 7 | 6.9 | | 7 | | | | | | | | | | | |
| D | DO | 4S | 22 | | 3 | | 3 | 2.7 | | 3 | | | | | | | | | | | |
| D | DO | 4S | 23 | | 1 | | 1 | 1.0 | | | | 1 | | | | | | | | | |
| D | DO | 4S | 28 | | 6 | | 6 | 6.6 | | | | 6 | | | | | | | | | |
| D | Totals | | | | 100 | 2.8 | 97 | 55.1 | | 19 | | 55 | 9 | | 14 | | | | | | |
| H | DO | CU | 3 | | 1 | 100.0 | | | | | | | | | | | | | | | |
| H | DO | CU | 12 | | 1 | 100.0 | | | | | | | | | | | | | | | |
| H | DO | 2S | 24 | | 4 | | 4 | 5.9 | | | | | 4 | | | | | | | | |
| H | DO | 2S | 32 | | 40 | | 40 | 55.4 | | | | | 9 | 31 | | | | | | | |
| H | DO | 3S | 28 | | 2 | | 2 | 3.1 | | | | 2 | | | | | | | | | |
| H | DO | 3S | 30 | | 3 | | 3 | 4.8 | | | | | 3 | | | | | | | | |
| H | DO | 3S | 32 | | 5 | | 5 | 7.6 | | | | 5 | | | | | | | | | |
| H | DO | 3S | 33 | | 3 | | 3 | 4.3 | | | | 3 | | | | | | | | | |
| H | DO | 3S | 36 | | 6 | | 6 | 8.1 | | | | 6 | | | | | | | | | |
| H | DO | 3S | 40 | | 5 | | 5 | 6.7 | | | | | 5 | | | | | | | | |
| H | DO | 4S | 13 | | 1 | | 1 | 1.1 | | | | 1 | | | | | | | | | |
| H | DO | 4S | 17 | | 2 | | 2 | 3.1 | | | | 2 | | | | | | | | | |
| H | Totals | | | | 74 | 2.1 | 73 | 41.2 | | | 20 | 5 | 3 | 13 | 31 | | | | | | |
| S | DO | CU | | | | | | | | | | | | | | | | | | | |
| S | DO | CU | 9 | | 0 | 100.0 | | | | | | | | | | | | | | | |
| S | DO | CU | 10 | | 2 | 100.0 | | | | | | | | | | | | | | | |
| S | DO | 2S | 24 | | 3 | | 3 | 46.2 | | | | | | 3 | | | | | | | |
| S | DO | 3S | 32 | | 3 | | 3 | 53.8 | | | | 1 | 2 | | | | | | | | |
| S | Totals | | | | 7 | 25.3 | 6 | 3.2 | | | 1 | 2 | | 3 | | | | | | | |
| C | DO | 3S | 37 | | 1 | | 1 | 100.0 | | | | 1 | | | | | | | | | |
| C | Totals | | | | 1 | | 1 | .5 | | | | 1 | | | | | | | | | |
| Total All Species | | | | | 182 | 3.4 | 176 | 100.0 | | 19 | 77 | 16 | 3 | 30 | 31 | | | | | | |

| TWP | RGE | SECT | TRACT | TYPE | ACRES | PLOTS | TREES | CuFt | BdFt |
|-----|-----|------|-------------|------|--------|-------|-------|------|------|
| 07N | 06W | 24 | AREAS 1-2-3 | LEAV | 863.00 | 102 | 496 | 1 | W |

| | PLOTS | TREES | TREES PER PLOT | ESTIMATED TOTAL TREES | PERCENT SAMPLE TREES |
|-----------|-------|-------|----------------|-----------------------|----------------------|
| TOTAL | 102 | 496 | 4.9 | | |
| CRUISE | 35 | 168 | 4.8 | 66,745 | .3 |
| DBH COUNT | | | | | |
| REFOREST | | | | | |
| COUNT | 67 | 328 | 4.9 | | |
| BLANKS | | | | | |
| 100 % | | | | | |

STAND SUMMARY

| | SAMPLE TREES | TREES /ACRE | AVG DBH | BOLE LEN | REL DEN | BASAL AREA | GROSS BF/AC | NET BF/AC | GROSS CF/AC | NET CF/AC |
|--------------|--------------|-------------|-------------|-----------|-------------|--------------|---------------|---------------|--------------|--------------|
| DOUGLEAV | 87 | 41.3 | 20.7 | 88 | 2.2 | 96.2 | 18,749 | 18,547 | 4,513 | 4,491 |
| HEMLEAV | 56 | 21.9 | 19.9 | 82 | 8.2 | 47.1 | 8,923 | 8,692 | 2,183 | 2,149 |
| SNAG | 14 | 10.6 | 13.9 | 54 | 0 | 11.2 | 1,015 | | 285 | |
| CEDLEAV | 2 | .7 | 30.6 | 47 | 0.5 | 3.6 | 509 | 509 | 132 | 132 |
| SFIRLEAV | 4 | 1.7 | 15.6 | 72 | 0.4 | 2.3 | 349 | 327 | 89 | 84 |
| ALDRLEAV | 5 | 1.1 | 16.7 | 47 | 0.4 | 1.6 | 140 | 125 | 46 | 43 |
| TOTAL | 168 | 77.3 | 19.6 | 80 | 31.5 | 162.1 | 29,684 | 28,199 | 7,248 | 6,900 |

| SD: | 1 | COEFF VAR | S.E.% | TREES/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|---|-------------|------------|------------|-----------|-----------|-----------------|-----------|-----------|
| | | | | LOW | AVG | HIGH | 5 | 10 | |
| DOUGLEAV | | 58.1 | 5.8 | 39 | 41 | 44 | | | 15 |
| HEMLEAV | | 98.9 | 9.8 | 20 | 22 | 24 | | | |
| SNAG | | 236.2 | 23.4 | 8 | 11 | 13 | | | |
| CEDLEAV | | 510.4 | 50.5 | 0 | 1 | 1 | | | |
| SFIRLEAV | | 471.3 | 46.7 | 1 | 2 | 3 | | | |
| ALDRLEAV | | 715.7 | 70.9 | 0 | 1 | 2 | | | |
| TOTAL | | 40.5 | 4.0 | 74 | 77 | 80 | 66 | 16 | 7 |

| SD: | 1 | COEFF VAR | S.E.% | BASAL AREA/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|---|-------------|------------|-----------------|------------|------------|-----------------|----------|-----------|
| | | | | LOW | AVG | HIGH | 5 | 10 | |
| DOUGLEAV | | 53.2 | 5.3 | 91 | 96 | 101 | | | 15 |
| HEMLEAV | | 94.8 | 9.4 | 43 | 47 | 52 | | | |
| SNAG | | 232.5 | 23.0 | 9 | 11 | 14 | | | |
| CEDLEAV | | 503.8 | 49.9 | 2 | 4 | 5 | | | |
| SFIRLEAV | | 470.3 | 46.6 | 1 | 2 | 3 | | | |
| ALDRLEAV | | 724.9 | 71.8 | 0 | 2 | 3 | | | |
| TOTAL | | 20.9 | 2.1 | 159 | 162 | 165 | 18 | 4 | 2 |

| SD: | 1 | COEFF VAR | S.E.% | NET BF/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|---|-------------|------------|---------------|---------------|---------------|-----------------|----------|-----------|
| | | | | LOW | AVG | HIGH | 5 | 10 | |
| DOUGLEAV | | 54.7 | 5.4 | 17,543 | 18,547 | 19,551 | | | 15 |
| HEMLEAV | | 94.8 | 9.4 | 7,876 | 8,692 | 9,508 | | | |
| SNAG | | | | | | | | | |
| CEDLEAV | | 511.6 | 50.7 | 251 | 509 | 766 | | | |
| SFIRLEAV | | 474.2 | 47.0 | 174 | 327 | 481 | | | |
| ALDRLEAV | | 810.1 | 80.2 | 25 | 125 | 225 | | | |
| TOTAL | | 18.5 | 1.8 | 27,683 | 28,199 | 28,716 | 14 | 3 | 2 |

| TC TSTATS | | | | STATISTICS | | | | PAGE 1 | | |
|---------------|--------------|-----------------|--------------|----------------|--------------|-----------------|--------------|--------------|--------------|------------|
| | | | | PROJECT KERRYE | | DATE 11/14/2003 | | | | |
| TWP | RGE | SECT | TRACT | TYPE | ACRES | PLOTS | TREES | CuFt | BdFt | |
| 07N | 06W | 13 | AREAS 4-5 CC | LEAV | 112.00 | 25 | 49 | 1 | W | |
| | | | | TREES | ESTIMATED | PERCENT | | | | |
| | | | | PER PLOT | TOTAL | SAMPLE | | | | |
| | | | | | TREES | TREES | | | | |
| TOTAL | 25 | 49 | 2.0 | | | | | | | |
| CRUISE | 13 | 24 | 1.8 | | 5,827 | | 4 | | | |
| DBH COUNT | | | | | | | | | | |
| REFOREST | | | | | | | | | | |
| COUNT | 12 | 25 | 2.1 | | | | | | | |
| BLANKS | | | | | | | | | | |
| 100 % | | | | | | | | | | |
| STAND SUMMARY | | | | | | | | | | |
| | SAMPLE | TREES | AVG | BOLE | REL | BASAL | GROSS | NET | GROSS | NET |
| | TREES | /ACRE | DBH | LEN | DEN | AREA | BF/AC | BF/AC | CF/AC | CF/AC |
| SNAG | 15 | 43.9 | 16.1 | 40 | | 62.4 | 5,546 | | 1,335 | |
| SFIRLEAV | 6 | 4.2 | 20.4 | 78 | 1 | 9.6 | 1,682 | 1,650 | 420 | 420 |
| CEDLEAV | 2 | 3.3 | 13.3 | 43 | | 3.2 | 275 | 275 | 94 | 94 |
| HEMLEAV | 1 | .6 | 32.0 | 60 | | 3.2 | 773 | 653 | 136 | 136 |
| TOTAL | 24 | 52.0 | 16.6 | 44 | | 78.4 | 8,276 | 2,578 | 1,986 | 650 |
| | COEFF | TREES/ACRE | | | | # OF PLOTS REQ. | | INF. POP. | | |
| SD: 1 | VAR. | S.E.% | LOW | AVG | HIGH | | 5 | 10 | | 15 |
| SNAG | 104.0 | 20.8 | 35 | 44 | 53 | | | | | |
| SFIRLEAV | 350.7 | 70.1 | 1 | 4 | 7 | | | | | |
| CEDLEAV | 383.3 | 76.7 | 1 | 3 | 6 | | | | | |
| HEMLEAV | 346.1 | 69.2 | 0 | 1 | 1 | | | | | |
| TOTAL | 98.3 | 19.7 | 42 | 52 | 62 | | 387 | 97 | | 43 |
| | COEFF | BASAL AREA/ACRE | | | | # OF PLOTS REQ. | | INF. POP. | | |
| SD: 1 | VAR. | S.E.% | LOW | AVG | HIGH | | 5 | 10 | | 15 |
| SNAG | 71.9 | 14.4 | 53 | 62 | 71 | | | | | |
| SFIRLEAV | 346.1 | 69.2 | 3 | 10 | 16 | | | | | |
| CEDLEAV | 346.1 | 69.2 | 1 | 3 | 5 | | | | | |
| HEMLEAV | 346.1 | 69.2 | 1 | 3 | 5 | | | | | |
| TOTAL | 66.7 | 13.3 | 68 | 78 | 89 | | 178 | 44 | | 20 |
| | COEFF | NET BF/ACRE | | | | # OF PLOTS REQ. | | INF. POP. | | |
| SD: 1 | VAR. | S.E.% | LOW | AVG | HIGH | | 5 | 10 | | 15 |
| SNAG | | | | | | | | | | |
| SFIRLEAV | 365.0 | 73.0 | 445 | 1,650 | 2,854 | | | | | |
| CEDLEAV | 348.8 | 69.8 | 83 | 275 | 467 | | | | | |
| HEMLEAV | 346.1 | 69.2 | 201 | 653 | 1,105 | | | | | |
| TOTAL | 297.3 | 59.5 | 1,045 | 2,578 | 4,111 | | 3,535 | 884 | | 393 |

