

**Engineering Notes for
Rock Thin STWD TS
6/18/2012**

A. Haul route roads:

The haul routes for this sale are on National Forest System (NFS) roads 3405, 3405-113, 3405-114, 3405-117, 3405-136, 3409, 3409-115 and 3409-116 to Highway 34 (Hwy 34). Log haul will travel east on Hwy 34 to the appraisal point of Philomath Oregon.

All roads used in this sale are non-key roads as designated under the Siuslaw travel management and roads analysis.

All roads used in this sale are closed to public access except by permit and walk in use during deer rifle season. The City of Corvallis maintains a gate on the 3405 at the entrance to the watershed. The gate is to remain closed and locked at all times unless otherwise agreed to by the City plant operators.

Coordinate sale activities with City of Corvallis water treatment plant operators Jon Boyd or Mike Hinton at 541-929-2636.

Road 3405 (MP 0.90-1.53) near the water treatment facility and residences are expected to have dust palliatives applied to the roads. Application of dust abatement measures is included and appraised for. A fire hydrant is located near the settling ponds. Contact City Plant Operators before using water sources on City property.

The bridge at MP 0.20 on road 3405 is planned for replacement in the future when funding becomes available. Bridge monitoring by forest bridge engineers is planned during haul. Haul would be restricted during repairs or replacement. Alternative haul routes are available on NFS roads 3405 and 2005.

Overload permits are required for legal highway loads over 80,000 lbs. Permits may be acquired by contacting the forest engineer Bill Butler at 541-225-6368 at least 30 days in advance of equipment mobilization.

Haul roads will be shared with two other sales. Bridge Thin Timber Sale which is a Forest Service sale has been awarded and activities are planned to begin in summer of 2012. The City of Corvallis has plans for a timber sale to be awarded in fall of 2012.

Maintenance on aggregate surfaced roads for this sale is the responsibility of the purchaser. NFS road beginning and ending termini are detailed in table 1.1

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Table 1.1

Road No.	Miles	Beginning Milepost	Ending Termini/Milepost
3405	7.00	Hwy 34	Unit 8 Ldg C
3405-113	1.20	3405	3405-114
3405-114	0.30	3405-113	MP 0.12
3405-117	1.6	3405	Unit 4
3405-136	0.12	3405-113	Unit 17
3409	2.39	3405	3409-116
3409-115	1.10	3409	Unit 3
3409-116	0.9	3409	Unit 21

The remaining portion of the 3405, 3405-113, 3405-136 and 3409 roads are not planned for use under this contract. Spot rock for NFS roads is included and appraised for.

Roads 3405 and 3409 will have reconstruction as part of a specified roads package attached to this sale. Road 3405-113 will have a culvert installation under T-833-F12-01 at MP 0.10. Coordinate culvert installations on road 3405 with City Plant Operators. Alternate routes for emergency access to facilities shall be confirmed prior to construction. The Forest Service and City Plant Operators have identified alternate routes.

Yarding and loading equipment for landings located along NFS roads 3405 are expected to block the road.

B. System and temporary roads –season of haul, road protection and truck assist.

See logging feasibility report (LFR) for details.

In general, all system roads are appraised for rock re-surfacing or spot rocking. Roads 3405, 3405-117 and 3405-113 to unit 14 are identified as all season roads in this sale.

The Siuslaw National Forest hydrologist has concurred with extended haul season on 3405-113 and 3405-117 under the following conditions:

- Additional spot rocking at stream crossings
- Suspension of haul for rain events exceeding 0.75 inches in a 24 hour period
- Installation of cross drain at MP 0.10 on 3405-113.

No truck assist is appraised

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C. Unit Notes: Numbers 6, 11 and 18 omitted.

Unit 1: Landings B and C roadside along 3409. Landing A has short spur to break and is new construction. Landing C ground based to 3409

Unit 2: Landings A and B on existing road template to southern half of unit. Landings D and E ground based to 3409.