Stand Table Summary

Project KERRYE

T07N R06W S24 TLEAV

T07N R06W S24 TLEAV

Twp Rge Sec Tract
07N 06W 24 AREAS 1-2-3

Type Acres Plots Sample Trees
LEAV 866.00 102 168

Page: 1
Date: 10/9/200
Time: 11:14:57AM

| S Spc | T | Av | | | Trees/ Acres | BA/ Acres | Logs Acres | Average Log | | Net Acres | Net Cu.Ft. | Net Bd.Ft. | Totals | | |
|----------|--------|---------------|-------------|-----------|-----------------|--------------|---------------|-------------|---------------|--------------|---------------|---------------|---------------|--------|--------|
| | | Sample DBH | FF Trees | Ht 16' | | | | Tot | Net Cu.Ft. | | | | Net Bd.Ft. | Tons | Cunits |
| DL | | 8 | 1 | 87 | 48 | 3.168 | 1.11 | 3.17 | 6.0 | 20.0 | | 19 | 63 | 165 | 55 |
| DL | | 13 | 2 | 87 | 109 | 2.400 | 2.21 | 4.80 | 18.0 | 72.5 | | 86 | 348 | 748 | 301 |
| DL | | 14 | 1 | 86 | 121 | 1.035 | 1.11 | 2.07 | 22.5 | 90.0 | | 47 | 186 | 403 | 161 |
| DL | | 15 | 1 | 86 | 69 | .901 | 1.11 | 1.80 | 16.5 | 55.0 | | 30 | 99 | 258 | 86 |
| DL | | 16 | 2 | 86 | 98 | 1.584 | 2.21 | 3.96 | 21.4 | 82.0 | | 85 | 325 | 734 | 281 |
| DL | | 17 | 1 | 86 | 82 | .702 | 1.11 | 1.40 | 26.0 | 85.0 | | 36 | 119 | 316 | 103 |
| DL | | 18 | 6 | 87 | 122 | 3.755 | 6.64 | 10.01 | 30.6 | 115.0 | | 307 | 1,152 | 2,656 | 997 |
| DL | | 19 | 6 | 87 | 108 | 3.370 | 6.64 | 6.74 | 40.0 | 143.3 | | 270 | 966 | 2,335 | 837 |
| DL | | 20 | 11 | 87 | 124 | 5.576 | 12.17 | 16.22 | 35.4 | 142.8 | | 575 | 2,317 | 4,978 | 2,006 |
| DL | | 21 | 5 | 86 | 130 | 2.299 | 5.53 | 6.90 | 39.7 | 164.7 | | 274 | 1,136 | 2,369 | 984 |
| DL | | 22 | 10 | 87 | 124 | 4.189 | 11.06 | 12.57 | 41.7 | 175.7 | | 524 | 2,208 | 4,539 | 1,912 |
| DL | | 23 | 5 | 88 | 123 | 1.917 | 5.53 | 5.75 | 46.5 | 200.7 | | 268 | 1,154 | 2,317 | 999 |
| DL | | 24 | 10 | 87 | 136 | 3.520 | 11.06 | 9.86 | 56.2 | 233.6 | | 554 | 2,302 | 4,798 | 1,994 |
| DL | | 25 | 2 | 86 | 106 | .649 | 2.21 | 1.30 | 67.5 | 252.5 | | 88 | 328 | 759 | 284 |
| DL | | 26 | 8 | 84 | 140 | 2.400 | 8.85 | 7.50 | 60.2 | 252.4 | | 451 | 1,893 | 3,909 | 1,639 |
| DL | | 27 | 2 | 88 | 148 | .556 | 2.21 | 1.67 | 72.5 | 336.7 | | 121 | 562 | 1,048 | 487 |
| DL | | 28 | 6 | 84 | 141 | 1.552 | 6.64 | 4.66 | 71.6 | 306.7 | | 333 | 1,428 | 2,885 | 1,236 |
| DL | | 29 | 1 | 92 | 144 | .241 | 1.11 | .72 | 87.0 | 450.0 | | 63 | 325 | 545 | 282 |
| DL | | 30 | 5 | 86 | 130 | 1.127 | 5.53 | 3.38 | 79.5 | 354.0 | | 269 | 1,196 | 2,328 | 1,036 |
| DL | | 32 | 1 | 85 | 84 | .198 | 1.11 | .20 | 156.0 | 700.0 | | 31 | 139 | 268 | 120 |
| DL | | 33 | 1 | 83 | 163 | .186 | 1.11 | .56 | 110.7 | 540.0 | | 62 | 302 | 535 | 261 |
| DL | Totals | 87 | 87 | 116 | | 41.325 | 96.22 | 105.23 | 42.7 | 176.2 | | 4,491 | 18,547 | 38,892 | 16,061 |
| HL | | 12 | 1 | 86 | 75 | 1.071 | .84 | 2.14 | 13.0 | 45.0 | | 28 | 96 | 241 | 84 |
| HL | | 14 | 1 | 89 | 79 | .787 | .84 | 1.57 | 18.5 | 70.0 | | 29 | 110 | 252 | 95 |
| HL | | 15 | 4 | 87 | 95 | 2.743 | 3.37 | 5.49 | 25.4 | 95.0 | | 139 | 521 | 1,205 | 451 |
| HL | | 16 | 1 | 88 | 95 | .603 | .84 | 1.21 | 30.0 | 110.0 | | 36 | 133 | 313 | 115 |
| HL | | 17 | 5 | 88 | 90 | 2.669 | 4.21 | 5.87 | 28.7 | 104.5 | | 169 | 614 | 1,461 | 532 |
| HL | | 18 | 1 | 89 | 92 | .476 | .84 | .95 | 36.5 | 125.0 | | 35 | 119 | 301 | 103 |
| HL | | 19 | 6 | 89 | 104 | 2.564 | 5.05 | 6.84 | 33.8 | 130.6 | | 231 | 893 | 2,002 | 773 |
| HL | | 20 | 11 | 88 | 111 | 4.243 | 9.26 | 12.73 | 35.9 | 147.6 | | 457 | 1,878 | 3,955 | 1,627 |
| HL | | 21 | 2 | 87 | 104 | .700 | 1.68 | 1.75 | 44.4 | 174.0 | | 78 | 304 | 673 | 264 |
| HL | | 22 | 1 | 82 | 107 | .319 | .84 | .64 | 37.5 | 150.0 | | 24 | 96 | 207 | 83 |
| HL | | 23 | 4 | 87 | 125 | 1.167 | 3.37 | 3.50 | 50.4 | 219.2 | | 176 | 767 | 1,528 | 664 |
| HL | | 24 | 9 | 86 | 110 | 2.411 | 7.57 | 6.70 | 50.0 | 207.6 | | 335 | 1,390 | 2,897 | 1,204 |
| HL | | 25 | 1 | 85 | 122 | .247 | .84 | .74 | 59.3 | 253.3 | | 44 | 188 | 380 | 162 |
| HL | | 26 | 7 | 86 | 122 | 1.597 | 5.89 | 4.79 | 60.6 | 264.8 | | 290 | 1,269 | 2,514 | 1,099 |
| HL | | 30 | 1 | 81 | 126 | .171 | .84 | .51 | 83.3 | 346.7 | | 43 | 178 | 371 | 154 |
| HL | | 32 | 1 | 83 | 103 | .151 | .84 | .30 | 119.0 | 450.0 | | 36 | 136 | 311 | 117 |
| HL | Totals | 56 | 87 | 103 | | 21.917 | 47.12 | 55.73 | 38.6 | 156.0 | | 2,149 | 8,692 | 18,611 | 7,527 |
| CL | | 24 | 1 | 68 | 67 | .577 | 1.81 | .58 | 74.0 | 140.0 | | 43 | 81 | 370 | 70 |
| CL | | 50 | 1 | 82 | 144 | .133 | 1.81 | .40 | 225.0 | 1073.3 | | 90 | 428 | 777 | 371 |
| CL | Totals | 2 | 71 | 81 | | .710 | 3.62 | .98 | 135.7 | 521.5 | | 132 | 509 | 1,147 | 441 |
| SFL | | 13 | 1 | 83 | 103 | .626 | .58 | 1.25 | 17.0 | 60.0 | | 21 | 75 | 184 | 65 |
| SFL | | 15 | 2 | 89 | 98 | .940 | 1.15 | 1.88 | 24.7 | 100.0 | | 47 | 188 | 403 | 163 |
| SFL | | 24 | 1 | 81 | 99 | .184 | .58 | .37 | 45.0 | 175.0 | | 17 | 64 | 143 | 56 |
| SFL | Totals | 4 | 86 | 100 | | 1.749 | 2.31 | 3.50 | 24.1 | 93.6 | | 84 | 327 | 730 | 283 |
| AL | | 14 | 1 | 87 | 50 | .308 | .33 | .31 | 22.0 | 60.0 | | 7 | 18 | 59 | 16 |
| AL | | 17 | 2 | 87 | 66 | .418 | .66 | .63 | 31.0 | 96.7 | | 19 | 61 | 168 | 53 |
| AL | | 18 | 1 | 87 | 71 | .186 | .33 | .37 | 29.0 | 95.0 | | 11 | 35 | 94 | 31 |

TC TSTNDSUM

Stand Table Summary

Project KERRYE

T07N R06W S24 TLEAV

T07N R06W S24 TLEAV

Twp Rge Sec Tract Type Acres Plots Sample Trees
07N 06W 24 AREAS 1-2-3 LEAV 866.00 102 168

Page: 2
Date: 10/9/200:
Time: 11:14:57AM

| Spc | S | DBH | T | Sample Trees | FF | Av Ht | 16' | Tot | Trees/ Acre | BA/ Acre | Logs Acre | Average Log | | Net Tons/ Acre | Net Cu.Ft. Acre | Net Bd.Ft. Acre | Totals | | |
|--------|---|--------|---|--------------|----|-------|-----|-----|-------------|----------|-----------|-------------|------------|----------------|-----------------|-----------------|--------|--------|--------|
| | | | | | | | | | | | | Net Cu.Ft. | Net Bd.Ft. | | | | Tons | Cunits | MBF |
| AL | | 19 | | 1 | | 86 | | 58 | .167 | .33 | .17 | 36.0 | 60.0 | 6 | | 10 | | 52 | 9 |
| AL | | Totals | | 5 | | 87 | | 61 | 1.080 | 1.65 | 1.48 | 29.2 | 84.4 | 43 | | 125 | | 373 | 108 |
| SN | | 9 | | 2 | | 86 | | 59 | 3.623 | 1.60 | | | | | | | | | |
| SN | | 10 | | 1 | | 82 | | 83 | 1.467 | .80 | | | | | | | | | |
| SN | | 11 | | 1 | | 88 | | 64 | 1.213 | .80 | | | | | | | | | |
| SN | | 13 | | 3 | | 86 | | 76 | 2.605 | 2.40 | | | | | | | | | |
| SN | | 15 | | 1 | | 83 | | 37 | .652 | .80 | | | | | | | | | |
| SN | | 17 | | 1 | | 88 | | 112 | .508 | .80 | | | | | | | | | |
| SN | | 20 | | 1 | | 89 | | 54 | .367 | .80 | | | | | | | | | |
| SN | | 60 | | 1 | | 89 | | 43 | .041 | .80 | | | | | | | | | |
| SN | | 65 | | 1 | | 89 | | 63 | .035 | .80 | | | | | | | | | |
| SN | | 70 | | 1 | | 88 | | 88 | .030 | .80 | | | | | | | | | |
| SN | | 85 | | 1 | | 88 | | 96 | .020 | .80 | | | | | | | | | |
| SN | | Totals | | 14 | | 86 | | 68 | 10.559 | 11.20 | | | | | | | | | |
| Totals | | | | 168 | | 87 | | 104 | 77.340 | 162.12 | 166.91 | 41.3 | 169.0 | 6900 | | 28,199 | | 59,752 | 24,421 |

Stand Table Summary

Project KERRYE

T07N R06W S13 TLEAV

T07N R06W S13 TLEAV

Twp Rge Sec Tract
07N 06W 13 AREAS 4-5 CC

Type
LEAV

Acres
 112.00

Plots
 25

Sample Trees
 24

Page: 1
Date: 11/14/20
Time: 3:26:02PM

| S Spc | T | Av | | | Trees/ Acre | BA/ Acre | Logs Acre | Average Log | | Net Cu.Ft. | Net Bd.Ft. | Totals | | |
|---------------|--------|---------------|-------------|-----------|----------------|-------------|--------------|-------------|---------------|---------------|---------------|---------------|--------------|----------------|
| | | Sample DBH | FF Trees | Ht 16' | | | | Tot | Net Cu.Ft. | | | Net Bd.Ft. | Tons Acre | Cunits Acre |
| SFL | | 12 | 1 | 84 | 106 | 2.037 | 1.60 | 4.07 | 15.0 | 50.0 | 61 | 204 | 68 | 23 |
| SFL | | 19 | 1 | 88 | 110 | .813 | 1.60 | 2.44 | 30.0 | 116.7 | 73 | 284 | 82 | 32 |
| SFL | | 23 | 1 | 80 | 97 | .555 | 1.60 | 1.11 | 56.0 | 170.0 | 62 | 189 | 70 | 21 |
| SFL | | 28 | 1 | 87 | 122 | .374 | 1.60 | 1.12 | 68.0 | 293.3 | 76 | 329 | 85 | 37 |
| SFL | | 32 | 1 | 82 | 122 | .286 | 1.60 | .86 | 84.0 | 383.3 | 72 | 329 | 81 | 37 |
| SFL | | 42 | 1 | 75 | 135 | .166 | 1.60 | .50 | 151.0 | 630.0 | 75 | 314 | 84 | 35 |
| SFL | Totals | 6 | 84 | 109 | | 4.231 | 9.60 | 10.10 | 41.6 | 163.3 | 420 | 1,650 | 471 | 185 |
| HL | | 32 | 1 | 84 | 120 | .573 | 3.20 | 1.15 | 119.0 | 570.0 | 136 | 653 | 153 | 73 |
| HL | Totals | 1 | 84 | 120 | | .573 | 3.20 | 1.15 | 119.0 | 570.0 | 136 | 653 | 153 | 73 |
| CL | | 11 | 1 | 86 | 72 | 2.424 | 1.60 | 2.42 | 17.0 | 50.0 | 41 | 121 | 46 | 14 |
| CL | | 18 | 1 | 82 | 87 | .905 | 1.60 | 1.81 | 29.0 | 85.0 | 53 | 154 | 59 | 17 |
| CL | Totals | 2 | 85 | 76 | | 3.330 | 3.20 | 4.24 | 22.1 | 65.0 | 94 | 275 | 105 | 31 |
| SN | | 9 | 1 | 83 | 56 | 10.557 | 4.16 | | | | | | | |
| SN | | 10 | 1 | 86 | 60 | 7.627 | 4.16 | | | | | | | |
| SN | | 11 | 2 | 88 | 69 | 12.607 | 8.32 | | | | | | | |
| SN | | 14 | 1 | 87 | 75 | 3.891 | 4.16 | | | | | | | |
| SN | | 16 | 1 | 75 | 46 | 2.979 | 4.16 | | | | | | | |
| SN | | 22 | 1 | 87 | 17 | 1.576 | 4.16 | | | | | | | |
| SN | | 24 | 1 | 83 | 60 | 1.324 | 4.16 | | | | | | | |
| SN | | 28 | 1 | 86 | 92 | .973 | 4.16 | | | | | | | |
| SN | | 36 | 1 | 83 | 69 | .589 | 4.16 | | | | | | | |
| SN | | 38 | 1 | 74 | 24 | .528 | 4.16 | | | | | | | |
| SN | | 44 | 1 | 79 | 17 | .394 | 4.16 | | | | | | | |
| SN | | 48 | 2 | 80 | 48 | .662 | 8.32 | | | | | | | |
| SN | | 64 | 1 | 88 | 17 | .186 | 4.16 | | | | | | | |
| SN | Totals | 15 | 85 | 60 | | 43.894 | 62.40 | | | | | | | |
| Totals | | 24 | 85 | 66 | | 52.028 | 78.40 | 15.48 | 42.0 | 166.5 | 650 | 2,578 | 728 | 289 |

TOTAL STAND

| TC TSTATS | | STATISTICS | | | | | | | PAGE 1 | |
|---------------|--------------|----------------|-------------|-----------------|-----------------------|------------------------|-----------------|---------------|----------------|---------------|
| | | PROJECT KERRYE | | | | | | | DATE 10/9/2003 | |
| TWP | RGE | SECT | TRACT | TYPE | ACRES | PLOTS | TREES | CuFt | BdFt | |
| 07N | 06W | 24 | AREAS 1-2-3 | 0001 | 866.00 | 102 | 938 | 1 | W | |
| | | PLOTS | TREES | TREES PER PLOT | ESTIMATED TOTAL TREES | PERCENT SAMPLE TREES % | | | | |
| TOTAL | | 102 | 938 | 9.2 | | | | | | |
| CRUISE | | 36 | 321 | 8.9 | 189,037 | .2 | | | | |
| DBH COUNT | | | | | | | | | | |
| REFOREST | | | | | | | | | | |
| COUNT | | 66 | 613 | 9.3 | | | | | | |
| BLANKS | | | | | | | | | | |
| 100 % | | | | | | | | | | |
| STAND SUMMARY | | | | | | | | | | |
| | SAMPLE TREES | TREES /ACRE | AVG DBH | BOLE LEN | REL DEN | BASAL AREA | GROSS BF/AC | NET BF/AC | GROSS CF/AC | NET CF/AC |
| DOUGLEAV | 87 | 41.3 | 20.7 | 88 | 22 | 96.2 | 18,749 | 18,547 | 4,513 | 4,491 |
| DOUG FIR | 62 | 62.3 | 14.4 | 66 | 19 | 70.8 | 10,880 | 10,441 | 2,782 | 2,701 |
| WHEMLOCK | 75 | 68.2 | 13.4 | 55 | 14 | 66.9 | 10,205 | 9,333 | 2,624 | 2,474 |
| HEMLEAV | 56 | 21.9 | 19.9 | 82 | 8 | 47.1 | 8,923 | 8,692 | 2,183 | 2,149 |
| SNAG | 14 | 10.6 | 13.9 | 54 | | 11.2 | 1,015 | | 285 | |
| R ALDER | 14 | 8.0 | 12.3 | 34 | 2 | 6.6 | 540 | 454 | 163 | 143 |
| CEDLEAV | 2 | .7 | 30.6 | 47 | 0.5 | 3.6 | 509 | 509 | 132 | 132 |
| SFIRLEAV | 4 | 1.7 | 15.6 | 72 | 0.4 | 2.3 | 349 | 327 | 89 | 84 |
| PS FIR | 2 | 2.4 | 11.2 | 39 | 0.4 | 1.6 | 156 | 156 | 41 | 41 |
| ALDRLEAV | 5 | 1.1 | 16.7 | 47 | 0.6 | 1.6 | 140 | 125 | 46 | 43 |
| TOTAL | 321 | 218.3 | 16.1 | 66 | 67 1/2 | 308.1 | 51,466 | 48,583 | 12,859 | 12,260 |
| SD: 1 | | COEFF VAR. | S.E.% | TREES/ACRE | | | # OF PLOTS REQ. | | INF. POP. | |
| | | | | LOW | AVG | HIGH | 5 | 10 | 15 | |
| DOUGLEAV | | 58.1 | 5.8 | 39 | 41 | 44 | | | | |
| DOUG FIR | | 104.2 | 10.3 | 56 | 62 | 69 | | | | |
| WHEMLOCK | | 104.9 | 10.4 | 61 | 68 | 75 | | | | |
| HEMLEAV | | 98.9 | 9.8 | 20 | 22 | 24 | | | | |
| SNAG | | 236.2 | 23.4 | 8 | 11 | 13 | | | | |
| R ALDER | | 426.9 | 42.3 | 5 | 8 | 11 | | | | |
| CEDLEAV | | 510.4 | 50.5 | 0 | 1 | 1 | | | | |
| SFIRLEAV | | 471.3 | 46.7 | 1 | 2 | 3 | | | | |
| PS FIR | | 600.6 | 59.5 | 1 | 2 | 4 | | | | |
| ALDRLEAV | | 715.7 | 70.9 | 0 | 1 | 2 | | | | |
| TOTAL | | 38.2 | 3.8 | 210 | 218 | 227 | 58 | 15 | 6 | |
| SD: 1 | | COEFF VAR. | S.E.% | BASAL AREA/ACRE | | | # OF PLOTS REQ. | | INF. POP. | |
| | | | | LOW | AVG | HIGH | 5 | 10 | 15 | |
| DOUGLEAV | | 53.2 | 5.3 | 91 | 96 | 101 | | | | |
| DOUG FIR | | 102.5 | 10.2 | 64 | 71 | 78 | | | | |
| WHEMLOCK | | 103.6 | 10.3 | 60 | 67 | 74 | | | | |
| HEMLEAV | | 94.8 | 9.4 | 43 | 47 | 52 | | | | |
| SNAG | | 232.5 | 23.0 | 9 | 11 | 14 | | | | |
| R ALDER | | 412.5 | 40.8 | 4 | 7 | 9 | | | | |
| CEDLEAV | | 503.8 | 49.9 | 2 | 4 | 5 | | | | |
| SFIRLEAV | | 470.3 | 46.6 | 1 | 2 | 3 | | | | |
| PS FIR | | 600.6 | 59.5 | 1 | 2 | 3 | | | | |
| ALDRLEAV | | 724.9 | 71.8 | 0 | 2 | 3 | | | | |
| TOTAL | | 29.1 | 2.9 | 299 | 308 | 317 | 34 | 8 | 4 | |
| SD: 1 | | COEFF VAR. | S.E.% | NET BF/ACRE | | | # OF PLOTS REQ. | | INF. POP. | |
| | | | | LOW | AVG | HIGH | 5 | 10 | 15 | |
| DOUGLEAV | | 54.7 | 5.4 | 17,543 | 18,547 | 19,551 | | | | |
| DOUG FIR | | 105.2 | 10.4 | 9,354 | 10,441 | 11,529 | | | | |
| WHEMLOCK | | 110.7 | 11.0 | 8,310 | 9,333 | 10,355 | | | | |

STATISTICS
PROJECT KERRYE

| TWP | RGE | SECT | TRACT | TYPE | ACRES | PLOTS | TREES | CuFt | BdFt |
|-----|-----|------|--------------|------|--------|-------|-------|------|------|
| 07N | 06W | 13 | AREAS 4-5 CC | 0002 | 112.00 | 42 | 341 | 1 | W |

| | PLOTS | TREES | TREES PER PLOT | ESTIMATED TOTAL TREES | PERCENT SAMPLE TREES |
|-----------|-------|-------|----------------|-----------------------|----------------------|
| TOTAL | 42 | 341 | 8.1 | | |
| CRUISE | 22 | 175 | 8.0 | 28,259 | .6 |
| DBH COUNT | | | | | |
| REFOREST | | | | | |
| COUNT | 20 | 158 | 7.9 | | |
| BLANKS | | | | | |
| 100 % | | | | | |