Unit 3: Unit is accessed from 3409-115 and has heavy brush and large trees across road from temp spur to eastern portion of unit. Landings A, B, C and E on existing temporary roads. Landing D new construction.

Unit 4: Roadside landings with one located on existing temporary road in eastern portion of unit. Additional spot rock has been appraised for to facilitate winter use. Two sections of adverse haul, 10 and 15 percent between unit 4 and 5.

Unit 5: Short spur to landing A. Unit mostly ground based with one yarder setting on 3405-117.

Unit 7: Mostly roadside ground based with one yarder setting on 3405 near western unit boundary. Unit uses 3405 and 3405-117.

Units 8: Roadside landings on 3405 with small amount of ground based in eastern portion of unit.

Unit 9: Landing B roadside on 3405. Landing A on short spur near junction of 3405 and 3405-113. Spur to A may be rocked and has been appraised for all season use.

Unit 10: Ground based unit has existing spur and will need approximately 100' reconstructed to 3405-113. The spur is such that only logging equipment can access unit and loading will occur on 3405-113.

Unit 12: Spur to A may be rocked and has been appraised for all season use.

Unit 13: Roadside yarder setting. Trucks may have to turn around and back in from unit 12 spur.

Unit 14: Roadside landings, unit has two sections on either side of unit 15.

Unit 15: Landing A on 3405-113. Landing B has longer spur to southeast of unit

Unit 17: Unit is at end of 3405-114. Short spur to A, longer spur to landing B with short branch to C.

Unit 19: Four small ground based pieces located west of 3405-113.

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Unit 20: Unit in two sections. Longer spur to landing A and B. Ground based with some downhill yarding to A. Spur to A and B will need realigned for haul north on 3405-113.

Unit 21: Unit is accessed from 3409-116 and has heavy brush and large trees across road.

Temporary haul roads have been appraised for 10 cubic yards each at the approach to system roads in order to reduce soil contamination on the system road

C. Pre and post sale operational status for the system roads:

Road #	Presale status	Post sale planned status	Waterbars/berms
3405	Non-Key, closed	Non-Key, closed	None
3405-113	Non-Key, closed	Non-Key, closed	Type 2 / None
3405-114	Non-Key, closed	Non-Key, closed	Type 1 / None
3405-117	Non-Key, closed	Non-Key, closed	Type 1 / None
3405-136	Non-Key, closed	Non-Key, closed	Type 1 / None
3409	Non-Key, closed	Non-Key, closed	Type 2 / None
3409-115	Non-Key, closed	Non-Key, closed	Type 1 / None
3409-116	Non-Key, closed	Non-Key, closed	Type 1 / None

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D. Log Haul Operating season and Haul routes.

Unit Number	Planned Haul Route	Engineering Log Haul Operating season *
1, 2	3409 to 3405 to Highway 34 to Philomath	Dry season
3	3409-115 to 3409 to 3405 to Highway 34 to Philomath	Dry season
4, 5, 7	3405-117 to 3405 to Highway 34 to Philomath	All season system roads, dry season temp roads
8	3405 to Highway 34 to Philomath	All season
9, 12, 13, 14	3405-113 to 3405 to Highway 34 to Philomath	All season
10, 20	3405-113 to 3405 to Highway 34 to Philomath	All season system roads, dry season temp roads
15	3405-113 to 3405 to Highway 34 to Philomath	All season system roads, dry season temp roads
17	3405-114 to 3405-113 to 3405 to Highway 34 to Philomath	Dry season
19	3405-113 to 3405 to Highway 34 to Philomath	Dry season
21	3409-116 to 3409 to 3405 to Highway 34 to Philomath	Dry season

* Dry season is June 15 – October 15

Miscellaneous maintenance:

Dust abatement and 3405-113 culvert installation estimated at \$6,286.00

Rob Sanders

Engineer

Siuslaw National Forest