STAND SUMMARY

| | SAMPLE TREES | TREES /ACRE | AVG DBH | BOLE LEN | REL DEN | BASAL AREA | GROSS BF/AC | NET BF/AC | GROSS CF/AC | NET CF/AC |
|--------------|--------------|--------------|-------------|-----------|---------|--------------|---------------|---------------|---------------|---------------|
| WHEMLOCK | 86 | 140.9 | 14.9 | 62 | | 171.4 | 30,143 | 28,191 | 7,294 | 7,007 |
| DOUG FIR | 61 | 75.5 | 15.4 | 63 | | 97.1 | 16,160 | 15,957 | 4,017 | 3,998 |
| SNAG | 15 | 26.1 | 16.1 | 40 | | 37.1 | 3,301 | | 795 | |
| PS FIR | 3 | 4.4 | 18.9 | 82 | 1 | 8.6 | 1,594 | 1,552 | 402 | 402 |
| SFIRLEAV | 6 | 2.5 | 20.4 | 78 | 1 | 5.7 | 1,001 | 982 | 250 | 250 |
| CEDLEAV | 2 | 2.0 | 13.3 | 43 | | 1.9 | 164 | 164 | 56 | 56 |
| HEMLEAV | 1 | .3 | 32.0 | 60 | | 1.9 | 460 | 389 | 81 | 81 |
| R ALDER | 1 | .5 | 18.0 | 79 | | 1.0 | 162 | 151 | 40 | 40 |
| TOTAL | 175 | 252.3 | 15.4 | 60 | | 324.8 | 52,986 | 47,386 | 12,936 | 11,834 |

| SD: | COEFF | | TREES/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|-------------|------------|------------|------------|------------|-----------------|-----------|-----------|
| | VAR. | S.E.% | LOW | AVG | HIGH | 5 | 10 | |
| 1 | | | | | | | | |
| WHEMLOCK | 79.6 | 12.3 | 124 | 141 | 158 | | | |
| DOUG FIR | 117.6 | 18.2 | 62 | 76 | 89 | | | |
| SNAG | 157.6 | 24.3 | 20 | 26 | 32 | | | |
| PS FIR | 242.6 | 37.4 | 3 | 4 | 6 | | | |
| SFIRLEAV | 458.4 | 70.7 | 1 | 3 | 4 | | | |
| CEDLEAV | 499.6 | 77.1 | 0 | 2 | 4 | | | |
| HEMLEAV | 452.6 | 69.8 | 0 | 0 | 1 | | | |
| R ALDER | 648.1 | 100.0 | 0 | 1 | 1 | | | |
| TOTAL | 36.3 | 5.6 | 238 | 252 | 266 | 53 | 13 | 6 |

| SD: | COEFF | | BASAL AREA/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|-------------|------------|-----------------|------------|------------|-----------------|----------|-----------|
| | VAR. | S.E.% | LOW | AVG | HIGH | 5 | 10 | |
| 1 | | | | | | | | |
| WHEMLOCK | 69.4 | 10.7 | 153 | 171 | 190 | | | |
| DOUG FIR | 102.5 | 15.8 | 82 | 97 | 113 | | | |
| SNAG | 124.5 | 19.2 | 30 | 37 | 44 | | | |
| PS FIR | 242.5 | 37.4 | 5 | 9 | 12 | | | |
| SFIRLEAV | 452.6 | 69.8 | 2 | 6 | 10 | | | |
| CEDLEAV | 452.6 | 69.8 | 1 | 2 | 3 | | | |
| HEMLEAV | 452.6 | 69.8 | 1 | 2 | 3 | | | |
| R ALDER | 648.1 | 100.0 | | 1 | 2 | | | |
| TOTAL | 25.0 | 3.9 | 312 | 325 | 337 | 25 | 6 | 3 |

| SD: | COEFF | | NET BF/ACRE | | | # OF PLOTS REQ. | | INF. POP. |
|--------------|-------------|------------|---------------|---------------|---------------|-----------------|-----------|-----------|
| | VAR. | S.E.% | LOW | AVG | HIGH | 5 | 10 | |
| 1 | | | | | | | | |
| WHEMLOCK | 69.4 | 10.7 | 25,173 | 28,191 | 31,209 | | | |
| DOUG FIR | 100.6 | 15.5 | 13,481 | 15,957 | 18,434 | | | |
| SNAG | | | | | | | | |
| PS FIR | 239.7 | 37.0 | 978 | 1,552 | 2,126 | | | |
| SFIRLEAV | 476.5 | 73.5 | 260 | 982 | 1,704 | | | |
| CEDLEAV | 456.0 | 70.4 | 49 | 164 | 279 | | | |
| HEMLEAV | 452.6 | 69.8 | 117 | 389 | 660 | | | |
| R ALDER | 648.1 | 100.0 | 0 | 151 | 302 | | | |
| TOTAL | 33.7 | 5.2 | 44,922 | 47,386 | 49,851 | 45 | 11 | 5 |

CRUISE DESIGN
ASTORIA DISTRICT

Sale Name: Kerry East Area(s) 1, 2, 3

Harvest Type: CC PC CT "Automark Thinning" (circle one)

Approx. Cruise Acres: 880 Estimated CV% 40 ^{Net BF of} BAF/Acre SE% Objective 7 ^{Net BF or} BAF/Acre _(Total Stand)

Planned Sale Volume: 16.8 MMBF Estimated Sale Area Value/Acre: \$5,265

- A. **Cruise Goals:** (a) Grade minimum 120 ^{"take" trees} conifer and _____ hardwood trees:
 (b) Sample 100 cruise plots; (c) Other goals (Determine "automark" thinning standards; Determine log grades for sale value; _____ Determine snag and leave tree species and sizes; _____ Determine LWD (down wood) cubic feet and decay classes; _____ Determine "diameter limit" harvest parameters;

Target BA is 140-160 (4 to 5 leave trees/plot)
Leave "biggest & best" trees regardless of species (incl. hdwds.)

B. **Cruise Design:**

1. Plot Cruises: BAF 33.6 (Full point) Half point) (circle one)

Fixed Plot Size _____ Plot Radius _____ feet

Cruise Line Direction(s) E-W

Cruise Line Spacing 14.0 (chains) (feet)

Cruise Plot Spacing 6.0 (chains) (feet)

Grade/Count Ratio 1 to 3

2. ITS (Sample Tree) Cruises: Measure-grade ratios: D-fir _____ Hemlock _____
Spruce _____ True Fir _____ Cedar _____ Hardwood _____

C. **Tree Measurements:**

1. **Diameter:** Minimum DBH to cruise is 8" for conifers and 8" for hardwoods. Record dbh to nearest 1/2" for trees < 16", to nearest 1" for trees 16-24", and to nearest 2" for trees > 24". If tree diameters are estimated (only estimate on variable plot cruises), then record to closest estimate.

2. **Bole Length:** Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.

3. **Top Cruise Diameter (TCD):** Minimum top outside bark is 7" or 40% of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for trees > 18" dbh.

4. **Form Factors:** (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area, and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.

5. **Tree Segments:** Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch. segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.

6. **Species, Sort, and Grade Codes:** A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); SF (Silver fir); A (Red alder); M (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DL, HL, CL, etc.)
B. Sort: Use code "1" (Domestic).
C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull

7. **Deductions:** Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.

8. **Standard Field Procedures:** Plot Type Cruises: Mark cruise line beginning and end points with ~~blue/yellow~~ ^{Orange/blk & white} flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at intervisible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.
ITS and 100% Cruises: Mark cruise "strips" with various colored flagging (not pink). Mark trees measured and graded with yellow paint.

9. **Cruising Equipment:** Relaskop Rangefinder Logger's Tape (with dbh on back)
Biltmore Stick Compass Cruise Cards in Tatum OR Data Recorder
Cruise Design Cruise Map Yellow Flagging Blue Flagging

10. **Attachments:** A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.)

B. Data Recorder Instructions

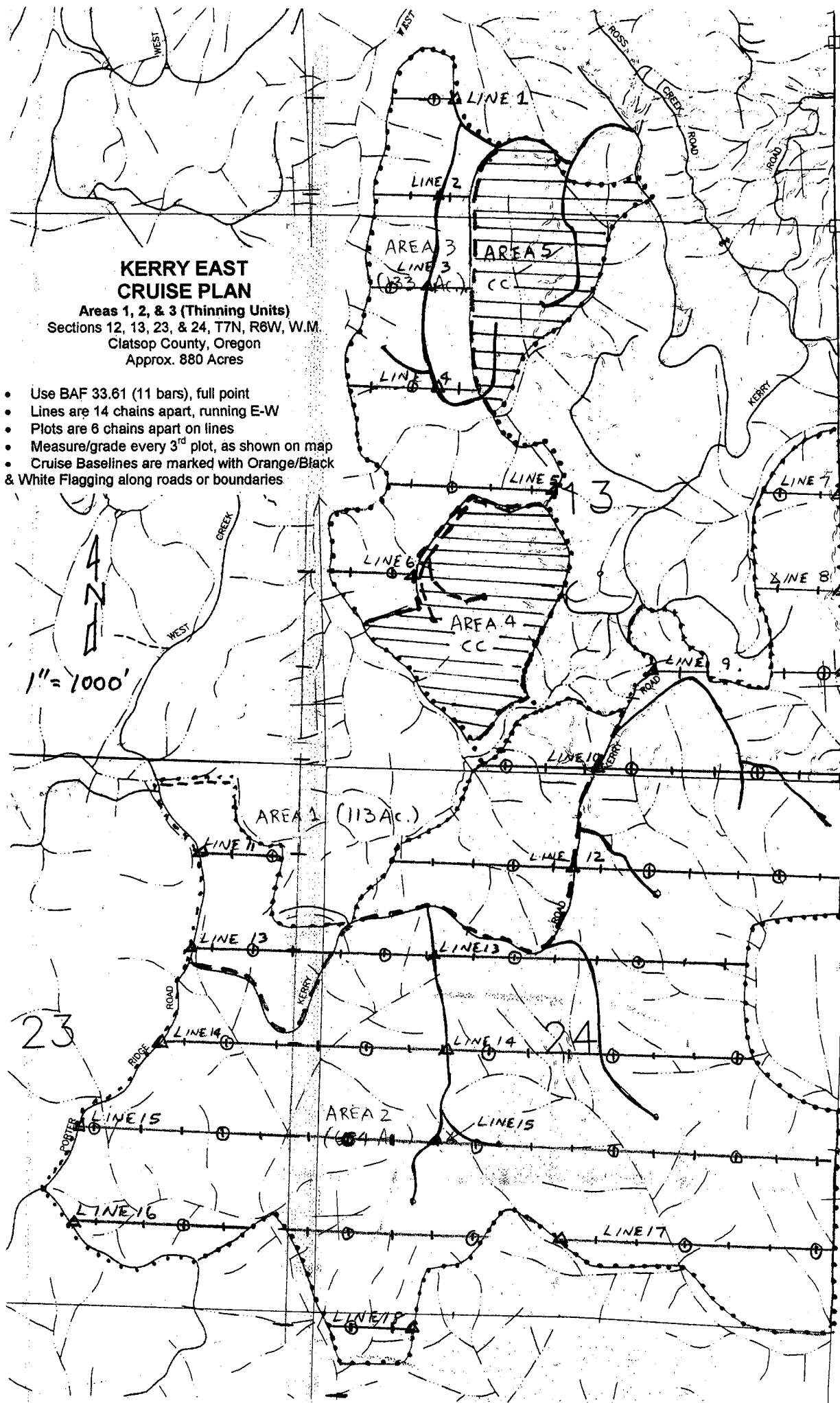
C. Other

Cruise Design by: Tom Scoggins
Approved by: _____
Date: _____

KERRY EAST CRUISE PLAN

Areas 1, 2, & 3 (Thinning Units)
Sections 12, 13, 23, & 24, T7N, R6W, W.M.
Clatsop County, Oregon
Approx. 880 Acres

- Use BAF 33.61 (11 bars), full point
- Lines are 14 chains apart, running E-W
- Plots are 6 chains apart on lines
- Measure/grade every 3rd plot, as shown on map
- Cruise Baselines are marked with Orange/Black & White Flagging along roads or boundaries



8/14/03

Kerry East - Cruise Plan
Areas 1, 2, + 3 (Thinnings)

Estimated Acres: 880

Estimated CV: 40%

Est. Sd Value: \$5,076,000

Desired SE: 7%
(total stand)

Est. CT Vol: 12.0 MMBF

Est. CT Value: \$3,400,000

Est. CT Value/Acre: \$3,864

$$n = \frac{CV^2}{SE^2}$$

$$n = \frac{1600}{49}$$

$$n = 32.65 \rightarrow 33 \text{ plots}$$

Est. Leave Tree BA Range:
140-160 ft²

$$\pm 10/150 = 6.7\%$$

Est. 280 ft²/acre

Leave 150 ft²/acre

Total 130 ft²/acre

Use 33.6 BAF \approx 4 take trees/plot

Objectives:

1) SE \leq 7%

2) \geq 120 graded "take" trees

3) Adequate coverage of entire CT area

Plan for \geq 33 "grade" plots; \geq 100 total plots
Grade 1 in 3 plots.

Use 6 ch. x 14 ch. grid.

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: Kerry East Area(s) 4 & 5 (cc)

Harvest Type: PC CT "Automark Thinning" (circle one)

Approx. Cruise Acres: 115 Estimated CV% 60% ^{Net BF or} BAF/Acre SE% Objective 10% ^{Net BF or} BAF/Acre

Planned Sale Volume: 16.8 MMBF Estimated Sale Area Value/Acre: \$5,265

- A. **Cruise Goals:** (a) Grade minimum 120 conifer and ~ hardwood trees:
 (b) Sample 40 cruise plots; (c) Other goals (Determine "automark" thinning standards; Determine log grades for sale value; Determine snag and leave tree species and sizes; Determine LWD (down wood) cubic feet and decay classes; Determine "diameter limit" harvest parameters;

B. Cruise Design:

1. **Plot Cruises:** BAF 40 Full point Half point (circle one)
 Fixed Plot Size _____ Plot Radius _____ feet
 Cruise Line Direction(s) See Map
 Cruise Line Spacing 7.0 chains (feet)
 Cruise Plot Spacing 4.0 chains (feet)
 Grade/Count Ratio 1:2
2. **ITS (Sample Tree) Cruises:** Measure-grade ratios: D-fir _____ Hemlock _____
 Spruce _____ True Fir _____ Cedar _____ Hardwood _____

C. Tree Measurements:

1. **Diameter:** Minimum DBH to cruise is 8" for conifers and 8" for hardwoods. Record dbh to nearest 1/2" for trees < 16", to nearest 1" for trees 16-24", and to nearest 2" for trees > 24". If tree diameters are estimated (only estimate on variable plot cruises), then record to closest estimate.
2. **Bole Length:** Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.
3. **Top Cruise Diameter (TCD):** Minimum top outside bark is 7" or 40% of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for trees > 18" dbh.
4. **Form Factors:** (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area, and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.

5. **Tree Segments:** Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch. segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.

6. **Species, Sort, and Grade Codes:** A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); SF (Silver fir); A (Red alder); M (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DL, HL, CL, etc.)
B. Sort: Use code "1" (Domestic).
C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull

7. **Deductions:** Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.

8. **Standard Field Procedures:** Plot Type Cruises: Mark cruise line beginning and end points with ~~blue/yellow~~ ^{orange/black & white} flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at intervisible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.
ITS and 100% Cruises: Mark cruise "strips" with various colored flagging (not pink). Mark trees measured and graded with yellow paint.

9. **Cruising Equipment:** Relaskop Rangefinder Logger's Tape (with dbh on back)
Biltmore Stick Compass Cruise Cards in Tatum OR Data Recorder
Cruise Design Cruise Map Yellow Flagging Blue Flagging

10. **Attachments:** A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale).
B. Data Recorder Instructions
C. Other

Cruise Design by: Tom Scoggins
Approved by: _____
Date: _____

CRUISE DESIGN MAP
 KERRY EAST - AREAS 4 & 5 (CC UNITS)
 Sections 12 & 13, T7N, R6W, W.M.
 Clatsop County, Oregon

Scale: 1" = 1000'

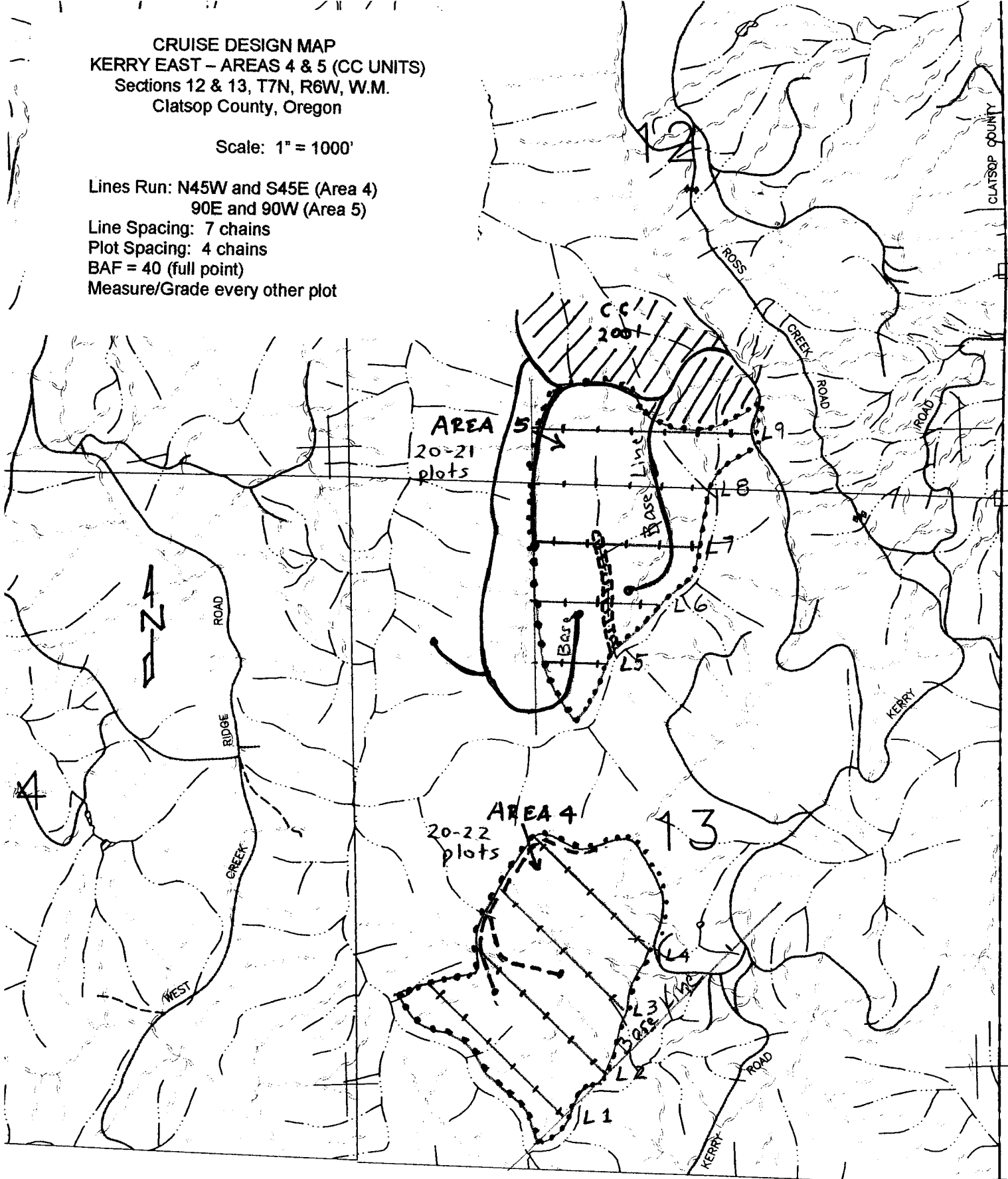
Lines Run: N45W and S45E (Area 4)
 90E and 90W (Area 5)

Line Spacing: 7 chains

Plot Spacing: 4 chains

BAF = 40 (full point)

Measure/Grade every other plot



Baselines Marked with
 Orange/Black & White Flagging

E 7470000 - 123°23'00"

471000 m

-123°22'00"E 747500'

T.S. 7/03

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: Kerry East Area(s) 7 (R/W)

Harvest Type: (CC) PC CT "Automark Thinning" (circle one)

Approx. Cruise Acres: 5 Estimated CV% 40% ^{Net BF or}BA/Acre SE% Objective 12% ^{Net BF or}BA/Acre

Planned Sale Volume: 16.8 MMBF Estimated Sale Area Value/Acre: \$5,265

A. **Cruise Goals:** (a) Grade minimum 36 conifer and 0 hardwood trees:
(b) Sample 12 cruise plots; (c) Other goals (Determine "automark" thinning standards; X Determine log grades for sale value; Determine snag and leave tree species and sizes; Determine LWD (down wood) cubic feet and decay classes; Determine "diameter limit" harvest parameters;
Outside sale road const. R/W in East Summit Rd.
area

B. Cruise Design:

- Plot Cruises:** BAF 33.6 (Full point; Half point) (circle one)
Fixed Plot Size Plot Radius feet
Cruise Line Direction(s) Along road
Cruise Line Spacing (chains) (feet)
Cruise Plot Spacing 300 (chains) (feet)
Grade/Count Ratio 1:2
- ITS (Sample Tree) Cruises:** Measure-grade ratios: D-fir Hemlock
Spruce True Fir Cedar Hardwood

C. Tree Measurements:

- Diameter:** Minimum DBH to cruise is 8" for conifers and 8" for hardwoods. Record dbh to nearest 1/2" for trees < 16", to nearest 1" for trees 16-24", and to nearest 2" for trees > 24". If tree diameters are estimated (only estimate on variable plot cruises), then record to closest estimate.
- Bole Length:** Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.
- Top Cruise Diameter (TCD):** Minimum top outside bark is 7" or 40% of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for trees > 18" dbh.
- Form Factors:** (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area, and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.

5. **Tree Segments:** Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch. segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.

6. **Species, Sort, and Grade Codes:** A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); SF (Silver fir); A (Red alder); M (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DL, HL, CL, etc.)

B. Sort: Use code "1" (Domestic).

C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull

7. **Deductions:** Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.

8. **Standard Field Procedures:** Plot Type Cruises: Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at intervisible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.

ITS and 100% Cruises: Mark cruise "strips" with various colored flagging (not pink). Mark trees measured and graded with yellow paint.

9. **Cruising Equipment:** Relaskop Rangefinder Logger's Tape (with dbh on back)
Biltmore Stick Compass Cruise Cards in Tatum OR Data Recorder
Cruise Design Cruise Map Yellow Flagging Blue Flagging

10. **Attachments:** A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

B. Data Recorder Instructions

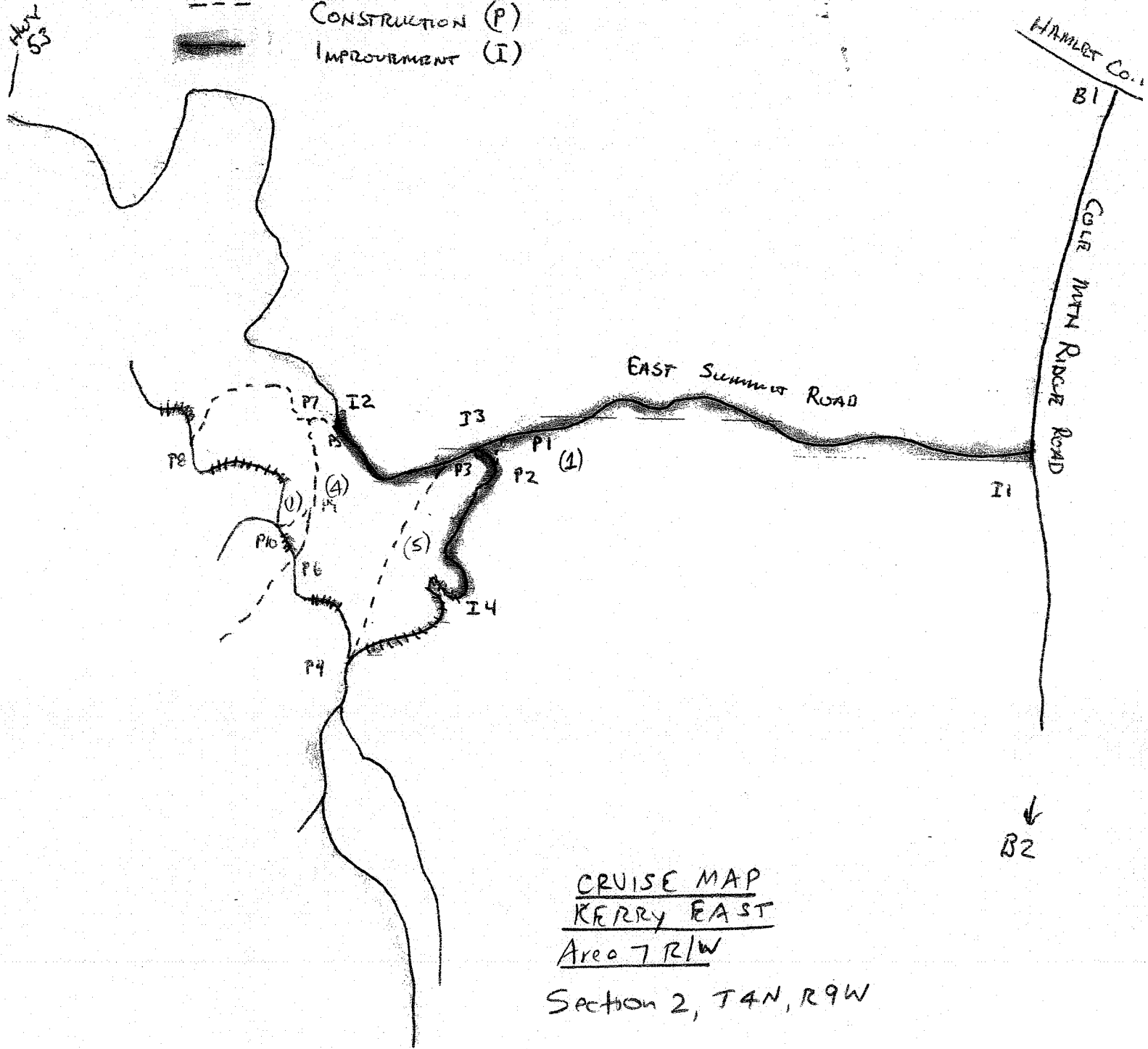
C. Other

Cruise Design by: Tom Scoggins

Approved by: _____

Date: 10/27/03

- ##### VACATE (V)
- ===== BRUSHING (B)
- CONSTRUCTION (P)
- ===== IMPROVEMENT (I)



CRUISE MAP
KERRY EAST
Area 7 R/W
 Section 2, T4N, R9W

3400' R/W

$3400 \times 45 = 153,000 \text{ ft}^2$

3.5 Acres

Use 11 plots @ 300' spacing

FPA "Written Plan" for Harvest of State Timber
Sale No. 341-04-63
Kerry East

**Portions of Sections 12, 13, 23, 24, and 25, T7N, R6W, W.M., Clatsop County,
Oregon**

Landowner: Oregon Department of Forestry
92219 Highway 202
Astoria, Oregon 97103
Phone: (503) 325-5451

Protected Resources:

West Creek (Type "F" And Type "D" stream) and several unnamed tributaries (all perennial Type "N" streams).

Type "F" tributaries to Fishhawk Creek, and several unnamed tributaries (all perennial Type "N" streams).

Specific Site Characteristics:

Most of the involved sale areas are partial cut units. Type F stream buffers are posted 100 to 200 feet from the streams. Harvest prescriptions within the partial cuts call for 150 square feet of average basal area retention of the largest trees. About 1700 feet of the boundary of a planned clearcut unit follows a buffer along the upper reaches of West Creek. The buffer is posted 100 to 200 feet from the stream. Vegetation within the buffers consists of a combination of conifers, hardwoods, and shrubs.

Tree and Vegetation Retention:

In all of the specified harvest areas, all trees and shrubs within the posted buffers will be retained and left undamaged. Additionally, within the thinning harvest units, upslope from the buffers, between 140 and 160 square feet of average basal area retention of the largest trees will provide sufficient shade and large down wood potential. All existing down wood will be left on site.

Practices:

Along all of the above mentioned streams, as well as any live streams, the following practices are required, under the timber sale contract, to protect the streams and streamside areas:

- No trees will be felled within posted stream buffers (RMA's).
- Trees adjacent to the posted stream buffers (RMA's) will be felled away from or parallel to the streams to prevent trees from entering the aquatic areas.
- No ground based logging equipment will be permitted within the posted RMA's nor within 50 feet of any live stream.
- When cable logging is conducted nearby the RMA's, logging lines may cross, but will not be lowered into the RMA's during yarding, except during rigging.

During rigging the lines must be pulled out of the RMA's when changing corridors.

- Cable corridors must be at least 100 feet apart where they cross the RMA's.
- Trees that fall or slide into Type F RMA's shall not be removed without prior approval from STATE.

I, the undersigned, submit this written plan in compliance with the requirements of the Forest Practices Act, regarding the planned operations to be conducted within 100 feet of Type F streams. I agree to the protection measures listed in this plan.

Submitted by: _____
Operator/ Purchaser

Date: _____

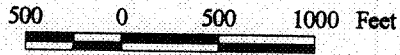
Reviewed by: Tom Scoggins
State Lands Forester

Date: 11/26/03

Attachments: Exhibit A map

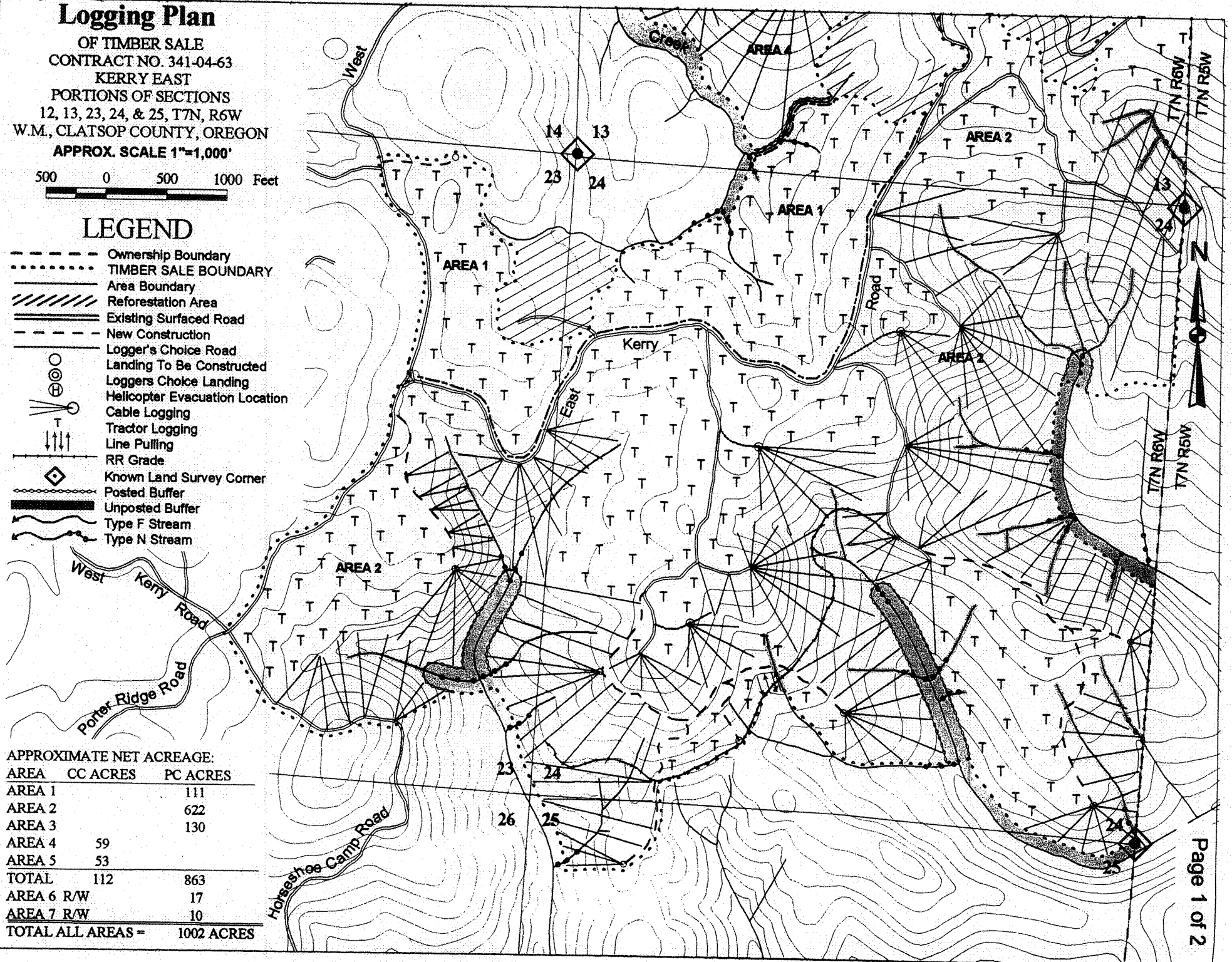
Logging Plan

OF TIMBER SALE
 CONTRACT NO. 341-04-63
 KERRY EAST
 PORTIONS OF SECTIONS
 12, 13, 23, 24, & 25, T7N, R6W
 W.M., CLATSOP COUNTY, OREGON
 APPROX. SCALE 1"=1,000'



LEGEND

- Ownership Boundary
- TIMBER SALE BOUNDARY
- Area Boundary
- /// Reforestation Area
- === Existing Surfaced Road
- - - New Construction
- Logger's Choice Road
- Landing To Be Constructed
- ⊙ Loggers Choice Landing
- ⊙ Helicopter Evacuation Location
- ⊙ Cable Logging
- ⊙ Tractor Logging
- ⊙ Line Pulling
- ⊙ RR Grade
- ◇ Known Land Survey Corner
- ⊖ Posted Buffer
- ⊖ Unposted Buffer
- ~ Type F Stream
- ~ Type N Stream

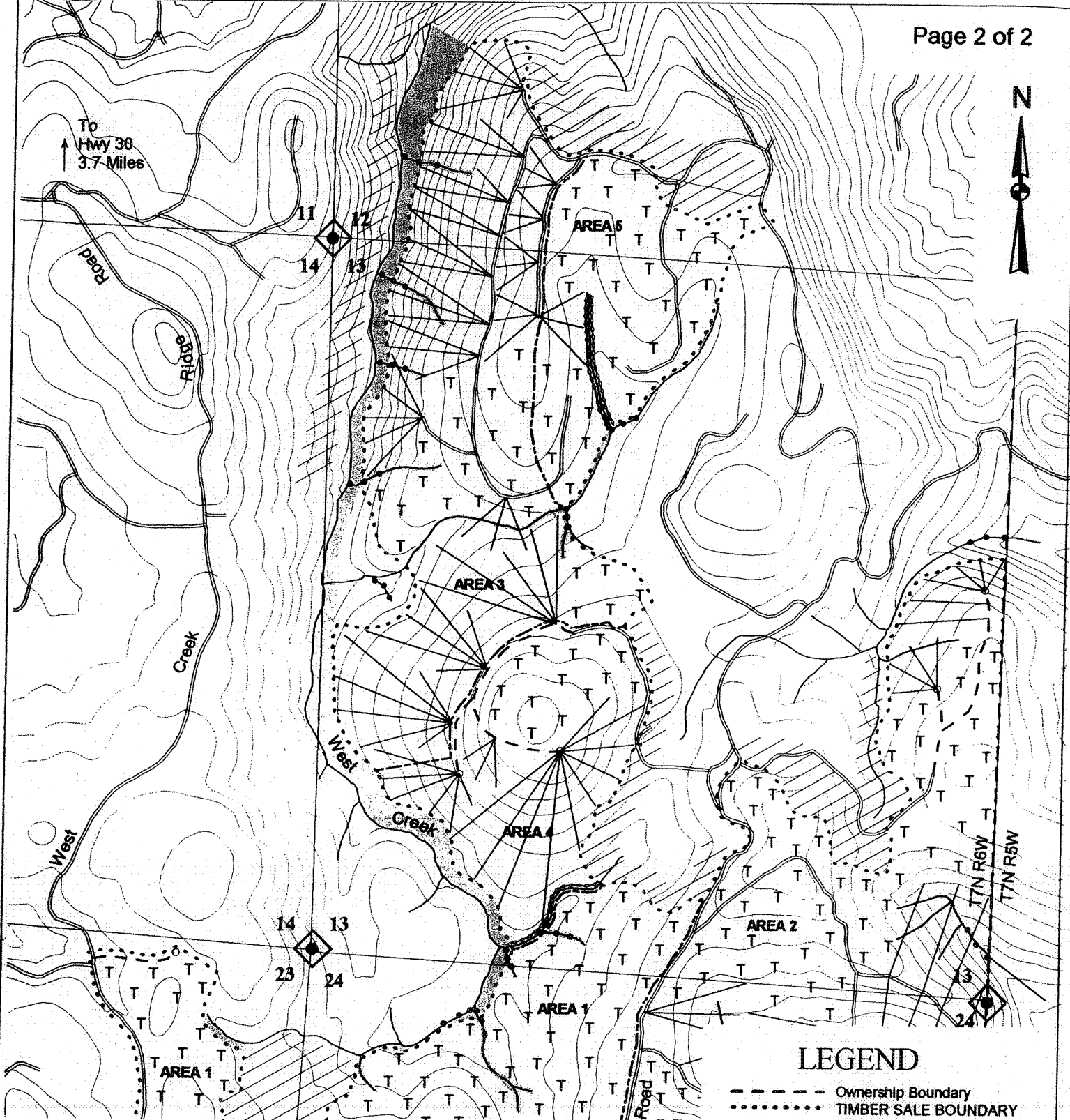


APPROXIMATE NET ACREAGE:

| AREA | CC ACRES | PC ACRES |
|-------------------|----------|------------|
| AREA 1 | | 111 |
| AREA 2 | | 622 |
| AREA 3 | | 130 |
| AREA 4 | 59 | |
| AREA 5 | 53 | |
| TOTAL | 112 | 863 |
| AREA 6 R/W | | 17 |
| AREA 7 R/W | | 10 |
| TOTAL ALL AREAS = | | 1002 ACRES |



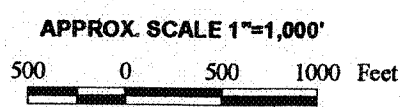
To
Hwy 30
3.7 Miles



APPROXIMATE NET ACREAGE:

| AREA | CC ACRES | PC ACRES |
|-------------------|----------|------------|
| AREA 1 | | 111 |
| AREA 2 | | 622 |
| AREA 3 | | 130 |
| AREA 4 | 59 | |
| AREA 5 | 53 | |
| TOTAL | 112 | 863 |
| AREA 6 R/W | | 17 |
| AREA 7 R/W | | 10 |
| TOTAL ALL AREAS = | | 1002 ACRES |

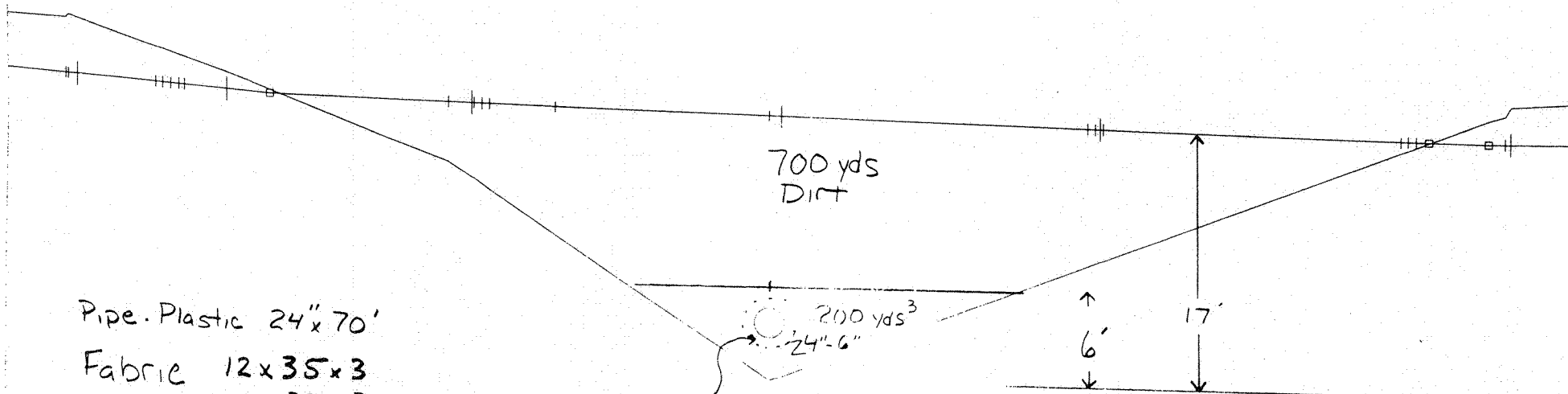
Logging Plan
 OF TIMBER SALE
 CONTRACT NO. 341-04-63
 KERRY EAST
 PORTIONS OF SECTIONS
 12, 13, 23, 24 & 25, T7N, R6W
 W.M., CLATSOP COUNTY, OREGON



LEGEND

- Ownership Boundary
- TIMBER SALE BOUNDARY
- Area Boundary
- /// Reforestation Area
- == Existing Surfaced Road
- - - New Construction
- Landing To Be Constructed
- ⊙ Loggers Choice Landing
- ⊕ Helicopter Evacuation Location
- ⊖ Cable Logging
- ⊙ Tractor Logging
- ◇ Known Land Survey Corner
- ⊖ Posted Buffer
- ⊕ Unposted Buffer
- ~ Type F Stream
- ~ Type N Stream

3+00 To 3+30



Pipe. Plastic 24" x 70'

Fabric 12 x 35 x 3
12 x 25 x 2
= 155'

$1860 \text{ FT}^2 = 207.40^2$

25 yds Bedding
50 yds Backfill
75 yds³ 3/4" - 0

210 yds³
24'-6"

700 yds
DIRT

↑
6'
↓
17'

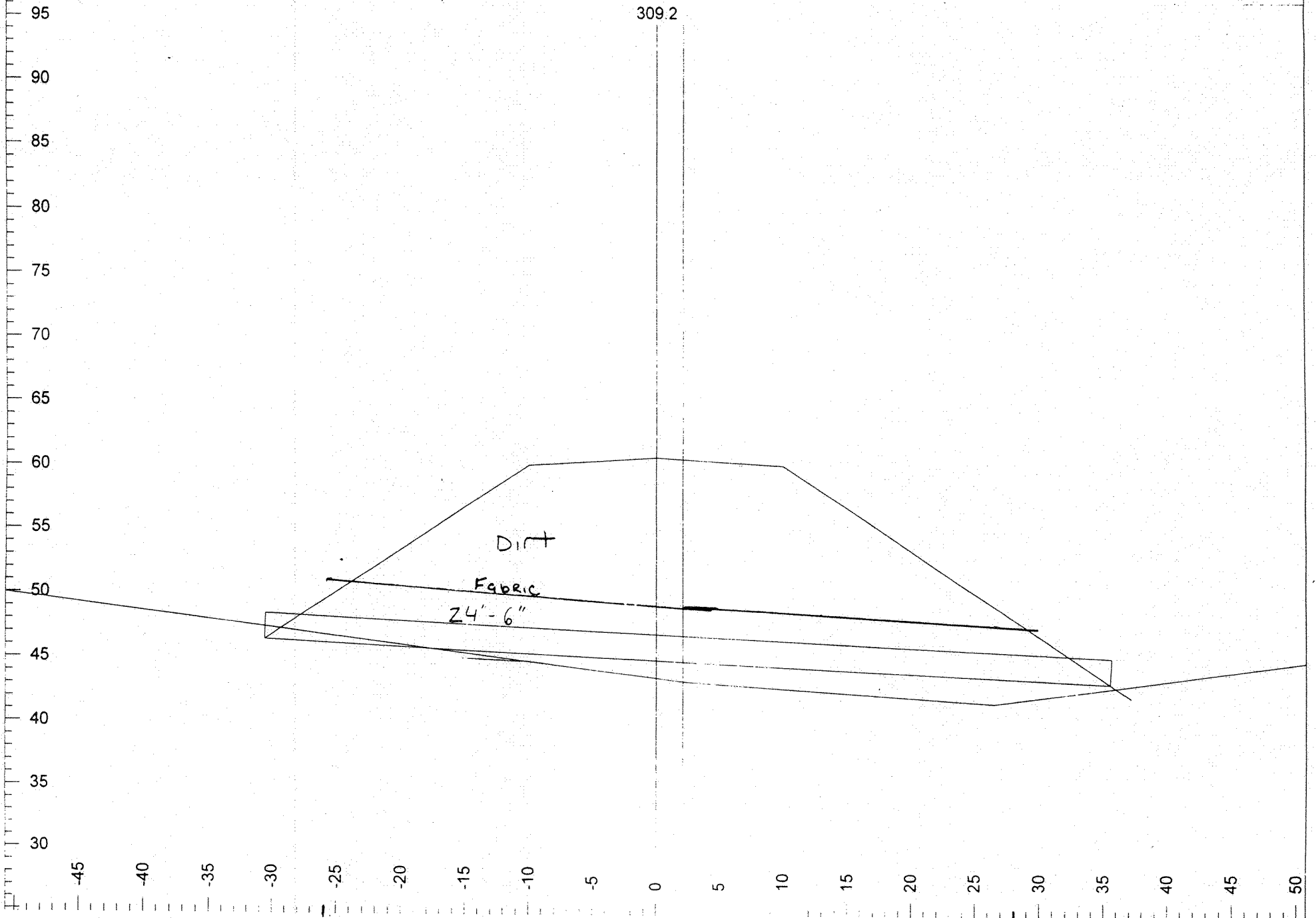
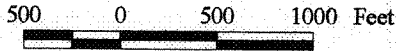


Exhibit "A"

OF TIMBER SALE
 CONTRACT NO. 341-04-63
 KERRY EAST
 PORTIONS OF SECTIONS
 12, 13, 23, 24, & 25, T7N, R6W
 W.M., CLATSOP COUNTY, OREGON

APPROX. SCALE 1"=1,000'

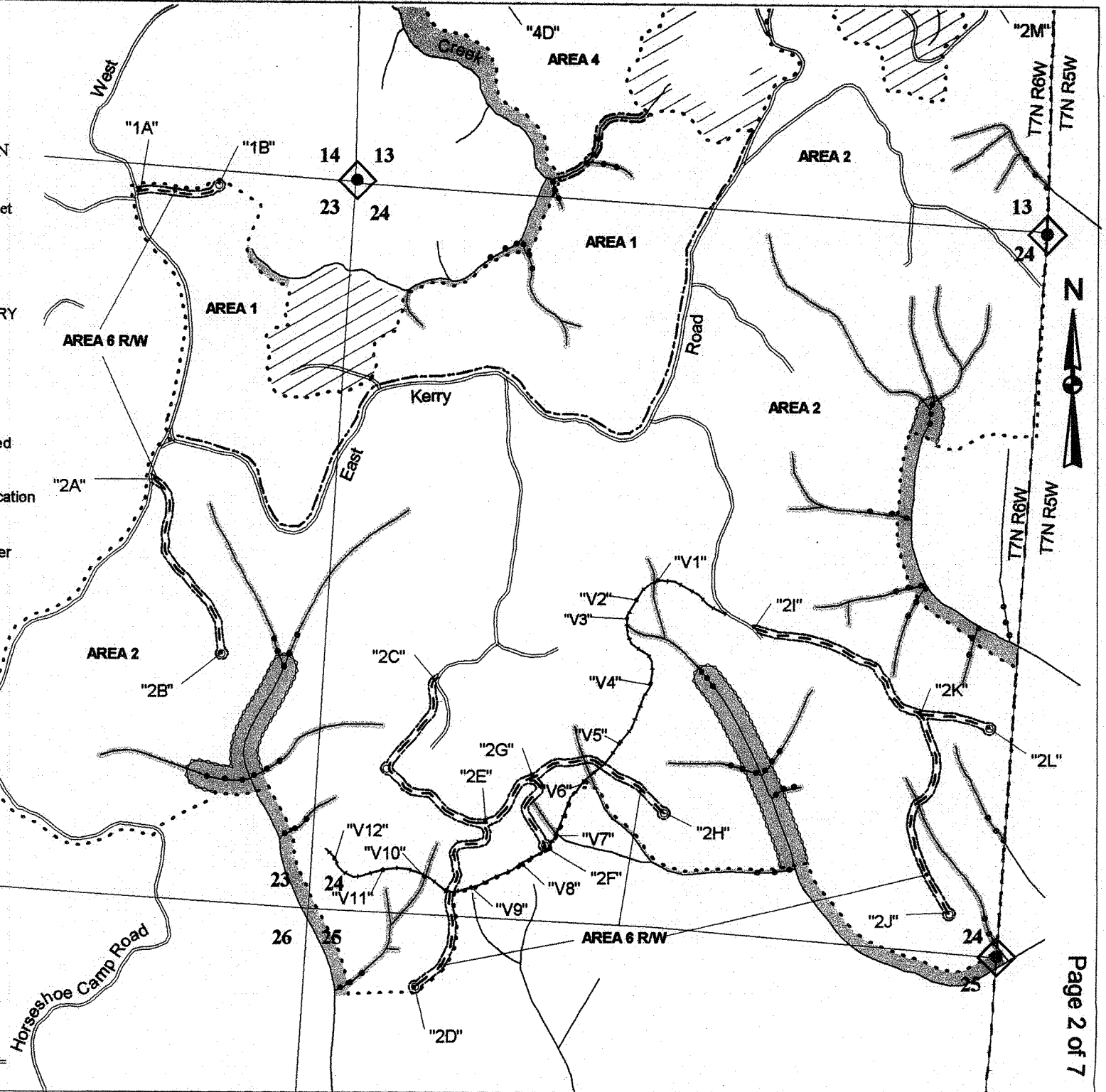


LEGEND

- Ownership Boundary
- TIMBER SALE BOUNDARY
- Area Boundary
- Right Of Way Boundary
- Reforestation Area
- POINT "A"
Point For Project Work
- Existing Surfaced Road
- New Construction
- Landing To Be Constructed
- Rock Quarry
- Stockpile Site
- Helicopter Evacuation Location
- Waste Area
- RR Grade
- Known Land Survey Corner
- Posted Buffer
- Unposted Buffer
- Type F Stream
- Type N Stream

APPROXIMATE NET ACREAGE:

| AREA | CC ACRES | PC ACRES |
|-------------------|----------|------------|
| AREA 1 | | 111 |
| AREA 2 | | 622 |
| AREA 3 | | 130 |
| AREA 4 | 59 | |
| AREA 5 | 53 | |
| TOTAL | 112 | 863 |
| AREA 6 R/W | | 17 |
| AREA 7 R/W | | 10 |
| TOTAL ALL AREAS = | | 1002 ACRES |



Kerry East 341-04-63

Drainage Acre Caclulation for Fill at 3+10 2G to 2H

Drainage Area = 5 Acres

$5/640 = 0.0078125$ = 0.0078125 square miles

50 year peak flow/square mile = 150cfs

0.0078125×150 = 1.17cfs

**FPA "Written Plan" for State Timber Sale Road Improvement
KERRY EAST TIMBER SALE**

Landowner: Oregon Department of Forestry
92219 Highway 202
Astoria, OR 97103

(503) 325-5451

Soapstone Creek Road (Point 17 to Point 18, station 0+50) Portions of SE ¼ Section 10, T4N, R9W, W.M., Clatsop County, Oregon.

Protected Resources: West Fork Soapstone Creek, a large, Type F fisheries resources. A written plan is required for any activities within 100 feet of a Type F stream.

Situation: A 36 inch diameter culvert on Soapstone Creek Road is undersized and is failing. As part of the road improvement for the timber sale, this culvert will be replaced with a 48" drainage structure. Further detailed work specifications for this project are included as Project No. 2 of the Kerry East Combination Timber Sale Contract shown/described in Exhibits A, B, C, H and L.

Drainage Area and Culvert Design:

- ❖ The stream crossing drainage area is 73 acres.
- ❖ The stored stream sediment will be removed to restore the stream channel for a distance of 25 feet above the culvert inlet.
- ❖ The 50 year peak flow for this drainage is 450 cfs per square mile. Therefore, the 50 year flow for this stream crossing is 52 cfs. Current FPA guidelines require that a culvert with a minimum diameter of 48 inches is necessary to pass the 50 year peak flow.
- ❖ A 48 inch diameter, 12 gauge aluminized steel culvert will be installed.
- ❖ The fill slopes will be armored with riprap rock to minimize surface erosion. The culvert design includes a 1:1 beveled inlet opening to improve efficiency.

Resource Protection Measures:

- 1) Work will be performed only during dry weather periods, low water stream flows and between July 1 and September 15, annually.
- 2) Riprap rock will be used to armor the fill slopes to minimize erosion and to construct an energy dissipater.
- 3) Machine activity in stream channels will be minimized. All excavation and riprap rock placement will be performed using a minimum 1½ cubic-yard track-mounted excavator.
- 4) De-watering of the installation area during development of the culvert bed and stream channel will be accomplished by use of coffer dams, temporary diversion ditches, or drainage structures and/or damming and pumping.
- 5) Selected native earth materials free from woody debris will be used for backfilling. Fill material will be thoroughly compacted with specialized compaction equipment.
- 6) Excavated waste materials will be hauled to approved waste areas and left in a stable condition.
- 7) All bare soils shall be mulched with straw and grass seeded approved by STATE.

**FPA "Written Plan" for State Timber Sale Road Improvement
KERRY EAST TIMBER SALE**

I, the undersigned, submit this written plan in compliance with the requirements in the Forest Practices Act regarding the operations conducted when, fills work exceeds 15 feet in height. I agree to the protection measures listed on this plan:

Submitted by: _____
Operator/Purchaser

Date: _____

Accepted by: _____
State Lands Forester

Date: _____

Attachments: Projects Map
Contract Exhibits B,C,H, and L

CC: Operator, Purchaser, District file, Salem, Eng. Unit

X:\Sunset Unit\2004 FY Sales\Kerry East\Sale Prep\Projects\Written Plan soapstone.doc

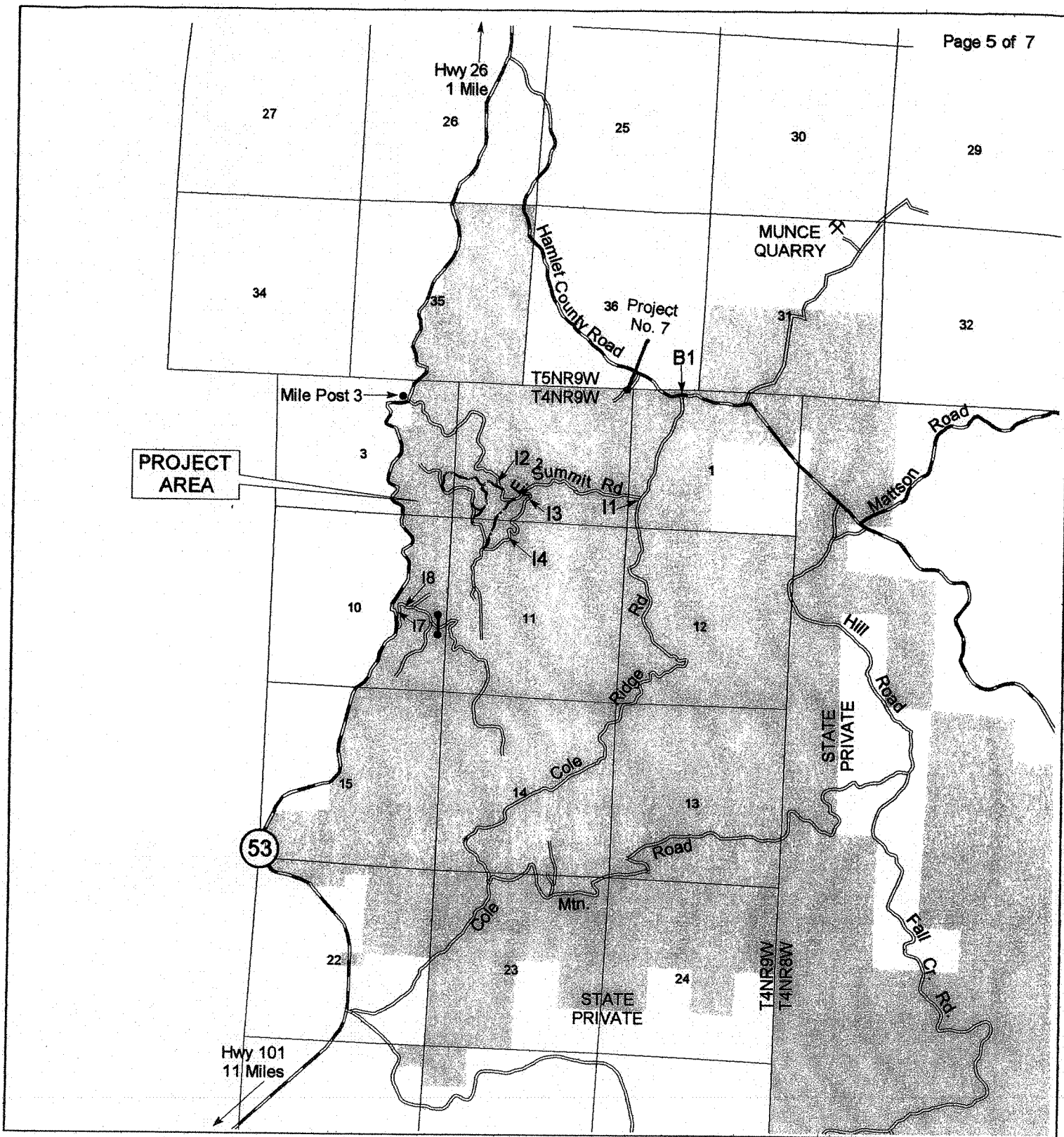


EXHIBIT "A"

Project Vicinity Map

OF TIMBER SALE CONTRACT NO. 341-04-63

KERRY EAST

PORTION OF T4N, R9W, W.M.,
CLATSOP COUNTY, OREGON



EXHIBIT "B"

ROAD IMPROVEMENT INSTRUCTIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

| <u>Segment</u> | <u>Station</u> | <u>Work Description</u> |
|------------------|----------------|--|
| 15 to 16 (Cont.) | 38+15 | Replace existing culvert, utilize 24 cubic yards of ¾"-0" crushed rock for culvert bedding/backfill. Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 44+35 | Replace existing culvert, utilize 24 cubic yards of ¾"-0" crushed rock for culvert bedding/backfill. Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 49+35 | Replace existing culvert, utilize 24 cubic yards of ¾"-0" crushed rock for culvert bedding/backfill. Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 53+90 | Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 60+12 | Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 65+65 | Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 83+10 | Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 88+35 | Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 105+30 | Replace existing culvert, utilize 24 cubic yards of ¾"-0" crushed rock for culvert bedding/backfill. Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 108+35 | Replace existing culvert, utilize 24 cubic yards of ¾"-0" crushed rock for culvert bedding/backfill. Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 145+00 | Install new culvert utilize 24 cubic yards of ¾"-0" crushed rock for culvert bedding/backfill. Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 180+60 | Utilize 12 cubic yards of riprap to construct an energy dissipator. |
| | 183+30 | Point 16. Replace existing culvert, utilize 24 cubic yards of ¾"-0" crushed rock for culvert bedding/backfill. |
| | 17 to 18 | 0+00 |
| 0+50 | | Replace existing culvert, utilize 60 cubic yards of ¾"-0" crushed rock for culvert bedding/backfill. Armor fill slopes utilizing 40 cubic yards of 24"-6" riprap rock. |
| 1+70 | | Utilize 30 cubic yards of riprap to construct an energy dissipator. |
| 1+90 | | Point 18. |

EXHIBIT "C"
 CULVERT LIST

| CULVERT NO. | DIAMETER (Inches) | LENGTH (Feet) | ROAD SEGMENT POINT TO POINT | STATION |
|-------------|-----------------------------------|---------------|-----------------------------|---------|
| 44 | 18 | 40 | I1 to I2 | 18+90 |
| 45 | 18 | 40 | I1 to I2 | 25+20 |
| 46 | 18 | 50 | I1 to I2 | 29+70 |
| 47 | 18 | 30 | I1 to I2 | 35+10 |
| 48 | 18 | 45 | I1 to I2 | 38+40 |
| 49 | 18 | 35 | I1 to I2 | 42+45 |
| 50 | 18 | 35 | I1 to I2 | 45+70 |
| 51 | 18 | 55 | I1 to I2 | 49+65 |
| 52 | 18 | 35 | I3 to I4 | 5+70 |
| 53 | 18 | 35 | I3 to I4 | 9+20 |
| 54 | 18 | 33 | I5 to I6 | 38+15 |
| 55 | 18 | 35 | I5 to I6 | 44+35 |
| 56 | 18 | 35 | I5 to I6 | 49+35 |
| 57 | 18 | 35 | I5 to I6 | 105+30 |
| 58 | 18 | 35 | I5 to I6 | 108+35 |
| 59 | 18 | 65 | I5 to I6 | 183+30 |
| 60* | 48 (12 gauge Aluminized Steel) | 50 | I7 to I8 | 0+50 |

*Indicates culverts that do not require markers.

State Timber Sale Contract
No. 341-04-63
Kerry East

EXHIBIT "L"

GRASS SEEDING AND MULCHING

This work shall consist of furnishing and placing required grass seed and straw mulch.

Seeding Seasons. Seeding shall be performed only from March 1 through June 15 and August 15 through October 31. Seeding materials shall not be applied during windy weather or when the ground is excessively wet or frozen. Work shall be performed during each specified seeding season on all completed and previously untreated sections. PURCHASER shall notify STATE 24 hours prior to seeding.

Application Methods for Grass Seed

Dry Method. Hand-operated seeding devices may be used when seed is applied in dry form.

Application Rates for Seed

Seed listed below shall be applied at the following rate per acre: 100 lbs.

| SPECIES | MIXTURE | PURE LIVE SEED | POISON AND/OR REPELLENT | GERMINATION |
|---------------|---------|----------------|-------------------------|-------------|
| Annual Rye | 33% | 95% | 0 | >90% |
| Orchard Grass | 33% | 95% | 0 | >90% |
| Perennial Rye | 34% | 95% | 0 | >90% |

Seeding and Mulching. Apply grass seed and straw mulch to all waste areas, and bare soils resulting from Project No. 3. Applied straw mulch shall be a minimum of 2 inches deep and provide a uniform cover.